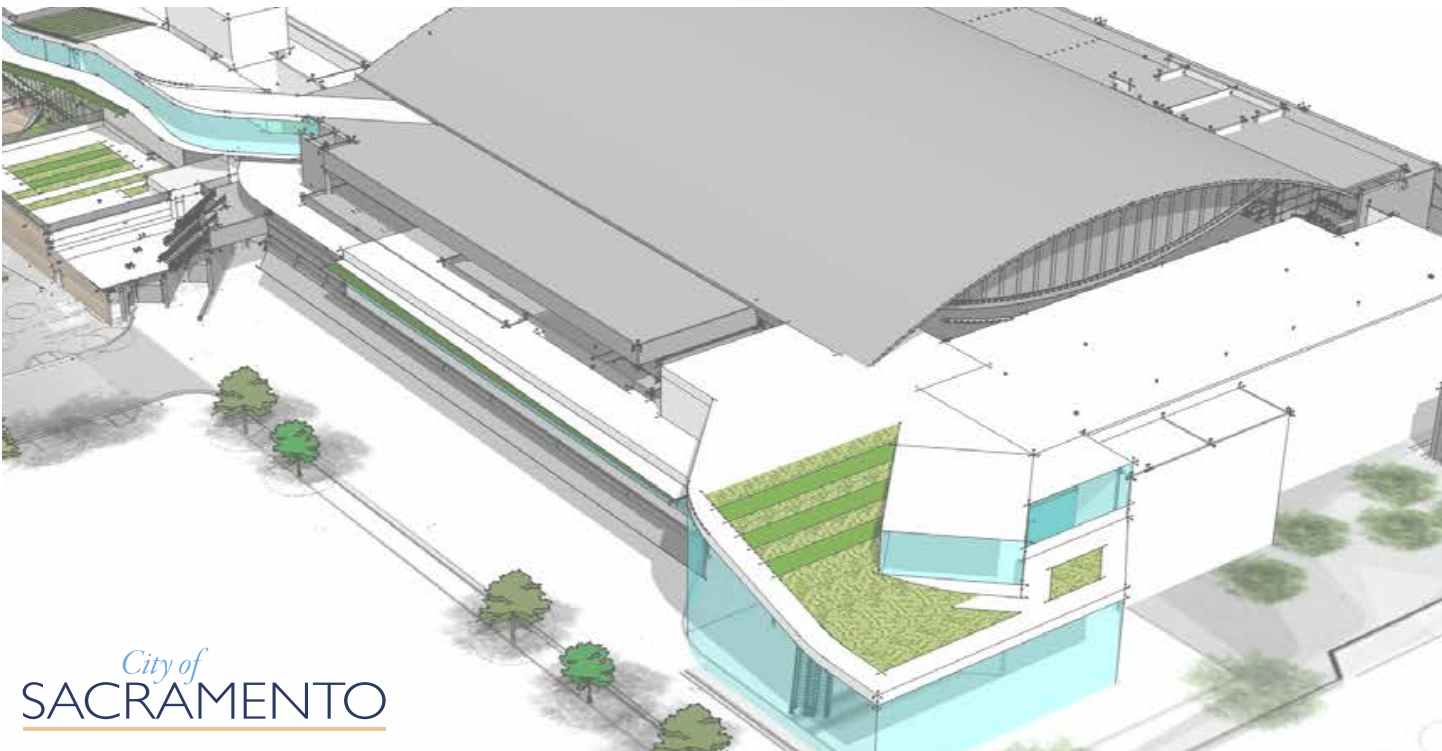


Sacramento Convention Center Renovation and Expansion and 15th/K Street Hotel Projects

Draft Environmental Impact Report | November 2017



Draft

SACRAMENTO CONVENTION CENTER RENOVATION AND EXPANSION & 15TH/K STREET HOTEL PROJECTS

Environmental Impact Report

Prepared for
City of Sacramento

November 2017



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SUMMARY

Sacramento Convention Center Renovation and Expansion and 15th/K Street Hotel Projects Environmental Impact Report

Introduction

This Environmental Impact Report (EIR) is an informational document intended to inform the public and decision-makers about the environmental consequences of the proposed Sacramento Convention Center Renovation and Expansion and 15th/K Street Hotel projects. The EIR considers the environmental impacts of the proposed projects as well as the additive effects of growth throughout the Sacramento area and the region. These latter impacts are referred to as cumulative impacts. The EIR has been prepared by the City of Sacramento pursuant to the requirements of the California Environmental Quality Act (CEQA).

The EIR describes the existing environmental conditions in the vicinity of the Sacramento Convention Center Renovation and Expansion project (SCC project) site and the 15th/K Street Hotel project (Hotel project) site, analyzes potential impacts on environmental resources due to the proposed projects, and identifies mitigation measures that could avoid or reduce the magnitude of those significant impacts. The environmental resource topics evaluated in the EIR include land use and employment; aesthetics/light and glare; air quality; biological resources; cultural resources; energy; global climate change; hydrology and water quality; noise and vibration; and transportation, as well as potential for growth and urban decay effects. The EIR evaluates a range of alternatives for the proposed projects.

This EIR is being published as a Draft EIR. The Draft EIR will be subject to review and comment by the public, as well as responsible agencies and other interested jurisdictions, agencies, and organizations for a minimum of forty-five (45) days. The public may comment on the EIR by submitting written comments at any time during the public review period. The City will complete a Final EIR, which will include the written comments received regarding the Draft EIR, responses to substantial environmental issues raised in the comments, and any changes to the Draft EIR that are required by the responses to written comments, or that are initiated by staff.

Upon publication, the environmental documents described above are available online at <http://www.cityofsacramento.org/Community-Development/Planning/Environmental/Impact-Reports>, and may be viewed in printed form at the City's Community Development Department, 300 Richards Boulevard, Third Floor, Sacramento, CA 95811. Hearings regarding the project will

occur at various times, and the City posts agendas at kiosks at City Hall and on its website at www.cityofsacramento.org.

City staff responsible for the drafting of the environmental document may be contacted with questions:

Scott Johnson, Associate Planner
300 Richards Boulevard, Third Floor
Sacramento, CA 95811
Telephone: 916-808-5842
Email: srjohnson@cityofsacramento.org

The Final EIR will be submitted to the City of Sacramento City Council for their consideration. As part of the project review and consideration, the City Council, prior to approving the project, is required under CEQA to certify that the EIR has been prepared in compliance with CEQA, and would also consider adoption of Findings of Fact pertaining to this EIR, specific mitigation measures, a Statement of Overriding Considerations relating to any identified significant and unavoidable effects, and a Mitigation Monitoring Plan.

Project Description

Project Locations

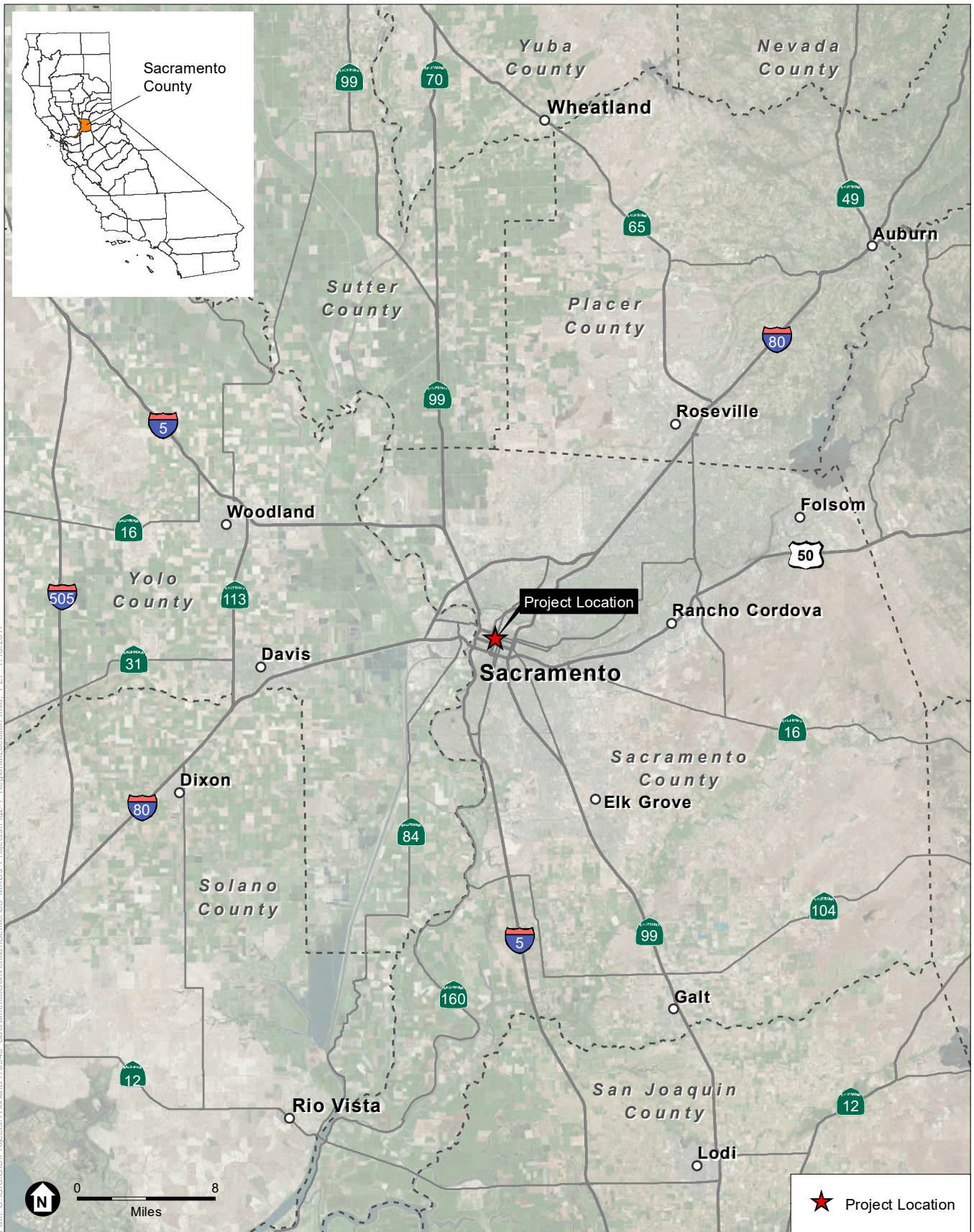
The SCC project site and the Hotel project site are located within the City of Sacramento's Central City community. **Figure S-1** shows the location of the project site in the Sacramento region. The SCC project site is generally bounded by 13th Street to the west, 15th Street to the east, J Street to the north, and K Street to the south. The SCC project site includes the existing Sacramento Convention Center and adjacent Panattoni Building and outdoor Activities Plaza, but excludes the Sacramento Community Theater.

The proposed Hotel project site is currently developed with a surface parking lot, and is bounded by a six-story office building to the west (1414 K Street), K Street to the north, 15th Street to the east, and Kayak Alley to the south. **Figure S-2** and **Figure S-3** illustrate the project locations in Sacramento's Central City.

SCC Project

The proposed SCC project would include the following modifications to the existing SCC facility in downtown Sacramento:

- 65,514 square feet of additional event space (exhibit halls, meeting rooms, and ballrooms);
- 34,835 square feet of additional pre-function space (e.g., lobbies, landings);
- 306 square foot increase of retail space;
- 6,508 square foot reduction of outdoor terrace space; and
- 36,254 square feet of additional support space (e.g., administrative office, kitchen, store rooms).



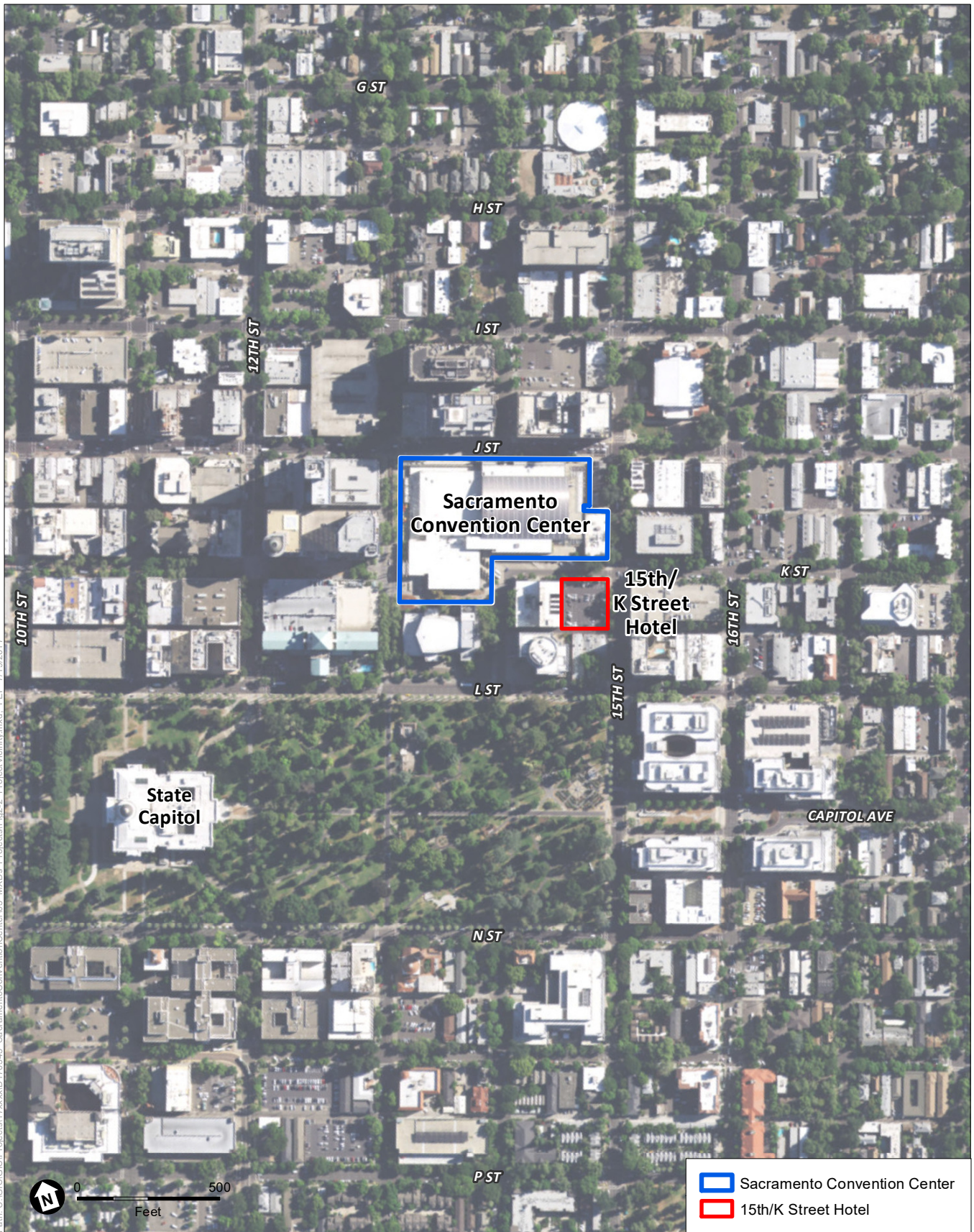
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SOURCE: Esri, 2015; ESA, 2017

Sacramento Convention Center Renovation and Expansion and 15th/K Street Hotel EIR

Figure S-1
Regional Location





SOURCE: Esri, 2015; ESA, 2017

Sacramento Convention Center Renovation and Expansion and 15th/K Street Hotel EIR

Figure S-2
Vicinity of Proposed Projects



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SOURCE: Populous, 2017

Sacramento Convention Center Renovation and Expansion and 15th/K Street Hotel EIR

Figure S-3
Project Sites

The project would also include the demolition of the adjacent Panattoni Building at 1030 15th Street, which is comprised of 15,863 square feet of commercial office space. **Table S-1** summarizes the existing and proposed development in the proposed SCC project.

TABLE S-1
SACRAMENTO CONVENTION CENTER EXPANSION AND RENOVATION
DETAIL OF PROPOSED SPACE CHANGES

	Existing	Demo	New	Unchanged	Net SF	Net Change
Exhibit Halls						
Hall A	55,000			55,000	55,000	0
Hall B	33,000			33,000	33,000	0
Hall C	24,864	24,864			0	-24,864
Hall D	12,321	12,321			0	-12,321
Hall E	12,321	12,321			0	-12,321
New Exhibit Space			75,172		75,172	75,172
Total	137,506	49,506	75,172		163,172	25,666
Meeting Rooms						
100A	253	253			0	-253
100B	480	480			0	-480
101	336	336			0	-336
102	406	406			0	-406
103	644	644			0	-644
104	920	920			0	-920
105	667	667			0	-667
201	522	522			0	-522
202	3,596	3,596			0	-3,596
203	2,418	2,418			0	-2,418
204	3,596	3,596			0	-3,596
205	726	726			0	-726
301	1,015			1,015	1,015	0
302	665			665	665	0
303	665			665	665	0
304	875			875	875	0
305	875			875	875	0
316	896			896	896	0
317	608			608	608	0
318	576			576	576	0
319	928			928	928	0
New Meeting Space - North			2,616		2,616	2,616
New Meeting Space - East			9,080		9,080	9,080
New Meeting Space - Southeast			2,716		2,716	2,716
Total	21,667	14,564	14,412		21,515	-152

**TABLE S-1
SACRAMENTO CONVENTION CENTER EXPANSION AND RENOVATION
DETAIL OF PROPOSED SPACE CHANGES**

	Existing	Demo	New	Unchanged	Net SF	Net Change
Ballrooms						
East Ballroom	24,282			24,282	24,282	0
New Ballroom (Phase 2)			40,000		40,000	40,000
Total	24,282	0	40,000		64,282	40,000
Lobbies & Prefunction						
West Lobby (Ground Lvl)	6,000	6,000			0	-6,000
West Lobby (Ground Lvl)			5,561		5,561	5,561
West Prefunction (Ground Lvl)			1,708		1,708	1,708
West Prefunction (Upper Lvl)			4,708		4,708	4,708
East Lobby (Upper Lvl)	9,000			9,000	9,000	0
New East Lobby (Ground Lvl)			5,882		5,882	5,882
East Prefunction (Upper Lvl)			5,907		5,907	5,907
J Street Lobby (Ground Lvl)	7,000			7,000	7,000	0
New North Prefunction @ J St)			1,326		1,326	1,326
Prefunction (Ground Lvl)	15,842	15,596			246	-15,596
Prefunction (Upper Lvl)	12,188			12,188	12,188	0
New Prefunction (Phase 2)			8,779		8,779	8,779
Street retail	1,364	658			706	-658
New Retail			964		964	964
Total	51,394	22,254	34,835		63,975	12,581
Subtotal without Terrace	234,849	86,324	164,419		312,944	78,095
Terrace						
Existing Outdoor Terrace	10,000	10,000			0	-10,000
New Outdoor Terrace (Phase 2)			3,492		3,492	3,492
Total	10,000	10,000	3,492		3,492	-6,508
Service/Admin/Kitchen/Etc.						
Operations, Catering & AV office area	4,343	4,343			0	-4,343
Administrative Offices (above Dock)			6,778		6,778	6,778
Food Service Offices (above Kitchen)			2,201		2,201	2,201
Kitchen	4,074	4,074			0	-4,074
New Kitchen			5,687		5,687	5,687
New support spaces (Phase 2)			21,070		21,070	21,070
New Plating Kitchen (Phase 2)			3,997		3,997	3,997
Support Spaces (all floors)	98,855	35,169	40,107		103,793	4,938
Support Spaces (Basement)	45,190			45,190	45,190	0
Total	152,462	43,586	79,840		188,716	36,254

TABLE S-1
SACRAMENTO CONVENTION CENTER EXPANSION AND RENOVATION
DETAIL OF PROPOSED SPACE CHANGES

	Existing	Demo	New	Unchanged	Net SF	Net Change
<i>Subtotal Terraces, Service/Admin/ Kitchen/Etc.</i>	162,462	53,586	83,332		192,208	29,746
<i>Total Convention Center</i>	397,311	139,910	247,751		505,152	107,841
Panattoni Building	36,085	36,085			0	-36,085
<i>Total Project</i>	433,396	175,995	247,751		505,152	71,756

SOURCE: City of Sacramento, 2017; Populous, 2017.

The renovated and expanded SCC would be a larger structure relative to the existing facility. Demolition and construction activities would take place throughout the facility.

Construction and demolition components on the east side of the SCC would include demolition of the existing Panattoni Building and construction of a new East Lobby in its place, which would create access to the Convention Center from 15th Street. The upper levels of the new East Lobby structure would accommodate administrative uses. In addition, the east terrace on the second level would be eliminated and new meeting rooms would be added in its place.

Project components on the west side of the existing SCC would include demolition of the portion of the facility constructed in 1974, which includes 3 exhibition halls and a number of other uses, and construction of a new west building in its place, which would include new exhibit space, a new west lobby, pre-function space facing J Street, a new kitchen and food service space, service areas, and an expanded second floor outdoor terrace. A 40,000 sf ballroom and back-of-house uses such as hallways and kitchen spaces would be constructed on the second level of the new west building.

The new west building would have a larger footprint than the existing west building. As a result, the building footprint would extend further to the north and west, reducing available pedestrian space along the building's 250-foot J Street frontage by 20 feet and along the building's 400-foot 13th Street frontage by 20 feet. In addition, the existing 250-foot long, pullout space on J Street would be replaced by a smaller turnout that would be a single-car width relative to the existing two-car width turnout. The area of the existing turnout to be eliminated would be replaced by sidewalk that aligns with the sidewalk that fronts the east building. This building and sidewalk extension would provide access to the planned 13th/J Street Downtown/Riverfront Streetcar stop.

At the southwest side of the west building, the landscaped walkway between the SCC and the Community Center Theater (CCT), to the south, would be eliminated and replaced with an outdoor activities plaza, which would include an outdoor amphitheater facing the main activities plaza and K Street pedestrian connection, as well as landscaping and pedestrian improvements.

Project components on the west side of the SCC would also include renovation of the central plant that provides heating, cooling and power to the Convention Center and the adjacent CCT.

The proposed expanded and reconfigured SCC would be a venue for an array of various conference and entertainment events during the year. As explained elsewhere in this chapter, one of the primary objectives of the proposed improvements to the SCC would be to allow a more efficient transition between events, allowing for an increase in the total number of annual events accommodated at the SCC. The total number of events would be affected by a number of factors, such as the relative success of Visit Sacramento or a private operator in attracting events, and the number of touring events each year. **Table S-2** provides an estimate of the type and number of events that could be expected during successful operation of the expanded and reconfigured SCC. It is estimated that the proposed SCC would generate an additional 1,790 attendees per event day.

Different types of events typically are presented on different days and at different times, and may overlap. For purposes of a conservative analysis, it has been assumed that on an annual basis there would be events attended by a range of numbers of attendees with total event attendance ranging from a few hundred per day for smaller events to over 15,000 per day for the largest events.

Hotel Project

The proposed Hotel project would include demolition of the existing parking lot and subsequent construction of a 350-room hotel. The EIR anticipates that the proposed Hotel project would include construction of an approximately 24-story hotel. The hotel would be anticipated to include the following elements:

- 170,000 square feet (sf) of hotel space, including up to 350 rooms, located on upper levels;
- 70,000 sf of meeting/conference space, located across 4 lower levels;
- Up to 130,000 sf of building amenities such as lobbies, including approximately 6,000 sf of restaurant space and a pool deck on approximately the 5th floor on the southwest corner of the structure;
- 15,000 sf of service and loading facilities; and
- 65,000 sf of parking space, anticipated to provide approximately 200 on-site parking spaces on 2 subterranean floors.
- A pedestrian bridge that would span K Street, connecting the second level floors of both the hotel and the proposed SCC East Lobby. The exact elevation of the pedestrian bridge is not known at this time, however, it is assumed that the pedestrian bridge would be designed to provide clearance for vehicular traffic along K Street, including trucks and other freight vehicles accessing the SCC loading docks.

**TABLE S-2
SACRAMENTO CONVENTION CENTER ANNUAL EVENT ATTENDANCE 2009-2016**

Event Type	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2009-2016 Average
Group A Events									
Number of Events	62	49	68	56	57	57	56	65	59
Total Attendance	184,956	212,623	381,078	313,813	289,592	378,855	278,499	403,187	305,325
Group B Events									
Number of Events	410	356	351	269	259	289	277	264	309
Total Attendance	204,151	205,596	172,397	124,767	152,891	126,081	159,624	146,895	161,550

SOURCE: Visit Sacramento, 2017.

Based on conceptual planning studies, the proposed Hotel building would be approximately 300 feet tall and include approximately 24 above-ground stories and two subgrade parking levels. The main entrance would front 15th Street and the ground floor would include the hotel lobby, building support toward the southwest, and loading dock facilities along K Street. Directly above the ground level would be approximately three levels dedicated to building amenities and meeting space. The second level would provide access to the proposed east lobby of the SCC via a proposed pedestrian bridge. The floors above the meeting and hotel amenity levels would be dedicated to hotel rooms and would be massed toward the north and eastern perimeters of the structure. The floor above the meeting levels would include a proposed amenity deck that would feature an outdoor terrace area toward the south west of the structure. The amenity deck would likely include an outdoor pool area.

The proposed Hotel project is anticipated to include two subgrade parking levels accommodating approximately 200 parking spaces. The below-grade floors would be constructed with a waterproof foundation and outer walls to prevent groundwater infiltration during seasonal periods where the water table would be at or above the lowest depth of the subgrade parking levels. This design would avoid the need for a seasonal dewatering system.

Notice of Preparation Comments

During the public comment period on the Notice of Preparation (NOP), August 2, 2017 through September 1, 2017, the City of Sacramento received 8 written comment letters regarding the proposed projects (see Appendix A for the NOP and Appendix B for the NOP Comment Letters). The comment letters included a number of comments pertaining to the projects and the scope of the EIR. The comments requested that the EIR include analysis of issues such as:

- The planned operations of the proposed projects and the related effects on trip making, vehicle miles traveled (VMT), and travel modes;
- Anticipated construction-related effects;
- Traffic-related effects during large events at the SCC and/or Hotel;
- Effects on surface water quality;
- Construction effects on tribal cultural resources;
- Wastewater generation and the potential effects on the Sacramento Regional Wastewater Treatment Plant (SRWTP) and the City's combined sewer system (CSS);
- Connectivity of the proposed projects to alternate modes of travel such as walking, biking, and transit; and
- Demand for electricity and infrastructure needs.

These issues are discussed in Chapter 4, Environmental Setting, Impacts, and Mitigation Measures.

Environmental Effects

The following discussion provides an overview of the key environmental effects of the proposed SCC project and the proposed Hotel project. This overview does not constitute a complete summary of every effect of the proposed projects described in the EIR, but rather it contains a description of those impacts that the City considers the principal environmental impacts of the proposed projects. At the end of this chapter, Table S-3, Summary Table, includes a complete summary of all impacts and mitigation measures described in Chapter 4 of the EIR.

Aesthetics, Light and Glare

The aesthetics of the SCC project area can largely be characterized as a built out urban environment. The reconfigured and expanded SCC would be a steel and concrete structure, with the primary entrances on the first level on the J Street (existing), 13th Street (near K Street), and 15th Street sides of the building. Like the existing SCC east building, the proposed reconfigured and expanded SCC would be a two-level structure. The proposed SCC second floor level would include an outdoor terrace overlooking the amphitheater and Activities Plaza between the SCC and the Community Center Theater. Similar to the existing SCC roof, the top of the roof of the proposed expanded and reconfigured SCC would rise approximately an additional 15 feet above the streetwall heights.

The proposed reconfigured and expanded SCC could incorporate varied signage that could promote the building activities and events, building and event sponsors, and civic activities at the property. Interior lighting may be seen through first floor glass panels or doors, or through walls that may be opened to the Activities Plaza or outdoor terraces. Exterior lighting for the proposed SCC would be provided to illuminate different areas of the facility and Activities Plaza.

Temporary lighting may occasionally be used for nighttime events in the Activities Plaza, including the use of spotlights to illuminate performers on the ground or stage, but the lighting would not be directed at the sky. However, exterior lighting could increase the amount of nighttime lighting in the area. Mitigation to focus light on-site to minimize spillover light and reduce lighting intensity would be imposed to reduce the impact to a less-than-significant level.

The proposed SCC project would be consistent with the vision for the City and would substantially comply with the aspirations expressed in the Central City Urban Design Guidelines (CCUDG) principles, including those for design, lighting, and glare reduction.

Based on conceptual planning studies, the proposed Hotel structure would be approximately 300 feet tall and include approximately 24 above-ground stories. The main entrance would front 15th Street and loading dock facilities would front along K Street. A proposed second level pedestrian bridge would provide access to the proposed east lobby of the SCC. The floors of the hotel tower structure would be massed toward the north and eastern perimeters of the structure.

The approximately 300-foot tall hotel building would be a highly visible structure during the day and especially at night when it would be accentuated by lighting. The hotel building would be

visible in varying degrees from J, K, L, 13th, and 15th streets, and other public locations such as the eastern side of Capitol Park and the plaza in front of the main entrance to the Memorial Auditorium.

As a result of the proposed Hotel project, the visual character of the Hotel project site would visually change, with the existing parking lot replaced with an approximately 300-foot tall hotel building. The changes would be consistent with City policy regarding urban design in the project vicinity as articulated in the 2035 General Plan and the CCUDG. While the changes in the visual character of the Hotel project site would be dramatic, the analysis demonstrates that they would not be adverse within the context of the City's articulated aesthetic values.

SCC and Hotel lighting and signage could result in brightly illuminated surfaces that could be directly visible from residential uses or other affected light-sensitive uses (e.g., pedestrians, vehicles) and could result in substantial changes to existing artificial light conditions or interfere with off-site activities. Mitigation would be imposed to reduce spillover light, reduce lighting intensity, and ensure that Hotel signage and lighting plans are reviewed and approved by the City's Urban Design Manager.

Air Quality

The proposed SCC would be consistent with the growth projections included in the City's 2035 General Plan and the Sacramento Area Council of Governments (SACOG) Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS). Air quality emissions from construction and operation of the proposed SCC could result in significant impacts. Construction emissions would affect local particulate and ozone (ROG and NO_x) concentrations, primarily due to fugitive dust sources and diesel exhaust. SCC operations would increase emissions from motor vehicle trips and on-site stationary sources. Other operational sources include fuel combustion associated with landscaping activities, space and water heating in buildings, and the use of consumer products.

The California Emission Estimator Model (CalEEMod version 2016.3.1) was used to calculate construction-related emissions of criteria air pollutants and to determine if such emissions would exceed the Sacramento Metropolitan Air Quality Management District's (SMAQMD) applicable regional significance thresholds. Criteria air pollutant and ozone precursor emissions resulting from construction emissions can be found in Appendix C1.

Construction emissions were estimated for the SCC using the methods contained in SMAQMD's Guide to Air Quality Assessment in Sacramento County. According to the SMAQMD guidance, projects that do not implement the District's Best Management Practices (BMPs) must meet a zero peak daily and annual emission threshold for PM₁₀ and PM_{2.5}. With implementation the SMAQMD's BMPs, the SMAQMD's peak daily and annual thresholds increase to 80 ppd/14.6 tons per year (tpy) of PM₁₀, and 82 ppd/15 tpy of PM_{2.5}. Projects that do not implement the District's Best Management Practices (BMPs) must meet a zero peak daily and annual emission threshold for PM₁₀ and PM_{2.5}. All construction projects within the SMAQMD are required to

implement Basic Construction Emission Control Practices to control PM10 and PM2.5.

Assuming implementation of such required practices, construction of the proposed projects would result in emissions of PM10 and PM2.5 below the SMAQMD significance thresholds. However, construction of the SCC project and construction of the SCC project and Hotel project (under both the phased and full shutdown construction schedules) would generate unmitigated NOx emissions that would exceed SMAQMD's thresholds. Consequently, construction of the proposed projects would result in a short-term significant impact due to NOx emissions. Mitigation would be required to control fugitive dust, reduce on-site exhaust emissions, and pay mitigation fees to SMAQMD for project NOx emissions that exceed the SMAQMD significance threshold.

Operation of the DSP would increase emissions of ozone precursors (ROG and NOx), PM10 and PM2.5 from vehicle trips, area sources (landscape maintenance, consumer products such as hairsprays, deodorants, and cleaning products), and energy sources (e.g., natural gas combustion for space and water heating). CalEEMod was used to estimate vehicle, area and energy use emissions associated with the SCC. The CalEEMod computer model was used to estimate operational emissions of ROG, NOx, PM10 and PM2.5 in the Baseline year (2015) for an event day (assuming a full capacity convention). Emissions of ROG, NOx, PM10, and PM2.5 would not exceed SMAQMD's significance thresholds after the implementation of operational BMPs required by applicable regulations. The SCC project is not anticipated to significantly increase the amount of diesel fueled vehicle miles traveled.

Similar to the SCC project, the SCC project and Hotel project would increase construction and operational air emissions due to demolition, excavation, construction, motor vehicle trips and onsite area and energy sources (e.g., natural gas combustion for space and water heating and landscape maintenance). The CalEEMod computer model was used to estimate construction and operational emissions of ROG, NOx, PM10, and PM2.5 in the Baseline year. Emissions of NOx would exceed SMAQMD's significance thresholds. Emissions of ROG, PM10, and PM2.5 would not exceed the applicable SMAQMD significance threshold.

A 16.4 percent reduction in NOx emissions would be achieved by simply implementing the design features proposed under the SCC project and Hotel project. However, even with achievement of the SMAQMD-required 15 percent reduction in operational mobile source emissions of NOx, emissions associated with the SCC project and Hotel project would exceed the applicable SMAQMD threshold. Thus, this impact would remain significant and unavoidable.

Biological Resources

The potential for the proposed projects to adversely change biological resources in or around the SCC and Hotel project sites is analyzed in this section with the impact analysis focusing on effects to migratory birds and tree removal.

Although the SCC and Hotel project sites are in a largely urbanized area within the downtown of Sacramento, natural and semi-natural habitats can occur within the area that provide suitable nesting habitat for migratory birds. Approximately 38 trees on and around the project sites could

be removed to accommodate project development. This includes 30 trees on and adjacent to the SCC site, primarily along the east side of 13th Street, within the Activities Plaza, and around the Panattoni Building. Approximately 8 trees would be removed on or adjacent to the Hotel site, along the K Street and 15th Street frontages. The mature trees on the project sites provide marginal nesting habitat for migratory bird species. While the project sites are situated in a highly urbanized area with constant pedestrian and traffic activity, mature trees within and adjacent to the project sites can provide perching and nesting habitat. Construction activities, such as construction noise or the removal of mature trees at the project sites, could therefore result in the abandonment or destruction of migratory bird nests. Mitigation is required to conduct tree removal activities outside of the nesting season, perform a nesting survey prior to construction, and monitor active nests on the project sites.

Sacramento City Code Chapters 12.56 provides for the removal of protected trees through a process for the removal of city trees by public projects (Sacramento City Code 12.56.040) and the tree permit process for the removal of protected trees for non-public projects (Sacramento City Code 12.56.050), through which the project applicant is required to acquire tree permits for the removal of protected trees. The conditions of tree permits are made at the discretion of directors for applicable city departments (Department of Public Works for City trees, not located in parks) or their representatives. Project applicant compliance with the conditions of the City's tree permit would constitute compliance with City Code Chapter 12.56. The City would follow all requirements under City Code 12.56.040 for the removal of protected trees for the SCC project and the project applicant for the Hotel project would comply with all requirements of the City's tree ordinance. Impacts to trees would be less than significant.

Cultural Resources

Archival research and field surveys were used to identify cultural resources in and around the project sites. Several records searches conducted in early 2017 at the North Central Information Center (NCIC) were compiled to provide coverage of the entirety of the proposed Central City Specific Plan (CCSP) area, which includes the SCC and Hotel project sites. The NCIC, at California State University, Sacramento, maintains the official California Historical Resources Information System (CHRIS) records of previous cultural resources studies and recorded cultural resources that include the project sites.

Both prehistoric and historic period archaeological resources have been documented within the vicinity of the project sites. To date, three prehistoric archeological sites have been identified within 0.5 mile of the project sites, and three historic period archaeological refuse scatters have been documented within the existing SCC footprint. Archaeological resources present on the project sites could be affected by construction activities, such as excavation and grading, which could adversely affect the physical integrity of the archaeological resource, its ability to yield important archaeological data, and/or expose Native American human remains.

The SCC project site has undergone significant ground disturbance as a result of ongoing modern construction since the 1970s. Previous construction during the 1990s expansion already disturbed

the historic ground surface (as evidence by the historic archaeological sites recorded and subsequently destroyed by construction), and further associated excavation would have impacted prehistoric deposits at or near the historic ground surface. As such, it is unlikely that intact historic, prehistoric or archaeological deposits are present within the SCC project site.

The Hotel site was historically occupied by single story commercial and industrial uses from the 1940s through 1997. Due to the age and recorded height of the building, it is unlikely that significant foundations were constructed for these buildings. The two recorded 300-gallon tanks previously on the site would not have resulted in significant additional depth of construction. Therefore, relatively undisturbed portions of the historic ground surface may be present below the anticipated fill line (approximately 12 feet). As such, there is moderate potential for historic sites dating the period prior to the building's original construction, as well as prehistoric sites at or below the fill level. The significant excavation associated with the subterranean parking garage has the potential to encounter archaeological deposits. Mitigation is required to identify procedures for encountering unanticipated discoveries, Native American resources, and human remains. Implementation of pre-construction training and accidental discovery procedures during construction would lessen anticipated impacts to prehistoric and historic-period archaeological resources, by ensuring that previously unidentified archaeological resources and human remains are protected.

Construction related project components could result in indirect effects to buildings in close proximity to the SCC project and Hotel project. Proposed construction activities, including impact pile driving, could result in vibration levels that have the potential to damage fragile buildings and structures, including those identified as eligible for the California Register or locally-listed properties and therefore qualifying as historical resources. Project activities in close proximity to St. Paul's Episcopal Church, the Maydestone Apartment Building, Westerguard Auto Repair Building, Pacific Telephone Inland Division Headquarters building (1414 K Street), and the Public Market/Sheraton Grand Hotel have the potential to cause an indirect impact to the historical resources through vibration occurring during demolition of the Panattoni Building and/or during construction of the improvements to the Convention Center Building. Due to the distance from potential SCC pile driving, none of the historic structures near the SCC would be exposed to vibration levels that would result in building damage. However, foundation pile driving within 47 feet of historic and some older buildings could result in vibration levels that could damage the historic structures. The only historic building located within 47 feet of the Hotel site is the 1414 K Street building, located adjacent to the Hotel project site western boundary. Depending on the final foundation design for the proposed Hotel project, impact pile driving could occur within just a few feet of the adjacent historic building. At this distance, the 1414 K Street building could be exposed to vibration levels from impact pile driving that would result in a significant impact. Mitigation for Hotel construction would be required to prepare a Vibration Reduction Plan to identify construction techniques that avoid exceeding the vibration threshold for historic buildings and repair damage to the 1414 K Street building if it occurs during Hotel construction.

Once constructed, the SCC project and Hotel project would alter the character of the project sites by replacing an existing or constructing a new building. This change would not substantially alter the context in which surrounding historic resources are situated due to the highly urban nature of the area. The proposed SCC project and Hotel project would change the setting of nearby historic buildings, but would not diminish the buildings' ability to convey their significance because the buildings' setting has been previously altered with the demolition of adjacent buildings in the 1990s, and with construction of the SCC in the 1970s and expansion in the 1990s. The buildings' physical characteristics that convey historic significance would not be altered in an adverse manner.

Energy Demand and Conservation

The analysis presented in the Energy Demand and Conservation section complies with the requirement in Appendix F of the CEQA Guidelines for an evaluation of a proposed projects' potential energy implications and encourages measures to avoid or reduce the inefficient, wasteful, or unnecessary consumption of energy. The analysis estimates construction and operational demand for electricity, natural gas, and transportation fuels.

The analysis concludes that energy consumption, including electricity, natural gas, and fuel, for construction and operation of the proposed SCC project and Hotel project would be accomplished without the addition of energy infrastructure that could result in adverse environmental effects. In view of the above, impacts related to energy consumption would be less than significant.

The 2035 General Plan contains several Climate Action Plan Policies and Programs that are intended and designed to reduce GHG emissions and lower energy consumption. Compact development patterns; developing sustainable buildings that incorporate a "whole system" approach to design and construction that consume less energy, water and other resources, facilitate natural ventilation, use daylight effectively; use of renewable energy systems; construction of LEED certified or equivalent buildings; and other building and design measures are outlined in general plan policies as ways for new buildings or retrofits to conserve energy. General Plan policy U 6.1.4 requires City facilities to consume 25 percent less energy by 2030 compared to the baseline year of 2005. The SCC would be designed to the Green Building Council's LEED Silver certification or equivalent and would meet all applicable greenhouse gas reducing strategies found in the 2016 Internal Operations Climate Action Plan (2016 IO CAP) relevant to the SCC project. Because the proposed Hotel project is not yet designed, mitigation would be required to ensure the Hotel project meets Title 24 standards, thereby demonstrating consistency with the City's CAP and not resulting in a wasteful or unnecessary use of energy.

Global Climate Change

The assessment of effects on global climate change focuses on the SCC project's consistency with the City's 2016 IO CAP and the Hotel project's consistency with the City of Sacramento's Climate Action Plan (CAP).

The City of Sacramento has adopted the 2016 IO CAP, which identifies 11 strategies focused on reducing GHG emission from the consumption of energy in buildings and facilities, fuel combustion in vehicle fleet, and decomposing waste in City-operated landfills. The City of Sacramento 2035 General Plan Update Policy ER 6.1.6 established the GHG reducing targets found in the 2016 IO CAP, which include reducing internal operations GHG emissions by 22 percent below 2005 levels by 2020 and 83 percent below 2005 levels by 2050. The construction of the proposed reconfiguration and expansion of the SCC would meet the latest Building Council's LEED Silver certification or equivalent and 25 percent better water reduction than CALGreen baseline. Replacing and upgrading the SCC as a LEED certified building would meet the City's energy retrofit requirements. Therefore, by meeting the Building Council's LEED Silver certification or equivalent and committing to a water consumption reduction of 25 percent below CALGreen baseline, the proposed reconfiguration and expansion of the SCC would meet all applicable GHG reducing strategies found in the 2016 IO CAP relevant to the project.

The evaluation of the Hotel project's consistency with the CAP uses the City's CAP Consistency Checklist. The Hotel project would be substantially consistent with the land use and urban form designation, allowable floor area ratio (FAR) and/or density standards in the City's 2035 General Plan. The Hotel project would be consistent with the Pedestrian Master Plan and the Bikeway Master Plan, and would comply with CALGreen Tier 1 water efficiency standards. The proposed Hotel project would be designed in compliance with the 2016 Title 24 Building Energy Efficiency Standards. The proposed projects would be consistent with all six applicable CAP consistency questions. As established in CEQA Guidelines section 15183.5(b), because the City has determined that these projects would be consistent with the City's CAP, the projects' contribution to cumulative GHG emissions and related global climate change is less than considerable, and the impact is considered less than significant.

Hydrology and Water Quality

Potential effects to hydrologic resources in the DSP area that are addressed in this EIR include water quality, groundwater resources, and drainage. Site characteristics such as regional and local drainage, flooding conditions, and water quality are described. The potential of the proposed projects to degrade water quality or adversely affect groundwater resources is evaluated. Potential effects to water quality from the proposed projects would be avoided through required compliance with a complex set of permits, codes, and other regulatory plans overseen by the City, Sacramento County, the Sacramento County Regional Sanitation District, and the Central Valley Regional Water Quality Control Board. The proposed projects would be required to comply with a number of regulations designed to reduce or eliminate construction-related water quality effects. Approvals would need to be provided for coverage under the National Pollutant Discharge Elimination System (NPDES) Construction General Permit and the erosion and sediment control plan, at which time construction projects would commence, and include all Best Management Practices (BMPs) outlined in the erosion and sediment control plan and stormwater pollution prevention plan (SWPPP). BMPs may consist of a wide variety of measures taken to reduce pollutants in stormwater and other non-point source runoff. The City would complete inspections

to verify that the erosion and sediment control plan and SWPPP are implemented correctly. The City would also require erosion and sediment control plans to include BMPs to minimize the potential for, and effects from, spills of hazardous, toxic, or petroleum substances during construction activities for all contractors. Implementation of these measures would comply with state and federal water quality regulations. These regulatory instruments are designed to ensure that construction projects result in water quality discharges that are not in violation of State Water Resources Control Board (SWRCB) objectives or City ordinances.

Project construction would require dewatering for the installation of below ground infrastructure and utilities. Dewatering activities would be temporary and take place in an area that is hydraulically connected to the Sacramento River and American River. The groundwater withdrawn during dewatering would be very small relative to the calculated groundwater storage capacity of the South American Subbasin (4,816,000 acre-feet). construction dewatering discharges may exceed the 7-day threshold, beyond which, the SCC project and the Hotel project representatives would be required to establish a memorandum of understanding (MOU) with the City Department of Utilities (DOU). Because most of the SCC utilities or infrastructure would not be deep enough to reach groundwater (between 16 and 20 feet below ground surface), the volume of dewatering would be minimal and not sufficient to substantially deplete groundwater supplies in the basin. The proposed Hotel project would require daily dewatering during construction of the subterranean parking, infrastructure, and utilities. Because these below ground structures would be waterproofed, dewatering would not be required after they are built. Groundwater recharge does not occur currently at the project sites with the exception of relatively small areas of landscaping where very minimal infiltration occurs. Therefore, project demolition, excavation, construction, and landscaping would not interfere with groundwater recharge.

Noise and Vibration

The current ambient noise environment throughout the Central is primarily the result of vehicular traffic along Interstate-5 (I-5), Business 80, Highway 50 and arterial roadways. Historic age buildings, eligible historic structures, listed historic structures may be sensitive receptors to vibration impacts.

Construction noise impacts are assessed relative to the increase in noise levels that could result from the operation of specified construction equipment compared to existing noise level conditions. Analysis of the proposed projects' temporary construction noise effects is based on construction equipment typically used for urban development projects. Construction of the SCC and Hotel projects could require the use of an impact pile driver to install deep foundations and to drive precast piles. The nearest sensitive land uses to the SCC and Hotel sites include St. Paul's Episcopal Church (located approximately 20 feet east of the SCC), and the Maydestone apartments (located approximately 125 feet east of the SCC, across 15th Street). Although construction activities are reasonably assumed to occur within the City of Sacramento's construction exempt hours, depending on location relative to sensitive receptors construction noise levels generated during building construction and potential impact pile driving, could

expose nearby sensitive land uses to noise levels that would be considered a substantial temporary increase over the existing ambient noise levels, resulting in a potentially significant impact. Mitigation is included to reduce exterior and interior construction-related noise at adjacent buildings.

Most of the long-term noise that would result due to the implementation of the proposed SCC and Hotel projects would primarily be traffic-generated. The proposed SCC and Hotel projects would contribute to an increase in local traffic volumes, resulting in higher traffic noise levels along local roadways. However, future traffic increases along local roadway segments associated with the operation of the proposed projects would not expose existing sensitive land uses to an increase in traffic noise that would exceed the City of Sacramento General Plan Policy EC 3.1.2.

The proposed projects would be located near existing sensitive land uses. These sensitive receptors could be exposed to loading dock and HVAC noise, but only to a less-than-significant level.

The proposed reconfiguration and expansion of the SCC would result in a new Activities Plaza located on the southwest side of the SCC building. Amplified outdoor noise is not anticipated at the Hotel site.

The nearest sensitive land uses to the Activities Plaza include the St. Paul's Episcopal Church (located approximately 640 feet northeast of the Activities Plaza), and the Maydestone apartments (located approximately 750 feet northeast of the Activities Plaza, across 15th Street). As shown in Figure 4.8-3, both the St. Paul's Episcopal Church and Maydestone apartments would be located within the 65 dBA Leq noise contour of the Activities Plaza and would be exposed to amplified noise levels that would exceed the City's exterior noise standard. Mitigation is included to reduce the impact from amplified noise.

Transportation

The analysis of transportation and circulation effects of the proposed projects involves an assessment of potential effects on roadways, transit facilities, and bicycle and pedestrian facilities.

The transportation analysis determined that the proposed projects would cause some intersections in the City of Sacramento to have degraded operating conditions, but because LOS F operations are considered acceptable within the City's Core Area and the projects would not substantially degrade corridor-wide operations (i.e., would not be detrimental to other General Plan circulation policies), the impact would be less than significant.

The proposed projects could cause transit delays around the SCC and Hotel project sites. However, an Event Transportation Management Plan (ETMP) to manage traffic during large events held at the SCC and Hotel would diminish queuing, reduce delay, and improve travel times, particularly along J Street.

The proposed SCC project would include the construction of a new curbside passenger loading zone on the west side of 15th Street between J Street and K Street. A bus stop serving YoloBus, Roseville Transit, Yuba Sutter Transit, and other public transit service providers is currently present at the location of the proposed loading zone. The construction of the loading zone would require the removal/relocation of the existing bus stop. The nearest bus stops serving the same routes are approximately two to three blocks away from this location, which would require existing passengers to walk a longer distance to access transit service. Mitigation would be required to coordinate with transit providers and relocate the bus stop prior to removal of the existing bus stop.

The SCC and Hotel project sites are located near numerous existing bicycle facilities. The proposed project would not alter existing bicycle facilities within the vicinity of the project site. However, by virtue of adding substantial levels of pedestrian traffic on K Street at 13th Street, it could cause conflicts with bicyclists who use this Class I facility and street crossing. A Hotel truck loading area and/or a garage driveway egress onto eastbound K Street approaching 15th Street would increase vehicular travel on this street, which has a Class III on-street bike route in the eastbound direction. Therefore, increased conflicts between bicyclists and vehicles on K Street at 15th Street could occur. Implementation of an ETMP, maintaining clear paths of bicycle travel, and designing the Hotel driveway to reduce conflicts would reduce the impact to a less-than-significant level.

Utilities and Service Systems

The analysis focused on effects to the City's combined sewer system (CSS) and the demand for wastewater treatment. Excavation during construction of the SCC and Hotel could encounter groundwater, which would require temporary dewatering. Groundwater extracted during construction would be discharged into the CSS. During dry periods and minor storm events, these systems would have sufficient capacity to convey dewatering flows. However, in the event that construction period dewatering occurs during a major storm event, sufficient storm drain capacity in the CSS might not be available to support dewatering discharges and existing capacity could be exceeded. The proposed projects are expected to increase the sanitary sewer flows due to the increases in the square footage convention space, events, and attendance. During wet weather, wastewater in the CSS is commingled with stormwater. Because the majority of the project sites are currently comprised of impermeable surfaces, the proposed projects would not increase impermeable surfaces such that there would be an increase in stormwater runoff compared to current conditions. However, additional wastewater flows into the CSS could exceed existing capacity during heavy storm events. Mitigation imposed would require the implementation of measures to manage wastewater, drainage and dewatered groundwater flows in a manner that would not exceed existing capacity of the CSS.

The proposed SCC and Hotel would increase the amount of wastewater requiring treatment at the SRWWTP, but would not exceed the current excess capacity at the SRWWTP. Thus, no additional

wastewater treatment facilities would need to be constructed to accommodate the increase in wastewater from the proposed projects.

Significant and Unavoidable Environmental Effects

Throughout this EIR, many 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 additional 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 key project-specific unavoidable significant environmental impacts include those listed below.

Project-Specific Significant and Unavoidable Impacts

Impact 4.2-3: The proposed project would result in long-term (operational) emissions of NO_x, ROG, PM₁₀, or PM_{2.5}. (Hotel)

Impact 4.4-3: Implementation of the proposed projects, in combination with other cumulative development, could contribute to the cumulative loss or alteration of paleontological resources, or archaeological resources, including human remains or Tribal Cultural Resources. (SCC/Hotel)

Impact 4.8-1: Construction of the proposed projects could generate noise that would conflict with City standards or result in substantial temporary or periodic increase in ambient noise levels. (SCC/Hotel)

Impact 4.8-5: Construction of the proposed projects could expose existing and/or planned buildings, and persons within, to vibration that could disturb people and damage buildings. (SCC/Hotel)

Cumulative Significant and Unavoidable Impacts

Impact 4.2-7: The proposed project would contribute to cumulative increases in long-term (operational) emissions of NO_x, ROG, PM₁₀, and PM_{2.5}. (SCC/Hotel)

Impact 4.8-6: The proposed projects would result in exposure of people to cumulative increases in construction noise levels. (SCC/Hotel)

Impact 4.8-7: The proposed projects would contribute to cumulative construction that could expose existing and/or planned buildings, and persons within, to significant vibration. (SCC/Hotel)

Alternatives to the Proposed Projects

Pursuant to State CEQA Guidelines, this EIR must present a discussion of a reasonable range of alternatives to the proposed projects. The alternatives should be designed to feasibly accomplish most of the basic objectives of the proposed projects while looking to avoid or substantially lessen one or more of the significant effects. The feasibility of an alternative is determined by the lead agency based on a variety of factors including, but not limited to, site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries, and site accessibility and control.

The alternatives evaluated in the EIR are described below. Of the alternatives considered for the proposed SCC project and proposed Hotel project, there were a number of alternatives found to be overtly infeasible or worthy of dismissal prior to further consideration that are also analyzed in Chapter 6 of this EIR. The alternatives considered in the EIR include:

SCC Project and Hotel Project

- SCC and Hotel Alternative 1: No SCC Project or Hotel Project Alternative

SCC Project

- SCC Alternative 1: No Project Alternative
- SCC Alternative 2: Smaller SCC Expansion
- SCC Alternative 3: Larger SCC Expansion
- SCC Alternative 4: No Panattoni Building Demolition/No East Lobby

Hotel Project

- Hotel Alternative 1: No Hotel Alternative
- Hotel Alternative 2: Smaller Hotel Alternative
- Hotel Alternative 3: No On-Site Hotel Parking Alternative

SCC and Hotel Alternative 1: No SCC Project or Hotel Project Alternative

Under the SCC and Hotel Alternative 1: No SCC Project or Hotel Project Alternative, SCC would not be renovated or expanded and the Hotel project would be constructed. The SCC would continue to operate at its current capacity. No improvements would be made to the SCC beyond standard maintenance and minor upgrades, so the physical and operational capacity of the SCC would not change, and service facilities and area amenities would be maintained but not materially expanded or improved. the proposed 15th/K Street Hotel would not be developed, and the project site would continue to operate as a commercial surface parking lot.

This alternative is the same as the Hotel Alternative 1: No Hotel Alternative, and a comparative analysis of environmental effects and the alternative's relationship to project objectives are discussed under Hotel Alternative 1.

SCC Alternative 1: No SCC Project

Under SCC Alternative 1, the No SCC Project Alternative, the SCC would not be renovated or expanded. Under this alternative operational capacity for the SCC, including event capacity and frequency, would remain as existing and the facility would be operated consistent with current practice. Under the No SCC Project Alternative, the City Council would not approve any project, and none of the mitigation measures identified in this Draft EIR would be implemented. No demolition would occur because the existing SCC and Panattoni building would be retained.

Under SCC Alternative 1, the SCC would continue to operate at its current capacity. No improvements would be made to the SCC beyond standard maintenance and minor upgrades, so the physical and operational capacity of the SCC would not change, and service facilities and area amenities would be maintained but not materially expanded or improved.

Under SCC Alternative 1, the proposed Hotel project, as a separate cumulative project, would be developed as proposed on the adjacent parking lot site, but a second-level pedestrian bridge connecting the hotel to the SCC would not be constructed.

SCC Alternative 2: Smaller SCC Expansion Alternative

The Smaller SCC Expansion Alternative (SCC Alternative 2) would reduce the scale of the SCC expansion and renovation, relative to the proposed SCC project. Under SCC Alternative 2, the SCC would be subject to major renovation of the existing facility which would expand the existing meeting spaces, develop a new east lobby and improve food service.

The first level of the renovated SCC under SCC Alternative 2 would include the following facility upgrades:

- Moved/expanded kitchen;
- Expanded/renovated western exhibit hall;
- Added service connections to the expanded western exhibit hall;
- Expanded pre-function spaces along the western and northern sides of the western exhibit hall;
- New vertical circulation;
- A new 9,637 sf east lobby;
- New food service outlets on the north and western sides of the facility; and
- Expanded west lobby.

The second level of the renovated SCC under SCC Alternative 2 would include a renovation of the existing meeting space at the southwestern end of the facility.

- Renovations to the 3rd floor of the SCC, under SCC Alternative 2 would include the following:
- New meeting spaces;
- New connector space;
- New vertical circulation;
- Renovation of the ballroom/meeting space; and
- New administrative space on the upper floor of the Panattoni building.

Under SCC Alternative 2 the SCC renovation would not require demolition of the western half of the SCC or demolition of the Panattoni building. In addition, much of the 2nd level exhibit areas would remain as is. There would be no changes to the SCC loading areas. On the western side of the SCC the expanded pre-function areas on the north and west sides of the facility and the expanded/new west lobby would extend the SCC footprint closer to J and 13th streets.

SCC Alternative 3: Larger SCC Expansion Alternative

The Larger SCC Expansion Alternative (SCC Alternative 3) would expand the scope and scale of the SCC expansion and renovation relative to the proposed SCC project. Under SCC Alternative 3, the SCC project would include demolition of the western half of the SCC and the Panattoni building, similar to the proposed SCC project. SCC Alternative 3 would, in addition, include renovation and expansion of the existing subgrade level, to include a new storage area and a new shared central plant.

The first level of the renovated SCC under SCC Alternative 3 would include the following facility upgrades:

- A new 62,780 sf exhibit hall in the northwest corner of the facility;
- A new 37,927 sf ballroom/multi-use room, located south of the proposed northwest exhibit hall. The footprint of the new ballroom would be in place of existing west lobby, service, and office facilities and the landscaped walkway between the existing SCC and the Community Center Theater, to the south;
- A 6,600 sf flex hall between the new exhibit hall and new ballroom/multi-use room;
- Pre-function space along the western and northern perimeters of the renovated west SCC;
- New 11,250 sf east lobby on the site of the existing Panattoni building; and
- New west lobby in the proposed pre-function space to the west of the new ballroom.

The second level of the expanded and renovated SCC under SCC Alternative 3 would include the following facility upgrades:

- 18,000 sf new 2nd-level west meeting space;
- A new 40,000 sf 2nd level ballroom above the proposed new 1st level ballroom/multi-use room;
- 9,757 sf of new meeting space constructed in place of the existing east terrace,
- Renovated small meeting spaces on the 2nd level;
- 6,033 sf administrative area above the new east lobby; and
- Elevated pedestrian bridge connecting the upper floor of the SCC east lobby to an above-ground-level floor of the proposed 15th/K Street hotel.

As with the proposed SCC project, under SCC Alternative 3 the SCC renovation would require demolition of the western half of the SCC and demolition of the Panattoni building. In addition, much of the 2nd level exhibit and meeting areas would be renovated or replaced. Proposed changes to the SCC loading areas would be similar to changes proposed for the SCC expansion and renovation, and as with the proposed SCC project, on the western side of the SCC the expanded pre-function areas on the north and west sides of the facility and the expanded/new west lobby would extend the SCC footprint closer to J and 13th streets.

SCC Alternative 4: No East Lobby Alternative

SCC Alternative 4 would implement the proposed SCC project with the exception that it would not include demolition of the Panattoni Building and construction of a new east lobby in its place. Under SCC Alternative 4, the Panattoni building would remain and would continue to function as administrative offices for the SCC. Because the east lobby would not be developed for the SCC, the pedestrian bridge between the SCC and the proposed 15th/K Street Hotel could not be constructed if the separate Hotel project is approved. Relative to the proposed SCC project, under SCC Alternative 4 the SCC would have a similarly sized structure, but would not have a true east lobby.

Hotel Alternative 1: No Hotel Alternative

Under Hotel Alternative 1, the proposed 15th/K Street Hotel would not be developed, and the project site would continue to operate as a commercial surface parking lot. Under the No Hotel Alternative, the City Council would not approve any project, and none of the mitigation measures identified in this Draft EIR would be implemented.

Under Hotel Alternative 1, the SCC would continue to operate at its current capacity. No improvements would be made to the SCC beyond standard maintenance and minor upgrades, so the physical and operational capacity of the SCC would not change, and service facilities and area amenities would be maintained but not materially expanded or improved.

Hotel Alternative 2: Smaller Hotel Alternative

Hotel Alternative 2 would include construction and operation of a smaller hotel on the 15th/K Street Hotel project site. Under Hotel Alternative 2, the 15th/K Street Hotel would be made smaller by reducing the number of rooms to 200, spread across approximately 11 levels, and reducing the conference/meeting/ballroom space by half to 35,000 sf, spread across approximately two levels. The smaller hotel would be anticipated to have approximately 13 aboveground levels, 11 fewer levels than would be included in the proposed Hotel project, but would have a similar footprint and would include other proposed components, including two floors of subgrade parking and an above-ground pedestrian bridge connection to the proposed SCC east lobby.

Hotel Alternative 3: No On-Site Hotel Parking Alternative

Hotel Alternative 3 would include construction of all elements of the proposed Hotel project with the exception of the two subgrade parking levels, which would not be included. Under Hotel Alternative 3, the hotel would not include on-site parking and there would be no subgrade floors. Any subsurface work would be limited to building foundation and utility work.

Hotel and event capacity at the proposed hotel would remain as proposed, however event attendees and hotel guests would be required to park offsite or utilize other forms of transportation. Similar to the Sheraton Grand hotel in Downtown Sacramento, the proposed hotel under Hotel Alternative 3 would be anticipated to lease parking spaces in nearby parking garages.

Environmentally Superior Alternative

An EIR is required to identify the environmentally superior alternative from among the range of reasonable alternatives that are evaluated. Section 15126.6 (e)(2) of the State CEQA Guidelines requires that an environmentally superior alternative be designated and states that if the environmentally superior alternative is the No Project alternative, the EIR also is required to identify an environmentally superior alternative among the other alternatives.

From the alternatives evaluated for the proposed SCC project in this EIR, the environmentally superior alternative would be SCC Alternative 1 – the No Project Alternative. This alternative would avoid all significant impacts associated with the proposed SCC project.

Among the other alternatives to the proposed SCC project, SCC Alternative 2, the Smaller SCC Alternative, would have the fewest adverse impacts because it would have less square footage and fewer annual and overlapping events. As described, SCC Alternative 2 would have similar construction intensity but require a much shorter construction duration which would lessen the severity of a number of impacts that would be influenced by the amount of construction. In addition, the lower operational capacity of the SCC, relative to the proposed SCC project, would lessen the severity of impacts from SCC operations as they would be influenced by the volume of visitors to the Convention Center. SCC Alternative 2 would lessen the severity of significant and unavoidable impacts from the proposed SCC project.

From the range of alternatives evaluated for the proposed Hotel project, the environmentally superior alternative would be Hotel Alternative 1 – the No Hotel Alternative, which is the “No Project” Alternative for the proposed Hotel project. This alternative would avoid all significant impacts associated with the proposed Hotel project.

Among the other alternatives to the proposed Hotel project, Hotel Alternative 2, the Smaller Hotel Alternative, would have the fewest adverse impacts because it would require a shorter construction duration, consume fewer resources and raw materials, and have less severe operational impacts. Hotel Alternative 2 would lessen the severity of significant and unavoidable impacts from the proposed Hotel project.

Summary Table

Table S-3 (Summary of Impacts and Mitigation Measures), has been organized to correspond with the environmental issues discussed in Chapter 4. The summary table is arranged in four columns:

1. Environmental impacts (“Impact”).
2. Level of significance without mitigation (“Significance Before Mitigation”).
3. Mitigation measures (“Mitigation Measure”).
4. The level of significance after implementation of mitigation measures (“Significance After Mitigation”).

If an impact is determined to be significant or potentially significant, mitigation measures are identified, where appropriate. More than one mitigation measure may be required to reduce the impact to a less-than-significant level. This EIR assumes that all applicable plans, policies, and regulations would be implemented, including, but not necessarily limited to, City General Plan policies, laws, and requirements or recommendations of the City of Sacramento. Applicable plans, policies, and regulations are identified and described in the Regulatory Setting of each issue area and within the relevant impact analysis. A description of the organization of the environmental analysis, as well as key foundational assumptions regarding the approach to the analysis, is provided in Section 4.0, Introduction to the Analysis.

**TABLE S-3
SUMMARY OF IMPACTS AND MITIGATION MEASURES**

Impact	Significance Before Mitigation		Mitigation Measures	Significance After Mitigation	
	SCC	SCC and HOTEL		SCC	SCC and HOTEL
4.1 Aesthetics, Light and Glare					
4.1-1: The proposed projects could substantially degrade the existing visual character or quality of the site and its surroundings.	LTS	LTS	None required.	NA	NA
4.1-2: The proposed projects could create a new source of substantial light.	PS	PS	<p>Mitigation Measure 4.1-2(a) (SCC/Hotel) Exterior lighting included shall incorporate fixtures and light sources that focus light on-site to minimize spillover light.</p> <p>Mitigation Measure 4.1-2(b) (Hotel) The hotel project applicant shall prepare and submit a conceptual signage and lighting design plan for review and approval by the City's Urban Design Manager. The City shall review and monitor the installation and testing of the displays, in order to ensure compliance with all City lighting regulations and these mitigation measures.</p> <p>Mitigation Measure 4.1-2(c) (SCC) Prior to issuance of a building permit for the SCC, the City shall develop plans and specifications for the proposed lighting displays and establish maximum luminance levels for the displays subject to review and approval of the City's Urban Design Manager. The City shall review and monitor the installation and testing of the displays, in order to ensure compliance with all City lighting regulations and these mitigation measures.</p> <p>Mitigation Measure 4.1-2(d) (SCC/Hotel) Project lighting shall not cause more than two foot-candles of lighting intensity or direct glare from the light source at any residential property.</p>	LTS	LTS
4.1-3: The proposed projects could create a new source of glare.	LTS	LTS	None required.	NA	NA
4.1-4: The proposed projects could contribute to substantial cumulative degradation of the existing visual character or quality in the vicinity.	LTS	LTS	None required.	NA	NA
4.1-5: The proposed projects could contribute to cumulative sources of substantial light in the area.	LTS	LTS	None required.	NA	NA
4.1-6: The proposed projects could contribute to cumulative sources of glare.	LTS	LTS	None required.	NA	NA
4.2 Air Quality					
4.2-1: Implementation of the proposed projects could conflict with or obstruct implementation of an applicable air quality plan.	LTS	LTS	<p>Mitigation Measure 4.2-1 (SCC/Hotel) The project applicant shall implement the emission reduction strategies contained in the SCC project and Hotel project AQMP (see Appendix C2), or other strategies which achieve equivalent reductions, as approved by the SMAQMD, in order to achieve a minimum 16.4 percent reduction in NO_x. Endorsement of the AQMP by the SMAQMD shall be obtained prior to issuance of building permits. Documentation confirming implementation of the AQMP shall be provided to the SMAQMD and the City of Sacramento prior to issuance of occupancy permits.</p>	LTS	LTS
4.2-2: Construction of the proposed projects would result in short-term emissions of NOX, PM10, and PM2.5.	PS	PS	<p>Mitigation Measure 4.2-2(a) (SCC/Hotel) The City shall require all construction plans to include the following required SMAQMD Basic Construction Emission Control Practices:</p> <ul style="list-style-type: none"> Water all exposed surfaces two times daily. Exposed surfaces include, but are not limited to soil piles, graded areas, unpaved parking areas, staging areas, and access roads. Cover or maintain at least two feet of free board space on haul trucks transporting soil, sand, or other loose material on the site. Any haul trucks that would be traveling along freeways or major roadways shall be covered. Use wet power vacuum street sweepers to remove any visible track-out mud or dirt onto adjacent public roads at least once a day. Use of dry power sweeping is prohibited. Limit vehicle speeds on unpaved roads to 15 miles per hour (mph). Pave all roadways, driveways, sidewalks, parking lots as soon as possible. In addition, building pads shall be laid immediately after grading unless seeding or soil binders are used. Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes (as required by the state airborne toxics control measure [Title 13, Section 2485 of the California Code of Regulations]). Provide clear signage that posts this requirement for workers at the entrances to the site. Maintain all construction equipment in proper working condition according to manufacturer's specifications. The equipment shall be checked by a certified mechanic and determine to be running in proper condition before it is operated. 	LTS	LTS

LTS = less than significant; NA = Not applicable; NI = no impact; PS = potentially significant; SU = significant and unavoidable.

Impact	Significance Before Mitigation		Mitigation Measures	Significance After Mitigation	
	SCC	SCC and HOTEL		SCC	SCC and HOTEL
			<p>Mitigation Measure 4.2-2(b) (SCC/Hotel) The City shall require all construction plans to include the following SMAQMD Enhanced Exhaust Control Practices:</p> <ul style="list-style-type: none"> Provide a comprehensive inventory of all off-road construction equipment, equal to or greater than 50 horsepower, that will be used an aggregate of 40 or more hours during any portion of the proposed project to the City and the SMAQMD. The inventory shall include the horsepower rating, engine model year, and projected hours of use for each piece of equipment. The construction contractor shall provide the anticipated construction timeline including start date, and name and phone number of the project manager and on-site foreman. This information shall be submitted at least four business days prior to the use of subject heavy-duty off-road equipment. The inventory shall be updated and submitted monthly throughout the duration of construction, except that an inventory shall not be required for any 30-day period in which no construction activity occurs. Provide a plan in conjunction with the equipment inventory, approved by the SMAQMD, demonstrating that the heavy-duty (50 horsepower or more) off-road vehicles to be used in the construction project, including owned, leased, and subcontractor vehicles, will achieve a project wide fleet-average 20 percent NOx reduction and 45 percent particulate reduction compared to the most recent CARB fleet average. Acceptable options for reducing emissions may include use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, and/or other options as they become available. Emissions from all off-road diesel powered equipment used on the project site shall not exceed 40 percent opacity for more than three minutes in any one hour. Any equipment found to exceed 40 percent opacity (or Ringelmann 2.0) shall be repaired immediately, and the City and SMAQMD shall be notified within 48 hours of identification of non-compliant equipment. A visual survey of all in-operation equipment shall be made at least weekly, and a monthly summary of the visual survey results shall be submitted throughout the duration of the project, except that the monthly summary shall not be required for any 30-day period in which no construction activity occurs. The monthly summary shall include the quantity and type of vehicles surveyed as well as the dates of each survey. The SMAQMD and/or other officials may conduct periodic site inspections to determine compliance. Nothing in this measure shall supersede other SMAQMD or state rules or regulations. If at the time of granting of each building permit, the SMAQMD has adopted a more restrictive regulation applicable to construction emissions, the City may completely or partially replace this mitigation with compliance with the new regulation. Consultation with the SMAQMD prior to construction will be necessary to make this determination. <p>Mitigation Measure 4.2-2(c) (SCC/Hotel) The City shall require grading or improvement plans to include the following SMAQMD Fugitive Dust Control Practices:</p> <ul style="list-style-type: none"> Water exposed soil with adequate frequency for continued moist soil. Suspend excavation, grading, and/or demolition activity when wind speeds exceed 20 mph. Install wind breaks (e.g., solid fencing) on windward side(s) of construction areas. Install wheel washers for all exiting trucks, or wash off all trucks and equipment leaving the site. Treat site accesses to a distance of 100 feet from the paved road with a 6 to 12-inch layer of wood chips, mulch, or gravel to reduce generation of road dust and road dust carryout onto public roads. 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 phone number of the District shall also be visible to ensure compliance. <p>Mitigation Measure 4.2-2(d) (SCC/Hotel) Prior to the issuance of a building permit, developers shall quantify the construction emissions of NO_x. The City shall require all construction plans to include the following SMAQMD off-site fee mitigation:</p> <ul style="list-style-type: none"> The project applicant shall pay into the SMAQMD's construction mitigation fund to offset construction-generated emissions of NO_x that exceed SMAQMD's daily emission threshold of 85 ppd. The project applicants shall coordinate with the SMAQMD for payment of fees into the Heavy-Duty Low-Emission Vehicle Program designed to reduce construction related emissions within the region. Fees shall be paid based upon the applicable current SMAQMD Fee. The applicants shall keep track of actual equipment use and their NO_x emissions so that mitigation fees can be adjusted accordingly for payment to the SMAQMD. 		
4.2-3: The proposed projects would result in long-term (operational) emissions of NO _x , ROG, PM10, or PM2.5.	LTS	PS	<p>Mitigation Measure 4.2-3 (SCC/Hotel) Implement Mitigation Measure 4.2-1. An AQMP has been prepared for the SCC project and Hotel project, demonstrating that the SCC project and Hotel project can achieve SMAQMD's required 15 percent reduction in ozone precursor emissions from transportation sources. Consistent with SMAQMD's CEQA Guidance, no further mitigation is required.</p>	LTS	SU
4.2-4: Implementation of the proposed projects could result in a significant increase in CO concentrations.	LTS	LTS	None required.	NA	NA
4.2-5: Implementation of the proposed projects could result in short-term and long-term exposure to Toxic Air Contaminants (TACs).	LTS	LTS	None required.	NA	NA
4.2-6: Implementation of the proposed projects would contribute to cumulative increases in short-term (construction) emissions.	PS	PS	<p>Mitigation Measure 4.2-6 (SCC/Hotel) Implement Mitigation Measure 4.2-2.</p>	LTS	LTS
4.2-7: The proposed projects would contribute to cumulative increases in long-term (operational) emissions of NO _x , ROG, PM10, and PM2.5.	PS	PS	<p>Mitigation Measure 4.2-7 (SCC/Hotel) Implement Mitigation Measure 4.2-1. An AQMP has been prepared for the SCC project and Hotel project, demonstrating that the SCC project and Hotel project can achieve SMAQMD's required 15 percent reduction in ozone precursor emissions from transportation sources. Consistent with SMAQMD's CEQA Guidance, no further mitigation is required.</p>	SU	SU
4.2-8: The proposed projects would contribute to cumulative increases in CO concentrations.	LTS	LTS	None required.	NA	NA

LTS = less than significant; NA = Not applicable; NI = no impact; PS = potentially significant; S = significant; SU = significant and unavoidable.

Impact	Significance Before Mitigation		Mitigation Measures	Significance After Mitigation	
	SCC	SCC and HOTEL		SCC	SCC and HOTEL
4.2-9: Implementation of the proposed projects would contribute to cumulative increases in short- and long-term exposures to Toxic Air Contaminants.	LTS	LTS	None required.	NA	NA
4.3 Biological Resources					
4.3-1: The proposed projects could disturb nesting migratory birds.	PS	PS	<p>Mitigation Measure 4.3-1 (SCC/Hotel)</p> <p>The project applicant shall conduct any tree removal activities required for project construction outside of the migratory bird breeding season (February 1 through August 31) where feasible. For any construction activities that will occur between February 1 and August 31, the applicant shall conduct preconstruction surveys in suitable nesting habitat within 50 feet of the construction area for nesting migratory birds. Surveys shall be conducted by a qualified biologist (one experienced with bird surveys). In addition, all trees slated for removal during the nesting season shall be surveyed by a qualified biologist no more than 48-hours before removal to ensure that no nesting birds are occupying the tree.</p> <p>If active nests are found during the survey, the applicant shall implement mitigation measures to ensure that the species will not be adversely affected, which would include establishing a no-work buffer zone (subject to conditional work within the buffer, as described in sub-measure (b), below), as approved by CDFW, around the active nest.</p> <p>Measures may include, but would not be limited to:</p> <ul style="list-style-type: none"> a) For migratory birds, a no-work buffer zone shall be established, and approved by CDFW, around the active nest. The no-work buffer may vary depending on species and site specific conditions as approved by CDFW. b) Depending on conditions specific to each nest, and the relative location and rate of construction activities, it may be feasible for construction to occur as planned within the buffer without impacting the breeding effort. In this case (to be determined on an individual basis, in consultation with the City and CDFW), the nest(s) shall be monitored by a qualified biologist during construction within the buffer. If, in the professional opinion of the monitor, the project would impact the nest, the biologist shall immediately inform the construction manager. The construction manager shall stop construction activities within the buffer until the nest is no longer active. Completion of the nesting cycle shall be determined by a qualified biologist. 	LTS	LTS
4.3-2: The proposed projects could require removal of protected trees.	LTS	LTS	None required.	NA	NA
4.3-3: Implementation of the proposed projects, in combination with other cumulative development, would contribute to the cumulative harm to, or loss of nesting habitat, for nesting protected bird species.	LTS	LTS	None required.	NA	NA
4.3-4: Implementation of the proposed project, in combination with other cumulative development, would contribute to the cumulative loss of locally protected trees.	LTS	LTS	None required.	NA	NA
4.4 Cultural Resources					
4.4-1: Construction of the proposed projects could cause a substantial adverse change in the significance of paleontological resource, or an archaeological resource, including human remains or traditional cultural resources.	PS	PS	<p>Mitigation Measure 4.4-1(a) (SCC/Hotel)</p> <p>A preconstruction training session conducted by a qualified archaeologist shall be held for all construction personnel and staff performing excavation activities on the project site. Training materials shall address procedures to be followed and appropriate conduct to be adhered to if unanticipated archaeological materials are encountered during the project work. All construction personnel involved in earth moving activities shall attend preconstruction training in person prior to the start of construction. Training shall include:</p> <ul style="list-style-type: none"> • The purpose of archaeological monitoring; • How to identify archaeological resources; • How to respond to the discovery of a potential resource; and • How to maintain proper discovery records and adhere to professional protocols during construction. <p>Mitigation Measure 4.4-1(b) (SCC/Hotel)</p> <p>In the event that unanticipated archaeological resources and/or human remains are encountered during construction, compliance with federal and State regulations and guidelines regarding the treatment of cultural resources and/or human remains shall be required.</p> <ul style="list-style-type: none"> i. If prehistoric or historic-period archaeological resources are encountered during project implementation, all construction activities within 100 feet shall halt and the City shall be notified. <ul style="list-style-type: none"> 1) A qualified archaeologist, defined as one meeting the Secretary of the Interior's Professional Qualifications Standards for Archeology, shall inspect the findings within 24 hours of discovery and report the results of the inspection to the City. 2) In the event that the identified archaeological resource is determined to be prehistoric, the City and qualified archaeologist will coordinate with and solicit input from the appropriate Native American Tribal Representatives regarding significance and treatment of the resource as a tribal cultural resource. Any tribal cultural resources discovered during project work shall be treated in consultation with the tribe, with the goal of preserving in place with proper treatment. 3) If the City determines that the resource qualifies as a historical resource or a unique archaeological resource (as defined pursuant to the CEQA Guidelines) and that the project has potential to damage or destroy the resource, mitigation shall be implemented in accordance with PRC Section 21083.2 and CEQA Guidelines Section 15126.4. Consistent with CEQA Guidelines Section 15126.4(b)(3), mitigation shall be accomplished through either preservation in place or, if preservation in place is not feasible, data recovery through excavation. 	LTS	LTS

LTS = less than significant; NA = Not applicable; NI = no impact; PS = potentially significant; S = significant; SU = significant and unavoidable.

Impact	Significance Before Mitigation		Mitigation Measures	Significance After Mitigation	
	SCC	SCC and HOTEL		SCC	SCC and HOTEL
			4) If preservation in place is feasible, this may be accomplished through one of the following means: (1) modifying the construction plan to avoid the resource; (2) incorporating the resource within open space; (3) capping and covering the resource before building appropriate facilities on the resource site; or (4) deeding resource site into a permanent conservation easement. 5) If avoidance or preservation in place is not feasible, a qualified archaeologist shall prepare and implement a detailed treatment plan to recover the scientifically consequential information from and about the resource, which shall be reviewed and approved by the City prior to any excavation at the resource site. 6) Treatment of unique archaeological resources shall follow the applicable requirements of PRC Section 21083.2, including creation of a treatment plan. 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. ii. In the event of discovery or recognition of any human remains during project implementation, project construction activities within 100 feet of the find shall cease until the Sacramento County Coroner has been contacted to determine that no investigation of the cause of death is required. If the County Coroner determines the remains are of Native American origin, they shall contact the NAHC to identify the Most Likely Descendant (MLD). The MLD shall be asked to make a recommendation to the landowner for treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98. The City shall comply with requirements identified by the NAHC for the appropriate means of treating the human remains and any associated funerary objects (CEQA Guidelines Section 15064.5[d]). iii. If discovery is made of items of paleontological interest, the contractor shall immediately cease all work activities in the vicinity (within approximately 100 feet) of the discovery. After cessation of excavation the contractor shall immediately contact the City. The contractor shall not resume work until authorization is received from the City. Any inadvertent discovery of paleontological resources during construction shall be evaluated by a qualified paleontologist. If it is determined that the project could damage a unique paleontological 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. If avoidance is not feasible, the paleontologist shall develop a treatment plan in consultation with the City.		
4.4-2: The proposed projects could cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines section 15064.5.	LTS	PS	Mitigation Measure 4.4-2(a) (Hotel) Implement Mitigation Measure 4.4-1(a) and 4.4-1(b). Mitigation Measure 4.4-2(b) (Hotel) The project applicant shall be responsible for repairs of any construction damage to the 1414 K Street building. Repairs shall be conducted in compliance with the "Treatment of Preservation" under the Secretary of Interior's Standards for the Treatment of Historic Properties (SOI Standards), and shall be subject to review and approval by the City Preservation Director.	NA	LTS
4.4-3: Implementation of the proposed projects, in combination with other cumulative development, could contribute to the cumulative loss or alteration of paleontological resources, or archaeological resources, including human remains or Tribal Cultural Resources.	LTS	PS	Mitigation Measure 4.4-3 (Hotel) Implement Mitigation Measure 4.4-1(a) and (b).	NA	SU
4.4-4: Implementation of the proposed projects, in combination with other cumulative development within the City of Sacramento, could contribute to the cumulative loss or alteration of historic built resources.	LTS	LTS	None required.	NA	NA
4.5 Energy Demand and Conservation					
4.5-1: The proposed projects would increase demand for energy, specifically electricity and natural gas, the construction of which could cause significant environmental effects.	LTS	LTS	None required.	NA	NA
4.5-2: The proposed projects could result in the wasteful, inefficient, or unnecessary use of energy.	LTS	PS	Mitigation Measure 4.5-2 (Hotel) Prior to Hotel building construction, the applicant shall submit to the City of Sacramento Building Department building design plans demonstrating that the buildings would meet Title 24 energy standards.	NA	LTS
4.5-3: The proposed projects, in combination with other cumulative development, would contribute to cumulative increases in demand for energy.	LTS	LTS	None required.	NA	NA
4.6 Global Climate Change					
4.6-1: Proposed improvements to the proposed projects could conflict with the City of Sacramento's Internal Operations Climate Action Plan.	LTS	LTS	None required.	NA	NA

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Impact	Significance Before Mitigation		Mitigation Measures	Significance After Mitigation	
	SCC	SCC and HOTEL		SCC	SCC and HOTEL
4.6-2: Implementation of the proposed projects could conflict with the City of Sacramento's Community-Wide Climate Action Plan.	LTS	LTS	None required.	NA	NA
4.7 Hydrology and Water Quality					
4.7-1: The proposed projects could degrade water quality during construction.	LTS	LTS	None required.	NA	NA
4.7-2: Operation of the proposed projects could generate new sources of polluted runoff and degrade water quality.	LTS	LTS	None required.	NA	NA
4.7-3 The proposed projects could adversely affect groundwater levels or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level.	LTS	LTS	None required.	NA	NA
4.7-4: Construction and operation of the proposed projects, in combination with other cumulative development, could contribute to cumulative degradation of water quality.	LTS	LTS	None required.	NA	NA
4.7-5: Implementation of the proposed projects, in combination with other cumulative development, could contribute to cumulative effects on groundwater levels.	LTS	LTS	None required.	NA	NA
4.8 Noise					
4.8-1: Construction of the proposed projects could generate noise that would conflict with City standards or result in substantial temporary or periodic increase in ambient noise levels.	PS	PS	<p>Mitigation Measure 4.8-1 (SCC/Hotel)</p> <p>The City shall include in all building permits a requirement that the contractor shall ensure that the following measures are implemented during all phases of construction within the SCC and Hotel areas:</p> <ul style="list-style-type: none"> a) All heavy construction equipment and all stationary noise sources (such as diesel generators) shall have manufacturer-installed mufflers. b) Construction equipment staging areas shall be located as far as feasible from residential areas while still serving the needs of construction contractors. c) Use of auger displacement for installation of foundation piles, if feasible (if underlying soils do not require driven piles). If impact pile driving is required, sonic pile drivers shall be used, unless engineering studies are submitted to the City that show this is not feasible, based on geotechnical considerations. d) Prior to construction activities, the building management of the Saint Paul's Episcopal Church and Maydestone apartment building shall be notified of the construction schedule, as well as the name and contact information of the project disturbance coordinator. e) Machines or equipment shall not start up prior to 7:00 a.m., Monday through Saturday, and prior to 9 a.m. on Sunday. f) Delivery of materials and equipment shall not occur prior to 7:00 a.m. nor past 6:00 p.m., Monday through Saturday, and prior to 9:30 a.m. nor past 6:00 p.m. on Sunday; g) Stationary construction equipment, such as compressors, shall be placed away from nearby residential areas and shall provide acoustical shielding. h) Idling times of equipment shall be minimized either by shutting equipment off when not in use or reducing maximum idling time to 5 minutes. i) The City (SCC) and/or the project applicant or its designee (Hotel) shall designate a disturbance coordinator and conspicuously post this person's number around the project site, in adjacent public spaces, and in construction notifications. The disturbance coordinator, in coordination with the City, shall be responsible for responding to any complaints about construction activities. The disturbance coordinator shall receive all public complaints about construction disturbances and, in coordination with the City, is responsible for determining the cause of the complaint and implementation of feasible measures to alleviate the problem. j) The City (SCC) and/or the project applicant or its designee (Hotel) shall provide written notice to all known occupied noise-sensitive uses (i.e., residential, religious, lodging) within 400 feet of the edge of the project site boundary at least 2 weeks prior to the start of each construction phase of the construction schedule, as well as the name and contact information of the project disturbance coordinator. 	SU	SU
4.8-2: Operation of uses developed pursuant to the proposed projects could increase local traffic that could result in a substantial permanent increase in ambient exterior noise levels in the project vicinity or conflict with the City of Sacramento noise standards.	LTS	LTS	None required.	NA	NA

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Impact	Significance Before Mitigation		Mitigation Measures	Significance After Mitigation	
	SCC	SCC and HOTEL		SCC	SCC and HOTEL
4.8-3: Operation of uses developed pursuant to the proposed projects could introduce new stationary noise sources that could result in a substantial permanent increase in ambient exterior noise levels in the project vicinity or conflict with the City of Sacramento noise standards.	PS	PS	<p>Mitigation Measure 4.8-3 (SCC) The project applicant shall be required to limit speakers at outdoor stages to be no louder than 100 dBA measured five (5) feet from the source.</p>	LTS	LTS
4.8-4: The proposed projects could result in residential interior noise levels of 45 dBA Ldn or greater caused by noise level increases due to project operation.	LTS	LTS	None required.	NA	NA
4.8-5: Construction of the proposed projects could expose existing and/or planned buildings, and persons within, to vibration that could disturb people and damage buildings.	PS	PS	<p>Mitigation Measure 4.8-5(a) (SCC/Hotel) Implement Mitigation Measure 4.8-1(c).</p> <p>Mitigation Measure 4.8-5(b) (Hotel) Prior to the issuance of a building permit, the project applicant shall develop a Vibration Reduction Plan in coordination with an acoustical consultant, geotechnical engineer, and construction contractor, and submit the Plan to the City Chief Building Official for approval. The Plan shall include the following elements:</p> <ol style="list-style-type: none"> 1) The Plan shall include measures to limit exposure of surrounding buildings to vibration levels that do not exceed the building damage threshold for historic and some older buildings of 0.25 PPV (in/sec) and annoyance threshold of 0.04 PPV (in/sec). 2) Buffer distances and types of equipment selected to minimize vibration impacts during construction at nearby receptors in order to meet the specified standards. 3) Implement a vibration, crack, and line and grade monitoring program at existing historic buildings located within 47 feet of construction activities. The following elements shall be included in this program: <ol style="list-style-type: none"> a) During building construction: <ol style="list-style-type: none"> i) The construction contractor shall regularly inspect and photograph crack gauges, maintaining records of these inspections to be included in post-construction reporting. Gauges shall be inspected every two weeks, or more frequently during periods of active project actions in close proximity to crack monitors. ii) The construction contractor shall collect vibration data from receptors and report vibration levels to the City Chief Building Official on a monthly basis. The reports shall include annotations regarding project activities as necessary to explain changes in vibration levels, along with proposed corrective actions to avoid vibration levels approaching or exceeding the established threshold. iii) With regards to historic structures, if vibration levels exceed the threshold and monitoring or inspection indicates that the project is damaging the building, the historic building shall be provided additional protection or stabilization. If necessary and with approval by the City Chief Building Official, the construction contractor shall install temporary shoring or stabilization to help avoid permanent impacts. Stabilization may involve structural reinforcement or corrections for deterioration that would minimize or avoid potential structural failures or avoid accelerating damage to the historic structure. Stabilization shall be conducted following the Secretary of Interior Standards Treatment of Preservation. This treatment shall ensure retention of the historical resource's character-defining features. Stabilization may temporarily impair the historic integrity of the building's design, material, or setting, and as such, the stabilization must be conducted in a manner that will not permanently impair a building's ability to convey its significance. Measures to shore or stabilize the building shall be installed in a manner that when they are removed, the historic integrity of the building remains, including integrity of material. b) Post-construction <ol style="list-style-type: none"> i) The applicant (and its construction contractor) shall provide a report to the City Chief Building Official regarding crack and vibration monitoring conducted during demolition and construction. In addition to a narrative summary of the monitoring activities and their findings, this report shall include photographs illustrating the post-construction state of cracks and material conditions that were presented in the pre-construction assessment report, along with images of other relevant conditions showing the impact, or lack of impact, of project activities. The photographs shall sufficiently illustrate damage, if any, caused by the project and/or show how the project did not cause physical damage to the historic and non-historic buildings. The report shall include annotated analysis of vibration data related to project activities, as well as summarize efforts undertaken to avoid vibration impacts. Finally, a post-construction line and grade survey shall also be included in this report. ii) The project applicant (and its construction contractor) shall be responsible for repairs from damage to historic and non-historic buildings if damage is caused by vibration or movement during the demolition and/or construction activities. Repairs may be necessary to address, for example, cracks that expanded as a result of the project, physical damage visible in post-construction assessment, or holes or connection points that were needed for shoring or stabilization. Repairs shall be directly related to project impacts and will not apply to general rehabilitation or restoration activities of the buildings. If necessary for historic structures, repairs shall be conducted in compliance with the Secretary of Interior Standards Treatment of Preservation. The project applicant shall provide a work plan for the repairs and a completion report to ensure compliance with the SOI Standards to the City Chief Building Official and City Preservation Director for review and comment. 	SU	SU
4.8-6: The proposed projects would result in exposure of people to cumulative increases in construction noise levels.	PS	PS	<p>Mitigation Measure 4.8-6 (SCC/Hotel) Implement Mitigation Measure 4.8-1.</p>	SU	SU
4.8-7: The proposed projects would contribute to cumulative construction that could expose existing and/or planned buildings, and persons within, to significant vibration.	PS	PS	<p>Mitigation Measure 4.8-7(a) (SCC/Hotel) Implement Mitigation Measure 4.8-5(a).</p> <p>Mitigation Measure 4.8-7(b) (Hotel) Implement Mitigation Measure 4.8-5(b).</p>	SU	SU
4.8-8: Implementation of the proposed projects would contribute to cumulative increases in residential interior noise levels of 45 dBA Ldn or greater.	LTS	LTS	None required.	NA	NA

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Impact	Significance Before Mitigation		Mitigation Measures	Significance After Mitigation	
	SCC	SCC and HOTEL		SCC	SCC and HOTEL
4.8-9: Implementation of the proposed projects would contribute to cumulative increases in residential interior noise levels of 45 dBA L _{dn} or greater.	LTS	LTS	None required.	NA	NA
4.8-10: Development pursuant to the proposed projects would contribute to cumulative increases in stationary noise levels.	LTS	LTS	None required.	NA	NA
4.9 Transportation					
4.9-1: The proposed projects could worsen conditions at intersections in the City of Sacramento.	LTS	LTS	None required.	NA	NA
4.9-2: The proposed projects could adversely affect public transit operations.	PS	LTS	<p>Mitigation Measure 4.9-2 (SCC)</p> <p>Implement Event Transportation Management Plan (ETMP) to the satisfaction of the City Traffic Engineer and subject to the performance standards set forth within it including:</p> <ol style="list-style-type: none"> Pedestrian Flows: Through pedestrian flow management, pedestrians do not spill out of sidewalks onto streets with moving vehicles, or out of crosswalks when crossing the street, particularly along J Street, 13th Street, and 15th Street. Vehicle Queuing: Traffic on eastbound J Street does not queue back due to event-related traffic, particularly eastbound right-turning vehicles conflicting with pedestrians crossing the south leg crosswalk at the J Street/13th Street intersection. Bus/Paratransit: Specific locations are provided to accommodate public buses and paratransit vehicle stops within one block of the SCC. Ridesharing: Specific locations are provided for pick-up / drop-off areas such that Transportation Network Companies (e.g., Uber, Lyft), taxis, and other ridesharing services do not impede vehicular or pedestrian flow. Truck Staging: Delivery trucks exclusively use the truck bays located along K Street west of 15th Street and do not block vehicular or bicycle access for extended periods of time. <p>The ETMP is included in Appendix L. It would be implemented for all large events with a combined daily attendance of 5,000 persons or more between the SCC and hotel event space. Due to the variation in event size, type, location, and travel characteristics, specific ETMP elements should be reviewed on a case-by-case basis to determine the appropriateness for a specific event day. Key ETMP elements relevant to large events centered at the SCC facility include the following:</p> <ul style="list-style-type: none"> At the J Street/13th Street intersection, position equipment and multiple traffic control officers (TCOs) and operate the intersection in one of the following two ways: <ol style="list-style-type: none"> Implement Option 1 (illustrated in Figure 4.9-22), which includes the following temporary measures: <ul style="list-style-type: none"> Convert the northbound approach to right-turn only and prohibit through movements using traffic cones and advance warning signage. Convert the southbound approach to one through lane and one left-turn lane using traffic cones and advance warning signage. Prohibit use of the east leg crosswalk using barricades and TCOs. Operate the north/south approaches as permissive (i.e., operate concurrently) signal phases. Maintain same cycle length to facilitate coordinated through traffic progression, though signal offset may need to be adjusted. Implement Option 2 (illustrated in Figure 4.9-23), which includes the following temporary measures: <ul style="list-style-type: none"> TCOs temporarily take control of the intersection and switch signal operations to flashing red. TCOs prohibit vehicles from entering the intersection during a 20-second pedestrian crossing window, whereby TCOs wave through pedestrians to cross at all marked crosswalks and diagonally through the intersection. TCOs prohibit pedestrians from entering crosswalks outside of the pedestrian crossing window and wave through vehicles. TCOs provide approximately 50, 17, and 13 seconds for the eastbound, northbound, and southbound vehicular flows, respectively. These approaches would maintain the same lane configurations as currently present. At the K Street/13th Street intersection, position multiple TCOs to manage pedestrian and vehicular traffic flows. 	LTS	NA
4.9-3: The proposed projects could fail to adequately provide access to transit.	PS	PS	<p>Mitigation Measure 4.9-3 (SCC)</p> <ol style="list-style-type: none"> Coordinate with relevant transit providers, as necessary, to identify a suitable replacement bus stop location and design that does not substantially alter existing service operations. Install replacement bus stop on 15th Street near J Street. Potential replacement options include: <ol style="list-style-type: none"> Installation of bus stop on the west side of 15th Street immediately south of J Street, north of proposed passenger loading zone. Integration of bus stop within the proposed SCC passenger loading zone on 15th Street. The bus stop should include enhanced passenger amenities including shelter, seating, and transit information signage. A portion of the loading zone should be reserved for exclusive use by public transit operators. Sufficient curb space should be reserved to accommodate at least one standard 40-foot bus at a given time. Ensure that the replacement bus stop is constructed and operational prior to the closure of the existing bus stop. 	LTS	LTS
4.9-4: The proposed projects could adversely affect existing or planned bicycle facilities or fail to provide for access by bicycle.	PS	PS	<p>Mitigation Measure 4.9-4(a) (SCC)</p> <ol style="list-style-type: none"> As part of the ETMP, station multiple TCOs at the K Street/13th Street intersection to facilitate bicycle crossings during large events. During outdoor events, ensure that east-west bicycle travel is accommodated within the vicinity of the SCC (between 13th and 14th Streets). Potential options include: <ol style="list-style-type: none"> Maintain clear path of travel along the planned Class I bike path through the project site during outdoor events. Situate fencing and/or barriers in a manner that does not physically block the planned bike path. Install signage notifying event attendees of the presence of the bike path and discouraging event attendees from dwelling on the path. Provide viable east-west bicycle detour around the SCC site during outdoor events. Detours should be sufficiently signed and marked to provide bicyclists with a clear path of travel. 	LTS	LTS

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Impact	Significance Before Mitigation		Mitigation Measures	Significance After Mitigation	
	SCC	SCC and HOTEL		SCC	SCC and HOTEL
			<p>Mitigation Measure 4.9-4(b) (Hotel) During the entitlement process, a site access and circulation study for motorized vehicles, trucks, bicycles, and pedestrians shall be conducted. The following recommendations shall be considered:</p> <ul style="list-style-type: none"> a) Adequate sight distance for all alleys, driveways, and loading areas along the site frontage, including the consideration of the addition of pedestrian/bicycle warning devices (e.g., audio/visual warning devices). b) Conformance with applicable City design and construction standards for all driveway and alley designs. c) Adequately sized sidewalks to serve hotel events and pedestrian circulation, defined as an eight-foot sidewalk with an additional eight-foot width for trees and planters. d) Location of trucks and truck loading bays do not inhibit bicycle travel on designated bicycle facilities within the project vicinity. e) Compliance with the City's Transportation Systems Management ordinance. 		
4.9-5: The proposed projects could adversely affect existing or planned pedestrian facilities or fail to provide for access for pedestrians.	PS	PS	<p>Mitigation Measure 4.9-5(a) (SCC)</p> <ul style="list-style-type: none"> i. Install pedestrian bulbouts at the following locations: <ul style="list-style-type: none"> a. J Street/13th Street intersection – northwest corner b. K Street/15th Street intersection – northeast, southeast, and southwest corners i. Install 15-foot wide continental crosswalks at the following locations: <ul style="list-style-type: none"> a. J Street/13th Street intersection – all legs b. J Street/14th Street intersection – east and west legs c. J Street/15th Street intersection – west leg d. K Street/15th Street intersection – all legs ii. As part of the ETMP, implement the following temporary measures (illustrated in Figure 4.9-24): <ul style="list-style-type: none"> a. At the J Street/13th Street intersection, under Option 1 described above, extend walk intervals to 60, 60, and 21 seconds for the north, south, and west leg crossings, respectively. Under Option 2, TCOs would take manual control of the intersection and operate the intersection with a 20-second pedestrian crossing window. b. At the K Street/13th Street intersection, position multiple TCOs to manage pedestrian and vehicular traffic flows. <p>Mitigation Measure 4.9-5(b) (SCC/Hotel) Implement the ETMP (included in Appendix L) for all large events with a combined daily attendance of 5,000 persons or more between the SCC and hotel event space. Due to the variation in event size, type, location, and travel characteristics, specific ETMP elements should be reviewed on a case-by-case basis to determine the appropriateness for a specific event day. Key ETMP elements relevant to large events centered at the hotel event space include the following:</p> <ul style="list-style-type: none"> a. Prohibit westbound traffic from entering the segment of K Street between 15th Street and 16th Street. Position traffic cones, barricades, and signage to prohibit northbound left-turn and westbound through movements at the K Street/16th Street intersection. b. Position a single Traffic Control Officer at the K Street/15th Street and K Street/16th Street intersections to monitor conditions. c. At the K Street/13th Street intersection, position multiple TCOs to manage pedestrian and vehicular traffic flows. Position traffic cones and warning signage along east curbside to prevent passenger loading activity from blocking crosswalks. <p>Mitigation Measure 4.9-5(c) (Hotel) Implement Mitigation Measure 4.9-4(b) (Hotel)</p>	LTS	LTS
4.9-6: The proposed projects could cause construction-related traffic impacts.	PS	PS	<p>Mitigation Measure 4.9-6(a) (SCC)</p> <ul style="list-style-type: none"> i. Before issuance of any demolition or building permits for any phase of the project, the project applicant shall prepare a detailed Construction Traffic Management Plan that will be subject to review and approval by the City Department of Public Works, in consultation with affected transit providers, and local emergency service providers including the City of Sacramento Fire and Police departments. The plan shall ensure that acceptable operating conditions on local roadways are maintained. At a minimum, the plan shall include: <ul style="list-style-type: none"> o The number of truck trips, time, and day of street closures o Time of day of arrival and departure of trucks o Limitations on the size and type of trucks, provision of a staging area with a limitation on the number of trucks that can be waiting o Provision of a truck circulation pattern o Identification of detour routes and signing plan for street closures o Provision of driveway access plan so that safe vehicular, pedestrian, and bicycle movements are maintained (e.g., steel plates, minimum distances of open trenches, and private vehicle pick up and drop off areas) o Maintain safe and efficient access routes for emergency vehicles and transit o Manual traffic control when necessary o Proper advance warning and posted signage concerning street/lane closures o Provisions for pedestrian and bicycle safety <p>A copy of the approved construction traffic management plan shall be submitted to local emergency response agencies and transit providers, and these agencies shall be notified at least 30 days before the commencement of construction that would partially or fully obstruct roadways.</p>	LTS	LTS

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Impact	Significance Before Mitigation		Mitigation Measures	Significance After Mitigation	
	SCC	SCC and HOTEL		SCC	SCC and HOTEL
			ii. The project applicant, in coordination with the City of Sacramento, Regional Transit, and other transit providers within the project vicinity and subject to their approval, shall identify temporary bus stop locations and cause ADA-compliant replacement bus stop facilities to be constructed in place of any bus stops that need to be temporarily closed during project construction. The relocation of bus stops may have a secondary impact related to the loss/relocation of a small number of on-street parking spaces and/or loading zones. This secondary impact would not be significant. Mitigation Measure 4.9-6(b) (Hotel) Before issuance of any demolition, grading or building permits for the project, the project applicant shall prepare a detailed Construction Traffic Management Plan that will be subject to review and approval by the City Department of Public Works, in consultation with affected transit providers, and local emergency service providers including the City of Sacramento Fire and Police departments. The plan shall ensure that acceptable operating conditions on local roadways are maintained. At a minimum, the plan shall include: <ul style="list-style-type: none"> • The number of truck trips, time, and day of street closures • Time of day of arrival and departure of trucks • Limitations on the size and type of trucks, provision of a staging area with a limitation on the number of trucks that can be waiting • Provision of a truck circulation pattern • Identification of detour routes and signing plan for street closures • Provision of driveway access plan so that safe vehicular, pedestrian, and bicycle movements are maintained (e.g., steel plates, minimum distances of open trenches, and private vehicle pick up and drop off areas) • Maintain safe and efficient access routes for emergency vehicles and transit • Manual traffic control when necessary • Proper advance warning and posted signage concerning street/lane closures • Provisions for pedestrian and bicycle safety A copy of the construction traffic management plan shall be submitted to local emergency response agencies and transit providers, and these agencies shall be notified at least 30 days before the commencement of construction that would partially or fully obstruct roadways.		
4.9-7: The proposed projects could worsen cumulative conditions at intersections in the City of Sacramento.	PS	PS	Mitigation Measure 4.9-7(a) (SCC) Implement Mitigation Measure 4.9-2 (SCC) (ETMP). Mitigation Measure 4.9-7(b) (Hotel) Implement Mitigation Measure 4.9-5(b) (Hotel) (ETMP).	LTS	LTS
4.9-8: The proposed projects could adversely affect cumulative public transit operations.	PS	PS	Mitigation Measure 4.9-8 (a) (SCC) Implement Mitigation Measure 4.9-2 (SCC) (ETMP). Mitigation Measure 4.9-8(b) (SCC) Final SCC project site plan shall not prohibit construction, by others, of future Downtown Riverfront Streetcar stop on the south side of J Street east of 13 th Street.	LTS	LTS
4.9-9: The proposed projects could fail to adequately provide access to transit under cumulative conditions.	LTS	LTS	None required.	NA	NA
4.9-10: The proposed projects could adversely affect planned bicycle facilities or fail to provide for access by bicycle under cumulative conditions.	PS	PS	Mitigation Measure 4.9-10(a) (SCC) Implement Mitigation Measure 4.9-4(a) (SCC), which identifies the need for bicycle improvement elements in an ETMP. Mitigation Measure 4.9-10(b) (Hotel) Implement Mitigation Measure 4.9-4(b) (Hotel).	LTS	LTS
4.9-11: The proposed projects could adversely affect planned pedestrian facilities or fail to provide for access for pedestrians under cumulative conditions.	PS	PS	Mitigation Measure 4.9-11(a) (SCC) Implement Mitigation Measure 4.9-5(a) (SCC), which identifies various crosswalk widenings, signal timing modifications, and other ETMP elements. Mitigation Measure 4.9-11(b) (Hotel) <ol style="list-style-type: none"> Implement Mitigation Measure 4.9-5(b) (Hotel), which identifies the need for implementation of an ETMP, the closure of westbound traffic on K Street between 15th Street and 16th Street, and the placement of TCOs at various locations with high pedestrian volumes. Implement Mitigation Measure 4.9-4(b) (Hotel). 	LTS	LTS
4.9-12: The proposed projects could cause construction-related traffic impacts under cumulative conditions.	LTS	LTS	None required.	NA	NA

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Impact	Significance Before Mitigation		Mitigation Measures	Significance After Mitigation	
	SCC	SCC and HOTEL		SCC	SCC and HOTEL
4.10 Utilities					
4.10-1: The proposed projects could discharge additional wastewater and stormwater flows to the City's CSS that could exceed existing system capacity.	PS	PS	<p>Mitigation Measure 4.10-1 (SCC/Hotel)</p> <p>The City shall manage wastewater from the project sites such that it shall not exceed existing CSS capacity by implementing the following methods:</p> <ul style="list-style-type: none"> a) Require the proposed projects to pay the established CSS mitigation fee. b) To the extent that the proposed projects would require localized upsizing of existing CSS infrastructure for service, the proposed projects shall pay their fair share for improvements to upsize or upgrade the CSS infrastructure. Fair share fees would be assessed and CSS improvements would be implemented, on a phased basis, consistent with buildout of each of the proposed projects. 	LTS	LTS
4.10-2: The proposed projects would increase demand for wastewater treatment.	LTS	LTS	None required.	NA	NA
4.10-3: Implementation of the proposed projects, in combination with other cumulative development, would contribute to cumulative increases in demand for wastewater and stormwater facilities.	PS	PS	<p>Mitigation Measure 4.10-3 (SCC/Hotel)</p> <p>Implement Mitigation Measure 4.10-1.</p>	LTS	LTS
4.10-4: Implementation of the proposed projects, in combination with other cumulative development, would contribute to cumulative increases in demand for wastewater treatment capacity at the SRWWTP.	LTS	LTS	None required.	NA	NA
4.10-5: The collection or disposal of additional solid waste generated under the proposed DSP would result in adverse physical environmental effects.	LTS	LTS	None required.	NA	NA
4.10-6: Implementation of the proposed projects, in combination with other cumulative development, would contribute to cumulative increases in solid waste.	LTS	LTS	None required.	NA	NA

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CHAPTER 1

Introduction

The City of Sacramento proposes renovation and expansion of the Sacramento Convention Center (SCC) project. A separate project applicant proposes to construct a full service hotel (Hotel project) on an adjacent parcel at the northwest corner of 15th Street and K Street. These two projects are addressed in this Draft EIR and are referred to collectively as the proposed projects.

This Environmental Impact Report (EIR) has been prepared pursuant to the California Environmental Quality Act (Public Resources Code [PRC] sections 21000 et seq.) (CEQA), State CEQA Guidelines (California Code of Regulations, Title 14, section 15000 et seq.) (State CEQA Guidelines) and the Sacramento Local Environmental Regulations (Resolution 91-892) adopted by the City of Sacramento in order to disclose the potential environmental consequences of implementing the proposed projects. The City of Sacramento, Community Development Department, Environmental Planning Services Division, lead agency responsible for administering the environmental review for projects in City of Sacramento, has determined that EIR is required for the proposed projects.

As required under CEQA, the EIR evaluates and describes potentially significant environmental impacts, identifies mitigation measures to avoid or reduce the magnitude of potential impacts, and evaluates the comparative effects of potentially feasible alternatives to the proposed projects.

1.1 Background

On October 18, 2016, City Council directed staff to continue exploring options for expansion of the Sacramento Convention Center (SCC), including financing opportunities. Since that time, City staff worked with the City's consultants, Populous and Rider Levett Bucknall, to evaluate the constraints and opportunities of the existing facility. In addition, staff also has pursued different financing options for the expansion including the use of loans from the California Infrastructure and Economic Development Bank.

In order to evaluate different options and encourage public input, Mayor Darrell Steinberg and Councilmember Steve Hansen hosted a series of five public workshops on the SCC.¹ These

¹ City of Sacramento, 2017. Convention Center Complex Renovation and Expansion. Available: <http://www.cityofsacramento.org/Convention-Cultural-Services/Divisions/Convention-Center/Reports-and-Resources>. Accessed July 24, 2017.

meetings explored various aspects of the Convention Center's current and future operations, including the following:

- Use, operation, marketing, and occupancy of the building;
- Existing challenges with the current building;
- SCC performance;
- Transient Occupancy Tax (TOT) regulations, uses, and growth trends;
- Trends in the convention center industry;
- Relationship between convention centers and hotels;
- A review of competitors;
- Design options including an evaluation of exhibition and meeting space needs;
- Potential economic impact;
- Sales and marketing;
- Ownership and operations options;
- Hotel development options;
- Economic analysis of financial performance needed to meet debt service obligations; and
- Development costs.²

The outcome of those workshops was a recommended design alternative and direction to staff to explore options for future operation, management and marketing of the SCC.³ The renovation and expansion would take advantage of the SCC's location in downtown with close proximity to several full-service hotels. The City determined that the proposed SCC design could provide amenities not only for visitors and event attendees, but also for Sacramento residents with a public plaza that could be designed as a community gathering place that could host events, presentations, and shows by Sacramento's performing arts community. The design could provide more meeting rooms and exhibit space than currently exists, and could provide a new east and west lobby that would allow for the stacking of events. This would have the potential to generate greater hotel usage throughout the week and thus more TOT revenue. More events at the SCC would also result in contributing to demand for additional hotel development in the downtown area.

An economic analysis prepared for the SCC project demonstrated a nexus between an increase in the number and frequency of citywide conventions and the generation of significant hotel

² City of Sacramento, 2017. Convention Center Complex Renovation and Expansion. Meeting Agendas for January 26, 2017; February 6, 2017; February 23, 2017; March 9, 2017; and March 23, 2017. Available: www.cityofsacramento.org/Convention-Cultural-Services/Divisions/Convention-Center/Reports-and-Resources. Accessed July 24, 2017.

³ City of Sacramento, 2017. City Council Report, File ID: 2017-00586, Title: Sacramento Convention Center Renovation and Expansion Project – Authorization for Project Design, Owner's Representatives Services and Funding for those Services (Published for 10-Day Review 05/11/2017). May 30, 2017.

demand, driving citywide economic impact.⁴ As a result of the SCC project, an annual increase of over 150,000 new hotel room nights in the City is anticipated, resulting in approximately \$22 million annually in new hotel revenues.⁵ According to these estimates, the City's annual TOT revenue would increase by almost \$2.7 million. To help accommodate demand for additional hotel rooms in the City and generate the estimated TOT revenue increase, additional hotel rooms would be needed.

1.2 Purpose and Use of this EIR

CEQA requires that before a decision can be made to approve a project that would pose potential adverse physical effects, an EIR must be prepared that fully describes the environmental effects of the project. The EIR is a public information document that identifies and evaluates potential environmental impacts of a project, recommends mitigation measures to lessen or eliminate significant adverse impacts, and examines feasible alternatives to the project. The information contained in the EIR must be reviewed and considered by the City and by any responsible agencies (as defined in CEQA) prior to a decision to approve, disapprove, or modify the proposed projects. This EIR has been prepared by the City of Sacramento, Community Development Department, 300 Richards Boulevard, Third Floor, Sacramento, CA 95811.

1.3 CEQA Environmental Review

1.3.1 Preliminary Project Evaluation

The State CEQA Guidelines define the role and standards of adequacy of an EIR as follows:

- **Informational Document.** An EIR is an informational document that will inform public agency decision-makers and the public of the significant environmental effect(s) of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project. The public agency shall consider the information in the EIR along with other information that may be presented to the agency (State CEQA Guidelines section 15121[a]).
- **Standards for Adequacy of an EIR.** An EIR should be prepared with a sufficient degree of analysis to provide decision-makers with information that enables them to make an informed decision that takes account of environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection but for adequacy, completeness, and a good faith effort at full disclosure (State CEQA Guidelines section 15151).

⁴ Visit Sacramento, 2017. Sacramento Convention Center Expansion “What If” Analysis with Option 2 Expansion Footprint. Presented by Brian Larson, Visit Sacramento Board Chair and Halo Hospitality Group President, to the Sacramento Convention Center Stakeholder Group on March 23, 2017.

⁵ Ibid.

State CEQA Guidelines section 15382 defines a significant effect on the environment as “a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project...” Therefore, in identifying the significant impacts of the project this EIR describes the potential for the proposed projects to result in substantial physical effects within the area affected by the projects, and identifies mitigation measures that would avoid or reduce the magnitude of those effects. See Section 4.0, Introduction to the Analysis, for further description of the approach to analyzing environmental impacts and identifying mitigation measures presented in this EIR.

The California Court of Appeal has recently addressed the question of how to properly identify the “type” of EIR that should be prepared for a project. In noting that there are many different names for EIRs, the court stated that “courts strive to avoid attaching too much significance to titles in ascertaining whether a legally adequate EIR has been prepared for a particular project” (*Citizens for a Sustainable Treasure Island v. City and County of San Francisco* (2014) 227 Cal. App. 4th 1036). In *Treasure Island*, the Court restated its findings in *California Oak Foundation v. Regents of University of California* (2010) 188 Cal.App.4th 227, 271) that the “fact that this EIR is labeled a ‘project’ rather than a ‘program’ EIR matters little for purposes of its sufficiency as an informative document. ‘The level of specificity of an EIR is determined by the nature of the project and the “rule of reason” [citation], rather than any semantic label accorded to the EIR.’”

The level of detail of the analyses of the proposed projects considered in this EIR varies in response to the level of detail known for each of the projects. See the discussion below under Section 1.4, Subsequent Project Approvals for a description of how this EIR will be used for later approvals pertaining to the proposed projects.

Having determined an EIR would be required to evaluate changes in the environment that would result from construction and operation of the proposed projects, the City elected not to prepare an Initial Study Checklist, as permitted by section 15060(d) of the State CEQA Guidelines.

1.3.2 EIR Scoping

On August 2, 2017, the City issued a Notice of Preparation (NOP) of the Draft EIR to governmental agencies and organizations and persons interested in the project (included in Appendix A). The NOP review period ended on September 1, 2017. The NOP was distributed to governmental agencies, organizations, and persons interested in the proposed project along with notice to the general public. The City sent the NOP to agencies with statutory responsibilities in connection with the proposed projects with the request for their input on the scope and content of the environmental information that should be addressed in the EIR.

The City of Sacramento received eight written comment letters regarding the proposed projects. Although many specific issues were mentioned in the NOP comment letters, the comments generally tended toward larger themes such as:

- Construction-related concerns including construction duration and phasing; noise; road closures, lane closures, and roadway detours; preparation of a construction traffic management plan; and dust;
- Potential transportation impacts to and interface with the multi-modal transportation network, including the pedestrian, bike, transit, and freeway systems;
- Consideration of Native American outreach and consultation in compliance with AB 52 and SB 18 regulations;
- Wastewater generation and demand for wastewater treatment;
- Possible requirement for water quality discharge permits; and
- Provision of electrical infrastructure.

The scope of this EIR includes environmental issues determined to be potentially significant as determined through preparation of the NOP, responses to the NOP, and discussions among the public, consulting staff, and the City of Sacramento. This process identified potentially significant impacts associated with the construction and/or operation of the proposed projects in the following issue areas:

- Aesthetics, Light, and Glare;
- Air Quality;
- Biological Resources;
- Cultural Resources;
- Energy Demand and Conservation;
- Global Climate Change;
- Hydrology and Water Quality;
- Noise and Vibration;
- Transportation and Circulation; and
- Utilities and Service Systems.

In accordance with CEQA this EIR evaluates the direct, indirect, and cumulative physical environmental impacts on the environment resulting from construction and operation of the proposed projects in these issue areas.

The focus of the analyses in the EIR are on the impacts of the proposed projects on the physical environment. Recently the California Supreme Court found that “agencies subject to CEQA generally are not required to analyze the impact of existing environmental conditions on a project’s future users or residents.” In *California Building Industry Association v. Bay Area Air Quality Management District* (2015) 62 Cal. 4th 369, the Supreme Court explained that 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. CEQA analysis is

therefore typically concerned with a project's impact on the environment, rather than with the environment's impact on a project and its users or residents.

Thus, with respect to such issues as geologic and seismic hazards, exposure to existing levels of air pollution and noise, and exposure to existing hazardous materials this EIR does not address the effects of bringing a new population into an area where such hazards exist, because the project itself would not increase or otherwise affect the existing conditions that create those risks.

1.3.3 Public Review

The Draft EIR will be available for public review and comment as set forth in the Notice of Availability. During the review and comment period written comments (including email) regarding the Draft EIR may be submitted to the City at the address below:

Scott Johnson, Associate Planner
City of Sacramento, Community Development Department
Environmental Planning Services
300 Richards Boulevard, Third Floor
Sacramento, CA 95811
Email: SRJohnson@cityofsacramento.org
Telephone: (916) 808-5842

The Draft EIR, Notice of Availability and other supporting documents, such as technical studies prepared by the City as part of the EIR process, are available for public review at the offices of the Community Development Department at 300 Richards Boulevard, Third Floor, Sacramento, California 95811, and on the City's website at <http://www.cityofsacramento.org/Community-Development/Planning/Environmental/Impact-Reports>.

1.3.4 Final EIR and EIR Certification

Following the public review and comment period for the Draft EIR, the City will prepare responses that address all substantive written and oral comments on environmental issues addressed in the Draft EIR that are received within the specified review period. The responses and any other revisions to the Draft EIR will be provided as a Final EIR. The Draft EIR and its Appendices, together with the Final EIR, will collectively constitute the EIR for the proposed projects.

1.3.5 Mitigation Monitoring Plan

Throughout this EIR, mitigation measures have been identified and presented in language that will facilitate preparation of a mitigation monitoring plan (MMP). As required under CEQA, an MMP will be implemented following certification of the Final EIR for the proposed projects and

will identify the specific timing and roles and responsibilities for implementation of adopted mitigation measures.⁶

1.4 Subsequent Project Approvals

This EIR discloses the environmental effects of construction and operation of the proposed projects pursuant to the requirements of the State CEQA Guidelines, as described in Chapter 2, Project Description. Discretionary approvals related to the proposed projects may be considered at the same time as action to certify this EIR, or may take place incrementally over a period of time.

Use of this EIR to cover later project-related actions by the City or responsible agencies is addressed in PRC section 21166 and State CEQA Guidelines section 15162(a). Under those sections, if the proposed future actions are consistent with the proposed projects as analyzed in this EIR, and would not create new significant or substantially more severe significant impacts that were not examined in this EIR, the later actions are considered to be within the scope of the EIR and no further review under CEQA is required. More specifically, State CEQA Guidelines section 15162(a) states:

When an EIR has been certified or a negative declaration adopted for a project, no subsequent EIR shall be prepared for that project unless the lead agency determines, on the basis of substantial evidence in the light of the whole record, one or more of the following:

- 1. Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;*
- 2. Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or Negative Declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or*
- 3. New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the Negative Declaration was adopted, shows any of the following:*
 - a. The project will have one or more significant effects not discussed in the previous EIR or negative declaration;*
 - b. Significant effects previously examined will be substantially more severe than shown in the previous EIR;*
 - c. Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the*

⁶ See State CEQA Guidelines, section 15097.

project, but the project proponents decline to adopt the mitigation measure or alternative; or

- d. Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.*

To the extent appropriate and consistent with the requirements of CEQA and the State CEQA Guidelines, the City and responsible agencies would rely on this EIR in conjunction with its consideration of subsequent project-related actions.

1.5 Document Organization

This Draft EIR document is organized as follows:

Summary – This section summarizes the proposed projects and the conclusions of the Draft EIR. A summary table is included and organized to allow the reader to easily identify potentially significant effects, proposed mitigation measures, and any residual environmental impacts after implementation of mitigation measures. A summary of the alternatives to the proposed projects and the environmentally superior alternatives are also provided. The Summary also describes areas of controversy regarding the proposed projects that are known to the City as of publication of this Draft EIR.

Chapter 1, Introduction – This chapter describes the purpose and organization of the EIR.

Chapter 2, Project Description – This chapter describes the proposed projects. The description includes, with text and graphics, the location and boundaries of the proposed projects, statements of objectives from the project applicant and the City, and a description of the proposed projects' components and characteristics.

Chapter 3, Land Use and Employment – This chapter provides an overview of the land use and planning issues that may arise in connection with development of the proposed projects. In addition, it describes employment conditions and trends in the City of Sacramento.

Chapter 4, Environmental Setting, Impacts, and Mitigation Measures – For each environmental issue, this chapter discusses the environmental and regulatory setting, the methodology used, the detailed analysis of potential impacts (including direct, indirect, and cumulative impacts), and, if necessary, a discussion of potentially feasible mitigation measures.

Chapter 5, Other CEQA Required Considerations – This chapter discusses several issues required to be included in an EIR, including effects not found to be significant, significant and unavoidable impacts, significant irreversible environmental changes, cumulative impacts, the potential for the proposed projects to cause urban decay, and the potential for the proposed projects to induce urban growth and development.

Chapter 6, Project Alternatives – This chapter describes potentially feasible alternatives to the proposed projects that may avoid or substantially reduce one or more significant impacts while attaining most of the basic objectives of the projects, and evaluates the comparative environmental effects of the alternatives.

Chapter 7, List of Preparers and Persons Consulted – This chapter identifies the agency staff and consultants who prepared the EIR, and agencies or individuals consulted during preparation of the EIR.

Chapter 8, Acronyms and Abbreviations – This chapter lists the acronyms used in this Draft EIR in alphabetical order.

Chapter 9, References – This chapter lists all citations used throughout the Draft EIR.

Appendices – The appendices include environmental scoping information and technical reports and data used in the preparation of the Draft EIR. These documents are included on CD at the back of the Draft EIR.

CHAPTER 2

Project Description

2.1 Introduction

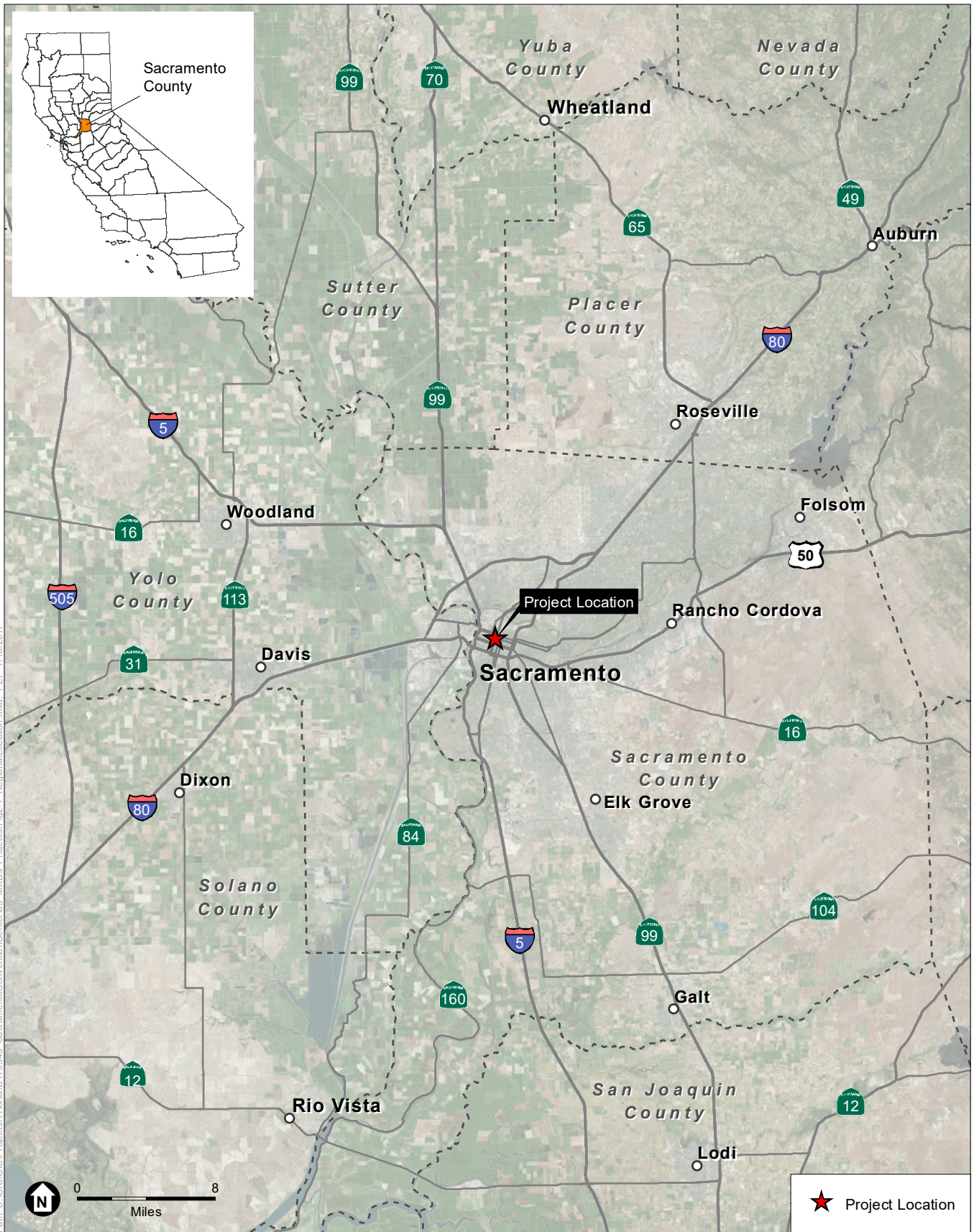
This Draft EIR includes consideration of two distinct projects that are proposed: The Sacramento Convention Center Renovation and Expansion project (SCC project) and the 15th/K Street Hotel project (Hotel project). Each of these projects is described herein, including the project sites; physical characteristics; operational characteristics including employment, attendance, and similar characteristics; construction characteristics; and anticipated discretionary approvals by the City and other agencies.

2.2 Project Location

The project sites are located in Sacramento, California, approximately 80 miles east of San Francisco and 85 miles west of Lake Tahoe. Sacramento is a major transportation hub, the point of intersection of transportation routes that connect Sacramento to the San Francisco Bay area to the west, the Sierra Nevada mountains and Nevada to the east, Los Angeles to the south, and Oregon and the Pacific Northwest to the north. The City is bisected by major freeways including Interstate 5 (I-5) that traverses the state from north to south; Interstate 80 (I-80), which provides an east-west connection between San Francisco and Reno; and U.S. Highway 50 which provides an east-west connection between Sacramento and South Lake Tahoe. Two railroads, the Union Pacific (UP) Railroad and the BNSF Railway transect Sacramento. **Figure 2-1** shows the location of the project site in the Sacramento region.

The SCC project site is generally bounded by 13th Street to the west, 15th Street to the east, J Street to the north, and K Street to the south. The SCC project site includes the existing Sacramento Convention Center and adjacent Panattoni Building and outdoor Activities Plaza, but excludes the Sacramento Community Theater.

The proposed Hotel project site is currently developed with a surface parking lot, and is bounded by a six-story office building to the west (1414 K Street), K Street to the north, 15th Street to the east, and Kayak Alley to the south. **Figure 2-2** and **Figure 2-3** illustrate the project locations in Sacramento's Central City.



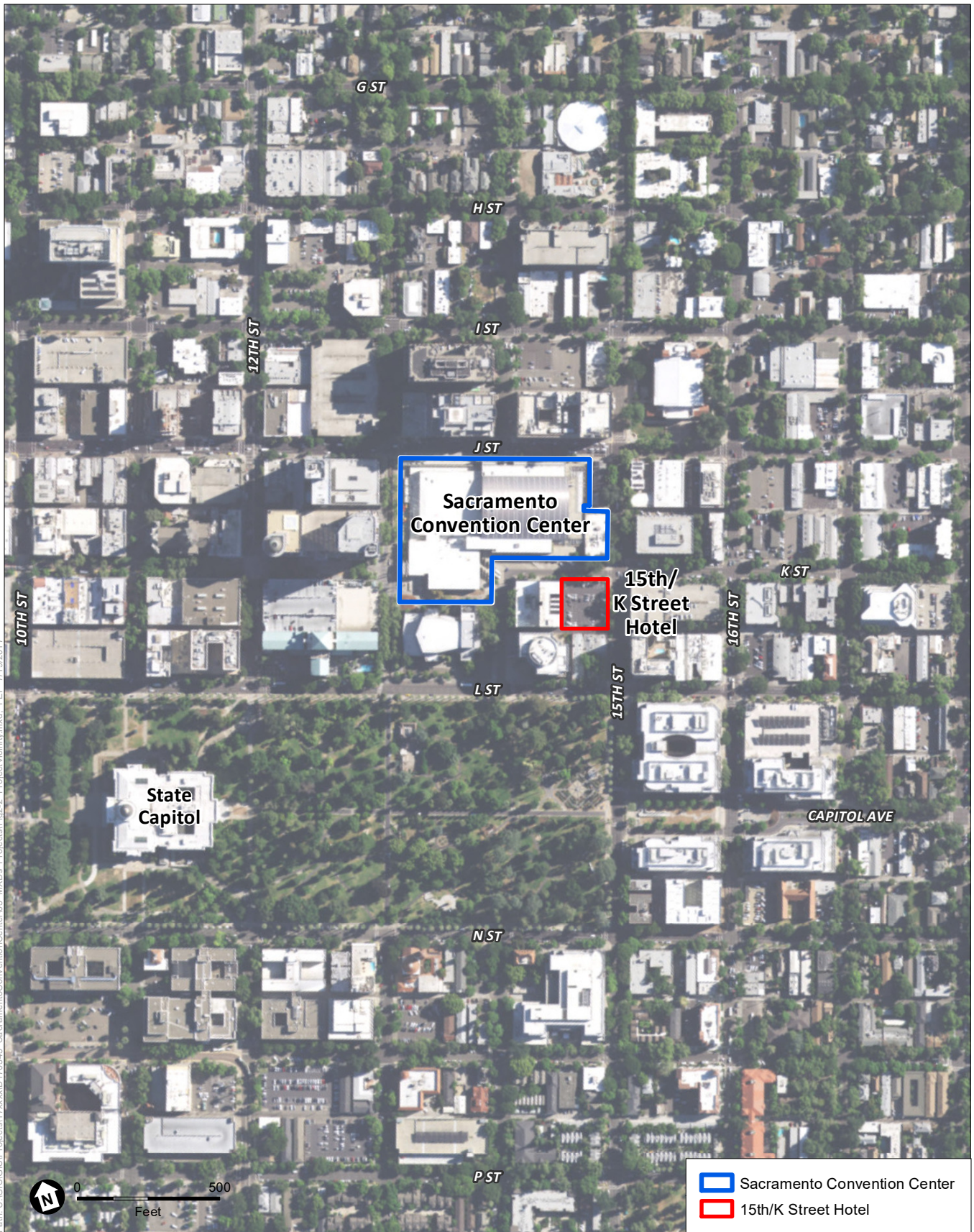
Path: U:\GIS\GIS\Projects\17xxx\170345 SacramentoConventionCenter03.MXD\Projects\Fig2-1 RegionalLocation.mxd, FEP: 7/18/2017

SOURCE: Esri, 2015; ESA, 2017

Sacramento Convention Center Renovation and Expansion and 15th/K Street Hotel EIR

Figure 2-1
Regional Location





SOURCE: Esri, 2015; ESA, 2017

Sacramento Convention Center Renovation and Expansion and 15th/K Street Hotel EIR

Figure 2-2
Vicinity of Proposed Projects



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SOURCE: Populous, 2017

Sacramento Convention Center Renovation and Expansion and 15th/K Street Hotel EIR

Figure 2-3
Project Sites

2.3 Project Objectives

CEQA Guidelines section 15124(b) requires that the project description include a statement of the objectives intended to be achieved by the project. The objectives describe the purpose of the project, and are intended to assist the lead agency in developing a reasonable range of alternatives for consideration in the EIR, as well as assisting the decision makers in assessing the feasibility of mitigation measures and alternatives. The following are the objectives of the SCC project and Hotel project, respectively.

2.3.1 SCC Objectives

The mission of the Sacramento Convention Center is to provide a quality, diverse, service-oriented facility that enhances the economic and cultural vitality of the Sacramento community. The following are the City's stated objectives for the proposed SCC project:

1. *Positive Economics*: Achieve positive economic impact for the hotel, restaurant, and business community, and a positive fiscal effect on the City through increased Transient Occupancy Tax revenues;
2. *Catalyst*: Serve as a catalyst to increase and drive the City's demand for hotel room nights;
3. *Destination*: Enrich the ability to sell the City as a convention and entertainment destination, and improve the City's competitiveness in relation to other comparably-sized convention facilities;
4. *Availability*: Increase the availability of SCC space by improving efficiency of loading and unloading exhibit and convention materials;
5. *Expansion*: Increase the amount of exhibit and ballroom space, and meeting rooms;
6. *Improved Conditions*: Improve the condition of the SCC facilities to make the facility more attractive to prospective event planners;
7. *Sustainable Project*: Develop a sustainable convention and entertainment center project that is US Green Building Council's Leadership in Energy and Environmental Design (LEED) Silver (or equivalent), supports smart growth principles, and encourages public transit use as well as pedestrian and bicycle transportation;
8. *Connect Downtown*: Develop an improved convention and entertainment center project that connects with and enhances downtown from the waterfront to Golden 1 Center to the Convention Center, and from the Capitol to the Railyards and intermodal facilities;
9. *Strengthen Downtown*: Strengthen the economic vitality of the eastern end of downtown;
10. *Regional Economic Catalyst*: Leverage the convention center to spark redevelopment of underutilized downtown properties on the eastern end of the Central Business District; and
11. *A First-Class Destination*: Operate and maintain the City-owned convention center and surrounding district so that they remain a first class destination.

2.3.2 Hotel Objectives

The overall goal of the Hotel project is to build and operate a full service hotel that can serve Sacramento Convention Center guests and other visitors to the City and provide a venue for meetings and events. The specific objectives of the proposed Hotel project are:

1. Construct and operate a modern hotel to address the existing shortage of hotel rooms available for business and tourist travelers within the Central Business District;
2. Construct and operate complementary meeting and conference space, entertainment space, dining space, and recreational amenities to help promote the Central Business District as the regional and historic center for meeting and gathering;
3. Enhance the continued economic revitalization and urbanization of downtown Sacramento with a modern hotel catering to business travelers and tourists;
4. Construct and operate a modern hotel within the transit-rich Central Business District and in close proximity to major transit stops and high-quality transit corridors;
5. Provide direct access to the Sacramento Convention Center to promote pedestrian travel and reduce potential conflicts between vehicles and pedestrians on K Street;
6. Support the ongoing shift within the downtown area to environmentally-conscious modes of travel by promoting ride-sharing services and non-vehicular travel by hotel guests and patrons;
7. Construct a modern and architecturally distinct high-rise hotel that balances the City's general plan vision for a higher-density Central City as well as capitol view protection goals consistent with the Capitol View Protection Act; and
8. Redevelop a surface parking lot to advance the City's goal to reduce the number of surface parking lots in the Central Business District and to integrate parking into buildings and structures to accommodate existing parking needs as well as hotel parking.

2.4 Sacramento Convention Center Renovation and Expansion Project

2.4.1 SCC Project Site

Location

The SCC project site consists of approximately 6.52 acres spread over more than two city blocks in downtown Sacramento.¹ (see Figure 2-3) The SCC project site is located on the blocks bounded by 13th, 15th, J, and K streets, including the adjacent abandoned K Street right of way (between 13th and 14th streets). Between 13th and 14th streets, K Street has been abandoned and no longer functions as a City street. St. Paul's Episcopal Church, at the corner of 15th and J streets is

¹ The project site consists of Assessor's Parcels 006-0115-016, 017, 018, and 019.

located on the same block but is not part of the project. In addition, the adjacent Sacramento Community Theater, located on 13th Street, between K and L streets, is not part of the project.

Existing Conditions

General Plan and Zoning

The majority of the SCC project site is currently designated Public/Quasi-Public (P/QP) on the City of Sacramento 2035 General Plan Land Use and Urban Form Diagram. The 0.3-acre parcel that houses the Panattoni Building is designated Central Business District (CBD).

The 2035 General Plan states that “[t]he Public/Quasi-Public designation describes areas with unique uses and typically unique urban forms. These areas host community services and/or educational, cultural, administrative, and recreational facilities often located within a well-landscaped setting. Most of these areas provide a public function and as a result, existing buildings often include a significant amount of surface parking lots and structured parking to accommodate users of the facilities. It should be noted that many Public/Quasi-Public uses are also allowed and are located in other land use and urban form designations.”

According to the 2035 General Plan, “[t]he Central Business District is Sacramento’s most intensely developed area. The CBD includes a mixture of retail, office, governmental, entertainment and visitor-serving uses built on a formal framework of streets and park spaces laid out for the original Sutter Land Grant in the 1840s. The vision for the CBD is a vibrant downtown core that will continue to serve as the business, governmental, retail, and entertainment center for the city and the region. A significant element in the future CBD includes new residential uses. Increasing the residential population will add vitality to the CBD by extending the hours of activity and the built-in market for retail, services, and entertainment.”

The project site is zoned C-3-SPD: CBD Zone as defined in chapters 17.216.800 through 17.216.880 of the Sacramento Planning and Development Code. The C-3-SPD zone is intended for the most intense residential, retail, commercial and office developments in the City and is the only classification which has no height limit, aside from height limits imposed by the Capitol View Protection requirements (17.216.860). Generally, office, retail, restaurant, residential, fitness, and theaters are permitted by right in the C-3 zone. An assembly use is allowed in the C-3 zone subject to the approval of a conditional use permit by the City Planning and Design Commission. Additional detail on the SCC project site zoning is provided in Chapter 3.0, Land Use, Population and Housing.

Existing and Adjacent Uses

The Sacramento Convention Center consists of two buildings: the west building constructed in 1974 and the east building constructed in 1992. As described in **Table 2-1**, the existing Sacramento Convention Center contains a total of 256,758 square feet (sf) of built space.

**TABLE 2-1
EXISTING SACRAMENTO CONVENTION CENTER
PROJECT SITE LAND USES**

Entire Property	Space (SF)
Exhibit Halls	137,506
Meeting Rooms	21,667
Ballrooms	24,282
Lobbies and Pre-function Space	51,394
Terrace	10,000
Service/Admin/Kitchen/etc.	152,462
Subtotal Convention Center	397,311
Panattoni Building	36,085
Total Project Site	433,396

SOURCE: Populous, 2017.

The SCC project site includes an approximately 1.5-acre Activities Plaza located between the Convention Center and the Sacramento Community Theater. The Panattoni Building is located on an approximately one-third acre parcel facing 15th Street.

St. Paul's Episcopal Church is located on the same block as the Convention Center, at the corner of J and 15th streets.

Access

Primary access to the project site is provided by J Street and 13th (see Figure 2-3). Loading docks are located on K Street, between 14th and 15th Street, and provide service delivery access to the site. On the project's northern boundary, J Street is a one-way eastbound street that serves as a primary east-west thoroughfare through downtown Sacramento, with three travel lanes along the project frontage. At its west end at 3rd Street, J Street provides connections to north- and south-bound off-ramps from Interstate 5 and a connection to eastbound lanes of the I Street Bridge from West Sacramento. J Street to the east of the site provides access through Midtown and East Sacramento, becoming Fair Oaks Boulevard when it crosses the American River.

On the western edge of the project site, 13th Street is a two-lane two-way street that serves as a connector from L Street and the State Capitol area to the project site. North of J Street, 13th Street connects to westbound I Street and the I-5 north and southbound ramps, and also continues into the Mansion Flats neighborhood. 13th Street also serves as a primary access to the City parking garage at 900 13th Street.

Fifteenth Street serves as the eastern boundary of the project site, running one-way between J and K streets, and serving as a couplet with northbound 16th Street. South of K Street, 15th Street is a primary connector between downtown Sacramento and the US 50.

K Street does not exist through a portion of the project site, between 13th and 14th streets. East of 14th Street, K Street connects to 15th Street and provides access to the existing Convention Center loading docks on the north side of the street, and an office building and parking lot on the south side of the street. Further to the east, K Street connect travels through the Handle District and Midtown.

Sixteenth Street runs one-way northbound near the project site, connecting J and L streets (and US 50 to the south) to US Business 80 to the north, passing through the River District and North Sacramento.

L Street is a one-way westbound street one block south of the project site, providing access to the State Capitol area, Golden 1 Center, and a northbound ramp to I-5 at 3rd Street.

2.4.2 Project Elements

The proposed SCC project would include the following modifications to the existing SCC facility in downtown Sacramento:

- 65,514 square feet of additional event space (exhibit halls, meeting rooms, and ballrooms);
- 34,835 square feet of additional pre-function space (e.g., lobbies, landings);
- 306 square foot increase of retail space;
- 6,508 square foot reduction of outdoor terrace space; and
- 36,254 square feet of additional support space (e.g., administrative office, kitchen, store rooms).

The project would also include the demolition of the adjacent Panattoni Building at 1030 15th Street, which is comprised of 15,863 square feet of commercial office space. **Table 2-2** summarizes the existing and proposed development in the proposed SCC project.

TABLE 2-2
SACRAMENTO CONVENTION CENTER EXPANSION AND RENOVATION
DETAIL OF PROPOSED SPACE CHANGES

	Existing	Demo	New	Unchanged	Net SF	Net Change
Exhibit Halls						
Hall A	55,000			55,000	55,000	0
Hall B	33,000			33,000	33,000	0
Hall C	24,864	24,864			0	-24,864
Hall D	12,321	12,321			0	-12,321
Hall E	12,321	12,321			0	-12,321
New Exhibit Space			75,172		75,172	75,172
Total	137,506	49,506	75,172		163,172	25,666

**TABLE 2-2
SACRAMENTO CONVENTION CENTER EXPANSION AND RENOVATION
DETAIL OF PROPOSED SPACE CHANGES**

	Existing	Demo	New	Unchanged	Net SF	Net Change
Meeting Rooms						
100A	253	253			0	-253
100B	480	480			0	-480
101	336	336			0	-336
102	406	406			0	-406
103	644	644			0	-644
104	920	920			0	-920
105	667	667			0	-667
201	522	522			0	-522
202	3,596	3,596			0	-3,596
203	2,418	2,418			0	-2,418
204	3,596	3,596			0	-3,596
205	726	726			0	-726
301	1,015			1,015	1,015	0
302	665			665	665	0
303	665			665	665	0
304	875			875	875	0
305	875			875	875	0
316	896			896	896	0
317	608			608	608	0
318	576			576	576	0
319	928			928	928	0
New Meeting Space - North			2,616		2,616	2,616
New Meeting Space - East			9,080		9,080	9,080
New Meeting Space - Southeast			2,716		2,716	2,716
Total	21,667	14,564	14,412		21,515	-152
Ballrooms						
East Ballroom	24,282			24,282	24,282	0
New Ballroom (Phase 2)			40,000		40,000	40,000
Total	24,282	0	40,000		64,282	40,000
Lobbies & Prefunction						
West Lobby (Ground Lvl)	6,000	6,000			0	-6,000
West Lobby (Ground Lvl)			5,561		5,561	5,561
West Prefunction (Ground Lvl)			1,708		1,708	1,708
West Prefunction (Upper Lvl)			4,708		4,708	4,708
East Lobby (Upper Lvl)	9,000			9,000	9,000	0
New East Lobby (Ground Lvl)			5,882		5,882	5,882
East Prefunction (Upper Lvl)			5,907		5,907	5,907

**TABLE 2-2
SACRAMENTO CONVENTION CENTER EXPANSION AND RENOVATION
DETAIL OF PROPOSED SPACE CHANGES**

	Existing	Demo	New	Unchanged	Net SF	Net Change
J Street Lobby (Ground Lvl)	7,000			7,000	7,000	0
New North Prefunction @ J St)			1,326		1,326	1,326
Prefunction (Ground Lvl)	15,842	15,596			246	-15,596
Prefunction (Upper Lvl)	12,188			12,188	12,188	0
New Prefunction (Phase 2)			8,779		8,779	8,779
Street retail	1,364	658			706	-658
New Retail			964		964	964
Total	51,394	22,254	34,835		63,975	12,581
Subtotal without Terrace	234,849	86,324	164,419		312,944	78,095
Terrace						
Existing Outdoor Terrace	10,000	10,000			0	-10,000
New Outdoor Terrace (Phase 2)			3,492		3,492	3,492
Total	10,000	10,000	3,492		3,492	-6,508
Service/Admin/Kitchen/Etc.						
Operations, Catering & AV office area	4,343	4,343			0	-4,343
Administrative Offices (above Dock)			6,778		6,778	6,778
Food Service Offices (above Kitchen)			2,201		2,201	2,201
Kitchen	4,074	4,074			0	-4,074
New Kitchen			5,687		5,687	5,687
New support spaces (Phase 2)			21,070		21,070	21,070
New Plating Kitchen (Phase 2)			3,997		3,997	3,997
Support Spaces (all floors)	98,855	35,169	40,107		103,793	4,938
Support Spaces (Basement)	45,190			45,190	45,190	0
Total	152,462	43,586	79,840		188,716	36,254
Subtotal Terraces, Service/Admin/ Kitchen/Etc.	162,462	53,586	83,332		192,208	29,746
Total Convention Center	397,311	139,910	247,751		505,152	107,841
Panattoni Building	36,085	36,085			0	-36,085
Total Project	433,396	175,995	247,751		505,152	71,756

SOURCE: City of Sacramento, 2017; Populous, 2017.

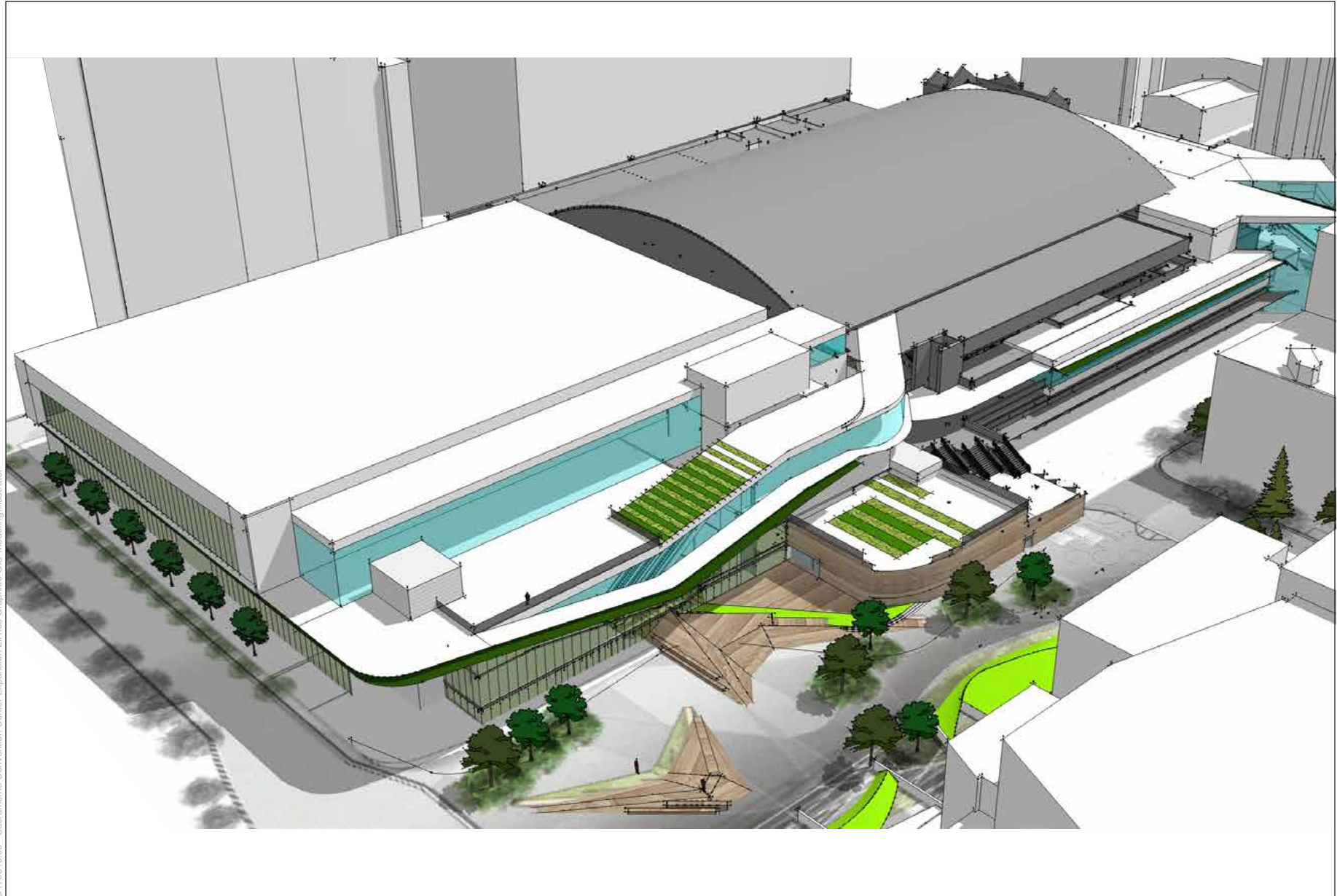
The renovated and expanded SCC would be a larger structure relative to the existing facility. Demolition and construction activities would take place throughout the facility, as described below (see **Figure 2-4**).

Construction and demolition components on the east side of the SCC would include demolition of the existing Panattoni Building and construction of a new East Lobby in its place, which would create access to the Convention Center from 15th Street. The upper levels of the new East Lobby structure would accommodate administrative uses. In addition, the east terrace on the second level would be eliminated and new meeting rooms would be added in its place. The proposed floorplans for the ground level and upper level of the expanded and renovated SCC are provided in **Figure 2-5** and **Figure 2-6**.

Project components on the west side of the existing SCC would include demolition of the portion of the facility constructed in 1974, which includes 3 exhibition halls and a number of other uses, and construction of a new west building in its place, which would include new exhibit space, a new west lobby, pre-function space facing J Street, a new kitchen and food service space, service areas, and an expanded second floor outdoor terrace. A 40,000 sf ballroom and back-of-house uses such as hallways and kitchen spaces would be constructed on the second level of the new west building.

The new west building would have a larger footprint than the existing west building. As a result, the building footprint would extend further to the north and west, reducing available pedestrian space along the building's 250-foot J Street frontage by 20 feet and along the building's 400-foot 13th Street frontage by 20 feet. In addition, the existing 250-foot long, pullout space on J Street would be replaced by a smaller turnout that would be a single-car width relative to the existing two-car width turnout. The area of the existing turnout to be eliminated would be replaced by sidewalk that aligns with the sidewalk that fronts the east building. This building and sidewalk extension would provide access to the planned 13th/J Street Downtown/Riverfront Streetcar stop.

At the southwest side of the west building, the landscaped walkway between the SCC and the Community Center Theater (CCT), to the south, would be eliminated and replaced with an outdoor activities plaza, which would include an outdoor amphitheater facing the main activities plaza and K Street pedestrian connection, as well as landscaping and pedestrian improvements (see **Figure 2-7**). Project components on the west side of the SCC would also include renovation of the central plant that provides heating, cooling and power to the Convention Center and the adjacent CCT.

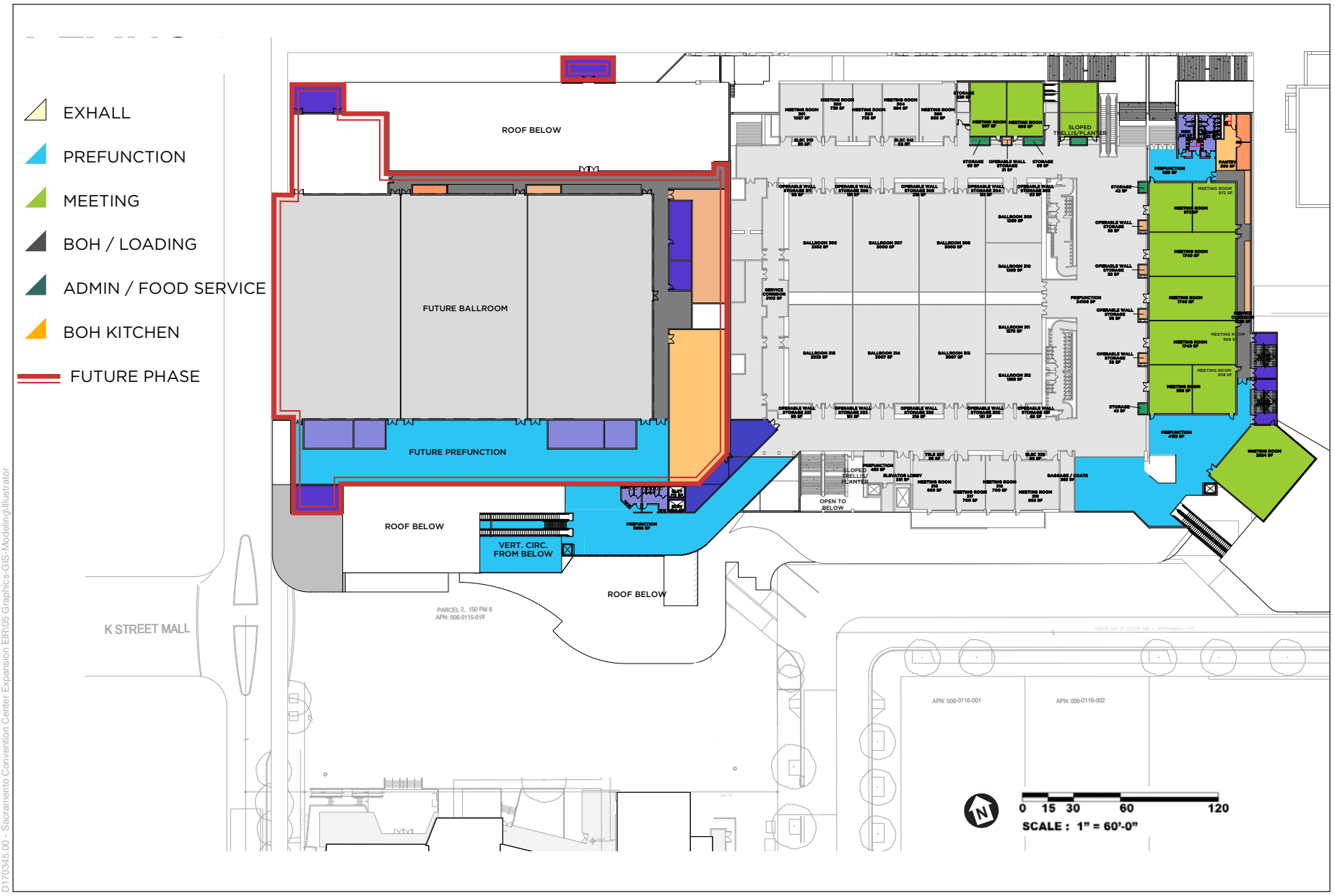


D:\70345.00 - Sacramento Convention Center Expansion EIR\05 Graphics-GIS-Modeling\Illustrator

SOURCE: Populous, 2017

Sacramento Convention Center Renovation and Expansion and 15th/K Street Hotel EIR

Figure 2-4
Project Concept Design/Building Massing



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SOURCE: Populous, 2017

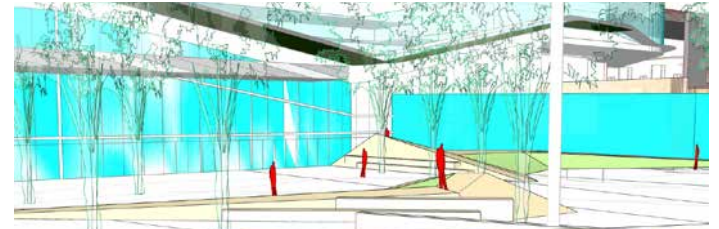
Sacramento Convention Center Renovation and Expansion and 15th/K Street Hotel EIR

Figure 2-6
SCC Second Floor Plan

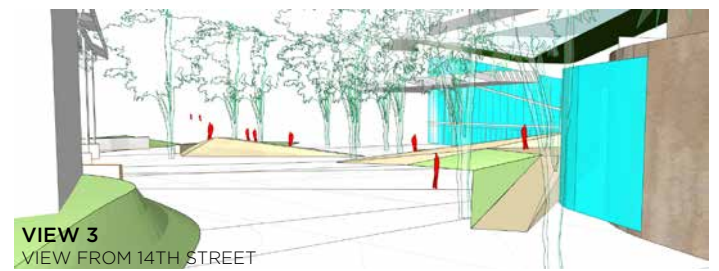




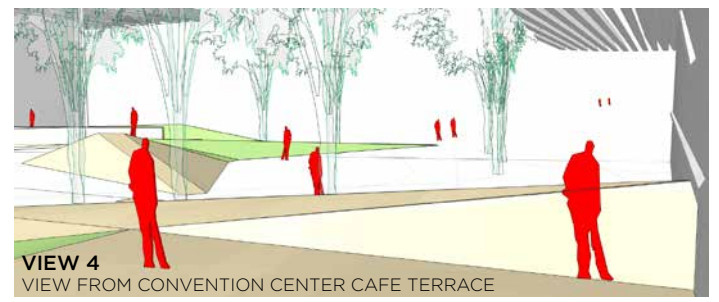
VIEW 1
LEVEE TO MOUNTAIN PLAZA FROM CONVENTION CENTER



VIEW 2
VIEW FROM THEATRE ENTRY PLAZA



VIEW 3
VIEW FROM 14TH STREET



VIEW 4
VIEW FROM CONVENTION CENTER CAFE TERRACE

SOURCE: Populous, 2017

Sacramento Convention Center Renovation and Expansion and 15th/K Street Hotel EIR

Figure 2-7
Project Landscape Concept Terrace Plan

Building Design

The reconfigured and expanded SCC would be a steel and concrete structure, with the primary entrances on the first level on the J Street (existing), 13th Street (near K Street), and 15th Street sides of the building (see Figure 2-4). The reconfigured SCC would create streetwalls measuring 80 feet along J Street, 60 feet along 13th Street, and 70 feet along 15th Street, with access to an open-air amphitheater from the activities Plaza on the southwest side of the building. Loading would continue to take place on K Street between 14th and 15th Street (see Figure 2-6). The Activities Plaza would allow for landscaping and terracing (see Figure 2-7). The parapet of the roof of the new SCC structure would rise approximately 60 feet above ground level, with a streetwall height of about 45 feet above J, 13th and 15th streets (see **Figures 2-8, 2-9, 2-10**).

Like the existing SCC east building, the proposed reconfigured and expanded SCC would be a two-level structure. The first floor would include the exhibit space, east and west lobbies, pre-function space, kitchens, storage, loading docks and service areas (see Figure 2-5).

The proposed SCC second floor level would include existing and new ballrooms, existing and new meeting rooms, pre-function spaces, a kitchen, service spaces, administration spaces, and an outdoor terrace overlooking the amphitheater and Activities Plaza between the SCC and the Community Center Theater (see Figure 2-6).

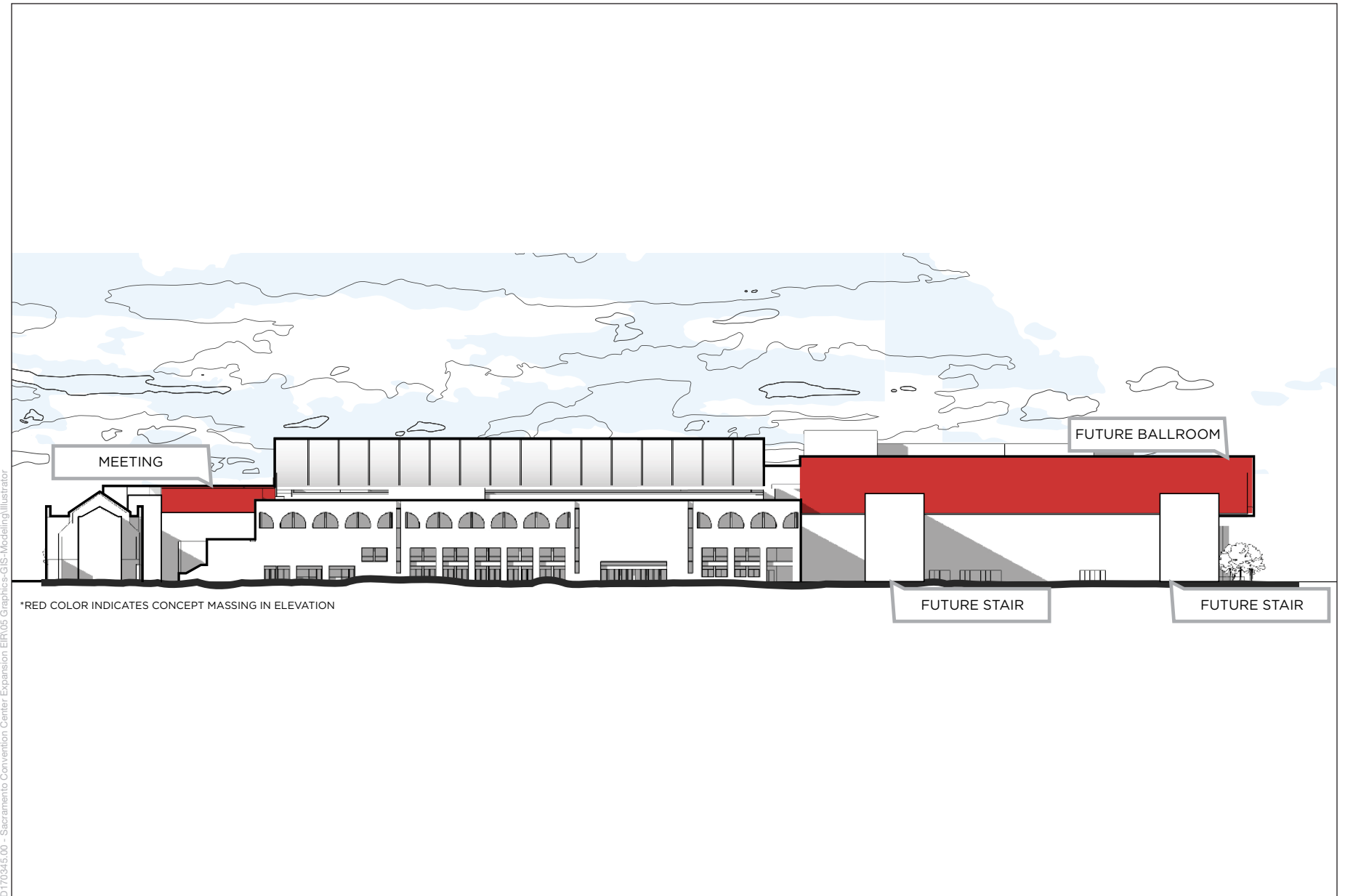
Similar to the existing SCC roof, the top of the roof of the proposed expanded and reconfigured SCC would rise approximately an additional 15 feet above the streetwall heights.

The exterior of the proposed SCC building would consist of a number of pre-cast concrete panels with a variety of textures and materials, including metal and/or perforated metal, and glass with tinting. Glass panels or doors would allow views into the proposed SCC concourse first floor from J Street, 13th Street, and the Activities Plaza area.

Open Space

An integral element of the proposed SCC would be open spaces intended to provide a variety of outdoor spaces in and out of the building, pedestrian circulation around the SCC, and pedestrian connectivity to J, K and 13th streets, as well as the nearby Community Center Theater. As depicted on Figure 2-7, approximately 40,000 square feet of open space would be included in the Activities Plaza surrounding the proposed SCC.

