

Chapter 4

Cumulative Impacts Analysis

4.1 Introduction

This section analyzes the proposed project's cumulative impacts. Cumulative impacts are defined as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts."¹ The analysis of cumulative impacts need not be as in-depth as what is performed relative to the proposed project, but instead is to "be guided by the standards of practicality and reasonableness."²

As the cumulative impacts are the anticipated impacts of the project along with reasonably foreseeable growth, State CEQA Guidelines Section 15130(b)(1) states that the identification of reasonably foreseeable growth may be based on either:

- A list of past, present, and probable future projects producing related or cumulative impacts; or
- A summary of projections contained in an adopted local, regional, or statewide plan, or related planning document designed to evaluate regional or area-wide conditions.

The cumulative impacts analysis presented in this chapter is a hybrid approach that both considers the adopted growth projections set forth in the San Diego Association of Governments (SANDAG) *Series 13 Regional Growth Forecast*³ and also identifies and addresses specific projects at and near SDIA, including those that would be carried out by the San Diego County Regional Airport Authority, as well as those outside of the Authority's control.

4.2 Regional Projections and Background Development Projects

The approach to the cumulative impacts analysis varies by discipline. Analyses whose cumulative impacts would accrue on a regional basis, such as regional traffic and air quality, are based on applicable planning documents designed to evaluate regional and area-wide conditions, and rely on regional projections prepared and adopted by SANDAG. For those disciplines where cumulative impacts are more localized (e.g., aesthetic impacts), the analysis considers specific development projects at or adjacent to SDIA that may contribute to cumulative impacts, as further described below.

¹ State CEQA Guidelines, Title 14, California Code of Regulations, Section 15355, "Cumulative Impacts."

² State CEQA Guidelines, Title 14, California Code of Regulations, Section 15130(b), "Discussion of Cumulative Impacts."

³ San Diego Association of Governments, *Series 13 Regional Growth Forecast*, October 2013. Available: <http://www.sandag.org/index.asp?classid=12&subclassid=84&projectid=503&fuseaction=projects.detail>.

The reasonably foreseeable growth occurring during the ADP buildout year (2035) and the long-term regional planning horizon (2050) is based on the demographic projections adopted by SANDAG in the Series 13 Regional Growth Forecast. Table 4-1 provides a summary of these data in the adopted Series 13 Regional Growth Forecast.

Table 4-1: SANDAG Adopted Series 13 Regional Growth Forecast

	2020	2035	2050
Population	3,435,713	3,853,698	4,068,759
Housing Units	1,249,654	1,394,688	1,491,804
Jobs	1,624,124	1,769,938	1,911,405

Source: San Diego Association of Governments, Series 13 Regional Growth Forecast, October 2013.

In conjunction with the review and use of the SANDAG data, the analysis identifies specific development projects in the SDIA area that were indicated by Civic San Diego and by the City of San Diego Planning Department, as well as three updates to City of San Diego Community Plans related to the local area, which are briefly described in Table 4-2. Civic San Diego project status was updated based upon their Final 2018 Downtown Development Status Log and review of project information/details posted online by developers. Figure 4-1 shows the locations of the Civic San Diego and City of San Diego cumulative projects within the vicinity of SDIA.

Table 4-2: Civic San Diego and City of San Diego Cumulative Projects

Project Name and Location	Brief Description	Current Status	Estimated Construction Start	Estimated Construction Completion
Agency Name: Civic San Diego				
VALENTINA East side of Pacific Highway between Cedar and Grape	110 Apartments	Exterior finishes	04/2017	2019
Bayside Fire Station Southeast corner of Pacific Highway and Cedar	Fire Station	Completed	N/A	N/A
Kettner Lofts (AV8) East side of Kettner between Hawthorn and Ivy	133 Apartments 10,000 square feet of Retail	Completed	N/A	N/A
Pacific Gate Pacific Highway/Broadway, E St/Rail Corridor	232 Condominiums 16,000 square feet of Retail	Completed	N/A	N/A
Savina Southwest corner of Kettner and Ash	285 Condominiums 12,000 square feet of Retail	Exterior finishes	03/2016	2019
Manchester Pacific Gateway (Navy Broadway Complex) Broadway/Harbor/Pacific Highway	855,000 square feet of Office 372,000 square feet of Navy Office 1,360 Hotel Rooms 391,000 square feet of Retail/Restaurant	Under construction of parking and Navy office	06/2018	06/2021 (Navy offices) other phases NP
Pacific & Broadway Parcel 1	306 Condominiums 15,000 square feet of Retail	Pending completion of	Unknown	Unknown

Table 4-2: Civic San Diego and City of San Diego Cumulative Projects

Project Name and Location	Brief Description	Current Status	Estimated Construction Start	Estimated Construction Completion
Northeast corner of Pacific Highway and Broadway		Construction Plans		
VICI/AMO India/Date/Columbia	VICI (North Side) -94 Apartments -14,000 square feet of Retail AMO (South Side) -28 Apartments -3,000 square feet of Retail	Completed	N/A	N/A
915 Grape Street Southwest corner of Grape and California	70 Apartments 1,000 square feet of Retail	Under construction	12/2017	12/2019
Laurel Pacific Valero Southeast corner of Pacific Highway and Laurel	4,000 square foot gas station	Completed	N/A	N/A
Ballpark Village Parcel C Park Blvd and 12 th Avenue	646 Residential Units 41,505 sf of Retail Space	Completed	N/A	N/A
Ballpark Village Parcel D Southeast of Park Blvd and south of Imperial Avenue	No formal project has been submitted	Pending	Unknown	Unknown
Carte Hotel 401 W. Ash Street	239 Hotel Rooms 4,000 sf of Retail	Completed	N/A	N/A
Moxy Hotel East side of 6 th Avenue between E Street and F Street	126 Hotel Rooms	Completed	N/A	N/A
AC Hotel Seventh Avenue and G Street/743 5 th Avenue	147 Hotel Rooms 1,200 sq ft Restaurant Space	Approved	NP	NP
TownePlace Suites by Marriott East side of 6 th Avenue between Ash Street and Beech Street	98 Hotel Rooms	Completed	NA	NA
Agency Name: City of San Diego Planning Department				
Liberty Station Hotels North Harbor Drive at Kincaid Rd.	3 hotels: Marriott TownePlace Suites - 222 Suites; Hampton Inn - 181 Rooms; and Embassy Suites – 247 Rooms	2 Hotels Completed: Hampton – March 2019; Marriott August 2019. Embassy Suites – Approved.	NP	NP
Uptown Community Plan Update	Assume growth consistent with SANDAG Forecasts	Approved November 2016	NA	NA

Table 4-2: Civic San Diego and City of San Diego Cumulative Projects

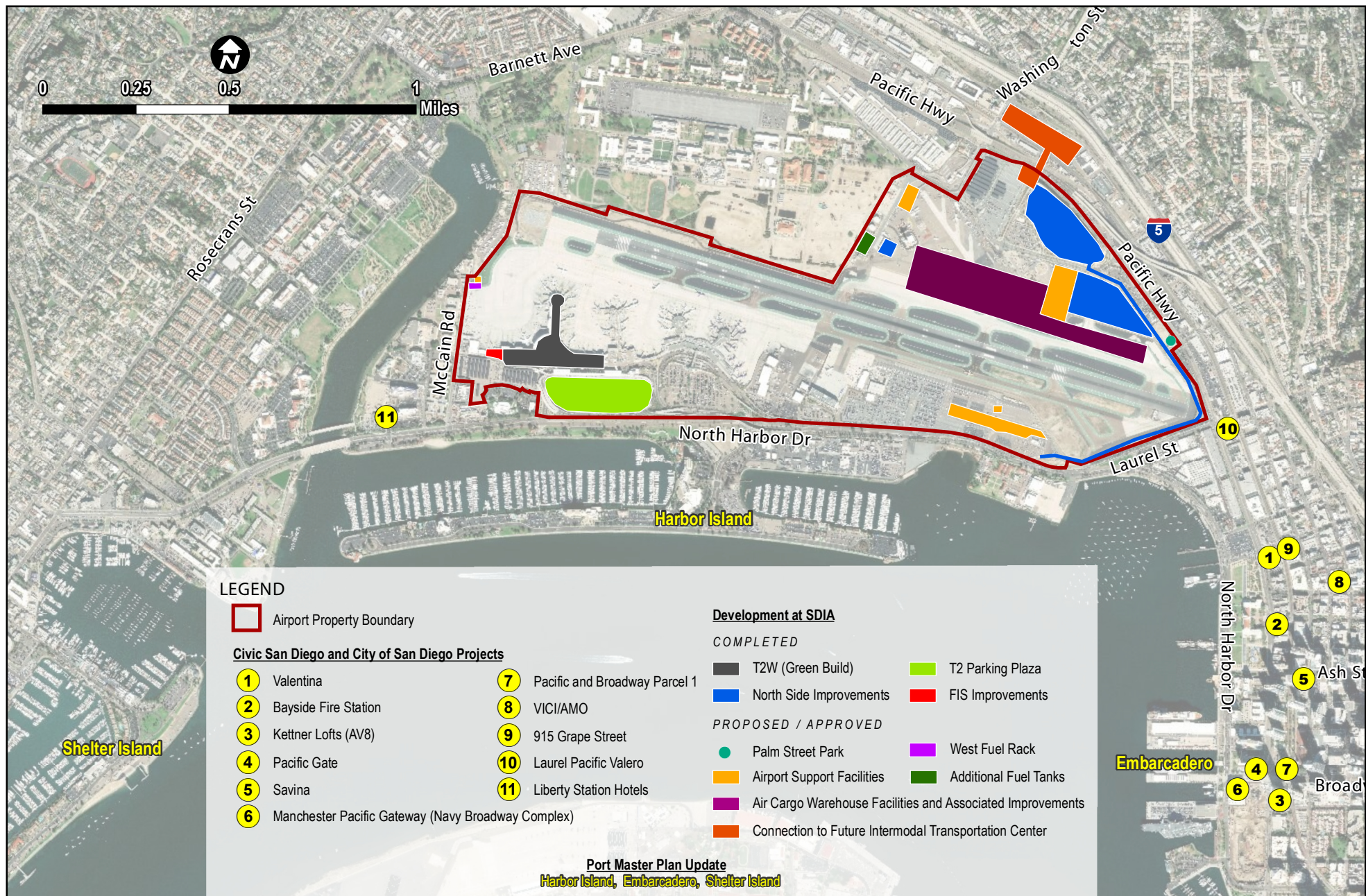
Project Name and Location	Brief Description	Current Status	Estimated Construction Start	Estimated Construction Completion
Midway Community Plan Update	Assume growth consistent with SANDAG Forecasts	Approved September 2018	NA	NA
Old Town Community Plan Update	Assume growth consistent with SANDAG Forecasts	Approved October 2018	NA	NA

Sources: Civic San Diego and City of San Diego Planning Department, 2017, as updated by field reconnaissance June 2019 and internet sources: <http://www.manchesterpacificgateway.com/updates/>;
<https://www.marriott.com/hotels/travel/santa-towneplace-suites-san-diego-airport-liberty-station/>;
<https://www.sandiego.org/members/hotels-resorts/hampton-inn-suites-by-hilton-san-diego-airport-liberty-station.aspx>;
The Daily Transcript, “Developers Bringing Branded Hotels to Liberty Station”, August 19, 2016. Available:
<https://www.atlashospitality.com/developers-bringing-trio-branded-hotels-liberty-station/>;
https://www.sandiego.gov/sites/default/files/midway_-_pacific_highway_community_plan_sept_2018_0.pdf;
https://www.sandiego.gov/sites/default/files/old_town_community_plan_draft_-_nov_2017.pdf;
<https://www.nbcsandiego.com/news/local/New-Boutique-European-Style-AC-Hotels-By-Marriott-7th-Avenue-G-Street-Downtown-San-Diego-509904421.html>;
<https://www.sandiegouniontribune.com/business/growth-development/sd-fi-ballpark-village-petco-park-development-20190319-story.html>.

