

## 3.17 TRANSPORTATION

This section of the 2024 PEIR describes the existing traffic and transportation networks within the SCAG region, sets forth the regulatory framework that affects transportation, and analyzes the potential impacts of Connect SoCal 2024. In addition, this 2024 PEIR provides regional-scale mitigation measures as well as project-level mitigation measures that can and should be considered and implemented by lead agencies for subsequent, site-specific environmental review to reduce identified impacts as appropriate and feasible. Additional discussion of transportation conformity is provided in Section 3.3, *Air Quality*. The analysis on emergency access is included in Section 3.9, *Hazards and Hazardous Materials*. Additional discussions of vehicle mile traveled (VMT), Senate Bill 375, Scoping Plans, and Senate Bill 743 are provided in Section 3.8, *Greenhouse Gas Emissions*.

### 3.17.1 ENVIRONMENTAL SETTING

Southern California's extensive roadway network facilitates the constant movement of people and goods throughout the area. The region's complex intermodal network facilitates transportation via highways, transit, passenger and freight rail, airports, and seaports. The regional roadway system consists of an interconnected network of interstates, freeways, highways, toll roads, arterial streets, and local streets. This roadway network allows for the operation and movement of private vehicles, commercial vehicles, private and public buses, and heavy-duty trucks. Active transportation modes, such as biking and walking use non-motorized transportation facilities, including bikeways and walkways that often share spaces with roadway facilities. As traffic worsens and pressure to act on climate change mounts, local jurisdictions have placed an emphasis on the importance of the integration of active transportation modes in transportation planning.

The regional public transit system includes local shuttles, municipal and area-wide bus operations, light rail transit operations, regional commuter rail services, and interregional passenger rail service. The freight railroad network includes an extensive system of private railroads and several publicly-owned freight rail lines serving industrial cargo and goods. The airport system consists of commercial, general, and military aviation facilities serving passenger, freight, business, recreational, and defense needs. The region's seaports support substantial international and interregional freight movement and tourist travel. Intermodal terminals, consisting of freight processing facilities, transfer, store, and distribute goods across the region and the globe.

As noted in Chapter 3.0, *Environmental Setting, Impacts, and Mitigation Measures*, of this 2024 PEIR, the discussions presented below regarding the environmental setting for this 2024 PEIR are focused on conditions and corresponding data from 2019, which is the most recent complete year for which transportation-related conditions and associated activity were not affected by the COVID-19 pandemic. Starting in early 2020, vehicular activity, goods movement, air travel, and transit ridership were all drastically reduced on a global scale as result of pandemic-related quarantines, stay-at-home orders, and other restrictions that severely limited the ability of people to physically travel, congregate, and interact. While these pandemic-related restrictions and mobility trends have largely been lifted, overall travel and movement patterns and associated volumes have yet to normalize (and may never revert to pre-pandemic conditions given a number of factors such as the substantial increase in work-from-home employment and modified commuting activity that have been established since 2020). In order to provide a reliable comparison and consistent evaluation of impacts of the Plan, a 2019 baseline condition is utilized in this section. Where appropriate, however, more recent data is provided, and discussion of more recent conditions is presented for context.

## DEFINITIONS

Definitions of terms used in the regulatory framework, characterization of baseline conditions, and impact analysis for transportation follow:

- *California Transportation Plan (CTP)*: This is a statewide, long-range transportation plan to meet future mobility needs and reduce greenhouse gas emissions (Caltrans 2021). The CTP defines performance-based goals, policies, and strategies to achieve the collective vision for California's future, statewide, integrated, multimodal transportation system.
- *Congestion Management Program (CMP)*: This is a state-mandated program enacted by the legislature to address the increasing concern that urban congestion is affecting economic vitality and diminishing quality of life in some communities. The CMP provides the analytical basis for transportation decisions through the State Transportation Improvement Program (STIP).
- *Congestion Management Agency (CMA)*: A CMA is a county-wide body comprised of local elected officials. The CMA administers the CMP to keep traffic levels manageable. In the past, state gas tax revenue had historically been used to fund roads and highways. With the passage of Proposition 111 in the 1990s, state gas tax and directed revenue are provided to fund road, bicycle, pedestrian, and public transit projects in addition to highways to help manage congestion for multi-modal purposes. CMA is charged with coordinating land use, air quality, and transportation planning among the local jurisdictions, including monitoring the levels of congestion on major roads and analyzing the impacts that a proposed development will have on future traffic congestion.
- *Complete Streets*: Planned, designed, operated and maintained for safe, convenient, and comfortable travel and access for users of all ages and abilities, will support people who are walking, bicycling, and using micro-mobility devices.