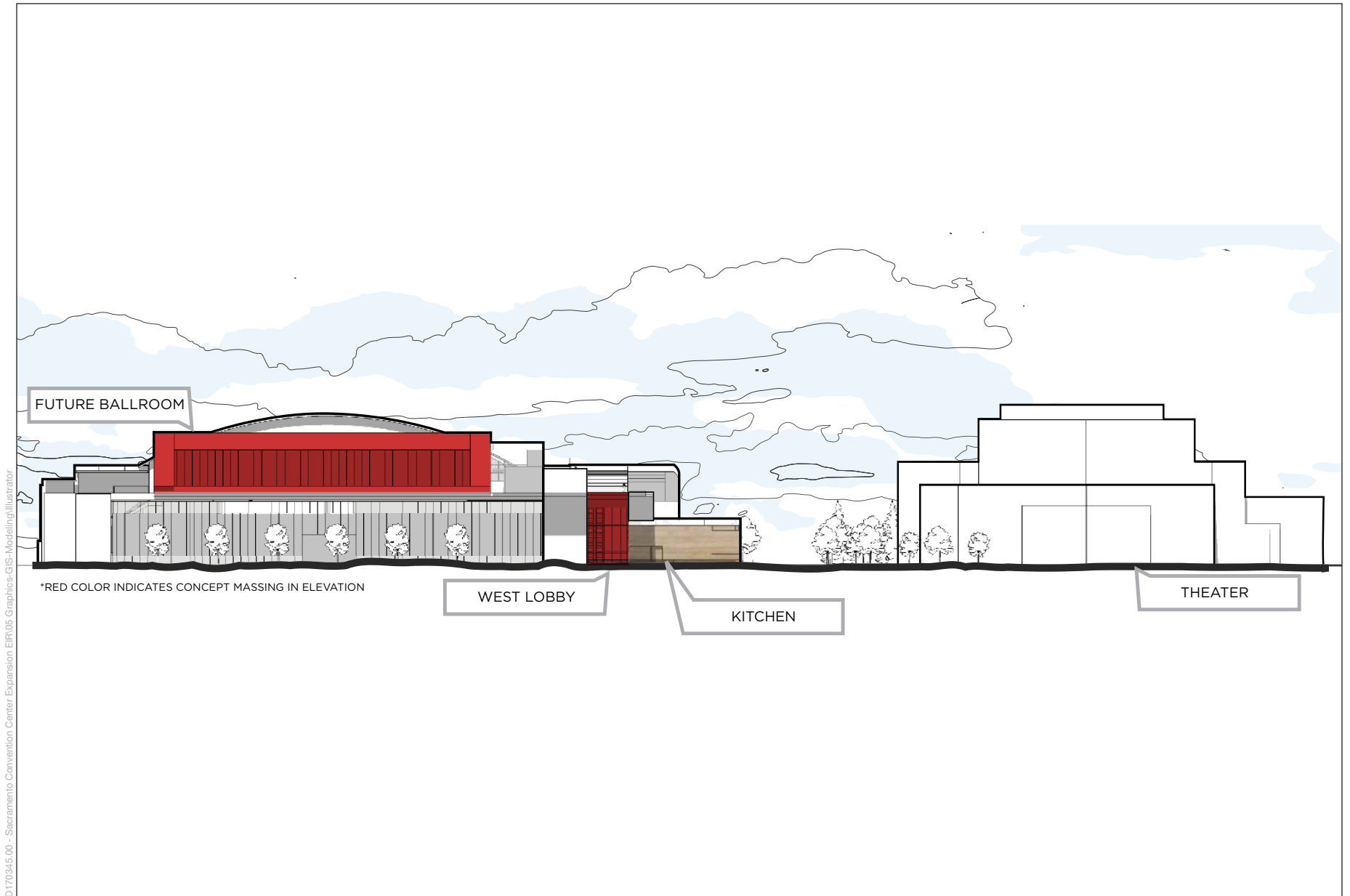
The proposed SCC Activities Plaza is anticipated to be actively used space that may accommodate small-scale performance venues, seasonal events, musical and cultural events, and gardens. The proposed SCC Activities Plaza would be comprised of hardscape and landscaped planters. Hardscape areas would feature use of a variety of paving materials and landscape plantings, and would include benches, public art, and water features.



SOURCE: Populous, 2017

Sacramento Convention Center Renovation and Expansion and 15th/K Street Hotel EIR

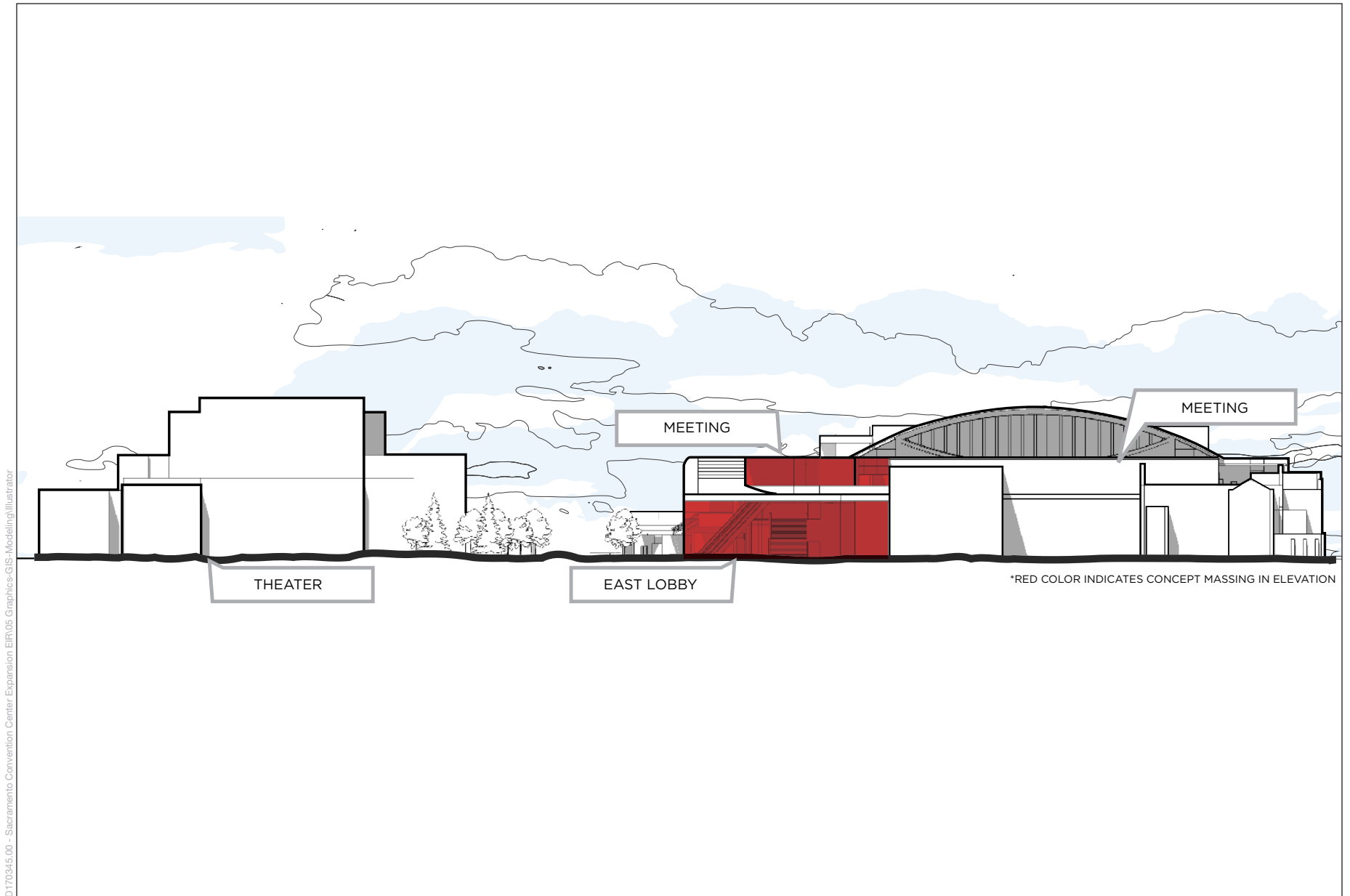
Figure 2-8
SCC J Street Elevation



SOURCE: Populous, 2017

Sacramento Convention Center Renovation and Expansion and 15th/K Street Hotel EIR

Figure 2-9
SCC 13th Street Elevation



SOURCE: Populous, 2017

Sacramento Convention Center Renovation and Expansion and 15th/K Street Hotel EIR

Figure 2-10
SCC 15th Street Elevation

Signage and Lighting

Signage

The proposed reconfigured and expanded SCC could incorporate varied signage that could promote the building activities and events, building and event sponsors, and civic activities at the property. Since people would approach the SCC from different locations, signage could be located on different sides of the SCC. Signs could be internal within the facility, or external, adhered to the structure, or free-standing in the Activities Plaza. These signs would likely be of a variety of types and sizes depending on their location, as shown on the following diagrams. Signs could be stationary, lit signs adhered to the building, or they could be projections onto glass or solid surfaces; they could be digital using LEDs (light emitting diodes) to convey changing messages and images; or they could utilize other technologies that may emerge in the future. A range of examples is provided to illustrate the spectrum of signage types currently being considered. Unique signage such as rooftop, laser, rotating or animated, projected image, digital, magnetic or electronic message signage may be allowed. The number, location, and size of signs would be determined in the future during Site Plan and Design Review and would be subject to Planning Director and/or Planning and Design Commission approval.

As most event attendees approach the main SCC entries located on the J Street side of the building or the West Lobby facing the Activities Plaza, signage likely would be provided in this area to accentuate this facade. This signage would be largely directed towards pedestrians in the Activities Plaza, motorists and streetcar passengers passing adjacent to the property along J Street alignment, or passing by the East Lobby along 15th Street. It is also possible that some large-scale graphics, projections, or illuminated signage located within the venue would be visible from this plaza area. As the Activities Plaza would be largely internal to the project site, the signage in the plaza area would not be as directly visible to pedestrians and people in vehicles on the project periphery other than those on 13th or K streets.

Lighting

The proposed SCC would be lit for visibility during events and at other times of the day and night. Interior lighting may be seen through first floor glass panels or doors, or through walls that may be opened to the Activities Plaza or outdoor terraces. Exterior lighting for the proposed SCC would be provided to illuminate different areas of the facility and Activities Plaza. The type of lighting and its intensity would vary, however, depending on how the venue is being used at any given time.

Sustainability

The proposed reconfigured and expanded SCC would be designed and constructed to meet the certification requirements of the LEED Silver certification or equivalent, including existing sections of the facility that would remain. The certification of the project as LEED Silver would be through a point system in which points would be assigned based on project characteristics. Some of the characteristics would be related to the project site, and others would be related to the project design and construction methods. The relevant characteristics of the project site would

involve its location in a downtown, infill location, redevelopment of an existing built property, the density of the site and connectivity to the adjacent community, and accessibility to public transportation. Details of the design process are not yet complete and, thus, many of the design details that would be measured to achieve LEED Silver certification, or equivalent, have yet to be determined.

LEED Silver certification may be achieved through varying levels of performance related to sustainability factors. The types of strategies that are being investigated to achieve sustainability targets to achieve LEED Silver or equivalent include:

- The use of thermal displacement ventilation and radiant strategies within the public spaces;
- The potential use of onsite central utility plant to reduce peak cooling and electrical demands;
- The use of low flow plumbing water fixtures throughout the building; and
- Local plant species to reduce irrigation needs.

2.4.3 Circulation

Vehicular

Vehicular circulation in and around the SCC project site would remain essentially the same as under current conditions. The turnout on the south side of J Street, east of 13th Street, would be reduced in width to a single-car width but would remain available for passenger drop-offs.

Vehicular parking would continue to be accommodated in local parking garages, including the nearby garage at 13th/J Street and other garages and lots in the vicinity.

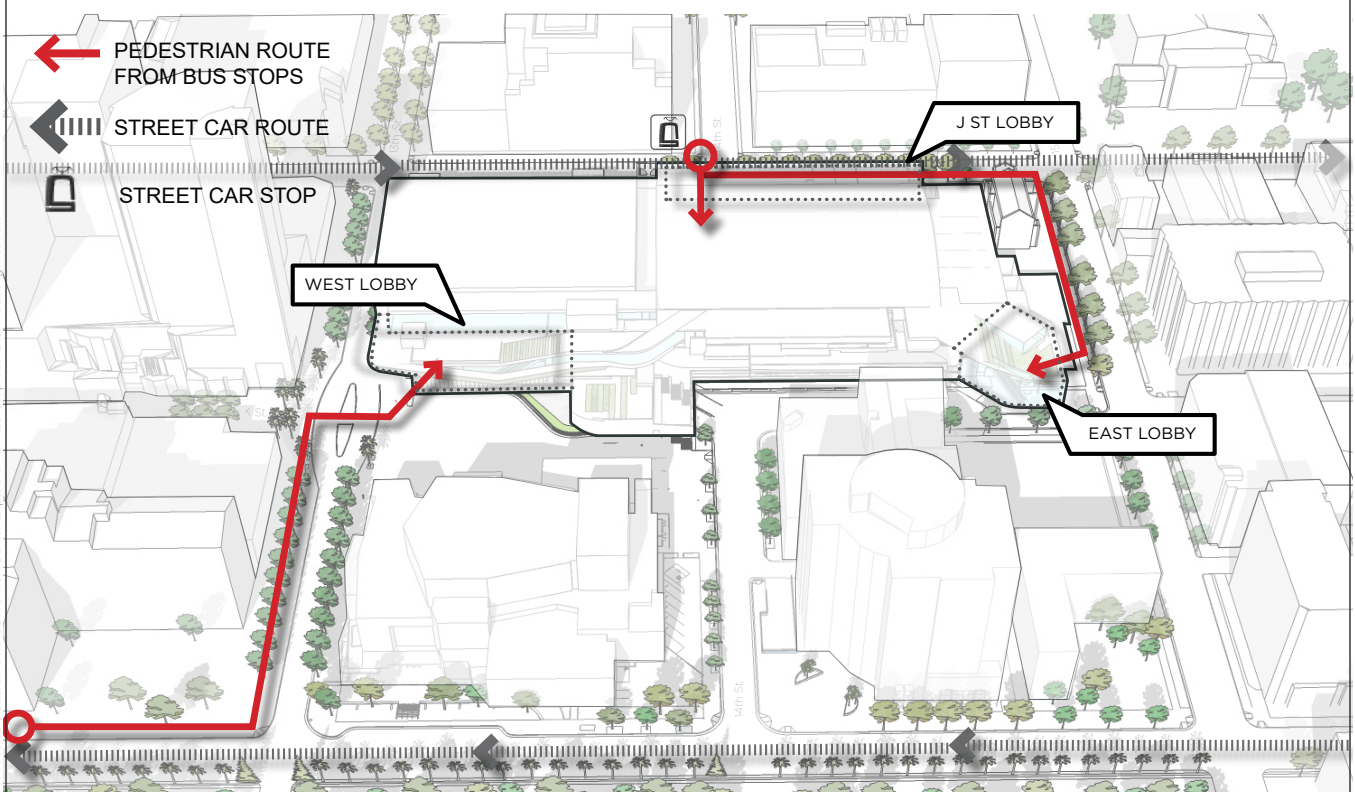
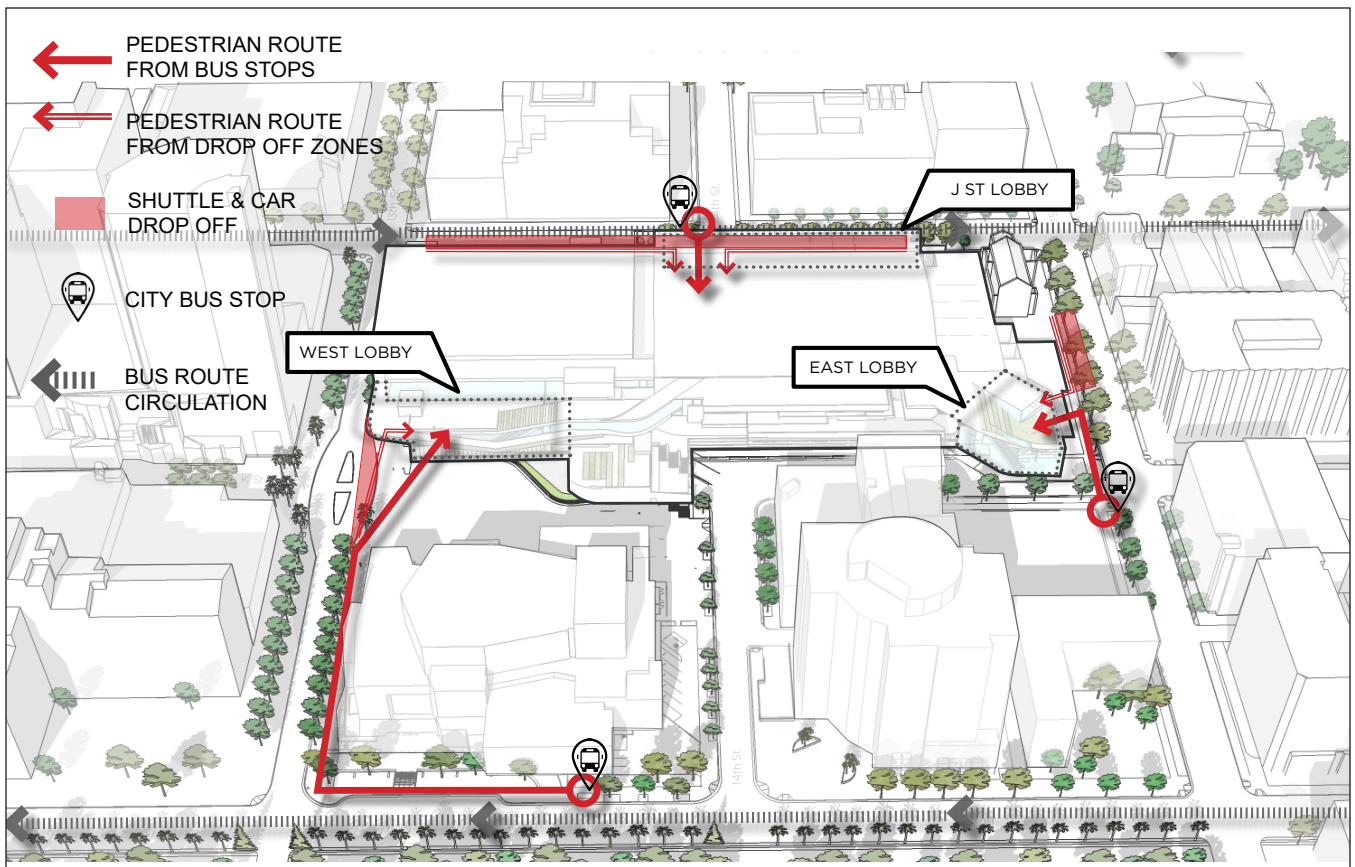
Delivery and Loading

Delivery trucks and service vehicles would access the proposed SCC via the 12 existing loading docks on the north side of K Street, between 14th and 15th streets. This location provides direct access to the proposed SCC loading docks and servicing area, located on the southeast portion of the SCC along K Street between 14th and 15th streets.

Freight delivery and service trucks would access the loading docks via northbound 14th Street, between L and K streets. Delivery and service vehicles would exit the loading area onto eastbound K Street, and would turn right onto 15th Street, heading south toward L Street for further access to downtown properties, or continue to W/X streets for access to US-50.

Transit

There are currently three (3) bus stops located on streets and sidewalks that front the SCC project site, including two on J Street (in front of the existing J Street entrance), and one on 15th Street (in front of the proposed East Lobby) (see **Figure 2-11**). The bus stops are owned, used, and maintained by Sacramento Regional Transit (SacRT). The existing SacRT bus stop on 15th Street south of J Street would be relocated to the south to a location between J Street and L Street. Paratransit, operated by SacRT, serves the site using the existing SacRT bus stops, providing direct access to the J Street entrance.



SOURCE: Populous, 2017

Sacramento Convention Center Renovation and Expansion and 15th/K Street Hotel EIR

Figure 2-11
Transit Access Map



Access to the SacRT Light Rail system in the close vicinity of the project sites is available at Blue Line stations at 12th/I streets, or at 11th/K Street (eastbound only) or 10th/K Street (westbound only). Passengers can take the Blue line southbound to connect to the Gold or Green Lines. Connections to the northbound Gold Line (to the Sacramento Valley Station) or the Green Line (to Township 9) are located at the 8th/K Street station, and to the Gold Line (toward Folsom) at the 7th/K Street station.

The proposed Downtown/Riverfront Streetcar line would travel on J Street adjacent to the SCC project site. It would travel northbound on 12th Street from K to J Street, and then eastbound on J Street in front of the SCC site. The Streetcar would turn south on 19th Street before turning westbound on L Street. Construction of the Downtown/Riverfront Streetcar project is expected to commence in 2018.

Pedestrians

The main pedestrian entry to the proposed expanded and reconfigured SCC would be located on the north and west sides of the facility (facing J and 13th streets, respectively), with an additional entry on the east side (facing 15th Street). Key pedestrian flows would be expected to originate from the west at the intersection of J and 13th streets, from the west and south at 13th Street near K Street, from the east and north from 15th Street between J and K streets (see **Figure 2-12**).

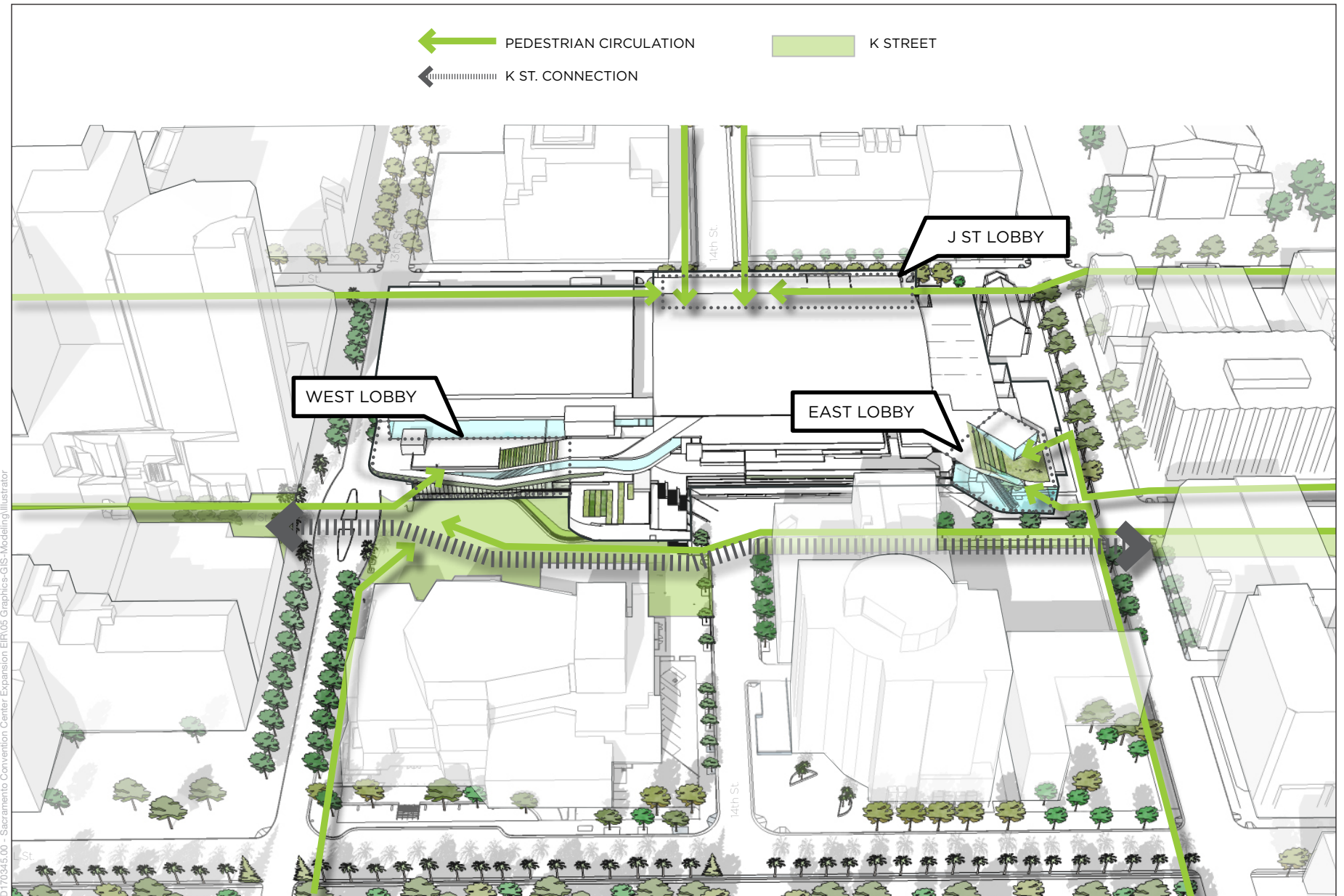
Bicycles

The proposed SCC project would comply with the requirements of the Planning and Development Code for the provision of short- and long-term bicycle parking (see Sacramento Planning and Development Code (PDC), Sacramento City Code, Chapter 17.608.030 and 17.608.040, Section N). The proposed SCC Bicycle Plan is depicted in **Figure 2-13**.

Approximately seven long-term employee secured bike parking spaces would be provided, most likely near the main entrances or near the proposed SCC administrative offices. Short-term patron bicycle parking spaces would most likely be provided in the Activities Plaza or near the east or west lobby entrances.

Event Transportation Management Plan

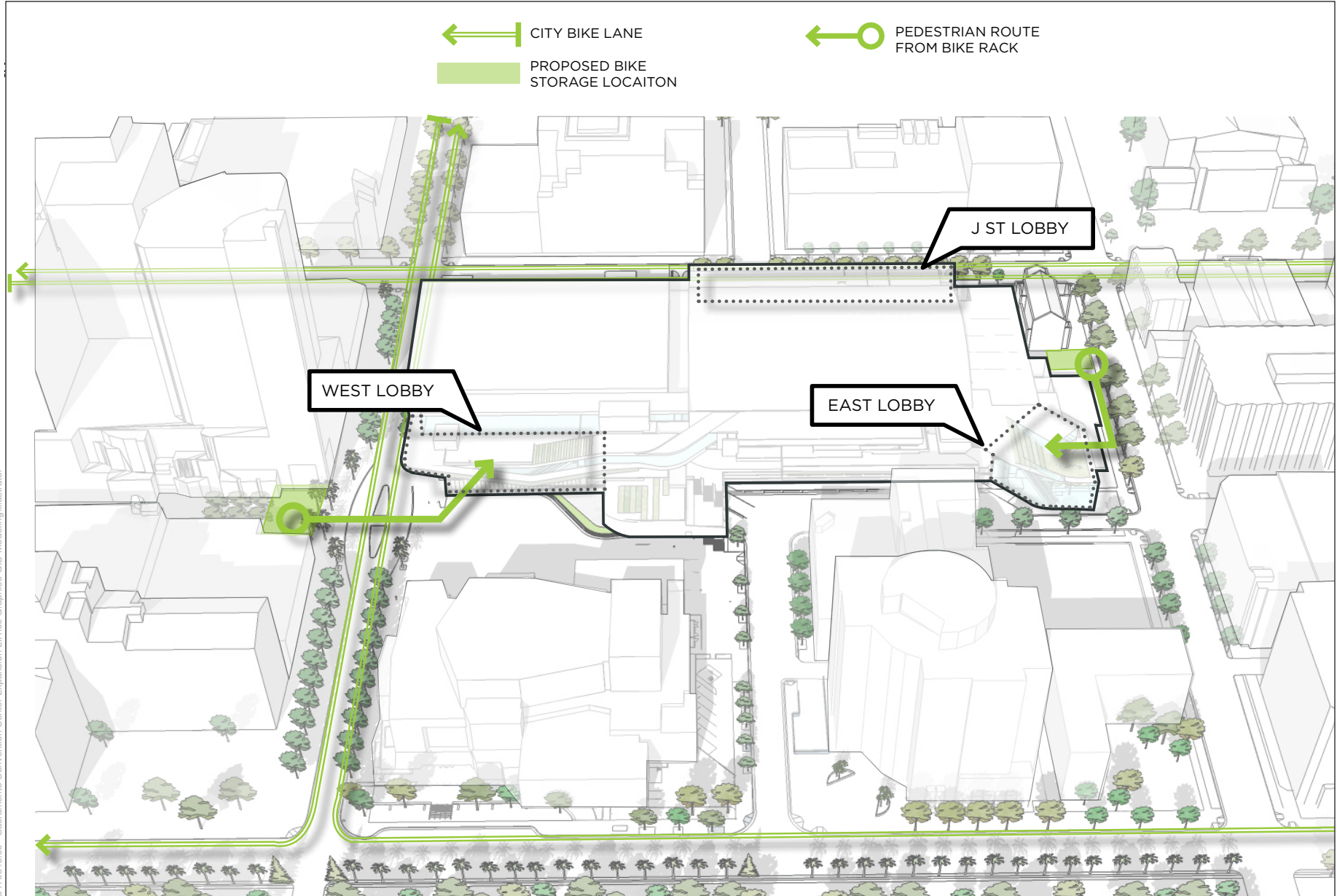
The proposed SCC project would include an Event Transportation Management Plan (ETMP), which is a management and operating plan designed to facilitate multi-modal travel to and from events at the SCC in a safe and efficient manner. The ETMP would be adapted and refined by the City of Sacramento, the SCC operator (if different than the City), and other agencies responsible for carrying it out. Subsequent adaptations or refinements would be made to respond to changing event types and schedules, new transportation access and parking opportunities, and planned transportation improvements that are implemented in the vicinity of the proposed SCC.



SOURCE: Populous, 2017

Sacramento Convention Center Renovation and Expansion and 15th/K Street Hotel EIR

Figure 2-12
Pedestrian Circulation Concept Design



SOURCE: Populous, 2017

Sacramento Convention Center Renovation and Expansion and 15th/K Street Hotel EIR

Figure 2-13
Bicycle Plan

The ETMP would provide for the following:

- Transportation control strategies, including potential designation of a Traffic Control Officer (TCO) supervisor who would manage event day traffic controls and the location of TCOs who would direct vehicular, transit and pedestrian traffic under various event scenarios.
- Communication strategies, including outreach and wayfinding strategies designed to inform event attendees of the various transportation options that would be available and provide directions on how they could be accessed.
- Wayfinding strategies, including a series of permanent and temporary signs as well as permanent changeable message signs on freeways that could be used to facilitate pedestrian, bicycle, and vehicle access.

Proposed transportation control strategies around the proposed SCC during large events are presented in the Draft ETMP, which is included in Appendix L.

2.4.4 Utilities

Water

The SCC is served by the City of Sacramento for domestic and fire water needs. The SCC project site is located in an area of the City that is served by an extensive system of service mains ranging in size from 8-inch to 16-inch diameters. There are two 16-inch mains in the immediate vicinity of the SCC project site, one within J Street between 14th and 15th streets and one in 15th Street between J and K streets. The existing SCC connects to the network of water supply mains with a 4-inch line in 13th Street and two 8-inch lines in 14th Street.

The proposed SCC would require reconstruction/rerouting of several key service points. There is an existing 6-inch domestic water service lateral located at the northwesterly corner of the K Street and 14th Street intersection that enters the existing SCC on the easterly side, in an area proposed for demolition. This access may be temporarily relocated during construction and would be permanently relocated once SCC expansion is complete. In addition, currently there is an existing 8-inch fire water service lateral located at the northwesterly corner of the K Street and 14th Street intersection that enters the existing building on the easterly side. With the proposed SCC project, this access would be relocated for temporary service during construction and permanently relocated to serve the completed expansion.

Wastewater

The SCC is served by the City of Sacramento for sanitary sewer for the collection system and by the Sacramento Regional County Sanitation District (SRCSD) for sewer treatment. The SCC project site is located in the Downtown Sacramento area served by the City's Combined Sewer System (CSS). The CSS legacy system serves both sanitary sewer and storm drainage needs in the same system. There are several CSS mains in roadways surrounding the CSS project site, including a 24-inch main in 13th Street, a 12-inch main in J Street between 15th and 14th streets, an

8-inch main in 15th Street between J Street and Jazz Alley, a 15-inch main in 14th Street between K and L streets that conveys flows from a 12-inch main in K Street.

Separate service lateral connections to the buildings are provided for sanitary sewer and storm drainage. These laterals are then combined in the street to a single main pipeline. There are several existing sanitary sewer service laterals to the existing SCC that would be relocated as part of the proposed SCC project. These include an existing 6-inch service located near the southwesterly corner at the intersection of 13th Street and K Street, and an existing 8-inch service lateral located at the northwest corner of the K Street and 14th Street that enters the existing building on the easterly side. These services would need to be relocated for both temporary and permanent service for the expansion.

Seasonal Dewatering

The SCC site is underlain by a seasonal dewatering system that collects and then pumps potentially intrusive groundwater to the CSS. The dewatering system would remain in place and would not be affected by the proposed expansion and renovation of the SCC.

Drainage

The SCC is served by the City of Sacramento for storm drainage via the CSS. There are numerous existing storm drain/roof drain lateral connections along the southerly side of the SCC. At the southwesterly corner near the intersection of 13th Street and K Street, there are two 6-inch and two 10-inch storm drain lateral connections at the corner of the building. At the intersection of K Street and 14th Street, there are two 12-inch storm drain lateral connections to both drain and sewer. It is likely these two services at K Street and 14th Street may remain in place if the expansion improvements planned in this area of the existing loading dock are not extensive. There is an existing 8-inch to 10-inch plaza area drainage system located between the SCC and Community Center Theater that may be removed with the expansion of the SCC building. The new 14th Street plaza area pedestrian connection through the site will require the installation of a new drainage system.

Energy and Telecommunications

Electrical Service

Electrical service would be provided by the Sacramento Municipal Utility District (SMUD) through service from its 12-kV system. The main electrical system connection to the SCC is located at the northwest corner of the K Street and 14th Street intersection and enters the building on the easterly side. With the proposed demolition of the western portion of the SCC, this connection would be relocated. Aside from connections that may be necessary to tie project systems to the SMUD system under adjacent streets, no further offsite improvements to the SMUD electrical system would be required, although transformers may need to be added to the existing SCC electrical vault to provide enough power supply to the SCC project site.

Natural Gas

The SCC is served natural gas by Pacific Gas & Electric (PG&E). PG&E provides service to downtown Sacramento through both high and low pressure systems. High pressure system pipelines, generally 4-inch diameter and larger, carry gas at approximately 40 pounds per square inch (psi). Low pressure system pipelines, generally 2-inch diameter, carry gas at a pressure of 7-inch water column (about 0.25 psi). Service is provided to most customers from the low pressure system unless usage exceeds about 3,000 cubic feet per hour, which is the case with the SCC.

The main gas service connection to the SCC is also located at the northwest corner of the K Street and 14th Street intersection and enters the building on the easterly side. With the proposed demolition of the western portion of the SCC, this connection would be relocated once SCC designs have been finalized. Other than connections between the project buildings and the existing PG&E natural gas mains, no further improvements to the PG&E distribution system would be required.

Telecommunications

The SCC is served by AT&T and Comcast for telecommunication needs. The main telecommunication system connection to the SCC is also located at the northwest corner of the K Street and 14th Street intersection and enters the building on the easterly side. With the proposed demolition of the western portion of the SCC, this connection would also require relocation.

2.4.5 Operations

SCC Events

The existing SCC has hosted an average of 368 events annually over the last 7 years (fiscal years 2009 through 2016). “Group A” events are larger and tend to drive a majority of the hotel room nights generated by SCC attendees. Examples of these types of events are conventions, tradeshows, annual meetings of professional associations, corporate annual meetings, and association conferences. The average attendance at Group A events was 5,175 attendees. “Group B” events are smaller and tend to be more local in nature, driving fewer hotel nights; the average attendance at Group B events was about 500 people. Examples of Group B events include performing arts, concerts and entertainment; small tradeshows and consumer shows; receptions and food functions; meetings; and graduations.

The proposed expanded and reconfigured SCC would be a venue for an array of various conference and entertainment events during the year. As explained elsewhere in this chapter, one of the primary objectives of the proposed improvements to the SCC would be to allow a more efficient transition between events, allowing for an increase in the total number of annual events accommodated at the SCC. The total number of events would be affected by a number of factors, such as the relative success of Visit Sacramento or a private operator in attracting events, and the number of touring events each year. **Table 2-3** provides an estimate of the type and number of events that could be expected during successful operation of the expanded and reconfigured SCC. It is estimated that the proposed SCC would generate an additional 1,790 attendees per event day.

TABLE 2-3
SACRAMENTO CONVENTION CENTER ANNUAL EVENT ATTENDANCE 2009-2016

Event Type	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2009-2016 Average
Group A Events									
Number of Events	62	49	68	56	57	57	56	65	59
Total Attendance	184,956	212,623	381,078	313,813	289,592	378,855	278,499	403,187	305,325
Group B Events									
Number of Events	410	356	351	269	259	289	277	264	309
Total Attendance	204,151	205,596	172,397	124,767	152,891	126,081	159,624	146,895	161,550

SOURCE: Visit Sacramento, 2017.

Different types of events typically are presented on different days and at different times, and may overlap. For purposes of a conservative analysis, it has been assumed that on an annual basis there would be events attended by a range of numbers of attendees with total event attendance ranging from a few hundred per day for smaller events to over 15,000 per day for the largest events.

SCC Employment

SCC employment includes permanent employment associated with the operations of the SCC, as well as temporary employment to support events throughout the year.

Permanent

The Sacramento Convention Center currently has approximately 86 permanent employees, working in business operations and administration, which include operation and maintenance of the SCC Complex. The proposed SCC would support approximately the same level of permanent employment.

Temporary/event-related

To support events at the SCC, such as an association meeting or convention, approximately 110 temporary employees are needed in a variety of jobs, including ushers, food service, security, janitorial, and similar positions. The proposed SCC project would result in the addition of 10-15 part-time, on-call staff to assist with housekeeping and event setup and teardown. Depending on the nature of the event, some temporary employees would work on days leading up to the event. Event-day employees would begin to arrive several hours before an event, and depending on their jobs, some employees would remain at the SCC for several hours or longer after events.

2.4.6 Construction

Construction Phasing

During project construction the City would keep functional and continue to operate, where feasible, sections of the SCC that are not under active construction, or where construction of planned components has reached completion. Another option is to close the entire SCC for the duration of construction. The City proposes two phasing plans for the SCC project that would meet operational goals, the Phased Construction Plan and the Full Shutdown Construction Plan, as described below.

Phased Construction Plan

Under the phased construction plan, the proposed SCC project would be constructed in two phases beginning in April of 2018. During the first phase, work would commence only on the east side of the SCC and would be completed by June of 2019. The Panattoni Building would be demolished and administrative office space and the new East Lobby would be constructed. In addition, the east outdoor terrace on the second level would be demolished and the new east

meeting rooms would be constructed. It is anticipated that operations would continue on the west side of the SCC during this phase.

Demolition and construction on the west side of the SCC (second phase) would commence following the conclusion of construction on the east side of the SCC, in June of 2019, and would be completed by December of 2020. As part of the second phase, the existing west building would be demolished and the new west building would be constructed, along with the Activities Plaza. During demolition and construction activities on the west side of the SCC, between June 2019 and December 2020, the east side of the facility would be operational and hold events. Events would be relocated to the east side and would use the junior ballroom, east meeting rooms, and Exhibit Halls A and B - all on the east side. All project components, with the exception of the second-level ballroom in the new west building would be completed by early December of 2020 and the SCC would resume operations in early December. The second-level ballroom would remain under construction until March of 2021. The above construction phases are further described in **Table 2-4**.

TABLE 2-4
PROPOSED SCC PROJECT PHASED CONSTRUCTION PLAN

Construction Phase	Time Period	
	Start Date	Stop Date
East Demolition, Expansion and Renovation	April 2018	June 2019
West SCC Event Operations	Ongoing	June 2019
West Demolition Expansion and Renovation	June 2019	December 2020
East SCC Event Operations	June 2019	Ongoing
Ballroom Construction	June 2019	March 2021
Full SCC Event Operations	March 2021	Ongoing

SOURCE: City of Sacramento, 2017

Full Shutdown Construction Plan

The full shutdown construction plan would begin work in January of 2019, on utilities and demolition of the Panattoni building and subsequent construction of the East Lobby, all components for which there would be no anticipated impacts to ongoing event operations at the SCC. The SCC would continue to operate during the construction of those elements until mid-July of 2019, and which time all event operations would cease and full demolition and construction on all other project components would commence. Construction would continue for 24 months, with the SCC becoming fully operational by December 2020. **Table 2-5** illustrates the timeline of the full shutdown construction plan.

**TABLE 2-5
PROPOSED SCC PROJECT FULL SHUTDOWN CONSTRUCTION PLAN**

Construction Phase	Time Period	
	Start Date	Stop Date
Early Utility Work, Panattoni Building Demolition, East Lobby Construction	January 2019	June 2018
Full SCC Event Operations	Ongoing	Mid/late July 2019
Full Event Operations Shutdown	Mid/Late July 2019	December 2020
Full Project Construction	July 2019	December 2020
Ballroom Construction	Mid/Late July 2019	March 2021

SOURCE: City of Sacramento

Construction Components

Demolition

As described above for the both the phased construction plan and the full shutdown construction plan, demolition and construction of the east and west expansions of the SCC would begin at different times but may overlap, and would include demolition of the west wing of the SCC, internal elements in the eastern wing of the SCC, and the entire Panattoni building, and would include removal of foundations, plumbing and electrical systems. Under the phased construction plan, demolition for the east expansion would begin in late spring of 2018 and last an estimated 2 months. Demolition for the west expansion would begin around June 2019 and last approximately 3 months.

Excavation

Site excavation would be limited to relocation of utilities as the proposed structures would be constructed at existing grade.

Construction

The foundations/footings phase of construction would involve pre-drilling and auger displacement for a deep foundation system during approximately 2 to 4 months. The construction components for the east and west expansion would involve the erection of steel, concrete and precast concrete elements. These components would involve the use of numerous cranes, loaders, welders, generators, concrete pumpers, and similar construction equipment. The site would be fenced during construction activities.

Interior and exterior finish work would involve a wide variety of construction activities involving creating and outfitting interior spaces and completing the exterior finish of buildings, including plumbing, electrical, heating and air conditioning systems, audio/video and other event system installation, and the like. Exterior site work and landscaping would be undertaken over a period of about 5 months, and would be anticipated to conclude in December of 2020.

Truck Routes

Construction vehicles would follow the established City truck routes, and as depicted on **Figure 2-14** (Construction Truck Routes), inbound truck trips would access the project site from J Street or 15th Street. The direction of outbound truck trips would be determined by the destination of the truck, especially during demolition when trucks would be transporting demolition materials to recycling facilities or landfills.

Dewatering

Construction of the foundations and event level components of the proposed facility would require temporary dewatering. Analysis of the ground water, both for contaminants and quantity would be performed in advance of installation of the construction dewatering system. Automatic controls may be used to alternate pumps and subsequent discharge quantities during the construction dewatering period.

Periodic water quality tests would be performed to establish needs for onsite treatment prior to discharge to the city collection grid. Permitting for the discharge of the temporary dewatering into the City's sewer and/or storm drain systems would be coordinated with the City Department of Utilities, SCRSD, and the Central Valley Regional Water Quality Control Board, as appropriate.

2.5 Hotel Project

2.5.1 Hotel Project Site

Location

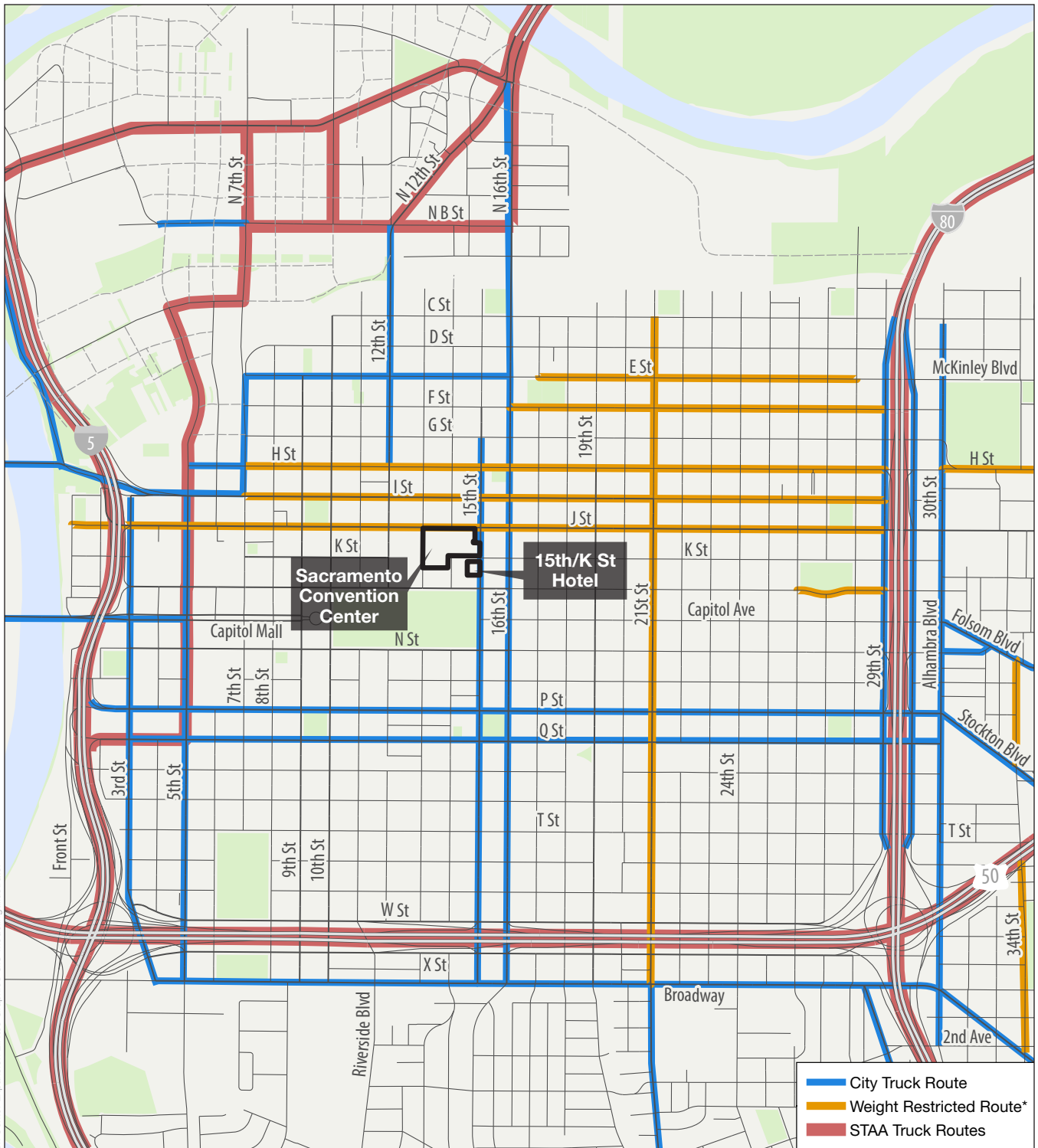
As is presented in Figure 2-3, the site of the proposed hotel consists of approximately 0.59-acre, presently in use as a parking lot, on a parcel at the southwest corner of K Street and 15th Street. The hotel project site is bounded by the six-story office building at 1414 K Street to the west, K Street to the north, 15 Street to the east, and Kayak Alley to the south. Kayak Alley is not part of the project site.

Existing Conditions

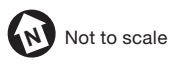
General Plan and Zoning

The Hotel project site is currently designated Central Business District (CBD) on the City of Sacramento 2035 General Plan Land Use and Urban Form Diagram.

According to the 2035 General Plan, “[t]he Central Business District is Sacramento’s most intensely developed area. The CBD includes a mixture of retail, office, governmental, entertainment and visitor-serving uses built on a formal framework of streets and park spaces laid out for the original Sutter Land Grant in the 1840s. The vision for the CBD is a vibrant downtown core that will continue to serve as the business, governmental, retail, and entertainment center for the city and the region. A significant element in the future CBD includes new residential uses. Increasing the residential population will add vitality to the CBD by extending the hours of activity and the built-in market for retail, services, and entertainment.”



* City Code 10.24.020:
Trucks exceeding a manufacturer's gross vehicle weight rating of ten thousand pounds prohibited.



D:\70345.00 - Sacramento Convention Center Expansion EIR\05 Graphics-GIS-Modeling\Illustrator

SOURCE: Fehr & Peers, 2017

Sacramento Convention Center Renovation and Expansion and 15th/K Street Hotel EIR

Figure 2-14
Construction Truck Routes



The Hotel project site is zoned C-3-SPD: CBD Zone as defined in chapters 17.216.800 through 17.216.880 of the Sacramento Planning and Development Code. The C-3-SPD zone is intended for the most intense residential, retail, commercial and office developments in the City and is the only classification which has no height limit, aside from 300-foot height limit imposed by the Capitol View Protection requirements (PDC 17.216.860). Generally, office, retail, restaurant, residential, fitness, and theaters are permitted by right in the C-3 zone. An assembly use is allowed in the C-3 zone subject to the approval of a conditional use permit by the City Planning and Design Commission. Additional detail on the site zoning is provided in Chapter 3.0, Land Use, Population and Housing.

Existing and Adjacent Uses

The Hotel project site is made up of three parcels including APNs 006-0116-005, 006-0116-004, and a substantial portion of APN 006-0116-003. The Hotel project site is presently paved and serves as a surface parking lot with 72 parking stalls.

Adjacent uses include the office building at 1414 K Street to the west; the SCC and Panattoni Building across K Street to the north; a large, multi-story parking garage with ground-floor restaurant use (Capitol Garage) across 15th Street to the east; and restaurant uses (Cafeteria 15L) across Kayak Alley to the south.

Access

Primary access to the project site is a driveway on K Street. The site also is open to Kayak Alley with entry and exit points for parking lot aisles along the alleyway which is accessible via 14th and 15th streets.

2.5.2 Hotel Project Elements

The proposed Hotel project would include demolition of the existing parking lot and subsequent construction of a 350-room hotel. The EIR anticipates that the proposed Hotel project would include construction of an approximately 24-story hotel. The hotel would be anticipated to include the following elements:

- 170,000 square feet (sf) of hotel space, including up to 350 rooms, located on upper levels;
- 70,000 sf of meeting/conference space, located across 4 lower levels;
- Up to 130,000 sf of building amenities such as lobbies, including approximately 6,000 sf of restaurant space and a pool deck on approximately the 5th floor on the southwest corner of the structure;
- 15,000 sf of service and loading facilities; and
- 65,000 sf of parking space, anticipated to provide approximately 200 on-site parking spaces on 2 subterranean floors.
- A pedestrian bridge that would span K Street, connecting the second level floors of both the hotel and the proposed SCC East Lobby. The exact elevation of the pedestrian bridge is not

known at this time, however, it is assumed that the pedestrian bridge would be designed to provide clearance for vehicular traffic along K Street, including trucks and other freight vehicles accessing the SCC loading docks.

Building Design

Based on conceptual planning studies, the proposed Hotel building would be approximately 300 feet tall and include approximately 24 above-ground stories and two subgrade parking levels. The main entrance would front 15th Street and the ground floor would include the hotel lobby, building support toward the southwest, and loading dock facilities along K Street. Directly above the ground level would be approximately three levels dedicated to building amenities and meeting space. The second level would provide access to the proposed east lobby of the SCC via a proposed pedestrian bridge. The floors above the meeting and hotel amenity levels would be dedicated to hotel rooms and would be massed toward the north and eastern perimeters of the structure. The floor above the meeting levels would include a proposed amenity deck that would feature an outdoor terrace area toward the south west of the structure. The amenity deck would likely include an outdoor pool area.

The proposed Hotel project is anticipated to include two subgrade parking levels accommodating approximately 200 parking spaces. The below-grade floors would be constructed with a waterproof foundation and outer walls to prevent groundwater infiltration during seasonal periods where the water table would be at or above the lowest depth of the subgrade parking levels. This design would avoid the need for a seasonal dewatering system.

2.5.3 Hotel Operations

Hotel Occupancy

The EIR assumes that occupancy rates for the proposed hotel would be similar to nearby hotels of similar type, reaching full or nearly full occupancy of the hotel's approximately 350 rooms during large events at the SCC or in downtown Sacramento.

Hotel Events

Events in the proposed 70,000 square feet (sf) of hotel meeting space would be programmed similar to operations in hotel meeting and event space in the nearby Hyatt and Sheraton Hotels. It is expected that some uses of the proposed Hotel meeting spaces would be in coordination with events taking place at the SCC; however, it is also expected that the meeting spaces would be programmed for uses that are not affiliated with the SCC and could occur concurrently with unrelated events at the SCC. Individual meeting spaces would most likely range in size from 15,000 sf to 200 sf. Anticipated events attendance would be generally small, with an anticipated single-event capacity of up to 2,000 guests in a ballroom-type setting.

Hotel Employment

The proposed hotel would employ approximately 125 permanent employees, in a variety of hospitality and service roles.

2.5.4 Circulation

Vehicular

The proposed Hotel project would have a main entrance on 15th Street with an on-street drop off passenger loading and unloading zone, or an off-street porte cochere that would have a vehicular entrance from 15th Street immediately south of K Street and an exit to 15th Street immediately north of Kayak Alley. Vehicle access to subgrade parking levels would be available via an ingress located on the south end of the hotel's 15th Street frontage (potentially directly from the porte cochere) or an on-alley ingress from Kayak Alley. The vehicle egress from subgrade parking levels would be located on K Street, with a right-out driveway which leads to the signalized intersection at K and 15th streets. Seven curbside parking places presently located along 15th Street, between K Street and Kayak Alley, would be eliminated.

Delivery and Loading

Delivery and loading facilities for the proposed Hotel project would be located along Kayak Alley, consistent with loading and delivery facility design for similar nearby uses,² or along K Street.

Pedestrian

Sidewalk improvements around the Hotel site along the K Street and 15th Street frontages would comply with City standards for width and design.

The proposed Hotel would include a pedestrian bridge providing a link between the hotel and the proposed East Lobby of the SCC, which would be constructed at the current site of the Panattoni Building, described in further detail under the SCC project description above. The pedestrian bridge would link above-ground floors of both structures, and would be designed to provide adequate clearance for vehicle traffic along K Street, below.

The proposed Hotel project would face K Street and 15th Street, providing pedestrian access on both sides of the structure.

Bicycle and Transit

Short-term patron and employee bicycle parking spaces would most likely be provided on-site, possibly in the subterranean parking garage. The PDC requires 1 long-term bicycle parking space per 30 rooms and 1 short-term bicycle parking space per 60 rooms. Therefore, 12 long-term and 6 short-term bicycle parking spaces would be required to be provided onsite. No other improvements or alteration of existing bicycle facilities are proposed.

² Cafeteria 15L, 1415 L Street, 1414 K Street, and 1400 K Street buildings are all serviced from Kayak Alley.

2.5.5 Utilities

The site of the proposed Hotel project is located within an area where infrastructure is well established. Thus, minimal offsite improvements would be necessary to provide utility services to the hotel project site, as described below.

Water

Water supply would be provided to the Hotel project site through existing 16-inch water supply mains in K and 15th streets. A 6-inch main may also be accessed from Kayak Alley.

Wastewater

The wastewater and drainage systems for the proposed hotel would connect to the City's Combined Sewer System (CSS). The project may access the CSS via 12-inch mains located in K Street and Kayak Alley, or an 8-inch main in 15th Street.

Drainage

Drainage for proposed Hotel project would be approximately the same as compared to the existing condition because the Hotel project site would continue to be nearly fully paved.

It is anticipated that storm water would be collected and treated on-site before the treated runoff leaves the project site and enters the City separated storm drain system. Since the storm water system is currently separated all the way to the outfall into the Sacramento River, the Hotel project site would include temporary storage with the necessary pre-release treatment facilities as required to meet the both current water quality standards and the discharge capacity of the existing system.

Stormwater within the construction footprint would be managed pursuant to a Stormwater Pollution Prevention Plan (SWPPP) that would be prepared for the proposed Hotel project.

Energy and Telecommunications

Electrical Service

Electrical service would be provided by the Sacramento Municipal Utility District (SMUD) through service from its 21-kV system. The Hotel project site would connect to the SMUD electrical grid at a 21-kV underground local line at Kayak Alley and 15th Street or via a proposed underground line that would be extended south from J Street, within 15th Street. Aside from connections that may be necessary to tie project systems to the SMUD system under adjacent streets, no further improvements to the SMUD electrical system are anticipated.

Natural Gas

Other than the existing connections between the proposed Hotel project and the existing PG&E natural gas mains, no further improvements to the PG&E distribution system would be necessary.

Telecommunications

The proposed Hotel would acquire telephone and data service from the current existing carrier(s) that are now established in downtown Sacramento. Connection(s) would be completed in existing telephonic and data manholes. The project applicant would coordinate with the City and other utility providers to determine the optimal solution for gaining access to adjacent lines, potentially including either open cuts or directional drilling that could be done in these manholes without severe traffic interference. Where open cuts are determined to be necessary, appropriate traffic management plans would be developed, subject to approval by the City of Sacramento. If feasible, service to the project site would be coordinated with SMUD in a common joint trench, in which a few 2-inch conduits would be added to the joint trench for telecommunication service.

2.5.6 Hotel Construction and Phasing

Construction of the proposed Hotel project would occur over approximately 2 years. While it is not known at this time when hotel construction would begin, this EIR assumes that stages of hotel and SCC construction would overlap and that more intensive construction activities could happen concurrently for both projects. Within year 1 of hotel construction, anticipated activities would include demolition of the existing parking lot and construction of the foundation and erection of the proposed hotel. Year 2 of construction would consist primarily of internal construction and commissioning, and exterior landscaping.

Demolition

Demolition of the existing parking lot on the hotel project site would last approximately two weeks. Demolition of the site would include removal of asphalt paving, and any below grade foundations, plumbing, and electrical systems that may remain from prior uses of the site. Demolition would take place with excavators, loaders, and dump trucks.

Excavation

The mass excavation phase would involve earth movement and hauling on an exposed site of approximately 0.59-acre. The project site would be excavated to a depth of approximately 30 feet below ground level. Excavated soil and debris would be hauled offsite for disposal.

Construction

The deep foundations/footings phase of construction would involve the driving or drilling of concrete foundation piles throughout the excavation area.

The construction phase would involve the erection of steel, concrete and/or precast concrete elements, and would take place over about eight months. This phase would involve the use of numerous cranes, loaders, welders, generators, concrete pumpers, and similar construction equipment.

Interior and exterior finish work would take place over about 12 months. This phase would involve a wide variety of construction activities involving creating and outfitting interior spaces

and completing the exterior finish of the building, including plumbing, electrical, heating and air conditioning systems, seat and other event system installation, and the like.

Exterior site work and landscaping would be undertaken over a period of about 2 months, concurrent with interior and exterior finish work.

Construction Circulation

Hotel Project Site

During construction, the entire Hotel project site would be fenced off. Construction fencing would be placed along the west side of 15th Street between K Street and Kayak Alley, and during portions of construction activities, within the western-most lane of 15th Street. Construction fencing would also be placed along the south side of K Street and the north side of Kayak Alley, both from the edge of 1414 K Street to 15th Street.

Water-filled construction barriers would be placed on the south side of 15th Street between K Street and Kayak Alley. The on-street parking on the western curb of 15th Street between K Street and Kayak Alley would be removed, eliminating up to 6 on-street parking spaces.

Construction gates providing access to the site would be located on K Street and Kayak Alley.

Road Closures

Construction of the pedestrian bridge between the proposed hotel and the proposed east lobby of the SCC would probably require temporary closure of K Street, possibly only at night, until completion of the bridge component. K Street, 15th Street, and Kayak Alley may be subject to occasional temporary roadway or lane closures for safety purposes, during hotel construction. All other roadways are expected to remain open. Bike detours would be put in place during construction activities.

Truck Routes

Construction vehicles would follow already established truck routes for the City and which are largely determined by the streets that can access the site and the City's one-way street system. As depicted on Figure 2-18 (Construction Truck Routes), inbound truck trips would access the project site from K Street or from Kayak Alley.

The direction of outbound truck trips would be determined by the destination of the truck, especially during demolition when trucks would be transporting demolition materials to recycling facilities or landfills. Outbound trucks headed to Richards Boulevard would depart the site on eastbound K Street, turning northbound on 16th Street. Trucks heading toward I-5 could travel south on 15th to L Street to the L Street northbound onramp. Trucks heading south on I-5 could travel south on 15th Street to P Street to the P Street onramp to I-5 South and connecting freeways.

Construction Dewatering

Construction of the foundations and parking levels components of the proposed Hotel project likely would require temporary dewatering during the rainy season. Analysis of the ground water, both for contaminants and quantity would be performed in advance of installation of the construction dewatering system. Monitor wells would be used to gain historical data both prior to and during the construction dewatering period. The wells would be either new or existing wells around the proposed Hotel site, including the project vicinity covering an area with a radius of about three-quarters of a mile. The system of monitoring wells would be used to determine subsidence parameters which in turn would dictate to the dewater subcontractor how low the immediate site water table can be dropped. Automatic controls may be used to alternate pumps and subsequent discharge quantities during the construction dewatering period.

Periodic water quality tests would be performed to establish needs for onsite treatment prior to discharge to the city collection grid. Permitting for the discharge of the temporary dewatering into the City's sewer and/or storm drain systems would be coordinated with the City Department of Utilities, SCRSD, and the Central Valley Regional Water Quality Control Board, as appropriate.

2.6 Actions

This EIR is intended to support decisions made by the City and responsible agencies that would allow the construction and operation of the proposed projects. Pursuant to State CEQA Guidelines section 15125(d), the following discussion describes the actions of the City or other agencies that the City is aware of at this time. If it is determined at a later date that additional actions are required to facilitate execution of the proposed projects, it is the City's intent that this EIR would be used to support those actions.

2.6.1 SCC Project Actions

The proposed SCC project is anticipated to require, but may not be limited to, the following City actions:

- Certification of the EIR to determine that the EIR was completed in compliance with the requirements of CEQA, that the decision-making body has reviewed and considered the information in the EIR, and that the EIR reflects the independent judgment of the City of Sacramento;
- Adoption of a Mitigation Monitoring Plan (MMP), which specifies the methods for monitoring mitigation measures required to eliminate or reduce the project'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;
- Revocation of a condominium map as authorized by California Civil Code Section 4295 for APNs 006-0115-016, -017, -018, -019 and -020 (Panattoni Building);

- Approval of a lot merger for APNs 006-0115-016, -017, -018, -019 and -020 and Lot A (Panattoni Building);
- Approval of a Conditional Use Permit to waive a portion of the ground floor retail requirement on L Street;
- Approval of a variance from the City's Noise Ordinance to allow extended construction hours and operation of the outdoor amphitheater;
- Approval of a demolition permit;
- Approval of a grading permit to regulate land disturbances, landfill, soil storage, pollution, and erosion and sedimentation resulting from construction activities; and
- Approval of a groundwater memorandum of understanding from the City of Sacramento for construction dewatering.

The proposed SCC project is expected to include, but may not be limited to, the following actions by entities other than the City:

- Approval of a construction activity stormwater permit, including a Stormwater Pollution Prevention Plan, from the Central Valley Regional Water Quality Control Board (CVRWQCB);
- Approval of a pre-treatment permit from the Sacramento Regional County Sanitation District to allow discharges associated with construction de-watering to the CSS; and
- Approval of a stationary source permit from the Sacramento Metropolitan Air Quality Management District (SMAQMD).

2.6.2 Hotel Project Actions

The proposed Hotel project would require the following City actions:

- Certification of the EIR to determine that the EIR was completed in compliance with the requirements of CEQA, that the decision-making body has reviewed and considered the information in the EIR, and that the EIR reflects the independent judgment of the City of Sacramento;
- Adoption of a Mitigation Monitoring Plan (MMP), which specifies the methods for monitoring mitigation measures required to eliminate or reduce the project'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;
- Approval of a Site Plan and Design Review Permit;
- Approval of a demolition permit;

- Approval of a grading permit to regulate land disturbances, landfill, soil storage, pollution, and erosion and sedimentation resulting from construction activities; and
- Approval of a groundwater memorandum of understanding from the City of Sacramento for construction dewatering.

The proposed Hotel project is anticipated to include, but may not be limited to, the following actions by entities other than the City:

- Approval of a construction activity stormwater permit, including a Stormwater Pollution Prevention Plan, from the Central Valley Regional Water Quality Control Board (CVRWQCB);
- Approval of a pre-treatment permit from the Sacramento Regional County Sanitation District to allow discharges associated with construction de-watering to the CSS; and
- Approval of a stationary source permit from the Sacramento Metropolitan Air Quality Management District (SMAQMD).

2.7 Responsible and Trustee Agencies

This EIR is intended to be used by responsible and trustee agencies (as defined by sections 15381 and 15386 of the State CEQA Guidelines) that may have review or discretionary authority over some component of the project. Agencies in addition to the Lead Agency that also may use this EIR in their review of the project or that may have responsibility over approval of certain project elements may include, but are not limited to, the following:

- Central Valley Regional Water Quality Control Board (CVRWQCB),
- Sacramento Metropolitan Air Quality Management District (SMAQMD),
- Sacramento Municipal Utility District (SMUD),
- Sacramento Regional County Sanitation District (SRCSD), and
- Sacramento Regional Transit (SacRT).

CHAPTER 3

Land Use and Employment

3.1 Introduction

This chapter of the EIR provides an overview of the land use and planning issues that may arise in connection with planning, construction, and operation of the proposed projects. The chapter describes existing and planned land uses in and adjacent to the project sites, including current land uses, land use designations, and zoning. Section 15125(d) of the State CEQA Guidelines states that an EIR shall discuss “any inconsistencies between the proposed project and applicable general plans and regional plans.” Potential inconsistencies between the proposed projects and the Sacramento 2035 General Plan, the Central City Community Plan, the City’s Comprehensive Zoning Ordinance, and the Sacramento Area Council of Governments (SACOG) Sacramento Region Blueprint and Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS) are discussed in this chapter. The determination of consistency with the City’s 2035 General Plan is within the authority of the City Council. The information provided in this chapter is intended to inform that determination. A general discussion on plan consistency is included below.

In addition, the reader is referred to the various environmental resource evaluations presented in Chapter 4 for a discussion of potential physical/environmental effects and potential incompatibilities that may be considered in the determination of physical environmental impacts. For example, land uses that produce excessive noise, light, dust, odors, traffic, or hazardous emissions may be undesirable when they intrude on places used for residential activities (e.g., residences, parks). Thus, certain industrial or commercial uses (which can produce noise and odors) may not be considered compatible with residential, educational, or healthcare uses, unless buffers, landscaping, or screening could protect residents from health hazards or nuisances.

This chapter also describes existing levels of and trends in employment in the City of Sacramento. It identifies the employment assumptions for the proposed projects and analyzes projected growth in employment in relation to City projections.

While an EIR may provide information regarding land use, socio-economic, population, employment, or housing issues, CEQA does not recognize these issues as direct physical effects on the environment.¹ Therefore, this chapter does not identify environmental impacts and

¹ Pursuant to section 15131 of the State CEQA Guidelines, social and economic effects are only significant to the extent that they may be material to the determination of the significance of a physical effect, or as a link in a “chain

mitigation measures. Adverse physical effects on the environment that could result from implementation of the projects, including the changes to land use or socioeconomics addressed in this chapter, are evaluated and disclosed in the appropriate environmental resource sections of this EIR.

No comments pertaining to land use were submitted in response to the NOP.

3.2 Land Use Consistency and Compatibility

3.2.1 Environmental Setting

Regional Context

The City of Sacramento is located approximately 80 miles east of San Francisco and 85 miles west of Lake Tahoe in the northern portion of the great Central Valley, at the northern end of the Sacramento/San Joaquin river delta and at the confluence of the Sacramento and American rivers. Sacramento is the seat of government for the State of California and also serves as the county seat of Sacramento County (see Figure 2-1, Project Location). The City of Sacramento is the largest incorporated city in Sacramento County.

Sacramento is a major transportation hub, the point of intersection of major transportation routes that connect Sacramento to the San Francisco Bay area to the west, the Sierra Nevada mountains and Nevada to the east, the City of Los Angeles to the south, and Oregon to the north. The City is bisected by a number of major freeways including Interstate 5 (I-5) that traverses the state from north to south; Interstate 80 (I-80), which provides an east-west connection between San Francisco and Reno, as well as Highway 50, which provides an east-west connection between Sacramento and South Lake Tahoe. In addition, the Union Pacific (UP) Railroad and the BNSF Railway transect the City.

SCC Project Site

The SCC project site consists of approximately 6.52 acres occupying more than two city blocks in downtown Sacramento.² The SCC project site is located on the blocks bounded by 13th, 15th, J, and K streets, including the adjacent abandoned K Street right-of-way (between 13th and 14th streets) (see Figure 2-3). Between 13th and 14th streets, K Street previously was abandoned and no longer functions as a City street. St. Paul's Episcopal Church, at the corner of 15th and J streets is not part of the SCC project site. In addition, the adjacent Sacramento Community Theater, located on 13th Street, between K and L streets, is not part of the SCC project site.

Hotel Project Site

The project site for the proposed Hotel project is currently a paved surface parking lot, bounded by a six-story office building to the west (1414 K Street), K Street to the north, 15th Street to the

of cause and effect from a proposed decision on a project through anticipated economic or social changes resulting from the project to physical changes caused in turn by the economic or social change.”

² The SCC project site consists of Assessor's Parcels 006-0115-016, 017, 018, and 019.

east, and Kayak Alley to the south. The parking lot has 72 parking stalls that are accessed from K Street and Kayak Alley. The parking lot is framed on its north (K Street) and east (15th Street) perimeters by low-lying manicured hedges, sidewalks, and ornamental street trees (see Figure 2-3).

Existing and Adjacent Uses

SCC

The existing SCC is made up of two buildings, the west building constructed in 1974 and the east building constructed in 1992. As described in **Table 3-1**, the existing site contains a total of 256,758 square feet (sf) of built space.

**TABLE 3-1
EXISTING SACRAMENTO CONVENTION CENTER SPACE ALLOCATION**

Entire Property	Space (SF)
Exhibit Halls	137,506
Meeting Rooms	21,667
Ballrooms	24,282
Lobbies and Pre-function Space	29,243
Terrace	10,000
Other	18,197
Subtotal Convention Center	240,895
Panattoni Building	15,863
Total Project	256,758

Source: Populous, 2017.

The SCC project site includes an approximately 1.5-acre Activities Plaza located between the SCC and the Sacramento Community Theater. The three-story Panattoni office building is located within the SCC project site on an approximately one-third acre parcel facing 15th Street.

Hotel Project Site

The project site for the proposed Hotel project is currently a paved surface parking lot, bounded by a six-story office building to the west (1414 K Street), K Street to the north, 15th Street to the east, and Kayak Alley to the south.

Adjacent Uses

The project sites are situated in an area of predominantly commercial (e.g., office, hotel, retail, restaurant, entertainment) development in downtown Sacramento. High-rise office buildings with first-floor commercial/retail shops and an AT&T data center are north of the SCC project site north of J Street. The Sacramento Memorial Auditorium is located northeast of the SCC project site at 1515 J St. St. Paul's Church and 15th Street are immediately east of the SCC project site,

beyond which are the four-story Maydestone Apartments building at 1001 15th Street and a six-story office building at 1515 K Street. Immediately south of the SCC project site, along 13th Street, is the Sacramento Community Center Theater. West of the SCC project site, beyond 13th Street, are the 26-story Sheraton Grand Sacramento Hotel; the 22-story Esquire Plaza office building at 1215 13th Street; restaurant, retail, and entertainment uses along the eastern end of the K Street Mall, and the 15-story Hyatt Regency Sacramento at 1209 L Street.

South of the SCC project site and adjacent to the Hotel project site on the west are a six-story office building at 1414 K Street and the four-story League of California Cities building at 1400 K Street. Immediately south of these two buildings is the 12-story Meridian Plaza office building at 1415 L Street. Immediately south of the Hotel project site are connected low-rise buildings that house several restaurants. Immediately east of the Hotel project site is a six-story parking garage with the Capitol Garage restaurant on the street level at 1500 K Street.

3.2.2 Regulatory Setting

Federal

There are no federal regulations that specifically regulate land use or land use compatibility on non-federal lands that would be applicable to the proposed projects.

State

Planning and Zoning Law, Government Code Sections 65000 – 66035

California Planning and Zoning Law requires each city to prepare and adopt “...a comprehensive, long term general plan for the physical development of the...city, and of any land outside its boundaries...” (Cal. Government Code Section 65300.) Under Government Code Section 65302, each general plan must include the following seven elements: Land Use; Circulation; Housing; Conservation; Open Space; Noise; and Safety.

Specific Plans are hybrid documents that act as a bridge between the City’s General Plan and Zoning Regulations for development of a particular area. Government Code Section 65450 states that a city may prepare a specific plan “for the systematic implementation of the general plan...” A Specific Plan is adopted in the same manner as a general plan (Cal. Government Code Section 65453) and is considered a legislative act.

Sustainable Communities and Climate Protection Act (SB 375)

The Sustainable Communities and Climate Protection Act of 2008, also known as Senate Bill 375 or SB 375, supports the State's climate action goals to reduce greenhouse gas (GHG) emissions through coordinated transportation and land use planning with the goal of more sustainable communities.

Under the Sustainable Communities Act, the California Air Resources Board (ARB) sets regional targets for GHG emissions reductions from passenger vehicle use. In 2010, ARB established

these targets for 2020 and 2035 for each region covered by one of the State's metropolitan planning organizations (MPO). ARB will periodically review and update the targets, as needed.

Each of California's MPOs must prepare a "sustainable communities strategy" (SCS) as an integral part of its regional transportation plan (RTP). The SCS contains land use, housing, and transportation strategies that, if implemented, would allow the region to meet its GHG emission reduction targets. Once adopted by the MPO, the RTP/SCS guides the transportation policies and investments for the region. ARB must review the adopted SCS to confirm and accept the MPO's determination that the SCS, if implemented, would meet the regional GHG targets. If the combination of measures in the SCS would not meet the regional targets, the MPO must prepare a separate "alternative planning strategy" (APS) to meet the targets. The APS is not a part of the RTP.

The Sustainable Communities Act also establishes incentives to encourage local governments and developers to implement the SCS or the APS. Developers may streamline certain environmental review requirements under the California Environmental Quality Act (CEQA) if new residential and mixed-use projects are consistent with a region's SCS (or APS) targets (see California Public Resources Code sections 21155, 21155.1, 21155.2, 21159.28.).

Local

Sacramento Area Council of Governments Blueprint and Metropolitan Transportation Plan/Sustainable Communities Strategy

SACOG Blueprint

The Sacramento Area Council of Governments (SACOG) is an association of local governments in the six-county Sacramento Region. Its members include the counties of El Dorado, Placer, Sacramento, Sutter, Yolo, and Yuba, as well as 22 cities, including the City of Sacramento. SACOG provides transportation planning and funding for the region, and serves as a forum for the study and resolution of regional issues. In addition to preparing the region's long-range transportation plan, SACOG approves the distribution of affordable housing in the region and assists in planning for transit, bicycle networks, clean air, and airport land uses.

SACOG, in partnership with the non-profit organization Valley Vision, undertook the Blueprint Project to build a consensus around a single, coherent, long-term vision for the development of the Sacramento region. The project was not intended to advocate any particular development pattern; instead, SACOG assumed that if it provided accurate information and forecasting tools to a wide variety of interest groups, a consensus would naturally emerge on what the region as a whole wanted for its future.

Through discussions at a series of workshops held throughout the greater Sacramento region, a consensus emerged that the low-density, segregated land use developments of the recent past would likely cause deterioration in the regional quality of life if continued into the future. The regional consensus supported the notion that future development should follow the principles of "smart growth," incorporating density of both residential and commercial development, diversity

of land uses within a neighborhood, design of the neighborhood, and access to regional destinations.

The Blueprint, adopted by the SACOG Board of Directors in December 2004, is a voluntary framework for guiding future growth in the region. The Blueprint is not a policy document and does not regulate land use or approve or prohibit growth in the region. The Blueprint is a transportation and land use analysis suggesting how cities and counties should grow based on the key principles listed below. A key issue for the Blueprint Project is that compliance with the adopted plan relies entirely on SACOG's ability to persuade jurisdictions to voluntarily follow the SACOG model. The Blueprint is intended by SACOG to be advisory and to guide the region's transportation planning and funding decisions.

The approved Blueprint is based on seven interlocking principles:

- Compact Development that requires less conversion of rural land, shortens travel distances, and reduces the per-unit cost of infrastructure and services.
- Housing Choices, in particular small lot single-family dwellings and attached products that suit the needs of seniors, empty-nesters, young couples, single-person households, single-parent households and other types of small households that currently make up 4-out-of-5 American households. The smaller products fit well with the theme of compact development.
- Mixed-Use Developments that allow people to work and shop near their home.
- Use of Existing Assets, in particular the development of sites that are already within the urban footprint and urban services coverage. This includes both infill development of vacant lots as well as re-development of under-utilized sites such as low-density strip retail areas.
- Transportation Choices, in particular the ability to use non-auto modes (transit, bike, walk) for at least some trips. Non-auto modes are most practical in compact, mixed-use communities.
- Quality Design in terms of aesthetic buildings but also in terms of providing attractive, walkable public spaces that create a sense of community.
- Conservation of Natural Resources through less conversion of land to urban use, slower growth of demand for water, and reduction in the amount of per-capita auto travel.

Metropolitan Transportation Plan/Sustainable Communities Strategy

The Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS) is a long-range plan for transportation in the region built on the Blueprint. SACOG is required by federal law to update the MTP at least every four years. Since the last MTP, California adopted Senate Bill 375, which requires the inclusion of a Sustainable Communities Strategy in the MTP.

SACOG is a metropolitan planning organization and has no regulatory authority related to land use. Nevertheless, in recognition of the connection between efficient land use and the MTP goals of reduction of trip lengths and mobile source greenhouse gas emission reductions, the MTP/SCS

contains a range of policies that reflect support for land use decisions that are consistent with the Blueprint, including:

- Provide information, tools, incentives and encouragement to local governments that have chosen to grow consistent with Blueprint principles;
- SACOG intends to educate and provide information to policymakers, local staff, and the public about the mutually supportive relationship between smart growth development, transportation, and resource conservation; and
- SACOG will encourage local jurisdictions in developing community activity centers well-suited for high quality transit service and complete streets.

The MTP/SCS policies are further reinforced by a range of strategies that direct SACOG to undertake actions that fall within its area of expertise, such as “[s]upport development proposals that are well-suited and located to support high-quality transit use in Transit Priority Areas, through Blueprint analysis.”

City of Sacramento 2035 General Plan

State law requires each city and county to prepare and adopt a comprehensive and long-range general plan for its physical development (Cal. Government Code Section 65300). A comprehensive general plan provides a jurisdiction with a consistent framework for land use decision-making. The general plan has been referred to as the “constitution” for land use development to emphasize its importance to land use decisions. The general plan and its maps, diagrams, and development policies form the basis for the City’s zoning, subdivision, and public works actions. Under California law, no specific plan, area plan, community plan, zoning, subdivision map, nor public works project may be approved unless the City finds that it is consistent with the adopted general plan. The Sacramento 2035 General Plan was adopted on March 3, 2015.

The 2035 General Plan is a long-term policy guide for the physical, economic, and environmental growth within the City. The 2035 General Plan’s goals, policies, and implementation programs define a roadmap to achieving Sacramento’s vision to be the most livable city in America.

Underlying the vision and connecting it to the roadmap are six themes that thread throughout the General Plan:

- Making Great Places,
- Growing Smarter,
- Maintaining a Vibrant Economy,
- Creating a Healthy City,
- Living Lightly-Reducing Our “Carbon Footprint,” and
- Developing a Sustainable Future.

In implementing these themes, the 2035 General Plan includes a land use diagram that establishes land use designations for the entire City, as well as goals, policies, and implementation programs that provide a framework for future decisions intended to reflect the general plan themes.

Existing General Plan Land Use Designations

SCC Project Site

The majority of the SCC project site is designated Public/Quasi-Public (P/QP) on the City of Sacramento 2035 General Plan Land Use and Urban Form Diagram. The 0.3-acre parcel that houses the existing Panattoni office building is designated Central Business District (CBD).

Public/Quasi-Public

The Public/Quasi-Public designation describes areas with unique uses and typically unique urban forms. These areas host community services and/or educational, cultural, administrative, and recreational facilities often located within a well-landscaped setting. Most of these areas provide a public function and as a result, existing buildings often include a significant amount of surface parking lots and structured parking to accommodate users of the facilities. Many Public/Quasi-Public uses are also allowed in, and are located in, land areas with other land use and urban form designations.

Central Business District (CBD)

The CBD is Sacramento's most intensely developed area. The CBD includes a mixture of retail, office, governmental, entertainment, and visitor-serving uses built on a formal framework of streets and park spaces laid out for the original Sutter Land Grant in the 1840s. The vision for the CBD is a vibrant downtown core that will continue to serve as the business, governmental, retail, and entertainment center for the city and the region. A significant element in the future CBD includes new residential uses. Increasing the residential population will add vitality to the CBD by extending the hours of activity and the built-in market for retail, services, and entertainment.

The CBD designation provides for mixed-use high-rise development and single-use or mixed-use development within easy access to transit (i.e., ground floor office/retail beneath residential apartments and condominiums), including office, retail, and service uses; multifamily dwellings (e.g., apartments and condominiums); gathering places such as plazas, courtyards, or parks; and compatible public, quasi-public, and special uses. Development standards within the CBD are as follows:

- Minimum Density: 61.0 Units/Net Acre,
- Maximum Density: 450.0 Units/Net Acre,
- Minimum FAR: 3.00 FAR, and
- Maximum FAR: 15.00 FAR.

No changes to the existing 2035 General Plan land use designations are proposed for the SCC project.

Goals and policies from the 2035 General Plan that are applicable to proposed SCC project are presented in **Table 3-2**.

Hotel Project Site

The 2035 General Plan land use designation for the Hotel project site is CBD.

No changes to the existing 2035 General Plan land use designation are proposed for the SCC project and Hotel project sites.

Goals and policies from the 2035 General Plan that are applicable to the proposed SCC project and Hotel project would include the goals and policies presented in Table 3-2 and the goals and policies presented in **Table 3-3**.

Central City Community Plan

The Central City Community Plan (CCCP) is part of the City's 2035 General Plan, and provides a refinement of the goals and objectives of the General Plan to serve as a guideline for development specifically within the CCCP area. The CCCP serves as a development guide for the public and private sector when planning physical improvements in the Central City area. The CCCP includes the area bounded by the Sacramento River to the west, the American River to the north, Sutter's Landing Park and Alhambra Boulevard to the east, and Broadway to the south. The primary goal of the CCCP is to continue revitalization of the Central City to provide a viable living, working, shopping, and cultural environment with a full range of day and night activities for residents, employees, and visitors. The CCCP was first adopted by the City in May 1980, but was updated as part of the 2035 General Plan.

SCC Project Site

The CCCP land use designations for the SCC project site are Public/Quasi-Public and Central Business District.³ No changes to existing CCCP land use designations are proposed for the SCC project. Goals and policies from the CCCP that are applicable to the SCC project are presented in Table 3-2.

Hotel Project Site

The CCCP land use designation for the Hotel project site is Central Business District. No changes to existing CCCP land use designations are proposed for the proposed Hotel project. Goals and policies from the CCCP that are applicable to the proposed Hotel project are presented in Table 3-3.

³ City of Sacramento, 2015. *Central City Community Plan*. Figure CC-2, Page 3-CC-7.

**TABLE 3-2
SACRAMENTO CONVENTION CENTER RENOVATION AND EXPANSION PROJECT
CITY OF SACRAMENTO 2035 GENERAL PLAN—RELEVANT GOALS AND POLICIES**

Applicable 2035 General Plan Goal/Policy	Discussion
Land Use and Urban Design	
<p>Goal LU 2.4 City of Distinctive and Memorable Places. Promote community design that produces a distinctive, high-quality built environment whose forms and character reflect Sacramento’s unique historic, environmental, and architectural context, and create memorable places that enrich community life.</p>	
<ul style="list-style-type: none"> LU 2.4.1 Unique Sense of Place. The City shall promote quality site, architectural and landscape design that incorporates those qualities and characteristics that make Sacramento desirable and memorable including: walkable blocks, distinctive parks and open spaces, tree-lined streets, and varied architectural styles. (RDR) 	<p>The proposed SCC project would include open spaces intended to provide a variety of outdoor spaces in and out of the building, pedestrian circulation around the SCC, and pedestrian connectivity to J, K and 13th Streets, as well as the nearby Community Center Theater. The proposed SCC Activities Plaza would be actively used space that may include small-scale performance venues, seasonal events, musical and cultural events, and gardens. The proposed SCC Activities Plaza would be comprised of hardscape and landscaped planters. Hardscape areas would feature use of a variety of paving materials and landscape plantings, and would include benches, public art, and water features.</p>
<ul style="list-style-type: none"> LU 2.4.4 Iconic Buildings. The City shall encourage the development of iconic public and private buildings in key locations to create new landmarks and focal features that contribute to the city’s structure and identity. (RDR/MPSP) 	<p>The proposed SCC project would be a distinctive, highly visible, iconic structure that would be accentuated by lighting and signage; it would be visible in varying degrees along J Street, K Street, 13th Street, 15th Street, and from the Sacramento Memorial Auditorium.</p>
<p>Goal LU 2.6.4 Sustainable Building Practices. The City shall promote and, where appropriate, require sustainable building practices that incorporate a “whole system” approach to designing and constructing buildings that consume less energy, water and other resources, facilitate natural ventilation, use daylight effectively, and are healthy, safe, comfortable, and durable. (RDR/IGC)</p>	
<ul style="list-style-type: none"> LU 2.6.5 Existing Structure Reuse. The City shall encourage the retention of existing structures and promote their adaptive reuse and renovation with green building technologies to retain the structures’ embodied energy, increase energy efficiency, make it more energy efficient, and limit the generation of waste. (RDR) 	<p>The proposed SCC project would expand and renovate the existing SCC to better and more efficiently accommodate the needs of professional conventions, trade shows, and related events. The proposed reconfigured and expanded SCC would be designed and constructed with a goal of achieving US Green Building Council’s Leadership in Energy and Environmental Design (LEED) Silver certification or equivalent for the entire facility, including existing sections of the facility that would remain.</p>
<p>Goal LU 2.7 City Form and Structure. Require excellence in the design of the city’s form and structure through development standards and clear design direction.</p>	
<ul style="list-style-type: none"> LU 2.7.3 Transitions in Scale. The City shall require that the scale and massing of new development in higher-density centers and corridors provide appropriate transitions in building height and bulk that are sensitive to the physical and visual character of adjoining neighborhoods that have lower development intensities and building heights. (RDR) 	<p>The reconfigured and expanded SCC would be a steel and concrete structure. The parapet of the roof of the new SCC structure would rise approximately 60 feet above ground level, with a streetwall height of about 45 feet above J, 13th and 15th streets. Like the existing SCC east building, the reconfigured and expanded SCC would be a two-level structure. The proposed building height and bulk would be similar to the existing SCC and would therefore provide appropriate massing and scale in relation to adjacent buildings and structures.</p>

TABLE 3-2
SACRAMENTO CONVENTION CENTER RENOVATION AND EXPANSION PROJECT
CITY OF SACRAMENTO 2035 GENERAL PLAN—RELEVANT GOALS AND POLICIES

Applicable 2035 General Plan Goal/Policy	Discussion
<ul style="list-style-type: none"> • LU 2.7.4 Public Safety and Community Design. The City shall promote design of neighborhoods, centers, streets, and public spaces that enhances public safety and discourages crime by providing street-fronting uses (“eyes on the street”), adequate lighting and sight lines, and features that cultivate a sense of community ownership (<i>RDR</i>) 	<p>The proposed SCC project would maintain City sidewalks along J Street, 13th Street, and 15th Street. The main pedestrian entry to the proposed expanded and reconfigured SCC would be located on the north and west sides of the facility (facing J and 13th Streets, respectively), with an additional entry on the east side (facing 15th Street). Key pedestrian flows would be expected to originate from the west at the intersection of J and 13th Streets, from the west and south at 13th Street near K Street, from the east and north from 15th Street between J and K Streets.</p> <p>The new west portion of the SCC would have a larger footprint than the existing west building. As a result, the building footprint would extend further to the north and west, reducing available pedestrian space along the building’s 250-foot J Street frontage by 20 feet and along the building’s 400-foot 13th Street frontage by 20 feet. In addition, the existing 250-foot long, 13-foot wide pullout space on J Street that currently exists would be narrowed to only one lane and the sidewalk would be widened to align with the sidewalk that fronts the east building.</p> <p>Vehicular circulation in and around the SCC project site would essentially remain the same as under current conditions. The south side of J Street, east of 13th Street, would be signed for passenger drop-offs. Vehicular parking would continue to be accommodated in local parking garages, including the nearby garage at 13th/J Street and other garages and lots in the vicinity.</p> <p>The proposed SCC project would include an Event Transportation Management Plan (ETMP), a management and operating plan designed to facilitate multi-modal travel to and from events at the SCC in a safe and efficient manner. The ETMP would be adapted and refined by the City of Sacramento, the SCC operator (if different than the City), and other agencies responsible for carrying it out. Subsequent adaptations or refinements would be made to respond to changing event types and schedules, new transportation access and parking opportunities, and planned transportation improvements that are implemented in the SCC vicinity.</p> <p>The ETMP would include transportation control strategies, including potential designation of a Traffic Control Officer (TCO) supervisor who would manage event day traffic controls and the location of TCO’s who would direct vehicular, transit and pedestrian traffic under various event scenarios; communication strategies, including outreach and wayfinding strategies designed to inform event attendees of the various transportation options that would be available and provide directions on how they could be accessed; and wayfinding strategies, including a series of permanent and temporary signs as well as permanent changeable message signs on freeways that could be used to facilitate pedestrian, bicycle, and vehicle access.</p>

**TABLE 3-2
SACRAMENTO CONVENTION CENTER RENOVATION AND EXPANSION PROJECT
CITY OF SACRAMENTO 2035 GENERAL PLAN—RELEVANT GOALS AND POLICIES**

Applicable 2035 General Plan Goal/Policy	Discussion
<p>Goal LU 5.1 Centers. Promote the development throughout the city of distinct, well designed mixed-use centers that are efficiently served by transit, provide higher-density, urban housing opportunities and serve as centers of civic, cultural, and economic life for Sacramento’s neighborhoods and the region.</p>	
<ul style="list-style-type: none"> • LU 5.1.1 Diverse Centers. The City shall encourage development of local, citywide, and regional mixed-use centers that address different community needs and market sectors, and complement and are well integrated with the surrounding neighborhoods. <i>(RDR)</i> 	<p>The proposed SCC project would be a regionally unique venue located in downtown Sacramento and a regional center for conventions and other gathering occasions that would attract visitors from around and outside the Sacramento area.</p>
<ul style="list-style-type: none"> • LU 5.1.2 Centers Served by Transit. The City shall promote the development of commercial mixed-use centers that are located on existing or planned transit stops in order to facilitate and take advantage of transit service, reduce vehicle trips, and enhance community access. <i>(RDR)</i> 	<p>There are currently three bus stops located on streets and sidewalks that front the SCC project site, including two on J Street (in front of the existing J Street entrance), and one on 15th Street (in front of the proposed East Lobby) (see Figure 2-15). The bus stops are owned, used, and maintained by Sacramento Regional Transit (SacRT). The existing SacRT bus stops would remain unchanged as part of the proposed project. Paratransit, operated by SacRT, serves the site using the existing SacRT bus stops, providing direct access to the J Street entrance.</p> <p>Access to the SacRT Light Rail system is available at Blue Line stations at 12th/I streets, or at 11th/K Street (eastbound only) or 10th/K Street (westbound only). Passengers can take the Blue line southbound to connect to the Gold or Green Lines. Connections to the northbound Gold Line (to the Sacramento Valley Station) or the Green Line (to Township 9) are located at the 8th/K Street station, and to the Gold Line (toward Folsom) at the 7th/K Street station.</p>
<ul style="list-style-type: none"> • LU 5.1.3 Cultural and Entertainment Centers. The City shall actively support the development of cultural, education, and entertainment facilities and events in the city’s centers to attract visitors and establish a unique identity for Sacramento. <i>(MPSP/IGC/JP)</i> 	<p>The proposed SCC project would be a regionally unique venue located in downtown Sacramento. This would be a state-of-the-art facility that would add to the City’s cultural identity and would be a regional center for conventions and other gathering occasions that would attract visitors from around and outside the Sacramento area.</p>
<p>Goal LU 5.6 Central Business District. Promote the Central Business District (CBD) as the regional center of the greater Sacramento area for commerce, culture, and government.</p>	
<ul style="list-style-type: none"> • LU 5.6.1 Downtown Center Development. The City shall encourage development that expands the role of the CBD as the regional center for living, commerce, arts, culture, entertainment, and government. <i>(RDR)</i> 	<p>The proposed SCC project would provide an expanded and renovated convention center in the CBD that would add to the City’s cultural identity and would provide the City with a regional center for conventions and other gathering occasions that would attract visitors from around and outside the Sacramento area.</p>
<ul style="list-style-type: none"> • LU 5.6.2 Family-Friendly Downtown. The City shall promote the CBD as a family-friendly area by requiring the development of a variety of housing types, daycare and school facilities, family-oriented services, and parks, plazas, and open spaces that will safely and comfortably accommodate those who wish to raise a family. <i>(RDR)</i> 	<p>The proposed SCC project would include open spaces intended to provide a variety of outdoor spaces in and out of the building, pedestrian circulation around the SCC, and pedestrian connectivity to J, K and 13th streets, as well as the nearby Community Center Theater. The proposed SCC Activities Plaza is anticipated to be actively used space that may include small-scale performance venues, seasonal events, musical and cultural events, and gardens, all of which would be family-friendly.</p>

TABLE 3-2
SACRAMENTO CONVENTION CENTER RENOVATION AND EXPANSION PROJECT
CITY OF SACRAMENTO 2035 GENERAL PLAN—RELEVANT GOALS AND POLICIES

Applicable 2035 General Plan Goal/Policy	Discussion
<p>Goal LU 8.1 Public/Quasi-Public. Provide for governmental, utility, institutional, educational, cultural, religious, and social facilities and services that are located and designed to complement Sacramento's neighborhoods, centers, and corridors and to minimize incompatibility with neighborhoods and other sensitive uses.</p>	
<ul style="list-style-type: none"> • LU 8.1.1 Public Places. The City shall create vibrant public places in Sacramento's neighborhoods, centers, and corridors that serve as gathering places. (MPSP/SO) 	<p>The proposed SCC project would include open spaces intended to provide a variety of outdoor spaces in and out of the building, The proposed SCC Activities Plaza would be actively used space that may include small-scale performance venues, seasonal events, musical and cultural events, and gatherings.</p>
<ul style="list-style-type: none"> • LU 8.1.2 Adequate Community Supporting Uses. The City shall seek to ensure that all manner of public and private community-supportive facilities and services are located throughout the city to provide places that serve the varied needs of the community, provide for community meeting places, and provide community and neighborhood landmark buildings and places. (MPSP/IGC/JP) 	<p>The proposed SCC project would provide an expanded and renovated convention center in the CBD that would be a regional center for conventions and other gathering occasions.</p>
<p>Goal LU 8.2 Special Uses. Provide for the development of Special Uses (e.g., assembly facilities, live-work studios, and care facilities) that are included within several Land Use and Urban Form Designations.</p>	
<ul style="list-style-type: none"> • LU 8.2.1 Assembly Facilities and Event Centers. The City shall encourage and support development throughout the city of assembly facilities for social, cultural, entertainment, sports, educational, and religious activities. (RDR) 	<p>The proposed SCC project would provide an expanded and renovated convention center in the CBD that would be a regional center for conventions and other gathering occasions.</p>
<p>Economic Development</p>	
<p>Goal ED 3.1 Land, Sites, and Opportunity Areas. Retain, attract, expand, and develop businesses by providing readily available and suitable sites with appropriate zoning and access.</p>	
<ul style="list-style-type: none"> • ED 3.1.10 Civic Amenities. The City shall support and encourage the development of civic amenities, entertainment venues, and convention opportunities that increase visitation, spending, and tourism in Sacramento. (MPSP) 	<p>The proposed SCC project would provide an expanded and renovated convention center in the CBD that would add to the City's cultural identity and would provide the City with a regional center for conventions and other gathering occasions that would attract visitors from around and outside the Sacramento area.</p>
<p>Education, Recreation, and Culture</p>	
<p>Goal ERC 4.1 Diversity of Arts and Cultural Facilities and Programs. Provide a diversity of arts and cultural facilities and programs for people of all ages to improve knowledge of Sacramento's history, enhance quality of life, and enrich community culture.</p>	
<ul style="list-style-type: none"> • ERC 4.1.2 Accessible Facilities and Programs. The City shall encourage the development of arts and cultural facilities and programs that are accessible to all residents (e.g., affordable fees and accessible by various travel modes). (MPSP/IGC/JP) 	<p>The proposed SCC project would provide an expanded and renovated convention center that would be accessible to all residents and would be supported by various modes of travel.</p>

**TABLE 3-2
SACRAMENTO CONVENTION CENTER RENOVATION AND EXPANSION PROJECT
CITY OF SACRAMENTO 2035 GENERAL PLAN—RELEVANT GOALS AND POLICIES**

Applicable 2035 General Plan Goal/Policy	Discussion
<ul style="list-style-type: none"> • ERC 4.1.3 City-Owned Resources. The City shall enhance the quality of existing City-owned arts and cultural resources and facilities through reinvestment, communications and marketing. (SO/FB) 	<p>The proposed SCC project would entail reinvestment by the City to provide an expanded and renovated convention center that would provide the City with a regional center for conventions and other gathering occasions.</p>
<ul style="list-style-type: none"> • ERC 4.1.5 Convention Center. The City shall support renovation and expansion of Convention Center facilities and adjacent supportive infrastructure, including hotels, to attract top-tier national and international events. (SO/FB) 	<p>The proposed SCC project would provide an expanded and renovated convention center that would provide the City with a regional center for conventions and other gathering occasions that would attract visitors from around and outside the Sacramento area and be capable of supporting top-tier national and international events.</p>
Central City Community Plan Policies	
Land Use and Urban Design	
<ul style="list-style-type: none"> • CC.LU 1.2 Interrelated Land Uses. The City shall provide for organized development of the Central City whereby the many interrelated land use components of the area support and reinforce each other and the vitality of the community. (RDR/MPSP) 	<p>The proposed SCC project would be integrated synergistically with surrounding uses in the project vicinity, including the thousands of office, retail, and government workers employed within walking distance to the project site, the transportation uses around the CBD, and other entertainment, cultural, and event venues within the CBD.</p>
<ul style="list-style-type: none"> • CC.LU 1.5 Central Business District. The City shall improve the physical and social conditions, urban aesthetics, and general safety of the Central Business District. (MPSP) 	<p>By expanding and renovating and outdated and underutilized facility, the SCC project site would improve the physical and aesthetic conditions of the project site and the east end of the CBD.</p>

TABLE 3-3
SACRAMENTO CONVENTION CENTER RENOVATION AND EXPANSION PROJECT AND 15TH/K STREET HOTEL PROJECT
CITY OF SACRAMENTO 2035 GENERAL PLAN—RELEVANT GOALS AND POLICIES IN ADDITION TO GOALS AND POLICIES FOR THE SCC PROJECT IN TABLE 3-2

Applicable 2035 General Plan Goal/Policy	Discussion
Land Use and Urban Design	
<p>Goal LU 1.1 Growth and Change. Support sustainable growth and change through orderly and well-planned development that provides for the needs of existing and future residents and businesses, ensures the effective and equitable provision of public services, and makes efficient use of land and infrastructure.</p>	
<ul style="list-style-type: none"> • LU 1.1.10 Exceeding Floor-Area-Ratio. The City may allow new development to exceed the maximum allowed FAR or density if it is determined that the project provides a significant community benefit. (RDR) 	<p>The proposed SCC project would be within the FAR requirements for the SCC project site. The proposed Hotel would be anticipated to slightly exceed the FAR ratio for the land use designation at the Hotel site but would not exceed the allowable height for the land use. The proposed hotel would meet a number of the city's goals for providing a connectivity within the CBD, providing a direct pedestrian link to the SCC, and offsetting the current undersupply of lodging with within the CBD. Those benefits would meet the requirement of LU 1.1.10 for the allowed exceedance of the FAR limits for the Hotel Project.</p>
<p>Goal LU 2.4 City of Distinctive and Memorable Places. Promote community design that produces a distinctive, high-quality built environment whose forms and character reflect Sacramento's unique historic, environmental, and architectural context, and create memorable places that enrich community life.</p>	
<ul style="list-style-type: none"> • LU 2.4.1 Unique Sense of Place. The City shall promote quality site, architectural and landscape design that incorporates those qualities and characteristics that make Sacramento desirable and memorable including: walkable blocks, distinctive parks and open spaces, tree-lined streets, and varied architectural styles. (RDR) 	<p>The proposed SCC project would include open spaces intended to provide a variety of outdoor spaces in and out of the building, pedestrian circulation around the SCC, and pedestrian connectivity to J, K and 13th streets, as well as the nearby Community Center Theater. The proposed SCC Activities Plaza would be actively used space that may include small-scale performance venues, seasonal events, musical and cultural events, and gardens. The proposed SCC Activities Plaza would be comprised of hardscape and landscaped planters. Hardscape areas would feature use of a variety of paving materials and landscape plantings, and would include benches, public art, and water features.</p> <p>The proposed Hotel building would be approximately 300 feet tall and include approximately 24 above-ground stories and two subgrade parking levels. The proposed hotel would be of a high-quality design that is consistent with the Central City Urban Design Guidelines.</p>
<ul style="list-style-type: none"> • LU 2.4.4 Iconic Buildings. The City shall encourage the development of iconic public and private buildings in key locations to create new landmarks and focal features that contribute to the city's structure and identity. (RDR/MPSP) 	<p>The proposed SCC project would be a distinctive, highly visible, iconic structure that would be accentuated by lighting and signage; it would be visible in varying degrees along J Street, K Street, 13th Street, 15th Street, and from the Sacramento Memorial Auditorium.</p> <p>The proposed Hotel building would be approximately 300 feet tall and include approximately 24 above-ground stories and two subgrade parking levels. The proposed Hotel would be of a high-quality design that is consistent with the Central City Urban Design Guidelines.</p>
<ul style="list-style-type: none"> • LU 2.4.5 Distinctive Urban Skyline. The City shall encourage the development of a distinctive urban skyline that reflects the vision of Sacramento with a prominent central core that contains the city's tallest buildings, complemented by smaller urban centers with lower-scale mid- and high-rise development. (RDR/MPSP) 	<p>The proposed Hotel building would be approximately 300 feet tall and include approximately 24 above-ground stories and two subgrade parking levels. The proposed Hotel would be of a high-quality design that is consistent with the Central City Urban Design Guidelines.</p>

**TABLE 3-3
SACRAMENTO CONVENTION CENTER RENOVATION AND EXPANSION PROJECT AND 15TH/K STREET HOTEL PROJECT
CITY OF SACRAMENTO 2035 GENERAL PLAN—RELEVANT GOALS AND POLICIES IN ADDITION TO GOALS AND POLICIES FOR THE SCC PROJECT IN TABLE 3-2**

Applicable 2035 General Plan Goal/Policy	Discussion
<p>Goal LU 2.6.4 Sustainable Building Practices. The City shall promote and, where appropriate, require sustainable building practices that incorporate a “whole system” approach to designing and constructing buildings that consume less energy, water and other resources, facilitate natural ventilation, use daylight effectively, and are healthy, safe, comfortable, and durable. (RDR/IGC)</p>	
<ul style="list-style-type: none"> • LU 2.6.5 Existing Structure Reuse. The City shall encourage the retention of existing structures and promote their adaptive reuse and renovation with green building technologies to retain the structures’ embodied energy, increase energy efficiency, make it more energy efficient, and limit the generation of waste. (RDR) 	<p>The proposed SCC project would expand and renovate the existing SCC to better and more efficiently accommodate the needs of professional conventions, trade shows, and related events. The proposed reconfigured and expanded SCC would be designed and constructed with a goal of achieving US Green Building Council’s Leadership in Energy and Environmental Design (LEED) Silver certification or equivalent for the entire facility, including existing sections of the facility that would remain.</p>
<p>Goal LU 2.7 City Form and Structure. Require excellence in the design of the city’s form and structure through development standards and clear design direction.</p>	
<ul style="list-style-type: none"> • LU 2.7.3 Transitions in Scale. The City shall require that the scale and massing of new development in higher-density centers and corridors provide appropriate transitions in building height and bulk that are sensitive to the physical and visual character of adjoining neighborhoods that have lower development intensities and building heights. (RDR) 	<p>The reconfigured and expanded SCC would be a steel and concrete structure. The parapet of the roof of the new SCC structure would rise approximately 60 feet above ground level, with a streetwall height of about 45 feet above J, 13th and 15th Streets Like the existing SCC east building, the reconfigured and expanded SCC would be a two-level structure. The proposed building height and bulk would be similar to the existing SCC and would therefore provide appropriate massing and scale in relation to adjacent buildings and structures.</p> <p>Pursuant to Chapter 17.808 of the City Code, the proposed Hotel project would be subject to the City’s Site Plan and Design Review process. The intent of this process is to (1) ensure that the development is consistent with applicable plans and design guidelines; (2) is high quality and compatible with surrounding development; (3) is supported by adequate circulation, utility, and related infrastructure; (4) is water and energy efficient; and (5) avoids or minimizes adverse environmental effects to the extent feasible. The aspects of design considered in the site plan and design review process include architectural design, site design, adequacy of streets and accessways for all modes of travel, energy consumption, protection of environmentally sensitive features, safety, noise, and other relevant considerations.</p>
<ul style="list-style-type: none"> • LU 2.7.4 Public Safety and Community Design. The City shall promote design of neighborhoods, centers, streets, and public spaces that enhances public safety and discourages crime by providing street-fronting uses (“eyes on the street”), adequate lighting and sight lines, and features that cultivate a sense of community ownership. (RDR) 	<p>The proposed SCC project would maintain City sidewalks along J Street, 13th Street, and 15th Street. The main pedestrian entry to the proposed expanded and reconfigured SCC would be located on the north and west sides of the facility (facing J and 13th Streets, respectively), with an additional entry on the east side (facing 15th Street). Key pedestrian flows would be expected to originate from the west at the intersection of J and 13th Streets, from the west and south at 13th Street near K Street, from the east and north from 15th Street between J and K Streets.</p>

TABLE 3-3
SACRAMENTO CONVENTION CENTER RENOVATION AND EXPANSION PROJECT AND 15TH/K STREET HOTEL PROJECT
CITY OF SACRAMENTO 2035 GENERAL PLAN—RELEVANT GOALS AND POLICIES IN ADDITION TO GOALS AND POLICIES FOR THE SCC PROJECT IN TABLE 3-2

Applicable 2035 General Plan Goal/Policy	Discussion
	<p>The new west portion of the SCC would have a larger footprint than the existing west building. As a result, the building footprint would extend further to the north and west, reducing available pedestrian space along the building's 250-foot J Street frontage by 20 feet and along the building's 400-foot 13th Street frontage by 20 feet. In addition, the existing 250-foot long, 13-foot wide pullout space on J Street that currently exists would be narrowed to only one lane and the sidewalk would be widened to align with the sidewalk that fronts the east building.</p> <p>Vehicular circulation in and around the SCC project site would essentially remain the same as under current conditions. The south side of J Street, east of 13th Street, would be signed for passenger drop-offs. Vehicular parking would continue to be accommodated in local parking garages, including the nearby garage at 13th/J Street and other garages and lots in the vicinity.</p> <p>The proposed SCC project would include an Event Transportation Management Plan (ETMP), a management and operating plan designed to facilitate multi-modal travel to and from events at the SCC in a safe and efficient manner. The ETMP would be adapted and refined by the City of Sacramento, the SCC operator (if different than the City), and other agencies responsible for carrying it out. Subsequent adaptations or refinements would be made to respond to changing event types and schedules, new transportation access and parking opportunities, and planned transportation improvements that are implemented in the SCC vicinity.</p> <p>The ETMP would include transportation control strategies, including potential designation of a Traffic Control Officer (TCO) supervisor who would manage event day traffic controls and the location of TCO's who would direct vehicular, transit and pedestrian traffic under various event scenarios; communication strategies, including outreach and wayfinding strategies designed to inform event attendees of the various transportation options that would be available and provide directions on how they could be accessed; and wayfinding strategies, including a series of permanent and temporary signs as well as permanent changeable message signs on freeways that could be used to facilitate pedestrian, bicycle, and vehicle access.</p> <p>Pursuant to Chapter 17.808 of the City Code, the proposed Hotel project would be subject to the City's Site Plan and Design Review process. The intent of this process is to (1) ensure that the development is consistent with applicable plans and design guidelines; (2) is high quality and compatible with surrounding development; (3) is supported by adequate circulation, utility, and related infrastructure; (4) is water and energy efficient; and (5) avoids or minimizes adverse environmental effects to the extent feasible. The aspects of design considered in the site plan and design review process include architectural design, site design, adequacy of streets and accessways for all modes of travel, energy consumption, protection of environmentally sensitive features, safety, noise, and other relevant considerations.</p>

**TABLE 3-3
SACRAMENTO CONVENTION CENTER RENOVATION AND EXPANSION PROJECT AND 15TH/K STREET HOTEL PROJECT
CITY OF SACRAMENTO 2035 GENERAL PLAN—RELEVANT GOALS AND POLICIES IN ADDITION TO GOALS AND POLICIES FOR THE SCC PROJECT IN TABLE 3-2**

Applicable 2035 General Plan Goal/Policy	Discussion
<p>Goal LU 5.1 Centers. Promote the development throughout the city of distinct, well designed mixed-use centers that are efficiently served by transit, provide higher-density, urban housing opportunities and serve as centers of civic, cultural, and economic life for Sacramento’s neighborhoods and the region.</p>	
<ul style="list-style-type: none"> • LU 5.1.1 Diverse Centers. The City shall encourage development of local, citywide, and regional mixed-use centers that address different community needs and market sectors, and complement and are well integrated with the surrounding neighborhoods. <i>(RDR)</i> 	<p>The proposed SCC project would be a regionally unique venue located in downtown Sacramento and a regional center for conventions and other gathering occasions that would attract visitors from around and outside the Sacramento area.</p>
<ul style="list-style-type: none"> • LU 5.1.2 Centers Served by Transit. The City shall promote the development of commercial mixed-use centers that are located on existing or planned transit stops in order to facilitate and take advantage of transit service, reduce vehicle trips, and enhance community access. <i>(RDR)</i> 	<p>There are currently three bus stops located on streets and sidewalks that front the SCC project site, including two on J Street (in front of the existing J Street entrance), and one on 15th Street (in front of the proposed East Lobby) (see Figure 2-15). The bus stops are owned, used, and maintained by Sacramento Regional Transit (SacRT). The existing SacRT bus stops would remain unchanged as part of the proposed project. Paratransit, operated by SacRT, serves the site using the existing SacRT bus stops, providing direct access to the J Street entrance.</p> <p>Access to the SacRT Light Rail system is available at Blue Line stations at 12th/I streets, or at 11th/K Street (eastbound only) or 10th/K Street (westbound only). Passengers can take the Blue line southbound to connect to the Gold or Green Lines. Connections to the northbound Gold Line (to the Sacramento Valley Station) or the Green Line (to Township 9) are located at the 8th/K Street station, and to the Gold Line (toward Folsom) at the 7th/K Street station.</p>
<ul style="list-style-type: none"> • LU 5.1.3 Cultural and Entertainment Centers. The City shall actively support the development of cultural, education, and entertainment facilities and events in the city’s centers to attract visitors and establish a unique identity for Sacramento. <i>(MPSP/IGC/JP)</i> 	<p>The proposed SCC project would be a regionally unique venue located in downtown Sacramento. This would be a state-of-the-art facility that would add to the City’s cultural identity and would be a regional center for conventions and other gathering occasions that would attract visitors from around and outside the Sacramento area.</p>
<p>Goal LU 5.6 Central Business District. Promote the Central Business District (CBD) as the regional center of the greater Sacramento area for commerce, culture, and government.</p>	
<ul style="list-style-type: none"> • LU 5.6.1 Downtown Center Development. The City shall encourage development that expands the role of the CBD as the regional center for living, commerce, arts, culture, entertainment, and government. <i>(RDR)</i> 	<p>The proposed SCC project would provide an expanded and renovated convention center in the CBD that would add to the City’s cultural identity and would provide the City with a regional center for conventions and other gathering occasions that would attract visitors from around and outside the Sacramento area.</p> <p>The proposed Hotel project would develop a new hotel in the CBD that would include approximately 350 rooms, meeting/conference space, restaurant space and other amenities. The proposed project would be integrated with and support the proposed SCC and facilitate increased visitation in the CBD.</p>

TABLE 3-3
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Applicable 2035 General Plan Goal/Policy	Discussion
<ul style="list-style-type: none"> • LU 5.6.2 Family-Friendly Downtown. The City shall promote the CBD as a family-friendly area by requiring the development of a variety of housing types, daycare and school facilities, family-oriented services, and parks, plazas, and open spaces that will safely and comfortably accommodate those who wish to raise a family. (RDR) 	<p>The proposed SCC project would include open spaces intended to provide a variety of outdoor spaces in and out of the building, pedestrian circulation around the SCC, and pedestrian connectivity to J, K and 13th streets, as well as the nearby Community Center Theater. The proposed SCC Activities Plaza is anticipated to be actively used space that may include small-scale performance venues, seasonal events, musical and cultural events, and gardens, all of which would be family-friendly.</p>
<ul style="list-style-type: none"> • LU 5.6.4 Building Height Transitions. The City shall maintain height standards for the adjoining transitions areas around the CBD consistent with the General Plan vision for a higher-density Central City and sensitive transitions to surrounding neighborhoods. (RDR) • LU 5.6.6 Central City Development Projects. The City shall work with the Sacramento Housing and Redevelopment Agency (SHRA), the Capitol Area Development Authority (CADA), and private developers to ensure that development efforts in areas surrounding the CBD (e.g., Railyards, River District, Docks Area, R Street) respect and respond to the urban patterns—streets, blocks, building heights, massing—and character established in the CBD, and do not undermine the physical centrality, visual primacy, or land use composition of the CBD. (IGC/JP) 	<p>Pursuant to Chapter 17.808 of the City Code, the proposed Hotel project would be subject to the City's Site Plan and Design Review process. The intent of this process is to (1) ensure that the development is consistent with applicable plans and design guidelines; (2) is high quality and compatible with surrounding development; (3) is supported by adequate circulation, utility, and related infrastructure; (4) is water and energy efficient; and (5) avoids or minimizes adverse environmental effects to the extent feasible. The aspects of design considered in the site plan and design review process include architectural design, site design, adequacy of streets and accessways for all modes of travel, energy consumption, protection of environmentally sensitive features, safety, noise, and other relevant considerations.</p>
<p>Goal LU 8.1 Public/Quasi-Public. Provide for governmental, utility, institutional, educational, cultural, religious, and social facilities and services that are located and designed to complement Sacramento's neighborhoods, centers, and corridors and to minimize incompatibility with neighborhoods and other sensitive uses.</p>	
<ul style="list-style-type: none"> • LU 8.1.1 Public Places. The City shall create vibrant public places in Sacramento's neighborhoods, centers, and corridors that serve as gathering places. (MPSP/SO) 	<p>The proposed SCC project would include open spaces intended to provide a variety of outdoor spaces in and out of the building. The proposed SCC Activities Plaza would be actively used space that may include small-scale performance venues, seasonal events, musical and cultural events, and gatherings.</p>
<ul style="list-style-type: none"> • LU 8.1.2 Adequate Community Supporting Uses. The City shall seek to ensure that all manner of public and private community-supportive facilities and services are located throughout the city to provide places that serve the varied needs of the community, provide for community meeting places, and provide community and neighborhood landmark buildings and places. (MPSP/IGC/JP) 	<p>The proposed SCC project would provide an expanded and renovated convention center in the CBD that would be a regional center for conventions and other gathering occasions.</p>
<p>Goal LU 8.2 Special Uses. Provide for the development of Special Uses (e.g., assembly facilities, live-work studios, and care facilities) that are included within several Land Use and Urban Form Designations.</p>	
<ul style="list-style-type: none"> • LU 8.2.1 Assembly Facilities and Event Centers. The City shall encourage and support development throughout the city of assembly facilities for social, cultural, entertainment, sports, educational, and religious activities. (RDR) 	<p>The proposed SCC project would provide an expanded and renovated convention center in the CBD that would be a regional center for conventions and other gathering occasions.</p>

**TABLE 3-3
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Applicable 2035 General Plan Goal/Policy	Discussion
Economic Development	
<p>Goal ED 3.1 Land, Sites, and Opportunity Areas. Retain, attract, expand, and develop businesses by providing readily available and suitable sites with appropriate zoning and access.</p>	
<ul style="list-style-type: none"> • ED 3.1.10 Civic Amenities. The City shall support and encourage the development of civic amenities, entertainment venues, and convention opportunities that increase visitation, spending, and tourism in Sacramento. (MPSP) 	<p>The proposed SCC project would provide an expanded and renovated convention center in the CBD that would add to the City’s cultural identity and would provide the City with a regional center for conventions and other gathering occasions that would attract visitors from around and outside the Sacramento area.</p> <p>The proposed Hotel project would develop a new hotel in the CBD that would include approximately 350 rooms, meeting/conference space, restaurant space and other amenities. The proposed Hotel project would be integrated with and support the proposed SCC and facilitate increased visitation in the CBD.</p>
Education, Recreation, and Culture	
<p>Goal ERC 4.1 Diversity of Arts and Cultural Facilities and Programs. Provide a diversity of arts and cultural facilities and programs for people of all ages to improve knowledge of Sacramento’s history, enhance quality of life, and enrich community culture.</p>	
<ul style="list-style-type: none"> • ERC 4.1.2 Accessible Facilities and Programs. The City shall encourage the development of arts and cultural facilities and programs that are accessible to all residents (e.g., affordable fees and accessible by various travel modes). (MPSP/IGC/JP) 	<p>The proposed SCC project would provide an expanded and renovated convention center that would be accessible to all residents and would be supported by various modes of travel.</p>
<ul style="list-style-type: none"> • ERC 4.1.3 City-Owned Resources. The City shall enhance the quality of existing City-owned arts and cultural resources and facilities through reinvestment, communications and marketing. (SO/FB) 	<p>The proposed SCC project would entail reinvestment by the City to provide an expanded and renovated convention center that would provide the City with a regional center for conventions and other gathering occasions.</p>
<ul style="list-style-type: none"> • ERC 4.1.5 Convention Center. The City shall support renovation and expansion of Convention Center facilities and adjacent supportive infrastructure, including hotels, to attract top-tier national and international events. (SO/FB) 	<p>The proposed SCC project would provide an expanded and renovated convention center that would provide the City with a regional center for conventions and other gathering occasions that would attract visitors from around and outside the Sacramento area and be capable of supporting top-tier national and international events.</p>

TABLE 3-3
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Applicable 2035 General Plan Goal/Policy	Discussion
Central City Community Plan Policies	
Land Use and Urban Design	
<ul style="list-style-type: none"> • CC.LU 1.2 Interrelated Land Uses. The City shall provide for organized development of the Central City whereby the many interrelated land use components of the area support and reinforce each other and the vitality of the community. <i>(RDR/MPSP)</i> 	<p>The proposed SCC project would be integrated synergistically with surrounding uses in the project vicinity, including the thousands of office, retail, and government workers employed within walking distance to the project site, the transportation uses around the CBD, and other entertainment, cultural, and event venues within the CBD.</p> <p>The proposed Hotel project would integrate synergistically with surrounding uses in the project vicinity, including the thousands of office, retail, and government workers employed within walking distance to the project site, the transportation uses around the CBD, and other entertainment, cultural, and event venues within the CBD.</p>
<ul style="list-style-type: none"> • CC.LU 1.5 Central Business District. The City shall improve the physical and social conditions, urban aesthetics, and general safety of the Central Business District. <i>(MPSP)</i> 	<p>By expanding and renovating and outdated and underutilized facility, the SCC project site would improve the physical and aesthetic conditions of the project site and the east end of the CBD.</p> <p>By developing an underutilized site (i.e., a parking lot), the proposed Hotel project would improve the physical and aesthetic conditions of the Hotel project site and the east end of the CBD.</p>

Planning and Development Code

The City of Sacramento's Planning and Development Code (PDC) (Sacramento City Code Title 17) is intended "[t]o implement the city's general plan through the adoption and administration of zoning laws, ordinances, rules, and regulations (§17.100.010(B)). To achieve this outcome, the PDC:

- regulates the use of land, buildings, or other structures;
- regulates the location, height, and size of buildings or structures, yards, courts, and other open spaces, the amount of building coverage permitted in each zone, and population density; and
- regulates the physical characteristics of buildings, structures, and site development, including the location, height, and size of buildings and structures; yards, courts, and other open spaces; lot coverage; land use intensity through regulation of residential density and floor area ratios; and architectural and site design.

Existing Zoning

SCC Project Site

C-3 (Central Business District Zone)

The SCC project site is zoned C-3 (Central Business District Zone) as defined in chapters 17.216.800 through 17.216.880, and 17.408 of the Sacramento Planning and Development Code. The Central Business District zone applies to an approximately seventy (70) block portion of the Central City. The CBD zone is intended for the City's most intense retail, commercial, office developments and is the City's only classification which has no height limit, aside from height limits imposed by the Capitol View Protection requirements (17.216.860) described below. This designation provides for by-right mixed-use high-rise development and single-use or mixed-use development within easy access to transit (i.e., ground floor office/retail beneath residential apartments and condominiums) that includes the following:

- Office, retail, restaurant, service, cinema, fitness, hotel, and uses
- Multifamily dwellings (e.g., apartments and condominiums)
- Gathering places such as plazas, courtyards, or parks
- Compatible public, quasi-public, and special uses.

An evaluation of the proposed SCC project's consistency with the C-3 zoning designation is provided below under *Consistency with Adopted Plans, Policies, and Zoning*.

Capitol View Protection Ordinance

Section 17.216.860 of the Sacramento City Code recognizes the State Capitol building and the surrounding grounds of Capitol Park as a unique cultural and open-space resource. The ordinance establishes height restrictions, setback requirements, and parking regulations for certain areas of the Downtown (CBD) located near the State Capitol building and Capitol Park, including along Capitol Mall. These regulations are designed to provide visual protection to and from the Capitol building and Capitol Park.

The height limits for the ordinance are illustrated on a map that is Exhibit B of the ordinance. Building height limits apply to the highest point of the building except for the following unoccupied elements: building caps that serve a decorative function, roof-top mechanical equipment that is screened and placed in a location furthest away when viewed from the Capitol grounds, and other architectural embellishments approved by the City Planning and Design Commission through Site Plan and Design Review.

SCC Project Site

The SCC project site is within the area that is subject to compliance with the ordinance. As specified on Exhibit B of the ordinance, the height limit for the northern half of the SCC project site (north of Jazz Alley) is 450 feet. The height limit for the southern half of the SCC project site (south of Jazz Alley) is 400 feet.

The proposed reconfigured SCC would create streetwalls measuring 80 feet along J Street, 60 feet along 13th Street, and 70 feet along 15th Street. The parapet of the roof of the new SCC structure would rise approximately 60 feet above ground level, with a streetwall height of about 45 feet above J, 13th and 15th streets. Similar to the existing SCC roof, the top of the roof of the expanded and reconfigured SCC would rise approximately an additional 15 feet above the streetwall heights. Consequently, the proposed SCC would reach a maximum height of 60 feet and would therefore comply with the Capitol View Protection Ordinance.

The setback requirements for the ordinance are illustrated on a map that is Exhibit C of the ordinance. The SCC project site is located outside the area subject to the setback requirements.

Hotel Project Site

The Hotel project site is zoned C-3 (Central Business District Zone), as described above. An evaluation of the proposed Hotel project's consistency with the C-3 zoning designation is provided below under *Consistency with Adopted Plans, Policies, and Zoning*.

The Hotel project site is within the area that is subject to compliance with the Capitol View Protection Ordinance. As specified on Exhibit B of the ordinance, the height limit for the Hotel project site is 300 feet.

The proposed Hotel structure would include approximately 24 above-ground stories, two subgrade parking levels, and would be a maximum height of 300 feet. Therefore, the proposed Hotel project would comply with the Capitol View Protection Ordinance.

The Hotel project site is located outside the area subject to the setback requirements of the Capitol View Protection Ordinance.

Downtown Cultural and Entertainment District Master Plan

Adopted on May 22, 1990, the Downtown Cultural and Entertainment District Master Plan was prepared by the Sacramento Housing and Redevelopment Agency (SHRA) and the City of

Sacramento Department of Planning and Development.⁴ The goal of the plan is to create a concentrated mix of cultural and entertainment facilities that will contribute to the downtown's night and weekend activity. The plan is not a formal policy document; it is intended to serve as a guide for the various public and private sector groups and agencies concerned about downtown.⁵

In its broadest definition, the plan states, the Cultural and Entertainment District encompasses the entire Central City, from Old Sacramento to midtown. The plan includes recommendations intended to achieve the goals of the Cultural and Entertainment District, including development of an integrated approach to downtown programming, promotion, and special events.⁶

The plan describes the City's formal consideration, dating back to 1987, of an expanded Community/Convention Center that would serve as a catalyst in the downtown revitalization process.⁷ In its discussion of future opportunities to further the goals of the plan, the plan describes the City's approval of a concept plan and financing strategy for expansion of the Community/Convention Center that would add 100,000 square feet of new exhibit hall space plus additional meeting room and support space. The expanded facility, the plan states, would provide space for public events of up to 10,000 people.⁸

The proposed SCC project would add 48,990 net square feet to the Convention Center, which is less than the 100,000 square feet of new exhibit hall space identified in previous plans, as identified in the Downtown Cultural and Entertainment District Master Plan. Nonetheless, proposed project would result in an expanded and renovated Convention Center that would further the City's goals of providing a quality, diverse, service-oriented convention center facility that enhances the economic and cultural vitality of the Sacramento community; achieves positive economic impact for the hotel, restaurant, and business community; and creates a positive fiscal effect on the City. For these reasons, the proposed SCC project supports the goals of the Downtown Cultural and Entertainment District Master Plan.

3.2.3 Land Use Evaluation

This section evaluates the proposed projects for compatibility with existing and planned adjacent land uses and for consistency with adopted plans, policies, and zoning designations. It differs from impact discussions in that only compatibility and consistency issues are discussed, as opposed to environmental impacts and mitigation measures. This discussion complies with section 15125(d) of the CEQA Guidelines, which requires EIRs to discuss inconsistencies with general plans and regional plans as part of the environmental setting. Physical environmental impacts resulting from implementation of the proposed projects are discussed in the applicable environmental resource sections in this EIR.

⁴ City of Sacramento, 1990. *Downtown Cultural and Entertainment District Master Plan*. Prepared by the Sacramento Housing and Redevelopment Agency and the City of Sacramento Department of Planning and Development.

⁵ Ibid. Page v.

⁶ Ibid. Page vii.

⁷ Ibid. Appendix A, pp. 53–54.

⁸ Ibid. p. 2.

Compatibility with Existing and Planned Adjacent Land Uses

SCC Project

The SCC project site is situated in an area of predominantly commercial (e.g., office, hotel, retail, restaurant, entertainment) development. Adjacent properties include high-rise office buildings north of the SCC project site; the Sacramento Memorial Auditorium northeast of the SCC project site, St. Paul's Church, the four-story Maydestone Apartments building, and a six-story office building west of the SCC project site; a surface parking lot (Hotel project site), the six-story 1414 K Street office building, the four-story 1400 K Street building, and the Sacramento Community Center Theater south of the SCC project site; and the Sheraton Grand Sacramento Hotel, the Esquire Plaza office building, and restaurant, retail, and entertainment uses along the eastern end of the K Street Mall west of the SCC project site.

The proposed SCC project would expand and renovate the existing SCC, and the expanded and renovated facility would continue to serve its existing function as a regional convention center. The proposed SCC project would include demolition of approximately 105,200 sf of existing convention center space in the western side of the SCC and approximately 11,500 sf of existing commercial office space in the Panattoni building, and the subsequent construction of 73,500 sf of new exhibit space, 14,500 sf of new meeting rooms, a new 40,000 sf ballroom, a new East Lobby, and upgraded lobbies, kitchen facilities, loading areas, outdoor terrace, administrative offices and related support areas. On a net basis, the proposed SCC project would add a net of 48,990 sf to the SCC project site.

The proposed SCC project would have a larger footprint than the existing west building. The building footprint would extend further to the north and west, reducing available pedestrian space along the building's J Street frontage and along the building's 13th Street frontage. In addition, the existing pullout space on J Street that currently exists would be eliminated, and would be replaced by sidewalk that aligns with the sidewalk that fronts the east building.

The proposed expanded and reconfigured SCC would be a venue for an array of various conference and entertainment events during the year. As explained elsewhere in this chapter, one of the primary objectives of the proposed improvements to the SCC would be to allow a more efficient transition between events, allowing for an increase in the total number of annual events accommodated at the SCC. The total number of events would be affected by a number of factors, such as the relative success of Visit Sacramento or a private operator in attracting events, and the number of touring events each year. Table 2-3 in Chapter 2, Project Description, provides an estimate of the type and number of events that could be expected during successful operation of the expanded and reconfigured SCC. It is estimated that the proposed SCC would generate an additional 1,790 attendees per event day.

Different types of events typically are presented on different days and at different times, and may overlap. For purposes of a conservative analysis, it has been assumed that on an annual basis there would be events attended by a range of numbers of attendees with total event attendance

ranging from a few hundred per day for smaller events to over 15,000 per day for the largest events.

In summary, while the proposed expanded and renovated SCC would have a larger building footprint than the existing SCC and would host more events annually than the existing SCC, the SCC's function as a regional convention center would remain the same with implementation of the proposed SCC project. Furthermore, it is not anticipated that operation of the proposed SCC project would generate excessive noise, light, dust, odors, or hazardous emissions that could be considered incompatible with existing or planned adjacent land uses (see Sections 4.1 Aesthetics, Light, and Glare; 4.2 Air Quality; and 4.8 Noise and Vibration for project impacts related to these topic areas). Therefore, it is not anticipated that any land use incompatibility with existing and planned adjacent land uses would occur.

Hotel Project

The Hotel project site is situated in an area of predominantly commercial (e.g. office, hotel, retail, restaurant, entertainment) development. Adjacent properties include the SCC to the north; a six-story parking garage with the Capitol Garage restaurant on the street-level at 1500 K Street to the east; connected low-rise buildings that house several restaurants and the 12-story Meridian Plaza office building at 1415 L Street to the south; and a six-story office building at 1414 K Street and the four-story League of California Cities building at 1400 K Street to the east.

The proposed Hotel project would replace an existing parking lot with an approximately 24-story hotel at a maximum height of 300 feet that would include approximately 350 rooms, meeting/conference space, restaurant space and other amenities (e.g., pool deck), service and loading facilities, approximately 200 on-site parking spaces on two subterranean floors, and a pedestrian bridge that would span K Street and connect second-level floors of the proposed hotel with the proposed SCC lobby.

The addition of an approximately 24-story (up to 300 feet in height) hotel would intensify but not materially change the pattern of land uses on the Hotel project site or in the surrounding area. The project vicinity includes two high-rise hotels (the 26-story Sheraton Grand Sacramento Hotel and the 15-story Hyatt Regency Sacramento), the SCC, the Sacramento Community Center Theater, and other office, residential, restaurant, retail, and entertainment uses in the heart of the Downtown CBD.

Furthermore, it is not anticipated that operation of the proposed Hotel project would generate excessive noise, light, dust, odors, or hazardous emissions that could be considered incompatible with existing or planned adjacent land uses (see Sections 4.1 Aesthetics, Light, and Glare; 4.2 Air Quality; and 4.8 Noise and Vibration for project impacts related to these topic areas).

Therefore, it is not anticipated that any land use incompatibility with existing and planned adjacent land uses would occur.

Consistency with Adopted Plans, Policies, and Zoning

An inconsistency is identified if either of the proposed projects would conflict with mandatory policies set forth within the City's General Plan, CCCP, or provisions of the City's Planning and Development Code. Regional plans addressing specific environmental issues, such as the Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan, are addressed in the applicable technical sections of this EIR. This chapter differs from the technical sections in Chapter 4, in that only issues of consistency of the proposed projects with City land use policies are addressed, as opposed to environmental impacts and mitigation measures. The analysis below complies with section 15125(d) of the CEQA Guidelines, which requires EIRs to discuss inconsistencies with general plans and regional plans as part of the environmental setting. Ultimately, it is within the authority of the City Council to interpret City policies and to determine if the projects are consistent or inconsistent with adopted plans and policies. Any inconsistencies with plans or policies adopted for the purpose of mitigating an environmental effect are further discussed in relevant environmental resource sections of the EIR.

SCC Project

City of Sacramento 2035 General Plan

The majority of the SCC project site is designated Public/Quasi-Public (P/QP) on the City of Sacramento 2035 General Plan Land Use and Urban Form Diagram. The 0.3-acre parcel that houses the Panattoni office building is designated Central Business District (CBD).

The Public/Quasi-Public designation describes areas with unique uses and typically unique urban forms. These areas host community services and/or educational, cultural, administrative, and recreational facilities often located within a well-landscaped setting. Most of these areas provide a public function and as a result, existing buildings often include a significant amount of surface parking lots and structured parking to accommodate users of the facilities. It should be noted that many Public/Quasi-Public uses are also allowed and are located in other land use and urban form designations. The proposed SCC project includes entertainment and visitor-serving uses consistent with the land uses identified for the Public/Quasi-Public designation. The proposed SCC project would not change the land use designation or existing use of the SCC project site and would not require any General Plan Amendments in order to be approved by the City.

The CBD is Sacramento's most intensely developed area. The CBD allows for a mixture of retail, office, residential, governmental, entertainment and visitor-serving uses. The proposed SCC project includes entertainment and visitor-serving uses consistent with the land uses identified for the CBD. The proposed SCC project would not change the land use designation or the existing use of the project site and would not require any General Plan Amendments in order to be approved by the City. As demonstrated in Table 3-2 above, the proposed SCC project would be considered consistent with the goals and policies contained in the City's 2035 General Plan.

Central City Community Plan

The primary goal of the CCCP is to continue revitalization of the Central City to provide a viable living, working, shopping, and cultural environment with a full range of day and night activities for residents, employees, and visitors. The CCCP land use designations for the SCC project site are Public/Quasi-Public and Central Business District. The proposed SCC project includes entertainment and visitor-serving uses consistent with the land uses identified for the Public/Quasi-Public and Central Business District land use designations. The proposed SCC project would not change the CCCP land use designations or the existing use of the SCC project site and would not require any amendments to the CCCP in order to be approved by the City. As demonstrated in Table 3-2 above, the proposed SCC project would be considered consistent with the goals and policies contained in the CCCP.

City of Sacramento Planning and Development Code

As discussed above, the SCC project site is zoned C-3 (Central Business District Zone). The CBD zone is intended for the City's most intense retail, commercial, office developments and is the City's only classification which has no height limit, aside from height limits imposed by the Capitol View Protection requirements (17.216.860) described below. This designation provides for by-right mixed-use high-rise development and single-use or mixed-use development within easy access to transit that includes compatible public, quasi-public, and special uses such as convention centers.

As discussed above, the SCC project site is within the area that is subject to the provisions of the Capitol View Protection Ordinance (Section 17.216.860 of the Sacramento City Code).

The setback requirements for the ordinance are illustrated on a map that is Exhibit C of the ordinance. The SCC project site is located outside the area subject to the setback requirements.

As specified on Exhibit B of the ordinance, the maximum height limit for the northern half of the SCC project (north of Jazz Alley) site is 450 feet. The maximum height limit for the southern half of the SCC project site (south of Jazz Alley) is 400 feet. The proposed expanded and renovated SCC would reach a maximum height of 60 feet, and would therefore be in compliance with the Capitol View Protection Ordinance.

The proposed SCC project would expand and renovate the existing SCC, and the expanded and renovated facility would continue to serve its existing function as a regional convention center. The proposed SCC project would not change the zoning designation of the SCC project site and would not require any amendments to the City's Planning and Development Code in order to be approved by the City. The proposed SCC project would be consistent with the City's Planning and Development Code.

Sacramento Area Council of Governments Blueprint

The proposed SCC project generally complies with the Blueprint's seven principles by improving and expanding existing uses on a site that is within downtown Sacramento (a major employment

area); encouraging greater usage of a range of transit opportunities due to the project's location near downtown Sacramento and proximity to recreational and commercial uses and developing an attractive project with quality design, as specified in the Central City Urban Design Guidelines. The SCC project meets the SACOG Blueprint growth principle of Use of Existing Assets by intensification of the existing use and redeveloping the SCC project site to make better use of existing public infrastructure.

Sacramento Area Council of Governments Metropolitan Transportation Plan/ Sustainable Communities Strategy

The proposed SCC project would intensify the existing development on the SCC project site. As described above, the expanded footprint and operations of the SCC would be consistent with the City of Sacramento 2035 General Plan land use and zoning designations for the SCC project site. The level of development assumed in the 2035 General Plan and 2035 General Plan Master EIR represent projected conditions in the year 2035, consistent with the horizon year of SACOG's projections for the MTP/SCS. Population projections in the 2035 General Plan and 2035 General Plan Master EIR were derived from SACOG's MTP forecast. Therefore, because the proposed SCC project would be consistent with the 2035 General Plan and 2035 General Plan Master EIR, the SCC project would also be consistent with the SACOG MTP/SCS.

SCC Project and Hotel Project

City of Sacramento 2035 General Plan

As described in the land use consistency discussion above, the proposed SCC project would be considered consistent with the goals and policies contained in the City's 2035 General Plan.

The 2035 General Plan land use designation for the Hotel project site is CBD. The CBD is Sacramento's most intensely developed area. The CBD allows for a mixture of retail, office, residential, governmental, entertainment and visitor-serving uses. The proposed Hotel project includes visitor-serving uses consistent with the land uses identified for the CBD. The proposed Hotel project would not change the land use designation of the Hotel project site and would not require any General Plan Amendments in order to be approved by the City. As demonstrated in Table 3-3 above, the proposed SCC project and Hotel project would be considered consistent with the goals and policies contained in the City's 2035 General Plan.

Central City Community Plan

As described in the land use consistency discussion for the SCC project, above, the proposed SCC project would be considered consistent with the goals and policies contained in the CCCP.

The CCCP land use designation for the Hotel project site is Central Business District. The primary goal of the CCCP is to continue revitalization of the Central City to provide a viable living, working, shopping, and cultural environment with a full range of day and night activities for residents, employees, and visitors. The proposed Hotel project includes visitor-serving uses consistent with the land uses identified for the Central Business District land use designation. The proposed Hotel project would not change the CCCP land use designation of the Hotel project site

and would not require any amendments to the CCCP in order to be approved by the City. As demonstrated in Table 3-3 above, the proposed SCC project and Hotel project would be considered consistent with the goals and policies contained in the CCCP.

City of Sacramento Planning and Development Code

The proposed SCC project would expand and renovate the existing SCC, and the expanded and renovated facility would continue to serve its existing function as a regional convention center. The proposed SCC project would not change the zoning designation of the SCC project site and would not require any amendments to the City's Planning and Development Code in order to be approved by the City. The proposed SCC project would be consistent with the City's Planning and Development Code.

As discussed above, the Hotel project site is zoned C-3 (Central Business District Zone). The CBD zone is intended for the City's most intense retail, commercial, office developments and is the City's only classification which has no height limit, aside from height limits imposed by the Capitol View Protection requirements (17.216.860) described below. This designation provides for by-right mixed-use high-rise development and single-use or mixed-use development within easy access to transit that includes compatible public, quasi-public, and special uses such as convention centers.

As discussed above, the Hotel project site is within the area that is subject to compliance with the Capitol View Protection Ordinance (Section 17.216.860 of the Sacramento City Code).

The setback requirements for the ordinance are illustrated on a map that is Exhibit C of the ordinance. The Hotel project site is located outside the area subject to the setback requirements.

The Hotel project site is within the area that is subject to compliance with the Capitol View Protection Ordinance. As specified on Exhibit B of the ordinance, the height limit for the Hotel project site is 300 feet. The proposed Hotel structure would include approximately 24 above-ground stories, two subgrade parking levels, and would be a maximum height of 300 feet. Therefore, the proposed Hotel project would be in compliance with the Capitol View Protection Ordinance.

The proposed Hotel project would replace an existing parking lot with an approximately 24-story hotel at a maximum height of 300 feet that would include approximately 350 rooms, meeting/conference spaces, restaurant space, other amenities (e.g., pool deck), service and loading facilities, approximately 200 on-site parking spaces on two subterranean floors, and a pedestrian bridge that would span K Street and connect above-ground-level floors of both the hotel and the proposed SCC lobby.

The proposed SCC project and Hotel project would not change the zoning designation of the Hotel project site and would not require any amendments to the City's Planning and Development Code in order to be approved by the City. For these reasons, the proposed SCC project and Hotel project would be consistent with the City's Planning and Development Code.

Sacramento Area Council of Governments Blueprint

The proposed SCC project and Hotel project generally comply with the Blueprint's seven principles by improving and expanding existing uses on a site that is within downtown Sacramento (a major employment area); encouraging greater usage of a range of transit opportunities due to the location of both projects within downtown Sacramento and proximity to recreational and commercial uses and developing attractive projects with quality design, including convention and hotel uses, as specified in the Central City Urban Design Guidelines. The proposed SCC project meets the SACOG Blueprint growth principle of Use of Existing Assets by intensification of the existing use and redeveloping the SCC project site to make better use of existing public infrastructure. The proposed Hotel project would place new uses within close proximity of transit, develop an existing vacant infill site within downtown Sacramento, and incorporate quality and unique design. For these reasons, the proposed SCC project and Hotel project would be consistent with the SACOG Blueprint.

Sacramento Area Council of Governments Metropolitan Transportation Plan/ Sustainable Communities Strategy

The proposed SCC project would intensify the existing development on the SCC project site. As described above, the expanded footprint and operations of the SCC would be consistent with the City of Sacramento 2035 General Plan land use and zoning designations for the SCC and Hotel project sites. The level of development assumed in the 2035 General Plan and 2035 General Plan Master EIR represent projected conditions in the year 2035, consistent with the horizon year of SACOG's projections for the MTP/SCS. Population projections in the 2035 General Plan and 2035 General Plan Master EIR were derived from SACOG's MTP forecast. Therefore, because the proposed SCC project and Hotel project would be consistent with the 2035 General Plan and 2035 General Plan Master EIR, they would also be consistent with the SACOG MTP/SCS.

City of Sacramento Central City Specific Plan

The City is currently preparing the Central City Specific Plan (CCSP) and associated CCSP EIR, which, if approved, would provide guidance for future development within the CCSP Planning Area (CCSP Area). The CCSP Area generally includes the areas of the Central City south of the River District Specific Plan Area and the Railyards Specific Plan Area, east of the Sacramento River, west from Alhambra Boulevard, and north from Broadway, and would be applicable to the SCC and Hotel project sites. The intent of the CCSP is to incentivize residential and non-residential growth within the CCSP Area, expand opportunities for adaptive reuse, streamline the City's processes for housing development within the Central City, encourage greater development heights along key corridors, facilitate multimodal transportation, allow for the development two hotels, guide the placement of public art, and make improvements to street lighting and bicycle and pedestrian facilities. The CCSP would establish a special planning district (SPD) that would provide updates to policies to allow for an intensification of development in the Central City by expanding allowable heights and densities in specific zones. The CCSP would establish the Central City as a transit priority area, consistent with PRC section 21099.

Under PRC section 21155.4, if a residential, employment center, or mixed-use development project is proposed within a transit priority area; is consistent with a specific plan for which an environmental impact report has been certified; and is consistent with the general plan designation, density, building intensity, and applicable policies specified in a sustainable communities strategy, further environmental review would not be required.

The proposed SCC project would expand and renovate the existing SCC facility, however land uses would not change on the project site. As demonstrated in Table 3-2 above, the proposed SCC project would be considered consistent with the goals and policies contained in the City's 2035 General Plan. As such, the SCC project would also be consistent with the proposed CCSP.

As described in the Table 3-3, the proposed Hotel project would be consistent with the 2035 General Plan land use designation and requirements for the CBD zone. To facilitate taller development in key areas Policy LU 1.1.10 of the 2035 General Plan would be amended to clarify the policy regarding allowable floor-area-ratios (FAR) to allow the FAR for a project site to be exceeded by 20 percent if the project provides a significant community benefit. The proposed Hotel project would exceed the allowable FAR for the Central Business District (CBD) zone with an FAR of 15.16, however as described in Table 3-3, the proposed Hotel project would be consistent the significant community benefit standard for exceeding the allowable FAR by up to 20 percent. This would allow for an FAR on the Hotel project site of 18.0, well above the proposed FAR for the Hotel project.

Therefore, the SCC project and the Hotel project would be consistent with the CCSP if adopted.

3.3 Employment

This section evaluates potential employment effects of the proposed projects. This section describes existing employment levels and the existing jobs-housing relationship in the city and evaluates the potential for employment increases that would result from implementation of the proposed projects to result in substantial changes to the jobs-housing relationship.

The evaluation included in this section was developed based on project-specific features and data provided by the United States Census Bureau's (U.S. Census) American Fact Finder, California Department of Finance (DOF) Population and Housing Estimates, the Sacramento Area Council of Governments (SACOG) 2013-2021 Regional Housing Needs Assessment Plan and Metropolitan Transportation Plan/Sustainable Communities Strategy,⁹ the City of Sacramento 2035 General Plan Housing Element,¹⁰ and the City of Sacramento 2035 General Plan Master Environmental Impact Report.¹¹

⁹ Sacramento Area Council of Governments, 2012. Regional Housing Needs Plan 2013-2021. Adopted September 20, 2012.

¹⁰ City of Sacramento, 2015. *City of Sacramento 2035 General Plan*. Adopted March 3, 2015.

¹¹ City of Sacramento, 2015. *City of Sacramento 2035 General Plan Master Environmental Impact Report* (SCH No. 2012122006). Certified March 3, 2015.

No comments pertaining to employment were submitted in response to the NOP.

3.3.1 Environmental Setting

Employment

The Sacramento region is a hub for state government and related industries, health services, financial services, and local/regional serving retail. According to the City's 2013-2021 Housing Element, in 2008 there were 299,732 jobs in the Sacramento. By 2020 the number of jobs is expected to increase by 8 percent to 324,027, and by 2035 the number of jobs is expected to increase by another 20 percent to 390,112, for a total increase of 30 percent from 2008 to 2035. Sacramento is projected to add over 90,000 jobs from 2008 to 2035.

The project sites are located within the City of Sacramento's Central City community and are located in the Central City Community Plan (CCCP) area. The Central City Community Plan area is bounded by the Sacramento River on the west, the American River on the north, Business 80 and Alhambra Boulevard on the east, and I-80 and Broadway on the south.

The Housing Element anticipates substantial growth in employment in the Central City between 2008 and 2035.¹² By 2020 the Central City is projected to experience a substantial increase in employment, adding 6,642 jobs from 2008 to 2020 (for a total of 121,450 jobs).¹³ From 2020 to 2035, the Central City is projected to experience another substantial increase in, adding 31,386 jobs (for a total of 152,836 jobs).¹⁴

Housing

According to the U.S. Census Bureau, the Central City contained 19,432 total housing units in 2000. Of the total units, single-family units comprised just 17.8 percent of the total Central City housing inventory, compared to 65.4 percent citywide. Conversely, multifamily units comprised 82.1 percent of the Central City units, ranging from duplex units to complexes of 50 or more units. This is compared to just 32.3 percent citywide. Within the Central City, units in smaller multifamily complexes represent the majority of units, with units in structures of two to four units representing 23.3 percent of all units, compared to just 9.7 percent citywide. Central City multifamily units are fairly evenly distributed between medium and large structures, ranging from five units to 50 or more units in the structure, all of which represent significantly higher proportions of the overall housing stock relative to the city as a whole.

Based on the average number of units in place between 2010 and 2014, the Central City housing stock increased by roughly 0.6 per year between 2000 and 2010-2014, somewhat slower than the average citywide growth rates of 1.4 percent. For the time period, the Central City captured

¹² City of Sacramento, 2013. City of Sacramento 2013-2021 Housing Element. Adopted December 17, 2013. p. H 3-3.

¹³ Ibid. p. H 3-15.

¹⁴ Ibid. p. H 3-15.

5.1 percent of the increase in total Citywide housing unit growth and 14.6 percent of the increase in multifamily housing unit growth within the city.

Jobs-Housing Relationship

Jobs-housing relationship is used to describe the ratio of residences to jobs in a particular community or geographic area. Low jobs-housing ratio (i.e., few jobs for the number of households in the area) indicates that many workers commute out of their residence area to their place of employment. In areas with high jobs-housing ratio (i.e., many jobs for the number of households in the area), jobs need to be filled by workers from outside the area. A jobs-housing ratio of 1.0 reflects that there is one job available per household and is considered to be in “balance.” Areas with high or low jobs-housing ratios are likely to generate longer home-to-work commutes.¹⁵

When assuming that the affordability of housing and the incomes of jobs in the local market are paired reasonably closely, if the quantity and proximity of housing units is proportionate to the quantity and proximity of jobs, the majority of employees would be able to work and reside in the same community. A more balanced relationship between jobs and housing can help reduce the number of vehicle trips and the overall vehicle miles traveled as a result of shorter commutes to employment within the same proximate residential areas. Such a reduction in vehicle trips and vehicle miles traveled would tend to reduce levels of air pollutant emissions (including greenhouse gas emissions) and would create less vehicular congestion on area roadways and intersections. It is important that the determination of the jobs-housing relationship focuses on whether housing in the community is affordable to local employees. The availability of an adequate housing supply, presenting a range of price levels that include prices that are reasonably affordable for local employees, can potentially reduce the commute mileage between homes and work sites.

The 2016 SACOG MTP/SCS evaluated the change in jobs-housing ratio between 2008 (considered to be a somewhat normal year in the regional economy) and the ratio projected for 2036 (see **Table 3-4**). Within the SACOG region, there were 969,838 jobs and 819,277 households in 2008, resulting in a jobs-housing ratio of 1.18. By 2036, the SACOG MTP/SCS projects there will be 1,327,279 jobs and 1,140,202 households resulting in a jobs-housing ratio of 1.16.¹⁶

TABLE 3-4
JOBS AND HOUSEHOLDS, 2008 AND 2036

Geographic Area	“Base” Jobs ¹		Total Jobs		Households		Jobs-Housing Ratio	
	2008	2036	2008	2036	2008	2036	2008	2036
SACOG Region	N/A	N/A	969,838	1,327,279	819,277	1,140,202	1.18	1.16
Sacramento County	N/A	N/A	626,155	831,171	511,402	699,811	1.22	1.19
Sacramento CBD/Riverfront Employment Center	99,243	133,026	109,719	144,559	17,523	46,211	6.26	3.13

NOTES:

1. “Base” jobs exclude retail and food service.

N/A = not available

¹⁵ Sacramento Area Council of Governments. 2016. *2016 Metropolitan Transportation Plan/Sustainable Communities Strategy*. Chapter 9, Economic Vitality. p. 220. February 18, 2016.

¹⁶ Ibid. p. 220. Table 9.5.

Geographic Area	"Base" Jobs ¹		Total Jobs		Households		Jobs-Housing Ratio	
	2008	2036	2008	2036	2008	2036	2008	2036
Sources: Sacramento Area Council of Governments. 2016. 2016 Metropolitan Transportation Plan/Sustainable Communities Strategy. Chapter 9, Economic Vitality. February 18, 2016; Kacey Lizon, Planning Manager, Sacramento Area Council of Governments, personal communication, April 14, 2016.								

In 2016, there were approximately 244,028 employees in City of Sacramento, with 184,885 households.¹⁷ This generates a jobs/housing ratio of 1.32, reflective of Sacramento's continuing role as the regional employment center, and demonstrating that employees commute from other neighboring communities in the region to work within the City.

3.3.2 Analysis

SCC Project

SCC Employment

Employment for the proposed SCC would include permanent full-time employment associated with the operations of the SCC, part-time employment to support events throughout the year, and temporary employment for demolition and construction.

Permanent Full Time

The Sacramento Convention Center currently has approximately 86 permanent employees, working in business operations and administration, which include operation and maintenance of the SCC. The proposed SCC project would support approximately the same level of permanent employment as under current conditions.

Part Time

To support events at the SCC, such as an association meeting or convention, approximately 110 part-time employees are needed in a variety of jobs, including ushers, food service, security, janitorial, and similar positions. Depending on the nature of the event, some part-time employees work on days leading up to the event. Event-day employees begin to arrive several hours before an event, and, depending on their jobs, some employees remain at the SCC for several hours or longer after events. The proposed SCC would increase the number of part-time employees from approximately 110 to approximately 130.

Construction

As described in Chapter 2, Project Description, construction of the proposed SCC renovation and expansion would take up to 37 months, with fluctuations in the number of construction workers depending on the specific construction phase and the City's chosen construction phasing plan.

¹⁷ City of Sacramento. 2015. City of Sacramento, Economic Development Department: Key Demographics. Available: <http://www.cityofsacramento.org/Economic-Development/Why-Sacramento/Demographics-and-Market-Information/Key-Demographics>. Accessed May 5, 2017.

Proposed SCC Jobs-Housing Relationship

As described above, it is anticipated that the proposed SCC project would result in a maximum increase of approximately 10-15 part-time employees. This minor increase in employment would result in a minimal contribution to the current imbalance between jobs and housing in the City. Moreover, as noted in the 2035 General Plan Master EIR, over time, several factors, including recent demographic trends and ongoing housing and development patterns would likely result in a more balanced ratio of jobs and housing in the City, along with a reduction in vehicle trips and associated pollutant emissions and congestion on area roadways and intersections. Major infill projects, including the Railyards Specific Plan and the Township 9 development, as well as recently approved loft, condominium, and single-family residential projects in the Downtown (CBD) and Midtown neighborhoods provide a wide range of housing types as well as housing and employment centers in close proximity to transit, bike lanes, and the network of sidewalks.¹⁸

SCC Project and Hotel Project

SCC Project and Hotel Project Employment

Employment for the proposed Hotel project would include permanent employment in a variety of hospitality and service roles and temporary employment construction.

Permanent

As described above, the proposed SCC project would not be anticipated to create additional permanent jobs, as existing permanent staff levels would be adequate to accommodate the increase in operations from the proposed SCC project.

The proposed Hotel project would employ approximately 125 permanent employees in a variety of hospitality and service roles.

Combined, the SCC project and Hotel project would add 125 permanent and 10-15 part-time employees to downtown Sacramento.

Construction

As described above and in Chapter 2, Project Description, construction of the proposed SCC renovation and expansion would take up to 37 months, depending on the City's chosen construction phasing plan. Construction of the proposed Hotel project would occur over approximately two years. The SCC project and Hotel project would have fluctuating construction-related employment numbers during construction periods as different phases of each project are built out.

SCC and Hotel Jobs-Housing Relationship

As described above, the proposed SCC project and Hotel project would employ a combined total of approximately 125 permanent employees and 10-15 part-time employees. This minor increase

¹⁸ City of Sacramento, 2015. *City of Sacramento 2035 General Plan Master Environmental Impact Report* (SCH No. 2012122006). Certified March 3, 2015. p. 3-10.

in employment would result in a minimal contribution to the current imbalance between jobs and housing in the City. Moreover, as noted in 2035 General Plan Master EIR, over time, several factors, including recent demographic trends and ongoing housing and development patterns would likely result in a more balanced ratio of jobs and housing in the City, along with a reduction in vehicle trips and associated pollutant emissions and congestion on area roadways and intersections. Major infill projects, including the Railyards Specific Plan and Township 9 development, as well as recently approved loft, condominium, and single-family residential projects in the Downtown (CBD) and Midtown neighborhoods provide a wide range of housing types as well as housing and employment centers in close proximity to transit, bike lanes, and the network of sidewalks.¹⁹

¹⁹ Ibid. p. 3-10.

CHAPTER 4

Environmental Impacts, Settings, and Mitigation Measures

4.0 Introduction to the Analysis

This EIR evaluates the physical environmental effects that would be potentially affected by the implementation of the proposed project. Some environmental effects that are typically considered under CEQA would not be affected by the proposed project and, pursuant to CEQA, are not further analyzed in this EIR. A discussion of those issues that were not further analyzed in the EIR can be found later in this chapter.

4.0.1 Definitions 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 to describe environmental effects of the Proposed Project:

- **Significance Criteria:** A set of criteria used by the lead agency to determine at what level or threshold an impact would be considered significant. Standards of Significance used in this EIR include those standards provided by the City of Sacramento. In determining the level of significance, the analysis assumes that the proposed projects would comply with relevant federal, State, and local regulations and ordinances.
- **Significant Impact:** A project impact is considered significant if the proposed projects would result in a substantial adverse change in the physical conditions of the environment. Significant impacts are identified by the evaluation of project-related physical change compared to specified significance criteria. 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
- **Potentially Significant Impact:** A potentially significant impact is identified where the proposed projects may cause a substantial adverse change in the environment, depending on certain unknown conditions related to the project or the affected environment. For CEQA purposes, a potentially significant impact is treated as if it were a significant impact.

¹ State CEQA Guidelines, section 15382.

- **Less-than-Significant Impact:** A project impact is considered less than significant when the physical change caused by the proposed projects would not exceed the applicable significance criterion.
- **Significant and Unavoidable Impact:** A project impact is considered significant and unavoidable if it would result in a substantial adverse physical change in the environment that cannot be feasibly avoided or mitigated to a less-than-significant level.
- **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.” Like any other significant impact, a significant cumulative impact is one in which the cumulative adverse physical change would exceed the applicable significance criterion and the proposed projects’ contribution is “cumulatively considerable.”
- **Mitigation Measure:** A mitigation measure is an action that could be taken that would avoid or reduce the magnitude of a significant impact. Section 15370 of the State 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.

4.0.2 Section Format

Chapter 4 is divided into technical sections (e.g., Section 4.1, Aesthetics, Light, and Glare) that present for each environmental resource issue area the physical environmental setting, regulatory setting, standards of significance, analytical methods, and impacts to the environment, and, where required, potentially feasible mitigation measures for significant impacts. Each section includes an analysis of project-specific and cumulative impacts for each issue area.

The technical environmental sections each begin with a description of the proposed projects’ **environmental setting** and the **regulatory setting** as it pertains to a particular issue. The environmental setting provides a point of reference for assessing the environmental impacts of the proposed project and project alternatives. The environmental setting discussion addresses the conditions that exist prior to implementation of the projects. This setting establishes the baseline by which the proposed projects and project alternatives are measured for environmental impacts. The regulatory setting presents relevant information about federal, state, regional, and/or local laws, regulations, plans or policies that pertain to the environmental resources addressed in each section.

Next, each section presents **significance criteria**, which identify the standards used by the City of Sacramento to determine the significance of effects of the proposed projects. The significance criteria used for the proposed projects were derived from the City of Sacramento's established significance standards, which, in turn, reflect policies of the 2035 General Plan, as well as other criteria applicable under CEQA, including thresholds established by trustee and responsible agencies.

A **methods and assumptions** description in each section presents the analytical methods and key assumptions used in the evaluation of effects of the proposed projects, and is followed by an **impacts and mitigation** discussion. The impact and mitigation portion of each section includes impact statements, prefaced by a number in bold-faced type. An explanation of each impact is followed by an analysis of its significance. The subsection concludes with a statement that the impact, following implementation of the mitigation measure(s) and/or the continuation of existing policies and regulations, would be reduced to a less-than-significant level or would remain significant and unavoidable.

The analysis of environmental impacts considers both the construction and operational phases associated with implementation of the proposed projects. As required by section 15126.2(a) of the State CEQA Guidelines, direct, indirect, short-term, long-term, onsite, and/or off-site impacts are addressed, as appropriate, for the environmental issue area being analyzed. Under CEQA, economic or social changes by themselves are not considered to be significant impacts, but may be considered in linking a project to a physical environmental change, or in determining whether an impact is significant.

Where enforcement exists and compliance can be reasonably anticipated, this EIR assumes that the proposed projects would meet the requirements of applicable laws and other regulations.

Mitigation measures pertinent to each individual impact, if available, appear after the impact discussion section and indicate whether the mitigation applies to the SCC project, the Hotel project, or both projects. The magnitude of reduction of an impact and the potential effect of that reduction in magnitude on the significance of the impact is also disclosed. An example of the format is shown below.

Impacts and Mitigation Measures

Impact 4.X-1: Impact statement

SCC Project

The discussion summarizes the impact of construction and operation of the SCC project as described in Chapter 2, Project Description. A significance conclusion specific to the SCC project will be drawn and indicated in **bold**.

SCC Project and Hotel Project

This analysis summarizes the impacts of construction and operation of the SCC project as well as the Hotel project. This analysis describes the effects of both projects together and identifies particular nuances of one project or the other where relevant. A significance conclusion specific to the effects of the SCC project and the Hotel project will be drawn and indicated in **bold**.

A statement of the level of significance before application of any mitigation measures is provided in **bold**.

Mitigation Measure

Mitigation Measure 4.X-1 (SCC/Hotel)

Mitigation measure presented in italics.

The project that the mitigation measure applies to is indicated in parentheses after the mitigation number. Recommended mitigation measures are numbered to match the impact number.

Level of Significance After Mitigation: This paragraph describes how the mitigation measure(s) reduces the impact and identifies the residual level of impact in **bold**.

Cumulative Impacts

An analysis of cumulative impacts follows the project-specific impacts and mitigation measures evaluation in each section. As defined in State CEQA Guidelines section 15355, a cumulative impact consists of an impact that is created as a result of the combination of the project(s) evaluated in the EIR together with other past, present and reasonably foreseeable projects causing related impacts. An introductory explanation that defines the cumulative analysis methodology and the cumulative context being analyzed for respective sections (e.g., SACOG projections, the Sacramento Valley Air Basin) is included at the beginning of the cumulative impact analysis in each technical section. In some instances, a project-specific impact may be considered less than significant, but may be considered potentially significant in combination with development of the surrounding area or in combination with regional growth projections. In some instances, a potentially significant impact may result on a project level but would not result in a considerable contribution to a significant cumulative impact. The cumulative impacts analysis is formatted the same as the project-specific impacts, as shown above.

4.0.3 Issues Previously Determined to be Less Than Significant

Upon review of the proposed projects, the City of Sacramento determined that due to the physical characteristics of the project sites and the projects as proposed several environmental issues would involve impacts that would be less than significant and need not be further considered in

the Draft EIR.² The discussions below provide brief statements of reasons for the City’s determination that these issues do not warrant further consideration in the EIR.

Agriculture and Forestry Resources

The SCC project site and Hotel project site are located in a disturbed environment surrounded by urban uses. There are no forested lands or lands being used for agriculture or forestry production on the project sites or in the projects’ vicinity. For these reasons, there is no potential for the proposed projects to cause loss to agriculture or forestry resources and this topic is not considered further in this EIR.

Geology, Soils, and Seismicity

Seismic Ground Shaking

No Alquist-Priolo Earthquake Fault Zones are present in the City of Sacramento. Therefore, no evidence exists to suggest that there is a reasonable chance of fault rupture within the project sites. As discussed in the City of Sacramento 2035 General Plan Master EIR (MEIR), despite its relatively distant location from known faults and fault zones, people and structures within the city could be subject to the effects of groundshaking caused by a seismic event located miles away.³ The resulting vibration could cause damage to buildings, roads, and infrastructure (primary effects), and could cause ground failures such as liquefaction or settlement in loose alluvium and/or poorly compacted fill (secondary effects).⁴

Portions of the city, including the project site, are underlain by artificial fill and alluvial deposits that, in their present states, could become unstable during seismic ground motion. To reduce the primary and secondary risks associated with seismically induced groundshaking, it is necessary to take the location and type of subsurface materials into consideration when designing foundations and structures.

As part of the construction permitting process, the City requires completed reports of soil conditions at the specific construction sites to identify potentially unsuitable soil conditions including potential exposure to potentially damaging seismic vibrations, ground failure, liquefaction, settlement, subsidence, lateral spreading, and collapse. The City requires that these evaluations be conducted by registered soil professionals, and measures to eliminate inappropriate soil conditions must be applied, depending on the soil conditions. The design of foundation and

² Public Resources Code, Section 21003(e) states that “[t]o provide more meaningful public disclosure, reduce the time and cost required to prepare an environmental impact report, and focus on potentially significant effects on the environment of a proposed project, lead agencies shall, in accordance with Section 21100, focus the discussion in the environmental impact report on those potential effects on the environment of a proposed project which the lead agency has determined are or may be significant. Lead agencies may limit discussion on other effects to a brief explanation as to why those effects are not potentially significant.”

³ City of Sacramento, 2015. *City of Sacramento 2035 General Plan Master Environmental Impact Report*. March 3, 2015. p. 4.5-4.