Notes: NP—Information not provided. NA—Not applicable

Additionally, the San Diego Unified Port District (District) is currently preparing a Port Master Plan Update (PMPU) that includes different development scenarios for District tidelands planned to occur over the next 30 years. Those scenarios are currently at a program-level of planning that anticipates a range of future development for each scenario in the near-term (0-10 years) and in the long-term (10+years), with the specifics of such development yet to be determined. A Discussion Draft of the PMPU was released on April 25, 2019 for a 90-day public review period. The Discussion Draft provides goals, policies, and standards that address allowable uses and activities, future development, and management of land and water within the Port’s jurisdiction. It is anticipated that the PMPU Draft EIR will be circulated for public review in spring 2020, with certification of the PMPU by the California Coastal Commission estimated for late 2020.

The 2018 Draft EIR identified the following general nature and range of development being considered for the PMPU at that time and Table 4-3 summarizes the potential program-level development ranges.



Source: CDM Smith, 2019, Kimley-Horn, 2018. Aerial source: NAIP, 2016.

PMPU Potential Program-level Development Ranges (0-10 years):

- Harbor Island – Potential growth within the District’s Harbor Island Planning District may include the following:
 - 750-1,500 hotel rooms
 - 40,000-140,000 sf of retail, restaurants, services, and aquaculture/bluetech uses
 - 15%-20% (150-200 slips) increase in vessel berthing
 - Final access points to East Harbor Island off of North Harbor Drive have not yet been determined, although it is likely that future development will continue to utilize the two existing intersections at Liberator Way and Harbor Island Drive
 - Note that the potential development within this 0-10 year phase is less than what was contemplated in the Notice of Preparation for the “Harbor Island East Basin Industrial Subarea Redevelopment and Port Master Plan Amendment” issued in August 2015
- Embarcadero – Potential growth and/or major projects within the District’s Embarcadero Planning District may include the following:

North Embarcadero Sub-District

- 450-550 hotel rooms
- 8,500-17,000 sf of retail, restaurants and services
- 10-15 acres of additional public space areas, including potential realignments of portions of Harbor Drive between Laurel Street and G Street that may involve roadway width reductions
- 600,000-1,000,000 additional cruise passengers per year

Central Embarcadero Sub-District

- 400-500 hotel rooms
- 150,000-215,000 sf of retail, restaurants, services, and aquaculture uses – including a major attraction and/or event center
- 22%-31% (25-35 slips) increase in vessel berthing

South Embarcadero Sub-District

- 550-650 hotel rooms
- 24,000-26,000 sf of retail, restaurants and services
- 960,000 sf of convention center exhibit area, meeting rooms, ballrooms and support spaces
- 3%-5% (16-23 slips) increase in vessel berthing

PMPU Potential Program-level Development Ranges (10+ years):

- Shelter Island – Potential growth within the Port’s Shelter Island Planning District may include the following:
 - 1,000-2,000 hotel rooms
 - 50,000-240,000 sf of retail, restaurants and services
 - 40,000-50,000 sf of commercial fishing, marine sales and services, and aquaculture/bluetech uses
 - 15%-20% (430-575) increase in vessel berthing slips
- Harbor Island – Potential growth within the Port’s Harbor Island Planning District may include the following:
 - 1,100-2,200 additional hotel rooms
 - 60,000-210,000 sf of additional retail, restaurants, services, and aquaculture/bluetech uses
 - 15%-20% (150-200 slips) increase in vessel berthing
 - Final access points to East Harbor Island off of North Harbor Drive have not yet been determined, although it is likely that future development will continue to utilize the two existing intersections at Liberator Way and Harbor Island Drive
 - Note that the potential development within this 10+ year phase is less than what was contemplated in the Notice of Preparation for the “Harbor Island East Basin Industrial Subarea Redevelopment and Port Master Plan Amendment” issued in August 2015

North Embarcadero Sub-District

- 950-1,150 hotel rooms
- 16,500-33,000 sf of retail, restaurants, and services

Central Embarcadero Sub-District

- 800-1,000 hotel rooms
- 300,000-435,000 sf of retail, restaurants, services, and aquaculture uses – including a major attraction and/or event center
- 35%-50% (50-75 slips) increase in vessel berthing

South Embarcadero Sub-District

- 1,150-1,350 hotel rooms
- 3,000-6,000 sf of retail, restaurants, and services
- 6%-9% (34-47 slips) increase in vessel berthing

The Port indicated that the development ranges presented above are in-line with preliminary PMPU “program-level” growth assumptions that are still under refinement; they do not reflect detailed “project -level” information. It is also assumed by the Port that supporting infrastructure and associated public improvement will be included as necessary to align with future development scenarios.

Table 4-3: Port of San Diego Master Plan Update: Development Potential

Potential Program-Level Development Ranges												
		Hotels (Rooms)		Retail, Restaurant, Commercial Fishing, Marine Sales & Service, Bluetech/ Aquaculture (Sq Ft)		Conv Center Space (Sq Ft)	Slips (Count)		Cruise (# Annual Passengers)		Large- Scale Public Space (Acres)	
		Low	High	Low	High		Low	High	Low	High	Low	High
PD1 - Shelter Island												
	0-10 years	-	-	-	-	-	-	-	-	-	-	-
	10+ years	1,000	2,000	90,000	290,000	-	430	575	-	-	-	-
	30-Yr Buildout	1,000	2,000	90,000	290,000	-	430	575	-	-	-	-
PD2 - Harbor Island												
	0-10 years	750	1,500	40,000	140,000	-	150	200	-	-	-	-
	10+ years	1,100	2,200	60,000	210,000	-	150	200	-	-	-	-
	30-Yr Buildout	1,850	3,700	100,000	350,000	-	300	400	-	-	-	-
PD3 - Embarcadero												
North Embarcadero Sub-District												
	0-10 years	450	550	8,500	17,000	-	-	-	600,000	1,000,000	10	15
	10+ years	950	1,150	16,500	33,000	-	-	-				
	Buildout	1,400	1,700	25,000	50,000	-	-	-	600,000	1,000,000	10	15
Central Embarcadero Sub-District												
	0-10 years	400	500	150,000	215,000	-	25	35	-	-	-	-
	10+ years	800	1,000	300,000	435,000	-	50	75	-	-	-	-
	Buildout	1,200	1,500	450,000	650,000	-	75	110	-	-	-	-
South Embarcadero Sub-District												
	0-10 years	550	650	24,000	26,000	960,000	16	23	-	-	-	-
	10+ years	1,150	1,350	3,000	6,000	-	34	47	-	-	-	-
	Buildout	1,700	2,000	27,000	32,000	960,000	50	70	-	-	-	-
PD3 - Embarcadero Totals												
	0-10 years	1,400	1,700	182,500	258,000	960,000	41	58	600,000	1,000,000	10	15
	10+ years	2,900	3,500	319,500	474,000	-	84	122	-	-	-	-
	30-Yr Buildout	4,300	5,200	502,000	732,000	960,000	125	180	600,000	1,000,000	10	15
PD1, 2, & 3 Totals												
	0-10 years	2,150	3,200	222,500	398,000	960,000	191	258	600,000	1,000,000	10	15
	10+ years	5,000	7,700	469,500	974,000	-	664	897	-	-	-	-
	30-Yr Buildout	7,150	10,900	692,000	1,372,000	960,000	855	1,155	600,000	1,000,000	10	15

Source: Appendix R-H2 - Exhibit L of this Recirculated Draft EIR.

The projects on the list were evaluated against SANDAG's growth forecast data by traffic analysis zone. The Port worked with SANDAG to add the PMPU projects to the Year 2050 travel forecast models that were used for this study as well as the Port's Harbor Drive Mobility Study. For purposes of this cumulative impact analysis, if it appeared that projects were not fully accounted for in the forecast numbers, the forecast numbers were adjusted upward to fully account for the projects.

On May 6, 2019 and subsequently on May 10, 2019, the Port of San Diego sent SDCRAA emails with an updated list of development assumptions for the PMPU.⁴ The updated list reflects a refinement to information previously provided and depicted in Table 4-3. The land use assumptions are generally consistent with the ranges of development intensity included in the Year 2050 regional travel forecast model refinements. Since the PMPU land use intensities are still being vetted through a public review process prior to Port Commissioners' acceptance and were not included in joint Port/SDCRAA modeling, no further refinements to the cumulative traffic section are needed.

On May 14, 2019, Port Commissioners entered into an agreement with STAY OPEN to provide 220 self-contained Pods (with a single bed in each Pod) on property immediately south of Port offices on Pacific Highway at Sassafras Street. This lower-cost accommodation is close to the Midtown light rail transit station and is expected to attract students and budget travelers, many of whom are not likely to rent a car. The site will displace about 100 -120 parking spaces that are being used by Park 'N Fly for long-term airport parking. At this time, it is unclear if the proposed uses by STAY OPEN will generate more or fewer vehicle trips as compared with the present use. The Port plans to commence an environmental review process for the use beginning in late 2019. For purposes of the ADP EIR, there is no evidence to suggest that the STAY OPEN use will generate additional vehicle trips to the study area, so this project is not being included quantitatively as a cumulative project for the traffic impact analysis in this Recirculated Draft EIR.

4.3 Development at SDIA

4.3.1 Past Projects at SDIA

The following development projects at SDIA are associated with implementation of the Airport Master Plan and have been completed.