Complete Streets is a transportation policy and design approach that requires streets to be planned, designed, operated, and maintained to enable safe, convenient, and comfortable travel and access for users of all ages and abilities regardless of their mode of transportation.

- *Goods Movement*: Refers to the transportation of for-sale products from the location of their manufacture or harvest to their final retail destination.
- *Level of Service (LOS)*: In the context of traffic analysis, this is a measure used to relate the quality of traffic service. LOS is used to analyze highways by categorizing traffic flow and assigning quality levels of traffic based on performance measures such as speed and density.
- *Million Annual Passengers (MAP)*: Number of people taking public transit, airline flight, bus, or train calculated expressed in the unit of 100,000 in terms of boarding counts.
- *Peak Hour*: The part of the day during which traffic congestion on roads and crowding on public transport is at its highest.
- *Safety*: Protection of persons and property from unintentional damage or destruction caused by accidental or natural events.
- *Transportation Demand Management (TDM)*: Strategies and actions directed at influencing the mode, frequency, time, route, or length of travel in order to maximize the efficiency and sustainable use of transportation facilities. TDM strategies typically include providing information on travel choices; managing parking, marketing and communications, financial incentives, and disincentives; providing and operating

facilities that make the use of non-solo driving more attractive; and encouraging telework and flexible work strategies.

- *Transportation System Management (TSM)*: Transportation system management refers to a set of strategies that largely aim to reduce greenhouse gas (GHG) emissions by reducing congestion, primarily by improving transportation system capacity and efficiency. TSM strategies may also address a wide range of other externalities associated with driving such as pedestrian/driver safety, efficiency, congestion, travel time, and driver satisfaction. Some TSM strategies are designed to reduce total and systemic congestion and improve system-wide efficiency, while other strategies target particularly problematic areas where improvements could greatly affect congestion, safety, efficiency, and GHG emissions.
- *Vehicle Miles Traveled (VMT)*: The number of VMT provides an indicator of the travel levels of the roadway system by motor vehicles in a given time period. This number is estimated based upon traffic volume counts and roadway length.
- *Vehicle Hours of Delay (VHD)*: The number of VHD provides an indicator of congestion levels of a roadway.

## CIRCULATION SYSTEM

### COMMUTE PATTERNS AND TRAVEL CHARACTERISTICS

The existing transportation network serving the SCAG region supports the movement of people and goods. On a typical weekday in the six-county region, the transportation network supports almost 450 million VMT and over 12 million vehicle hours of travel (VHT). Of this total, over half occur in Los Angeles County (see **Table 3.17-1, Summary of Existing (2019) Daily and Per Capita Vehicle Miles of Travel**, and **Table 3.17-2, Summary of Existing (2019) Daily and Per Capita Vehicle Hours of Travel**).

TABLE 3.17-1 Summary of Existing (2019) Daily and Per Capita Vehicle Miles of Travel

COUNTY	VEHICLE MILES OF TRAVEL (VMT)						PER CAPITA VMT	
	A.M. PEAK PERIOD		P.M. PEAK PERIOD		DAILY		2019 POPULATION	DAILY
	MILES	% <sup>1</sup>	MILES	% <sup>1</sup>	MILES	% <sup>1</sup>	PERSONS	MILES
Imperial	1,195,394	1%	1,813,790	1%	6,962,832	2%	181,000	38.47
Los Angeles	44,066,280	50%	62,556,412	50%	220,265,652	50%	10,046,000	21.93
Orange	15,257,985	17%	21,552,117	17%	76,502,832	17%	3,191,000	23.98
Riverside	11,378,558	13%	16,240,138	13%	59,090,566	13%	2,386,000	24.77
San Bernardino	11,914,484	14%	16,697,557	13%	62,795,419	14%	2,175,000	28.87
Ventura	3,830,296	4%	5,302,749	4%	18,622,869	4%	846,000	22.01
<b>Total</b>	<b>87,642,996</b>	<b>100%</b>	<b>124,162,762</b>	<b>100%</b>	<b>444,240,170</b>	<b>100%</b>	<b>18,827,000</b>	<b>23.60</b>