⁴ City of Sacramento, 2009. *City of Sacramento 2030 General Plan Master Environmental Impact Report*. March 3, 2015. p. 4.5-4.

excavation-wall support must conform to the analysis and implementation criteria described in the California Building Code (CBC), Chapters 16, 18, 33, and the appendix to Chapter 33.

For these reasons, there would be no adverse effects from either of the proposed projects related to seismic ground shaking.

Soil Erosion

Construction activities at the project site would result in demolition, site preparation activities, such as excavation, grading and trenching, which would result in the exposure of soils. The project sites are relatively flat.

Compliance with the City of Sacramento's Grading Ordinance, Chapter 15.88 of the Sacramento Municipal Code, requires that an Erosion and Sediment Control Plan must be prepared for each project within the city prior to the commencement of grading. An erosion control professional, landscape architect, or civil engineer specializing in erosion control must design the Erosion and Sediment Control Plan and be on the project site during the installation of erosion and sediment control measures, and supervise implementation of the installation and maintenance of such facilities throughout the site clearing, grading and construction periods.⁵

Consistent with the requirement of general plan policy EC 1.1.2 a geotechnical investigation has been conducted for the project sites. For the SCC project site, the geotechnical investigation concluded that the site soils could be excavated with light to moderate effort, using conventional heavy duty grading equipment.⁶

General plan policy ER 1.1.7 would require that necessary erosion control measures are used during site development activities, which would include demolition, grading, trenching, and construction. With implementation of all required regulations and preparation of an Erosion and Sediment Control Plan, incorporation of recommendations from the geotechnical study prepared for the proposed project, there would be minimal, if any, erosion from the project site. For this reason, the potential for soil erosion and sedimentation is not reviewed further in this EIR.

Unstable Geological Units and Expansive Soils

Due to the relatively flat topography of the city, landslides are not considered to be major threats to any areas within the city, including the project site.

Subsidence occurs over large areas with substantial withdrawal of oil, natural gas, or groundwater. There are no active oil or natural gas production operations near the project site or the city as a whole, so subsidence resulting from such activities would not occur within the city, including the project site. There are groundwater withdrawal activities located in the project site

⁵ City of Sacramento, 2015. *City of Sacramento 2035 General Plan Master Environmental Impact Report*. March 3, 2015. p. 4.5-6.

⁶ GEOCON Consultants, 2017. *Geotechnical Investigation for the Sacramento Convention Center Expansion and Renovation*, 1400 J Street, Sacramento, California. June 2017. pp. 9 to 14.

and within the city and subsidence has been observed, specifically in downtown Sacramento near I-5 associated with the long-term dewatering of the “boat” section of I-5.⁷

Subsidence or settlement may also occur over smaller areas near dewatering activities. Because of the shallow water table, dewatering may be necessary during excavation and foundation support construction activities within the project site. Often, groundwater provides partial support for the near-surface soil materials and, when withdrawn, allows the soils to slough into the excavation. If the dewatering system draws down the water table adjacent to the excavation, there is the possibility of undermining foundations on the adjacent site, causing cracking or collapse. To avoid these conditions, dewatering system design and excavation-wall support need to be designed appropriate to the soil conditions.

As part of the construction permitting process, the City requires completed reports of soil conditions at the specific construction sites to identify potentially unsuitable soil conditions including liquefaction, settlement, subsidence, lateral spreading, and collapse. The City requires that these evaluations be conducted by registered soil professionals, and measures to eliminate inappropriate soil conditions must be applied, depending on the soil conditions. The design of foundation and excavation-wall support must conform to the analysis and implementation criteria described in the CBC, Chapters 16, 18, 33, and the appendix to Chapter 33.⁸

As described in the geotechnical survey report for the proposed SCC project, high in-situ moisture content would be anticipated to require aerating/drying of soils to achieve proper compaction. The proposed SCC project would include an elevator pit and utility excavation, which, depending on the time of year those excavations occur, may require dewatering. Based on the soil type and moisture levels, the geotechnical survey report recommends the use of auger case pressure-grout displacement (AGPD) piles or continuous flight auger (CFA) piles, neither of which, would require pile driving for installation.⁹ With implementation of recommended foundation construction methods, impacts from construction of the proposed SCC project would not adversely affect the local geology or soil, or contribute to subsidence that could adversely affect nearby structures.

Conditions, similar to those from the SCC project site, are anticipated for the adjacent proposed Hotel project site to the south.

For the above reasons, unstable geological units and expansive soils are not discussed further in this EIR.

⁷ City of Sacramento, 2009. *City of Sacramento 2030 General Plan Master Environmental Impact Report*. March 3, 2009. p. 6.5-20.

⁸ City of Sacramento, 2015. *City of Sacramento 2035 General Plan Master Environmental Impact Report*. March 3, 2015. p. 4.5-5.

⁹ GEOCON Consultants, 2017. *Geotechnical Investigation for the Sacramento Convention Center Expansion and Renovation, 1400 J Street, Sacramento, California*. June 2017. p. 18.

Capability to Support Septic Tanks

There are no plans to provide wastewater service via septic tank or other alternative wastewater disposal systems for either of the proposed projects. All proposed sewer impacts would involve connections to existing service systems (addressed in Section 4.10, Utilities and Service Systems). For this reason, the ability of the project soils to support septic is not further considered in this EIR.

Hazards and Hazardous Materials

The project sites are located in Downtown Sacramento, which contains a number of hazardous materials sites, in various stages of remedial action. There are no cleanup sites within 2,000 feet of either of the project sites but there are 36 cleanup sites within 5,000 feet.¹⁰ Therefore, construction and operations, for either of the proposed projects, would not be anticipated to encounter known hazardous materials sites or contaminated groundwater. Further, the proposed projects would not affect or disrupt any ongoing remediation of contaminated sites.

The proposed SCC project would include demolition of the western wing of the SCC and the Panattoni building on the eastern side of the SCC. Both structures may contain building materials designated as hazardous materials, including asbestos-containing materials (ACM) and lead based paint (LBP). Disturbance of sites with known or unknown hazardous material contamination could cause various short-term or long-term adverse health effects in persons exposed to hazardous substances. If construction or demolition is proposed on a site that is known to contain hazardous materials or previously unknown hazardous materials are discovered during construction activities, investigation, remediation, and cleanup of the site would be required before construction could begin. To prevent potential health hazards to construction workers and the public from exposure to previously unknown contamination, General Plan Policy PHS 3.1.2 requires that property owners of contaminated sites develop plans to investigate and manage hazardous material contamination to prevent risk to human health or the environment. These activities would occur under the supervision of the Regional Water Quality Control Board (RWQCB), California Department of Toxic Substances Control (DTSC), or the SCEMD, depending on the particular characteristics of each site. In addition, upon identification of the contamination, a remediation plan pursuant to Section 25401.05 (a)(1) of the California Health and Safety Code and approved by the appropriate agency or authority must be implemented at the site. Should any previously undiscovered chemicals of concern be found during construction of the project, including excavation or earth-moving activities, construction activities would be required to cease and further investigation and remediation would be required before construction could continue.

¹⁰ California Department of Toxic Substances Control, 2017. EnviroStor website. Available: www.envirostor.dtsc.ca.gov/public/. Accessed May 19, 2017.

Compliance with all applicable rules and regulations, along with implementation general plan policies, would reduce the potential for exposure of construction workers and the general public to unusual or excessive risk related to hazardous materials during construction.

Construction activities on the project site would involve the transport and use of fuels, lubricants, paint, solvents, and other potentially hazardous materials to the project site during construction. Relatively small amounts of these commonly used hazardous substances would be used on site for construction and equipment maintenance. An array of federal, state, and local laws regulate the transport, management, storage, and use of hazardous materials, which would encompass all anticipated construction-oriented uses of such materials during project construction. These laws are enforced by various City, County, and State departments. Consequently, use of these materials for their intended purpose would not pose a significant risk to the public or environment.

Following construction, the transport, storage, use, and/or disposal of hazardous materials would be limited to common hazardous materials typical of any residences or place of employment (e.g., cleaning agents, paints and thinners, fuels, insecticides, herbicides, etc.). Although limited quantities of hazardous materials can be found in most buildings, the use of such substances would not occur in quantities that would present a significant hazard to the environment or the public. Accidents or spills involving small quantities of the materials typical of any residences or place of employment (cleaning agents, paints, etc.) would not create a significant hazard to the public or the environment. Therefore, with the compliance with existing regulations, construction and operation of the proposed project would not expose people (e.g., residents, pedestrians, construction workers) to ACM, LBP, or other hazardous materials.

For these reasons, potential exposure of humans to hazardous materials as a result of the proposed SCC project is not further considered in this EIR.

The proposed Hotel project would include demolition of the existing AKT parking lot, which is not anticipated to contain building materials designated as hazardous materials. Further, the proposed Hotel project site is not known to contain hazardous materials from prior development. As described for the SCC, the proposed Hotel project would be subject to general plan policies and restrictions as they pertain to hazardous materials, which would minimize the potential impact of discovery of previously unknown hazardous materials or the use and handling of hazardous materials during construction. For these reasons, the potential exposure of humans to hazardous materials as a result of the proposed Hotel project is not further considered in this EIR.

Hydrology and Water Quality

The proposed SCC project and Hotel project would generate runoff that would contain pollutants common in urban runoff, including metals, oils and grease, pesticides, herbicides, nutrients, pet waste, and trash. Without BMPs to remove these pollutants, stormwater leaving the project sites could degrade the quality of receiving waters. The City of Sacramento currently implements the SQIP, which is designed to reduce stormwater pollution to the maximum extent practicable and

eliminate prohibited non-stormwater discharges through a NPDES municipal stormwater discharge permit. The City of Sacramento also provides direction on post-construction BMPs in the Stormwater Quality Design Manual for the Sacramento Region. The proposed projects would be subject to City of Sacramento General Plan Policies U 4.1.4, ER 1.1.3, ER 1.1.4, and ER 1.1.7; the City's ordinances; the SQIP; and the Stormwater Quality Design Manual for the Sacramento Region. Specifically, the projects would be required to comply with the following permits and plans:

- Stormwater Quality Design Manual for the Sacramento Region BMPs, and LID measures to reduce pollutants in stormwater and non-stormwater discharges to the Maximum Extent Practicable;
- City of Sacramento Stormwater Management and Discharge Control Code; and
- City of Sacramento General Plan policies related to hydrology and water quality, and the protection and preservation of natural resources.

Permanent onsite water quality treatment meeting the requirements specified in the Stormwater Quality Design Manual for the Sacramento Region would be required for the proposed projects. The plan development process would include identification of BMPs that respond to the design and construction methods within each of the proposed project sites. The BMPs would be implemented to ensure that water quality would not be degraded and the violation of water quality or waste discharge objectives set by the State Water Board would not occur. City review would confirm that BMP implementation complies with all applicable regulations. Given that regulations are in place to ensure that the SCC project and Hotel project would not result in impacts to water quality, this impact discussed further in this EIR.

Although the SCC project and Hotel project would not use groundwater as a supply, the projects would increase the amount of impervious surfaces and hence would reduce the ability for precipitation to percolate to the aquifer, thereby reducing groundwater recharge. This would not be of concern because the project sites are not located within an area designated as a groundwater recharge area, and the underlying groundwater is primarily recharged by the Sacramento and American Rivers. Impacts to the City's Standard Specification for Dewatering, the CVRWQCB's General Dewatering Permit, and NPDES General Construction Permit BMPs would prevent impacts to groundwater quality during construction. Once construction is complete, no dewatering or use of groundwater would occur within the project sites. Compliance with all applicable water quality and runoff regulations would result in implementation of BMPs for source control and for source treatment to prevent contamination in stormwater runoff. For the above reasons, the proposed SCC project and Hotel project would have a negligible impact on groundwater quality, and this topic is not discussed further in this EIR.

The SCC and Hotel project sites are located in developed highly urbanized areas, dominated by impervious surfaces. For the existing SCC project site and the Hotel project site, stormwater drainage flows from each site to the City's Combined Sewer System (CSS). The proposed SCC project would, would have a larger structural footprint but would not alter existing drainage

patterns. The renovated and expanded SCC would remove the landscaped area between the existing SCC and the Community Center Theater and replace it with the proposed activities plaza, which would include landscape elements. The proposed Hotel project would construct a high rise building made up of impervious surfaces on the site of an existing paved parking lot. A small landscaped strip along 15th Street would be removed as part of the proposed Hotel project, which would result in a reduction of impervious surfaces on the project site. As the with the proposed SCC project removal of the small landscaped area on the project site would not substantially alter drainage or groundwater recharge within the highly urbanized Downtown Sacramento setting. Overall, the SCC project and Hotel project would have a small reduction in pervious surfaces present on the project sites, however drainage patterns on the project sites would not be substantially changed from existing patterns, and the topic is not considered further in this EIR.

Mineral Resources

The project sites are located in a disturbed environment surrounded by urban uses. The Surface Mining and Reclamation Act (SMARA) directs the State Geologist to classify (identify and map) the non-fuel mineral resources of the State to show where economically significant mineral deposits occur and where they are likely to occur based upon the best available scientific data. Areas known as Mineral Resource Zones (MRZs) are classified on the basis of geologic factors, without regard to existing land use and land ownership. The areas are categorized into four general classifications (MRZ-1 through MRZ-4) as described below.

MRZ-1: Areas where available geologic information indicates there is little or no likelihood for presence of significant mineral resources.

MRZ-2a: Areas underlain by mineral deposits where geologic data indicate that significant measured or indicated resources are present. Areas classified MRZ-2a contain discovered mineral deposits as determined by such evidence as drilling records, sample analysis, surface exposure, and mine information. Land included in the MRZ-2a category is of prime importance because it contains known economic mineral deposits.

MRZ-2b: Areas underlain by mineral deposits where geologic information indicates that significant inferred resources are present. Areas classified MRZ-2b contain discovered mineral deposits that are either inferred reserves as determined by limited sample analysis, exposure, and past mining history or are deposits that presently are sub-economic. Further exploration and/or changes in technology or economics could result in upgrading areas classified MRZ-2b to MRZ-2a.

MRZ-3a: Areas containing known mineral occurrences of undetermined mineral resource significance. Further exploration within these areas could result in the reclassification of specific localities as MRZ-2a or MRZ-2b.

MRZ-3b: Areas containing inferred mineral occurrences of undetermined mineral resource significance. Land classified MRZ-3b represents areas in geologic settings that appear to be favorable environments for the occurrence of specific mineral deposits. Further exploration could result in the reclassification

of all or part of these areas as MRZ-3a or specific localities as MRZ-2a or MRZ-2b.

MRZ-4: Areas of no known mineral occurrences where geologic information does not rule out the presence or absence of significant mineral resources.

Public Resources Code Section 2762 directs that if a use is proposed that might threaten the potential recovery of minerals from an area that has been classified MRZ-2, the county (or city) must specify its reasons for permitting use, provide public notice of those reasons, and forward a copy of its statement of reasons to the State Geologist and State Mining and Geology Board.

Downtown Sacramento, including the project sites, is classified as MRZ-1.

For these reasons the potential for the proposed projects to cause loss of a local or regionally identified mineral resource was not further considered in this EIR.

Population and Housing

The proposed SCC project and proposed Hotel project do not include development or demolition of any housing units. There would be no housing units or population generated as a result of the proposed projects. Therefore, population and housing is not considered further in this EIR.

Public Services

Police Protection

The project sites are provided police protection services by the Sacramento Police Department (Sacramento PD) from the Richards Police Facility, which houses the Central and East Commands. The project sites are within District 3. Sacramento PD provides police officers for approximately 12 events at the SCC per year. The number of officers provided for each event is determined in consultation with SCC staff and takes a number of factors into consideration, including: type of event, number of attendees, alcohol served, draw of the attraction relative to usual expected attendance, problems in past venues (throughout the nation), etc.

The proposed SCC project would not result in additional residents, but would have specialized security needs. In order to accommodate a variety of events with a high number of attendees, the Convention Center has to consistently provide adequate security. To provide the security needed for these fluctuating crowds at events, the Convention Center is required to maintain a Transportation Management Plan (TMP) that is in coordination with the Convention Center operator, the City of Sacramento, and other agencies responsible for its implementation. Sacramento PD, in collaboration with the Convention Center operator, is contractually obligated to assist with traffic enforcement before, during, and after events, and assists with a variety of vehicular, transit, and pedestrian controls. These traffic control strategies provide additional security in the vicinity of the Convention Center for large events.

As described in Chapter 2, Project Description, the proposed project would allow for an increase in the total number of annual events accommodated at the SCC. This would be anticipated to

increase the frequency of large events for which Sacramento PD would assist in implementation of the traffic controls described above, thereby increasing the number of days, annually, for which Sacramento PD would provide officers. The proposed project would increase event square footage by approximately 35%, which could be roughly anticipated to expand the potential attendance for large events at the SCC by 35%. Thus, a single large event at the expanded SCC may require additional officers relative to existing conditions. However, as described above, the Sacramento PD only provides officers for approximately 12 events annually, of which only a hand full bring attendee numbers of sufficient size to reach the facility's attendee capacity. Sacramento PD officers providing traffic control support for SCC events would be in addition to regular staffing levels, necessary for providing police protection to the City. Thus, an increase in the frequency of large events accommodated at the SCC may require that the Sacramento PD provide additional officers to meet the increased demand for police protection services. However, the frequency or magnitude of events as a result of the proposed project would not be anticipated to require a substantial increase in Sacramento PD staffing as the Sacramento PD regularly provides such services for larger events at other venues, such as the Golden 1 Center, which take place at a higher frequency and draw a higher number of attendees. Further, Sacramento PD already provides such services for concurrent events at multiple large venues within the City. The Sacramento PD is staffed to provide police protection to large events within the City, and the increased demand for police services to the SCC would not be to the extent that a substantial number of new officers would be needed or that the constructed of new facilities would be required.

The proposed Hotel project would not generate additional residents and would not require an expansion of police protection services.

For these reasons, the effects of the proposed project on police protection are not further considered in this EIR.

Fire Protection

The project sites are provided fire protection services by the Sacramento Fire Department (SFD). Five SFD stations are located in close proximity to the project sites. The project sites would be served by SFD Station 2 located approximately 0.1 mile north of the project sites, with backup service provided by Stations 1, 4, 5, and 14.

According to the 2035 General Plan MEIR, the SFD requires a ratio of one fire station for every 1.5 mile service radius, per every 16,000 population, and where a company experiences call volumes exceeding 3,500 in a year.¹¹ For purposes of the MEIR analysis, 1 station per 16,000 city residents threshold was used to determine whether the additional growth anticipated to occur under the General Plan would require additional fire stations that could result in additional environmental impacts that were not evaluated in the MEIR. The proposed SCC project does not change the current land use or introduce new residential units, therefore demand for fire

¹¹ City of Sacramento, 2015. *City of Sacramento 2035 General Plan Master Environmental Impact Report*. March 3, 2015. p. 4.10-5.

protection services would not be increased as a result of the proposed SCC project. The proposed Hotel project would develop hotel use in the place of a parking lot, however, similar to the SCC, no new residential units are proposed. For these reasons, the effects of the proposed projects on fire protection facilities are not further considered in this EIR.

Schools, Parks, Recreational Facilities, and Libraries

The proposed SCC project would expand and renovate the SCC and the proposed Hotel project would develop a hotel on a parcel used as a parking lot. Neither of the proposed projects would include residential units. Thus, the proposed projects would not generate any students or provide a new school, park, recreation, or library site. Further, the proposed projects would not create demand for schools, parks, recreational facilities or libraries. For these reasons, the effects of the proposed projects on such facilities and services are not considered further in this EIR.

Water Supply

Water supply for the proposed projects was previously considered and analyzed under the 2035 General Plan MEIR. This DEIR incorporates by reference the analysis of water supplies and treatment infrastructure provided in the MEIR on pages 4.11-1 through 4.11-11. As stated in State CEQA Guidelines section 15178(c)(1), an EIR for a subsequent project(s) that is consistent with the overall planning decision (in this case the 2035 General Plan) and analyzed within the context of the 2035 MEIR shall incorporate by reference the MEIR and analyze only the subsequent project's "additional" significant environmental effects not identified by the MEIR. In this case, the proposed projects' land use and zoning are consistent with those that were analyzed in the MEIR. Further, because the water supply for the proposed projects were included within the context of the water supply demand and conveyance analysis for the MEIR, there would be no additional environmental impacts related to water supply that were not already analyzed in the MEIR. The City has sufficient water supply, treatment capacity, and delivery infrastructure to fulfill the demands of the proposed projects. For these reasons, analysis of water supply for the proposed projects is not required in this EIR.

4.1 Aesthetics, Light, and Glare

This section addresses the appearance and visual character in and around the project sites, and considers the changes to those visual conditions that would result from implementation of the proposed projects.

The Environmental Setting of this chapter includes descriptions of existing visual characteristics of the project sites and vicinity. Existing plans and policies relevant to urban design and visual resource issues associated with implementation of the proposed projects are provided. The impact discussion evaluates potential impacts to aesthetic and visual resources resulting from implementation of the proposed projects in the context of existing conditions based on analyses of photographs, site reconnaissance, and project data. Where significant impacts are identified, potentially feasible measures that could be undertaken to avoid or reduce the magnitude of those significant impacts are described.

No comments pertaining to aesthetics, light, and glare were submitted in response to the NOP.

The analyses included in this section were developed based on site visits and documented photographs, information, and policies provided in the City of Sacramento 2035 General Plan, the City of Sacramento 2035 General Plan Master Environmental Impact Report, the Central City Community Plan, and the Central City Urban Design Guidelines.

4.1.1 Environmental Setting

Regional Setting

The City of Sacramento is visually characterized by a dense downtown urban core surrounded by lower density suburbs and open, undeveloped, agricultural land. To the east, on clear days the foothills of the Sierra Nevada Mountains provide a backdrop to the visual setting of the City. Downtown Sacramento is framed by a grid pattern of bisecting streets. Buildings range from small single-family residences to large high-rise office buildings. Buildings are comprised of a multitude of materials including metal, glass, wood, brick, and stone.

Sacramento's downtown skyline is visible from nearby locations such as the West Sacramento riverfront, the SR 160 and Business 80 bridges over the American River, as well as from miles around the City, including from eastbound I-80 on the Sacramento-Yolo Causeway, from westbound I-80 east of the City of Roseville, from northbound I-5 between Elk Grove and Sacramento, from southbound I-5 north of the downtown area, and from westbound US-50 as far east as El Dorado Hills. High-rise buildings are the distinctive features of the skyline, including the Wells Fargo Center, the California Environmental Protection Agency building, the U.S. Federal Courthouse, the U.S. Bank Plaza Building, the Sheraton Grande Hotel, the California State Capitol, the Renaissance Tower, and, by night, the distinctive blue light of the Esquire Plaza building and the colorful LED-lit top of the US Bank Plaza Building.

The City is physically and visually bisected by a number of major freeways including Interstate 5 (I-5) that traverses the state from north to south; Interstate 80 (I-80), which provides an east-west connection between San Francisco and Reno; State Route 99 (SR 99), which traverses the California Central Valley from its southern end at I-5 near Wheeler Ridge to its northern end at State Route 36 near Red Bluff; as well as Highway 50, which provides an east-west connection between Sacramento and South Lake Tahoe. In some areas, freeways are lighted by poles and overhead lamps. In most areas within the City, surrounding development generates light that provides ambient light in the vicinity. Headlights from motor vehicles contribute to the ambient light conditions.

Central Business District

The project sites are located within the Central Business District (CBD) of downtown Sacramento, which is a developed urban area characterized by a wide mix of building types and sizes. Much of the CBD is developed in mid-rise buildings ranging from two to six stories, multi-story high rises constructed mainly of stone, brick, metal and glass, interspersed with parks and municipal uses. Buildings that have been constructed more recently tend to be taller than the older buildings.

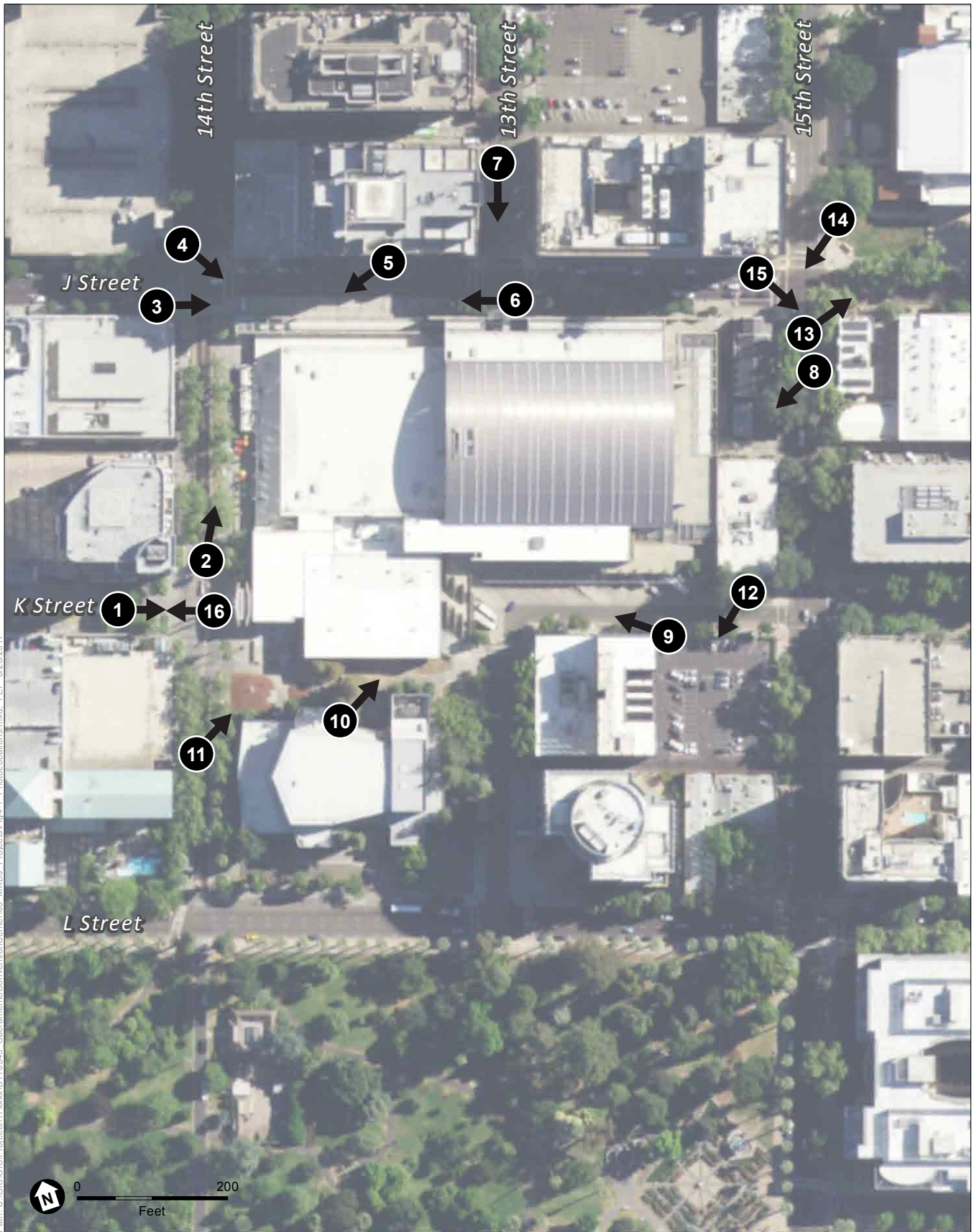
The CBD includes buildings of varying styles, from the 1920's Italianate masonry and terra-cotta facades to the 1950's-era modern steel and glass clad exteriors to more recently designed buildings. A few large buildings dominate some blocks in the CBD. A sense of consistency is achieved by a recurring pattern of large buildings with uniform setbacks, block-like shapes, and exterior materials of concrete, steel, glass, terra cotta, stucco, and other similar building façade materials.

Project Sites

SCC Project Site

The SCC project site is generally bounded by 13th Street to the west, 15th Street to the east, J Street to the north, and K Street to the south. The project sites evaluated here do not include St. Paul's Episcopal Church at the corner of 15th and J streets or the adjacent Sacramento Community Theater, located on L Street, between 13th and 14th streets. The existing SCC is made up of two buildings: the west building constructed in 1974 and the east building constructed in 1992. The SCC project site includes an approximately 1.5-acre Activities Plaza located between the SCC and the Sacramento Community Theater. The Panattoni Building is located on an approximately one-third acre parcel facing 15th Street (see **Figure 4.1-1**).

The SCC west building is a two-story building that comprises interconnected block-shaped elements of varying heights and massings with concrete and glass exterior elements. The 13th Street entrance protrudes out slightly from the building's west frontage and includes a large bowl-shaped window overlaid with decorative panels and fronted by twin cylindrical elements that extend several feet above the building entrance and are illuminated internally and externally at night (see **Figure 4.1-2**, viewpoint 1). The west building's 13th Street frontage is visually



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SOURCE: Esri, 2015; ESA, 2017

Sacramento Convention Center Expansion EIR

Figure 4.1-1
Photo Location Map





Viewpoint 1: Sacramento Convention Center (SCC) 13th Street entrance. View facing east.



Viewpoint 2: SCC 13th Street frontage with office buildings across J Street in the background.

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SOURCE: ESA, 2017

Sacramento Convention Center Expansion EIR

Figure 4.1-2
Viewpoints 1 and 2



characterized by ornamental trees along 13th Street, multi-colored tables and chairs outside of the restaurant within the west building that fronts 13th Street, and two rectangular sculptured stone fountains separated by a walkway and running lengthwise along the center divider of 13th Street at the entrance to the SCC (see Figure 4.1-2, viewpoint 2).

The west building's J Street frontage is visually characterized by the concrete and glass exterior of the building, a sidewalk and bus/vehicle drop-off area, the movement of eastbound vehicular traffic on J Street, and the elevated digital marquee located near the corner of J and 13th streets, which displays illuminated digital information about SCC events and which is visible during the day and at night (see **Figures 4.1-3** and **4.1-4**).

The SCC east building is a two-story building that is physically and visually differentiated from the west building by its overall greater height than the west building and its more recent construction, which includes a distinctive curved metal roof and floor-to-ceiling windows that afford views of the third-floor outdoor terrace on the building's eastern frontage from the third-floor lobby.

As with the 13th Street entrance of the west building, the J Street entrance of the east building includes a large bowl-shaped window overlaid with decorative panels and fronted by twin internally lighted cylindrical elements that match those on the 13th Street entrance (see **Figure 4.1-5**, viewpoint 7).

The Panattoni Building is immediately east of and attached to the SCC east building and is within the SCC project site. The Panattoni Building is a three-story office building that was built in the 1970s. The building is block-shaped with concrete and dark-glass exteriors. The building's east façade faces 15th Street is largely obscured by mature ornamental trees (see **Figure 4.1-5**, viewpoint 8).

The south side of the east building, along K Street, includes loading docks for the SCC (see **Figure 4.1-6**, viewpoint 9). West of the loading docks and immediately south of west building, the approximately 1.5-acre outdoor Activities Plaza includes unpaved areas, mature ornamental trees, pathways leading between the SCC and the Sacramento Community Center Theater, and a paved outdoor gathering area immediately south of 13th Street entrance (see Figure 4.1-6, viewpoint 10 and **Figure 4.1-7**, viewpoint 11).

Hotel Project Site

The Hotel project site is a paved surface parking lot with 72 parking stalls located south of the Panattoni Building. The parking lot is framed on its north (K Street) and east (15th Street) perimeters by low-lying manicured hedges, sidewalks, and ornamental street trees. Properties adjacent to the Hotel project site are described below.



Viewpoint 3: SCC digital marquee at the corner of J and 13th Streets. View facing east.



Viewpoint 4: SCC bus/vehicle drop-off area along SCC J Street frontage. View facing southwest.

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SOURCE: ESA, 2017

Sacramento Convention Center Expansion EIR

Figure 4.1-3
Viewpoints 3 and 4





Viewpoint 5: View of SCC J Street frontage with Sheraton Grand Sacramento Hotel (right) and Esquire Plaza office building (left) in background. View facing west.



Viewpoint 6: View of J Street from east end of SCC bus/vehicle drop-off area. View facing west.

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SOURCE: ESA, 2017

Sacramento Convention Center Expansion EIR

Figure 4.1-4
Viewpoints 5 and 6





Viewpoint 7: SCC main entrance on J Street. View facing south.



Viewpoint 8: North façade of Panattoni Building with SCC east building in background. View facing west.

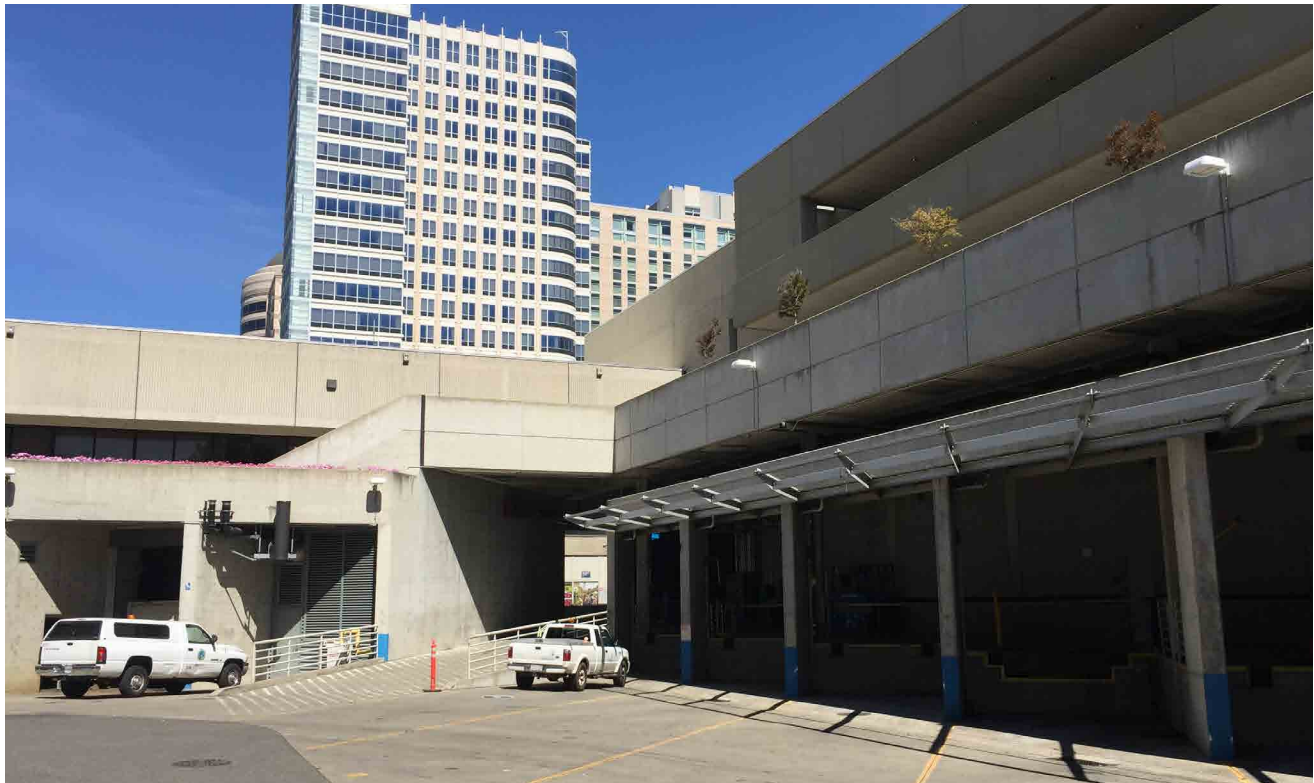
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SOURCE: ESA, 2017

Sacramento Convention Center Expansion EIR

Figure 4.1-5
Viewpoints 7 and 8





Viewpoint 9: Loading docks and mechanical equipment area along the southern portion of the SCC. View facing west.



Viewpoint 10: Art sculpture in SCC outdoor activities plaza with southern portion of SCC west building in background. View facing northeast.

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SOURCE: ESA, 2017

Sacramento Convention Center Expansion EIR

Figure 4.1-6
Viewpoints 9 and 10





Viewpoint 11: Statue in SCC outdoor activities plaza with southern portion of SCC west building in background. View facing northeast.



Viewpoint 12: Hotel project site (parking lot) with a six-story office building at 1414 K Street (right) and 12-story Meridian Plaza office building at 1415 L Street (left) in background

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SOURCE: ESA, 2017

Sacramento Convention Center Expansion EIR

Figure 4.1-7
Viewpoints 11 and 12



Adjacent Properties

Buildings located north of the SCC project site, beyond J Street, include a high-rise building at 1325 J Street with concrete, glass, and granite exterior elements; a medium-rise mid-century office building at 1407 J Street with concrete and glass exterior elements; and an attached medium-rise mid-century building with a windowless concrete exterior.

The Sacramento Memorial Auditorium is located northeast of the SCC project site at 1515 J Street and is visible from the northeastern portions of the SCC along J Street and 15th Street. The Memorial Auditorium opened in 1927 and is built in the style best described as Mediterranean Revival.¹ The three-story auditorium building and grounds occupy the block between J Street, I Street, 15th Street, and 16th Street. The wall finish includes five shades of brick. The roof is red clay tiles with terra cotta and plaster trimmings. The roof on the main auditorium building, on the wing, and the towers is gabled with a low pitch. One of the most visually distinctive features of the building is the main portico that faces J Street and which is dominated by six stone columns topped with terra cotta capitals and arches. The auditorium grounds are landscaped with a lawn, mature Dutch elms, junipers, and other ornamental vegetation.² The Sacramento Memorial Auditorium is a designated City landmark listed on the National Register of Historic Places and Sacramento Register of Historic and Cultural Resources (see **Figure 4.1-8**, viewpoint 13).

St. Paul's Church sits immediately east of the SCC project site at the corner of J and 15th streets. Construction of the church began in 1903. Built of solid granite, the church building is visually distinguished by its English stone church architecture and stained-glass windows. St. Paul's Church is a designated City landmark listed on the Sacramento Register of Historic and Cultural Resources (see Figure 4.1-8, viewpoint 14).

The four-story Maydestone Apartments building is located immediately east of the SCC project site at 1001 15th Street. The building is a four-story, rectangular 24-unit apartment building designed in the Mission Revival style. The building is wood framed with a stucco surface on three sides (the rear façade is painted wood.)³ Constructed in 1912, the Maydestone Apartments building is a designated City landmark listed on the National Register of Historic Places and Sacramento Register of Historic and Cultural Resources (see **Figure 4.1-9**, viewpoint 15). As a residential property, the Maydestone Apartments building is a sensitive receptor for light generated by the proposed projects.

A six-story office building at 1414 K Street and the four-story League of California Cities building at 1400 K Street are located south of the SCC project site and adjacent to the Hotel project site on the west. The building at 1414 K Street was constructed in 1924-1925 and is listed

¹ City of Sacramento, 2015. *City of Sacramento 2035 General Plan*. Adopted March 3, 2015. Page 2-136.

² United States Department of the Interior, National Park Service, 1977. National Register of Historic Places Nomination form for the Sacramento Memorial Auditorium.

³ United States Department of the Interior, National Park Service, 2012. Draft National Register of Historic Places Nomination form for the Maydestone Apartments.



Viewpoint 13: Sacramento Memorial Auditorium. View facing northeast



Viewpoint 14: St. Paul's Episcopal Church on the corner of 15th and J Streets. View facing west.

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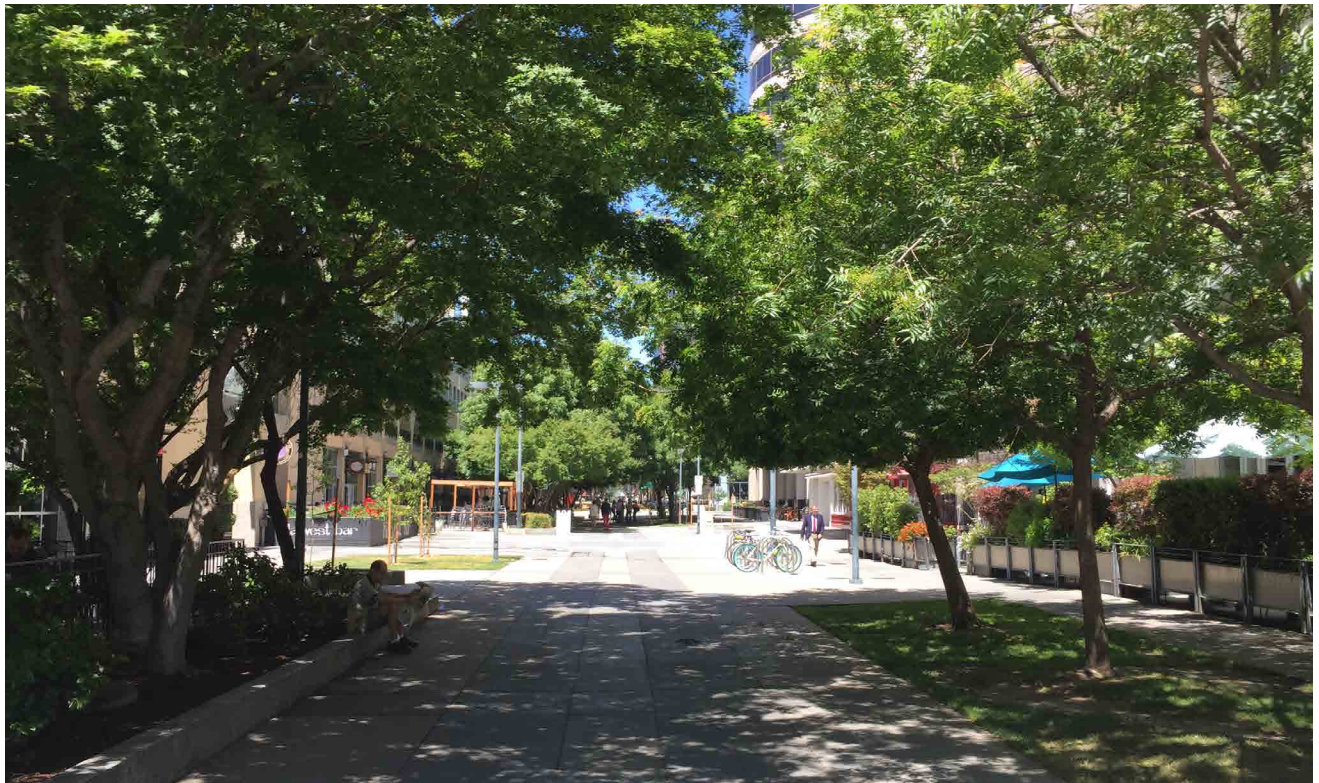
SOURCE: ESA, 2017

Sacramento Convention Center Expansion EIR

Figure 4.1-8
Viewpoints 13 and 14



Viewpoint 15: Maydestone Apartments at 1001 15th Street. View facing east.



Viewpoint 16: View to east end of K Street Mall from SCC 13th Street frontage. View facing west.

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SOURCE: ESA, 2017

Sacramento Convention Center Expansion EIR

Figure 4.1-9
Viewpoints 15 and 16



on the Sacramento Register of Historic and Cultural Resources as the Pacific Telephone Inland Division Headquarters. The building's red brick east façade faces the Hotel project site (see Figure 4.1-7, viewpoint 12). The building's north façade faces the loading docks of the SCC east building and includes two arched entrances and a decorative brick exterior. The four-story League of California Cities building at 1400 K Street has a concrete and glass exterior with an attached parking garage.

Immediately south of the buildings at 1414 and 1400 K Street is the 12-story Meridian Plaza office building at 1415 L Street. The building structure includes a central cylindrical element with a glass exterior, set inside larger building structure with concrete and glass exteriors.

Immediately south of the Hotel project site are connected low-rise buildings that house several restaurants. Immediately east of the Hotel project site is a six-story parking garage with the Capitol Garage restaurant on the street level at 1500 K Street. Immediately south of the western portion of the SCC site is the Sacramento Community Center Theater, a low-rise concrete structure flanked on all sides by mature ornamental trees.

West of the SCC project site, beyond 13th Street, are the 26-story postmodern Sheraton Grand Sacramento Hotel; the 22-story Esquire Plaza office building at 1215 13th Street; the 15-story postmodern Hyatt Regency Sacramento at 1209 L Street; and west-facing views of the eastern end of the K Street Mall, which comprises a tree-line pedestrian mall flanked by predominantly mid-rise buildings that house restaurants, shops, and offices (see Figure 4.1-9, viewpoint 16).

Light and Glare

Nighttime lighting is necessary to provide and maintain safe, secure, and attractive environments; however, these lights have the potential to produce spillover light and glare, and if designed incorrectly, could be considered unattractive. Although nighttime light is a common feature of urban areas, spillover light can adversely affect light-sensitive uses, such as residential units at nighttime.

Ambient light levels or illumination is measured in foot-candles. **Table 4.1-1** lists typical ambient illumination levels in foot-candles for exterior and interior lighting. "Horizontal" foot-candles measure light illumination on a horizontal surface, such as a sidewalk or parking lot; "vertical" foot-candles measure light illumination on a vertical surface.

Glare results when a light source directly in the field of vision is brighter than the eye can comfortably accept, and can be generated by direct natural or artificial lighting or reflected light usually from reflective façade materials. Squinting or turning away from a light source is an indication of glare. The presence of a bright light in an otherwise dark setting may be distracting or annoying, referred to as discomfort glare, or it may diminish the ability to see other objects in the darkened environment, referred to as disability glare.

**TABLE 4.1-1
 TYPICAL ILLUMINATION LEVELS IN FOOT-CANDLES**

Light Source	Foot-Candles
Starlight	0.0002
Moonlight	0.02
Street Lighting	0.6-1.6
Office Lighting	70-150
Direct Sunlight	6,000-10,000

SOURCE: City of Sacramento, 2014. *Sacramento 2035 General Plan Background Report*. Public Review Draft, August 2014. Table 6-13, p. 6-122.

The City of Sacramento is substantially developed, and a significant amount of artificial light and glare from urban uses already exists. Existing sources of light and glare in the vicinity of the project sites are primarily outdoor lights illuminating the existing buildings and businesses. The downtown area has a higher concentration of artificial light and reflective surfaces that produce glare than the outlying residential areas due to the amount of artificial light and number of sources such as exterior building lights, lighted signs (e.g., the SCC digital marquee), street lights, roadways, signal lights, and parking area lights. Some of the most notable sources of nighttime light in the downtown skyline include colored light features on high-rise buildings such as the Esquire Plaza and US Bank Tower. At the street level, the SCC and the Esquire Theater on K Street are visually notable at night due to bright neon signs.

Although many of the buildings in downtown Sacramento are clad in non-reflective surfaces such as stone or terra cotta, the area around the project sites contains a few noticeable sources of reflective glare, including the Esquire Plaza and Meridian Plaza office buildings. Finally, automobiles traveling along adjacent roadways (J and L streets and 13th and 15th streets.) also contribute to nighttime sources of light and glare in the project vicinity.

4.1.2 Regulatory Setting

Federal

There are no federal regulations pertaining to visual resources that are applicable to the proposed projects.

State

California Scenic Highway Program

California’s Scenic Highway Program was created by the Legislature in 1963 to preserve and protect scenic highway corridors from change that would diminish the aesthetic value of lands adjacent to highways. The state laws governing the Scenic Highway Program are found in the Streets and Highways Code, Section 260 et seq. The State Scenic Highway System includes a list of highways that are either eligible for designation as scenic highways or have been so designated. These

highways are identified in Section 263 of the Streets and Highways Code. A highway may be designated scenic depending upon how much of the natural landscape can be seen by travelers, the scenic quality of the landscape, and the extent to which development intrudes upon the traveler's enjoyment of the view.

When a city or county nominates an eligible scenic highway for official designation, it must identify and define the scenic corridor of the highway. A scenic corridor is the land generally adjacent to and visible from the highway. A scenic corridor is identified using a motorist's line of vision. A reasonable boundary is selected when the view extends to the distant horizon. The corridor protection program does not preclude development, but seeks to encourage quality development that does not degrade the scenic value of the corridor. Jurisdictional boundaries of the nominating agency are also considered. The agency must also adopt ordinances to preserve the scenic quality of the corridor or document such regulations that already exist in various portions of local codes. These ordinances make up the scenic corridor protection program. County roads can also become part of the Scenic Highway System. To receive official designation, the county must follow the same process required for official designation of State Scenic Highways.

According to the California Department of Transportation (Caltrans) list of designated scenic highways under the California Scenic Highway Program, there are no highway segments within the City of Sacramento that are designated scenic. SR 160 from the Contra Costa County line to the south city limit of Sacramento is the only officially designated state scenic highway near the City of Sacramento.⁴ The project sites are not visible from SR 160.

Local

City of Sacramento 2035 General Plan

The 2035 General Plan includes the following goals and policies that are relevant to the proposed SCC and Hotel projects.

Land Use and Urban Design Element

Goal LU 2.4 City of Distinctive and Memorable Places. Promote community design that produces a distinctive, high-quality built environment whose forms and character reflect Sacramento's unique historic, environmental, and architectural context, and create memorable places that enrich community life.

Policies

LU 2.4.1 **Unique Sense of Place.** The City shall promote quality site, architectural and landscape design that incorporates those qualities and characteristics that make Sacramento desirable and memorable including: walkable blocks, distinctive parks and open spaces, tree-lined streets, and varied architectural styles. (RDR)

LU 2.4.2 **Responsiveness to Context.** The City shall require building design that respects and responds to the local context, including use of local materials where feasible, responsiveness to Sacramento's

⁴ California Department of Transportation, 2012. *California Scenic Highway Program*. Available: www.dot.ca.gov/hq/LandArch/scenic/schwy.htm. Accessed August 5, 2013.

climate, and consideration of cultural and historic context of Sacramento's neighborhoods and centers. (RDR)

- LU 2.4.3 **Enhanced City Gateways.** The City shall ensure that public improvements and private development work together to enhance the sense of entry at key gateways to the city. (JP)
- LU 2.4.4 **Iconic Buildings.** The City shall encourage the development of iconic public and private buildings in key locations to create new landmarks and focal features that contribute to the city's structure and identity. (RDR/MPSP)
- LU 2.4.5 **Distinctive Urban Skyline.** The City shall encourage the development of a distinctive urban skyline that reflects the vision of Sacramento with a prominent central core that contains the city's tallest buildings, complemented by smaller urban centers with lower-scale mid- and high-rise development. (RDR/MPSP)
- Goal LU 2.7 City Form and Structure. Require excellence in the design of the city's form and structure through development standards and clear design direction.**

Policies

- LU 2.7.3 **Transitions in Scale.** The City shall require that the scale and massing of new development in higher-density centers and corridors provide appropriate transitions in building height and bulk that are sensitive to the physical and visual character of adjoining neighborhoods that have lower development intensities and building heights. (RDR)
- LU 2.7.4 **Public Safety and Community Design.** The City shall promote design of neighborhoods, centers, streets, and public spaces that enhances public safety and discourages crime by providing street-fronting uses ("eyes on the street"), adequate lighting and sight lines, and features that cultivate a sense of community ownership. (RDR)
- LU 2.7.7 **Buildings that Engage the Street.** The City shall require buildings to be oriented to and actively engage and complete the public realm through such features as building orientation, build-to and setback lines, façade articulation, ground-floor transparency, and location of parking. (RDR)
- LU 2.7.8 **Screening of Off-street Parking.** The City shall reduce the visual prominence of parking within the public realm by requiring most off-street parking to be located behind or within structures or otherwise fully or partially screened from public view. (RDR/MSPS)
- Goal LU 4.5 Urban Neighborhoods. Promote vibrant, high-density, mixed-use urban neighborhoods with convenient access to employment, shopping, entertainment, transit, civic uses (e.g., school, park, place of assembly, library, or community center), and community-supportive facilities and services.**

Policies

- LU 4.4.1 **Well-Defined Street Forms.** The City shall require that new buildings in urban neighborhoods maintain a consistent setback from the public right-of-way in order to create a well-defined public sidewalk and street. (RDR)
- LU 4.4.2 **Building Orientation.** In buildings with nonresidential uses at street level, the City shall require that building facades and entrances directly face the adjoining street frontage and include a high proportion of transparent windows facing the street. (RDR)
- LU 4.4.3 **Building Design.** The City shall encourage sensitive design and site planning in urban neighborhoods that mitigates the scale of larger buildings through careful use of building massing, setbacks, façade articulation, fenestration, varied parapets and roof planes, and pedestrian-scaled architectural details. (RDR)

Urban Form Guidelines

The SCC project site is designated Public/Quasi-Public and Central Business District by the City of Sacramento 2035 General Plan. The hotel project site is designated Central Business District.⁵

The 2035 General Plan includes Urban Form Guidelines for the Central Business District designation, as presented below:

Central Business District

1. A mixture of mid- and high-rise buildings creating a varied and dramatic skyline with unlimited heights;
2. Lot coverage generally not exceeding 90 percent;
3. Buildings are sited to positively define the public streetscape and public spaces;
4. Building facades and entrances directly addressing the street and have a high degree of transparency;
5. An interconnected street system providing for traffic and route flexibility;
6. Vertical and horizontal integration of residential uses;
7. Public parks and open space areas within walking distance of local residents;
8. Paring is integrated into buildings or placed in separate structures;
9. Minimal or no curb cuts along primary streets;
10. Side or rear access to parking and service functions;
11. Broad sidewalks appointed with appropriate pedestrian amenities, including sidewalk restaurant/café seating;
12. Street design integrating pedestrian, bicycle, transit and vehicular use and incorporates traffic-calming features and on-street parking; and
13. Consistent planting of street trees providing shade and enhance character and identity.

Environmental Resources Element

Policies

- ER 7.1.3 **Lighting.** The City shall minimize obtrusive light by limiting outdoor lighting that is misdirected, excessive, or unnecessary, and requiring light for development to be directed downward to minimize spill-over onto adjacent properties and reduce vertical glare. (RDR)
- ER 7.1.4 **Reflective Glass.** The City shall prohibit new development from (1) using reflective glass that exceeds 50 percent of any building surface and on the bottom three floors, (2) using mirrored glass, (3) using black glass that exceeds 25 percent of any surface of a building, (4) using metal building materials that exceed 50 percent of any street-facing surface of a primarily residential building, and (5) using exposed concrete that exceeds 50 percent of any building. (RDR)

⁵ City of Sacramento, 2014. Sacramento 2035 General Plan Land Use and Urban Form Diagram. June 26, 2014.

Central City Community Plan

The City of Sacramento currently has ten adopted community plans that include policies and land use diagrams that pertain to the respective community plan areas. The project sites are located within the Central City Community Plan (CCCP) area bounded by the Sacramento River on the west, the American River on the north, Business 80 and Alhambra Boulevard on the east, and parcels fronting southern edge of Broadway on the south. Community plans are part of the 2035 General Plan and are intended to supplement city-wide policies based on conditions or issues unique to the community plan area. The following policies from the CCCP are applicable to the proposed projects:

Land Use and Urban Design

Policies

- CC.LU 1.2 **Visual Qualities.** The City shall improve the visual qualities of improvements, especially signing, building and yard maintenance, commercial developments and overhead utilities. (RDR)
- CC.LU 1.3 **Interrelated Land Uses.** The City shall provide for organized development of the Central City whereby the many interrelated land use components of the area support and reinforce each other and the vitality of the community. (RDR/MPSP)

City of Sacramento Planning and Development Code (Title 17)

The City of Sacramento's Planning and Development Code (Sacramento City Code Title 17) is intended "[t]o implement the city's general plan through the adoption and administration of zoning laws, ordinances, rules, and regulations" (section 17.100.010(B)). To achieve this outcome, the Planning and Development Code:

- regulates the use of land, buildings, or other structures;
- regulates the location, height, and size of buildings or structures, yards, courts, and other open spaces, the amount of building coverage permitted in each zone, and population density; and
- regulates the physical characteristics of buildings, structures, and site development, including the location, height, and size of buildings and structures; yards, courts, and other open spaces; lot coverage; land use intensity through regulation of residential density and floor area ratios; and architectural and site design.

Site Plan and Design Review

Pursuant to Chapter 17.808 of the City Code, with specific and limited exemptions described below, development in the City is subject to Site Plan and Design Review (SPDR). The intent of this process is to (1) ensure that the development is consistent with applicable plans and design guidelines; (2) is high quality and compatible with surrounding development; (3) is supported by adequate circulation, utility, and related infrastructure; (4) is water and energy efficient; and (5) avoids environmental effects to the extent feasible. The aspects of design considered in the SPDR process include architectural design, site design, adequacy of streets and accessways for all modes of travel, energy consumption, protection of environmentally sensitive features, safety, noise, and other relevant considerations.

Pursuant to Chapter 17.808.160 of the City Code, the following development projects are exempt from the SPDR requirement: alterations to an existing building or structure that is not in a historic district and that does not substantially alter the exterior appearance of the building or structure, as determined by the director; an alteration to an existing site that does not significantly alter the functioning of the site with respect to traffic circulation, parking, infrastructure, and environmentally sensitive features, as determined by the director; secondary dwelling units; sidewalk cafes; convenience recycling facilities; and registered house plans (subject to site plan review, but not design review). For development projects located in a historic district or that involve a landmark, repainting of surfaces that were originally painted and the color scheme is not a significant character-defining feature of the historic resource; routine nonabrasive cleaning and maintenance; and site plantings when plantings and landscape elements are not significant character-defining features of the historic resource are exempt from SPDR.

Through the SPDR process, the City has the authority to approve or require deviations from design and development standards to respond to site- and project-specific considerations. Deviations are subject to review and approval of either the City Design Director or the City Planning and Design Commission, depending on the nature of the deviation.

Depending on the nature of the proposal, SPDR can be conducted by staff, the City Design Director, or the Planning and Design Commission. The Planning and Design Commission review is required for certain large projects (more than 150 residential units or 125,000 square feet for non-residential or mixed use projects), projects more than 60 feet in height, or where a deviation requires Commission review. City Design Director review is required where a project is not in substantial compliance with applicable design guidelines, or requests a deviation. For projects taking place in a historic district or related to an historic landmark, SPDR is undertaken by the Preservation Commission or the City Preservation Director, as appropriate. All other projects not requiring review by the respective Commission or Director are reviewed by City staff.

Capitol View Protection Ordinance

Section 17.216.860 of the Sacramento City Code recognizes the State Capitol building and the surrounding grounds of Capitol Park as a unique cultural and open-space resource. The ordinance establishes height restrictions, setback requirements, and parking regulations for certain areas of the Downtown (CBD) located near the State Capitol building and Capitol Park, including along Capitol Mall. These regulations are designed to provide visual protection to and from the Capitol building and Capitol Park.

The height limits for the ordinance are illustrated on a map that is Exhibit B of the ordinance. Building height limits apply to the highest point of the building except for the following unoccupied elements: building caps that serve a decorative function, roof-top mechanical equipment that is screened and placed in a location furthest away when viewed from the Capitol grounds, and other architectural embellishments approved by the city planning and design commission through site plan and design review.

Sacramento Central City Urban Design Guidelines

The Central City Urban Design Guidelines (CCUDG) direct future growth in the Central City Community Plan area. The CCUDG generally provide guidance in three areas: the urban design framework, the public realm, and the private realm. They establish a framework of urban design concepts intended to inform all decisions relating to the physical form and character of public and private development throughout the Central City. The CCUDG are intended to provide direction rather than impose prescriptive requirements. The City Commission or Director responsible for design review has the authority to waive individual guidelines for specific projects where it is found that such waiver will better achieve the design policy objectives than strict application of the CCUDG. Key urban design framework concepts established for the whole of the Central City include:

- **The Central City Skyline.** High-rise towers should add visual interest to the skyline; that high-rise towers should reflect the role of the Central Core as the regional center of culture, commerce, and government; and that care is to be given to transitions from the Central Core to adjacent neighborhoods;
- **Central City Gateways.** Care should be taken to enhance the design of key entries to the Central City from freeways and on Capitol Mall;
- **Primary Streets and the Street Grid.** Protection and enhancement of the traditional street grid to improve connectivity around the Central City, including the re-connection of the Railyards/ River District via Railyards street network, and north-south streets such as 5th, 6th, 7th, and 10th streets; and design of streets so as to accommodate high traffic volumes without creating barriers to a safe, convenient, and attractive pedestrian and bicycle environment;
- **Transit Streets and Transit-Oriented Development.** Location of higher density transit-oriented development within one-quarter mile of transit stops, and emphasis on transit-friendly street design;
- **A Pedestrian- and Bicycle-Friendly Central City.** Designation and design of special streets as primary pedestrian and bicycle routes, providing connections among Central City neighborhoods and to the riverfront open space and trail system; and a focus on enhanced pedestrian environment on streets and in alleys;
- **A Healthy Urban Forest.** Protection and enhancement of the Central City's urban forest, maximizing shade coverage from street trees; recognition of the important role that the urban forest plays in the economic and social well-being, and sustainability of the Central City;
- **Distinctive Urban Neighborhoods and Districts.** Development that enhances existing and creates new neighborhoods and districts, such as the Railyards; high quality design that enhances the public realm and responds to the physical, historical and cultural context;
- **Preserving Historic Resources.** Recognition of the importance of the Central City's historic resources; protection of historic resources and features, and integration into new development; new development that positively responds and relates to the historic character of the Central City;

- **Parks and Open Space.** Enhancement of existing and provision of new parks to serve existing and future residents of the Central City; public streets as greenways that connect Central City neighborhoods to the riverfront and other major parks; provision of private open space and recreation facilities in high density residential projects; developing parks, trails, and other recreational amenities consistent with flood protection; balance in uses between public spaces and private development along the American and Sacramento River Corridors;
- **Creating a Complete, Well-served Community.** Plan for new accessible parks, schools, community centers, fire stations and other public facilities, as well as neighborhood retail and services, to meet the needs of the future residential population in the Central City;
- **Active Streetscapes and Sidewalk Cafes.** Design streets and alleys and adjacent development to promote active use, including sidewalk cafes;
- **The Retail Environment.** Promote retail development by requiring minimum retail frontages, identifying retail streets, and requiring ground-floor transparency to promote window-shopping; and
- **A Well-defined Public Realm.** Continuity of street-wall, with consistent setbacks and build-to lines that define the pedestrian realm for retail and commercial streets, and reflect the historic character for institutional and residential uses.

4.1.3 Analysis, Impacts, and Mitigation

Significance Criteria

For purposes of this EIR and consistent with the criteria presented in Appendix G of the State CEQA Guidelines, impacts to aesthetics may be considered significant if implementation of the proposed projects would:

- Have a substantial adverse effect on a scenic vista;
- Substantially degrade the existing visual character or quality of the site and its surroundings;
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway; or
- Create a new source of substantial light or glare which would adversely affect daytime or nighttime views in the area.
 - *Glare.* Glare is considered to be significant if it would be cast in such a way as to cause public hazard or annoyance for a sustained period of time.
 - *Light.* Light is considered significant if it would be cast onto oncoming traffic or residential uses.

Issues not Discussed in Impacts

A scenic vista is defined as a viewpoint that provides expansive views of a highly valued landscape for the benefit of the general public. As discussed in the Regulatory Setting above, the project sites are located in an area subject to the requirements of the City's Capitol View Protection Ordinance, which establishes height restrictions, setback requirements, and parking

regulations for certain areas of the Downtown (CBD) located near the State Capitol building and Capitol Park. As specified on Exhibit B of the ordinance, the height limit for the northern half of the SCC project (north of Jazz Alley) site is 450 feet. The height limit for the southern half of the SCC project site (south of Jazz Alley) is 400 feet. The height limit for the Hotel project site is 300 feet. The proposed SCC project would reach a maximum height of approximately 60 feet, and the proposed Hotel would not exceed the 300-foot height limit. The setback requirements for the ordinance are illustrated on a map that is included as Exhibit C of the ordinance. Both the SCC project site and the proposed hotel project site are located outside the area subject to the setback requirements of the ordinance. Consequently, both of the proposed projects would be in compliance with the requirements of the Capitol View Protection Ordinance.

No other scenic vistas are present in the vicinity of the project sites, which are located in a developed urban setting, and therefore the proposed project would not have an impact on a scenic vista. As described in the Regulatory Setting above, none of the freeway segments within the area of the project sites has been designated as scenic. Thus, implementation of the proposed projects would not damage scenic resources in the vicinity of a scenic highway. For these reasons, the first and third significance criteria listed above are not further addressed in this section of the EIR.

Methodology and Assumptions

The analysis of aesthetics involves a qualitative comparison of the existing built and natural environment to the future built and natural environment and evaluation of the visual changes that would result from implementation of the proposed projects. Key view corridors were examined, and existing views to and from the project sites were compared to those that would be expected to occur in the future under the proposed projects. In addition, the changes proposed in the projects were evaluated in the context of adopted City urban design policies and regulations.

Impacts and Mitigation Measures

Impact 4.1-1: The proposed projects could substantially degrade the existing visual character or quality of the site and its surroundings.

The 2035 General Plan provides guidance that reflects the diverse nature of the built environment in Sacramento and the complex nature of urban design in the community. Policies such as LU 2.4.1 and LU 2.4.2 reflect Sacramento's traditional character and place a priority on design that "respects and responds to the local context." At the same time, policies such as LU 2.4.4 and LU 2.4.5 reflect the City's aspiration for iconic buildings and a distinctive skyline that creates landmarks and visually reinforces downtown Sacramento's role as the region's business and governmental core.

Changes in the visual character or quality of a site affect each individual differently, and thus to some extent are based on subjective and individual perspectives. In downtown Sacramento, the CCUDG represent an articulation of the community's goals and values surrounding urban design and architectural quality and create an objective framework in which to consider aesthetic changes which may otherwise be considered subjective. The CCUDG are intended "to ensure that

proposed higher-density development also provides the qualities and amenities that will create an attractive, livable downtown with a lively mix of uses, walkable streets, an open and interesting skyline, and a high level of design expression.” Accordingly, for the purposes of this analysis, the proposed projects are considered in light of the CCUDG. Substantial compliance with the CCUDG was used as the measure of significance.

SCC Project

Proposed SCC Building

The proposed SCC project would include renovation and expansion of the existing SCC for the purpose of establishing an improved convention and entertainment center. The proposed design concept and massing for proposed SCC is shown on Figure 2-7, the proposed SCC site plan is provided in Figure 2-8, and building elevation diagrams are provided in Figures 2-10, 2-11, and 2-13 in Chapter 2, Project Description.

The reconfigured and expanded SCC would be a steel and concrete structure, with the primary entrances on the first level on the J Street (existing), 13th Street (near K Street), and 15th Street sides of the building. The reconfigured SCC would create streetwalls measuring 80 feet along J Street, 60 feet along 13th Street, and 70 feet along 15th Street, with access to an open-air amphitheater from the Activities Plaza on the southwest side of the building. The parapet of the roof of the new SCC structure would rise approximately 60 feet above ground level, with a streetwall height of about 45 feet above J, 13th and 15th streets.

Like the existing SCC east building, the proposed reconfigured and expanded SCC would be a two-level structure. The proposed SCC second floor level would include an outdoor terrace overlooking the amphitheater and Activities Plaza between the SCC and the Community Center Theater.

Similar to the existing SCC roof, the top of the roof of the proposed expanded and reconfigured SCC would rise approximately an additional 15 feet above the streetwall heights.

The exterior of the proposed SCC building would be made up of a number of pre-cast concrete panels comprising of a range of textures and materials, including metal and/or perforated metal, and glass with tinting. Glass panels or doors would allow views into the proposed SCC concourse first floor from J Street, 13th Street, and the Activities Plaza area.

Open Space

An integral element of the proposed SCC would be open spaces intended to provide a variety of outdoor spaces in and out of the building, pedestrian circulation around the SCC, and pedestrian connectivity to J, K and 13th streets, as well as the nearby Community Center Theater. Approximately 40,000 square feet of open space would be included in the Activities Plaza surrounding the proposed SCC.

The proposed SCC Activities Plaza is anticipated to be actively used space that may be a locale for small-scale performance venues, seasonal events, musical and cultural events, and gardens.

The proposed SCC Activities Plaza would include hardscape and landscaped planters. Hardscape areas would feature use of a variety of paving materials and landscape plantings, and would include benches, public art, and water features.

Signage and Lighting

Signage

The proposed reconfigured and expanded SCC could incorporate varied signage that could promote the building activities and events, building and event sponsors, and civic activities at the property. Since people would approach the proposed SCC from different locations, signage could be located on different sides of the SCC structure. Signs could be internal within the facility, or external, adhered to the structure, or free-standing in the Activities Plaza. These signs would be of a variety of types and sizes depending on their location. Signs could be stationary, lit signs adhered to the building, or they could be projections onto glass or solid surfaces; they could be digital, using LEDs (light emitting diodes) or laser projections on building surfaces to convey changing messages and images, or they could utilize other technologies that may emerge in the future. Unique signage such as rooftop, laser, rotating or animated, projected image, digital, magnetic or electronic message signage may be allowed. The number, location, and size of signs would be determined in the future during SPDR and would be subject to Staff, Planning Director and/or Planning and Design Commission approval.

Lighting

The proposed SCC would be lit for visibility during events and at other times of the day and night. Interior lighting may be seen through first floor glass panels or doors, or through walls that may be opened to the Activities Plaza or outdoor terraces. Exterior lighting for the proposed SCC would be provided to illuminate different areas of the facility and Activities Plaza. The type of lighting and its intensity would vary, however, depending on how the venue is being used at any given time. Temporary lighting may occasionally be used for nighttime events in the Activities Plaza, including the use of spotlights to illuminate performers on the ground or stage, but the lighting would not be directed at the sky.

Analysis

Views

The approximately 60-foot tall, multi-faceted SCC structure itself would be a distinctive, highly visible, iconic structure that would be instantly recognizable due to a design unique in the region, especially at night when it would be accentuated by bright lighting and signage. The proposed SCC would be visible in varying degrees from J, 13th, and 15th streets. The approach to the site on eastbound J Street would be particularly distinctive because of the visibility of the proposed SCC from the J and 13th Street intersection. In addition, attendees of the Memorial Auditorium would have direct views of the proposed SCC from the main portico that faces J Street. In these ways, the SCC would reflect the City's goals for distinctive and iconic buildings.

Central City Urban Design Guidelines

The CCUDG provide direction to encourage and promote an array of visual and aesthetic characteristics of building and landscape design in the City's central core. The proposed SCC would be a unique structure designed to accommodate large events and by virtue of its size and mass would not be able to meet every specific element addressed in the CCUDG. The CCUDG's principles are not prescriptive, however, and on balance, the design of the proposed SCC would substantially comply with the aspirations expressed in the CCUDG principles.

General Plan Policy Consistency

The City intends for the CBD to be the most intensely developed area of the City with increased density, height, and the inclusion of unique and iconic places. The City's 2035 General Plan includes various goals and policies aimed at achieving these goals. Goal LU 2.4 seeks to create a city of distinctive and memorable places while promoting community design that produces a distinctive, high-quality built environment whose forms and character reflect Sacramento's unique historic, environmental, and architectural context, and create memorable places that enrich community life. Policy LU 2.4.1 seeks to create a unique sense of place while promoting quality site, architectural and landscape design that incorporates those qualities and characteristics that make Sacramento desirable and memorable including: walkable blocks, distinctive parks and open spaces, tree-lined streets, and varied architectural styles. Policy LU 2.4.4 encourages the development of iconic public and private buildings in key locations to create new landmarks and focal features that contribute to the City's structure and identity. The proposed SCC project would be consistent with the vision for the City detailed in the policies above.

Design Review

The proposed design of the expanded and renovated SCC would be subject to review by the City through the SPDR process using the criteria listed in the CCUDG. The SPDR is intended to ensure that the design is of the highest quality, commensurate with a project of this magnitude and visibility. Among the considerations for project design would be that pedestrian levels should be appropriate in scale and detailing to the surrounding area; that the highest quality materials and detailing should be used on all elevations of the building; and that the proposed project should complement existing downtown high-rise development. Review would also consider the details of fenestration, massing and planar changes of the building that should create visual interest, and the City's goal that the overall project should provide a distinctive skyline with appropriate detailing and finish at the building top.

As detailed above, the design of the SCC in downtown Sacramento is consistent with existing City policy. Because the project would involve the construction of new buildings that advance the City's adopted goals and policies, the visual changes associated with the proposed SCC project are not seen as adverse. Furthermore, the SPDR would ensure that the proposed project would be of a high-quality design and that it would not substantially degrade the existing character or quality of the area or the SCC project site.

Summary

As a result of the proposed SCC project, the visual character of the SCC project site would undergo visual change, as the existing SCC would be expanded and renovated as described above. The changes would be consistent with City policies regarding urban design in the project vicinity as articulated in the 2035 General Plan and the CCUDG. The proposed SCC project would not change the fundamental character of the SCC project site, which would be occupied by a regional convention center as it is under the existing condition. The building features and design of the proposed expanded and renovated SCC would not be adverse within the context of the City's articulated aesthetic values. For these reasons, the proposed SCC project would not substantially degrade the existing visual character or quality of the site and its surroundings, and this impact is considered **less than significant**.

SCC Project and Hotel Project

The SCC project's consistency with the visual character of the area is described above.

Based on conceptual planning studies, the proposed Hotel structure would be approximately 300 feet tall and include approximately 24 above-ground stories. The main entrance would front 15th Street and loading dock facilities would front along K Street. A proposed second level pedestrian bridge would provide access to the proposed east lobby of the SCC. The floors of the hotel tower structure would be massed toward the north and eastern perimeters of the structure.

Analysis

Views

The approximately 300-foot tall hotel building would be a highly visible structure during the day and especially at night when it would be accentuated by lighting. The hotel building would be visible in varying degrees from J, K, L, 13th, and 15th streets, and other public locations such as the eastern side of Capitol Park and the plaza in front of the main entrance to the Memorial Auditorium.

General Plan Policy Consistency

The City's 2035 General Plan includes various goals and policies aimed at achieving the goal of making the CBD the most intensely developed area of the City with increased density, height, and the inclusion of unique and iconic places. Goal LU 2.4 aims at creating a city of distinctive and memorable places while promoting community design that produces a distinctive, high-quality built environment whose forms and character reflect Sacramento's unique historic, environmental, and architectural context, and create memorable places that enrich community life. Policy LU 2.4.1 seeks to create a unique sense of place while promoting quality site, architectural and landscape design that incorporates those qualities and characteristics that make Sacramento desirable and memorable including: walkable blocks, distinctive parks and open spaces, tree-lined streets, and varied architectural styles. Policy LU 2.4.4 encourages the development of iconic public and private buildings in key locations to create new landmarks and focal features that contribute to the City's structure and identity. While Policy LU 2.4.5 encourages the development of a distinctive urban skyline that reflects the vision of Sacramento

with a prominent central core that contains the City's tallest buildings, complemented by smaller urban centers with lower-scale mid- and high-rise development. Policy LU 4.4.3 encourages sensitive design and site planning in urban neighborhoods that mitigates the scale of larger buildings through careful use of building massing, setbacks, façade articulation, fenestration, varied parapets and roof planes, and pedestrian-scaled architectural details. The proposed project would be required to be consistent with the vision for the City detailed in the policies above.

Design Review

The proposed design of the hotel would be subject to SPDR by the City using the criteria listed in the CCUDG, including the CCUDG direction that high-rise towers in the Central City should add visual interest to the skyline; that high-rise towers should reflect the role of the Central Core as the regional center of culture, commerce, and government; and that care is to be given to transitions from the Central Core to adjacent neighborhoods. The review of the project design is intended to ensure that the design is of the highest quality, commensurate with a project of this magnitude and visibility. Among the considerations for project design would be that pedestrian levels should be appropriate in scale and detailing to the surrounding area; that the highest quality materials and detailing should be used on all elevations of the building; and that the proposed project should complement existing downtown high-rise development. Review would also consider the details of fenestration, the massing and planar changes of the building would create visual interest, and that the overall project provides a distinctive skyline with appropriate detailing and finish at the building top. Because the project would involve the construction of a new building that advances the City's adopted goals and policies, the visual changes associated with the project are not seen as adverse. Furthermore, the SPDR process would ensure that the proposed project would be of a high-quality design and that it would not substantially degrade the existing character or quality of the area or the project site.

Summary

As a result of the proposed Hotel project, the visual character of the Hotel project site would visually change, with the existing parking lot replaced with an approximately 300-foot tall hotel building. The changes would be consistent with City policy regarding urban design in the project vicinity as articulated in the 2035 General Plan and the CCUDG. While the changes in the visual character of the Hotel project site would be dramatic, the analysis demonstrates that they would not be adverse within the context of the City's articulated aesthetic values. The building features and design of the proposed hotel would not be adverse within the context of the City's articulated aesthetic values. For these reasons, the proposed project would not substantially degrade the existing visual character or quality of the site and its surroundings, and this impact is considered **less than significant**.

Mitigation Measure

None required.

Impact 4.1-2: The proposed projects could create a new source of substantial light.

SCC Project

Construction

Construction for the proposed SCC project would take place during daylight hours, within a standard daily construction time window. Nighttime construction activities are not anticipated. Lighting within the SCC construction site would be for security purposes only and would be focused on the project site so as to not be directly visible to nearby sensitive receptors residing in nearby housing units. Therefore, impacts related to construction lighting would be **less than significant**.

Operation

As described above, the proposed SCC would include a variety of lighting and illuminated signage that could create a high degree of visibility during and between events. As was previously described, a variety of different lighting techniques could be employed depending on the location.

Exterior lighting for the proposed SCC would be provided to illuminate different areas of the proposed convention center building and Activities Plaza, and would include street lighting, sidewalk lighting, building perimeter lighting, emergency lighting, and outdoor security lighting along walkways, driveways, and plaza areas. Temporary lighting may occasionally be used for nighttime events in the Activities Plaza, including the use of spotlights to illuminate performers on the ground or stage, but the lighting would not be directed at the sky. Vertical walls of the SCC building would be visibly lit in most directions, both from the outside as well as from the inside where transparent surfaces would permit light from inside to be visible to outside observers. This lighting would be to accentuate and create visibility of the SCC structure as well as lighting for signage and advertising purposes. Vertical wall lighting may include use of LED lights constructed as part of the building façade, or laser projection onto flat surfaces of the building façade. Some of these elements could be signage opportunities as well, and so there could be some overlap between signage and lighting in these instances.

Increased lighting and reflective materials on the SCC site could directly or indirectly create light spillover onto adjacent buildings that could disturb building occupants. In particular, residents of the Maydestone Apartments at 1001 15th Street with windows that have views to the west in the direction of the SCC could experience indirect light spillover from the proposed new east lobby of the SCC into the windows of their units, lighting otherwise darkened rooms and potentially interfering with sleep or other activities. These same residents could also experience indirect spillover lighting created by light reflected from the vertical surfaces of the SCC building.

The intent of the lighting, including changing, colorful lights, would be to increase the visibility of the SCC compared to other buildings in the vicinity. Thus, in addition to light spillover on adjacent properties, lighting from all of the project's features including building lights and LED signs could make the proposed SCC substantially brighter and more visible at night than the existing SCC and other existing buildings in downtown Sacramento. Many views of the SCC

would be limited by intervening development; views of building lights and signage would become increasingly intermittent as the elevation of the signage decreases and as the signage becomes more internal to the site.

The Sacramento 2035 General Plan includes Policy ER 7.1.3, which requires projects to minimize obtrusive light by limiting outdoor lighting that is misdirected, excessive, or unnecessary, and requiring light for development to be directed downward to minimize spill-over onto adjacent properties and reduce vertical glare. The proposed SCC lighting and signage could result in brightly illuminated surfaces that could be indirectly visible from residential uses or other affected light-sensitive uses and could result in substantial changes to existing artificial light conditions or interfere with off-site activities. This increased visibility could disturb or distract individuals observing the area from homes, offices, automobiles, or while walking as pedestrians on downtown streets.

For the reasons discussed above, lighting associated with the proposed SCC project could significantly affect the ambient nighttime light in the downtown area, including light spillover to nearby residential uses. This impact is considered **potentially significant**.

SCC Project and Hotel Project

Construction

Construction for the proposed SCC project and the Hotel project would take place during daylight hours, within a standard daily construction time window. Nighttime construction activities are not anticipated. Lighting within the SCC construction site and the Hotel construction site would be for security purposes only and would be focused on the project sites so as to not be directly visible to nearby sensitive receptors residing in nearby housing units. Therefore, impacts related to construction lighting would be **less than significant**.

Operation

Operational light impacts from the proposed SCC project and proposed Hotel project would include impacts from both project sites.

As described above for the SCC project, lighting associated with the proposed SCC project could significantly affect the ambient nighttime light in the downtown area, including light spillover to nearby residential uses. This impact would be part of the impact for the SCC project and Hotel project.

A detailed design of the proposed Hotel project, including a lighting and signage plan, has not been provided to the City. However, the proposed Hotel would include illuminated signage and a variety of lighting, including street lighting, sidewalk lighting, building perimeter lighting, emergency lighting, outdoor security lighting, and interior lighting (e.g., from hotel rooms and other internal uses) that would be visible from outside the building.

Hotel lighting and signage could result in brightly illuminated surfaces that could be directly visible from residential uses or other affected light-sensitive uses (e.g., pedestrians, vehicles) and

could result in substantial changes to existing artificial light conditions or interfere with off-site activities. This increased visibility could disturb or distract individuals observing the area from homes, offices, automobiles, or while walking as pedestrians on downtown streets.

For the reasons discussed above, lighting associated with the proposed SCC project and Hotel project could significantly affect the ambient nighttime light in the downtown area, including light spillover to nearby residential uses. This impact is considered **potentially significant**.

Mitigation Measures

Mitigation Measure 4.1-2(a) (SCC/Hotel)

Exterior lighting included shall incorporate fixtures and light sources that focus light on-site to minimize spillover light.

Mitigation Measure 4.1-2(b) (Hotel)

The hotel project applicant shall prepare and submit a conceptual signage and lighting design plan for review and approval by the City's Urban Design Manager. The City shall review and monitor the installation and testing of the displays, in order to ensure compliance with all City lighting regulations and these mitigation measures.

Mitigation Measure 4.1-2(c) (SCC)

Prior to issuance of a building permit for the SCC, the City shall develop plans and specifications for the proposed lighting displays and establish maximum luminance levels for the displays subject to review and approval of the City's Urban Design Manager. The City shall review and monitor the installation and testing of the displays, in order to ensure compliance with all City lighting regulations and these mitigation measures.

Mitigation Measure 4.1-2(d) (SCC/Hotel)

Project lighting shall not cause more than two foot-candles of lighting intensity or direct glare from the light source at any residential property.

Significance After Mitigation: Mitigation Measures 4.1-2(a) through 4.1-2(d) would ensure that new nighttime light from elements of the proposed projects would be sufficiently reduced to avoid disturbance of sensitive receptors. With the implementation of **Mitigation Measure 4.1-2(a) through (d)** listed above, this impact would be reduced to a **less-than-significant** level.

Impact 4.1-3: The proposed projects could create a new source of glare.

Glare is caused by direct light sources as well as reflections from pavement, vehicles, and building materials such as reflective glass and polished surfaces. During daylight hours, the amount of glare depends on the intensity and direction of sunlight. At night, artificial lighting can cause glare from reflective surfaces. Glare can create hazards to motorists and nuisances for

pedestrians and other viewers. The effects of additional nighttime lighting have been previously considered under Impact 4.1-2.

SCC Project

The proposed reconfigured and expanded SCC would be a two-level structure, similar in height and bulk to the existing SCC east building. The exterior of the proposed SCC building would be made up of a number of pre-cast concrete panels comprising of a range of textures and materials, including metal and/or perforated metal, and glass. Glass panels or doors would allow views into the proposed SCC concourse first floor from J Street, 13th Street, and the Activities Plaza area.

The SCC project site is in the central core of downtown Sacramento and is surrounded by a variety of buildings, the Maydestone Apartments, numerous office buildings, hotels, and general retail/commercial businesses. The project would be constructed to be consistent with the requirements of the CCUDG, which generally discourage the use of reflective surfaces in building facades. Furthermore, the Sacramento 2035 General Plan includes Policy ER 7.1.4, which prohibits new development from (1) using reflective glass that exceeds 50 percent of any building surface and on the bottom three floors, (2) using mirrored glass, (3) using black glass that exceeds 25 percent of any surface of a building, (4) using metal building materials that exceed 50 percent of any street-facing surface of a primarily residential building, and (5) using exposed concrete that exceeds 50 percent of any building. Required adherence to the requirements of the CCUDG and the general plan, enforced through the SPDR process, would ensure that the proposed SCC project would not create glare that could result in a public hazard or a substantial annoyance to nearby land uses, and the impact would be **less than significant**.

SCC Project and Hotel Project

As described above, required compliance with the CCUDG and the general plan would limit the creation of glare from the SCC project to below the significance threshold. However, impacts from the SCC project and Hotel project could combine to cause glare in the project sites' vicinity.

A detailed design of the proposed Hotel project has not been provided to the City. Lacking a more detailed design, it is reasonable to assume that the proposed Hotel could include building materials such as reflective glass and polished surfaces that could create glare that could result in a public hazard or a substantial annoyance to nearby receptors.

As previously described, the Hotel project site is in the central core of downtown Sacramento and is surrounded by a variety of buildings, including numerous office buildings, hotels, and general retail/commercial businesses. The Hotel project would be constructed to be consistent with the requirements of the CCUDG, which generally discourage the use of reflective surfaces in building facades. Furthermore, the Sacramento 2035 General Plan includes Policy ER 7.1.4, which prohibits new development from (1) using reflective glass that exceeds 50 percent of any building surface and on the bottom three floors, (2) using mirrored glass, (3) using black glass that exceeds 25 percent of any surface of a building, (4) using metal building materials that exceed 50 percent of any street-facing surface of a primarily residential building, and (5) using

exposed concrete that exceeds 50 percent of any building. Required adherence to the requirements of the CCUDG and the general plan would ensure that the proposed SCC project and Hotel project would not create glare that could result in a public hazard or a substantial annoyance to nearby land uses, and the impact would be **less than significant**.

Mitigation Measure

None required.

Cumulative Impacts

Impact 4.1-4: The proposed projects could contribute to substantial cumulative degradation of the existing visual character or quality in the vicinity.

The geographic context for changes in the visual character of the proposed projects' vicinity is the CBD of downtown Sacramento. The CBD is characterized by a mix of retail/commercial, office, and residential uses housed in buildings of various heights. In addition to the proposed SCC project, there are numerous approved and proposed development projects in the CBD that could be constructed and operational in the foreseeable future, each of which has undergone or will be required to comply with the City's Design Review process. Approved and proposed development projects in the CBD include the 16-story hotel and condominium tower recently completed at 5th and J streets, adjacent to the Golden 1 Center; the proposed Downtown Commons (or DoCo) project that would develop a two-level outdoor mixed-use entertainment and shopping complex on K Street between 5th and 7th streets, also adjacent to the Golden 1 Center; proposed shops, restaurants, and apartments on the 700 block of K Street; a proposed 26-story office and commercial tower at 601 J Street; the proposed Downtown Riverfront Streetcar project, a 3.3-mile initial transportation line that would extend from the West Sacramento Civic Center to the CBD and Midtown Sacramento; and a variety new housing and non-residential uses that would be developed in the CBD and greater Central City (such as the 11-story mixed-use project currently under construction at 19th and J Streets) over a 20-year period under the proposed Downtown Specific Plan.

The proposed expansion and renovation of the existing SCC and the development of the proposed Hotel project, in conjunction with proposed and approved development would intensify the existing urban visual character of the CBD. However, the addition of cumulative development within the CBD would not degrade the existing visual character or quality in the vicinity. The proposed projects would fill in the urban fabric of the vicinity and the building heights and designs would be consistent with the surrounding urban character of the area. Therefore, the cumulative impact would be **less than significant**.

Mitigation Measure

None required.

Impact 4.1-5: The proposed projects could contribute to cumulative sources of substantial light in the area.

Cumulative impacts related to light under buildout of the City's General Plan are analyzed in the Sacramento 2035 General Plan Master Environmental Impact Report (MEIR). Under general plan buildout, the geographic context for the analysis of cumulative visual resources impacts is the Policy Area, which includes the existing incorporated city limits plus a few small adjacent areas to the north and west. This cumulative impact analysis considers implementation of the proposed 2035 General Plan.

As previously discussed, Sacramento is an urbanized city and contains numerous existing sources of nighttime lighting. Existing development within the City of Sacramento as well as the City of West Sacramento and the remainder of Sacramento County outside of the city limits have resulted in a cumulative increase in nighttime lighting. The cumulative effect of this past development has resulted in a cumulative loss of available nighttime views resulting in a potentially significant cumulative effect. Future development would occur within the city within existing urban uses, which would already be subject to lighting from existing development and vehicle headlights. General Plan Policy ER 7.1.3 requires that misdirected, excessive, or unnecessary outdoor lighting be minimized. Compliance with existing City policy to limit excessive lighting would result in a **less-than-significant** cumulative impact.

Mitigation Measure

None required.

Impact 4.1-6: The proposed projects could contribute to cumulative sources of glare.

The cumulative context for glare is the geographic area where glare that is generated by the proposed projects is also exposed to glare from other cumulative projects. This would primarily include development in the vicinity of the proposed projects along J Street and 15th Street, but would include any development on blocks surrounding the project sites. It should be noted that glare is a project-specific effect, caused by individual occurrences that do not necessarily lead to cumulative effects. The cumulative effects would typically be annoyance and awareness that glare is recurring in an area.

Sacramento is an urbanized area with high-rise buildings in the downtown area along with multi-story office buildings located along major commercial corridors that generate the primary source of glare. Glare from sunlight reflecting off of a glass surface could cause a public hazard or annoyance to motorists. At certain times of the day buildings with glass dominated facades can impact drivers within sight of them. However, projects of substantial size that could contribute to added glare in the City would be required to go through the City's Design Review process, and

future projects would, in many cases, also be subject to CEQA review and may require further mitigation for glare impacts. In addition, General Plan Policy ER 7.1.4 prohibits new development from (1) using reflective glass that exceeds 50 percent of any building surface and on the bottom three floors, (2) using mirrored glass, (3) using black glass that exceeds 25 percent of any surface of a building, (4) using metal building materials that exceed 50 percent of any street-facing surface of a primarily residential building, and (5) using exposed concrete that exceeds 50 percent of any building. Compliance with existing City policy would limit the amount of glare created in the projects' vicinity and the cumulative impact would be **less than significant**.

Mitigation Measure

None required.

4.2 Air Quality

This section addresses the potential impacts of the proposed projects on ambient air quality and its potential to expose people to unhealthful pollutant concentrations. This section also identifies mitigation measures to reduce the severity of any significant air quality impacts from the proposed projects. Impacts to greenhouse gases (GHG) are addressed elsewhere in this EIR, in a standalone section.

Comments on the NOP (see Appendix B) included a letter from the California Applicant's Attorneys Association (CAAA) that requested the assessment of health hazards associated with demolition and construction. These issues have been addressed in this section.

The analysis included in this section was developed based on a set of construction assumption defaults in the California Emission Estimator Model (CalEEMod 2016.3.1) and project-specific construction and operational features, and data provided in the *City of Sacramento 2035 General Plan*,¹ the *City of Sacramento 2035 General Plan Master Environmental Impact Report*,² traffic information provided by the traffic consultant (see Appendix L), and Sacramento Metropolitan Air Quality Management District's (SMAQMD) *CEQA Guide to Air Quality Assessment in Sacramento County*.³

4.2.1 Environmental Setting

Air quality is affected by the rate, amount, and location of pollutant emissions and the associated meteorological conditions that influence pollutant movement and dispersal. Wind speed, wind direction, and air temperature combined with geographic features such as mountains and valleys determine how air pollutant emissions affect local air quality.

Climate and Topography

Sacramento lies within the Sacramento Valley Air Basin (SVAB). The topographic features giving shape to the SVAB are the Coast Range to the west, the Sierra Nevada to the east, and the Cascade Range to the north. These mountain ranges channel winds through the SVAB, but also inhibit the dispersion of pollutant emissions. The SVAB, including Sacramento, is characterized by a Mediterranean climate that includes mild, rainy winter weather from November through March and warm to hot, dry weather from May through September. Sacramento Valley temperatures range from 20 to 115 degrees Fahrenheit and the average annual rainfall is 20 inches.

The predominant annual and summer wind pattern in the Sacramento Valley is the full sea breeze, commonly referred to as Delta breezes. These cool winds originate from the Pacific Ocean and

¹ City of Sacramento, 2015. *City of Sacramento 2035 General Plan*. Adopted March 3, 2015.

² City of Sacramento, 2015. *City of Sacramento 2035 General Plan Master Environmental Impact Report* (SCH No. 2012122006). Certified March 3, 2015.

³ Sacramento Metropolitan Air Quality Management District, 2009. *Guide to Air Quality Assessment in Sacramento County*. December 2009. Available: <http://www.airquality.org/ceqa/ceqaguideupdate.shtml>. Accessed July 10, 2017.

flow through the Carquinez Straits, a sea-level gap in the Coast Range. In the winter (December to February), northerly winds predominate. Wind directions in the Sacramento Valley are influenced by the predominant wind flow pattern associated with each season. During about half the days from July through September, however, a phenomenon called the “Schultz Eddy,” a large isotropic vertical-axis eddy on the north side of the Carquinez Straits, prevents the Delta breezes from transporting pollutants north and out of the Sacramento Valley and causes the wind pattern to circle back south, all of which tends to keep air pollutants in the Sacramento Valley. This phenomenon’s effect exacerbates the pollution levels in the area, and increases the likelihood of violations of State and/or federal air quality standards.

The vertical and horizontal movement of air is an important atmospheric component involved in the dispersion and subsequent dilution of air pollutants. Without movement, air pollutants can collect and concentrate in a single area, increasing the associated health hazards. For instance, in the winter, persistent inversions occur frequently in the SVAB, especially during autumn and early winter, and restrict the vertical dispersion of pollutants released near ground level.

Air Pollutants of Concern

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

Criteria Air Pollutants

Criteria air pollutants are a group of six common air pollutants for which the US EPA has set ambient air quality standards (see Section 4.2.2). Criteria air pollutants include ozone (O₃), carbon monoxide (CO), nitrogen dioxide (NO₂), sulfur dioxide (SO₂), particulate matter (PM) in size fractions of 10 microns or less in diameter (PM₁₀) and 2.5 microns or less in diameter (PM_{2.5}), and lead. Most of the criteria pollutants are directly emitted. Ozone, however, is a secondary pollutant that is formed in the atmosphere by chemical reactions between nitrogen oxides (NO_x) and reactive organic gases (ROG). In addition to the criteria air pollutants identified by the US EPA, California adds four criteria air pollutants (visibility reducing particulates, sulfates, hydrogen sulfide, and vinyl chloride).

Criteria air pollutants of concern in the SVAB include O₃, CO, PM₁₀, and PM_{2.5}, as concentrations of these pollutants are above state and/or national ambient air quality standards (see Section 4.2.2). Sulfur dioxide, lead, visibility reducing particulates, sulfates, hydrogen sulfide, and vinyl chloride concentrations are well below state and/or national ambient air quality standards and are not air pollutants of concern in the SVAB. **Table 4.2-1** lists the health effects associated with the criteria air pollutants of concern.

Ozone

As discussed above, O₃ is a secondary air pollutant produced in the atmosphere through a complex series of photochemical reactions involving the O₃ precursors reactive organic gases (ROG), also referred to as volatile organic compounds (VOC) by some regulating agencies, and oxides of nitrogen (NO_x). The main sources of ROG in the SVAB are the evaporation of

**TABLE 4.2-1
HEALTH AND ENVIRONMENTAL EFFECTS OF CRITERIA AIR POLLUTANTS OF CONCERN**

Pollutant	Adverse Effects
Ozone	<ul style="list-style-type: none"> • People most at risk from breathing air containing ozone include people with asthma, children, older adults, and people who are active outdoors, especially outdoor workers. In addition, people with certain genetic characteristics, and people with reduced intake of certain nutrients, such as vitamins C and E, are at greater risk from ozone exposure. • Breathing ozone can trigger a variety of health problems including chest pain, coughing, throat irritation, and airway inflammation. It also can reduce lung function and harm lung tissue. Ozone can worsen bronchitis, emphysema, and asthma, leading to increased medical care. • Ozone affects sensitive vegetation and ecosystems, including forests, parks, wildlife refuges and wilderness areas. In particular, ozone harms sensitive vegetation during the growing season.
Carbon Monoxide	<ul style="list-style-type: none"> • Breathing air with a high concentration of CO reduces the amount of oxygen that can be transported in the blood stream to critical organs like the heart and brain. • At very high levels, which are possible indoors or in other enclosed environments, CO can cause dizziness, confusion, unconsciousness and death. • Very high levels of CO are not likely to occur outdoors. However, when CO levels are elevated outdoors, they can be of particular concern for people with some types of heart disease. These people already have a reduced ability for getting oxygenated blood to their hearts in situations where the heart needs more oxygen than usual. They are especially vulnerable to the effects of CO when exercising or under increased stress. In these situations, short-term exposure to elevated CO may result in reduced oxygen to the heart accompanied by chest pain also known as angina.
Particulate Matter	<ul style="list-style-type: none"> • Particulate matter contains microscopic solids or liquid droplets that are so small that they can be inhaled and cause serious health problems. Particles less than 10 micrometers in diameter pose the greatest problems, because they can get deep into your lungs, and some may even enter the bloodstream. • Fine particles (PM_{2.5}) are the main cause of reduced visibility (haze) in parts of the United States, including many national parks and wilderness areas.
Nitrogen Dioxide	<ul style="list-style-type: none"> • Breathing air with a high concentration of NO₂ can irritate airways in the human respiratory system. Such exposures over short periods can aggravate respiratory diseases, particularly asthma, leading to respiratory symptoms (such as coughing, wheezing or difficulty breathing), hospital admissions and visits to emergency rooms. Longer exposures to elevated concentrations of NO₂ may contribute to the development of asthma and potentially increase susceptibility to respiratory infections. People with asthma, as well as children and the elderly are generally at greater risk for the health effects of NO₂. • NO₂, along with other oxides of nitrogen (NO_x), reacts with other chemicals in the air to form both particulate matter and ozone. Both of these are also harmful when inhaled due to effects on the respiratory system.

SOURCES: United States Environmental Protection Agency (US EPA), 2017. Ozone Basics. Available: <https://www.epa.gov/ozone-pollution/ozone-basics#effects>. Accessed July 10, 2017.
 US EPA, 2016. Basic Information about Carbon Monoxide (CO) Outdoor Air Pollution. Available: <https://www.epa.gov/co-pollution/basic-information-about-carbon-monoxide-co-outdoor-air-pollution#Effects>. Accessed July 10, 2017.
 US EPA, 2016. Particulate Matter (PM) Basics. Available: <https://www.epa.gov/pm-pollution/particulate-matter-pm-basics#effects>. Accessed July 10, 2017.
 US EPA, 2016. Basic Information about NO₂. Available: <https://www.epa.gov/no2-pollution/basic-information-about-no2#Effects>. Accessed July 10, 2017.

solvents, paints, and fuels; the main sources of NO_x are combustion processes (including motor vehicle engines). Ozone is referred to as a regional air pollutant because its precursors are transported and diffused by wind concurrently with O₃ production through a photochemical reaction process. Ozone causes eye irritation, airway constriction, and shortness of breath, and can aggravate existing respiratory diseases such as asthma, bronchitis, and emphysema.

Carbon Monoxide

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 vehicle engines; the highest emissions occur during low travel speeds, stop-and-go driving, cold starts, and hard acceleration. Exposure of humans to high concentrations of CO reduces the oxygen-carrying capacity of the blood and can cause headaches, nausea, dizziness, and fatigue, impaired central nervous system function, and angina (chest pain) in persons with serious heart disease. Very high concentrations of CO can be fatal.

Particulate Matter

Particulate matter (PM) is frequently classified by particle size, where PM₁₀ consists of PM that is 10 microns or less in diameter and PM_{2.5} consists of the subset of PM₁₀ that is 2.5 microns or less in diameter (a micron is one-millionth of a meter). PM₁₀ and PM_{2.5} represent fractions of particulate matter that can be inhaled into air passages and the lungs and can cause adverse health effects. Some sources of particulate matter, such as wood burning in fireplaces, demolition, and construction activities, are more local in nature, while others, such as vehicular traffic, have a more regional effect. Very small particles of certain substances (e.g., sulfates and nitrates) can cause lung damage directly, or can contain adsorbed gases (e.g., chlorides or ammonium) that may be injurious to health. Particulates also can damage materials and reduce visibility.

Large dust particles (diameter greater than 10 microns) settle out rapidly and are easily filtered by human breathing passages. This large dust is of more concern as a soiling nuisance rather than a health hazard. The remaining fine particulate matter, PM₁₀ and PM_{2.5}, are a health concern particularly at levels above the federal and state ambient air quality standards. PM_{2.5} (including diesel exhaust particles) has greater effects on health because these particles are small enough to be able to penetrate to the deepest parts of the lungs.

Nitrogen Dioxide

Nitrogen dioxide (NO₂) is a reddish brown gas that is a byproduct of combustion processes. Automobiles and industrial operations are the main sources of NO₂. Aside from its contribution to ozone formation, NO₂ can increase the risk of acute and chronic respiratory disease and reduce visibility. NO₂ may be visible as a coloring component on high pollution days, especially in conjunction with high ozone levels.

Other Criteria Air Pollutants

Other criteria air pollutants include SO₂ and lead, which are not air pollutants of concern in the SVAB. SO₂ is a combustion product of sulfur or sulfur-containing fuels such as coal and diesel. SO₂ is also a precursor to the formation of particulate matter, atmospheric sulfate, and atmospheric sulfuric acid formation that could precipitate downwind as acid rain. The maximum SO₂ concentrations recorded in the project vicinity are well below federal and state standards.

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.

Toxic Air Contaminants

Toxic air contaminants (TACs) are airborne substances that are capable of causing short-term (acute) and/or long-term (chronic or carcinogenic, i.e., cancer causing) adverse human health effects (i.e., injury or illness). TACs include both organic and inorganic chemical substances and may be emitted from a variety of common sources including gasoline stations, automobiles, diesel engines, dry cleaners, industrial operations, and painting operations. TACs of concern include diesel particulate matter (DPM) and asbestos.

Diesel Particulate Matter

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 and rail lines with diesel locomotive operations.

CARB identified DPM as a TAC in 1998, primarily based on evidence demonstrating cancer effects in humans. It is estimated that about 70% of total known cancer risk related to air toxics in California is attributable to DPM. More than 90% of DPM is less than 1 μm in diameter, and thus is a subset of $\text{PM}_{2.5}$; therefore, DPM also contributes to the same non-cancer health effects as $\text{PM}_{2.5}$ exposure (see Table 4.2-1). DPM may also facilitate development of new allergies.

Regulation of diesel engines and fuels have decreased DPM levels by 68% since 1990. Furthermore, CARB estimates that emissions of DPM in 2035 will be less than half those in 2010, even with increasing vehicle miles traveled (VMT).⁴ Nonetheless, based on 2012 estimates of statewide exposure, DPM is estimated to increase statewide cancer risk by 520 cancers per million residents exposed over a lifetime.

Asbestos

Asbestos is a fibrous mineral and used as a processed component of building materials. Because asbestos has been proven to cause serious adverse health effects, including asbestosis and lung cancer, it is strictly regulated based on its natural widespread occurrence and its use as a building material. When building materials containing asbestos are disturbed, asbestos fibers may be released. Asbestos is also naturally occurring in ultramafic rock (a rock type commonly found in California), but its occurrence at the project site has a low probability.⁵

⁴ California Air Resources Board, 2016. Overview: Diesel Exhaust and Health. Available: <https://www.arb.ca.gov/research/diesel/diesel-health.htm>. Accessed July 10, 2017.

⁵ California Department of Conservation, 2000. A General Location Guide for Ultramafic Rocks in California – Areas More Likely to Contain Naturally Occurring Asbestos. August, 2000. Available: ftp://ftp.consrv.ca.gov/pub/dmg/pubs/ofr/ofr_2000-019.pdf. Accessed July 10, 2017.

Existing Ambient Air Quality

Nearby ambient air quality monitoring stations that are assumed to be representative of the ambient air at the project site are located in Sacramento at 1309 T Street and at a monitor within the Del Paso Manor neighborhood. The T Street monitor measures and records concentrations of O₃, PM₁₀, and PM_{2.5}, and is located approximately 0.7 miles southwest of the project site. The Del Paso Manor neighborhood monitor provides the nearest representative measurement of CO, approximately 6.9 miles northeast of the project site. **Table 4.2-2** presents a three-year summary of air pollutant concentration data collected at these monitoring stations for O₃, PM₁₀, PM_{2.5}, and CO, as well as the number of days the applicable standards were exceeded during the given year.

As described in Table 4.2-2, O₃ levels in the project vicinity have resulted in numerous violations of ambient air quality standards between 2014 and 2016. Concentrations of O₃ in the project vicinity did not exceed the 1-hour state standard, but exceeded the 8-hour state and national standards 11 and 10 times, respectively, during the 3-year study period.

Ambient air quality monitoring data for PM₁₀ in the project area suggests that the 24-hour standard was exceeded at least once in 2014 and at least once in 2015; however, the number of exceedance days is not available for those years. Regarding PM_{2.5}, the study area was estimated to have exceeded the 24-hour national standard approximately three times in 2015. In 2016, both the PM₁₀ 24-hour standards and the PM_{2.5} 24-hour standard were not exceeded. There were no exceedances of the annual average standards for PM₁₀ or PM_{2.5} recorded during the 3-year study period.

There have been no recorded exceedances of the state and national 1-hour and annual NO₂ standards and the state and national 1-hour and 8-hour CO standards during the 3-year study period.

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). The ability to detect odors varies considerably among the population and overall is quite subjective. People may have different reactions to the same odor. An odor that is offensive to one person may be perfectly acceptable to another (e.g., coffee roaster). An unfamiliar odor is more easily detected and is more likely to cause complaints than a familiar one. Known as odor fatigue, a person can become desensitized to almost any odor and recognition only occurs with an alteration in the intensity. 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.

**TABLE 4.2-2
SUMMARY OF AIR QUALITY MONITORING DATA (2014–2016)**

Pollutant	National / State Standard	2014	2015	2016
Ozone				
Maximum 1-hour concentration, ppm	0.09 ^a	0.085	0.092	0.094
Number of days above State 1-Hour standard		0	0	0
Maximum 8-hour concentration, ppm	0.070 / 0.070	0.072	0.076	0.074
Number of days above National 8-Hour standard		3	4	3
Number of days above State 8-Hour standard		4	4	3
Nitrogen Dioxide (NO₂)				
Annual average concentration, ppm	0.053 / 0.030	0.011	0.011	NA
Maximum 1-Hour concentration, ppm	0.100 / 0.18	0.064	0.055	0.055
Number of days above National 1-Hour standard		0	0	0
Number of days above State 1-Hour standard		0	0	0
Respirable Particulate Matter (PM₁₀)				
Annual average concentration, µg/m ³	20 ^a	NA	NA	NA
Maximum 24-Hour concentration (national/state), µg/m ³	150 / 50	105.7/ 106.4	57.8/ 59.1	37.1/36.5
Estimated number of days above National 24-Hour standard ^c		0	0	0
Estimated number of days above State 24-Hour standard ^c		NA	NA	NA
Fine Particulate Matter (PM_{2.5})				
Annual average concentration, µg/m ³	12.0 / 12	8	9.5	NA
Maximum 24-Hour concentration, µg/m ³	35 ^b	26.3	36.3	17
Estimated number of days above National 24-Hour standard ^c		0	3	NA
Carbon Monoxide (CO)				
Maximum 8-Hour concentration, ppm	9 / 9.0	NA	NA	NA
Number of days above National or State 8-hour standard		0	0	0
Maximum 1-Hour concentration, ppm	35 / 20	2.3	2.1	2.3
Number of days above National or State 1-hour standard		0	0	0

NOTES: Number of days exceeded is for all days in a given year, except for particulate matter. PM10 and PM2.5 are monitored every six days. Ozone, NO₂, PM10, and PM2.5 monitoring data from T Street Station (CARB 2017). Carbon monoxide monitoring data from Sacramento-Del Manor Station (US EPA 2017). The CARB and US 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/m³ = micrograms per cubic meter; NA = No data or insufficient data.

a. State standard, not to be exceeded.

b. National standard, not to be exceeded.

c. Particulate matter sampling schedule of one out of every six days, for a total of approximately 60 samples per year. Estimated days exceeded mathematically estimates of how many days concentrations would have been greater than the level of the standard had each day been monitored.

SOURCES: California Air Resources Board, 2017. *Summaries of Air Quality Data, 2014-2016*. Available: www.arb.ca.gov/adam/index.html. Accessed June 1, 2017;
US EPA, 2017. AirData. Available: <https://epa.maps.arcgis.com/apps/webappviewer/index.html?id=5f239fd3e72f424f98ef3d5def547eb5>. Accessed June 1, 2017.

Sensitive Receptors

Air quality does not affect individuals or groups within the population in the same way, and some groups are more sensitive to adverse health effects caused by exposure to air pollutants than others. Population subgroups sensitive to the health effects of air pollutants include the elderly and the young, those with higher rates of respiratory disease such as asthma and chronic obstructive pulmonary disease, and with other environmental or occupational health exposures (e.g., indoor air quality) that affect cardiovascular or respiratory diseases.

Land uses such as schools, children's day care centers, hospitals, and nursing and convalescent homes are considered to be the most sensitive to poor air quality because the population groups associated with these uses have increased susceptibility to respiratory distress. Parks and playgrounds are considered moderately sensitive to poor air quality because persons engaged in strenuous work or exercise also have increased sensitivity to poor air quality; however, exposure times are generally far shorter in parks and playgrounds than in residential locations and schools, which typically reduces the overall health risk associated with exposure to pollutants. Residential areas are considered more sensitive to air quality conditions compared to commercial and industrial areas because people generally spend longer periods of time at their residences, with associated greater exposure to ambient air quality conditions. Workers are not considered sensitive receptors because all employers are required to follow regulations set forth by the Occupation Safety and Health Administration (OSHA) to ensure the health and well-being of their employees.

The nearest sensitive receptors from the SCC and Hotel project sites are residents of the apartment complex on the southeast corner of the intersection at J Street and 15th Street. Capitol Park is located approximately 200 feet south of the project sites. The nearest school is Washington Elementary School, approximately 1,850 feet northeast of the project sites. A child day care center (Forever Young Child Care Center) is located approximately 2,000 feet southwest of the project sites.

4.2.2 Regulatory Setting

Federal, state, and local agencies regulate air quality in California.

Federal

Criteria Air Pollutants

The United States Environmental Protection Agency (US EPA) is required by the federal Clean Air Act (CAA) to identify and establish National Ambient Air Quality Standards (NAAQS) to protect public health and the environment. The federal CAA identifies two types of NAAQS: primary and secondary. Primary standards 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.

The US EPA has set NAAQS for six principal pollutants, called criteria air pollutants. These criteria air pollutants include O₃, NO₂, SO₂, CO, PM, and lead. The original indicator for PM was total suspended particulates; currently the standards are in terms of PM₁₀ and PM_{2.5}. **Table 4.2-3** presents the current NAAQS (and state ambient air quality standards) and provides a brief discussion of the related health effects and principal sources for each pollutant.

**TABLE 4.2-3
STATE AND NATIONAL AMBIENT AIR QUALITY STANDARDS AND MAJOR SOURCES**

Pollutant	Averaging Time	State Standard	National Standard	Major Pollutant Sources
Ozone	1 hour	0.09 ppm	---	Formed when reactive organic gases (ROG) and nitrogen oxides (NO _x) react in the presence of sunlight. Major sources include on-road motor vehicles, solvent evaporation, and commercial / industrial mobile equipment.
	8 hour	0.070 ppm	0.070 ppm	
Carbon Monoxide	1 hour	20 ppm	35 ppm	Internal combustion engines, primarily gasoline-powered motor vehicles.
	8 hour ¹	9.0 ppm	9 ppm	
Nitrogen Dioxide	1 hour	0.18 ppm	100 ppb	Motor vehicles, petroleum refining operations, industrial sources, aircraft, ships, and railroads.
	Annual Avg.	0.030 ppm	0.053 ppm	
Sulfur Dioxide	1 hour	0.25 ppm	75 ppb	Fuel combustion, chemical plants, sulfur recovery plants, and metal processing.
	3 hour	---	0.5 ppm ²	
	24 hour	0.04 ppm	0.14 ppm	
	Annual Avg.	---	0.030 ppm	
Respirable Particulate Matter (PM ₁₀)	24 hour	50 ug/m ³	150 ug/m ³	Dust and fume-producing industrial and agricultural operations, combustion, atmospheric photochemical reactions, and natural activities (e.g., wind-raised dust and ocean sprays).
	Annual Avg.	20 ug/m ³	---	
Fine Particulate Matter (PM _{2.5})	24 hour	---	35 ug/m ³	Fuel combustion in motor vehicles, equipment, and industrial sources; residential and agricultural burning; Also, formed from photochemical reactions of other pollutants, including NO _x , sulfur oxides, and organics.
	Annual Avg.	12 ug/m ³	12.0 ug/m ³	
Lead	Monthly Ave.	1.5 ug/m ³	---	Present source: lead smelters, battery manufacturing and recycling facilities. Past source: combustion of leaded gasoline.
	Quarterly	---	1.5 ug/m ³	
Hydrogen Sulfide	1 hour	0.03 ppm	No National Standard	Geothermal power plants, petroleum production and refining
Sulfates	24 hour	25 ug/m ³	No National Standard	Produced by the reaction in the air of SO ₂ .
Visibility Reducing Particles	8 hour	Extinction of 0.23/km; visibility of 10 miles or more	No National Standard	See PM _{2.5} .
Vinyl chloride	24 hour	0.01 ppm	No National Standard	Polyvinyl chloride and vinyl manufacturing.

NOTE:

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

2 Secondary national standard.

ppb = parts per billion; ppm = parts per million; ug/m³ = micrograms per cubic meter.

SOURCES: California Air Resources Board, 2016. *Ambient Air Quality Standards*. Available:

<https://www.arb.ca.gov/research/aaqs/aaqs2.pdf>. Standards last updated May 4, 2016;

California Air Resources Board, 2009. *ARB Fact Sheet: Air Pollution Sources, Effects and Control*. Available:

<http://www.arb.ca.gov/research/health/fs/fs2.htm>.

The US EPA classifies air basins (or portions thereof) as “attainment” or “nonattainment” for each criteria air pollutant, based on whether or not the National Ambient Air Quality Standards (NAAQS) had been achieved. The classification is determined by comparing actual monitoring data with the standards. “Unclassified” is defined by the federal CAA as any area that cannot be classified, on the basis of available information, as meeting or not meeting the national primary or secondary ambient air quality standard for the pollutant. Furthermore, an area may be designated attainment with a maintenance plan (also known as a maintenance area), which means that an area was previously nonattainment for a criteria air pollutant but has since been redesignated as attainment. These areas have demonstrated through modeling they have sufficient controls in place to meet and maintain the NAAQS.

The Sacramento region’s attainment status for the criteria air pollutants are summarized in **Table 4.2-4** (state designations are also provided). The Sacramento region is considered a federal nonattainment area for O₃ and PM_{2.5} and as an attainment-maintenance area for the federal CO and PM₁₀ standards.

**TABLE 4.2-4
 SACRAMENTO COUNTY ATTAINMENT STATUS**

Pollutant and Averaging Time	Designation/Classification	
	State Standards	Federal Standards
Ozone (1-hour)	Nonattainment	No Federal Standard
Ozone (8-hour)	Nonattainment/Serious	Nonattainment/Severe
Carbon Monoxide	Attainment	Attainment/Maintenance
Nitrogen Dioxide	Attainment	Unclassified/Attainment
Sulfur Dioxide	Attainment	Unclassified
Respirable Particulate Matter (PM ₁₀)	Nonattainment	Attainment/Maintenance*
Fine Particulate Matter (PM _{2.5})	Attainment	Nonattainment/Moderate
Lead	Attainment	Attainment
Visibility Reducing Particles	Unclassified	No Federal Standard
Sulfates	Attainment	No Federal Standard
Hydrogen Sulfide	Unclassified	No Federal Standard
Vinyl Chloride	Unclassified	No Federal Standard

NOTE: CARB makes area designations for ten criteria pollutants (O₃, CO, NO₂, SO₂, PM₁₀, PM_{2.5}, lead, visibility reducing particles, sulfates, and hydrogen sulfide. CARB does not designate areas according to the vinyl chloride standard.

* Effective October 28, 2013, the U.S. EPA formally re-designated Sacramento County as attainment for the federal PM₁₀ standard.

SOURCE: California Air Resources Board, 2016. *Area Designation Maps*. Available: <http://www.arb.ca.gov/deg/adm/adm.htm>. Accessed June 2, 2017

The federal CAA requires each state to prepare an air quality control plan referred to as a State Implementation Plan (SIP). The SIP is a living document that is periodically modified to reflect the latest emissions inventories, planning documents, and rules and regulations of air basins as reported by the agencies with jurisdiction over them. The US EPA has responsibility to review all

state SIPs to determine if they conform to the mandates of the federal CAA and will achieve air quality goals when implemented.

Hazardous Air Pollutants

Federal laws use the term “Hazardous Air Pollutants” (HAPs) to refer to the same types of compounds that are referred to as TACs under State law. Currently, 187 substances are regulated as HAPs. The federal CAA requires the US EPA to identify National Emission Standards for Hazardous Air Pollutants (NESHAPs) to protect public health and welfare. NESHAPs potentially applicable to the project include the National Emission Standard for Asbestos (40 CFR 61, Subpart M).

State

Criteria Air Pollutants

At the state level, the California Air Resources Board (CARB) oversees California air quality policies and regulations. California had adopted its own air quality standards (California Ambient Air Quality Standards, or CAAQS) as shown in Table 4.2-2. Most of the California ambient standards tend to be at least as protective as NAAQS and are often more stringent.

In 1988, California passed the California Clean Air Act (CCAA) (California Health and Safety Code Sections 39600 et seq.), which, like its federal counterpart, called for the designation of areas as attainment or nonattainment, but based on state ambient air quality standards rather than the federal standards. The CCAA requires each air district in which state air quality standards are exceeded to prepare a plan that documents reasonable progress towards attainment. If an air basin (or portion thereof) exceeds the CAAQS for a particular criteria air pollutant, it is considered to be nonattainment of that criteria air pollutant until the area can demonstrate compliance. As indicated in Table 4.2-4, Sacramento County is classified as nonattainment and serious nonattainment for the 8-hour and 1-hour state ozone standards, respectively, and is nonattainment for the 24-hour and annual state PM₁₀ standard.

Toxic Air Contaminants

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 AB 2728. The Air Toxics “Hot Spots” Information and Assessment Act of 1987 (AB 2588) seeks to identify, quantify, and evaluate risk from air toxics sources; however, AB 2588 does not regulate air toxics emissions.

In 2000, CARB approved a comprehensive Diesel Risk Reduction Plan to reduce diesel emissions from both new and existing diesel-fueled vehicles and engines. Further regulations of diesel emissions by the CARB include the On-Road Heavy Duty Diesel Vehicle (In-Use) Regulation, the On-Road Heavy Duty (New) Vehicle Program, the In-Use Offroad Diesel Vehicle Regulation, and the New Offroad 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.

In 2004, CARB adopted a measure to limit idling of diesel-fueled commercial motor vehicles. Heavy-duty diesel vehicles with a Gross Vehicle Weight Rating (GVWR) of 10,000 lbs. or heavier are prohibited from idling for more than 5 minutes within California's borders. Exceptions to the rule apply for certain circumstances.

Local

Sacramento Metropolitan Air Quality Management District

The SMAQMD is the regional agency responsible for air quality regulation within Sacramento County. The SMAQMD regulates air quality through its planning and review activities and has permit authority over most types of stationary emission sources and can require operators of stationary sources to obtain permits, can impose emission limits, set fuel or material specifications, and establish operational limits to reduce air emissions. The SMAQMD regulates new or modified stationary sources of TACs.

All areas designated as nonattainment are required to prepare plans showing how the area would meet the air quality standards by its attainment dates. The following are the most recent air quality plans applicable to the area of the proposed projects:

- Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan⁶
- SMAQMD's Triennial Report and Air Quality Plan Revision⁷
- PM₁₀ Implementation/Maintenance Plan and Redesignation Request for Sacramento County⁸
- PM_{2.5} Maintenance Plan and Redesignation Request⁹
- 2004 Revision to the California State Implementation Plan for CO¹⁰

The construction phase of the proposed projects would be subject to the applicable SMAQMD regulations with regards to construction and stationary equipment, particulate matter

⁶ Sacramento Metropolitan Air Quality Management District, 2013. Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan (2013 SIP Revisions). September 26, 2013. Available: [http://www.airquality.org/ProgramCoordination/Documents/4\)%202013%20SIP%20Revision%20Report%201997%20Std.pdf](http://www.airquality.org/ProgramCoordination/Documents/4)%202013%20SIP%20Revision%20Report%201997%20Std.pdf). Accessed July 10, 2017.

⁷ Sacramento Metropolitan Air Quality Management District, 2015. Triennial Report and Air Quality Plan Revision. May 28, 2015. Available: [http://www.airquality.org/ProgramCoordinationDocuments11\)%20%202015TriennialReportandProgressRevision.pdf](http://www.airquality.org/ProgramCoordinationDocuments11)%20%202015TriennialReportandProgressRevision.pdf). Accessed July 10, 2017.

⁸ Sacramento Metropolitan Air Quality Management District, 2010. PM₁₀ Implementation/Maintenance Plan and Redesignation Request for Sacramento County. October 28, 2010. Available: [http://www.airquality.org/ProgramCoordination/Documents/10\)%20%20PM10%20Imp%20and%20MP%202010.pdf](http://www.airquality.org/ProgramCoordination/Documents/10)%20%20PM10%20Imp%20and%20MP%202010.pdf). Accessed July 10, 2017.

⁹ Sacramento Metropolitan Air Quality Management District, 2013. PM_{2.5} Implementation/Maintenance Plan and Redesignation Request for Sacramento PM_{2.5} Nonattainment Area. October 24, 2013. Available: [http://www.airquality.org/ProgramCoordination/Documents/9\)%20%20PM2.5%20Imp%20and%20MP%202013.pdf](http://www.airquality.org/ProgramCoordination/Documents/9)%20%20PM2.5%20Imp%20and%20MP%202013.pdf). Accessed July 10, 2017.

¹⁰ Sacramento Metropolitan Air Quality Management District, 2004. 2004 Revision to the California State Implementation Plan for Carbon Monoxide. July 22, 2004. Available: [http://www.airquality.org/ProgramCoordination/Documents/1\)%202004%20CO%20Maintenance%20Plan.pdf](http://www.airquality.org/ProgramCoordination/Documents/1)%202004%20CO%20Maintenance%20Plan.pdf). Accessed July 10, 2017.

generation, architectural coatings, and paving materials. Equipment used during construction would be subject to the applicable requirements of SMAQMD Regulation 2 (Permits), Rule 201 (General Permit Requirements); and Regulation 4 (Prohibitory Rules), Rule 401 (Ringelmann Chart/Opacity), Rule 402 (Nuisance), Rule 403 (Fugitive Dust), Rule 404 (Particulate Matter), Rule 405 (Dust and Condensed Fumes), Rule 420 (Sulfur Content of Fuels), Rule 442 (Architectural Coatings), Rule 453 (Cutback and Emulsified Asphalt Paving Materials).

Furthermore, the demolition or renovation of existing buildings and structures would be subject to Regulation 9, Rule 902 (Asbestos). Rule 902 is intended to limit asbestos emissions from demolition or renovation of structures and the associated disturbance of regulated asbestos containing material (RACM) generated or handled during these activities. This rule addresses the National Emissions Standards for Asbestos and adds requirements.

The operational phase of the proposed projects would be subject to SMAQMD Rule 201, which requires any business or person to obtain an authority to construct and a permit to operate prior to installing or operating new equipment or processes that may release or control air pollutants to ensure that all SMAQMD rules and regulations are considered. Potentially applicable stationary pollutant sources during the operational phase of the proposed projects include a new boiler as part of the SCC. A permit is required for all boilers, process heaters, and steam generators with a rated heat input capacity of 1 million British thermal units (Btu) per hour or greater, or boilers, process heaters, and steam generators of any size that are not fired exclusively on purchased quality natural gas, liquid petroleum gas, or any combination thereof. A permit is required if the aggregate rated heat input capacity of all boilers, process heaters, and steam generators used in the same process is 1 million Btu per hour or greater. SMAQMD Rule 414 applies to boilers rated less than 1 million Btu per hour.

City of Sacramento 2035 General Plan

The following goals and policies from the 2035 General Plan are relevant to air quality.

Goal ER 6.1 Improved Air Quality. Improve the health and sustainability of the community through improved regional air quality and reduced greenhouse gas emissions that affect climate change.

Policies

- ER 6.1.1 **Maintain Ambient Air Quality Standards.** The City shall work with the California Air Resources Board and the Sacramento Metropolitan Air Quality Management District (SMAQMD) to meet State and Federal ambient air quality standards in order to protect residents, regardless of age, culture, ethnicity, gender, race, socioeconomic status, or geographic location, from the health effects of air pollution.
- ER 6.1.2 **New Development.** The City shall review proposed development projects to ensure projects incorporate feasible measures that reduce construction and operational emissions for reactive organic gases, nitrogen oxides and particulate matter (PM₁₀ and PM_{2.5}) through project design.
- ER 6.1.3 **Emissions Reduction.** The City shall require development projects that exceed SMAQMD ROG and NO_x operational thresholds to incorporate design or operational features that reduce emissions equal to 15 percent from the level that would be produced by an unmitigated project.

- ER 6.1.4 **Sensitive Uses.** The City shall coordinate with SMAQMD in evaluating exposure of sensitive receptors to toxic air contaminants, and will impose appropriate conditions on projects to protect public health and safety.
- ER 6.1.10 **Coordination with SMAQMD.** The City shall coordinate with SMAQMD to ensure projects incorporate feasible mitigation measures if not already provided for through project design.

The proposed Sacramento Convention Center Renovation and Expansion would be consistent with policies ER 6.1.1, ER 6.1.2, and ER 6.1.3 because all recommended SMAQMD mitigation measures would be implemented during construction and operation, and comply (if applicable) with the SMAQMD's 15 percent emission reduction/mitigation guideline through the preparation of the Air Quality Mitigation Plan (AQMP). All mitigation measures proposed would be implemented through coordination with the SMAQMD; therefore, the proposed Sacramento Convention Center Renovation and Expansion would be consistent with ER 6.1.4 and ER 6.1.10.

Sacramento Central City Community Plan

The City's *Central City Community Plan*¹¹ does not contain goals and policies specific to air quality.

4.2.3 Analysis, Impacts and Mitigation

Significance Criteria

Impacts related to air quality are considered significant if the proposed projects would result in the following:

- Conflict with or obstruct implementation of an applicable air quality plan;
- Violate any air quality standard or contribute substantially to an existing or projected air quality violation;
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors);
- Expose sensitive receptors to substantial pollutant concentrations; or
- Create objectionable odors affecting a substantial number of people.

The SMAQMD has developed significance thresholds to help lead agencies determine whether a project may have a significant air quality impact. Projects whose emissions are expected to meet or exceed the recommended significance criteria will have a potentially significant adverse impact on air quality.

The SMAQMD has established mass emissions thresholds for O₃ precursors, NO_x and ROG, PM₁₀, and PM_{2.5} because the Sacramento region does not meet the state and federal ozone and state particulate matter (PM₁₀ and PM_{2.5}) ambient air quality standards. Emissions of O₃

¹¹ City of Sacramento, 2015. *Central City Community Plan*. Adopted March 3, 2015.

precursors or PM from an individual project could contribute to an existing exceedance of the ozone standards. Construction activities are not likely to generate substantial quantities of CO; however, increased traffic congestion could result in CO hotspots (exceedance of the CO ambient air quality standards). **Table 4.2-5** presents the applicable SMAQMD thresholds of significance.

**TABLE 4.2-5
SMAQMD CRITERIA AIR POLLUTANT THRESHOLDS OF SIGNIFICANCE**

Pollutant	Construction Phase	Operational Phase
Oxides of nitrogen (NOX)	85 lb/day	65 lb/day
ROG (VOC)	None	65 lb/day
PM ₁₀	0 *	0 *
PM _{2.5}	0 *	0 *
CO	20 ppm (1-hour); 9 ppm (8-hour)	20 ppm (1-hour); 9 ppm (8-hour)

NOTE:

* If all feasible Best Achievable Control Technology/Best Management Practices are applied, then the threshold of significance is 80 lbs/day and 14.6 tons/year for PM₁₀, and 82 lbs/day and 15 tons/year for PM_{2.5} for both construction and operational phases. Consequently, these thresholds are used to evaluate operational emissions.

SOURCE: Sacramento Metropolitan Air Quality Management District, 2015. Guide to Air Quality Assessment in Sacramento County. Chapter 2 Appendix (Updated May 2015). Available: <http://www.airquality.org/LandUseTransportation/Documents/CH2ThresholdsTable5-2015.pdf>. Accessed July 6, 2017.

Specifically, the project would have a potentially significant adverse impact on air quality if emissions:

- Result in short-term (construction) emissions of NO_x above 85 pounds per day;
- Result in short-term (construction) emissions of PM₁₀ above 0 pounds per day without implementation of all best management practices (BMPs) and above 80 pounds per day or 14.6 tons per year after implementation of all BMPs;
- Result in short-term (construction) emissions of PM_{2.5} above 0 pounds per day without implementation of all BMPs and above 82 pounds per day or 15.0 tons per year after implementation of all BMPs;
- Result in long-term (operational) emissions of NO_x or ROG above 65 pounds per day;
- Result in long-term (operational) emissions of PM₁₀ above 0 pounds per day without implementation of all BMPs and above 80 pounds per day or 14.6 tons per year after implementation of all BMPs;
- Result in long-term (operational) emissions of PM_{2.5} above 0 pounds per day without implementation of all BMPs and above 82 pounds per day or 15.0 tons per year after implementation of all BMPs;
- Result in CO concentrations that exceed the 1-hour state ambient air quality standard (i.e., 20.0 ppm) or the 8-hour state ambient standard (i.e., 9.0 ppm);
- Create objectionable odors affecting a substantial number of people; or

- Result in TAC exposures that cause a lifetime cancer risk exceeding 10 in 1 million for stationary sources, or substantially increase the lifetime cancer risk as a result of increased exposure to TACs from mobile sources.

Methodology and Assumptions

Project-related air quality impacts fall into two categories: short-term impacts due to construction, and long-term impacts due to project operation. First, during project construction (short-term), the project would affect local particulate concentrations primarily due to fugitive dust sources and diesel exhaust. Under operations (long-term), the project would result in an increase in emissions primarily due to motor vehicle trips and on-site stationary sources (such as the boiler). Other sources include minor area sources such as landscaping and use of consumer products.

Construction Impacts

Construction emissions were estimated using the California Emissions Estimator Model (CalEEMod) version 2016.3.2. Inputs to the model include square footage of the new convention center space and demolition of existing buildings, as detailed in Table 2-2, Detail of Proposed Space Changes.

Two possible construction schedules were analyzed: a phased construction schedule and a full shutdown construction schedule. Reasonable assumptions and default CalEEMod settings were used to estimate criteria air pollutant and ozone precursor emissions, which can be found in Appendix C1. Construction-related emissions of criteria air pollutants are then compared to SMAQMD's applicable regional significance thresholds.

The 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 and demolition activity (also known as fugitive dust); and
- Evaporative emissions of ROG from paving activity and the application of architectural coatings.

The primary TACs during construction would be DPM from construction equipment exhaust. DPM exhaust is a complex mixture of thousands of gases and fine particles commonly known as soot. The health risk resulting from exposure to DPM emissions from construction equipment was evaluated qualitatively.

Operational Impacts

Operation of the proposed projects would increase emissions of O₃ precursors (ROG and NO_x), PM₁₀, and PM_{2.5}, from vehicle trips, area sources (e.g., landscape maintenance and consumer products such as cleaning products), and energy sources (e.g., natural gas combustion for space and water heating). Operational emissions for project buildout were estimated using CalEEMod

based on the proposed land uses (for area and stationary source emissions), trip generation rates, and vehicle miles traveled (VMT) developed for the proposed projects. The model does not contain a land use designation for a conference center. Rather, the “arena” designation was used as it most closely resembles the use pattern of a conference center; like arenas, conference centers are used sporadically by large groups of people instead of consistently by smaller groups, like an office building.

Localized CO Concentrations

CO concentration levels are highest near crowded or congested intersections where traffic is slow or idling. Projects that would increase traffic volumes on surrounding roadways and/or degrade the existing level of service (LOS) would potentially increase CO concentrations at nearby intersections. The SMAQMD has developed screening criteria to analyze potential CO impacts and identify when site-specific CO dispersion modeling is necessary. The screening criteria are divided into two tiers; if the first tier of screening criteria is not met, then the second tier of screening criteria shall be examined. According to the SMAQMD, a project would not result in a significant CO impact if one of the following tiers is met:¹²

1. First Tier
 - a. Traffic generated by the proposed projects will not result in deterioration of intersection level of service (LOS) or LOS E or F; and
 - b. The proposed projects will not contribute to additional traffic to an intersection that already operates at LOS E or F.
2. Second Tier
 - a. The proposed projects would not result in an affected intersection experiencing more than 31,600 vehicles per day;
 - b. The proposed projects would not contribute traffic to a tunnel, parking garage, bridge underpass, urban street canyon, or below-grade roadway; or other location where horizontal or vertical mixing of air will be substantially limited; and
 - c. The mix of vehicle types at the intersection is not anticipated to be substantially different from the County average (as identified by the EMFAC or CalEEMod models).

The CALINE4 dispersion model is the preferred method of estimating CO pollutant concentrations at sensitive land uses near congested roadways and intersections. For each intersection analyzed, CALINE4 uses traffic volumes, CO emission rates, and receptor locations to estimate peak hour CO concentrations. For this analysis, CO concentrations were calculated based on a simplified CALINE4 screening procedure and CO emissions rates for Sacramento County from the California Air Resources Board’s Emissions Factors (EMFAC) 2014 model. The model is used to identify potential CO hotspots. The modeling methodology assumed worst-case

¹² Sacramento Metropolitan Air Quality Management District, 2016. Guide to Air Quality Assessment in Sacramento County (Chapter 4). Available: http://www.airquality.org/LandUseTransportation/Documents/Ch4Operational_FINAL8-2016.pdf. Accessed June 14, 2017.

conditions to provide a maximum, worst-case CO concentration. To ensure that an adequate margin of safety was used, the highest 1-hour and 8-hour CO readings from Sacramento County were used as the background concentration. The Baseline year (2015) and 2036 were selected for the baseline and cumulative analysis, respectively, in order to generate emission factors and emission estimates. Appendix C1 contains the CO modeling inputs and results.

Toxic Air Contaminants

Emissions of TAC during operation of the proposed projects would be primarily from idling diesel trucks at the expanded loading dock. The SCC currently has twelve truck bays and the SCC project would not add any new truck loading docks. As part of the SCC project and Hotel project, a total of three new truck docks would be provided, immediately opposite the SCC truck loading area. However, as discussed under Section 4.2.2 above, CARB's measure to limit idling of diesel-fueled commercial motor vehicles to a maximum of five minutes at any one location would limit impacts to air quality.

Air Quality Mitigation Plan

SMAQMD has developed guidance to mitigate operational emissions for projects subject to the California Environmental Quality Act. SMAQMD's guidance recommends that project applicants prepare an Air Quality Mitigation Plan (AQMP) for all projects that exceed SMAQMD's operational significance thresholds of 65 pounds per day for oxides of nitrogen (NO_x), 65 pounds per day for reactive organic gases (ROG), 80 pounds per day for particulate matter less than or equal to 10 microns (PM₁₀), and 82 pounds per day for PM_{2.5}.

For projects that are operationally significant for particulates (PM₁₀ or PM_{2.5}) no specific reduction standard has been determined at this time to be considered feasible mitigation. The focus of an AQMP for particulates will be to implement all feasible mitigation for projects on a case-by-case basis using CalEEMod and off-model measures.

If a project exceeds these thresholds, mitigation must be identified to reduce on-road mobile source emissions by 15 percent if the project is within the current State Implementation Plan (SIP), or by 35 percent if not within the SIP. The SMAQMD has determined that this reduction in emissions will satisfy the "all feasible measures" mitigation requirement under CEQA. The proposed project would be consistent with the City of Sacramento's 2035 General Plan; therefore, the proposed project is included in the SIP. Therefore, the 15 percent reduction applies to the proposed projects.

The following steps were used to determine if the proposed projects would meet the 15 percent reduction goal. The first step involves estimating total unmitigated ROG and NO_x emissions using CalEEMod default values. Since the proposed projects include a traffic analysis, the second step involves estimating mitigated ROG and NO_x emissions using CalEEMod, but adjusted for the VMT estimates included in Section 4.9, Transportation. Then, the decrease in ROG and NO_x mobile source emissions between unmitigated and mitigated is calculated, and the difference is converted to NO_x equivalents (NO_xe). NO_xe is the sum of NO_x reductions plus one-seventh of

ROG reductions. If the project meets the 15 percent NO_xe reduction goal, it is considered consistent with the SIP and other recent SMAQMD air quality management plans. Appendix C2 includes additional information and modeling results.

Issues not Discussed in Impacts

Odors

An odor analysis typically evaluates the potential for a project to generate odors and for the project to be affected by odors from nearby sources of odors. General land uses to be developed under the proposed projects are not generally considered sources of substantial odors. The SCC has not had any documented odor complaints in the most recent three years.¹³ Consequently, impacts to odors will not be addressed in the impact discussion. Issues related to odor from the proposed projects would be considered to have **no impact**.

Impacts and Mitigation Measures

Impact 4.2-1: Implementation of the proposed projects could conflict with or obstruct implementation of an applicable air quality plan.

SCC Project

The *Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan (2013 SIP Revisions)*,¹⁴ which addresses attainment of the federal 8-hour ozone standard, and the *2015 Triennial Report and Plan Revision*,¹⁵ are the latest plans issued by the SMAQMD, which incorporate land use assumptions and travel demand modeling from the Sacramento Area Council of Governments (SACOG). To determine compliance with the applicable air quality plan, the SMAQMD recommends comparing the project's vehicle-miles traveled (VMT) and population growth rate to the SACOG growth projections included in the *Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS)*.¹⁶

SACOG is required to consider adopted local land use plans in the formulation of the land use forecast and growth projections in the MTP/SCS. The SCC project would be consistent with the City of Sacramento's 2035 General Plan; therefore, the SCC project would be within the growth projections provided by SACOG and thereby consistent with the MTP/SCS.

Furthermore, as discussed in Impact 4.2-3 below, unmitigated operational emissions from the SCC project would not generate ROG, NO_x, PM₁₀, or PM_{2.5} emissions that would exceed any CEQA significance threshold, thus obstructing the implementation of air quality plans. Therefore, this impact is considered **less than significant**.

¹³ Sacramento Metropolitan Air Quality Management District, 2017. Email communication between Jim Jester of SMAQMD and Daniel Sloat of Environmental Science Associates. June 19, 2017.

¹⁴ Sacramento Metropolitan Air Quality Management District, 2013. *Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan (2013 SIP Revisions)*. September 26, 2013.

¹⁵ Sacramento Metropolitan Air Quality Management District, 2009. *2009 Triennial Report and Plan Revision*. December 2009.

¹⁶ Sacramento Area Council of Governments, 2016. *Metropolitan Transportation Plan/Sustainable Communities Strategy*. Adopted February 18, 2016.

SCC Project and Hotel Project

The SCC project and Hotel project would result in similar impacts as those discussed under the SCC project only. The SCC project and Hotel project would be consistent with the City of Sacramento’s 2035 General Plan; therefore, because SACOG is required to consider adopted local land use plans in the formulation of the land use forecast and growth projections in the MTP/SCS, the SCC project and Hotel project would be within the growth projections provided by SACOG and thereby consistent with the MTP/SCS.

Although the SCC project with the Hotel project would be consistent with the SACOG growth projections presented in the 2016 MTP/SCS, as discussed in Impact 4.2-3 below, unmitigated operational NO_x emissions from the SCC project and Hotel project would exceed the applicable CEQA significance threshold, and would be considered operationally significant for CEQA purposes. If not mitigated to prescribed levels, the pollutant emissions generated during future operations of the SCC project and Hotel project could conflict with or obstruct implementation of applicable air quality plans. An AQMP was prepared demonstrating that the SCC project and Hotel project could achieve the requisite percent reduction of NO_xe after all proposed design features have been implemented; the AQMP can be found in Appendix C2. As shown in **Table 4.2-6**, the SCC project and Hotel project would result in a 16.4 percent reduction in NO_xe emissions by simply implementing the design features proposed under the SCC project and Hotel project. Therefore, because the SCC project and Hotel project would be consistent with the land use parameters established in the SACOG MTP/SCS and would incorporate provisions that would reduce unmitigated emissions by at least 15 percent, this impact is considered **less than significant**.

**TABLE 4.2-6
 PERCENT REDUCTION OF MOBILE EMISSIONS OF NO_xe
 AFTER IMPLEMENTATION OF ALL DESIGN FEATURES¹**

Proposed Project	Emissions Without Proposed Design Features (ppd)			Emissions With Proposed Design Features (ppd)			Percent Reduction	Exceed 15%?
	ROG	NO _x	NO _x e ²	ROG	NO _x	NO _x e ²		
SCC project and Hotel project	18.37	32.37	34.99	17.64	26.74	29.26	16.4%	Yes

NOTES:

Operational emissions estimates made using CalEEMod 2016.3.1. See Appendix C2 for details. NO_xe (as defined by the SMAQMD) is the reduction in ROG (divided by 7), plus the reduction in NO_x.

SOURCE: ESA, 2017.

Summary

The SCC project and the SCC project and Hotel project would be consistent with the growth projections included in the City’s 2035 General Plan and the SACOG MTP/SCS. Emissions from the SCC project would be below all applicable CEQA significance thresholds. The impact from the SCC project is considered **less than significant**.

However, the SCC project and Hotel project would generate unmitigated operational emissions of NO_x that would exceed the applicable CEQA significance threshold. As shown in the AQMP, the SCC project and Hotel project would incorporate provisions and implement design features that would reduce unmitigated emissions by at least 15 percent. Therefore, because the SCC project and Hotel project would be consistent with the land use parameters established in the SACOG MTP/SCS and would incorporate provisions that would reduce unmitigated emissions by at least 15 percent, this impact is considered **less than significant**.

Mitigation Measure

Mitigation Measure 4.2-1 (SCC/Hotel)

The project applicant shall implement the emission reduction strategies contained in the SCC project and Hotel project AQMP (see Appendix C2), or other strategies which achieve equivalent reductions, as approved by the SMAQMD, in order to achieve a minimum 16.4 percent reduction in NO_{xe}. Endorsement of the AQMP by the SMAQMD shall be obtained prior to issuance of building permits. Documentation confirming implementation of the AQMP shall be provided to the SMAQMD and the City of Sacramento prior to issuance of occupancy permits.

Significance After Mitigation: The SMAQMD recommends that lead agencies require projects exceeding their significance thresholds of ROG and/or NO_x reduce their ozone precursor emissions by 15 percent. SMAQMD calculates this 15 percent using NO_{xe}, which is calculated by adding the mitigated ROG emissions (divided by 7) to mitigated NO_x emissions. Using the SMAQMD *Recommended Guidance for Land Use Emission Reduction*,¹⁷ an AQMP was prepared demonstrating that the SCC project and Hotel project could achieve the requisite percent reduction of NO_{xe} after all proposed design features have been implemented; the AQMP can be found in Appendix C2.

With the implementation of **Mitigation Measure 4.2-1** and as shown in Table 4.2-6, the SCC project and Hotel project would result in a 16.4 percent reduction in NO_{xe} emissions after mitigation. Therefore, because the SCC project and Hotel project would be consistent with the land use parameters established in the SACOG MTP/SCS and would incorporate provisions that would reduce unmitigated emissions by at least 15 percent, this impact is considered **less than significant**.

Impact 4.2-2: Construction of the proposed projects would result in short-term emissions of NO_x, PM₁₀, and PM_{2.5}.

SCC Project

Construction-related emissions are considered short-term in duration, but nevertheless can have the potential to represent a significant, adverse impact on air quality. Construction-related emissions arise from a variety of activities, including: operation of construction equipment and

¹⁷ Sacramento Metropolitan Air Quality Management District, 2016. Recommended Guidance for Land Use Emission Reductions, Version 3.3. Available: <http://www.airquality.org/LandUseTransportation/Documents/SMAQMD%20Land-Use-Emission-Reductions-FINALv3-3.pdf>. Accessed July 10, 2017.

employee vehicles, demolition and excavation for infrastructure and building foundations, architectural coatings, and paving.

There are two possible construction schedules: a phased construction schedule or a full shutdown construction schedule. Construction under the phased construction schedule would begin in April 2018. Under the full shutdown construction schedule, construction would commence January 2019. Construction is anticipated to be completed March 2021 for both potential construction schedules.

Emissions of ozone precursors (ROG and NO_x) are generated primarily by mobile sources and largely vary as a function of vehicle trips per day and the type, quantity, intensity, and frequency of heavy-duty, off-road equipment used. Typically, a large portion of construction-related ROG emissions also results from the application of asphalt and architectural coatings.

Construction-related fugitive dust emissions of particulate matter would vary from day to day, depending on the level and type of activity, silt content of the soil, and the weather. In the absence of mitigation, construction activities could result in significant and adverse quantities of dust, and, as a result, local visibility and PM₁₀ concentrations may be adversely affected on a temporary and intermittent basis during construction of the SCC project.

Construction emissions were estimated for the SCC project using the methods contained in SMAQMD's *Guide to Air Quality Assessment in Sacramento County*.¹⁸ The CalEEMod model was used to quantify construction emissions from off-road equipment, haul trucks associated with demolition and imported soils, on-road worker vehicle emissions, and vendor delivery trips. The unmitigated and mitigated construction emissions for the worst-case day for each construction year under the phased construction schedule can be found in **Tables 4.2-7** and **Table 4.2-8**, respectively. Those tables compare emissions from the phased construction schedule to SMAQMD's NO_x, PM₁₀, and PM_{2.5} construction thresholds.

The unmitigated and mitigated construction emissions for the worst-case day for each construction year under the full shutdown construction schedule can be found in **Tables 4.2-9** and **Table 4.2-10**, respectively. Those tables compare emissions from the full shutdown construction schedule to SMAQMD's NO_x, PM₁₀, and PM_{2.5} construction thresholds.

As shown in Tables 4.2-7 and 4.2-9, for both the phased and full shutdown construction schedules, maximum daily construction NO_x emissions would exceed the SMAQMD significance thresholds in 2018, and maximum daily and annual construction PM₁₀ and PM_{2.5} emissions would exceed the SMAQMD significance thresholds for each year of construction. The predominant construction activity associated with these emissions would be off-road diesel equipment and on-road haul trucks during construction of the proposed SCC project. Overall, the proposed project would have a **significant impact** related to construction emissions.

¹⁸ Sacramento Metropolitan Air Quality Management District, 2009. *Guide to Air Quality Assessment*. Adopted December 2009 and last updated September 2016.

**TABLE 4.2-7
UNMITIGATED SCC PROJECT CONSTRUCTION EMISSIONS UNDER THE PHASED CONSTRUCTION SCHEDULE**

Construction Year	NO _x (ppd)	PM ₁₀ (ppd)	PM _{2.5} (ppd)	PM ₁₀ (tpy)	PM _{2.5} (tpy)
2018	89	25	14	1	1
2019	39	5	2	< 1	< 1
2020	22	2	1	< 1	< 1
2021	20	1	1	< 1	< 1
SMAQMD Thresholds ³	85	0	0	0	0
Maximum	89	25	14	1	1
Significant (Yes or No)?	Yes	Yes	Yes	Yes	Yes

NOTES:

1. Project construction emissions estimates were made using CalEEMod version 2016.3.1. See Appendix C1 for model outputs and more detailed assumptions.
2. Values in **bold** are in excess of the applicable SMAQMD significance threshold.
3. SMAQMD has established a zero emissions threshold for PM₁₀ and PM_{2.5} when projects do not implement their Best Available Practices (BMP).

SOURCE: ESA, 2017.

**TABLE 4.2-8
MITIGATED SCC PROJECT CONSTRUCTION EMISSIONS UNDER THE PHASED CONSTRUCTION SCHEDULE^{1,2}**

Construction Year	NO _x (ppd)	PM ₁₀ (ppd)	PM _{2.5} (ppd)	PM ₁₀ (tpy)	PM _{2.5} (tpy)
2018	71	23	13	1	1
2019	31	4	1	< 1	< 1
2020	18	1	1	< 1	< 1
2021	16	1	1	< 1	< 1
SMAQMD Thresholds	85	80	82	14.6	15
Maximum	71	23	13	1	1
Significant (Yes or No)?	No	No	No	No	No

NOTES:

1. Project construction emissions estimates were made using CalEEMod version 2016.3.1. See Appendix C1 for model outputs and more detailed assumptions. Mitigated construction NO_x and PM emissions account for a 20 and 45 percent reduction in off-road equipment emissions, respectively, as a result of the implementation of Mitigation Measures 4.2-2(a) through Mitigation Measures 4.2-2(d).
2. Values in **bold** are in excess of the applicable SMAQMD significance threshold.

SOURCE: ESA, 2017.

**TABLE 4.2-9
 UNMITIGATED SCC PROJECT CONSTRUCTION EMISSIONS UNDER THE FULL SHUTDOWN CONSTRUCTION SCHEDULE**

Construction Year	NO _x (ppd)	PM ₁₀ (ppd)	PM _{2.5} (ppd)	PM ₁₀ (tpy)	PM _{2.5} (tpy)
2019	106	26	15	1	1
2020	20	1	1	< 1	< 1
2021	20	1	1	< 1	< 1
SMAQMD Thresholds ³	85	0	0	0	0
Maximum	106	26	15	1	1
Significant (Yes or No)?	Yes	Yes	Yes	Yes	Yes

NOTES:

1. Project construction emissions estimates were made using CalEEMod version 2016.3.1. See Appendix C1 for model outputs and more detailed assumptions.
2. Values in **bold** are in excess of the applicable SMAQMD significance threshold.
3. SMAQMD has established a zero emissions threshold for PM₁₀ and PM_{2.5} when projects do not implement their Best Available Practices (BMP).

SOURCE: ESA, 2017.

**TABLE 4.2-10
 MITIGATED SCC PROJECT CONSTRUCTION EMISSIONS UNDER THE FULL SHUTDOWN CONSTRUCTION SCHEDULE^{1, 2}**

Construction Year	NO _x (ppd)	PM ₁₀ (ppd)	PM _{2.5} (ppd)	PM ₁₀ (tpy)	PM _{2.5} (tpy)
2019	85	23	13	1	1
2020	16	1	1	< 1	< 1
2021	16	1	1	< 1	< 1
SMAQMD Thresholds	85	80	82	14.6	15
Maximum	85	23	13	1	1
Significant (Yes or No)?	No	No	No	No	No

NOTES:

1. Project construction emissions estimates were made using CalEEMod version 2016.3.1. See Appendix C1 for model outputs and more detailed assumptions. Mitigated construction NO_x and PM emissions account for a 20 and 45 percent reduction in off-road equipment emissions, respectively, as a result of the implementation of Mitigation Measures 4.2-2(a) through Mitigation Measures 4.2-2(d).
2. Values in **bold** are in excess of the applicable SMAQMD significance threshold.

SOURCE: ESA, 2017.

SCC Project and Hotel Project

Construction of the SCC project and Hotel project would consist of demolition, excavation for infrastructure and building foundations, building construction, and paving and landscaping installation.

Construction is anticipated to begin at the same time as the phased or full shutdown scenario and would take approximately two years (both the SCC project and the Hotel project would be built at the same time). Construction emissions were estimated using a similar methodology as used for the SCC project. The unmitigated and mitigated construction emissions for the worst-case

day for each construction year under the phased construction schedule can be found in **Tables 4.2-11** and **Table 4.2-12**, respectively. Those tables compare emissions to SMAQMD's NO_x, PM₁₀, and PM_{2.5} construction thresholds.

**TABLE 4.2-11
UNMITIGATED SCC PROJECT AND HOTEL PROJECT CONSTRUCTION EMISSIONS UNDER THE PHASED CONSTRUCTION SCHEDULE**

Construction Year	NO _x (ppd)	PM ₁₀ (ppd)	PM _{2.5} (ppd)	PM ₁₀ (tpy)	PM _{2.5} (tpy)
2018	179	36	20	2	1
2019	64	7	4	< 1	< 1
2020	33	4	2	< 1	< 1
2021	28	4	2	< 1	< 1
SMAQMD Thresholds ³	85	0	0	0	0
Maximum	179	36	20	2	1
Significant (Yes or No)?	Yes	Yes	Yes	Yes	Yes

NOTES:

1. Project construction emissions estimates were made using CalEEMod version 2016.3.1. See Appendix C1 for model outputs and more detailed assumptions.
2. Values in **bold** are in excess of the applicable SMAQMD significance threshold.
3. SMAQMD has established a zero emissions threshold for PM₁₀ and PM_{2.5} when projects do not implement their Best Available Practices (BMP).

SOURCE: ESA, 2017.

**TABLE 4.2-12
MITIGATED SCC PROJECT AND HOTEL PROJECT CONSTRUCTION EMISSIONS UNDER THE PHASED CONSTRUCTION SCHEDULE^{1,2}**

Construction Year	NO _x (ppd)	PM ₁₀ (ppd)	PM _{2.5} (ppd)	PM ₁₀ (tpy)	PM _{2.5} (tpy)
2018	143	34	18	2	1
2019	51	6	3	< 1	< 1
2020	26	4	1	< 1	< 1
2021	23	3	1	< 1	< 1
SMAQMD Thresholds	85	80	82	14.6	15.0
Maximum	143	34	18	2	1
Significant (Yes or No)?	Yes	No	No	No	No

NOTES:

1. Project construction emissions estimates were made using CalEEMod version 2016.3.1. See Appendix C1 for model outputs and more detailed assumptions. Mitigated construction NO_x and PM emissions account for a 20 and 45 percent reduction in off-road equipment emissions, respectively, as a result of the implementation of Mitigation Measures 4.2-2(a) through Mitigation Measures 4.2-2(d).
2. Values in **bold** are in excess of the applicable SMAQMD significance threshold.

SOURCE: ESA, 2017.

The unmitigated and mitigated construction emissions for the worst-case day for each construction year under the full shutdown construction schedule can be found in **Tables 4.2-13**

and **Table 4.2-14**, respectively. Those tables compare emissions to SMAQMD’s NO_x, PM₁₀, and PM_{2.5} construction thresholds.

**TABLE 4.2-13
 UNMITIGATED SCC PROJECT AND HOTEL PROJECT CONSTRUCTION EMISSIONS UNDER THE FULL SHUTDOWN
 CONSTRUCTION SCHEDULE**

Construction Year	NO _x (ppd)	PM ₁₀ (ppd)	PM _{2.5} (ppd)	PM ₁₀ (tpy)	PM _{2.5} (tpy)
2019	201	37	21	3	2
2020	31	4	2	< 1	< 1
2021	28	4	2	< 1	< 1
SMAQMD Thresholds ³	85	0	0	0	0
Maximum	201	37	21	3	2
Significant (Yes or No)?	Yes	Yes	Yes	Yes	Yes

NOTES:

1. Project construction emissions estimates were made using CalEEMod version 2016.3.1. See Appendix C1 for model outputs and more detailed assumptions.
2. Values in **bold** are in excess of the applicable SMAQMD significance threshold.
3. SMAQMD has established a zero emissions threshold for PM₁₀ and PM_{2.5} when projects do not implement their Best Available Practices (BMP).

SOURCE: ESA, 2017.

**TABLE 4.2-14
 MITIGATED SCC PROJECT AND HOTEL PROJECT CONSTRUCTION EMISSIONS UNDER THE FULL SHUTDOWN
 CONSTRUCTION SCHEDULE^{1,2}**

Construction Year	NO _x (ppd)	PM ₁₀ (ppd)	PM _{2.5} (ppd)	PM ₁₀ (tpy)	PM _{2.5} (tpy)
2019	161	34	19	3	1
2020	25	3	1	< 1	< 1
2021	23	3	1	< 1	< 1
SMAQMD Thresholds	85	80	82	14.6	15.0
Maximum	161	34	19	3	1
Significant (Yes or No)?	Yes	No	No	No	No

NOTES:

1. Project construction emissions estimates were made using CalEEMod version 2016.3.1. See Appendix C1 for model outputs and more detailed assumptions. Mitigated construction NO_x and PM emissions account for a 20 and 45 percent reduction in off-road equipment emissions, respectively, as a result of the implementation of Mitigation Measures 4.2-2(a) through Mitigation Measures 4.2-2(d).
2. Values in **bold** are in excess of the applicable SMAQMD significance threshold.

SOURCE: ESA, 2017.

As shown in Tables 4.2-11 and 4.2-13, maximum daily construction NO_x emissions would exceed the SMAQMD significance thresholds in 2018, and maximum daily and annual construction PM₁₀ and PM_{2.5} emissions would exceed the SMAQMD significance thresholds for each year of construction. Similar to the SCC project, the predominant construction activity associated with these emissions would be off-road diesel equipment and on-road haul trucks during construction of the proposed project. PM₁₀ and PM_{2.5}, in the form of fugitive dust, would

be emitted during the transport of off- and on-road vehicles on unpaved surfaces. Overall, the SCC project and Hotel project would have a **significant impact** related to construction emissions.

Summary

SMAQMD has established a zero emissions threshold for PM₁₀ and PM_{2.5}, requiring all construction projects to implement the SMAQMD's *Basic Construction Emission Control Practices* to control PM₁₀ and PM_{2.5}. With implementation of SMAQMD's Best Management Practices (BMPs), the SMAQMD's peak daily and annual thresholds increase to 80 pounds per day or 14.6 tons per year of PM₁₀ and 82 pounds per day or 15 tons per year of PM_{2.5}. Assuming implementation of such required practices, construction of the proposed projects would result in emissions of PM₁₀ and PM_{2.5} below the SMAQMD significance thresholds. However, construction of the SCC project and construction of the SCC project and Hotel project (under both the phased and full shutdown construction schedules) would generate unmitigated NO_x emissions that would exceed SMAQMD's thresholds. Consequently, construction of the proposed projects would result in a **short-term significant impact** due to NO_x emissions.

Mitigation Measure

Mitigation Measure 4.2-2(a) (SCC/Hotel)

The City shall require all construction plans to include the following required SMAQMD Basic Construction Emission Control Practices:

- *Water all exposed surfaces two times daily. Exposed surfaces include, but are not limited to soil piles, graded areas, unpaved parking areas, staging areas, and access roads.*
- *Cover or maintain at least two feet of free board space on haul trucks transporting soil, sand, or other loose material on the site. Any haul trucks that would be traveling along freeways or major roadways shall be covered.*
- *Use wet power vacuum street sweepers to remove any visible track-out mud or dirt onto adjacent public roads at least once a day. Use of dry power sweeping is prohibited.*
- *Limit vehicle speeds on unpaved roads to 15 miles per hour (mph).*
- *Pave all roadways, driveways, sidewalks, parking lots as soon as possible. In addition, building pads shall be laid immediately after grading unless seeding or soil binders are used.*
- *Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes (as required by the state airborne toxics control measure [Title 13, Section 2485 of the California Code of Regulations]). Provide clear signage that posts this requirement for workers at the entrances to the site.*
- *Maintain all construction equipment in proper working condition according to manufacturer's specifications. The equipment shall be checked by a certified mechanic and determine to be running in proper condition before it is operated.*

Mitigation Measure 4.2-2(b) (SCC/Hotel)

The City shall require all construction plans to include the following SMAQMD Enhanced Exhaust Control Practices:

- *Provide a comprehensive inventory of all off-road construction equipment, equal to or greater than 50 horsepower, that will be used an aggregate of 40 or more hours during any portion of the proposed project to the City and the SMAQMD. The inventory shall include the horsepower rating, engine model year, and projected hours of use for each piece of equipment. The construction contractor shall provide the anticipated construction timeline including start date, and name and phone number of the project manager and on-site foreman. This information shall be submitted at least four business days prior to the use of subject heavy-duty off-road equipment. The inventory shall be updated and submitted monthly throughout the duration of construction, except that an inventory shall not be required for any 30-day period in which no construction activity occurs.*
- *Provide a plan in conjunction with the equipment inventory, approved by the SMAQMD, demonstrating that the heavy-duty (50 horsepower or more) off-road vehicles to be used in the construction project, including owned, leased, and subcontractor vehicles, will achieve a project wide fleet-average 20 percent NO_x reduction and 45 percent particulate reduction compared to the most recent CARB fleet average. Acceptable options for reducing emissions may include use of late model engines, low-emission diesel products, alternative fuels, engine retrofit technology, after-treatment products, and/or other options as they become available.*
- *Emissions from all off-road diesel powered equipment used on the project site shall not exceed 40 percent opacity for more than three minutes in any one hour. Any equipment found to exceed 40 percent opacity (or Ringelmann 2.0) shall be repaired immediately, and the City and SMAQMD shall be notified within 48 hours of identification of non-compliant equipment. A visual survey of all in-operation equipment shall be made at least weekly, and a monthly summary of the visual survey results shall be submitted throughout the duration of the project, except that the monthly summary shall not be required for any 30-day period in which no construction activity occurs. The monthly summary shall include the quantity and type of vehicles surveyed as well as the dates of each survey. The SMAQMD and/or other officials may conduct periodic site inspections to determine compliance. Nothing in this measure shall supersede other SMAQMD or state rules or regulations.*
- *If at the time of granting of each building permit, the SMAQMD has adopted a more restrictive regulation applicable to construction emissions, the City may completely or partially replace this mitigation with compliance with the new regulation. Consultation with the SMAQMD prior to construction will be necessary to make this determination.*

Mitigation Measure 4.2-2(c) (SCC/Hotel)

The City shall require grading or improvement plans to include the following SMAQMD Fugitive Dust Control Practices:

- *Water exposed soil with adequate frequency for continued moist soil.*
- *Suspend excavation, grading, and/or demolition activity when wind speeds exceed 20 mph.*
- *Install wind breaks (e.g., solid fencing) on windward side(s) of construction areas.*
- *Install wheel washers for all exiting trucks, or wash off all trucks and equipment leaving the site.*
- *Treat site accesses to a distance of 100 feet from the paved road with a 6 to 12-inch layer of wood chips, mulch, or gravel to reduce generation of road dust and road dust carryout onto public roads.*
- *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 phone number of the District shall also be visible to ensure compliance.*

Mitigation Measure 4.2-2(d) (SCC/Hotel)

Prior to the issuance of a building permit, developers shall quantify the construction emissions of NO_x. The City shall require all construction plans to include the following SMAQMD off-site fee mitigation:

- *The project applicant shall pay into the SMAQMD's construction mitigation fund to offset construction-generated emissions of NO_x that exceed SMAQMD's daily emission threshold of 85 ppd. The project applicants shall coordinate with the SMAQMD for payment of fees into the Heavy-Duty Low-Emission Vehicle Program designed to reduce construction related emissions within the region. Fees shall be paid based upon the applicable current SMAQMD Fee. The applicants shall keep track of actual equipment use and their NO_x emissions so that mitigation fees can be adjusted accordingly for payment to the SMAQMD.*

Significance After Mitigation: With implementation of **Mitigation Measures 4.2-2(a), (b), (c), and (d)**, fugitive dust would be controlled, exhaust emissions would be reduced on-site, and mitigation fees would be provided to SMAQMD for project NO_x emissions that exceed the SMAQMD significance threshold. SMAQMD uses the fees to fund off-site projects and programs that would offset the project's NO_x emissions. Implementation of Mitigation Measure 4.2-2 would reduce construction emissions from the proposed project to levels shown in Tables 4.2-8, 4.2-10, 4.2-12, or 4.2-14. Emissions of NO_x, PM₁₀, and PM_{2.5} emissions would be reduced to levels below the respective thresholds. These measures would reduce project-related construction emissions of NO_x, PM₁₀, and PM_{2.5} to **less-than-significant** levels.

Impact 4.2-3: The proposed projects would result in long-term (operational) emissions of NO_x, ROG, PM₁₀, or PM_{2.5}.

SCC Project

The SCC project would increase emissions due to motor vehicle trips and onsite area and energy sources (e.g., natural gas combustion for space and water heating and landscape maintenance). Since the significance thresholds are a daily measure, the operational pollutant emissions during an event day were modeled to represent worst-case emissions, where the SCC hosts the maximum allowable number of attendees, producing the greatest volume of operational emissions. The CalEEMod computer model was used to estimate operational emissions of ROG, NO_x, PM₁₀ and PM_{2.5} in the Baseline year (2015) for an event day (assuming a full capacity convention), and results are summarized on **Table 4.2-15**. Estimated emissions are compared to the SMAQMD significance thresholds. As shown in Table 4.2-15, emissions of ROG, NO_x, PM₁₀, and PM_{2.5} would not exceed SMAQMD’s significance thresholds after the implementation of operational BMPs required by applicable regulations.