4.3.1.1 Terminal 2-West (Green Build)

The Terminal 2-West (T2-West) Project, also known as the "Green Build," began construction in 2009 and was completed in 2013. The project included the following features:

- 10 new gates to reduce terminal congestion and provide expanded, more comfortable passenger waiting areas
- Dual-level roadway to relieve curb-front traffic congestion by separating arriving and departing passengers

⁴ Hofreiter, Larry, Port of San Diego. Email to Ted Anasis, San Diego County Regional Airport Authority, Subject: PMPU Development Assumption's - Planning District's #1 through #3. May 6, 2019; Hofreiter, Larry, Port of San Diego. Email to Ted Anasis, San Diego County Regional Airport Authority, Subject: FW: Updated PMPU Development Assumption's_05.09.2019 PD's #1 through #3. May 10, 2019.

- Enhanced curbside check-in, allowing passengers to print boarding passes, check baggage and view gate information at an easy-to-use curbside kiosk before entering the terminal
- More security lanes to improve flow of passengers through the terminal
- Expanded concessions area providing more dining and shopping options

4.3.1.2 North Side Improvements

The North Side Improvements included several improvement projects that began construction in 2013 and were completed in 2016. The North Side Improvements included the following:

- Receiving and Distribution Center – a 21,000 square-foot central delivery location for food, beverage, retail and other goods. The center reduces traffic on surrounding roadways by centralizing all truck deliveries. Airport vehicles deliver materials via on-airport roadways. This has reduced truck trips on Harbor Drive by 50–75 per day.
- Rental Car Center – a facility to house many of the rental car companies in a single building, dramatically reducing the number of shuttle buses circulating around the Airport. The new Rental Car Center opened in January 2016.
- Fixed Base Operator (FBO) Building – features a 19,000-square-foot terminal, a 250,000-square-foot ramp and five hangars on 12.4 acres. Its amenities include office space, a snooze room, VIP lounge, fitness center, viewing deck, gourmet café, and an executive conference room. Landmark began operating out of the new facility in August 2014.
- Roadway Improvements – expansion of the Washington Street entrance roadway at Pacific Highway; widening of Sassafras Street north of Pacific Highway; and a new terminal link roadway for rental car and parking shuttle buses, which removes traffic from Laurel Street and North Harbor Drive.

4.3.2 Present Projects at SDIA

The following projects, which were recently completed, are also part of the SDIA Airport Master Plan.

4.3.2.1 Terminal 2 Parking Plaza

Construction began in 2016 for a three-story Parking Plaza with approximately 2,900 parking stalls in front of Terminal 2. Construction was completed in May 2018, which resulted in a net increase of nearly 1,600 parking stalls over previous surface parking.

4.3.2.2 Federal Inspection Services (FIS) Improvements and Relocation at Terminal 2

This project relocated the existing FIS facility for international arrivals from Terminal 2-East (T2-East) to the newly completed Green Build portion of the existing T2-West, and included approximately 40,000 square feet of new construction and approximately 85,000 square feet of modifications within the existing terminal, including converting six existing gates to allow for both domestic and international arrivals. The FIS improvements and relocation provides additional and more efficient processing of passengers arriving on international flights. Construction began in 2017 and the new FIS facility began operations in T2-West in June 2018.

4.3.3 Proposed/Approved Future Projects at SDIA

For the cumulative impacts analysis, this Draft EIR also accounts for implementation of proposed and/or approved future development projects at SDIA that are not related to the ADP (i.e., projects having independent utility). Such projects are described below.

4.3.3.1 Palm Street Park

As part of the Airport's north side construction program, an observation park is being planned on a 0.9-acre remnant parcel at the corner of Palm Street and Admiral Boland Way. The construction and completion dates of the observation park have not been determined.

4.3.3.2 Airport Support Facilities

Several existing Airport Support Facilities provide critical airport and airline operations, but are located in aging, outdated structures and inefficient locations. Existing Airport Support Facilities are proposed to be relocated or reconstructed in energy efficient structures and locations to provide operations in areas designated for Airport Support uses long-term. The demolition of several of these buildings would occur under the proposed project as listed below. The existing Airport Support Facilities to be relocated or reconstructed within the Airport site's total 661 acres are as follows:

- a. *Facilities Management Department (FMD)* which provides offices, warehouse, machine/maintenance shops, and parking/storage for maintenance equipment, airport fleet vehicles, and staff vehicles on the north side of the Airport. The demolition of the FMD administration building, workshop, and maintenance shop would occur as part of the proposed project (see Table 2-3 in Chapter 2, Project Description);
- b. *Aircraft Fueling Operations* which provide dispatch office, maintenance, and parking facilities for aircraft refueling trucks on the north side of the Airport;
- c. *An Airline Support Building* that will consolidate airline operations from separate structures and locations into a single facility on the south side of the Airport. The demolition of the United Cargo, Southwest Cargo, Air Freight, Menzies Aviation Maintenance, and American Airlines Maintenance buildings would occur as part the proposed project (see Table 2-3 in Chapter 2, Project Description);
- d. *Relocation of Air Operations (AOA) Gate P-18* on the south side of the Airport to serve the consolidated Airline Support Building;
- e. *Modify the existing Rental Car Center Bus Parking* facility on the south side of the Airport to dispatch and store buses: and
- f. *Relocate the storage of solid waste/recycled materials and connections to the sanitary sewer for the disposal of lavatory waste* (also referred to as a triturator) to two enclosures located on the south side of the Airport – an east location serving Terminal 1 and a west location serving Terminal 2.

It should be noted that as part of the Airport Support Facilities' environmental regulatory compliance, a 3-million gallon underground storage tank will be installed next to the new FMD

facility for storm water capture and reuse purposes (as further detailed in Section 3.10, Hydrology and Water Quality). Relocation and reconstruction of the subject Airport Support Facilities began in November of 2018 and is anticipated to be completed in the fourth quarter of 2020.

4.3.3.3 Air Cargo Warehouse Facilities and Associated Improvements

Included in the SDIA Northside Improvements that were addressed in the 2011 Supplemental Environmental Impact Report for the San Diego International Airport – Airport Master Plan is the SDIA Air Cargo Warehouse Facilities and Associated Improvements Project.⁵

The proposed air cargo facilities would be located parallel to, and on the north side of, Taxiway C, and are anticipated to include approximately 225,000 square feet of warehouse space for air cargo, and an aircraft parking apron with up to nine (9) parking positions for cargo aircraft. All current and future air cargo operators would be consolidated into the new cargo facilities.

Air cargo operations (including the sorting and staging of pallets/containers) at SDIA are currently conducted out in the open on former runway/taxiway and apron areas in the northern portion of the airfield. The new facilities would provide an enclosed area (warehouse) within which incoming and outgoing cargo can be sorted and staged prior to being transferred between trucks and aircrafts. As currently planned, two air cargo warehouse structures would total approximately 1,939 feet in length, and setback 1,113 feet from the runway to provide airspace clearance for the tails of aircraft parked in front of the warehouse. The planned air cargo facilities would include the construction of a new aircraft parking apron area. A cross taxilane would be constructed adjacent to the cargo ramp and parallel to Taxiway C. Development of the proposed air cargo warehouse facilities is anticipated to begin in mid-2020 and completed by end of 2021. The construction and completion dates of the air cargo facilities and associated taxilane have not been determined.

4.3.3.4 Additional Fuel Tanks Project

The SDCRAA is proposing the construction of additional aviation fuel tanks at the existing fuel farm on the north side of the Airport to meet industry standards for on-airport aviation fuel reserves. The Additional Fuel Tanks Project would address deficiencies in aviation fuel reserves for existing aircraft operations and would also allow for, as needed, repair of the fuel storage and conveyance system to occur without compromising fuel service. This project would also reduce the need for trucked fuel deliveries to supplement on-Airport fuel shortfalls in the event of interruption of the Airport fuel delivery pipeline supplying the fuel farm or the temporary shutdown of one of the existing fuel tanks due to maintenance needs or emergency stoppage. Preparation of a Draft EIR for the Additional Fuel Tanks Project is currently underway. Construction of the project, if approved, is anticipated to take approximately 17 months and be initiated in 2020 and completed in 2021.

⁵ San Diego County Regional Airport Authority, Final Supplemental Environmental Impact Report, San Diego International Airport – Airport Master Plan, August 2011. Available: <https://www.san.org/Airport-Projects/Environmental-Affairs#1245170-ceqa--nepa>.

4.3.3.5 Aircraft Fuel Hydrant System

The fueling of aircraft at the Airport presently occurs through the use of fuel trucks that service aircraft where they are parked, including at terminal gates. The fuel trucks fill up at a fueling station (i.e., “fuel rack”) located adjacent to the fuel tank farm in the northern portion of the Airport and at a fuel rack located approximately 400 feet north of the Airport Administration Offices (the former Commuter Terminal). The current refueling operations conducted via fuel tanker trucks is an outdated, slow, and inefficient way to refuel aircraft compared to an underground hydrant fueling system. Refueling by fuel tanker trucks also emits air pollutants and poses safety concerns with other ground support equipment servicing the aircraft at the terminal gates. The SDCRAA will install a fuel hydrant pit(s) at each gate along with the associated fuel pipeline network to improve safety and efficiency of aircraft refueling and reduce environmental effects from existing aircraft refueling operations.⁶ CEQA review for the aircraft fuel hydrant system was completed by the SDCRAA in May 2019 and construction is anticipated to commence in late 2019 with completion in August 2020.

4.3.3.6 West Fuel Rack

As noted above, the fueling of aircraft at the Airport presently occurs through the use of fuel trucks that service aircraft where they are parked, including at terminal gates. The fuel trucks fill up at a fueling station (i.e., “fuel rack”) located adjacent to the fuel tank farm in the northern portion of the Airport and at a fuel rack located approximately 400 feet north of the Airport Administration Offices (the former Commuter Terminal). To ensure reliable and continuous service, the aforementioned existing fuel rack located near the Airport Administrative Offices building will be removed and a new fuel rack will be constructed at the west end of the Airport, north of the proposed T2-West Stinger. CEQA review for the new west fuel rack was completed by the SDCRAA in May 2019 and construction is anticipated to commence in September 2020 with completion in September 2021.