Source: SCAG Modeling (2023)

Table Note:

1. Percentage of region

TABLE 3.17-2 Summary of Existing (2019) Daily and Percentage Vehicle Hours of Travel

COUNTY	VEHICLE HOURS OF TRAVEL (VHT)						PER CAPITA VHT	
	A.M. PEAK PERIOD		P.M. PEAK PERIOD		DAILY		2019 POPULATION	DAILY
	HOURS	% <sup>1</sup>	HOURS	% <sup>1</sup>	HOURS	% <sup>1</sup>	PERSONS	HOURS
Imperial	23,490	1%	36,970	1%	131,999	1%	181,000	0.73
Los Angeles	1,536,929	57%	2,238,034	57%	6,721,964	55%	10,046,000	0.67
Orange	455,884	17%	658,653	17%	2,072,554	17%	3,191,000	0.65
Riverside	288,835	11%	403,018	10%	1,350,455	11%	2,386,000	0.57
San Bernardino	304,535	11%	426,953	11%	1,448,043	12%	2,175,000	0.67
Ventura	101,906	4%	145,333	4%	459,970	4%	846,000	0.54
<b>Total</b>	<b>2,711,579</b>	<b>100%</b>	<b>3,908,960</b>	<b>100%</b>	<b>12,184,986</b>	<b>100%</b>	<b>18,827,000</b>	<b>0.65</b>

Source: SCAG Modeling (2023)

Table Note:

1. Percentage of region

Much of the existing travel in the SCAG region takes place during periods of congestion, particularly during the morning (6:00 AM to 9:00 AM) and evening peak periods (3:00 PM to 7:00 PM). Congestion can be quantified as the amount of travel that takes place in delay (vehicle hours of delay or VHD) and, alternately, as the percentage of all travel time that occurs in delay (defined as the travel time spent on the highway due to congestion, which is the difference between VHT at free-flow speeds and VHT at congested speeds). Existing travel delays and percent of regional VHT in delay ranges from a low of less than one percent delay in Imperial County on freeways and arterials to 67 percent in Los Angeles County (see Table 3.17-2).

There is variation in average travel distance from home to work, ranging from approximately 15 miles in Imperial County to approximately 21 miles in Riverside and San Bernardino Counties. The difference in average travel time during the peak hours ranges from a low of approximately 18 minutes in the a.m. peak hour in Imperial County to a high of approximately 33 minutes in San Bernardino County (Table 3.17-3). Home-to-work trip duration and distance are both greater for the inland counties of Riverside and San Bernardino, reflecting regional housing and employment distribution patterns (see **Table 3.17-3, Summary of Existing Work Trip Length**).

TABLE 3.17-3 Summary of Existing (2019) Trip Length and Duration

COUNTY	AVERAGE PERSON TRIP LENGTH		AVERAGE HOME-TO-WORK TRIP DURATION (MINUTES)		
	TRIP PURPOSE	AVERAGE PERSON TRIP LENGTH (MILES)	VEHICLE TRIPS (A.M. ONLY)	TRANSIT TRIPS (A.M. ONLY)	WALK/BIKE TRIPS (AM ONLY)
Imperial	Home-Based Work Trips	15.17	17.95	56.36	20.90
	Non-Work Trips	3.79	-	-	-
Los Angeles	Home-Based Work Trips	15.39	29.26	72.72	25.30
	Non-Work Trips	6.13	-	-	-
Orange	Home-Based Work Trips	15.26	23.56	99.81	22.98
	Non-Work Trips	6.09	-	-	-
Riverside	Home-Based Work Trips	21.16	31.89	124.30	22.98
	Non-Work Trips	6.33	-	-	-
San Bernardino	Home-Based Work Trips	21.59	32.92	127.83	22.70
	Non-Work Trips	6.15	-	-	-
Ventura	Home-Based Work Trips	16.56	28.53	121.06	20.98
	Non-Work Trips	5.74	-	-	-
<b>Region</b>	<b>Home-Based Work Trips</b>	<b>16.70</b>	<b>28.77</b>	<b>76.62</b>	<b>24.25</b>
	<b>Non-Work Trips</b>	<b>6.12</b>	<b>-</b>	<b>-</b>	<b>-</b>