**TABLE 4.2-15
 SCC PROJECT OPERATIONAL EMISSIONS**

Source	ROG (ppd)	NO _x (ppd)	PM ₁₀ (ppd)	PM _{2.5} (ppd)	PM ₁₀ (tpy)	PM _{2.5} (tpy)
Area	2	< 1	< 1	< 1	< 0.01	< 0.01
Energy	< 1	1	< 1	< 1	0.01	0.01
Mobile	7	28	21	6	3.75	1.04
Stationary	1	1	1	1	0.16	0.16
Total	9	30	22	7	3.92	1.21
SMAQMD Thresholds ³	65	65	80	82	14.6	15
Significant (Yes or No)?	No	No	No	No	No	No

NOTES:

1. Project operational emissions estimates were made using CalEEMod version 2016.3.1. See Appendix C1 for model outputs and more detailed assumptions.
2. Values in **bold** are in excess of the applicable SMAQMD significance threshold.
3. SMAQMD has established a zero emissions threshold for PM₁₀ and PM_{2.5} when projects do not implement their Best Available Practices.

SOURCE: ESA, 2017.

All original 1972 Central Utility Plant (CUP) equipment (located in the basement of the original convention center) will be removed from service. It is anticipated approximately 10.6 million Btu (MMBTU) per hour of total heating capacity will be required for the entire building complex, including all proposed future additions. The existing boilers within the 1996 CUP addition will remain (totaling 8.8 MMBTU per hour) and a new natural gas-fired boiler (5 MMBTU per hour) would be added. The operational emissions analysis accounts for the new 5 MMBTU per hour boiler. CalEEMod default emission factors were used to determine emissions from these stationary sources.

SCC Project and Hotel Project

Similar to the SCC project, the SCC project and Hotel project would increase emissions due to motor vehicle trips and onsite area and energy sources (e.g., natural gas combustion for space and water heating and landscape maintenance). The CalEEMod computer model was used to estimate operational emissions of ROG, NO_x, PM₁₀, and PM_{2.5} in the Baseline year. Estimated emissions are compared to the SMAQMD significance thresholds in **Table 4.2-16**. As shown in Table 4.2-16, emissions of NO_x would exceed SMAQMD's significance thresholds. Emissions of ROG, PM₁₀, and PM_{2.5} would not exceed the applicable SMAQMD significance threshold.

Summary

The build-out of the SCC project would not result in emissions that would exceed the significance thresholds specified by the SMAQMD. This would result in a **less-than-significant impact** with regards to long-term operational emissions of NO_x, ROG, PM₁₀, and PM_{2.5}.

TABLE 4.2-16
SCC PROJECT AND HOTEL PROJECT OPERATIONAL EMISSIONS

Source	ROG (ppd)	NO _x (ppd)	PM ₁₀ (ppd)	PM _{2.5} (ppd)	PM ₁₀ (tpy)	PM _{2.5} (tpy)
Area	11	< 1	< 1	< 1	< 1	< 1
Energy	1	5	< 1	< 1	< 1	< 1
Mobile	19	87	74	20	13	3
Stationary	1	1	1	1	< 1	< 1
Total	31	93	75	22	13	4
SMAQMD Thresholds ³	65	65	80	82	14.6	15
Significant (Yes or No)?	No	Yes	No	No	No	No

NOTES:

1. Project operational emissions estimates were made using CalEEMod version 2016.3.1. See Appendix C1 for model outputs and more detailed assumptions.
2. Values in **bold** are in excess of the applicable SMAQMD significance threshold.
3. SMAQMD has established a zero emissions threshold for PM₁₀ and PM_{2.5} when projects do not implement their Best Available Practices.

SOURCE: ESA, 2017.

The build-out of the SCC project and Hotel project would result in the emissions of NO_x that would exceed the significance thresholds specified by the SMAQMD. This would result in a **significant impact** with regards to long-term operational emissions of NO_x. There would be a less-than-significant impact with regards to long-term operational emissions of ROG, PM₁₀, and PM_{2.5}.

As described under Impact 4.2-1, the SMAQMD recommends that lead agencies require projects considered in the SIP with emissions exceeding their daily thresholds of ROG and/or NO_x reduce their ozone precursor emissions by at least 15 percent. As shown in the AQMP, the SCC project with the Hotel project would incorporate provisions and implement design features that would reduce unmitigated emissions by at least 15 percent. However, according to SMAQMD's CEQA Guidance, projects that exceed the air districts criteria pollutant emissions thresholds, even after

demonstrating a 15 percent reduction in O₃ precursor emissions from transportation sources, are still considered significant under CEQA. Thus, this impact would remain **significant and unavoidable**.

Mitigation Measure

Mitigation Measure 4.2-3 (SCC/Hotel)

Implement Mitigation Measure 4.2-1. An AQMP has been prepared for the SCC project and Hotel project, demonstrating that the SCC project and Hotel project can achieve SMAQMD's required 15 percent reduction in ozone precursor emissions from transportation sources. Consistent with SMAQMD's CEQA Guidance, no further mitigation is required.

Significance After Mitigation: As shown in Table 4.2-6, a 16.4 percent reduction in NO_xe emissions would be achieved by simply implementing the design features proposed under the SCC project and Hotel project. However, even with achievement of the SMAQMD-required 15 percent reduction in operational mobile source emissions of NO_x, emissions associated with the SCC project and Hotel project would exceed the applicable SMAQMD threshold. Thus, this impact would remain **significant and unavoidable**.

Impact 4.2-4: Implementation of the proposed projects could result in a significant increase in CO concentrations.

CO is a localized pollutant of concern. CO is of less concern during construction because construction activities are not likely to generate substantial quantities of CO. Due to the temporary operation of equipment in any one area, construction of individual development or infrastructure projects pursuant to the proposed project would not emit CO in quantities that could pose health concerns.

SCC Project

For operation of the SCC project, traffic was analyzed to determine its potential effect on CO concentrations near surface streets and intersections in and around the area of the SCC project site. The analysis presented in Section 4.9, Transportation, shows that one intersection would operate at LOS E or worse during the AM or PM peak hours. CO modeling was conducted for this intersection using CALINE4.

Conservative assumptions were used to estimate CO concentrations. Those assumptions included the use of worst-case meteorology, the inclusion of the highest 1-hour and 8-hour background CO concentrations recorded in Sacramento during the past five years, the use of Baseline plus SCC project traffic volumes, and the use of conservative 2017 CO emission rates.

As shown in **Table 4.2-17**, the analysis finds that no exceedances of the CO 1-hour or 8-hour standard would occur at the intersection. Therefore, the operation of the proposed project would have a **less-than-significant impact** on local CO concentrations.

**TABLE 4.2-17
SCC PROJECT CARBON MONOXIDE CONCENTRATIONS AT AFFECTED INTERSECTIONS**

Intersection	CO Concentrations	
	1-hour (ppm)	8-hour (ppm)
J Street and 13 th Street	4.3	3.4
Threshold	20	9
Exceed Threshold?	No	No

NOTES:
CO concentrations include a worst case 1-hour CO background concentration of 2.1 ppm. The modeled 1-hour concentrations were converted to 8-hour concentrations using a persistence factor of 0.80. CALINE4 modeling results and additional assumptions are included in Appendix C1.

SCC Project and Hotel Project

For operation of the SCC project and Hotel project, traffic was analyzed to determine its potential to affect CO concentrations near surface streets and intersections in and around the area of the project site. The analysis presented in Section 4.9, Transportation, shows that two intersections would operate at LOS E or worse during the AM or PM peak hours. CO modeling was conducted for these intersections using CALINE4.

Conservative assumptions were used to estimate worst-case CO concentrations. Those assumptions included the use of worst-case meteorology, the inclusion of the highest 1-hour and 8-hour background CO concentrations recorded in Sacramento during the past five years, the use of Baseline plus SCC project and Hotel project traffic volumes, and the use of conservative 2017 CO emission rates.

As shown in **Table 4.2-18**, the analysis finds that no exceedances of the CO 1-hour or 8-hour standard would occur at any of the intersections. Therefore, the operation of the SCC project with the Hotel project would have a **less-than-significant impact** on local CO concentrations.

**TABLE 4.2-18
SCC PROJECT AND HOTEL PROJECT CARBON MONOXIDE CONCENTRATIONS AT AFFECTED INTERSECTIONS**

Intersection	CO Concentrations	
	1-hour (ppm)	8-hour (ppm)
J Street and 12 th Street	4.5	3.6
J Street and 13 th Street	4.6	3.7
Threshold	20	9
Exceed Threshold?	No	No

NOTES:
CO concentrations include a worst case 1-hour CO background concentration of 2.1 ppm. The modeled 1-hour concentrations were converted to 8-hour concentrations using a persistence factor of 0.80. CALINE4 modeling results and additional assumptions are included in Appendix C1.

Summary

As shown in Tables 4.2-17 and 4.2-18, at the intersections that would operate at LOS E or worse as a result of the implementation of the proposed projects, CO concentrations would not exceed the operational CO significance threshold. This impact would be **less than significant**.

Mitigation Measure

None required.

Impact 4.2-5: Implementation of the proposed projects could result in short-term and long-term exposure to Toxic Air Contaminants.

SCC Project

Construction

DPM represents the primary TAC of concern from construction activities. Construction activities would generate DPM emissions due to operation of internal combustion engines in equipment such as loaders, backhoes, and cranes, as well as haul trucks.

Exposure of sensitive receptors is the primary factor used to determine health risk. Exposure is a function of the concentration of a substance or substances in the environment and the extent of exposure. A longer exposure period would result in a higher exposure level. Thus, the risks estimated for a maximally exposed individual are higher if a fixed exposure occurs over a longer period of time.

According to the Office of Environmental Health Hazard Assessment (OEHHA), health risk assessments should be based on a 30-year exposure period.¹⁹ However, such assessments should be limited to the period/duration of activities associated with the project. Thus, the duration of the proposed construction activities under the SCC project would only constitute a small percentage of the total 30-year exposure period. Due to this relatively short period of exposure, TACs generated during construction would not be expected to result in concentrations causing significant health risks. Construction of the SCC project would result in **less-than-significant** construction-related health risks.

Projects that comply with SMAQMD Rule 902 would ensure that RACM would be disposed of appropriately and safely, minimizing the release of airborne asbestos emissions. Therefore, demolition activity, with regards to emissions of asbestos, would result in a **less-than-significant impact** to air quality.

¹⁹ Office of Environmental Health Hazard Assessment, 2015. *Guidance Manual for Preparation of Health Risk Assessments*. February 2015.

Operation

The SCC project is not anticipated to significantly increase the amount of diesel fueled vehicle miles traveled. Diesel-fueled commercial motor vehicles with gross vehicle weight ratings of greater than 10,000 pounds are subject to CARB's Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling. The rule restricts idling to no more than five consecutive minutes at any location. There are exceptions to the rule that allow for idling longer than five minutes in duration: diesel-fueled commercial motor vehicles controlling cargo temperature (such as refrigerated trucks delivering food) may idle for longer than five minutes. However, the amount of diesel-fueled commercial motor vehicles controlling cargo temperature is not expected to increase significantly due to the SCC project. Therefore, with regard to TAC emissions, operation of the SCC project would result in a **less-than-significant impact** to air quality.

SCC Project and Hotel Project

Construction

Construction of the SCC project and Hotel project would result in similar impacts as for the SCC project. The duration of the proposed construction activities for the hotel would only constitute a small percentage of the total 30-year exposure period. Due to this relatively short period of exposure, TACs generated during construction would not be expected to result in concentrations causing significant health risks. Health risks associated with construction of the hotel would be **less than significant**.

Projects that comply with SMAQMD Rule 902 would ensure that RACM would be disposed of appropriately and safely, minimizing the release of airborne asbestos emissions. Therefore, demolition activity, with regards to emissions of asbestos, would result in a **less-than-significant impact** to air quality.

Operation

The SCC project and Hotel project is not anticipated to significantly increase the amount of diesel fueled vehicle miles traveled. Diesel-fueled commercial motor vehicles with gross vehicle weight ratings of greater than 10,000 pounds are subject to CARB's Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling. The rule restricts idling to no more than five consecutive minutes at any location. There are exceptions to the rule that allow for idling longer than five minutes in duration: diesel-fueled commercial motor vehicles controlling cargo temperature (such as refrigerated trucks delivering food) may idle for longer than five minutes. However, the amount of diesel-fueled commercial motor vehicles controlling cargo temperature is not expected to increase significantly due to the SCC project and Hotel project. Therefore, with regards to TAC emissions, operation of the SCC project and Hotel project would result in a **less-than-significant impact** to air quality.

Summary

In summary, the construction duration of the SCC project and the SCC project and Hotel project would constitute a small percentage of the total 30-year exposure period used for health risk evaluations, which would result in a **less-than-significant impact**.

Operation of the SCC project and the SCC project and Hotel project would not result in any significant cancer health risks. Therefore, TACs generated during operation of the proposed SCC project and Hotel project would result in a **less-than-significant impact**.

Mitigation Measure

None required.

Cumulative Impacts

The geographic context for changes in the air quality environment due to development of the proposed project would be both regional and local. Ozone, PM₁₀, and PM_{2.5} would be the primary pollutants of regional concern, which means that the cumulative context would be comprised of the SVAB.

Particulates (fugitive dust and fine particulate matter, including DPM) and TACs could result in localized impacts in close proximity to pollutant sources. In addition to the SCC project and the SCC project and Hotel project, the other active cumulative construction projects in the immediate vicinity are development under the Downtown Specific Plan, Railyards Specific Plan, and the River District Specific Plan, the I Street Bridge Replacement project and the Powerhouse Science Center, development in the Bridge District of West Sacramento, other potential future development in Downtown Commons, and the Downtown Riverfront Streetcar project.

As described above in Impact 4.2-1, the SCC project and Hotel project would not conflict with or obstruct implementation of applicable air quality plans based on SACOG's future growth projections for the region, and thus, this impact is not discussed further in the cumulative analysis. In addition, the CO hotspot analysis detailed in Impact 4.2-4 incorporated cumulative traffic assumptions into the model in order to determine the worst case pollutant concentrations. Finally, the project would not include uses that have been identified by SMAQMD as potential sources of objectionable odors, nor would the proposed project locate odor sensitive-receptors in close proximity to substantial sources of odor. This impact would not be affected by cumulative development.

Impact 4.2-6: Implementation of the proposed projects would contribute to cumulative increases in short-term (construction) emissions.

NO_x, PM₁₀, and PM_{2.5} are the pollutants that SMAQMD has identified as the primary concerns from construction. Development of the SCC project, the Hotel project and other concurrent construction activities elsewhere in the SVAB could contribute to cumulative construction-related NO_x, PM₁₀ and PM_{2.5} emissions. Construction of the SCC project and the SCC project and Hotel

project would result in significant emissions of NO_x, PM₁₀ and PM_{2.5}, which could combine with emissions generated by other existing and future development within the SVAB to contribute to an air quality impact in the region. Since the construction emissions from the SCC project and the SCC project and Hotel project exceeds the SMAQMD significance thresholds, they would also be considered significant contributors to cumulative emissions. Consequently, the proposed SCC project and Hotel project would have a cumulatively considerable contribution to a **significant cumulative impact**.

Mitigation Measure

Mitigation Measure 4.2-6 (SCC/Hotel)

Implement Mitigation Measure 4.2-2.

Significance After Mitigation: With implementation of the above mitigation measure for the proposed projects, exhaust emissions would be reduced onsite and mitigation fees would be provided to SMAQMD to offset project NO_x emissions that exceed the SMAQMD significance threshold. SMAQMD uses these fees to fund off-site projects that would offset the project's NO_x emissions. Although cumulative NO_x emissions in the SVAB would be significant due to existing violations in the region, with implementation of **Mitigation Measure 4.2-2**, the contribution from the proposed projects would be reduced to a level that would result in a less than considerable contribution to the significant cumulative impact. Thus, this impact would be mitigated to a **less-than-significant** level.

Impact 4.2-7: The proposed projects would contribute to cumulative increases in long-term (operational) emissions of NO_x, ROG, PM₁₀, and PM_{2.5}.

ROG and NO_x are ozone precursors and are primarily of regional concern. Thus, all other mobile, area, and energy sources in the SVAB that would operate concurrently with the proposed projects would contribute to cumulative operational-related ROG and NO_x emissions. As described in Impact 4.2-3, the SCC project and Hotel project would result in substantial emissions of NO_x, which would combine with emissions generated by other existing and future development within the SVAB to contribute to an air quality violation in the region. Also, the proposed projects' exceedance of the thresholds indicates that its contribution to such a violation would be considerable. Consequently, the proposed projects' contribution to ozone precursor emissions would be cumulatively considerable, resulting in a **significant cumulative impact**.

As is also described under Impact 4.2-3, the SCC project and Hotel project would result in a 16.4 percent reduction in NO_xe emissions by implementing the design features proposed under the proposed project and would meet or exceed the 15 percent emission reduction/mitigation guideline established by the SMAQMD. Nevertheless, even with a 15 percent reduction in operational mobile source emissions, NO_x emissions associated with proposed project would exceed the applicable SMAQMD threshold, contributing to significant cumulative air emissions. Consequently, this cumulative impact would remain **potentially significant**.

Mitigation Measure

Mitigation Measure 4.2-7 (SCC/Hotel)

Implement Mitigation Measure 4.2-1. An AQMP has been prepared for the SCC project and Hotel project, demonstrating that the SCC project and Hotel project can achieve SMAQMD’s required 15 percent reduction in ozone precursor emissions from transportation sources. Consistent with SMAQMD’s CEQA Guidance, no further mitigation is required.

Significance After Mitigation: As is described under Impact 4.2-3, above, the traffic reduction and other emission reductions built into the locality of the proposed project would exceed 15 percent reduction in NO_xe emissions after mitigation. Much of the reduction would be achieved by location within the Sacramento urban core with access to a variety of transportation options. Nonetheless, NO_x emissions would still exceed the applicable SMAQMD threshold. Thus, operational emissions of NO_x would be **significant and unavoidable**.

Impact 4.2-8: The proposed projects would contribute to cumulative increases in CO concentrations.

Cumulative traffic was analyzed to determine its potential to affect CO concentrations along surface streets near sensitive receptors in the vicinity of the proposed project. A review of the traffic data shows that two intersections would operate at LOS E or worse during the AM or PM peak hours during cumulative year 2036. **Tables 4.2-19 and 4.2-20** shows the results of the cumulative CO modeling for the SCC project and the SCC project and Hotel project, respectively. As shown in Tables 4.2-19 and 4.2-20, there would be no exceedances of the CO 1-hour or 8-hour standard at any of the intersections. Thus, the proposed project would rest in a **less-than-significant cumulative impact** on local CO concentrations.

**TABLE 4.2-19
 CUMULATIVE SCC PROJECT CARBON MONOXIDE CONCENTRATIONS AT AFFECTED INTERSECTIONS**

Intersection	CO Concentrations	
	1-hour (ppm)	8-hour (ppm)
J Street and 12 th Street	4.0	3.2
J Street and 13 th Street	4.2	3.4
Threshold	20	9
Exceed Threshold?	No	No

NOTES:

CO concentrations include a worst case 1-hour CO background concentration of 2.1 ppm. The modeled 1-hour concentrations were converted to 8-hour concentrations using a persistence factor of 0.80. CALINE4 modeling results and additional assumptions are included in Appendix C1.

**TABLE 4.2-20
 CUMULATIVE SCC PROJECT AND HOTEL PROJECT CARBON MONOXIDE CONCENTRATIONS AT AFFECTED
 INTERSECTIONS**

Intersection	CO Concentrations	
	1-hour (ppm)	8-hour (ppm)
J Street and 12 th Street	4.0	3.2
J Street and 13 th Street	4.3	3.4
Threshold	20	9
Exceed Threshold?	No	No

NOTES:
 CO concentrations include a worst case 1-hour CO background concentration of 2.1 ppm. The modeled 1-hour concentrations were converted to 8-hour concentrations using a persistence factor of 0.80. CALINE4 modeling results and additional assumptions are included in Appendix C1.

Mitigation Measure

None required.

Impact 4.2-9: Implementation of the proposed projects would contribute to cumulative increases in short- and long-term exposures to Toxic Air Contaminants.

The SMAQMD considers the project-level threshold of significance for evaluating TACs generated by a project is also applicable to a project’s contribution to cumulative TACs. The evaluation of health risks from TAC represents a local rather than regional analysis. The qualitative discussion in Impact 4.2-5 shows that TACs and resulting health risks produced during construction of the proposed projects would result in a less-than-significant impact. Furthermore, health risks from the operation of the proposed projects would result in a less-than-significant impact. Therefore, since the proposed projects would not have a significant project-specific health risk, the proposed projects would also not cause or contribute to a significant cumulative health risk, and this impact would be **less than significant**.

Mitigation Measure

None required.

4.3 Biological Resources

This section examines the potential impacts of implementation of the proposed Sacramento Convention Center Expansion and Renovation project (SCC project) and the 15th/K Street Hotel project (Hotel project) on biological resources and identifies mitigation measures to avoid or reduce those impacts, where appropriate. The section includes a description of the existing environment for biological resources, and also includes a summary of the current regulatory status relevant to biological resources potentially present within and near the project sites.

No comment letters related to biological resources were received in response to the NOP circulated for the proposed project.

4.3.1 Data Sources/Methodology

The analysis in this section was based on field reconnaissance and a review of potentially occurring special-status species,¹ wildlife habitats, vegetation communities, and jurisdictional waters of the U.S. and of the State. Biological resources within the project site were identified by ESA biologist Kelly Bayne through a reconnaissance-level survey and a tree inventory conducted on June 30, 2017. The survey was conducted on foot and existing habitat types, plants, and wildlife species within and adjacent to the project sites were recorded. In addition, a tree inventory was conducted for all trees within the project sites.

Potentially jurisdictional wetlands and other waters of the U.S. do not occur within the project sites or vicinity. Prior to the survey, a review of pertinent literature and database queries were conducted for the project sites and surrounding area. The sources of reference data reviewed for this evaluation included the following:

- City of Sacramento 2035 General Plan Update Draft Master EIR (MEIR);²
- Sacramento East,³ California U.S. Geological Survey (USGS) 7.5-minute topographic quadrangle;
- U.S. Fish and Wildlife Service (USFWS) list of Federal Endangered and Threatened Species that may occur in the proposed projects location, and/or may be affected by the proposed projects;⁴
- California Department of Fish and Wildlife's (CDFW) California Natural Diversity Database (CNDDB) list of special-status species occurrences within the Sacramento East and eight

1 Species that are protected pursuant to Federal or State endangered species laws, or have been designated as Species of Special Concern by the CDFW, or species that are not included on any agency listing but meet the definition of rare, endangered or threatened species of the CEQA Guidelines section 15380(b), are collectively referred to as "special-status species."

2 City of Sacramento, 2015. *City of Sacramento 2035 General Plan Update Master Environmental Impact Report*. Certified March 3, 2015.

3 U.S. Department of the Interior, Geological Survey, 1997.

4 U.S. Fish and Wildlife Service, 2017. List of Threatened and Endangered Species that May Occur in the Proposed Project Location, and/or May be Affected by the Proposed Project. Available: www.fws.gov/sacramento/es_species/Lists/es_species_lists-overview.htm. Accessed June 21, 2017.

surrounding USGS 7.5-minute topographic quadrangles (Sacramento West, Taylor Monument, Rio Linda, Citrus Heights, Carmichael, Elk Grove, Florin, Clarksburg);⁵

- California Native Plant Society (CNPS) Inventory of Rare and Endangered Plants (v8-03) known to occur within the Sacramento East and eight surrounding USGS 7.5-minute topographic quadrangles;⁶
- Special Vascular Plants, Bryophytes, and Lichens List;⁷ and
- Special Animals List.⁸

4.3.2 Environmental Setting

Regional Setting

The study area for biological resources is comprised of the project sites and immediate vicinity. The project sites encompass approximately 6.52 acres, and are located in the City of Sacramento, within the Sacramento Valley floristic province of the Great Central Valley⁹ (see Figure 2-1 in Chapter 2, Project Description). Historically, the region supported extensive marshes, riparian woodland intermixed with oak woodland, vernal pool complexes, and native grasslands. Intensive agricultural and urban development has resulted in substantial changes and conversions of these habitats. The remaining native vegetative communities exist now as isolated remnant patches within urban and agricultural landscapes.

Project Sites

SCC Project Site

The SCC project site is located on the blocks bounded by 13th, 15th, J, and K streets, including the adjacent abandoned K Street right of way (between 13th and 14th streets) (see Figures 2-2 and 2-3 in Chapter 2, Project Description), in downtown Sacramento. St. Paul's Episcopal Church at the corner of 15th and J streets is not part of the SCC project site. In addition, the adjacent Sacramento Community Theater, located on L Street, between 13th and 14th streets, is not part of the SCC project site. The majority of the SCC project site is currently designated Public/Quasi-Public (P/QP) on the City of Sacramento 2035 General Plan Land Use and Urban Form Diagram. The 0.3-acre parcel that houses the Panattoni Building is designated Central Business District (CBD). The existing Sacramento Convention Center is made up of two buildings, the west building constructed in 1974 and the east building constructed in 1992. The SCC project site includes an approximately 1.5 acre Activities Plaza located between the Convention Center and

5 California Department of Fish and Wildlife, 2017. California Natural Diversity Database RareFind 5 personal computer program. Available: <https://www.wildlife.ca.gov/Data/CNDDDB/Maps-and-Data>. Accessed June 21, 2017. Data set expires December 2, 2017.

6 California Native Plant Society, 2017. Inventory of Rare and Endangered Plants (online edition, v8-03). California Native Plant Society. Sacramento, CA. Accessed June 21, 2017.

7 California Department of Fish and Wildlife, 2017. California Natural Diversity Database. Special Vascular Plants, Bryophytes, and Lichens List. Quarterly publication. 126 pp. Data dated April 2017.

8 California Department of Fish and Wildlife, 2017. California Natural Diversity Database. Special Animals List. Periodic publication. 51 pp. Data dated April 2017.

9 Baldwin, B. G., D. H. Goldman, D. J. Keil, R. Patterson, T. J. Rosatti, and D. H. Wilken, editors, 2012. *The Jepson manual: vascular plants of California, second edition*. University of California Press, Berkeley. p. 41.

the Sacramento Community Theater. The Panattoni Building is located on an approximately one-third acre parcel facing 15th Street. The SCC project site is generally flat with an elevation of approximately 20 feet above mean sea level.

Urban vegetation associated with the SCC project site consists of landscaping, ornamental shrubs, and shade trees within a plaza south of the existing convention center and along sidewalks. Adjacent land uses consist of office and hotel buildings as well as retail space.

Hotel Project Site

The Hotel project site is a paved surface parking lot with 72 parking stalls located south of the Panattoni Building, and is flat with an elevation of approximately 20 feet above mean sea level. The parking lot is bordered on its north (K Street) and east (15th Street) perimeters by low-lying manicured hedges, sidewalks, and ornamental street trees. Adjacent land uses consist of office and hotel buildings as well as retail space.

Habitat Types

Wildlife habitats are generally described in terms of vegetation types along with landform, disturbance regime, and other unique environmental characteristics. Vegetation types are assemblages of plant species that occur together in the same area and are repeated across landscapes, and are defined by species composition and relative abundance. Wildlife habitats generally correspond to vegetation types. Those described in this document refer to the CDFW's *A Guide to Wildlife Habitats of California*¹⁰ that is used in CDFW's California Wildlife Habitat Relationship System.

Urban/Developed

This is the only habitat type within both project sites and consists of buildings, sidewalks, parking area, and other built infrastructure. Urban vegetation associated with the project sites consists of landscaping, including ornamental shrubs, shade trees and hedges. The project sites do not support natural habitats. Landscaped vegetation at the project sites provides habitat for common species of birds such as house sparrow (*Passer domesticus*), house finch (*Haemorhous mexicanus*), and western scrub jay (*Aphelocoma californica*).

Special-Status Species

Special-status species are legally protected under the state and federal Endangered Species Acts or other regulations or are species that are considered sufficiently rare by the scientific community to qualify for such listing. These species are in the following categories:

1. Species listed or proposed for listing as threatened or endangered under the federal Endangered Species Act (FESA) (50 Code of Federal regulations [CFR] 17.12 [listed plants], 17.11 [listed animals] and various notices in the Federal Register [FR] [proposed species]);

¹⁰ Mayer, Kenneth E., and W.F. Laudenslayer, Jr., 1988. *A Guide to Wildlife Habitats of California*. State of California Resources Agency, Department of Fish and Game. Sacramento, CA. 166 pp. Available: www.wildlife.ca.gov/Data/CWHR/Wildlife-Habitats. Accessed April 12, 2017.

2. Species that are candidates for possible future listing as threatened or endangered under the federal Endangered Species Act (61 FR 40, February 28, 1996);
3. Species listed or proposed for listing by the State of California as threatened or endangered under the California Endangered Species Act (CESA) (14 California Code of Regulations [CCR] 670.5);
4. Plants listed as rare or endangered under the California Native Plant Protection Act (California Fish and Game Code, Section 1900 et seq.);
5. Animal species of special concern to CDFW;
6. Animals fully protected under Fish and Game Code (California Fish and Game Code, Sections 3511 [birds], 4700 [mammals], and 5050 [reptiles and amphibians]);
7. Species that meet the definitions of rare and endangered under CEQA. CEQA Section 15380 provides that a plant or animal species may be treated as “rare or endangered” even if not on one of the official lists (State CEQA Guidelines, Section 15380); and
8. Plants considered under the CDFW and CNPS to be “rare, threatened or endangered in California” (California Rare Plant Rank [CRPR] 1A, 1B, and 2) as well as CRPR Rank 3 and 4¹¹ plant species.

A list of special-status species that have the potential to occur within the vicinity of the project sites was compiled based on data in the CNDDDB,¹² the USFWS list of Federal Endangered and Threatened Species that Occur in or may be Affected by the Projects,¹³ and the CNPS Inventory of Rare and Endangered Plants (see **Appendix D**).¹⁴ A list of special-status species, their general habitat requirements, and an assessment of their potential to occur within the vicinity of the project sites is provided below in **Table 4.3-1**. Recorded observations of special-status species within five miles of the project sites are shown in **Figure 4.3-1**.¹⁵

¹¹ CRPR 3 and 4 plants may be analyzed under CEQA §15380 if sufficient information is available to assess potential impacts to such plants. Factors such as regional rarity vs. statewide rarity should be considered in determining whether cumulative impacts to a CRPR 3 or 4 plant are significant even if individual project impacts are not. CRPR 3 and 4 plants may be considered regionally significant if, for example, the occurrence is located at the periphery of the species’ range, or exhibits unusual morphology, or occurs in an unusual habitat/substrate. For these reasons, CRPR 3 and 4 plants should be included in the special-status species analysis. CRPR 3 and 4 plants are also included in the California Natural Diversity Database Special Plants, Bryophytes, and Lichens List. [Refer to the current online published list available at: <http://www.dfg.ca.gov/biogeodata>.]

¹² California Department of Fish and Wildlife, 2017. California Natural Diversity Database (CNDDDB) RareFind 5 personal computer program. Available: <https://www.wildlife.ca.gov/Data/CNDDDB/Maps-and-Data>. Accessed June 21, 2017. Data set expires December 2, 2017.

¹³ U.S. Fish and Wildlife Service, 2017. List of Threatened and Endangered Species that May Occur in the Proposed Project Location, and/or May be Affected by the Proposed Project. Available: www.fws.gov/sacramento/es_species/Lists/es_species_lists-overview.htm. Accessed June 21, 2017.

¹⁴ California Native Plant Society, 2017. *Inventory of Rare and Endangered Plants (online edition, v8-03)*. Available: <http://www.rareplants.cnps.org/>. Accessed June 21, 2017.

¹⁵ California Department of Fish and Wildlife, 2017. California Natural Diversity Database (CNDDDB) RareFind 5 personal computer program. Available: <https://www.wildlife.ca.gov/Data/CNDDDB/Maps-and-Data>. Accessed June 21, 2017. Data set expires December 2, 2017.

**TABLE 4.3-1
SPECIAL-STATUS SPECIES WITH THE POTENTIAL TO OCCUR AT THE PROJECT SITES**

Scientific Name	Common Name	Listing Status: Federal/State/Other	Habitat Description	Potential for Occurrence within the Project Sites
Amphibians				
<i>Ambystoma californiense</i>	California tiger salamander	FT/ST,WL/--	Grassland, oak savanna, and edges of mixed woodland and lower elevation coniferous forest. Requires temporary breeding ponds to breed. Spends most time underground in animal burrows, especially those of California ground squirrels, valley pocket gophers, and moles. Requires both suitable upland terrestrial habitat with mammal burrows for refuge and temporary breeding ponds in order to survive and reproduce.	Unlikely. No suitable habitat present within the project sites.
<i>Rana draytonii</i>	California red-legged frog	FT/CSC/--	Found mainly near ponds in humid forests, woodlands, grasslands, coastal scrub, and streamsides with plant cover. Most common in lowlands or foothills. Frequently found in woods adjacent to streams. Breeding habitat is in permanent or ephemeral water sources; lakes, ponds, reservoirs, slow streams, marshes, bogs, and swamps. Ephemeral wetland habitats require animal burrows or other moist refuges for estivation when the wetlands are dry.	Unlikely. No suitable habitat present within the project sites.
<i>Spea hammondi</i>	western spadefoot	--/CSC/--	Occurs primarily in grassland habitats, but can be found in valley-foothill hardwood woodlands. Vernal pools are essential for breeding and egg-laying.	Unlikely. No suitable habitat present within the project sites.
Birds				
<i>Accipiter cooperii</i>	Cooper's hawk	--/WL/--	Woodland, chiefly of open, interrupted or marginal type. Nest sites mainly in riparian growths of deciduous trees, as in canyon bottoms on river flood-plains. Also nests in live oaks.	Low. No suitable habitat present within the project sites. May nest in large trees in vicinity of project sites.
<i>Agelaius tricolor</i>	tricolored blackbird	--/SC,CSC/--	Highly colonial species, most numerous in central valley & vicinity. Largely endemic to California. Requires open water, protected nesting substrate, & foraging area with insect prey within a few km of the colony.	Unlikely. No suitable habitat present within the project sites.
<i>Aquila chrysaetos</i>	golden eagle	--/FP,WL/--	Rolling foothills, mountain areas, sage-juniper flats, & desert. Cliff-walled canyons provide nesting habitat in most parts of range; also, large trees in open areas.	Unlikely. No suitable habitat present within the project sites.
<i>Ardea alba</i>	great egret	--/--/--	Colonial nester in large trees. Rookery sites located near marshes, tide-flats, irrigated pastures, and margins of rivers and lakes.	Unlikely. No suitable habitat present within the project sites.

**TABLE 4.3-1
 SPECIAL-STATUS SPECIES WITH THE POTENTIAL TO OCCUR AT THE PROJECT SITES**

Scientific Name	Common Name	Listing Status: Federal/State/Other	Habitat Description	Potential for Occurrence within the Project Sites
<i>Ardea herodias</i>	great blue heron	--/--/--	Colonial nester in tall trees, cliff sides, and sequestered spots on marshes. Rookery sites in close proximity to foraging areas: marshes, lake margins, tide-flats, rivers and streams, wet meadows.	Unlikely. No suitable habitat present within the project sites.
<i>Athene cunicularia</i>	burrowing owl	--/CSC/--	Forages in open plains, grasslands, and prairies; typically nests in abandoned small mammal burrows.	Unlikely. No suitable habitat present within the project sites.
<i>Buteo regalis</i>	ferruginous hawk	--/WL/--	Open grasslands, sagebrush flats, desert scrub, low foothills & fringes of pinyon-juniper habitats. Eats mostly lagomorphs, ground squirrels, and mice. Population trends may follow lagomorph population cycles.	Unlikely. No suitable habitat present within the project sites.
<i>Buteo swainsoni</i>	Swainson's hawk	--/ST/--	Breeds in grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees. Requires adjacent suitable foraging areas such as grasslands, or alfalfa or grain fields supporting rodent populations.	Low. No suitable habitat present within the project sites. May nest in large trees in vicinity of project sites.
<i>Coccyzus americanus occidentalis</i>	western yellow-billed cuckoo	FT/SE/--	Riparian forest nester, along the broad, lower flood-bottoms of larger river systems. Nests in riparian jungles of willow, often mixed with cottonwoods, w/lower story of blackberry, nettles, or wild grape.	Unlikely. No suitable habitat present within the project sites.
<i>Egretta thula</i>	snowy egret	--/--/--	Colonial nester, with nest sites situated in protected beds of dense tule. Rookery sites situated close to foraging areas: marshes, tidal-flats, streams, wet meadows, and borders of lakes.	Unlikely. No suitable habitat present within the project sites.
<i>Elanus leucurus</i>	white-tailed kite	--/FP/--	Rolling foothills and valley margins with scattered oaks and river bottomlands or marshes next to deciduous woodland. Open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching.	Unlikely. No suitable habitat present within the project sites.
<i>Falco columbarius</i>	merlin	--/WL/--	Seacoast, tidal estuaries, open woodlands, savannahs, edges of grasslands & deserts, farms & ranches. Clumps of trees or windbreaks are required for roosting in open country.	Unlikely. No suitable habitat present within the project sites.

**TABLE 4.3-1
SPECIAL-STATUS SPECIES WITH THE POTENTIAL TO OCCUR AT THE PROJECT SITES**

Scientific Name	Common Name	Listing Status: Federal/State/Other	Habitat Description	Potential for Occurrence within the Project Sites
<i>Melospiza melodia</i>	song sparrow ("Modesto" population)	--/CSC/--	Emergent freshwater marshes dominated by tule (<i>Scirpus</i> spp., <i>Schoenoplectus</i> spp.) and cattail (<i>Typha</i> spp.) as well as riparian willow (<i>Salix</i> spp.) thickets. Also nest in riparian forests of valley oak (<i>Quercus lobata</i>) with a sufficient understory of blackberry (<i>Rubus</i> spp.), along vegetated irrigation canals and levees, and in recently planted valley oak restoration sites.	Unlikely. No suitable habitat present within the project sites.
<i>Nycticorax nycticorax</i>	black-crowned night heron	--/--/--	Forages in marshes swamps and wooded streams; nests in thickets or reedbeds.	Unlikely. No suitable habitat present within the project sites.
<i>Phalacrocorax auritus</i>	double-crested cormorant	--/WL/--	Colonial nester on coastal cliffs, offshore islands, & along lake margins in the interior of the state.	Unlikely. No suitable habitat present within the project sites.
<i>Progne subis</i>	purple martin	--/CSC/--	Inhabits woodlands, low elevation coniferous forest of Douglas-fir (<i>Pseudotsuga menziesii</i>), ponderosa pine (<i>Pinus ponderosa</i>), and Monterey pine (<i>Pinus radiata</i>). Nests primarily in old woodpecker cavities, also in human-made structures. Nest often located in tall, isolated tree/snag.	Unlikely. No suitable habitat present within the project sites.
<i>Riparia riparia</i>	bank swallow	--/ST/--	Colonial nester; nests primarily in riparian and other lowland habitats west of the desert. Requires vertical banks/cliffs with fine-textured/sandy soils near streams, rivers, lakes, ocean to dig nesting hole.	Unlikely. No suitable habitat present within the project sites.
<i>Vireo bellii pusillus</i>	least Bell's vireo	FE/SE/--	Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms; below 2000 ft. Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, <i>Baccharis</i> sp., and mesquite.	Unlikely. No suitable habitat present within the project sites.
<i>Xanthocephalus xanthocephalus</i>	yellow-headed blackbird	--/CSC/--	Nests in freshwater emergent wetlands with dense vegetation and deep water. Often along borders of lakes or ponds. Nests only where large insects such as <i>Odonata</i> are abundant, nesting timed with maximum emergence of aquatic insects.	Unlikely. No suitable habitat present within the project sites.
Fish				
<i>Archoplites interruptus</i>	Sacramento perch	--/CSC/--	Historically found in the sloughs, slow-moving rivers, and lakes of the central valley. Prefers warm water. Aquatic vegetation is essential for young. Tolerates wide range of physio-chemical water conditions.	Unlikely. No suitable habitat present within the project sites.

**TABLE 4.3-1
SPECIAL-STATUS SPECIES WITH THE POTENTIAL TO OCCUR AT THE PROJECT SITES**

Scientific Name	Common Name	Listing Status: Federal/State/Other	Habitat Description	Potential for Occurrence within the Project Sites
<i>Hypomesus transpacificus</i>	Delta smelt	FT/SE/--	Open surface waters in the Sacramento/San Joaquin Delta. Seasonally in Suisun Bay, Carquinez Strait and San Pablo Bay. Found in Delta estuaries with dense aquatic vegetation and low occurrence of predators. May be affected by downstream sedimentation.	Unlikely. No suitable habitat present within the project sites.
<i>Oncorhynchus mykiss</i>	Central Valley steelhead	FT/--/--	This ESU enters the Sacramento and San Joaquin Rivers and their tributaries from July to May; spawning from December to April. Young move to rearing areas in and through the Sacramento and San Joaquin Rivers, Delta, and San Pablo and San Francisco Bays.	Unlikely. No suitable habitat present within the project sites.
<i>Oncorhynchus tshawytscha</i>	chinook salmon - Sacramento River winter-run ESU	FT/SE/--	Adult nos. Depend on pool depth & volume, amount of cover, & proximity to gravel. Water temps >27 c is lethal to adults federal listing refers to pops spawning in Sacramento River & tributaries.	Unlikely. No suitable habitat present within the project sites.
<i>Oncorhynchus tshawytscha</i>	chinook salmon - Central Valley spring-run ESU	FT/ST/--	Sacramento river below Keswick Dam. Spawns in the Sacramento River but not in tributary streams. Requires clean, cold water over gravel beds with water temperatures between 6 & 14 c for spawning.	Unlikely. No suitable habitat present within the project sites.
<i>Pogonichthys macrolepidotus</i>	Sacramento splittail	--/CSC/--	Endemic to the lakes and rivers of the Central Valley, but now confined to the delta, Suisun Bay & associated marshes. Slow moving river sections, dead end sloughs. Requires flooded vegetation for spawning & foraging for young.	Unlikely. No suitable habitat present within the project sites.
<i>Spirinchus thaleichthys</i>	longfin smelt	FC/ST,CSC/--	Euryhaline, nektonic & anadromous. Found in open waters of estuaries, mostly in middle or bottom of water column. Prefer salinities of 15-30 ppt, but can be found in completely freshwater to almost pure seawater.	Unlikely. No suitable habitat present within the project sites.
Invertebrates				
<i>Andrena subapasta</i>	vernal pool andrenid bee	--/--/--	Collects pollen primarily from <i>Arenaria californica</i> but also <i>Orthocarpus erianthus</i> & <i>Lasthenia</i> sp. Nests in uplands near vernal pools.	Unlikely. No suitable habitat present within the project sites.
<i>Branchinecta lynchi</i>	vernal pool fairy shrimp	FT/--/--	Endemic to the grasslands of the central valley, central coast mountains, and south coast mountains, in astatic rain-filled pools. Inhabit small, clear-water sandstone-depression pools and grassed swale, earth slump, or basalt-flow depression pools.	Unlikely. No suitable habitat present within the project sites.

**TABLE 4.3-1
SPECIAL-STATUS SPECIES WITH THE POTENTIAL TO OCCUR AT THE PROJECT SITES**

Scientific Name	Common Name	Listing Status: Federal/State/Other	Habitat Description	Potential for Occurrence within the Project Sites
<i>Branchinecta mesovallensis</i>	midvalley fairy shrimp	--/--/--	Vernal pools in the Central Valley.	Unlikely. No suitable habitat present within the project sites.
<i>Cicindela hirticollis abrupta</i>	Sacramento Valley tiger beetle	--/--/--	Sandy floodplain habitat in the Sacramento valley. No beetles located during intensive 2001-2004 surveys. Requires fine to medium sand, terraced floodplains or low sandy water edge flats.	Unlikely. No suitable habitat present within the project sites.
<i>Desmocerus californicus dimorphus</i>	valley elderberry longhorn beetle	FT/--/--	Occurs only in the Central Valley of California, in association with blue elderberry (<i>Sambucus nigra</i> ssp. <i>caerulea</i>). Prefers to lay eggs in elderberries 2-8 inches in diameter; some preference shown for "stressed" elderberries.	Unlikely. No suitable habitat present within the project sites.
<i>Dumontia oregonensis</i>	hairy water flea	--/--/--	Vernal pools. In California, known only from Mather Field.	Unlikely. No suitable habitat present within the project sites.
<i>Hydrochara rickseckeri</i>	Ricksecker's water scavenger beetle	--/--/--	Aquatic.	Unlikely. No suitable habitat present within the project sites.
<i>Lepidurus packardii</i>	vernal pool tadpole shrimp	FE/--/--	Inhabits vernal pools and swales in the Sacramento Valley containing clear to highly turbid water. Pools commonly found in grass bottomed swales of unplowed grasslands. Some pools are mud-bottomed & highly turbid.	Unlikely. No suitable habitat present within the project sites.
<i>Linderiella occidentalis</i>	California linderiella	--/--/--	Seasonal pools in unplowed grasslands with old alluvial soils underlain by hardpan or in sandstone depressions. Water in the pools has very low alkalinity, conductivity, and TDS.	Unlikely. No suitable habitat present within the project sites.
Mammals				
<i>Lasiurus cinereus</i>	hoary bat	--/--/--	Prefers open habitats or habitat mosaics, with access to trees for cover and open areas or habitat edges for feeding. Roosts in dense foliage of medium to large trees. Feeds primarily on moths.	Unlikely. No suitable habitat present within the project sites.
<i>Taxidea taxus</i>	American badger	--/CSC/--	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats, with friable soils. Needs sufficient food, friable soils & open, uncultivated ground. Preys on burrowing rodents. Digs burrows.	Unlikely. No suitable habitat present within the project sites.

**TABLE 4.3-1
 SPECIAL-STATUS SPECIES WITH THE POTENTIAL TO OCCUR AT THE PROJECT SITES**

Scientific Name	Common Name	Listing Status: Federal/State/Other	Habitat Description	Potential for Occurrence within the Project Sites
Reptiles				
<i>Emys marmorata</i>	western pond turtle	--/CSC/--	A thoroughly aquatic turtle of ponds, marshes, rivers, streams & irrigation ditches, usually with aquatic vegetation, below 6000 FT elevation. Need basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.	Unlikely. No suitable habitat present within the project sites.
<i>Thamnophis gigas</i>	giant garter snake	FT/ST/--	Prefers freshwater marsh and low gradient streams. Has adapted to drainage canals & and irrigation ditches. This is the most aquatic of the garter snakes in California.	Unlikely. No suitable habitat present within the project sites.
Plants				
<i>Astragalus tener</i> var. <i>ferrisiae</i>	Ferris' milk-vetch	--/--/1B.1	Meadows, valley and foothill grassland. Subalkaline flats on overflow land in the central valley; usually seen in dry, adobe soil. 15-245 feet. Blooms April through May	Unlikely. No suitable habitat present within the project sites.
<i>Carex comosa</i>	bristly sedge	--/--/2B.1	Marshes and swamps. Lake margins, wet places; site below sea level is on a delta island. 16-3,297 feet. Blooms May through September.	Unlikely. No suitable habitat present within the project sites.
<i>Centromadia parryi</i> subsp. <i>rudis</i>	Parry's rough tarplant	--/--/4.2	Alkaline, vernal mesic, seeps, sometimes roadsides. Valley and foothill grassland, vernal pools. 0-328 feet.	Unlikely. No suitable habitat present within the project sites.
<i>Cuscuta obtusiflora</i> var. <i>glandulosa</i>	Peruvian dodder	--/--/2B.2	Marshes and swamps (freshwater). Freshwater marsh. 50-918 feet. Blooms July through October.	Unlikely. No suitable habitat present within the project sites.
<i>Downingia pusilla</i>	dwarf downingia	--/--/2B.2	Vernal pools in foothill woodland and valley grassland. 0-997 feet. Blooms March through May.	Unlikely. No suitable habitat present within the project sites.
<i>Fritillaria agrestis</i>	stinkbells	--/--/4.2	Cismontane woodland, chaparral, valley and foothill grassland. Usually on serpentine; mostly found in nonnative grassland or in grassy openings in clay soil. 30-5,100 feet.	Unlikely. No suitable habitat present within the project sites.
<i>Gratiola heterosepala</i>	Boggs Lake hedge-hyssop	--/SE/1B.2	Marshes and swamps (freshwater), vernal pools. Clay soils; usually in vernal pools, sometimes on lake margins. 32-7,791 feet. Blooms April through August.	Unlikely. No suitable habitat present within the project sites.
<i>Hesperevax caulescens</i>	hogwallow starfish	--/--/4.2	Valley and foothill grassland (mesic, clay), vernal pools (shallow). 0-1657 feet.	Unlikely. No suitable habitat present within the project sites.

**TABLE 4.3-1
SPECIAL-STATUS SPECIES WITH THE POTENTIAL TO OCCUR AT THE PROJECT SITES**

Scientific Name	Common Name	Listing Status: Federal/State/Other	Habitat Description	Potential for Occurrence within the Project Sites
<i>Hibiscus lasiocarpus</i> <i>var. occidentalis</i>	woolly rose-mallow	--/1B.2	Marshes and swamps (freshwater). Moist, freshwater-soaked river banks & low peat islands in sloughs; can also occur on riprap and levees. In California, known from the delta watershed. 0-393 feet. Blooms June through September.	Unlikely. No suitable habitat present within the project sites.
<i>Juglans hindsii</i>	Northern California black walnut	--/1B.1	Riparian forest, riparian woodland. Few extant native stands remain; widely naturalized. Native stands are now only known to occur in Napa and Contra Costa counties. Deep alluvial soil associated with a creek or stream. 0-1,443 feet. Blooms April through May.	Unlikely. No suitable habitat present within the project sites.
<i>Juncus leiospermus</i> <i>var. ahartii</i>	Ahart's dwarf rush	--/1B.2	Vernal pools, valley and foothill grassland. Restricted to the edges of vernal pools. 98-751 feet. Blooms March through May.	Unlikely. No suitable habitat present within the project sites.
<i>Legenere limosa</i>	legenere	--/1B.1	Vernal pools. Many historical occurrences are extirpated. In beds of vernal pools. 3-2,887 feet. Blooms April through June.	Unlikely. No suitable habitat present within the project sites.
<i>Lepidium latipes</i> <i>var. heckardii</i>	Heckard's pepper-grass	--/1B.2	Valley and foothill grassland. Grassland, and sometimes vernal pool edges. Alkaline soils. 6-656 feet. Blooms March through May.	Unlikely. No suitable habitat present within the project sites.
<i>Lilaeopsis masonii</i>	Mason's lilaeopsis	--/SR/1B.1	Freshwater and brackish marshes, riparian scrub. Tidal zones, in muddy or silty soil formed through river deposition or river bank erosion. 0-32 feet. Blooms April through November.	Unlikely. No suitable habitat present within the project sites.
<i>Navarretia eriocephala</i>	hoary navarretia	--/4.3	Vernally mesic. Cismontane woodland, valley and foothill grassland. 344-1312 feet.	Unlikely. No suitable habitat present within the project sites.
<i>Orcuttia tenuis</i>	slender Orcutt grass	FT/SE/1B.1	Vernal pools. Often in gravelly pools. 35-1760 m. Blooms May through September (October).	Unlikely. No suitable habitat present within the project sites.
<i>Orcuttia viscida</i>	Sacramento Orcutt grass	FE/SE/1B.1	Vernal pools. 98-328 feet. Blooms April through July (September).	Unlikely. No suitable habitat present within the project sites.
<i>Sagittaria sanfordii</i>	Sanford's arrowhead	--/1B.2	Marshes and swamps. In standing or slow-moving freshwater ponds, marshes, and ditches. 0-2,000 feet. Blooms May through October.	Unlikely. No suitable habitat present within the project sites.
<i>Symphotrichum lentum</i>	Suisun Marsh aster	--/1B.2	Marshes and swamps (brackish and freshwater). Most often seen along sloughs with <i>Phragmites</i> sp., <i>Scirpus</i> sp., blackberry, <i>Typha</i> sp., etc. 0-10 feet. Blooms May through November.	Unlikely. No suitable habitat present within the project sites.

**TABLE 4.3-1
SPECIAL-STATUS SPECIES WITH THE POTENTIAL TO OCCUR AT THE PROJECT SITES**

Scientific Name	Common Name	Listing Status: Federal/State/Other	Habitat Description	Potential for Occurrence within the Project Sites
<i>Trifolium hydrophilum</i>	saline clover	--/--/1B.2	Marshes and swamps, valley and foothill grassland, vernal pools. Mesic, alkaline sites. 0-984 feet. Blooms April through June.	Unlikely. No suitable habitat present within the project sites.
Sensitive Vegetation Communities				
Elderberry savanna	--	--	Open to moderately closed stands characterized by <i>Sambucus Mexicana</i> . Understory typically dominated by grasses. Occurs in association with remnant riparian forest vegetation.	Unlikely. Habitat not present within or directly adjacent to the project sites.
Great Valley Cottonwood Riparian Forest	--	--	A dense, broadleaved, winter deciduous riparian forest dominated by Fremont cottonwood (<i>Populus fremontii</i>) and Goodding's black willow (<i>Salix gooddingii</i>). The understory is usually dense, with abundant vegetative reproduction of canopy dominants and California wild grape is the most conspicuous vine. Habitat experiences frequent flooding.	Unlikely. Habitat not present within or directly adjacent to the project sites.
Great Valley Valley Oak Riparian Forest	--	--	Medium to tall (rarely to 100 feet) broadleaved, winter deciduous, closed-canopy riparian forest dominated by Valley oak (<i>Quercus lobata</i>). Understories include scattered Oregon ash, Northern California black walnut, and western sycamore as well as young valley oaks. Vines are relatively scattered throughout the shady understory but quickly become conspicuous occupying gaps where light is available.	Unlikely. Habitat not present within or directly adjacent to the project sites.
Northern Claypan Vernal Pool	--	--	Similar to Northern Hardpan Vernal Pools, but with less topographical relief, and usually lower overall cover. Pools range in size from the small (a few square meters) to quite large (covering several hectares).	Unlikely. Habitat not present within or directly adjacent to the project sites.
Northern Hardpan Vernal Pool	--	--	Community is dominated by annual grasses and herbs that grow in and out of the water. Germination and growth begin with winter rains, often continuing even when inundated. These pools gradually evaporate during spring, leaving concentric bands of vegetation that colorfully encircle the drying pools.	Unlikely. Habitat not present within or directly adjacent to the project sites.

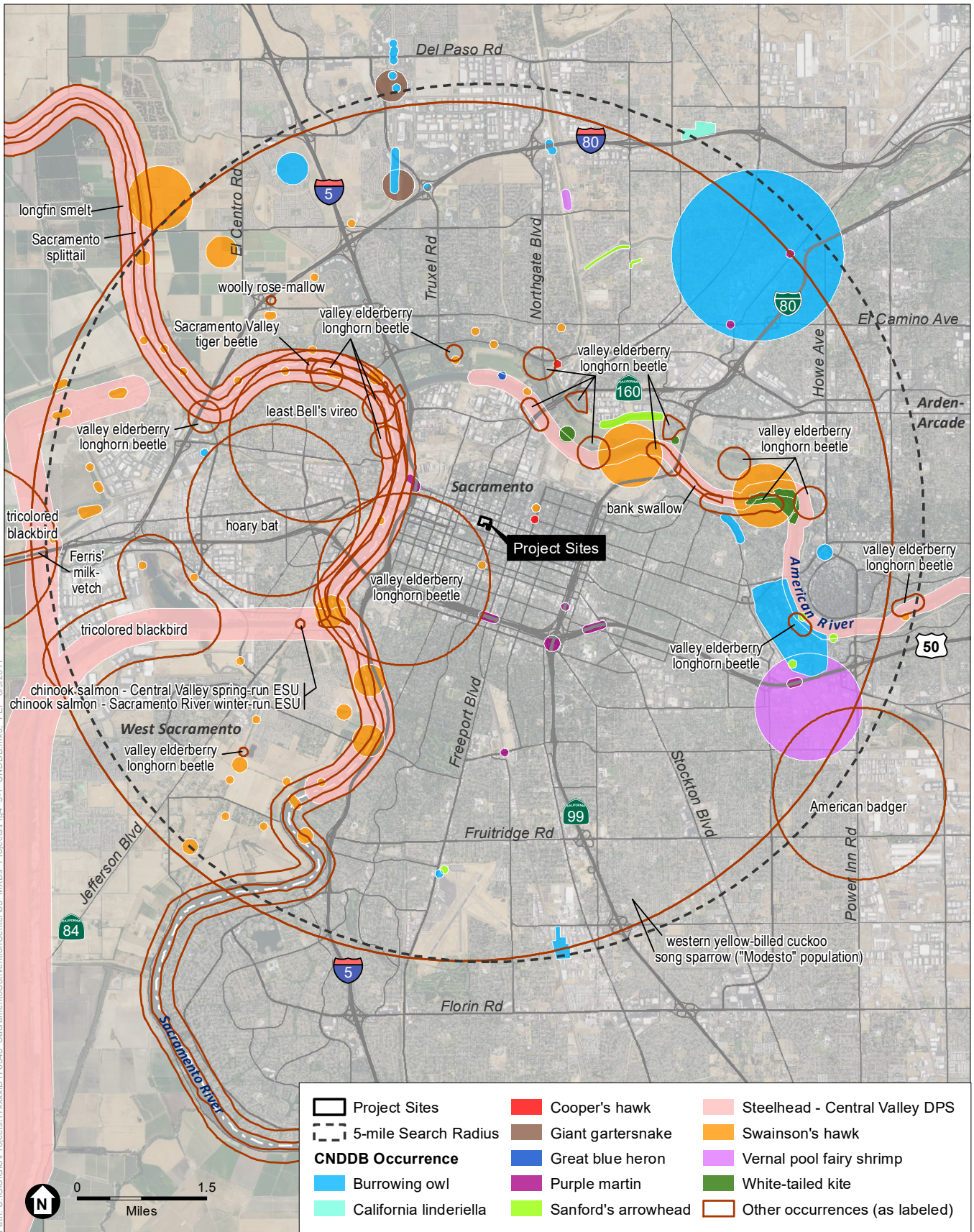
**TABLE 4.3-1
SPECIAL-STATUS SPECIES WITH THE POTENTIAL TO OCCUR AT THE PROJECT SITES**

Scientific Name	Common Name	Listing Status: Federal/State/Other	Habitat Description	Potential for Occurrence within the Project Sites
Northern Volcanic Mudflow Vernal Pool	--	--	Pools occur on Tertiary volcanic mudflows called lahars. Pools form after winter rains in settings of impeded water over rock-bound depressions. The pools are small, forming in irregular depressions in gently sloping surfaces. Habitat is seasonally flooded and seasonally saturated.	Unlikely. Habitat not present within or directly adjacent to the project sites.

KEY:

*Federal: (USFWS)**FE = Listed as Endangered by the Federal Government**FT = Listed as Threatened by the Federal Government**FC = Candidate for listing by the Federal Government**(PD) = Proposed for Delisting**State: (CDFW)**SE = Listed as Endangered by the State of California**ST = Listed as Threatened by the State of California**SR = Listed as Rare by the State of California (plants only)**SC = Candidate for listing by the State of California**CSC = California Species of Special Concern**FP = CDFW Fully Protected Species**WL = Species on the CDFW Watch List**CPRR: (California Rare Plant Rank)**Rank 1A = Plants presumed extinct in California**Rank 1B = Plants rare, threatened, or endangered in California and elsewhere**Rank 2 = Plants rare, threatened, or endangered in California but more common elsewhere**Rank 3 = Need more information**Rank 4 = Limited distribution – a watch list**0.1 = Seriously endangered in California**0.2 = Fairly endangered in California**0.3 = Not very endangered in California**-- = No Listing*

SOURCES: CDFW, 2017a; CNPS, 2017; and USFWS, 2017a.



SOURCE: USDA, 2016; CDFW, 2017; ESA, 2017

Sacramento Convention Center Expansion EIR

Figure 4.3-1
Special-status Species within a 5-mile Search Radius of the Project Sites

The “Potential for Occurrence” category is defined as follows:

- **Unlikely:** The project sites and/or surrounding area do not support suitable habitat for a particular species, or the project sites are outside of the species known range.
- **Low Potential:** The project sites and/or immediate area only provide limited amounts and low quality habitat for a particular species. In addition, the known range for a particular species may be outside of the immediate project area.
- **Medium Potential:** The project sites and/or immediate area provide suitable habitat for a particular species.
- **High Potential:** The project sites and/or immediate area provide ideal habitat conditions for a particular species and/or known populations occur in the immediate area and/or within the project sites.

Conclusions regarding habitat suitability and species occurrence are based on the analysis of existing literature and databases described previously and known habitats occurring within the project sites and regionally.

Database queries identify 62 special-status plant and wildlife species records. All 62 species were eliminated from further consideration based upon the highly urbanized nature of the area and a lack of suitable habitat.

Birds

Common Migratory Birds

A large number of common bird species are migratory and are afforded protection under the Migratory Bird Treaty Act (MBTA). Examples of common migratory bird species that may use the project area include northern mockingbird (*Mimus polyglottos*), mourning dove (*Zenaida macroura*), cliff swallow (*Petrochelidon pyrrhonota*) and western kingbird (*Tyrannus verticalis*). Occupied nests of all migratory birds are protected under the MBTA, which makes it illegal to destroy any active migratory bird nest. Migratory birds may utilize trees within the urban setting for nesting.

Sensitive Habitats

Sensitive habitats can be defined as any area in which plant or animal life or their habitats are either rare or especially valuable and any area which meets one of the following criteria: (1) habitats containing or supporting "rare and endangered" species as defined by the State Fish and Game Commission, (2) all perennial and intermittent streams and their tributaries, (3) coastal tide lands and marshes, (4) coastal and offshore areas containing breeding or nesting sites and coastal areas used by migratory and resident water-associated birds for resting areas and feeding, (5) areas used for scientific study and research concerning fish and wildlife, (6) lakes and ponds and adjacent shore habitat, (7) existing game and wildlife refuges and reserves, and (8) sand dunes. The project sites do not support any sensitive habitats.

Wildlife Movement Corridors

Terms such as habitat corridors, linkages, crossings, and travel routes are used to describe physical connections that allow wildlife to move between patches of suitable habitat in undisturbed landscapes, as well as environments fragmented by urban development. Wildlife movement corridors are considered an important ecological resource by various agencies (CDFW and USFWS) and under CEQA. Movement corridors may provide favorable locations for wildlife to travel between different habitat areas such as foraging sites, breeding sites, cover areas, and preferred summer and winter range locations. They may also function as dispersal corridors allowing animals to move between various locations within their range. Areas of human disturbance or urban development can fragment wildlife habitats and impede wildlife movement between areas of suitable habitat. This fragmentation creates isolated “islands” of vegetation that may not provide sufficient area to accommodate sustainable populations, and can adversely affect genetic and species diversity. The project sites do not support any wildlife movement corridors.

Tree Inventory

The tree inventory was conducted by International Society of Arboriculture Certified Arborist Kelly Bayne (Certification # WE-7741A) on June 30, 2017. Trees were surveyed according to standard professional practices. Please see **Appendix D** and **Figure 4.3-2** for results of the tree inventory. Trees were also searched for evidence of nesting birds. No nests were observed at the time of the survey.

4.3.3 Regulatory Setting

Federal

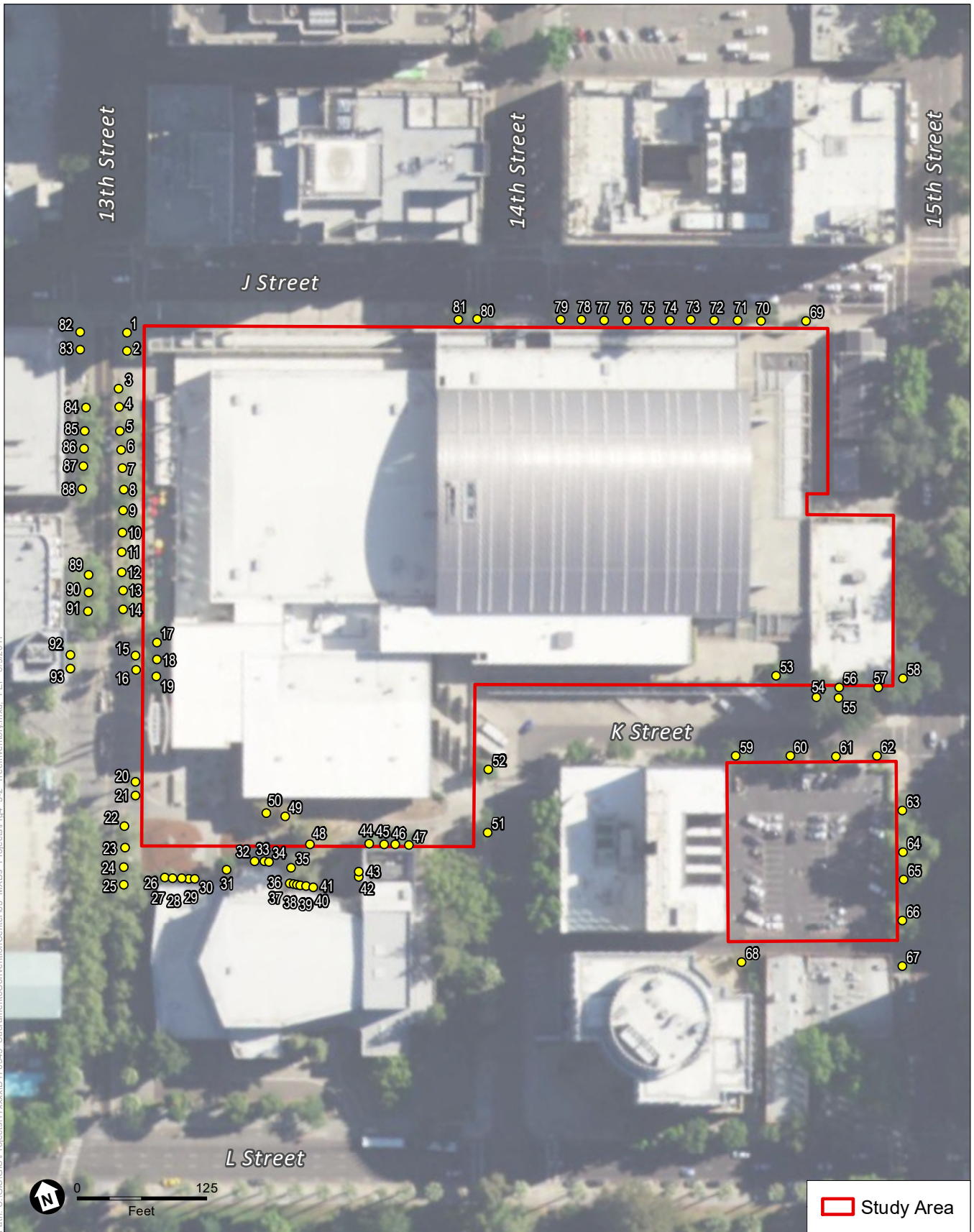
Migratory Bird Treaty Act

The MBTA enacts the provisions of treaties between the United States, Great Britain, Mexico, Japan, and the Soviet Union and authorizes the U.S. Secretary of the Interior to protect and regulate the taking of migratory birds. It establishes seasons and bag limits for hunted species and protects migratory birds, their occupied nests, and their eggs. Most actions that result in a taking or in permanent or temporary possession of a protected species constitute violations of the MBTA. Examples of permitted actions that do not violate the MBTA are the possession of a hunting license to pursue specific game birds, legitimate research activities, display in zoological gardens, bird banding, and other similar activities. USFWS is responsible for overseeing compliance with the MBTA.

California Fish and Game Code

Protection of Birds and Their Nests

Under Section 3503 of the CFGC, it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird, except as otherwise provided by this code or any regulation made pursuant thereto. Section 3503.5 of the code prohibits take, possession, or destruction of any birds in the orders Falconiformes (hawks) or Strigiformes (owls), or of their nests and eggs. Migratory



SOURCE: Esri, 2015; ESA, 2017

Sacramento Convention Center Expansion EIR

Figure 4.3-2
Tree Inventory

non-game birds are protected under Section 3800, while other specified birds are protected under Section 3505.

Local

City of Sacramento 2035 General Plan

The following goals and policies from the 2035 General Plan are relevant to biological resources at the project sites. These policies guide the location, design, and quality of development to protect biological resources such as wildlife habitat, open space corridors, and ecosystems.

Goal ER 2.1 Natural and Open Space Protection. Protect and enhance open space, natural areas, and significant wildlife and vegetation in the City as integral parts of a sustainable environment within a larger regional ecosystem.

Policies

- ER 2.1.1 **Resource Preservation.** The City shall encourage new development to preserve on-site natural elements that contribute to the community's native plant and wildlife species value and to its aesthetic character.
- ER 2.1.10 **Habitat Assessments.** The City shall consider the potential impact on sensitive plants and wildlife for each project requiring discretionary approval. If site conditions are such that potential habitat for sensitive plant and/or wildlife species may be present, the City shall require habitat assessments, prepared by a qualified biologist, for sensitive plant and wildlife species. If the habitat assessment determines that suitable habitat for sensitive plant and/or wildlife species is present, then either (1) protocol-level surveys shall be conducted (where survey protocol has been established by a resource agency), or, in the absence of established survey protocol, a focused survey shall be conducted consistent with industry-recognized best practices; or (2) suitable habitat and presence of the species shall be assumed to occur within all potential habitat locations identified on the project site. Survey Reports shall be prepared and submitted to the City and the California Department of Fish and Wildlife (CDFW) or the United States Fish and Wildlife Service (USFWS) (depending on the species) for further consultation and development of avoidance and/ or mitigation measures consistent with state and federal law.

Goal ER 3.1 Urban Forest. Manage the city's urban forest as an environmental, economic, and aesthetic resource to improve Sacramento residents' quality of life.

Policies

- ER 3.1.2 **Manage and Enhance the City's Tree Canopy.** The City shall continue to plant new trees, ensure new developments have sufficient right-of-way width for tree plantings, manage and care for all publicly owned trees, and work to retain healthy trees. The City shall monitor, evaluate and report, by community plan area and city wide, on the entire tree canopy in order to maintain and enhance trees throughout the city and to identify opportunities for new plantings.
- ER 3.1.3 **Trees of Significance.** The City shall require the retention of City trees and Heritage Trees by promoting stewardship of such trees and ensuring that the design of development projects provides for the retention of these trees wherever possible. Where tree removal cannot be avoided, the City shall require tree replacement or appropriate remediation.

Tree Preservation Ordinance

The City recognizes that the planting and preservation of trees enhances the natural scenic beauty, increases life-giving oxygen, promotes ecological balance, provides natural ventilation, air filtration, and temperature, erosion, and acoustical controls, increases property values, improves

the lifestyle of residents, and enhances the identity of the city. City Code Chapter 12.56¹⁶ includes provisions to protect City street trees as well as private protected trees.

A City tree is defined as any tree the trunk of which, when measured 4.5 feet above ground, is partially or completely located in a city park, on real property the city owns in fee, or on a public right-of-way, including any street, road, sidewalk, park strip, mow strip, or alley. A private protected tree is defined as a tree that is designated by city council resolution to have special historical value, special environmental value, or significant community benefit, and is located on private property; any native Valley oak (*Quercus lobata*), blue oak (*Quercus douglasii*), interior live oak (*Quercus wislizenii*), coast live oak (*Quercus agrifolia*), California buckeye (*Aesculus californica*), or California sycamore (*Platanus racemosa*), that has a diameter at standard height (DSH)¹⁷ of 12 inches or more, and is located on private property; a tree that has a DSH of 24 inches or more located on private property that is an undeveloped lot or does not include any single or duplex dwellings; or a tree that has a DSH of 32 inches or more located on private property that includes any single unit or duplex dwellings. The director may require, where appropriate, the replacement of city trees or private protected trees proposed for removal.

4.3.4 Analysis, Impacts and Mitigation

Significance Criteria

The proposed project would result in a significant impact on the environment if it would:

1. 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 Wildlife or U.S. Fish and Wildlife Service;
2. 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 Wildlife or U.S. Fish and Wildlife Service;
3. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
4. 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;
5. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or

¹⁶ City of Sacramento. *Municipal Code Chapter 12.56, Tree Planting, Maintenance, and Conservation*. Available: www.qcode.us/codes/sacramento. Accessed June 21, 2017.

¹⁷ Diameter at standard height (DSH) is a tree's diameter measured at 4.5 feet above the ground.

6. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

Methodology and Assumptions

This section assesses the potential for the proposed project to adversely change biological resources in or around the project area. The impact analysis focuses on foreseeable changes to the baseline condition and compares those changes to the significance criteria presented above. Potential impacts are analyzed using information presented above regarding habitats present in and around the project area, and potential occurrence of special-status and protected species.

In the impact analysis, three principal factors were considered: (1) magnitude of the impact (e.g., substantial/not substantial); (2) uniqueness of the affected resource (i.e., rarity of the resource); and (3) susceptibility of the affected resource to perturbation (i.e., sensitivity of the resource). The evaluation of the significance considered the interrelationship of these three factors. For example, a relatively small magnitude impact to a State or federally listed species would be considered significant if the species is exceptionally rare or believed to be highly susceptible to disturbance. Conversely, a plant community such as annual grassland is not necessarily rare or sensitive to disturbance. Therefore, a much larger magnitude of impact would be necessary to result in a significant impact.

Issues not Discussed under Impacts and Mitigation Measures

With regard to significance criterion (1), the project site has very limited natural features (mature ornamental trees) that would provide suitable habitat for wildlife. The mature trees on-site provide marginal nesting habitat for migratory bird species due to the urban nature of the project site. While the potential for nesting birds is low, tree removal would have the potential to impact nesting migratory bird species. Therefore, impacts to nesting birds are analyzed in detail below.

With regard to significance criterion (2), no riparian habitat or other sensitive natural communities occur at the project site. Therefore, there would be **no impact**, and no further analysis is required.

With regard to significance criterion (3), no waters of the U.S. are present at the project site. Therefore, there would be **no impact**, and no further analysis is required.

With regard to significance criterion (4), no established native resident or migratory wildlife corridors are known to occur at the project site. Therefore, there would be **no impact**, and no further analysis is required.

With regard to significance criteria (5), the proposed project may remove protected trees at the project site. Therefore, impacts to protected trees are analyzed in detail below.

With regard to significance criterion (6), the proposed project is not located within an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local,

regional, or state habitat conservation plan. Therefore, there would be **no impact**, and no further analysis is required.

Impacts and Mitigation Measures

Impact 4.3-1: The proposed projects could disturb nesting migratory birds.

SCC Project and Hotel Project

The project sites have the potential to (or are located in the vicinity of) habitat features that could support migratory bird species. Direct impacts on nesting migratory birds or their habitat could result in substantial lowered reproductive success or habitat loss, thereby potentially adversely affecting local population levels. Potential significant impacts on migratory birds associated with the proposed projects include:

- Loss of breeding, foraging, roosting, and refuge habitat resulting from the permanent removal of suitable trees; and
- Abandoned eggs or young and subsequent nest failure for migratory birds as a result of construction-related noise and increased human presence.

Approximately 38 trees on and around the project sites could be removed to accommodate project development (see Appendix D). This includes 30 trees on and adjacent to the SCC site, primarily along the east side of 13th Street, within the Activities Plaza, and around the Panattoni Building. Approximately 8 trees would be removed on or adjacent to the Hotel site, along the K Street and 15th Street frontages. The mature trees on the project sites provide marginal nesting habitat for migratory bird species. While the project sites are situated in a highly urbanized area with constant pedestrian and traffic activity, mature trees within and adjacent to the project sites can provide perching and nesting habitat. Construction activities, such as construction noise or the removal of mature trees at the project sites, could therefore result in the abandonment or destruction of migratory bird nests.

If tree removal occurs outside of the general bird nesting season (February 1 through August 31), the loss of mature trees would not result in the loss of active nests, and no impact would occur. If tree removal occurs during the nesting season, the loss of mature trees could result in destruction of nests or disturb nesting birds to the extent that they abandon the nest. This would be a **significant impact**.

Mitigation Measure

Mitigation Measure 4.3-1 (SCC/Hotel)

The project applicant shall conduct any tree removal activities required for project construction outside of the migratory bird breeding season (February 1 through August 31) where feasible. For any construction activities that will occur between February 1 and August 31, the applicant shall conduct preconstruction surveys in suitable nesting habitat within 50 feet of the construction area for nesting migratory birds. Surveys shall be conducted by a qualified biologist (one experienced with bird surveys). In addition, all

trees slated for removal during the nesting season shall be surveyed by a qualified biologist no more than 48-hours before removal to ensure that no nesting birds are occupying the tree.

If active nests are found during the survey, the applicant shall implement mitigation measures to ensure that the species will not be adversely affected, which would include establishing a no-work buffer zone (subject to conditional work within the buffer, as described in sub-measure (b), below), as approved by CDFW, around the active nest.

Measures may include, but would not be limited to:

- a) For migratory birds, a no-work buffer zone shall be established, and approved by CDFW, around the active nest. The no-work buffer may vary depending on species and site specific conditions as approved by CDFW.*
- b) Depending on conditions specific to each nest, and the relative location and rate of construction activities, it may be feasible for construction to occur as planned within the buffer without impacting the breeding effort. In this case (to be determined on an individual basis, in consultation with the City and CDFW), the nest(s) shall be monitored by a qualified biologist during construction within the buffer. If, in the professional opinion of the monitor, the project would impact the nest, the biologist shall immediately inform the construction manager. The construction manager shall stop construction activities within the buffer until the nest is no longer active. Completion of the nesting cycle shall be determined by a qualified biologist.*

Significance After Mitigation: With the implementation of **Mitigation Measure 4.3-1(a) and (b)** listed above, the proposed projects would not cause a substantial reduction in local population size or reduce reproductive success to migratory bird species. Thus, impacts to migratory birds from implementation of the proposed projects would be reduced to a **less-than-significant** level.

Impact 4.3-2: The proposed projects could require removal of protected trees.

SCC Project and Hotel Project

Construction

Approximately 38 trees on and around the project site could be removed, including 30 trees on the SCC site and 8 trees on the hotel site, as shown in Figure 4.3-2 and Appendix D. These trees are protected by Sacramento City Code Chapters 12.56. Additionally, project activities could harm retained trees by direct impacts to tree limbs, trunk, or roots, or indirect impacts through changes in hydrology from changes in grading, loss of top soil, or an increase in impervious surfaces.

Sacramento City Code Chapters 12.56 provides for the removal of protected trees through a process for the removal of city trees by public projects (Sacramento City Code 12.56.040) and the tree permit process for the removal of protected trees for non-public projects (Sacramento City

Code 12.56.050), through which the project applicant is required to acquire tree permits for the removal of protected trees. The conditions of tree permits are made at the discretion of directors for applicable city departments (Department of Public Works for City trees, not located in parks) or their representatives. Project applicant compliance with the conditions of the City's tree permit would constitute compliance with City Code Chapter 12.56. The City would follow all requirements under City Code 12.56.040 for the removal of protected trees for the SCC project and the project applicant for the Hotel project would comply with all requirements of the City's tree ordinance. Therefore, the impact from the SCC project and Hotel project would be **less than significant**.

Mitigation Measure

None required.

Cumulative Impacts

Because the project sites are surrounded by largely urban land uses, the cumulative context for impacts to biological resources focuses on the Sacramento metropolitan area with additional context provided by the larger Sacramento Valley. Since the 1900s, development of the City of Sacramento, and the larger Sacramento Valley has resulted in modifications of natural habitats, including but not limited to, the loss of wildlife habitat and open space areas due urban and agricultural development, and flood control development along the Sacramento and American rivers.

Impact 4.3-3: Implementation of the proposed projects, in combination with other cumulative development, would contribute to the cumulative harm to, or loss of nesting habitat, for nesting protected bird species.

SCC Project and Hotel Project

The cumulative context for nesting bird habitat includes the Sacramento metropolitan area with additional context provided by the larger Sacramento Valley. Historic and ongoing loss of natural habitats suitable for nesting birds, has occurred as natural habitats have been converted to urban and agricultural development. Future development within the Sacramento Valley is expected to continue. Projects within the Sacramento Valley would be required to comply with local ordinances and policies, in addition to CESA, FESA, CWA, Fish and Game Code of California, and other relevant regulations permits and requirements. Nevertheless, the loss of natural habitats for nesting birds within the Sacramento Valley is a significant cumulative impact.

The project sites and surrounding areas contains habitats that have been highly modified or are of relatively low quality due to their urban nature, or proximity to urban developments. Additionally, affected habitats are mostly isolated from other areas of similar habitat due to existing urban development. Although the proposed projects could directly affect nesting migratory bird species and their habitat, the projects' contribution would not be cumulatively considerable. Therefore, the cumulative impact to loss of habitat within the Sacramento Valley would be **less than significant**.

Mitigation Measure

None required.

Impact 4.3-4: Implementation of the proposed projects, in combination with other cumulative development, would contribute to the cumulative loss of locally protected trees.

SCC Project and Hotel Project

The context for cumulative impacts to locally protected trees includes the City of Sacramento. The City of Sacramento is known as the “City of Trees” and there are 6.9 million trees within the Sacramento region.¹⁸ The City of Sacramento 2035 General Plan includes goals and policies to promote tree planting and protection of the urban forest to increase the City’s tree canopy, and implements a tree ordinance protecting City trees. As a result, there is no cumulative impact to protected urban trees within the City of Sacramento.

Implementation of the proposed projects could potentially remove protected street trees. Because the project proponents are required to comply with the City’s tree ordinance and implement mitigation measures to protect retained trees in proximity to potential impactful activities, the projects would not result in a considerable contribution to the cumulative loss of locally protected trees. As a result, this impact is considered **less than significant**.

Mitigation Measure

None required.

¹⁸ Sacramento Tree Foundation, 2016. Urban Forests for Clean Air. Available: www.sactree.com/pages/471. Accessed June 21, 2017.

4.4 Cultural Resources

Cultural resources include built environment, architectural and cultural landscape resources, historical and prehistoric archaeological resources, tribal cultural resources, and human remains. This section discusses the potential for implementation of the proposed SCC project and Hotel project to adversely affect cultural resources.

During the NOP circulation period, written comments that address cultural resources issues were received from the Native American Heritage Commission regarding general project compliance with Assembly Bill 52 and SB 18. SB 18, which is state legislation relating to general plan amendments, does not apply to the project. A discussion of AB 52 consultation is included in the Environmental Setting Section below, as well as under Impact 4.4-1.

Potential effects on known archaeological sites in the vicinity of the project sites are discussed in this section. A non-confidential cultural resources report is included in this EIR as Appendix E. More detailed information on archaeological sites, including location, is included in a Confidential Appendix of the Cultural Resources Survey and Inventory Report (CRSIR). Pursuant to State CEQA Guidelines section 15120(d),¹ and in order to protect the integrity of the resources that may be disclosed, the CRSIR is part of the Administrative Record for this EIR, but is confidential and available for review only by qualified cultural resource specialists and City staff. This Confidential Appendix is on file at the City of Sacramento, Community Development Department, 300 Richards Boulevard, 3rd Floor, Sacramento, CA, 95811.

The analysis in this section was developed based on data provided in the City of Sacramento 2035 General Plan and Master EIR; archival research, including record searches at the North Central Information Center (NCIC) of the California Historical Resources Information System (CHRIS); and the knowledge of ESA's cultural resources staff based on past work on projects in the vicinity of the Convention Center, throughout the Central City, and elsewhere in the Sacramento region.

4.4.1 Environmental Setting

Natural Setting

The project sites are in the relatively flat floodplains of the American and Sacramento Rivers, located in the southern portion of the Sacramento Valley within the northern portion of California's Central Valley (also referred to as the Great Valley), which is a nearly flat alluvial plain that lies between the Sierra Nevada on the east and the Coast Ranges on the west. In the Sacramento area, since the mid-19th century the Sacramento and American Rivers have been confined by human-made levees, such as those along the American River north of the Convention Center.

¹ CEQA Guidelines section 15120(d) states that "[n]o document prepared pursuant to this article that is available for public examination shall include a "trade secret" as defined in Section 6254.7 of the Government Code, information about the location of archaeological sites and sacred lands, or any other information that is subject to the disclosure restrictions of Section 6254 of the Government Code."

The underlying geology of the area consists of deep Holocene and historic-period/modern alluvium (Great Valley stream channel, fan, and basin deposits) with some wind-blown “dune” deposits.^{2,3} Soils in the downtown area consist of a variety of sandy and silty loams (alluvium) mixed with historic-period and modern fill.⁴

The Holocene environment of the region was characterized by a general warming trend that subsumed episodes of relatively cool climates. Prior to historic-period and modern development, Sacramento’s downtown area and vicinity consisted of non-tidal marshland, broad gallery forests, and open grassland.⁵ Early peoples had access to a wide variety of flora and fauna. The arrival of Euroamericans to the area led to a dramatic decrease in the populations of the faunal species due to overhunting and habitat loss.^{6,7}

Paleontological Setting

The Society of Vertebrate Paleontology (SVP) has established guidelines for the identification, assessment, and mitigation of adverse impacts on nonrenewable paleontological resources.^{8,9} Most practicing paleontologists in the United States adhere closely to the SVP’s assessment, mitigation, and monitoring requirements as outlined in these guidelines, which were approved through a consensus of professional paleontologists and reflect the currently accepted standard practices. Many federal, state, county, and city agencies have either formally or informally adopted the SVP’s standard guidelines for the mitigation of adverse construction-related impacts on paleontological resources. The SVP has helped define the value of paleontological resources and, in particular, indicates the following:

- Vertebrate fossils and fossiliferous (fossil-containing) deposits are considered significant nonrenewable paleontological resources and are afforded protection by federal, state, and local environmental laws and guidelines.
- A paleontological resource is considered to be older than recorded history, or 5,000 years before present, and is not to be confused with an archaeological resource.
- Invertebrate fossils are not significant paleontological resources unless they are present within an assemblage of vertebrate fossils or they provide undiscovered information on the origin and character of the plant species, past climatic conditions, or the age of the rock unit itself.

² California Division of Mines and Geology, 1971. Geologic Map of California: Sacramento Sheet, prepared by the State of California Department of Conservation.

³ Meyer, Jack, and Jeffery Rosenthal, 2008. A Geoarchaeological Overview and Assessment of Caltrans District 3, prepared for Caltrans District 3, Sacramento. Fig. 47, 50.

⁴ U.S. Department of Agriculture, “Natural Resources Conservation Service Web Soil Survey”, Version 3.1, Available: <http://websoilsurvey.sc.egov.usda.gov/app/WebSoilSurvey.aspx>. Accessed June 26, 2016.

⁵ Meyer, Jack, and Jeffery Rosenthal, 2008. A Geoarchaeological Overview and Assessment of Caltrans District 3, prepared for Caltrans District 3, Sacramento. p. 34-35.

⁶ Ibid. p. 34-36.

⁷ Heady, H. F., 1977. “Valley Grassland”, *In* Terrestrial Vegetation of California, edited by M. G. Barchour and J. Majour, pp. 491–514, John Wiley & Sons, New York, NY.

⁸ Society of Vertebrate Paleontology, 1995. Assessment and Mitigation of Adverse Impacts to Nonrenewable Paleontologic Resources – Standard Guidelines. *In* Society of Vertebrate Paleontology News Bulletin, 163:22-27.

⁹ Society of Vertebrate Paleontology, 1996. Conditions of receivership for paleontologic salvage collections. *In* Society of Vertebrate Paleontology News Bulletin, 166:31-32.

- A project paleontologist, special interest group, lead agency, or local government can designate certain plant or invertebrate fossils as significant.

In accordance with these principles, the SVP outlined criteria for screening the paleontological potential of rock units and established assessment and mitigation procedures tailored to such potential.¹⁰ **Table 4.4-1** lists the criteria for high-potential, undetermined, and low-potential rock units.

**TABLE 4.4-1
CRITERIA FOR DETERMINING PALEONTOLOGICAL POTENTIAL**

Paleontological Potential	Description
High	Geologic units from which vertebrate or significant invertebrate or plant fossils have been recovered. Only invertebrate fossils that provide new information on existing flora or fauna or on the age of a rock unit would be considered significant.
Undetermined	Geologic units for which little to no information is available.
Low	Geologic units that are not known to have produced a substantial body of significant paleontological material.

SOURCES: Society of Vertebrate Paleontology, 1995 Assessment and Mitigation of Adverse Impacts to Nonrenewable Paleontologic Resources – Standard Guidelines. *In* Society of Vertebrate Paleontology News Bulletin, 163:22-27; Society of Vertebrate Paleontology, 1996 Conditions of receivership for paleontologic salvage collections. *In* Society of Vertebrate Paleontology News Bulletin, 166:31-32.

Sacramento's downtown area does not contain any geologic units from which vertebrate or significant invertebrate or plant fossils have been recovered. Most of the project area has been previously excavated and filled. Although not discussed in the SVP standards, artificial fills, surface soils, and high-grade metamorphic rocks do not contain paleontological resources. While such materials were originally derived from rocks, they have been altered, weathered, or reworked such that the discovery of intact fossils would be rare. Therefore, there is little potential for the soils underlying the project sites to contain fossils.

Prehistoric Setting

Categorizing the prehistoric period into cultural stages allows researchers to describe a broad range of archaeological resources with similar cultural patterns and components during a given timeframe, thereby creating a regional chronology. Rosenthal et al. provide a framework for the interpretation of the Central Valley prehistoric record and divided human history in the region into three basic periods: Paleo-Indian (13,550 to 10,550 before present [BP]), Archaic (10,550 to 900 BP), and Emergent (900 to 300 BP).¹¹ The Archaic period is subdivided into three sub-periods: Lower Archaic (10,550 to 7550 BP), Middle Archaic (7550 to 2550 BP), and Upper

¹⁰ Society of Vertebrate Paleontology, 1995. Assessment and Mitigation of Adverse Impacts to Nonrenewable Paleontologic Resources – Standard Guidelines. *In* Society of Vertebrate Paleontology News Bulletin, 163:22-27.

¹¹ Rosenthal, Jeffrey S., Gregory G. White, and Mark Q. Sutton, 2007. "The Central Valley: A View from the Catbird's Seat", *In* California Prehistory: Colonization, Culture, and Complexity, edited by Terry L. Jones and Kathryn A. Klar, pp. 147-163, AltaMira Press, Lanham, MD.

Archaic (2550 to 900 BP).¹² Economic patterns, stylistic aspects, and regional phases further subdivide cultural patterns into shorter phases. This scheme uses economic and technological types, socio-politics, trade networks, population density, and variations of artifact types to differentiate between cultural periods. The following summary of the region's prehistory is derived principally from Rosenthal et al. and Moratto.^{13,14}

Paleo-Indian Period (13,550 to 10,550 BP)

Humans first entered the Central Valley sometime prior to 13,000 years ago. At that time Pleistocene glaciers had receded to the mountain crests leaving conifer forests on the mid and upper elevations of the Sierra Nevada and a nearly contiguous conifer forest on the Coast Ranges. The Central Valley was covered with extensive grasslands and riparian forests. The Sacramento-San Joaquin Delta did not yet exist. The Central Valley was home to a diverse community of large mammals, which soon became extinct. Human populations were likely focused on large game hunting, although evidence remains scant, as does understanding of lifeways during this period.

Lower Archaic Period (10,550 to 7,550 BP)

Climate change during the Lower Archaic led to the rapid expanse of oak woodland and grassland prairies across the Central Valley. After 10,550 BP, a significant period of soil deposition ensued in the Valley, capping older Pleistocene formations. This was followed around 7,000 BP by a second period of substantial soil deposition in the Valley.

It was during this period that the first evidence of milling stone technology appears, indicating an increased reliance on processing plants for food. Milling stones include hand stones and milling slabs and are frequently associated with a diverse tool assemblage including cobble-based pounding, chopping, and scraping tools. Milling tools were used for processing seeds and nuts. The Lower Archaic also saw the development of well-made bifaces used for projectile points and cutting tools, commonly formed from meta-volcanic greenstone and volcanic basalts.

Middle Archaic Period (7,550 to 2,550 BP)

After about 7,550 BP, California was marked by another change in climate with warmer and drier conditions throughout the region. Oak woodland expanded upslope in the Coast Ranges and conifer forest moved into the alpine zone in the Sierra Nevada. Rising sea levels led to the formation of the Sacramento-San Joaquin Delta and associated marshlands. An initial period of upland erosion and lowland deposition was followed by a long period of stabilization of landforms. Scant evidence of human occupation from this period has been found in the Sacramento Valley or the adjacent Coast Ranges. Most evidence comes from the Sierra Foothills in Calaveras and Tuolumne counties.

¹² Ibid.

¹³ Ibid.

¹⁴ Moratto, Michael J., California Archaeology, 1984 [2004]. Coyote Press, Salinas, CA.

Upper Archaic Period (2,550 to 900 BP)

Evidence for Upper Archaic human occupation in the Central Valley is much more extensive than for earlier periods. The development of the Holocene landscape buried older deposits, resulting in the identification of more sites from the Upper Archaic than from older periods of development. Alluvial deposition was partially interrupted by two consecutive droughts known as the Medieval Climatic anomaly.

Two fundamental adaptations developed side-by-side during the Upper Archaic period, evidenced by a diversification in settlements patterns. Populations in the Central Valley tended towards large, high-density, permanent settlements. These villages were used as hubs from which the populace roamed to collect resources, utilizing a wide range of technologies. The populations in the foothills and mountains lived in less dense settlements, moving with the seasons to maximize resource returns. Tools tended to be expedient and multipurpose for use in a wide variety of activities. Village sites show extended occupation as evidenced by well-developed middens, frequently containing hundreds of burials, storage pits, structural remains, hearths, ash dumps, and extensive floral and faunal remains.

Emergent Period (900 to 300 BP)

A major shift in material culture occurred around 900 BP, marking the beginning of the Emergent Period. Particularly notable was the introduction of the bow and arrow. The adoption of the bow occurred at slightly different times in various parts of the Sacramento Valley, but by 750 BP it was in use in the Delta region. The bow was accompanied by the Stockton Serrated point, a seemingly indigenous invention, distinctive from point types used by populations in other parts of California. Another key element of material culture from this period include big-head effigy ornaments thought to be associated with the Kuksu religious movement. In areas where stone was scarce, baked clay balls are found, presumably for cooking in baskets. Other diagnostic items from this period are bone tubes, stone pipes, and ear spools. Along rivers, villages are frequently associated with fish weirs, with fishing taking on an increasing level of importance in the diet of the local populace.

Ethnographic Setting

Depopulation and relocation of Central Valley Native Americans in the 19th century resulted in conflicting and incomplete information about tribal locations. Although cultural descriptions of these groups in the English language are known from as early as 1849, most of our current cultural knowledge comes from various early 20th century anthropologists.¹⁵ However, ethnographic data indicates that the project area is within the border lands occupied and used by the Nisenan, or Southern Maidu.¹⁶ The United Auburn Indian Community (and the Wilton Rancheria), who identify as both ethnically Miwok and Maidu, have been in ongoing consultation

¹⁵ Levy, Richard, 1978. "Eastern Miwok", In California, edited by Robert F. Heizer, pp. 398-413, Handbook of North American Indians, Vol. 8, William C. Sturtevant, general editor, Smithsonian Institution, Washington, DC. p. 413.

¹⁶ Shipley, William F., 1978. "Native Languages of California", In California, edited by Robert F. Heizer, pp. 80-90, Handbook of North American Indians, Vol. 8, William C. Sturtevant, general editor, Smithsonian Institution, Washington, DC.

with the City of Sacramento regarding this and other projects, as part of AB 52 and serve as a point of contact for regional Native American issues within the City.

Nisenan

The language of the Nisenan, which includes several dialects, is classified in the Maiduan family of the Penutian linguistic stock.^{17,18} The western boundary of Nisenan territory was the western bank of the Sacramento River. The eastern boundary was “the line in the Sierra Nevada mountains where the snow lay on the ground all winter.”¹⁹

Nisenan settlement locations depended primarily on elevation, exposure, and proximity to water and other resources. Permanent villages usually were located on low rises along major watercourses. Village size ranged from three houses to 40 or 50. Houses were domed structures covered with earth and tule or grass and measured 3.0 to 4.5 meters in diameter. Brush shelters were used in summer and at temporary camps during food-gathering rounds. Larger villages often had semi-subterranean dance houses that were covered in earth and tule or brush, with a central smoke hole at the top and an east-facing entrance. Another common village structure was a granary used for storing acorns.²⁰

The Nisenan occupied permanent settlements from which specific task groups set out to harvest the seasonal bounty of flora and fauna provided by the rich valley environment. The Valley Nisenan economy involved riparian resources—in contrast to the Hill Nisenan, whose resource base consisted primarily of acorn and game procurement. The only domestic plant was native tobacco, but many wild species were closely husbanded. The acorn crop from the blue oak and black oak was so carefully managed that this activity served as the equivalent of agriculture. Acorns could be stored in anticipation of winter shortfalls in resource abundance. Deer, rabbit, and salmon were the chief sources of animal protein in the aboriginal diet, but many other insect and animal species were taken when available.²¹

Religion played an important role in Nisenan life. The Nisenan believe that all natural objects were endowed with supernatural powers. Two kinds of shamans existed: curing shamans and religious shamans. Curing shamans had limited contact with the spirit world and diagnosed and

¹⁷ Kroeber, Alfred L., 1925 [1976]. *Handbook of the Indians of California*, Bureau of American Ethnology Bulletin 78, Smithsonian Institution, Washington, D.C., 1976 reprinted ed., Dover Publications, Inc., New York, NY.

¹⁸ Shipley, William F., 1978. “Native Languages of California”, *In California*, edited by Robert F. Heizer, pp. 80-90, *Handbook of North American Indians*, Vol. 8, William C. Sturtevant, general editor, Smithsonian Institution, Washington, DC.

¹⁹ Littlejohn, Hugh W., 1928. *Nisenan Geography*, Document 18, University of California Department of Anthropology, Berkeley, CA.

²⁰ Wilson, Norman L., and Arlean H. Towne, 1978. “Nisenan”, *In California*, edited by Robert F. Heizer, pp. 387-397, *Handbook of North American Indians*, Vol. 8, William C. Sturtevant, general editor, Smithsonian Institution, Washington, DC.

²¹ *Ibid.*

healed illnesses. Religious shamans gained control over the spirits through dreams and esoteric experiences.²² The usual mode of burial was cremation.²³

As with other California Native American groups, the gold rush of 1849 had a devastating effect on the Valley Nisenan. The flood of miners that came to the area in search of gold brought diseases with them that decimated the Nisenan population. Those who survived were subjected to violence and prejudice at the hands of the miners, and the Nisenan eventually were pushed out of their ancestral territory. Although this contact with settlers had a profound negative impact on the Nisenan population through disease and violent actions, the Nisenan people survived and maintained strong communities and action-oriented organizations.²⁴

Ethnographic Villages

Ethnographic accounts document several Native American villages within or in close proximity to Sacramento's Downtown area. These records, however, are somewhat lacking in detail regarding specific locations. The accounts show that the Nisenan villages Sa'cum and Momol were in the downtown area, while three other Nisenan villages (Sama, Sekumni, Pusune) were outside but in the vicinity.^{25,26,27}

The Nisenan village Sa'cum is thought to have been in present-day downtown Sacramento, at Cesar Chavez Park. Momol was also a Nisenan village shown in ethnographic accounts to be located on the south side of the American River (through the present-day Railyards, prior to the river's relocation in the 1860s) at its confluence with the Sacramento River, within the current downtown area. Sama was a Nisenan village documented in present-day south Sacramento, south of the downtown area. Ethnographic records depict Pusune at the confluence of the two rivers, either on the west side of the Sacramento River, in present-day West Sacramento, or along the north side of the American River; both locations are outside the downtown area. Sekumni is believed to have been along the north side of the American River, in the present-day River District near the State Route 160 Bridge (12th/16th Street), outside the downtown area.^{28,29,30}

²² Ibid.

²³ Faye, Paul-Louis, 1923. Notes on the Southern Maidu, University of California Publications in American Archaeology and Ethnology 20:35–53.

²⁴ Castillo, Edward D., 1978. "The Impact of Euro-American Exploration and Settlement", *In California*, edited by Robert F. Heizer, pp. 99-127, Handbook of North American Indians, Vol. 8, William C. Sturtevant, general editor, Smithsonian Institution, Washington, DC.

²⁵ Heizer, Robert, 1978. Handbook of North American Indians, Volume 8: California.

²⁶ Casilear, George W., and Henry Bainbridge, 1850. View of Sacramento City as it Appeared During the Great Inundation in January 1850, Lithograph by Sarony, New York, NY.

²⁷ Kroeber, Alfred L., 1925 [1976]. Handbook of the Indians of California, Bureau of American Ethnology Bulletin 78, Smithsonian Institution, Washington, D.C., Dover Publications, Inc., New York, NY.

²⁸ Casilear, George W., and Henry Bainbridge, 1850. View of Sacramento City as it Appeared During the Great Inundation in January 1850, Lithograph by Sarony, New York, NY.

²⁹ Kroeber, Alfred L., 1925 [1976]. Handbook of the Indians of California, Bureau of American Ethnology Bulletin 78, Smithsonian Institution, Washington, D.C., Dover Publications, Inc., New York, NY.

³⁰ Wilson, Norman L., and Arlean H. Towne, 1978. "Nisenan", *In California*, edited by Robert F. Heizer, pp. 387-397, Handbook of North American Indians, Vol. 8, William C. Sturtevant, general editor, Smithsonian Institution, Washington, DC.

Historic Setting

Europeans did not enter the Sacramento area until 1808, when Gabriel Moraga's expedition reached the junction of the Sacramento and American Rivers. By the late 1820s, English, American, and French fur trappers, attracted by the abundance of animal life, began operations throughout the Sacramento Valley. Native Americans still predominantly occupied the region, with only the occasional Spanish expedition into the interior to search for mission sites or escaped neophytes (Native Americans who had entered the mission system).³¹

Permanent non-native settlement in the Sacramento Valley began in the 1830s when Spanish and Mexican governors issued large land grants to individuals, often in return for military or other services rendered to the government. Swiss immigrant John Augustus Sutter, Jr., upon receipt of a land grant from Mexican Governor Juan Alvarado, first settled the Sacramento area in 1839. Sutter established a fort away from the low-lying rivers area; Sutter's Fort served as an agricultural station and destination for immigrants into California until January 1848.³²⁻³³⁻³⁴⁻³⁵

City of Sacramento

Sutter's small riverside settlement quickly took on the role of a bustling port as ocean going ships and riverboats used the Sacramento River to transport goods and gold-seeking passengers to the mine fields in the slopes of the Sierra Nevada after the discovery of gold at Sutter's Mill (near present day Coloma in El Dorado County) in 1849. Sutter laid out a grid of streets extending from the waterfront and named the new town Sacramento, establishing numbered streets running north to south and lettered streets, east of Front Street along the Sacramento River, running east to west, with each block divided into eight 80 foot by 150-foot lots with four lots on either side of an east/west oriented central alley.

The new town was centered on the embarcadero, or Front Street, and continued inland to the east centered along J Street.³⁶⁻³⁷ Downtown Sacramento developed rapidly after 1850. The blocks fronting J Street were heavily developed, owing to the street's use as the main road leading east out of the City, with slightly less development on the parallel I and K Streets. By 1851, J Street was substantially occupied from Front Street eastward beyond 10th Street with stores, saloons, hotels, grocery stores, stables, and other concerns vying for the business of visitors and residents.

³¹ Hoover, Mildred Brooke, Hero Eugene Rensch, Ethel Rensch, and William N. Abeloe, 2002. *Historic Spots in California*, 5th edition, revised by Douglas E. Kyle, Stanford University Press, Stanford, CA. pp. 302-304.

³² Jackson, W., Turrentine, R., and F. Herbert, Stephen R. Wee, 1983. *The Old Courthouse Block: H-I-6-7 Streets, Sacramento, 1848-1983*, November 1983. p. 1.

³³ Bean, Walton, 1978. *California, an Interpretive History*, McGraw Hill, New York, NY. pp. 67-68.

³⁴ Hoover, Mildred Brooke, Hero Eugene Rensch, and Ethel Rensch, revised by William N. Abeloe, 1966. *Historic Spots in California*, Stanford University Press, Stanford, CA. pp. 298-302.

³⁵ Reps, John W., 1975. *Cities of the American West: A History of Frontier Urban Planning*. Princeton University Press, Princeton, NJ. p. 195.

³⁶ Brieness, M.G., J. West, and P.D. Schulz, 1981. *Overview of Cultural Resources in the Central Business District, Sacramento, California*, prepared for the Sacramento Museum and History Department. pp. 46-47.

³⁷ Warner, W.H., 1848 [1969] *Map of Sacramento, Plan of Sacramento City*. *Historic Urban Plans*, Ithaca, NY.

During the mid-1800s, the City faced severe flooding issues. The majority of flooding stemmed from the American River, where, during heavy rains, segments of the river north of I Street would cause severe flooding. The flood of 1861/62 left portions of the City under 20 feet of water. To address this problem, the City dug a new mouth for the American River, rerouting it further north to better regulate flow, and elevated the city streets between I Street and L Street, from Front Street to 12th Street, approximately 4 to 15 feet. The City completed this enormous undertaking in 1873, and this action has shaped the current downtown grid since that time.³⁸ The 13-year process resulted in gaps between the street and the business fronts. These were covered with new sidewalks leaving “hollow sidewalks” below the new street grade.

With the reduction of flood risk, downtown businesses grew steadily; for the first 60 years of its existence the City of Sacramento consisted of the 4.5 square mile grid encompassing the modern neighborhoods of Midtown and Downtown. Between 1895 and 1915, the City underwent rapid development thanks to the introduction of a street car line. From 1906 to 1943, Pacific Gas and Electric Company operated a streetcar line which supported expanded residential development as outlying areas became more easily accessible.

The earliest annexation efforts in the late-19th and early-20th centuries pulled in the suburbs south and east of the grid. These new suburbs provided housing for residents commuting downtown, and were developed in phases spanning the first half of the 20th century. As private automobiles overtook streetcars as the primary form of transportation, the suburbs surrounding Sacramento expanded further away from the streetcar lines, which eventually fell out of use and were removed soon after World War II ended. Sacramento’s downtown core had fallen into economic and physical decline by the 1950s, as the suburban growth pulled residents out of downtown. Declining tax revenue and property values led to the redevelopment/urban renewal efforts in downtown Sacramento in the post-war period.

Downtown Sacramento (Central Business District)

Downtown Sacramento (the Central Business District (CBD)) is defined as the area generally bounded by I Street to the north, Interstate 5 to the west, P Street to the south, and 16th Street to the east. While Sacramento’s central grid began development in the mid-19th century with the arrival of John Sutter, the CBD includes predominantly modern construction resulting from the ongoing development and redevelopment of the urban core.³⁹ The diverse buildings in the CBD include historic hotels, the Golden 1 Center, commercial space and restaurants, mid- and high-rise office buildings, government buildings, the State Capitol, and medium-rise office and residential buildings.

³⁸ City of Sacramento, 2009. *City of Sacramento 2030 General Plan Master Environmental Impact Report* (SCH No. 2007072024), certified March 3, 2009. p. 6.4-9.

³⁹ SAMCC and the Historic Old Sacramento Foundation, 2006. *Old Sacramento and Downtown*. Images of America: Arcadia Publishing, San Francisco CA.

Memorial Auditorium Historic District

The SCC project site is adjacent to the Memorial Auditorium Historic District. The following excerpt is from the Sacramento Register of Historic and Cultural Resources.⁴⁰

This District essentially constitutes the Memorial Auditorium, the block face to the south opposite the Auditorium... and the half block to the east on the south side of J Street. The scale and materials of some of the structures strongly contribute to the Auditorium. Some portions of the streetscape are minimally intact but the District could be increasingly supportive of the Memorial Auditorium if it were rehabilitated sensitively in the future.

The boundaries are defined by new construction, parking lots and non-contributory older buildings.

Recorded and Known Resources in the Vicinity of the Project Sites

The NCIC indicates that there are 3 previously recorded archaeological sites within the SCC project footprint, all of which were demolished during the 1990s construction of the Convention Center Eastern Expansion. Within 0.5 miles of the SCC project site, 16 previously recorded cultural resources have been documented: 13 archaeological resources, one architectural resource, and two sites which have both archaeological and architectural components (P-34-000065 and P-34-002358). Within 0.5 miles of the Hotel project site, 11 previously recorded cultural resources have been documented: eight archaeological resources, one architectural resource, and two composite sites. **Table 4.4-2** describes these resources and their proximity to both project sites.

Architectural Resources

SCC Project Site

Archival review of the City of Sacramento Landmark Register identified seven architectural resources in close proximity to the SCC project site, including three resources adjacent to the site. **Figure 4.4-1** and **Table 4.4-3** details these resources and their locations.

Hotel Project Site

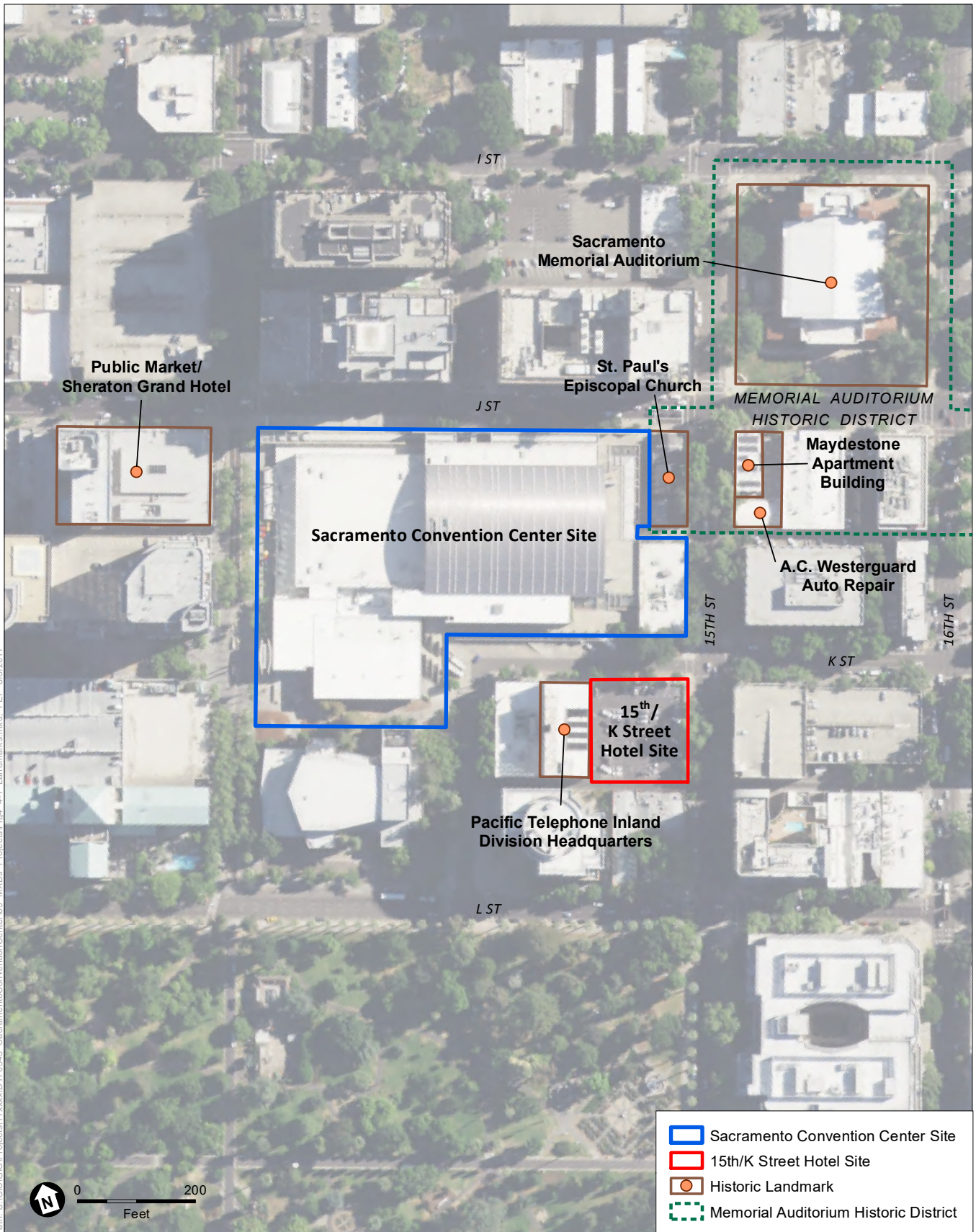
Review of the City of Sacramento Landmark Register identified one architectural resource adjacent to the Hotel project site: Pacific Telephone Inland Division Headquarters, 1414 K Street (see Figure 4.4-1 and Table 4.4-3).

⁴⁰ City of Sacramento, 2015. Sacramento Register of Historic & Cultural Resources. Available: <https://www.cityofsacramento.org/Community-Development/Planning/Urban-Design/Preservation/Sacramento-Registerf>. August 2015.

**TABLE 4.4-2
PREVIOUSLY RECORDED CULTURAL RESOURCES WITHIN 0.5 MILES OF THE SCC AND HOTEL PROJECT SITES**

P# / Trinomial	Resource Name	Date Recorded	Description	California, National, or local register	SCC Site	Hotel Site
P-34-2358	Raised Streets and Hollow Sidewalks District	2009; 2010	Historic vernacular landscape district of hollow sidewalks in historic downtown	Appears eligible for National Register	Within .5 mile	Within .5 mile
P-34-421H / CA-SAC-394	n/a	1980	Historic period discrete refuse deposits and structural remains, 1851-1890 (Site entirely removed for construction of Liberty House Store in 1979)	n/a	Within .5 mile	Outside .5 mile
P-34-002	n/a	1986	Historic period discrete refuse deposits	n/a	Within .5 mile	Within .5 mile
P-34-063 / CA-SAC -0036	n/a	1934	Archaeological site	n/a	Within .5 mile	Outside .5 mile
P-34-065 / CA-SAC -0038	n/a	1934; 1981; 1991; 2008	Composite site including prehistoric village site and historic built resources	n/a	Within .5 mile	Within .5 mile
P-34-0724 / CA-SAC -00552	n/a	2002	Historic archaeological site including privies, pits, cisterns, and structures	n/a	Within .5 mile	Within .5 mile
P-34-0725 / CA-SAC -00553	n/a	1992	Historic period discrete refuse deposit	n/a	Within site – destroyed	Within .5 mile
P-34-0726 / CA-SAC -00554	n/a	1992	Historic period discrete refuse deposit	n/a	Within site – destroyed	Within .5 mile
P-34-0727 / CA-SAC -00555	n/a	1991	Historic period discrete refuse deposit	n/a	Within site – destroyed	Within .5 mile
P-34-0892 / CA-SAC -00670	n/a	1991	Historic period refuse discrete deposit	n/a	Within .5 mile	Within .5 mile
P-34-01002 / CA-SAC -00692	n/a	2004	Remains of an 1870s boarding house	n/a	Within .5 mile	Outside .5 mile
P-34-02100	n/a	2008	Historic period refuse discrete deposit	n/a	Within .5 mile	Within .5 mile
P-34-02359	n/a	2008	Prehistoric habitation site	n/a	Within .5 mile	Outside .5 mile
P-34-02360	n/a	2004	Historic period refuse discrete deposit	n/a	Within .5 mile	Outside .5 mile
P-34-02391	Julius Wetzlar House (1021 H Street)	1976	Residential building	National Register listed	Within .5 mile	Within .5 mile
P-34-03900	n/a	1981	Site of first and second Capitols	California Register listed	Within .5 mile	Outside .5 mile

Source: NCIC, 2016



SOURCE: USDA, 2016; City of Sacramento, 2017; ESA, 2017

Sacramento Convention Center Renovation and Expansion and 15th/K Street Hotel EIR

Figure 4.4-1
City of Sacramento Landmarks Near Project Sites

**TABLE 4.4-3
 PREVIOUSLY RECORDED CULTURAL RESOURCES WITHIN 0.5 MILE OF THE SCC AND HOTEL PROJECT SITES**

Resource Name	Address	California, National, or local register	SCC Site		Hotel Site	
			Adjacent	Close proximity	Adjacent	Close proximity
St. Paul's Episcopal Church	1430 J Street/ 1012 15 th Street	Sacramento Register	yes	no	no	no
Sacramento Memorial Auditorium	1515 J Street	National Register, California Register, Sacramento Register	no	yes	no	no
Maydestone Apartment Building	1001 15 th Street	Sacramento Register	no	yes	no	no
Pacific Telephone Inland Division Headquarters	1414 K Street	Sacramento Register	yes	no	yes	no
A.C. Westerguard Auto Repair	1015 15 th Street	Sacramento Register	no	yes	no	no
Public Market/Sheraton Grand Hotel	1230 J Street	California Register and Sacramento Register	no	yes	no	no
Memorial Auditorium Historic District	n/a	Sacramento Register	yes	no	no	no

Archaeological Resources

As described above, the archaeological resources previously recorded within 0.5 miles of the SCC and Hotel project sites consist of two prehistoric resources, 12 historic-period resources, and two resources that have both prehistoric and historic-period components. The three previously recorded archaeological sites within the SCC project footprint include remnants of historic period refuse scatters, including pottery and glass fragments, animal and fish bones, and other household refuse. None of these resources were evaluated prior to their demolition during the construction of the Eastern Expansion of the Convention Center in 1992. Pursuant to State CEQA Guidelines section 15120(d) details on the locations of previously recorded archaeological resources are not provided in this section.

Native American Consultation

The City of Sacramento has notified tribes pursuant to AB 52 regarding the proposed projects, and is engaged in consultation and continuing correspondence with the tribes regarding Tribal Cultural Resources.

Archaeological Sensitivity Analysis

One purpose of records searches, Native American consultation, and background research is to identify archaeologically sensitive areas within 0.5 mile of the project sites. The degree of buried site potential presence is inversely related to the estimated date range of a landform (i.e., the older the landform, the less likely of finding buried archaeological sites). Landforms that predate the earliest estimated periods for human occupation of the region are considered to have very low

sensitivity for the presence of buried archaeological sites, while those that postdate those estimated dates are considered to have a higher potential for presence of buried archaeological sites. Currently, archaeological research indicates that the earliest evidence for human occupation of California dates to the Late Pleistocene, which ended approximately 11,500 BP. Therefore, the potential for the presence of buried archaeological deposits in landforms from or predating the Late Pleistocene is very low.⁴¹

Archival review of the area around the project sites determined that Sacramento is underlain by deep Holocene and historic-period/modern alluvium with small areas of wind-blown “dune” deposits.^{42,43} Soils in the area consist of various sandy and silty loams (alluvium) mixed with historic-period and modern fill.⁴⁴

The Geotechnical Investigation conducted for the SCC project determined that the SCC project site is underlain by 5 to 12 feet of fill, “presumably placed to raise grades above the common flood level during the early development of Sacramento and generally consisted of poorly sandy silt (ML) with gravel and occasional brick, wood and metal debris.” Below the fill, the investigation identified alluvial soils extending as deep as 40 feet below the ground surface.⁴⁵ Due to its close proximity, the depth of fill at the Hotel site is assumed to be similar to that of the SCC site.

Given the Late Holocene/historic-period/modern age of the area’s underlying geologic formation, the potential for buried prehistoric archaeological deposits in undisturbed portions of Sacramento is considered to be high.⁴⁶ Prior to historic-period and modern development, the Sacramento area would have been an amenable setting for procurement of the abundant flora and fauna found in the area’s marshes, river channels, and adjacent forests and grasslands. Areas of higher ground in Sacramento would also have been an ideal setting for prehistoric habitation. This is supported by the documented presence of several ethnographic villages and prehistoric archaeological sites in the vicinity of Sacramento.

Historic-period and modern development activities have heavily disturbed the majority of the project area, thereby reducing the potential for both the presence and significance (due to probable loss of integrity) of shallow buried and surficial prehistoric deposits. As such, while there is virtually no potential for presence of surface-level archaeological resources in the project

⁴¹ Meyer, Jack, and Jeffery Rosenthal, 2008. A Geoarchaeological Overview and Assessment of Caltrans District 3, prepared for Caltrans District 3, Sacramento. pp.160-161.

⁴² California Division of Mines and Geology, 1971. Geologic Map of California: Sacramento Sheet, prepared by the State of California Department of Conservation.

⁴³ Meyer, Jack, and Jeffery Rosenthal, 2008. A Geoarchaeological Overview and Assessment of Caltrans District 3, prepared for Caltrans District 3, Sacramento. Fig. 47, 50.

⁴⁴ U.S. Department of Agriculture, “Natural Resources Conservation Service Web Soil Survey”, Version 3.1, Available: <http://websoilsurvey.sc.egov.usda.gov/app/WebSoilSurvey.aspx>. Accessed June 26, 2016.

⁴⁵ Geocon Consultants, Inc. 2017. Geotechnical Investigation; Sacramento Convention Center Expansion and Renovation. June 2017.

⁴⁶ Meyer, Jack, and Jeffery Rosenthal, 2008. A Geoarchaeological Overview and Assessment of Caltrans District 3, prepared for Caltrans District 3, Sacramento. pp. 115, 160-161.

area there remains a moderate potential for presence of buried archaeological resources. The potential for significance of any intact prehistoric archaeological resources in the project area is unpredictable and would depend on the nature of the deposit. The archaeological sensitivity of the project area for surficial prehistoric deposits is low and for buried prehistoric deposits is moderate.

Additionally, historic-period development activities and associated use in the project area may have resulted in the creation of buried historic-period archaeological deposits. Previously documented historic period archaeological deposits were identified during the 1992 Convention Center Expansion.⁴⁷ These sites were all demolished during construction. Based on the known disturbance related to development of the existing Convention Center and surrounding properties, the potential significance of any intact historic-period archaeological resources in the project area is low.

The Hotel site was historically occupied by two single story buildings dating from the 1940s. The western half of the Hotel site was historically occupied by commercial tenants (including restaurants and banks), and the eastern half consisted of an industrial garage. The 1952 Sanborn insurance map notes that this garage site included two 300-gallon underground gas tanks. According to City permit records, both of these buildings were demolished in 1997. Due to the age and recorded height of these buildings, and lack of additional recorded details, it is assumed that neither was constructed with a deep foundation, and therefore native soils are anticipated to be relatively close to the current ground level.

In summary, in the project area the presence of previously recorded archaeological resources within the vicinity, lack of previous systematic subsurface archaeological survey, presence of recorded ethnographic villages in proximity, and historic-period use, the archaeological sensitivity is low for surficial prehistoric deposits, moderate for buried prehistoric deposits, and low (at the Convention Center Site) to moderate (at the Hotel site) for historic-period deposits.

4.4.2 Regulatory Setting

Federal

The National Historic Preservation Act of 1966 (NHPA), as amended, (16 USC section 470f) and its implementing regulations (16 USC section 470 et seq., 36 CFR section 800, 36 CFR section 60, and 36 CFR section 63) establish the federal government's policy on historic preservation and the programs, including the National Register of Historic Places (National Register), through which that policy is implemented. Under the NHPA, historic properties include "any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places" (16 USC section 470w [5]).

⁴⁷ Praetzellis, Adrian, 1991. Archaeological Excavations on the J/K/14/15 block, Sacramento" On-file at the NCIC.

Under NHPA, a resource is significant if it meets the National Register listing criteria at 36 CFR section 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:

- A. That are associated with events that have made a significant contribution to the broad patterns of our history, or
- B. That are associated with the lives of persons significant in our past, or
- C. That 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. That have yielded, or may be likely to yield, information important in prehistory or history.

State

California Environmental Quality Act

CEQA (Public Resources Code [PRC] section 21000 et seq.) is the principal statute governing environmental review of projects occurring in the State. CEQA requires lead agencies to determine if a project would have a significant effect on historical resources, unique archaeological resources, or tribal cultural resources.

Historical Resources

The State CEQA Guidelines establish that a historical resource includes: (1) a resource in the California Register of Historical Resources (California Register); (2) a resource included in a local register of historical resources, as defined in PRC section 5020.1(k) or identified as significant in a historical resource survey meeting the requirements of PRC section 5024.1(g); and (3) any object, building, structure, site, area, place, record, or manuscript which 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 by the lead agency, provided the lead agency's determination is supported by substantial evidence in light of the whole record.

If a lead agency determines that an archaeological site is a historical resource, the provisions of CEQA section 21084.1 and State CEQA Guidelines section 15064.5 apply. If an archaeological site does not meet the criteria for a historical resource contained in the CEQA Guidelines, then the site may be treated in accordance with the provisions of CEQA section 21083, pertaining to unique archaeological resources.

Unique Archaeological Resources

As defined in PRC section 21083.2 a “unique archaeological resource” is an archaeological artifact, object, or site, about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

- Contains information needed to answer important scientific research questions and there is a demonstrable public interest in that information;
- Has a special and particular quality such as being the oldest of its type or the best available example of its type; or,
- Is directly associated with a scientifically recognized important prehistoric or historic event or person.

Tribal Cultural Resources

Impacts to tribal cultural resources also are considered under CEQA (PRC section 21084.2). PRC section 21074(a) defines a tribal cultural resource as any of the following:

- Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:
 - included or determined to be eligible for inclusion in the California Register; or
 - included in a local register of historical resources, as defined in PRC section 5020.1(k).
- 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 [PRC] section 5024.1. In applying these criteria, the lead agency would consider the significance of the resource to a California Native American tribe.

Pursuant to PRC section 21074(a)(c), an historical resource, unique archaeological resource, or non-unique archaeological resource may also be a tribal cultural resource if it is included or determined eligible for the California Register, included in a local register of historical resources, or is determined to be such by a State lead agency.

The State CEQA Guidelines note that if an archaeological resource is not a unique archaeological, historical resource, or tribal cultural resource, the effects of a project on those cultural resources shall not be considered a significant effect on the environment (State CEQA Guidelines section 15064.5(c)(4)).

California Register of Historical Resources

The California Register of Historical Resources (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)). The criteria for eligibility for the California Register are based upon criteria for listing in the National Register (PRC section 5024.1(b)). Certain resources are determined by the statute 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 cultural resource must be significant at the local, State, and/or federal level under one or more of the following four criteria:

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

A resource eligible for the California Register must be of sufficient age, and retain enough of its historic character or appearance (integrity) to convey the reason for its significance.

Additionally, the California Register consists of resources that are listed automatically and those that must be nominated through an application and public hearing process. The California Register automatically includes the following:

- California properties listed on the National Register and those formally determined eligible for the National Register;
- California Registered Historical Landmarks from No. 770 onward; and
- California Points of Historical Interest that have been evaluated by the OHP and have been recommended to the State Historical Commission for inclusion on the California Register.

Other resources that may be nominated to the California Register include:

- Historical resources with a significance rating of Category 3 through 5 (those properties identified as eligible for listing in the National Register, the California Register, and/or a local jurisdiction register);
- Individual historic resources;
- Historic resources contributing to historic districts; and
- Historic resources designated or listed as local landmarks, or designated under any local ordinance.

California PRC Section 5097.99

California PRC section 5097.99, as amended, states that no person shall obtain or possess any Native American artifacts or human remains which are taken from a Native American grave or cairn. Any person who knowingly or willfully obtains or possesses any such artifacts or human remains is guilty of a felony which is punishable by imprisonment. Any person who removes,

without authority of law, any such items with intent to sell or dissect or with malice or wantonness is also guilty of a felony which is punishable by imprisonment.

The California Native American Historic Resources Protection Act of 2002 (PRC section 5097.995 et seq.), imposes civil penalties, including imprisonment and fines up to \$50,000 per violation, for any person who unlawfully and maliciously excavates upon, removes, destroys, injures, or defaces a Native American historic, cultural, or sacred site that is listed or may be listed in the California Register.

California Health and Safety Code Section 7050.5 and 7052

California Health and Safety Code (HSC) section 7050.5 protects human remains by prohibiting the disinterring, disturbing, or removing of human remains from any location other than a dedicated cemetery. PRC section 5097.98 (and reiterated in CEQA Guidelines section 15064.59 (e)) also identifies steps to follow in the event of the accidental discovery or recognition of any human remains in any location other than a dedicated cemetery. HSC section 7052 states that the disturbance of Native American, or any other, human remains is a felony, unless the disturbance has been lawfully authorized.

Assembly Bill 52

In September of 2014, the California Legislature passed Assembly Bill (AB) 52, which added provisions to the PRC regarding consultation requirements with California Native American tribes and the evaluation of impacts on tribal cultural resources under CEQA. AB 52 requires lead agencies to engage in consultation with California Native American tribes under certain circumstances to identify any known tribal cultural resources (PRC sections 21080.3.1, 21080.3.2, 21082.3). In addition, as discussed above, AB 52 requires lead agencies to analyze project impacts on tribal cultural resources, separately from archaeological resources (PRC sections 21074 and 21083.09), in recognition that archaeological resources have cultural values beyond their ability to yield data important to prehistory or history. AB 52 defines “tribal cultural resources” in a new section of the PRC section 21074 (see tribal cultural resources discussion, above).

Local

City of Sacramento 2035 General Plan

The City’s 2035 General Plan’s Historic and Cultural Resources Element includes goals and policies relating to the identification and preservation of its historic resources. The following goals and policies from the 2035 General Plan are relevant to Cultural Resources.

Goal HCR 2.1 Identification and Preservation of Historic and Cultural Resources. Identify and preserve the city’s historic and cultural resources to enrich our sense of place and our understanding of the city’s prehistory and history.

Policies

- HCR 2.1.1 **Identification.** The City shall identify historic and cultural resources, including individual properties, districts, and sites (e.g., archaeological sites) to ensure adequate protection of these resources. (PSR)
- HCR 2.1.2 **Applicable Laws and Regulations.** The City shall ensure compliance with City, State, and Federal historic preservation laws, regulations, and codes to protect and assist in the preservation of historic and archaeological resources, including the use of the California Historical Building Code as applicable. Unless listed in the Sacramento, California, or National registers, the City shall require discretionary projects involving resources 50 years and older to evaluate their eligibility for inclusion on the California or Sacramento registers for compliance with the California Environmental Quality Act. (RDR)
- HCR 2.1.3 **Consultation.** The City shall consult with appropriate organizations and individuals (e.g., CHRIS Information Centers, the Native American Heritage Commission (NAHC), the CA Office of Planning and Research (OPR) “Tribal Consultation Guidelines”, etc.) and shall establish a public outreach policy to minimize potential impacts to historic and cultural resources. (IGC/JP)
- HCR 2.1.11 **Compatibility with Historic Context.** The City shall review proposed new development, alterations, and rehabilitation/remodels for compatibility with the surrounding historic context. The City shall pay special attention to the scale, massing, and relationship of proposed new development to surrounding historic resources. (RDR)
- HCR 2.1.12 **Contextual Features.** The City shall promote the preservation, rehabilitation, restoration, and/or reconstruction, as appropriate, of contextual features (e.g., structures, landscapes, street lamps, signs) related to historic resources. (RDR)
- HCR 2.1.15 **Demolition.** The City shall consider demolition of historic resources as a last resort, to be permitted only if rehabilitation of the resource is not feasible, demolition is necessary to protect the health, safety, and welfare of its residents, or the public benefits outweigh the loss of the historic resource. (RDR)
- HCR 2.1.15 **Archaeological & Cultural Resources.** The City shall develop or ensure compliance with protocols that protect or mitigate impacts to archaeological and cultural resources including prehistoric resources. (RDR)

City of Sacramento Historic Preservation Program

The City of Sacramento’s historic preservation program began in 1975 with the enactment of the City’s first historic preservation ordinance. Amendments to the original preservation ordinance, Ordinance No. 2006-063, were enacted in October 2006, amending Chapter 17.134 of Title 17 of the Sacramento City Code. On September 30, 2013, these sections of the Code were included in a comprehensive update of Title 17, the Planning and Development Code (PDC). Under the new PDC, the substance of the preservation sections was not materially changed, and changes related to procedures were also relatively minor. Title 17, section 17.604.210 relates to eligibility criteria for historic resources. Other preservation related matters are found under Chapter 17.604 or other sections of the PDC.

The City Code provides for the compilation of the ordinances, adopting designations and deletions of Landmarks, Contributing Resources, and Historic Districts into the Sacramento Register.

Landmark Eligibility Criteria (17.604.210(A))

A nominated resource shall be listed on the Sacramento Register as a landmark if the city council finds, after holding the hearing required by this chapter, that all of the requirements set forth below are satisfied:

1. Requirements.
 - a. The nominated resource meets one or more of the following criteria:
 - i. It is associated with events that have made a significant contribution to the broad patterns of the history of the city, the region, the state or the nation;
 - ii. It is associated with the lives of persons significant in the city's past;
 - iii. It embodies the distinctive characteristics of a type, period or method of construction;
 - iv. It represents the work of an important creative individual or master;
 - v. It possesses high artistic values; or
 - vi. It has yielded, or may be likely to yield, information important in the prehistory or history of the city, the region, the state or the nation;
 - b. The nominated resource has integrity of location, design, setting, materials, workmanship and association. Integrity shall be judged with reference to the particular criterion or criteria specified in subsection A.1.a of this section;
 - c. The nominated resource has significant historic or architectural worth, and its designation as a landmark is reasonable, appropriate and necessary to promote, protect and further the goals and purposes of this chapter.
2. Factors to be considered. In determining whether to list a nominated resource on the Sacramento Register as a landmark, the factors below shall be considered.
 - a. A structure removed from its original location is eligible if it is significant primarily for its architectural value or it is the most important surviving structure associated with a historic person or event.
 - b. A birthplace or grave is eligible if it is that of a historical figure of outstanding importance and there is no other appropriate site or structure directly associated with his or her productive life.
 - c. A reconstructed building is eligible if the reconstruction is historically accurate, if the structure is presented in a dignified manner as part of a restoration master plan, and if no other original structure survives that has the same association.
 - d. Properties that are primarily commemorative in intent are eligible if design, age, tradition, or symbolic value invests such properties with their own historical significance.
 - e. Properties achieving significance within the past 50 years are eligible if such properties are of exceptional importance.

4.4.3 Analysis, Impacts and Mitigation

Analysis Methodology and Assumptions

Archival Review

Archival research and field surveys were used to identify cultural resources in and around the project sites. Several records searches conducted in early 2017 at the NCIC were compiled to provide coverage of the entirety of the proposed Downtown Specific Plan (DSP) area, which includes the SCC and Hotel project sites. The NCIC, at California State University, Sacramento, maintains the official CHRIS records of previous cultural resources studies and recorded cultural resources that include the project sites. This section discusses the following NCIC records searches, as relevant to the project sites:

- **SAC-17-3:** January 11, 2017;
- **SAC-17-11:** January 19, 2017; and
- **SAC-17-22:** February 6, 2017.

The purpose of the records searches was to: (1) determine whether known cultural resources were previously recorded in the project area; (2) assess the likelihood for unrecorded cultural resources to be present based on historical references and the distribution of nearby resources; and (3) develop a context for the identification and preliminary evaluation of cultural resources. The records searches consisted of an examination of the following documents:

- **NCIC base map:** Sacramento East, CA (USGS 7.5-minute topo map); and
- **Resource Inventories:** National Register of Historic Places, California Inventory of Historical Resources, California Historical Landmarks, California Points of Historical Interest, Historic Properties Directory Listing (*Sacramento County, through May 2012*), Archaeological Determinations of Eligibility (Sacramento County, through April 5, 2012), Caltrans Historic Bridge Inventory (Sacramento County, through March 2016).

As discussed above, the results from the NCIC indicate that there are 16 previously recorded cultural resources within 0.5 mile of the SCC site: 13 are archaeological resources, one is an architectural resource, and two have both archaeological and architectural components (P-34-000065 and P-34-002358). Within 0.5 miles of the Hotel site, 11 previously recorded cultural resources have been documented: eight archaeological resources, one architectural resource, and two composite sites. The records searches identified no previously recorded architectural resources adjacent to the project sites.

In addition, archival review identified seven Sacramento Register landmark resources in close proximity to both the SCC and Hotel project sites. Table 4.4-3 and Figure 4.4-1 detail these resources and their locations.

Significance Criteria

The proposed projects would result in a significant effect on cultural resources if they would:

1. Cause a substantial adverse change in the significance of historical or archaeological resources as defined in State CEQA Guidelines section 15064.5; or
2. Adversely affect tribal cultural resources.

These significance criteria do not specifically call out impacts of discovery of human remains. Rather, the potential discovery of human remains is included in the discussions of archaeological resources and as tribal cultural resources, below.

For the purposes of the impact discussion, “historical resource” is used to describe built environment historic period resources. Archaeological resources include buried prehistoric and historic resources. Buried historic resources may qualify as “historical resources” pursuant to the State CEQA Guidelines, and are analyzed separately from built environment historical resources.

Impacts and Mitigation Measures

Impact 4.4-1: Construction of the proposed projects could cause a substantial adverse change in the significance of paleontological resource, or an archaeological resource, including human remains or traditional cultural resources.

SCC Project

As described above under Environmental Setting, both prehistoric and historic period archaeological resources have been documented within the vicinity of the project sites. To date, three prehistoric archaeological sites have been identified within 0.5 mile of the project sites, and three historic period archaeological refuse scatters have been documented within the existing SCC footprint. Archaeological resources present on the project sites could be affected by construction activities, such as excavation and grading, which could adversely affect the physical integrity of the archaeological resource, its ability to yield important archaeological data, and/or expose Native American human remains. Such potential impacts could include:

- physical destruction of the all or a portion of a resource as a result of earth moving activities such as pile driving, grading, or subsurface construction (such as basements and underground utilities); and,
- adverse effects to those physical characteristics that convey a resource’s historical significance and justify its eligibility for inclusion in the California Register, as a result of activities such as deep filling or the use of construction techniques that remove the potential for research by effectively rendering the resource inaccessible.

The City’s 2035 General Plan includes policies to ensure compliance with protocols that protect or mitigate impacts to archaeological and cultural resources. PRC section 21080.3.1, described in the regulatory setting above, provides a process for initiating consultation with Native American Tribes and individuals. The City’s consultation with Native American tribes is ongoing.

As described above, the SCC project site has undergone significant ground disturbance as a result of ongoing modern construction since the 1970s. Previous construction during the 1990s expansion already disturbed the historic ground surface (as evidence by the historic archaeological sites recorded and subsequently destroyed by construction), and further associated excavation would have impacted prehistoric deposits at or near the historic ground surface. As such, it is unlikely that intact historic or prehistoric deposits are present within the SCC project site.

Although unlikely due to the level of prior disturbance, it is possible that archaeological resources could be present within previously undisturbed soils on the SCC project site. Therefore, construction could result in impacts to archaeological resources. Destruction or loss of integrity in these resources would result in a **potentially significant impact**.

Tribal Cultural Resources

A tribal cultural resource is defined in Public Resources Code Section 21074 as 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.

To date, three prehistoric archeological sites have been identified within 0.5 mile of the project area. Although none have specifically been identified as potential tribal cultural resources, the legal definition of tribal cultural resources is relatively new and local tribal representatives, if given the opportunity, may view them as such. The potential for additional tribal cultural resources has been identified through consultation with the UAIC. In light of the nature of the proposed project, types of tribal cultural resources, if any, are anticipated to be subsurface prehistoric archaeological resources. As described above, no such prehistoric resources have been documented within, or in the immediate vicinity of, the project site.

As noted above, if not discovered prior to development, such resources could be damaged or destroyed through earthwork, ground disturbance, or other subsurface construction activities. Damage to or loss of tribal cultural resources would be a **potentially significant impact**.

Paleontological Resources

The City of Sacramento and surrounding area are not highly sensitive for paleontological resources although some discoveries have been made in the past. As with archaeological resources, the excavation and construction of the existing buildings has largely removed the historic-era ground surface and any potential traces of paleontological resources in the project site. Based on a review of current site plans and known disturbance, there appears to be a very low potential to uncover paleontological resources during SCC project implementation. Nonetheless, if such resources are present, they could be damaged or destroyed during project excavation, pile driving, utilities installation by SMUD, PG&E and/or the City and related construction activities. This is considered a **potentially significant impact**.

SCC Project and Hotel Project

The paleontological, prehistoric, ethnographic, and historic contexts for the Hotel site are similar to that of the SCC site described above. Impacts to tribal cultural resources, human remains, and paleontological resources would be the same as those described above for the SCC site.

While the Hotel site does not have the same history of documented historic period archaeological sites as the SCC site, neither site is in close proximity to recorded prehistoric sites or documented ethnographic village sites. They would have experienced similar prehistoric and ethnographic uses.

The Hotel site was historically occupied by single story commercial and industrial uses from the 1940s through 1997. As described in the setting section above, due to the age and recorded height of the building, it is unlikely that significant foundations were constructed for these buildings. The two recorded 300-gallon tanks would not have resulted in significant additional depth of construction. Therefore, relatively undisturbed portions of the historic ground surface may be present below the anticipated fill line (approximately 12 feet). As such, there is moderate potential for historic sites dating the period prior to the building's original construction, as well as prehistoric sites at or below the fill level.

Although unlikely, it is possible that archaeological or paleontological resources could be present within previously undisturbed soils on the Hotel project site. Therefore, construction could result in impacts to archaeological resources. Destruction or loss of integrity in these resources would result in a **potentially significant impact**.

Mitigation Measure

Mitigation Measure 4.4-1(a) (SCC/Hotel)

A preconstruction training session conducted by a qualified archaeologist shall be held for all construction personnel and staff performing excavation activities on the project site. Training materials shall address procedures to be followed and appropriate conduct to be adhered to if unanticipated archaeological materials are encountered during the project work. All construction personnel involved in earth moving activities shall attend preconstruction training in person prior to the start of construction. Training shall include:

- *The purpose of archaeological monitoring;*
- *How to identify archaeological resources;*
- *How to respond to the discovery of a potential resource; and*
- *How to maintain proper discovery records and adhere to professional protocols during construction.*

Mitigation Measure 4.4-1(b) (SCC/Hotel)

In the event that unanticipated archaeological resources and/or human remains are encountered during construction, compliance with federal and State regulations and

guidelines regarding the treatment of cultural resources and/or human remains shall be required.

- i. If prehistoric or historic-period archaeological resources are encountered during project implementation, all construction activities within 100 feet shall halt and the City shall be notified.*
 - 1) A qualified archaeologist, defined as one meeting the Secretary of the Interior's Professional Qualifications Standards for Archeology, shall inspect the findings within 24 hours of discovery and report the results of the inspection to the City.*
 - 2) In the event that the identified archaeological resource is determined to be prehistoric, the City and qualified archaeologist will coordinate with and solicit input from the appropriate Native American Tribal Representatives regarding significance and treatment of the resource as a tribal cultural resource. Any tribal cultural resources discovered during project work shall be treated in consultation with the tribe, with the goal of preserving in place with proper treatment.*
 - 3) If the City determines that the resource qualifies as a historical resource or a unique archaeological resource (as defined pursuant to the CEQA Guidelines) and that the project has potential to damage or destroy the resource, mitigation shall be implemented in accordance with PRC Section 21083.2 and CEQA Guidelines Section 15126.4. Consistent with CEQA Guidelines Section 15126.4(b)(3), mitigation shall be accomplished through either preservation in place or, if preservation in place is not feasible, data recovery through excavation.*
 - 4) If preservation in place is feasible, this may be accomplished through one of the following means: (1) modifying the construction plan to avoid the resource; (2) incorporating the resource within open space; (3) capping and covering the resource before building appropriate facilities on the resource site; or (4) deeding resource site into a permanent conservation easement.*
 - 5) If avoidance or preservation in place is not feasible, a qualified archaeologist shall prepare and implement a detailed treatment plan to recover the scientifically consequential information from and about the resource, which shall be reviewed and approved by the City prior to any excavation at the resource site.*
 - 6) Treatment of unique archaeological resources shall follow the applicable requirements of PRC Section 21083.2, including creation of a treatment plan. 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.*

- ii. *In the event of discovery or recognition of any human remains during project implementation, project construction activities within 100 feet of the find shall cease until the Sacramento County Coroner has been contacted to determine that no investigation of the cause of death is required. If the County Coroner determines the remains are of Native American origin, they shall contact the NAHC to identify the Most Likely Descendant (MLD). The MLD shall be asked to make a recommendation to the landowner for treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98. The City shall comply with requirements identified by the NAHC for the appropriate means of treating the human remains and any associated funerary objects (CEQA Guidelines Section 15064.5[d]).*
- iii. *If discovery is made of items of paleontological interest, the contractor shall immediately cease all work activities in the vicinity (within approximately 100 feet) of the discovery. After cessation of excavation the contractor shall immediately contact the City. The contractor shall not resume work until authorization is received from the City. Any inadvertent discovery of paleontological resources during construction shall be evaluated by a qualified paleontologist. If it is determined that the project could damage a unique paleontological 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. If avoidance is not feasible, the paleontologist shall develop a treatment plan in consultation with the City.*

Significance After Mitigation: Mitigation Measure 4.4-1(a) and 4.4-1(b) addresses the training of a construction crew and discovery of unanticipated archaeological resources, tribal cultural resources, and human remains. Implementation of pre-construction training and accidental discovery procedures during construction would lessen anticipated impacts to prehistoric and historic-period archaeological resources, by ensuring that previously unidentified archaeological resources and human remains are protected. With the implementation of Mitigation Measure 4.4-1(a) through (b), this impact would be reduced to a **less-than-significant level**.

Impact 4.4-2: The proposed projects could cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines section 15064.5.

The existing SCC structure dates to the modern period, constructed between 1974 and 1992, and as such, no historical resources (50 years or older) are located within the SCC project site, so the proposed SCC project would not result in the demolition or alteration of a historic resource per CEQA. Further, no structures currently exist on the Hotel project site. However, as discussed in the Environmental Setting, several National Register, California Register, and/or City of Sacramento resources are located adjacent to the project sites.

All of these buildings are historic resources for purposes of CEQA. No project construction would directly alter or materially impair these buildings, but construction and operation activities

associated with the proposed projects could potentially result in indirect impacts to these resources.

SCC Project

Construction

Construction related project components could result in indirect effects to buildings in close proximity to the SCC. Proposed construction activities, including impact pile driving, could result in vibration levels that have the potential to damage fragile buildings and structures, including those identified as eligible for the California Register or locally-listed properties and therefore qualifying as historical resources.

As discussed in section 4.7, Noise and Vibration, ground-borne vibration can damage the foundations and exteriors of existing buildings. Project activities in close proximity to St. Paul's Episcopal Church, the Maydestone Apartment Building, Westerguard Auto Repair Building, Pacific Telephone Inland Division Headquarters building, and the Public Market/Sheraton Grand Hotel have the potential to cause an indirect impact to the historical resources through vibration occurring during demolition of the Panattoni Building and/or during construction of the improvements to the Convention Center Building. In particular, impact pile driving within 47 feet of an historic structure could result in damage to the building. St. Paul's Episcopal Church's Haymond/St. Cecelia Window is located on the western façade, and faces the SCC. The Haymond/St. Cecelia Window is an important visual element of the church. During the 1990s expansion of the SCC, the western facing windows were temporarily removed in order to prevent vibration and construction related damage. During their reinstallation, the windows were reinforced to avoid future window sagging and prevent future damage that may occur as a result of age or loss of structural integrity, or damage from outside factors such as vibration or weather.

Impact pile driving could occur at the Panattoni building (for the new East Lobby) and the entire western portion of the SCC project site. Impact pile driving for these project components would occur approximately 80 feet from the St. Paul's Episcopal Church, 70 feet from the Public Market/Sheraton Grand Hotel, 125 feet from the A.C. Westerguard Auto Repair and Maydestone buildings, and 85 feet from the Pacific Telephone Inland Division Headquarters building. At these distances, none of the historic structures near the SCC would be exposed to vibration levels that would result in building damage. The stained glass windows on the western façade of St. Paul's Episcopal Church have been reinforced and are of sufficient distance from potential impact pile driving to not be affected by vibration related impacts, and no vibration related damage to the windows is anticipated due to the construction of the SCC project. Therefore, vibration resulting from SCC construction is considered a **less-than-significant impact**.

Operation

Once constructed, the SCC would alter the character of the project site by replacing existing, late modern urban buildings constructed in the 1970's and 1990's with a different, larger, building. This change would not substantially alter the context in which surrounding historic resources, including St. Paul's Episcopal Church, Sacramento Memorial Auditorium, the Maydestone

Apartment building, the Westergard Building, the Public Market/Sheraton Grand Hotel, or the Memorial Auditorium Historic District, are situated. The context for these historic resources has been previously altered with the demolition of buildings for redevelopment in the 1950s and 1960s, and with construction of the Convention Center in the 1970s and subsequent surrounding modern development.

These historic resources also contribute to the larger urban context themselves, within a downtown setting where similar large structures would have been anticipated to be built. The west facing windows in St. Paul's Episcopal Church face out to a small courtyard between the church and the SCC, situated on the church property. The 1990s expansion of the SCC blocked direct evening sunlight to the church's western façade, resulting in predominantly diffused light penetrating the stained glass windows and illuminating the artistic qualities of the stained glass. The proposed new construction of the SCC in proximity to St. Paul's Episcopal Church would not result in the introduction of significantly greater shadows to the church's western façade than the current SCC. The stained glass would continue to be illuminated via indirect, diffused light, and as such would not be considered a significant adverse impact to the church's historic significance. Therefore, the improvements and aesthetic changes to the SCC would not diminish the significance of the surrounding historic resources.

Therefore, indirect impacts resulting from the proposed SCC project would be considered **less than significant**.

SCC Project and Hotel Project

Construction

Construction of the proposed Hotel project would occur adjacent to the historic Pacific Telephone Inland Division Headquarters building at 1414 K Street. As discussed above, construction related vibration, including impact pile driving, has the potential to damage adjacent historic buildings. As discussed in section 4.7, Noise and Vibration, the highest vibration levels would be generated during the construction of the proposed Hotel would be during foundation pile installation where impact pile drivers may be used. Foundation pile driving within 47 feet of historic and some older buildings could result in vibration levels that could damage the historic structures. The only historic building located within 47 feet of the Hotel site is the 1414 K Street building, located adjacent to the Hotel project site western boundary. Depending on the final foundation design for the proposed Hotel project, impact pile driving could occur within just a few feet of the adjacent historic building. At this distance, the 1414 K Street building could be exposed to vibration levels from impact pile driving that would result in a **significant impact**.

Operation

The 1414 K Street building is oriented so that its primary elevation faces K Street, with a partially enclosed courtyard open to the east, facing the Hotel project site. Historically single story buildings occupied the space immediately east of 1414 K Street through the modern era (as late as 1997). The 1414 K Street building is also a relatively tall, multi-story urban context structure, built to the property line, and within a downtown setting where similar large structures would

have been anticipated to be built. Therefore, the proposed Hotel project would not be an unanticipated use of the parcel adjacent to the property. The addition of new construction on the Hotel site would be in line with the original design and contextual arrangement of 1414 K Street building within the downtown landscape.

The proposed Hotel project would change the setting of 1414 K Street building, but this would not diminish the building's ability to convey its significance because the building's setting has been previously altered with the demolition of adjacent buildings in the 1990s, and with construction of the SCC in the 1970s and expansion in the 1990s. The building's physical characteristics that convey historic significance would not be altered in an adverse manner. Therefore, indirect impacts to the 1414 K Street building would be considered **less than significant**.

Mitigation Measure

Mitigation Measure 4.4-2(a) (Hotel)

Implement Mitigation Measure 4.4-1(a) and 4.4-1(b).

Mitigation Measure 4.4-2(b) (Hotel)

The project applicant shall be responsible for repairs of any construction damage to the 1414 K Street building. Repairs shall be conducted in compliance with the "Treatment of Preservation" under the Secretary of Interior's Standards for the Treatment of Historic Properties (SOI Standards), and shall be subject to review and approval by the City Preservation Director.

Significance After Mitigation: Mitigation Measures 4.4-2(a) and (b) would reduce potential impacts to a **less-than-significant** level by ensuring that damage to 1414 K Street building from the Hotel project's construction is minimized, and that any damage that does occur is identified and rectified promptly and in a manner that does not alter the historic character of the building. Mitigation Measure 4.8-5(a) and (b) address vibration related impacts to both historic and non-historic buildings, including the development of a Vibration Reduction Plan to identify construction techniques that avoid exceeding the vibration threshold for historic buildings. The plan will include pre-construction documentation, vibration monitoring during construction, and post-construction reporting and repair requirements consistent with the Secretary of Interior Standards Treatment of Preservation.

Cumulative Impacts

The cumulative setting for cultural resources includes the City of Sacramento for historic period resources, as the resources that might be found on the site would be important as to their being part of the history of the City of Sacramento. For prehistoric archaeological resources and tribal cultural resources, the cumulative setting includes the portions of the Central Valley identified as the territory of the local Nisenan and Miwok Native American communities (from approximately the Butte/Yuba County line south to Sacramento for the Nisenan, and Sacramento to Stockton for the Miwok). Historic resources tend to be more highly concentrated within the City limits.

However, even within the City limits, the majority of these resources have not been surveyed for significance under local, state, or federal criteria.

Within the City of Sacramento and Central Valley, excavations have uncovered evidence of prehistoric Native American culture dating to 7,750 before present, and future development within city limits increases the likelihood that archaeological sites be uncovered.

Impact 4.4-3: Implementation of the proposed projects, in combination with other cumulative development, could contribute to the cumulative loss or alteration of paleontological resources, or archaeological resources, including human remains or Tribal Cultural Resources.

Based upon previous cultural resource surveys and research, the area that comprises the City of Sacramento and surrounding area has been inhabited by prehistoric peoples for thousands of years. Prehistoric occupation was drawn towards high areas with ready access to water and floral and faunal sources of food, which the Central Valley and vicinity of the City of Sacramento provided. As described above, the City of Sacramento has several known occupation and burial sites located within the City, although these sites are predominantly located approximately .5 miles from the project sites, as well as historic period archaeological resources previously identified within the SCC project site, and within the .5 mile buffers of both the SCC and Hotel project sites. Development within the Central Valley since the arrival of European Americans, and especially the increased development in urban centers resulting from the twentieth century's exponential population increase, has led to the loss of many of archaeological evidence of the valley's earliest occupation. Evidence of the historic occupation of the City since the 1850s is also evident in historic period archaeological sites located throughout the City. These sites are frequently unearthed during development project excavation, such as the 1992 Convention Center Expansion, and provide insight into the historic occupation of various parts of the City.

The proposed projects, in combination with other development in the City of Sacramento and Central Valley, could contribute to the loss of significant archaeological resources. Subsurface and earth moving activities associated with construction and development of the urban core have the potential to damage or destroy known and currently undiscovered archaeological resources, including human remains.

Federal, state, and local laws can generally protect archaeological resources in most instances. Even so, it is not always feasible to entirely avoid archaeological sites or retain them in situ. Because all significant archaeological resources are unique and non-renewable members of finite classes, all adverse effects or negative impacts erode a dwindling resource base.

Due to the extensive modern development within and adjacent to the project sites, it is not currently possible to thoroughly address the potential for subsurface resources. While there had been considerable previous ground disturbance at the SCC site and several feet of historic fill covers much of the ground surface for both the SCC and Hotel Sites, it is still possible that historic and prehistoric period resources are present under the surface of both project sites.

However, as noted above, the SCC site is less likely to include intact archaeological sites due to the extensive ground disturbance associated with the construction of the SCC in the 1970s and 1990s expansion. While not impossible, it is not anticipated that any intact archaeological resources remain on the SCC site. Ground disturbance associated with the Hotel site is less extensive, and proposes greater depth of excavation due to the inclusion of multiple sublevels and foundation. As such the potential for intact historic and prehistoric period archaeological resources is higher at the Hotel site. As unique and non-renewable members of finite classes, the Hotel project's incremental contribution to the cumulative effects would itself be potentially cumulatively considerable; therefore, this is a **potentially significant cumulative impact** for the Hotel project. A **less-than-significant** cumulative impact is anticipated for the SCC project, due to the lessened possibility of intact archaeological resources due to previous ground disturbance.

Mitigation Measure

Mitigation Measure 4.4-3 (Hotel)

Implement Mitigation Measure 4.4-1(a) and (b).

Significance After Mitigation: Implementation of Mitigation Measures 4.4-1(a) and (b) would ensure that existing archaeological resources are identified, evaluated and treated promptly before they can be damaged or destroyed during construction. However, as noted above, archaeological resources are finite. As such, the loss of this material record cannot be completely mitigated. Therefore, the Hotel project's potential contribution to this impact would be **significant and unavoidable**.

Impact 4.4-4: Implementation of the proposed projects, in combination with other cumulative development within the City of Sacramento, could contribute to the cumulative loss or alteration of historic built resources.

Historic development of the City of Sacramento dates back to the mid-nineteenth century and reflects the origins and ongoing development of the City. The project area includes the development of City of Sacramento's historic downtown grid as well as several subsequent decades of development representing the City's economic growth and changing patterns of development through the 19th and 20th centuries.

Urban infill development and adaptive reuse of historical resources in the Downtown core have the potential to directly and indirectly affect the historic buildings through the alteration of the resource itself or the surrounding environment/setting. Potential development on these parcels could include the alteration of existing significant buildings that could cause a substantial adverse change in the significance of an historical resource. If these or other currently unidentified historic resources were damaged or destroyed during development or construction, then the project contribution to cumulative loss of historic resources would be considered potentially significant.

Federal, state, and local laws protect historical resources in most instances. Additionally, the only anticipated impacts to historic built resources include indirect construction-related vibration impacts to 1414 K Street. These impacts are minor at the scale of historic resources within the cumulative setting, and as such would not be considered cumulatively considerable.

No proposed Hotel construction or operations activities or components would physically alter historical resources such that the significance of these historical resources would be materially impaired by negatively affecting the buildings' historic integrity of location, design, workmanship, materials, feelings, and association. As such, the project contribution to the cumulative loss of historical resources would therefore be **less than significant**.

Mitigation Measure

None required.

4.5 Energy Demand and Conservation

This section provides a summary of existing energy utilities and service systems provided to the vicinity of the proposed projects, including electricity and natural gas. Pertinent regulations and requirements at the federal, State, and local level are described. Potential impacts on energy utilities and service systems that could result from implementation of the proposed projects are discussed, and, as warranted, potentially feasible mitigation measures are described in order to avoid or reduce the magnitude of potential utilities and service system-related impacts.

The analysis included in this section was developed based on data provided by the City, Pacific Gas & Electric (PG&E), Sacramento Municipal Utility District (SMUD), and the California Energy Commission (CEC). Additional data and information was gathered from the City of Sacramento 2035 General Plan,¹ City of Sacramento 2035 General Plan Master Environmental Impact Report,² and other published technical reports, as indicated in the footnoted references.

The City received comments on the NOP related to utilities and service systems; these comments are addressed in this chapter to the extent they pertain to the impacts of the proposed projects (see Appendix B). NOP comments relevant to this section include requests for the City to evaluate impacts related to transmission and distribution line easements, utility line routing, and energy efficiency.

4.5.1 Environmental Setting

Electricity

SMUD is responsible for the generation, transmission, and distribution of electrical power to its 900 square mile service area, which includes the Proposed Project areas. SMUD's service area includes most of Sacramento County and a small portion of Placer County. SMUD is a publicly-owned utility governed by an elected board of seven directors that make policy decisions and appoint the general manager, the individual responsible for the District's operations.

In 2015, SMUD obtained its electricity from the following sources: large hydroelectric (8 percent and natural gas (47 percent). Around 23 percent of SMUD's energy resources are from "unspecified sources of power", which means it was obtained through transactions and the specific generation source is not traceable. Approximately 22 percent of SMUD's energy portfolio is from eligible renewable resources, including biomass and waste (11 percent), geothermal (1 percent), eligible hydroelectric (1 percent), solar (3 percent), and wind (7 percent).³

Electrical service would be provided by SMUD through service from its 12-kV system. The proposed SCC project which includes the demolition of the western portion of the SCC, would

¹ City of Sacramento, 2015. *City of Sacramento 2035 General Plan*. Adopted March 3, 2015.

² City of Sacramento, 2015. *City of Sacramento 2035 General Plan Master Environmental Impact Report* (SCH No. 2012122006). Certified March 3, 2015.

³ Sacramento Municipal Utility District, 2015, Power Content Label. Available: <https://www.smud.org/assets/documents/pdf/Power-Content-Label-full.pdf>. Accessed June 29, 2017.

result in an additional two transformers to the existing 1996 vault, two busses and four panels. The main electrical system connection to the SCC is located at the northwest corner of the K Street and 14th Street intersection and enters the building on the southerly side. No improvements are needed to the SMUD electrical system.

The Hotel project site would connect to the SMUD electrical grid at a 21-kV underground local line at Kayak Alley and 15th Street or via a proposed underground line that would be extended south from J Street, within 15th Street. Aside from connections that may be necessary to tie project systems to the SMUD system under adjacent streets, no further improvements to the SMUD electrical system are anticipated.

Natural Gas

PG&E provides electricity and natural gas distribution, electricity generation, transportation and transmission, natural gas procurement, and storage, but in Sacramento County is a supplier of only natural gas. As a regulated utility, PG&E is bound to update its systems to meet any additional demand.

Services are provided within 48 counties in California with a total service area of approximately 70,000 square miles in northern and central California. The utility provides services with 42,141 miles of natural gas distribution pipelines and 6,438 miles of transportation pipelines. PG&E serves approximately 4.3 million natural gas distribution customers. It is anticipated that natural gas distribution lines in new development will be placed underground in accordance with California Public Utility Commission (CPUC) regulations.⁴

The SCC is served with natural gas by PG&E. PG&E provides service to downtown Sacramento through both high and low pressure systems. High pressure system pipelines, generally 4-inch diameter and larger, carry gas at approximately 40 pounds per square inch (psi). Low pressure system pipelines, generally 2-inch diameter, carry gas at a pressure of 7-inch water column (about 0.25 psi). Service is generally provided from the low pressure system unless usage exceeds about 3,000 cubic feet per hour, which is applicable to the SCC.

The main gas service connection to the SCC is also located at the northwest corner of the K Street and 14th Street intersection and enters the building on the easterly side. With the proposed demolition of the western portion of the SCC, this connection would be relocated once SCC designs have been finalized. Other than connections between the project buildings and the existing PG&E natural gas mains, no further improvements to the PG&E distribution system would be required.

Other than the existing connections between the proposed Hotel project and the existing PG&E natural gas mains, no further improvements to the PG&E distribution system would be necessary.

⁴ Pacific Gas & Electric, 2015. Company Profile. Available: <http://www.pge.com/en/about/company/profile/index.page?>. Page 1 of 4. Accessed June 29, 2017.

Energy from Fuel Consumption by Construction and Operational Transportation

Vehicles operated for both construction and operational transportation result in the consumption of transportation fuels. The consumption of energy by way of transportation can be calculated using the type of construction equipment used and the period of time for construction and Vehicle Miles Traveled (VMT) for operational transportation fuels. As technology becomes more efficient for construction and passenger vehicles, the consumption of transportation fuels decreases overall. Additionally, the implementation of alternative modes of transportation, such as transit, bicycling, and walking, can contribute to the decrease of transportation fuels consumed.⁵

4.5.2 Regulatory Setting

Federal

Federal Energy Regulatory Commission

The Federal Energy Regulatory Commission (FERC) is an independent agency that regulates the interstate transmission of electricity, natural gas, and oil. FERC also reviews proposals to build liquefied natural gas (LNG) terminals and interstate natural gas pipelines as well as licensing hydropower projects. Licensing of hydroelectric facilities under the authority of FERC includes input from State and federal energy and power generation, environmental protection, fish and wildlife, and water quality agencies.⁶

National Highway Traffic Safety Administration Standards

The National Highway Traffic Safety Administration (NHTSA) and the U.S. Environmental Protection Agency are taking coordinated steps to enable the production of clean energy vehicles with improved fuel efficiency. NHTSA sets the Corporate Average Fuel Economy (CAFE) levels, which are rapidly increasing over the next several years in order to improve energy security and reduce fuel consumption. The first phase of the CAFE standards (for model year 2017 to 2021) is projected to require, on an average industry fleet-wide basis, a range from 40.3 to 41.0 mpg in model year 2021. The second phase of the CAFE program (for model years 2022 to 2025) is projected to require, on an average industry fleet-wide basis, a range from 48.7 to 49.7 mpg in model year 2025. The second phase of standards has not been finalized due to the statutory requirement that the NHTSA set average fuel economy standards not more than five model years at a time.⁷

⁵ City of Sacramento, 2015. *City of Sacramento 2035 General Plan Master Environmental Impact Report* (SCH No. 2012122006). Certified March 3, 2015. Section 6-6.

⁶ Federal Energy Regulatory Commission, 2015. About FERC. Available: <http://www.ferc.gov/about/about.asp>. Accessed December 15, 2015.