4.3.3.7 Connection to Future Intermodal Transit Center

In conjunction with a multi-agency planning process conducted in 2009, as part of the Destination Lindbergh planning effort, to improve intermodal access to the SDIA while considering the Airport as a potential location for a regional transportation hub, SANDAG prepared preliminary plans for future development of an Intermodal Transit Center (ITC) at the northern edge of SDIA. The proposed ITC would be located at the intersection of West Washington and Hancock Streets and Pacific Highway on the north side of the heavy rail and light rail right-of-ways and is contemplated to serve as a transportation hub for bus, rail and parking facilities, with the possibility of expanding to the south at a later phase to provide a High Speed Rail station if proposed by the California High Speed Rail Authority. It is envisioned that a connection between the ITC and SDIA would be provided via a pedestrian bridge to the entrance plaza of the existing Rental Car Center, as shown on Figure 2-1. As also shown on Figure 2-1, future development of the ITC and pedestrian bridge may include a remote passenger processing facility. Transportation to and from the main SDIA terminal area would occur via the existing shuttle system that transports passengers between the Rental Car Center and the Airport terminals along an on-airport roadway.

⁶ Given the extent of the on-airport pipeline network for the Aircraft Fuel Hydrant System, this project is not specifically identified on Figure 4-1.

The contemplated ITC is not located within the planning or operation jurisdiction of the SDCRAA; however, development of the pedestrian bridge and remote passenger processing facility could be accomplished by SDCRAA if and when the ITC is constructed in the future.

Future development of the ITC is discussed in the 2050 Regional Transportation Plan (RTP) adopted by SANDAG, but it is not currently funded. For the purposes of the ADP EIR cumulative impacts analysis, it is anticipated that development of the ITC would be funded at some point in the future and construction of the ITC, along with the pedestrian bridge and remote passenger processing facility, would occur from 2030 through 2035.

4.4 Cumulative Impacts Study Area

The cumulative impacts study area for impacts affected by regional growth projections includes the 18 cities and County of San Diego that are included in the SANDAG. The cumulative impacts study area (i.e., geographic scope) varies by environmental topic, depending upon the geographic area where the impacts of those projects could combine with those of the ADP. Some cumulative impacts study areas for environmental topics are larger or smaller than others (e.g., the cumulative impacts study area for visual resources includes those areas in proximity to the Airport, whereas the cumulative impacts study area for air quality is the larger regional air basin). The cumulative impacts study area for the local projects used for each environmental topic is identified within each environmental issue analysis presented in this chapter.

4.5 Cumulative Impacts

4.5.1 Aesthetics and Visual Resources

Development projects at/adjacent to SDIA involving notable above-ground structural improvements in combination with the proposed project's structural improvements could pose the potential for impacts to views/viewsheds through the Airport and light/glare-related impacts. Past/present development projects at the Airport with notable above-ground structural improvements include T2-West (the Green Build), the North Side Improvements (in particular the Rental Car Center), and the T2 Parking Plaza. Proposed future development projects at the Airport with notable above-ground structural improvements consist of the cargo handling buildings associated with the Future Cargo Facilities in the northern part of the Airport, the construction of additional aviation fuel tanks at the existing fuel farm on the north side of the Airport, as well as the future possibility of facilities on-Airport (a remote passenger processing facility and pedestrian bridge) providing connection to SANDAG's potential future ITC.

The relevant geographic area of analysis for cumulative aesthetics impacts includes the Airport proper and views towards the south/southwest (i.e., towards San Diego Bay, the Pacific Ocean, and the Point Loma Peninsula) from elevated areas east of SDIA and views towards the east/southeast (i.e., towards the Navy Boat Channel and the downtown skyline) from NTC Park in Liberty Station.

As discussed in Section 3.1, Aesthetics and Visual Resources, and shown in Figures 3.1-5 through 3.1-10 and 3.1-14, the proposed project facilities (i.e., new T1/T1 Parking Structure, T2-West Stinger, new T2-East concourse, new commercial development opportunity building, new airport administration building, and circulation/roadway improvements) would not block existing views of visual resources and designated viewsheds/view corridors identified in regulatory/planning

documents would be preserved. As also shown on Figures 3.1-5 through 3.1-10 and 3.1-14, the past/present development projects at SDIA (T2-West [the Green Build], the North Side Improvements, and the T2 Parking Plaza) similarly do not block existing views of visual resources and designated viewsheds/view corridors under both baseline conditions (“before” photographs) and in conjunction with the proposed facilities (“after” photographs with proposed facilities) are/would be preserved.

Regarding proposed development projects on the Airport, given the relatively low height (10 to 20 feet) of the proposed new air cargo warehouse facilities on the north side, and given that the site of the proposed additional above-ground aviation fuel tanks would be south of the existing above-ground aviation fuel tanks at the existing fuel farm on the north side of the Airport, these warehouse facilities and additional fuel tanks would not alter or block views of scenic resources to the south of SDIA.

Definitive development plans for SANDAG’s potential future ITC and associated on-Airport facilities (a remote passenger processing facility and pedestrian bridge) have not been developed. It is anticipated that the ITC and associated facilities would have a height/building mass similar to or less than those of existing facilities on the north side of the Airport (e.g., the four-level 52-foot-high Rental Car Center) and existing facilities to the north/east of the Airport (e.g., the multi-story Port of San Diego Administration Building) and, therefore, the potential ITC and related facilities are not anticipated to substantially alter views of scenic resources south of SDIA. Based on the above, the proposed project, in combination with cumulative projects, would result in a ***less than significant cumulative impact*** related to maintaining views of visual resources/scenic vistas and designated viewsheds/view corridors identified in regulatory/planning documents.

As discussed in Section 3.1, Aesthetics and Visual Resources, construction and operation of the proposed facilities would not alter lighting so as to create a new source of substantial light or glare that would adversely affect day or nighttime views in the area, and the cumulative impact would be less than significant. Development of the proposed project, in combination with past, present, and reasonably foreseeable probable future projects, would introduce new or expanded sources of lighting and glare that would contribute to increased nighttime lighting levels. As described in Section 3.1, the project area is highly developed and currently contains moderate to high levels of ambient lighting, typical of a modern airport transportation area. Similar to existing development at SDIA, all lighting associated with the proposed facilities and cumulative projects would be shielded and directed downward to minimize light spillover. The shielding and focusing of lighting sources would also minimize any adverse glare effects.

The proposed facilities, Future Cargo Facilities and additional aviation fuel tanks in the northern part of the Airport, as well as the potential ITC and related on-airport facilities (a remote passenger processing facility and pedestrian bridge), would also utilize low-reflective materials to minimize any introduced sources of daytime or nighttime glare within the area. Coordination with FAA would occur during design of the proposed facilities, Future Cargo Facilities, additional aviation fuel tanks, and all potential future ITC-related facilities to ensure that new facilities do not pose any hazard to aircraft or air traffic controllers. As such, the proposed project, in combination with cumulative projects, would not alter lighting so as to create a new source of substantial light or

glare that would adversely affect day or nighttime views in the area, and the cumulative impact would be *less than significant*.

4.5.2 Air Quality

The analysis of Impact 3.2-3 in Section 3.2.7.3 addresses the potential for implementation of the proposed project to result in a cumulatively considerable air quality impact. As concluded therein, construction of the proposed project in conjunction with other projects anticipated to be under construction during that same time would result in a *significant* impact relative to cumulative air pollutant emissions, at which the proposed project's contribution to that significant impact would be *cumulatively considerable*. Operation of the proposed project at buildout in 2035 and in the 2050 horizon year would result in a cumulatively considerable net increase of VOCs and NO_x, which are precursors to O₃, for which the San Diego air basin is in nonattainment under federal and state ambient air quality standards. That cumulatively considerable impact is a *significant and unavoidable impact* of the proposed project. Additionally, existing background concentrations of PM₁₀ currently exceed state standards and there would be an increase in PM₁₀ emissions associated with project operations. The increase is considered to be cumulatively considerable; this is a *significant and unavoidable impact*. It should be noted, for informational purposes only, that the air pollutant emissions associated with operations at SDIA in the future without implementation of the proposed project would be generally the same as, or greater than (i.e., worse than), emissions with implementation of the proposed project due to anticipated growth in future activity that will occur at SDIA regardless of whether the project is implemented. As such, SDIA's contribution to cumulative (regional) air quality impacts would be greater without implementation of the proposed project than with implementation of the project.

4.5.3 Greenhouse Gases and Climate Change

The GHG impacts addressed earlier in Section 3.3, Greenhouse Gases and Climate Change, are treated exclusively as cumulative impacts; there are no non-cumulative GHG emission impacts from a climate change perspective. In its notice of proposed amendments to the CEQA Guidelines pertaining to GHG, the California Natural Resources Agency (CNRA) noted that the impacts of GHG emissions should be considered in the context of a cumulative impact, rather than a project impact. The public notice states:

“While the Proposed Amendments do not foreclose the possibility that a single project may result in greenhouse gas emissions with a direct impact on the environment, the evidence before [CNRA] indicates that in most cases, the impact will be cumulative. Therefore, the Proposed Amendments emphasize that the analysis of greenhouse gas emissions should center on whether a project's incremental contribution of greenhouse gas emissions is cumulatively considerable.”⁷

It is the accumulation of GHGs in the atmosphere that may result in global climate change. Climate change impacts are cumulative in nature and, thus, no typical single project would result in emissions of such a magnitude that it, in and of itself, would be significant on a project basis. A

⁷ California Natural Resources Agency. Notice of Public Hearings and Notice of Proposed Amendment of Regulations Implementing the California Environmental Quality Act. 2009.

typical single project's GHG emissions will be small relative to total global or even statewide GHG emissions. Thus, the analysis of significance of potential impacts from GHG emissions related to a single project is already representative of the long-term impacts on a cumulative basis. As such, the assessment of significance is based on a determination of whether the GHG emissions from the proposed project represent a cumulatively considerable contribution to global climate change impacts. As indicated in Section 3.3, Greenhouse Gases and Climate Change, implementation of the proposed project would result in a significant impact related to GHG emissions; hence, the project's cumulatively considerable impact would be a ***significant and unavoidable impact*** relative to GHG emissions.

4.5.4 Human Health Risk

To begin, no standards have been set forth by an agency with subject matter expertise that establish a threshold of significance for cumulative human health risk impacts. Additionally, the methodologies, models and thresholds of significance used to determine cancer risk, and chronic and acute non-cancer health hazards in Section 3.4 of this EIR are incremental in nature, intended to determine the risks associated with an individual project; the analytical framework is not intended for applications relating to cumulative risk. Moreover, due to uncertainties in evolving technologies, future regulations, and other societal and technological factors, meaningful quantification of future cumulative health risk exposure in the vicinity of the project is not feasible. Therefore, although the following discussion addresses existing health risk data and project-related contributions, no determination of significance can be made regarding these impacts.

As detailed in the San Diego County Air Pollution Control District's 2017 Air Toxics "Hot Spots" Program Report for San Diego County, the total ambient cancer risk from toxic air contaminants (TAC), not including diesel particulate matter, at the monitoring station nearest to the project site was estimated to be approximately 345 cancer cases in 1 million. With the addition of the California Air Resources Board's 2012 statewide estimate of approximately 520 cancer cases in 1 million from diesel particulate matter, the total existing ambient risk would equal approximately 865 cancer cases in 1 million.