Source: SCAG Modeling (2023)

Table Note: Only considers Home to work/business direct trips

The characteristics of home-to-work trip and all daily trips vary widely among counties (see **Table 3.17-4, Existing Travel Mode Split [Percentage of County Total]**). On average, vehicular trips account for approximately 92 percent of home to work/university trips, including 68.7 percent in single occupancy trips, 9.7 percent in two-person carpools, 7.8 percent in three-person carpools, and 5.7 percent in auto passenger trips. When accounting for all daily trips, on average vehicular trips account for approximately 88 percent of all daily trips, including 36.8 percent in single occupancy trips, 12.8 percent in two-person carpools, 9.5 percent in three-person carpools, and 28.5 percent in auto passenger trips. Only 3.2 percent of work trips and 2.4 percent of all trips are made via transit/rail in the region (SCAG 2023b). Of these, the greatest number of travelers is carried by buses, with lesser patronage on Metro Rail, paratransit, commuter rail, and other forms of public transit services. Trips made via public transit account for 3.2 percent of all home-to-work trips in the region and 2.4 percent of all daily trips (Table 3.17-4). Non-motorized trips account for 4.8 percent of all home-to-work trips in the region and 9.9 percent of all daily trips (Table 3.17-4).

In its 2022 Progress Report, California’s Sustainable Communities and Climate Protection Act, the California Air Resources Board (CARB) indicates that VMT and VMT per capita across the State, including in the SCAG region, continues to grow although not as fast as identified in the 2018 Progress Report (CARB 2022). The 2022 Progress Report shows that per capita VMT, while dipping to as low as 10 percent below 2005 levels between 2006 and 2012 (likely reflecting the recession) had grown to over 4 percent above 2005 levels by 2019. More specifically, as noted in the 2022 Progress Report, the latest Scoping Plan scenario modeling shows that in 2019, Californians drove an average of 24.6 miles daily; and that this figure needs to be cut to no more than 18.4 miles by 2030 and to 17.2 miles by 2045 to achieve California’s climate goals. In 2019, the four largest MPO regions, including the

SCAG region, together account for 81 percent of the statewide light-duty VMT and 82 percent of population. While the passenger vehicle and light-duty trucks per capita VMT and the associated GHG emissions relative to 2005 in the State continued to rise, the 2022 Progress Report showed that the regional passenger vehicle and light-duty trucks per capita VMT and GHG emissions in the SCAG region were both trending in the right directions (decreasing trends) (see Section 3.8, *Greenhouse Gas Emissions*).

TABLE 3.17-4 Existing (2019) Travel Mode Split (Percentage of County Total)