⁷ National Highway Traffic Safety Administration, 2016. Available: <http://www.nhtsa.gov/fuel-economy>. Accessed February 25, 2016.

State

California Public Utilities Commission Requirements

The California Public Utilities Commissions (CPUC) is a State agency created by a constitutional amendment to regulate privately-owned utilities providing telecommunications, electric, natural gas, water, railroad, rail transit, and passenger transportation services, and in-State moving companies. The CPUC is responsible for assuring that California utility customers have safe, reliable utility services at reasonable rates, while protecting utility customers from fraud. The CPUC regulates the planning and approval for the physical construction of electric generation, transmission, or distribution facilities; and local distribution pipelines of natural gas.⁸

California Energy Commission

The California Energy Commission (CEC) is California's primary energy policy and planning agency. Created by the California Legislature in 1974, the CEC has five major responsibilities: (1) forecasting future energy needs and keeping historical energy data; (2) licensing thermal power plants 50 MW or larger; (3) promoting energy efficiency through appliance and building standards; (4) developing energy technologies and supporting renewable energy; and (5) planning for and directing State response to energy emergencies. Under the requirements of the California Public Resources Code, the CEC in conjunction with the California Department of Conservation (DOC) Division of Oil, Gas, and Geothermal Resources is required to assess electricity and natural gas resources on an annual basis or as necessary.⁹

Title 20 and Title 24, California Code of Regulations

New buildings constructed in California must comply with the standards contained in Title 20, Energy Building Regulations, and Title 24, Energy Conservation Standards, of the California Code of Regulations (CCR). Part 11 of Title 24 is the California Green Building Standards Code (CALGreen) sets minimum and mandatory sustainability requirements, in order to reduce environmental impact through better planning, design and construction practices. CALGreen works along with the mandatory construction codes of Title 24 and is enforced at the local level.¹⁰

Title 20 contains standards ranging from power plant procedures and siting to energy efficiency standards for appliances to ensuring reliable energy sources are provided and diversified through energy efficiency and renewable energy resources. Title 24 (AB 970) contains energy efficiency standards for residential and nonresidential buildings based on a State mandate to reduce California's energy demand. Specifically, Title 24 addresses a number of energy efficiency measures that impact energy used for lighting, water heating, heating and air conditioning,

⁸ California Public Utilities Commission, 2016. *California Public Utilities Commission*. Available: <http://www.cpuc.ca.gov>. Accessed February 5, 2016.

⁹ California Energy Commission, 2016. "About the California Energy Commission." Available: <http://www.energy.ca.gov/commission>. Accessed February 5, 2016.

¹⁰ California Department of Housing and Community Development, 2016. *2016 Report to the Legislature: Status of the California Green Building Standards Code*. Accessed June 29, 2017.

including the energy impact of the building envelope such as windows, doors, skylights, wall/floor/ceiling assemblies, attics, and roofs.^{11,12}

Any project-related construction would be required to comply with the Title 24 codes currently in place, including the CALGreen code. The existing 2016 standards became effective on July 1, 2017.¹³

Warren-Alquist Energy Resources Conservation and Development Act

Initially passed in 1974 and amended since, the Warren-Alquist Energy Resources Conservation and Development Act (Warren-Alquist Act) created the California Energy Commission, the State's primary energy and planning agency. The seven responsibilities of the Commission are: forecasting future energy needs, promoting energy efficiency and conservation through setting standards, supporting energy related research, developing renewable energy resources, advancing alternative and renewable transportation fuels and technologies, certifying thermal power plants 50 megawatts or larger, and planning for and directing state response to energy emergencies. The State Energy Commission regulates energy resources by encouraging and coordinating research into energy supply and demand problems to reduce the rate of growth of energy consumption. Additionally, the Warren-Alquist Act acknowledges the need for renewable energy resources and encourages the Commission to explore renewable energy options that would be in line with environmental and public safety goals. (Warren-Alquist Energy Resources Conservation and Development Act Public Resources Code section 25000 et seq.).¹⁴

Local

Climate Action Plan for Internal Operations

In addition to the City's CAP, the City adopted the 2016 Internal Operations Climate Action Plan (2016 IO CAP) which outlines GHG reduction strategies to reduce internal operational GHG emissions. The 2016 IO CAP reviews the City's progress toward meeting the adopted 2020 target for internal operations by benchmarking municipal emissions in 2013, reviewing the status of actions recommended in the 2010 IO CAP, and analyzing additional actions necessary to meet the City's long-term, post-2020 targets. The result is a path to achieve a 33 percent reduction in GHG emissions below 2005 levels by 2020 that builds upon the progress achieved to date, while allowing the City to align with long-term 2050 GHG reduction goals. The 2016 IO CAP identifies

¹¹ California Energy Commission, 2017. Title 20 Public Utilities and Energy. Available: [https://govt.westlaw.com/calregs/Browse/Home/California/CaliforniaCodeofRegulations?guid=I237B3BF0D44E11DEA95CA4428EC25FA0&originationContext=documenttoc&transitionType=Default&contextData=\(sc.Default\)](https://govt.westlaw.com/calregs/Browse/Home/California/CaliforniaCodeofRegulations?guid=I237B3BF0D44E11DEA95CA4428EC25FA0&originationContext=documenttoc&transitionType=Default&contextData=(sc.Default)). Accessed June 29, 2017.

¹² California Building Standards Commission, 2016. Title 24 California Building Standards Code. Available: <http://www.bsc.ca.gov/codes.aspx>. Accessed June 29, 2017.

¹³ California Building Standards Commission, 2017. California Building Standards Code. Available: <http://www.bsc.ca.gov>. Accessed June 29, 2017.

¹⁴ California Energy Commission, 2015. Warren-Alquist Act, 2015. Available: http://www.energy.ca.gov/reports/Warren-Alquist_Act/index.html. Accessed December 15, 2015.

a total of 11 specific action strategies in five major sectors of the City's operations: building energy, water management, streetlights and signals, vehicle fleet and fuels, and urban forestry.

City of Sacramento 2035 General Plan

The following goals and policies from the City of Sacramento 2035 General Plan are relevant to energy. It is important to note that the City's Climate Action Plan (CAP), originally adopted in 2012, has been integrated into the 2035 General Plan. The CAP policies outline strategies that can contribute to the reduction of greenhouse gas emissions as a result of energy generation and consumption, and how to adapt to expected climate change impacts.¹⁵

Goal U 6.1 Adequate Level of Service. Provide for the energy needs of the city and decrease dependence on nonrenewable energy sources through energy conservation, efficiency, and renewable resource strategies.

Policies

- U 6.1.1 **Electricity and Natural Gas Services.** The City shall continue to work closely with local utility providers to ensure that adequate electricity and natural gas services are available for existing and newly developing areas.
- U 6.1.5 **Energy Consumption per Capita.** The City shall encourage residents and businesses to consume 25 percent less energy by 2030 compared to the baseline year of 2005.
- U 6.1.6 **Renewable Energy.** The City shall encourage the installation and construction of renewable energy systems and facilities such as wind, solar, hydropower, geothermal, and biomass facilities.
- U 6.1.15 **Energy Efficiency Appliances.** The City shall encourage builders to supply Energy STAR appliances and HVAC systems in all new residential developments, and shall encourage builders to install high-efficiency boilers where applicable, in all new non-residential developments.

As described in Impact 4.5-1, SMUD and PG&E would have sufficient existing infrastructure within the Proposed Project areas to meet future energy consumption demands, including electricity, natural gas, and fuel, for construction and operation of the proposed projects. Therefore, the proposed projects would be consistent with Policy U 6.1.1. Lastly, after implementation of Mitigation Measure 4.5-1, which insures that the proposed Hotel would exceed the 2016 Title 24 energy standards by a minimum of 15 percent, the proposed projects would be consistent with Policy U 6.1.5, Policy U 6.1.6 and Policy U 6.1.15.

4.5.3 Analysis, Impacts and Mitigation

Significance Criteria

Appendix F of the CEQA Guidelines identify any potential significance criteria for the evaluation of impacts related to energy demand and conservation. The proposed projects would result in a significant impact on energy demand and conservation if they would:

¹⁵ City of Sacramento, 2015. *2012 Climate Action Plan: Executive Summary*. Available: <http://portal.cityofsacramento.org/Community-Development/Resources/Online-Library/Sustainability>. Accessed June 11, 2017.

1. Require or result in the construction of new energy production and/or transmission facilities or expansion of existing facilities, the construction of which could cause significant environmental effects; or
2. Result in the wasteful, inefficient, or unnecessary consumption of energy for project construction or operation, including transportation energy.

Methodology and Assumptions

The analysis in this section focuses on the nature and magnitude of the change in energy resources due to construction and operation of land uses developed under the proposed projects.

Electricity Demand

Electrical service would be provided to the SCC through service from SMUD’s 12-kV system. The main electrical system connection to the SCC is located at the northwest corner of the K Street and 14th Street intersection and enters the building on the southeasterly side. No improvements to the SMUD electrical system would be required.

The Hotel project site would connect to the SMUD electrical grid at a 21-kV underground local line at Kayak Alley and 15th Street or via a proposed underground line that would be extended south from J Street, within 15th Street. Aside from connections that may be necessary to tie project systems to the SMUD system under adjacent streets, no further improvements to the SMUD electrical system are anticipated.

Operational-related electricity annual consumption rates for the proposed projects were calculated using the California Emissions Estimator Model (CalEEMod) version 2016.3.1. CalEEMod is a statewide land use emission computer model designed to estimate criteria pollutant and greenhouse gas (GHG) emissions associated with both construction and operation from a variety of land use projects. In addition to estimating pollutant and GHG emissions, CalEEMod can provide annual energy (i.e., electricity and natural gas) consumption estimates for non-residential and residential developments. **Table 4.5-1** shows the estimate amount of electricity that would be consumed by all of the components of the proposed projects. CalEEMod assumptions and modeling details can be found in Appendix C1.

**TABLE 4.5-1
 PROPOSED PROJECTS OPERATIONAL ENERGY USE**

Land Use	Amount	Units	Electricity ¹	Natural Gas ¹
			Megawatt-hours/year	Million Btu/year
SCC Expansion	64	ksf	1,429	2,296
Hotel	350	Rooms	3,869	14,915
Total			5,298	17,211

NOTES:

1 Electricity and natural gas consumption estimates were generated using CalEEMod 2016.3.1. See Appendix F for model outputs.

SOURCE: ESA, 2017

Natural Gas Demand

The PG&E supplies natural gas to the Sacramento area. The main gas service connection to the SCC is also located at the northwest corner of the K Street and 14th Street intersection and enters the building on the easterly side. With the proposed demolition of the western portion of the SCC, this connection would be relocated once SCC designs have been finalized. Other than connections between the project buildings and the existing PG&E natural gas mains, no further improvements to the PG&E distribution system would be required in anticipation of the SCC and Hotel projects. Other than the existing connections between the proposed Hotel project and the existing PG&E natural gas mains, no further improvements to the PG&E distribution system would be necessary.

Operational-related electricity annual consumption rates for the proposed projects were calculated using CalEEMod 2016.3.1. Tables 4.5-1 estimate the amount of electricity that would be consumed by all of the components of the Proposed Project. CalEEMod assumptions and modeling details can be found in Appendix C1.

Operational Transportation Fuel Use

Transportation fuel consumption for construction and operation are a key element of project energy consumption. For construction, this includes fuel use (diesel and/or gas) associated with construction equipment and vehicles. For operations, this includes fuel use associated with on-road vehicles.

Operational-related fuel use was back-calculated based on GHG emissions estimated using the CalEEMod 2016.3.1 and unit volume fuel factors for gasoline and diesel provided by the U.S. Energy Information Administration.¹⁶ **Table 4.5-2** presents estimated annual fuel use for project operations, categorized by the Proposed Project. These estimates have been calculated using CalEEMod 2016.3.1 model. CalEEMod assumptions and modeling details can be found in Appendix C1.

**TABLE 4.5-2
PROPOSED PROJECT ANNUAL OPERATIONAL FUEL USE**

Category	Diesel Fuel (gallons)^{1,2}	Gasoline (gallons)^{1,2}
SCC and Hotel	1,600	180,444
SCC	485	54,667

NOTES:

- 1 Operational fuel use based on the CalEEMod 2016.3.1 model and the methodology described above. See Appendix F for model outputs.
- 2 Unit volume fuel factors (kg CO₂/gallon) for gasoline and diesel are from the U.S. Energy Information Administration Frequently Asked Questions. Available: <https://www.eia.gov/tools/faqs/faq.php?id=307&t=11>.

Source: ESA, 2017

¹⁶ U.S. Energy Information Administration, 2017. Frequently Asked Questions. Available: <https://www.eia.gov/tools/faqs/faq.php?id=307&t=11>. Assessed June 29, 2017.

Construction Fuel Use

For construction, diesel and gasoline fuel use were estimated using CalEEMod as follows. First, total GHG emissions estimated were split into diesel- and gasoline-generated emissions. This split was based on the percentage of diesel and gasoline vehicles typically operated during construction projects. These percentages are heavily weighted towards diesel vehicles. Then, diesel and gasoline GHG emissions were converted to gallons using standard conversion factors provided by the U.S. Energy Information Administration. **Table 4.5-3** and **Table 4.5-4** estimate the fuel use for construction under the phased and full shut down construction schedules, respectively. These estimates have been calculated using CalEEMod 2016.3.2 model. CalEEMod assumptions and modeling details can be found in Appendix C1.

**TABLE 4.5-3
 PROPOSED PROJECTS' CONSTRUCTION FUEL USE
 PHASED SCC CONSTRUCTION SCHEDULE**

Category	Diesel Fuel ^{1,2} (gallons)	Gasoline ^{1,2} (gallons)
SCC and Hotel	288,194	17,279
SCC	119,057	7,138

NOTES:

- 1 Assumes worst-case construction fuel use based on the CalEEMod 2016.3.1 model and the methodology described above. See Appendix F for model outputs.
- 2 Unit volume fuel factors (kg CO₂/gallon) for gasoline and diesel are from the U.S. Energy Information Administration Frequently Asked Questions. Available: <https://www.eia.gov/tools/faqs/faq.php?id=307&t=11>.

Source: ESA, 2017

**TABLE 4.5-4
 PROPOSED PROJECTS' CONSTRUCTION FUEL USE
 FULL SHUTDOWN SCC CONSTRUCTION SCHEDULE**

Category	Diesel Fuel ^{1,2} (gallons)	Gasoline ^{1,2} (gallons)
SCC and Hotel	350,083	20,990
SCC	118,568	7,109

NOTES:

- 1 Assumes worst-case construction fuel use based on the CalEEMod 2016.3.1 model and the methodology described above. See Appendix F for model outputs.
- 2 Unit volume fuel factors (kg CO₂/gallon) for gasoline and diesel are from the U.S. Energy Information Administration Frequently Asked Questions. Available: <https://www.eia.gov/tools/faqs/faq.php?id=307&t=11>.

Source: ESA, 2017

Impacts and Mitigation Measures

Impact 4.5-1: The proposed projects would increase demand for energy, specifically electricity and natural gas, the construction of which could cause significant environmental effects.

SCC Project

Electricity

The SCC project would be served by an existing connection to SMUD's 12 kV distribution network. Table 4.5-1, above, summarizes the anticipated demand from the project and estimates an electricity demand of 1,429 MWh/year.

SMUD has reviewed the SCC project and demand estimates and confirmed it would be able to serve the anticipated demand load.¹⁷ In addition, the SCC would be designed and constructed to achieve the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) Silver equivalent energy and environmental design. While two transformers may be added to the existing SCC vault to supply additional electrical capacity to the building, no new offsite facilities or connections would be needed for the SCC project. Therefore, potential effects on energy related facilities would be considered **less than significant**.

Natural Gas

Natural gas is provided to the SCC by PG&E. Table 4.5-1 estimates approximately 2,296 million Btu/year would be consumed by the proposed SCC, primarily for space heating and water heating.

The main gas service connection to the SCC is located at the northwest corner of the K Street and 14th Street intersection and enters the building on the easterly side. With the proposed demolition of the western portion of the SCC, this connection would be relocated once SCC designs have been finalized. Other than connections between the project buildings and the existing PG&E natural gas mains, no further improvements to the PG&E distribution system would be required. Therefore, potential effects on energy related facilities would be considered **less than significant**.

Operational Transportation Fuel Use

Operational transportation would require the use of fuels (primarily gasoline and diesel) for the operation of passenger vehicles and light trucks associated with the proposed SCC project. The estimated demand for operational diesel fuel and gasoline provided for in the proposed SCC project is shown in Table 4.5-2. For the operation of the proposed SCC, it is estimated that annually there would be approximately 54,667 gallons of gasoline and 485 gallons of diesel fuel consumed.

Vehicular circulation in and around the SCC project site would essentially remain the same as under current conditions. Vehicular parking for the SCC would continue to be accommodated in local parking garages, including the nearby garage at 13th/J Street and other garages and lots in

¹⁷ Shimizu, Gary, Principal Distribution System Engineer. Email communication August 20, 2017.

the vicinity. The increased use of fuel as a result of the proposed SCC project would not result in the requirement for additional facilities, and thus would not create new significant impacts not otherwise addressed in this EIR. Therefore, the potential effect on energy fuel consumption from operational transportation is considered **less than significant**.

Construction Fuel Use

The estimated quantity of diesel fuel and gasoline use to support construction of the SCC is shown in Table 4.5-3 and Table 4.5-4 for the phased and full shutdown SCC construction schedules, respectively. It is estimated there would be approximately 119,057 gallons of diesel fuel and 7,138 gallons of gasoline consumed under the phased SCC construction schedule and approximately 118,568 gallons of diesel fuel and 7,109 gallons of gasoline consumed under the full shutdown SCC construction schedule. Construction activities are temporary and would not result in a long-term increase in demand for fuel, and would not be of sufficient magnitude to require new infrastructure to be constructed to supply construction activities. Therefore, the impact is considered **less than significant**.

SCC Project and Hotel Project

Electricity

As noted above in section 4.5.3, the SCC project site would be served by SMUD's existing 12-kV line and infrastructure, while the Hotel project site would be served by connections to the SMUD's 21 kV distribution network. Table 4.5-1, above, summarizes the anticipated demand from the proposed projects and estimates a combined electricity demand of 5,298 MWh/year.

Given that there are approximately 6,000 megawatts of pending power plant projects in the State,¹⁸ the increase in electrical demand from operation of the proposed projects would not have a substantial impact on the local or regional electrical supplies or require additional capacity to be constructed. Since the proposed projects, once constructed, would be connected to SMUD's existing distribution networks, it is anticipated that SMUD would be able to serve the proposed projects.¹⁹ The physical environmental effects of adding electrical facilities within the SCC and Hotel project sites are considered in the resource evaluations in this EIR; no additional effects would be created. This impact is considered **less than significant**.

Natural Gas

Natural gas is provided to the SCC and Hotel project sites by PG&E. Table 4.5-1, above, summarizes the anticipated demand from the proposed projects and estimates a combined natural gas demand of 17,211 million Btu/year. In comparison, it is projected that natural gas demand in California would decrease in 2030 to 2.23 trillion Btu/year.²⁰ Ninety percent of the State's natural

¹⁸ California Energy Commission, 2017. Status of All Project, Power Plant Projects since 1996, Available: http://www.energy.ca.gov/sitingcases/all_projects.html Accessed July, 2017.

¹⁹ Shimizu, Gary, Principal Distribution System Engineer. Email communication August 20, 2017.

²⁰ California Energy Commission, 2015. Draft Staff Report: 2015 Natural Gas Outlook. Available: http://docketpublic.energy.ca.gov/PublicDocuments/15-IEPR-03/TN206501_20151103T100153_Draft_Staff_Report_2015_Natural_Gas_Outlook.pdf. Accessed July 2017.

gas is imported from the Rocky Mountain region, the Southwest, and Canadian basins. The United States produces 20 trillion cubic feet per year and had 340 trillion cubic feet of proven reserves in 2014.²¹ Consequently, given the ample regional natural gas supplies available and the existing natural gas infrastructure, the proposed projects would not have a significant impact on regional natural gas supply or require additional capacity to be constructed.

Other than the existing connections between the proposed SCC and Hotel projects and the existing PG&E natural gas mains, no further improvements to the PG&E distribution system would be necessary. Therefore, potential effects on energy related facilities would be limited, and this impact is considered **less than significant**.

Operational Transportation Fuel Use

Operational transportation would require the use of fuels (primarily gasoline and diesel) for the operation of passenger vehicles and light trucks associated with the SCC and Hotel. The estimated combined annual demand for operational diesel fuel and gasoline provided for in the proposed SCC and Hotel projects is shown in Table 4.5-2. For the operation of the SCC and Hotel, it is estimated that annually there would be approximately 180,444 gallons of gasoline and 1,600 gallons of diesel fuel consumed.

Vehicular circulation in and around the SCC and Hotel project sites would essentially remain the same as under current conditions. Vehicular parking for the SCC would continue to be accommodated in local parking garages, including the nearby garage at 13th/J Street and other garages and lots in the vicinity. The proposed Hotel project would have a main entrance on 15th Street with an on-street drop off passenger loading and unloading zone, or an off-street porte cochere that would have a vehicular entrance from 15th Street immediately south of K Street and an exit to 15th Street immediately north of Kayak Alley.

The increased use of fuel as a result of the proposed projects would not result in the requirement for additional facilities, and thus would not create new significant impacts not otherwise addressed in this EIR. Therefore, the impact is considered **less than significant**.

Construction Fuel Use

Construction of the new development anticipated under the SCC and Hotel would require the use of fuels (primarily gasoline and diesel) for operation of construction equipment (e.g., dozers, excavators, generators, and trenchers), construction vehicles (e.g., dump and delivery trucks), and construction worker vehicles. Direct energy use would also include the use of electricity required to power construction equipment (e.g., welding machines and electric power tools). The estimated quantity of diesel fuel and gasoline use to support construction of all development anticipated under the phased and combined SCC construction schedules is shown in Table 4.5-3 and Table 4.5-4, respectively. It is estimated there would be approximately 288,194 gallons of diesel fuel and 17,279 gallons of gasoline consumed under the phased SCC construction schedule and

²¹ U.S. Energy Information Administration, 2016. California State Profile and Energy Estimates: Profile Analysis. Available: <https://www.eia.gov/state/analysis.cfm?sid=CA>. Accessed July 7, 2017.

approximately 350,083 gallons of diesel fuel and 20,990 gallons of gasoline consumed under the full shutdown SCC construction schedule.

Construction activities are temporary and would not result in a long-term increase in demand for fuel, and would not be of sufficient magnitude to require new infrastructure to be constructed to supply construction activities. Therefore, the impact is considered **less than significant**.

Summary

Energy consumption, including electricity, natural gas, and fuel, for construction and operation of the proposed projects would be accomplished without the addition of energy infrastructure that could result in adverse environmental effects. In view of the above, impacts related to energy consumption would be **less than significant**.

Mitigation Measure

None required.

Impact 4.5-2: The proposed projects could result in the wasteful, inefficient, or unnecessary use of energy.

SCC Project

Electricity and Natural Gas

As stated in Chapter 2, Project Description, the proposed expansion of the SCC would be built to LEED Silver or equivalent standards, which would make the entire building function more energy efficiently. Since the SCC is owned and operated by the City of Sacramento, the proposed improvements to the SCC must be consistent with the City of Sacramento's 2016 IO CAP. The 2016 IO CAP identifies 11 strategies focused on reducing GHG emissions from the consumption of energy in buildings and facilities, fuel combustion in vehicle fleet, and decomposing waste in City-operated landfills. Of the 11 strategies identified in the 2016 IO CAP, two energy strategies are relevant to the proposed improvements to the SCC:

- **BE-2: Green Building Policy for New City Buildings.** In accordance with the City's 2035 General Plan Land Use Policy LU 8.1.5, new or renovated City-owned buildings are energy efficient and meet, as appropriate, Leadership in Energy and Environmental Design (LEED) Silver or equivalent standards.
- **BE-3: Energy Efficiency Retrofits Program for Existing Facilities.** The City's Energy Efficiency Retrofits program directs City staff to identify cost-effective improvements to existing facilities in heating/cooling, lighting, pumping systems and other facility components.

The proposed expansion of the SCC, as well as the existing SCC buildings, would be built to LEED Silver or equivalent standards. By bringing the entire SCC to LEED Silver certification or equivalent would meet the City's energy retrofit requirements. Therefore, by meeting the

Building Council's LEED Silver certification or equivalent, the proposed reconfiguration and expansion of the SCC would meet all applicable GHG reducing strategies found in the 2016 IO CAP relevant to the project. Therefore, the proposed SCC project would be consistent with the City's 2016 IO CAP and would not result in wasteful, inefficient or unnecessary use of energy. This impact would be considered **less than significant**.

Operational and Construction Transportation

Tables 4.5-2, 4.5-3, and 4.5-4 show the operational and construction fuel use for the proposed SCC project. For operations, the SCC would consume 485 gallons of diesel fuel and 54,667 gallons of gasoline on an annual basis. It is estimated there would be approximately 119,057 gallons of diesel fuel and 7,138 gallons of gasoline consumed under the phased SCC construction schedule and approximately 118,568 gallons of diesel fuel and 7,109 gallons of gasoline consumed under the full shutdown SCC construction schedule.

The proposed SCC project would include an Event Transportation Management Plan (ETMP) (see Appendix L). The ETMP would identify strategies for managing multi-modal transportation options during SCC events, and would be adapted and refined by the City of Sacramento, the SCC operator (if different than the City), and other agencies responsible for implementing it. As described in Section 4.9, Transportation, it is reasonable to expect that the urban setting of the SCC would yield lower VMT than suburban locations²² elsewhere in the Sacramento region due to access to a variety of non-automobile travel modes and synergistic qualities with surrounding land uses that would reduce the length of vehicle trips and allow for a greater share of trips to be completed via transit, walking, and biking. This reduction in trip making and trip lengths would have a commensurate reduction in transportation fuel consumption. In addition, SCC-related construction activities would be temporary and would be spread out over a period of 37 months. Since the use of fuel during construction would be temporary, it would not result in a long-term increase in demand for fuel. Thus, construction and operation of the future proposed SCC would not result in a wasteful or unnecessary use of energy. Therefore, this impact would be considered **less than significant**.

SCC Project and Hotel Project

Electricity and Natural Gas

The proposed projects would strive to promote sustainability with green building technology and renewable energy resources. Buildings and infrastructure constructed pursuant to the proposed improvements to the SCC and Hotel would comply with Title 20 and 24 California Code of Regulations, including CALGreen.

As previously discussed above, the proposed expansion of the SCC, as well as the existing SCC buildings, would be built to LEED Silver or equivalent standards and would be consistent with the City's 2016 IO CAP and would not result in wasteful, inefficient or unnecessary use of energy.

²² Includes comparable facilities of similar size, programming, and functionality to those of the proposed SCC project.

The 2035 General Plan contains several Climate Action Plan Policies and Programs that are intended and designed to reduce GHG emissions and lower energy consumption. Compact development patterns; developing sustainable buildings that incorporate a “whole system” approach to design and construction that consume less energy, water and other resources, facilitate natural ventilation, use daylight effectively; use of renewable energy systems; construction of LEED certified or equivalent buildings; and other building and design measures are outlined in general plan policies as ways for new buildings or retrofits to conserve energy. General Plan policy U 6.1.4 requires City facilities to consume 25 percent less energy by 2030 compared to the baseline year of 2005.

The proposed Hotel project is not yet designed, and it is undetermined what energy design features would be included to demonstrate its energy efficiency. Therefore, the proposed Hotel may result in wasteful, inefficient or unnecessary use of energy. This impact would be considered **potentially significant**.

Operational and Construction Transportation

Based on Table 4.5-3, it is estimated that 1,600 gallons of diesel fuel and 180,444 gallons of gasoline would be consumed during the operation of the proposed projects.

The proposed expansion of the SCC and Hotel would include an ETMP, a management and operating plan designed to facilitate multi-modal travel to and from events at the SCC and Hotel in a safe and efficient manner. The ETMP would be adapted and refined by the City of Sacramento, the SCC operator (if different than the City), and other agencies responsible for carrying it out. Subsequent adaptations or refinements would be made to respond to changing event types and schedules, new transportation access and parking opportunities, and planned transportation improvements that are implemented in the SCC vicinity. As described in Section 4.9, Transportation, it is reasonable to expect that the urban setting of the proposed projects would yield lower VMT than project alternatives²³ located elsewhere in the Sacramento region due to access to a variety of non-automobile travel modes and synergistic qualities with surrounding land uses that would reduce the length of vehicle trips and allow for a greater share of trips to be completed via transit, walking, and biking. This reduction in trip making and trip lengths would have a commensurate reduction in transportation fuel consumption.

As explained above in Impact 4.5-1, the proposed projects would require the use of fuels for operation of construction equipment, construction vehicles, and construction worker vehicles. Direct energy use would also include the use of electricity required to power construction equipment. As shown in Table 4.5-3 and Table 4.5-4, it is estimated there would be approximately 288,194 of diesel fuel and 17,279 of gasoline consume during the construction of the proposed projects under the SCC phased construction schedule and approximately 350,083 gallons of diesel fuel and 20,990 gallons of gasoline consume during the construction of the

²³ Includes comparable facilities of similar size, programming, and functionality to those of the proposed SCC and hotel projects. Additionally, includes comparable facilities that would host events of similar size, type, duration, and frequency to those expected to be held at the proposed SCC and hotel projects.

proposed projects under the SCC full shutdown construction schedule. Notably, construction activities are temporary and would be spread out over a period of two years. Since the use would be temporary, it would not result in a long-term increase in demand for fuel. Thus, construction and operation of the proposed projects would not result in a wasteful or unnecessary use of energy. Therefore, this impact would be considered **less than significant**.

Summary

The proposed projects, would be designed and operated to minimize the use of electrical, natural gas, and transportation fuel energy to the extent feasible. However, because the proposed Hotel project is not yet designed, the proposed Hotel project could result in wasteful, inefficient or unnecessary use of energy. Therefore, this impact would be considered **potentially significant**.

Mitigation Measure

Mitigation Measure 4.5-2 (Hotel)

Prior to Hotel building construction, the applicant shall submit to the City of Sacramento Building Department building design plans demonstrating that the buildings would meet Title 24 energy standards.

Significance after Mitigation: Implementation of **Mitigation Measure 4.5-2** would insure that the proposed Hotel project would meet Title 24 energy standards. The CAP Consistency Review Checklist was based on improving efficiency by 30 percent above the requirements of the 2008 Title 24 standards (effective January 1, 2010). Since setting that standard, the State has updated the Building Energy Efficiency Standards on an approximate three-year cycle, with each cycle resulting in increasingly stringent energy requirements. For example, the 2013 Building Energy Efficiency Standards went into effect on July 1, 2014 and the 2016 Building Energy Efficiency Standards went into effect on January 1, 2017. The California Energy Commission has stated that the 2013 Title 24 standards would use 25 percent less energy for lighting, heating, cooling, ventilation, and water heating than the Title 24 standards used for the City's CAP (2008 Title 24 standards),²⁴ and that residences built to the 2016 standards will use about 28 percent less energy for lighting, heating, cooling, ventilation and water heating than those built to the 2013 standards.²⁵ Energy savings for non-residential buildings are comparable. These energy improvements enacted by the State and applicable to each building constructed in the community would satisfy the reduction requirements that are identified in the City's CAP. Therefore, by demonstrating consistency with the City's CAP, the proposed projects would not result in a wasteful or unnecessary use of energy, and this impact would be **less than significant**.

²⁴ California Energy Commission, 2017. *2013 Building Energy Efficiency Standards. Building Energy Efficiency Standards Frequently Asked Questions*. Available: www.energy.ca.gov/title24/2013standards/rulemaking/documents/2013_Building_Energy_Efficiency_Standards_FAQ.pdf. Accessed October 23, 2017.

²⁵ California Energy Commission, 2017. *2016 Building Energy Efficiency Standards. 2016 Building Energy Efficiency Standards Frequently Asked Questions*. Available: www.energy.ca.gov/title24/2016standards/rulemaking/documents/2016_Building_Energy_Efficiency_Standards_FAQ.pdf. Accessed October 23, 2017.

Cumulative Impacts

The cumulative impacts regarding the wasteful, inefficient, or unnecessary consumption of energy during construction (Impact 4.5-2) would be the same as the proposed projects-specific context. Energy consumption effects related to individual projects are localized and would not combine with similar effects in other locations.

Impact 4.5-3: The proposed projects, in combination with other cumulative development, would contribute to cumulative increases in demand for energy.

Continued growth throughout SMUD's and PG&E's service areas could contribute to ongoing increases in demand for electricity and natural gas. These anticipated increases would be countered, in part, by ongoing increases in national, statewide, and local requirements and incentives to support construction or retrofit of buildings with increased energy efficiency. For electricity supply, overall electricity supply during most conditions is adequate. However, as demand continues to increase in SMUD's service area, temporary shortfalls could occur on SMUD's system (and other portions of the statewide grid) during temporary periods of high peak demand. SMUD is actively planning for anticipated increases in peak demand through 2050. Peak demands occur during the summer during hot weather conditions when people run their air conditioners. Although SMUD's facilities reach peak demand for only about 40 hours per year, meeting demand during peak periods is a key planning consideration for the utility.²⁶ SMUD is currently actively planning to offset growth in peak demands by encouraging and deploying energy efficiency and conservation measures within its service area.²⁷ Through a combination of increases in efficiency and deployment of power management strategies including power imports during peak periods, SMUD expects to maintain sufficient capacity to provide power to its service area, including the project, at least through 2050.

With respect to natural gas, PG&E sources natural gas from a combination of producers and suppliers located in Canada and the U.S. Southwest. The utility maintains contracts with producers and suppliers over daily, monthly, and longer term agreements. PG&E also maintains gas storage facilities and a network of conveyance and distribution pipelines within its service area. In order to address future increases in demand, PG&E maintains an active planning process to identify and deploy additional conservation measures to minimize increases in demand, to secure continued natural gas supply, and to maintain sufficient distribution system capacity within its service area. With respect to the proposed projects and vicinity, existing and planned infrastructure is anticipated to be sufficient to maintain service to the proposed plan and other cumulative scenario projects. Therefore, cumulative scenario impact on natural gas supply would not be cumulatively considerable.²⁸

²⁶ Sacramento Municipal Utility District, 2017. The Challenge of Peak Demand. Available: <https://www.smud.org/en/about-smud/company-information/challenge-of-peak-demand.htm>. Accessed June 29, 2017.

²⁷ Ibid.

²⁸ Pacific Gas & Electric, 2017. Operating Data. Available: www.pge.com/pipeline/operations/cgt_pipeline_status.page#flows. Accessed June 29, 2017.

Additionally, conservation policies encouraged by the City, including those set forth in the City's 2035 General Plan (electricity and natural gas services, energy consumption per capita, renewable energy, energy efficiency appliances) are expected to support increased energy conservation in new development, including that which would occur pursuant to the proposed projects, could result in an overall increase in energy demand on suppliers, anticipated increases would be affected positively by these requirements. Cumulative impacts on energy production and transmission facilities therefore are not significant and the project's contribution is not cumulatively considerable. As such, this impact is considered **less than significant**.

Mitigation Measure

None required.

4.6 Global Climate Change

This section assesses the potential greenhouse gas (GHG) emissions and climate change effects of construction and operation of the proposed project and identifies potentially feasible mitigation measures where appropriate.

No comments were received on the NOP related to climate change.

The analysis was developed based on project-specific construction and operational features described in Chapter 2, Project Description, on data provided in the City of Sacramento 2035 General Plan,¹ the City of Sacramento 2035 General Plan Master Environmental Impact Report,² City's Community-Wide Climate Action Plan³ and the City's Climate Action Plan for Internal Operations.⁴

4.6.1 Environmental Setting

“Global warming” and “global climate change” are the terms used to describe the increase in the average temperature of the earth's near-surface air and oceans since the mid-20th century and its projected continuation. Warming of the climate system is now considered to be unequivocal.⁵

Natural processes and human actions have been identified as the causes of this warming. The International 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. After 1950, however, increasing GHG concentrations resulting from human activity such as fossil fuel burning and deforestation are believed to be responsible for most of the observed temperature increase. Increases in GHG concentrations in the earth's atmosphere are thought to be the main cause of human-induced climate change. Certain gases in the atmosphere naturally trap heat by impeding the exit of solar radiation that has hit the earth and is reflected back into space. This is sometimes referred to as the “greenhouse effect” and the gases that cause this effect are called “greenhouse gases.” 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 decreased the amount of solar radiation that is reflected back into space, intensifying the natural greenhouse effect and resulting in the increase of global average temperature.

¹ City of Sacramento, 2015. *City of Sacramento 2035 General Plan*. Adopted March 3, 2015.

² City of Sacramento, 2015. *City of Sacramento 2035 General Plan Master Environmental Impact Report* (SCH No. 2012122006). Certified March 3, 2015.

³ City of Sacramento, 2015. *Climate Action Plan Consistency Review Checklist*. June 19, 2015.

⁴ City of Sacramento, 2016. *Sacramento Climate Action Plan for Internal Operations*. 2016.

⁵ Intergovernmental Panel on Climate Change, 2007. *Climate Change 2007: Impacts, Adaptation, and Vulnerability. Contribution of Working Group II to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change* [Parry, Martin L., Canziani, Osvaldo F., Palutikof, Jean P., van der Linden, Paul J., and Hanson, Clair E. (eds.)]. Cambridge University Press, Cambridge, United Kingdom. 2007. p. 9.

Carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆) are the principal GHGs. When concentrations of these gases exceed natural concentrations in the atmosphere, the greenhouse effect may be intensified. CO₂, CH₄, and N₂O occur naturally, and are also generated through human activity. Emissions of CO₂ are largely by-products of fossil fuel combustion, whereas CH₄ results from off-gassing⁶ associated with agricultural practices and landfills. Other human-generated GHGs include fluorinated gases such as SFCs, PFCs, and SF₆, which have much higher heat-absorption potential than CO₂, and are byproducts of certain industrial processes.

CO₂ is the reference gas for climate change because it is the predominant GHG emitted. The effect that each of the aforementioned gases can have on global warming is a combination of the mass of their emissions and their global warming potential (GWP). GWP indicates, on a pound-for-pound basis, 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 CO₂. For example, CH₄ and N₂O are substantially more potent GHGs than CO₂, with GWPs of 21 and 310 times that of CO₂, respectively.

In emissions inventories, GHG emissions are typically reported as metric tons of CO₂ equivalents (CO₂e). CO₂e are calculated as the product of the mass emitted of a given GHG and its specific GWP. While CH₄ and N₂O have much higher GWPs than CO₂, CO₂ is emitted in such vastly higher quantities that it accounts for the majority of GHG emissions in CO₂e, both from residential developments and human activity in general.

Potential Effects of Human Activity on GHG Emissions

Fossil fuel combustion, especially for the generation of electricity and powering of motor vehicles, has led to substantial increases in CO₂ emissions (and thus substantial increases in atmospheric concentrations). In 1994, atmospheric CO₂ concentrations were found to have increased by nearly 30 percent above pre-industrial (c. 1860) concentrations.

There is international scientific consensus that human-caused increases in GHGs have contributed and will continue to contribute to global warming. 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, more high ozone days, more large forest fires, and more drought years. 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* noted, the legislature in enacting Assembly Bill (AB) 32 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 as follows:⁷ “The impacts of global

⁶ Off-gassing is defined as the release of chemicals under normal conditions of temperature and pressure.

⁷ California Air Resources Board, 2008. *Climate Change Scoping Plan*. Adopted December 11, 2008, re-approved by the CARB on August 24, 2011. p. 10.

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 under Regulatory Setting.

Impacts of Climate Change

Ecosystem and Biodiversity Impacts

Climate change is expected to have effects on diverse types of ecosystems.⁸ As temperatures and precipitation change, seasonal shifts in vegetation will occur; this could affect the distribution of associated flora and fauna species. As the range of species shifts, habitat fragmentation could occur, with acute impacts on the distribution of certain sensitive 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.”⁹ Shifts in existing biomes could make ecosystems vulnerable to encroachment by invasive species. Forest dieback poses risks for carbon storage, biodiversity, wood production, water quality, and economic activity. Wildfires, which are an important control mechanism in many ecosystems, may become 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.¹⁰

Human Health Impacts

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

⁸ U.S. Environmental Protection Agency, 2008. *Climate Change – Ecosystems and Biodiversity*. Available: www.epa.gov/climatechange/effects/eco.html. Accessed June 19, 2012.

⁹ Intergovernmental Panel on Climate Change, 2014. *Climate Change 2013: Impacts, Adaptation, and Vulnerability, Summary for Policymakers*. Working Group II Contribution to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change. pp. 14-15.

¹⁰ Intergovernmental Panel on Climate Change, 2014. *Climate Change 2014, Synthesis Report Summary for Policymakers, Fifth Assessment Report*.

seasonal temperature variations expected as a result of climate change could affect the viability of existing agricultural operations, making the food supply more vulnerable.¹¹

Greenhouse Gas Emissions Estimates

Global Emissions

Worldwide emissions of GHGs in 2013 were approximately 35.3 billion metric tons of CO₂e per year.¹² This includes both ongoing emissions from industrial and agricultural sources, but excludes emissions from land use changes.

U.S. Emissions

In 2014, the United States emitted about 69 million metric tons of CO₂e. Of the four major emission sectors—residential, commercial, industrial, and transportation—transportation accounts for the highest fraction of GHG emissions (approximately 33 percent); these emissions are generated from direct fossil fuel combustion.¹³

State of California Emissions

In California, the transportation sector is the largest emitter of GHGs, followed by electricity generation. Emissions of CO₂ are byproducts of fossil fuel combustion. Methane, a highly potent GHG, results from off-gassing (the release of chemicals from nonmetallic substances under ambient or greater pressure conditions) and is largely associated with agricultural practices and landfills. Nitrous oxide is also largely attributable to agricultural practices and soil management. Carbon dioxide sinks, or reservoirs, include vegetation and the ocean, which absorb CO₂ through sequestration and dissolution, respectively, two of the most common processes of CO₂ sequestration. California produced approximately 459.3 million metric tons of CO₂e in 2013. Combustion of fossil fuel in the transportation sector was the single largest source of California's GHG emissions in 2013, accounting for 37 percent of total GHG emissions in the state. This sector was followed by the industrial sector (23 percent), and the electric power sector (including both in-state and out-of-state sources) (20 percent).¹⁴

City of Sacramento Emissions

Based on the 2011 GHG inventory for the City of Sacramento, the transportation sector represents the largest source of GHG emissions, accounting for 52.2 percent of the City's annual emissions of 3.85 million metric tons of CO₂e. Electricity and natural gas use to operate, heat, and cool commercial, industrial, and residential buildings accounted for another 38.2 percent of annual CO₂e emissions. The other CO₂e emission sectors included in the inventory (with percent

¹¹ U.S. Environmental Protection Agency, 2008. *Climate Change – Health and Environmental Effects*. Available: www.epa.gov/climatechange/effects/health.html#climate. Accessed June 19, 2012.

¹² PBL Netherlands Environmental Assessment Agency, 2015. Trends in Global CO₂ Emissions, 2014 Report.

¹³ U.S. Environmental Protection Agency, 2016. *Draft Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2014*; Executive Summary, Table ES-2. February 2016.

¹⁴ California Air Resources Board, 2015. *California Greenhouse Gas Inventory 2015 Edition of the GHG Emission Inventory Release (June 2015)*. Available: www.arb.ca.gov/cc/inventory/data/data.htm.

contributions reported in parentheses) were waste (8.2 percent), wastewater treatment (0.5 percent), water consumption (0.3 percent) and industrial specific sources (0.5 percent).¹⁵

4.6.2 Regulatory Setting

Federal

U.S. Environmental Protection Agency “Endangerment” and “Cause or Contribute” Findings

The U.S. Supreme Court has held that the United States Environmental Protection Agency (US EPA) 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 the US 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 the US EPA had the authority to regulate GHGs.

On December 7, 2009, the US EPA Administrator signed two distinct findings regarding GHGs under Section 202(a) of the CAA:¹⁶

- ***Endangerment Finding:*** The current and projected concentrations of the six key GHGs—CO₂, CH₄, N₂O, HFCs, PFCs, and SF₆—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.

Mandatory Greenhouse Gas Reporting Rule

On September 22, 2009, the US EPA released its final Greenhouse Gas Reporting Rule (Reporting Rule). The Reporting Rule is a response to the fiscal year (FY) 2008 Consolidated Appropriations Act (H.R. 2764; Public Law 110-161), that required the US EPA to develop “...mandatory reporting of GHGs above appropriate thresholds in all sectors of the economy....” The Reporting Rule applies to most entities that emit 25,000 metric tons of CO₂e or more per year. Since 2010, facility owners must submit an annual GHG emissions report with detailed calculations of facility GHG emissions. The Reporting Rule also mandates recordkeeping and administrative requirements in order for the US EPA to verify annual GHG emissions reports.

State

In California, the legal framework for GHG emission reduction has come about through an incremental set of Governors’ Executive Orders, legislation, and regulations put in place since 2002. The major components of California’s climate change initiative are reviewed below.

¹⁵ City of Sacramento, 2015. *City of Sacramento 2035 General Plan Master Environmental Impact Report*. Adopted March 3, 2015.

¹⁶ U.S. Environmental Protection Agency. 2016. *Endangerment and Cause or Contribute Findings for Greenhouse Gases under Section 202(a) of the Clean Air Act*. Available: www3.epa.gov/climatechange/endangerment/.

Assembly Bill 1493

In 2002, then-Governor Gray Davis signed AB 1493. AB1493, also known as the “Pavley” regulations (named for the bill’s author, State Senator Fran Pavley), required the CARB to develop and adopt, by January 1, 2005, regulations that achieve “the maximum feasible reduction of GHGs emitted by passenger vehicles and light-duty trucks and other vehicles determined by the CARB to be vehicles whose primary use is noncommercial personal transportation in the state.”

To meet the requirements of AB 1493, in 2004 the CARB approved amendments to the California Code of Regulations (CCR), adding GHG emissions standards to California’s existing standards for motor vehicle emissions. Amendments to CCR Title 13, Sections 1900 and 1961 (13 CCR 1900, 1961), and adoption of Section 1961.1 (13 CCR 1961.1), require automobile manufacturers to meet fleet-average GHG emissions limits for all passenger cars, light-duty trucks within various weight criteria, and medium-duty passenger vehicle weight classes (i.e., any medium-duty vehicle with a gross vehicle weight (GVW) rating of less than 10,000 pounds and that is designed primarily for the transportation of persons), beginning with model year 2009. For passenger cars and light-duty trucks with a loaded vehicle weight (LVW) of 3,750 pounds or less, the GHG emission limits for model year 2016 are approximately 37 percent lower than the limits for the first year of the regulations, model year 2009. For light-duty trucks with an LVW of 3,751 pounds to a GVW of 8,500 pounds, as well as for medium-duty passenger vehicles, GHG emissions were reduced approximately 24 percent between 2009 and 2016.

Because the Pavley regulations would impose stricter standards than those under the CAA, California applied to the US EPA for a waiver under the CAA; this waiver was initially denied in 2008. In 2009, however, the US EPA granted the waiver.

Senate Bills 1078 and 107 and Executive Orders S-14-08 and S-21-09

SB 1078 (Chapter 516, Statutes of 2002) requires 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.

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

The 33-percent-by-2020 goal was codified in April 2011 with Senate Bill X1-2, which was signed by Governor Edmund G. Brown, Jr. This new Renewable Portfolio Standard (RPS) preempts the CARB 33 percent Renewable Electricity Standard and applies to all electricity retailers in the state, including publicly owned utilities (POUs), investor-owned utilities,

electricity service providers, and community choice aggregators. Consequently, the Sacramento Metropolitan Utility District (SMUD), who would be the electricity provider for the proposed projects, must meet the 33 percent goal by 2020. All of these entities must adopt the new RPS goals of 20 percent of retail sales from renewables by the end of 2013 and 25 percent by the end of 2016, with the 33 percent requirement being met by the end of 2020.

Executive Order S-3-05

In 2005, in recognition of California's vulnerability to the effects of climate change, then-Governor Arnold Schwarzenegger established Executive Order S-3-05, which set forth the following target dates by which statewide GHG emissions would be progressively reduced: by 2010, reduce GHG emissions to 2000 levels; by 2020, reduce GHG emissions to 1990 levels; and by 2050, reduce GHG emissions to 80 percent below 1990 levels.

Assembly Bill 32 and the California Climate Change Scoping Plan

Assembly Bill 32 Requirements

In 2006, the California legislature passed AB 32 (California Health and Safety Code Division 25.5, Sections 38500, et seq.), also known as the Global Warming Solutions Act. AB 32 requires the CARB to design and implement feasible and cost-effective emissions limits, regulations, and other measures, such that statewide GHG emissions are reduced to 1990 levels by 2020 (representing a 25-percent reduction in emissions). AB 32 anticipates that the GHG reduction goals will be met, in part, through local government actions. The CARB has identified a GHG reduction target of 15 percent from current levels for local governments (municipal and community-wide) and notes that successful implementation of the plan relies on local governments' land use planning and urban growth decisions because local governments have primary authority to plan, zone, approve, and permit land development to accommodate population growth and the changing needs of their jurisdictions.

Scoping Plan Provisions

Pursuant to AB 32, the CARB adopted a *Climate Change Scoping Plan* in December 2008 (re-approved by CARB on August 24, 2011¹⁷) outlining measures to meet the 2020 GHG reduction goals. In order to meet these goals, California must reduce its GHG emissions by 30 percent below projected 2020 business-as-usual emissions levels or about 15 percent from today's levels. The Scoping Plan recommends measures that are worth studying further, and that the State of California may implement, such as new fuel regulations. It estimates that a reduction of 174 million metric tons of CO₂e (about 191 million U.S. tons) from the transportation, energy, agriculture, forestry, and other sources could be achieved should the state implement all of the measures in the Scoping Plan. The Scoping Plan relies on the requirements of Senate Bill (SB) 375 (discussed below) to implement the carbon emission reductions anticipated from land use decisions.

¹⁷ California Air Resources Board, 2008. *Climate Change Scoping Plan*. Adopted December 11, 2008, re-approved by CARB August 24, 2011. pp. ES-1 and 17.

In May 2014, CARB published its First Update to the Scoping Plan.¹⁸ This update builds upon the initial Scoping Plan with new strategies and recommendations. The update defines ARB's climate change priorities over the next five years and sets the groundwork to reach long-term goals set forth in Executive Orders S-3-05 and B-16-2012.

CARB is currently updating its Scoping Plan to reflect the 40 percent below 1990 by 2030 target required by SB 32. This updated Scoping Plan is expected to be approved by the CARB in 2017.

Cap-and-Trade Program

The Scoping Plan identifies cap-and-trade as a key strategy for helping California reduce its GHG emissions.¹⁹ A cap-and-trade program sets the total amount of GHG emissions allowable for facilities under the cap and allows covered sources, including producers and consumers of energy, to determine the least expensive strategies to comply. AB 32 required the CARB to adopt the cap-and-trade regulation by January 1, 2011, and the program itself began in November 2012.

Carbon offset credits are created through the development of projects, such as renewable energy generation or carbon sequestration projects, that achieve the reduction of emissions from activities not otherwise regulated, covered under an emissions cap, or resulting from government incentives. Offsets are verified reductions of emissions whose ownership can be transferred to others. As required by AB 32, any reduction of GHG emissions used for compliance purposes must be real, permanent, quantifiable, verifiable, enforceable, and additional. Offsets used to meet regulatory requirements must be quantified according to the CARB-adopted methodologies, and the CARB must adopt a regulation to verify and enforce the reductions. The criteria developed will ensure that the reductions are quantified accurately and are not double-counted within the system.²⁰

Executive Order S-1-07

Executive Order S-1-07, signed by then-Governor Arnold Schwarzenegger in 2007, proclaimed that the transportation sector is the main source of GHG emissions in California, at over 40 percent of statewide emissions. The order established a goal of reducing the carbon intensity of transportation fuels sold in California by a minimum of 10 percent by 2020. It also directed the CARB to determine whether this Low Carbon Fuel Standard could be adopted as a discrete, early-action measure after meeting the mandates in AB 32. The CARB adopted the Low Carbon Fuel Standard on April 23, 2009.

Senate Bill 1368

SB 1368 is the companion bill of AB 32 and was signed by then-Governor Schwarzenegger in September 2006. SB 1368 requires the California Public Utilities Commission (CPUC) to establish a GHG emission performance standard for baseload generation from investor-owned

¹⁸ California Air Resources Board, 2012. *First Update to the Climate Change Scoping Plan*. Adopted May 28, 2014.

¹⁹ California Air Resources Board, 2008. *Climate Change Scoping Plan*. Adopted December 11, 2008, re-approved by the CARB on August 24, 2011. pp. 18-20.

²⁰ *Ibid.* pp. 36-38.

utilities by February 1, 2007. The California Energy Commission (CEC) was also required to establish a similar standard for local publicly owned utilities by June 30, 2007. These standards cannot exceed the GHG emission rate from a baseload combined-cycle natural gas-fired plant. The legislation further requires that all electricity provided to California, including imported electricity, must be generated from plants that meet the standards set by the CPUC and CEC.

Senate Bill 375

In addition to policy directly guided by AB 32, the legislature in 2008 passed SB 375, which provides for regional coordination in land use and transportation planning and funding to help meet the AB 32 GHG reduction goals. SB 375 aligns regional transportation planning efforts, regional GHG emissions reduction targets, and land use and housing allocations. SB 375 requires Regional Transportation Plans (RTPs) developed by the state's 18 metropolitan planning organizations (MPOs) to incorporate a "sustainable communities strategy" (SCS) that will achieve GHG emission reduction targets set by the CARB. SB 375 also includes provisions for streamlined CEQA review for some infill projects, such as transit-oriented development. SB 375 would be implemented over the next several years. The Sacramento Area Council of Government's (SACOG) 2016 *Metropolitan Transportation Plan/Sustainable Communities Strategy* was adopted on February 18, 2016. SACOG's *Strategy* calls for meeting and exceeding the CARB GHG reduction goals from passenger vehicles and light-duty trucks of 7.6 percent by 2020 and 15.6 percent by 2035, where 2005 is the baseline year for comparison.²¹

Senate Bill 350

SB 350 (Clean Energy and Pollution Reduction Act of 2015) was signed into law on October 7, 2015, establishing new goals for clean energy, clean air, and GHG reduction goals for 2030 and beyond. SB 350 requires the following:

- Increase California's renewable electricity procurement goal under the RPS from 33 percent by 2020 to 50 percent by 2030,
- Double existing building energy efficiency by 2030; and
- Facilitate the growth of renewable energy markets within the western U.S. by reorganizing the California Independent System Operator (CAISO).

Green Building Standards Code

In January 2010, the State of California adopted the California Green Building Standards Code (CALGreen) that establishes mandatory green building standards for all buildings in California. The code covers five categories: planning and design, energy efficiency, water efficiency and conservation, material conservation and resource efficiency, and indoor environmental quality. These standards include a mandatory set of minimum guidelines, as well as more rigorous voluntary measures, for new construction projects to achieve specific green building performance levels. This

²¹ Sacramento Area Council of Governments, 2016. 2016 *Metropolitan Transportation Plan/Sustainable Communities Strategy*. Adopted February 18, 2016. p. 173.

Code went into effect as part of local jurisdictions' building codes on January 1, 2011 and was most recently updated as the 2016 California Green Building Standards Code (effective January 1, 2017).²²

Executive Order B-16-12

In 2012, Governor Brown issued Executive Order B-16-12, ordering “that California’s state vehicle fleet increase the number of zero-emission vehicles through the normal course of fleet replacement so that at least 10 percent of fleet purchases of light-duty vehicles be zero-emission by 2015 and 25 percent of fleet purchases of light-duty vehicles be zero-emission by 2020. The executive order also requires that California target for 2050 a reduction of GHG emissions from the transportation sector equaling 80 percent less than 1990 levels.

Executive Order B-30-15

In 2015, Governor Brown issued Executive Order B-30-15, establishing a GHG reduction target of 40 percent below 1990 levels by 2030. This goal was set to make it possible to reach the ultimate goal of AB 32 to reduce GHG emissions 80 percent under 1990 levels by 2050.

California Environmental Quality Act (CEQA) and Senate Bill 97

Under CEQA, lead agencies are required to disclose the reasonably foreseeable adverse physical environmental effects of projects they are considering for approval. GHG emissions have the potential to adversely affect the environment because they contribute to global climate change. In turn, global climate change has the potential to raise sea levels, alter rainfall and snowfall, and affect habitat.

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 guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions, as required by CEQA, no later than July 1, 2009. The California Natural Resources Agency was required to certify or adopt those guidelines by January 1, 2010. On December 30, 2009, the Natural Resources Agency adopted amendments to the State CEQA Guidelines, as required by SB 97. These State CEQA Guidelines amendments provide guidance to public agencies regarding the analysis and mitigation of the effects of GHG emissions in draft CEQA documents. The amendments became effective March 18, 2010.

State CEQA Guidelines

The State CEQA Guidelines are embodied in the CCR, Public Resources Code, Division 13, starting with Section 21000. State CEQA Guidelines section 15064.4 specifically addresses the significance of GHG emissions, requiring a lead agency to make a “good-faith effort” to

²² California Building Standards Commission, 2016. California 2016 Green Building Standards Code, CalGreen California Code of Regulations, Title 24, Part 11. Effective Date: January 1, 2017.

“describe, calculate or estimate” GHG emissions in CEQA environmental documents. Section 15064.4 further states that the analysis of GHG impacts should include consideration of (1) the extent to which the project may increase or reduce GHG emissions, (2) whether the project emissions would exceed a locally applicable threshold of significance, and (3) the extent to which the project would comply with “regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions.” 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 (State CEQA Guidelines section 15064(h)(3)). The State CEQA Guidelines do not, however, set a numerical threshold of significance for GHG emissions.

The CEQA Guidelines also include the following direction on measures to mitigate GHG emissions, when such emissions are found to be significant:

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; and
- (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.²³

Local

City of Sacramento Climate Action Plan (CAP) for Internal Operations

In March 2015, the City of Sacramento adopted the 2035 General Plan Update, which included Policy ER 6.1.6 calling for the maintenance and implementation of the City’s Internal Operations Climate Action Plan (IO CAP). The IO CAP is a component of the General Plan that was

²³ State CEQA Guidelines section 15126.4(a).

evaluated with the certified Master Environmental Impact Report for the 2035 General Plan Update (Resolution No. 2015-0060). In June 2016, the City of Sacramento adopted the 2016 IO CAP. The 2016 IO CAP assesses the City's progress toward meeting the internal operation GHG reduction target of 22 percent below 2005 levels by 2020, as well as the City's long-term objective of achieving GHG reductions of 83 percent below 2005 levels by 2050, both goals being identified as consistent with the statewide GHG reduction goals, identified above. The 2016 IO CAP identifies a total of 11 action strategies in four of the City's major sections.

SMUD SolarShares Program

As part of a SMUD campus account that includes the Convention Center and Memorial Auditorium, the Community Theater is enrolled in a voluntary community solar program. SMUD provides approximately half of the annual electricity use for the complex with solar power generated off-site. This solar power is in excess of eligible renewables SMUD that produces to meet the Renewables Portfolio Standard. All renewable energy credits from the City's SolarShares allocation are attributable to the City, as outlined in the program agreement with SMUD. Sacramento City Council approved participation in the program on August 29, 2017. SolarShares service will initiate in January 2018 and continue for a twenty-year agreement term.

For the Convention Center and Memorial Auditorium account, SMUD is dedicating 1,701 kilowatts of solar photovoltaics, with a contractual commitment to provide 3,678,718 kWh annually to the account. This allocation will offset 50 percent of annual consumption at 2015 usage levels (7,382,982 kWh), but the exact proportion may vary over time based on overall demand at the complex. SolarShares allocations will be credited to the City on electricity bills according to rates established in the agreement, offsetting the account's grid consumption.

City of Sacramento Climate Action Plan (CAP) and City of Sacramento 2035 General Plan

The City of Sacramento CAP includes several initiatives to reach its goals of reducing community-wide emissions by 15 percent below 2005 levels by 2020, 38 percent below 2005 levels by 2030, and 83 percent below 2005 levels by 2050. These goals must be achieved with the addition of new residents living in the city and additional people working in the city. As compared to 2005, by 2020 Sacramento expects an additional 116,400 people, 58,500 housing units, and 80,200 employees. On a per capita basis (including new residents), Sacramento will need to reduce its emissions to about 6.2 metric tons of CO_{2e} per person by 2020. This represents a 31 percent reduction from 2005 per capita emission levels (8.9 metric tons CO_{2e} per person).

The CAP outlines seven strategies to meet Sacramento's GHG reduction goals.²⁴ Those strategies include:

- Strategy 1: Sustainable Land Use – This strategy focuses on using land efficiently, while preserving the character of existing neighborhoods, by providing for complete neighborhoods that incorporate natural resources and green infrastructure.

²⁴ City of Sacramento, 2012. *Sacramento Climate Action Plan*. Adopted February 14, 2012. pp. i-xiv.

- Strategy 2: Mobility and Connectivity – This strategy involves creating a multi-modal transportation network that increases the use of sustainable modes of transportation (walking, biking, and transit) and reduces dependence on automobiles.
- Strategy 3: Energy Efficiency and Renewable Energy – The third strategy increases the energy efficiency of existing and new buildings and maximizes the use and generation of renewable energy.
- Strategy 4: Water Reduction and Recycling – This strategy reduces the production, consumption, and disposal of waste materials, while encouraging reuse, recycling, and composting.
- Strategy 5: Water Conservation and Wastewater Reduction – This strategy encourages water conservation and management and wastewater treatment practices that reduce energy demand.
- Strategy 6: Climate Change Adaptation – This strategy plans for climate change risks and is designed to create resilient communities, economies, and environments.
- Strategy 7: Community Involvement and Empowerment – This strategy enlists the ideas and energy of residents and businesses to help achieve the City’s climate action objectives.

For each of the seven strategies listed above, the CAP includes measures and actions that the City will use to reduce GHG emissions and adapt to climate change. Measures organize the specific programs, policies, and actions that the City will carry out to achieve its climate action strategies. Within each measure are the detailed actions that the City will take to implement the measures.

In 2015, the City adopted its 2035 General Plan. The strategies, measures, and actions that formed the backbone of the City’s CAP were incorporated into the 2035 General Plan. Appendix B of the 2035 General Plan identifies the location of each CAP measure within the 2035 General Plan.²⁵

To determine a project’s consistency with the CAP, the City developed a Climate Action Plan Consistency Checklist.²⁶ This checklist provides a streamlined review process for proposed development projects subject to environmental review under CEQA.

4.6.3 Analysis, Impacts and Mitigation

Significance Criteria

GHG emissions relate to an inherently a cumulative impact because no single project makes a significant contribution to global climate change. The State CEQA Guidelines require the analysis of GHGs and potential climate change impacts from new development. Under section 15183.5 of the State CEQA Guidelines:

[p]ublic agencies may choose to analyze and mitigate significant greenhouse gas emissions in a plan for the reduction of greenhouse gas emissions or similar

²⁵ City of Sacramento, 2015. General Plan Climate Action Plan Policies and Programs, Appendix B, pp. 1-78.

²⁶ City of Sacramento, 2015. Climate Action Plan Consistency Review Checklist. June 19, 2015. pp. 1-20.

document. A plan to reduce greenhouse gas emissions may be used in a cumulative impacts analysis as set forth below. Pursuant to sections 15064(h)(3) and 15130(d), a lead agency may determine that a project's incremental contribution to a cumulative effect is not cumulatively considerable if the project complies with the requirements in a previously adopted plan or mitigation program under specified circumstances.

The Sacramento 2016 IO CAP and CAP qualifies under section 15183.5 of the State CEQA Guidelines as a plan for the reduction of GHG emissions for use in cumulative impact analysis pertaining to development projects. Thus, for purposes of this EIR, impacts to global climate change would be considered significant if the proposed project would conflict with either the City's 2016 IO CAP or CAP.

Methodology and Assumptions

CEQA Guidelines section 15064.4 allows lead agencies to rely on a qualitative analysis to describe GHG emissions resulting from a project. CEQA Guidelines section 15183.5 allows for public agencies to analyze and mitigate GHG emissions as part of a larger plan for the reduction of greenhouse gases and describes the required contents of such a plan. The following plans are considered with respect to the proposed projects:

Consistency with the City of Sacramento Internal Operations Climate Action Plan

As discussed above, the City has adopted the 2016 IO CAP, which outlines GHG reduction strategies to reduce internal operational GHG emissions. These GHG reduction strategies are outlined below.

- **BE-1: Energy Savers Campaign – “Light & Equip Off” Policy.** A City policy adopted in 2009 directs City staff to turn off all lights and computers when not in use.
- **BE-2: Green Building Policy for New City Buildings.** In accordance with the City's 2035 General Plan Land Use Policy LU 8.1.5, new or renovated City-owned buildings are energy efficient and meet, as appropriate, Leadership in Energy and Environmental Design (LEED) Silver or equivalent standards.
- **BE-3: Energy Efficiency Retrofits Program for Existing Facilities.** The City's Energy Efficiency Retrofits program directs City staff to identify cost-effective improvements to existing facilities in heating/cooling, lighting, pumping systems and other facility components.
- **WT-1: Water, Wastewater, and Drainage Pumping Efficiency and System Optimization.** Since the late 1990s, the City's Department of Utilities (DOU) has been continually seeking new options and technologies to improve the energy and operational efficiencies of the City's water delivery system. Most of these actions have included upgrades to more efficient motors and pumps, but also include pumping logistics.
- **WT-2: Low-Maintenance Landscaping.** City departments are continuing to explore ways to incorporate sustainable or low-maintenance landscaping to reduce the demand for water used

to irrigate City landscapes. These landscapes include City-maintained trees, lawns, and ornamental turf around City buildings and streetscapes. Streetscapes include vegetation and landscaping along street medians, sidewalks, and other thoroughfare features. This measure does not include landscaping at parks, which is included separately under WT-3.

- **WT-3: Watering Reductions in City Parks.** In addition to converting landscapes to low-water use features and plantings, the City has also reduced water use at City parks through operational changes, such as controlled irrigation schedules and weather sensitive irrigation systems. In 2010, DPR reduced water use by changing its watering schedule from 5 to 3 days per week, with watering occurring only during evening hours to reduce evaporation.
- **WT-4: Long-Term Water Saving and Drought-Response.** The City Council adopted a Water Conservation Plan (WCP) in 2013, which identifies over 20 community-wide water conservation actions. The intent of the WCP is to ensure compliance with requirements established by Senate Bill (SB) X7-7 to reduce urban per capita water consumption 20 percent by the year 2020.
- **SS-1: Streetlight LED Program.** The City of Sacramento began a pilot project in 2010 to convert existing metal halide and other traditional incandescent streetlights to light-emitting diode (LED) technology.
- **SS-2: Traffic Signal LED Program.** Since 1996, the City has actively worked to replace the majority of incandescent traffic signal fixtures with LED fixtures.
- **VF-1: Overall Fleet Efficiency and Electric Fleet Pledge.** As part of the City's Sustainable Fleet Policy, the City continues to improve fleet vehicle efficiency as part of the City's ongoing replacement program. Vehicle purchases are based upon established vehicle standards that emphasize the greatest fuel economy and lowest emissions in each vehicle's respective class. As national vehicle efficiency standards increase over time, such as the Corporate Average Fuel Economy (CAFE) standards, replacement of older fleet vehicles with newer, more efficient vehicles will naturally increase the fleet's overall efficiency.
- **VF-2: Alternative Fuels: Renewable Natural Gas.** The City has a significant opportunity in reducing emissions from the vehicle fleet by switching to renewable natural gas (RNG) for the City's compressed natural gas (CNG) and liquefied natural gas (LNG) fleet. RNG is sourced from methane gas captured from decomposition of organic waste sources such as landfills and agricultural waste, and is available both as LNG and CNG. Because of these renewable sources, emissions resulting from RNG would add "net zero" carbon emissions into the atmosphere, meaning that no new carbon emissions would be attributed to the combustion of RNG.

Projects that are consistent with the relevant GHG reduction measures provided above, would be considered consistent with the City's 2016 IO CAP and therefore would not result in significant GHG emissions or climate change impacts.

Consistency with the City of Sacramento Community-Wide Climate Action Plan

As discussed above, the City has developed a Community-Wide CAP Consistency Review Checklist. This checklist is designed to streamline the GHG emissions review process for new development projects subject to CEQA.

Table 4.6-1 presents the checklist. The first checklist question focuses on a project’s consistency with the general plan and sustainable land use aspects of the CAP. Questions 2, 3, and 4 evaluate a project’s consistency with the CAP’s mobility requirements, while questions 5 and 6 focus on evaluating whether a project is consistent with the energy efficiency and renewable energy portions of the CAP. Projects that achieve each item on the City’s CAP Consistency Review Checklist would be consistent with the City’s CAP, and therefore would not result in significant GHG emissions or climate change impacts.

**TABLE 4.6-1
CITY OF SACRAMENTO CAP CONSISTENCY REVIEW CHECKLIST**

City of Sacramento Consistency Review Checklist Questions	
1.	Is the proposed project substantially consistent with the land use and urban form designation, allowable floor area ratio (FAR) and/or density standards in the City’s 2035 General Plan?
2.	Would the project incorporate traffic calming measures ?
3.	Would the project incorporate pedestrian facilities and connections to public transportation consistent with the City’s Pedestrian Master Plan?
4.	Would the project incorporate bicycle facilities consistent with the City’s Bikeway Master Plan and meet or exceed minimum standards for bicycle facilities in the Zone Code and CALGreen?
5.	Would the project include on-site renewable energy systems (e.g., solar photovoltaic, solar water heating, etc.) that would generate at least 15% of the project’s total energy demand?
6.	Would the project comply with minimum CALGreen Tier 1 water efficiency standards?

Source: City of Sacramento, 2015.

Impacts and Mitigation Measures

The analysis conducted throughout this EIR consists of the evaluation of the SCC project alone and then the SCC project and Hotel project together. However, for this chapter, there are different regulatory requirements based upon different plans for City internal operations that apply only to City facilities and a community wide plan that applies to facilities throughout the city. Since the 2016 IO CAP would only apply to City owned facilities, such as the SCC, the discussion under Impact 4.6-1 does not include an evaluation of the Hotel project. An evaluation of the consistency of the SCC project alone and the SCC project and Hotel project together with the Citywide CAP can be found in Impact 4.6-2.

Impact 4.6-1: The proposed projects could conflict with the City of Sacramento’s Internal Operations Climate Action Plan.

SCC Project

The SCC would not be owned or operated by the City of Sacramento and is not required to demonstrate consistency with the City of Sacramento’s latest IO CAP. As a result, this discussion only pertains to the SCC project.

Since the SCC is owned and operated by the City of Sacramento, the proposed improvements to the SCC must be consistent with the City of Sacramento’s latest IO CAP. The City of Sacramento

has adopted the 2016 IO CAP, which identifies 11 strategies focused on reducing GHG emission from the consumption of energy in buildings and facilities, fuel combustion in vehicle fleet, and decomposing waste in City-operated landfills. The City of Sacramento 2035 General Plan Update Policy ER 6.1.6 established the GHG reducing targets found in the 2016 IO CAP, which include reducing internal operations GHG emissions by 22 percent below 2005 levels by 2020 and 83 percent below 2005 levels by 2050. Of the 11 strategies identified in the 2016 IO CAP, three are relevant to the proposed improvements to the SCC and are listed below.

- **BE-2: Green Building Policy for New City Buildings.** In accordance with the City’s 2035 General Plan Land Use Policy LU 8.1.5, new or renovated City-owned buildings are energy efficient and meet, as appropriate, Leadership in Energy and Environmental Design (LEED) Silver or equivalent standards.
- **BE-3: Energy Efficiency Retrofits Program for Existing Facilities.** The City’s Energy Efficiency Retrofits program directs City staff to identify cost-effective improvements to existing facilities in heating/cooling, lighting, pumping systems and other facility components.
- **WT-4: Long-Term Water Saving and Drought-Response.** The City Council adopted a Water Conservation Plan (WCP) in 2013, which identifies over 20 community-wide water conservation actions. The intent of the WCP is to ensure compliance with requirements established by Senate Bill (SB) X7-7 to reduce urban per capita water consumption 20 percent by the year 2020.

As discussed in Section 2.4.2 (Project Elements) of this EIR, the construction of the proposed reconfiguration and expansion of the SCC would meet the latest Building Council’s LEED Silver certification or equivalent and 25 percent better water reduction than CALGreen baseline. Replacing and upgrading the SCC as a LEED certified building would meet the City’s energy retrofit requirements. Therefore, by meeting the Building Council’s LEED Silver certification or equivalent and committing to a water consumption reduction of 25 percent below CALGreen baseline, the proposed reconfiguration and expansion of the SCC would meet all applicable GHG reducing strategies found in the 2016 IO CAP relevant to the project. Therefore, the proposed SCC project would not conflict with adopted 2016 IO CAP and would result in **less-than-significant impact**.

Summary

As described above, the 2016 IO CAP would only apply to City owned facilities, such as the SCC, and would not be relevant to the Hotel project. The proposed reconfiguration and expansion of the SCC would be consistent with and conform to all relevant GHG reduction strategies found in the City’s 2016 IO CAP. As established in CEQA Guidelines section 15183.5(b), because the City has determined that the SCC project would be consistent with the City’s 2016 IO CAP, the SCC project’s contribution to cumulative GHG emissions and related global climate change is less than considerable, and the impact is considered **less than significant**.

Mitigation Measure

None required.

Impact 4.6-2: Implementation of the proposed projects could conflict with the City of Sacramento's Community-Wide Climate Action Plan.

As shown in Table 4.6-1 above, the City's CAP consistency review checklist includes six criteria against which a project must be evaluated. Projects that are determined consistent with each of the six criteria are considered consistent with Sacramento's CAP and would not have a significant GHG impact. Although the SCC project is subject to the City's 2016 IO CAP, a discussion is provided here for comparison. The following discussion evaluates the proposed Hotel project's consistency with each of the six checklist questions.

SCC Project

1. *Is the proposed SCC project substantially consistent with the land use and urban form designation, allowable floor area ratio (FAR) and/or density standards in the City's 2035 General Plan?*

The SCC project is located in the Public/Quasi-Public land use designation, which anticipates uses that host community services and/or educational, cultural, administrative, and recreational activities. The SCC project is an expansion and renovation of the existing Convention Center, and expansion of the existing outdoor Activities Plaza. This renovation and expansion would continue the Convention Center's use as a civic and community resource for hosting educational, cultural, administrative, and recreational events. The Public Quasi-Public District does not have any restrictions to the FAR. Since the SCC project would continue the allowable uses under the 2035 General Plan, and since there is no maximum FAR for the SCC project site, the SCC project would be consistent with the Public/Quasi-Public land use and urban form designation of the general plan.

2. *Would the proposed SCC project incorporate traffic calming?*

The SCC would not result in the alterations of existing roadways or construction of additional roadways within in the Public Quasi-Public District. Consequently, this criterion would not apply to the proposed SCC and traffic-calming measures are not proposed.

3. *Would the SCC project incorporate pedestrian facilities and connections to public transportation consistent with the City's Pedestrian Master?*

The SCC would include pedestrian access via sidewalks on all surface streets. The main pedestrian entry to the proposed expanded and reconfigured SCC would be located on the north and west sides of the facility (facing J and 13th streets, respectively), with an additional entry on the east side (facing 15th Street). Key pedestrian flows would be

expected to originate from the west at the intersection of J and 13th streets, from the west and south at 13th Street near K Street, from the east and north from 15th Street between J and K streets. Since the SCC would maintain pedestrian access to sidewalks and public transportation, the SCC's pedestrian facilities and connections would be consistent with the City's Pedestrian Master Plan.

4. *Would the SCC project incorporate bicycle facilities consistent with the City's Bikeway Master Plan and meet or exceed minimum standards for bicycle facilities in the Zone Code and CALGreen?*

On August 16, 2016, the City of Sacramento Council approved the 2016 Bicycle Master Plan. The 2016 Bicycle Master Plan guides the development of bikeways and supports facilities like bike parking throughout the City of Sacramento.²⁷

The level of pedestrian improvements necessary to determine the project's consistency with the City's Pedestrian Master Plan and thus CAP consistency is measured according to the "Basic, Upgrade, or Premium" categories defined in Appendix A to the Pedestrian Master Plan. The differences between these three categories are based on several criteria, including project location, surrounding land uses, and proximity to transit. The "Pedestrian Smart Growth Scorecard" (from Appendix A of the Pedestrian Master Plan) was completed for the proposed SCC, resulting in a score of 3.28. According to the City's Pedestrian Master Plan, a high rating (between 3 and 4) would indicate a development is likely to be pedestrian oriented. Since the SCC rating is calculated to be 3.28, the SCC would meet this standard and would be consistent with the Pedestrian Master Plan. Based on this evaluation, the SCC's pedestrian amenities would meet the City of Sacramento's Consistency Checklist for pedestrian facilities.

5. *Would the SCC project include on-site renewable energy systems (e.g., solar photovoltaic, solar water heating, etc.) that would generate at least 15% of the project's total energy demand?*

The proposed SCC would not generate 15 percent of its energy demand on-site. The CAP Consistency Review Checklist was based on improving efficiency by 30 percent above the requirements of the 2008 Title 24 standards (effective January 1, 2010). Since setting that standard, the State has updated the Building Energy Efficiency Standards on an approximate three-year cycle, with each cycle resulting in increasingly stringent energy requirements. For example, the 2013 Building Energy Efficiency Standards went into effect on July 1, 2014 and the 2016 Building Energy Efficiency Standards went into effect on January 1, 2017. The California Energy Commission has stated that the 2013 Title 24 standards would use 25 percent less energy for lighting, heating, cooling, ventilation, and

²⁷ City of Sacramento, 2016. *Bicycle Master Plan Update*. Available: <https://www.cityofsacramento.org/Public-Works/Transportation/Programs-and-Services/Bicycling-Program>.

water heating than the Title 24 standards used for the City's CAP (2008 Title 24 standards),²⁸ and that residences built to the 2016 standards will use about 28 percent less energy for lighting, heating, cooling, ventilation and water heating than those built to the 2013 standards.²⁹ Energy savings for non-residential buildings are comparable. These energy improvements enacted by the State and applicable to each building constructed in the community would satisfy the reduction requirements that are identified in the City's CAP.

The proposed reconfiguration and expanded SCC would be designed and constructed for the entire facility, including existing sections of the facility that would remain, to meet the certification requirements of the US Green Building Council's LEED Silver certification or equivalent. In addition, the SCC would be enrolled in the SMUD's SolarShares Program, which will offset 50 percent of annual consumption at 2015 usage levels (7,382,982 kWh).

Since the proposed SCC would meet LEED Silver or equivalent standards and enrolled in the SMUD's SolarShares Program, the SCC would meet 2016 Title 24 energy standards, meeting the Sacramento CAP's energy efficiency standards.

6. *Would the SCC project comply with minimum CALGreen Tier 1 water efficiency standards?*

The proposed SCC project would include a commitment to a series of water conserving landscape requirements that involve the use of drought-resistant landscaping and water-conserving irrigation methods to reduce water waste. The future SCC would include a commitment to achieve, at a minimum, the CALGreen Tier 1 water efficiency standards. Consequently, the SCC would be consistent with this CAP energy efficiency and renewable energy requirement.

The SCC would be consistent with five applicable CAP consistency questions described above. The consistency criterion regarding traffic calming (Question 2) does not apply to the project. This is a **less-than-significant impact** because the SCC project would be consistent with each of the applicable criteria.

SCC Project and Hotel Project

1. *Are the proposed projects substantially consistent with the land use and urban form designation, allowable floor area ratio (FAR) and/or density standards in the City's 2035 General Plan?*

²⁸ California Energy Commission, 2017. *2013 Building Energy Efficiency Standards. Building Energy Efficiency Standards Frequently Asked Questions*. Available: www.energy.ca.gov/title24/2013standards/rulemaking/documents/2013_Building_Energy_Efficiency_Standards_FAQ.pdf. Accessed October 23, 2017.

²⁹ California Energy Commission, 2017. *2016 Building Energy Efficiency Standards. 2016 Building Energy Efficiency Standards Frequently Asked Questions*. Available: www.energy.ca.gov/title24/2016standards/rulemaking/documents/2016_Building_Energy_Efficiency_Standards_FAQ.pdf. Accessed October 23, 2017.

The SCC and Hotel projects are located in the Public/Quasi-Public and Central Business Districts, respectively. According to the City of Sacramento 2035 General Plan, the Public Quasi-Public District does not have any restrictions to the floor area ratios (FAR) and the Central Business District is restricted to a FAR ranging between 3.0 to 15.0. Since the City of Sacramento does not have any FAR restrictions in its general plan for a Public/Quasi-Public District designation, the FAR of the proposed SCC project would be consistent with the land use and urban form designations of the general plan.

The Hotel project is designated as Central Business District in the 2035 General Plan. The Central Business District is the City's most intensely developed area, and is intended for a mixture of development types and uses. This designation provides for mixed-use high-rise development and single-use or mixed-use development within easy access to transit. The Hotel project site is located in close proximity to transit facilities, fronts a major through street with sidewalks for pedestrian connectivity, and is adjacent to the Convention Center which is a major complementary use. It is also one-half block from Capitol Park, a major outdoor recreational amenity accessible by foot. Parking facilities would be subterranean and would be incorporated into the building design. At approximately 24 stories, the construction of the Hotel project would also enhance the existing Sacramento skyline. Therefore, the type of development proposed by the Hotel project would be consistent with the land use and urban form designation for the Hotel project site. According to the City of Sacramento 2035 General Plan, the Central Business District has an allowable FAR ranging between 3.0 to 15.0. The FAR of the proposed Hotel project would be approximately 15.16 (gross square footage/site square footage = 385,000 square feet/25,397 square feet), which barely exceeds the maximum allowable 15.00 FAR for the Central Business District designation. Since the Hotel project would only exceed the maximum FAR by 0.16 and would not exceed any height restrictions established for the Central Business District, the Hotel project would be substantially consistent with a Central Business District designation.

2. *Would the proposed projects incorporate traffic calming measures?*

Traffic calming features include such things as marked crosswalks, count-down signal timers, curb extensions, and raised crosswalks and intersections. The proposed SCC and Hotel projects would not result in the alteration of existing roadways or construction of additional roadways within in the Public/Quasi-Public designation and Central Business District. Consequently, this criterion would not apply to the proposed SCC or Hotel projects and traffic-calming measures are not proposed.

3. *Would the proposed projects incorporate pedestrian facilities and connections to public transportation consistent with the City's Pedestrian Master?*

The proposed SCC and Hotel projects would include pedestrian access via sidewalks on all surface streets. The main pedestrian entry to the SCC would be located on the north and

west sides of the facility (facing J and 13th streets, respectively), with an additional entry on the east side (facing 15th Street). Key pedestrian flows would be expected to originate from the west at the intersection of J and 13th streets, from the west and south at 13th Street near K Street, from the east and north from 15th Street between J and K streets. The proposed Hotel project would be anticipated to front to 15th Street, possibly with a side entrance on K Street, providing pedestrian access on both sides of the structure. Since the SCC and Hotel projects would maintain pedestrian access to sidewalks and public transportation, the proposed projects' pedestrian facilities and connections would be consistent with the City's Pedestrian Master Plan.

4. *Would the proposed projects incorporate bicycle facilities consistent with the City's Bikeway Master Plan and meet or exceed minimum standards for bicycle facilities in the Zone Code and CALGreen?*

On August 16, 2016, the City of Sacramento Council approved the 2016 Bicycle Master Plan. The 2016 Bicycle Master Plan guides the development of bikeways and supports facilities like bike parking throughout the City of Sacramento.³⁰

The level of pedestrian improvements necessary to determine the project's consistency with the City's Pedestrian Master Plan and thus CAP consistency is measured according to the "Basic, Upgrade, or Premium" categories defined in Appendix A to the Pedestrian Master Plan. The differences between these three categories are based on several criteria, including project location, surrounding land uses, and proximity to transit. The "Pedestrian Smart Growth Scorecard" (from Appendix A of the Pedestrian Master Plan) was completed for the proposed projects, which resulted in a score of 3.28. According to the City's Pedestrian Master Plan, a high rating (between 3 and 4) would indicate a development is likely to be pedestrian oriented. Since the SCC project and Hotel project rating is calculated to be 3.28, it is anticipated that the SCC and Hotel would meet this standard and would be consistent with the Pedestrian Master Plan. Based on this evaluation, the proposed projects pedestrian amenities would meet the City of Sacramento's Consistency Checklist for pedestrian facilities.

5. *Would the proposed projects include on-site renewable energy systems (e.g., solar photovoltaic, solar water heating, etc.) that would generate at least 15% of the project's total energy demand?*

The proposed SCC and Hotel would not generate 15 percent of its energy demand on-site. The SCC project would be developed to meet LEED Silver or equivalent standards, thereby reducing energy consumption and increasing energy efficiency, and meeting Sacramento CAP's energy efficiency standards. In addition, the SCC would be enrolled in the SMUD's

³⁰ Ibid.

SolarShares Program, which will offset 50 percent of annual consumption at 2015 usage levels (7,382,982 kWh).

In addition to the above project details, the proposed Hotel project would be designed in compliance with the 2016 Title 24 Building Energy Efficiency Standards, effective January 1, 2017.

The CAP Consistency Review Checklist was based on improving efficiency by 30 percent above the requirements of the 2008 Title 24 standards (effective January 1, 2010). Since setting that standard, the State has updated the Building Energy Efficiency Standards on an approximate three-year cycle, with each cycle resulting in increasingly stringent energy requirements. For example, the 2013 Building Energy Efficiency Standards went into effect on July 1, 2014 and the 2016 Building Energy Efficiency Standards went into effect on January 1, 2017. The California Energy Commission has stated that the 2013 Title 24 standards would use 25 percent less energy for lighting, heating, cooling, ventilation, and water heating than the Title 24 standards used for the City's CAP (2008 Title 24 standards),³¹ and that residences built to the 2016 standards will use about 28 percent less energy for lighting, heating, cooling, ventilation and water heating than those built to the 2013 standards.³² Energy savings for non-residential buildings are comparable. These energy improvements enacted by the State and applicable to each building constructed in the community would satisfy the reduction requirements that are identified in the City's CAP.

6. *Would the proposed projects comply with minimum CALGreen Tier 1 water efficiency standards?*

The proposed SCC and Hotel would include a commitment to a series of water conserving landscape requirements that involve the use of drought-resistant landscaping and water-conserving irrigation methods to reduce water waste. The SCC and Hotel would both include a commitment to achieve, at a minimum, the CALGreen Tier 1 water efficiency standards. Consequently, the proposed projects would be consistent with this CAP energy efficiency and renewable energy requirement.

The proposed projects would be consistent with all six applicable CAP consistency questions described above. This is a **less-than-significant impact** because the SCC and Hotel projects would be consistent with each of the applicable criteria.

³¹ California Energy Commission, 2017. 2013 Building Energy Efficiency Standards. *Building Energy Efficiency Standards Frequently Asked Questions*. Available: www.energy.ca.gov/title24/2013standards/rulemaking/documents/2013_Building_Energy_Efficiency_Standards_FAQ.pdf. Accessed October 23, 2017.

³² California Energy Commission, 2017. 2016 Building Energy Efficiency Standards. *2016 Building Energy Efficiency Standards Frequently Asked Questions*. Available: www.energy.ca.gov/title24/2016standards/rulemaking/documents/2016_Building_Energy_Efficiency_Standards_FAQ.pdf. Accessed October 23, 2017.

Summary

As described above, the proposed projects would be consistent with all six applicable CAP consistency questions. As established in CEQA Guidelines section 15183.5(b), because the City has determined that these projects would be consistent with the City's CAP, the projects' contribution to cumulative GHG emissions and related global climate change is less than considerable, and the impact is considered **less than significant**.

Mitigation Measure

None required.

4.7 Hydrology and Water Quality

This section of the EIR addresses potential effects to hydrologic resources in the project sites, including water quality, groundwater resources, flooding, and drainage. Site characteristics such as regional and local drainage, flooding conditions, and water quality are described. The potential of the proposed projects to degrade water quality and adversely affect groundwater resources is evaluated.

Issues related to the generation of wastewater and stormwater drainage, the capacity of the Combined Sewer System (CSS) to handle flows generated by the proposed project, and impacts on stormwater conveyance facilities are addressed in Section 4.10, Utilities and Service Systems.

The City received comments on the NOP related to hydrology and water quality from the Central Valley Regional Water Quality Control Board (CVRWQCB) regarding the regulations and permits required for the proposed projects.

The analysis included in this section was developed based on project information included in the Sacramento Convention Center Concept Design,¹ data provided by the City of Sacramento and in the City of Sacramento 2035 General Plan Master EIR (MEIR), and other published technical reports, as indicated in the footnoted references.

4.7.1 Environmental Setting

Regional Surface Water Resources

The City of Sacramento is located at the confluence of the Sacramento and American rivers within the Sacramento River Basin. The Sacramento River Basin encompasses approximately 27,200 square miles and is bounded by the Sierra Nevada to the east, the Coast Ranges to the west, the Cascade Range and Trinity Mountains to the north, and the Sacramento – San Joaquin Delta (Delta) to the southwest. The Sacramento River Basin is the largest river basin in California, capturing, on average, approximately 22 million acre-feet of annual precipitation. The Sacramento River is approximately 327 miles long, and its major tributaries are the Pit and McCloud Rivers, which join the Sacramento River from the north, and the Feather and American Rivers, which are tributaries from the east. Numerous additional tributary streams and creeks flow from the east and west.

The average runoff from the Sacramento River basin is estimated to be 22 million acre-feet per year. The melting snow pack in the Sierra Nevada maintains stream flow during most of the summer. The Sacramento River system experiences variations in water levels during different parts of the year and during different parts of the month. Two factors affecting the water level are the amount of runoff entering the system from the rivers' watersheds and the amount of water being released from dams upriver. The system is also subject to tidal action from the Sacramento-

¹ Populous, et al., 2017. Sacramento Convention Center Expansion & Renovation Concept Design Submittal. July 28, 2017.

San Joaquin Delta (Delta). Finally, the river channel is confined by a levee system on each bank of the river. During periods of high flows, primarily in the winter, a system of bypass channels allows water to leave the river channel and bypass the urbanized areas of the valley, thus reducing potential flood hazard. Chief of these in the project vicinity is the Yolo Bypass, which is located north and west of the confluence with the American River.

The Sacramento River, beginning at the “I” Street Bridge and including all portions downstream, is considered part of the Sacramento-San Joaquin Delta. Flooding has historically been a problem for Sacramento, prompting the City to build levees beginning in the 1860s.

The American River drains the central portion of the Sierra Nevada from the crest near Lake Tahoe to the reservoir at Folsom Lake, and the secondary reservoir below it at Nimbus Dam. The American River basin drains an area of roughly 1,875 square miles. An average of 2.2 million acre-feet drains from the basin annually. The Lower American River comprises the 24-mile stretch of river below Nimbus Dam to the confluence. Flows in the Lower American River are controlled by releases from Folsom Dam and Nimbus Dam.²

The project sites are located approximately one mile east of the Sacramento River and about 1.5 miles south of the American River. Stormwater runoff from the project sites is conveyed to the CSS. Please refer to section 4.10, Utilities and Service Systems, for a detailed description of the CSS.

Surface Water Quality

The Sacramento River has been classified by the Central Valley Regional Water Quality Control Board (CVRWQCB) as having numerous beneficial uses, including providing a municipal, agricultural, and recreational water supply. Other beneficial uses include freshwater habitat, spawning grounds, wildlife habitat, and navigation on the Sacramento River. The Sacramento River Basin covers approximately 27,210 square miles and includes the entire area drained by the Sacramento River. For planning purposes, this includes all watersheds tributary to the Sacramento River that are north of Cosumnes River watershed. It also includes the closed basin of Goose Lake and drainage sub-basins of Cache and Putah Creeks. The principal streams are the Sacramento River and its larger tributaries: the Pit, Feather, Yuba, Bear, and American Rivers to the east; and Cottonwood, Stony, Cache, and Putah Creeks to the west. Major reservoirs and lakes include Shasta, Oroville, Folsom, Clear Lake, and Lake Berryessa.³

Reaches of the Sacramento River flow through the Sacramento urban area that are considered impaired and listed on the Clean Water Act (CWA) Section 303(d) list of impaired and threatened waters for California. Section 303(d) establishes the total maximum daily load (TMDL) process to assist in guiding the application of state water quality standards, requiring the states to identify

² City of Sacramento, 2015. *Sacramento 2035 General Plan Update Master Environmental Impact Report* (SCH No. 2012122006). Certified March 3, 2015. pp. 4.7-1 – 4.7-18.

³ Central Valley Regional Water Quality Control Board, 2015. *Water Quality Control Plan for the Sacramento and San Joaquin River Basins*. Revised Pages, pp. I-1.00. June 2015.

streams in which water quality is impaired (affected by the presence of pollutants or contaminants) and to establish the TMDL or the maximum quantity of a particular contaminant that a water body can assimilate without experiencing adverse effects. The 303(d) list breaks up the Sacramento River into four sections, Keswick Dam to Cottonwood Creek, Cottonwood Creek to Red Bluff, Red Bluff to Knights Landing, and Knights Landing to the Delta. All sections of the Sacramento River are listed on the 303(d) list for unknown toxicity, and Red Bluff to the Delta is also listed for mercury. Mercury is primarily a legacy of gold mining.⁴

Ambient water quality in the Sacramento and American rivers is influenced by numerous natural and artificial sources, including soil erosion, discharges from industrial and residential wastewater plants, stormwater runoff, agriculture, recreation activities, mining, and timber harvesting.

Urban Runoff Water Quality

Constituents found in urban runoff vary as a result of differences in rainfall intensity and occurrence, geographic features, land use in the City, as well as vehicle traffic and percent of impervious surface. In the Sacramento area, there is a natural weather pattern of a long dry period from May to October. During this seasonal dry period, pollutants contributed by vehicle exhaust, vehicle and tire wear, crankcase drippings, spills, and atmospheric fallout accumulates within the urban watershed. Precipitation during the early portion of the wet season (November to April) washes these pollutants into the stormwater runoff, which can result in elevated pollutant concentrations in the initial wet weather runoff. This initial runoff with peak pollutant levels is referred to as the “first flush” of a storm event or events.

Stormwater discharge monitoring data have been collected from the Sacramento urban area monitoring stations since 1990. From this monitoring, the following six pollutants have been identified as “target pollutants:” mercury, diazinon, chlorpyrifos, lead, copper, and fecal coliform. These pollutants were determined based on their toxicity, potential of exceeding water quality criteria, ability to accumulate in humans and animals, or if listed as a pollutant impairing water bodies by the State Water Resources Control Board (State Water Board).

In general, stormwater runoff within the City of Sacramento flows into either the City’s Combined Sewer System (CSS), which is treated at the County’s wastewater treatment plant or to the separated sewer system which conveys run-off to drainage system of pump stations which discharge run-off to the American, Sacramento Rivers and/or their respective tributaries. The CSS is considered at or near capacity and requires all additional inflow into the system to be mitigated. Refer to section 4.10, Utilities and Service Systems, for more information on the City’s sewage and stormwater drainage facilities. Water quality requirements included in the Sacramento County Municipal Separate Storm Sewer System (MS4) permit are discussed under Regulatory Setting below.

⁴ U.S. Environmental Protection Agency, 2017. Impaired Waters and TMDLs: Impaired Waters and Mercury. May 2017.

Groundwater Use

The City of Sacramento has historically relied on groundwater to satisfy a portion of its demand. The City overlies two subbasins of the Sacramento Valley Groundwater Basin (the North American and South American subbasins). The two subbasins are separated from one another, and recharged from the American River. The City is one of many water purveyors that use groundwater from the subbasins. The City operates 20 active municipal supply wells and five irrigation wells north of the American River (American River subbasin), and operates two active municipal supply wells and nine irrigation wells south of the American River (South American subbasin).⁵ Although the City pumps groundwater from both subbasins, more than 90 percent of the amount pumped by the City is pumped from the North American subbasin between 2011 and 2015.⁶

Groundwater Quality

This section is focused on the South American subbasin, because groundwater quality within this subbasin is separated from that of the North American subbasin, except at much greater depths. The South American subbasin covers approximately 248,000 acres (388 square miles) and lies within the southernmost extent of the Sacramento Valley Basin, extending into northern portions of the Sacramento-San Joaquin Delta. Except for areas of localized groundwater contamination, groundwater underlying the City's service area generally meets primary and secondary drinking water standards for municipal water use, and is described as being calcium magnesium-bicarbonate type water, with minor fractions of sodium-magnesium bicarbonate. Due to high concentrations of iron and manganese in the lower aquifer system, the upper aquifer system is usually the preferred source of groundwater. The lower aquifer system also contains higher concentrations of total dissolved solids (TDS) than the upper aquifer.

There is currently a dewatering system at the SCC project site that includes pumps in the basement. The volume of groundwater that is pumped from the basement is unknown as surface runoff and other water enters the system. The holding tank is six feet in diameter by ten feet, and cycles irregularly, but is not significant in terms of volume. The water pumped from the basement is discharged to the CSS connection on J Street.

4.7.2 Regulatory Setting

Federal

Surface Water Quality

Water quality objectives for all waters of the United States are established under applicable provisions of section 303 of the federal Clean Water Act (CWA). The CWA prohibits the discharge of pollutants to navigable waters from a point source unless authorized by a National Pollutant Discharge Elimination System (NPDES) permit. Because implementation of these regulations has been delegated to the State, additional information regarding this permit is discussed under the "State" subheading, below.

⁵ West Yost Associates. 2016. *City of Sacramento 2015 Urban Water Management Plan*. June 2016. p. 6-4.

⁶ *Ibid.* p. 6-5, Table 6-1.

Standards for a total of 81 individual constituents have been established under the Safe Drinking Water Act, as amended in 1996. The U.S. Environmental Protection Agency (EPA) may add additional constituents in the future. Please see section 4.10, Utilities and Service Systems, for an analysis of effects related to potable water supply.

National Pollutant Discharge Elimination System Permits

The NPDES permit system was established in the CWA to regulate municipal and industrial point discharges to surface waters of the U.S. Each NPDES permit for point discharges contains limits on allowable concentrations of pollutants contained in discharges. Sections 401 and 402 of the CWA contain general requirements regarding NPDES permits. Section 307 of the CWA describes the factors that the EPA must consider in setting effluent limits for priority pollutants.

The CWA was amended in 1987 to require NPDES permits for non-point source (i.e., stormwater) pollutants in discharges. Stormwater sources are diffuse and originate over a wide area rather than from a definable point. The goal of NPDES stormwater regulations is to improve the quality of stormwater discharged to receiving waters to the “maximum extent practicable” through the use of structural and non-structural Best Management Practices (BMPs). BMPs can include the development and implementation of various practices including educational measures (workshops informing public of what impacts results when household chemicals are dumped into storm drains), regulatory measures (local authority of drainage facility design), public policy measures, and structural measures (filter strips, grass swales and detention ponds). The NPDES permits that apply to activities in the City of Sacramento are described under local regulations below.

State

Porter-Cologne Water Quality Control Act Overview

Porter-Cologne, passed in 1969, articulates with the federal CWA (see “Clean Water Act” above). It established the State Water Board and divided the state into nine regions, each overseen by a regional Water Board. The State Water Board is the primary state agency responsible for protecting the quality of the state’s surface and groundwater supplies, but much of its daily implementation authority is delegated to the nine regional Water Boards, which are responsible for implementing CWA Sections 402, and 303(d). In general, the State Water Board manages both water rights and statewide regulation of water quality, while the regional Water Boards focus exclusively on water quality in their regions. The Sacramento River basin is under the jurisdiction of the Central Valley Water Board. Construction activities are regulated under the NPDES General Permit for Discharges of Storm Water Runoff associated with Construction Activity (General Construction Permit CVRWQCB Order No. 2012-0006-DWQ, NPDES No. CAS000002), provided that the total amount of ground disturbance during construction is one acre or more. The CVRWQCB enforces the General Construction Permit within the City of Sacramento. Coverage under a General Construction Permit requires the preparation and implementation of a stormwater pollution prevention plan (SWPPP) and notice of intent (NOI). The SWPPP includes pollution prevention measures (erosion and sediment control measures and measures to control non-stormwater discharges and hazardous spills), demonstration of compliance with all applicable

local and regional erosion and sediment control standards, identification of responsible parties, a detailed construction timeline, and a best management practices (BMPs) monitoring and maintenance schedule. The NOI includes site specific information and the certification of compliance with the terms of the General Construction Permit.

Dewatering Activities

Where groundwater levels tend to be shallow, dewatering during construction is sometimes necessary to keep trenches or excavations free of standing water when improvements or foundations/footings are installed. Clean or relatively pollutant-free water that poses little or no risk to water quality may be discharged directly to surface water under certain conditions. The CVRWQCB has adopted a general NPDES permit for short-term discharges of small volumes of wastewater from certain construction-related activities (General Dewatering Permit). Permit conditions for the discharge of these types of wastewaters to surface waters are specified in “General Order for Dewatering and Other Low-Threat Discharges to Surface Waters” (Order No. R5-2013-0074, NPDES No. CAG995001). Discharges may be covered by the General Dewatering Permit provided they are (1) either four months or less in duration or (2) the average dry weather discharge does not exceed 0.25 million gallons per day and meet the effluent limitations provided in order for pH, turbidity, total suspended solids, and biological oxygen demand. Construction dewatering, well development water, pump/well testing, and miscellaneous dewatering/low-threat discharges are among the types of discharges that may be covered by the General Dewatering Permit.

Stormwater Discharges

The CWA mandates permits for municipal stormwater discharges. The City of Sacramento has coverage under a MS4 General Permit (Order No. R5-2016-0040, NPDES No. CAS0085324). This permit requires that controls be implemented to reduce the discharge of pollutants in stormwater discharges to the maximum extent practicable, including management practices, control techniques and system, design and engineering methods, and other measures as appropriate. As part of permit compliance, the City has prepared a Stormwater Quality Improvement Plan (SQIP), which outlines the requirements for municipal operations, industrial and commercial businesses, illegal discharges, construction sites, planning and land development, public education and outreach, and watershed stewardship. These requirements include multiple measures to control pollutants in stormwater discharge and are reflected in City ordinances and design criteria. New development and redevelopment projects under the proposed plan would be required to follow the guidance contained in the latest edition of the Stormwater Quality Design Manual for the Sacramento Region.

Water quality objectives for the Sacramento River are specified in the Water Quality Control Plan for the Sacramento River Basin and San Joaquin River Basin (Basin Plan) prepared by the CVRWQCB in compliance with the federal CWA and the California Water Code (section 13240). The Basin Plan contains water quality numerical and narrative standards and objectives for rivers and their tributaries within its jurisdiction. In cases where the Basin Plan does not

contain a standard for a particular pollutant, other criteria, such as US EPA water quality criteria developed under Section 304(a) of the CWA, apply.

Surface Water Quality

The State Water Boards are delegated authority from EPA to implement portions of the CWA, and the State's water quality law, the Porter-Cologne Water Quality Control Act (Porter-Cologne Act). These agencies have established water quality standards that are required by section 303 of the CWA and the Porter-Cologne Act. The Porter-Cologne Act states that basin plans will consist of beneficial uses, water quality objectives, and a program of implementation for achieving water quality objectives. A Water Quality Control Plan, or Basin Plan, prepared by CVRWQCB, establishes water quality numerical and narrative standards and objectives for rivers and their tributaries within the area subject to the Basin Plan. In cases where the Basin Plan does not contain a standard for a particular pollutant, other criteria apply such as EPA water quality criteria developed under section 304(a) of the CWA.

Water quality objectives for the Sacramento River are specified in the Water Quality Control Plan for the Sacramento River Basin and San Joaquin River Basin (Basin Plan) prepared by the CVRWQCB in compliance with the federal CWA and the California Water Code (section 13240). The Basin Plan establishes water quality objectives and implementation programs to meet stated objectives and to protect the beneficial uses of water in the Sacramento-San Joaquin River Basin. Because the City of Sacramento and the project sites are located within the Sacramento River Basin, all discharges to surface water or groundwater fall under the Central Valley Water Board's jurisdiction and are subject to the Basin Plan requirements. The requirements outlined in the NPDES permits that regulate development within the City are based on the Basin Plan requirements.

Construction Site Runoff Management

In accordance with 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 (General Construction Permit). The current General Construction Permit is the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities, Order No. 2009-0009-DWQ (as amended by CVRWQCB Order Nos. 2010-0014-DWQ and 2012-0006-DWQ), NPDES No. CAS000002, effective July 1, 2010. General Construction Permit applicants are required to prepare and implement a SWPPP which includes implementing 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 included 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 City drainage system or receiving waters.

Construction activity that results in soil disturbances of less than one acre is subject to the General Construction Permit if there is potential for significant water quality impairment resulting from the activity as determined by the CVRWQCB. The City review process in terms of construction management and water quality for projects on sites less than one acre mirrors the process for sites larger than one acre. The City of Sacramento requires an erosion and sediment control plan and standard construction BMPs for other pollutants are required for construction sites less than one acre.

Local

City of Sacramento 2035 General Plan

The City of Sacramento 2035 General Plan adopted the following goals and policy measures that pertain to the impacts evaluated in this section (urban runoff water quality, construction dewatering, and wastewater discharges).

The following goals and policies from the 2035 General Plan are relevant to hydrology and water quality.

Goal ER 1.1 Water Quality Protection. Protect local watersheds, water bodies and groundwater resources, including creeks, reservoirs, the Sacramento and American Rivers, and their shorelines.

Policies

- ER 1.1.2 **Regional Planning.** The City shall continue to work with local, State, and Federal agencies and private watershed organizations to improve water quality.
- ER 1.1.3 **Stormwater Quality.** The City shall control sources of pollutants and improve and maintain urban runoff water quality through storm water protection measures consistent with the City's National Pollution Discharge Elimination System (NPDES) Permit.
- ER 1.1.4 **New Development.** The City shall require new development to protect the quality of water bodies and natural drainage systems through site design (e.g., cluster development), source controls, storm water treatment, runoff reduction measures, best management practices (BMPs) and Low Impact Development (LID), and hydromodification strategies consistent with the city's NPDES Permit.
- ER 1.1.5 **Limit Stormwater Peak Flows.** The City shall require all new development to contribute no net increase in stormwater runoff peak flows over existing conditions associated with a 100-year storm event.
- ER 1.1.6 **Post-Development Runoff.** The City shall impose requirements to control the volume, frequency, duration, and peak flow rates and velocities of runoff from development projects to prevent or reduce downstream erosion and protect stream habitat.
- ER 1.1.7 **Construction Site Impacts.** The City shall minimize disturbances of natural water bodies and natural drainage systems caused by development, implement measures to protect areas from erosion and sediment loss, and continue to require construction contractors to comply with the City's erosion and sediment control ordinance and stormwater management and discharge control ordinance.

The proposed projects would include LID design, with particular encouragement for permeable surfaces, where suitable, to allow natural drainage. This would reduce peak flows and stormwater runoff potential, keeping contaminants out of the storm drainage system and surface water bodies.

The proposed SCC project and Hotel project would be consistent with each of the 2035 General Plan goals and policies listed above.

Stormwater Quality/Urban Runoff Management

The County of Sacramento and the cities of Sacramento, Folsom, Citrus Heights, Elk Grove, Rancho Cordova, and Galt have coverage under the *National Pollutant Discharge Elimination System Permit and Waste Discharge Requirements General Permit for Municipal Separate Storm Sewer Systems* (MS4 Permit) (CVRWQCB Order No. R5-2016-0040, NPDES Permit No. CAS0085324) that was adopted on June 30, 2016. Collectively, these jurisdictions are referred to as the Sacramento Stormwater Quality Partnership (Partnership). The MS4 Permit is intended to implement the Basin Plan through the effective implementation of BMPs to reduce pollutants in stormwater discharges to the maximum extent practicable. The permittees listed under the joint permit have the authority to develop, administer, implement, and enforce storm water management programs within their own jurisdiction.

Urban storm water runoff is defined in the MS4 Permit as including stormwater and dry weather flows from a drainage area that reaches a receiving water body or subsurface. The permit regulates the discharge of all wet and dry weather urban storm water runoff within the City of Sacramento and requires the City to implement a stormwater management program to reduce pollutants in stormwater to the maximum extent practicable. In response, the City of Sacramento and the other Permittees created the SQIP to address the MS4 permit requirements and reduce the pollution carried by stormwater into local creeks and rivers. The program includes pollution reduction activities for construction sites, industrial sites, illegal discharges and illicit connections, new development, and municipal operations. The program also includes an extensive public education effort, target pollutant reduction strategy and monitoring program. The SQIP also outlines the priorities, key elements, strategies, and evaluation methods of the program.⁷

The specific BMPs that are appropriate for a project to meet the requirement of reducing the discharge of pollutants to the maximum extent practicable are site specific. During the design process, the appropriate required measures and Low Impact Development (LID)⁸ strategies are selected and incorporated into project plans. The County of Sacramento and the cities of Sacramento, Folsom, Citrus Heights, Elk Grove, Rancho Cordova, Galt, and Roseville collaboratively published the Stormwater Quality Design Manual for Sacramento and South Placer Regions (May 2007) to meet MS4 Permit requirements and to provide clear guidance for project applicants on how to incorporate BMPs that achieve permit compliance.⁹ The manual provides locally-adapted information for design and selection of three categories of stormwater

⁷ County of Sacramento and the Cities of Sacramento, Citrus Heights, Elk Grove, Folsom, Galt, and Rancho Cordova, 2009. *Stormwater Quality Improvement Plan*. April 2009. pp. 1-1 to 1-16.

⁸ Low Impact Development uses site design and stormwater management to maintain pre-development runoff rates and volumes through the use of decentralized design techniques that infiltrate, filter, store, evaporate, and detain runoff.

⁹ Cities of Citrus Heights, Elk Grove, Folsom, Galt, Rancho Cordova, Roseville, Sacramento and Sacramento County, 2007. *Stormwater Quality Design Manual for the Sacramento and South Placer Regions*. May 2007. pp. 1-1 to 1-8.

quality control measures: source control, runoff reduction, and treatment control. The following are required items for each of the local permitting agencies as specified in the new development element provisions of the MS4 permit:

- the types of projects subject to the development standards and thresholds for determining what types of control measures apply to the project;
- maintenance agreements or covenants are required for selected control measures; and
- sizing methodology for water quality flow (WQF) -based measures (e.g., vegetated swale) and water quality volume WQV-based measures (e.g., water quality detention basin).

The Sacramento Stormwater Quality Partnership Hydromodification Management Plan (HMP) was released in July 2011 to provide an additional resource for stormwater management strategies. The HMP was subsequently revised in February 2013 to address CVRWQCB comments and is expected to be final in early 2018.

In addition, the State Water Board has adopted an Amendment to the State's Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries that added Part 1 Trash Provisions (the "Trash Amendment"). (See http://www.waterboards.ca.gov/water_issues/programs/trash_control/.) The City's stormwater collection system (MS4) is subject to the requirements set forth in the Trash Amendment. A key central element of the Trash Amendments is a land-use based compliance approach that targets high trash generating areas, such as high density residential (10 units/acre or greater), industrial, commercial, mixed urban, and public transportation land uses (referred to in the Trash Amendment as "Priority Land Uses"). Projects that include Priority Land Uses will be required to comply with the Trash Amendments by implementing appropriate measures and/or controls as determined by the City's Director of Utilities or designee, which must be included in projects' approved improvement plans.

Stormwater runoff from each of the project sites would flow into the City's combined sewer system (CSS). For the CSS, the City's Stormwater Management and Discharge Control ordinance regulates discharges from construction runoff. As described above, because the CSS has its own NPDES permit and treats stormwater runoff, construction for each of the proposed projects would not be subject to a SWPPP as described in the Construction General Permit implemented by the RWQCB.

Dewatering

All new groundwater discharges to the CSS or separated sewer system are regulated and monitored by the City's Utilities Department pursuant to Department of Utilities Engineering Services Policy No. 0001, adopted as Resolution No. 92-439 by the Sacramento City Council. Groundwater discharges to the City's sewer system are defined as construction dewatering discharges, foundation or basement dewatering discharges, treated or untreated contaminated groundwater cleanup, discharges, and uncontaminated groundwater discharges. Dewatering activities associated with the construction of drilled pier foundations are considered "construction dewatering discharges" and are required to sufficiently lower the water table where drilled pier

foundations would be installed to allow for the setline of poured concrete or other such pile materials that may be disrupted by the presence of groundwater.

The City requires that any short-term discharge be permitted, or an approved Memorandum of Understanding (MOU) for long-term discharges be established to ensure capacity of the system. Short-term limited discharges of seven days duration or less must be approved through the City Department of Utilities by acceptance letter or building permit plan approval. Long-term discharges of greater duration than seven days must be approved through the City Department of Utilities and the Director of the Department of Utilities through a MOU process. The MOU must specify the type of groundwater discharge, flow rates, discharge system design, a City-approved contaminant assessment of the proposed groundwater discharge indicating tested levels of constituents, and a City-approved effluent monitoring plan to ensure contaminant levels remain in compliance with State standards or the Sacramento County Regional Sanitation District (Regional San) and CVRWQCB -approved levels. All groundwater discharges to the sewer must be granted a Regional San discharge permit. If the discharge is part of a groundwater cleanup or contains excessive contaminants, CVRWQCB approval is also required. As stated in Section 4.0, Introduction to the Analysis, the proposed projects are not expected to encounter known sources of groundwater contamination during construction or operation.

Wastewater Discharges

Chapter 13.08 of the Sacramento City Code prohibits the discharge of any substances, materials, waters, or waste if the discharge would violate any sewer use ordinance enacted by Regional San. Section 13.08.040 of the Sacramento City Code identifies specific waters, wastes, and substances that may not be discharged to the sewer.

Any discharge into the CSS must have a Sewer Use Questionnaire on file with the Regional San, which would apply to the specific project. The Regional San has adopted a Sewer Use Ordinance that regulates the use of public sewers connected to the SRWTP. The wastewater discharged from the SRWTP to Sacramento River is regulated under a NPDES permit issued by the RWQCB. Discharge limitations are specified in the permit to limit water quality impacts in the Sacramento River. Categorical Pretreatment Standards have also been established for the pretreatment of certain classes of industrial wastes discharged to publicly owned treatment works, such as the SRWTP. The purpose of these standards is to protect the SRWTP and the environment by regulating potentially harmful discharges to the sewer from industrial and commercial business. Impacts associated with capacity of the CSS and the Regional San are addressed in section 4.10, Utilities and Service Systems.

Construction Site Runoff Management

In accordance with 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 (General Construction Permit). The current General Construction Permit is the NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities, Order

No. 2009-0009-DWQ (as amended by CVRWQCB Order Nos. 2010-0014-DWQ and 2012-0006-DWQ), NPDES No. CAS000002, effective July 1, 2010. General Construction Permit applicants are required to prepare and implement a SWPPP which includes implementing 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 included 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 City drainage system or receiving waters.

Construction activity that results in soil disturbances of less than one acre is subject to the General Construction Permit if there is potential for significant water quality impairment resulting from the activity as determined by the CVRWQCB. The City review process in terms of construction management and water quality for projects on sites less than one acre mirrors the process for sites larger than one acre. The City of Sacramento requires an erosion and sediment control plan and standard construction BMPs required for construction sites less than one acre.

City of Sacramento Construction Site Stormwater Controls

The City's Grading, Erosion and Sediment Control Ordinance requires project applicants to prepare erosion, sediment and pollution control plans for both during and after construction of a project, and grading plans. The Ordinance applies to projects where 50 cubic yards or more of soil is excavated and/or disposed and requires BMPs that must be approved of by the City's Department of Utilities. In addition, the City's Stormwater Management and Discharge Control Ordinance minimizes or eliminates sediment and pollutants in construction site stormwater discharges.

4.7.3 Analysis, Impacts and Mitigation

Significance Criteria

The following significance criteria are used in this analysis. These criteria are also similar to the City's 2035 General Plan EIR and Initial Study Checklist.

This EIR assumes implementation of the proposed project would have a significant impact related to hydrology and water quality if it would:

- Substantially degrade water quality and violate any water quality objectives set by the State Water Board, due to increases in sediments and other contaminants generated by construction and/or development of the project;
- Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level.

Methodology and Assumptions

Analysis of potential hydrology and water quality impacts is based on review of the proposed projects design and intended uses, as well as information developed and provided by the City and applicant engineers to establish existing conditions and to identify potential environmental effects, based on the standards of significance presented in this section.

Impacts on surface and groundwater quality were analyzed by reviewing existing groundwater and surface water quality reports that pertain to the project sites, identifying existing onsite ground and surface waters, including the depth to groundwater, and evaluating existing and potential sources of water quality pollutants based on the types of land uses and operational activities on the project sites. Additionally, the applicability of federal and state regulations, ordinances, and/or standards to surface and groundwater quality of the project sites and subsequent receiving waters are assessed. Potential impacts from implementation of the proposed project were determined evaluating whether development of the proposed project would exceed the thresholds of significance outlined above.

Impacts on water quality are assessed as a function of potential pollutant types, concentrations, and load (effect of flow quantity changes). These are evaluated qualitatively because specific design characteristics and land uses could affect the amount, type, and susceptibility to runoff of potential pollutants.

The California Supreme Court recently found that “agencies subject to CEQA generally are not required to analyze the impact of existing environmental conditions on a project’s future users or residents.” In *California Building Industry Association v. Bay Area Air Quality Management District* (2015) 62 Cal. 4th 369, the Supreme Court explained that 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. CEQA analysis is therefore concerned with a project’s impact on the environment, rather than with the environment’s impact on a project and its users or residents. Thus, the City is not required to consider the effects of bringing a new population into an area where there is a 100-year flood zone, a dam inundation zone, or where seiche and tsunami could occur.

Issues not Discussed in Impacts

For the purposes of this analysis, there would be no environmental effects related to mudflow as the topography of the project sites are flat and urbanized and mudflows would not occur.

Impacts and Mitigation Measures

Impact 4.7-1: The proposed projects could degrade water quality during construction.

SCC Project

The use of construction equipment and other vehicles could result in spills of oil, grease, gasoline, brake fluid, antifreeze, or other vehicle-related fluids and pollutants. Improper handling, storage,

or disposal of fuels and materials or improper cleaning of machinery could result in accidental spills or discharges that could degrade water quality.

As discussed previously in the Regulatory Setting, the proposed SCC would be required to comply with a number of regulations designed to reduce or eliminate construction-related water quality effects, including the NPDES Construction General Permit; SQIP; Grading, Erosion and Sediment Control Ordinance; and project-specific dewatering discharge permit. Before the onset of any construction activities, an erosion and sediment control plan would be prepared and submitted to the City, and the construction permit would include all BMPs outlined in the erosion and sediment control plan. BMPs may consist of a wide variety of measures taken to reduce pollutants in stormwater and other non-point source runoff to within the standards set forth in the aforementioned permits. The City shall complete inspections to verify that the erosion and sediment control plan and BMPs are implemented correctly.

The City requires an erosion and sediment control plan that includes BMPs to minimize the potential for, and effects from, spills of hazardous, toxic, or petroleum substances during construction activities for all contractors. Implementation of these measures would comply with state and federal water quality regulations. The federal reportable spill quantity for petroleum products, as defined in 40 CFR 110, is any oil spill that:

- violates applicable water quality standards;
- causes a film or sheen on, or discoloration of, the water surface; or
- causes a sludge or emulsion to be deposited beneath the surface of the water.

If a spill occurs, the contractors are required to notify the City, and the contractor would take action to contact the appropriate safety and clean-up crews to ensure that a Spill Prevention, Control, and Countermeasures Program (SPCCP) is followed. In addition, the City would respond and investigate any spills reported. A written description of reportable releases would be submitted to the CVRWQCB and the Department of Toxic Substances Control (DTSC) by the contractor or land owner. If an appreciable spill occurs and results determine that construction activities have adversely affected surface water or groundwater quality, a detailed analysis would be performed to the specifications of DTSC to identify the likely cause of contamination. This analysis would include recommendations for reducing or eliminating the source or mechanisms of contamination. Based on this analysis, contractors would select and implement measures to control contamination, with a performance standard that surface and/or groundwater quality must be returned to baseline conditions. These measures would be subject to approval by the City and/or the CVRWQCB.

Prior to discharge of dewatered effluent, the contractor would be required to obtain a permit for the discharge of low-threat water from the CVRWQCB that includes specific requirements and establishes discharge limits.

In light of the existing developed conditions, compliance with the SQIP, Land Grading and Erosion Control Ordinance, NPDES Construction General Permit, and dewatering permit would

prevent the substantial degradation of water quality during project construction. These regulatory instruments are designed to ensure that construction projects result in water quality discharges that are not in violation of water quality standards State Water Board objectives of City ordinances. The impact of the proposed SCC would be **less than significant**.

SCC Project and Hotel Project

The analysis of impacts for the SCC project and Hotel project combined would be the same as described for the proposed SCC project above. Therefore, the impact would be **less than significant**.

Mitigation Measure

None required.

Impact 4.7-2: Operation of the proposed projects could generate new sources of polluted runoff and degrade water quality.

SCC Project

During operation, runoff from the project site would contain pollutants common in urban runoff including metals, oils and grease, pesticides, herbicides, nutrients, and garbage/litter. Without BMPs to remove these pollutants, stormwater leaving the project site could degrade the quality of receiving waters. The City currently implements the SQIP, which is designed to reduce stormwater pollution to the maximum extent practicable and eliminate prohibited non-stormwater discharges through a NPDES municipal stormwater discharge permit. The City also provides direction on post-construction BMPs in the Stormwater Quality Design Manual for the Sacramento and South Placer Regions. The proposed project would be subject to City of Sacramento General Plan Policies U 4.1.4, ER 1.1.3, ER 1.1.4, and ER 1.1.7; the City's ordinances; the SQIP; the Stormwater Quality Design Manual for Sacramento and South Placer Regions; and the NPDES permit for the CSS and RegionalSan discharge, and would meet the state water quality discharge criteria. Specifically, the project would be required to comply with the following permits and plans:

- Waste Discharge Requirements (Order No. R5-2015-0045) and NPDES Permit for City of Sacramento Combined Wastewater Collection and Treatment System Sacramento County (No. CA0079111);
- Stormwater Quality Design Manual for the Sacramento and South Placer Regions (Design Manual) BMPs, and LID measures to reduce pollutants in storm water and non-stormwater discharges to the Maximum Extent Practicable;
- City of Sacramento Stormwater Management and Discharge Control Code; and
- City of Sacramento General Plan policies related to hydrology and water quality, and the protection and preservation of natural resources.

Permanent onsite water quality treatment meeting the requirements specified in the Stormwater Quality Design Manual for the Sacramento and South Placer Regions will be required for any surface drainage from the project that flows to the City's separated drainage system. The SCC would also be designed to comply with the regulatory requirements listed above and to obtain certification under the United States Green Building Council (USGBC) Leadership in Energy and Environmental Design (LEED) program. Project-specific BMPs which would be required conditions for compliance with the mandatory permits and regulations described in the Environmental and Regulatory Settings, above, have not been identified because project design is in an early phase. The project development process includes identification of BMPs that respond to the design and construction methods of the project. The BMPs would be implemented to ensure that water quality would not be degraded and the violation of water quality or waste discharge objectives set by the State Water Board would not occur. City review would confirm that BMP implementation complies with all applicable regulations. The LEED certification process also requires extensive coordination with the USGBC, and through that coordination, identifies measures that ensure that water pollutant removal would be implemented in full compliance with the program and certification requirements. Given that regulations are in place to ensure that the project would not result in an impact to water quality, this impact would be **less than significant**.

SCC Project and Hotel Project

The analysis of impacts for the SCC project and Hotel project combined would be the same as described for the proposed SCC project above. Therefore, the impact would be **less than significant**.

Mitigation Measure

None required.

Impact 4.7-3: The proposed projects could adversely affect groundwater levels or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level.

SCC Project

Construction

Project construction could require dewatering for the installation of below ground infrastructure and utilities. Dewatering activities would be temporary and take place in an area that is hydraulically connected to the Sacramento River and American River. The groundwater withdrawn during dewatering would be very small relative to the calculated groundwater storage capacity of the South American Subbasin (4,816,000 acre-feet). However, construction dewatering discharges may exceed the 7-day threshold, beyond which, the SCC project representatives would be required to establish an MOU with the DOU. Because most of the utilities or infrastructure would not be deep enough to reach groundwater (between 16 and 20 feet

below ground surface),¹⁰ the volume of dewatering would be minimal and not sufficient to substantially deplete groundwater supplies in the basin. Groundwater recharge does not occur currently at the project site with the exception of relatively small areas of landscaping where very minimal infiltration occurs. Therefore, project demolition, excavation, construction, and landscaping would not interfere with groundwater recharge.

Because the proposed project would not directly withdraw groundwater for potable water supply, would not increase impervious surface over the aquifer, and would monitor and adjust dewatering rates to prevent subsidence, this impact would be **less than significant**.

Operation

The proposed SCC would not withdraw groundwater during operation for water supply because water would be supplied from the City's system. The SCC project site is located within Downtown Sacramento, which is not an important groundwater recharge area due to the extent of impervious surfaces. The project site is currently impervious with the exception of relatively small areas of landscaping where very minimal infiltration would occur. After project implementation, the project site would become nearly completely impervious and the project would result in a very small decrease in the amount of water that percolates to the underlying aquifer. This decrease would not be of a sufficient in magnitude to result in a net deficit in the aquifer volume or lowering of the groundwater table. Current seasonal dewatering at the project site would be the same for the existing system serving the convention center. The impact would be **less than significant**.

SCC Project and Hotel Project

Construction

Project construction would require dewatering for the installation of below ground infrastructure and utilities. Dewatering activities would be temporary and take place in an area that is hydraulically connected to the Sacramento River and American River. The groundwater withdrawn during dewatering would be very small relative to the calculated groundwater storage capacity of the South American Subbasin (4,816,000 acre-feet). construction dewatering discharges may exceed the 7-day threshold, beyond which, the SCC project and the Hotel project representatives would be required to establish an MOU with the DOU. Because most of the SCC utilities or infrastructure would not be deep enough to reach groundwater (between 16 and 20 feet below ground surface),¹¹ the volume of dewatering would be minimal and not sufficient to substantially deplete groundwater supplies in the basin. The proposed Hotel project would require daily dewatering during construction of the subterranean parking, infrastructure, and utilities. Because these below ground structures would be waterproofed, dewatering would not be required after they are built. Groundwater recharge does not occur currently at the project sites with the exception of relatively small areas of landscaping where very minimal infiltration occurs.

¹⁰ Geocon Consultants, Inc. 2017. Geotechnical Investigation for the Sacramento Convention Center Expansion and Renovation. June 2017.

¹¹ Ibid.

Therefore, project demolition, excavation, construction, and landscaping would not interfere with groundwater recharge.

Because the proposed projects would not directly withdraw groundwater for potable water supply, would not increase impervious surface over the aquifer, this impact would be **less than significant**.

Operation

The proposed projects would not withdraw groundwater during operation for water supply because water would be supplied from the City's system. The project sites are located within Downtown Sacramento, which is not an important groundwater recharge area due to the extent of impervious surfaces. The project sites are currently impervious with the exception of relatively small areas of landscaping where very minimal infiltration would occur. After implementation, the project sites would become nearly completely impervious and would result in a very small decrease in the amount of water that percolates to the underlying aquifer. This decrease would not be of a sufficient magnitude to result in a net deficit in the aquifer volume or lowering of the groundwater table. Current seasonal dewatering at the SCC would be the same for the existing system serving the convention center and there would be no dewatering at the proposed Hotel site. The impact would be **less than significant**.

Mitigation Measure

None required.

Cumulative Impacts

Project effects on water quality and hydrology must be considered in light of other past, present, and future projects that could add to the effects of the project, creating cumulative effects. These effects may be contributed to by development within the Sacramento River watershed, which extends well beyond the City of Sacramento limits. The cumulative context for water quality considers the construction and operation within the geographic scope of the Basin Plan and, therefore, development within the larger Sacramento River watershed and the Sacramento–San Joaquin Delta (Delta). The Sacramento River watershed covers 27,000 square miles. The Delta extends for 24 miles from east to west and 48 miles from north to south where the Sacramento and San Joaquin rivers meet before discharging into the San Francisco Bay. With respect to groundwater, the cumulative context is the Central Sacramento County Groundwater Basin and North American Subbasin of the Sacramento Valley Groundwater Basin.

Impact 4.7-4: Construction and operation of the proposed projects, in combination with other cumulative development, could contribute to cumulative degradation of water quality.

Non-point source water pollution from the combination of past, present, and future projects in the Sacramento River watershed and Delta, including residential, commercial, and industrial land development; agriculture; parks; transit; infrastructure; and other land uses could result in the degradation of water quality in the Sacramento River watershed and Delta. Cumulative land

development in the City of Sacramento, in addition to other development in the Sacramento River watershed and Delta, would result in an increase in impervious surfaces and potentially an increase in urban runoff and water pollutants, if not properly mitigated. For example, as outlined in the Sacramento 2035 General Plan Master Environmental Impact Report (MEIR), planned development in the Greenbriar, Panhandle, Camino Norte, and Delta Shores specific plans alone would result in an additional 2,256 acres of impervious cover.¹² In addition to these specific plans, there are many more potential development projects within the Sacramento River watershed and Delta that may contribute to increases in urban runoff volume and pollutants. Older land development that was constructed without BMPs to control the transport of water pollutants continues to represent a non-point source of polluted stormwater runoff. While agricultural runoff is regulated, it is a major non-point source of a variety of water pollutants. While new development is less likely to significantly degrade water quality because of existing regulations, older development, agriculture, and other non-point sources could impair receiving water quality. This is considered a **significant cumulative impact**.

The City of Sacramento currently implements the SQIP, which is designed to reduce stormwater pollution to the maximum extent practicable and eliminate prohibited non-stormwater discharges through a NPDES municipal stormwater discharge permit. The City of Sacramento also provides direction on post-construction BMPs in the Stormwater Quality Design Manual for the Sacramento and South Placer Regions. The proposed project would be subject to City of Sacramento General Plan Policies U 4.1.4, ER 1.1.3, ER 1.1.4, and ER 1.1.7; the City's ordinances; the SQIP; the Stormwater Quality Design Manual for Sacramento and South Placer Regions; and the General Permit, General Dewatering Permit, MS4 Permit, and NPDES permit for the CSS, and would meet the state water quality discharge criteria. As discussed previously under Impacts 4.7-1 and 4.7-2, through compliance with these regulations, permits, and plans, the proposed project would reduce project generation of water pollutants to the maximum extent practicable consistent with the goal of NPDES stormwater regulations through the use of structural and non-structural BMPs as well as measures to meet the requirements for LEED certification. Therefore, the projects' contribution to the significant cumulative impact would not be considerable. This impact would be **less than significant**.

Mitigation Measure

None required.

Impact 4.7-5: Implementation of the proposed projects, in combination with other cumulative development, could contribute to cumulative effects on groundwater levels.

The Central Sacramento County Groundwater Management Plan includes groundwater supply and demand projections through 2030. The comparison of supply and demand shows that supplies

¹² City of Sacramento, 2015. *Master Environmental Impact Report for the City of Sacramento 2035 General Plan Update (SCH No. 2012122006)*. Certified March 3, 2015.

should be sufficient to meet demands through 2030. The plan acknowledges that there are more factors than just supply and demand that determine whether a groundwater basin is managed sustainably, and groundwater management objectives are identified in the plan.¹³ Because supply would be sufficient to meet demand and the groundwater basin would be managed sustainably so as to not exceed the calculated long-term average annual sustainable yield of 273,000 acre-feet per year, this cumulative impact would be **less than significant**.

Mitigation Measure

None required.

¹³ Water Forum, Sacramento County Water Agency, and MWH, 2006. *Central Sacramento County Groundwater Management Plan*. February 2006.

4.8 Noise and Vibration

This section describes the existing noise environment near the proposed project areas (including the proposed reconfiguration and expansion of the SCC and new Hotel), and evaluates the potential for construction and operation of the proposed projects to result in significant impacts associated with noise and vibration.

No comments related to noise and vibration were received subsequent to the issuance of the NOP for the proposed projects.

The analysis included in this section was developed based on data provided in the City of Sacramento 2035 General Plan,¹ the City of Sacramento 2035 General Plan Master Environmental Impact Report,² the Federal Transit Administration's (FTA's) Transit Noise and Vibration Impact Assessment.³

4.8.1 Environmental Setting

Technical Background and Noise Terminology

Noise can be 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) which is measured in decibels (dB), with zero dB corresponding roughly to the threshold of human hearing and 120 to 140 dB corresponding to the threshold of pain.

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 (sound power). The sound pressure level, therefore, constitutes the additive force exerted by a sound corresponding to the frequency/sound power level spectrum.

The typical human ear is not equally sensitive to all frequencies of the audible sound spectrum. As a consequence, when assessing potential noise impacts, sound is measured using an electronic filter that de-emphasizes the frequencies below 1,000 Hz and above 5,000 Hz in a manner corresponding to the human ear's decreased sensitivity to low and extremely high frequencies instead of the frequency mid-range. This method of frequency weighting is referred to as A-weighting and is expressed in units of A-weighted decibels (dBA). Frequency A-weighting follows an international standard methodology of frequency de-emphasis and is typically applied to community noise measurements. Some representative noise sources and their corresponding A-weighted noise levels are shown in **Figure 4.8-1**.

¹ City of Sacramento, 2015. *City of Sacramento 2035 General Plan*. Adopted March 3, 2015.

² City of Sacramento, 2015. *City of Sacramento 2035 General Plan Master Environmental Impact Report* (SCH No. 2012122006). Certified March 3, 2015.

³ Federal Transit Administration, 2006. *Transit Noise and Vibration Impact Assessment*. May 2006.

NOISE LEVEL
COMMON OUTDOOR ACTIVITIES (dBA) COMMON INDOOR ACTIVITIES

	110	Rock band
Jet flyover at 1,000 feet		
	100	
Gas lawnmower at 3 feet		
	90	
Diesel truck at 50 feet at 50 mph		Food blender at 3 feet
	80	
Noisy urban area, daytime		
Gas lawnmower at 100 feet	70	Garbage disposal at 3 feet
Commercial area		Normal speech at 3 feet
Heavy traffic at 300 feet	60	
		Large business office
Quiet urban daytime	50	Dishwasher in next room
Quiet urban nighttime	40	Theater, large conference room (background)
Quiet suburban nighttime		
	30	Library
		Bedroom at night, concert hall (background)
Quiet rural nighttime	20	
		Broadcast/recording studio
	10	
	0	

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SOURCE: ESA, 2017

Sacramento Convention Center Renovation and Expansion and 15th/K Street Hotel EIR

Figure 4.8-1
Typical Noise Levels



Noise exposure is a measure of noise over a period of time. Noise level is a measure of noise at a given instant in time. Community noise varies continuously over a period of time with respect to the contributing sound sources of the community noise environment. 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 sources such as traffic and atmospheric conditions. What makes community noise constantly 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 receptor. These successive additions of sound to the community noise environment vary the community noise level from instant to instant, requiring the measurement of noise exposure over a period of time to legitimately characterize a community noise environment and evaluate cumulative noise impacts.

This time-varying characteristic of environmental noise is described using statistical noise descriptors. The most frequently used noise descriptors are summarized below:

L_{eq} : the energy-equivalent sound level is used to describe noise over a specified period of time, typically one hour, in terms of a single numerical value. The L_{eq} is the constant sound level, which would contain the same acoustic energy as the varying sound level, during the same time period (i.e., the average noise exposure level for the given time period).

L_{max} : the instantaneous maximum noise level for a specified period of time.

L_{50} : the noise level that is equaled or exceeded 50 percent of the specified time period. The L_{50} represents the median sound level.

L_{90} : the noise level that is equaled or exceeded 90 percent of the specific time period. This is considered the background noise level during a given time period.

L_{dn} : also abbreviated DNL, it is a 24-hour day and night A-weighted noise exposure level which accounts for the greater sensitivity of most people to nighttime noise by weighting noise levels at night (“penalizing” nighttime noises). Noise between 10:00 p.m. and 7:00 a.m. is weighted (penalized) by adding 10 dB to take into account the greater annoyance of nighttime noises.

CNEL: similar to DNL, the Community Noise Equivalent Level (CNEL) adds a 5-dB “penalty” for the evening hours between 7:00 p.m. and 10:00 p.m. in addition to a 10-dB penalty between the hours of 10:00 p.m. and 7:00 a.m.

As a general rule, in areas where the noise environment is dominated by traffic, the L_{eq} during the peak-hour is generally within one to two decibels of the L_{dn} at that location.⁴

⁴ California Department of Transportation, 2013. *Technical Noise Supplement to the Traffic Noise Analysis Protocol*. September 2013.

Effects of Noise on People

When a new noise is introduced to an environment, human reaction can be predicted by comparing the new noise to the ambient noise level, which is the existing noise level comprised of all sources of noise in a given location. In general, the more a new noise exceeds the ambient noise level, the less acceptable the new noise will be judged by those hearing it. With regard to increases in A-weighted noise level, the following relationships occur:

- except in carefully controlled laboratory experiments, a change of 1-dB cannot be perceived;
- outside of the laboratory, a 3-dB change is considered a just-perceivable difference;
- a change in level of at least 5-dB is required before any noticeable change in human response would be expected; and
- a 10-dB change is subjectively heard as approximately a doubling in loudness, and can cause an adverse response.⁵

The perceived increases in noise levels shown above are applicable to both mobile and stationary noise sources. 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, rather logarithmically. For example, if two identical noise sources produce noise levels of 50 dBA, the combined sound level would be 53 dBA, not 100 dBA.

Noise Attenuation

Stationary point sources of noise, including stationary mobile sources such as idling vehicles, attenuate (lessen) at a rate between 6 dB for hard sites and 7.5 dB for soft sites for each doubling of distance from the reference measurement. Hard sites are those with a reflective surface between the source and the receiver such as parking lots or smooth bodies of water. No excess ground attenuation is assumed for hard sites and the changes in noise levels with distance (drop-off rate) is simply the geometric spreading of the noise from the source. Soft sites have an absorptive ground surface such as soft dirt, grass or scattered bushes and trees. In addition to geometric spreading, an excess ground attenuation value of 1.5 dB (per doubling distance) is normally assumed for soft sites. Line sources (such as traffic noise from vehicles) attenuate at a rate between 3 dB for hard sites and 4.5 dB for soft sites for each doubling of distance from the reference measurement.⁶

Noise levels may also be reduced by intervening structures, such as a row of buildings, a solid wall, or a berm located between the receptor and the noise source.

⁵ Ibid. Although the increases human perception in A-weighted noise levels is from a Caltrans document, the human perception of noise follows these noise levels regardless of the source – mobile or stationary. Therefore, this reference document is applicable to more than just traffic noise sources.

⁶ Ibid.

Fundamentals of Vibration

As described in the FTA's *Transit Noise and Vibration Impact Assessment*, ground-borne vibration can be a serious concern for nearby neighbors, causing buildings to shake and rumbling sounds to be heard.⁷ In contrast to airborne noise, ground-borne 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 ground-borne vibration are trains, buses and heavy trucks on rough roads, and construction activities such as blasting, sheet pile-driving and operating heavy earth-moving equipment.

There are several different methods that are used to quantify vibration. The peak particle velocity (PPV) is defined as the maximum instantaneous peak of the vibration signal, which is measured in inches per second. The PPV is most frequently used to describe vibration impacts to 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 (Vdb) is commonly used to express RMS. The decibel notation acts to compress the range of numbers required to describe vibration. Typically, ground-borne vibration generated by man-made activities attenuates rapidly with distance from the source of the vibration. Sensitive receptors for vibration assessment include structures (especially older masonry structures), people who spend a lot of time indoors (especially residents, students, the elderly and sick), and vibration sensitive equipment such as hospital analytical equipment and equipment used in computer chip manufacturing.

The effects of ground-borne vibration include movement of the building floors, rattling of windows, shaking of items on shelves or hanging on walls and rumbling sounds. In extreme cases, the vibration can cause damage to 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 exceeds the threshold of perception by only a small margin. A vibration level that causes annoyance can be well below the damage threshold for normal buildings.

Existing Noise-Sensitive Land Uses

Noise sensitive land uses, where high noise levels can disrupt sleep, mechanical equipment, or other activities, or where long-term exposure can result in health effects, are typically defined as residences, schools, places of worship, hospitals and care centers. The proposed project would include the reconfiguration and expansion of the SCC and a construction of a new Hotel. The nearest sensitive land uses to the project site include St. Paul's Episcopal Church (located approximately 20 feet east of the project site), and the Maydestone community (located approximately 125 feet east of the convention center site, across 15th Street).

⁷ Federal Transit Administration, 2006. *Transit Noise and Vibration Impact Assessment*. May 2006.

Existing Noise Environment

The ambient noise environment surrounding the project site is primarily the result of vehicle traffic on J Street, 15th Street and L Street. Other noise sources in the area include trucks idling to enter and unload at the Sacramento Convention Center loading docks.

To quantify the existing ambient noise levels, ESA conducted a noise survey within and near the proposed project site. The noise survey began on June 7, 2017 and consisted of a series of 1-hour and 15-minute short-term noise measurements. **Figure 4.8-2** illustrates the location of the short-term noise measurements. The 1-hour short-term noise measurements were conducted during the daytime, evening and nighttime hours to approximate the day-night noise level (L_{dn}), which are summarized in **Table 4.8-1**. The results of the 15-minute short-term noise measurement survey can be found in **Table 4.8-2**. All noise measurements were conducted using a Larson Davis 831 sound level meter (SLM). The noise meter was calibrated before and after the noise measurement survey.

**TABLE 4.8-1
 1-HOUR DAY, EVENING AND NIGHT SHORT-TERM AMBIENT NOISE MONITORING RESULTS**

Measurement Location	1-hour L_{eq} Noise Measurement (dBA)			Estimated L_{dn} (dBA)
	Day	Evening	Night	
ST-1	72 ¹	64 ²	68 ³	75
ST-2	64 ⁴	63 ⁵	60 ⁶	67

NOTES:

LST = Long-Short-Term Noise Measurement

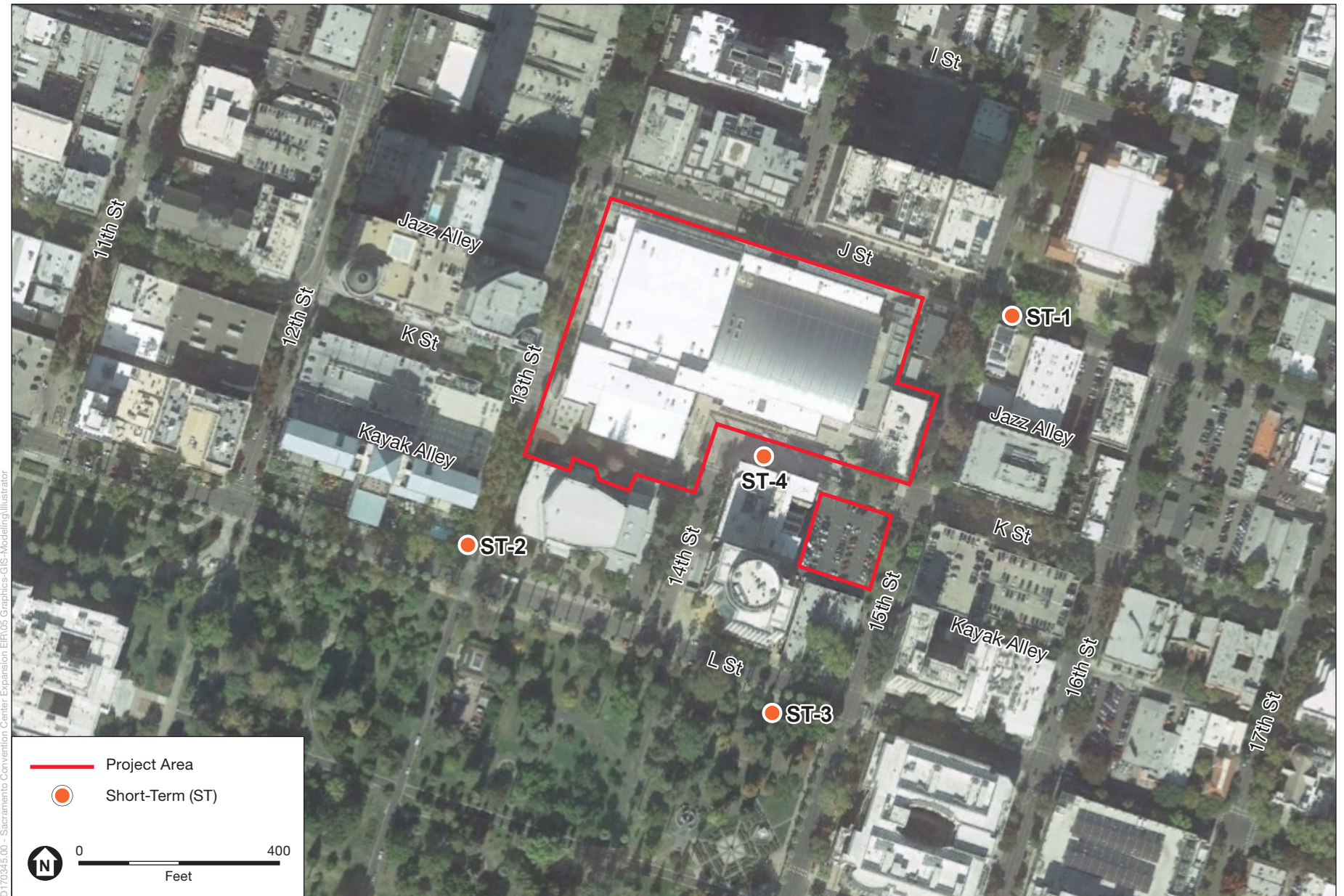
- 1-hour noise measurement began on June 7, 2017 at 9:20 a.m. Noise Sources include vehicular traffic along J Street and 15th Street, pedestrian traffic, and nearby landscaping activities.
- 1-hour noise measurement began on June 7, 2017 at 8:00 p.m. Noise Sources include vehicular traffic along J Street and 15th Street, pedestrian traffic and distant music/crowd noise from nearby nightclub.
- 1-hour noise measurement began on June 7, 2017 at 10:00 p.m. Noise Sources include vehicular traffic along J Street and 15th Street, occasional skateboarders, pedestrian traffic and distant music/crowd noise from nearby nightclub.
- 1-hour noise measurement began on June 7, 2017 at 10:32 a.m. Noise Sources include vehicular traffic along L Street and 13th Street, and infrequent pedestrian traffic.
- 1-hour noise measurement began on June 7, 2017 at 9:00 a.m. Noise Sources include vehicular traffic along L Street and 13th Street, and infrequent pedestrian traffic.
- 1-hour noise measurement began on June 7, 2017 at 11:00 p.m. Noise Sources include vehicular traffic along L Street and 13th Street, occasional skateboarders and infrequent pedestrian traffic.

**TABLE 4.8-2
 15-MINUTE SHORT-TERM AMBIENT NOISE MONITORING RESULTS**

Measurement Location	Start Time	L_{min} (dBA)	L_{eq} (dBA)	L_{max} (dBA) ¹	Primary Noise Sources
ST-3	11:36 AM	53	62	87	L Street, 15th Street, pedestrian traffic
ST-4	12:01 PM	53	60	75	14th Street/K Street, pedestrian traffic

NOTES:

1. Measured maximum noise levels were primarily the result of vehicular traffic (e.g., horn blasts, music, idling engines) and human activity (e.g., people talking, laughing, shouting).



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SOURCE: Google Earth Pro; ESA, 2017

Sacramento Convention Center Renovation and Expansion and 15th/K Street Hotel EIR

Figure 4.8-2
Noise Measurement Locations

4.8.2 Regulatory Setting

Federal

There are no federal regulations relevant to noise that would apply to this project.

State

The State of California 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 4.8 tons, gross vehicle rating) is also 80 dBA at 15 meters from the roadway centerline. These standards are implemented through controls on vehicle manufacturers and by legal sanction of vehicle operators by state and local law enforcement officials.

State regulations include requirements for the construction of new hotels, motels, apartment houses, and dwellings other than detached single-family dwellings that are intended to limit the extent of noise transmitted into habitable spaces. These requirements are collectively known as the California Noise Insulation Standards and are found in Title 24 of the California Code of Regulations (CCR).

The State of California updated its Building Code requirements with respect to sound transmission, effective January 2014. Section 1207 of the California Building Code (CCR, Title 24) establishes material requirements in terms of sound transmission class (STC)⁸ rating of 50 for all common interior walls and floor/ceiling assemblies between adjacent dwelling units or between dwelling units and adjacent public area. The previous code requirements (before 2014) set an interior performance standard of 45 dBA from exterior noise sources. This requirement was reinstated in July of 2015. Title 24 standards are enforced through Santa Clara County's building permit application and inspection process.

Local

City of Sacramento 2035 General Plan

The following noise and vibration-related goals and policies identified in the Environmental Constraints Element of the *City of Sacramento 2035 General Plan*⁹ are relevant to the proposed projects.

Goal EC 3.1 Noise Reduction. Minimize noise impacts on human activity to ensure the health and safety of the community.

Policies

EC 3.1.1 **Exterior Noise Standards.** The City shall require noise mitigation for all development where the projected exterior noise levels exceed those shown in **Table 4.8-3** (Table EC 1 in the General Plan), to the extent feasible.

⁸ The STC is used as a measure of a materials ability to reduce sound. The STC is equal to the number of decibels a sound is reduced as it passes through a material.

⁹ City of Sacramento, 2015. *City of Sacramento 2035 General Plan*. Adopted March 3, 2015.

**TABLE 4.8-3
EXTERIOR NOISE COMPATIBILITY STANDARDS FOR VARIOUS LAND USES**

Land Use Type	Highest Level of Noise Exposure that is Regarded as “Normally Acceptable” ^a (L _{dn} ^b or CNEL ^c)
Residential—Low Density Single Family, Duplex, Mobile Homes	60 dBA ^{d,e}
Residential—Multi-family	65 dBA
Urban Residential Infill ^f and Mixed-Use Projects ^g	70 dBA
Transient Lodging—Motels, Hotels	65 dBA
Schools, Libraries, Churches, Hospitals, Nursing Homes	70 dBA
Auditoriums, Concert Halls, Amphitheaters	Mitigation based on site-specific study
Sports Arena, Outdoor Spectator Sports	Mitigation based on site-specific study
Playgrounds, Neighborhood Parks	70 dBA
Golf Courses, Riding Stables, Water Recreation, Cemeteries	75 dBA
Office Buildings—Business, Commercial and Professional	70 dBA
Industrial, Manufacturing, Utilities, Agriculture	75 dBA

NOTES:

- a. As defined in the *State of California General Plan Guidelines*, “Normally Acceptable” means that the “specified land use is satisfactory, based upon the assumption that any building involved is of normal conventional construction, without any special noise insulation requirements.”
- b. L_{dn} or Day Night Average Level is an average 24-hour noise measurement that factors in day and night noise levels.
- c. CNEL or Community Noise Equivalent Level measurements are a weighted average of sound levels gathered throughout a 24-hour period.
- d. dBA or A-weighted decibel scale is a measurement of noise levels.
- e. The exterior noise standard for the residential area west of McClellan Airport known as McClellan Heights/Parker Homes is 65 dBA.
- f. With land use designations of Central Business District, Urban Neighborhood (Low, Medium, or High) Urban Center (Low or High), Urban Corridor (Low or High).
- g. All mixed-use projects located anywhere in the City of Sacramento.

SOURCE: City of Sacramento, 2015. *City of Sacramento 2035 General Plan*. Adopted March 3, 2015. p. 2-350.

- EC 3.1.2 **Exterior Incremental Noise Standards.** The City shall require noise mitigation for all development that increases existing noise levels by more than the allowable increment shown in **Table 4.8-4** (Table EC 2 in the General Plan), to the extent feasible.
- EC 3.1.3 **Interior Noise Standards.** The City shall require new development to include noise mitigation to assure acceptable interior noise levels appropriate to the land use type: 45 dBA L_{dn} for residential, transient lodgings, hospitals, nursing homes, and other uses where people normally sleep; and 45 dBA L_{eq} (peak hour) for office buildings and similar uses.
- EC 3.1.4 **Interior Noise Review for Multiple, Loud Short-Term Events.** In cases where new development is proposed in areas subject to frequent, high-noise events (such as aircraft over-flights, or train and truck pass-by events), the City shall evaluate noise impacts on any sensitive receptors from such events when considering whether to approve the development proposal, taking into account potential for sleep disturbance, undue annoyance, and interruption in conversation, to ensure that the proposed development is compatible within the context of its surroundings.
- EC 3.1.5 **Interior Vibration Standards.** The City shall require construction projects anticipated to generate a significant amount of vibration to ensure acceptable interior vibration levels at nearby residential and commercial uses based on the current City or Federal Transit Administration (FTA) criteria.

**TABLE 4.8-4
 EXTERIOR INCREMENTAL NOISE IMPACT STANDARDS FOR NOISE-SENSITIVE USES (DBA)**

Residences and Buildings where People Normally Sleep ^a		Institutional Land Uses with Primarily Daytime and Evening Uses ^b	
Existing L _{dn}	Allowable Noise Increment	Existing Peak Hour L _{eq}	Allowable Noise Increment
45	8	45	12
50	5	50	9
55	3	55	6
60	2	60	5
65	1	65	3
70	1	70	3
75	0	75	1
80	0	80	0

NOTES:

a. This category includes homes, hospitals, and hotels where a nighttime sensitivity to noise is assumed to be of utmost importance.

b. This category includes schools, libraries, theaters, and churches where it is important to avoid interference with such activities as speech, meditation, and concentration on reading material.

SOURCE: City of Sacramento, 2015. *City of Sacramento 2035 General Plan*. Adopted March 3, 2015. p. 2-351.

- EC 3.1.6 **Effects of Vibration.** The City shall consider potential effects of vibration when reviewing new residential and commercial projects that are proposed in the vicinity of rail lines or light rail lines.
- EC 3.1.7 **Vibration.** The City shall require an assessment of the damage potential of vibration-induced construction activities, highways, and rail lines in close proximity to historic buildings and archaeological sites and require all feasible measures be implemented to ensure no damage would occur.
- EC 3.1.8 **Operational Noise.** The City shall require mixed-use, commercial, and industrial projects to mitigate operational noise impacts to adjoining sensitive uses when operational noise thresholds are exceeded.
- EC 3.1.9 **Compatibility with Park and Recreation Uses.** The City shall limit the hours of operation for parks and active recreation areas in residential areas to minimize disturbance to residences.
- EC 3.1.10 **Construction Noise.** The City shall require development projects subject to discretionary approval to assess potential construction noise impacts on nearby sensitive uses and to minimize impacts on these uses, to the extent feasible.

The proposed projects would generate noise and vibration during short-term construction activities and long-term operations. Consistent with Policy EC 3.1.1 and as discussed below under Impact 4.8-2, on-road traffic noise associated with the proposed projects would result in noise levels that would not exceed the normally acceptable L_{dn} for Urban Residential Infill and Mixed-Use Projects. Also as described under Impact 4.8-2, the proposed projects' traffic noise levels would not exceed the allowable incremental noise levels of Policy EC 3.1.2. Construction vibration impacts are assessed in Impacts 4.8-5 and were determined to be consistent with policies EC 3.1.5, EC 3.1.6, and EC 3.1.7, after mitigation. Operational noise of the proposed projects, including heating, ventilation and air conditioning units (HVAC), amplified sound and loading dock activities, are assessed and mitigated in Impact 4.8-3. The proposed projects would

be consistent with policies EC 3.1.8 and EC 3.1.9. Consistent with policy EC 3.1.10, construction noise of the proposed projects was analyzed and mitigated to the extent feasible in Impact 4.8-1.

Sacramento Central City Community Plan

The City's *Central City Community Plan*¹⁰ does not contain goals and policies specific to noise.

City of Sacramento Municipal Code (Noise Control Ordinance)

The Sacramento Municipal Code includes noise regulations in Title 8 – Health and Safety, Chapter 8.68 – Noise Control (referred to generally as the Noise Control Ordinance). Of the regulations in Chapter 8.68, the following regulations would be applicable to the proposed projects:

- Section 8.68.080 exempts certain activities from Chapter 8.68, including “noise sources due to the erection (including excavation), demolition, alteration, or repair of any building or structure” as long as these activities are limited to between the hours of 7:00 am and 6:00 pm Monday through Saturday, and between the hours of 9:00 am and 6:00 pm on Sunday. The use of exhaust and intake silencers for internal combustion engines is also required. Construction work can occur outside of the designated hours if the work is of urgent necessity and in the interest of public health and welfare for a period not to exceed 3 days. Section 8.68.080 also exempts noise from any mechanical device, apparatus, or equipment related to or connected with emergency activities or emergency work from Chapter 8.68 requirements.
- Section 8.68.060 sets standards for cumulative exterior noise levels at residential and agricultural properties, including exterior noise standards of 55 dBA from 7:00 am to 10:00 pm, and 50 dBA from 10:00 pm to 7:00 am. Per Section 8.68.060(b), the allowable decibel increase above the exterior noise standards in any one hour are:
 1. 0 dB for cumulative period of 30 minutes per hour;
 2. 5 dB for cumulative period of 15 minutes per hour;
 3. 10 dB for cumulative period of 5 minutes per hour;
 4. 15 dB for cumulative period of 1 minutes per hour; or
 5. 20 dB not to be exceeded for any time per hour.

In addition, per Section 8.68.060(c), each of the noise limits above shall be reduced by 5 dB for impulsive or simple tone noises, or for noises consisting of speech or music. If the ambient noise level exceeds that permitted by any of the first four noise limit categories specified in subsection (b) above, the allowable noise limit shall be increased in 5 dB increments in each category to encompass the ambient noise level. If the ambient noise level exceeds the fifth noise level category, the maximum ambient noise level shall be the noise limit for that category.

¹⁰ City of Sacramento, 2015. *Central City Community Plan*. Adopted March 3, 2015.

4.8.3 Analysis, Impacts, and Mitigation

Significance Criteria

Appendix G of the CEQA Guidelines identifies potential significance criteria for the evaluation of impacts related to noise and vibration. The proposed project would have a significant impact related to noise and vibration if it would:

- Result in a substantial permanent increase in ambient exterior noise levels in the project vicinity that exceed standards in the City's 2035 General Plan or Noise Control Ordinance;
- Result in residential interior noise levels of 45 dBA L_{dn} or greater caused by noise level increases due to project operation;
- Construction noise levels that result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project that exceed the standards in the City of Sacramento Noise Control Ordinance;
- Permit existing and/or planned buildings (and persons within) to be exposed to significant vibration due to project construction; or
- Permit adjacent residential and commercial buildings (and persons within) to be exposed to significant vibration due to highway traffic and rail operations.

Methods and Assumptions

Construction noise impacts are assessed relative to the increase in noise levels that could result from the operation of specified construction equipment compared to existing noise level conditions. Analysis of the proposed project's temporary construction noise effects is based on specific estimates of construction equipment and duration of use from the project applicant. In all cases, the analyses accounted for attenuation of noise levels due to distances between the construction activity and the sensitive land uses in the site vicinity. Construction noise levels at nearby sensitive land uses that would be associated with the proposed project were estimated using the FHWA's *Roadway Construction Noise Model* (RCNM).¹¹

This evaluation uses speech interference as an indicator that construction noise could cause a substantial adverse impact on daytime and evening activities, and sleep interference as an indicator that construction noise could cause a substantial adverse impact on nighttime activities. The speech and sleep interference criteria are based on objective research of speech and sleep interference (as opposed to subjective surveys of annoyance) can be used to evaluate a project's noise impacts. The speech and sleep interference criteria used in this EIR are defined below:

- **Speech Interference.** A speech interference threshold, in the context of impact duration and time of day, is used to identify substantial increases in noise from temporary construction activities. This analysis assumes noise peaks generated by construction equipment could result in speech interference in adjacent buildings if the noise level in the interior of the

¹¹ Federal Highway Administration, 2006. *FHWA Roadway Construction Noise Model User's Guide*. January 2006.

buildings exceeds 45 dBA. A typical building can reduce noise levels by approximately 25 dB with the windows closed.¹² This noise reduction could be maintained only on a temporary basis in some cases, since it assumes windows must remain closed at all times. Assuming a 25 dB reduction with the windows closed, an exterior noise level of 70 dBA L_{eq} would maintain an acceptable interior noise environment of 45 dBA during the day and evening hours. Noise levels would vary depending on the phase of construction and the types of construction equipment being used. Therefore, an exterior noise level that exceeds 70 dBA L_{eq} during the daytime is used as the threshold for substantial construction noise where the duration of construction noise exceeds two weeks.

- **Sleep Interference.** Based on available sleep data, an interior nighttime level of 35 dBA is considered acceptable for sleeping.¹³ Assuming a 25 dB reduction with the windows closed, an exterior noise level of 60 dBA would maintain an acceptable interior noise environment of 35 dBA at night. Therefore, a significant impact would occur if the proposed project were to generate exterior noise levels above the 60 dBA L_{eq} sleep interference threshold for one or more nights.

For the purposes of the assessment of potential vibration impacts, the methodology described in the Caltrans' *Transportation and Construction Vibration Guidance Manual* was used to evaluate project-related vibration effects to nearby sensitive land uses.¹⁴ The Caltrans guidance manual focuses entirely on addressing vibration from construction activities. Impact pile driving is considered a continuous/frequent intermittent source.¹⁵ The building damage threshold for historic and some older buildings is 0.25 PPV (in/sec) and the vibration threshold where vibration level increases are considered distinctly perceptible is 0.04 PPV (in/sec) for continuous/frequent intermittent sources. Off-site sensitive receptors exposed to construction vibration levels that would exceed the later of these thresholds would be considered to result in a significant impact. Buildings that would be exposed to construction vibration levels that would exceed the former of these thresholds would also be considered to result in a significant impact.

Non-transportation operational activities at the proposed project site including operation of heating, ventilation and air-conditioning systems (HVAC) units, outdoor event area and loading docks were also evaluated. Referenced noise levels generated during these operations (i.e., HVAC, loading docks) were used to calculate a L_{eq} at the nearest sensitive receptor. Noise exposure at nearby sensitive receptors from the proposed outdoor amphitheater were estimated using the CadnaA acoustical model and design features (i.e., stage and speaker placement) provided by the project applicant.

¹² U.S. Environmental Protection Agency, 1974. *Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety*. March 1974.

¹³ Ibid.

¹⁴ California Department of Transportation, 2013. *Transportation and Construction Vibration Guidance manual*. September 2013.

¹⁵ Ibid.

Impacts and Mitigation Measures

Impact 4.8-1: Construction of the proposed projects could generate noise that would conflict with City standards or result in substantial temporary or periodic increase in ambient noise levels.

Noise levels from construction activity at nearby sensitive receptors would fluctuate depending on the particular type, number, and duration of uses of various pieces of construction equipment. Construction-related material haul trips would raise ambient noise levels along haul routes, depending on the number of haul trips made and types of vehicles used. In addition, certain types of construction equipment generate impulsive noises (such as pile driving), which can be disruptive. **Table 4.8-5** shows typical noise levels produced by the types of construction equipment that would likely be used during the proposed improvements to the existing SCC and construction of the Hotel.

**TABLE 4.8-5
 REFERENCE CONSTRUCTION EQUIPMENT NOISE LEVELS
 (50 FEET FROM SOURCE)**

Type of Equipment	L _{max} , dBA	Hourly L _{eq} , dBA/% Use ¹
Backhoe	80	76/40%
Grader	85	81/40%
Concrete Mixer Truck	85	81/40%
Loader	80	76/40%
Air Compressor	80	76/40%
Impact Pile Driver	101	94/20%
Auger Drill Rig	85	78/20%
Excavator	85	81/40%

NOTES:
 1. Percent used during the given time period (usually an hour – hourly L_{eq}) were obtained from the FHWA Roadway Construction Noise Model User's Guide.

SOURCE: Federal Highway Administration, 2006. *FHWA Roadway Construction Noise Model*. January 2006.

As previously discussed in the *Methods and Assumptions* discussion in Section 4.8.3, nearby sensitive land uses exposed to an exterior noise level of 70 dBA L_{eq} and 60 dBA L_{eq} would result in speech interference and sleep interference, respectively. Since construction activities would only occur during the daytime hours permitted in the City's municipal code Section 8.68.080, the speech interference threshold of 70 dBA L_{eq} is used to determine whether nearby sensitive receptors are exposed to construction noise levels that is considered to result in a substantial increase in ambient noise levels. Since construction activities will occur during the daytime hours, noise generated during construction would be expected to be less disruptive and intrusive than noise generated in the evening, night or early morning hours.

The operation of each piece of off-road equipment within the SCC and Hotel project sites would not be constant throughout the day, as equipment would be turned off when not in use. Most of

the time over a typical work day, the equipment would be operating at different locations within the project sites and would not likely be operating concurrently. However, for a more conservative approximation of construction noise levels to which the nearest sensitive receptor would be exposed, it is assumed for this analysis that two of the loudest pieces of construction equipment would be operating at the same time and located within the SCC and Hotel sites nearest to an offsite sensitive receptor.