Based on information presented in Section 3.4 of this EIR, the proposed project's maximum estimated incremental cancer risk would be 8 cancer cases per 1 million people at the maximally exposed individual resident (MEIR) location after mitigation. This maximum impact would occur at the nearest residential use in Middletown, just east of the project site. Cancer impacts at all residential locations would be less than 10 in 1 million. The 30-year resident MEIR risk increment would amount to approximately 1 percent of the existing cancer risk identified above (i.e., 865 cancer cases in 1 million). The relatively small estimated project-related increase would not be measurable in collected cancer statistics against the urban background conditions of the project site. Additionally, the project would not exceed the incremental thresholds identified for chronic non-cancer and acute non-cancer health hazards.

4.5.5 Biological Resources

Construction and operation of development projects near the California least tern nesting areas ("ovals") at the southeast portion of SDIA in combination with expansion of the capture area of the SAN Stormwater Capture and Reuse System, the new remain overnight (RON) aircraft parking areas, realignment of Taxiway B and construction of a new Taxiway A, new T1, new multi-use path,

and new on-airport entry roadway included in the proposed project could pose the potential for indirect impacts to California least terns at SDIA. As discussed in Section 3.5, Biological Resources, construction of the proposed project poses the potential for a significant impact; however, implementation of the recommended mitigation measures would reduce the impact to less than significant. The past development projects at the Airport in the vicinity of the California least tern ovals is the Northside Improvements (more specifically the Terminal Link Roadway) and the Taxiway B Object-Free Area Improvement Project.

Development projects at/adjacent to SDIA involving ground-disturbing activities and/or storm water flows to the Navy Boat Channel and/or San Diego Bay in combination with the proposed project improvements could pose the potential for impacts to Essential Fish Habitat (EFH).

The relevant geographic area of analysis for cumulative biological resources impacts includes the Airport proper and areas to the southwest (Shelter Island), south (Harbor Island), and southeast (Embarcadero/Downtown-Centre City Planning Area) that drain to the Navy Boat Channel or San Diego Bay.

As discussed in Section 3.5, Biological Resources, SDCRAA would continue to implement the applicable measures specified in the 1993 Biological Opinion (BO), the 2013 Informal Section 7 Consultation between the FAA and U.S. Fish and Wildlife Service (USFWS) regarding potential effects of the SDIA Northside Improvements Project, and the 2018 Informal Section 7 Consultation between the FAA and USFWS regarding potential effects of the Taxiway B Object-Free Area Improvement Project, which would avoid and/or minimize potential indirect impacts from construction and operation of the proposed project, and impacts would be less than significant. Further, as discussed in Section 3.5, SDCRAA would implement Mitigation Measures MM-BIO-1 related to construction and MM-BIO-2 related to operations to ensure that potential indirect impacts to California least tern from the proposed project would be less than significant. As such, construction and operation of the proposed project, in combination with cumulative projects, would not have a substantial adverse effect on a species identified as sensitive or special status species in local or regional plans or by the California Department of Fish and Wildlife (CDFW) or USFWS (i.e., California least tern), and the cumulative impact would be ***less than significant***.

As discussed in Section 3.5, Biological Resources, Best Management Practices (BMPs) associated with the stormwater pollution prevention plan (SWPPP) and regulatory permits would be implemented during construction of the proposed project to minimize the potential for construction-related runoff to occur or otherwise affect biological resources. During operations, existing requirements would provide a basis for ensuring that operation of the proposed project would not result in a violation of water quality standards or discharge requirements. Additionally, the proposed project includes the expansion of the capture area of the SAN Stormwater Capture and Reuse System to divert and capture a portion of stormwater runoff for reuse instead of discharging it to San Diego Bay. Therefore, the proposed project would not degrade biological productivity or water quality in the Navy Boat Channel or San Diego Bay. BMPs would also be implemented during construction of proposed future projects at SDIA that involve ground-disturbing activities (i.e., Airport Support Facilities, Air Cargo Warehouse Facilities and Associated Improvements, and Connection to Future ITC) to minimize the potential for construction-related runoff to occur. The SAN Stormwater Capture and Reuse System would also reduce stormwater

runoff to San Diego Bay during operation of past, present, and proposed future projects at SDIA. It is anticipated that development projects off-Airport to the southwest (Shelter Island), south (Harbor Island), and southeast (Embarcadero/Downtown-Centre City Planning Area) described in Section 4.2 above and identified on Figure 4-1 would also implement BMPs during construction activities and incorporate measures during operation to ensure that water quality standards or discharge requirements are not violated. As such, construction and operation of the proposed project, in combination with cumulative projects, would not have a substantial adverse effect on riparian habitat or other sensitive natural communities (i.e., EFH). The cumulative impact would be ***less than significant***.

4.5.6 Cultural Resources

Development projects at SDIA that could adversely affect historical resources, in combination with the proposed project improvements that would result in the demolition of historical resources, could pose the potential for impacts to historical resources, more specifically historical resources associated with the historical use of the Airport property for aeronautical/aviation purposes. The relevant geographic area of analysis for cumulative historical resources impacts includes the Airport proper, which is also the cultural resources Area of Potential Effect (APE) for the proposed project (see Figure 3.6-1 in Section 3.6, Cultural Resources). As shown in Table 3.6-1 and Figure 3.6-1 in Section 3.6, eleven historical resources have been identified on the Airport property, two of which (Consolidated Aircraft Plant No. 1 [historic district] and Ryan Aeronautical Company Historic District) have been demolished as part of past improvement projects on the north side and south side of the Airport. None of the proposed future development projects at the Airport identified in Section 4.3.3 above would result in impacts to historical resources.

As discussed in Section 3.6, Cultural Resources, implementation of the proposed project would require the demolition and removal of two significant historical buildings (the existing Terminal 1 and the existing Terminal 2-East). Mitigation Measure MM-HR-1: Preparation of Historic American Buildings Survey/Historic American Engineering Record (HABS/HAER) Documentation, is proposed to document the characteristics of each of these two buildings; however, the permanent loss of those historic structures would be a significant and unavoidable impact of the project. Implementation of the proposed project would also impact the former United Airlines Hangar and Terminal Building, which is also a significant historical building. Mitigation Measures MM-HR-1 and MM-HR-2: Relocation of the United Airlines Hangar and Terminal Building, are proposed and would reduce the impact to a level less than significant. Based on the above, implementation of the proposed project, in combination with past development at the Airport, would cause a substantial adverse change in the significance of historical resources as defined by State CEQA Guidelines Section 15064.5(a). This would be a ***significant cumulative impact*** to historical resources and the proposed project's contribution to this impact would be ***cumulatively considerable***.

4.5.7 Tribal Cultural Resources

Development projects at/adjacent to SDIA involving ground-disturbing activities in combination with ADP improvements also involving ground-disturbing activities could pose the potential for impacts to tribal cultural resources. The relevant geographic area of analysis for cumulative impacts on tribal cultural resources includes the project site and other development projects within a 0.5-mile radius of the project site (i.e., the total area of the Native American Heritage Commission (NAHC) sacred lands file search for the proposed project). As discussed in Section 3.7,

Tribal Cultural Resources, no tribal cultural resources have been identified at the Airport or within a 0.5-mile radius of the project site, including during ground-disturbing activities for past/present development projects at SDIA listed in Section 4.3 above. As such, tribal cultural resources are not anticipated to be encountered during ground-disturbing activities for the proposed ADP improvements or proposed future projects at SDIA such as the Air Cargo Warehouse Facilities, the Additional Fuel Tanks Project, and facilities to connect to the possible future ITC. Further, based on the results of the NAHC records search, tribal cultural resources are not anticipated to be encountered during ground-disturbing activities for projects proposed south/southeast of the Airport discussed in Section 4.2 and identified on Figure 4-1.

As discussed in Section 3.7, the SDCRAA has agreed to the Viejas Band of Kumeyaay Indians' request that a Kumeyaay Cultural Monitor be present onsite during ground disturbing activities for the proposed project. In the unlikely event previously unknown potential tribal cultural resources are encountered during ground-disturbing activities for the ADP improvements or for the proposed future projects on the Airport identified above, all construction activities would be halted and representatives of the Viejas Band of Kumeyaay Indians would be notified, followed by evaluation of the resource(s) and, if necessary, development of a data recovery plan. As such, the proposed project, in combination with cumulative projects, would not cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074. Cumulative impacts to tribal cultural resources would be *less than significant*.

4.5.8 Geology and Soils

Geologic hazard impacts, such as seismic hazards including ground rupture, ground acceleration, liquefaction, and dynamic settlement, tend to be location-specific and do not compound or increase in combination with past, present, or future projects. Any future development within the geographic area (at/adjacent to SDIA) would encounter geologic and seismic risks based on their individual site constraints.

As discussed in Section 3.8, Geology and Soils, with implementation of the recommendations specified in the project-specific geotechnical investigation, and compliance with other regulatory requirements, including the California Building Code (CBC), City of San Diego Municipal Code, and the Alquist-Priolo Earthquake Fault Zoning Act, construction and operation of the proposed project would have a less than significant impact associated with exposure of people or structures to substantial risk related to seismic hazards. As with the proposed project, cumulative development projects at and adjacent to SDIA would be designed and constructed in accordance with CBC, City of San Diego Municipal Code, and Alquist-Priolo Earthquake Fault Zoning Act requirements to minimize potential risks and hazards associated with geology and soils. As such, the proposed project, in combination with cumulative projects, would result in a *less than significant impact* related to geology and soils.

4.5.9 Hazards and Hazardous Materials

Risks associated with hazards and hazardous material occur largely in a site-specific and localized context, as potential adverse impacts associated with a hazardous material release or spill diminish in magnitude with distance. Thus, future projects that could contribute to these cumulative impacts include those projects that transport hazardous materials in the vicinity of the project site or projects in the immediate vicinity, such as new airport support facilities and taxiway

improvements/relocation described in Section 4.3, occurring on or around properties known to contain hazardous or potentially hazardous conditions, such as hazardous waste generation or handling, or the presence of leaking underground storage tanks.

It is possible for the combined effects of the increased use, transportation, and disposal of hazardous materials to be influenced by cumulative development. Any health or safety effects of routine hazardous materials use would be limited to the specific individuals using the materials and anyone in the immediate vicinity of the use. Such hazardous materials would include, but not be limited to, cleaning agents, paints, pesticides, other materials used for landscaping, fuel, and other materials used in all motor vehicles. It is expected that all potentially hazardous materials would be used, stored, and disposed of in accordance with manufacturers' specifications and handled in compliance with applicable standards and regulations. Adherence to existing regulatory requirements pertaining to hazards and hazardous materials is designed to minimize exposure and protect human health and the environment. Further, the proposed project would result in continued transport and use of similar types of hazardous materials that are currently handled at the site and the proposed project would not result in a substantial change in the amount of hazardous materials handled on the project site. Cumulative impacts associated with hazards and hazardous materials would not cumulatively affect off-site areas.