COUNTY	PERSON TRIP TYPE	DRIVE ALONE	2-PERSON CARPOOL	3-PERSON CARPOOL	AUTO PASSENGER TRIP	TRANSIT	NON-MOTORIZED	TOTAL
Imperial	Home Based Work	61.8%	10.9%	10.7%	4.8%	0.1%	11.7%	100.0%
	All Daily Trips	30.4%	13.1%	10.2%	27.9%	1.1%	17.3%	100.0%
Los Angeles	Home Based Work	65.9%	9.7%	7.5%	6.2%	5.3%	5.4%	100.0%
	All Daily Trips	36.1%	12.8%	9.3%	27.8%	3.5%	10.5%	100.0%
Orange	Home Based Work	72.9%	9.4%	7.7%	5.3%	0.7%	4.0%	100.0%
	All Daily Trips	39.5%	12.6%	9.3%	28.3%	1.2%	9.1%	100.0%
Riverside	Home Based Work	72.5%	10.2%	8.6%	4.8%	0.4%	3.5%	100.0%
	All Daily Trips	35.5%	12.9%	10.3%	31.3%	1.3%	8.7%	100.0%
San Bernardino	Home Based Work	71.8%	10.5%	8.8%	5.0%	0.6%	3.3%	100.0%
	All Daily Trips	37.3%	13.5%	10.1%	28.9%	1.4%	8.8%	100.0%
Ventura	Home Based Work	71.8%	8.8%	7.2%	4.5%	0.6%	7.1%	100.0%
	All Daily Trips	37.2%	12.3%	9.4%	28.4%	1.1%	11.6%	100.0%
<b>Total</b>	<b>Home Based Work</b>	<b>68.7%</b>	<b>9.7%</b>	<b>7.8%</b>	<b>5.7%</b>	<b>3.2%</b>	<b>4.8%</b>	<b>100.0%</b>
	<b>All Daily Trips</b>	<b>36.8%</b>	<b>12.8%</b>	<b>9.5%</b>	<b>28.5%</b>	<b>2.4%</b>	<b>9.9%</b>	<b>100.0%</b>

Source: SCAG Modeling (2023)

Table Note: Numbers in each column may not add up precisely due to rounding.

## REGIONAL FREEWAY, HIGHWAY, AND ARTERIAL SYSTEM

The regional freeway, highway, and arterial system is the primary means of person and freight movement for the region (**Table 3.17-5, Existing Regional Freeway Route Miles and Lane Miles by County [2019]**). This system provides for direct auto, bus and truck access to employment, services and goods. The network of freeways, interstates, and highways serves as the backbone of the system, offering high-capacity, limited-access travel and serves as the primary heavy-duty truck route system. Deferred maintenance on roadways within the SCAG region has contributed significantly to the poor condition of many roadways and many need costly repairs to improve security and efficiency. The Plan will focus on preserving the existing transportation network, including preservation of roads, highways, bridges, railways, bicycle and pedestrian facilities, and transit infrastructure, with the intent of maintaining mobility in a cost-efficiency manner without increasing capacity.

TABLE 3.17-5 Existing Regional Freeway Route Miles and Lane Miles by County (2019)

COUNTY	FREEWAY ROUTE MILES	FREEWAY LANE MILES
Imperial	95	379
Los Angeles	657	4,683
Orange	227	1,658
Riverside	321	1,834
San Bernardino	471	2,558
Ventura	94	538
<b>Total</b>	<b>1,865</b>	<b>11,651</b>

Source: SCAG Modeling (2023)

Table Note: Freeway Lane Miles by County are inclusive of Toll and High-Occupancy Toll (HOT) Lane Miles

## ARTERIAL STREET SYSTEM

The local street system provides access for local businesses and residents. Principal arterials account for about 44 percent of the arterial (principal and minor) network (**Table 3.17-6, Existing Regional Arterial Lane Miles by County [2019]**) and carry a high percentage of total traffic. In many cases arterials serve as alternate parallel routes to congested freeway corridors. Peak period congestion on the arterial street system occurs generally in the vicinity of activity centers, at bottleneck intersections and near many freeway interchanges.

TABLE 3.17-6 Existing Regional Arterial Lane Miles by County (2019)

COUNTY	ARTERIALS	LANE MILES
Imperial	Principal	364
	Minor	517
Los Angeles	Principal	8,383
	Minor	8,931
Orange	Principal	3,582
	Minor	2,777
Riverside	Principal	1,032
	Minor	3,088
San Bernardino	Principal	1,725
	Minor	3,892
Ventura	Principal	811
	Minor	992
<b>SCAG Total</b>	<b>Principal</b>	<b>15,898</b>
	<b>Minor</b>	<b>20,196</b>

Source: SCAG Modeling (2023)