SCC Project

Construction of the proposed SCC project would occur over approximately 39 months starting in either April 2018 or January 2019 and concluding in March 2021. Construction of the SCC would require demolition of a total of approximately 116,700 square feet (s) of building space and the construction of 73,500 sf of new exhibit space, 14,500 sf of new meeting rooms, a new 40,000 sf ballroom, a new East Lobby, and upgraded lobbies, kitchen facilities, loading areas, outdoor terrace, administrative offices and related support areas. The SCC project would construct approximately 52,000 net square feet. Construction of the SCC would occur under either a phased or full shutdown construction schedule.

Under the phased construction schedule, construction of the east side of the SCC building including office space, utilities and the east lobby would begin in April 2018 and be completed over a 15-month period. In June 2019, the west side would be demolished and the new kitchen and exhibit space would be constructed along with a new 2nd story ballroom. The 40,000 sf ballroom would be divisible into three small ballrooms or a reduced ballroom with the last third divided into five meeting rooms. The Convention Center on the east side would remain open throughout construction. Events would be relocated to the east side and would use the junior ballroom, east meeting rooms, and Exhibit Halls A and B - all on the east side. All of the project except the ballroom would be completed by early December 2020 and the Convention Center would resume operations in early December. Work on the ballroom would continue until June March 2021 and would be available for use then.

Under the full shutdown construction schedule, construction would start in January 2019, but only on utilities and the demolition of the Pannattoni building and construction of the new east lobby. The Convention Center would cease operations in mid to late July 2019 and all the rest of the work would commence. As noted above, the 40,000 sf ballroom would be divisible into 3 small ballrooms or a reduced ballroom with the last third divided into 5 meeting rooms. All of the project except the ballroom would be completed by early December 2020 and the Convention Center would resume operations in early December. Work on the ballroom would continue until June March 2021 and would be available for use then.

Under both construction schedules, construction activities would require excavation for infrastructure and building foundations, building construction, and paving and landscaping installation. All of these construction activities would require onsite staging areas to store off-road equipment and temporarily hold building materials.

The St. Paul's Episcopal Church and Maydestone apartments are located approximately 20 and 125 feet from the SCC project site eastern boundary, respectively. Using the reference noise levels provided in Table 4.8-5 and a 6 dB per doubling of distance drop-off, an excavator and grader running at the same time and location could generate a noise level of 92 dBA L_{eq} and 76 dBA L_{eq} from a distance of 20 and 125 feet, respectively.

Construction of the proposed SCC project could require the use of impact pile drivers to drive precast piles at the Panattoni building (for the new East Lobby) and entire western portion of the SCC site. As previously discussed, the St. Paul's Episcopal Church and Maydestone apartment building would be located approximately 80 and 125 feet, respectively, from where onsite impact pile driving could occur. From this distance, these sensitive receptors could be exposed to a noise levels ranging from 86 to 90 dBA L_{eq} .

The SCC project does not include a variance request for construction to occur outside daytime hours as permitted in Chapter 8.68, Article II(E) of the Sacramento City Code. Although construction activities would comply with the City's construction exempt hours and would not conflict with the City's noise standards, construction of the SCC project would expose nearby sensitive land uses to noise levels that would be considered a substantial temporary noise increase over the existing ambient levels. Therefore, noise generated during the construction of the SCC could result in a **potentially significant impact**.

SCC Project and Hotel Project

Construction of the SCC and Hotel would occur concurrently over approximately 39 months starting in January or February of 2018 and concluding in March of 2021. Construction activities would require demolition of existing structures, excavation for infrastructure and building foundations, building construction, and paving and landscaping installation. All of these construction activities would require onsite staging areas to store off-road equipment and temporarily hold building materials.

The nearest sensitive land uses to the SCC and Hotel sites include St. Paul's Episcopal Church (located approximately 20 feet east of the SCC), and the Maydestone apartments (located approximately 125 feet east of the SCC, across 15th Street). Using the reference noise levels provided in Table 4.8-5 and a 6 dB per doubling of distance drop-off, an excavator and grader running at the same time and location could generate a noise level of 92 dBA L_{eq} and 76 dBA L_{eq} from a distance of 20 and 125 feet, respectively.

Construction of the SCC and Hotel projects could require the use of an impact pile driver to install deep foundations and to drive precast piles. The St. Paul's Episcopal Church and Maydestone apartment building would be located approximately 80 and 125 feet, respectively, from where onsite impact pile driving could occur. Using the reference noise levels provided in Table 4.8-5 and a 6 dB per doubling of distance drop-off rate, onsite impact pile driving would expose the Saint Paul's Episcopal Church and Maydestone apartment building to a noise level of 90 dBA L_{eq} and 86 dBA L_{eq} , respectively.

The projects do not include variance requests to operate outside daytime hours as permitted in Chapter 8.68, Article II(E) of the City Code. Although construction activities would comply with the City's construction exempt hours and would not conflict with the City's noise standards, construction of the SCC and Hotel projects could expose nearby sensitive land uses to noise levels that would be considered a substantial temporary noise increase over the existing ambient levels. Therefore, noise generated during the construction of the SCC and Hotel projects could result in a **potentially significant impact**.

Summary

The proposed projects would require the use of construction equipment and the use of impact pile drivers during the construction of the SCC project and Hotel project. All construction activities would occur within the City of Sacramento's construction exempt hours. However, depending on location relative to sensitive receptors construction noise levels generated during building construction and potential impact pile driving could, expose nearby sensitive land uses to noise levels that would be considered a substantial temporary increase over the existing ambient noise levels, resulting in a **potentially significant impact**.

Mitigation Measure

Mitigation Measure 4.8-1 (SCC/Hotel)

The City shall include in all building permits a requirement that the contractor shall ensure that the following measures are implemented during all phases of construction within the SCC and Hotel areas:

- a) All heavy construction equipment and all stationary noise sources (such as diesel generators) shall have manufacturer-installed mufflers.*
- b) Construction equipment staging areas shall be located as far as feasible from residential areas while still serving the needs of construction contractors.*
- c) Use of auger displacement for installation of foundation piles, if feasible (if underlying soils do not require driven piles). If impact pile driving is required, sonic pile drivers shall be used, unless engineering studies are submitted to the City that show this is not feasible, based on geotechnical considerations.*
- d) Prior to construction activities, the building management of the Saint Paul's Episcopal Church and Maydestone apartment building shall be notified of the construction schedule, as well as the name and contact information of the project disturbance coordinator.*
- e) Machines or equipment shall not start up prior to 7:00 a.m., Monday through Saturday, and prior to 9 a.m. on Sunday.*
- f) Delivery of materials and equipment shall not occur prior to 7:00 a.m. nor past 6:00 p.m., Monday through Saturday, and prior to 9:30 a.m. nor past 6:00 p.m. on Sunday;*

- g) *Stationary construction equipment, such as compressors, shall be placed away from nearby residential areas and shall provide acoustical shielding.*
- h) *Idling times of equipment shall be minimized either by shutting equipment off when not in use or reducing maximum idling time to 5 minutes.*
- i) *The City (SCC) and/or the project applicant or its designee (Hotel) shall designate a disturbance coordinator and conspicuously post this person's number around the project site, in adjacent public spaces, and in construction notifications. The disturbance coordinator, in coordination with the City, shall be responsible for responding to any complaints about construction activities. The disturbance coordinator shall receive all public complaints about construction disturbances and, in coordination with the City, is responsible for determining the cause of the complaint and implementation of feasible measures to alleviate the problem.*
- j) *The City (SCC) and/or the project applicant or its designee (Hotel) shall provide written notice to all known occupied noise-sensitive uses (i.e., residential, religious, lodging) within 400 feet of the edge of the project site boundary at least 2 weeks prior to the start of each construction phase of the construction schedule, as well as the name and contact information of the project disturbance coordinator.*

Significance after Mitigation: Implementation of **Mitigation Measure 4.8-1** would reduce construction noise within the proposed project sites and surrounding areas to the extent feasible. Restricting heavy-duty equipment operations in close proximity to buildings would substantially reduce exterior and interior noise at adjacent buildings. Auger displacement pile installation could reduce associated noise by 17 dB (compared to impact pile driving) and intervening noise barriers or buildings could reduce noise exposure at the nearest receptors by 10 to 15 dB. These measures would minimize exterior noise levels at nearby receptors during construction. However, even with implementation of these mitigation measures, it is likely that construction activities would result in increased levels of annoyance, interruption of conversation at the St. Paul's Episcopal Church and Maydestone apartments. In addition, alternative methods to driven pile installation are only feasible if underlying soils would allow for piles installed using auger displacement or sonic pile driving techniques. Thus, underlying soils may require driven piles for project foundations. With the above considerations, this impact would be considered **significant and unavoidable** during the short-term duration of construction activities at the proposed project sites.

Impact 4.8-2: Operation of uses developed pursuant to the proposed projects could increase local traffic that could result in a substantial permanent increase in ambient exterior noise levels in the project vicinity or conflict with the City of Sacramento noise standards.

SCC Project

Most of the long-term noise that would result due to the implementation of the proposed SCC project would primarily be traffic-generated. The proposed SCC project would contribute to an increase in local traffic volumes, resulting in higher traffic noise levels along local roadways.

Using algorithms from the FHWA’s *Traffic Noise Model Technical Manual* and the estimated SCC traffic volumes provided by the 2017 Fehr & Peers traffic study, traffic noise levels were estimated for roadway segments near the SCC project site under Baseline and Baseline plus SCC project conditions.¹⁶ See Appendix K for noise modeling details. The segments analyzed and the associated results of the modeling are shown in **Table 4.8-6**. According to the City of Sacramento General Plan Policy EC 3.1.2, residences exposed to future traffic noise levels that exceeds the allowable incremental noise increases detailed in Table 4.8-4 is considered **significant**.

**TABLE 4.8-6
BASELINE AND PROJECTED L_{DN} TRAFFIC NOISE LEVELS ALONG STREETS
SACRAMENTO CONVENTION CENTER**

Roadway Segment	Traffic Noise Level, dBA, Ldn ¹			
	Baseline	Baseline plus SCC	Incremental Increase	Existing Sensitive Land uses Exposed to a Significant Increase in Traffic Noise? (Yes or No) ²
12th Street				
I Street to J Street	61	62	1	No
J Street to K Street	60	61	1	No
13th Street				
I Street to J Street	60	60	0	No
J Street to K Street	59	60	1	No
K Street to L Street	58	58	0	No
14th Street				
I Street to J Street	59	60	1	No
15th Street				
I Street to J Street	63	63	0	No
J Street to K Street	64	64	0	No
K Street to L Street	65	65	0	No
16th Street				
I Street to J Street	67	67	0	No
J Street to K Street	66	66	0	No
I Street				
12th Street to 13th Street	64	64	0	No
13th Street to 14th Street	63	63	0	No
14th Street to 15th Street	63	63	0	No
15th Street to 16th Street	63	64	1	No

¹⁶ Fehr & Peers, 2017. SCC and Hotel Traffic Report. August 2017.

**TABLE 4.8-6
 BASELINE AND PROJECTED L_{DN} TRAFFIC NOISE LEVELS ALONG STREETS
 SACRAMENTO CONVENTION CENTER**

Roadway Segment	Traffic Noise Level, dBA, L _{dn} ¹			
	Baseline	Baseline plus SCC	Incremental Increase	Existing Sensitive Land uses Exposed to a Significant Increase in Traffic Noise? (Yes or No) ²
J Street				
12th Street to 13th Street	67	67	0	No
13th Street to 14th Street	67	67	0	No
14th Street to 15th Street	67	67	0	No
15th Street to 16th Street	66	66	0	No
K Street				
15th Street to 16th Street	60	60	0	No
L Street				
13th Street to 14th Street	62	63	1	No
14th Street to 15th Street	63	63	0	No

NOTES:

- Noise levels were determined using methodology described in FHWA Traffic Noise Model Technical Manual. See Appendix K for Details
- Existing land uses exposed to traffic noise that result in a noise increase greater than what is allowed in the City of Sacramento General Plan Policy EC 3.1.2 is considered a significant impact.

SOURCE: ESA, 2017

As shown in Table 4.8-6, none of the sensitive land uses along roadway segments analysis would be exposed to an increase in traffic noise that would exceed the City of Sacramento General Plan Policy EC 3.1.2. Therefore, the increase in vehicular traffic along local roadways would result in the exposure of adjacent existing sensitive land uses to traffic noise that would result in a **less-than-significant impact**.

SCC Project and Hotel Project

Most of the long-term noise that would result due to the implementation of the proposed SCC and Hotel projects would primarily be traffic-generated. The proposed SCC and Hotel projects would contribute to an increase in local traffic volumes, resulting in higher traffic noise levels along local roadways. Using algorithms from the FHWA’s *Traffic Noise Model Technical Manual* and the estimated SCC and Hotel traffic volumes provided by the 2017 Fehr & Peers traffic study, traffic noise levels were estimated for roadway segments near the SCC site under Baseline and Baseline plus SCC conditions.¹⁷ See Appendix K for noise modeling details. The roadway segments analyzed and the associated results of the modeling are shown in **Table 4.8-7**.

¹⁷ Ibid.

According to the City of Sacramento General Plan Policy EC 3.1.2, residences exposed to future traffic noise levels that exceeds the allowable incremental noise increases detailed in Table 4.8-4 is considered **significant**.

**TABLE 4.8-7
BASELINE AND PROJECTED L_{DN} TRAFFIC NOISE LEVELS ALONG STREETS
SACRAMENTO CONVENTION CENTER & HOTEL**

Roadway Segment	Traffic Noise Level, dBA, Ldn ¹			
	Baseline	Baseline plus SCC and Hotel	Incremental Increase	Existing Sensitive Land uses Exposed to a Significant Increase in Traffic Noise? (Yes or No) ²
12th Street				
I Street to J Street	61	62	1	No
J Street to K Street	60	61	1	No
13th Street				
I Street to J Street	60	60	0	No
J Street to K Street	59	60	1	No
K Street to L Street	58	59	1	No
14th Street				
I Street to J Street	59	60	1	No
15th Street				
I Street to J Street	63	63	0	No
J Street to K Street	64	65	1	No
K Street to L Street	65	65	0	No
16th Street				
I Street to J Street	67	67	0	No
J Street to K Street	66	67	1	No
I Street				
12th Street to 13th Street	64	64	0	No
13th Street to 14th Street	63	63	0	No
14th Street to 15th Street	63	64	1	No
15th Street to 16th Street	63	64	1	No
J Street				
12th Street to 13th Street	67	67	0	No
13th Street to 14th Street	67	67	0	No
14th Street to 15th Street	67	67	0	No
15th Street to 16th Street	66	66	0	No
K Street				
15th Street to 16th Street	60	61	1	No

**TABLE 4.8-7
 BASELINE AND PROJECTED L_{DN} TRAFFIC NOISE LEVELS ALONG STREETS
 SACRAMENTO CONVENTION CENTER & HOTEL**

Roadway Segment	Traffic Noise Level, dBA, Ldn ¹			
	Baseline	Baseline plus SCC and Hotel	Incremental Increase	Existing Sensitive Land uses Exposed to a Significant Increase in Traffic Noise? (Yes or No) ²
L Street				
13th Street to 14th Street	62	63	1	No
14th Street to 15th Street	63	64	1	No

NOTES:
 1. Noise levels were determined using methodology described in FHWA Traffic Noise Model Technical Manual. See Appendix K for Details
 2. Existing land uses exposed to traffic noise that result in a noise increase greater than what is allowed in the City of Sacramento General Plan Policy EC 3.1.2 is considered a significant impact.

SOURCE: ESA, 2017

As shown in Table 4.8-7, none of the sensitive land uses along roadway segments analysis would be exposed to an increase in traffic noise that would exceed the City of Sacramento General Plan Policy EC 3.1.2. Therefore, the increase in vehicular traffic along local roadways would result in the exposure of adjacent existing sensitive land uses to traffic noise that would result in a **less-than-significant impact**.

Summary

Future traffic increases along local roadway segments associated with the operation of the proposed projects would not expose existing sensitive land uses to an increase in traffic noise that would exceed the City of Sacramento General Plan Policy EC 3.1.2. Therefore, the increase in vehicular traffic along local roadways would result in the exposure of adjacent existing sensitive land uses to traffic noise that would result in a **less-than-significant impact**.

Mitigation Measure

None required.

Impact 4.8-3: Operation of uses developed pursuant to the proposed projects could introduce new stationary noise sources that could result in a substantial permanent increase in ambient exterior noise levels in the project vicinity or conflict with the City of Sacramento noise standards.

SCC Project

Loading Docks

The loading docks at the existing Sacramento Convention Center are located on K Street, between 14th Street and 15th Street, and provide service delivery access to the site. Implementation of the SCC project would not result in an increase in the number loading docks. Although the number of loading docks would not increase, the frequency at which trucks will be arriving and departing the SCC would increase as a result of the proposed renovation and expansion of the SCC.

Truck deliveries at loading docks generate noise as a result of truck arrivals and departures from the unloading area, trucks backing into the docks (including backup beepers), air brakes, and other truck unloading-related noise. These activities would be a source of elevated noise levels at nearby sensitive receptors. Noise levels of 80 dBA L_{max} and 60 dBA L_{eq} at a distance of 50 feet can be generated during loading dock activities.¹⁸

Sensitive land uses located within approximately 120 feet of a loading dock could be exposed to noise levels above the applied City of Sacramento's nighttime noise standard of 50 dBA L_{eq} . There are no existing sensitive land uses within 120 feet of the existing loading docks. The nearest sensitive receptors are St. Paul's Episcopal Church which is approximately 250 feet to the northeast, and the Maydestone apartment community which is approximately 340 feet to the northeast of the loading docks. These sensitive uses are located on the northeast side of the SCC and are shielded from the loading docks by the SCC building. As all sound from the loading docks would be projected south, southwest, and southeast, and direct noise impacts to the sensitive receptors mentioned above would be shielded by the SCC, no sensitive land uses would be exposed to noise levels above the 50 dBA L_{eq} noise standard. Therefore, operation of loading docks at the Sacramento Convention Center would expose nearby sensitive land uses to noise levels that would result in a **less-than-significant impact**.

Central Utility Plant

The existing central utility plan at the proposed SCC would undergo capital replacement of boilers, chillers and electrical panels. The central utility plant will provide heating, cooling and power to the Convention Center and the adjacent Activities Plaza. The primary new sources of noise generated by the central utility plant is from the boilers. Although the noise generated by the boiler could result in a substantial noise from within the SCC building, but because the boilers would be completely enclosed, the exterior noise levels outside of the SCC build is not expected to result in a substantial noise increase at nearby existing sensitive land uses. Therefore, this impact would result in a **less-than-significant impact**.

¹⁸ ESA, 2008. *Fresh & Easy Distribution Truck Noise Study*. November 2008.

Amplified Sound

The proposed reconfiguration and expansion of the SCC could result in new Activities Plaza. The proposed Activities Plaza would likely be located on the southwest side of the building between the Community Center Theater (CCT) and SCC. The primary sources of amplified sound during outdoor events at the proposed Activities Plaza would be from the speakers, which are proposed to be located on the north side of the Activities Plaza facing either 13th Street or K Street. According to the City Code (8.68.060 Exterior Noise Standards), the daytime and nighttime exterior noise standards at nearby sensitive land uses would be 55 dBA (from 7:00 am to 10:00 pm) and 50 dBA (from 10:00 pm to 7:00 am), and reduced by 5 dBA for noise consisting of speech or music, resulting in day and nighttime limits of 50 dBA and 45 dBA, respectively.

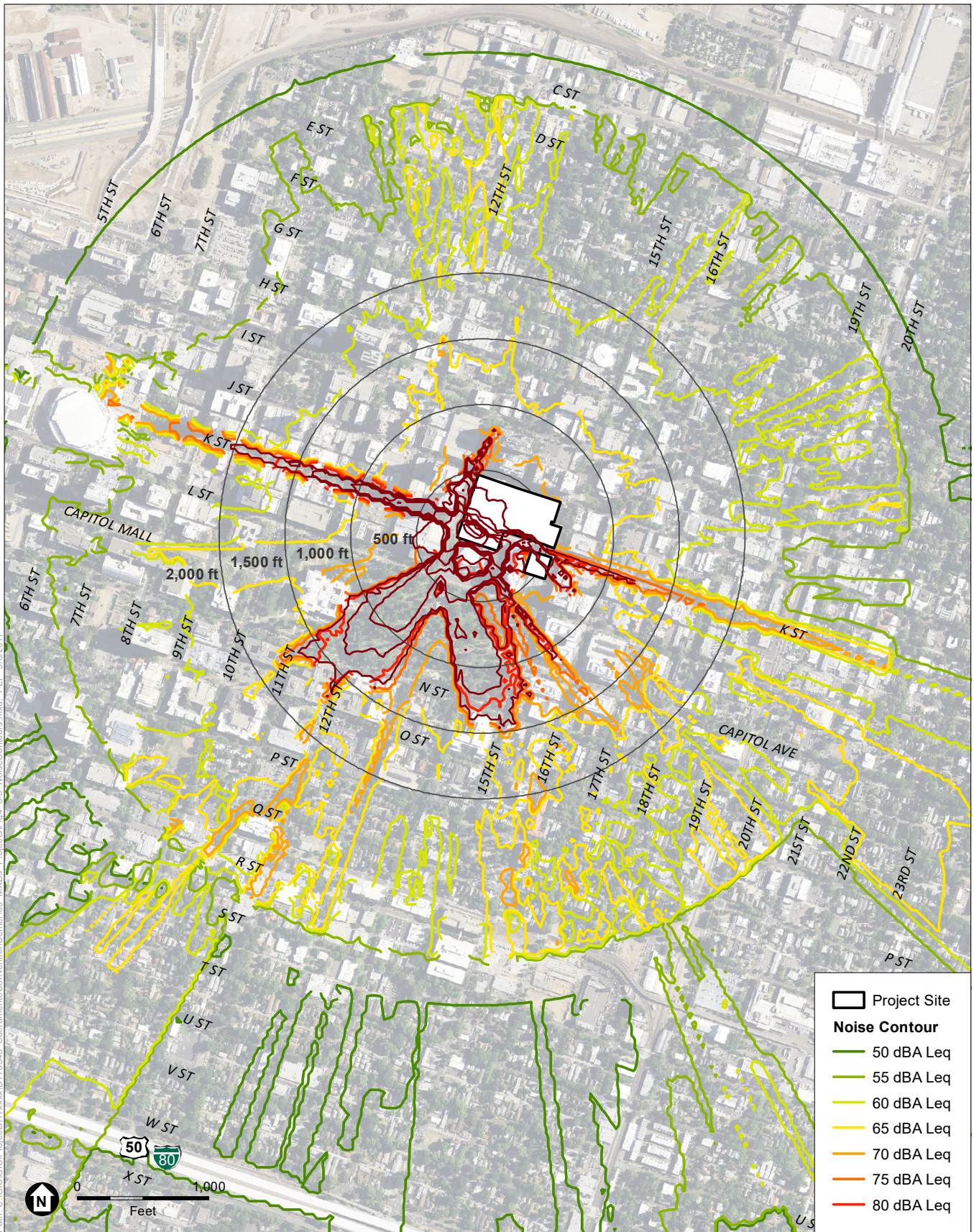
The Computer Aided Noise Abatement (Cadena) noise propagation program (Version 4.6.155) was used to estimate the propagation of noise from the proposed outdoor Activities Plaza. The results of the modeling are presented in **Figure 4.8-3**. Cadena is a Windows-based software program that predicts and assesses noise levels near noise sources based on International Organization for Standardization 9613-2 algorithms for noise propagation calculations. The calculations account for classical sound wave divergence plus attenuation factors resulting from air absorption, basic ground effects, and barrier/shielding.

The nearest sensitive land uses to the outdoor Activities Plaza include the St. Paul's Episcopal Church (located approximately 640 feet northeast of the Activities Plaza), and the Maydestone apartments (located approximately 750 feet northeast of the outdoor community center theater, across 15th Street). As shown in Figure 4.8-3, both the St. Paul's Episcopal Church and Maydestone apartments would be located within the 65 dBA L_{eq} noise contour of the Activities Plaza and would be exposed to amplified noise levels that would exceed the City's exterior noise standard. Because major noise producing events at the outdoor Activities Plaza would expose sensitive receptors to noise levels that would exceed the City's exterior day and night noise standards, this impact is considered **significant**.

SCC Project and Hotel Project

Loading Docks

As previously discussed, the renovation and expansion of the SCC would not result in an increase in the number loading docks. Although the number of loading docks would not increase, the frequency at which trucks will be arriving and departing the SCC would increase as a result of the proposed renovation and expansion of the SCC. The proposed Hotel could have two to three loading docks, likely to be located on K Street across from the SCC loading docks. Sensitive land uses located within approximately 120 feet of a loading docks could be exposed to noise levels above the applied City of Sacramento's nighttime noise standard of 50 dBA L_{eq} . The nearest sensitive land use is located approximately 325 feet from the SCC loading docks, well beyond the established 120 feet impact contour. Therefore, operation of loading docks at the SCC and Hotel would expose nearby sensitive land uses to noise levels that would result in a **less-than-significant impact**.



SOURCE: USDA, 2016; ESA, 2017

Sacramento Convention Center Renovation and Expansion and 15th/K Street Hotel EIR

Figure 4.8-3
Unmitigated Amplified Sound Contour Map

Central Utility Plant

The proposed SCC would upgrade the existing central plant that provides heating, cooling and power to the Convention Center and the adjacent Sacramento Community Theater. The proposed Hotel would not have a dedicated central utility plant. Since the central utility plant would be completely enclosed, the exterior noise levels outside of the SCC building is not expected to result in a substantial noise increase at nearby existing sensitive land uses. Therefore, this impact would be **less than significant**.

Amplified Sound

The proposed reconfiguration and expansion of the SCC would result in a new Activities Plaza located on the southwest side of the SCC building. Amplified outdoor noise is not anticipated at the Hotel site.

The nearest sensitive land uses to the Activities Plaza include the St. Paul's Episcopal Church (located approximately 640 feet northeast of the Activities Plaza), and the Maydestone apartments (located approximately 750 feet northeast of the Activities Plaza, across 15th Street). As shown in Figure 4.8-3, both the St. Paul's Episcopal Church and Maydestone apartments would be located within the 65 dBA L_{eq} noise contour of the Activities Plaza and would be exposed to amplified noise levels that would exceed the City's exterior noise standard. Because major noise producing events at the Activities Plaza would expose sensitive receptors to noise levels that would exceed the City's exterior day and night noise standards, this impact is considered **significant**.

Heating, Ventilation, and Air-Conditioning Systems

The HVAC systems for maintaining comfortable temperatures within the proposed Hotel would consist largely of packaged air conditioning systems. The precise locations of HVAC systems are unknown at this time. Possible HVAC system locations would include street level and rooftops. HVAC units can generate noise levels of approximately 51 dBA L_{eq} at a reference distance of 100 feet from the operating units during maximum heating or air conditioning operations.¹⁹

Sensitive land uses located within approximately 110 feet of HVAC units could be exposed to noise levels above the City of Sacramento's nighttime noise standard of 50 dBA L_{eq} . The nearest sensitive land use consists of multi-family residences (Maydestone apartments) at 1001 15th Street located approximately 330 feet north-east of the proposed Hotel. At this distance, the residences residing within the Maydestone apartments would not be exposed to HVAC noise levels that would exceed the applied City of Sacramento's nighttime noise standard. Therefore, operation of HVAC units at the proposed Hotel would expose nearby sensitive land uses to noise levels that would result in a **less-than-significant impact**.

¹⁹ Puron, 2005. *48PG03-28 Product Data*. p. 10 – 11.

Summary

The amplified sound generated at the Activities Plaza proposed under the SCC project could expose existing sensitive receptors near the Activities Plaza to noise levels that would exceed the City of Sacramento day and nighttime exterior noise standard for speech and music. This would result in a **significant impact**.

Mitigation Measure

Mitigation Measure 4.8-3 (SCC)

The project applicant shall be required to limit speakers at outdoor stages to be no louder than 100 dBA measured five (5) feet from the source.

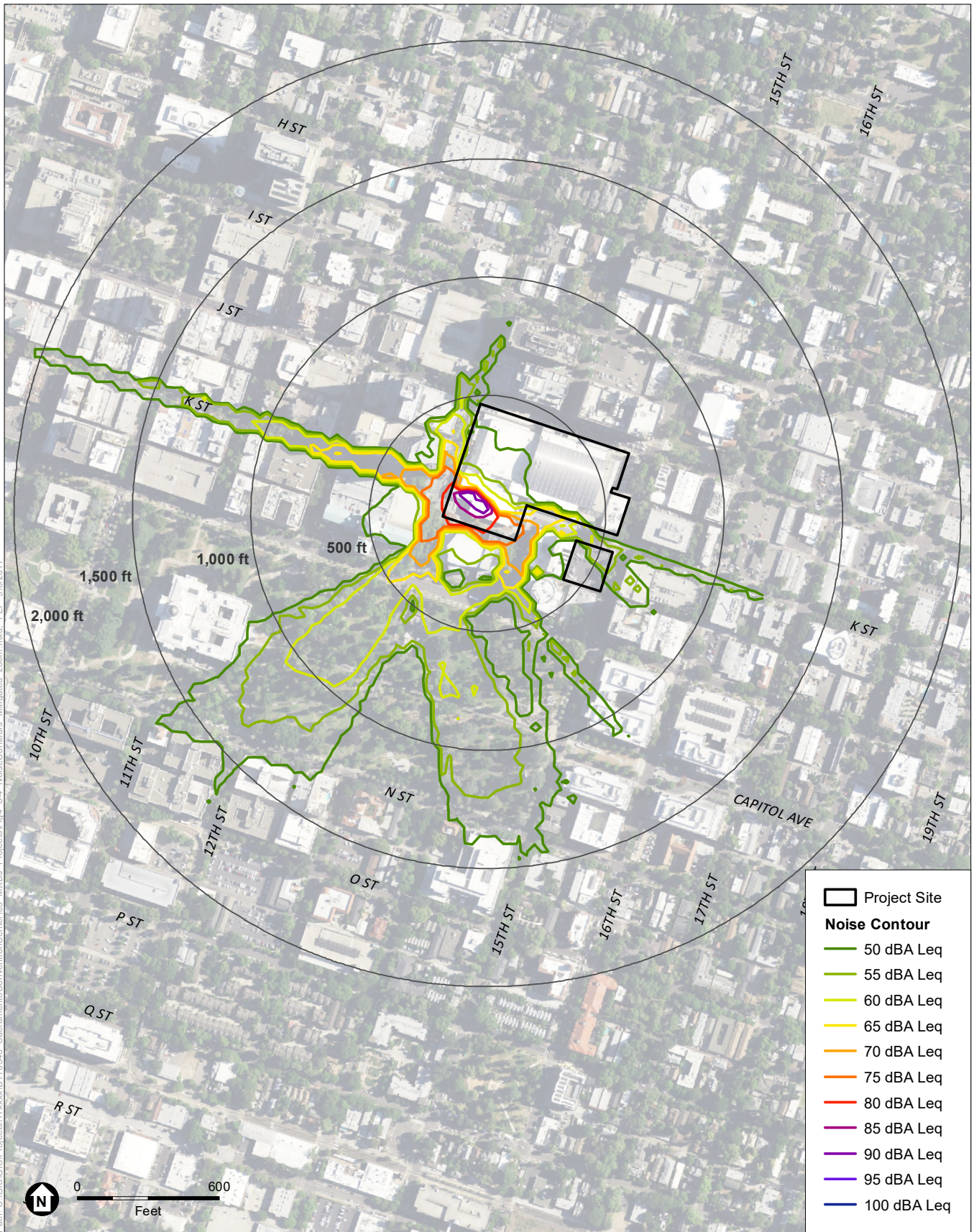
Significance after Mitigation: Implementation of **Mitigation Measure 4.8-3** would reduce noise exposure at nearby sensitive land uses during major events by not allowing speakers to exceed 100 dBA from a distance of five feet. CadnaA was used to estimate the propagation of noise from the proposed outdoor community Center with implementation of Mitigation Measure 4.8-3. The results of the modeling can be found in **Figure 4.8-4**. As shown in Figure 4.8-4, both the St. Paul's Episcopal Church and Maydestone apartments would be located outside of the 50 dBA L_{eq} noise contour and would be exposed to amplified noise levels that would not exceed the City's exterior noise standard. As a result, impacts of amplified exterior sound systems would be considered **less than significant after mitigation**.

Impact 4.8-4: The proposed projects could result in residential interior noise levels of 45 dBA L_{dn} or greater caused by noise level increases due to project operation.

SCC Project

Operational traffic as a result of the proposed SCC project would increase traffic noise levels at existing land uses in the projects' vicinity, as described above in Impact 4.8-2. A typical building can reduce noise levels by approximately 25 dB with the windows closed.²⁰ Assuming an outdoor to indoor attenuation of 25 dB, residential buildings exposed to exterior noise level of 70 dBA L_{dn} would result in interior noise levels of 45 dBA L_{eq} . As shown in Table 4.8-6, the total roadway noise under baseline plus SCC project conditions would not exceed the 70 dBA L_{dn} standard at existing residential uses. Since traffic generated during the operation of the SCC would not generate traffic volumes along roadways within the Sacramento downtown area that would exceed the City of Sacramento's exterior noise standard to the extent that interior noise levels at existing residential uses adjacent to these roadway segments would increase above 45 dBA L_{dn} . In addition, operational noise associated with loading dock operations and amplified sound from the Activities Plaza would not exceed 70 dBA L_{dn} at nearby sensitive receptors, thereby exceeding the 45 dBA interior noise threshold. Therefore, the proposed SCC project would not result in residential interior noise levels of 45 dBA L_{dn} or greater caused by noise level increases and result in **less-than-significant impact**.

²⁰ U.S. Environmental Protection Agency, 1974. *Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety*. March 1974.



SOURCE: USDA, 2016; ESA, 2017

Sacramento Convention Center Renovation and Expansion and 15th/K Street Hotel EIR

Figure 4.8-4
Mitigated Amplified Sound Contour Map

SCC Project and Hotel Project

Operation of the SCC and Hotel projects would result in similar impacts as discussed above. Operation of the SCC and Hotel projects would increase traffic noise levels at existing residential land uses, as shown Table 4.8-7. However, the increase in traffic noise levels would not exceed the City of Sacramento's exterior noise standard of 70 dBA L_{dn} for residential uses under baseline plus SCC and Hotel project conditions. Therefore, the proposed SCC and Hotel projects would not result in residential interior noise levels of 45 dBA L_{dn} or greater caused by noise level increases and result in **less-than-significant impact**.

Summary

The proposed projects would not increase traffic noise levels along roadways within the Sacramento downtown area that would exceed the City's exterior noise standard of 70 dBA L_{dn}. Since the proposed projects would not expose existing residences to traffic noise that exceeds the City's exterior noise standards, interior noise levels at existing residential uses would not increase above 45 dBA L_{dn}. Therefore, this impact would result in **less-than-significant impact**.

Mitigation Measure

None required.

Impact 4.8-5: Construction of the proposed projects could expose existing and/or planned buildings, and persons within, to vibration that could disturb people and damage buildings.

SCC Project

The renovation and expansion of the SCC would require the use of equipment or vehicles that could expose nearby sensitive receptors to vibrations levels that may result in an annoyance or building damage. Because construction activities within the SCC areas are anticipated to take place on a frequent basis over a period of approximately 39 months, these activities would be considered a continuous/frequent intermittent vibration source.

According to the Caltrans' *Transportation and Construction Vibration Guidance Manual*, the building damage threshold for historic and some older buildings is 0.25 PPV (in/sec) and the vibration threshold where vibration level increases are considered distinctly perceptible is 0.04 PPV (in/sec) for continuous/frequent intermittent sources.²¹ Ground-borne vibration from demolition, building construction and impact pile driving activities at the SCC could produce substantial vibration at nearby sensitive receptors, including structures themselves. The extent to which these receptors would be affected depends largely on soil conditions, building design and materials, construction techniques employed, distance from the construction site to the structure, the age and condition of the structure, and the receptor's location in the building.

²¹ California Department of Transportation, 2013. *Transportation and Construction Vibration Guidance manual*. September 2013.

Typical reference vibration levels for various pieces of equipment are listed below in **Table 4.8-8**. The use of impact pile drivers would generate the highest vibration levels. According to a FTA’s *Transit Noise and Vibration Impact Assessment*, the use of impact pile drivers can result in building damage to historic and some older buildings within 47 feet and in human annoyance within 148 feet.²²

**TABLE 4.8-8
VIBRATION VELOCITIES FOR CONSTRUCTION EQUIPMENT**

Equipment/Activity	PPV at 25 ft (inches/second) ^a
Large Bulldozer	0.089
Hoe Ram	0.089
Loaded Trucks	0.076
Pile Driver (Impact)	0.644
Pile Driver (Sonic)	0.170
Caisson Drilling (represents Auger Drilling Pile Installation) ^d	0.089

SOURCE: Federal Transit Administration, 2006. *Transit Noise and Vibration Impact Assessment*. May 2006 (Table 12-2, p. 12-12).

Impact pile driving could occur at the Panattoni building (for the new East Lobby) and entire western portion of the SCC area. Impact pile driving could occur as approximately 80 feet from the St. Paul’s Episcopal Church, 70 feet from the Public Market/Sheraton Grand Hotel, 125 feet from the A.C. Westerguard Auto Repair and Maydestone buildings, and 85 feet from the Pacific Telephone Inland Division Headquarters building. At these distances, the none of the historic structures near the SCC project site are close enough to be exposed to vibration levels that would result in building damage. However, people worshipping at the St. Paul’s Episcopal Church and living at the Maydestone apartment building would be exposed to vibration levels during onsite impact pile driving that would result in human annoyance. This would be a **short-term potentially significant impact**.

SCC Project and Hotel Project

Construction of the SCC and Hotel projects would require the use of an impact pile driver to install deep foundations and to drive precast piles. As previously discussed, the use of impact pile drivers can result in building damage to historic and some older buildings within 47 feet. The only historic building located within 47 feet of the proposed SCC and Hotel project sites is the Pacific Telephone Inland Division Headquarters, which is located approximately 10 feet of the Hotel site’s western boundary. At this distance, the Pacific Telephone Inland Division Headquarters historic building would be exposed to vibration levels from onsite impact pile driving that could result in building damage.

²² Federal Transit Administration, 2006. *Transit Noise and Vibration Impact Assessment*. May 2006.

As previously discussed, the use of impact pile drivers can result in human annoyance within 148 feet. St. Paul's Episcopal Church and Maydestone apartment are located within 148 feet of where impact pile driving would occur during the construction of the SCC. People worshipping at the St. Paul's Episcopal Church and living at the Maydestone apartment building would be exposed to vibration levels during onsite impact pile driving that would result in human annoyance.

Due to the close proximity of St. Paul's Episcopal Church, Maydestone apartment building and Pacific Telephone Inland Division Headquarters historic building to onsite construction areas, vibration levels generated during construction could expose people or building to vibration levels that would exceed either the building damage or human annoyance thresholds during impact pile driving. This would be a short-term **potentially significant impact**.

Summary

The construction activities associated with the proposed projects would require the use of impact pile drivers that could result in vibration effects. Construction activities, including impact pile driving, would be temporary and intermittent at any particular location and use in the proposed project area. However, due to the close proximity of historic buildings to the proposed project areas, vibration levels generated during impact pile driving could exceed the applied vibration thresholds for human annoyance and/or building damage at nearby existing sensitive receptors and existing historic structures. This would result in a short-term **potentially significant impact**.

Mitigation Measure 4.8-5(a) (SCC/Hotel)

Implement Mitigation Measure 4.8-1(c).

Mitigation Measure 4.8-5(b) (Hotel)

Prior to the issuance of a building permit, the project applicant shall develop a Vibration Reduction Plan in coordination with an acoustical consultant, geotechnical engineer, and construction contractor, and submit the Plan to the City Chief Building Official for approval. The Plan shall include the following elements:

- 1) The Plan shall include measures to limit exposure of surrounding buildings to vibration levels that do not exceed the building damage threshold for historic and some older buildings of 0.25 PPV (in/sec) and annoyance threshold of 0.04 PPV (in/sec).*
- 2) Buffer distances and types of equipment selected to minimize vibration impacts during construction at nearby receptors in order to meet the specified standards.*
- 3) Implement a vibration, crack, and line and grade monitoring program at existing historic buildings located within 47 feet of construction activities. The following elements shall be included in this program:*

- a) *During building construction:*
- i) *The construction contractor shall regularly inspect and photograph crack gauges, maintaining records of these inspections to be included in post-construction reporting. Gauges shall be inspected every two weeks, or more frequently during periods of active project actions in close proximity to crack monitors.*
 - ii) *The construction contractor shall collect vibration data from receptors and report vibration levels to the City Chief Building Official on a monthly basis. The reports shall include annotations regarding project activities as necessary to explain changes in vibration levels, along with proposed corrective actions to avoid vibration levels approaching or exceeding the established threshold.*
 - iii) *With regards to historic structures, if vibration levels exceed the threshold and monitoring or inspection indicates that the project is damaging the building, the historic building shall be provided additional protection or stabilization. If necessary and with approval by the City Chief Building Official, the construction contractor shall install temporary shoring or stabilization to help avoid permanent impacts. Stabilization may involve structural reinforcement or corrections for deterioration that would minimize or avoid potential structural failures or avoid accelerating damage to the historic structure. Stabilization shall be conducted following the Secretary of Interior Standards Treatment of Preservation. This treatment shall ensure retention of the historical resource's character-defining features. Stabilization may temporarily impair the historic integrity of the building's design, material, or setting, and as such, the stabilization must be conducted in a manner that will not permanently impair a building's ability to convey its significance. Measures to shore or stabilize the building shall be installed in a manner that when they are removed, the historic integrity of the building remains, including integrity of material.*
- b) *Post-construction*
- i) *The applicant (and its construction contractor) shall provide a report to the City Chief Building Official regarding crack and vibration monitoring conducted during demolition and construction. In addition to a narrative summary of the monitoring activities and their findings, this report shall include photographs illustrating the post-construction state of cracks and material conditions that were presented in the pre-construction assessment report, along with images of other relevant conditions showing the impact, or lack of impact, of project activities. The photographs shall sufficiently illustrate damage, if any, caused by the project and/or show how the project did not cause physical damage to the historic and non-historic buildings. The report shall include annotated analysis of vibration data related to project activities, as well as summarize efforts undertaken to avoid vibration impacts. Finally, a post-construction line and grade survey shall also be included in this report.*

- ii) *The project applicant (and its construction contractor) shall be responsible for repairs from damage to historic and non-historic buildings if damage is caused by vibration or movement during the demolition and/or construction activities. Repairs may be necessary to address, for example, cracks that expanded as a result of the project, physical damage visible in post-construction assessment, or holes or connection points that were needed for shoring or stabilization. Repairs shall be directly related to project impacts and will not apply to general rehabilitation or restoration activities of the buildings. If necessary for historic structures, repairs shall be conducted in compliance with the Secretary of Interior Standards Treatment of Preservation. The project applicant shall provide a work plan for the repairs and a completion report to ensure compliance with the SOI Standards to the City Chief Building Official and City Preservation Director for review and comment.*

Significance after Mitigation: Implementation of **Mitigation Measure 4.8-5** would ensure that building damage at the nearest historic building structures and human disturbance from construction activities within the proposed project areas would be minimized to the extent feasible. However, alternative methods to driven pile installation are only feasible if underlying soils would allow for piles to be installed using auger displacement or sonic pile driving techniques. As such, underlying soils may be such that those methods are infeasible and impact pile driving may be a required construction method. If auger displacement or sonic pile driving is found to be feasible and implemented as such, the proposed projects may still result in substantial vibration during construction that would likely result in disturbance impacts at the nearest receptors where people live and worship during the daytime hours (such as Maydestone apartments, Saint Paul's Episcopal Church). While implementation of the mitigation measures described above could avoid or minimize vibration-caused building damage and would reduce vibration impacts to surrounding receptors, they would not guarantee that construction activities would not adversely affect surrounding receptors at times during construction on the proposed projects. Consequently, this impact would be **significant and unavoidable** during the short-term duration of construction activities on the proposed project sites.

Cumulative Impacts

The geographic context for changes in the noise and vibration environment due to development of the proposed projects would be localized in an urban area of the City of Sacramento, as well as along roadways that would serve the project. In order to contribute to a cumulative construction noise impact, another project in close proximity would have to be constructed at the same time as the proposed project. There are numerous development projects in several locations near and within the proposed project, currently in the planning stages that could be constructed and operational in the foreseeable future. The largest projects near the proposed project area are the development of the Sacramento Downtown Specific Plan, a hotel at 15th Street and K Street, Memorial Auditorium renovations and Community Center Theater renovations.

Impact 4.8-6: The proposed projects would result in exposure of people to cumulative increases in construction noise levels.

As previously discussed in Impact 4.8-1, construction activities could adversely affect off-site noise-sensitive land uses if located within close proximity to where project-related construction would occur. If project-related activities were to coincide with another development, such as the Downtown Specific Plan, the combined effect could result in the exposure of off-site noise-sensitive land uses to higher noise levels than what was predicted under the proposed projects. Although construction noise is temporary in nature, it is reasonably foreseeable that multiple construction projects could occur in the vicinity simultaneously, including the SCC project, the Hotel project, the Community Center Theater renovations project, and the Memorial Auditorium renovation project. Noise resulting from simultaneous construction of these projects would be a potentially significant cumulative impact. Given the size and scale of the SCC project and Hotel project, the proposed projects would have a cumulative considerable contribution to the impact, and the cumulative impact would be **potentially significant**.

Mitigation Measures

Mitigation Measure 4.8-6 (SCC/Hotel)

Implement Mitigation Measure 4.8-1.

Significance after Mitigation: Implementation of **Mitigation Measure 4.8-6** would reduce the contribution of the proposed projects to cumulative construction noise levels at the existing noise sensitive land uses located near the project area. However, even with implementation of these mitigation measures, it is likely that construction activities would still result in nuisance impacts at surrounding receptors during the day. Consequently, this impact would be **significant and unavoidable** during the short-term duration of construction activities on the proposed project sites.

Impact 4.8-7: The proposed projects would contribute to cumulative construction that could expose existing and/or planned buildings, and persons within, to significant vibration.

As previously discussed under Impact 4.8-4, the construction activities within the proposed projects area could require the use of impact pile drivers to drive precast piles at the Panattoni building (for the new East Lobby) and entire western portion of the SCC area and foundation pile installation at the proposed Hotel. Impact pile driving would be temporary and intermittent. Due to the close proximity of existing Pacific Telephone Inland Division Headquarters to the proposed Hotel construction area, vibration levels generated during impact pile driving would exceed the applied vibration threshold for building damage. Impact pile driving within the SCC footprint would expose St. Paul's Episcopal Church and Maydestone apartment building to vibration levels that would result in human annoyance. If project construction were to coincide with another development in close physical proximity (within approximately 150 feet), the combined effect could result in the exposure of sensitive land uses or historic structures to higher vibration levels

than what was predicted for the proposed projects. The proposed projects' contribution to increased vibration levels would be cumulatively considerable, and the impact would be a **significant cumulative impact**.

Mitigation Measures

Mitigation Measure 4.8-7(a) (SCC/Hotel)

Implement Mitigation Measure 4.8-5(a).

Mitigation Measure 4.8-7(b) (Hotel)

Implement Mitigation Measure 4.8-5(b).

Significance after Mitigation: Implementation of **Mitigation Measure 4.8-7(a)** and **Mitigation Measure 4.8-7(b)** would ensure that building damage at the nearest historic building structures and human disturbance from construction activities within the proposed project areas would be minimized to the extent feasible. However, alternative methods to driven pile installation are only feasible if underlying soils would allow for piles to be installed using auger displacement or sonic pile driving techniques. As such, underlying soils may be such that those methods are infeasible and impact pile driving may be a required construction method. If auger displacement or sonic pile driving is found to be feasible and implemented as such, the proposed projects may still result in substantial vibration during construction that would likely result in nuisance impacts at surrounding receptors during the day. Consequently, this impact would be **significant and unavoidable** during the short-term duration of construction activities on the proposed project sites.

Impact 4.8-8: The proposed projects would contribute to cumulative increases in traffic noise levels.

On-road traffic associated with the full build-out of the proposed SCC and Hotel would be the primary source that would contribute to the cumulative noise environment. Noise projections were made using traffic noise prediction equations found in the FHWA's *Traffic Noise Model Technical Manual* for Existing, Cumulative and Cumulative plus SCC and Hotel projects conditions using roadway traffic volumes.²³ The segments analyzed and results of the modeling are shown in **Table 4.8-9**.

Cumulative traffic noise level significance is determined by a two-step process. First, a comparison is made of the increase in noise levels between cumulative conditions with the proposed project and baseline conditions to incremental threshold established in the City of Sacramento's General Plan Policy EC 3.1.2 (Table 4.8-4). If the roadside noise levels would exceed this incremental threshold, a cumulative noise impact would be identified.

²³ Fehr & Peers, 2017. SCC and Hotel Traffic Report. August 2017.

The second step of the cumulative roadside noise analysis (if a cumulative noise impact is predicted) is to evaluate if the contribution of the proposed project to roadside noise levels is cumulatively considerable. This second step (if necessary) involves assessing whether the proposed project contribution to roadside noise levels (i.e., the difference between cumulative conditions and cumulative plus project conditions) would exceed the incremental threshold established in the City of Sacramento’s General Plan Policy EC 3.1.2 (Table 4.8-4). The roadway segments analyzed and the results of the noise increases resulting from modeling are shown in Table 4.8-9.

**TABLE 4.8-9
 CUMULATIVE L_{DN} TRAFFIC NOISE LEVELS ALONG STREETS IN THE SCC AND HOTEL VICINITY**

Roadway Segment	Traffic Noise Level 50 feet from Center of Roadway, dBA, L _{dn} ¹						
	Baseline	Cumulative without Project	Cumulative with Project	Cumulative with Project incremental increase above Baseline Conditions	Cumulative with Project incremental increase above Cumulative without Project	Cumulatively Significant? (Yes or No) ²	Project's Contribution Significant? (Yes or No) ²
12th Street							
I Street to J Street	61	62	62	1	0	No	No
J Street to K Street	60	60	61	1	1	No	No
13th Street							
I Street to J Street	60	61	62	2	1	No	No
J Street to K Street	59	60	60	1	0	No	No
K Street to L Street	58	57	58	0	1	No	No
14th Street							
I Street to J Street	59	59	61	2	2	No	No
15th Street							
I Street to J Street	63	61	62	-1	1	No	No
J Street to K Street	64	64	64	0	0	No	No
K Street to L Street	65	65	65	0	0	No	No
16th Street							
I Street to J Street	67	68	68	1	0	No	No
J Street to K Street	66	67	67	1	0	No	No
I Street							
12th Street to 13th Street	64	64	64	0	0	No	No
13th Street to 14th Street	63	64	64	1	0	No	No
14th Street to 15th Street	63	64	64	1	0	No	No
15th Street to 16th Street	63	64	65	2	1	No	No

**TABLE 4.8-9
 CUMULATIVE L_{DN} TRAFFIC NOISE LEVELS ALONG STREETS IN THE SCC AND HOTEL VICINITY**

Roadway Segment	Traffic Noise Level 50 feet from Center of Roadway, dBA, L _{dn} ¹						
	Baseline	Cumulative without Project	Cumulative with Project	Cumulative with Project incremental increase above Baseline Conditions	Cumulative with Project incremental increase above Cumulative without Project	Cumulatively Significant? (Yes or No) ²	Project's Contribution Significant? (Yes or No) ²
J Street							
12th Street to 13th Street	67	67	68	1	1	No	No
13th Street to 14th Street	67	68	68	1	0	No	No
14th Street to 15th Street	67	68	68	1	0	No	No
15th Street to 16th Street	66	66	67	1	1	No	No
K Street							
15th Street to 16th Street	60	60	62	2	2	No	No
L Street							
13th Street to 14th Street	62	62	63	1	1	No	No
14th Street to 15th Street	63	63	64	1	1	No	No

NOTES:

N/A = New Road

- Noise levels were determined using methodology described in FHWA Traffic Noise Model Technical Manual
- Existing sensitive land uses exposed to traffic noise that result in a noise increase greater than what is allowed in the City of Sacramento General Plan Policy EC 3.1.2 is considered a significant impact.

SOURCE: ESA, 2017

As can be seen in Table 4.8-9, none of the roadway segments analyzed under Cumulative plus SCC and Hotel Projects conditions would experience an increase in traffic noise levels over either baseline and cumulative no projects conditions that would exceed the incremental threshold established in the City of Sacramento's General Plan Policy EC 3.1.2 (Table 4.8-4). Consequently, the cumulative impact would be **less than significant**.

Mitigation Measure

None required.

Impact 4.8-9: Development pursuant to the proposed projects would contribute to cumulative increases in stationary noise levels.

As discussed under Impact 4.8-3, the operation of loading docks, HVAC units and central utility plant would not expose nearby sensitive land uses to noise levels exceeding the City's exterior

noise standards. Impact 4.8-3 further concluded that amplified sound generated by the new outdoor community center theater could expose nearby sensitive land uses to noise levels that would exceed the City exterior noise standards. The nearest cumulative project to the proposed projects is the hotel at 15th Street and K Street, Memorial Auditorium renovations and Community Center Theater renovations. These uses would likely require the use of HVAC units and would generate amplified sound during their operation. Due to the distance between the nearest sensitive land use to these cumulative projects and the proposed project, the combined noise levels would not likely be higher than what already assessed in Impact 4.8-3. Events at the Memorial Auditorium and proposed outdoor community center theater could occur at the same time. However, since the Memorial Auditorium is an indoor venue, there is no meaning potential for a cumulative impact. Consequently, the cumulative impact would be **less than significant**.

Mitigation Measure

None required.

Impact 4.8-10: Implementation of the proposed projects would contribute to cumulative increases in residential interior noise levels of 45 dBA L_{dn} or greater.

Operation of the proposed projects in conjunction of other cumulative projects would generate noise levels that could result in noise exposure of residential receptors in the project vicinity, as described above in Impact 4.8-8. For on-road transportation sources, the total roadway noise from cumulative and proposed project-related traffic could exceed the 70 dBA L_{dn} standard at existing residential uses. As shown in Table 4.8-9, none of the roadway segments analyzed would exceed the City's exterior noise standard of 70 dBA L_{dn}. Since the proposed project-related traffic volumes along roadways within the Sacramento downtown area would not result in the exposure of residences to traffic noise levels that would exceed the City of Sacramento exterior noise standard, it is unlikely that interior noise levels at existing residential uses adjacent to these roadway segments would increase above 45 dBA L_{dn}. As discussed under Impact 4.8-9, due to the distance between the nearest sensitive land use to cumulative projects and the proposed project, the combined noise levels from stationary noise sources would not be likely to be higher than what was already assessed in Impact 4.8-3. Therefore, mobile and stationary noise sources from cumulative projects and the proposed projects would not result in residential interior noise levels of 45 dBA L_{dn} or greater caused by noise level increases, and the cumulative impact would be **less than significant**.

Mitigation Measure

None required.

4.9 Transportation

This chapter analyzes the potential transportation impacts associated with the Sacramento Convention Center (SCC) Expansion Project and 15th/K Street Hotel project to the roadway, bicycle, pedestrian, and transit systems in the study area. Construction impacts and parking are also analyzed. This chapter presents the project-specific and cumulatively considerable impacts of each of these projects and recommends mitigation measures to lessen their significance. All supporting technical calculations and additional technical information can be found in Appendix L of the Draft EIR.

Introduction

This chapter relies on a variety of data sources and/or publicly available information to support the technical analysis. This information includes, but is not limited, to:

- Data from the 2035 City of Sacramento General Plan and the 2010 Census.
- Data from the recently adopted Sacramento Area Council of Governments (SACOG) 2036 MTP/SCS and the SACOG regional travel model;
- Downtown Specific Plan/Sacramento Grid 3.0;
- City of Sacramento Bicycle Master Plan
- Attendance data for events at the SCC;
- Number of full-time SCC staff and event-related staff;
- Historical data on hotel use for SCC event attendees;
- Travel behavior survey data for the Golden 1 Center; and
- Traffic counts and parking data collected in May of 2017.

This chapter presents a comprehensive, multi-modal analysis of each of the proposed project's impacts under baseline and cumulative conditions. A baseline condition is necessary to reflect the full utilization of the SCC facility under existing conditions. The cumulative scenario, which is required under CEQA, evaluates the project's contribution to any cumulatively considerable impacts.

Analysis Scenarios and Periods

As shown, six future analysis scenarios are quantitatively evaluated for two weekday peak hours. The peak hours under study include:

- Weekday AM Peak Hour – peak 60-minutes of travel during the morning (7 to 9 AM) commute period. At most study intersections, this occurs from 7:45 to 8:45 AM.
- Weekday PM Peak Hour – peak 60-minutes of travel during the evening (4 to 6 PM) peak travel period. At most study intersections, this occurs from 4:30 to 5:30 PM.

To the extent possible, the analyses presented here rely upon inputs from empirical data and are considered reasonable and reliable in the professional judgment of the experts who prepared the technical analysis. Section 4.9.3 describes these inputs and their data sources in detail. Where it was not possible to find comparable or empirical data to derive the inputs, reasonably conservative estimates were developed based on professional engineering judgment.

4.9.1 Environmental Setting

This section describes the environmental setting, which is the baseline scenario upon which project-specific impacts are evaluated. This section describes the existing condition of the roadway, bicycle, pedestrian, and transit networks.

Roadway Network

The roadway network includes arterial, collector, and local streets in the study area, as well as their intersections.

Study Area

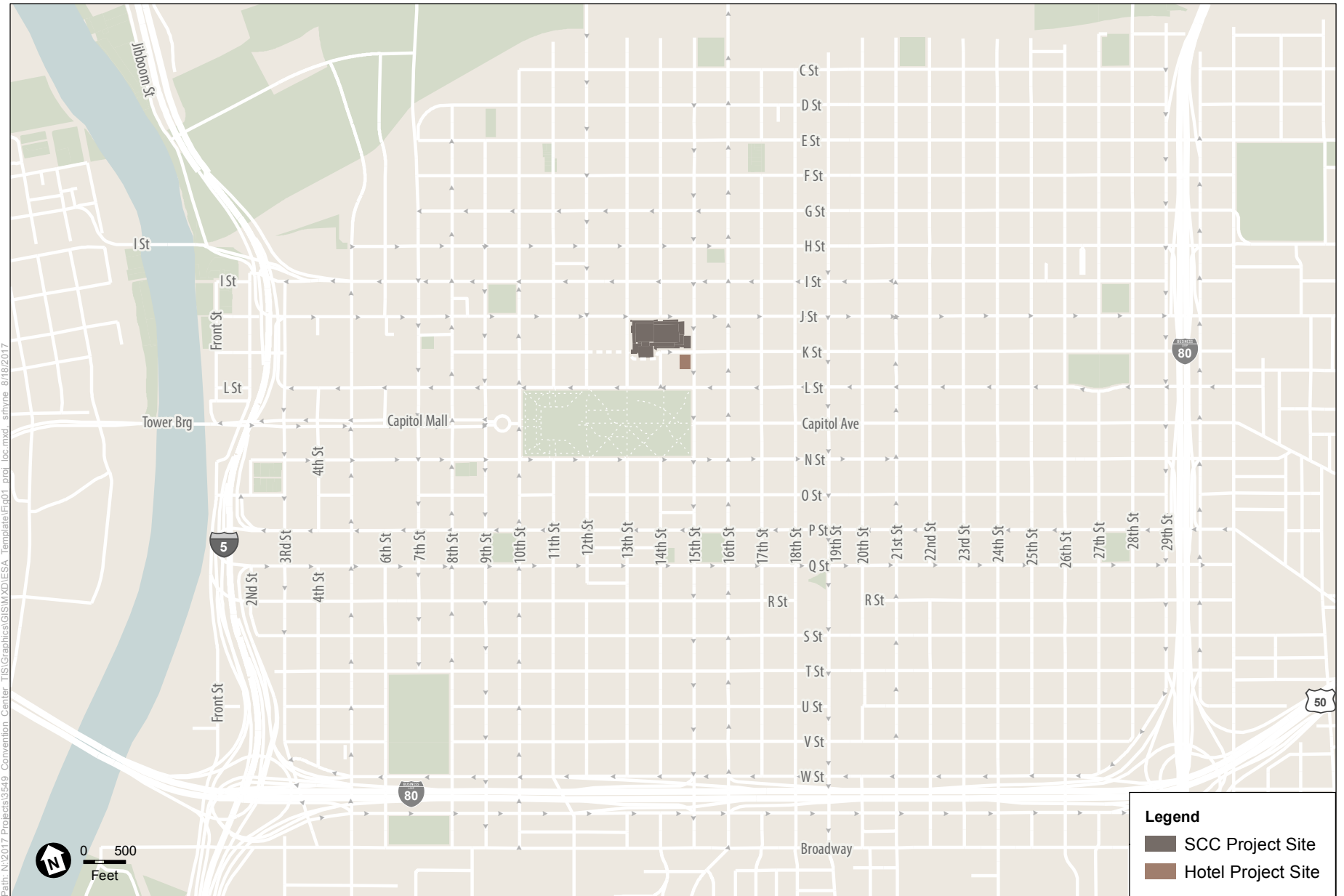
An extensive study area was developed based on collaboration between the environmental consultants and City of Sacramento staff. The factors considered when developing the study area included: projects' expected travel characteristics (including number of vehicle trips and directionality of those trips), primary travel routes to/from project vicinity, anticipated parking locations, mode split, and other considerations.

Figure 4.9-1 shows the location of the existing Sacramento Convention Center. As shown, it is located on the south side of J Street between 13th and 15th streets. The hotel site is located west of 15th Street and south of K Street. **Figure 4.9-2** shows the location of the 17 existing intersections selected for analysis. The study intersections extend from the I Street corridor on the north to the L Street corridor on the south. They also extend from the 12th Street corridor on the west to the 16th Street corridor on the east.

Street System

Figure 4.9-3 displays the existing roadway network in the study area, including directionality, number of lanes, and functional class. Key existing roadways within the study area include:

- I Street/J Street – are westbound-only, and eastbound-only arterials, respectively, that extend easterly from I-5 into the downtown grid. I Street provides access to both directions of I-5 as well as Old Sacramento. J Street can be accessed from both directions of I-5 and the I Street bridge. Within the vicinity of the SCC, both streets have three travel lanes (excluding turn pockets). I Street and J Street have posted speed limits of 25 mph and 30 mph, respectively, within the study area.

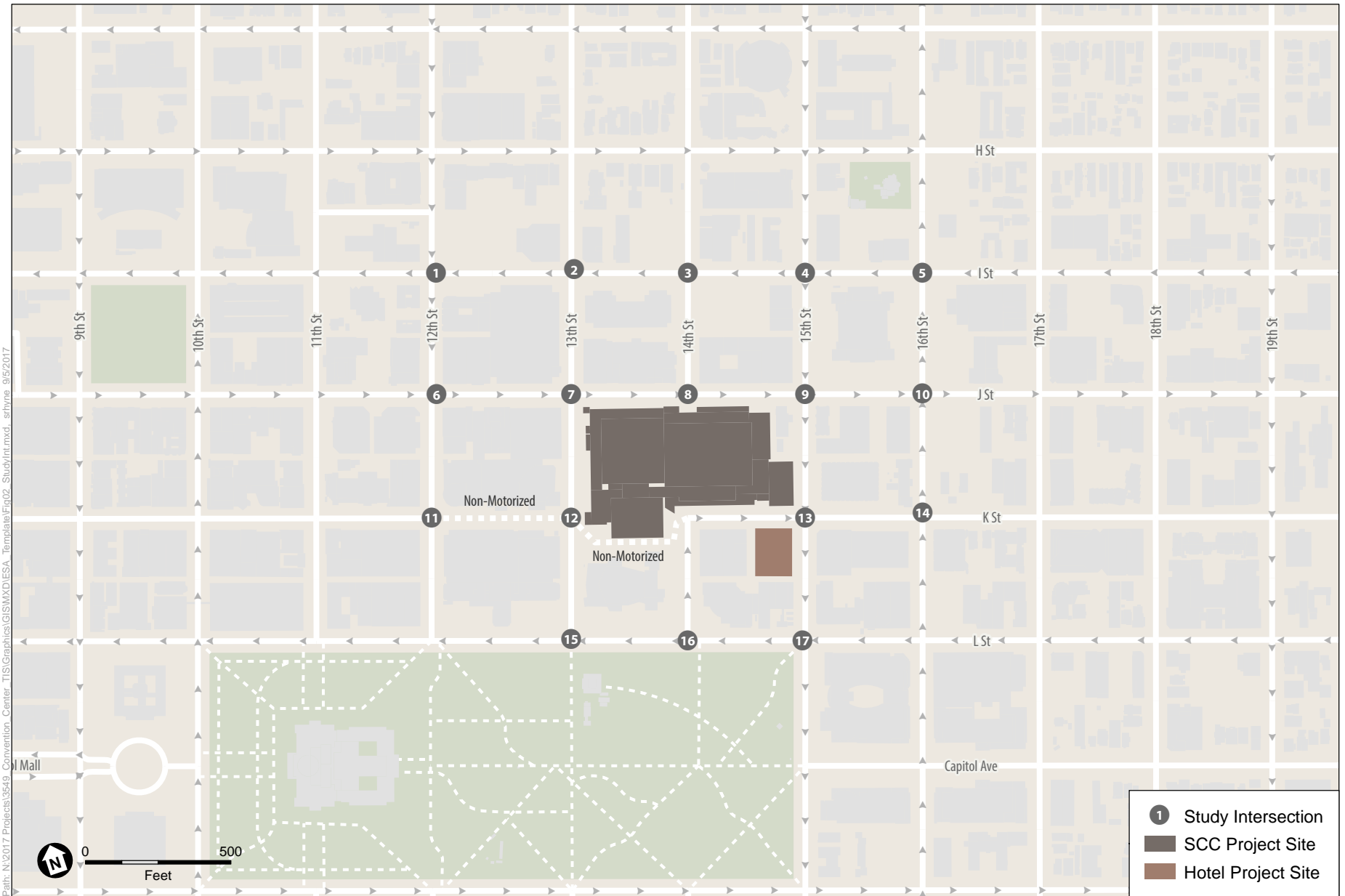


SOURCE: Fehr & Peers, 2017

Sacramento Convention Center Renovation and Expansion and 15th/K Street Hotel EIR

Figure 4.9-1

Project Location



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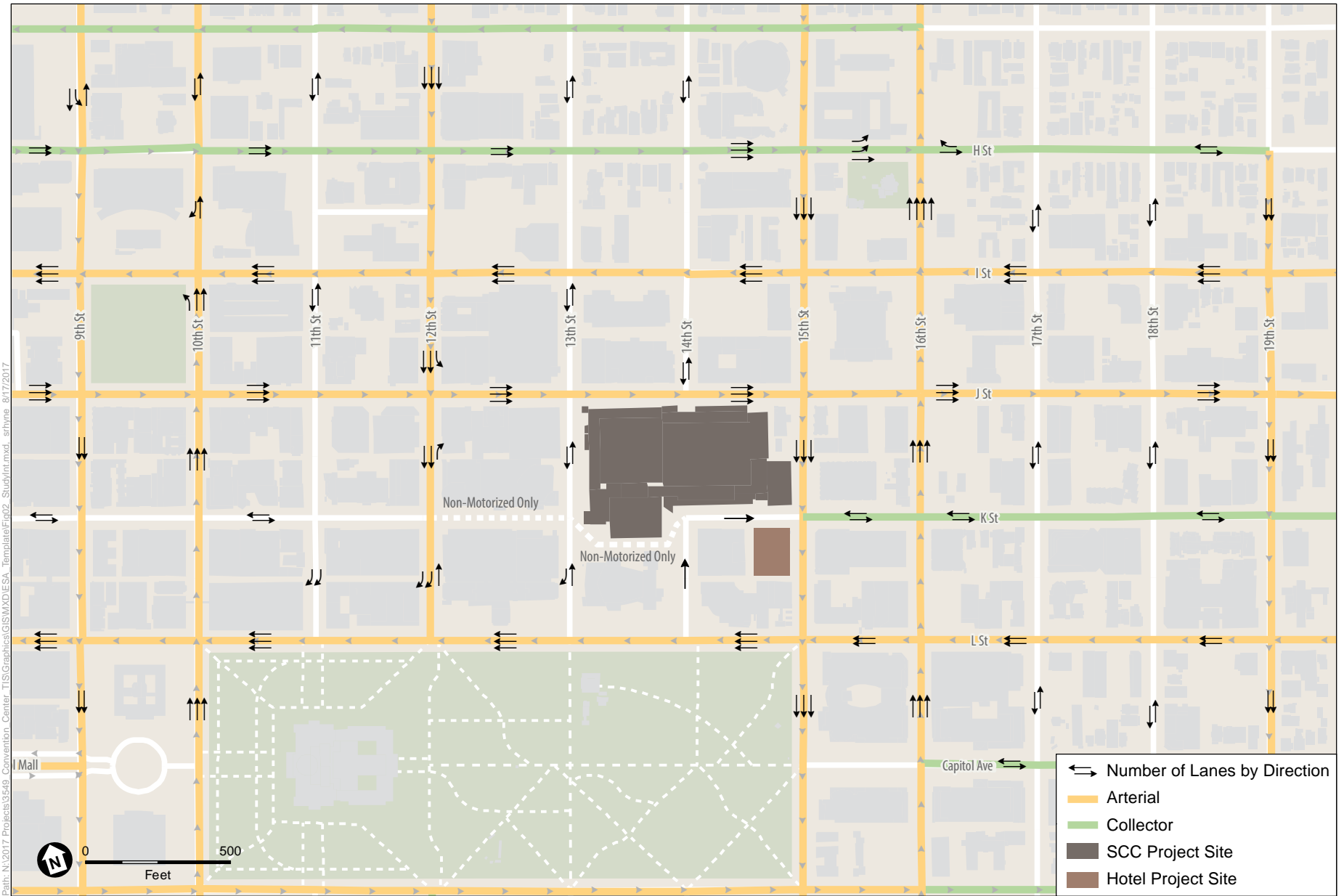
SOURCE: Fehr & Peers, 2017

Sacramento Convention Center Renovation and Expansion and 15th/K Street Hotel EIR

Figure 4.9-2

Study Intersections





SOURCE: Fehr & Peers, 2017

Sacramento Convention Center Renovation and Expansion and 15th/K Street Hotel EIR

Figure 4.9-3

Existing Roadway Network

- K Street – is a two-way major collector between 15th Street and Alhambra Boulevard. In this segment, it has one travel lane in each direction and a posted speed limit of 25 mph. The one-block segment of K Street between 14th Street and 15th Street, with one eastbound travel lane, provides access to the loading docks for the SCC as well as access to two parking facilities on the south side of the street. The segment of K Street between 8th Street and 12th Street is a two-lane street, where light rail trains share the travel lanes with vehicles, that provides local access. Between 13th and 14th streets, K Street is abandoned and no longer functions as a City street.
- L Street – is a one-way arterial serving westbound travel only, extending from 30th Street to its western terminus at I-5. L Street provides access to northbound I-5. Within the vicinity of the SCC, L Street has a posted speed limit of 25 mph. L Street transitions from two to three travel lanes at 15th Street.
- 12th Street/16th Street – form a one-way couplet that extends into and out of downtown from SR 160. 12th Street accommodates inbound (southbound) travel, while 16th Street accommodates outbound (northbound) travel. In between SR 160 and J Street, 12th Street has three southbound travel lanes. 12th Street transitions to two-way operations between J Street and L Street with two southbound lanes and one northbound lane. 16th Street transitions from three to four northbound travel lanes at G Street. Light rail trains operate along 12th Street. 12th Street and 16th Street have posted speed limits of 25 mph and 30 mph, respectively, within the study area.
- 13th Street – is a two-way, two-lane local street between C Street and Broadway. 13th Street extends from C Street to L Street before terminating at Capitol Park. The segment of 13th Street between J Street and L Street, with a posted speed limit of 15 mph, provides local access to the western end of the SCC as well as the Sacramento Community Theater. Access to the primary parking garage that serves the SCC is located on the west side of 13th Street between J Street and I Street.
- 15th Street – is a one-way (southbound) arterial between F Street and Broadway. It has three travel lanes within the vicinity of the project site. North of F Street, 15th Street is a one-way local street to its northerly terminus just north of C Street.

Truck Routes

All Federal and State highways within the City of Sacramento are designated as truck routes by Caltrans and are included in the National Network for Surface Transportation Assistance Act (STAA) of 1982. The City identified 31 two-way streets as City truck routes in a 1983 resolution, in addition to all one-way streets.¹

The following roadway segments are classified as City STAA routes:

- 12th Street/16th Street between North B Street and Richards Boulevard

In addition, F Street between 12th Street and 16th Street, E Street between 7th Street and 16th Street, the P Street/Q Street couplet between 3rd Street and 30th Street, 12th Street between North B Street

¹ City of Sacramento, 1983. *City Truck Routes*. Available: <https://www.cityofsacramento.org/Public-Works/Transportation/Traffic-Data-Maps>.

and F Street, and 16th Street between North B Street and Broadway are classified as truck routes. The SCC receives trucks at their loading docks on K Street between 14th Street and 15th Street.

Data Collection

Vehicle turning movement counts were collected at critical intersections along the SCC frontage in May of 2017. Counts were also collected at six additional study intersections between April 2015 and March 2016. These volumes were deemed reasonable for use in representing existing conditions based on comparisons of link-level traffic flows at adjacent intersections. The traffic data collection also included bicycles and pedestrians.

During the counts, which were collected on Tuesdays, Wednesdays, or Thursdays, weather conditions were dry, and no unusual traffic patterns were observed. On the May 2017 count day, the SCC hosted three events totaling approximately 2,839 attendees. The event profile of the May 2017 count day, including daily attendance, event operations, and event start/end time, represents a typical mid-week event day at the SCC under existing conditions, and is therefore suitable for the purposes of the transportation analysis.

Roadway Operations

Each study intersection was analyzed using the concept of Level of Service (LOS). LOS is a qualitative measure of traffic operating conditions whereby a letter grade from A to F is assigned based on the average delay per vehicle. These grades represent the perspective of drivers and are an indication of the comfort and convenience associated with driving. In general, LOS A represents free-flow conditions with no congestion, and LOS F represents severe congestion and delay under stop-and-go conditions.

Table 4.9-1 displays the delay range associated with each LOS category for signalized and unsignalized intersections. At signalized intersections and all-way stop intersections, the reported delay and LOS is the weighted average of all vehicles passing through the intersection. At side-street stop-controlled intersections, the reported delay and LOS is based on the minor street movement that experiences the greatest delay.

**TABLE 4.9-1
 INTERSECTION LEVEL OF SERVICE DEFINITIONS**

Level of Service	Signalized Intersections	Unsignalized Intersections
A	0 – 10.0 secs/veh	0 – 10.0 secs/veh
B	10.1 – 20.0 secs/veh	10.1 – 15.0 secs/veh
C	20.1 – 35.0 secs/veh	15.1 – 25.0 secs/veh
D	35.1 – 55.0 secs/veh	25.1 – 35.0 secs/veh
E	55.1 – 80.0 secs/veh	35.1 – 50.0 secs/veh
F	> 80.0 secs/veh	> 50.0 secs/veh

NOTE: Control delay includes initial deceleration delay, queue move-up time, stopped delay, and acceleration delay.

SOURCE: Transportation Research Board, 2010. *Highway Capacity Manual*.

The SimTraffic micro-simulation model was used to analyze all study intersections. The use of SimTraffic is appropriate given the coordinated signal timing plans, close spacing of intersections, and existing/projected levels of traffic in the study area. Its use for “plus project” conditions is particularly important given the expected amount of project-added trips and the effects of large numbers of pedestrian crossings, whose effects on travel are modeled in SimTraffic. Per standard practice, ten SimTraffic runs were conducted with the results averaged to yield the reported condition. SimTraffic provides outputs consistent with the *2010 Highway Capacity Manual (HCM)*. Per City of Sacramento Traffic Impact Study guidelines, a peak hour factor of 1.0 was used.

Micro-simulation models such as SimTraffic account for the effects of queue spillbacks on upstream intersections. If traffic spills back from a congested location to a nearby upstream intersection, any delays occurring at the upstream intersection (even though they were caused by the downstream location) are attributed to the upstream intersection. So, a severely over-capacity intersection may cause LOS E or F operations at upstream intersections, which if not for that downstream bottleneck, would otherwise operate acceptably.

Figure 4.9-4 display the existing AM and PM peak hour traffic volumes, controls, and lane configurations at the study intersections. **Table 4.9-2** summarizes the peak hour traffic volumes on several key roadway segments near the SCC during the AM and PM peak hours. Peak hour traffic flows are greatest on I Street, J Street, 15th Street, and 16th Street, the primary roadways traversing the study area. On average, traffic volumes during the PM peak hour are 29 percent greater than volumes during the AM peak hour. AM peak hour volumes exceed PM peak hour volumes on roadway segments carrying inbound vehicles to Downtown, including I Street west of 16th Street, J Street east of 12th Street, and 12th Street south of I Street.

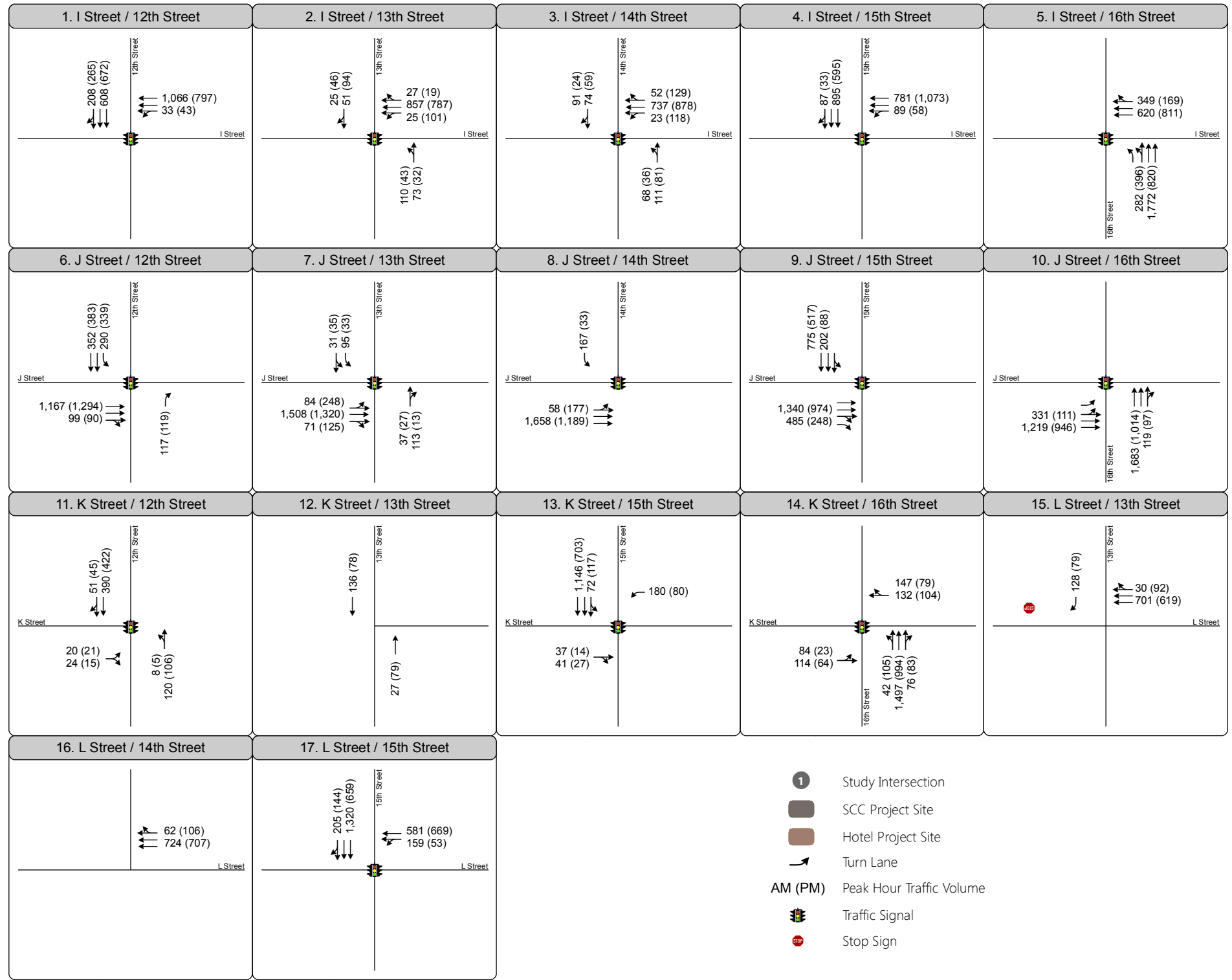
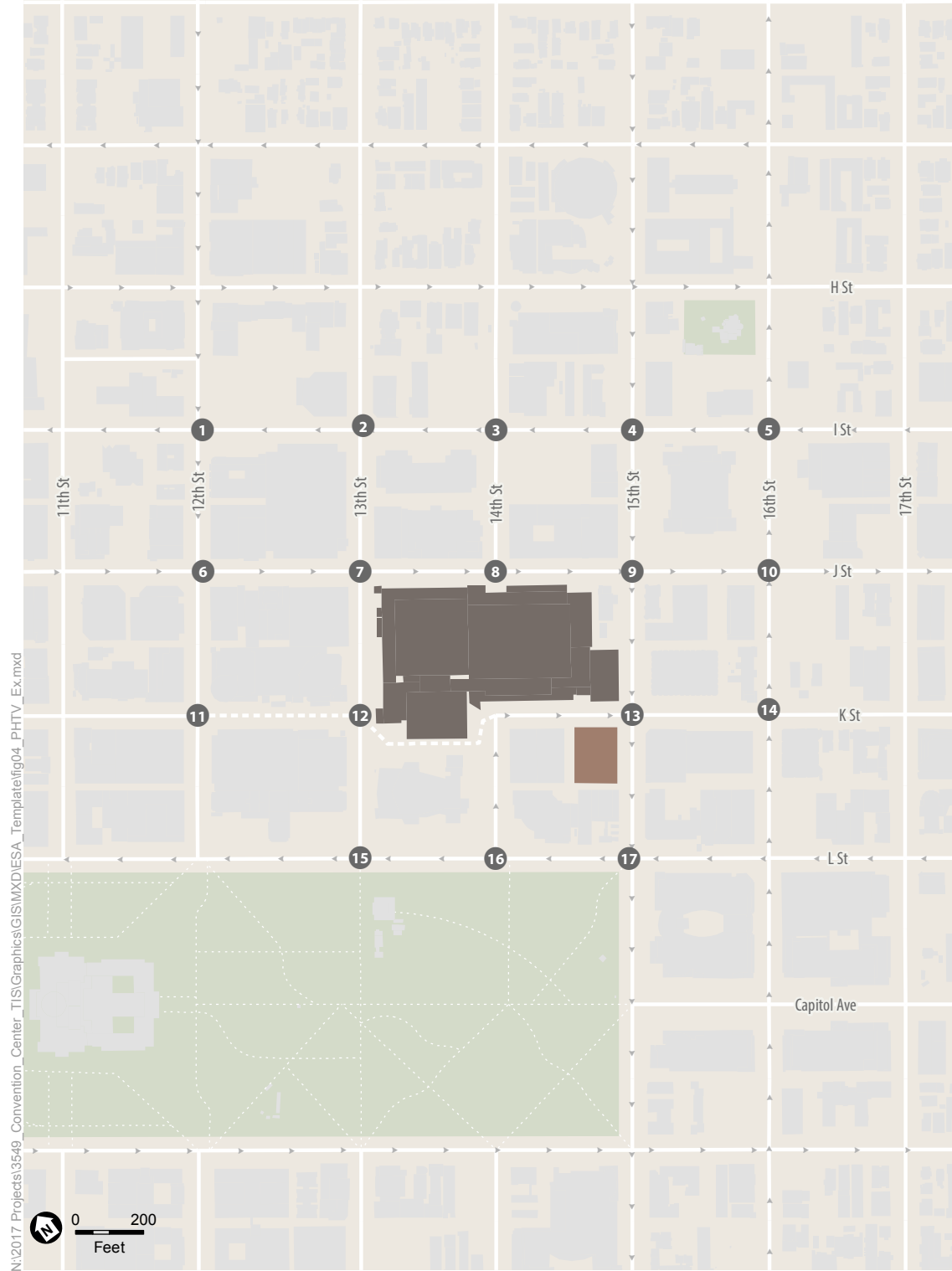
**TABLE 4.9-2
 PEAK HOUR TRAFFIC VOLUMES – EXISTING CONDITIONS**

Roadway Segment ¹	AM Peak Hour	PM Peak Hour
	Volume	Volume
I Street west of 16 th Street	1,207	902
I Street east of 12 th Street	840	1,099
J Street east of 12 th Street	1,752	1,574
J Street east of 15 th Street	1,062	1,542
K Street east of 15 th Street	211	289
L Street west of 16 th Street	722	740
L Street west of 13 th Street	698	829
12 th Street south of I Street	715	641
13 th Street south of J Street	200	252
15 th Street south of I Street	653	984
15 th Street south of L Street	712	1,479
16 th Street north of L Street	1,182	1,615
16 th Street north of I Street	989	2,121

NOTE:

1. Traffic volumes represent two-way totals where street is two-way.

SOURCE: Fehr & Peers, 2017.



SOURCE: Fehr & Peers, 2017



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Figure 4.9-4
Weekday AM and PM Peak Hour Traffic Volumes and Lane Configurations - Existing Conditions

Table 4.9-3 displays the LOS and average delay at each study intersection for each peak hour. All study intersections operate at LOS C or better during the AM and PM peak hours. Signal coordination combined with extended peak hour cycle lengths facilitate through travel on major arterials in the study area.

**TABLE 4.9-3
 INTERSECTION OPERATIONS – EXISTING CONDITIONS**

Intersection	Control Type	AM Peak Hour		PM Peak Hour	
		Avg Delay	LOS	Avg Delay	LOS
1 I Street / 12 th Street	Signal	13	B	13	B
2 I Street / 13 th Street	Signal	5	A	7	A
3 I Street / 14 th Street	Signal	4	A	6	A
4 I Street / 15 th Street	Signal	8	A	11	B
5 I Street / 16 th Street	Signal	9	A	24	C
6 J Street / 12 th Street	Signal	15	B	13	B
7 J Street / 13 th Street	Signal	14	B	27	C
8 J Street / 14 th Street	Signal	4	A	13	B
9 J Street / 15 th Street	Signal	9	A	11	B
10 J Street / 16 th Street	Signal	6	A	17	B
11 K Street / 12 th Street	Signal	4	A	5	A
12 K Street / 13 th Street	Uncontrolled	1	A	1	A
13 K Street / 15 th Street	Signal	6	A	9	A
14 K Street / 16 th Street	Signal	13	B	20	B
15 L Street / 13 th Street	SSSC	1 (6)	A (A)	3 (11)	A (B)
16 L Street / 14 th Street	Uncontrolled	1	A	1	A
17 L Street / 15 th Street	Signal	10	A	12	B
18 Kayak Alley / 14 th Street	SSSC	1 (1)	A (A)	1 (3)	A (A)
19 Kayak Alley / 15 th Street	SSSC	1 (5)	A (A)	3 (14)	A (B)

NOTE:

1. For signalized and uncontrolled intersections, average intersection delay is reported in seconds per vehicle for all approaches
2. For side-street stop controlled intersections, LOS and average delay for the movement with the most delay are reported in parentheses along with the overall intersection delay.

SOURCE: Fehr & Peers, 2017.

The results in Table 4.9-3 reflect a typical weekday condition in which ‘typical’ activities were occurring in these venues, but conditions were not necessarily at peak events.

Under existing conditions, there may be a perception amongst some roadway users that substantial congestion exists along the SCC frontage along J Street. This phenomenon may be explained by surges in traffic congestion (e.g., in the 15 minutes following an SCC event concluding) or by downstream congestion caused by occasional large events at other event

venues (e.g., Memorial Auditorium). The photograph below illustrates some of the queuing that occurs on J Street during arrival and departure time periods for large events at the SCC. In this instance, heavy pedestrian volumes on the south leg crosswalk of the J Street/13th Street intersection conflict with eastbound vehicles attempting to turn right from J Street to 13th Street. This conflict causes a queue to form in the right-most travel lane that extends back to 12th Street.



View of queuing on J Street west of 13th Street during PM peak hour.

Bicycle Network

The street grid system within the Central City serves as the hub of the Sacramento region's bicycle network. The Sacramento River Bike Trail, Two Rivers Bike Trail, and Sacramento Northern Bike Trail all serve the Central City; just across the American River, the American River Bike Trail stretches for 33 miles between Sacramento and Folsom Lake. These facilities serve the periphery of the Grid, and the Grid's street network functions as the bicycle network within the Central City. Many streets in the Grid feature relatively slow travel speeds and low traffic volumes. The redundancy of the Grid provides multiple route options, allowing bicyclists to avoid streets with higher traffic volumes. In addition to the numerous low-speed, low-volume streets found in the Grid, many streets with relatively higher motor vehicle traffic volumes and speeds feature dedicated on-street bicycle lanes. Lastly, the flat topography contributes to the ease of biking around the Grid.

Bicycle facilities are typically categorized in the following classifications:

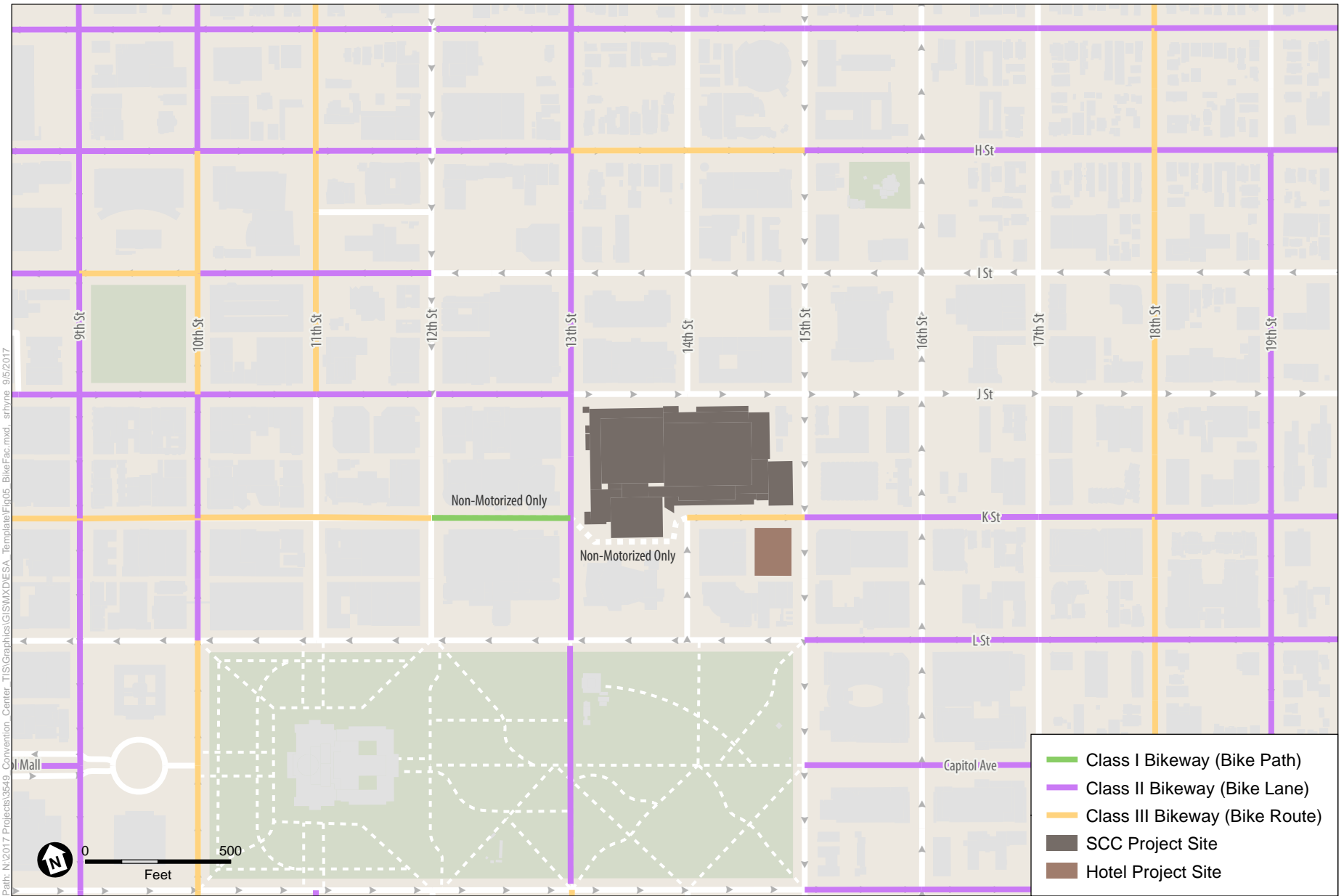
- Class I Multi-use Off-Street paths – are paved trails that are separated from roadways, and allow for shared use by both cyclists and pedestrians.
- Class II On-Street Bike Lanes – are designated for use by bicycles by striping, pavement legends, and signs.
- Class III On-Street Bike Routes – are designated by signage for shared bicycle use with vehicles but do not necessarily include any additional pavement width for bicyclists.
- Class IV Separated Bikeways (also known as protected bikeways or cycle tracks) – separated bikeways improve upon buffered bike lanes by providing vertical separation between bike lanes and the adjacent travel lanes. Vertical separation can be provided with concrete curb and gutter, bollards or on-street parking.

Bicycle facilities in the Grid are connected to regional and citywide facilities via bike lanes on West Capitol Avenue to West Sacramento, via the Class I bike path along the American River Parkway and the Sacramento River, and via several bike lane connections to the adjoining East Sacramento, Land Park, and Curtis Park neighborhoods. The majority of Downtown’s bicycle network consists of on-street facilities including Class II bike lanes and Class III bike routes, although short segments of Class I bike path or plaza spaces allow bicyclist connectivity to on-street facilities where motorized travel is not permitted (including segments of the K Street Mall).

To the east of the proposed project, the network of on-street bicycle lanes within Midtown provides a high degree of east-west connectivity and a lower level of north-south connectivity; twelve east-west streets feature on-street Class II bicycle lanes while six north-south streets feature on-street Class II bicycle lanes. Several of the primary east-west bicycle routes in Midtown do not extend through Downtown, including those found on F Street, K Street, L Street, N Street, P Street, and Q Street. Downtown’s bicycle lane network is more dense in the area north of the Capitol, surrounding the proposed project, than in neighborhoods south of the Capitol.

Figure 4.9-5 displays existing bicycle facilities within the study area. As shown, Class II bike lanes and Class III bike routes are present on a variety of roadways within the study area. Most notably, Class II bike lanes are present to the east of the SCC on K Street, L Street, and Capitol Avenue and to the west of the SCC on J Street. 13th Street, which forms the western boundary of the SCC, has a continuous Class II bike lane that serves north-south travel for cyclists.

The K Street corridor serves as a primary east-west bicycle route through the northern portion of Downtown, with a combination of Class I, Class II, and Class III bicycle facilities accommodating bicycle travel between Old Sacramento, Downtown, and Midtown. The existing SCC site occupies an area within the street grid that is an existing gap in this otherwise contiguous bicycle corridor. The K Street corridor between 13th Street and 14th Street currently lacks a formal bicycle facility (though bicyclists ride on the walkway that connects these two streets). In early 2017, the City implemented improvements to further establish this bicycle route near the SCC, including “Bicycle Route” signage on eastbound K Street between



SOURCE: Fehr & Peers, 2017

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Figure 4.9-5

Existing Bicycle Facilities

14th Street and 15th Street, and the installation of green skip-stop striping through the K Street/ 15th Street intersection. In order to close this gap, the City of Sacramento has planned for the construction of a Class I bicycle facility along this segment of K Street in various planning documents, including the Bicycle Master Plan, Grid 3.0, and the Downtown Specific Plan.

Traffic counts on streets along the project frontage included bicycle observations. K Street at 13th Street carried 39 AM peak hour bicyclists and 33 PM peak hour bicyclists. 13th Street between J Street and L Street carried 57 AM peak hour bicyclists and 51 PM peak hour bicyclists.

A bikeshare station with capacity for up to five bikes is currently located immediately south of the SCC West Lobby.

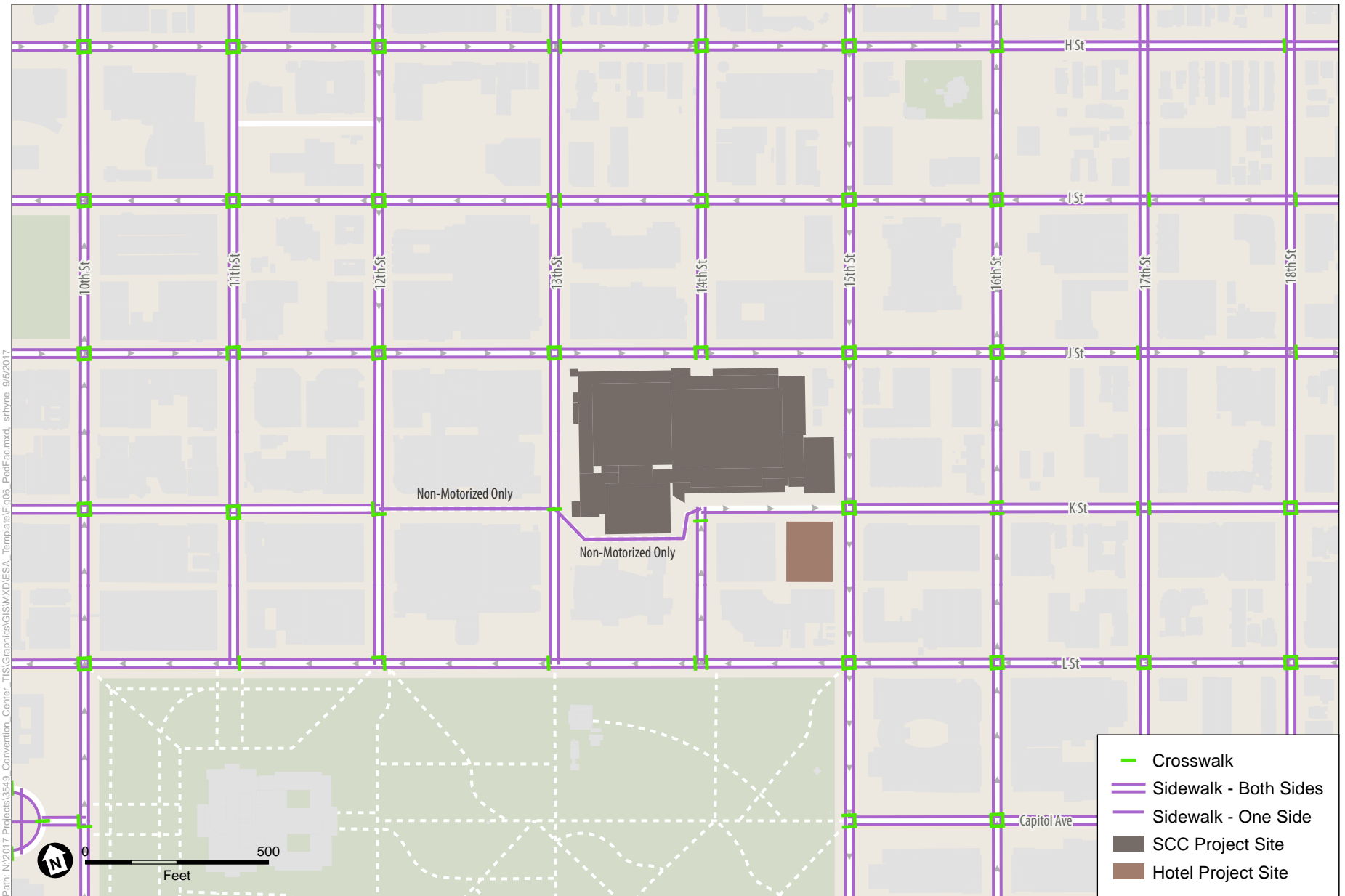
Pedestrian Network

The street grid system within the Central City serves the most walkable 4.25 square mile area in the Sacramento region. According to 2010 Census data, fifteen percent of the residents within the Central City walk to work on a regular basis, which equates to approximately five times the rate of those who choose this form of commute in the City as a whole; and anecdotal evidence suggests that the percentage of walk trips for non-commute trips in the Grid is even higher. Although Sacramento's mild climate and flat terrain contribute to a walkable environment, the transportation system within the Central City provides the mobility framework that makes pedestrian travel preferable for many.

The relatively dense, grid network of streets within the Central City provides for a high level of connectivity and pedestrian accessibility. The Grid is characterized by high density and a mix of land uses, which result in a high proportion of short-distance walk trips relative to the City as a whole. Most streets in the Grid feature sidewalks on both sides of the street with landscaped buffers and on-street parking, which increase pedestrian comfort by providing a buffer between the sidewalk and the roadway. Many places in the Grid also feature a mature tree canopy that offers shade from direct sunlight. Traffic signals within the study area operate on relatively short cycle lengths, and most have automatic walk signals (pedestrian recall) for pedestrians and crosswalks on all approaches; combined, these features result in low levels of crossing delay for pedestrians at most locations. Other factors that increase pedestrian safety and comfort include the dispersion of automobile traffic across the Grid, short crossing distances for pedestrians, and relatively low vehicle travel speeds.

Figure 4.9-6 displays existing pedestrian facilities within the project vicinity. Sidewalks are present on nearly all streets within the project vicinity. The only street frontage near the SCC currently lacking sidewalks is the north side of K Street between 14th Street and 15th Street where the SCC loading docks are located. Entry to the SCC is available via sidewalks and pedestrian pathways on J Street, 13th Street, and K Street.

Crosswalks are present at all signalized study intersections. All marked crosswalks within the study area are 10 feet wide and feature either standard or continental striping treatments.



SOURCE: Fehr & Peers, 2017

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Figure 4.9-6

Existing Pedestrian Facilities

K Street serves as an enhanced pedestrian corridor through the study area. Between 12th Street and 14th Street, vehicles are restricted from K Street, allowing for the exclusive use of the corridor by pedestrians and bicyclists. The K Street/13th Street intersection, immediately adjacent to the SCC West Lobby, features decorative pavement, monument features, and a raised crossing throughout the entirety of the intersection.

Table 4.9-4 summarizes the existing peak hour pedestrian flows at major crosswalk locations near the SCC. The highest concentrations of pedestrian flows are located at the J Street/13th Street and K Street/13th Street intersections. Existing pedestrian flows were derived from pedestrian counts collected on Wednesday, May 3, 2017. The SCC hosted three events that day, including the California Association of Realtors Legislative Conference, the California Primary Care Association Lobby Day, and the California Hispanic Chamber of Commerce Legislative Day. The three events combined for an estimated 2,839 daily attendees.

**TABLE 4.9-4
 PEDESTRIAN VOLUMES NEAR SCC – EXISTING CONDITIONS**

Intersection	Leg	AM Peak Hour	PM Peak Hour
J Street/13 th Street	North	288	135
	South	532	383
	East	286	113
	West	284	219
J Street/14 th Street	North	87	88
	East	44	58
	West	59	75
K Street/13 th Street	--	297	515
	North	47	77
K Street/15 th Street	South	88	107
	East	104	108
	West	90	125

NOTE: Counts conducted on May 3, 2017. AM and PM peak hour pedestrian volumes represent busiest 60 minute pedestrian flows during each peak period.

SOURCE: Fehr & Peers, 2017.

Transit Network

The Central City is the hub of the Sacramento Regional Transit District (RT), which serves as the region’s primary provider of bus and rail transport. Region-wide, RT operates 69 bus routes and 42.9 miles of light rail on three lines: the Blue Line, Gold Line, and Green Line. All three light rail lines converge in Downtown and run concurrently on the portion of the system located between 7th Street, 13th Street, K Street and R Street. The 16th Street Station, located near the center of the Grid at the border between Midtown and Downtown, has the highest number of daily boardings in the entire light rail system, due in part to the large number of transfers between

the Blue Line and Gold Line that occur at this station. Light rail service operates on 15-minute headways during the day and 30-minute headways during evenings, weekends, and holidays. Fixed-route bus service operates on headways ranging from 15 to 75 minutes, depending on the route. Buses and light rail run 365 days a year, using 87 light rail vehicles, 211 buses, and 29 shuttle vans. The annual ridership on the system (bus and light rail) has grown from 14 million passengers in 1987 to more than 25 million passengers in Fiscal Year 2016.² Currently, weekday light rail ridership averages about 36,000, and the weekday bus ridership is approximately 38,500 passengers per day.²

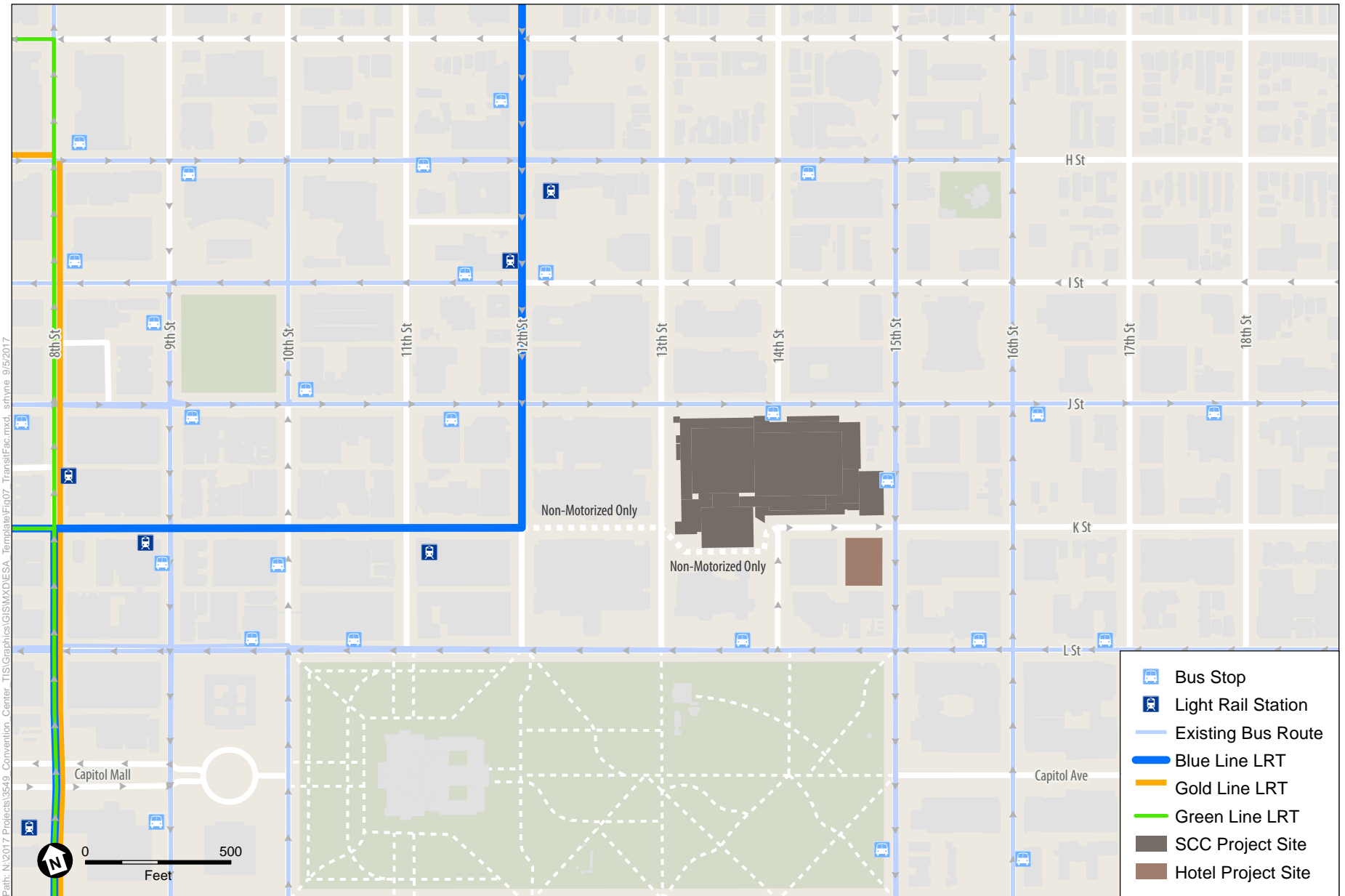
The following transit services are available within the project vicinity (see **Figure 4.9-7** for illustration of existing routes, stops, and stations).

- **Light Rail Transit**

- **Blue Line** – operates along 12th Street and K Street, with the nearest stops to the SCC being the Cathedral Square stop on K Street and the 12th & I stop on 12th Street. Cosumnes River College in South Sacramento is the southern terminus and the Watt & I-80 station is the northern terminus. This line operates on 15-minute headways on weekdays during the majority of the day. During evening hours, this line operates on 30-minute headways.
- **Gold Line** – operates along 7th Street and 8th Street, with a western terminus at the Sacramento Valley Station just west of the 5th Street/H Street intersection. The eastern terminus of the line is a stop in historic Folsom. The nearest stops are at 7th/Capitol Mall (Southbound) and 8th/Capitol Mall (Northbound). This line operates on 15-minute headways on weekdays during the majority of the day. During evening hours, this line operates on 30-minute headways.
- **Green Line** – operates along 7th Street with a north terminus at Richards Boulevard/Township 9 and a southern terminus at 13th Street just north of R Street. The nearest stops are at 7th/Capitol Mall (Southbound) and 8th/Capitol Mall (Northbound). This line operates on 30-minute headways on weekdays between 6 AM and 9 PM. The Green Line does not operate on Saturdays or Sundays.

- **Local Fixed Route Bus Service** – The SCC is served primarily by RT bus routes 30 and 62. Route 30 (CSUS-Downtown) connects California State University at Sacramento (CSUS) at its eastern terminus with Downtown Sacramento and the Sacramento Valley Station at its western terminus. Route 62 (Freeport) connects the Pocket Transit Center at its southern terminus with Downtown Sacramento at its northern terminus. Access to these routes is available at the mid-intersection bus stop at the J Street/14th Street intersection (eastbound) and the farside bus stop on L Street west of 14th Street (westbound). As shown in the photograph below, the J Street/14th Street bus stop is designed with sufficient capacity for one bus to dwell without blocking adjacent crosswalks.

² Sacramento Regional Transit District. RT Facts and Figures. Available: <https://www.sacrt.com/factsheetindex.stm>.



SOURCE: Fehr & Peers, 2017

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Figure 4.9-7

Existing Transit Service and Facilities

- **Regional Fixed Route Bus Service** – Several regional transit service providers provide fixed route bus service to downtown Sacramento from outlying communities throughout the greater Sacramento region. These services primarily cater to downtown Sacramento commuters and operate during the morning and evening peak periods. Within the vicinity of the SCC, the bus stop located on 15th Street south of J Street (near St. Paul’s Episcopal Church and the Panattoni Building) is served by several regional transit service providers, including El Dorado Transit, e-Tran, Roseville Transit, YoloBus, and Yuba Sutter Transit.
- **Capitol Corridor** - is an intercity passenger train service that serves downtown Sacramento from the new Intermodal Transportation Facility located north of I Street. It operates between Auburn and the Bay Area seven days a week. Currently, the latest trains depart the Intermodal Transportation Facility at 10:30 PM on weekdays and weekends.



View of bus stopping on J Street within 14th Street intersection

Parking

Parking supply and availability is an important consideration in analyzing the effects of the proposed project on the surrounding transportation system. Although the availability of parking, in and of itself, is not considered an impact under CEQA, it is nevertheless important to understand the area’s parking characteristics for the following reasons:

- The location, convenience, and price of parking can influence mode choice;
- The selection of one garage/lot over another determines traffic and pedestrian flows that impact intersection operations; and
- Parking location selection influences pedestrian walk flows to/from the project site, which in turn, affects site access and potential frontage improvements.

Figure 4.9-8 displays the supply of public off-street parking in the project vicinity. These parking areas are a mix of public and private ownership and represent the current available supply of parking available for public use during a typical weekday. It should be noted that this does not represent available parking for the proposed project, since individual garage/lot operations can vary on a daily basis based on the preferences of the operator. On-street parking is limited within the project vicinity due to the frequency of driveways, block lengths, and parking restrictions.

As illustrated in Figure 4.9-8, approximately 5,700 public off-street parking spaces are present within ¼ mile of the project site. Fehr & Peers conducted weekday parking occupancy surveys at parking lots and garages within the vicinity of the SCC facility from 7:30 AM to 8:30 AM. During this timeframe, approximately 3,800 public parking spaces were unoccupied. This represents the estimated available supply at off-site locations in the project vicinity for a weekday daytime SCC event.

The data on Figure 4.9-8 represent the best available information as of the time this analysis was being prepared. Although they include the majority of medium/large-sized garages and lots in the area, it is not an exhaustive list of every potential parking location.

4.9.2 Regulatory Setting

This section provides a discussion of applicable federal, state, and local regulations pertaining to transportation that may be applicable to the Proposed Project.

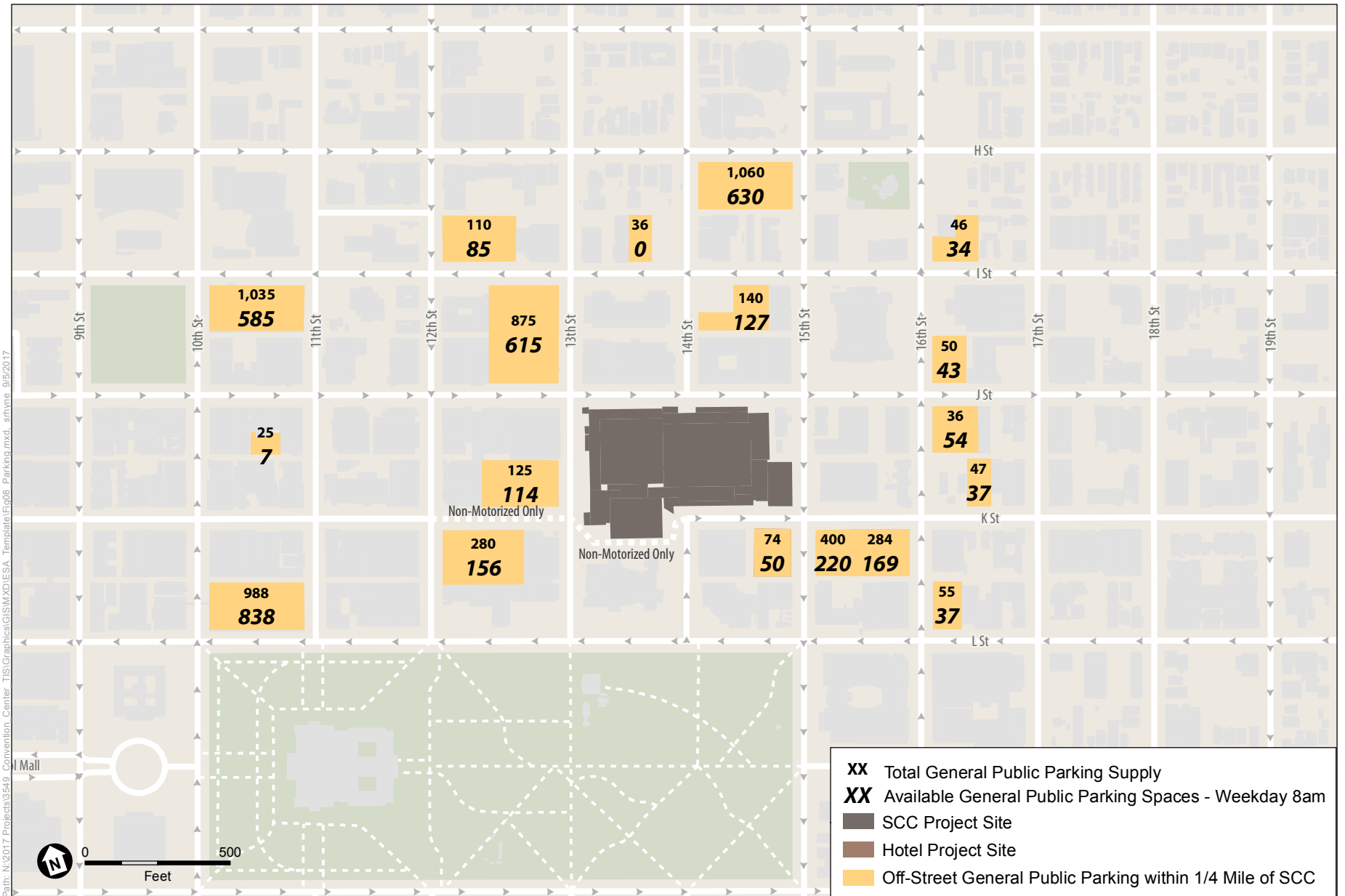
Federal

There are no applicable federal regulations that apply directly to the Proposed Project. However, federal regulations relating to the Americans With Disabilities Act (ADA), Title VI, and Environmental Justice relate to transit service.

State

Senate Bill 743

Senate Bill 743, passed in 2013, requires the California Governor's Office of Planning and Research (OPR) to develop new guidelines that address traffic metrics under CEQA. 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." OPR is currently updating its CEQA Guidelines to implement SB 743 and is proposing that vehicle miles traveled (VMT) be the primary metric used to identify transportation impacts.



SOURCE: Fehr & Peers, 2017

Sacramento Convention Center Renovation and Expansion and 15th/K Street Hotel EIR

Figure 4.9-8

Existing Weekday General Public Parking Supply and Availability

Certification of these revisions to the Guidelines by the Secretary of the California Natural Resources Agency will trigger requirements for their use by lead agencies, including the City of Sacramento.³ As this is a substantive change to CEQA practice, there has been considerable statewide interest and comment on OPR's latest (January 2016) on Updates to the CEQA Guidelines on Evaluating Transportation Impacts in CEQA⁴ (Revised Proposal). As of today, the date for formal adoption of these Guidelines is uncertain.

In anticipation of formal adoption of the revised Guidelines, and in order to implement its "smart growth" policies, the City of Sacramento is currently engaged in a process to update the transportation performance metrics and thresholds used to measure transportation system impacts of discretionary projects.

Caltrans

Caltrans issued interim guidance on incorporating SB 743 into its policies and procedures in *Local Development – Intergovernmental Review Program* (Caltrans, 2016). The high-level interim guidance document for District staff refocuses Caltrans' attention on local development project's VMT, appropriate transportation demand measures (TDM), and determining how to address multimodal operational issues.

Regional

SACOG is responsible for the preparation of, and updates to, the 2016 MTP/SCS and the corresponding Metropolitan Transportation Improvement Program (MTIP) for the six-county Sacramento region. The MTP/SCS provides a 20-year transportation vision and corresponding list of projects. The MTIP identifies short-term projects (7-year horizon) in more detail. The current MTP/SCS was adopted by the SACOG Board in 2016.

Local

City of Sacramento 2035 General Plan

On March 3, 2015, the City of Sacramento City Council adopted the 2035 General Plan. The Mobility Element of the City of Sacramento's 2035 General Plan outlines goals and policies that coordinate the transportation and circulation system with planned land uses. The following LOS policy is relevant to this study:

Policy

- M 1.2.2 **The City shall implement a flexible context-sensitive Level of Service (LOS) standard, and will measure traffic operations against the vehicle LOS thresholds established in this policy.** The City will measure vehicle LOS based on the methodology contained in the latest version of the Highway Capacity Manual (HCM) published by the Transportation Research Board. The City's specific vehicle LOS thresholds have been defined based on community values with respect to modal priorities, land use context, economic development, and environmental resources and constraints. As such, the City has established variable LOS thresholds appropriate for the unique characteristics of the City's diverse neighborhoods and communities. The City will strive to operate

³ Public Resources Code section 21099(b)(2).

⁴ Governor's Office of Planning and Research, Revised Proposal on Updates to the CEQA Guidelines on Evaluating Transportation Impacts in CEQA, Implementing Senate Bill 743 (Steinberg, 2013), January 20, 2016.

the roadway network at LOS D or better for vehicles during typical weekday conditions including AM and PM peak hour with certain exceptions mapped on Figure M-1 (and listed in the actual General Plan document).

- A. Core Area (Central City Community Plan Area) – LOS F allowed
- B. Priority Investment Areas – LOS F allowed
- C. LOS E roadways (11 distinct segments listed). LOS E is also allowed on all roadway segments and associated intersections located within ½ mile walking distance of a light rail stations.
- D. LOS F roadways (24 distinct segments listed)
- E. If maintaining the above LOS standards would, in the City’s judgment, be infeasible and/or conflict with the achievement of other goals, LOS E or F conditions may be accepted provided that provisions are made to improve the overall system, promote non-vehicular transportation and/or implement vehicle trip reduction measures as part of a development project or a city-initiated project. Additionally, the City shall not expand the physical capacity of the planned roadway network to accommodate a project beyond that identified in Figure M4 and M4a (2035 General Plan Roadway Classification and Lanes).

According to Figure M1 (Vehicle Level of Service Exception Areas) of the 2035 City of Sacramento General Plan, the Tier 1 Priority Investment Area is bounded by the Sacramento River, American River, Broadway, and Alhambra Boulevard. All study intersections are located within the Tier 1 Priority Investment Area.

The following policies from the City of Sacramento’s 2035 General Plan are also applicable to this study:

Policies

- M 1.1.1 **Right-of-Ways.** The City shall preserve and manage right-of-ways consistent with: the circulation diagram, the City Street Design Standards, the goal to provide Complete Streets as described in Goal M 4.2, and the modal priorities for each street segment and intersection established in Policy M4.4.1: Roadway Network Development, Street Typology System.
- M 1.2.3 **Transportation Evaluation.** The City shall evaluate discretionary projects for potential impacts to traffic operations, traffic safety, transit service, bicycle facilities, and pedestrian facilities, consistent with the City’s Traffic Study Guidelines.
- M 1.2.4 **Multimodal Access.** The City shall facilitate the provision of multimodal access to activity centers such as commercial centers and corridors, employment centers, transit stops / stations, airports, schools, parks, recreation areas, medical centers, and tourist attractions.
- M 1.3.1 **Grid Network.** To promote efficient travel for all modes, the City shall require all new residential, commercial or mixed-use development that proposes or is required to construct or extend streets to develop a transportation network that is well-connected, both internally and to off-site networks preferably with a grid or modified grid-form.
- M 1.3.2 **Eliminate Gaps.** The City shall eliminate “gaps” in roadways, bikeways, and pedestrian networks. To this end:
 - a. The City shall construct new multi-modal crossings of the Sacramento and American Rivers.
 - b. The City shall plan and pursue funding to construct grade-separated crossings of freeways, rail lines, canals, creeks, and other barriers to improve connectivity.
 - c. The City shall construct new bikeways and pedestrian paths in existing neighborhoods to improve connectivity.

- M 1.3.3 **Improve Transit Access.** The City shall support the Sacramento Regional Transit District (RT) in addressing identified gaps in public transit networks by working with RT to appropriately locate passenger facilities and stations, pedestrian walkways and bicycle access to transit stations and stops, and public rights of way as necessary for transit- only lanes, transit stops, and transit vehicle stations and layover.
- M 2.1.2 **Sidewalk Design.** The City shall require that sidewalks wherever possible be developed at sufficient width to accommodate all users including persons with disabilities and complement the form and function of both the current and planned land use context of each street segment (i.e. necessary buffers, amenities, outdoor seating space).
- M 2.1.4 **Cohesive and Continuous Network.** The City shall develop a pedestrian network of public sidewalks, street crossings, and other pedestrian paths that makes walking a convenient and safe way to travel citywide. The network should include a dense pattern of routes in pedestrian-oriented areas such as the Central City and include wayfinding where appropriate.
- M 3.1.12 **New Facilities.** The City shall work with transit providers and private developers to incorporate transit facilities into new private development and City project designs including incorporation of transit infrastructure (i.e., electricity, fiber-optic cable, etc.), alignments for transit route extensions, new station locations, bus stops, and transit patron waiting area amenities (i.e. benches, real-time traveler information screens).
- M 3.1.14 **Direct Access to stations.** The City shall ensure that development projects located in the Central City and within ½ mile walking distance of existing and planned light rail stations provide direct pedestrian and bicycle access to the station area, to the extent feasible.
- M 3.1.15 **Light Rail Extensions and Enhancements.** The City shall support the extension of light rail service to Sacramento International Airport, further extension in South Sacramento, and other improvements to facilities such as the 65th street, Royal Oaks, and Swanston stations.
- M 3.1.16 **Streetcar Facilities.** The City shall support the development of streetcar lines and related infrastructure and services in the Central City and other multi-modal districts.
- M 4.2.1 **Accommodate All Users.** The City shall ensure that all new roadway projects and any reconstruction projects designate sufficient travel space for all users including bicyclists, pedestrians, transit riders, and motorists except where pedestrians and bicyclists are prohibited by law from using a given facility.
- M 4.2.2 **Pedestrian and Bicycle-Friendly Streets.** In areas with high levels of pedestrian activity (e.g., employment centers, residential areas, mixed-use areas, schools), the City shall ensure that all street projects support pedestrian and bicycle travel. Improvements may include narrow lanes, target speeds less than 35 miles per hour, sidewalk widths consistent with the Pedestrian Master Plan, street trees, high-visibility pedestrian crossings, and bikeways (e.g. Class II and Class III bike lanes, bicycle boulevards, separated bicycle lanes and/ or parallel multi-use pathways).
- M 4.2.5 **Multi-Modal Corridors.** Consistent with the Roadway Network and Street Typologies established in this General Plan, the City shall designate multi-modal corridors in the Central City, within and between urban centers, along major transit lines, and/ or along commercial corridors appropriate for comprehensive multimodal corridor planning and targeted investment in transit, bikeway, and pedestrian path improvements if discretionary funds become available.
- M 4.4.4 **Traffic Signal Management.** To improve traffic flow and associated fuel economy of vehicles traveling on city streets, the City shall synchronize the remaining estimated 50 percent of the city's eligible traffic signals by 2035, while ensuring that signal timing considers safe and efficient travel for all modes.
- M 5.1.2 **Appropriate Bikeway Facilities.** The City shall provide bikeway facilities that are appropriate to the street classifications and type, number of lanes, traffic volume, and speed on all rights-of-way.

- M 5.1.3 **Continuous Bikeway Network.** The City shall provide a continuous bikeway network consisting of bike-friendly facilities connecting residential neighborhoods with key destinations and activity centers (e.g., transit facilities, shopping areas, education institutions, employment centers).
- M 5.1.5 **Motorists, Bicyclists, and Pedestrian Conflicts.** The City shall develop safe and convenient bikeways, streets, roadways, and intersections that reduce conflicts between bicyclists and motor vehicles on streets, between bicyclists and pedestrians on multi-use trails and sidewalk, and between all users at intersections.
- M 5.1.6 **Connections between New Development and Bicycle Facilities.** The City shall require that new development provides connections to and does not interfere with existing and proposed bicycle facilities.
- M 5.1.7 **Bikeway Requirements.** The City shall provide bike lanes on all repaved and/ or reconstructed arterial and collector streets to the maximum extent feasible. The appropriate facility type for each roadway segment shall be consistent with the Roadway Network and Street Typologies defined in this General Plan.

City of Sacramento Grid 3.0

On August 16, 2016, the Sacramento City Council accepted Grid 3.0 as the City's guide for future circulation improvements in the Central City and directed staff to amend the appropriate local and regional documents to reflect the recommendations of Grid 3.0 and to complete required environmental review. Grid 3.0 identifies a future transportation network and a list of projects needed to provide improved mobility and access, protect residential neighborhoods, optimize the interaction of transportation modes, provide an appropriate amount of parking at the appropriate price levels, and provide safe and efficient connections to the surrounding areas. The circulation improvements included in Grid 3.0 are illustrated in preferred roadway, bicycle, transit and pedestrian network maps. Grid 3.0 is being considered for formal approval as part of the Downtown Specific Plan review process.

Proposed Downtown Specific Plan

In 2015, the Downtown Housing Initiative was launched to bring 10,000 new housing units in the next ten years to Downtown Sacramento. The transportation network for Downtown Specific Plan is based on the Grid 3.0 plan described above. The Downtown Specific Plan takes that initiative further by looking at growth opportunities for the next twenty years and beyond. The development of the Specific Plan was initiated in 2016 and is scheduled to finish in 2018.

Central City 2035 Community Plan

The Central City Community Plan serves as a vision to identify how the Downtown and Midtown areas can contribute to the General Plan's vision of becoming the most livable city in America. Where the 2035 General Plan's goals, policies, and implementation programs define the roadmap of strategies to achieve the overall citywide vision, the Central City Community Plan vision is specific to the role that the Downtown and Midtown areas play in supporting the overall citywide vision.

Policies

- CC.M 1.1 **Major Street System.** The City shall establish a major street system which will route vehicular traffic to the activity areas of the Central City without directing such traffic through predominantly residential neighborhoods.

- CC.M 1.6 **Commuter Bikeways.** The City shall prioritize the addition of commuter routes to existing bikeways. The plan recommends that the City identify a north/south route and an east/west bike route that would be improved for commuter use. Improvements would involve modification of the streets to accommodate bicycle commuters rather than exclusively for auto use.

4.9.3 Analysis, Impacts, and Mitigation

Significance Criteria

The following describes the significance criteria used to identify project-specific and cumulatively considerable impacts to the transportation and circulation system for each of the proposed projects.

Intersections

Impacts to the roadway system are considered significant if:

- The traffic generated by the plan degrades the overall roadway system operation to the extent that the plan would not be consistent with General Plan Policy M 1.2.2 relating to the City's Level of Service Policy.

General Plan Mobility Element Policy M 1.2.2 sets forth definitions for what is considered an acceptable LOS. All study intersections are located in the Core Area and are governed by Policy M 1.2.2 (a). LOS F is acceptable at these locations during peak hours, provided that the project provides improvements to other parts of the citywide transportation system within the project site vicinity (or within the area affected by the project's vehicular traffic impacts) to improve transportation-system-wide roadway capacity, to make intersection improvements, or to enhance non-auto travel modes in furtherance of the 2035 General Plan goals. Road widening or other improvements to road segments are not required.

The above significance criterion is the City's interpretation of how General Plan Policy M 1.2.2 should be applied in the Core Area and Priority Investment Areas of the City. This policy allows these areas to have intersections that operate at LOS F. However, such conditions should not be detrimental to other general plan circulation policies (including but not limited to policies M 1.2.1, 1.2.4, 1.3.3, and 1.3.5), which pertain to providing high-quality transit, walkable neighborhoods and business districts, continuous and connected bikeways, TDM, emergency response, and other circulation considerations. Therefore, while LOS F peak hour operating conditions at a single intersection may be considered acceptable, an entire roadway system that experiences severe gridlock, and hampers all modes of travel is generally not considered acceptable. To this end, the evaluation of intersection LOS focuses on the totality of system operations to assess consistency with 2035 General Plan Policy M 1.2.2.

In developing policy M 1.2.2, the City evaluated the benefits of allowing lower levels of service in order to promote infill development within an urbanized high density area of the city that reduces VMT and supports more transportation alternatives, including biking, walking, and transit, as compared to requiring a higher level of service that would accommodate more cars but may also require widening roads and would result in increased VMT and greenhouse gas (GHG)

emissions. Based on this evaluation, the City determined that LOS F is acceptable during peak hours within the Core Area, provided that the project provides improvements to other parts of the citywide transportation system within the project site vicinity (or within the area affected by the project's vehicular traffic impacts) to improve transportation-system-wide roadway capacity, to make intersection improvements, or to enhance non-auto travel modes in furtherance of the general plan goals. The City's LOS policy was adopted to allow decreased levels of service (e.g., LOS F) in the urbanized Core Area of the City that supports more transportation alternatives and places residents proximate to employment, entertainment, retail and neighborhood centers and thus reduces overall vehicle miles traveled and results in environmental benefits (e.g., improved air quality and reduced GHG emissions).

Transit

Impacts to the transit system are considered significant if the proposed project would:

- Adversely affect public transit operations; or
- Fail to adequately provide access to transit.

Bicycle Facilities

Impacts to bicycle facilities are considered significant if the proposed project would:

- Adversely affect existing or planned bicycle facilities; or
- Fail to adequately provide for access by bicycle.

Pedestrian Circulation

Impacts to pedestrian circulation are considered significant if the proposed project would:

- Adversely affect existing or planned pedestrian facilities; or
- Fail to adequately provide for access by pedestrians.

Construction-Related Traffic Impacts

The project would have a temporarily significant impact during construction if it would:

- Degrade an intersection or roadway to an unacceptable level;
- Cause inconveniences to motorists due to prolonged road closures; or
- Result in increased frequency of potential conflicts between vehicles, pedestrians, and bicyclists.

Analysis Methodology

This section presents the methodology for analyzing transportation impacts. The analysis of the proposed project impacts is conducted by comparing baseline conditions to conditions with the SCC project as well as to conditions with both the SCC project and the Hotel project.

For cumulative analysis, future year 2036 conditions are compared to conditions with the SCC project as well as to conditions with both the SCC project and the Hotel project. The analysis

comparing baseline conditions to project conditions assesses the near-term effects of the proposed SCC expansion project and hotel project, while the analysis comparing 2036 cumulative conditions to project conditions assesses the long-term effects in combination with other known and forecast development. The year 2036 was selected because it corresponds to the horizon year from the SACOG regional travel demand model.

Intersection Level of Service (LOS) Analysis

Traffic operations at all study intersections were analyzed for weekday AM and PM peak-hour conditions using procedures and methodologies contained in the *Highway Capacity Manual* (Transportation Research Board, 2010) for calculating delay at intersections. These methodologies were applied using the SimTraffic software program, which considers the effects of lane utilization, turn pocket storage lengths, upstream/downstream queue spillbacks, coordinated signal timings, pedestrian crossing activity, and other conditions on intersection and overall corridor operations. Utilization of SimTraffic microsimulation analysis is appropriate given the presence of coordinated signal timing plans, close spacing of signalized intersections, and overall levels of traffic and peak-hour congestion within the study area. Reported results are based on an average of ten model runs.

Vehicle Miles Traveled Analysis

This section describes the methodologies used to estimate the Vehicle Miles of Travel (VMT) associated with the SCC Expansion Project and the Hotel Project. VMT is presented in the transportation section for informational purposes. However, the values shown here are used in other chapters of the EIR as inputs to air quality, noise, and greenhouse gas emissions.

VMT is considered a useful metric in understanding the overall impacts of a project on the transportation system. By definition, one VMT occurs when a vehicle is driven one mile. In addition, a given VMT value represents vehicular miles of travel for an entire weekday. VMT is often expressed on a ‘per capita’ or ‘per employee’ basis to understand the relative efficiency of one project versus another. The City wants to be proactive in its approach to “smart growth” policies and is currently engaged in a process to update the transportation performance metrics and thresholds used to measure transportation system impacts of discretionary projects. For the proposed SCC Expansion and Hotel projects, the City will evaluate transportation impacts using the significance criteria described previously. Although VMT is presented in this section, it is not used as a significance criterion due to the City’s ongoing process to identify an appropriate threshold of significance by which to measure its impact.

Transit Analysis

Impacts to transit facilities address adverse effects on existing bus routes (due to worsened congestion) or effects due to changes in bus stop designs. Ridership increases that would result from the proposed project are not considered an adverse effect on the environment because they result in greater project efficiency and reduced VMT and GHG emissions. Therefore, ridership increases are not included in the significance criteria.

Pedestrian Analysis

The pedestrian impact analysis evaluates the estimated number of pedestrians compared to the width of sidewalks and crosswalks to determine the adequacy of those facilities to accommodate anticipated pedestrian flows.

The LOS for sidewalks and crosswalks is calculated based on Chapter 23 (Off-Street Pedestrian and Bicycle Facilities) of the 2010 HCM. It is noted that Chapters 4, 16, and 17 of the 2010 HCM also include discussions of pedestrian facilities. However, page 23-1 states that pedestrian capacity concepts are the same across facility types, but LOS thresholds may differ depending on the type of facility. Since Chapter 23 presents a clear means by which to analyze pedestrian facility capacity, methods from that chapter (including appropriate pedestrian capacity design standards) are used in this study.

The pedestrian LOS is based on the average space per pedestrian, which is determined from the pedestrian flow rate. The pedestrian flow rate is expressed as the number of pedestrians per minute per foot (ped/min/ft) of crossing width (i.e., the width of the facility, not the length of the crossing) during the peak 15-minutes. It is calculated as follows:

$$\text{Pedestrian Flow Rate} = \text{Pedestrians during peak 15-min} / (15 \times \text{Width})$$

As recommended in Chapter 23, the pedestrian flow calculations use a 0.85 peak hour factor (PHF) to determine the peak 15-minute flow. The effective walkway width is considered, which takes into account shy distance away from curbs, fences, and buildings, as well as any fixed objects (trees, benches, etc.). Page 4-28 of the 2010 HCM indicates that walkways should arguably be designed to a LOS D or better condition. This is because when there are no barriers to pedestrian travel, pedestrians will tend to spill over the edges of a walkway at densities below capacity. Thus, this study applies a LOS D design/evaluation criterion for pedestrian facilities.

Most sidewalks in the study area will have ‘platooned flows’ (i.e., groups will tend to walk together as a result of being released from an upstream signal). According to Table 23-1 of the 2010 HCM, the maximum pedestrian flow rate is 11 pedestrians per minute per foot at LOS D for platooned flows. This condition is described as “speed and ability to pass slower pedestrians restricted”.

At signalized crosswalks, the relative proportion of time in which the pedestrian ‘Walk’ interval is illuminated must also be considered. Finally, the potential for pedestrians to enter the intersection during a flashing ‘Don’t Walk’ signal should also be considered.

Bicycle Analysis

The bicycle analysis considers whether the addition of project vehicle trips would have an impact on the bicycle network. The assessment of potential safety impacts on the bicycle network focuses on whether added congestion or queues generated by project vehicle trips would affect cyclists at intersections or garage access points.

The transportation analysis includes a qualitative assessment of bicycle conditions as they relate to the project site and bicycle parking, and to bicycle circulation in the study area. The proposed project would result in a significant impact if it would adversely affect existing or planned bicycle facilities in the study area, whether the project would interfere with bicycle accessibility to the site and adjoining areas, or would create new hazardous conditions for bicycling.

Construction Analysis

The construction impact evaluation addresses temporary construction-related traffic from construction workers and materials delivery and its potential to result in substantial interference with pedestrian, bicycle, or vehicle circulation and accessibility to adjoining areas, thereby resulting in potential hazardous conditions.

Parking Analysis

The analysis of parking conditions includes quantification of parking supply and demand during peak weekday conditions based on the travel demand analysis described previously. However, adequacy of parking supply is not considered an area of environmental impact under CEQA, though adverse effects to vehicular circulation associated with searching for parking is considered a potential environmental effect.

SCC Project Features

Development Program

The Sacramento Convention Center project site consists of approximately 6.52 acres spread over more than two city blocks in downtown Sacramento.⁵ The project site is located on the blocks bounded by 13th, 15th, J, and K streets, including the adjacent abandoned K Street alignment (between 13th and 14th streets).

The proposed project would be constructed in two phases. During Phase 1, the Panattoni Building (located on the west side of 15th Street north of K Street) would be demolished and a new East Lobby would be constructed creating access to the Convention Center from 15th Street. A new west building would also be constructed with new exhibit space, a new west lobby, new kitchen and food service space, and other related uses. Phase 2 would include construction of the second level of the new west building constructed as part of Phase 1. It would include a new ballroom and kitchen. Modifications to the external public realm would include a reconfigured sidewalk along the J Street frontage and a new outdoor Activities Plaza located in between the SCC facility and the Community Center Theater.

The SCC project analyzed in this chapter consists of both the Phase 1 and 2 described above, and would add a net 65,514 square feet of additional event space (exhibit halls, meeting rooms, and ballrooms) to the existing SCC facility. Although it would also result in additional building space for other supporting and ancillary uses, those increase do not affect the project's trip generation,

⁵ The project site consists of Assessor's Parcels 006-0115-016, 017, 018, and 019.

which is largely a function of event attendance and employees. Refer to **Figure 4.9-9** for the SCC conceptual project site plan.

Pedestrian Access

Event attendees would access the SCC facility via three primary locations, including the reconfigured J Street Lobby (at 14th Street), the reconfigured West Lobby, and the new East Lobby at the northwest corner of the K Street/15th Street intersection. The project would include reconfigured sidewalks along the J Street, 13th Street, and 15th Street frontages of the SCC facility. A new outdoor Activities Plaza would include a pedestrian pathway traversing east-west through the project site, connecting 13th Street with 14th Street along the K Street alignment.

The project would not include any modifications to crosswalks at adjacent intersections.

Bicycle Access

Event attendees accessing the SCC facility via bicycle would utilize existing bike facilities on 13th Street (Class II north of L Street and Class II south of L Street) and K Street (Class I west of 13th Street, Class III east of 14th Street, and Class II east of 15th Street).

Bicycle storage would be provided near the West and East Lobbies. The West Lobby bicycle storage area would be located along the K Street alignment west of the K Street/13th Street intersection. The East Lobby bicycle storage area would be located on the west side of 15th Street just south of J Street, immediately south of St. Paul's Episcopal Church.

Transit Access

Event attendees accessing the SCC facility by public transit would utilize existing LRT and bus routes serving the project site vicinity. Private shuttles transporting event attendees to the SCC facility would utilize the three passenger loading zones described below.

Vehicular Access

Vehicular circulation in and around the project site would essentially remain unchanged from current conditions.

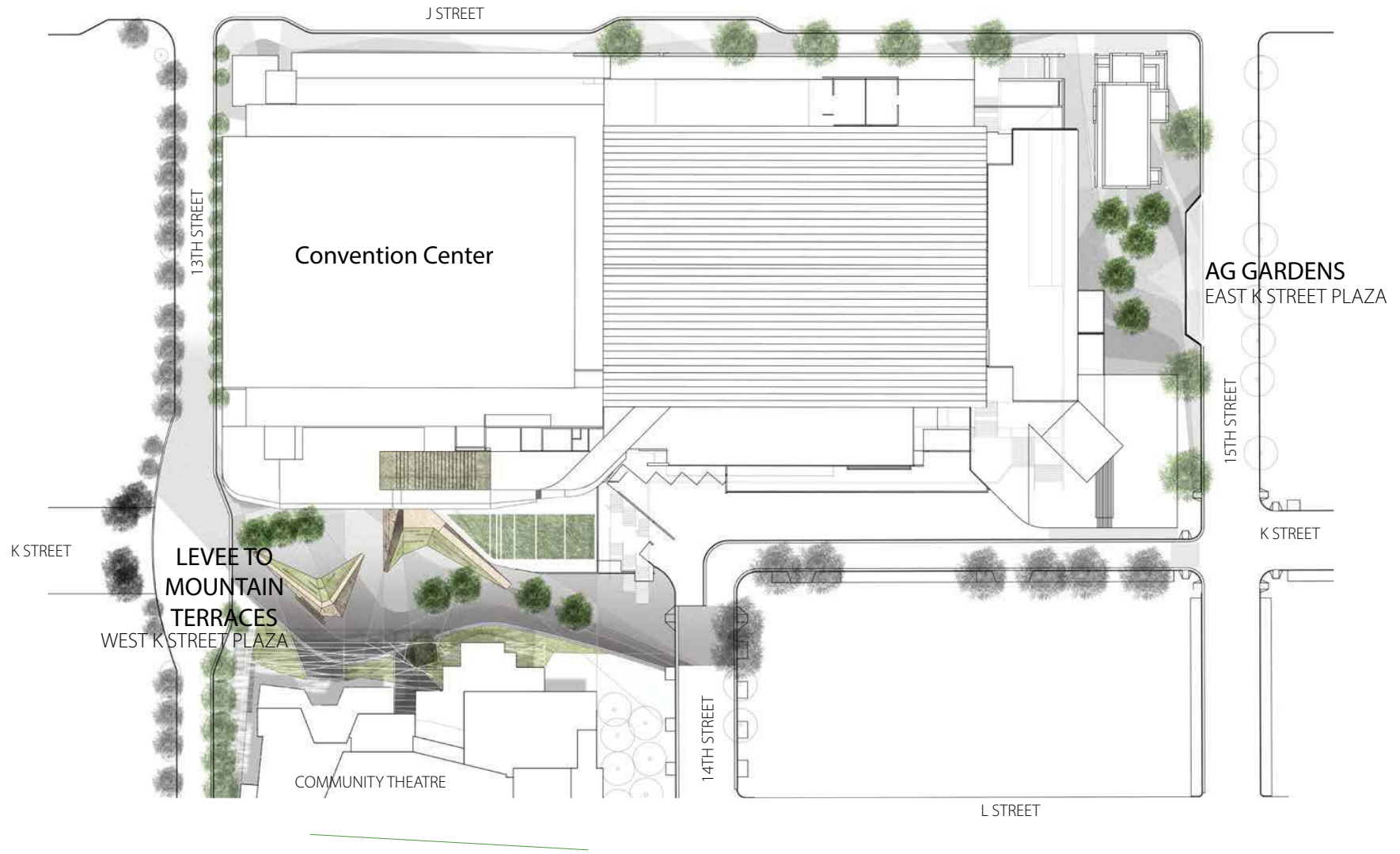
Parking

Vehicular parking would continue to be accommodated in local parking garages within the vicinity of the SCC facility. No new parking would be constructed.

Commercial Loading

Loading docks are located on K Street, between 14th Street and 15th Street, and provide service delivery access to the site. The SCC currently has twelve truck bays, eleven of which are allocated for events and one that is allocated for shipping and receiving for operations. The SCC has an off-site staging area near Miller Regional Park for trucks to wait when the loading docks are full. The SCC expansion project would not add any new truck loading docks.

N:\2017 Projects\3549_Convention_Center_TIS\Graphics\Fig09_SCC_SitePlan.ai



SOURCE: ESA, 2017

Sacramento Convention Center Renovation and Expansion and 15th/K Street Hotel EIR

Figure 4.9-9

SCC Project Conceptual Plan



Passenger Loading

On-street passenger loading would be available at two primary curbside locations surrounding the SCC. It is anticipated that these areas would be utilized for private vehicle, carsharing, and shuttle pick-up and drop-off activities.

The south side of J Street would continue to be signed and advertised for passenger loading between 13th Street and 15th Street. Along the J Street frontage, the project design would allow for the future construction of the planned Downtown Riverfront Streetcar. A new passenger loading area would be provided on the west side of 15th Street south of J Street near the new SCC East Lobby. Both primary loading areas would provide on-street bays to allow for passenger loading activity to occur outside of the adjacent travel lane.

Event Transportation Management Plan

As is described in more detail later, the proposed project will be responsible for implementing an Event Transportation Management Plan (ETMP) that is designed to facilitate multi-modal travel to and from large events at the SCC in a safe and efficient manner. The ETMP would be refined by the City of Sacramento, the SCC operator (if different than the City), and other agencies responsible for implementation. Subsequent adaptations or refinements would be made to respond to changing event types and schedules, new transportation access and parking opportunities, and planned transportation improvements that are implemented in the SCC vicinity. The ETMP is included in Appendix L.

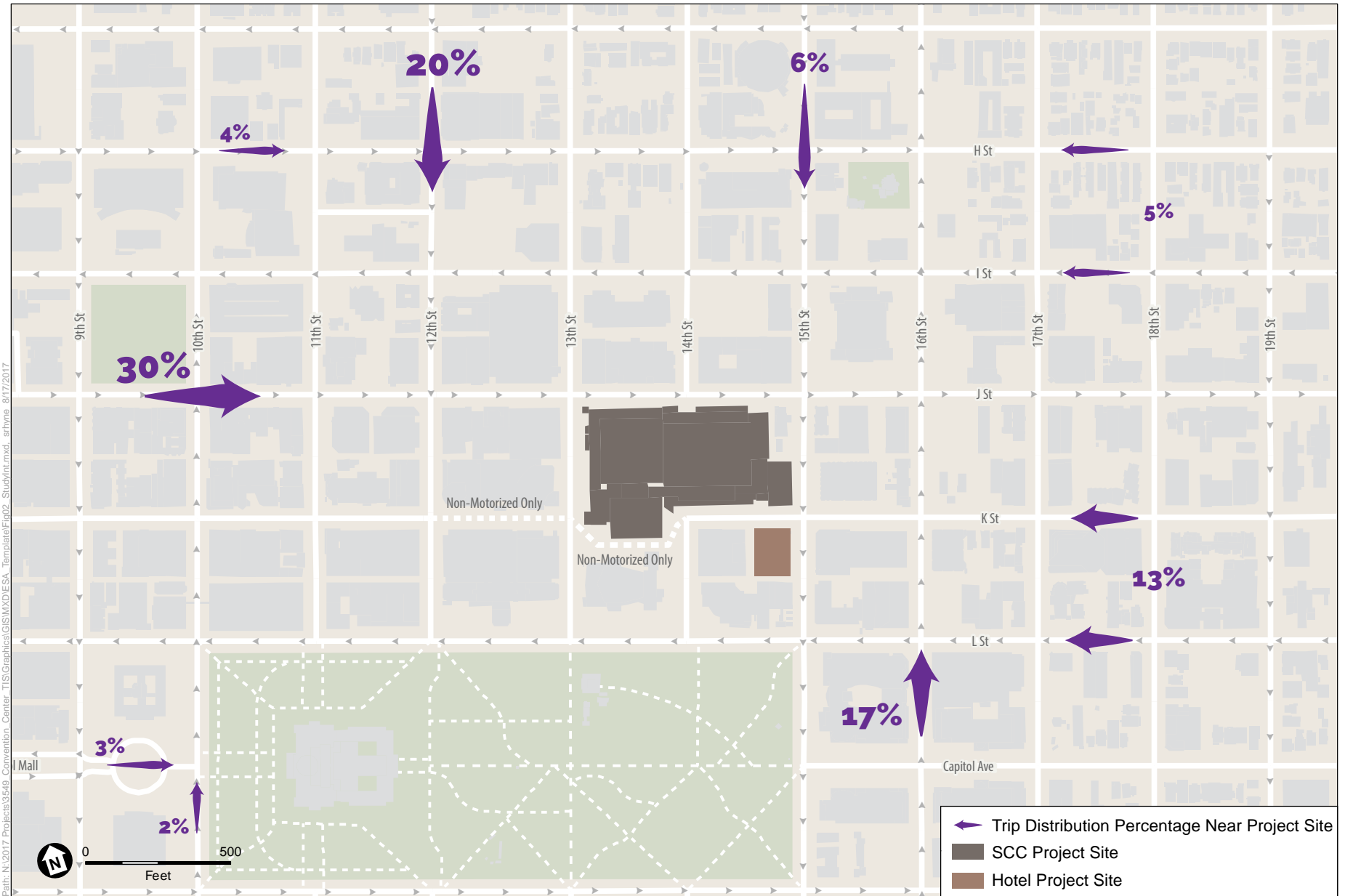
Hotel Project Features

Development Program

A detailed site plan for the hotel has not been developed to date, though specific land use characteristics have been provided by the City of Sacramento. The hotel project would have 350 rooms and 70,000 gross square feet of meeting and event space. The hotel would also include a restaurant, gift shop, and guest amenities (e.g., swimming pool, fitness center). Refer to **Figure 4.9-10** for a conceptual project site plan. The hotel would replace the existing 73-space surface parking lot located west of 15th Street and south of K Street. A pedestrian bridge above and across K Street would connect the hotel directly to the new SCC East Lobby.

Vehicular Access and Parking

A total of 200 below-ground vehicular parking spaces would be provided for the hotel. For analysis purposes, it is assumed that ingress to the hotel parking structure (and check-in area) would be provided on the south end of the project's 15th Street frontage, while egress would be onto K Street (e.g., right out only) west of 15th Street. Ultimately, the hotel developer may elect to also provide egress onto 15th Street via Kayak Alley, however, assuming that all hotel guest vehicular egress would occur onto K Street is a more conservative assumption for the purposes of the transportation analysis. The project would require elimination of six metered on-street parking spaces on the west side of 15th Street along its frontage.



SOURCE: Fehr & Peers, 2017

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Figure 4.9-10

Distribution of Inbound Vehicle Trips -
Baseline Plus SCC Project Conditions

Commercial Loading

Loading docks would be located on the south side of K Street west of 15th Street, immediately opposite the SCC truck loading area. A total of three truck docks would be provided. Trucks would presumably be routed northbound on 14th Street and then eastbound on K Street to the loading docks. They would then exit the docks onto K Street and then turn onto 15th Street.

Passenger Loading

The hotel lobby would be located along the project's 15th Street frontage. Passenger loading would be accommodated on the west side of 15th Street between K Street and Kayak Alley either through on-street curbside loading or an off-street porte cochere configuration.

Project Travel Demand Analysis

Travel demand refers to the new vehicle, transit, bicycle, and pedestrian traffic that would be generated by a proposed project. Evaluating the travel data is necessary to address potential effects on roadway, transit, bicycle, pedestrian, and parking facilities.

Forecasts of travel demand from the land use assumptions are presented in detail in a Travel Characteristics Memorandum,⁶ which is summarized below and included in Appendix L. The travel forecasts are based on projected attendance levels, full-time and event staffing levels, historical SCC event data, pedestrian counts collected during events at the two main entrances to the SCC, average vehicle occupancy data collected at the adjacent parking garage on 13th Street during SCC events, and data from the regional travel demand model. Projected attendance levels that are assumed in the travel demand analysis are presented in detail in a Project Attendance Estimation Memorandum⁷, which is summarized below and included in Appendix L.

Trip Generation

SCC Project

The proposed project would add 65,514 square feet of additional event space (exhibit halls, meeting rooms, and ballrooms) to the existing SCC facility in downtown Sacramento. This additional event space would enable more efficient use of the SCC facility, allowing for more frequent, larger events. Therefore, SCC events with higher attendance levels would occur with the proposed project.

For the purposes of the travel demand analysis, a reasonably foreseeable and conservative 'design event' was selected for analysis in order to evaluate day-to-day transportation operations, as well as the magnitude of anticipated change the proposed project would have on those operations. Considering the transportation conditions in downtown Sacramento and the variability in the size, type, timing, and travel characteristics of SCC events, a design event is typified by the following characteristics:

⁶ Fehr & Peers. 2017. *Sacramento Convention Center Expansion Project Travel Characteristics*. July 14, 2017.

⁷ Fehr & Peers. 2017. *Sacramento Convention Center Expansion Project Attendance Estimation Approach*. June 8, 2017.

- Weekday with one or more events held within the main SCC building (i.e., excludes events held in Memorial Auditorium or Community Center Theatre).
- Neither the first or last day of a multi-day event.⁸
- Event attendee arrival and departure patterns coincide with typical downtown Sacramento morning and evening commute time periods (approximate 8 AM event start and 5 PM event conclusion).
- Event does not have significant attendee transportation management component (that could otherwise reduce vehicle trip generation).

Events that meet these criteria generally have the greatest effect on the downtown Sacramento transportation system, and therefore represent ‘worst-case’ conditions for the purposes of the transportation analysis.⁹

The transportation analysis focuses exclusively on the anticipated use of the indoor event space at the SCC facility. While other SCC functions would generate activity at the project site (e.g., the outdoor Activities Plaza), the irregularity and uncertainty surrounding such functions would require substantial speculation to determine potential transportation effects. Moreover, it is not anticipated that these functions would generate greater attendance, and in turn, transportation impacts, than SCC conference or convention events.

Historic SCC event data from 2014, 2015, and 2016 was reviewed to understand attendance levels, frequency of events by day of week, and data on event types and sizes. The entirety of event data from 2015 was selected for analysis because it provides the most recent complete dataset.¹⁰ In 2015, the SCC hosted events on 275 days (i.e., three out of every four days) with 614,203 actualized annual event attendees.

Based on an evaluation of 2015 SCC attendance data, the proposed project would result in an increase in daily design event attendance of 1,835 persons. This represents about 28 persons per thousand square feet of event space. This figure is considered to be a conservative estimate of SCC event space utilization for the following reason:

- The design event represents the top tenth percentile of daily design event attendance totals from the 2015 annual list (instead of a more regularly occurring SCC event with lower attendance totals).

⁸ Typically, medium- and large-sized events at the SCC typically last at least three days. This is similar to other large convention center facilities, including the Moscone Center in San Francisco where approximately 84 percent of events last three or more days. Daily event attendance typically peaks during a ‘mid-event day’ rather than the first or last day, as not all event attendees attend every day of a multi-day event.

⁹ It is acknowledged that some weekend and evening SCC events may have greater traffic, parking, and pedestrian loads than these typical events. However, those activities occur during periods when the surrounding transportation system experiences less travel demand and is therefore capable of accommodating these peak loads.

¹⁰ The 2016 event dataset was missing attendance figures for 23 events, all of which took place in August or later. SCC documents event attendance as reported by the individual event operators, making it difficult to verify actual attendance figures for more recent events.

Based on historical SCC event data, the 1,835 additional persons that would be generated by the proposed project would generate an estimated 1,395 local (76 percent) and 440 non-local (24 percent) attendees per day during large event days (see Appendix L):

- **Local attendees** – reside in the Sacramento region and travel from their home to the SCC and back during an event day.
- **Non-local attendees** – reside outside of the Sacramento region and stay in Sacramento area hotels over the duration of SCC events, traveling between their hotel and the SCC on event days.

The percentage of local attendees versus non-local attendees was derived from historic SCC event data. These figures are considered conservative, since there is likely some amount of hotel/lodging bookings that is not reported to SCC and would therefore not be included in this dataset (e.g., Airbnb rentals).

The anticipated mode split between local and non-local event attendees varies greatly.

Table 4.9-5 displays the projected mode share for local and non-local event attendees. These figures represent mode share for the primary commute trip to and from the SCC facility, but do not capture non-commute travel (e.g., mid-day travel).

**TABLE 4.9-5
 COMMUTE MODE SHARE BY ATTENDEE TYPE**

Attendee Type		Private Vehicle	Uber/Lyft/ Taxi	Transit ¹	Walk/ Bike	Total
Local ²	%	78%	12%	6%	4%	100%
	Persons	1,088	167	84	56	1,395
Non-Local ³	%	10%	15%	-	75%	100%
	Persons	44	66	-	330	440
Total	%	62%	13%	4%	21%	100%
	Persons	1,132	233	84	386	1,835

NOTES:

1. Sacramento Regional Transit Blue Line light rail service is available within ¼ mile of the SCC facility at the 12th/I Station (northbound and southbound) and Cathedral Square Station (eastbound and westbound). Gold Line light rail service is available within ½ mile of the SCC facility at the Archives Plaza Station (eastbound and westbound). Bus stops within the immediately vicinity of the SCC facility include those located at 14th/J, 15th/K, and 14th/L streets. These stops are served by Sacramento Regional Transit, as well as other regional transit providers (e.g., YoloBus).
2. Local attendee mode share percentages derived from February 2017 travel behavior survey of single-game ticket buyers for a Sacramento Kings regular season weekday basketball game at Golden 1 Center in downtown Sacramento.
3. Based on the calculations above and 1.2 attendees per room, project non-local attendees would generate demand for 367 hotel rooms on a nightly basis. SCC staff reports that most non-local attendees typically stay in hotels within the vicinity of the SCC facility. Three hotels provide 1,243 rooms within ¼ mile (comfortable walking distance) of the SCC facility, including the Hyatt Regency (505 rooms), the Sheraton Grand (503 rooms), and the Residence Inn by Marriott (235 rooms). In total, downtown Sacramento hotels provide approximately 2,000 rooms.

SOURCE: Fehr & Peers, 2017.

Local attendee mode share estimates were derived from the results of a travel behavior survey conducted in February 2017 for event attendees at the Golden 1 Center in downtown Sacramento. Specifically, survey responses from single-game ticket buyers for a Sacramento Kings regular season weekday basketball game were utilized to estimate mode share for local attendees. Refer

to July 14, 2017 Technical Memorandum in Appendix L for further details and a discussion of why this data is applicable to the proposed project.

According to historic SCC event data, the majority of non-local event attendees stay in hotels within close proximity to the SCC facility, particularly the Sheraton Grand, the Hyatt Regency, and the Residence Inn by Marriott hotels. Each of these hotels is located within one block of the SCC facility, a comfortable walking distance for most event attendees. Therefore, it is estimated that non-local attendee mode share would primarily consist of walking trips. A smaller portion of non-local event attendees would stay in hotels or other lodging accommodations located further from the SCC facility. This condition is most likely to occur during larger events (such as what is being studied here) with higher demand for hotel rooms that exceed the supply of available rooms within the immediate vicinity of the SCC facility. These attendees would experience longer trip lengths for their travel to and from the SCC facility, and would therefore be expected to drive and park (via personal vehicle or rental car), get dropped off/picked up (via Uber/Lyft/Taxi), or use transit.

Observations recorded between 7 AM and 9:30 AM at the two main entrances (i.e., at J/13th and K/13th streets) to the SCC facility during an event that began at 9 AM on May 3, 2017 indicated that 75 percent of event attendees arrived at the SCC facility during the hour prior to the event start time. Observations recorded during an event on July 20, 2017 that concluded at 5 PM indicated that 80 percent of attendees for an all-day event would depart during the PM peak hour.

In addition to commute travel to and from the SCC facility, project event attendees are expected to generate the following non-commute trips:

- **Mid-day trips**, for an estimated 50 percent of event attendees who leave the SCC facility during the middle of the day for reasons discussed above. An estimated 90 percent of these trips are expected to be walking trips to nearby restaurants and hotels. A smaller portion of these trips would be private vehicle (five percent) or Uber/Lyft/Taxi trips (five percent) for attendees traveling further distances.
- **Pick-Ups and Drop-Offs**, including private vehicle and Uber/Lyft/Taxi pick-ups and drop-offs. These trips would generate one additional outbound vehicle trip during the AM peak hour and one additional inbound vehicle trip during the PM peak hour. A conservative estimate of five percent of all local event attendee commute trips completed via private vehicle would be morning drop-offs and afternoon pick-ups. Additionally, an estimated 13 percent of all event attendees would commute via Uber/Lyft/Taxi (see Table 4.9-5). Finally, an estimated five percent of mid-day attendee trips would be completed via Uber/Lyft/Taxi.

Table 4.9-6 summarizes the projected total daily person trips generated by project event attendees. As shown, the project would generate 5,505 daily event attendee person trips, with 2,753 being inbound and 2,753 being outbound.

**TABLE 4.9-6
 PROJECT EVENT ATTENDEE DAILY PERSON TRIP GENERATION**

Trip Purpose	Trip Generator	Mode of Travel				Total
		Private Vehicle	Uber/Lyft/Taxi	Transit	Walk/Bike	
Commuter Trip	Local Attendee ¹	2,176	334	168	112	2,790
	Non-Local Attendee ²	88	132	-	660	880
Non-Commuter Trip	Attendee ³	92	92	-	1,651	1,835
Total		2,356	558	168	2,423	5,505

NOTE:

1. Calculated as follows: 1,395 local attendees @ 2 commute trips = 2,790 attendee person trips. Mode share of 78% private vehicle, 12% Uber/Lyft/Taxi, 6% transit, and 4% walk/bike.
2. Calculated as follows: 440 non-local attendees @ 2 commute trips = 880 attendee person trips. Mode share of 10% private vehicle, 15% Uber/Lyft/Taxi, and 75% walk/bike.
3. Calculated as follows: 50% of 1,835 total attendees @ 2 mid-day trips = 1,835 attendee person trips. Mode share of 5% private vehicle, 5% Uber/Lyft/Taxi, and 90% walk/bike.

SOURCE: Fehr & Peers, 2017.

Generally, SCC project employees fall into two categories:

- Full-Time SCC staff - includes administrative, operations, and maintenance employees responsible for booking events and maintaining the SCC facility.
- Event-related staff - includes caterers, security, and janitorial staff who are employed on a temporary basis during event days only.

There are currently 86 full-time SCC staff. Under existing conditions, all full-time SCC staff are based out of either the SCC facility or the adjacent Panattoni Building. With the proposed project, all permanent SCC staff would be based out of the SCC facility, and no additional full-time staff positions would be added. Therefore, the project would not substantially alter the travel characteristics of full-time SCC staff compared to existing conditions.

During events, up to 100 additional event-related staff are present at the SCC facility. Since the May 2017 traffic counts surrounding the SCC were collected while an event was occurring, trips associated with the event-related staff are reflected in the existing volumes. Similar to the expected increase in daily attendance that would result from the project, it is anticipated that the number of event-related staff present on-site would increase proportionally in order to accommodate the additional attendees and building square footage. The project would increase the SCC event space by 35 percent. Therefore, the proposed project would result in an increase of event-related staff by 35 percent, or 35 persons.