The proposed project site is identified on lists of hazardous materials sites. However, with compliance with mitigation measures and applicable regulatory requirements, excavation, transport, and treatment (or disposal of) any encountered contaminated soils, groundwater and hazardous building materials at the project site would be addressed and impacts would be less than significant. Any excavation, transport, and treatment (or disposal of) hazardous materials associated with other projects at the project site and at surrounding sites would also be subject to similar regulatory requirements and oversight and, thus, are not anticipated to pose substantial risk to the public. Therefore, although the proposed project would be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, within implementation of mitigation and compliance with regulatory requirements, the proposed project is not expected to create a significant hazard to the public (including construction workers) or the environment during construction.

The proposed project would accommodate emergency response and evacuation during construction and operation. Compliance with emergency access requirements would ensure the proposed project would not interfere with an existing emergency response or emergency evacuation plan. Other development within the area would also be required to comply with these requirements.

As identified in Section 4.3, the on-airport cumulative projects include the implementation and operation of a replacement fueling station (i.e., "fuel rack") to be constructed at the west end of the Airport north of the proposed T2-West Stinger, and a new hydrant fueling system consisting of pit(s) at each gate along with a fuel pipeline network. The transport of fuels via fuel trucks would decline with installation of a hydrant fuel system. The implementation and operation of a new fuel rack and hydrant fueling system would be subject to strict oversight and due to regulatory and operational safeguards in place, including FAA Advisory Circular 150/5230-4B, Aircraft Fuel Storage, Handling, Training, and Dispensing on Airports, as such, the likelihood and consequences

of a major fuel release from either the hydrant fueling system or the new fuel rack would be extremely small.

In addition, as identified in Section 4.3, the on-airport cumulative projects also include the implementation and operation of additional aviation fuel tanks at the existing fuel farm on the north side of the Airport to meet industry standards for on-airport aviation fuel reserves. The Additional Fuel Tanks Project would also reduce the need for trucked fuel deliveries to supplement on-Airport fuel shortfalls in the event of interruption of the Airport fuel delivery pipeline supplying the fuel farm or the temporary shutdown of one of the existing fuel tanks due to maintenance needs or emergency stoppage. Leak detection pipelines would be constructed under the proposed fuel tanks to ensure functionality and integrity of the proposed fuel tanks. The expanded fuel farm fire suppression system would be constructed, operated, and maintained in conformance with Chapter 9, Fire Protection Systems, and Chapter 20, Aviation Facilities, of the 2016 California Fire Code. Additionally, the Additional Fuel Tanks Project would include the construction of containment dike walls that have the capacity to hold contents of the SDIA fuel stores, per National Fire Protection Association 30 requirements. Expansion of the existing containment dike wall system would create adequate containment areas around each of the proposed fuel tanks, which would provide adequate protection against impacts associated with catastrophic failure of one or more tanks. In addition, 21 foam makers would be installed at the fuel farm as a part of the fire protection system improvements. The Additional Fuel Tanks Project would adhere to applicable fire and hazardous materials safety requirements and existing safety systems and emergency response resources would be adapted to serve the project. As with the proposed new fuel rack and hydrant fueling system, the proposed Additional Fuel Tanks Project would be subject to strict oversight and, due to regulatory and operational safeguards in place, including FAA Advisory Circular 150/5230-4B, Aircraft Fuel Storage, Handling, Training, and Dispensing on Airports, the likelihood and consequence of a major fuel release from the Additional Fuel Tanks Project would be extremely small.

In summary, with implementation of project specific mitigation measures identified in Section 3.9 (MM-HW-1 through MM-HW-4), the proposed project, in combination with cumulative projects, would result in a less than significant impact related to the release of hazardous materials into the environment, or impacts from listed hazardous materials sites, or impacts to adopted emergency response or evacuation plans. However, as discussed in Section 3.9.6.5, regarding impacts associated with whether the proposed project could result in excessive noise for people residing or working in the project area, future airport operations associated with the project would result in significant and unavoidable aircraft noise impacts on areas around the Airport. This impact would be attributable primarily to future growth in passenger demand at the Airport, which is projected to occur with or without the proposed project. Notwithstanding, this significant impact could be considered to be a cumulatively considerable contribution to significant noise impacts within the region. As such, the impact is considered to be ***significant and unavoidable***.

4.5.10 Hydrology and Water Quality

As described in Section 3.10, Hydrology and Water Quality, implementation of the proposed project would include improvements related to the SAN Stormwater Capture and Reuse System and the hydrology and water quality impacts of the project would be less than significant. Relative to cumulative impacts, the project site and surrounding area are situated within a highly urbanized

setting that has been in a developed state for many years. The cumulative projects described above in Sections 4.2 and 4.3 involve redevelopment of previously improved parcels that are mostly paved and are, or were, occupied by urban uses. Redevelopment of those parcels with other urban uses is not expected to result in adverse impacts to the hydrology and water quality of the overall area. In addition, as discussed above in Section 4.5.9 above, the on-airport cumulative projects include the implementation and operation of a new fueling station (i.e., “fuel rack”) to be constructed at the west end of the Airport north of the proposed T2-West Stinger, a new hydrant fueling system consisting of pit(s) at each gate along with a fuel pipeline network, and additional aviation fuel tanks at the existing fuel farm on the north side of the Airport. The implementation and operation of these projects would be subject to strict oversight and due to regulatory and operational safeguards in place, including FAA Advisory Circular 150/5230-4B, Aircraft Fuel Storage, Handling, Training, and Dispensing on Airports, the likelihood and consequences of a major fuel release from either the hydrant fueling system or the new fuel rack would be extremely small. Further, the Additional Fuel Tanks Project would include the construction of containment dike walls that have the capacity to hold contents of the SDIA fuel stores, per National Fire Protection Association 30 requirements. Expansion of the existing containment dike wall system would create adequate containment areas around each of the proposed fuel tanks, which would provide adequate protection against impacts associated with catastrophic failure of one or more tanks.

New development and redevelopment in San Diego are subject to the requirements of the Municipal Separate Storm Sewer Systems [MS4] Permit for the San Diego region issued by the California Regional Water Quality Control Board in 2013 (Order No. R9-2013-0001), to which the County of San Diego, City of San Diego, Port of San Diego, and SDCRAA and 17 other cities in San Diego County are Copermittees. The MS4 Permit and local implementing programs, such as SDCRAA BMP Design Manual noted in Section 3.10 and the City of San Diego Storm Water Standards,⁸ the County of San Diego BMP Design Manual,⁹ and the Port of San Diego BMP Design Manual,¹⁰ all include requirements for Low Impact Development (LID) BMPs that emphasize reduction in stormwater discharge through features such as infiltration, use of permeable surface materials, and harvesting/reuse. The MS4 Permit, which sets forth requirements for the local implementing programs, provides the regulatory basis for avoiding adverse hydrology and water quality impacts from new development and significant redevelopment, as would apply to the cumulative projects above.¹¹ Based on the above, cumulative impacts to hydrology or water quality would be a ***less than significant impact***.

⁸ City of San Diego. Storm Water Standards. October 1, 2018. Available: https://www.sandiego.gov/sites/default/files/storm_water_standards_manual_oct_2018.pdf.

⁹ County of San Diego, Public Works Department. County of San Diego BMP Design Manual For Permanent Site Design, Storm Water Treatment and Hydromodification Management, Storm Water Requirements for Development Applications. February 2016. Available: https://www.sandiegocounty.gov/content/sdc/dpw/watersheds/DevelopmentandConstruction/BMP_Design_Manual.html.

¹⁰ Port of San Diego. BMP Design Manual For Permanent Site Design, Stormwater Treatment and Hydromodification Management. January 2018. Available: <https://pantheonstorage.blob.core.windows.net/environment/january-2018-port-bmp-design-manual-chapters-final.pdf>.

¹¹ California Regional Water Quality Control Board - San Diego Region. NPDES No. CAS0109266. Available: https://www.waterboards.ca.gov/sandiego/water_issues/programs/stormwater/docs/2015-1118_AmendedOrder_R9-2013-0001_COMPLETE.pdf.

4.5.11 Land Use and Planning

Development projects at/adjacent to SDIA in combination with ADP improvements could pose the potential for impacts to land use and planning. The relevant geographic area of analysis for cumulative impacts on land use and planning includes the Airport proper and areas to west (Peninsula Planning Area), the southwest (Shelter Island), south (Harbor Island), southeast (Embarcadero/Downtown-Centre City Planning Area), northeast (Uptown Planning Area), and north (Midway-Pacific Highway Corridor Planning Area) (see Figure 4-1). As discussed in Section 3.11, Land Use and Planning, the proposed project would not conflict with most aspects of land use plans, policies, or regulations related to land use planning (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect. Future airport operations associated with the project would, however, result in significant and unavoidable aircraft noise impacts on areas around the Airport, significant and unavoidable roadway noise impacts southeast of the Airport, and significant and unavoidable traffic impacts in areas close to the Airport. Such impacts would be attributable primarily to future growth in passenger demand at the Airport and in the region, which is projected to occur with or without the proposed project. Notwithstanding, the aforementioned significant impacts could be considered to be a cumulatively considerable contribution to significant noise and traffic impacts within the local planning areas. As such, the impact is considered to be **significant and unavoidable**.

4.5.12 Noise

Section 3.12, Noise, addresses impacts of the proposed project related to aircraft noise, roadway traffic noise, and construction noise. The analysis of aircraft noise presented in that section accounts for existing and future aircraft operations at SDIA through 2050. Aircraft noise impacts to the nearby area are dominated by operations at SDIA. Although aircraft operations also occur at Naval Air Station (NAS) North Island, located south of SDIA, such operations do not overlap with those of SDIA, but rather are separated from, and extend south of, SDIA. The NAS North Island aircraft noise contours presented in the *Air Installations Compatible Use Zones (AICUZ) Update, 2011 Final AICUZ Study Update*¹² show the aircraft noise contours for existing/baseline conditions and for the future prospective AICUZ footprint, projected for Calendar Year 2020, as extending primarily to the south, away from SDIA. There is a small amount of overlap between the northern edge of the prospective (2020) NAS North Island 60 Community Noise Equivalent Level (CNEL) contour and the southern edge of the SDIA 60 CNEL contour, occurring near Harbor Island. The combined (cumulative) noise level of the two 60 CNELs in that overlap area would be approximately 63 CNEL, and there are no noise-sensitive uses within that overlap area.