At similar event centers, event staff arrivals and departures typically occur outside of the AM and PM peak hours. This is due to staff arriving prior to 7 AM for event set-up and departing after 6 PM for event break-down and clean up. For analysis purposes, it is estimated that 10 percent of SCC event-related staff, or 4 persons, would arrive during the AM peak hour and depart during

the PM peak hour, respectively. Mode share for event-related staff mode share is estimated to be 90 percent private vehicle trips and 10 percent non-auto trips.

The removal of the 36,085 square foot Panattoni Building would result in a decrease in daily and peak hour trips associated with its office functions (employees, deliveries, visitors, etc.). Of the approximately 134 employees currently located in the Panattoni Building, 16 employees are full-time SCC staff who would be relocated to the SCC facility with the proposed project. Therefore, the removal of the Panattoni Building would represent a net 88 percent decrease (118 non-SCC employees divided by 134 total employees) from its current trip generation. This is equivalent to the removal of 31,755 square feet of office space.

Based on trip generation rates for the General Office Building land use category in the *Trip Generation Manual, 9th Edition* (Institute of Transportation Engineers, 2012), removal of the Panattoni Building would result in a net reduction of 350 daily vehicle trips, 50 AM peak hour trips, and 47 PM peak hour trips.

Table 4.9-7 summarizes the estimated total daily and peak hour vehicle trips generated by the SCC project.

**TABLE 4.9-7
 SCC EXPANSION PROJECT VEHICLE TRIP GENERATION**

Trip Generator	Daily Vehicle Trips	AM Peak Hour Vehicle Trips			PM Peak Hour Vehicle Trips		
		In	Out	Total	In	Out	Total
Event Attendees ¹	2,691	752	175	927	186	802	988
Event Employees ²	63	4	-	4	-	4	4
Panattoni Building ³	-350	-44	-6	-50	-8	-39	-47
Miscellaneous ⁴	50	5	5	10	5	5	10
Total	2,454	717	174	891	183	772	955

NOTE:

1. See previous tables.
2. Calculated as follows: 70 event employee daily trips @ 90% private vehicle mode share = 63 daily vehicle trips. 4 event employee AM and PM peak hour trips @ 90% private vehicle mode share = 4 AM and PM peak hour vehicle trips (rounded).
3. Calculated as follows: 11.58 ksf office space reduction @ 11.03 daily vehicle trips per office ksf = -350 daily vehicle trips. 11.58 ksf office space reduction @ 1.56 AM peak hour vehicle trips per office ksf = -50 AM peak hour vehicle trips @ 88% ins and 12% outs. 11.58 ksf office space reduction @ 1.49 PM peak hour vehicle trips per office ksf = -47 PM peak hour vehicle trips @ 17% ins and 83% outs.
4. Miscellaneous trips included those attributed to deliveries, maintenance, buses, etc. that may not otherwise be captured by other trip generator types.

SOURCE: Fehr & Peers, 2017.

Hotel Project

The proposed hotel project would include the following trip-generating land uses:¹¹

- 350 hotel rooms
- 70,000 square feet of event space
- 6,000 square feet of restaurant space
- 125 employees

The event space could be used by either hotel guests or non-guests.

The project would include a 200-space parking structure for hotel guests. The existing 73-space surface parking lot located at the project site would be removed. This lot is currently privately owned and offers public parking for daily and monthly customers.

For the purposes of the transportation analysis, the full buildout of the hotel project as described above was assumed, along with a ‘design event’ day defined as follows:

- Weekday event at the hotel
- Neither the first or last day of a multi-day event¹²
- Approximate 8 AM event start
- Approximate 5 PM event conclusion

These parameters establish a hypothetical hotel event profile that would have the greatest potential to affect the surrounding downtown Sacramento transportation network (i.e., because its start/end times would overlap with the peak hours of travel on adjacent streets). The following sections present data and analyses of the anticipated attendance of this design event.

The description and expected operating characteristics of the proposed hotel project closely match the description of the “Hotel” land use category contained in *Trip Generation Manual, 9th Edition*, Institute of Transportation Engineers, 2012. The “Hotel” land use category provides a wide array of on-site amenities (including restaurants and gift shops), but generally does not include large event space. This description leads to the following conclusions regarding the project’s trip generation:

- The ITE “Hotel” trip rates account for the project’s on-site restaurant uses and employees.

¹¹ The proposed hotel project would include other amenities (e.g., swimming pool, fitness center, and lobby) that would improve the guest experience and support basic hotel functions. However, these amenities are not expected to materially alter the hotel project’s trip generation characteristics.

¹² An event that occupies the entirety of the 70,000 square feet of hotel event space would be considered a large convention or conference event for transportation planning purposes. Typically, medium- and large-sized convention and conference events last at least three days. This is similar to other event center facilities, including the Moscone Center in San Francisco where approximately 84 percent of events last three or more days. Daily event attendance typically peaks during a ‘mid-event day’ rather than the first or last day, as not all event attendees attend every day of a multi-day event.

- Since ITE “Hotel” trip rates do not account for large event space, its event-related trip generation will be quantified using anticipated attendance levels and travel behavior characteristics.

Since the transportation analysis is being conducted for typical weekday AM and PM peak hours, it is expected that hotel event activities at this time would typically consist of business/professional convention or conference events and related activities. This event profile is similar to the typical large event analyzed for the SCC project. Given the similarity in the SCC and hotel event profiles, the following trip generation inputs from the SCC project analysis were used for the hotel project analysis:

- The event space at the hotel would accommodate business/professional activities that attract 2,500 daily attendees.¹³
- Event attendees that are staying overnight at the proposed hotel would have an average room occupancy of 1.2 persons per room.
- 75 percent of all event attendees would arrive at the event space during the AM peak hour, while 80 percent of all event attendees would depart from the event space during the PM peak hour.¹⁴
- External attendee mode share is estimated as follows:
 - Private vehicle trips – 78 percent
 - 95 percent of external attendees traveling by private vehicle would drive and park
 - 5 percent of external attendees traveling by private vehicle would be dropped off
 - Uber/Lyft/Taxi trips – 12 percent
 - Transit trips – 6 percent
 - Walk/bike trips – 4 percent
- Average vehicle occupancy (AVO) for external private vehicle trips would be an estimated 1.4 persons per vehicle.¹⁵
- AVO for external Uber/Lyft/Taxi trips would be an estimated 1.2 persons per vehicle.
- All staff for event activities would arrive prior to guests and depart after guests (i.e., outside of the peak study hours).

For the purposes of the transportation analysis, it is estimated that 50 percent of the 350 available hotel rooms would be utilized by event attendees during a design event. This would result in an

¹³ The methodology for determining design event daily attendance is consistent with the approach described in detail in the June 8, 2017 memorandum entitled Sacramento Convention Center Expansion Project Attendance Estimation Approach. This approach assumes utilization of available event space at a rate of 28 persons per thousand square feet (ksf) per day. Daily hotel event attendance is calculated as follows: 70 ksf event space @ 28 persons per ksf = 2,500 persons.

¹⁴ These figures were derived from field observations recorded during SCC events held on May 3, 2017.

¹⁵ This figure was derived from field observations recorded at the parking garage located near 13th/J streets during SCC events held on May 3, 2017.

estimated 210 internal event attendees (i.e., attendees who are also guests at the hotel) and 2,290 external event attendees (i.e., attendees who are residing at home or at another hotel).¹⁶ This is considered conservative because it implies that over 90 percent of event attendees do not stay at the proposed hotel despite attending an all-day event at it.

Since the design event is the middle day of a multi-day event, some of the event attendees would already be present at the hotel during the design event, and would therefore not generate peak hour vehicle trips (i.e., commute trips) during the design event day. It is conservatively estimated that 50 percent of internal event attendees would commute to and from the hotel the day of the design event, while the other 50 percent would already be present on-site. **Table 4.9-8** summarizes the expected trip generation specific to the number of hotel rooms (including guests, employees, deliveries, and other trip-generating activities) based on these estimates.

**TABLE 4.9-8
 PROPOSED HOTEL PROJECT – ROOM-RELATED VEHICLE TRIP GENERATION**

Land Use	ITE Land Use Code	Units	Trip Rates ¹		AM Peak Hour Vehicle Trips			PM Peak Hour Vehicle Trips		
			AM	PM	In	Out	Total	In	Out	Total
Hotel	310	350 rooms	0.53	0.60	109	76	186	107	103	210
Non-Event Guest Trip Generation										
Non-Event Guests Total Trips ²					55	38	93	54	52	105
Non-Automobile Trip Adjustment ³					-5	-4	-9	-5	-5	-10
Non-Event Guests Vehicle Trips Subtotal					50	34	84	49	47	95
Event Guest Trip Generation										
Event Guests Total Trips ⁴					55	38	93	54	52	105
Event Day Adjustment ⁵					-27	-19	-46	-27	-26	-52
<i>Event Day Adjustment Subtotal</i>					<i>28</i>	<i>19</i>	<i>47</i>	<i>27</i>	<i>26</i>	<i>53</i>
Non-Automobile Trip Adjustment ⁶					-3	-2	-5	-3	-3	-6
Event Guests Vehicle Trips Subtotal					24	17	41	24	23	46
Total Vehicle Trips					74	51	125	73	70	141

NOTES:

1. Trip rates for hotel project based on "Hotel" land use category in Trip Generation Manual, 9th Edition (ITE, 2012).
2. Non-event guests represent 50% of total peak hour trips generated by the hotel rooms. Although hotels also generate employee and delivery-related trips, these typically occur in off-peak hours.
3. Calculated based on 90% automobile mode share for non-event guests.
4. Event guests represent 50% of total peak hour trips generated by the hotel rooms.
5. An estimated 50% of event guests who are staying overnight at the hotel would not generate peak hour trips to/from the hotel on a design event day (i.e., they are already present on-site for a multi-day event).
6. Calculated based on 90% automobile mode share for event guests.

SOURCE: Fehr & Peers, 2017.

¹⁶ Calculated as follows: 50% of 350 rooms = 175 rooms for internal event attendees. 175 rooms @ 1.2 persons per room = 210 internal event attendees.

Table 4.9-9 displays the Hotel project’s expected AM and PM peak hour vehicle trip generation. The project would generate approximately 1,446 trips and 1,524 vehicle trips during the AM and PM peak hours, respectively. Of these totals, the event space is responsible for approximately 94 percent of the total peak hour trip generation. These trip generation totals reflect the subtraction of approximately 28 and 55 trips during the AM and PM peak hours, respectively, due to the elimination of the existing on-site surface parking lot.

**TABLE 4.9-9
 PROPOSED HOTEL PROJECT ROOM & HOTEL EVENT SPACE VEHICLE TRIP GENERATION**

Land Use	Units	AM Peak Hour Vehicle Trips			PM Peak Hour Vehicle Trips		
		In	Out	Total	In	Out	Total
Hotel ¹	350 rooms	74	51	125	73	70	141
Hotel Event Space	2,290 external event attendees ²	1,129	220	1,349	234	1,204	1,438
Existing Surface Lot ³	73 parking spaces	-27	-7	-28	-5	-50	-55
Total Vehicle Trips		1,176	264	1,446	302	1,224	1,524

NOTES:

1. Trip generation directly related to hotel operations calculated in previous table.
2. Calculated as follows: 50% of 350 rooms = 175 rooms for internal event attendees. 175 rooms @ 1.2 persons per room = 210 internal event attendees. 2,500 daily event attendees – 210 internal event attendees = 2,290 external event attendees. External event attendee mode share of 78% private vehicle, 12% Uber/Lyft/Taxi, 6% transit, and 4% walk/bike. AVO of 1.4 persons per vehicle for private vehicle trips and 1.2 persons per vehicle for Uber/Lyft/Taxi trips. AM peak hour captures 75% of attendee arrivals and PM peak hour captures 80% of attendee departures. Calculations include outbound AM peak hour and inbound PM peak hour “driver” trips for private vehicle and Uber/Lyft/Taxi pick-ups and drop-offs. Internal event attendee trip generation is captured by the Hotel trip generation calculations.
3. Peak hour trip rates derived from driveway counts at existing surface lot on Wednesday, July 19, 2017.

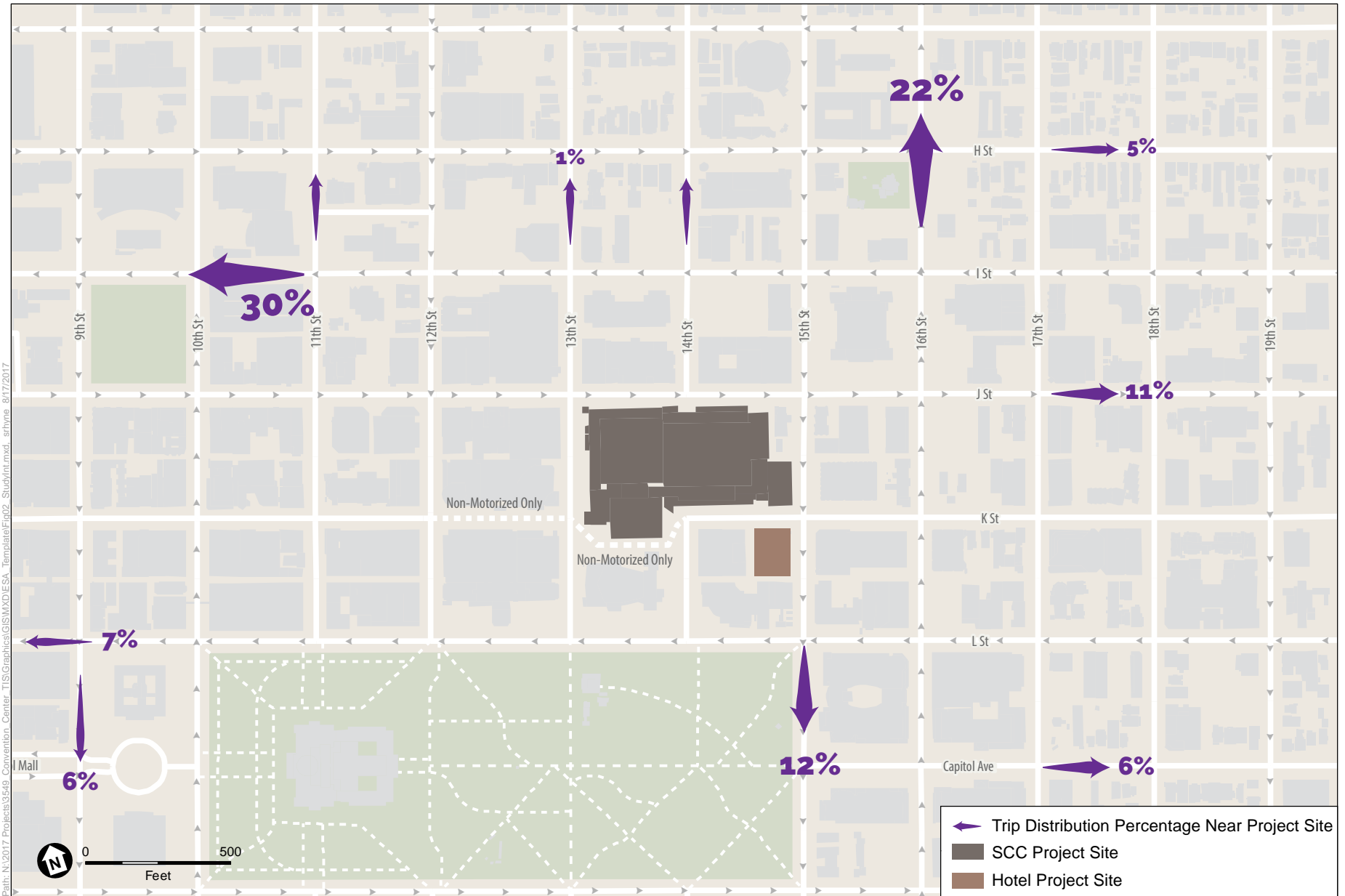
SOURCE: Fehr & Peers, 2017.

Trip Distribution/Assignment

The following section provides a description of the vehicle trip distribution forecasts.

SCC Project

The vehicle trip distribution for local event attendees was determined based on an evaluation of travel origins and destinations using the regional travel demand model. An analysis was conducted for all home-based-work trips within the model that had destinations in downtown Sacramento to estimate the spatial distribution of vehicle trip origins (i.e., home locations) and the anticipated travel routes for SCC project local event attendees. The trip distribution of downtown Sacramento employees reasonably approximates that for local event attendees because, generally, the SCC attracts local event attendees based on the distribution of the adult population throughout the region, similar to how downtown Sacramento employers attract employees from throughout the region. **Figures 4.9-11 and 4.9-12** show the distribution of inbound and outbound vehicle trips for the SCC expansion.



SOURCE: Fehr & Peers, 2017

Sacramento Convention Center Renovation and Expansion and 15th/K Street Hotel EIR

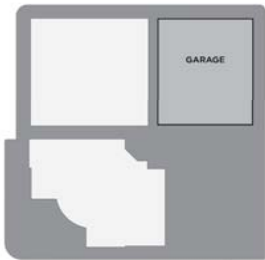
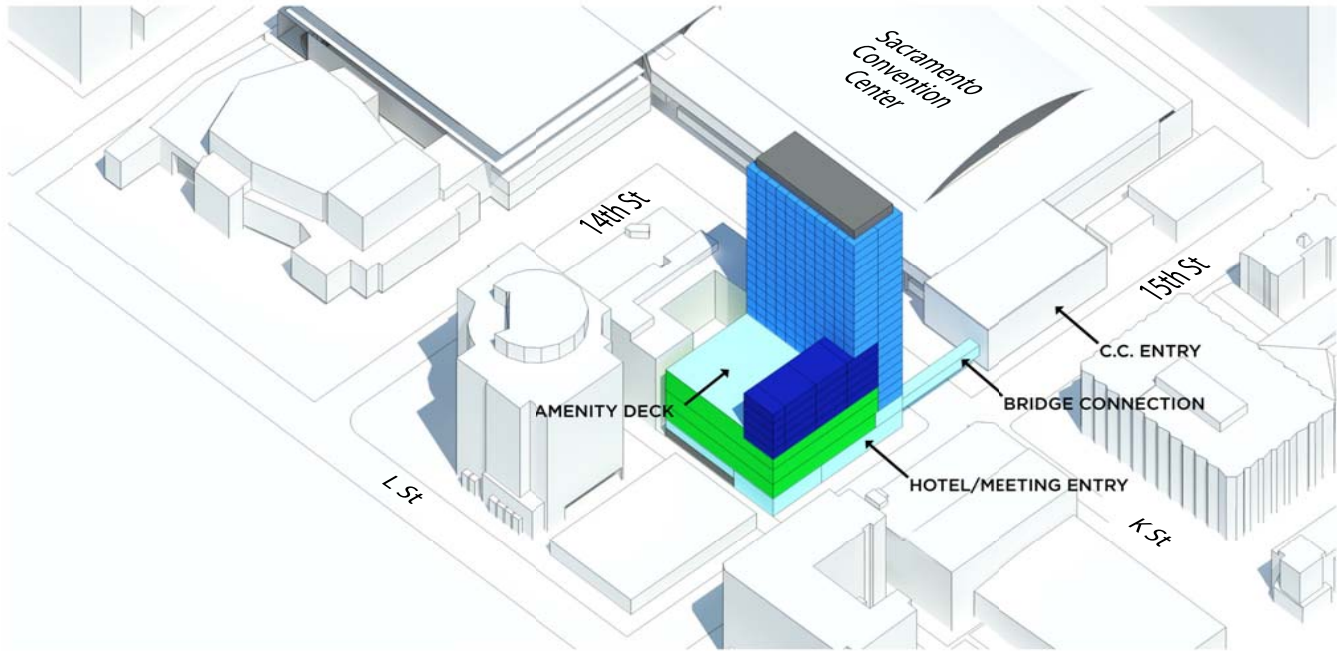
Figure 4.9-11

Distribution of Outbound Vehicle Trips -
Baseline Plus SCC Project Conditions

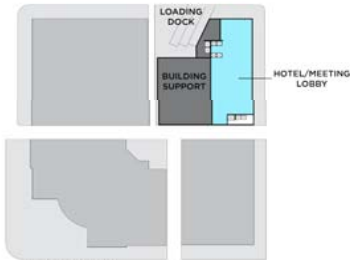
N:\2017 Projects\3549_Convention_Center_TIS\Graphics\Fig10_Hotel_SitePlan.ai

PROGRAM AREA SF

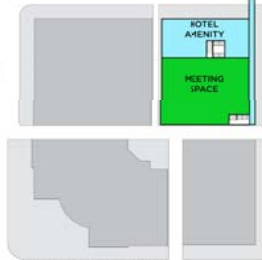
HOTEL BAYS	350 KEYS
170,000 SF	
MEETING SPACE	70,000 GSF
4 LVLS	
BUILDING AMENITIES	120,000 GSF
SERVICE + LOADING	15,000 GSF
PARKING	200 SPACES
65,000 SF	<small>*MORE MAY BE NEEDED DEPENDING ON CITY ORDINANCES</small>
375,000 GSF EXCLUDING PARKING	



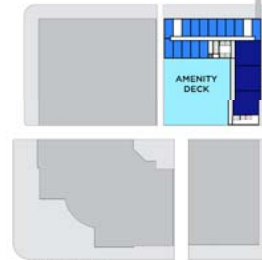
UNDERGROUND PARKING (2 LEVELS)



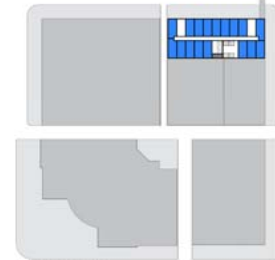
GROUND LEVEL



MEETING SPACE + HOTEL



HOTEL LEVEL



HOTEL LEVEL

SOURCE: City of Sacramento

Sacramento Convention Center Renovation and Expansion and 15th/K Street Hotel EIR

Figure 4.9-12
Hotel Project Conceptual Plan



Since the vast majority of non-local event attendee trips to/from the SCC facility would be made by non-auto travel modes, a vehicular trip distribution estimate for non-local event attendees is not applicable.¹⁷ However, short trips made by non-local attendees is considered in the analysis.

The regional travel demand model was used to assign vehicle trips through the study intersections via the following steps:

1. Project vehicle trips were assigned into various garages and surface lots based on the amount of available parking in each facility, location of each facility (relative to trip origin and the SCC), and walk distance to the SCC lobbies. The assignment process considered the origin and destination of trips to approximate likely driver parking location decisions (i.e., trips from the west will likely park west of the SCC).
2. A trip table (matrix) was created to assign inbound and outbound vehicle trips between the TAZs and a series of newly created TAZs that represent parking surrounding the SCC.
3. The regional travel demand model assigned project trips to various freeways and surface streets. This process allows for the traffic model to keep account of the volume and routing of trips and predicts trip diversions resulting from increases in congestion. The trip assignment patterns were reviewed for reasonableness with minor rerouting of trips to shorter/less congested paths. These trips are then added to the Baseline No Project scenario to yield the Baseline Plus SCC Project scenario.

Event-related staff trip distribution is estimated to be the same as the trip distribution for local attendees. This represents a typical distribution of home-based-work trips for downtown Sacramento employees.

Hotel Project

Hotel guest, employee, and event attendee project trips were distributed and assigned to the roadway network utilizing the same process described for the SCC project trips. The primary difference between the two processes was the assignment of hotel guest and internal event attendee trips to the on-site parking garage instead of the public parking supply surrounding the project site. External event attendees and hotel employees were assigned to off-site public parking similar to SCC event attendees and employees.

Vehicle Miles of Travel (VMT)

This section provides estimates of the daily VMT that would be generated by the proposed SCC and Hotel projects under each of the analysis scenarios. A comparison of the VMT generated by each analysis scenario is provided in **Table 4.9-10**. It is important to note that these daily VMT estimates represent a worst-case scenario where large events are held at both the SCC and Hotel

¹⁷ Many non-local event attendees may drive from their residence to a hotel near the SCC facility. But since the analysis event scenario is focusing on a ‘mid-event day’ in which attendance is greatest, these trips typically do not occur on this day. It is possible that some non-local event attendees will travel, for example, from a remote origin to a hotel near the SCC during the middle day of a conference. However, SCC staff does not possess any data to estimate the frequency of such activities, nor their mode split or trip origin locations (i.e., need for trip length to estimate VMT) of such trips. Moreover, analysts typically classify such a trip and its vehicle miles of travel (VMT) as attributable to the hotel.

project sites. It is not expected that these VMT totals would occur on a daily basis throughout the year, as events with fewer attendees would generate less VMT.

TABLE 4.9-10
DAILY VMT SUMMARY – SCC PROJECT AND HOTEL PROJECT

Analysis Scenario	Daily VMT	SCC Project Daily VMT	Hotel Project Daily VMT
Baseline No Project	76,367	--	--
Baseline Plus SCC Project	103,515	27,148	--
Baseline Plus SCC Project and Hotel Project	167,756	--	64,241
Cumulative No Project	74,796	--	--
Cumulative Plus SCC Project	101,383	26,587	--
Cumulative Plus SCC Project and Hotel Project	164,349	--	62,967

NOTE: Analysis scenarios including the SCC and Hotel projects assume a maximum event at each facilities' respective event space.
 SOURCE: Fehr & Peers, 2017.

As shown in Table 4.9-10, daily VMT would increase with the completion of both the SCC and Hotel projects compared to ‘no project’ analysis scenarios. This is consistent with the inherent nature of each project as an activity generator and trip attractor, particularly for trips outside of the region that may exhibit longer average trip lengths (that in turn contribute to VMT).

Although detailed VMT analysis was not conducted for project alternatives, it is reasonable to expect that the urban setting of the proposed projects would yield lower VMT than project alternatives¹⁸ located elsewhere in the Sacramento region for the following reasons:

- Proposed projects would have access to a greater variety of non-automobile travel modes by virtue of being located at the heart of the regional transit system and within close proximity to extensive bicycle and pedestrian networks. This reduced reliance on automobile travel would yield fewer vehicle trips than alternative locations where multi-modal transportation options are lacking.
- Proposed projects would have synergistic qualities with surrounding land uses that would reduce the length of vehicle trips and allow for a greater share of trips to be completed via transit, walking, and biking. For example, the proximity of the SCC to nearby hotels would allow for event attendees to lodge within close travel distance to the SCC facility, resulting in a high share of walking trips, or for event attendees who elect to drive or rideshare, a short vehicle trip. Similarly, the proximity of the proposed Hotel project and nearby restaurants would allow for hotel guests to walk to dinner, versus a less walkable environment where it is more likely that this trip would be completed via automobile. Although a vehicle trip may be required to access the project site, once within the downtown Sacramento area, many ancillary trips could be completed without a vehicle.

¹⁸ Includes comparable facilities of similar size, programming, and functionality to those of the proposed SCC and hotel projects. Additionally, includes comparable facilities that would host events of similar size, type, duration, and frequency to those expected to be held at the proposed SCC and hotel projects.

Baseline Analysis

This section describes the transportation conditions for the following scenarios:

- Baseline No Project
- Baseline Plus SCC Project
- Baseline Plus SCC Project and Hotel Project

A Baseline scenario was established in order to evaluate travel conditions at the SCC facility under a ‘worst-case’ scenario when the greatest number of event attendees are traveling to and from the site on a given design day. The methodology for establishing the Baseline scenario is discussed below.

Baseline No Project Conditions

The Baseline No Project scenario does not assume any land use or transportation network changes from existing conditions. However, it does assume the full utilization of the SCC facility under its current configuration. This differs from the existing conditions analysis, which evaluates a smaller, more ‘typical’ event at the existing SCC facility as observed on May 3, 2017. Due to study time constraints, it was not possible to defer collection of existing counts until a suitable full utilization event of the SCC facility was scheduled to occur.

The Baseline No Project daily attendance total was derived from historic 2015 SCC event data for design event days as previously defined. According to these data, the single largest daily attendance total on a design event day (i.e., weekday, 8 AM event start/5 PM event conclusion) was 6,367 persons. Therefore, the Baseline No Project scenario assumes a design event at the existing SCC facility with 6,367 persons. This maximum design event experienced a higher than normal SCC event space utilization, with approximately 38 persons per square foot. This is 10 persons per square foot higher than the SCC space utilization during a typical design event (i.e., 28 persons per square foot, the space utilization estimate used to calculate the SCC project event attendance). Therefore, use of the maximum design event to establish a Baseline scenario is a conservative approach for evaluating transportation impacts associated with the SCC.

Table 4.9-11 provides a comparison of this ‘maximum weekday event’ to other typical SCC events in terms of daily attendance. As shown in Table 4.9-11, SCC events of this size total nearly 5,000 persons greater than the average SCC daily design event attendance.

**TABLE 4.9-11
 SCC DAILY DESIGN EVENT ATTENDANCE TRENDS**

Event Profile	Daily Attendance	Daily Attendance Percentile
Maximum Weekday Event (Baseline Conditions)	6,367 persons	100 th
May 3, 2017 Observed Event (Existing Conditions)	2,839 persons	91 st
Average Event	1,380 persons	62 nd

SOURCE: Sacramento Convention Center, Fehr & Peers, 2017.

Figure 4.9-13 displays the Baseline No Project AM and PM peak hour traffic volumes, controls, and lane configurations at the study intersections. These volumes were developed by layering the SCC attendee trips generated by a ‘maximum weekday event’ onto the existing roadway network. The travel characteristics of the additional Baseline SCC event attendees were estimated using a similar approach to that utilized to determine SCC project attendee trip generation, mode split, trip distribution, and trip assignment. This forecasting procedure allows for the potential redistribution of some trips to other roadways in response to changes in traffic levels and congestion.

Table 4.9-12 presents Baseline No Project traffic volumes for the AM and PM peak hours at key roadway segments within the study area. Major inbound and outbound routes, including J Street, 15th Street, and 16th Street, carry the greatest volumes of traffic (than under existing conditions) during the AM and PM peak hours under Baseline No Project conditions. On average, PM peak hour volumes are 24 percent greater than AM peak hour volumes.

**TABLE 4.9-12
 PEAK HOUR TRAFFIC VOLUMES – BASELINE NO PROJECT CONDITIONS**

Roadway Segment ¹	AM Peak Hour	PM Peak Hour
	Volume	Volume
I Street west of 16 th Street	1,290	930
I Street east of 12 th Street	940	1,370
J Street east of 12 th Street	2,120	1,700
J Street east of 15 th Street	1,110	1,650
K Street east of 15 th Street	255	410
L Street west of 16 th Street	895	790
L Street west of 13 th Street	871	905
12 th Street south of I Street	810	650
13 th Street south of J Street	420	500
15 th Street south of I Street	700	1,070
15 th Street south of L Street	714	1,640
16 th Street north of L Street	1,330	1,640
16 th Street north of I Street	1,000	2,160

NOTE:

1. Traffic volumes represent two-way totals.

SOURCE: Fehr & Peers, 2017.

Table 4.9-13 displays the LOS and average delay at each study intersection under Baseline No Project conditions for each peak hour. As shown in Table 4.9-13, all signalized study intersections operate at LOS D or better under Baseline No Project conditions.

**TABLE 4.9-13
 INTERSECTION OPERATIONS – BASELINE NO PROJECT CONDITIONS**

Intersection	Control Type	AM Peak Hour		PM Peak Hour	
		Avg Delay	LOS	Avg Delay	LOS
1 I Street / 12 th Street	Signal	16	B	14	B
2 I Street / 13 th Street	Signal	6	A	16	B
3 I Street / 14 th Street	Signal	2	A	6	A
4 I Street / 15 th Street	Signal	8	A	12	B
5 I Street / 16 th Street	Signal	9	A	23	C
6 J Street / 12 th Street	Signal	35	C	26	C
7 J Street / 13 th Street	Signal	29	C	45	D
8 J Street / 14 th Street	Signal	7	A	18	B
9 J Street / 15 th Street	Signal	9	A	12	B
10 J Street / 16 th Street	Signal	7	A	18	B
11 K Street / 12 th Street	Signal	5	A	6	A
12 K Street / 13 th Street	Uncontrolled	11	B	4	A
13 K Street / 15 th Street	Signal	7	A	27	C
14 K Street / 16 th Street	Signal	16	B	30	C
15 L Street / 13 th Street	Side Street Stop	2 (11)	A (B)	4 (18)	A (C)
16 L Street / 14 th Street	Uncontrolled	2	A	2	A
17 L Street / 15 th Street	Signal	11	B	27	C
18 Kayak Alley / 14 th Street	Side Street Stop	1 (3)	A (A)	1 (4)	A (A)
19 Kayak Alley / 15 th Street	Side Street Stop	1 (13)	A (B)	11 (48)	B (E)

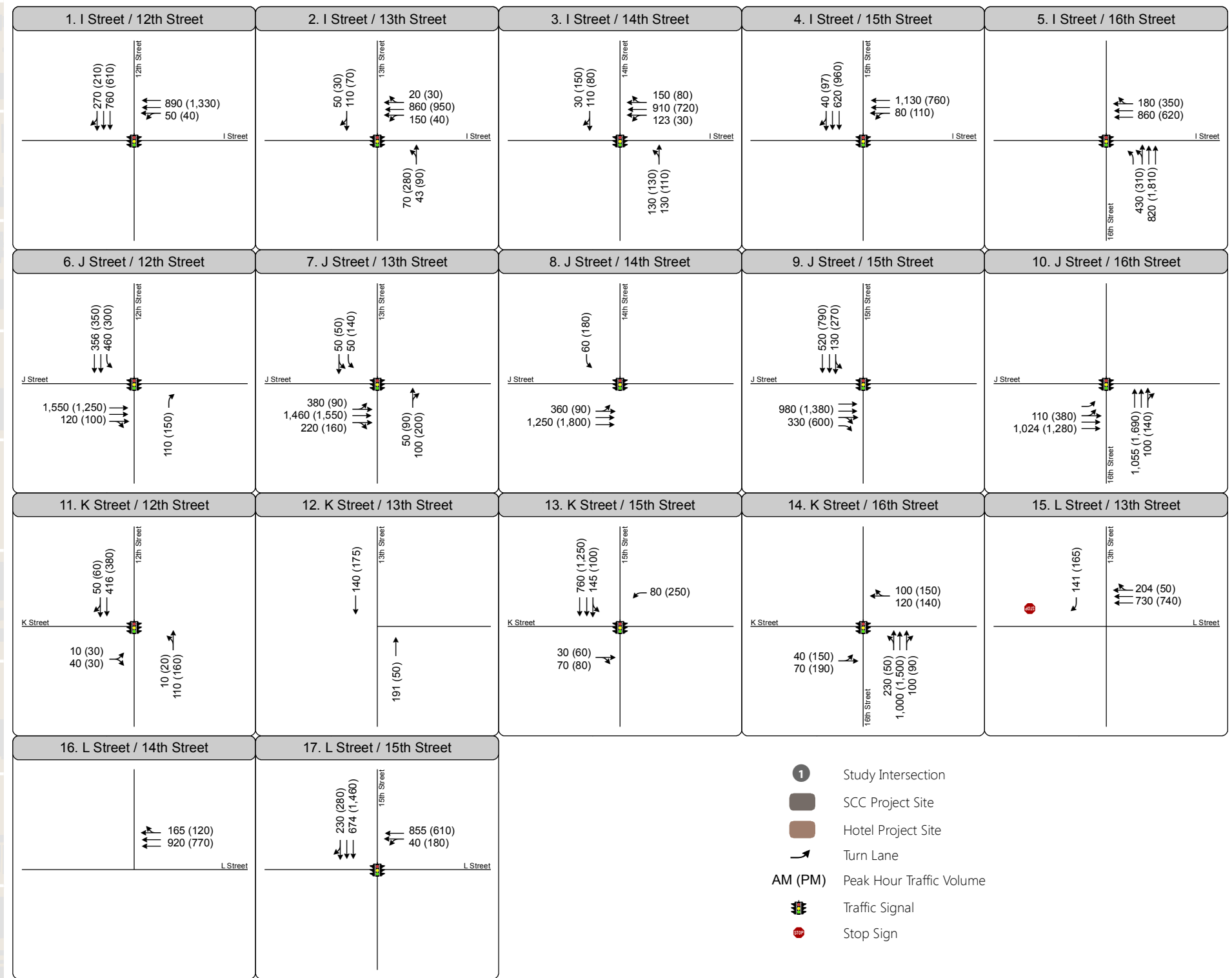
NOTES:

1. For signalized and uncontrolled intersections, average intersection delay is reported in seconds per vehicle for all approaches
2. For side-street stop controlled intersections, LOS and average delay for the movement with the most delay are reported in parentheses along with the overall intersection delay.

SOURCE: Fehr & Peers, 2017.

Baseline Plus SCC Project Conditions

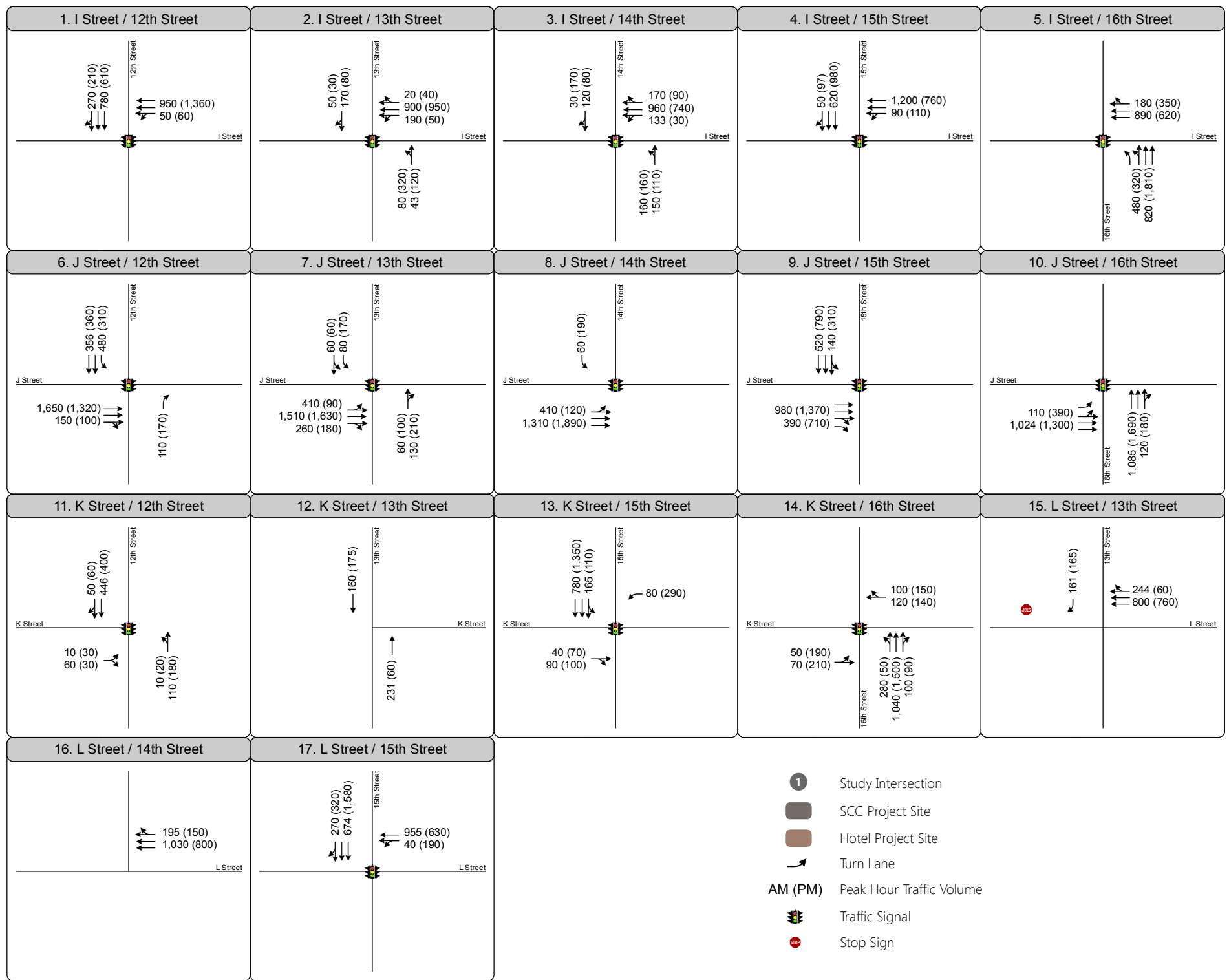
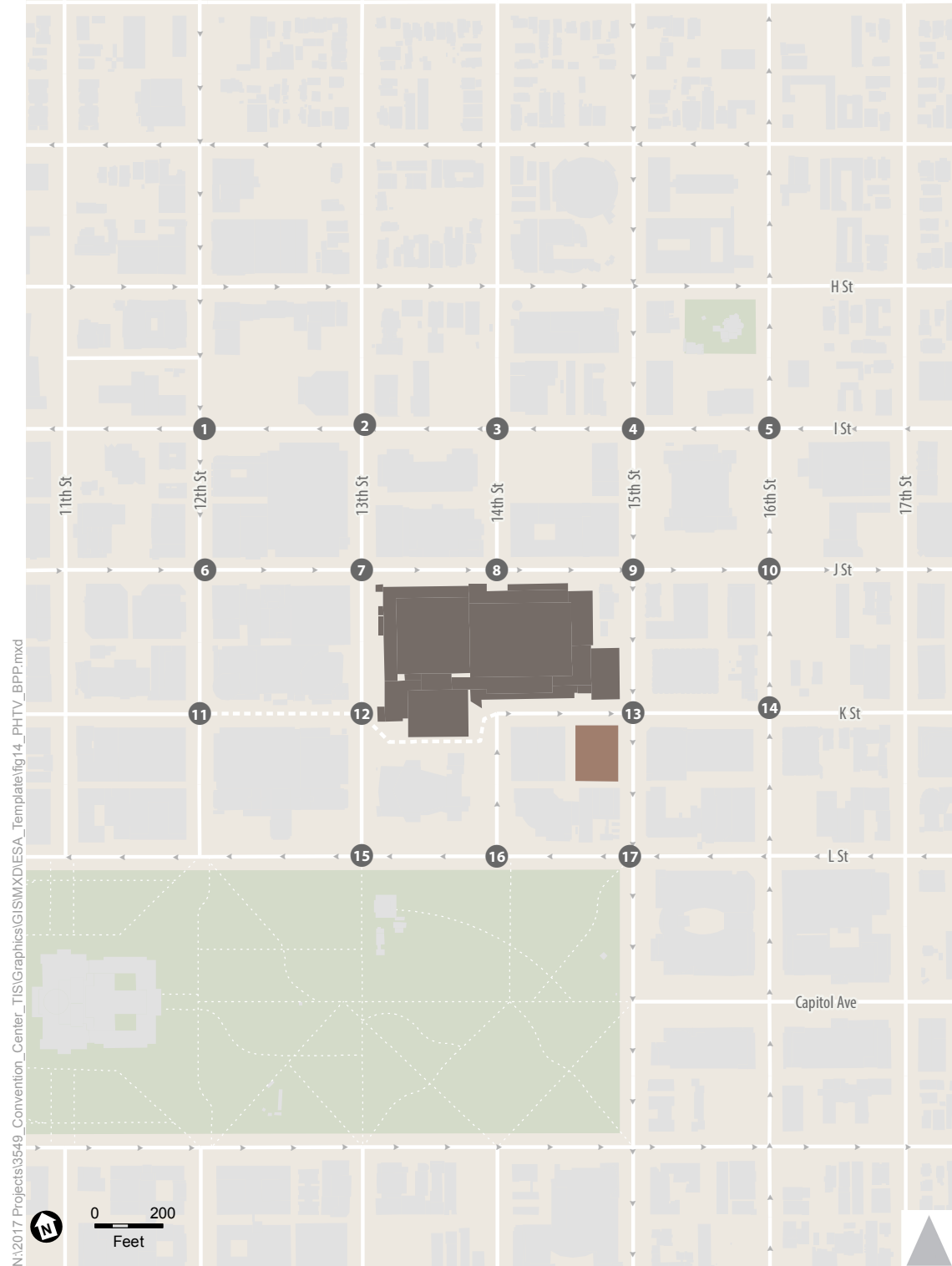
Figure 4.9-14 displays the Baseline Plus SCC Project scenario AM and PM peak hour traffic volumes, controls, and lane configurations at the study intersections. These volumes were developed by layering the SCC attendee trips generated by the proposed SCC project onto the existing roadway network.



SOURCE: Fehr & Peers, 2017

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Figure 4.9-13
Weekday AM and PM Peak Hour Traffic Volumes and Lane Configurations - Baseline No Project Conditions



SOURCE: Fehr & Peers, 2017

Sacramento Convention Center Renovation and Expansion and 15th/K Street Hotel EIR

Figure 4.9-14
Weekday AM and PM Peak Hour Traffic Volumes and Lane Configurations - Baseline Plus SCC Project Conditions

Table 4.9-14 compares Baseline No Project and Baseline Plus SCC Project traffic volumes for the AM and PM peak hours at key roadway segments within the study area. Key findings from this table include the following:

- On average, the AM and PM peak hour volumes would increase by six percent and three percent, respectively, between Baseline No Project and Baseline Plus SCC Project conditions.
- The largest increases in volume from Baseline No Project conditions would occur on J Street east of 12th Street (120 added vehicles during the AM peak hour, 100 added vehicles during the PM peak hour), L Street west of 16th Street (100 vehicles during the AM peak hour), and 15th Street south of L Street (130 added vehicles during the PM peak hour).
- The greatest increases in traffic volumes would be concentrated on roadway segments adjacent to major parking facilities utilized by SCC attendees, including K Street east of 15th Street, 13th Street south of J Street, and J Street east of 12th Street. These parking locations would attract an increased number of vehicle trips due to the additional SCC attendees generated by the project. Increased volumes would also occur on routes utilized by vehicles that pick up and drop off SCC attendees, including J Street and 15th Street.

**TABLE 4.9-14
PEAK HOUR TRAFFIC VOLUME COMPARISON – BASELINE NO PROJECT AND BASELINE PLUS SCC PROJECT CONDITIONS**

Roadway Segment	Baseline No Project Conditions		Baseline Plus SCC Project Conditions			
	AM Peak Hour	PM Peak Hour	AM Peak Hour		PM Peak Hour	
	Volume	Volume	Volume	% Change	Volume	% Change
I Street west of 16 th Street	1,290	930	1,370	6%	940	1%
I Street east of 12 th Street	940	1,370	1,000	6%	1,420	4%
J Street east of 12 th Street	2,120	1,700	2,240	6%	1,800	6%
J Street east of 15 th Street	1,110	1,650	1,120	1%	1,680	2%
K Street east of 15 th Street ¹	255	410	285	12%	470	13%
L Street west of 16 th Street	895	790	995	11%	820	4%
L Street west of 13 th Street	871	905	961	10%	925	2%
12 th Street south of I Street	810	650	830	2%	670	3%
13 th Street south of J Street ¹	420	500	510	21%	550	9%
15 th Street south of I Street	700	1,070	710	1%	1,090	2%
15 th Street south of L Street	714	1,640	714	0%	1,750	6%
16 th Street north of L Street	1,330	1,640	1,420	7%	1,640	0%
16 th Street north of I Street	1,000	2,160	1,000	0%	2,160	0%

NOTE:

1. Traffic volumes represent two-way totals.

SOURCE: Fehr & Peers, 2017.

Table 4.9-15 displays the LOS and average delay at each study intersection under Baseline Plus SCC Project conditions. No changes in lane configurations or signal timing from existing conditions were assumed. Increases in pedestrian crosswalk movements were made at intersections commensurate with parking garage use, nearby hotels, nearby transit stations, and available sidewalks/crosswalks.

**TABLE 4.9-15
 INTERSECTION OPERATIONS – BASELINE PLUS SCC PROJECT CONDITIONS**

Intersection	Control Type	Baseline No Project Conditions				Baseline Plus SCC Project Conditions				
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		
		Avg Delay	LOS	Avg Delay	LOS	Avg Delay	LOS	Avg Delay	LOS	
1	I Street / 12 th Street	Signal	16	B	14	B	17	B	15	B
2	I Street / 13 th Street	Signal	6	A	16	B	7	A	19	B
3	I Street / 14 th Street	Signal	2	A	6	A	7	A	8	A
4	I Street / 15 th Street	Signal	8	A	12	B	9	A	12	B
5	I Street / 16 th Street	Signal	9	A	23	C	9	A	19	B
6	J Street / 12 th Street	Signal	35	C	26	C	38	D	51	D
7	J Street / 13 th Street	Signal	29	C	45	D	38	D	55	E
8	J Street / 14 th Street	Signal	7	A	18	B	8	A	19	B
9	J Street / 15 th Street	Signal	9	A	12	B	10	A	12	B
10	J Street / 16 th Street	Signal	7	A	18	B	7	A	16	B
11	K Street / 12 th Street	Signal	5	A	6	A	5	A	6	A
12	K Street / 13 th Street	Uncontrolled	11	B	4	A	54	F	8	A
13	K Street / 15 th Street	Signal	7	A	27	C	8	A	26	C
14	K Street / 16 th Street	Signal	16	B	30	C	19	B	29	C
15	L Street / 13 th Street	Side Street Stop	2 (11)	A (B)	4 (18)	A (C)	4 (14)	A (B)	6 (26)	A (D)
16	L Street / 14 th Street	Uncontrolled	2	A	2	A	2	A	2	A
17	L Street / 15 th Street	Signal	11	B	27	C	14	B	30	C
18	Kayak Alley / 14 th Street	Side Street Stop	1 (3)	A (A)	1 (4)	A (A)	1 (3)	A (A)	1 (4)	A (A)
19	Kayak Alley / 15 th Street	Side Street Stop	1 (13)	A (B)	11 (48)	B (E)	2 (16)	A (C)	11 (43)	B (E)

NOTES:

LOS F is allowed at intersections located in the Core Area of the City, per General Plan Policy M 1.2.2(a). Therefore, they are not highlighted in the above table.

1. For signalized and uncontrolled intersections, average intersection delay is reported in seconds per vehicle for all approaches
2. For side-street stop controlled intersections, LOS and average delay for the movement with the most delay are reported in parentheses along with the overall intersection delay.

SOURCE: Fehr & Peers, 2017.

Averaged across all study intersections, the SCC project would cause an average increase in vehicle delay of four seconds during the AM peak hour and three seconds during the PM peak hour. The majority of the delay increase would occur along the J Street corridor. The following summarizes the meaningful changes in intersection operations during each peak hour:

- **AM Peak Hour** – The project would degrade operations at the K Street/13th Street intersection from LOS B to LOS F. This degradation could be attributed to an increase in vehicles accessing parking facilities located on 13th Street in addition to heavy event pedestrian flows crossing 13th Street at K Street.
- **PM Peak Hour** – The project would degrade operations from LOS D to LOS E during the PM peak hour at the J Street/13th Street intersection. The J Street/12th Street and J Street/13th Street intersections would experience a combined increase of 44 seconds of delay for eastbound movements.

Figure 4.9-15 displays estimated PM peak hour pedestrian flows on sidewalks surrounding the SCC under Baseline Plus SCC Project conditions. The figure also shows a comparison to Baseline No Project pedestrian flows. PM peak hour pedestrian volumes are shown here and utilized for the pedestrian analysis because they would be higher than the AM peak hour pedestrian volumes due to SCC event arrival and departure patterns. An estimated 75 percent of event attendees would arrive in downtown Sacramento for SCC events during the AM peak hour, while 80 percent would depart during the PM peak hour. An even greater share of event attendees would depart the SCC facility during the PM peak hour and walk to other downtown Sacramento destinations (e.g., for dinner, professional networking) before departing downtown altogether outside of the PM peak hour.

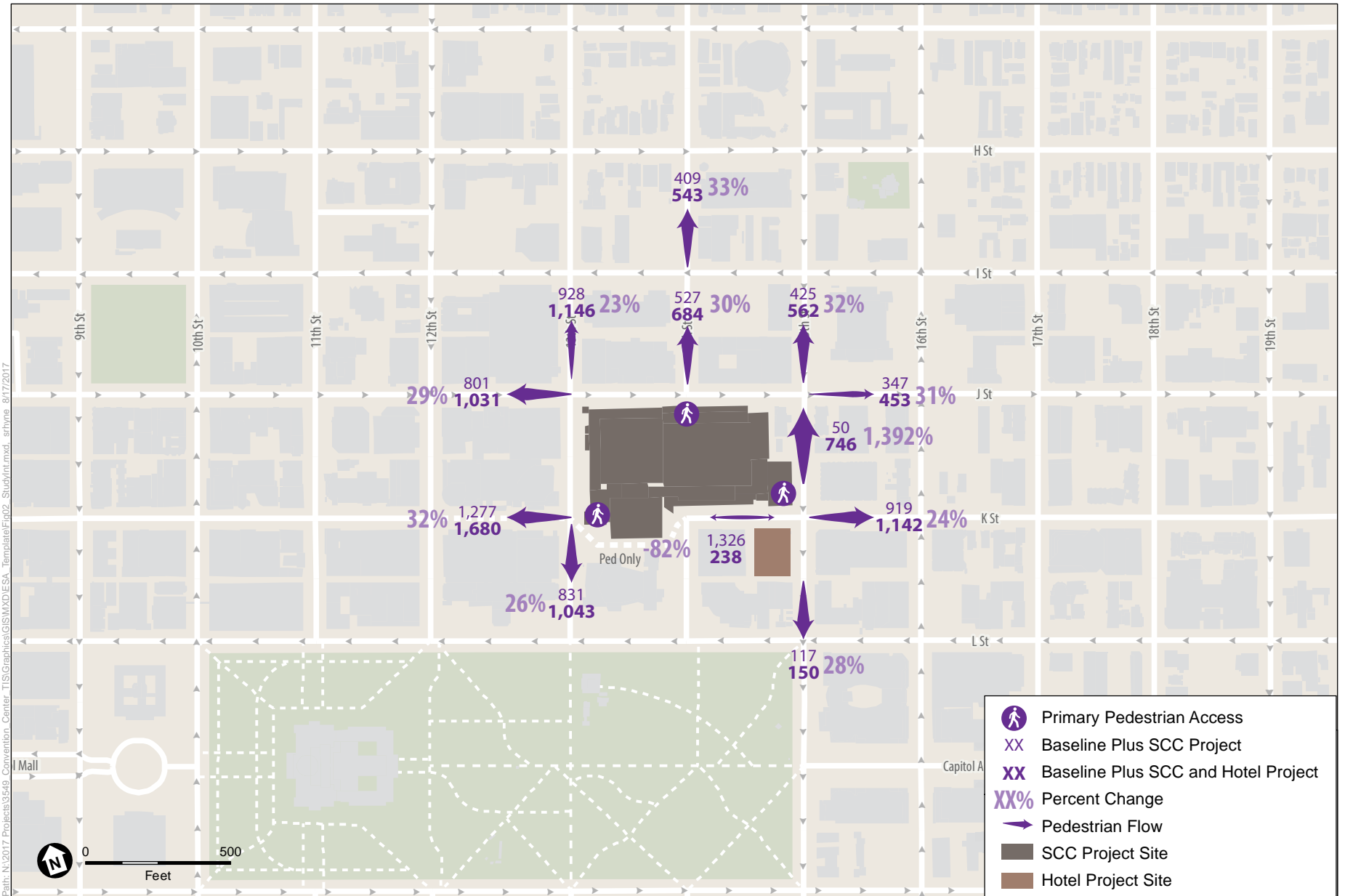
The SCC project would affect pedestrian flows in the following ways:

- Project generated attendees would increase pedestrian flows between the SCC and nearby parking areas, transit stations, and hotels.
- The addition of the East Lobby would redistribute pedestrian flows on the eastern edge of the project site by providing a direct point of access on 15th Street for event attendees traveling to and from locations east of the SCC. The availability of the East Lobby would decrease pedestrian flows on K Street between 14th Street and 15th Street and increase pedestrian flows on 15th Street between J Street and K Street.

Tables 4.9-16 and 17 presents the pedestrian volumes and LOS for crosswalks and sidewalks, respectively, which are expected to be used to a significant degree by the SCC project. Several crosswalks are expected to have pedestrian flow rates that are worse than the HCM's recommendation of LOS D for platooned flow. These locations include:

- J Street/13th Street – All legs
- J Street/14th Street – East leg
- K Street/15th Street – North leg

No sidewalks would operate at unacceptable levels.



SOURCE: Fehr & Peers, 2017

NOTE: Pedestrian flows represent two-way flows on sidewalks.

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Figure 4.9-15

**TABLE 4.9-16
PEAK HOUR CROSSWALK PEDESTRIAN VOLUMES AND LOS – BASELINE PLUS SCC PROJECT CONDITIONS**

Crossing Location	Leg ¹	Legal (Improper) ⁴ Crossing Type					
		AM Peak Hour			PM Peak Hour		
		Pedestrians	Pedestrian Flow Rate (ped/minute/ft) ²	LOS	Pedestrians	Pedestrian Flow Rate (ped/minute/ft) ²	LOS
J Street / 13 th Street	North	628	14 (7)	E (D)	775	17 (9)	E (D)
	South	761	17 (9)	E (D)	995	22 (11)	F (E)
	East	506	11 (6)	E (D)	680	15 (8)	E (D)
	West	628	14 (8)	E (D)	775	17 (9)	E (D)
J Street / 14 th Street	North	100	1 (1)	B (B)	100	1 (0)	B (A)
	East	505	12 (7)	E (D)	609	7 (4)	D (C)
	West	132	3 (2)	C (B)	245	3 (2)	C (B)
J Street / 15 th Street	North	45	1 (0)	B (A)	118	2 (1)	B (B)
	South	122	2 (1)	B (B)	409	6 (3)	C (B)
	East	45	1 (0)	B (A)	117	2 (1)	B (B)
	West	419	7 (3)	D (B)	586	10 (4)	D (C)
K Street / 13 th Street	-	1,631	2 (2)	B (B)	3,007	4 (4)	C (C)
K Street / 15 th Street	North	470	7 (3)	D (C)	886	12 (6)	E (C)
	South	393	6 (3)	C (B)	594	8 (4)	D (C)
	East	393	6 (3)	C (B)	594	8 (4)	D (C)
	West	369	5 (2)	C (B)	684	10 (4)	D (C)

NOTES:

1. Locations having great pedestrian flows are shown in the table. "East Leg" refers to the crossing on the east edge of the intersection. "North," "South," "West" legs have similar definitions.
2. Peak hour pedestrian flows are estimates based on parking garage/lot/on-street usage, locations of transit stops, and convention center entrances. Pedestrian flow rate calculated for peak 15-minutes based on a suggested 0.85 PHF per page 23-24 of 2010 HCM.
3. Width of crosswalks based on striping, 10-feet on all legs.
4. Calculations for "improper" crossings based on: additional 2-foot of crossing width within crosswalk, and use of 50% of Flashing Don't Walk by pedestrians to enter the crosswalk.

SOURCE: Fehr & Peers, 2017.

**TABLE 4.9-17
PEAK HOUR SIDEWALK PEDESTRIAN VOLUMES AND LOS – BASELINE PLUS SCC PROJECT CONDITIONS**

Sidewalk Street Segment ¹	Side	Actual Width ² (ft)	Effective Width ² (ft)	AM Peak Hour			PM Peak Hour		
				Pedestrians ³	Pedestrian Flow Rate (ped/minute/ft) ⁴	LOS	Pedestrians ³	Pedestrian Flow Rate (ped/minute/ft) ⁴	LOS
J Street between 12th Street and 13th Street	North	13	5	317	1.2	B	479	1.9	B
J Street between 12th Street and 13th Street	South	13	8	387	0.9	B	552	1.4	B
J Street between 13th Street and 14th Street	North	15	8	127	0.3	A	170	0.4	A
J Street between 13th Street and 14th Street	South	16	8	760	1.9	B	1,005	2.5	B
J Street between 14th Street and 15th Street	South	8	6	135	0.4	A	249	0.8	B
K Street between 12th Street and 13th Street	Mall	40	22.5	655	0.6	B	1,680	1.5	B
13th Street between I Street and J Street	West	16	8	939	2.3	B	1,071	2.6	B
13th Street between J Street and K Street	West	17	9	410	0.9	B	500	1.1	B
13th Street between J Street and K Street	East	12	8.5	507	1.2	B	670	1.5	B
13th Street between K Street and L Street	West	13	4	566	2.8	B	827	4.1	C
13th Street between K Street and L Street	East	8	6.5	142	0.4	A	207	0.6	A
14th Street between I Street and J Street	East	19	10	505	1.0	B	609	1.2	B
15th Street between I Street and J Street	West	15	5	374	1.5	B	468	1.8	B

NOTES:

--" indicates that proposed project dimensions are not currently available based on the level of detail incorporated into the conceptual project design. Therefore, pedestrian flow rates and corresponding LOS results cannot be determined at this time.

1. Sidewalk locations for having greatest pedestrian flows are shown in the table.
2. "Actual Width" of crosswalks based on distance between building / fence / outer edge of sidewalk and curb / planting strip. "Effective Width" of sidewalk subtracts obstruction (such as poles or benches) widths, 2 feet for shy distance away from buildings and 1.5 feet for shy distance away from low walls, fences, or curbs per HCM guidance.
3. Pedestrian volumes estimated based parking garage/lot/on-street usage, locations of transit stops, and convention center entrances.
4. Pedestrian flow rate calculated for peak 15-minutes based on a suggested 0.85 PHF per page 23-24 of 2010 HCM. Shaded cells represent LOS E or F.

SOURCE: Fehr & Peers, 2017.

Baseline Plus SCC Project and Hotel Project Conditions

Figure 4.9-16 displays the Baseline Plus SCC Project and Hotel Project scenario AM and PM peak hour traffic volumes, controls, and lane configurations at the study intersections. These volumes were developed by layering the trips generated by the proposed SCC and Hotel projects onto the existing roadway network. This procedure does not assume any potential street closures or traffic management activities associated with SCC or hotel events.

Table 4.9-18 compares Baseline Plus SCC Project and Baseline Plus SCC Project and Hotel Project traffic volumes for the AM and PM peak hours at key roadway segments within the study area. Key findings from this table include the following:

- On average, the AM and PM peak hour volumes would increase by eight percent and four percent, respectively, between Baseline Plus SCC Project and Baseline Plus SCC Project and Hotel Project conditions.
- The largest increases in volume from Baseline Plus SCC Project conditions would occur on L Street west of 13th Street (239 added vehicles during the AM peak hour), 15th Street south of I Street (140 added vehicles during the AM peak hour), 16th Street north of L Street (140 added vehicles during the AM peak hour), and K Street east of 15th Street (130 added vehicles during the PM peak hour).
- Traffic volume increases would be greatest on roadway segments near the Hotel project site in the eastern portion of the study area. Additional event attendees attracted to the hotel event space would generate more vehicle trips to and from nearby parking areas (e.g., the K Street parking garages) and the on-site hotel loading area. Hotel guests would also generate additional vehicle trips to and from the on-site hotel parking garage.

Table 4.9-19 displays the LOS and average delay at each study intersection under Baseline Plus SCC Project and Hotel Project conditions. No changes in lane configurations or signal timing from existing conditions were assumed. Increases in pedestrian crosswalk movements were made at intersections commensurate with parking garage use, nearby hotels, nearby transit stations, and available sidewalks/crosswalks.

Averaged across all study intersections, the Hotel project would cause an average increase in vehicle delay of three seconds during the AM peak hour and seven seconds during the PM peak hour. The majority of the delay increase would occur along the J Street and K Street corridors. The following summarizes the meaningful changes in intersection operations during each peak hour:

- AM Peak Hour – The project would further degrade LOS F operations at the K Street/13th Street intersection. Average delay would increase from 54 to 63 seconds per vehicle.
- PM Peak Hour – The project would degrade operations at the J Street/12th Street intersection from LOS D to LOS F.

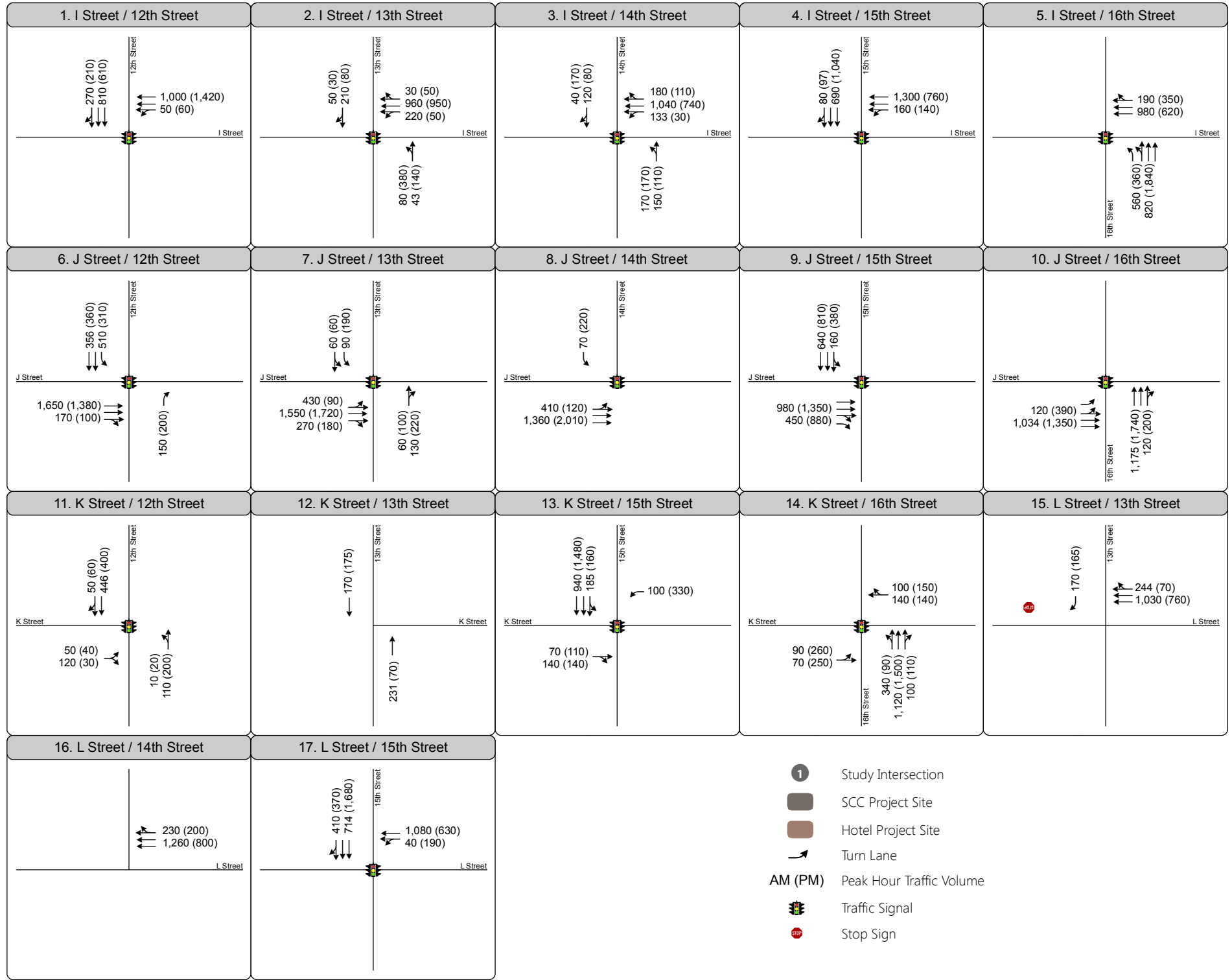
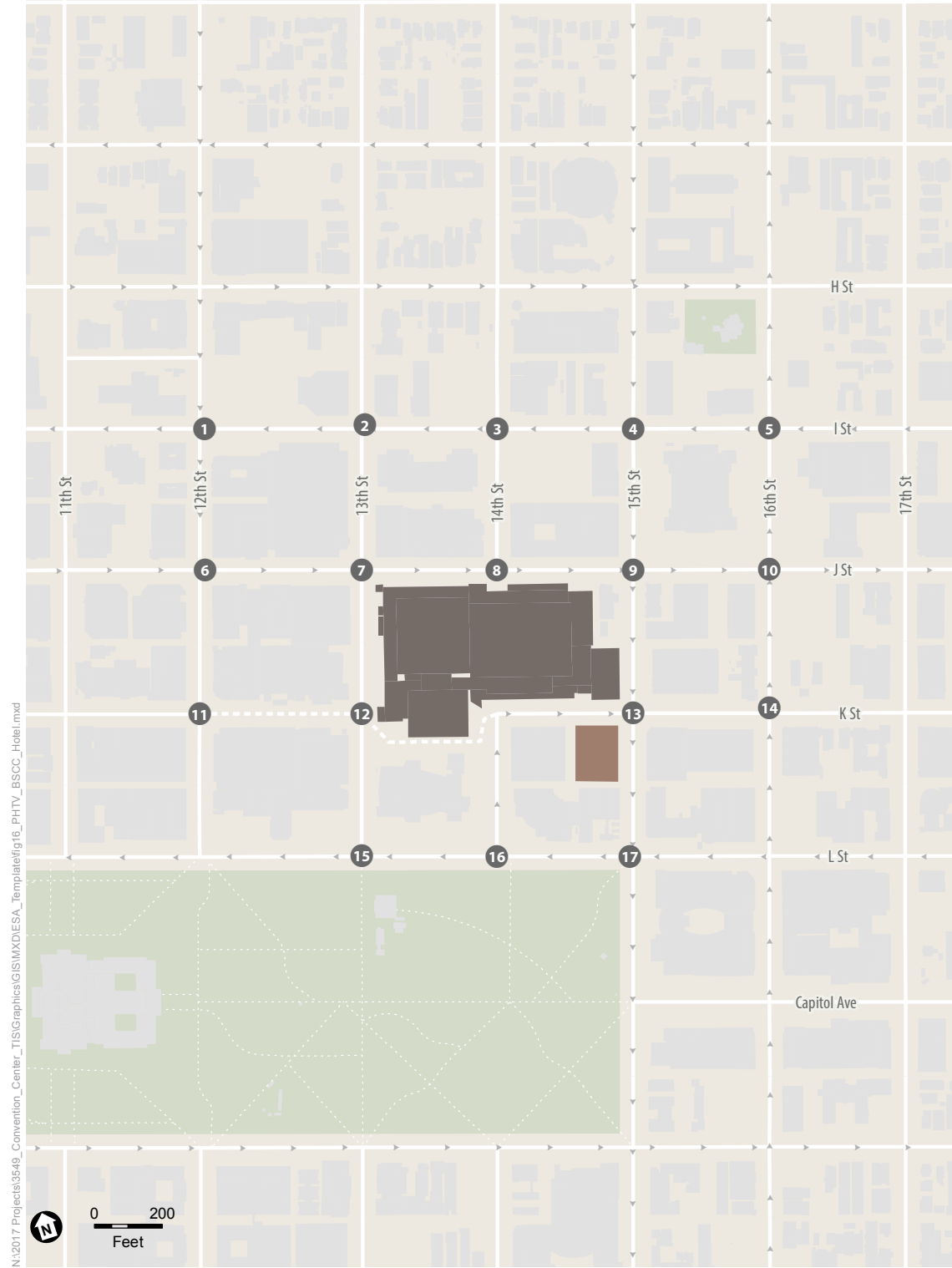
**TABLE 4.9-18
 PEAK HOUR TRAFFIC VOLUME COMPARISON – BASELINE PLUS SCC PROJECT AND BASELINE PLUS SCC
 PROJECT AND HOTEL PROJECT CONDITIONS**

Roadway Segment	Baseline Plus SCC Project Conditions		Baseline Plus SCC Project and Hotel Project Conditions			
	AM Peak Hour	PM Peak Hour	AM Peak Hour		PM Peak Hour	
	Volume	Volume	Volume	% Change	Volume	% Change
I Street west of 16 th Street	1,370	940	1,540	12%	980	4%
I Street east of 12 th Street	1,000	1,420	1,050	5%	1,480	4%
J Street east of 12 th Street	2,240	1,800	2,310	3%	1,890	5%
J Street east of 15 th Street	1,120	1,680	1,140	2%	1,730	3%
K Street east of 15 th Street ¹	285	470	355	25%	600	22%
L Street west of 16 th Street	995	820	1,120	13%	820	0%
L Street west of 13 th Street	961	925	1,200	25%	925	0%
12 th Street south of I Street	830	670	860	4%	670	0%
13 th Street south of J Street ¹	510	550	520	2%	560	2%
15 th Street south of I Street	710	1,090	850	20%	1,180	8%
15 th Street south of L Street	714	1,750	754	6%	1,850	5%
16 th Street north of L Street	1,420	1,640	1,560	10%	1,700	4%
16 th Street north of I Street	1,000	2,160	1,010	1%	2,190	1%

NOTE:

1. Traffic volumes represent two-way totals.

SOURCE: Fehr & Peers, 2017.



SOURCE: Fehr & Peers, 2017

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Figure 4.9-16
Weekday AM and PM Peak Hour Traffic Volumes and Lane Configurations - Baseline Plus SCC and Hotel Projects Conditions

**TABLE 4.9-19
INTERSECTION OPERATIONS – BASELINE PLUS SCC PROJECT AND HOTEL PROJECT CONDITIONS**

Intersection	Control Type	Baseline Plus SCC Project Conditions				Baseline Plus SCC Project and Hotel Project Conditions				
		AM Peak Hour		PM Peak Hour		AM Peak Hour		PM Peak Hour		
		Avg Delay	LOS	Avg Delay	LOS	Avg Delay	LOS	Avg Delay	LOS	
1	I Street / 12 th Street	Signal	17	B	15	B	36	D	27	C
2	I Street / 13 th Street	Signal	7	A	19	B	7	A	21	C
3	I Street / 14 th Street	Signal	7	A	8	A	7	A	8	A
4	I Street / 15 th Street	Signal	9	A	12	B	10	A	16	B
5	I Street / 16 th Street	Signal	9	A	19	B	10	B	20	B
6	J Street / 12 th Street	Signal	38	D	51	D	47	D	90	F
7	J Street / 13 th Street	Signal	38	D	55	E	43	D	65	E
8	J Street / 14 th Street	Signal	8	A	19	B	7	A	22	C
9	J Street / 15 th Street	Signal	10	A	12	B	10	B	18	B
10	J Street / 16 th Street	Signal	7	A	16	B	7	A	16	B
11	K Street / 12 th Street	Signal	5	A	6	A	6	A	7	A
12	K Street / 13 th Street	Uncontrolled	54	F	8	A	63	F	17	C
13	K Street / 15 th Street	Signal	8	A	26	C	10	A	49	D
14	K Street / 16 th Street	Signal	19	B	29	C	24	C	43	D
15	L Street / 13 th Street	Side Street Stop	4 (14)	A (B)	6 (26)	A (D)	8 (22)	A (C)	7 (39)	A (E)
16	L Street / 14 th Street	Uncontrolled	2	A	2	A	4	A	10	A
17	L Street / 15 th Street	Signal	14	B	30	C	20	B	35	C
18	Kayak Alley / 14 th Street	Side Street Stop	1 (3)	A (A)	1 (4)	A (A)	1 (3)	A (A)	6 (13)	A (B)
19	Kayak Alley / 15 th Street	Side Street Stop	2 (16)	A (C)	11 (43)	B (E)	2 (13)	A (B)	14 (93)	B (F)

NOTES:

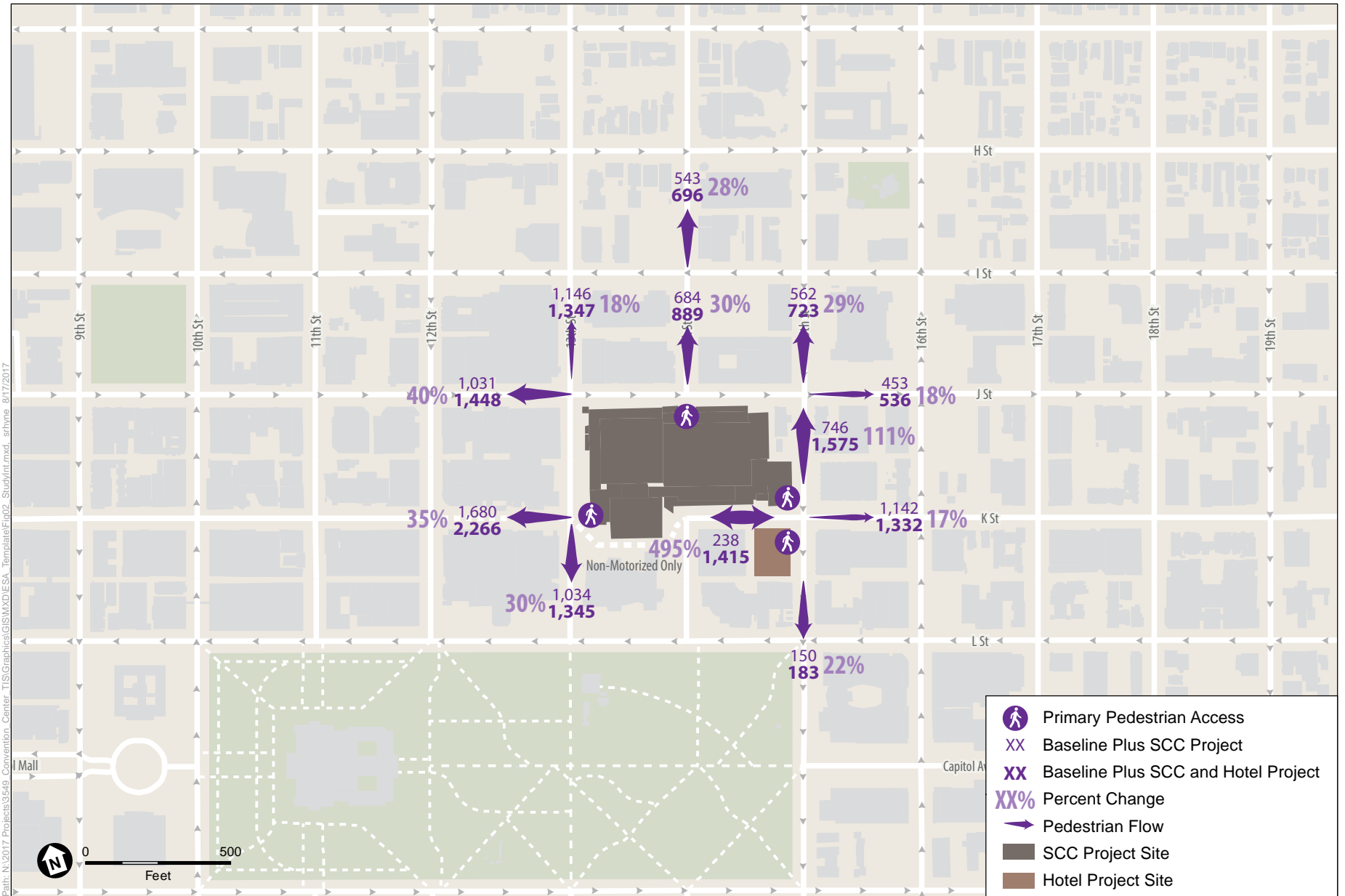
LOS F is allowed at intersections located in the Core Area of the City, per General Plan Policy M 1.2.2(a). Therefore, they are not highlighted in the above table.

1. For signalized and uncontrolled intersections, average intersection delay is reported in seconds per vehicle for all approaches
2. For side-street stop controlled intersections, LOS and average delay for the movement with the most delay are reported in parentheses along with the overall intersection delay.

SOURCE: Fehr & Peers, 2017.

All other study intersections would operate at LOS E or better during both the AM and PM peak hours.

Figure 4.9-17 displays estimated PM peak hour pedestrian flows on sidewalks surrounding the project sites under Baseline Plus SCC Project and Hotel Project conditions. The figure also shows a comparison to Baseline Plus SCC Project pedestrian flows. The Hotel project would increase pedestrian flows between the Hotel project site and nearby parking areas, transit stations, and hotels. K Street and 15th Street would experience the greatest increases in pedestrian activity.



SOURCE: Fehr & Peers, 2017

NOTE: Pedestrian flows represent two-way flows on sidewalks.

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Figure 4.9-17

Table 4.9-20 and 21 presents the pedestrian volumes and LOS for crosswalks and sidewalks, respectively, which are expected to be used to a significant degree by the Hotel project. With the addition of the Hotel project, several crosswalks are expected to have pedestrian flow rates resulting in a LOS that is worse than the HCM’s recommendation of LOS D for platooned flow. These locations include:

- J Street/13th Street – All legs
- J Street/14th Street – East leg
- J Street/15th Street – West leg
- K Street/15th Street – North, south, and west legs

**TABLE 4.9-20
PEAK HOUR CROSSWALK PEDESTRIAN VOLUMES AND LOS – BASELINE PLUS SCC PROJECT AND HOTEL
PROJECT CONDITIONS**

Crossing Location	Leg ¹	Legal (Improper) ⁴ Crossing Type					
		AM Peak Hour			PM Peak Hour		
		Pedestrians	Pedestrian Flow Rate (ped/minute/ft) ²	LOS	Pedestrians	Pedestrian Flow Rate (ped/minute/ft) ²	LOS
J Street / 13 th Street	North	866	19 (10)	F (D)	1,059	23 (12)	F (E)
	South	942	21 (11)	F (D)	1,233	27 (14)	F (E)
	East	698	15 (8)	E (D)	921	20 (11)	F (E)
	West	865	19 (10)	F (D)	1,059	23 (13)	F (E)
J Street / 14 th Street	North	125	2 (1)	B (B)	139	1 (1)	B (B)
	East	651	16 (9)	E (D)	791	10 (5)	D (C)
	West	157	4 (2)	C (B)	283	3 (2)	C (B)
J Street / 15 th Street	North	62	1 (0)	B (A)	152	2 (1)	B (B)
	South	139	2 (1)	B (B)	456	6 (3)	D (C)
	East	62	1 (0)	B (A)	150	2 (1)	B (B)
	West	582	10 (4)	D (C)	801	13 (6)	E (C)
K Street / 13 th Street	Crossing	2,251	3 (3)	C (B)	3,943	6 (5)	C (C)
K Street / 15 th Street	North	486	7 (3)	D (C)	940	13 (6)	E (D)
	South	488	7 (3)	D (C)	810	11 (5)	E (C)
	East	409	6 (3)	C (B)	648	9 (4)	D (C)
	West	960	13 (6)	E (D)	1,507	21 (10)	F (D)

NOTES:

1. Locations having great pedestrian flows are shown in the table. “East Leg” refers to the crossing on the east edge of the intersection. “North,” “South,” “West” legs have similar definitions.
2. Peak hour pedestrian flows are estimates based on parking garage/lot/on-street usage, locations of transit stops, and convention center entrances. Pedestrian flow rate calculated for peak 15-minutes based on a suggested 0.85 PHF per page 23-24 of 2010 HCM.
3. Width of crosswalks based on striping, 10-feet on all legs.
4. Calculations for “improper” crossings based on: additional 2-foot of crossing width within crosswalk, and use of 50% of Flashing Don’t Walk by pedestrians to enter the crosswalk.

SOURCE: Fehr & Peers, 2017.

**TABLE 4.9-21
PEAK HOUR SIDEWALK PEDESTRIAN VOLUMES AND LOS – BASELINE PLUS SCC PROJECT AND HOTEL PROJECT CONDITIONS**

Sidewalk Street Segment ¹	Side	Actual Width ² (ft)	Effective Width ² (ft)	AM Peak Hour			PM Peak Hour		
				Pedestrians ³	Pedestrian Flow Rate (ped/minute/ft) ⁴	LOS	Pedestrians ³	Pedestrian Flow Rate (ped/minute/ft) ⁴	LOS
J Street between 12th Street and 13th Street	North	13	5	645	2.5	B	863	3.4	C
J Street between 12th Street and 13th Street	South	13	8	391	1.0	B	585	1.4	B
J Street between 13th Street and 14th Street	North	15	8	175	0.4	A	230	0.6	B
J Street between 13th Street and 14th Street	South	16	8	984	2.4	B	1,292	3.2	C
J Street between 14th Street and 15th Street	South	8	6	135	0.4	A	249	0.8	B
K Street between 12th Street and 13th Street	Mall	40	22.5	1,009	0.9	B	2,266	2.0	B
K Street between 14th Street and 15th Street	South	15	7	815	2.3	B	1,190	3.3	C
13th Street between I Street and J Street	West	16	8	1,086	2.7	B	1,255	3.1	C
13th Street between J Street and K Street	West	17	9	490	1.1	B	601	1.3	B
13th Street between J Street and K Street	East	12	8.5	656	1.5	B	862	2.0	B
13th Street between K Street and L Street	West	13	4	752	3.7	C	1,076	5.3	C
13th Street between K Street and L Street	East	8	6.5	188	0.6	B	269	0.8	B
14th Street between I Street and J Street	East	19	10	663	1.3	B	797	1.6	B
15th Street between I Street and J Street	West	15	5	483	1.9	B	604	2.4	B
15th Street between K Street and L Street	West	--	--	1,591 ⁵	--	--	2,445 ⁵	--	--

NOTES:

"--" indicates that proposed project dimensions are not currently available based on the level of detail incorporated into the conceptual project design. Therefore, pedestrian flow rates and corresponding LOS results cannot be determined at this time.

1. Sidewalk locations for having greatest pedestrian flows are shown in the table.
2. "Actual Width" of crosswalks based on distance between building / fence / outer edge of sidewalk and curb / planting strip. "Effective Width" of sidewalk subtracts obstruction (such as poles or benches) widths, 2 feet for shy distance away from buildings and 1.5 feet for shy distance away from low walls, fences, or curbs per HCM guidance.
3. Pedestrian volumes estimated based parking garage/lot/on-street usage, locations of transit stops, and convention center entrances.
4. Pedestrian flow rate calculated for peak 15-minutes based on a suggested 0.85 PHF per page 23-24 of 2010 HCM. Shaded cells represent LOS E or F.
5. Absent a detailed site plan, pedestrian flow estimates assume that all pedestrian ingress/egress would occur at a hotel front door located on the west side of 15th Street south of K Street.

SOURCE: Fehr & Peers, 2017.

No sidewalks would operate at unacceptable levels.

The aggregate effect of increased pedestrian and vehicular traffic generated by the Hotel project would worsen queuing along westbound K Street east of 15th Street, as shown by the micro-simulation output graphic below. The queuing would be caused by multiple factors, including increased pedestrian activity at the K Street/15th Street intersection, increased vehicular travel along 15th Street for trips accessing the hotel passenger loading area, permitted east-west signal phasing, and increased vehicular egress from the parking garages located on K Street between 15th Street and 16th Street. It is important to note that this queuing is only expected to occur on days when the Hotel is hosting a large on-site event, and not on days when the hotel is operating under 'normal' conditions (i.e., travel to and from the hotel primarily comprises of hotel guests and employees).



View of PM Peak Hour SimTraffic model output under Baseline Plus SCC plus Hotel Conditions

Cumulative Conditions

Cumulative impacts refer to the combined effect of the proposed SCC project and Hotel project impacts with the impacts of other past, present, and reasonably foreseeable future projects. The geographic area that could be affected by a project varies, depending on the type of environmental issue being considered. This cumulative impact analyses does not rely on any list of specific pending, reasonably foreseeable development proposals in the general vicinity of the proposed plan. As described below, this cumulative assessment relies on existing and future development accommodated under the City's General Plan, which is included in the SACOG MTP/SCS regional travel demand model.

For transportation and traffic impacts, the geographic focus of the cumulative analysis is the study area and intersections previously identified in Figure 4.9-1.

Cumulative Land Use and Transportation System Assumptions

The most recent version of the SACMET regional travel demand model developed and maintained by SACOG was used to forecast cumulative (year 2036) traffic volumes within the study area. The cumulative version of this model accounts for planned land use growth within the City of Sacramento according to the City's 2035 General Plan, as well as within the surrounding region. The SACMET model also accounts for planned improvements to the surrounding transportation system, including improvements identified in the City's "Grid 3.0" plan for the Central City, and incorporates the current MTP/SCS for the Sacramento region. The version of the model used to develop the forecasts was modified to include the most recent planned land uses and transportation projects within the City of Sacramento. Modifications to the model included additional transportation network and land use detail within the study area to improve accuracy.

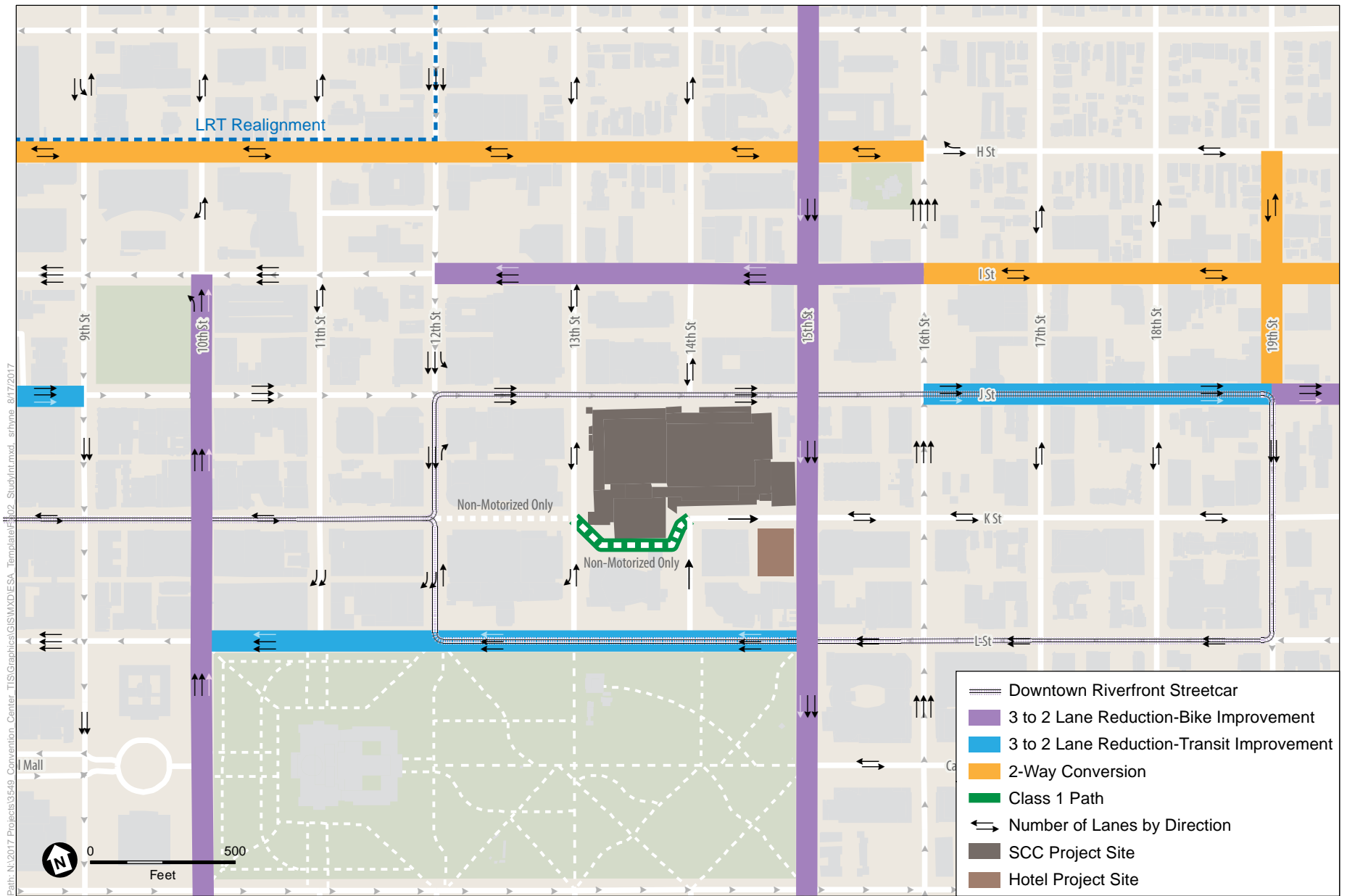
The cumulative analysis for this study assumes a variety of reasonably foreseeable future roadway improvements in the study area including:

- MTP/SCS Projects
 - Green Line Light Rail extension to the Sacramento International Airport
 - Increase in bus service with 15 minute or better headways from roughly one quarter of all services in base year to about half of all services by 2036. The number of buses entering Downtown Sacramento during peak periods is projected to increase by 75 percent by 2036.
 - I Street Bridge Replacement between Sacramento and West Sacramento
 - New Sacramento River crossing at Broadway connecting Sacramento and West Sacramento
 - New all-modes American River crossing between Downtown and Natomas
- Downtown Specific Plan/Grid 3.0 Projects – multi-modal set of transportation improvements throughout Downtown.
- Downtown Riverfront Streetcar service between Downtown Sacramento and West Sacramento;

A forecasting procedure known as the 'difference method' was used to develop the Cumulative No Project, Cumulative Plus SCC Project and Cumulative Plus SCC Project and Hotel Project forecasts. This method accounts for potential differences between the base year model and existing traffic counts that could otherwise transfer to the future year model and traffic forecasts.

This forecasting procedure is calculated as follows:

$$\text{Cumulative Traffic Forecast} = \text{Existing Count Volume} + (\text{Cumulative Model Forecast} - \text{Base Year Model Forecast})$$



SOURCE: Fehr & Peers, 2017

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Figure 4.9-18

Planned Cumulative Transportation Network Changes



Cumulative No Project Conditions

Figure 4.9-19 displays the Cumulative No Project scenario AM and PM peak hour traffic volumes, controls, and lane configurations at the study intersections. These volumes are based on a ‘maximum weekday event’ at the SCC under its existing configuration combined with cumulative background traffic.

Table 4.9-22 presents Cumulative No Project traffic forecasts for the AM and PM peak hours at key roadway segments within the study area. Major inbound and outbound routes, including I Street, J Street, L Street, 15th Street, and 16th Street, carry the highest volumes of traffic during the AM and PM peak hours under Baseline No Project conditions. On average, PM peak hour volumes are 19 percent greater than AM peak hour volumes.

**TABLE 4.9-22
 PEAK HOUR TRAFFIC VOLUMES – CUMULATIVE NO PROJECT CONDITIONS**

Roadway Segment	AM Peak Hour	PM Peak Hour
	Volume	Volume
I Street west of 16 th Street	1,450	1,020
I Street east of 12 th Street	1,220	1,290
J Street east of 12 th Street	2,300	2,210
J Street east of 15 th Street	1,270	1,760
K Street east of 15 th Street ¹	250	480
L Street west of 16 th Street	1,030	1,020
L Street west of 13 th Street	960	1,060
12 th Street south of I Street	860	1,010
13 th Street south of J Street ¹	490	530
15 th Street south of I Street	650	690
15 th Street south of L Street	840	1,750
16 th Street north of L Street	1,470	1,730
16 th Street north of I Street	1,160	2,120

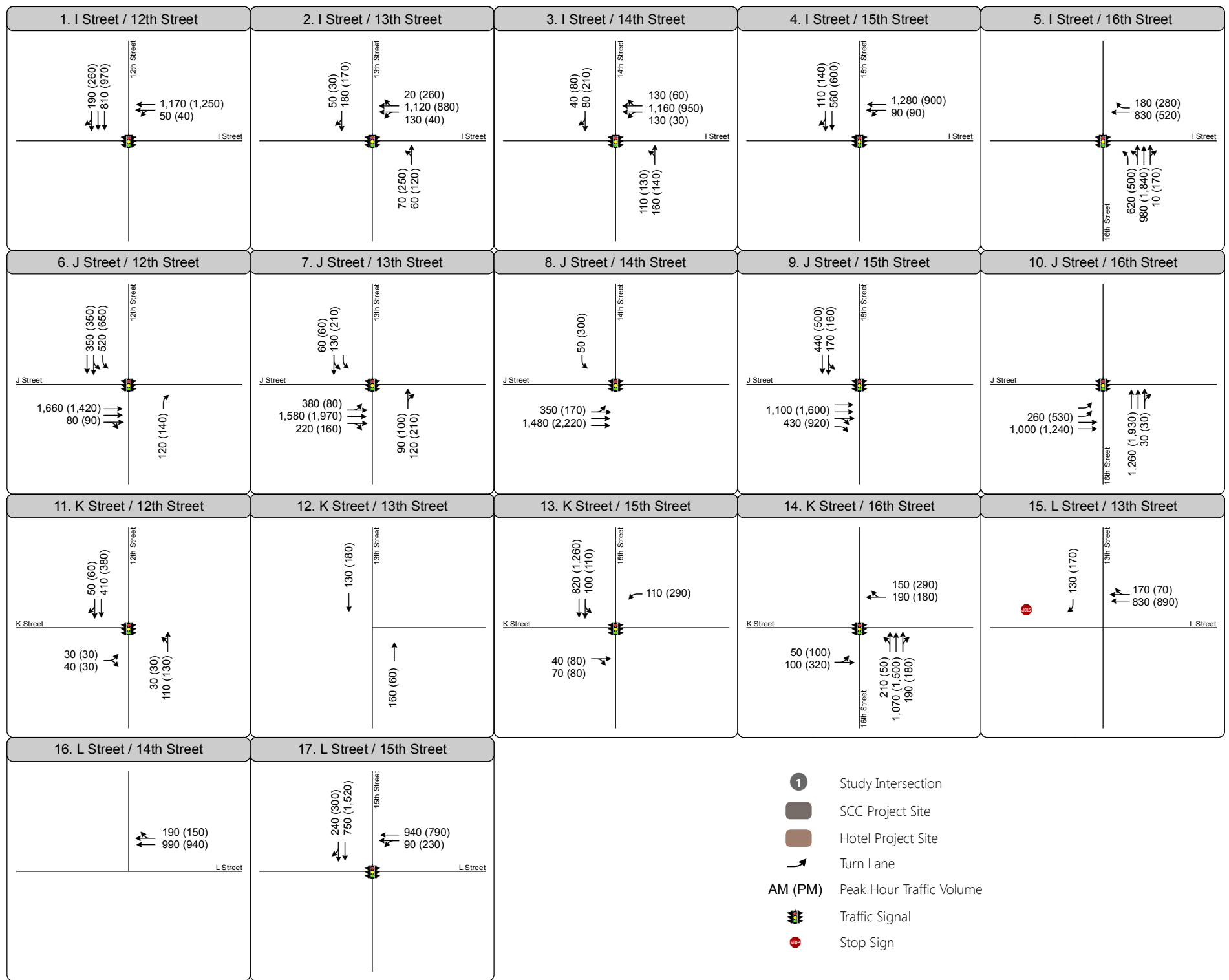
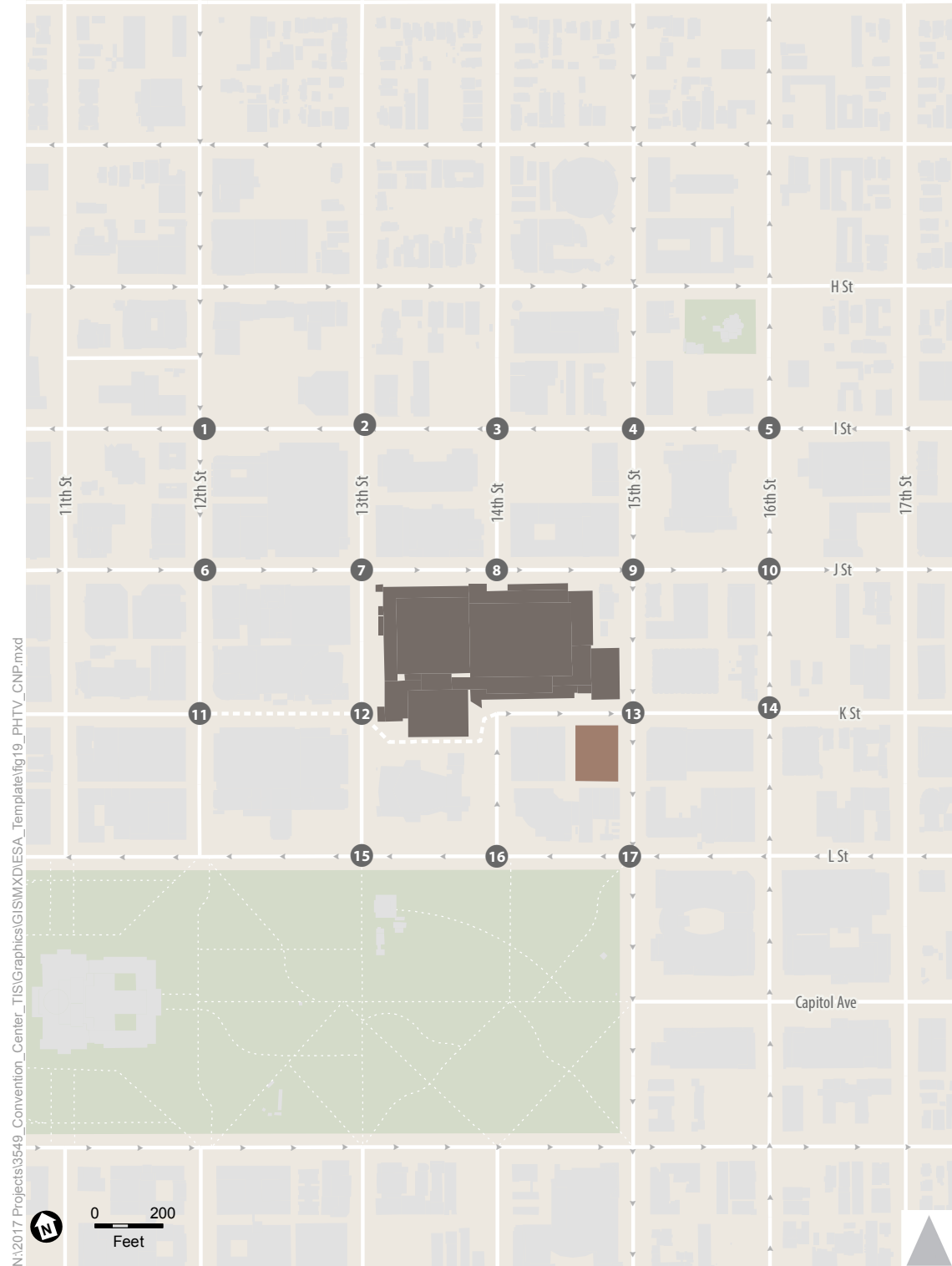
NOTE:

1. Traffic volumes represent two-way totals.

SOURCE: Fehr & Peers, 2017.

Table 4.9-23 displays the LOS and average delay at each study intersection under Cumulative No Project conditions for each peak hour. Lane configurations were updated to reflect roadway network modifications listed under the reasonably foreseeable cumulative transportation improvements as identified in the Downtown Specific Plan/Grid 3.0. Specific Downtown Specific Plan/Grid 3.0 improvements within the study area that would affect the study intersections include the following:

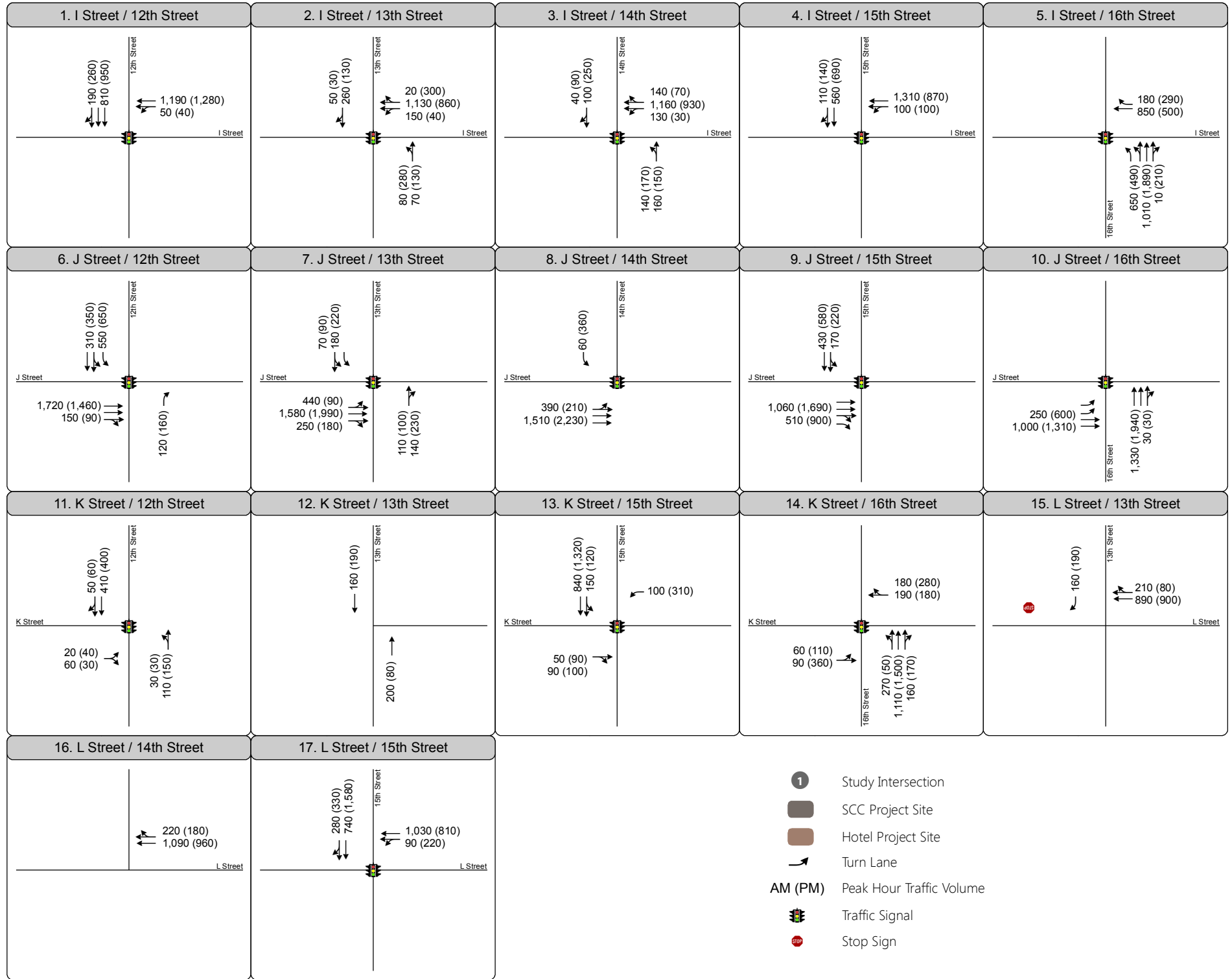
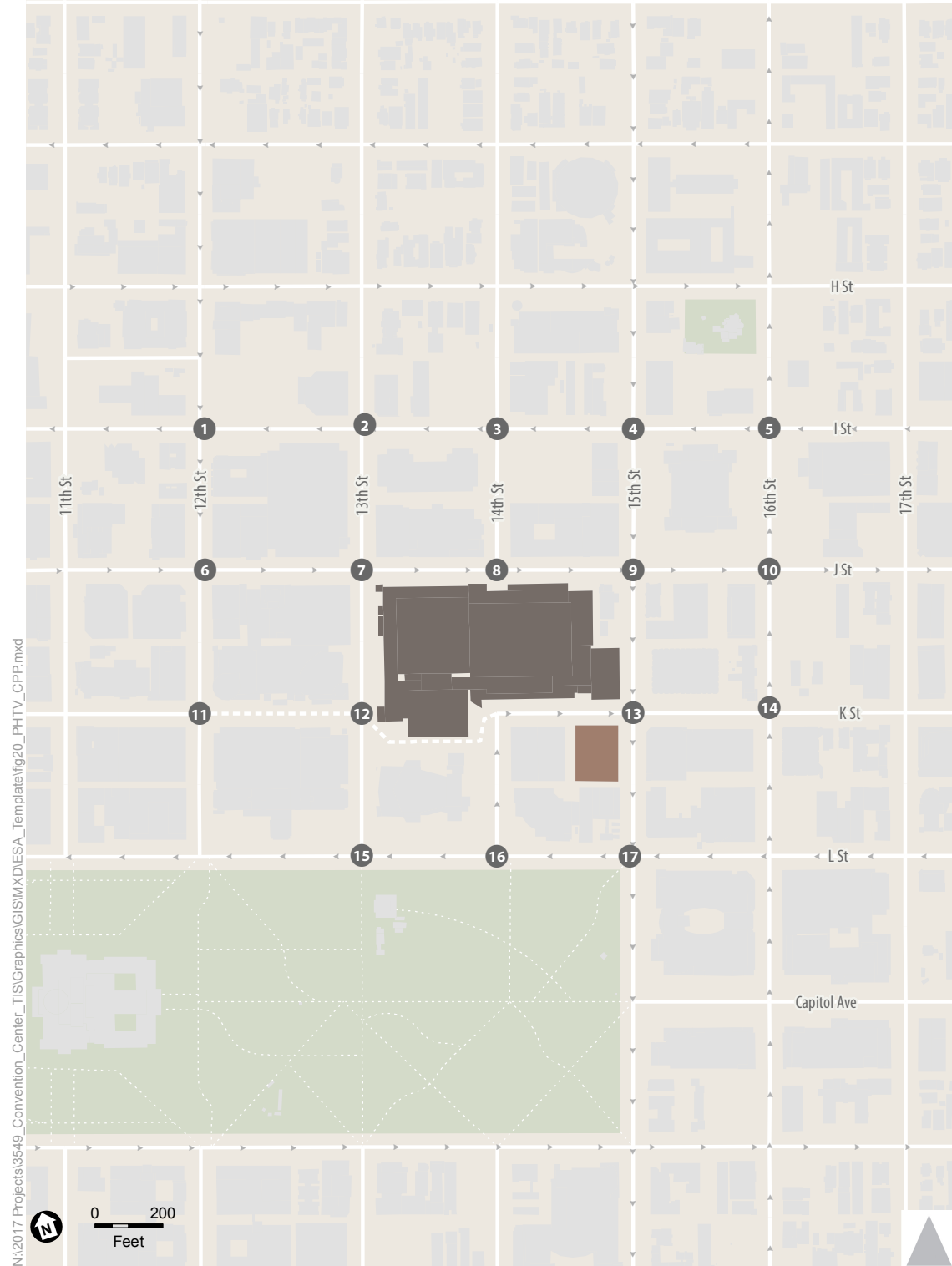
- I Street – three-to-two lane conversion between 12th Street and 16th Street and two-way conversion east of 16th Street
- J Street – three-to-two lane conversion east of 16th Street



SOURCE: Fehr & Peers, 2017

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Figure 4.9-19
Weekday AM and PM Peak Hour Traffic Volumes and Lane Configurations - Cumulative No Project Conditions



SOURCE: Fehr & Peers, 2017

Sacramento Convention Center Renovation and Expansion and 15th/K Street Hotel EIR

Figure 4.9-20
Weekday AM and PM Peak Hour Traffic Volumes and Lane Configurations - Cumulative Plus SCC Project Conditions

**TABLE 4.9-23
INTERSECTION OPERATIONS – CUMULATIVE NO PROJECT CONDITIONS**

Intersection	Control Type	AM Peak Hour		PM Peak Hour	
		Avg Delay	LOS	Avg Delay	LOS
1 I Street / 12 th Street	Signal	15	B	34	C
2 I Street / 13 th Street	Signal	9	A	24	C
3 I Street / 14 th Street	Signal	11	B	17	B
4 I Street / 15 th Street	Signal	12	B	12	B
5 I Street / 16 th Street	Signal	27	C	27	C
6 J Street / 12 th Street	Signal	32	C	71	E
7 J Street / 13 th Street	Signal	44	D	59	E
8 J Street / 14 th Street	Signal	7	A	26	C
9 J Street / 15 th Street	Signal	11	B	14	B
10 J Street / 16 th Street	Signal	8	A	20	C
11 K Street / 12 th Street	Signal	6	A	7	A
12 K Street / 13 th Street	Uncontrolled	18	C	4	A
13 K Street / 15 th Street	Signal	9	A	26	C
14 K Street / 16 th Street	Signal	19	B	31	C
15 L Street / 13 th Street	SSSC	3 (15)	A (C)	5 (25)	A (C)
16 L Street / 14 th Street	Uncontrolled	2	A	2	A
17 L Street / 15 th Street	Signal	15	B	28	C
18 Kayak Alley / 14 th Street	SSSC	1 (4)	A (A)	1 (3)	A (A)
19 Kayak Alley / 15 th Street	SSSC	2 (11)	A (B)	21 (119)	C (F)

NOTES:

LOS F is allowed at intersections located in the Core Area of the City, per General Plan Policy M 1.2.2(a). Therefore, they are not highlighted in the above table.

1. For signalized and uncontrolled intersections, average intersection delay is reported in seconds per vehicle for all approaches
2. For side-street stop controlled intersections, LOS and average delay for the movement with the most delay are reported in parentheses along with the overall intersection delay.

SOURCE: Fehr & Peers, 2017.

- L Street – three-to-two lane conversion between 15th Street and 10th Street (per **Figure 4.9-18**)
- 15th Street – three-to-two lane conversion between I Street and L Street
- Modifications to intersection approaches to accommodate roadway conversions:
 - J Street/12th Street intersection (north leg) – convert from two through lanes and one left-turn pocket to one through lane, one shared through-left-turn lane, and one left-turn pocket.
 - I Street/16th Street intersection (east leg) – convert from two westbound through lanes and one westbound shared through-right-turn lane to one eastbound lane, one westbound through lane, and one westbound right-turn pocket.

- The greatest increases in traffic volumes would be concentrated on roadway segments adjacent to major parking facilities utilized by SCC attendees, including K Street east of 15th Street, 13th Street south of J Street, and J Street east of 12th Street. These parking locations would attract an increased number of vehicle trips due to the additional SCC attendees generated by the project. Increased volumes would also occur on routes utilized by vehicles that pick up and drop off SCC attendees, including J Street and 15th Street.

**TABLE 4.9-24
 PEAK HOUR TRAFFIC VOLUME COMPARISON – CUMULATIVE NO PROJECT AND CUMULATIVE PLUS SCC PROJECT CONDITIONS**

Roadway Segment	Cumulative No Project Conditions		Cumulative Plus SCC Project Conditions			
	AM Peak Hour	PM Peak Hour	AM Peak Hour		PM Peak Hour	
	Volume	Volume	Volume	% Change	Volume	% Change
I Street west of 16 th Street	1,450	1,020	1,500	3%	990	-3%
I Street east of 12 th Street	1,220	1,290	1,240	2%	1,320	2%
J Street east of 12 th Street	2,300	2,210	2,390	4%	2,270	3%
J Street east of 15 th Street	1,270	1,760	1,230	-3%	1,910	8%
K Street east of 15 th Street ¹	250	480	300	20%	520	8%
L Street west of 16 th Street	1,030	1,020	1,120	9%	1,030	1%
L Street west of 13 th Street	960	1,060	1,050	9%	1,110	5%
12 th Street south of I Street	860	1,010	860	0%	990	-2%
13 th Street south of J Street ¹	490	530	570	16%	600	12%
15 th Street south of I Street	650	690	660	2%	790	13%
15 th Street south of L Street	840	1,750	830	-1%	1,800	3%
16 th Street north of L Street	1,470	1,730	1,540	5%	1,720	-1%
16 th Street north of I Street	1,160	2,120	1,190	3%	2,180	3%

NOTE:

1. Traffic volumes represent two-way totals.

SOURCE: Fehr & Peers, 2017.

Table 4.9-25 displays the LOS and average delay at each study intersection under Cumulative Plus SCC Project conditions. Increases in pedestrian crosswalk movements were made at intersections commensurate with parking garage use, nearby hotels, nearby transit stations, and available sidewalks/crosswalks.

**TABLE 4.9-25
INTERSECTION OPERATIONS – CUMULATIVE PLUS SCC PROJECT CONDITIONS**

Intersection	Control Type	Cumulative No Project Conditions				Cumulative Plus SCC Project Conditions				
		AM Peak Hour		PM Hour		AM Peak Hour		PM Peak Hour		
		Avg Delay	LOS	Avg Delay	LOS	Avg Delay	LOS	Avg Delay	LOS	
1	I Street / 12 th Street	Signal	15	B	34	C	15	B	39	D
2	I Street / 13 th Street	Signal	9	A	24	C	11	B	23	C
3	I Street / 14 th Street	Signal	11	B	17	B	10	B	28	C
4	I Street / 15 th Street	Signal	12	B	12	B	12	B	12	B
5	I Street / 16 th Street	Signal	27	C	27	C	30	C	29	C
6	J Street / 12 th Street	Signal	32	C	71	E	36	D	74	E
7	J Street / 13 th Street	Signal	44	D	59	E	52	D	63	E
8	J Street / 14 th Street	Signal	7	A	26	C	7	A	33	C
9	J Street / 15 th Street	Signal	11	B	14	B	11	B	18	B
10	J Street / 16 th Street	Signal	8	A	20	C	8	A	28	C
11	K Street / 12 th Street	Signal	6	A	7	A	6	A	7	A
12	K Street / 13 th Street	Uncontrolled	18	C	4	A	54	F	9	A
13	K Street / 15 th Street	Signal	9	A	26	C	10	A	36	D
14	K Street / 16 th Street	Signal	19	B	31	C	24	C	42	D
15	L Street / 13 th Street	SSSC	3 (15)	A (C)	5 (25)	A (C)	5 (23)	A (C)	10 (58)	B (F)
16	L Street / 14 th Street	Uncontrolled	2	A	2	A	3	A	3	A
17	L Street / 15 th Street	Signal	15	B	28	C	18	B	28	C
18	Kayak Alley / 14 th Street	SSSC	1 (4)	A (A)	1 (3)	A (A)	1 (4)	A (A)	1 (3)	A (A)
19	Kayak Alley / 15 th Street	SSSC	2 (11)	A (B)	21 (119)	C (F)	2 (17)	A (C)	22 (133)	C (F)

NOTES:

1. For signalized and uncontrolled intersections, average intersection delay is reported in seconds per vehicle for all approaches
2. For side-street stop controlled intersections, LOS and average delay for the movement with the most delay are reported in parentheses along with the overall intersection delay.

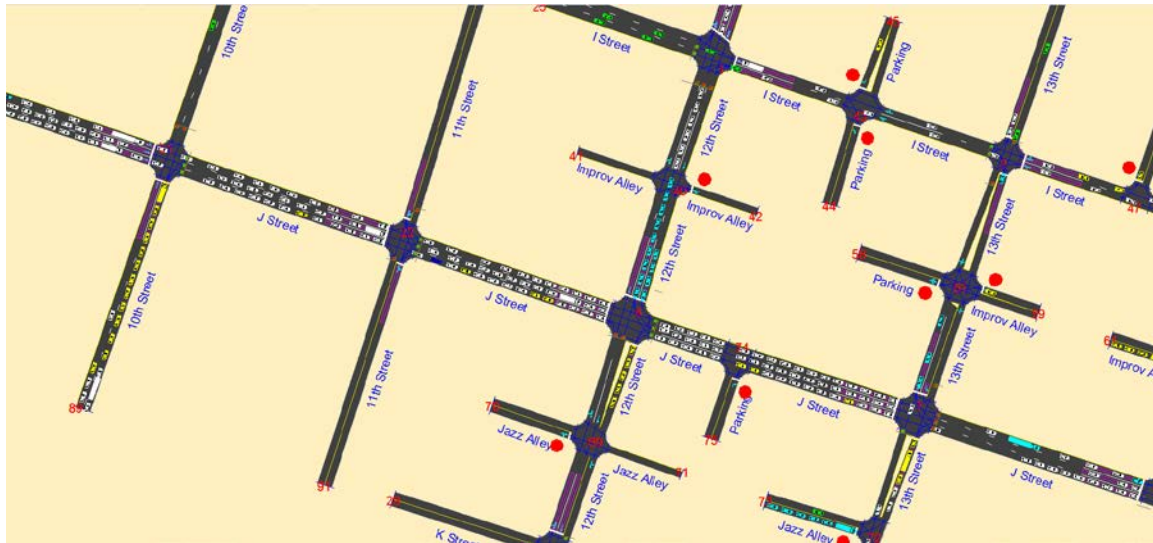
SOURCE: Fehr & Peers, 2017.

While pedestrian flows were not analyzed for Cumulative Plus SCC Project conditions, it is expected that pedestrian flows and corresponding LOS results would resemble those described under Baseline Plus SCC Project conditions for the following reasons:

- Pedestrian facilities within the study area are not expected to change substantially between Baseline and Cumulative conditions.
- Project-related pedestrian volumes and location-specific flows would be similar under Baseline and Cumulative conditions.

- Although additional development activity and further encouragement of walking as a mode of transportation would increase walking trips in downtown Sacramento under Cumulative conditions, location-specific increases in pedestrian volumes are not likely to be sufficient enough to significantly alter flow rates and corresponding LOS results between the Baseline and Cumulative scenarios.

During the PM peak hour, implementation of the SCC project would worsen the bottleneck at the J Street/13th Street intersection under cumulative conditions, as shown in the graphic below. Although operations at the J Street/12th Street and J Street/13th Street intersections are reported at LOS E, review of the SimTraffic output yields substantial queue spillbacks to upstream signalized intersections. In fact, the eastbound approach to the J Street/12th Street intersection would only be able to accommodate 71 percent of its cumulative travel demand. As a result of these bottlenecks, downstream locations (i.e., J Street/14th and J Street/15th) would only be able to accommodate 76 percent of the cumulative travel demand is able to reach these intersections within the peak hour. So, although LOS E conditions are reported, PM peak hour conditions are represented by lengthy vehicle queues, and longer travel times.

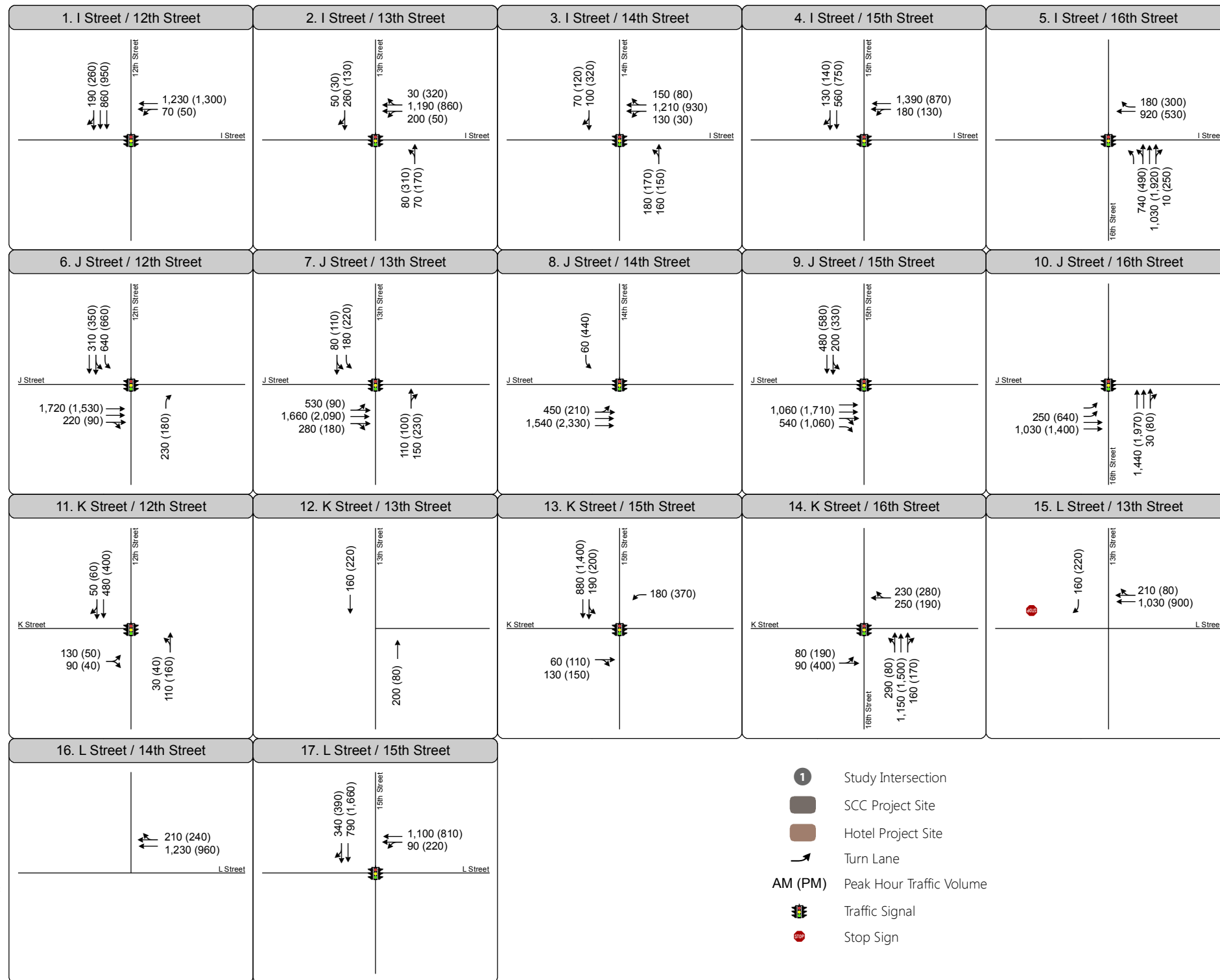
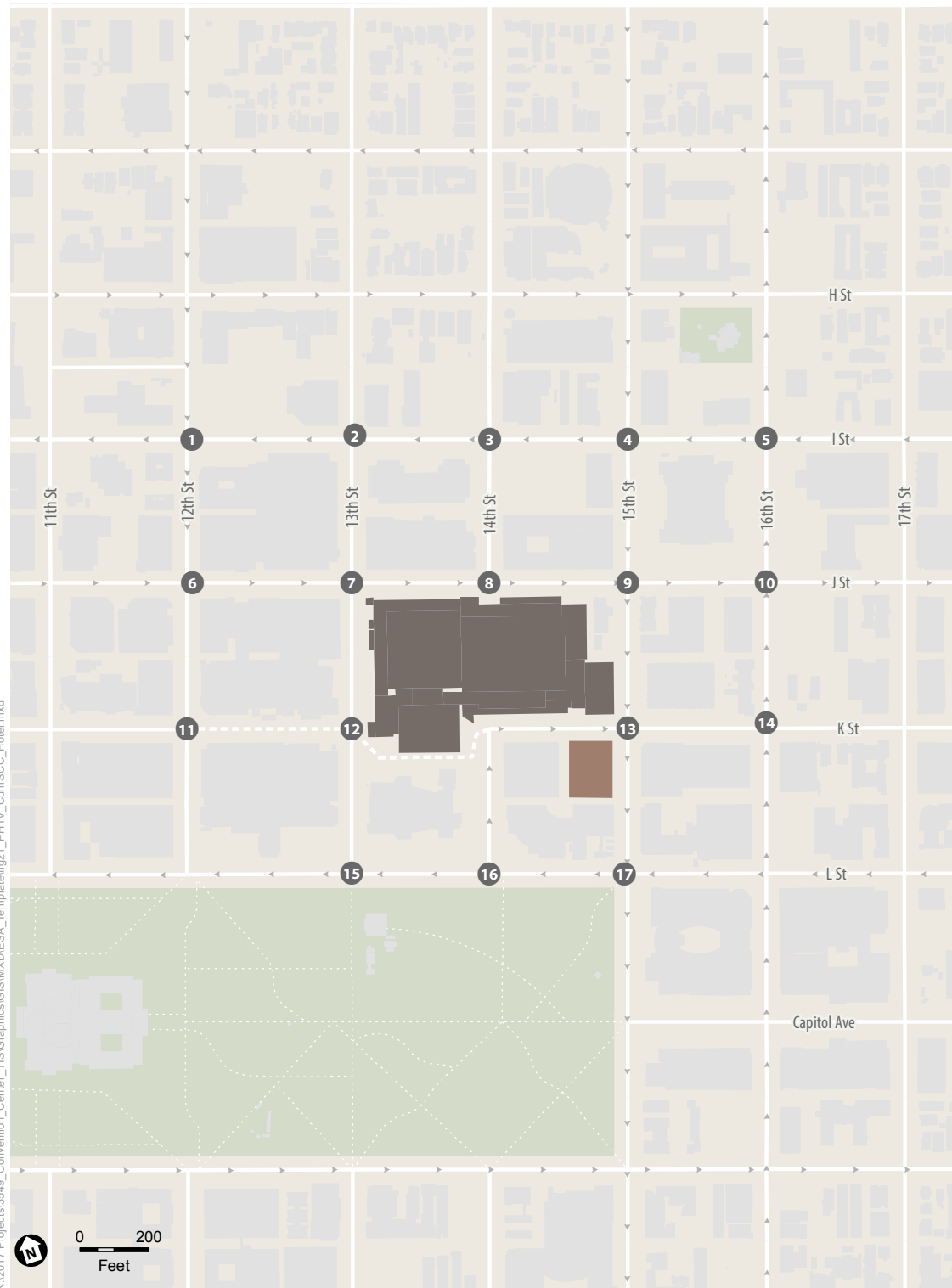


View of PM Peak Hour SimTraffic model output under Cumulative Plus SCC Project Conditions

Cumulative Plus SCC Project and Hotel Project Conditions

Figure 4.9-21 displays the Cumulative Plus SCC Project and Hotel Project scenario AM and PM peak hour traffic volumes, controls, and lane configurations at the study intersections. These volumes were developed by layering the trips generated by the proposed SCC and Hotel projects onto the cumulative transportation network and traffic forecasts.

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SOURCE: Fehr & Peers, 2017

Sacramento Convention Center Renovation and Expansion and 15th/K Street Hotel EIR

Figure 4.9-21
Weekday AM and PM Peak Hour Traffic Volumes and Lane Configurations - Cumulative Plus SCC and Hotel Projects Conditions

Table 4.9-26 compares Cumulative Plus SCC Project and Cumulative Plus SCC Project and Hotel Project traffic volumes for the AM and PM peak hours at key roadway segments within the study area. Key findings from this table include the following:

- On average, the AM and PM peak hour volumes would increase by eight percent and four percent, respectively, between Cumulative Plus SCC Project and Cumulative Plus SCC Project and Hotel Project conditions.
- The largest increases in volume from Cumulative Plus SCC Project conditions would occur on J Street east of 12th Street (200 added vehicles during the AM peak hour, 100 added vehicles during the PM peak hour), J Street east of 15th Street (130 added vehicles during the PM peak hour), K Street east of 15th Street (130 added vehicles during the AM peak hour, 160 added vehicles during the PM peak hour), and L Street west of 13th Street (140 added vehicles during the AM peak hour).
- Traffic volume increases would be greatest on roadway segments near the Hotel project site in the eastern portion of the study area. Additional event attendees attracted to the hotel event space would generate more vehicle trips to and from nearby parking areas (e.g., the K Street parking garages) and the on-site hotel loading area. Hotel guests would also generate additional vehicle trips to and from the on-site hotel parking garage.

**TABLE 4.9-26
PEAK HOUR TRAFFIC VOLUME COMPARISON – CUMULATIVE PLUS SCC PROJECT AND CUMULATIVE PLUS SCC PROJECT AND HOTEL PROJECT CONDITIONS**

Roadway Segment	Cumulative Plus SCC Project Conditions		Cumulative Plus SCC Project and Hotel Project Conditions			
	AM Peak Hour	PM Peak Hour	AM Peak Hour		PM Peak Hour	
	Volume	Volume	Volume	% Change	Volume	% Change
I Street west of 16 th Street	1,500	990	1,660	11%	1,020	3%
I Street east of 12 th Street	1,240	1,320	1,300	5%	1,350	2%
J Street east of 12 th Street	2,390	2,270	2,590	8%	2,370	4%
J Street east of 15 th Street	1,230	1,910	1,260	2%	2,040	6%
K Street east of 15 th Street ¹	300	520	430	43%	680	24%
L Street west of 16 th Street	1,120	1,030	1,190	6%	1,030	0%
L Street west of 13 th Street	1,050	1,110	1,190	13%	1,140	3%
12 th Street south of I Street	860	990	930	8%	1,000	1%
13 th Street south of J Street ¹	570	600	620	9%	620	3%
15 th Street south of I Street	660	790	740	12%	880	10%
15 th Street south of L Street	830	1,800	880	6%	1,880	4%
16 th Street north of L Street	1,540	1,720	1,600	4%	1,750	2%
16 th Street north of I Street	1,190	2,180	1,210	2%	2,220	2%

NOTE:

1. Traffic volumes represent two-way totals.

SOURCE: Fehr & Peers, 2017.

Table 4.9-27 displays the LOS and average delay at each study intersection under Cumulative Plus SCC Project and Hotel Project conditions. No changes in lane configurations or signal timing from Cumulative No Project conditions were assumed. Increases in pedestrian crosswalk movements were made at intersections commensurate with parking garage use, nearby hotels, nearby transit stations, and available sidewalks/crosswalks.

**TABLE 4.9-27
INTERSECTION OPERATIONS – CUMULATIVE PLUS SCC PROJECT AND HOTEL PROJECT CONDITIONS**

Intersection	Control Type	Cumulative Plus SCC Project Conditions				Cumulative Plus SCC Project and Hotel Project Conditions				
		AM Peak Hour		PM Hour		AM Peak Hour		PM Peak Hour		
		Avg Delay	LOS	Avg Delay	LOS	Avg Delay	LOS	Avg Delay	LOS	
1	I Street / 12 th Street	Signal	15	B	39	D	15	B	52	D
2	I Street / 13 th Street	Signal	11	B	23	C	10	B	27	C
3	I Street / 14 th Street	Signal	10	B	28	C	13	B	37	D
4	I Street / 15 th Street	Signal	12	B	12	B	16	B	18	B
5	I Street / 16 th Street	Signal	30	C	29	C	38	D	31	C
6	J Street / 12 th Street	Signal	36	D	74	E	48	D	84	F
7	J Street / 13 th Street	Signal	52	D	63	E	57	E	66	E
8	J Street / 14 th Street	Signal	7	A	33	C	8	A	35	D
9	J Street / 15 th Street	Signal	11	B	18	B	11	B	24	C
10	J Street / 16 th Street	Signal	8	A	28	C	9	A	23	C
11	K Street / 12 th Street	Signal	6	A	7	A	7	A	7	A
12	K Street / 13 th Street	Uncontrolled	54	F	9	A	68	F	20	C
13	K Street / 15 th Street	Signal	10	A	36	D	12	B	49	D
14	K Street / 16 th Street	Signal	24	C	42	D	28	C	52	D
15	L Street / 13 th Street	SSSC	5 (23)	A (C)	10 (58)	B (F)	6 (27)	A (D)	9 (52)	A (F)
16	L Street / 14 th Street	Uncontrolled	3	A	3	A	3	A	4	A
17	L Street / 15 th Street	Signal	18	B	28	C	24	C	32	C
18	Kayak Alley / 14 th Street	SSSC	1 (4)	A (A)	1 (3)	A (A)	1 (4)	A (A)	1 (4)	A (A)
19	Kayak Alley / 15 th Street	SSSC	2 (17)	A (C)	22 (133)	C (F)	3 (21)	A (C)	21 (145)	C (F)

NOTES:

LOS F is allowed at intersections located in the Core Area of the City, per General Plan Policy M 1.2.2(a). Therefore, they are not highlighted in the above table.

1. For signalized and uncontrolled intersections, average intersection delay is reported in seconds per vehicle for all approaches.
2. For side-street stop controlled intersections, LOS and average delay for the movement with the most delay are reported in parentheses along with the overall intersection delay.

SOURCE: Fehr & Peers, 2017.

Similar to the pedestrian analysis discussion provided in the Cumulative Plus SCC Project section above, it is not anticipated that Cumulative Plus SCC Project and Hotel Project pedestrian flow rates and corresponding LOS results would be substantially different than those disclosed in the Baseline Plus SCC Project and Hotel Project section.

By virtue of adding more vehicle trips on J Street, the Hotel project would exacerbate vehicular queuing along the J Street corridor. Operations at the J Street/12th Street intersection would degrade to LOS F during the PM peak hour. Bottlenecks at the J Street at 12th and 13th Street intersections would limit the flow of traffic to downstream intersections. Similar to Baseline conditions, the addition of the Hotel project would also exacerbate queuing on the K Street corridor east of 14th Street. During the PM peak hour, addition of the Hotel project would increase overall intersection delay by 13 and 10 seconds at the K Street/15th Street and K Street/16th Street intersections, respectively.

Impacts and Mitigation Measures

Impact 4.9-1: The proposed projects could worsen conditions at intersections in the City of Sacramento.

SCC Project

The proposed SCC project would cause some intersections in the City of Sacramento to have degraded operating conditions. All study intersections are located in the Core Area and are governed by General Plan Mobility Element Policy M 1.2.2. This policy states that LOS F is acceptable at these locations during peak hours if the project improves the overall system, promotes non-vehicular transportation, and/or implements vehicle trip reduction measures. The SCC project fulfills this requirement by virtue of its location in downtown Sacramento in close proximity to extensive transit, bicycle, and pedestrian facilities and services, providing event attendees with numerous non-vehicular transportation options for travel to and from the SCC.

As shown in Table 4.9-15, all signalized study intersections would continue to operate at LOS E or better with the addition of the SCC project traffic to Baseline No Project Conditions. The K Street/13th Street intersection would operate at LOS F during the AM peak hour due to heavy pedestrian flows that cross 13th Street to/from K Street. Vehicles on northbound and southbound 13th Street yield to these crossing pedestrians, which causes the LOS F condition. Since this condition is isolated to a single intersection and is primarily due to the heavy pedestrian flows at an uncontrolled crossing (whose operations are addressed in Impact 4.9-4), this condition does not represent a significant roadway system impact at this intersection. This would be considered a **less-than-significant** impact.

SCC Project and Hotel Project

The addition of the proposed hotel to the Baseline Plus SCC project condition would cause some intersections in the City of Sacramento to have degraded operating conditions. As shown in Table 4.9-19, the addition of hotel trips would cause the J Street/12th Street intersection to degrade to LOS F during the PM peak hour. LOS F operations are considered acceptable in this

instance because the subject intersection is within the City's Core Area and the project would not substantially degrade corridor-wide operations (i.e., would not be detrimental to other General Plan circulation policies). Moreover, per General Plan Mobility Element Policy M 1.2.2., LOS F operations are acceptable at this location because the proposed hotel project would include features that promote non-vehicular transportation, including a pedestrian bridge connecting guests to the SCC facility and a location that provides guests with access to the downtown multimodal transportation system. This would be considered a **less-than-significant** impact.

Mitigation Measure

None required.

Impact 4.9-2: The proposed projects could adversely affect public transit operations.

SCC Project

The proposed SCC project could cause increases in vehicular travel times along J Street, which could adversely affect on-time performance for buses operating in the corridor. Results from the traffic operations analysis indicate the project would cause an approximate 40-second increase in travel time on J Street from 12th Street to 16th Street. Since buses operate in general purpose travel lanes, they would experience additional delays during large SCC event arrival and departure time periods. Affected bus routes include Regional Transit Route 30, which operates every 15 minutes between Downtown and CSU Sacramento, and multiple commuter express routes that utilize the J Street corridor during peak commute hours (e.g., North Natomas Flyer). The source of this travel delay can be attributed primarily to substantial increases in vehicular and pedestrian travel at the J Street/13th Street intersection. Because travel to the SCC project by bus is an important part of reducing its private vehicle travel, diminished on-time performance and transit reliability could deter ridership. Since this could adversely affect existing public transit operations and also discourage use of travel to the SCC project by bus, impacts would be considered **significant**.

SCC Project and Hotel Project

As described under Baseline Plus SCC Project conditions, the SCC project alone would cause a significant impact to transit operations due to increased vehicular and pedestrian travel surrounding the project site. This condition would remain with the addition of the hotel project. However, the hotel project's effects on transit service provider delays along J Street would be different than those of the SCC due to their different activity levels and locations. The hotel project would add 90 PM peak hour vehicles to J Street east of 12th Street. It would add 238 pedestrians to the south leg and 241 pedestrians to the east leg of the J Street/13th Street intersection during the PM peak hour. Those volumes in and of themselves, (as well as the lack of hotel-related pick-up and drop-off activity in the immediate intersection vicinity) are not sufficient so as to trigger implementation of the full ETMP. Therefore, the hotel project itself would not adversely impact public transit operations or reduce access to transit. However, under

SCC Project and Hotel Project conditions, impacts to transit operations would be considered **significant**.

Mitigation Measure

Mitigation Measure 4.9-2 (SCC)

Implement Event Transportation Management Plan (ETMP) to the satisfaction of the City Traffic Engineer and subject to the performance standards set forth within it including:

1. *Pedestrian Flows: Through pedestrian flow management, pedestrians do not spill out of sidewalks onto streets with moving vehicles, or out of crosswalks when crossing the street, particularly along J Street, K Street, 13th Street, and 15th Street.*
2. *Vehicle Queuing: Traffic on eastbound J Street does not queue back due to event-related traffic, particularly eastbound right-turning vehicles conflicting with pedestrians crossing the south leg crosswalk at the J Street/13th Street intersection.*
3. *Bus/Paratransit: Specific locations are provided to accommodate public buses and paratransit vehicle stops within one block of the SCC.*
4. *Ridesharing: Specific locations are provided for pick-up / drop-off areas such that Transportation Network Companies (e.g., Uber, Lyft), taxis, and other ridesharing services do not impede vehicular or pedestrian flow.*
5. *Truck Staging: Delivery trucks exclusively use the truck bays located along K Street west of 15th Street and do not block vehicular or bicycle access for extended periods of time.*

The ETMP is included in Appendix L. It would be implemented for all large events with a combined daily attendance of 5,000 persons or more between the SCC and hotel event space. Due to the variation in event size, type, location, and travel characteristics, specific ETMP elements should be reviewed on a case-by-case basis to determine the appropriateness for a specific event day. Key ETMP elements relevant to large events centered at the SCC facility include the following:

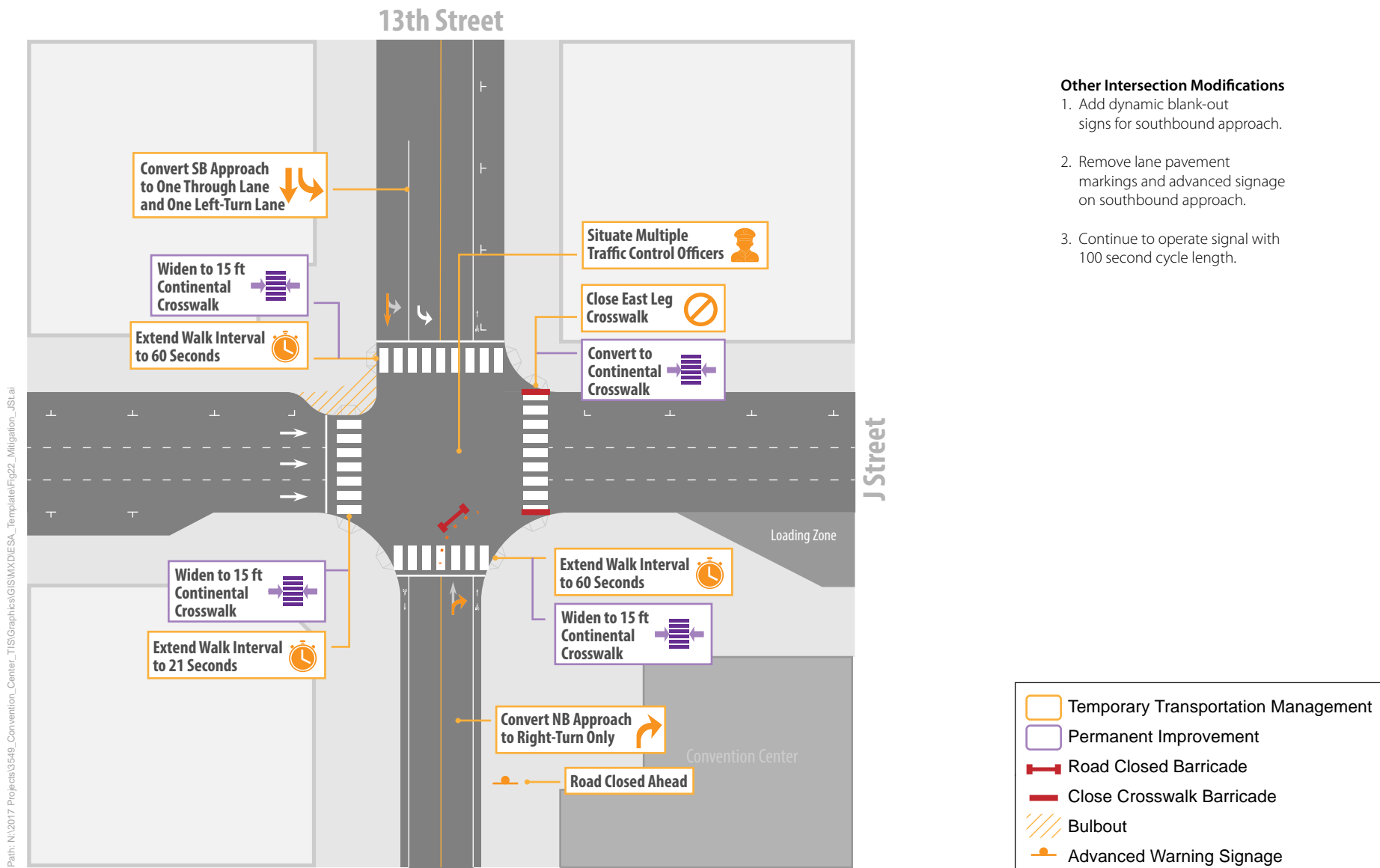
- *At the J Street/13th Street intersection, position equipment and multiple traffic control officers (TCOs) and operate the intersection in one of the following two ways:*
 1. *Implement Option 1 (illustrated in **Figure 4.9-22**), which includes the following temporary measures:*
 - *Convert the northbound approach to right-turn only and prohibit through movements using traffic cones and advance warning signage.*
 - *Convert the southbound approach to one through lane and one left-turn lane using traffic cones and advance warning signage.*
 - *Prohibit use of the east leg crosswalk using barricades and TCOs.*

- *Operate the north/south approaches as permissive (i.e., operate concurrently) signal phases.*
 - *Maintain same cycle length to facilitate coordinated through traffic progression, though signal offset may need to be adjusted.*
2. *Implement Option 2 (illustrated in **Figure 4.9-23**, which includes the following temporary measures:*
- *TCOs temporarily take control of the intersection and switch signal operations to flashing red.*
 - *TCOs prohibit vehicles from entering the intersection during a 20-second pedestrian crossing window, whereby TCOs wave through pedestrians to cross at all marked crosswalks and diagonally through the intersection.*
 - *TCOs prohibit pedestrians from entering crosswalks outside of the pedestrian crossing window and wave through vehicles. TCOs provide approximately 50, 17, and 13 seconds for the eastbound, northbound, and southbound vehicular flows, respectively. These approaches would maintain the same lane configurations as currently present.*
- *At the K Street/13th Street intersection, position multiple TCOs to manage pedestrian and vehicular traffic flows.*

It should be noted that other potential options were considered and tested and found to be less effective than Options 1 or 2. Some examples of options that were removed from further consideration included converting the northbound 13th Street approach to J Street to permit through movements only. Other options involved temporary conversions of 13th Street to one-way only, and modified egress points at nearby parking garages.

Significance After Mitigation: With the implementation of Mitigation Measure 4.9-2 listed above, this impact would be reduced to a **less-than-significant** level. The temporary ETMP measures described above would diminish queuing, reduce delay, and improve travel times along J Street. As shown in **Table 4.9-28**, Option 1 listed above would reduce delays at the J Street/12th Street intersection from 51 seconds (without the ETMP) to 22 seconds (with the ETMP) and delays at the J Street/13th Street intersection from 55 seconds to 29 seconds during the PM peak hour. Option 1 would also reduce the travel time on eastbound J Street from 12th Street to 16th Street by approximately one minute during the PM peak hour. This would yield travel times that would be 20 seconds faster than Baseline No Project conditions. The reduced delay and shortened travel time would enable buses to improve on-time performance.

Option 2 listed above would reduce delays at the J Street/12th Street intersection from 51 seconds (without the ETMP) to 31 seconds (with the ETMP) and delays at the J Street/13th Street intersection from 55 seconds to 43 seconds during the PM peak hour. Option 2 would also reduce the travel time on eastbound J Street from 12th Street to 16th Street by approximately forty seconds during the PM peak hour, restoring travel times to approximately the same amount of time as Baseline No Project conditions. The reduced delay and shortened travel time would enable buses to improve on-time performance.



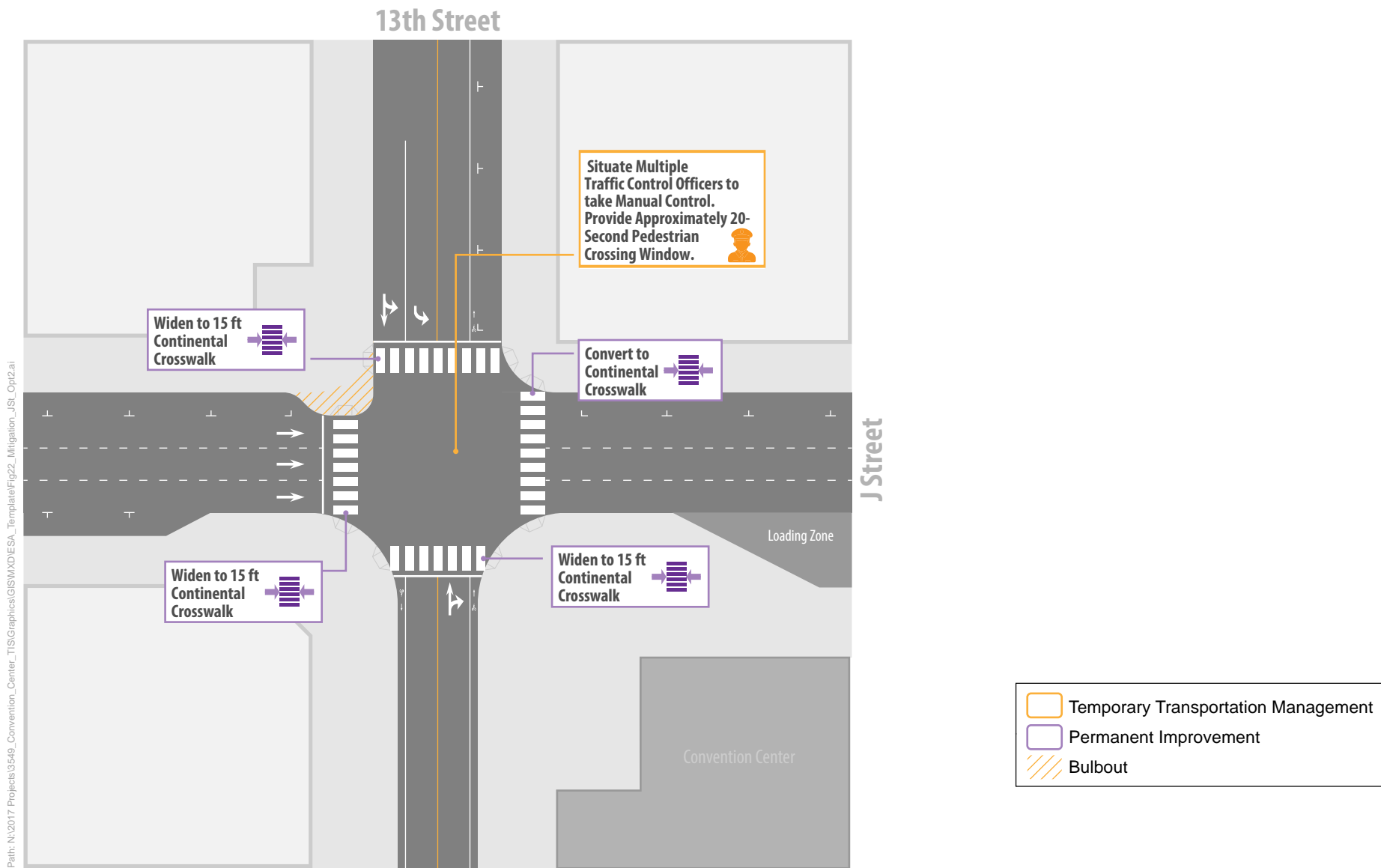
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SOURCE: Fehr & Peers, 2017

Sacramento Convention Center Renovation and Expansion and 15th/K Street Hotel EIR



Figure 4.9-22
 SCC Project Mitigation Option 1 -
 Traffic Management on J Street at 13th Street



SOURCE: Fehr & Peers, 2017

Sacramento Convention Center Renovation and Expansion and 15th/K Street Hotel EIR



Figure 4.9-23
 SCC Project Mitigation Option 2 -
 Traffic Management on J Street at 13th Street

**TABLE 4.9-28
J STREET/13TH STREET MITIGATION EFFECTIVENESS – PM PEAK HOUR**

Intersection	Control Type	Baseline No Project Conditions		Baseline Plus SCC Project Conditions						
				No Mitigation		Mitigation Option 1		Mitigation Option 2		
		Avg Delay	LOS	Avg Delay	LOS	Avg Delay	LOS	Avg Delay	LOS	
6	J Street / 12 th Street	Signal	26	C	51	D	22	C	31	C
7	J Street / 13 th Street	Signal	45	D	55	E	29	C	43	D

SOURCE: Fehr & Peers, 2017.

Impact 4.9-3: The proposed projects could fail to adequately provide access to transit.

SCC Project

The proposed SCC project would include the construction of a new curbside passenger loading zone on the west side of 15th Street between J Street and K Street. A bus stop serving YoloBus, Roseville Transit, Yuba Sutter Transit, and other public transit service providers is currently present at the location of the proposed loading zone. The construction of the loading zone would require the removal/relocation of the existing bus stop. The nearest bus stops serving the same routes are approximately two to three blocks away from this location, which would require existing passengers to walk a longer distance to access transit service. Since the removal of the existing bus stop would inhibit access to existing public transit service, this impact would be considered **significant**.

SCC Project and Hotel Project

The hotel project itself would not affect existing transit stops or otherwise reduce access to transit. However, because the SCC project would require the removal/relocation of the existing bus stop on the west side of 15th Street between J Street and K Street, the impact to transit access under Baseline Plus SCC Project and Hotel Project conditions would be considered **significant**.

Mitigation Measure

Mitigation Measure 4.9-3 (SCC)

- i. *Coordinate with relevant transit providers, as necessary, to identify a suitable replacement bus stop location and design that does not substantially alter existing service operations.*
- ii. *Install replacement bus stop on 15th Street near J Street. Potential replacement options include:*
 - a. *Installation of bus stop on the west side of 15th Street immediately south of J Street, north of proposed passenger loading zone.*
 - b. *Integration of bus stop within the proposed SCC passenger loading zone on 15th Street. The bus stop should include enhanced passenger amenities*

including shelter, seating, and transit information signage. A portion of the loading zone should be reserved for exclusive use by public transit operators. Sufficient curb space should be reserved to accommodate at least one standard 40-foot bus at a given time.

- iii. *Ensure that the replacement bus stop is constructed and operational prior to the closure of the existing bus stop.*

Significance After Mitigation: The installation of a replacement bus stop would minimize the effect of the bus stop removal on existing passengers. Also, relocation of the bus stop along existing route alignments would allow transit operators to maintain existing routes without requiring detours or deviations. Since two options are available to relocate the bus stop, the SCC controls the frontage associated with Option b, and similar bus stop relocations have been implemented elsewhere in downtown, this is considered a feasible mitigation measure. This impact would be reduced to a **less-than-significant** level.

Impact 4.9-4: The proposed projects could adversely affect existing or planned bicycle facilities or fail to provide for access by bicycle.

SCC Project

The SCC project is located near numerous existing bicycle facilities. The proposed project would not alter existing bicycle facilities within the vicinity of the project site. However, by virtue of adding substantial levels of pedestrian traffic on K Street at 13th Street, it could cause conflicts with bicyclists who use this Class I facility and street crossing.

The SCC project site is located along the planned Class I bike path on K Street between 13th Street and 14th Street. The current conceptual design shows the Class I bike path as a shared bicycle-pedestrian path that meanders through the project site from 13th Street to 14th Street. According to the current SCC project conceptual design, the area planned for the Class I bike path is co-located with a proposed outdoor Activities Plaza, where performances and other events would be held. During events, the outdoor Activities Plaza would attract crowds and could potentially be enclosed to allow for ticketing and crowd management. The presence of crowds and potential physical barriers associated with outdoor events would impede bicycle access via the planned Class I bike path, effectively breaking a critical contiguous bicycle route through downtown Sacramento. This would be considered a **potentially significant** impact.

SCC Project and Hotel Project

The hotel project would not eliminate any existing or proposed bicycle facilities along K Street or 15th Street. Although specific details of ingress/egress along the hotel frontage are not known at this time, the conceptual plan for the hotel project identifies a truck loading area and a garage driveway egress on the south side of K Street between 14th and 15th Streets. A truck loading area and/or a garage driveway egress onto eastbound K Street approaching 15th Street would increase vehicular travel on this street, which has a Class III on-street bike route in the eastbound

direction. Therefore, due to the potential for increased conflicts between bicyclists and vehicles on K Street at 15th Street, this is considered a **potentially significant** impact.

Mitigation Measures

Mitigation Measure 4.9-4(a) (SCC)

- i. *As part of the ETMP, station multiple TCOs at the K Street/13th Street intersection to facilitate bicycle crossings during large events.*
- ii. *During outdoor events, ensure that east-west bicycle travel is accommodated within the vicinity of the SCC (between 13th and 14th streets). Potential options include:*
 - a. *Maintain clear path of travel along the planned Class I bike path through the project site during outdoor events. Situate fencing and/or barriers in a manner that does not physically block the planned bike path. Install signage notifying event attendees of the presence of the bike path and discouraging event attendees from dwelling on the path.*
 - b. *Provide viable east-west bicycle detour around the SCC site during outdoor events. Detours should be sufficiently signed and marked to provide bicyclists with a clear path of travel.*

Significance After Mitigation: The presence of TCOs would reduce conflicts between bicyclists/pedestrians on K Street and vehicles on 13th Street without adversely impacting 13th Street vehicular traffic (by virtue of its modest volumes). This impact would be reduced to a **less-than-significant** level.

Mitigation Measure 4.9-4(b) (Hotel)

During the entitlement process, a site access and circulation study for motorized vehicles, trucks, bicycles, and pedestrians shall be conducted. The following recommendations shall be considered:

- a. *Adequate sight distance for all alleys, driveways, and loading areas along the site frontage, including the consideration of the addition of pedestrian/bicycle warning devices (e.g., audio/visual warning devices).*
- b. *Conformance with applicable City design and construction standards for all driveway and alley designs.*
- c. *Adequately sized sidewalks to serve hotel events and pedestrian circulation, defined as an eight-foot sidewalk with an additional eight-foot width for trees and planters.*
- d. *Location of trucks and truck loading bays do not inhibit bicycle travel on designated bicycle facilities within the project vicinity.*
- e. *Compliance with the City's Transportation Systems Management ordinance.*

Significance After Mitigation: Implementation of the recommendations described above would ensure adequate bicycle access and circulation to the hotel project site consistent with City standards, ordinances, and engineering practices. This impact would be reduced to a **less-than-significant** level.

Impact 4.9-5: The proposed projects could adversely affect existing or planned pedestrian facilities or fail to provide for access for pedestrians.

SCC Project

The SCC project is surrounded by numerous pedestrian facilities. The proposed project would modify many of the sidewalks along its frontage. In some cases, sidewalks would become narrower, while in other instances, they would be widened. The SCC project would not modify existing crosswalks near the SCC. Table 4.9-16 indicates that during peak pedestrian surges before and after SCC events, several crosswalks would operate at unacceptable conditions where pedestrians could spill out of the available crosswalk capacity.

The SCC project would maintain pedestrian access to and from the north and west with the J Street and West Lobbies, respectively. A new East Lobby located near the K Street/15th Street would create a new pedestrian access point for event attendees traveling to and from the SCC from the east. The presence of the East Lobby would create a more even distribution of pedestrians surrounding the SCC project site and reduce the number of pedestrians crossing between on the east and west sides of the project site (along pedestrian routes such as K Street between 14th Street and 15th Street).

The renovated J Street Lobby would serve as the primary entry point for event attendees accessing the SCC facility from the north. As such, a significant number of pedestrians would utilize crosswalks at the J Street/14th Street intersection to access the SCC facility. Currently, buses stop on J Street within the 14th Street intersection. Review of bus operations did not reveal bus encroachment into the east or west leg crosswalks. However, since the SCC project would not provide adequate access for pedestrians, this would be considered a **potentially significant** impact.

SCC Project and Hotel Project

The hotel project would construct new sidewalks along its 15th Street and K Street frontages in conjunction with its construction. However, details regarding pedestrian features (e.g., sidewalk width, access walkways to hotel, driveway cuts, etc.) are not known at this time. During events at the hotel event space, vehicular activity would increase on roadways immediately surrounding the hotel project site (e.g., heavy westbound left-turn movements at the K Street/15th Street intersection), creating potential conflicts with pedestrians. Additionally, a maximum event at the hotel would add 936 pedestrians during the PM peak hour to the K Street/13th Street crossing. This would be considered a **potentially significant** impact.

Mitigation Measures

Mitigation Measure 4.9-5(a) (SCC)

- i. *Install pedestrian bulbouts at the following locations:*

- a. *J Street/13th Street intersection – northwest corner*
- b. *K Street/15th Street intersection – northeast, southeast, and southwest corners*
- ii. *Install 15-foot wide continental crosswalks at the following locations:*
 - a. *J Street/13th Street intersection – all legs*
 - b. *J Street/14th Street intersection – east and west legs*
 - c. *J Street/15th Street intersection – west leg*
 - d. *K Street/15th Street intersection – all legs*
- iii. *As part of the ETMP, implement the following temporary measures (illustrated in Figure 4.9-24):*
 - a. *At the J Street/13th Street intersection, under Option 1 described above, extend walk intervals to 60, 60, and 21 seconds for the north, south, and west leg crossings, respectively. Under Option 2, TCOs would take manual control of the intersection and operate the intersection with a 20-second pedestrian crossing window.*
 - b. *At the K Street/13th Street intersection, position multiple TCOs to manage pedestrian and vehicular traffic flows.*

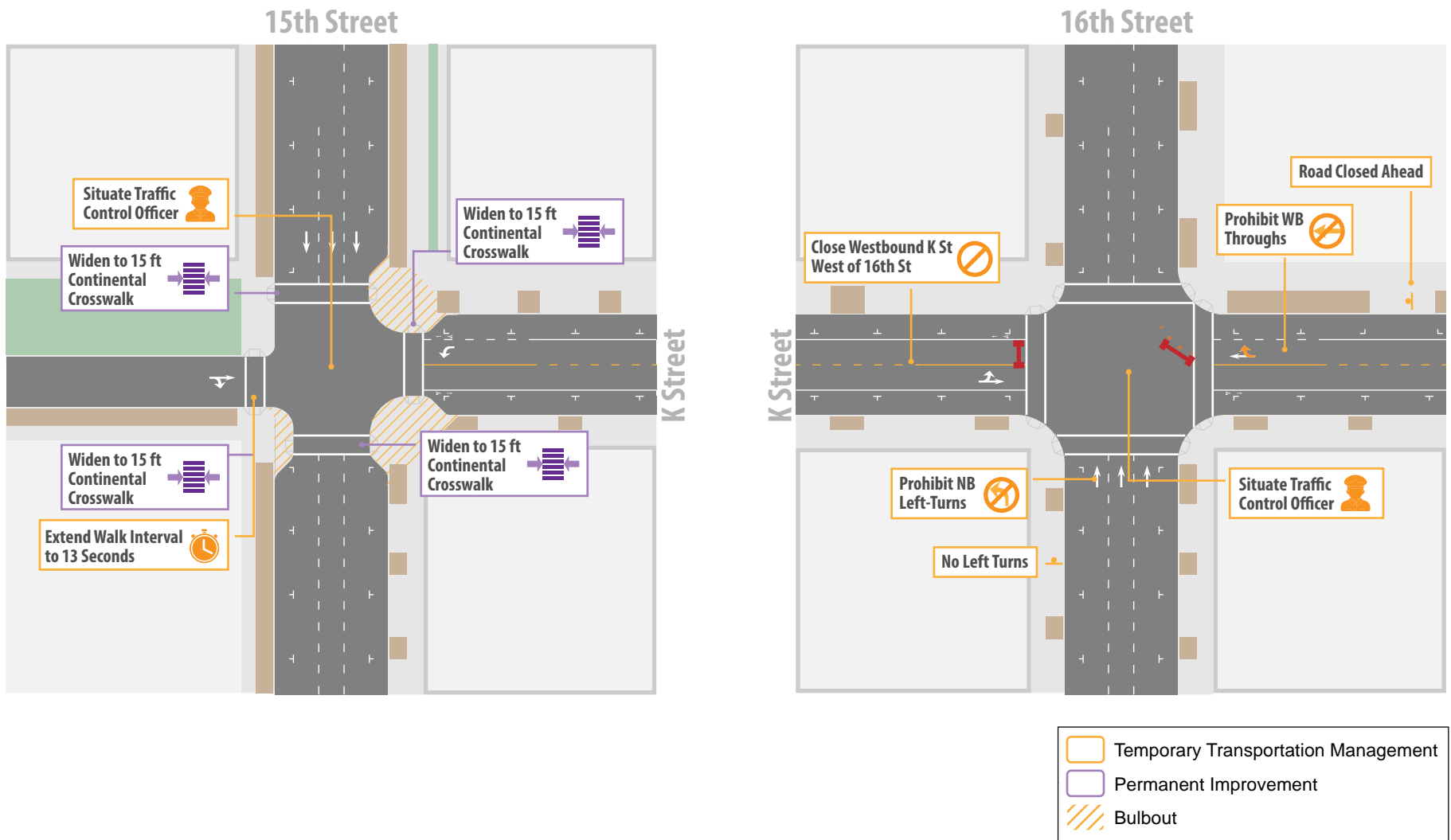
Significance After Mitigation: The mitigation measures described above would improve pedestrian operations to acceptable LOS D or better conditions (see Appendix L for technical calculations). This impact would be reduced to a **less-than-significant** level.