The analysis of traffic noise impacts accounts for future increases in background traffic that would occur in conjunction with future regional growth. As such, the analysis already accounts for cumulative traffic noise impacts.

¹² Naval Base Coronado, CA. Air Installations Compatible Use Zones (AICUZ) Update, Naval Air Station North Island and Naval Outlying Landing Field Imperial Beach, 2011 Final AICUZ Update. Available: [https://www.cnmc.navy.mil/content/dam/cnmc/cnrsw/Naval%20Base%20Coronado/Documents/2011%20NBC%20AICUZ%20Study%20\(reduced%20size\).pdf](https://www.cnmc.navy.mil/content/dam/cnmc/cnrsw/Naval%20Base%20Coronado/Documents/2011%20NBC%20AICUZ%20Study%20(reduced%20size).pdf).

Relative to the potential for cumulative construction noise impacts, the vast majority of cumulative projects shown in Figure 4-1 are located well away from the project site. Given the separation distances of the projects situated outside of SDIA and their relationship to the noise-sensitive receptors near SDIA, as described in Section 3.12, no significant cumulative construction noise impacts (i.e., noise levels greater than 75 decibels [dB] Equivalent Continuous Noise Level [L_{eq}]) are anticipated to occur relative to those projects. Relative to the potential for cumulative construction noise impacts from the combination of the proposed project and other improvements proposed within SDIA, the greatest potential for a significant impact would be relative to the combination of the proposed project's improvements to Taxiway A/Taxiway B and the Air Cargo Warehouse Facilities and Associated Improvements located approximately 800 feet to the north at its nearest point, as well as the Additional Fuel Tanks Project located approximately 1,100 feet to the north, as shown on Figure 4-1. As indicated in Section 3.12.5.5.2, construction of the Taxiway A/Taxiway B improvements would be within 650 feet of the U.S. Coast Guard Station (considered to be a noise-sensitive use because of its sleeping quarters) at the closest point of construction, which could result in a "worst-case" construction noise level of up to 73.6 dB L_{eq} , based on the very conservative assumption that all construction equipment is operating at the same time. Using that same conservative assumption, the noise level at the U.S. Coast Guard Station that would be associated with the Air Cargo Warehouse Facilities and Associated Improvements would be approximately 65.2 dB L_{eq} and the Additional Fuel Tanks Project would be approximately 63.7 dB L_{eq} , which when combined with 73.6 dB L_{eq} , would equal a cumulative noise level of approximately 74.6 dB L_{eq} , which would be less than significant.

Relative to cumulative impacts associated with the combination of the three types of noise sources – aircraft noise, traffic noise, and construction noise – the most notable potential for such impacts is primarily associated with only the combination of aircraft noise and traffic noise. As noted above, the vast majority of the cumulative projects are located well away from the project site, which avoids the potential for any notable combined construction noise impacts, and the only notable potential for cumulative construction noise impacts relates to the combination of the Taxiway A/Taxiway B improvements and Air Cargo Warehouse Facilities and Associated Improvements and the Additional Fuel Tanks Project, which would impact the U.S. Coast Guard Station, but at a less than significant level. That cumulative construction noise impact is accounted for in the discussion below regarding the addition of project-related aircraft noise and traffic noise.

The evaluation of combined noise levels was considered in terms of the thresholds of significance related to increases in exterior noise levels in noise-sensitive areas; specifically, whether there would be: (1) a 1.5 dB or more increase resulting in noise-sensitive areas being exposed to 65 CNEL or greater, as compared to the existing (2018) baseline condition; or (2) a 3.0 dB or more increase resulting in noise-sensitive areas being exposed to 60 CNEL to less than 65 CNEL, as compared to the existing (2018) baseline condition.

In evaluating the potential for such increases in noise levels, it is useful to understand how noise levels from two sources are added, which is done logarithmically based on the sound energy level of each source, to determine the combined (cumulative) noise level. Relative to whether the combined noise levels from two sources would result in a 1.5 dB increase or a 3 dB increase, the noise levels generated by the sources need to generate generally similar noise levels in order to result in those levels of increase. For example, two noise sources that generate equal sound energy

levels, in terms of dB, will result in a combined, cumulative noise level that is 3 dB higher than the level that would occur from either source individually (i.e., 65 dB + 65 dB = 68 dB). If, on the other hand, the noise levels from two sources are substantially different, say they differ by 10 dB or more, the cumulative noise level is approximately the same as the louder noise source (i.e., 65 dB + 55 dB = 65.4 dB, which rounds to 65 dB). Relative to whether a 1.5 dB increase would occur when combining two noise sources, there would generally need to be a 4 dB increase to result in a 1.5 dB increase in the louder of the two sources (i.e., 65 dB + 61 dB = 66.5 dB).

Section 3.12.4.5.2 summarizes the results of the roadway (traffic) noise modeling completed for the proposed project and includes a description of roadways where there are noise-sensitive uses nearby. Table 4-4 identifies the roadway segments with noise-sensitive uses nearby, the nature of those uses, the existing noise levels in terms of the modeled roadway CNEL levels for existing baseline conditions, the future (2050) roadway noise levels, the approximate CNEL for aircraft noise in 2050 estimated for that area, and the combined future roadway noise and future aircraft noise CNEL.¹³

Table 4-4: Cumulative Roadway and Aircraft Noise

Roadway Segment	Type of Noise-Sensitive Use Nearby	Existing CNEL	2050 Roadway Noise CNEL	2050 Approximate Aircraft Noise CNEL	2050 Combined CNEL	Increase in CNEL Compared to Existing CNEL	Significant Cumulative Impact
Pacific Highway							
Barnett Ave to Washington St	Group Quarters	73.4	74.8	62	75.0	1.6	No
Kettner Boulevard							
Palm St to Laurel St	Residential	67.1	69.8	75	76.1	9.0	Yes
India Street							
Sassafras St to Laurel St	Residential	66.1	69.9	73	74.7	8.6	Yes
Laurel Street							
Pacific Hwy to India St	Residential	64.3	66.8	76	76.5	12.2	Yes
Hawthorn Street							
Pacific Hwy to India St	Residential	66.3	69.2	69	72.1	5.8	Yes
India St to State St	Residential	66.3	69.3	71	73.2	6.9	Yes
Grape Street							
Pacific Highway to India St	Residential	68.9	72.7	69	74.2	5.3	Yes
India St to State St	Residential	69.6	73.7	71	75.6	6.0	Yes
Harbor Drive							
Cell Phone Lot to Laurel St/Solar Turbines	Residential	73.2	74.2	71	75.9	2.7	No

Source: CDM Smith, 2019.

¹³ This approach is considered to represent a conservative (worst-case) analysis of cumulative increases of future noise levels over existing baseline noise levels because the existing CNEL is based on the modeled roadway noise level for existing traffic and does not account for the fact that the actual existing noise level at several locations is dominated by aircraft noise, which is higher than the modeled roadway noise level.

As indicated in Table 4-4, the combined 2050 roadway noise level and 2050 future aircraft noise level would result in more than a 3 dB increase over the existing baseline roadway CNEL, which would be a significant cumulative noise impact along all of the subject roadway segments except Pacific Highway from Barnett Avenue to Washington Street and Harbor Drive from Cell Phone Lot to Laurel Street/Solar Turbines. As described in Section 3.12, Mitigation Measures MM-NOI-1 through MM-NOI-5 are proposed to mitigate aircraft noise impacts; however, it has been concluded that the noise impacts would be significant and unavoidable.

It should be noted that the increases over the existing baseline noise level from 2050 cumulative noise levels shown in Table 4-4 would generally be the same without the proposed project than with the proposed project (i.e., impacts would be similar under the No Project Alternative compared to the proposed project); this is because the future aircraft noise levels are projected to be the same with or without the proposed project and roadway noise levels would generally be similar with or without the proposed project (see Section 3.12). Notwithstanding the above, the cumulative noise impacts would be **significant and unavoidable**, and the proposed project's contribution to such impacts would be considerable.

4.5.13 Public Services

The context for assessing cumulative environmental impacts associated with fire and law enforcement services is based on the jurisdiction providing such services. Fire services are provided by the City of San Diego Fire-Rescue Department (SDFD) and police services are provided by the City of San Diego Police Department (SDPD) and San Diego Harbor Police Department (SDHPD). As discussed in Sections 4.2 and 4.3 and shown in Figure 4-1, there are other past, present, and proposed future projects both on- and off-Airport within the vicinity of the proposed project. These projects represent further improvement in the Airport operations and further development of the surrounding area. These projects are located within the jurisdiction of SDFD and SDPD, and the projects located with the Port of San Diego jurisdiction (i.e., development being considered under the Port Master Plan Update as described in Section 4.2) are also served by the SDHPD. The cumulative projects also include the new Bayside Fire Station at the southeast corner of Pacific Highway and Cedar Street, which opened in June 2018. Many of the projects at SDIA, such as new airport support facilities and taxiway improvements/relocation described in Section 4.3, would not impact the provision of law enforcement and fire protection services. The new Bayside Fire Station improves fire protection services in the project area vicinity and downtown San Diego. However, other new development, such as new residential and hotel uses, occurring in the vicinity has the potential to increase demand for law enforcement and fire protection services.

Cumulative impacts could occur if growth within each service area requires expansion of servicing facilities such as construction of a new fire or police station that have not already been accounted for in the planning process. Fire, police, and emergency services are maintained and expanded through property taxes and collection of fees that grow incrementally as development occurs within a service area. Providing for new equipment, facilities, and staffing is assessed as part of the annual fiscal budget process. As the need is identified and new facilities are planned, environmental review would commence consistent with CEQA to analyze and mitigate any potential physical environmental impacts. It is anticipated that new development would be constructed in compliance with the current California Uniform Fire Code, the SDFD bulletins that supplement the California Uniform Fire Code, and other applicable fire and safety standards.

Traffic increases associated with future growth at the Airport and in the region would result in several intersections, road segments, and freeway segments operating at unacceptable levels, compared to existing baseline conditions. However, California Vehicle Code rules of the road requirements that every other vehicle must yield right-of-way to emergency vehicles sounding a siren,¹⁴ enforcement of code requirements pertaining to emergency vehicle access, as well as the on-going evaluations of growth in each service area discussed above would provide for the maintenance of adequate response times and emergency access.

Based on the City of San Diego's acknowledgement of, and planning for, future growth within San Diego, and the attendant fire and police protection needs, significant cumulative impacts related to substantial physical deterioration of fire stations and law enforcement facilities are not expected to occur. Further, implementation of the proposed project does not involve population growth and construction and operation would occur in compliance with current fire code and safety code requirements.