Mitigation Measure 4.9-5(b) (SCC/Hotel)

Implement the ETMP (included in Appendix L) for all large events with a combined daily attendance of 5,000 persons or more between the SCC and hotel event space. Due to the variation in event size, type, location, and travel characteristics, specific ETMP elements should be reviewed on a case-by-case basis to determine the appropriateness for a specific event day. Key ETMP elements relevant to large events centered at the hotel event space include the following:

- a. *Prohibit westbound traffic from entering the segment of K Street between 15th Street and 16th Street. Position traffic cones, barricades, and signage to prohibit northbound left-turn and westbound through movements at the K Street/16th Street intersection.*
- b. *Position a single Traffic Control Officer at the K Street/15th Street and K Street/16th Street intersections to monitor conditions.*
- c. *At the K Street/13th Street intersection, position multiple TCOs to manage pedestrian and vehicular traffic flows. Position traffic cones and warning signage along east curbside to prevent passenger loading activity from blocking crosswalks.*

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SOURCE: Fehr & Peers, 2017

Sacramento Convention Center Renovation and Expansion and 15th/K Street Hotel EIR



Figure 4.9-24
15th/K Street Hotel Mitigation -
Traffic Management on K Street at 15th and 16th Street

Significance After Mitigation: The mitigation measure described above would divert 230 PM peak hour vehicular trips away from heavy pedestrian flows at the K Street/ 15th Street intersection, reducing the potential for vehicle-pedestrian conflicts. These trips would instead travel northbound on 16th Street, where it is not expected that any subsequent significant indirect impacts would occur. This impact would be reduced to a **less-than-significant** level.

Mitigation Measure 4.9-5(c) (Hotel)

Implement Mitigation Measure 4.9-4(b) (Hotel).

Significance After Mitigation: Implementation of Mitigation Measure 4.9-4(b) (Hotel) would ensure adequate pedestrian access and circulation to the hotel project site consistent with City standards, ordinances, and engineering practices. This impact would be reduced to a **less-than-significant** level.

Impact 4.9-6: The proposed projects could cause construction-related traffic impacts.

SCC Project

Construction of the SCC project would involve a phased construction effort over an extended period. Project construction could also require temporary closures of bus stops located along the project's frontage on J Street and 15th Street. Large numbers of trucks and employee trips would arrive at and depart the SCC project during construction. These activities could potentially cause lane closures, damage to roadways, and increased conflicts with bicyclists, pedestrians, and transit. The duration of construction, number of trucks, truck routing, number of employees, employee parking, truck idling, lane closures, and a variety of other construction-related activities are unknown at this time. Therefore, it would be speculative to conduct any type of quantitative analysis. However, because of the extent and duration of construction, and the associated potential for prolonged lane closures, damage to roadbeds, and traffic hazards to bikes/ pedestrians, SCC project impacts during construction would be **significant**.

SCC Project and Hotel Project

Construction of the Hotel project would involve grading, earthwork, and construction activities over an extended period. Large numbers of trucks and employee trips would enter and exit the construction area. These activities could potentially cause lane closures, damage to roadways, and increased conflicts with bicyclists, pedestrians, and transit. The duration of construction, number of trucks, truck routing, number of employees, employee parking, truck idling, lane closures, and a variety of other construction-related activities are unknown at this time. Therefore, it would be speculative to conduct any type of quantitative analysis. However, because of the extent and duration of construction, and the associated potential for prolonged lane closures, damage to roadbeds, and traffic hazards to bikes/pedestrians, Hotel Project impacts during construction would be **significant**.

Mitigation Measures

Mitigation Measure 4.9-6(a) (SCC)

- i. *Before issuance of any demolition or building permits for any phase of the project, the project applicant shall prepare a detailed Construction Traffic Management Plan that will be subject to review and approval by the City Department of Public Works, in consultation with affected transit providers, and local emergency service providers including the City of Sacramento Fire and Police departments. The plan shall ensure that acceptable operating conditions on local roadways are maintained. At a minimum, the plan shall include:*
- *The number of truck trips, time, and day of street closures*
 - *Time of day of arrival and departure of trucks*
 - *Limitations on the size and type of trucks, provision of a staging area with a limitation on the number of trucks that can be waiting*
 - *Provision of a truck circulation pattern*
 - *Identification of detour routes and signing plan for street closures*
 - *Provision of driveway access plan so that safe vehicular, pedestrian, and bicycle movements are maintained (e.g., steel plates, minimum distances of open trenches, and private vehicle pick up and drop off areas)*
 - *Maintain safe and efficient access routes for emergency vehicles and transit*
 - *Manual traffic control when necessary*
 - *Proper advance warning and posted signage concerning street/lane closures*
 - *Provisions for pedestrian and bicycle safety*

A copy of the approved construction traffic management plan shall be submitted to local emergency response agencies and transit providers, and these agencies shall be notified at least 30 days before the commencement of construction that would partially or fully obstruct roadways.

- ii. *The project applicant, in coordination with the City of Sacramento, Regional Transit, and other transit providers within the project vicinity and subject to their approval, shall identify temporary bus stop locations and cause ADA-compliant replacement bus stop facilities to be constructed in place of any bus stops that need to be temporarily closed during project construction. The relocation of bus stops may have a secondary impact related to the loss/relocation of a small number of on-street parking spaces and/or loading zones. This secondary impact would not be significant.*

Mitigation Measure 4.9-6(b) (Hotel)

Before issuance of any demolition, grading or building permits for the project, the project applicant shall prepare a detailed Construction Traffic Management Plan that will be subject to review and approval by the City Department of Public Works, in consultation with affected transit providers, and local emergency service providers

including the City of Sacramento Fire and Police departments. The plan shall ensure that acceptable operating conditions on local roadways are maintained. At a minimum, the plan shall include:

- *The number of truck trips, time, and day of street closures*
- *Time of day of arrival and departure of trucks*
- *Limitations on the size and type of trucks, provision of a staging area with a limitation on the number of trucks that can be waiting*
- *Provision of a truck circulation pattern*
- *Identification of detour routes and signing plan for street closures*
- *Provision of driveway access plan so that safe vehicular, pedestrian, and bicycle movements are maintained (e.g., steel plates, minimum distances of open trenches, and private vehicle pick up and drop off areas)*
- *Maintain safe and efficient access routes for emergency vehicles and transit*
- *Manual traffic control when necessary*
- *Proper advance warning and posted signage concerning street/lane closures*
- *Provisions for pedestrian and bicycle safety*

A copy of the construction traffic management plan shall be submitted to local emergency response agencies and transit providers, and these agencies shall be notified at least 30 days before the commencement of construction that would partially or fully obstruct roadways.

Significance After Mitigation: The mitigation measures described above would reduce construction-related traffic impacts to a **less-than-significant** level.

Cumulative Impacts

The cumulative impact analysis presented in this chapter consists of a two-step approach. First, the study assesses whether cumulative impacts from past, present, and probable future projects, as well as the proposed project, are significant. If the cumulative impacts are not significant, this conclusion is presented. If the cumulative impacts are significant, a determination is then made as to whether the project's incremental contribution to those impacts is "cumulatively considerable" (that is, significant in and of itself).

Impact 4.9-7: The proposed projects could worsen cumulative conditions at intersections in the City of Sacramento.

SCC Project

The proposed SCC project would exacerbate congested conditions on several roadways in the City of Sacramento under Cumulative conditions. All study intersections are located in the Core Area and are governed by General Plan Mobility Element Policy M 1.2.2. This policy states that LOS F is acceptable at these locations during peak hours if the project improves the overall system, promotes non-vehicular transportation, and/or implements vehicle trip reduction

measures. Also, LOS F is acceptable at isolated locations when systemic congestion or gridlock does not occur that may affect other mode of transportation. The SCC project fulfills this requirement by virtue of its location in downtown Sacramento in close proximity to extensive transit, bicycle, and pedestrian facilities and services, providing event attendees with numerous non-vehicular transportation options for travel to and from the SCC.

The K Street/13th Street intersection would operate at LOS F during the AM peak hour due to heavy pedestrian flows that cross 13th Street to/from K Street. Vehicles on northbound and southbound 13th Street yield to these crossing pedestrians, which causes the LOS F condition. Extensive queuing would occur on J Street within the vicinity of the project site, stemming from the bottleneck created at the J Street/13th Street intersection. A review of SimTraffic micro-simulation results indicates that the percent of demand served along the corridor would be limited to as little as 71 percent in the eastbound direction, indicating that over one-quarter of vehicles attempting to travel down J Street could not enter the study area due to congestion during the PM peak hour. So, although LOS E conditions are reported, PM peak hour conditions are represented by lengthy vehicle queues, and longer travel times. Since this condition is present on several key roadways within the study area and could potentially hamper other modes of transportation, this would be a **significant** impact.

SCC Project and Hotel Project

The addition of the proposed hotel to the SCC project would further exacerbate congested conditions on several roadways in the City of Sacramento. The addition of hotel trips would cause the J Street/12th Street intersection to degrade to LOS F during the PM peak hour. In addition to worsening vehicle delay at this location, the proposed hotel project would contribute to the extensive queuing on J Street described above under Cumulative Plus SCC Project conditions. While the proposed hotel project would include improvements (e.g., the pedestrian bridge connecting to the SCC) that would promote non-vehicular transportation per General Plan Mobility Element Policy M 1.2.2., the extensive delay and queuing that would occur during the PM peak hour as a result of the project would substantially degrade operations on several corridors within the project site vicinity, and therefore would be detrimental to other General Plan circulation policies. This would be considered a **significant** impact.

Mitigation Measures

Mitigation Measure 4.9-7(a) (SCC)

Implement Mitigation Measure 4.9-2 (SCC) (ETMP).

Significance After Mitigation: With the implementation of Mitigation Measure 4.9-2 (SCC) listed above, this impact would be reduced to a **less-than-significant** level. The temporary ETMP measures described above would diminish queuing and reduce delay along J Street, improving conditions for all modes of travel.

Mitigation Measure 4.9-7(b) (Hotel)

Implement Mitigation Measure 4.9-5(b) (Hotel) (ETMP).

Significance After Mitigation: The mitigation measures described in Mitigation Measure 4.9-5(b) (Hotel) would divert 270 vehicular trips away from heavy pedestrian flows at the K Street/15th Street intersection, reducing the extensive queuing on westbound K Street east of 15th Street. These trips would instead travel northbound on 16th Street, where it is not expected that any subsequent significant indirect impacts would occur. This impact would be reduced to a **less-than-significant** level.

Impact 4.9-8: The proposed projects could adversely affect cumulative public transit operations.

SCC Project

The proposed SCC project could cause increases in vehicular travel times along J Street, which could adversely affect on-time performance for buses operating in the corridor. Since buses operate in general purpose travel lanes, they would experience additional delays during SCC event arrival and departure time periods. Affected bus routes include Regional Transit Route 30, which operates every 15 minutes between Downtown and CSU Sacramento, and multiple commuter express routes that utilize the J Street corridor during peak commute hours (e.g., North Natomas Flyer). Additionally, once constructed, the planned Downtown Riverfront Streetcar will operate in mixed-flow traffic on J Street within the vicinity of the SCC. Similar to bus routes, streetcar operations would be affected by vehicular delay along J Street. The source of this travel delay can be attributed to substantial increases in vehicular and pedestrian travel at the J Street/13th Street intersection. Because travel to the SCC project by transit is an important part of reducing its private vehicle travel, diminished on-time performance and transit reliability could deter ridership. This could adversely affect existing public transit operations and also discourage use of travel to the SCC project by bus.

The proposed SCC project is located along the planned Downtown Riverfront Streetcar alignment. Within the vicinity of the project site, the streetcar is planned to operate in mixed-flow traffic in the right-most travel lane on J Street. A streetcar stop is planned on the south side of J Street east of 13th Street, in between the intersection and the passenger loading zone located along the J Street frontage of the SCC project site. According to the current conceptual design, the SCC project does not incorporate sufficient curb space at this location to accommodate the planned streetcar stop (i.e., contiguous 80 feet of curb to accommodate a streetcar vehicle). Since the project would conflict with planned transit services, impacts would be considered **significant**.

SCC Project and Hotel Project

As described under Cumulative Plus SCC Project conditions, the SCC project alone would cause a significant impact to transit operations due to increased vehicular and pedestrian travel surrounding the project site. This condition would remain with the addition of the hotel project.

However, the hotel project's effects on transit service provider delays along J Street would be different than those of the SCC due to their different activity levels and locations. The hotel project would add 100 PM peak hour vehicles to J Street east of 12th Street under Cumulative conditions. Those volumes in and of themselves, (as well as the lack of hotel-related pick-up and drop-off activity in the immediate intersection vicinity) are not sufficient so as to trigger implementation of the full ETMP. Therefore, the hotel project itself would not adversely impact public transit operations or reduce access to transit. However, under SCC Project and Hotel Project conditions, impacts to transit operations would be considered **significant**.

Mitigation Measures

Mitigation Measure 4.9-8(a) (SCC)

Implement Mitigation Measure 4.9-2 (SCC) (ETMP).

Significance After Mitigation: With the implementation of Mitigation Measure 4.9-2 (SCC) listed above, this impact would be reduced to a **less-than-significant** level. The temporary ETMP measures described above would diminish queuing and reduce delay along J Street, improving public transit travel time, on-time performance, and service reliability.

Mitigation Measure 4.9-8(b) (SCC)

Final SCC project site plan shall not prohibit construction, by others, of future Downtown Riverfront Streetcar stop on the south side of J Street east of 13th Street.

Significance After Mitigation: By allowing for the construction of the planned Downtown Riverfront Streetcar stop, this impact would be reduced to a **less-than-significant** level.

Impact 4.9-9: The proposed projects could fail to adequately provide access to transit under cumulative conditions.

SCC Project

Under cumulative conditions, the proposed SCC project would not reduce access to transit. Under Baseline Plus SCC Project conditions, the construction of the proposed SCC project would require the closure of the existing bus stop on the west side of 15th Street between J and K Streets. However, the implementation of Mitigation Measure 4.9-3 (SCC) would adequately replace this bus stop prior to the closure of the existing stop and in advance of the cumulative analysis year (2036). Therefore, this would be considered a **less-than-significant** impact.

SCC Project and Hotel Project

The hotel project would not reduce access to transit under Cumulative Plus SCC Project Plus Hotel Project conditions. This would be considered a **less-than-significant** impact.

Mitigation Measure

None required.

Impact 4.9-10: The proposed projects could adversely affect planned bicycle facilities or fail to provide for access by bicycle under cumulative conditions.

SCC Project

The SCC project is located near numerous existing bicycle facilities. The proposed project would not alter existing or planned bicycle facilities within the vicinity of the project site. However, by virtue of adding substantial levels of pedestrian traffic on K Street at 13th Street, it could cause conflicts with bicyclists who use this Class I facility and street crossing.

The SCC project site is located along the planned Class I bike path on K Street between 13th Street and 14th Street. The current conceptual design shows the Class I bike path as a shared bicycle-pedestrian path that meanders through the project site from 13th Street to 14th Street. According to the current SCC project conceptual design, the area planned for the Class I bike path is co-located with a proposed outdoor Activities Plaza, where performances and other events would be held. During events, the outdoor Activities Plaza would attract crowds and could potentially be enclosed to allow for ticketing and crowd management. The presence of crowds and potential physical barriers associated with outdoor events would impede bicycle access via the planned Class I bike path, effectively breaking a critical contiguous bicycle route through downtown Sacramento. This would be considered a **potentially significant** impact.

SCC Project and Hotel Project

The hotel project, by virtue of having a truck loading area and garage driveway egress onto eastbound K Street approaching 15th Street, would increase vehicular travel on this street, which has a Class III on-street bike route. Specific details of ingress/egress and the accommodation of bicyclists and pedestrians along the hotel frontage are not known at this time. Due to the potential for increased conflicts between bicyclists and vehicles on K Street at 15th Street, this is considered a **potentially significant** impact.

Mitigation Measures

Mitigation Measure 4.9-10(a) (SCC)

Implement Mitigation Measure 4.9-4(a) (SCC), which identifies the need for bicycle improvement elements in an ETMP.

Significance After Mitigation: The presence of TCOs would reduce conflicts between bicyclists/pedestrians on K Street and vehicles on 13th Street without adversely impacting 13th Street vehicular traffic (by virtue of its modest volumes). This impact would be reduced to a **less-than-significant** level.

Mitigation Measure 4.9-10(b) (Hotel)

Implement Mitigation Measure 4.9-4(b) (Hotel).

Significance After Mitigation: Implementation of the recommendations described in Mitigation Measure 4.9-4(b) (Hotel) would ensure adequate bicycle access and circulation to the hotel project site consistent with City standards, ordinances, and engineering practices. This impact would be reduced to a **less-than-significant** level.

Impact 4.9-11: The proposed projects could adversely affect planned pedestrian facilities or fail to provide for access for pedestrians under cumulative conditions.

SCC Project

The SCC project is surrounded by numerous pedestrian facilities. The proposed project would modify many of the sidewalks along its frontage. In some cases, sidewalks would become narrower, while in other instances, they would be widened. The SCC project would not modify existing crosswalks near the SCC. Table 4.9-16 indicates that during peak pedestrian surges before and after SCC events, several crosswalks would operate at unacceptable conditions where pedestrians could spill out of the available crosswalk capacity. Although this table describes expected conditions under Baseline Plus SCC Project conditions, it is expected that Cumulative Plus SCC Project conditions would be similar from a pedestrian analysis standpoint.

The SCC project would maintain pedestrian access to and from the north and west with the J Street and West Lobbies, respectively. A new East Lobby located near the K Street/15th Street would create a new pedestrian access point for event attendees traveling to and from the SCC from the east. The presence of the East Lobby would create a more even distribution of pedestrians surrounding the SCC project site and reduce the number of pedestrians crossing between on the east and west sides of the project site (along pedestrian routes such as K Street between 14th Street and 15th Street).

The renovated J Street Lobby would serve as the primary entry point for event attendees accessing the SCC facility from the north. As such, a significant number of pedestrians would utilize crosswalks at the J Street/14th Street intersection to access the SCC facility. Currently, buses stop on J Street within the 14th Street intersection. Review of bus operations did not reveal bus encroachment into the east or west leg crosswalks. However, since the SCC project would not provide adequate access for pedestrians, this would be considered a **potentially significant** impact.

SCC Project and Hotel Project

The hotel Project would construct new sidewalks along its 15th Street and K Street frontages in conjunction with its construction. However, details regarding pedestrian features (e.g., sidewalk width, access walkways to hotel, driveway cuts, etc.) are not known at this time. During events at the hotel event space, vehicular activity would increase on roadways immediately surrounding the

hotel project site (e.g., heavy westbound left-turn movements at the K Street/15th Street intersection), creating potential conflicts with pedestrians. This would be a **potentially significant** impact.

Mitigation Measures

Mitigation Measure 4.9-11(a) (SCC)

Implement Mitigation Measure 4.9-5(a) (SCC), which identifies various crosswalk widenings, signal timing modifications, and other ETMP elements.

Significance After Mitigation: The mitigation measures described above would improve pedestrian operations to acceptable conditions. This impact would be reduced to a **less-than-significant** level.

Mitigation Measure 4.9-11(b) (Hotel)

- i. *Implement Mitigation Measure 4.9-5(b) (Hotel), which identifies the need for implementation of an ETMP, the closure of westbound traffic on K Street between 15th Street and 16th Street, and the placement of TCOs at various locations with high pedestrian volumes.*
- ii. *Implement Mitigation Measure 4.9-4(b) (Hotel).*

Significance After Mitigation: The mitigation measures described above would divert 270 vehicular trips away from heavy pedestrian flows at the K Street/15th Street intersection, reducing the potential for vehicle-pedestrian conflicts. These trips would instead travel northbound on 16th Street, where it is not expected that any subsequent significant indirect impacts would occur.

Implementation of the recommendations described in Mitigation Measure 4.9-4(b) (Hotel) would ensure adequate pedestrian access and circulation to the hotel project site consistent with City standards, ordinances, and engineering practices. This impact would be reduced to a **less-than-significant** level.

Impact 4.9-12: The proposed projects could cause construction-related traffic impacts under cumulative conditions.

SCC Project

The construction of the SCC project would be complete by 2036, the analysis year under Cumulative Plus SCC Project conditions. Therefore, the SCC project would not generate construction activity or construction-related traffic impacts under cumulative conditions. This would be considered a **less-than-significant** impact.

SCC Project and Hotel Project

The construction of the hotel project would be complete by 2036, the analysis year under Cumulative Plus SCC Project and Hotel Project conditions. Therefore, the hotel project would not

generate construction activity or construction-related traffic impacts under cumulative conditions. This would be considered a **less-than-significant** impact.

Mitigation Measure

None required.

4.10 Utilities and Service Systems

This section provides a summary of existing utilities and service systems that serve the proposed projects including stormwater conveyance, wastewater conveyance and treatment, and solid waste collection and disposal. Pertinent regulations and requirements at the federal, State, and local level are reviewed. Potential impacts on utilities and service systems that could result from implementation of the proposed projects are discussed, and, as warranted, mitigation measures that could be applied in order to avoid or minimize the magnitude of potential utilities-related impacts are presented. Potential impacts on stormwater conveyance facilities are also discussed in this section. For a discussion of stormwater quality management, please refer to Section 4.7, Hydrology and Water Quality.

The City received comments on the NOP related to utilities from the Central Valley Water Quality Control Board (CVRWQCB) and Sacramento Regional County Sanitation District (RegionalSan), which are addressed in this chapter to the extent they pertain to potential impacts of the proposed projects (see Appendix B). The NOP comment letters received include requests to (1) comply with the state antidegradation policy to maintain highest water quality possible, and (2) acquire the appropriate permits for wastewater discharge.

The analysis included in this section was developed based on construction and operational information data provided by the City with respect to existing wastewater demands, and additional data and information gathered from the City of Sacramento 2035 General Plan Update, Master Environmental Impact Report for the City of Sacramento 2035 General Plan Update, and other published technical reports, as indicated in the footnoted references.

4.10.1 Wastewater and Drainage

Environmental Setting

Sacramento Regional Wastewater Treatment Plant

The Sacramento Regional Wastewater Treatment Plant (SRWWTP) is located in Elk Grove, and is owned and managed by the RegionalSan. RegionalSan provides regional wastewater conveyance and treatment services to commercial, residential, and industrial end users within the City of Sacramento, several other areas including Sacramento County and the cities of Citrus Heights, Elk Grove, Folsom, Rancho Cordova, and West Sacramento, as well as the communities of Courtland and Walnut Grove. RegionalSan maintains 177 miles of interceptor pipelines. The existing SRWWTP currently maintains a maximum average dry weather treatment capacity of 181 million gallons per day (mgd). As of 2014, actual average dry weather flow for the facility was approximately 106 mgd, substantially lower than the facility's capacity.¹ Treated effluent is discharged into the Sacramento River.

¹ MacKay & Soms Civil Engineers, 2015. *RegionalSan Capacity Analysis - Sutter Pointe Wastewater Conveyance Project*. p. 19.

In 2010, the CVRWQCB released a draft permit for the SRWWTP that targeted ammonia reductions from the existing SRWWTP facility. The SRWWTP currently maintains secondary-level treatment processes. In order to meet the target requirements, as well as other anticipated future discharge requirements, RegionalSan is upgrading the SRWWTP. The proposed upgrade includes deployment of new treatment technologies and facilities, and would increase the quality of effluent discharged into the Sacramento River. The proposed upgrade would not result in a net increase in permitted capacity of the SRWWTP.

Sewer and Drainage

The project sites are located in an area of Sacramento served by the City's combined sewer system (CSS), a collection and conveyance system designed to convey domestic sewage, commercial and industrial wastewater, and surface stormwater runoff in a single pipeline for treatment at a regional wastewater treatment facility. The CSS is a legacy system, continuing to be used and maintained well past its original design life, that was designed and has operated to provide both stormwater and sanitary sewer service (combined in a single pipeline system) within this area.

Combined sewer systems were constructed in the City until 1946. Because the system was designed to carry both stormwater and sanitary flows, the system is considerably oversized for managing sanitary flows generated within the applicable service area. However, it is insufficiently sized to meet the City's current design standard for drainage, which is to convey flows consistent with a 10-year storm event (i.e., a storm event of sufficient size that it has a 10% chance of annual occurrence). Because the system does not meet City standards for stormwater conveyance capacity, it is subject to outflow and, infrequently, overflow during major storm events.²

Under normal conditions, stormwater plus sanitary flows are routed in a westerly direction to Sump 1/1A and Sump 2, which are located near the Sacramento River. In order to provide secondary treatment, the City has entered into a contract with the SRWWTP to convey up to a total capacity of 108.5 mgd of wastewater combined from Sumps 2, 2A, 21, 55, and 119. These flows would be routed along RegionalSan's Interceptor pipeline for conveyance to RegionalSan's treatment facility, and ultimate treatment. This volume of capacity is sufficient for dry weather flows, with some additional capacity.³

During heavy storms when this capacity is exceeded, excess flows in the Combined Sewer System (CSS) are routed to the Combined Wastewater Treatment Plant, located along South Land Park Drive and 35th Avenue. This facility provides only primary treatment of up to an additional 130 mgd. If flows exceed this volume, additional water, up to a capacity of 350 mgd, is routed to the Pioneer Reservoir storage and treatment facility. When this facility too has reached capacity, excess flows are discharged from Sump 2 directly into the Sacramento River, without treatment. If the pipeline capacity is exceeded beyond this point, excess flows could flood local streets in the

² Outflow is defined as the discharge of water to City streets; overflow, which occurs rarely, is defined as discharges that spill untreated wastewater/stormwater from the combined system directly into the Sacramento River.

³ Nolte, 2011. *Downtown Infrastructure Study*. September 2011. pp. IV-1 – IV-11.

downtown area through manholes and catch basins. Please see Section 4.7, Hydrology and Water Quality, for a discussion of localized flooding.

The area served by the CSS is currently operated under Cease and Desist Order No. 85-342 (C&DO), promulgated by the CVRWQCB. The order, which includes amendments, requires that the City implement certain operational improvements in order to reduce system overflows, with the ultimate goal of providing 10-year capacity for the combined sewer system.

In order to address the requirements of the C&DO, the City has developed several strategies to reduce or avoid outflow and overflow events. Key improvements, in various stages of completion, are funded by fees imposed on new development to fund long-term improvements to the CSS. These include:

- Rehabilitation and expansion of Sumps 1/1A and 2;
- Rehabilitating and converting Pioneer Reservoir into a treatment facility;
- Rehabilitating and up-sizing of sewer mains in the combined system; and
- Rehabilitating the Combined Wastewater Treatment Plant.

Adjacent to the RSP Area, the CSS is composed of pipes that range from approximately 8 inches to 36 inches in diameter. Water flows within the system from the north in the River District to the south. Pipeline composition reflects historic installations as well as upgrades, and includes brick, polyvinyl chloride (PVC), reinforced concrete pipe (RCP), and vitrified clay pipe (VCP).

Regulatory Setting

Federal

Environmental Protection Agency's National CSO Control Policy

The U.S. Environmental Protection Agency (US EPA) initiated its Combined Sewer Overflow (CSO) Control Policy (40 CFR 122) in April, 1994. The CSO Policy provides a national level framework for the control and management of CSOs. The CSO Policy provides guidance regarding how to achieve Clean Water Act goals and requirements when faced with management of a CSO. Key components of the CSO Policy that are relevant to the proposed project include a requirement for Nine Minimum Controls (NMCs), which apply to every CSS in the nation. The NMCs are minimum technology-based actions or measures that are designed to reduce CSOs and their effects on receiving water quality. The intent of the NMCs is to be implementable without extensive engineering studies or major construction. The policy requires that at least 85% of the average annual CSS storm flow must be captured and routed to at least primary treatment with disinfection prior to discharge.

State

There are no applicable State regulations relative to the design of wastewater utilities.

Local

Sacramento Combined Sewer Development Fee

In order to support ongoing maintenance and upgrade efforts within the combined sewer system area, the City has adopted the Combined Sewer Development Fee.⁴ This fee is designed to be an impact mitigation fee that requires mitigation of any significant increase in wastewater flows over the baseline/present level. To the extent that a proposed development project or other project could have a significant impact on the combined sewer system, the City requires an acceptable mitigation plan. The mitigation plan typically includes payment of fees in order to mitigate that project's impacts to the sewer system. Alternatively, a developer may mitigate impacts on the combined sewer system by getting City approval of a Mitigation Plan. Such a plan would be required to include on-site storage, retention, sewer main up-sizing, stormwater best management practices (BMPs), diversion of flows, rerouting of pipelines, replacement of pipelines, connection to separated areas, or other upgrades as warranted.

Facility Impact Fee

In addition to the Combined Sewer Development Fee, Regional San levies a fee for planning, designing, construction, and other costs related to wastewater conveyance, treatment, and disposal using Regional San's facilities. Fee amounts are determined in coordination with Regional San, the project applicant, and Sacramento County.

City of Sacramento Design and Procedures Manual Update

The City of Sacramento Department of Utilities (DOU) is in the process of revising the Design and Procedures Manual (DPM) to provide updated development guidance, including wastewater generation factors for residential, commercial, employment, industrial, education, and other types of facilities.

City of Sacramento 2035 General Plan

The following goal and policies are applicable to utility services within the City.

Goal U 1.1 High-Quality Infrastructure and Services. Provide and maintain efficient, high quality public infrastructure facilities and services throughout the city.

Policies

U 1.1.1 Provision of Adequate Utilities. The City shall continue to provide and maintain adequate water, wastewater, and stormwater drainage utility services utility services to areas in the city currently receiving these services from the City, and shall provide and maintain adequate water, wastewater, and stormwater drainage utility services to areas in the city that do not currently receive these City services upon funding and construction of necessary infrastructure.

U 1.1.5 Growth and Level of Service. The City shall require new development to provide adequate facilities or pay its fair share of the cost for facilities needed to provide services to accommodate growth without adversely impacting current service levels.

⁴ City of Sacramento Code 13.08.490.

Goal U 3.1 Adequate and Reliable Sewer and Wastewater Facilities. Provide adequate and reliable sewer and wastewater facilities that collect, treat, and safely dispose of wastewater.

Policies

U.3.1 **Sufficient Service.** The City shall provide sufficient wastewater conveyance, storage, and pumping capacity for peak sanitary sewer flows and infiltration.

U 3.1.4 **Combined Sewer System Rehabilitation and Improvements.** In keeping with its Combined Sewer System (CSS) Long Term Control Plan (LTCP), the City shall continue to rehabilitate the CSS to decrease flooding, CSS outflows and Combined System overflow (CS)). Through these improvements and new development requirements the City shall also insure that development in the CSS does not result in increased flooding, CSS outflows or CSOs.

Goal U 4.1 Adequate Stormwater Drainage. Provide adequate stormwater drainage facilities and services that are environmentally-sensitive, accommodate growth, and protect residents and property.

Policies

U 4.1.1 **Adequate Drainage Facilities.** The City shall ensure that all new drainage facilities are adequately sized and constructed to accommodate stormwater runoff in urbanized areas.

U 4.1.4 **Watershed Drainage Plans.** The City shall require developers to prepare watershed drainage plans for proposed developments that define needed drainage improvements per City standards, estimate construction costs for these improvements, and comply with the City's National Pollutant Discharge Elimination System (NPDES) permit.

U 4.1.6 **New Development.** The City shall require proponents of new development to submit drainage studies that adhere to City stormwater design requirements and incorporate measures, including "green infrastructure" and Low Impact Development (LID) techniques, to prevent on- or off-site flooding.

General Plan Consistency Analysis

Policies U 1.1.1 and U 1.1.6 address the commitment of the City to ensure that adequate water, wastewater and drainage facilities are provided for development within the City. The proposed projects would contribute toward these efforts through payment of applicable fees and by constructing adequate sewer and drainage facilities. Applicable plans, permit compliance, and drainage studies would be completed prior to construction. Please also refer to the impact analysis discussion below.

The City requires developers to mitigate increased drainage flows caused by a particular project using one of the following approaches to mitigate impacts:⁵

1. Project Developer pays the proposed CSS drainage impact fee. This fee was calculated to be \$6.89 per square foot of increased imperviousness in 2015.
2. Project Developer directly mitigates the impacts utilizing low impact development BMPs.
3. Project Developer directly mitigates the impacts via an on-site or off-site improvement as determined by a Drainage Design Report.

⁵ City of Sacramento, 2017. *Downtown Specific Plan Utility Infrastructure Analysis*. March 2017.

4. For projects disturbing less than 2 acres, the Project Developer prepares a Drainage Design Report, and provide a minimum of 7,600 cubic-feet of on-site storage per acre of increased impervious area. The maximum discharge flow rate from the on-site storage shall be limited to 0.18 cubic feet per second (cfs) per acre.
5. At the City's discretion, the Project Developer can share in a City sponsored Project that improves the system in the area, and can be upsized to incorporate mitigation of the project. A separate cost sharing agreement shall be executed for this option.

Dewatering

All new groundwater discharges to the CSS or separated sewer system are regulated and monitored by the City's Utilities Department pursuant to Department of Utilities Engineering Services Policy No. 0001, adopted as Resolution No. 92-439 by the Sacramento City Council. Groundwater discharges to the City's sewer system are defined as construction dewatering discharges, foundation or basement dewatering discharges, treated or untreated contaminated groundwater cleanup, discharges, and uncontaminated groundwater discharges.

The City requires that any short-term discharge be permitted, or an approved Memorandum of Understanding (MOU) for long-term discharges be established to ensure capacity of the system. Short-term limited discharges of seven days duration or less must be approved through the City Department of Utilities (DOU) by acceptance letter or building permit plan approval. Long-term discharges of greater duration than seven days must be approved through the City DOU and the Director of the DOU through a MOU process. The MOU must specify the type of groundwater discharge, flow rates, discharge system design, a City-approved contaminant assessment of the proposed groundwater discharge indicating tested levels of constituents, and a City-approved effluent monitoring plan to ensure contaminant levels remain in compliance with State standards or the Sacramento County Regional Sanitation District (Regional San) and Central Valley Water Board-approved levels. All groundwater discharges to the sewer must be granted a Regional San discharge permit. If the discharge is part of a groundwater cleanup or contains excessive contaminants, Central Valley Water Board approval is also required. See Section 4.7, Hydrology and Water Quality for more information regarding groundwater.

Analysis, Impacts and Mitigation

Significance Criteria

The proposed project would result in a significant impact on wastewater or storm drainage utilities if it would:

1. result in inadequate wastewater capacity to serve the project's demand in addition to existing commitments; or
2. require or result in either the construction of new wastewater treatment facilities or storm water drainage facilities or the expansion of existing facilities, the construction of which could cause significant environmental impacts.

Methodology and Assumptions

The following impact analysis evaluates potential for facilities related to proposed projects to result in changes to existing infrastructure and supply relating to wastewater and stormwater. The analysis focuses primarily on potential impacts to facilities located outside of the project site. Anticipated wastewater generation was estimated based on the City DOU Standard Specifications wastewater generation factors. The City of Sacramento Design Standards for wastewater generation rates contain average daily flow rates for residential and non-residential uses. The existing standard for sewer generation is 400 gallons per day (gpd) per Equivalent Single Family Dwelling Unit (ESD). The City DOU is currently in the process of revising these Design Standards. The new standards are anticipated to be adopted by Fall 2017. Wastewater generation was calculated for the SCC project and the Hotel project separately.

For more recent planning studies, the City has used a lower generation rate of 310 gpd per ESD. This is based on the stricter water usage construction standards limiting the flow per fixture unit that have been adopted over the last decade. With the State's adoption of CALGreen construction standards, even further reductions would be realized. However, this lower generation rate has not been formally adopted as the City's standard, and is therefore subject to change.

This analysis uses wastewater generation factors provided by the City DOU to establish ESD factors for the calculation of wastewater impacts from each of the proposed projects. The factors provided by the City DOU are based on the standard generation rate of 400 gpd per ESD. A factor of 0.3 ESD per hotel room was used for the proposed Hotel which accounts for all uses associated with the proposed hotel, including hotel amenities footage.⁶ This factor, when multiplied by 400 gpd per ESD yields a sewer generation rate of 120 gpd per hotel room. This factor has not been formally adopted as the City's standard, and is therefore subject to change.

For conference/meeting/ballroom space, several types of functions could take place in these spaces in the proposed SCC and proposed Hotel. Different types of events would have varying wastewater generation rates and the most applicable ESD factor provided by the City DOU would be for "Halls, Lodges, & Auditoriums." When used for those functions, the space would have a wastewater generation factor of 0.3 ESD. This factor, when multiplied by 400 gpd per ESD yields wastewater generation rate of 120 gpd per 1,000 sf.

Table 4.10-1 demonstrates the wastewater generation for average dry weather flow (ADWF) by facility type for the proposed SCC project and combined SCC project and Hotel project, per the wastewater generation factors described above.

As shown in Table 4.10-1, the proposed SCC project would develop 51,978 sf of convention/meeting space, which would be anticipated to increase the residential-equivalent ADWF by approximately 6,238 gpd.

⁶ Ochoa, Sarai, City of Sacramento, Department of Utilities, 2017. Personal Communication with Jonathan Teofilo, October 16, 2017.

**TABLE 4.10-1
 WASTEWATER GENERATION**

Facility Type	# of Units	ESD factor	Generation Rate ¹	Average Dry Weather Flow (ADWF)
Proposed SCC Project				
Convention Center	51,978 sf	0.3 / 1,000 sf (Halls, Lodges, & Auditoriums)	120 gpd / 1,000 sf	6,238 gpd
SCC Total				6,238 gpd
SCC Project and Hotel Project				
Hotel Room	350 rooms	0.3 / room	120 gpd / room	42,000 gpd
Restaurant	6,000 sf	2.0 / 1,000 sf (Restaurant – Dine-In)	800 gpd / 1,000 sf	4,800 gpd
Meeting Space	70,000 sf	0.3 / 1,000 sf (Halls, Lodges, & Auditoriums)	120 gpd / 1,000 sf	8,400 gpd
Hotel Total				55,200 gpd
SCC + Hotel Total				61,438 gpd

NOTES:

1. 400 gpd x ESD factor.

Source: Personal communication, City of Sacramento DOU, Ochoa, Sarai, 2017, ESA, 2017.

Given the anticipated development of 350 hotel rooms, the anticipated increase in ADWF is 42,000 gpd. The proposed 6,000 sf of restaurant uses in the proposed Hotel would increase ADWF by approximately 4,800 gpd and the anticipated development of 70,000 square feet of conference/ballroom space is anticipated to increase the ADWF by approximately 8,400 gpd. The total increase in ADWF from the proposed Hotel project would be approximately 55,200 gpd and the combined anticipated increase in ADWF from the SCC project and Hotel project would be approximately 61,438 gpd.

Impacts and Mitigation Measures

Impact 4.10-1: The proposed projects could discharge additional wastewater and stormwater flows to the City’s CSS that could exceed existing system capacity.

SCC Project

Construction

Excavation during construction of the SCC could encounter groundwater, which would require temporary dewatering. Groundwater extracted during construction would be discharged into the CSS. During dry periods and minor storm events, these systems would have sufficient capacity to convey dewatering flows. However, in the event that construction period dewatering occurs during a major storm event, sufficient storm drain capacity in the CSS might not be available to support dewatering discharges and existing capacity could be exceeded. This is considered a **potentially significant** impact.

Operation

The proposed SCC is expected to increase the sanitary sewer flows due to the increases in the square footage convention space, events, and attendance. These factors would result in an increase total anticipated increase in the ADWF of between 28,198 gpd and 53,173 gpd. The CSS has more than enough capacity to convey wastewater flows during dry weather. During wet weather, wastewater in the CSS is commingled with stormwater. Because the majority of the SCC site is currently comprised of impermeable surfaces, the proposed expansion and renovations would not increase impermeable surfaces such that there would be an increase in stormwater runoff compared to current conditions. However, additional wastewater flows into the CSS could exceed existing capacity during storm events, and this is considered a **potentially significant** impact.

SCC Project and Hotel Project

Construction

The analysis of impacts for the SCC would be the same for the combined proposed SCC project and Hotel project conditions during construction activities, as described above, and impacts would be **potentially significant**.

Operation

The proposed projects are expected to increase the sanitary sewer flows due to the increases in the square footage convention space, events, and attendance. These factors would result in a total anticipated increase in the ADWF of between 98,723 gpd and 157,333 gpd. The CSS has more than enough capacity to convey wastewater flows during dry weather light storm events. During wet weather, wastewater in the CSS is commingled with stormwater. Because the majority of the project sites are currently comprised of impermeable surfaces, the proposed projects would not increase impermeable surfaces such that there would be an increase in stormwater runoff compared to current conditions. In fact, the proposed SCC includes the use of green roof technology that would absorb and attenuate stormwater runoff from the SCC into the CSS. However, additional wastewater flows into the CSS could exceed existing capacity during heavy storm events, and this is considered a **potentially significant** impact.

Summary

Under dry weather conditions and small storm events, there is adequate capacity in the City's sewer and drainage systems to accommodate the proposed projects increases in wastewater. However, during large storm events, the combination of increased wastewater and stormwater could exceed system capacity. This is considered a **potentially significant** impact.

Mitigation Measure

Mitigation Measure 4.10-1 (SCC/Hotel)

The City shall manage wastewater from the project sites such that it shall not exceed existing CSS capacity by implementing the following methods:

- a) *Require the proposed projects to pay the established CSS mitigation fee.*

- b) *To the extent that the proposed projects would require localized upsizing of existing CSS infrastructure for service, the proposed projects shall pay their fair share for improvements to upsize or upgrade the CSS infrastructure. Fair share fees would be assessed and CSS improvements would be implemented, on a phased basis, consistent with buildout of each of the proposed projects.*

Significance After Mitigation: Mitigation Measure 4.10-1 would require the implementation of measures to manage wastewater, drainage and dewatered groundwater flows in a manner that would not exceed existing capacity of the CSS. Therefore, impacts to infrastructure capacity would be **less than significant**.

Impact 4.10-2: The proposed projects would increase demand for wastewater treatment.

SCC Project

The proposed SCC would increase the amount of wastewater requiring treatment at the SRWWTP of approximately 3,037 gpd ADWF. This amount of wastewater would not exceed the current excess capacity of approximately 75 mgd at the SRWWTP and the increase of wastewater flows would not exceed the dry or wet weather treatment capacity at the SRWWTP. RegionalSan expects per capita consumption to fall 25 percent over the next 20+ years through the ongoing installation and use of water meters as well as compliance with conservation mandates such as the state Water Conservation Act of 2009 (SB X7-7).⁷ As a result, substantial additional conservation is expected throughout RegionalSan's service area, and the existing 181 mgd ADWF capacity will be sufficient for at least 40 more years.⁸ Thus, no additional wastewater treatment facilities would need to be constructed to accommodate the increase in wastewater from the proposed SCC, and this impact is **less than significant**.

SCC Project and Hotel Project

The proposed SCC would increase the amount of wastewater requiring treatment at the SRWWTP of approximately 3,037 gpd ADWF. This amount of wastewater would not exceed the current excess capacity of approximately 75 mgd at the SRWWTP and the increase of wastewater flows would not exceed the dry or wet weather treatment capacity at the SRWWTP. Regional San expects per capita consumption to fall 25 percent over the next 20+ years through the ongoing installation and use of water meters as well as compliance with conservation mandates such as the state Water Conservation Act of 2009 (SB X7-7).⁹ As a result, substantial additional conservation is expected throughout RegionalSan's service area, and the existing 181 mgd ADWF capacity will be sufficient for at least 40 more years.¹⁰ Thus, no additional wastewater treatment facilities

⁷ City of Sacramento, 2015. *2035 General Plan Master EIR*, Certified March 3, 2015, p. 4.13-16.

⁸ Sacramento Regional County Sanitation District, 2014. *EchoWater Draft Environmental Impact Report*. Available: <http://www.regionalsan.com/echowater-project>. Accessed April 2014 as cited in City of Sacramento. *2035 General Plan Master EIR*, Certified March 3, 2015, p. 4.13-16.

⁹ City of Sacramento, 2015. *2035 General Plan Master EIR*, Certified March 3, 2015, p. 4.13-16.

¹⁰ Sacramento Regional County Sanitation District, 2014. *EchoWater Draft Environmental Impact Report*. Available: <http://www.regionalsan.com/echowater-project>. Accessed April 2014 as cited in City of Sacramento. *2035 General Plan Master EIR*, Certified March 3, 2015, p. 4.13-16.

would need to be constructed to accommodate the increase in wastewater from the proposed SCC, and this impact is **less than significant**.

Mitigation Measure

None required.

Cumulative Impacts

The cumulative context for the CSS includes the area of downtown Sacramento, Land Park, Curtis Park, and East Sacramento that it serves, including CSS conveyance. The cumulative context for wastewater treatment includes the service area for the SRWWTP. This includes current and future wastewater from development within the cities of Sacramento, Citrus Heights, Folsom, Rancho Cordova, Elk Grove, West Sacramento, and select unincorporated areas of Sacramento County.

Impact 4.10-3: Implementation of the proposed projects, in combination with other cumulative development, would contribute to cumulative increases in demand for wastewater and stormwater facilities.

Under existing conditions, the wastewater conveyance and storage systems within the Downtown Sacramento area flood and overflow during major storm events. The vast majority of existing land area within the areas served by these systems is hardscape and impervious. However, new project development that may occur in coming years could convert some of the limited remaining pervious areas to impervious surfaces. Therefore, new development in areas served by the CSS would result in a net increase in wastewater and stormwater flows directed to the CSS. This would result in a potentially significant cumulative impact to the CSS system.

As discussed in Impact 4.10-1, the proposed projects would result in increased wastewater flows that could further tax the CSS system during major storm events. During these periods, the proposed projects contribution to cumulative increases in wastewater to the CSS could exacerbate the lack of capacity in the system. Therefore, the proposed projects' contributions to wastewater flow conveyance in the CSS would be cumulatively considerable.

The Downtown Infrastructure Analysis and CSSIP identify a number of improvements to the City's drainage and sewer systems, as listed previously in the environmental setting. If these improvements were fully implemented, there would be additional capacity within the CSS system, which would reduce the potential for existing and future flows to exceed system capacity. Funding for these improvements has not been secured, and, therefore, the cumulative impact would be **potentially significant**.

Mitigation Measure

Mitigation Measure 4.10-3 (SCC/Hotel)

Implement Mitigation Measure 4.10-1.

Significance After Mitigation: Mitigation Measure 4.10-3 would fully offset the proposed projects' contributions to the CSS by requiring projects to construct appropriate facilities to delay discharge of wastewater or pay the applicable fee to the City to make necessary localized or system-wide improvements. With mitigation, the project contribution would be **less than significant**.

Impact 4.10-4: Implementation of the proposed projects, in combination with other cumulative development, would contribute to cumulative increases in demand for wastewater treatment capacity at the SRWWTP.

As development occurs throughout the region, wastewater flows requiring treatment at the SRWWTP will increase. The SRWWTP currently has an excess capacity of 76 mgd, which would be available for a substantial portion of growth in the region. The RegionalSan's 2020 Master Plan identifies improvements needed to expand to 207 mgd, in order to accommodate growth in its service area through 2020 based on SACOG projections. Additionally, the RegionalSan is considering upgrades to enable compliance with revised and anticipated Regional Board effluent requirements. The proposed projects' contributions to cumulative scenario significant impacts would be less than one-tenth of one percent of the SRWWTP's total capacity. The proposed projects would only increase wastewater requiring treatment by up to 157,333 gpd which could be accommodated within the growth projections used to prepare the 2020 Master Plan. Therefore, the proposed projects' contribution would not be considerable, and the resulting impact would be **less than significant**.

Mitigation Measure

None required.

4.10.2 Solid Waste

Environmental Setting

Within the City of Sacramento, residential waste is collected by the City's Recycling and Solid Waste Division and commercial and multi-family waste is collected by private franchised haulers.^{11,12} Solid waste collected by the commercial haulers is taken to either a transfer station and then transported to a landfill or is taken directly to a landfill facility. Commercial waste can be taken to a variety of landfills, as long as they are compliant with the Sacramento Regional Solid Waste Authority (SWA) Code for commercial waste hauling.¹³ A majority of the City collected residential solid waste is taken to the Sacramento Recycling and Transfer Station or the

¹¹ City of Sacramento, 2015. *About RSW*. <http://portal.cityofsacramento.org/General-Services/RSW/About-RSW>. Accessed December 9, 2015.

¹² City of Sacramento, 2015. *Commercial and Construction Services*. Available: <http://portal.cityofsacramento.org/General-Services/RSW/Collection-Services/Commercial-Services>. Accessed December 9, 2015.

¹³ Sacramento Regional Solid Waste Authority Commercial Code. *Title II of SWA Code Regulating Commercial Solid Waste Collection, Transportation, or Disposal*. Available: <http://www.swa.saccounty.net/Documents/SWA%20Title%20II.pdf>. Accessed December 15, 2015.

North Area Recovery Station where it is sorted for transport to disposal facilities.¹⁴ Construction and demolition waste is collected by either commercial franchise haulers or hauled by the contractor or permit holder. If construction and demolition debris is being hauled by anyone else, it must be source separated and sent to an authorized recycler or delivered to a certified construction and demolition debris sorting facility.¹⁵

On an annual basis, the City of Sacramento disposes of approximately 474,624¹⁶ tons of solid waste. Approximately 50 percent of the waste is recycled and the other 50 percent is disposed of in a landfill.¹⁷

Several facilities provide solid waste disposal services to the City of Sacramento. These include the following, in order by the amount of waste the facility receives from commercial haulers and the City of Sacramento Recycling and Solid Waste Division:¹⁸

- Kiefer Landfill, located in Sloughouse, California, is operated by Sacramento County and maintains a permitted capacity of 10,815 tons per day. The landfill has nearly 113 million cubic yards of available capacity, and is estimated to have sufficient capacity to maintain operations through 2035.^{19,20}
- Forward Landfill, located southeast of Stockton, California, is operated by Allied Waste North America. The landfill has a maximum daily throughput of over 8,668 tons per day, with a remaining capacity of approximately 24 million cubic yards and is estimated to have sufficient capacity to maintain operations through 2021.^{21,22}
- L and D Landfill, located off of Fruitridge Road in Sacramento, California, is operated by L and D Landfill, LP. The landfill has a maximum capacity of 2,540 tons per day, with a maximum permitted capacity of 6,031,055 cubic yards, sufficient to provide service through 2023. A large volume transfer facility is also located on site.^{23,24}

¹⁴ City of Sacramento, 2015. 2014 CalRecycle Electronic Annual Report.

¹⁵ City of Sacramento, 2013. Construction & Demolition Management Plan. Available: <http://portal.cityofsacramento.org/General-Services/RSW/Collection-Services/Recycling/Construction-and-Demolition>. Accessed December 9, 2015.

¹⁶ City of Sacramento, 2015. 2014 CalRecycle Electronic Annual Report.

¹⁷ City of Sacramento, 2015. *City of Sacramento 2035 General Plan Master Environmental Impact Report, Appendix C, Background Report, Chapter 4: Utilities*. February 24, 2015. Accessed December 1, 2015.

¹⁸ California Department of Resources Recycling and Recovery, 2015. Jurisdiction Disposal by Facility 2014 Reporting. Accessed November 23, 2015.

¹⁹ California Department of Resources Recycling and Recovery, 2015. *Facility Site/Summary Details: Sacramento County Landfill (Kiefer)*. <http://www.calrecycle.ca.gov/SWFacilities/Directory/34-AA-0001/Detail/>. Accessed November 23, 2015.

²⁰ California Department of Resources Recycling and Recovery, 2015. *Sacramento County Landfill (Kiefer) Permit*. Accessed December 9, 2015.

²¹ California Department of Resources Recycling and Recovery, 2015. *Facility Site/Summary Details: Forward Landfill*. <http://www.calrecycle.ca.gov/SWFacilities/Directory/39-AA-0015/Detail/>. Accessed November 23, 2015.

²² California Department of Resources Recycling and Recovery, 2015. *Forward Landfill Permit*. Accessed December 9, 2015.

²³ California Department of Resources Recycling and Recovery, 2015. *Facility Site/Summary Details: L and D Landfill*. <http://www.calrecycle.ca.gov/SWFacilities/Directory/34-AA-0020/Detail/>. Accessed November 23, 2015.

²⁴ California Department of Resources Recycling and Recovery, 2015. *L and D Landfill Permit*. Accessed December 9, 2015.

- Yolo County Central Landfill, located north of Davis, California, is operated by the Yolo County Planning and Public Works Department. The facility maintains a maximum daily throughput of 1,800 tons per day, with a maximum permitted capacity of 49 million cubic yards. The facility is expected to have sufficient capacity to allow operations through 2081.^{25,26}

Regulatory Setting

Federal

Resource Conservation and Recovery Act

The Resource Conservation and Recovery Act (RCRA), Subtitle D, contained in Title 42 of the United States Code (USC) section 6901 et seq. contains regulations for municipal solid waste landfills and requires states to implement their own permitting programs incorporating the federal landfill criteria. The federal regulations address the location, operation, design, groundwater monitoring, and closure of landfills. The US EPA waste management regulations are codified in Volume 40 of the Code of Federal Regulations (CFR) pts. 239-282. The RCRA Subtitle D is implemented by Title 27 of the Public Resources Code (PRC), approved by the US EPA.

State

Integrated Waste Management Act (Assembly Bill 939)

Regulation affecting solid waste disposal in California is embodied in PRC Title 14, known as the Integrated Waste Management Act originally adopted in 1989. Assembly Bill (AB) 939 was designed to increase landfill life by diverting solid waste from landfills within the state and conserving other resources through increasing recycling programs and incentives. AB 939 requires that counties prepare Integrated Waste Management Plans to implement landfill diversion goals, and requires that cities and counties prepare and adopt Source Reduction and Recycling Elements (SRRE). The SRRE must set forth a program for management of solid waste generated with the jurisdiction of the respective city or county. Each source reduction and recycling element must include, but is not limited to, all of the following components for solid waste generated in the jurisdiction of the plan:

- A waste characterization component,
- A source reduction component,
- A recycling component,
- A composting component,
- A solid waste facility capacity component,
- An education and public information component,
- A funding component, and

²⁵ California Department of Resources Recycling and Recovery, 2015. *Facility Site/ Summary Details: Yolo County Central Landfill*. <http://www.calrecycle.ca.gov/SWFacilities/Directory/57-AA-0001/Detail/>. Accessed November 23, 2015.

²⁶ California Department of Resources Recycling and Recovery, 2015. *Yolo County Central Landfill Permit*. Accessed December 9, 2015.

- A special waste component.

The SRRE programs are designed to achieve landfill diversion goals by encouraging recycling in the manufacture, purchase and use of recycled products. AB 939 also requires that California cities implement plans designed to divert the total solid waste generated within each jurisdiction by 50 percent based on a base year of 2000. The diversion rate is adjusted annually for population and economic growth when calculating the percentage achieved in a particular jurisdiction.

Public Resources Code 41780

The California State Legislature set the policy goal for the state that not less than 75% of solid waste generated be source reduced, recycled or composted by the year 2020. Furthermore, a 50 percent diversion rate will be enforced for local jurisdictions.

Assembly Bill 1220

The California Department of Resources Recycling and Recovery (CalRecycle) and the State Water Resources Control Board (State Water Board) completed a parallel rulemaking as a result of AB 1220 (Chapter 656, Statutes of 1993). AB 1220 required clarification of the roles and responsibilities of the two boards, the Regional Water Quality Control Boards (Regional Water Boards) and CalRecycle's local enforcement agencies in regulating solid waste disposal sites. The approved Title 27 regulations combine prior disposal site/landfill regulations of CalRecycle and the State Water Board that were maintained in Title 14 CCR and Chapter 15 of Title 23 CCR (which contains requirements for disposal of hazardous waste). The purpose for CalRecycle standards in this subdivision is to protect public health and safety and the environment. The regulations apply to active and inactive disposal sites, including facilities or equipment used at the disposal sites. These standards make clear that the primary responsibility for enforcing state minimum standards rests with the local enforcement agency in cooperation with the Regional Water Board or other oversight agency. Subchapters of Title 27 include operating criteria for landfills and disposal sites, requirements to have enough materials to cover waste to prevent a threat to human health and the environment, requirements for operations at solid waste facilities for the handling of waste and equipment needs of the site, requirements for controlling activities on site, requirements for controlling landfill gas that is made from the decomposition of wastes on site, and requirements of the owner/operator of a facility to properly operate the site to protect the site from fire threat.

Assembly Bill 341

In an effort to reduce greenhouse gas emissions from disposing of recyclables in landfills, AB 341 requires local jurisdictions to implement commercial solid waste recycling programs. Businesses that generate four cubic yards or more of solid waste per week or multifamily dwellings of five units or more must arrange for recycling services. In order to comply with AB 341, jurisdictions' commercial recycling programs must include education, outreach and monitoring of commercial waste generators and report on the process to CalRecycle. Jurisdictions may enact mandatory commercial recycling ordinances to outline how the goals of AB 341 will be reached. For businesses to comply with AB 341, they must arrange for recyclables collection

through self-haul, subscribing to franchised haulers for collection, or subscribing to a recycling service that may include mixed waste processing that yields diversion results comparable source separation.²⁷

Assembly Bill 1826

In order to further reduce greenhouse gas emissions from disposing of organics materials in landfills, AB 1826 requires businesses to recycle their organic waste beginning on April 1, 2016, depending on the amount of solid waste they generate per week. Similar to AB 341, jurisdictions are required to implement an organic waste recycling program that includes the education, outreach and monitoring of businesses that must comply. Organic waste refers to food waste, green waste, landscaping and pruning waste, nonhazardous wood waste, and food-soiled paper that is mixed with food waste.

Local

City of Sacramento 2035 General Plan

The following goals and policies from the 2035 General Plan are relevant to solid waste.

Goal U 1.1 High-Quality Infrastructure and Services. Provide and maintain efficient, high-quality public infrastructure facilities and services throughout the city.

Policies

U 1.1.2 **Citywide Level of Service Standards.** The City shall establish and maintain service standards [Levels of Service (LOS)] for water, wastewater, stormwater drainage, and solid waste services.

Goal U 5.1 Solid Waste Facilities. Provide adequate solid waste facilities, meet or exceed State law requirements, and utilize innovative strategies for economic and efficient collection, transfer, recycling, storage, and disposal of refuse.

Policies

U 5.1.2 **Landfill Capacity.** The City shall continue to coordinate with Sacramento County in providing long term landfill disposal capacity within the Sacramento Region to reduce greenhouse gas emissions.

U 5.1.5 **Residential and Commercial Waste Disposal.** The City shall continue to provide curbside trash and recycling collection service to single-family residential dwellings and offer collection service to commercial and multifamily residential development.

The proposed project would be consistent with Goal U 1.1 and associated policies by supporting recycling programs, implementing construction waste recycling and reuse practices, and the contracting of private franchised haulers who are required to deliver waste to a facility that has been approved by the City.

Sacramento Regional Solid Waste Authority

The SWA is a Joint Powers Authority that is funded by franchise fees and oversees solid waste, recycling, and disposal needs in the greater Sacramento area. The SWA Board of Directors is composed of elected officials from member cities (currently the City of Sacramento) and

²⁷ Assembly Bill 341: Mandatory Commercial Recycling, 2011. <http://www.calrecycle.ca.gov/recycle/commercial/#Elements>. Accessed December 15, 2015.

Sacramento County. The SWA regulates commercial solid waste and construction and demolition waste collected by franchised haulers through ordinances.

Title II of SWA Code Regulating Commercial Solid Waste Collection, Transportation or Disposal

Title II of the SWA Code Regulating Commercial Solid Waste Collection, Transportation, or Disposal requires that commercial franchised haulers must meet the diversion requirements in PRC Section 41780. Title II requires that all commercial generators must use the franchised haulers for solid waste and recyclables collection.²⁸

Title IV of SWA Code Regulating Business Recycling, Non-Residential, Non-Residential Property Recycling, Multi-Family Property Recycling and Single Family Residential Property (Property Managed by an Association or Other) Recycling

Title IV of the SWA Code Regulating Business Recycling, Non-Residential, Non-Residential Property Recycling, Multi-Family Property Recycling and Single Family Residential Property (Property Managed by an Association or Other) Recycling requires that commercial franchised haulers must meet a 30 percent total recycling rate for all commercial hauling within the City.²⁹

Source Reduction Recycling Element

The California Integrated Waste Management Act of 1989 (AB 939, noted above) mandates that each city shall prepare, adopt, and submit a SRRE. AB 939 required all cities to achieve a minimum diversion of 50 percent diversion by the year 2000. The City of Sacramento's Final Draft SRRE, approved in 1995, pledges to exceed the requirements of AB 939, where feasible, in an effort to achieve a 70 percent landfill avoidance goal adopted by City Council in August 1989. In order to achieve this goal, the City has implemented a number of programs, including curbside recycling, drop-off and buy-back centers, and compost programs.

Sacramento Municipal Code

Chapter 17.616 of the City of Sacramento Municipal Code outlines the recycling and solid waste disposal regulations. These regulations are necessary in order to lengthen the lifespan of landfills, encourage recycling, and meet State mandated goals for waste reduction and recycling, specifically AB 939. These policies provide guidelines regarding the location, size and design features of recycling and trash enclosures in a manner by which adequate, convenient space for the collection, storage, and loading of recyclable and solid waste material is provided. In addition, developers are required to submit a "statement of recycling information" to the City's solid waste manager. The requirement for this statement includes: a site plan which includes design specifications, plans for demolition and construction, and any details of proposed education/

²⁸ SWA Commercial Code. *Title II of SWA Code Regulating Commercial Solid Waste Collection, Transportation or Disposal*. <http://www.swa.saccounty.net/Documents/SWA%20Title%20II.pdf>. Accessed December 15, 2015.

²⁹ SWA Commercial Code. *Title IV of SWA Code Regulating Business Recycling, Non-Residential, Non-Residential Property Recycling, Multi-Family Property Recycling and Single Family Residential Property (Property Managed by an Association or Other) Recycling*. <http://www.swa.saccounty.net/Documents/SWA%20Title%20IV.pdf>. Accessed January 18, 2016.

public relations programs. Section 17.616.030 of the code provides the following recycling volume and plan requirements for new development:

- Multi-family residential: 1 cubic yard per 16 units;
- Office and general commercial: 1 cubic yard per 40,000 sf;
- Restaurant/bar: 1 cubic yard per 5,000 sf, 90 gallon container minimum;
- Retail sales: 1 cubic yard per 8,000 sf, 90 gallon container minimum;
- Motel/hotel/inn/bed and breakfast: 1 cubic yard per 20 rooms, 90 gallon container minimum;
- Park: supply recycling receptacle with each garbage receptacle unless park prohibits food and drink from outside the park and food and beverage containers provided in the park are paper only; and
- Hospital/medical clinics: none except the cafeteria which must comply with the same requirements as a restaurant/bar; and
- Develop recycling plan to be submitted with improvement plan review for the project.

The Municipal Code Chapter 8.124 regarding Construction and Demolition Debris Recycling requires that projects within the City that are subject to the construction and demolition requirements must recycle at least fifty percent of all debris during the course of a project. Projects that are subject to the requirements in Chapter 8.124 are any construction, addition, repair, alteration, remodel, or renovation work within the City that has a construction permit with a job value of \$250,000 or more.^{30,31}

Analysis, Impacts and Mitigation

Significance Criteria

The proposed projects would result in a significant impact on utilities if they would:

- require or result in either the construction of new solid waste facilities or the expansion of existing facilities, the construction of which could cause significant environmental effects.

Methodology and Assumptions

The following impact analysis evaluates the potential for the proposed projects to result in impacts related to solid waste facilities. The analysis focuses on wastes generated by the proposed projects' potential impacts to solid waste handling and disposal facilities located outside the City. Potential changes in solid waste generation are evaluated using waste generation data from current convention center operations of an average of 27 tons per month or 324 tons per year, and for the hotel a generation rate of 3.2 lbs/unit-day. Using these factors, the estimated increase in solid waste from the SCC can be calculated based on the increase in square footage of 48,990

³⁰ Sacramento Municipal Code. Chapter 8.124 Construction and Demolition Debris Recycling.

³¹ City of Sacramento, 2015. *C&D Debris Recycling Ordinance*. Available: <https://www.cityofsacramento.org/Public-Works/RSW/Collection-Services/Recycling/Construction-and-Demolition>. Accessed September 6, 2017.

square feet, resulting in an increase of approximately 5 tons per month or approximately 60 tons per year. Waste generated by the proposed Hotel project would be approximately 175 tons per year.

Impacts and Mitigation Measures

Impact 4.10-5: The collection or disposal of additional solid waste generated by the proposed projects would result in adverse physical environmental effects.

SCC Project

Construction

Construction of the proposed SCC project would result in the generation of various construction waste including scrap lumber, scrap finishing materials, various scrap metals, and other recyclable and non-recyclable construction related wastes. Construction waste would be managed in accordance with ordinances promulgated by the SWA – in particular, in accordance with SWA’s requirement that haulers achieve a 30 percent recycling rate. Recyclable construction materials, including concrete, metals, wood, and various other recyclable materials would be diverted to recycling facilities.

Further, construction of the proposed SCC project would be required to comply with City demolition and construction requirements to divert a minimum of 50 percent of construction wastes to a certified recycling processor. Adhering to these requirements would minimize the total volume of demolition and construction waste that would be sent to landfills, but would not avoid disposal of all construction waste in local landfills. Construction waste would be delivered to one or more of the following facilities: Lockwood Landfill, Kiefer Landfill, L and D Landfill, Yolo County Central Landfill, or Forward Landfill. In consideration of the large volume of landfill capacity available to serve the proposed SCC project, sufficient landfill capacity would be available to serve construction of the proposed SCC. Because new or expanded solid waste management or disposal facilities would not be required to accommodate construction waste, no adverse physical environmental effects would result and, as a result, potential construction period impacts on landfills would be **less than significant**.

Operation

Operation of the proposed SCC would result in the generation of municipal wastes in accordance with the proposed increase in use intensity on site. Waste from operations would include household, commercial, and office wastes. As described in the methodology above, the proposed SCC would generate a total of approximately 60 tons of solid waste per year.

Waste generated by the proposed SCC project would be collected and transported to local landfills by the City and/or private haulers, and either recycled in accordance with City programs and requirements, or landfilled at Kiefer Landfill or transported and landfilled at the Lockwood Landfill in Sparks, Nevada. As noted previously, these facilities together currently have

approximately 458 million cubic yards³² in available capacity. The proposed SCC project-related wastes would represent less than one-thousandth of one percent (<0.001%) of total annual capacity for these two landfills. Sufficient landfill capacity would be available to serve the proposed SCC and would not require new or expanded solid waste management or disposal facilities. Additionally, implementation of typical recycling rates, and SWA and City recycling requirements would result a portion of the total waste stream being diverted to recycling. This would further minimize impacts to landfill capacity. Because there would be no need to expand or create new landfill or solid waste management facilities, there would be no related physical environmental effects. Therefore, the impact would be **less than significant**.

SCC Project and Hotel Project

Construction

Construction of the proposed projects would result in the same level of waste diverted from and sent to local landfills as the described for the proposed SCC project above, and the impacts would be **less than significant**.

Operation

Operation of the proposed projects would result in the generation of municipal wastes in accordance with the proposed increase in use intensity on site. Waste from operations would include household, commercial, and office wastes. As described in the methodology above, the proposed SCC would generate a total of approximately 65 tons of solid waste per year.

Waste generated by the proposed projects would be collected and transported to local landfills by the City and/or private haulers, and either recycled in accordance with City programs and requirements, or landfilled at Kiefer Landfill or transported and landfilled at the Lockwood Landfill in Sparks, Nevada. As noted previously, these facilities together currently have approximately 458 million cubic yards³³ in available capacity. The proposed SCC project-related wastes would represent less than one-thousandth of one percent (<0.001%) of total annual capacity for these two landfills. Sufficient landfill capacity would be available to serve the proposed SCC and would not require new or expanded solid waste management or disposal facilities. Additionally, implementation of typical recycling rates, and SWA and City recycling requirements would result a portion of the total waste stream being diverted to recycling. This would further minimize impacts to landfill capacity. Because there would be no need to expand or create new landfill or solid waste management facilities, there would be no related physical environmental effects. Therefore, the impact would be **less than significant**.

Mitigation Measure

None required.

³² One cubic yard is equivalent to approximately 0.1125 tons uncompacted, or approximately 0.375 tons compacted, as waste would arrive at the landfill from trucks or other transport equipment.

³³ One cubic yard is equivalent to approximately 0.1125 tons uncompacted, or approximately 0.375 tons compacted, as waste would arrive at the landfill from trucks or other transport equipment.

Cumulative Impacts

The following discussion provides an analysis of cumulative level impacts that could occur as a result of the proposed plan. The cumulative context for solid waste includes all development within the SWA's service area, including the City of Sacramento.

Impact 4.10-6: Implementation of the proposed projects, in combination with other cumulative development, would contribute to cumulative increases in solid waste.

As discussed previously, Lockwood Landfill, which is one of the primary landfills used for the City, is expected to have sufficient capacity to maintain operation for at least the next 100 years. Similarly, Kiefer Landfill, which is the other primary landfill used by the City, maintains approximately 51 additional years of available capacity.

Growth proposed under the 2035 General Plan would result in residences in the city producing an additional 69,300 tons of solid waste per year. Furthermore, using employment rates at buildout, it can be estimated that businesses would be producing an additional 112,080 tons of solid waste per year. Thus by 2035, the city would be producing an additional 181,380 tons of solid waste per year. This does not take into account mandatory reduction and diversion programs, which include diversion of at least 50 percent of waste, thus reducing the total to a conservative estimate of 90,690 tons per year. Available landfill capacity would be sufficient to accommodate these increases, along with the additional estimated 65 tons per year from the proposed projects. For these reasons, the proposed projects would not be cumulatively considerable, and the solid waste impacts would be **less than significant**.

Mitigation Measure

None required.

CHAPTER 5

Other CEQA Required Considerations

5.1 Introduction

Section 15126 of the State CEQA Guidelines requires that all phases of a project must be considered when evaluating its impact on the environment, including planning, acquisition, construction, and operation. Further, the evaluation of significant impacts must consider direct and reasonably foreseeable indirect effects of the project over the short-term and long-term. As part of this analysis, the EIR must identify (1) significant environmental effects of the proposed project, (2) mitigation measures proposed to minimize 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.

The Summary section and sections 4.1 through 4.10 provide a comprehensive presentation of the proposed projects' environmental effects, proposed mitigation measures, and conclusions regarding the level of significance of each impact both before and after mitigation.

Chapter 6, Project Alternatives, presents a comparative analysis of alternatives to each of the proposed projects.

The other CEQA-required analyses described above are presented below.

5.2 Significant and Unavoidable Impacts

Section 15126.2(b) of the State 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 project on various aspects of the environment are discussed in detail in Chapter 4, Environmental Impacts, Setting, and Mitigation Measures. Project-specific and cumulative impacts that cannot be avoided if each of the projects are approved as proposed include:

5.2.1 Project-Specific Significant and Unavoidable Impacts

Impact 4.2-3: The proposed project would result in long-term (operational) emissions of NO_x, ROG, PM₁₀, or PM_{2.5}.

Impact 4.4-3: Implementation of the proposed projects, in combination with other cumulative development, could contribute to the cumulative loss or alteration of paleontological resources, or archaeological resources, including human remains or Tribal Cultural Resources.

Impact 4.8-1: Construction of the proposed projects could generate noise that would conflict with City standards or result in substantial temporary or periodic increase in ambient noise levels.

Impact 4.8-5: Construction of the proposed projects could expose existing and/or planned buildings, and persons within, to vibration that could disturb people and damage buildings.

5.2.2 Cumulative Significant and Unavoidable Impacts

Impact 4.2-7: The proposed project would contribute to cumulative increases in long-term (operational) emissions of NO_x, ROG, PM₁₀, and PM_{2.5}.

Impact 4.8-6: The proposed projects would result in exposure of people to cumulative increases in construction noise levels.

Impact 4.8-7: The proposed projects would contribute to cumulative construction that could expose existing and/or planned buildings, and persons within, to significant vibration.

5.3 Significant Irreversible Environmental Effects

Under CEQA, an EIR must analyze the extent to which a project's primary and secondary effects would generally commit future generations to the allocation of nonrenewable resources and to irreversible environmental damage (State CEQA Guidelines section 15126.2(c); 15127). 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 project would involve uses in which irreversible damage could result from any potential environmental accidents associated with the project; or
- The proposed consumption of resources is not justified (e.g., the project involves the wasteful use of energy).

Development of the proposed SCC project would result in the continued dedication of the SCC project site to convention center facilities, thereby precluding other conflicting uses for the lifespan of the project. Redevelopment of the SCC project site to a less developed condition would not be feasible due to the intensity of use that already exists on the site, the urbanization of the surrounding area, and the level of capital investment required to support the costs of construction.

Similarly, Development of the proposed Hotel project would result in continued dedication of the project site to urban uses; the project site is presently developed as a parking lot and had previously been developed as an office building. Redevelopment of the hotel project site to a less developed condition would not be feasible due to the intensity of use that currently and previously existed on the site, the urbanization of surrounding area, and the value of the property as a potential site for urban infill development.

The State CEQA Guidelines also require a discussion of the potential for irreversible environmental damage caused by an accident associated with either of the proposed projects. While the proposed projects could result in the use, transport, storage, and disposal of hazardous wastes during construction and operation, as described in Section 4.0.3, Issues Previously Determined to be Less Than Significant, all activities would comply with applicable state and federal laws related to hazardous materials, which significantly reduce the likelihood and severity of accidents that could result in irreversible environmental damage.

Implementation of each of the proposed projects would result in the long-term commitment of resources to urban development. The most notable significant irreversible impacts are increased generation of pollutants from vehicle travel and stationary operations, and the short-term commitment of non-renewable and/or slowly renewable natural and energy resources, such as water resources during construction activities. Expanded operations associated with future uses would also consume natural gas and electrical energy. For the SCC, although the overall level of resource consumption on the project site would increase, on a per attendee or per square foot basis, the replacement of older inefficient buildings with new buildings built to modern codes, and the high level of sustainability that would be achieved through construction of the proposed project to LEED Silver (or equivalent) standards, would result in increased energy efficiency. The unavoidable consequences of each of the proposed projects are described in the appropriate sections in Chapter 4, Environmental Impacts, Setting, and Mitigation Measures.

Resources that would be permanently and continually consumed by implementation of each of the proposed projects 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. With respect to operational activities, compliance with applicable building codes, including the 2016 Title 24 Energy Efficiency Standards, as well as mitigation measures, planning policies, and standard conservation features, would ensure that natural resources are conserved to the maximum extent feasible. As noted above and elsewhere in Chapters 2 and 4, the SCC project would be constructed to LEED Silver (or equivalent)

standards, which ensure high levels of efficiency in energy consumption, water demand, wastewater generation, stormwater runoff. It is also possible that, over time, new technologies or systems will emerge, or will become more cost-effective or user-friendly, to further reduce the reliance upon nonrenewable natural resources. Nonetheless, construction activities related to each of the proposed projects 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.

Over the past decade our understanding of global climate change and the role that communities can play in addressing it has grown significantly. There is scientific consensus that recent increases in global temperatures are associated with corresponding increases of greenhouse gases (GHGs). This temperature increase is beginning to affect regional climates and is expected result in impacts to our region and the world. Climate change has profound implications for the availability of the natural resources on which economic prosperity and human development depend. Because climate change is inherently a cumulative effect, the relative contributions from each of the proposed projects to global warming is not currently possible to determine. This issue is discussed in Section 4.6, Global Climate Change.

5.4 Growth-Inducing Effects

As required by section 15126.2(d) of the State CEQA Guidelines, an EIR must discuss ways in which a proposed project could foster economic or population growth or the construction of additional housing, either directly or indirectly, in the surrounding environment. Also, the EIR must discuss the characteristics of the 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, or through the establishment of policies or other precedents that directly or indirectly encourage additional growth. The purpose of this section is to evaluate the potential growth-inducing effects resulting from the implementation of each of the proposed projects in the City of Sacramento, and throughout the region. Additional analysis of the growth-inducing effects from each of the proposed projects is provided in Chapter 3, Land Use and Employment.

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 new physical or transportation access to an area; a change in zoning or general plan amendment approval); or economic expansion or growth occurs in an area in response to the project (e.g., changes in revenue base, employment expansion). These circumstances are further described below:

- **Elimination of Obstacles to Growth:** This refers to the extent to which a proposed project removes infrastructure limitations or provides infrastructure capacity, or removes regulatory constraints that could result in growth unforeseen at the time of project approval.

- **Economic Effects:** This refers to the extent to which a proposed project could cause increased activity in the local or regional economy. Economic effects can include such effects as the Multiplier Effect. A “multiplier” is an economic term used to describe inter-relationships among various sectors of the economy. The multiplier effect provides a quantitative description of the direct employment effect of a project, as well as indirect and induced employment growth. The multiplier effect acknowledges that the onsite employment and population growth of each project is not the complete picture of growth caused by the project.

5.4.1 Elimination of Obstacles to Growth

The elimination of physical obstacles to growth is considered a growth-inducing effect. Growth within Downtown Sacramento and City of Sacramento as a whole is affected by the capacity of utility systems serving the City including the wastewater and drainage, water supply, and electrical systems. Growth within the City is also affected by the roadway circulation system, public transit infrastructure and services and bikeway/pedestrian facilities.

The proposed SCC project would expand and renovate the existing SCC to allow for the accommodation of more attendees at one time and the accommodation of more events annually. Infrastructure improvements for the proposed project would include construction and operation of a central utilities plan (CUP) that would serve the expanded SCC and the Community Center Theater to the south as well as various changes relating to access to the facility by those using motor vehicles as well as pedestrians.

5.4.2 Economic Effects

SCC Expansion and Renovation Project

As is presented in Chapter 2, Project Description, the SCC currently has approximately 82 permanent employees serving administrative and maintenance functions and 100 event-related temporary employees who fill a variety of jobs, including ushers, food service, security, janitorial, and similar positions.

The proposed SCC project would increase the potential number of events occurring annually at the SCC through improved staging facilities and space utilization. The proposed project would also increase ball room/exhibit hall square footage, allowing for a greater number of attendees for events hosted at the SCC. While the number of permanent employees would remain substantially the same for operation of the SCC following construction, the increased frequency of events and/or increased attendee capacity may require that the SCC hire additional temporary event-related employees.

In addition to the employment growth generated by the proposed SCC project, 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 residents and employees. The multiplier effect tends to be greater in regions with larger diverse economies 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 and thus have a relatively reduced impact on the local and regional economy.

Two different types of additional employment are tracked through the multiplier effect. Indirect employment includes those additional jobs that are generated through the expenditure patterns of residents and direct employment associated with the project. For example, the additional workers and SCC event attendees resulting from implementation of the proposed SCC project would spend money in the local economy, and the expenditure of that money would result in additional jobs. Indirect jobs tend to be in relatively close proximity to the places of employment and residence.

The multiplier effect also calculates induced employment. Induced employment follows the economic effect of employment beyond the expenditures of the employees within the proposed project area to include jobs created by the stream of goods and services necessary to support businesses within the proposed project area. When a manufacturer buys products or sells products, the employment associated with those purchases and sales are considered induced employment.

For example, when an employee from the project goes out to lunch, the person who serves the project employee lunch holds a job that was indirectly supported by the proposed project. When the server then goes out and spends money in the economy, the jobs generated by this third-tier effect are considered induced.

The multiplier effect also considers the secondary effect of employee expenditures. Thus, it includes the economic effect of the dollars spent by those employees who support the employees of the project.

In Chapter 2, it is estimated that the SCC expansion and renovation would result in an increase in direct employment of 10 to 15 event-related temporary jobs associated with expanded event capacity and frequency of events. As noted in Chapter 2, permanent employment associated with the SCC is expected to be similar to levels currently experienced at the SCC. Compared to existing conditions, temporary event employment would vary depending upon the number and nature of events held at the SCC. Overall, the economic effects of operations of the expanded SCC would not be substantially different from existing levels.

Increased future employment generated by attendee and employee spending ultimately results in physical development of space to accommodate those employees. It is the characteristics of this physical space and its specific location that determine the type and magnitude of environmental impacts of this additional economic activity. Although the economic effect can be predicted to some extent, and is viewed by the City as being substantial and beneficial, the actual environmental consequences of this type of economic growth (i.e., new physical development) are too speculative to predict or evaluate, since they can be spread throughout the Sacramento metropolitan region and beyond.

While the proposed project would contribute to direct, indirect, and induced growth in the region, it would expand and renovate the SCC in a manner that is efficient and utilizes existing and planned urban resources.

Hotel Project

The proposed Hotel project would add up to 350 hotel rooms, 6,000 square feet (sf) of restaurant space, and 70,000 sf of event/meeting/ballroom space. As described in Chapter 2, the Hotel project would have approximately 125 permanent employees serving hospitality, administrative, maintenance, and event functions. As described above for the SCC project, the employees from the proposed Hotel project would spend money in the local economy, and the expenditure of that money would result in indirect employment (i.e., additional jobs). As is presented below, in **Table 5-1**, the indirect and induced employment growth associated with the increased employment from the Hotel project would add an additional 82 jobs in the Sacramento regional economy, bringing the total increase in jobs associated with the proposed Hotel to 207 jobs.

TABLE 5-1
INDIRECT AND INDUCED EMPLOYMENT

Employment Type	Direct Employment Change over Present	Indirect		Induced		Total Indirect + Induced Employment	Total Employment
		Type I Multiplier ¹	Change from Direct	Type II Multiplier ¹	Change from Indirect		
Hotel	125	1.35	33	1.63	49	82	207

NOTE:

1. IMPLAN 2010 dataset for Sacramento County.

SOURCE: Sacramento County, 2013. *Employment Multipliers*; ESA, 2017.

Increased future employment generated by spending by hotel-guests, hotel-event-space-attendees and hotel employees may ultimately result in physical development of space to accommodate those employees. It is the characteristics of this physical space and its specific location that determine the type and magnitude of environmental impacts of this additional economic activity. Visitors booking a hotel room in Sacramento pay a transient occupancy tax (TOT), which serves as a revenue stream to the City of Sacramento. A new hotel adjacent to the Sacramento Convention Center is anticipated to serve Convention Center attendees who may visit Sacramento for multiple days. And while the proposed Hotel project could attract patrons who intend to travel outside of the Sacramento metropolitan area, many patrons will spend money near the proposed Hotel site because it is in the heart of downtown Sacramento and surrounded by entertainment, cultural, dining, and recreational opportunities. Development of a new hotel would increase local economic activity, induce visitors to stay proximate to the Convention Center, and provide an additional source of revenue directly to the City through the TOT. Although the economic effect can be predicted, the actual environmental consequences of this type of economic growth are too speculative to predict or evaluate, since they can be spread throughout the Sacramento metropolitan region and beyond.

While the proposed Hotel project would contribute to direct, indirect, and induced growth in the region, it would construct the Hotel project in a manner that is efficient and utilizes existing and planned urban resources.

5.4.3 Environmental Effects of Induced Growth

While economic and employment growth at each of the project sites are intended consequences of the proposed projects, growth induced directly and indirectly by each of the proposed projects could also affect the greater Sacramento region. Potential effects caused by induced growth in the region 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.

Specifically, an increase in housing demand in the greater Sacramento region could cause significant environmental effects as new residential development would require governmental services, such as schools, libraries, and parks. Indirect and induced employment and population growth would further contribute to the loss of open space because it would encourage conversion to urban uses for housing, commercial space, and infrastructure.

While the proposed SCC Expansion and Renovation project and Hotel project would contribute to direct, indirect, and induced growth in the region, it is not anticipated that growth induced by the proposed projects would be of sufficient size to substantially increase demand for development in the region, to the extent that such demand would lead to significant environmental effects. For these reasons, this impact would be considered less than significant.

5.5 Urban Decay

5.5.1 Economic and Social Effects

Under CEQA, economic or social effects are not considered significant effects on the environment. Rather, these effects are considered in the context of their potential linkage or indirect connections between a proposed project and physical environmental effects. More specifically, the direction for treatment of economic and social effects is stated in section 15131(a) of the CEQA Guidelines:

Economic or social effects of a project shall not be treated as significant effects on the environment. An EIR may trace a chain of cause and effect from a proposed decision on a project through anticipated economic or social changes resulting from the project to physical changes caused in turn by the economic or social changes. The intermediate economic or social changes need not be analyzed in any detail greater than necessary to trace the chain of cause and effect. The focus of the analysis shall be on physical changes.

A social or economic change also may be considered in determining whether the physical change is significant (CEQA Guidelines section 15382).

5.5.2 Urban Decay

As used in CEQA, the term “urban decay” was introduced by the Court of Appeal in the case entitled *Bakersfield Citizens for Local Control v. City of Bakersfield* (2004) 124 Cal.App.4th 1184 (Bakersfield Citizens). In that decision, the court required the City of Bakersfield to revise and recirculate two EIRs for two proposed Wal-Mart stores because the documents both failed to address the possible indirect physical effects flowing from the direct economic effects of the two projects. Though the court did not expressly define “urban decay,” the court seemed to equate the concept with a “chain reaction of store closures and long-term vacancies, ultimately destroying existing neighborhoods and leaving decaying shells in their wake.”¹ For the purposes of this assessment and consistent with the above described court decision, “urban decay” is not simply a condition in which buildings become vacant as businesses compete with each other in the normal course of the market-based economy, nor is it a condition where a building may be vacated by one business or use and reused by a different business or for alternative purposes. Rather, under CEQA “urban decay” is defined as physical deterioration of properties or structures that is so prevalent, substantial, and continuing for a significant period of time that it impairs the proper utilization of the properties and structures, and the health, safety, and welfare of the surrounding community. Physical deterioration includes abnormally high business vacancies, abandoned buildings, boarded doors and windows, parked trucks and long-term unauthorized use of the properties and parking lots, extensive or offensive graffiti painted on buildings, dumping of refuse or overturned dumpsters on properties, dead trees and shrubbery, and uncontrolled weed growth or homeless encampments.

The conditions that were present in the Bakersfield Citizens case are distinguishable from the conditions related to the proposed SCC project and the proposed Hotel project. In Bakersfield, two proposed Wal-Mart stores were proposed, and the question of urban decay related to the potential adverse effect of additional retail supply on existing retail stores in the same market area.

SCC Project

The proposed SCC project would be an expansion of the existing use/services provided from the SCC project site. Expanded exhibit hall/ballroom floor space and staging facilities would expand the City’s ability to attract a higher volume and/or larger sizes of conferences to the SCC on an annual basis. Similar types of meeting spaces are offered at other locations within the region, such as hotels, however the SCC is a regionally-serving meeting venue that has the largest meeting spaces, uniquely capable of accommodating “Group A” events, described in Chapter 2 as having average attendance of 5,175 attendees. The unique size and capacity offerings of the SCC do not place it in direct competition with other meeting space providers in the area. Relative to existing operations, the additional number of event attendees and additional number of conferences hosted on an annual basis would be attracted from similarly-sized conference

¹ City of Bakersfield, 2004. *Bakersfield Citizens for Local Control v. City of Bakersfield* (2004) 124 Cal.App.4th 1184, p. 1204.

facilities outside of the region, as there are no other facilities within the region that are capable of accommodating such events. For these reasons, the proposed SCC project would not be anticipated to provide competitive pressure on meeting space providers in the region, which in turn could lead to subsequent closure and non-use of those sites to the extent that they fall into disrepair or become subject to blight effects, contributing to urban decay.

Hotel Project

For the proposed Hotel project, the conditions are different in that the project would add hotel capacity to the CBD, within which there is a noted shortage in hotel capacity that the project would be intended to ease. The 70,000 sf meeting space, included with the proposed Hotel project would expand the City's ability to attract a higher volume and/or larger sizes of conferences to the SCC on an annual basis, as the hotel would be designed to encourage a synergistic relationship with the nearby SCC, hosting SCC-event-related events during large events at the SCC. This would be similar to the synergistic relationship of existing nearby hotels with SCC programming. Construction and operation of event/meeting space in the Sacramento market would not be considered to have a substantial effect, such that it would cause similar uses to go out of business.

The proposed Hotel project would also include 6,000 sf of restaurant space, which could house a single large restaurants or small number of smaller restaurants. The downtown Sacramento area contains hundreds of thousands of square feet of restaurant space, with a large amount of restaurant space projected for development, across a number of large projects. The restaurant space proposed as part of the proposed Hotel project, would be too small to have a substantive impact to the restaurant market place, and would not be of sufficient size to meaningfully contribute to the potential for urban decay, in relation to restaurant space.

CHAPTER 6

Project Alternatives

6.1 Overview

Pursuant to State CEQA Guidelines section 15126.6, this EIR must describe a range of reasonable alternatives to the proposed SCC project and proposed Hotel project that might feasibly accomplish most of the basic objectives of each of the proposed projects and could avoid or substantially lessen one or more of the significant effects of either project. The feasibility of an alternative is determined by the lead agency based on a variety of factors including, but not limited to, site suitability, economic viability, availability of infrastructure, general plan consistency, other plans or regulatory limitations, jurisdictional boundaries, and site accessibility and control (State CEQA Guidelines section 15126.6(f)(1)).

The chapter discloses the comparative effects of each of the alternatives relative to each of the proposed projects, and evaluates the relationship of the alternatives to the objectives of the respective proposed project. As required under section 15126.6(e) of the State CEQA Guidelines, an environmentally superior alternative is identified at the end of this chapter for each proposed project.

6.2 Factors in the Selection of Alternatives

6.2.1 Project Objectives

The objectives of the proposed projects are used to evaluate the reasonableness and feasibility of each alternative. As presented in Chapter 2, Project Description, the objectives for each project are as follows:

SCC Project Objectives

The City's stated mission for the SCC project is to provide a quality, diverse, service-oriented facility that enhances the economic and cultural vitality of the Sacramento community. The following are the City's stated objectives for the proposed SCC project:

1. *Positive Economics*: Achieve positive economic impact for the hotel, restaurant, and business community, and a positive fiscal effect on the City through increased Transient Occupancy Tax revenues;
2. *Catalyst*: Serve as a catalyst to increase and drive the City's demand for hotel room nights;

3. *Destination*: Enrich the ability to sell the City as a convention and entertainment destination, and improve the City's competitiveness in relation to other comparably-sized convention facilities;
4. *Availability*: Increase the availability of SCC space by improving efficiency of loading and unloading exhibit and convention materials;
5. *Expansion*: Increase the amount of exhibit and ballroom space, and meeting rooms;
6. *Improved Conditions*: Improve the condition of the SCC facilities to make the facility more attractive to prospective event planners;
7. *Sustainable Project*: Develop a sustainable entertainment and sports center project that is LEED Silver (or equivalent), supports smart growth principals, and encourages public transit use as well as pedestrian and bicycle transportation;
8. *Connect Downtown*: Develop an improved convention and entertainment center project that connects with and enhances downtown from the waterfront to Golden 1 Center to the Convention Center, and from the Capitol to the Railyards and intermodal facilities;
9. *Strengthen Downtown*: Strengthen the economic vitality of the eastern end of downtown;
10. *Regional Economic Catalyst*: Leverage the convention center to spark redevelopment of underutilized downtown properties on the eastern end of the Central Business District; and
11. *A First-Class Destination*: Operate and maintain the City-owned convention center and surrounding district so that they remain a first class destination.

Hotel Project Objectives

The project applicant's overall goal of the Hotel project is to build and operate a full service hotel that can serve SCC patrons and other visitors to the City, and provide a venue for meetings and events. The applicant's stated objectives for the proposed Hotel project are:

1. Construct and operate a modern hotel to address the existing shortage of hotel rooms available for business and tourist travelers within the Central Business District;
2. Construct and operate complementary meeting and conference space, entertainment space, dining space, and recreational amenities to help promote the Central Business District as the regional and historic center for meeting and gathering;
3. Enhance the continued economic revitalization and urbanization of downtown Sacramento with a modern hotel catering to business travelers and tourists alike;
4. Construct and operate a modern hotel within the transit-rich Central Business District and in close proximity to major transit stops and high-quality transit corridors;
5. Provide direct access to the Sacramento Convention Center to promote pedestrian travel and reduce potential conflicts between vehicles and pedestrians on K Street;

6. Support the ongoing shift within the downtown area to environmentally-conscious modes of travel by promoting ride-sharing services and non-vehicular travel by hotel guests and patrons;
7. Construct a modern and architecturally distinct high-rise hotel that balances the General Plan vision for a higher-density Central City as well as capitol view protection goals consistent with the Capitol View Protection Act; and
8. Redevelop a surface parking lot to advance the City's goal to reduce the number of surface parking lots in the Central Business District and to integrate parking into buildings and structures to accommodate existing parking needs as well as hotel parking.

6.2.2 Significant Effects of the Proposed Projects

Section 15126.2(b) of the State 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 project on various aspects of the environment are discussed in detail in Chapter 4, Environmental Impacts, Setting, and Mitigation Measures. Project-specific and cumulative impacts that cannot be avoided if each of the projects are approved as proposed include:

Project-Specific Significant and Unavoidable Impacts

Impact 4.2-3: The proposed project would result in long-term (operational) emissions of NO_x, ROG, PM₁₀, or PM_{2.5}. (Hotel)

Impact 4.4-3: Implementation of the proposed projects, in combination with other cumulative development, could contribute to the cumulative loss or alteration of paleontological resources, or archaeological resources, including human remains or Tribal Cultural Resources. (SCC/Hotel)

Impact 4.8-1: Construction of the proposed projects could generate noise that would conflict with City standards or result in substantial temporary or periodic increase in ambient noise levels. (SCC/Hotel)

Impact 4.8-5: Construction of the proposed projects could expose existing and/or planned buildings, and persons within, to vibration that could disturb people and damage buildings. (SCC/Hotel)

Cumulative Significant and Unavoidable Impacts

Impact 4.2-7: The proposed project would contribute to cumulative increases in long-term (operational) emissions of NO_x, ROG, PM₁₀, and PM_{2.5}. (SCC/Hotel)

Impact 4.8-6: The proposed projects would result in exposure of people to cumulative increases in construction noise levels. (SCC/Hotel)

Impact 4.8-7: The proposed projects would contribute to cumulative construction that could expose existing and/or planned buildings, and persons within, to significant vibration. (SCC/Hotel)

6.3 Alternatives Considered but Dismissed from Further Evaluation

In identifying alternatives to the proposed projects, primary consideration was given to alternatives that could reduce significant unavoidable impacts resulting from a proposed project while still obtaining the objectives of the proposed project. Certain impacts that are identified as being significant and unavoidable under the proposed projects (e.g., increase in air pollutants from project construction and operation) are due primarily to developing a site that is currently undeveloped or intensifying development activity beyond current levels. These impacts would not be possible to eliminate, but could be reduced, for example, by limiting the scale of the proposed SCC project, reconfiguring uses, or implementing specific measures. Alternatives that reduce the intensity of the SCC project and the Hotel project are addressed later in this chapter.

As required under section 15126.6(c) of the State CEQA Guidelines, the City is required to disclose alternatives that were considered but rejected from further analysis in this Draft EIR and provide the rationale for dismissal of those alternatives. Of the alternatives considered for the proposed SCC renovation and expansion, a concept plan presented to the City Council on October 18, 2016 was rejected from further analysis. Although this plan would have added approximately the same amount of meeting, ballroom, and flexible space as the proposed SCC project, the building footprint would have expanded farther south up to the edge of the Community Center Theater. This design would completely eliminate the Activities Plaza and would not provide outdoor space to create a dynamic and synergistic environment between the two buildings and uses. Further, eliminating the Activities Plaza would have also cutoff pedestrian and bicycle access along K Street between 13th Street and 14th Street. The cost of this potential design was also too expensive to move forward with. Therefore, it was rejected and is not further considered here. For the proposed 15th/K Street hotel, no alternatives were found to be overtly infeasible or worthy of dismissal prior to further consideration. Therefore, alternatives considered for the proposed projects have been selected for further consideration and are discussed in the following section.

6.4 Alternatives Selected for Further Consideration

This section describes the range of alternatives to the proposed projects that are analyzed in this Draft EIR and examines how specific environmental impacts would differ in severity compared to those associated with the proposed projects. For the most part, significant impacts of the alternatives can be mitigated to less than significant levels through adoption of mitigation measures identified in Chapter 4, which contains the environmental analysis of the proposed projects. To varying degrees, the following alternatives would also avoid and/or lessen impacts,

including some or all of the significant and unavoidable impacts, of the proposed projects. The alternatives considered in this section include:

SCC Project and Hotel Project

- SCC and Hotel Alternative 1: No SCC Project or Hotel Project Alternative

SCC Project

- SCC Alternative 1: No Project Alternative
- SCC Alternative 2: Smaller SCC Expansion
- SCC Alternative 3: Larger SCC Expansion
- SCC Alternative 4: No Panattoni Building Demolition/No East Lobby

Hotel Project

- Hotel Alternative 1: No Hotel Alternative
- Hotel Alternative 2: Smaller Hotel Alternative
- Hotel Alternative 3: No On-Site Hotel Parking Alternative

The evaluation of alternatives is organized to facilitate a clear comparison between the effects of the alternative and the effects of the proposed projects. For each project there is a discussion of those impacts of the alternative that would be the same or similar to those of the proposed projects. This is followed by a discussion of those effects of the alternative that would be less severe than those of the proposed projects, followed by those effects of the alternative that would be more severe than those of the proposed projects. Each discussion concludes with a discussion of the relationship between the alternative and the basic objectives of the proposed projects. Alternatives are evaluated at a less specific level than the proposed projects.

6.4.1 SCC and Hotel Alternatives

SCC and Hotel Alternative 1: No SCC Project or Hotel Project Alternative

Under the SCC and Hotel Alternative 1: No SCC Project or Hotel Project Alternative, SCC would not be renovated or expanded and the Hotel project would be constructed. The SCC would continue to operate at its current capacity. No improvements would be made to the SCC beyond standard maintenance and minor upgrades, so the physical and operational capacity of the SCC would not change, and service facilities and area amenities would be maintained but not materially expanded or improved. the proposed 15th/K Street Hotel would not be developed, and the project site would continue to operate as a commercial surface parking lot.

This alternative is the same as the Hotel Alternative 1: No Hotel Alternative, and a comparative analysis of environmental effects and the alternative's relationship to project objectives are discussed under Hotel Alternative 1.

6.4.2 SCC Expansion and Renovation Alternatives

The City is considering varying development scenarios for the SCC project. Table 6-1 provides a comparison of key event square footage differences between the alternatives selected for further analysis.

**TABLE 6-1
COMPARISON OF SCC EVENT SQUARE FOOTAGE BETWEEN ALTERNATIVES**

Event Space Type	Proposed SCC Project	SCC Alternative 1	SCC Alternative 2	SCC Alternative 3	SCC Alternative 4
Exhibit Hall	160,000 sf	137,000 sf	145,300 sf	195,300 sf	160,000 sf
Meeting Space ¹	45,000 sf	21,667 sf	37,645 sf	56,904 sf	45,000 sf
Ballroom	40,000 sf	24,282 sf	24,282 sf	40,000 sf	40,000 sf
Event Space Total	245,000 sf	182,949 sf	207,227 sf	292,204 sf	245,000 sf

NOTE:

1. Meeting space includes the existing ballroom on the second floor that can be transformed into meeting space.

SOURCE: Populous, 2017.

SCC Alternative 1: No SCC Project

Description

Under SCC Alternative 1, the No SCC Project Alternative, the SCC would not be renovated or expanded. Under this alternative operational capacity for the SCC, including event capacity and frequency, would remain as existing and the facility would be operated consistent with current practice. Under the No SCC Project Alternative, the City Council would not approve any project, and none of the mitigation measures identified in this Draft EIR would be implemented. No demolition would occur because the existing SCC and Panattoni building would be retained.

Under SCC Alternative 1, the SCC would continue to operate at its current capacity. No improvements would be made to the SCC beyond standard maintenance and minor upgrades, so the physical and operational capacity of the SCC would not change, and service facilities and area amenities would be maintained but not materially expanded or improved.

Under SCC Alternative 1, the proposed Hotel project, as a separate cumulative project, would be developed as proposed on the adjacent parking lot site, but a second-level pedestrian bridge connecting the hotel to the SCC would not be constructed.

Comparative Analysis of Environmental Effects

In general, the effects of the No SCC Project Alternative would be a continuation of the existing conditions described in the Environmental Settings presented in the resource sections of Chapter 4, because no new development would occur at the SCC site.

Impacts Identified as Being the Same or Similar to the Proposed SCC Project

Because there would be no construction under this alternative, and no changes to the operation of the SCC, none of the impacts identified for the proposed projects would occur under the No SCC Project Alternative.

Impacts Identified as Being Less Severe than the Proposed SCC Project

Under SCC Alternative 1, no demolition would occur, and no new development would be constructed, so there would be none of the impacts associated with construction, such as construction emissions (Impacts 4.2-2, 4.2-5, 4.2-6, and 4.2-9), construction traffic (Impacts 4.9-5 and 4.9-12), disturbance to nesting raptors or migratory birds (Impact 4.3-1 and 4.3-3), loss of street trees (Impacts 4.3-2 and 4.3-4), damage to historic, archaeological, tribal cultural and/or paleontological resources (Impacts 4.4-1 through 4.4-4), degradation of water quality (Impact 4.7-1) and construction noise and vibration (Impacts 4.8-1, 4.8-4, 4.8-5, and 4.8-6).

Because there would be no new development and no changes to the size or configuration of the SCC, the No SCC Project Alternative would not increase the amount of lighting or glare in the Downtown project site or elsewhere (Impacts 4.1-2, 4.1-3, 4.1-5, and 4.1-6), degrade the existing visual character of the project site (Impacts 4.1-1 and 4.1-4), create new sources of event noise (Impacts 4.8-2 and 4.8-7), increase noise levels within existing and future residences (Impacts 4.7-3 and 4.7-8), result in adverse effects on pedestrian or bicycle facilities (Impacts 4.9-3, 4.9-4, 4.9-10, and 4.9-11), or obstruct the implementation of an air quality plan (Impact 4.2-1) or the City's CAP (Impacts 4.5-1 and 4.5-2). The No SCC Project Alternative would not increase demand for energy (Impacts 4.6-1, 4.6-2, and 4.6-3) or other utilities. There would be no new sources of polluted runoff or new impacts to groundwater (Impacts 4.7-2 through 4.7-5).

The proposed SCC project would cause increases in vehicular travel times along J Street, which would be at their peak during SCC event arrival and departure time periods. Increased vehicular travel times would cause delays in transit routes in the vicinity of the SCC, during events. Under SCC Alternative 1, there would be no worsening of conditions at intersections or increase in vehicular travel times from the proposed SCC project (Impacts 4.9-1, 4.9-2, 4.9-7, 4.9-8, and 4.9-9).

The proposed SCC project would increase the capacity and frequency of event programming at the SCC. This would bring more people to the SCC, which would increase activity in and around the SCC and would increase the facility's utilities demand, to meet the requirements of the anticipated additional event attendees. Because SCC event programming under the No SCC Project Alternative would be similar to existing operations in relation to existing number of annual event attendees and frequency of events, impacts that would have a commensurate increase with the increase in event attendees—including vehicle emissions (Impacts 4.2-3, 4.2-4, 4.2-7, and 4.2-8), noise, wastewater generation (Impacts 4.10-2 and 4.10-4), demand for water supply (Impacts 4.10-1 and 4.10-3)—would be less severe than under the proposed SCC project.

For these reasons, impacts under the No SCC Project Alternative would be less severe than under the proposed SCC project.

Impacts Identified as Being More Severe than the Proposed SCC Project

The No SCC Project Alternative would not result in any impacts that would be more severe than under the proposed SCC project because there would be no demolition, construction or changes to operations at the SCC project site.

Relationship to Significant and Unavoidable Impacts

Under the No SCC No Project Alternative the SCC project and Hotel project would not be constructed. Therefore, all significant and unavoidable impacts of the proposed projects would be avoided under SCC Alternative 1.

Relationship to Plan Objectives

Under the No SCC Project Alternative none of the project objectives for the proposed SCC project would be achieved.

SCC Alternative 2: Smaller SCC Expansion Alternative

Description

The Smaller SCC Expansion Alternative (SCC Alternative 2) would reduce the scale of the SCC expansion and renovation, relative to the proposed SCC project. Under SCC Alternative 2, the SCC would be subject to major renovation of the existing facility which would expand the existing meeting spaces, develop a new east lobby and improve food service.

The first level of the renovated SCC under SCC Alternative 2 would include the following facility upgrades:

- Moved/expanded kitchen;
- Expanded/renovated western exhibit hall;
- Added service connections to the expanded western exhibit hall;
- Expanded pre-function spaces along the western and northern sides of the western exhibit hall;
- New vertical circulation;
- A new 9,637 sf east lobby;
- New food service outlets on the north and western sides of the facility; and
- Expanded west lobby.

The second level of the renovated SCC under SCC Alternative 2 would include a renovation of the existing meeting space at the southwestern end of the facility.

- Renovations to the 3rd floor of the SCC, under SCC Alternative 2 would include the following:

- New meeting spaces;
- New connector space;
- New vertical circulation;
- Renovation of the ballroom/meeting space; and
- New administrative space on the upper floor of the Panattoni building.

Under SCC Alternative 2 the SCC renovation would not require demolition of the western half of the SCC or demolition of the Panattoni building. In addition, much of the 2nd level exhibit areas would remain as is. There would be no changes to the SCC loading areas. On the western side of the SCC the expanded pre-function areas on the north and west sides of the facility and the expanded/new west lobby would extend the SCC footprint closer to J and 13th streets.

As described in Table 6-1, above, the renovated SCC under SCC Alternative 2 would have more event square footage, relative to the existing SCC, but would have less event square footage relative to the proposed SCC project, by approximately 37,773 sf. Thus, under SCC Alternative 2, the renovated SCC would have a higher attendee capacity than could be accommodated at the existing SCC facility but a lower capacity than could be accommodated by the proposed SCC project. In addition, SCC Alternative 2 would not include improvements to event staging areas (a feature that would allow for improved staging and subsequent higher frequency of events), which are included in the proposed SCC project. Thus, the renovated SCC under SCC Alternative 2 would have lower attendee capacity and lower event frequency capacity relative to the proposed SCC project.

Under SCC Alternative 2, there would be fewer improvements to SCC service and logistical facilities, relative to the proposed SCC project. Improvements under the proposed SCC project, including a new shared central plant, new storage, and new service kitchen on the second level, would not take place under SCC Alternative 2.

Construction under SCC Alternative 2 would not require demolition of the western half of the SCC or the Panattoni building, however elimination of the eastern terrace and construction of second level meeting spaces would be included. Renovation of the SCC under SCC Alternative 2 would be less intensive than construction under the proposed SCC project, reducing the anticipated duration and intensity of construction.

Because there would be no addition of an east lobby under SCC Alternative 2, the proposed Hotel project would not include a second level pedestrian bridge between the hotel and the SCC facility.

Comparative Analysis of Environmental Effects

Impacts Identified as Being the Same or Similar to the Proposed SCC Project

The site that would be developed under SCC Alternative 2 is within a highly urbanized area within the Central City, and would be the same as the site to be developed under the proposed SCC project, so impacts related to ground disturbance would be essentially the same. Impacts

would be substantially the same for biological resources, including raptors and other protected species (Impacts 4.3-1 and 4.3-3) and trees (Impacts 4.3-2 and 4.3-4) and for water resources, including generation of new sources of polluted runoff (Impacts 4.7-2 and 4.7-4) and ground water levels and recharge (Impacts 4.7-3 and 4.7-5). While construction intensity would be less under SCC Alternative 2, proximity to residential uses and impacts to indoor residential noise levels would be similar to the proposed SCC project (Impacts 4.8-3 and 4.8-8).

Renovations to the SCC under SCC Alternative 2 would include expansion of the pre-function space along the western and northern exteriors of the western half of the SCC. Under both SCC Alternative 2 and the proposed SCC project, these exterior areas would be built out with similar design and decorative themes. While under SCC Alternative 2 the western side of the SCC would not include the upper level construction proposed under the proposed SCC project, the impact to the visual character of the site and its surroundings of SCC Alternative 2 would be similar to the impact described for the proposed SCC project (Impacts 4.1-1 and 4.1-4).

Impacts Identified as Being Less Severe than the Proposed SCC Project

Under SCC Alternative 2, impacts to historic, tribal cultural, and archaeological resources would be less severe than under the proposed SCC project because construction would be less intensive and would not include the large-scale demolition and limited excavation in the western half of the SCC and the Panattoni building under the proposed SCC project (Impacts 4.4-1, 4.4-2, 4.4-3, 4.4-4, 4.4-5, and 4.4-6). Compared to the proposed SCC project, lower levels of construction under Alternative 2 would require less earthwork and use of heavy equipment, which would have less severe impacts related to construction, such as construction-related air emissions (Impacts 4.2-2, 4.2-5, 4.2-6, and 4.2-9), noise and vibration (Impacts 4.8-1, 4.8-4, 4.8-5, and 4.8-6), and degradation of water quality (Impact 4.7-1). There would be fewer construction related traffic impacts due to the shorter durations of construction activities (Impacts 4.9-5 and 4.9-12).

As described above, renovation of the SCC under SCC Alternative 2 would not include the volume of upper level construction that would occur under the proposed SCC project. As a result, under SCC Alternative 2 the renovated SCC would be a smaller structure for which impacts based on the size of the structure and design elements would be less severe relative to the proposed SCC project. Such impacts would include creation of new sources of light and glare (Impacts 4.1-2, 4.1-3, 4.1-5, and 4.1-6), because under SCC Alternative 2, the SCC would have less external surface area and fewer internal and external areas requiring lighting that would be visible to viewers outside of the SCC. A smaller SCC under SCC Alternative 2 would also have lower power demands and consumption of resources which could affect consistency with the City's Municipal CAP (Impacts 4.5-1 and 4.5-2),

Under SCC Alternative 2 the SCC would have lower allowable levels for maximum attendee capacity and event frequency, which would reduce, on a relative level, the severity of operational impacts that would be effected by the size and/or frequency of events. This would affect impacts such as demand for water and wastewater conveyance and treatment (Impacts 4.10-1 through 4.10-4), electricity and natural gas (Impacts 4.6-1, 4.6-2, and 4.6-3), which would be lowered

based on lower annual volume of attendees. Lower attendee volumes and/or event frequency under SCC Alternative 2 would also be expected to have lower impacts related to transportation, including vehicle trips to and from the SCC, and operations, including heating and cooling and other forms resources consumption that would generate air emissions (Impacts 4.2-1, 4.2-3, 4.2-4, 4.2-7, and 4.2-8). Fewer vehicle trips and lower attendee volumes would have proportionately lower ambient exterior noise impacts (Impacts 4.8-2 and 4.8-7).

Impacts Identified as Being More Severe than the Proposed SCC Project

The proposed SCC project would cause increases in vehicular travel times along J Street, which would be at their peak during SCC event arrival and departure time periods. Increased vehicular travel times would cause delays in transit routes in the vicinity of the SCC, during events. Under SCC Alternative 2, lower attendee volumes would have fewer vehicle trips relative to the proposed SCC project. However, construction of an east lobby under the proposed SCC would divert a substantial number of vehicle drop-offs and pedestrian traffic toward the east lobby, at K and 15th Street. Under Alternative 2, no east lobby would be constructed, and all added vehicle drop off and pedestrian traffic from the project would be focused at the north and west lobbies. Therefore, it is anticipated that traffic conditions at the J and 13th Street and K and 13th Street intersections would be more severe, relative to the proposed SCC project (Impact 4.9-1 and 4.9-7). Worsened conditions at the J and 13th Street intersections would also be expected to create more severe transit delays for bus transit along J Street (Impact 4.9-2, 4.9-8 and 4.8-9). Worsened conditions along J Street generally would also be anticipated to increase conflicts between vehicles and bicyclists and pedestrians, relative to the proposed SCC project (Impacts 4.9-3, 4.9-4, 4.9-10, and 4.9-11).

Relationship to Significant and Unavoidable Impacts

Under SCC Alternative 2 the severity of significant and unavoidable impacts from the proposed SCC project would be lessened for temporary increases in noise levels (Impacts 4.8-1 and 4.8-6) and for vibration effects from construction (Impacts 4.8-5 and 4.8-7), however neither reduction would necessarily reduce those impacts to less than significant levels. In addition, operational emissions under Alternative 2 would be less than would occur under the proposed SCC project, thereby reducing the project's significant and unavoidable impact on cumulative air quality (Impact 4.2-7). Regardless, each of the impacts described above may continue to be significant and unavoidable as the reductions provided by implementation of Alternative 2 may not be enough to reduce those impacts to below thresholds of significance.

Overall, implementation of SCC Alternative 2 would lessen the severity of significant and unavoidable impacts that would occur under the proposed SCC project.

Relationship to SCC Project Objectives

SCC Alternative 2 would result in expansion and renovation of the SCC in a less intensive manner than under the proposed SCC project, resulting in a smaller overall structure and differing mix of service and event spaces. While this alternative would result in a smaller renovation and expansion project than the proposed SCC project, SCC Alternative 2 would still expand the SCC

event and service spaces allowing for larger events than under existing conditions. This would achieve, but to a lesser extent than the proposed SCC project, the City's SCC objectives, including achieving a positive economic impact (Objective 1), increasing demand for hotel room nights (Objective 2), improving the City's profile as a convention destination (Objective 3), increasing the amount of exhibit and ball room space (Objective 5), improving the condition of the SCC facilities (Objective 6), facility sustainability (Objective 7), improving the SCC and its connection to the area (Objective 8), strengthening the economic vitality of the eastern end of downtown (Objective 9), encouraging redevelopment of underutilized downtown properties (Objective 10), and developing the SCC to be a first-class destination (Objective 11).

SCC Alternative 2 would not include facility improvements that would enhance efficiency of event staging and logistical facilities (Objective 4).

SCC Alternative 3: Larger SCC Expansion Alternative

Description

The Larger SCC Expansion Alternative (SCC Alternative 3) would expand the scope and scale of the SCC expansion and renovation relative to the proposed SCC project. Under SCC Alternative 3, the SCC project would include demolition of the western half of the SCC and the Panattoni building, similar to the proposed SCC project. SCC Alternative 3 would, in addition, include renovation and expansion of the existing subgrade level, to include a new storage area and a new shared central plant.

The first level of the renovated SCC under SCC Alternative 3 would include the following facility upgrades:

- A new 62,780 sf exhibit hall in the northwest corner of the facility;
- A new 37,927 sf ballroom/multi-use room, located south of the proposed northwest exhibit hall. The footprint of the new ballroom would be in place of existing west lobby, service, and office facilities and the landscaped walkway between the existing SCC and the Community Center Theater, to the south;
- A 6,600 sf flex hall between the new exhibit hall and new ballroom/multi-use room;
- Pre-function space along the western and northern perimeters of the renovated west SCC;
- New 11,250 sf east lobby on the site of the existing Panattoni building; and
- New west lobby in the proposed pre-function space to the west of the new ballroom.

The second level of the expanded and renovated SCC under SCC Alternative 3 would include the following facility upgrades:

- 18,000 sf new 2nd-level west meeting space;
- A new 40,000 sf 2nd level ballroom above the proposed new 1st level ballroom/multi-use room;

- 9,757 sf of new meeting space constructed in place of the existing east terrace,
- Renovated small meeting spaces on the 2nd level;
- 6,033 sf administrative area above the new east lobby; and
- Elevated pedestrian bridge connecting the upper floor of the SCC east lobby to an above-ground-level floor of the proposed 15th/K Street hotel.

As with the proposed SCC project, under SCC Alternative 3 the SCC renovation would require demolition of the western half of the SCC and demolition of the Panattoni building. In addition, much of the 2nd level exhibit and meeting areas would be renovated or replaced. Proposed changes to the SCC loading areas would be similar to changes proposed for the SCC expansion and renovation, and as with the proposed SCC project, on the western side of the SCC the expanded pre-function areas on the north and west sides of the facility and the expanded/new west lobby would extend the SCC footprint closer to J and 13th streets.

As described in Table 6-1, above, under SCC Alternative 3 the renovated SCC would have approximately 47,204 sf more event space than under the proposed SCC project, an increase of 19% compared to the proposed SCC project. SCC Alternative 3 would also include more square footage for event staging areas, which would complement the increase in event space, improving event staging to allow for stacking of events, similar to the improved event-staging capabilities of the proposed SCC project.

Under SCC Alternative 3 improvements to SCC service and logistical facilities would be similar to the proposed SCC project, including a new shared central plant and new storage. However, the shared central plant would be located on the basement level, under SCC Alternative 3, where it would be located on the first level under the proposed SCC project.

As with the proposed SCC project, construction under SCC Alternative 3 would require demolition of the western half of the SCC and the Panattoni building along with elimination of the eastern terrace. Renovation and expansion of the SCC under SCC Alternative 3 would be anticipated to be more intensive than construction under the proposed SCC project, thereby increasing the anticipated duration and intensity of construction.

Comparative Analysis of Environmental Effects

Impacts Identified as Being the Same or Similar to the Proposed SCC Project

The site that would be developed under SCC Alternative 3 would be the same as the site to be developed under the proposed SCC project, so impacts related to ground disturbance would be essentially the same. Specifically, impacts would be the same for biological resources, including raptors and other protected species (Impacts 4.3-1 and 4.3-3) and trees (Impacts 4.3-2 and 4.3-4) and for water resources, including generations of new sources of polluted runoff (Impacts 4.7-2 and 4.7-4) and ground water levels and recharge (Impacts 4.7-3 and 4.7-5).

Renovations to the SCC under SCC Alternative 3 would include expansion of the pre-function space along the western and northern exteriors of the western half of the SCC and expansion to the south of the western footprint of the SCC. Under both SCC Alternative 3 and the proposed SCC project, these exterior areas would be built out with similar design and decorative themes. Under SCC Alternative 3, the impact to the visual character of the site and its surroundings would be similar to the impact of the proposed SCC project (Impacts 4.1-1 and 4.1-4).

Renovation and expansion of the SCC under SCC Alternative 3 would include a greater volume of upper level construction relative to the proposed SCC project. However, the SCC footprint under SCC Alternative 3 would generally fit within the same development envelope as the proposed SCC project and would have a similar number of outside lights and window areas. Such impacts would include creation of new sources of light and glare (Impacts 4.1-2, 4.1-3, 4.1-5, and 4.1-6), implementation of the City's CAP (Impacts 4.5-1 and 4.5-2),

Impacts Identified as Being Less Severe than the Proposed SCC Project

Because the changes to the SCC would be equal to or larger than under the proposed SCC project, none of the impacts under SCC Alternative 3 would be anticipated to be less severe than impacts that would occur under the proposed SCC project.

Impacts Identified as Being More Severe than the Proposed SCC Project

Under SCC Alternative 3, the SCC would have 19% more indoor event space and would have a larger footprint than under the proposed SCC project. Thus, under SCC Alternative 3, impacts to historic, tribal cultural, and archaeological resources would be expected to be more severe than under the proposed SCC project because construction would include expansion of the existing subgrade level, increasing the amount of excavation relative to the proposed SCC project (Impacts 4.4-1 through 4.4-6) and expansion of the SCC footprint to consume the existing courtyard between the SCC and the Community Center Theater. Because construction would occur over a longer period of time, SCC Alternative 3 would have more severe construction impacts, including construction-related air emissions (Impacts 4.2-2, 4.2-5, 4.2-6, and 4.2-9), noise and vibration (Impacts 4.8-1, 4.8-4, 4.8-5, and 4.8-6), and degradation of water quality (Impact 4.7-1). In addition, SCC Alternative 3 would be anticipated to have more severe construction-related traffic impacts due to a greater volume of construction (Impacts 4.9-5 and 4.9-12).

Under SCC Alternative 3 the SCC would have a larger structure, which would include approximately 19% more event space, capable of accommodating a larger number of attendees and a higher frequency of events on an annual basis. Consequently, this alternative would have more severe impacts related to an increases in the event capacity of the SCC. These include impacts associated with demand for water and wastewater conveyance and treatment (Impacts 4.10-1 through 4.10-4), electricity and natural gas (Impacts 4.6-1, 4.6-2, and 4.6-3), which would be increased based on a higher volume of attendees annually. Increased event capacity and/or event frequency would also be anticipated to have more severe impacts related to transportation

and operations, including air emissions (Impacts 4.2-1, 4.2-3, 4.2-4, 4.2-7, and 4.2-8) and ambient exterior and interior noise (Impacts 4.8-2, 4.8-3, 4.8-7, and 4.8-8).

Similar to the proposed SCC project, SCC Alternative 3 would construct an east lobby, however, as described above, SCC Alternative 3 would have a higher number of event attendees overall. This would add additional SCC vehicle trips and would have a higher number of vehicle drop-offs near each of the SCC lobbies, relative to the proposed SCC project. Higher vehicle and pedestrian activity would increase delays at area intersections, which would be anticipated to increase transit delays along J Street, relative to the proposed SCC project (Impacts 4.9-1, 4.9-2, 4.9-7, 4.9-8, and 4.8-9).

Under Alternative 3, the footprint of the SCC would be expanded to the south, which would include the area designated as an events plaza under the proposed SCC project and eliminate the pedestrian link along K Street between 13th and 14th streets. In combination with a greater number of vehicle trips to and from the SCC, which would increase vehicle conflicts with pedestrians, this impact would be more severe than the impact to pedestrian facilities under the proposed SCC project (Impacts 4.9-4 and 4.9-11). Similarly, an increase in vehicle activity in the vicinity of the SCC, under SCC Alternative 3, would increase conflicts between vehicles and bicyclists (Impacts 4.9-3 and 4.9-10). Higher SCC event pedestrian activity at the 13th and K Street intersection would be expected to increase delay for bicycle transportation along the Class II bicycle lanes on 13th Street, similar to the vehicle delays.

Relationship to Significant and Unavoidable Impacts

Implementation of SCC Alternative 3 would not reduce the severity of significant and unavoidable impacts from the proposed SCC project.

Relationship to SCC Project Objectives

Under SCC Alternative 3 the SCC would be expanded and renovated to expand event square footage, expanding capacity, and improving event staging facilities to tighter transition between events, increasing the potential number of annual events. The City's objectives for the SCC relevant to improved capacity and operations would be met under Alternative 3 (Objectives 1, 2, 3, 4, 5, 6, 9 and 11). Under SCC Alternative 3, the SCC facility improvements would be designed to meet LEED Silver (or equivalent) standards (Objective 7). The SCC renovation and expansion under SCC Alternative 3 would be designed to have better connectivity between the existing section of the SCC to be retained, and would further be connected, via a pedestrian bridge, to the proposed 15th/K Street Hotel. This improved connectivity would improve pedestrian and corridor links to other sections of downtown (SCC Objective 8). Development of the SCC in combination with the proposed 15th/K Street Hotel represent development growth in the eastern Central Business District that would be anticipated to encourage new development at nearby under-utilized sites (Objective 10).

SCC Alternative 4: No East Lobby Alternative

Description

SCC Alternative 4 would implement the proposed SCC project with the exception that it would not include demolition of the Panattoni Building and construction of a new east lobby in its place. Under SCC Alternative 4, the Panattoni building would remain and would continue to function as administrative offices for the SCC. Because the east lobby would not be developed for the SCC, the pedestrian bridge between the SCC and the proposed 15th/K Street Hotel could not be constructed if the separate Hotel project is approved. Relative to the proposed SCC project, under SCC Alternative 4 the SCC would have a similarly sized structure, but would not have a true east lobby.

SCC operations under SCC Alternative 4 would have the same event space as would be available under the proposed SCC project. It is anticipated that operational capacity would be similar to the proposed SCC project, however the lack of an east lobby would limit the facility's ability to accommodate concurrent large events on opposing sides of the SCC. This applies to a type of event that would require exclusive use of a lobby for extended event activities and controlled entry. Separate east and west lobbies would allow for two such events to take place simultaneously, and a continued lack of an east lobby, as would occur under Alternative 4, would maintain that limiting factor. Thus, it is reasonable to conclude that under SCC Alternative 4, overall event attendee numbers and annual event frequency would be less than could occur under the proposed SCC project. In addition, all attendee entrée into the SCC would be directed through the west lobby, which would divert pedestrians and vehicle drop-offs from the site of the east lobby, as is planned under the proposed SCC project, toward the west side of the SCC, at the 13th and J Street and 13th and K Street intersections. This would decrease the pedestrian volume at the K and 15th Street intersection and lower sidewalk and crosswalk pedestrian flows on the east side of the SCC.

Under SCC Alternative 4, SCC demolition and construction would be less intensive relative to the proposed SCC project because the Panattoni Building would be retained and the SCC east lobby would not be constructed. Other components of the proposed SCC project would still take place on the east side of the SCC so some construction-related impacts would be similar to the proposed SCC project. It is anticipated that retaining the Panattoni building and omitting construction of an east lobby would shorten the duration of project construction and decrease the intensity of construction activities on the east side of the SCC.

Comparative Analysis of Environmental Effects

Impacts Identified as Being the Same or Similar to the Proposed SCC Project

No impacts under SCC Alternative 4 would be anticipated to be the same or similar to impacts that would occur under the proposed SCC project.

Impacts Identified as Being Less Severe than the Proposed SCC Project

The site that would be developed under SCC Alternative 4 would have a smaller construction footprint relative to the proposed SCC project because there would be no ground disturbance associated with demolition of the Panattoni building or construction of an east lobby. Thus, impacts related to ground disturbance and project footprint would be less severe. Specifically, impacts would be less severe for biological resources, including raptors and other protected species (Impacts 4.3-1 and 4.3-3) and trees (Impacts 4.3-2 and 4.3-4), as fewer trees would be removed. Impacts from ground disturbance would include impacts to archaeological, tribal cultural, historic and paleontological resources would be less severe (Impacts 4.4-1 through 4.4-6). Under SCC Alternative 4, there would be fewer project components, relative to the proposed SCC project, which would have less severe impacts for water resources, including generations of new sources of polluted runoff (Impacts 4.7-2 and 4.7-4) and ground water levels and recharge (Impacts 4.7-3 and 4.7-5). As described above, construction intensity would be anticipated to be less under SCC Alternative 4, thus the occurrence and intensity of construction activity, in proximity to residential uses and impacts to indoor residential noise levels would be anticipated to be less severe (Impacts 4.8-3 and 4.8-8). In addition, construction-related impacts, including construction emissions (Impacts 4.2-2 and 4.2-6), degradation of water quality (Impact 4.7-1), and construction noise and vibration (Impacts 4.8-1, 4.8-4, 4.8-5, and 4.8-6), would also be less severe. There would be fewer construction related traffic impacts due to the shorter durations of construction activities (Impacts 4.9-5 and 4.9-12).

Under both SCC Alternative 4 and the proposed SCC project, the exterior of expanded sections of the SCC would be built out with similar design and decorative themes. However, the eastern side of the SCC under SCC Alternative 4 would not include the east lobby construction proposed under the SCC expansion and renovation. The east lobby, under the proposed SCC project, would add substantial new sources of light, including external light and windows to internally lit areas, to the SCC's 15th and K Street frontages. Under SCC Alternative 4, the east lobby and incorporated new sources of light and glare, would not be added to the east side of the SCC. As such, SCC Alternative 4 would be anticipated to have less severe impacts related to light and glare (Impacts 4.1-2, 4.1-3, 4.1-5, and 4.1-6). In addition, the SCC would retain the Panattoni building under Alternative 4, which would maintain more of the existing visual character of the site, relative to the proposed SCC project. Therefore, the impact of SCC Alternative 4 to the visual character of the site and its surroundings would be less severe (Impacts 4.1-1 and 4.1-4).

Under SCC Alternative 4, events would be anticipated to be smaller and less frequent, relative to the proposed SCC project, because the SCC would not have an east lobby. Consequently, smaller and less frequent events would be anticipated to generate lower levels of air emissions from attendee transportation and event operations (Impacts 4.2-1, 4.2-3, 4.2-4, 4.2-5, 4.2-7, 4.2-8, and 4.2-9). Lower attendee numbers and staffing under SCC Alternative 4 would be anticipated to have lesser demands on the utility infrastructure, including water supply (Impacts 4.10-1 and 4.10-3) and wastewater conveyance and treatment (4.10-2 and 4.10-4). In addition, there would be lesser energy demands under SCC Alternative 4 (Impacts 4.6-1, 4.6-2, and 4.6-3) and SCC Alternative 4 would be anticipated to have a less severe impact on the implementation of the

City's CAP (Impacts 4.5-1 and 4.5-2). In addition, smaller sized events would be anticipated to have less severe transportation and operational noise impacts with less SCC-event-related vehicle activity in the vicinity of the SCC (Impacts 4.8-2 and 4.8-7).

Impacts Identified as Being More Severe than the Proposed SCC Project

The proposed SCC project would cause increases in vehicular travel times along J Street, which would be at their peak during SCC event arrival and departure time periods. Increased vehicular travel times would cause delays in transit routes in the vicinity of the SCC, during events. Under SCC Alternative 4, lower attendee volumes would have fewer vehicle trips relative to the proposed SCC project. However, construction of an east lobby under the proposed SCC would divert a substantial number of vehicle drop-offs and pedestrian traffic toward the east lobby, at K and 15th Street. Under Alternative 2, no east lobby would be constructed, and all added vehicle drop off and pedestrian traffic from the project would be focused at the north and west lobbies. Therefore, it is anticipated that traffic conditions at the J and 13th Street and K and 13th Street intersections would be more severe, relative to the proposed SCC project (Impact 4.9-1 and 4.9-7). Worsened traffic conditions at the J and 13th Street intersections would also be anticipated to create more severe transit delays for bus transit along J Street (Impact 4.9-2, 4.9-8, and 4.9-9). Worsened conditions along J and 13th streets would also be anticipated to increase conflicts between vehicles and bicyclists and pedestrians, relative to the proposed SCC project (Impacts 4.9-3, 4.9-4, 4.9-10, and 4.9-11).

Relationship to Significant and Unavoidable Impacts

Similar to SCC Alternative 2, under SCC Alternative 4 the severity of significant and unavoidable impacts from the proposed SCC project would be lessened for temporary increases in noise levels (Impacts 4.8-1 and 4.8-6) and for vibration effects from construction (Impacts 4.8-5 and 4.8-7). In addition, operational emissions under Alternative 4 would be less than would occur under the proposed SCC project, thereby reducing the project's significant and unavoidable impact on cumulative air quality (Impact 4.2-7). Regardless, each of the impacts described above may continue to be significant and unavoidable as the reductions provided by implementation of Alternative 4 may not be enough to reduce those impacts to below thresholds of significance.

Overall, implementation of SCC Alternative 4 would lessen the severity of significant and unavoidable impacts that would occur under the proposed SCC project.

Relationship to SCC Project Objectives

Under SCC Alternative 4, the SCC would be renovated and expanded to be of similar size to the proposed SCC project, but would not include the addition of an east lobby or connection to the proposed hotel project. As described above, this would result in smaller events and fewer events, due to less effective staging of events and pre-function areas. Smaller and/or less frequent events at the SCC, relative to the proposed SCC project, would lessen potential economic benefits from the project in other parts of the City. As it relates to City's SCC objectives, benefits related to economic vitality (Objectives 1, 9, and 10), growth in hotel usage (Objective 2), expansion of exhibit space (Objective 5), and development of the SCC to be LEED Silver (or equivalent)

(Objective 7), could all be achieved, but to a lesser extent than would be achieved under the proposed SCC project.

The main difference between SCC Alternative 4 and the proposed SCC project would be the retention of the Panattoni building, and elimination of the proposed SCC east lobby. The lack of an east lobby under SCC Alternative 4 would not eliminate sellable event space within the SCC, which would be the same at project completion as would exist under the proposed SCC project. However, the lack of an east lobby would inhibit or limit the potential for the accommodation of large concurrent events at the SCC, as described above. While the SCC expansion and renovation under SCC Alternative 4 would meet some SCC projects objectives, some of the basic objectives of the SCC project would be achieved to a lesser extent than could be achieved by the proposed SCC project. For example, Objectives 3, 4, 6, 8, and 11 call for making the SCC more competitive as a convention destination, improving facility efficiency, facility conditions, connectivity to the surrounding downtown area, and elevating the facility as a first-class event venue. Under SCC Alternative 4, the SCC would be less competitive relative convention centers that have multiple lobbies for hosting concurrent events. Under SCC Alternative 4, the SCC would operate less efficiently because all events would have to utilize the same lobby, and connectivity to areas east of the SCC would continue to be limited. Therefore, Alternative 4 would meet objectives 3, 4, 6, 8, and 11, to a lesser extent than would be achieved by the proposed SCC project.

6.4.3 15th/K Street Hotel Alternatives

Under Hotel Alternative 1 it is assumed that the SCC would continue to operate in its current form. Under the remaining 15th/K Street Hotel alternatives described below, the SCC expansion and renovation project would be developed as proposed and described in Chapter 2 of this Draft EIR. **Table 6-2** illustrates provides a comparison of the Hotel project alternatives.

**TABLE 6-2
COMPARISON OF HOTEL PROJECT ALTERNATIVES**

	Proposed Hotel Project	Alternative 1: No Hotel Alternative	Alternative 2: Smaller Hotel Alternative	Alternative 3: No On-Site Hotel Parking Alternative
Hotel Rooms	350 rooms 170,000 sf	None	200 rooms 97,143 sf ¹	350 rooms 170,000 sf
Meeting/Conference Space (sf)	70,000 sf	None	35,000 sf	70,000 sf
Hotel Amenities (sf)	130,000 sf	None	130,000 sf	130,000 sf
Service & Loading Facilities (sf)	15,000 sf	None	15,000 sf	15,000 sf
Parking Spaces (# of spaces)	200 spaces 65,000 sf	None	200 spaces 65,000 sf	None

NOTES:

1. Calculated as a 43% reduction in square footage, based on a commensurate 43% reduction in number of hotel rooms.

Source: ESA, 2017.

Hotel Alternative 1: No Hotel Alternative

Description

Under Hotel Alternative 1, the proposed 15th/K Street Hotel would not be developed, and the project site would continue to operate as a commercial surface parking lot. Under the No Hotel Alternative, the City Council would not approve any project, and none of the mitigation measures identified in this Draft EIR would be implemented.

Under Hotel Alternative 1, the SCC would continue to operate at its current capacity. No improvements would be made to the SCC beyond standard maintenance and minor upgrades, so the physical and operational capacity of the SCC would not change, and service facilities and area amenities would be maintained but not materially expanded or improved.

Comparative Analysis of Environmental Effects

As with the No Project Alternative for the proposed SCC project, the No Hotel Alternative would be a continuation of the existing conditions described in the Environmental Settings presented in the resource sections of Chapter 4, because no new development would occur at the proposed hotel site.

Impacts Identified as Being the Same or Similar to the Proposed Hotel Project

No impacts under Hotel Alternative 1 would be anticipated to be the same or similar to impacts that would occur under the proposed Hotel project because no construction, demolition, or change in operations would take place.

Impacts Identified as Being Less Severe than the Proposed Hotel Project

Under Hotel Alternative 1, there would be no construction or demolition at the project site, and the project site would continue to be operated as a parking lot. Therefore, there would be no new impacts from construction, increased development intensity on the project site, or a change in uses at the project site. Therefore, all impacts under Hotel Alternative 1 would be less severe for the 15th/K Street Hotel site.

Impacts Identified as Being More Severe than the Proposed Hotel Project

There would be no impacts that would be more severe under Hotel Alternative 1 for the proposed projects, as no construction, demolition, or change in existing operations, would take place.

Relationship to Significant and Unavoidable Impacts

Under the No Hotel Alternative, the Hotel project would not be constructed. Therefore, all significant and unavoidable impacts of the proposed project would be avoided under Hotel Alternative 1.

Relationship to Hotel Project Objectives

Under the No Hotel Project Alternative, none of the 15th/K Street Hotel objectives would be achieved.

Hotel Alternative 2: Smaller Hotel Alternative

Description

Hotel Alternative 2 would include construction and operation of a smaller hotel on the 15th/K Street Hotel project site. Under Hotel Alternative 2, the 15th/K Street Hotel would be made smaller by reducing the number of rooms to 200, spread across approximately 11 levels, and reducing the conference/meeting/ballroom space by half to 35,000 sf, spread across approximately two levels. The smaller hotel would be anticipated to have approximately 13 aboveground levels, 11 fewer levels than would be included in the proposed Hotel project, but would have a similar footprint and would include other proposed components, including two floors of subgrade parking and an above-ground pedestrian bridge connection to the proposed SCC east lobby.

The reduction of 150 hotel rooms and 35,000 sf of meeting space under Hotel Alternative 2 would attract fewer overnight guests and would have the capacity to accommodate a smaller numbers of event attendees. Under Hotel Alternative 2, event space capacity would be reduced to a size similar to the meeting capacity at the nearby Sheraton Grand Sacramento Hotel, which can be configured to accommodate a maximum of approximately 3,292 attendees within 35,125 sf of meeting space in multiple rooms across 3 floors. As described above, the proposed hotel would have fewer rooms, which would reduce the capacity to provide overnight lodging for individuals attending events at the hotel's meeting space as well as SCC event attendees. Under Hotel Alternative 2, the lower meeting square footage would provide less auxiliary event space for complementary events related to SCC events.

Construction activities, under Hotel Alternative 2 would have the same amount of demolition, excavation, and site preparation activity and would have the same construction intensity (including installation of impact driven piles to support the foundation), however the smaller hotel development under Hotel Alternative 2 would shorten the duration of hotel construction.

Comparative Analysis of Environmental Effects

Impacts Identified as Being the Same or Similar to the Proposed Hotel Project

The project that would be developed under Hotel Alternative 2 would have the same footprint as under the proposed Hotel project, so impacts related to ground disturbance and project footprint would be essentially the same. Specifically, impacts would be the same for biological resources, including raptors and other protected species (Impacts 4.3-1 and 4.3-3) and trees (Impacts 4.3-2 and 4.3-4). Impacts from ground disturbance, including impacts to archaeological, tribal cultural, historic and paleontological resources would be the same (Impacts 4.4-1, 4.4-2, 4.4-3, 4.4-4, 4.4-5, 4.4-6, and 4.4-7). Under Hotel Alternative 2, the project would have a similar aboveground and subgrade footprint to the proposed Hotel project, which would have similar impacts for water resources, including generations of new sources of polluted runoff (Impacts 4.7-2 and 4.7-4) and ground water levels and recharge (Impacts 4.7-3 and 4.7-5).

The proposed hotel structure under Hotel Alternative 2 would be smaller than the hotel structure for the proposed Hotel project, however the footprint of the lower levels would be anticipated to be similar. As such, the hotel development under Hotel Alternative 2 would have similar impacts related to introduction of new source of light and glare (Impacts 4.1-2, 4.1-3, 4.1-5, and 4.1-6).

Under Hotel Alternative 2, the project would have a similar impact to the proposed Hotel project on implementation of the City's CAP (Impacts 4.5-1 and 4.5-2).

Impacts Identified as Being Less Severe than the Proposed Hotel Project

Under both Hotel Alternative 2 and the proposed Hotel project, the hotel exterior would be built out with the same design. However, under Hotel Alternative 2, the project would be anticipated to have approximately 11 fewer levels, with 73,000 less hotel sf and 35,000 less event sf. As with the proposed Hotel project, the visual character of the project site would undergo visual change, as the existing parking lot would be replaced with and approximately 13-story hotel. However, the substantially reduced height of the building under Hotel Alternative 2 would result in a less dramatic change to the existing character of the site and its surroundings than would result from development of the approximately 24-story hotel under the proposed Hotel project. As a result, the impact to the visual character of the site and its surroundings would remain unchanged, which could be considered a reduced impact, but which could also be viewed as interfering with the City's achieving General Plan Policy LU 2.4.4 of developing an iconic ambience in the downtown area (Impacts 4.1-1 and 4.1-4).

As described above, duration of hotel construction, under Hotel Alternative 2, would be anticipated to be shorter than under the proposed Hotel project, however construction intensity would be anticipated to be the same. Due to the shorter duration of construction impacts to indoor residential noise levels would be anticipated to be less severe (Impacts 4.8-3 and 4.8-8) as would construction-related traffic impacts (Impacts 4.9-5 and 4.9-12).

While construction intensity would be anticipated to be similar to the proposed Hotel project, the shorter duration of hotel construction under Hotel Alternative 2 would result in less severe impacts related to impacts influenced by intensity or duration of construction. These include construction-related air emissions (Impacts 4.2-2, 4.2-5, 4.2-6, and 4.2-9), noise and vibration (Impacts 4.8-1, 4.8-4, 4.8-5, and 4.8-6), and degradation of water quality (Impact 4.7-1), all of which would be lessened in severity as a result of a shorter construction duration.

Under Hotel Alternative 2, the hotel meeting and event spaces would have 50% lower capacity than the proposed Hotel project, so air emissions from attendee transportation and event operations would be expected to be lower by a similar proportion (Impacts 4.2-1, 4.2-3, 4.2-4, 4.2-5, 4.2-7, 4.2-8, and 4.2-9). Lower attendee numbers and staffing under Hotel Alternative 2 would have lower demand on the utility infrastructure, including water supply (Impacts 4.10-1 and 4.10-3) and wastewater conveyance and treatment (4.10-2 and 4.10-4). With 50% lower meeting sf and 150 fewer hotel rooms, there would be lower energy demands for the hotel project under Hotel Alternative 2 (Impacts 4.6-1, 4.6-2, and 4.6-3). The Hotel under Hotel Alternative 2

would have fewer vehicle trips to and from the hotel from hotel guests, hotel event attendees, and hotel employees. As a result, impacts to nearby intersections, including delays, would be less severe (Impacts 4.9-1 and 4.9-7). Reduced delays would lessen the severity of impacts to public transit along J Street and 15th Street, in the project vicinity (Impacts 4.9-2, 4.9-8, and 4.9-9). Fewer vehicle trips to and from the hotel would reduce conflicts between bicyclists and vehicles on K and 15th Street (Impacts 4.9-3 and 4.9-10). Fewer vehicle trips would also reduce conflicts between vehicles and pedestrians (Impacts 4.9-4 and 4.9-11). As described in Section 4.8, Noise and Vibration, most of the long-term noise that would result due to the implementation of the proposed SCC and Hotel projects would primarily be traffic-generated. Thus, fewer vehicle trips to and from the hotel, relative to the proposed Hotel project, would also reduce operational noise impacts from traffic (Impacts 4.8-2 and 4.8-7).

Impacts Identified as Being More Severe than the Proposed Hotel Project

No impacts under Hotel Alternative 2 would be anticipated to be more severe than impacts that would occur under the proposed Hotel project.

Relationship to Significant and Unavoidable Impacts

Under Hotel Alternative 2, all significant and unavoidable impacts would be lessened relative to the proposed Hotel project, with the exception of cumulative impacts to cultural resources, paleontological resources, and undiscovered human remains (Impact 4.4-3). Cumulative impacts to those resources would be the same and remain significant and unavoidable for both the proposed Hotel Project and Hotel Alternative 2 because both alternatives would have the same general project footprints, grading plans, and depth of ground disturbance. Thus, the likelihood of impacts to those resources would be similar.

Overall, implementation of Hotel Alternative 2 would lessen the severity of significant and unavoidable impacts that would occur under the proposed Hotel project.

Relationship to Plan Objectives

The Smaller Hotel Alternative would construct a modern hotel that would provide additional hotel capacity to the CBD (Objective 1), however this alternative would provide fewer new hotel rooms relative to the proposed Hotel project. The hotel would include meeting and conference space, entertainment space, dining space, and recreational amenities (Objective 2), a pedestrian path to the SCC (Objective 5), as well as on-site parking integrated into the hotel structure (Objective 8). The hotel would be developed as a high rise, but would not exceed capitol view protection thresholds (Objective 7). The hotel would be located along major transit stops and high-quality transit corridors (Objective 4). Under Hotel Alternative 2, the project would add to the continued economic revitalization within downtown Sacramento (Objective 3), however contributions to revitalization and urbanization would be achieved to a lesser extent, relative to the proposed Hotel project, because this alternative would provide fewer hotel rooms and less event space. The hotel would provide 200 on-site parking spaces, however available rooms and event space would support a higher number of patrons, who would be encouraged to utilize other forms of transportation (Objective 6).

Hotel Alternative 3: No On-Site Hotel Parking Alternative

Description

Hotel Alternative 3 would include construction of all elements of the proposed Hotel project with the exception of the two subgrade parking levels, which would not be included. Under Hotel Alternative 3, the hotel would not include on-site parking and there would be no subgrade floors. Any subsurface work would be limited to building foundation and utility work.

Hotel and event capacity at the proposed hotel would remain as proposed, however event attendees and hotel guests would be required to park offsite or utilize other forms of transportation. Similar to the Sheraton Grand hotel in Downtown Sacramento, the proposed hotel under Hotel Alternative 3 would be anticipated to lease parking spaces in nearby parking garages.

Under Hotel Alternative 3, construction of the hotel would not include excavation to construct subgrade parking levels. However, project earthwork would still include pile driving and establishment of the hotel foundation and utility connections. Construction duration would be shortened because the Hotel Alternative 3 would not require excavation for 2 subgrade parking levels, however that reduction would be limited. All other construction phases would be the same as the phases in the proposed Hotel project. While some site dewatering may be necessary during construction of the hotel foundation, the dewatering effort would be less intensive than anticipated dewatering for the proposed 15th/K Street hotel site.

Comparative Analysis of Environmental Effects

Impacts Identified as Being the Same or Similar to the Proposed Hotel Project

The footprint of the hotel project site would be the same under Hotel Alternative 3 as with the proposed Hotel project; thus, impacts for which project footprints would determine potential impacts, would be the same. These would include impacts to biological resources, including raptors and/or migratory birds (Impacts 4.3-1 and 4.3-3) and street trees (Impacts 4.3-2 and 4.3-4). Impacts to historical resources would also be anticipated to be the same (Impacts 4.4-3 and 4.4-5).

The above-ground portion of the proposed hotel, under Hotel Alternative 3, would be the same as the proposed Hotel project, therefore, both alternatives would generate similar sources of potential polluted runoff and water quality degradation (Impacts 4.7-2 and 4.7-4). Because the above-ground structure would be identical to the proposed Hotel, under Hotel Alternative 3 the impacts on the existing visual character of the project site and vicinity (Impacts 4.1-1 and 4.1-4) and light and glare (Impacts 4.1-2, 4.1-3, 4.1-5, and 4.1-6) would be identical to those described for the proposed Hotel project.

Under Hotel Alternative 3, the proposed hotel would have the same operational space, including the same number of rooms and the same event space, as the proposed Hotel project. As such, events and hotel usage would be anticipated to be the same and have the same demand for water supply (Impacts 4.10-1 and 4.10-3), wastewater conveyance and treatment (Impacts 4.10-2 and

4.10-4). Similarly, operational noise would be anticipated to be the same (Impacts 4.8-2, 4.8-3, 4.8-7, and 4.8-8).

The hotel under Hotel Alternative 3 would have the same operational uses, however the lack of on-site parking would encourage hotel guests and event attendees to utilize nearby parking facilities. It is anticipated that a similar number of hotel guests and event attendees would utilize personal vehicle and public transportation, respectively, which would have similar overall operational air emissions (Impacts 4.2-3, 4.2-4, 4.2-5, 4.2-7, 4.2-8, and 4.2-9). With similar hotel features and levels of transit utilization, the hotels under both the Hotel Alternative 3 and the proposed Hotel project would have similar effects on the implementation of applicable air quality plans (Impact 4.2-1) and the City's CAP (Impacts 4.5-1 and 4.5-2).

Impacts Identified as Being Less Severe than the Proposed Hotel Project

Under Hotel Alternative 3, the hotel would require less energy resources, relative to the proposed 15th/K Street Hotel project, as the hotel would not include energy demands from subgrade parking levels. Therefore, impacts to energy resources would be less severe (Impacts 4.6-1, 4.6-2, and 4.6-3).

Construction of the hotel project under Hotel Alternative 3 would not require construction of subgrade parking levels, therefore construction intensity would be similar to the proposed Hotel project, but the duration of construction would be of shorter. A shorter construction duration would have a commensurate lowering of severity for impacts that are influenced by construction intensity or duration. This would include construction emissions (Impacts 4.2-2 and 4.2-6), potential degradation of water quality during construction (Impact 4.7-1), construction noise and vibration (Impacts 4.8-1, 4.8-4, 4.8-5, and 4.8-6), and construction-related traffic impacts (Impact 4.9-5 and 4.9-12).

Hotel Alternative 3 would require much less ground disturbing activity during construction relative to the proposed projects, because the hotel site would not require excavation for the construction of two subgrade parking levels. Thus, potential impacts for which are a result of ground disturbance would be less severe. These impacts would include impacts to archaeological resources, tribal cultural resources, paleontological resources (Impacts 4.4-1, 4.4-2, 4.4-4, and 4.4-6), groundwater (Impacts 4.7-3 and 4.7-5).

Under Hotel Alternative 3, it is anticipated that there would be a similar number of vehicle trips to and from the hotel, however the lack of on-site parking would have a less severe impact to the K and 15th Street intersection because vehicle trips would end at nearby parking facilities instead of at the proposed hotel (Impacts 4.9-1 and 4.9-7). Reduced vehicle activity in the immediate vicinity of the proposed hotel would reduce conflicts between vehicles and bicyclists and vehicles and pedestrians (Impacts 4.9-3, 4.9-4, 4.9-10, and 4.9-11). Reduced vehicle activity at the K and 15th Street intersection would also have a less severe impact on transit operations along 15th and J streets (Impacts 4.9-3, 4.9-8, and 4.9-9).

Impacts Identified as Being More Severe than the Proposed Hotel Project

No impacts under Hotel Alternative 3 would be anticipated to be more severe than impacts that would occur under the proposed Hotel project.

Relationship to Significant and Unavoidable Impacts

Implementation of Hotel Alternative 3 would lessen the severity of significant and unavoidable impacts from noise and vibration (Impacts 4.8-1, 4.8-5, and 4.8-6).

Under Hotel Alternative 3, project-specific and cumulative long-term operational emissions (Impacts 4.2-3 and 4.2-7) would be similar to the proposed Hotel Project. Cumulative impacts to previously undiscovered cultural resources, paleontological resources, and human remains would be similar due to similar project footprints and levels of ground disturbance under Alternative 3 and the proposed Hotel Project. Under Alternative 3, cumulative impacts from construction vibration would be less severe, however based on the proximity of nearby historic resources and sensitive receptors, this impact would remain well above the threshold of significance (Impact 4.8-7).

Overall, implementation of Hotel Alternative 3 would lessen the severity of significant and unavoidable impacts that would occur under the proposed Hotel Project.

Relationship to Hotel Project Objectives

The No On-Site Parking Hotel Alternative (Hotel Alternative 3) would construct a modern hotel that would provide additional hotel capacity to the CBD (Objective 1), similar to the proposed Hotel project. The hotel would include meeting and conference space, entertainment space, dining space, and recreational amenities (Objective 2), and a pedestrian path to the SCC (Objective 5). The hotel would be developed as a high rise, but would not exceed capitol view protection thresholds (Objective 7). The hotel would be located along major transit stops and high-quality transit corridors (Objective 4). Under Hotel Alternative 2, the project would add to the continued economic revitalization within downtown Sacramento (Objective 3). Under Hotel Alternative 3, the hotel would not provide on-site parking spaces, however available rooms and event space would support the same number of patrons as would be supported by the proposed Hotel project, who would be encouraged to utilize other forms of transportation (Objective 6).

Hotel Alternative 3 would redevelop the existing surface parking lot on the project site, however parking would not be integrated into the hotel structure and the parking needs of the hotel would not be accommodated on-site. Therefore, Hotel Alternative 3 would fail to meet Hotel Objective 8.

6.5 Environmentally Superior Alternative

An EIR is required to identify the environmentally superior alternative from among the range of reasonable alternatives that are evaluated. Section 15126.6 (e)(2) of the State CEQA Guidelines states that an environmentally superior alternative must be designated and that if the

environmentally superior alternative is the No Project alternative, the EIR must identify an environmentally superior alternative among the other alternatives.

6.5.1 SCC Project

From the alternatives evaluated for the proposed SCC project in this EIR, the environmentally superior alternative would be SCC Alternative 1 – the No Project Alternative. This alternative would avoid all significant impacts associated with the proposed SCC project.

Among the other alternatives to the proposed SCC project, SCC Alternative 2, the Smaller SCC Alternative, would have the fewest adverse impacts because it would have less square footage and fewer annual and overlapping events. As described, SCC Alternative 2 would have similar construction intensity but require a much shorter construction duration which would lessen the severity of a number of impacts that would be influenced by the amount of construction. In addition, the lower operational capacity of the SCC, relative to the proposed SCC project, would lessen the severity of impacts from SCC operations as they would be influenced by the volume of visitors to the Convention Center. SCC Alternative 2 would lessen the severity of significant and unavoidable impacts from the proposed SCC project.

6.5.2 Hotel Project

From the range of alternatives evaluated for the proposed Hotel project, the environmentally superior alternative would be Hotel Alternative 1 – the No Hotel Alternative, which is the “No Project” Alternative for the proposed Hotel project. This alternative would avoid all significant impacts associated with the proposed Hotel project.

Among the other alternatives to the proposed Hotel project, Hotel Alternative 2, the Smaller Hotel Alternative, would have the fewest adverse impacts because it would require a shorter construction duration, consume fewer resources and raw materials, and have less severe operational impacts. Hotel Alternative 2 would lessen the severity of significant and unavoidable impacts from the proposed Hotel project.

CHAPTER 7

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CHAPTER 8

Acronyms and Abbreviations

A-OS	Agriculture-Open Space Zoning Designation
AB	Assembly Bill
ACM	Asbestos-Containing Material
AGPD	auger case pressure-grout displacement
AQMP	Air Quality Management Plan
ARP-F	American River Parkway-Floodplain Zoning Designation
ASCE	American Society of Civil Engineers
BACT	Best Available Control Technology
Basin Plan	Water Quality Control Plan for the Sacramento River Basin and San Joaquin River Basin
bgs	Below Ground Surface
BMP	Best Management Practice
BP	before present
Btu	British thermal unit
Business 80	Capital City Freeway
C-1	Limited Commercial Zoning Designation
C-2	General Commercial Zoning Designation
C-3	Central Business District Zoning Designation
C-4	Heavy Commercial Zoning Designation
CAA	Clean Air Act
CADA	Capitol Area Development Authority
CAFE	Corporate Average Fuel Economy
CAISO	California Independent System Operator
CAL FIRE	California Department of Forestry and Fire Protection
Cal/OSHA	California Division of Occupational Safety and Health
CalEEMod	California Emission Estimator Model
CALGreen	California Green Building Standards Code
California Register	California Register of Historical Resources
CalSTRS	California State Teachers Retirement System
Caltrans	California Department of Transportation
CAP	Climate Action Plan
CARB	California Air Resources Board
CBC	California Building Code
CBD	Central Business District

CCAA	California Clean Air Act
CCCP	City of Sacramento's Central City Community Plan
CCR	California Code of Regulations
CCUDG	Central City Urban Design Guidelines
CDC	California Department of Conservation
CDFW	California Department of Fish and Wildlife
CDHS	California Department of Health Services
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFA	continuous flight auger
CFC	California Fire Code
CFGC	California Fish and Game Code
CFR	Code of Federal Regulations
CGS	California Geologic Survey
CH ₄	Methane
CNDDB	California Department of Fish and Wildlife's Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNG	compressed natural gas
CNPS	California Native Plant Society
CO	Carbon Monoxide
CO ₂	Carbon Dioxide
CO ₂ e	Carbon Dioxide Equivalent
CPUC	California Public Utilities Commission
CRPR	California Rare Plant Rank
CRSIR	Cultural Resources Survey and Inventory Report
CSLC	California State Lands Commission
CSS	Combined Sewer System
CUP	Conditional Use Permit
CUP	central utilities plan
CUPA	Certified Unified Program Agency
CVFPB	Central Valley Flood Protection Board
CVRWQCB	Central Valley Regional Water Quality Control Board
CWA	Federal Clean Water Act
CWTP	Combined Wastewater Treatment Plant
dB	Decibel
Delta	Sacramento-San Joaquin Delta
DHA	Sacramento County Department of Human Assistance
DHS	California Department of Health Services
DOC	California Department of Conservation

DOF	California Department of Finance
DOSH	Division of Occupational Safety and Health
DOT	United States Department of Transportation
DOU	Department of Utilities
DPM	Diesel Particulate Matter
DPS	Distinct Population Segment
Draft EIR	Draft Environmental Impact Report
DSH	Diameter at Standard Height
DSP	Downtown Specific Plan
DSP area	Downtown Specific Plan Area
DTSC	California Department of Toxic Substances Control
EFH	Essential Fish Habitat
EIR	Environmental Impact Report
EMD	Sacramento County Environmental Management Department
EMFAC	California Air Resources Board's Emissions Factors
EMS	Emergency Medical Services
EMT	Emergency Medical Technicians
EPA	Environmental Protection Agency
ES	Elementary School
ESA	Environmental Science Associates
ESC	Entertainment and Sports Center
ESU	Evolutionary Significant Units
ETMP	Event Transportation Management Plan
F	Flood Zone Zoning Designation
FAR	Floor Area Ratio
FCAA	Federal Clean Air Act
FCAAA	Federal Clean Air Act Amendments
FESA	Federal Endangered Species Act
FIP	Federal Implementation Plan
FPD	Fire Protection District
FR	Federal Register
FY	Fiscal Year
GHG	Greenhouse Gas
gsf	Gross Square Feet
GVW	Gross Vehicle Weight
GWP	Global Warming Potential
H	Hospital Zone Zoning Designation
HAP	Hazardous Air Pollutant
HFC	Hydroflourocarbon
Highway 50	W-X Freeway
HMBP	Hazardous Materials Business Plan

HMP	Hydromodification Management Plan
HPS	High Pressure Sodium
HS	High School
HSC	California Health and Safety Code
HUD	United States Department of Housing and Urban Development
HVAC	Heating, Ventilation, and Air Conditioning
Hz	Hertz
I-5	Interstate 5
I-80	Interstate 80
I-Bank	California Infrastructure and Economic Development Bank
IBC	International Building Code
IPCC	International Panel on Climate Change
kV	kilovolt
LBP	Lead-Based Paint
LED	Light Emitting Diodes
LEED	Leadership in Energy and Environmental Design
LID	Low Impact Development
LNG	Liquid Natural Gas
LOS	Level of Service
LVW	Loaded Vehicle Weight
M-1	Industrial Zoning Designation
M-2	Heavy Industrial Zoning Designation
MBTA	Migratory Bird Treaty Act
MDO	Medium Density Overlay
MEIR	Master Environmental Impact Report
mgd	Million Gallons Per Day
MLD	Most Likely Descendent
MMP	Mitigation Monitoring Plan
MOU	Memorandum of Understanding
mph	Miles Per Hour
MPO	Metropolitan Planning Organization
MRZ	Mineral Resource Zone
MS	Middle School
MS4	Sacramento County Municipal Separate Storm Sewer System
MSAA	Master Streambed Alteration Agreement
MTP/SCS	SACOG's Metropolitan Transportation Plan/Sustainable Communities Strategy
N ₂ O	Nitrous Oxide
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
NCIC	North Central Information Center

NCY	North City substation
NESHAP	National Emission Standards for Hazardous Air Pollutant
NHPA	National Historic Preservation Act
NHTSA	National Highway Traffic Safety Administration
NO ₂	Nitrogen Dioxide
NO _x	Nitrogen Oxides
NOP	Notice of Preparation
NPDES	National Pollution Discharge Elimination System
NPPA	California Native Plant Protection Act
NRCS	Department of Agriculture Natural Resources Conservation Service
O ₃	Ozone
OB	Office Building Zoning Designation
OEHHA	Office of Environmental Health Hazard Assessment
OPR	Governor's Office of Planning and Research
ORMU	Office/Residential Mixed-Use
OSHA	Occupation Safety and Health Administration
OSHPD	California Office of Statewide Health Planning and Development
Parkway Plan	Sacramento River Parkway Plan
PBID	Property and Business Improvement District
PCB	Polychlorinated Biphenyl
PDC	Planning and Development Code
PFC	Perfluorocarbon
PGA	Peak Ground Acceleration
PG&E	Pacific Gas & Electric
PM _{2.5}	Particulate Matter in Size Fractions of 2.5 Microns or Less in Diameter
PM ₁₀	Particulate Matter in Size Fractions of 10 Microns or Less in Diameter
Porter-Cologne	Porter-Cologne Water Quality Control Act
POU	Publicly Owned Utility
ppd	Pounds Per Day
PPV	Peak Particle Velocity
PRC	Public Resource Code
PRMP	Parks and Recreation Master Plan
proposed plan	Sacramento Convention Center Expansion
psi	pounds per square inch
R-1	Standard Single Family Zoning Designation
R-1B	Single or Two Family Zoning Designation
R-2B	Multi-Family Zoning Designation
R-3A	Multi-Family Zoning Designation
R-4	Multi-Family Zoning Designation
R-4A	Multi-Family Zoning Designation

R-5	Multi-Family Zoning Designation
RACM	regulated asbestos containing material
RCNM	FHWA's <i>Roadway Construction Noise Model</i>
REA	Railway Express Agency
REC	Recognized Environmental Condition
Regional San	Sacramento Regional County Sanitation District
Reporting Rule	U.S. EPA Greenhouse Gas Reporting Rule
RHNA	Regional Housing Needs Assessment
RHNP	Regional Housing Needs Plan
RLB	Rider Levett Bucknall
RMU	Residential Mixed-Use
RMX	Residential Mixed Use Zoning Designation
RNG	renewable natural gas
RO	Residential-Office Zoning Designation
ROG	Reactive Organic Gases
RPS	Renewable Portfolio Standard
RT	Regional Transit
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board (Water Board)
SAB	State Allocation Board
Sac RT	Sacramento Regional Transit
SACOG	Sacramento Area Council of Governments
Sacramento DPR	City of Sacramento Department of Parks and Recreation
Sacramento PD	Sacramento Police Department
SACSIM	Sacramento Activity-Based Travel Simulation Model
SB	Senate Bill
SCC	Sacramento Convention Center
SCS	Sustainable Community Strategy
SCUSD	Sacramento City Unified School District
SDC	Seismic Design Category
SEL	Single Event Noise Level
sf	square foot
SF ₆	Sulfur Hexafluoride
SFD	Sacramento Fire Department
SIP	State Implementation Plan
SITF	Sacramento Intermodal Transit Facility
SHRA	Sacramento Housing and Redevelopment Authority
SLM	sound level meter
SMAQMD	Sacramento Metropolitan Air Quality Management District
SMARA	California Surface Mining and Reclamation Act of 1975
SMUD	Sacramento Municipal Utility District

SO ₂	Sulfur Dioxide
SPD	Special Planning District
SPCCP	Spill Prevention, Control, and Countermeasure Program
SPDR	Site Plan and Design Review
SQIP	Stormwater Quality Improvement Plan
SR	State Route
SRA	State Responsibility Area
SRFECC	Sacramento Regional Fire/EMS Communications Center
SRCSD	Sacramento Regional County Sanitation District
SRWTP	Sacramento Regional Wastewater Treatment Plan
SVAB	Sacramento Valley Air Basin
SVP	Society of Vertebrate Paleontology
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	Toxic Air Contaminant
TC	Transportation Corridor Zoning Designation
TCO	Traffic Control Officer
TMP	Transportation Management Plan
TOT	Transient Occupancy Tax
tpy	Tons Per Year
TPZ	Tree Protection Zone
TRUSD	Twin Rivers Unified School District
UFC	Uniform Fire Code
UP	Union Pacific Railroad
USACE	United States Army Corps of Engineers
US Census	United States Census
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
USGBC	United States Green Building Council
USGS	United States Geological Survey
UST	Underground Storage Tank
VdB	Vibration Decibels
VELB	Valley Elderberry Longhorn Beetle
VMT	Vehicle Miles Traveled
VOC	Volatile Organic Compound
Warren-Alquist Act	Warren-Alquist Energy Resources Conservation and Development Act
WCP	Water Conservation Plan
WDR	Waste Discharge Requirement
WQF	water quality flow
WSA	Water Supply Assessment
WWTP	Wastewater Treatment Plant

ZNE

Zero Net Energy

CHAPTER 9

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6. Project Alternatives

No References