Therefore, the proposed project, in combination with cumulative projects, would result in a ***less than significant impact*** related to public services, because there would be no substantial cumulative adverse physical impacts associated with the construction of new or physically altered fire and police protection facilities (i.e., fire and police stations), the construction of which could cause significant environmental impacts not already addressed as part of the proposed project, in order to maintain adequate services.

4.5.14 Traffic and Circulation

Cumulative traffic and circulation impacts are incorporated into the analysis provided in Section 3.14, Traffic and Circulation. More specifically, the contributions of the proposed project to cumulative impacts were determined based on a comparison between Future (2024, 2026, 2030, 2035, and 2050) Without Project traffic conditions and Future (2024, 2026, 2030, 2035, and 2050) With Project traffic conditions. The Future Without Project scenarios include traffic associated with future regional growth, which accounts for traffic from cumulative projects. Please see Section 3.14 for additional details regarding the methodology used in the analysis and how it accounts for cumulative traffic and circulation impacts. As indicated in Section 3.14, future cumulative traffic (i.e., Future Without Project) would result in several intersections, roadway segments, and freeway segments operating at unacceptable levels, compared to existing baseline conditions, which would constitute ***significant cumulative traffic impacts***. The addition of project-related construction and operational traffic would result in additional significant impacts. As such, the project would have a ***cumulatively considerable contribution*** to those significant impacts.

4.5.15 Utilities

Cumulative impacts on utilities can result from the combined demand of the proposed project along with the other projects described in Sections 4.2 and 4.3 located within the service area of each utility. The service area of each utility is described below.

¹⁴ California Vehicle Code Section 21806.

Wastewater

The project site is located within the wastewater service area of the City of San Diego Public Utilities Department (PUD) Wastewater Branch. The cumulative projects identified in Sections 4.2. and 4.3 are also located within this service area. Wastewater projections are updated on a regular basis to reflect the latest available information and trends in population growth, per capita wastewater flows, and population-independent flows. Additionally, as discussed in Section 3.15.4, the City has planned wastewater improvements that would increase capacity to treat nearly 340 million gallons per day estimated to be generated by 2050.¹⁵

Given that there is existing capacity at San Diego treatment plants and there are planning efforts underway to ensure future capacity, it is anticipated that sufficient capacity exists at the Point Loma Wastewater Treatment Plant to process wastewater associated with the proposed project. Furthermore, cumulative development will also be required to reduce its wastewater generation by complying with regulations such as the California Green Building Standards Code (CALGreen), to reduce water use through installation of water efficient fixtures. As described in Section 3.15.4, SDCRAA is committed to reducing water consumption, which would also reduce wastewater generation. This goal would be furthered by water conservation strategies implemented as part of the proposed project, which would reduce the amount of wastewater generated. As such, cumulative wastewater impacts would not exceed the capacity of local wastewater infrastructure and impacts be less than significant. Therefore, the proposed project, in combination with cumulative projects, would result in a ***less than significant impact*** related to wastewater.

Potable Water

The project site is located within the City of San Diego PUD's water service area. The cumulative projects identified in Sections 4.2. and 4.3 are also located within this service area. The Water Supply Assessment (WSA) findings for the proposed project (Appendix R-I) substantiate there is sufficient planned water supply to serve the proposed project's future water demands within the PUD's water service area in normal, single-dry year, and multiple-dry year forecasts. As such, the WSA concluded that the projected level of water demand projections for the proposed project is within the regional water resource planning documents of the City of San Diego PUD, the San Diego County Water Authority (SDCWA), and the Metropolitan Water District of Southern California (MWD) to serve the projected demands of the project, in addition to existing and planned future water demands of the PUD. Notwithstanding, the proposed project and new development would be required to comply with required water conservation strategies, such as those identified in CALGreen, to reduce water demands associated with project implementation. As described in Section 3.15.4, SDCRAA is committed to reducing water consumption, and this goal would be furthered by water conservation strategies implemented as part of the proposed project, including stormwater capture for re-use. This would reduce the amount of municipal water used for non-potable purposes. Therefore, cumulative potable water impacts would be less than significant.

¹⁵ City of San Diego. Wastewater Service Area Map webpage. Available: <https://www.sandiego.gov/mwwd/general/servicearea>.

Therefore, the proposed project, in combination with cumulative projects, would result in a ***less than significant impact*** related to potable water.

Solid Waste

The context for assessing cumulative environmental impacts associated with solid waste is San Diego County. The cumulative projects identified in Sections 4.2. and 4.3 are also located within the County and are served by the same regional landfills. The proposed project combined with future development at SDIA and the other development projects described in Sections 4.2 and 4.3 would generate solid waste through demolition/construction and operations that would increase the amount of solid waste generated within the region. Solid waste management planning within San Diego County is addressed through the Countywide Integrated Waste Management Plan (CIWMP). As discussed in Section 3.15, Utilities, counties in California are required to plan for maintaining 15 years of countywide landfill disposal capacity. Based on projected generation rates, which take into account growth trends in population and employment, the County of San Diego has sufficient permitted landfill capacity to accommodate disposal for the next 15 years and beyond (current permitted capacity is estimated to extend through 2052).¹⁶ Specifically, the 15-year disposal average in the County (from 2017 to 2033 [i.e., the horizon year of the required 15-year planning period]) is approximately 3,333,042 tons per year. However, when factoring in a 75 percent reduction of organics disposal to meet the state goals by 2025, the projected disposal by 2032 is 2,358,127 tons annually. The maximum annual allowable permitted capacities for all San Diego County landfills is 6,933,400 tons in 2017, decreasing to approximately 3,415,000 tons beginning in 2030, when the Otay Mesa and Miramar Landfills are estimated to close.¹⁷ The disposal projection for the horizon year is approximately 2,358,127 tons per year (considering the mandated organics reductions), which leaves approximately 1,056,873 tons per year of available capacity (i.e., 31 percent of the permitted disposal capacity would still be available in the planning horizon year).

The proposed project and the other projects identified in Sections 4.2 and 4.3 represent development and redevelopment projects in an existing urbanized area that currently generate solid waste that is disposed of through the County's waste management system, including landfill disposal. Projections of future solid waste generation take in to account future growth within areas of the County, including the City of San Diego, and, as indicated above, the future landfill capacity within the County is more than sufficient to meet the projected disposal demand. Therefore, the proposed project, in combination with cumulative projects, would result in a ***less than significant impact*** related to solid waste.

¹⁶ County of San Diego Department of Public Works. San Diego County Five-Year Review Report of the Countywide Integrated Waste Management Plan. January 25, 2018. Available: https://www.sandiegocounty.gov/content/dam/sdc/dpw/SOLID_WASTE_PLANNING_and_RECYCLING/Files/2.%20Five-YearReview-%20Final.pdf.

¹⁷ County of San Diego Department of Public Works. San Diego County Five-Year Review Report of the Countywide Integrated Waste Management Plan. January 25, 2018. Available: https://www.sandiegocounty.gov/content/dam/sdc/dpw/SOLID_WASTE_PLANNING_and_RECYCLING/Files/2.%20Five-YearReview-%20Final.pdf.

Storm Drain System

The context for assessing cumulative environmental impacts associated with the storm drain system is the proposed project site and immediately adjacent lands within the subwatershed of San Diego Bay and the Navy Boat Channel, because this represents the drainage area that would be influenced by the proposed project. The cumulative projects that are also located within this drainage area include the projects at SDIA listed in Section 4.3, and projects listed in Section 4.2 that are generally north of Hawthorn Street (Intercontinental Hotel, Laurel Pacific Valero, and the Liberty Station hotels). The project site is already developed and essentially fully-paved, and the project would not result in an increase in stormwater runoff at SDIA and no expansion of existing off-site facilities would be necessary to accommodate runoff associated with operation of the proposed project. Further, the proposed project includes the expansion of the capture area of the SAN Stormwater Capture and Reuse System and, thus, there would be a net reduction in the overall volume of stormwater discharged into San Diego Bay. Therefore, the proposed project, in combination with cumulative projects, would result in a ***less than significant impact*** related to the storm drain system.

Energy Demand Conservation

Electricity and natural gas are provided to the project site by San Diego Gas and Electric (SDG&E). The cumulative projects identified in Sections 4.2. and 4.3, are also located within this service area. The geographic scope for cumulative impacts related to energy conservation encompasses the Airport and region. The proposed project, as with other new development, would require energy for construction and operation. Energy is required for virtually every day-to-day activity in the region, be it for transportation, manufacturing, construction, agricultural production, material distribution, or personal conveniences. These ongoing activities and their associated energy requirements are supported in part by various energy providers throughout and beyond the region, including SDG&E, which provides electricity and natural gas service to the project site and surroundings. SDG&E continually assesses projected demand and plans and operates accordingly. Additionally, the California Energy Commission (CEC) is required to constantly assess population growth, electricity demand, and reliability. The CEC uses these assessments and forecasts to develop energy policies that conserve resources, protect the environment, ensure energy reliability, enhance the state's economy, and protect public health and safety.

As discussed in Section 3.15, Utilities, the proposed project would be located within an area that has existing energy and water infrastructure and supplies available to serve the proposed project. Additionally, the proposed project would be implemented in compliance with federal, state, and local regulations and policies reducing energy demand associated with building energy use, water demand, wastewater generation, vehicle fuels, and construction equipment. Additionally, the proposed project would comply with SDIA's commitment to sustainable development by implementing energy and water efficiency features that go beyond the CALGreen requirements, including a target to achieve third-party certification programs for sustainable design and construction (i.e., a minimum certification of Leadership in Energy and Environmental Design

(LEED) Silver¹⁸ for building design and construction and qualification under the Envision Rating System¹⁹ for sustainable infrastructure).

As with the proposed project, other new development at SDIA and the surrounding area would be subject to regulations such as CALGreen and State Energy Conservation Standards contained in Title 24 that would result in a lower increase in cumulative energy demand. In addition, electricity supplied to the project would be required to comply with California's aggressive renewable portfolio standard. Based on the above, no significant cumulative impact related to energy is anticipated to occur. As such, the proposed project would not contribute to wasteful, inefficient, or unnecessary energy use and would not increase reliance on fossil fuels. Therefore, the proposed project, in combination with cumulative projects, would result in a ***less than significant impact*** related to the energy conservation.

¹⁸ Leadership in Energy and Environmental Design (LEED) is a third-party rating system devised by the United States Green Building Council (USGBC) to evaluate the environmental performance of a building and encourage sustainable design.

¹⁹ Envision is the Institute for Sustainable Infrastructure's rating system for infrastructure projects based on their contribution to economic, environmental, and social aspects of sustainability. Credits are offered in the area of quality of life, the natural world, leadership, climate and risk, and resource allocation.