## REGIONAL TOLL, HIGH-OCCUPANCY TOLL (HOT), AND HIGH-OCCUPANCY VEHICLE (HOV) SYSTEM AND PARK AND RIDE SYSTEM

The regional toll, HOT, and HOV system consists of exclusive lanes on freeways and arterials, as well as busways and exclusive rights-of-way dedicated to the use of toll-paying vehicles, high-occupancy toll (HOT) vehicles, and high-occupancy vehicles (HOVs). As described in **Table 3.17-7, Existing Regional Toll, High-Occupancy Toll, and High-Occupancy Vehicle Lane Miles by County (2019)**, the toll, HOT, and HOV system includes lanes on freeways, ramps and freeway-to-freeway connectors. The regional toll, HOT, and HOV system is designed to maximize the person-carrying capacity of the freeway system through the charging of tolls for selective highway segments and encouragement of shared-ride travel modes. HOT and HOV lanes operate at a minimum occupancy threshold of either two or three persons, with and without tolls, respectively. Many include on-line and off-line park and ride facilities, and several HOV lanes are full “transitways” including on-line and off-line stations for buses to board passengers.

TABLE 3.17-7 Existing Regional Toll, High-Occupancy Toll, and High-Occupancy Vehicle Lane Miles by County (2019)

COUNTY	TOLL LANE MILES	HOT LANE MILES	HOV LANE MILES
Imperial	-	-	0
Los Angeles	-	84	474
Orange	295	42	252
Riverside	-	35	80
San Bernardino	-	-	113
Ventura	-	-	8
<b>Total</b>	<b>295</b>	<b>161</b>	<b>927</b>

Source: SCAG Modeling (2023).

Park and ride facilities are generally located at the urban fringe along heavily traveled freeway and transit corridors and support shared-ride trips, either by transit or by carpool or vanpool. Most rail transit stations have park and ride lots nearby. Park and ride lots in the SCAG region include: 161 in Los Angeles County, 31 in Orange County, 33 in Riverside County, 27 in San Bernardino County, and 22 in Ventura County (SoCal511 2023).

## PUBLIC TRANSIT

In Southern California public transit service is comprised of local and express buses, transitways, Rapid Bus, bus rapid transit (BRT), urban rail, including subway and light rail principally centered in the core of Los Angeles County, commuter rail that spans five counties and shuttles/circulators that feed all transportation modes and activity centers. See **Table 3.17-8, SCAG Region Annual Fixed Route Transit Ridership (2005-2019)** for an annual breakdown of transit ridership in the SCAG region. Transit service is provided by approximately 67 separate public agencies. Twelve of these agencies provide 91 percent of the existing public bus transit service. Local service is supplemented by municipal lines and shuttle services while additional regional service is offered via private bus companies.

TABLE 3.17-8 SCAG Region Annual Fixed Route Transit Ridership (2005–2019)

	2005	2008	2010	2012	2015	2016	2018	2019
<b>Total Trips</b>								
Metro Rail	74,242,912	86,707,131	95,596,698	101,516,533	106,974,667	108,089,770	110,139,493	102,729,642
Commuter Rail	10,693,327	12,680,973	7,398,000	13,155,790	10,693,000	13,758,419	14,190,870	12,824,059
Bus	611,308,450	627,639,691	548,728,000	587,830,836	609,795,000	525,376,865	622,286,000	504,872,015
<b>Total</b>	<b>696,244,689</b>	<b>727,027,795</b>	<b>617,928,000</b>	<b>702,503,159</b>	<b>694,731,000</b>	<b>647,225,054</b>	<b>721,674,000</b>	<b>620,455,716</b>
<b>Passenger Miles</b>								
Metro Rail	442,916,123	524,813,417	564,179,659	597,916,365	634,484,952	651,537,856	705,117,231	670,421,169
Commuter Rail	359,938,222	436,565,493	274,625,402	433,650,956	359,938,222	425,150,283	438,553,704	416,394,626
Bus	2,375,502,229	2,461,654,000	2,206,840,397	2,487,359,821	2,375,502,229	2,206,425,695	2,461,654,000	2,953,664,315
<b>Total</b>	<b>3,178,356,574</b>	<b>3,423,032,910</b>	<b>3,045,645,458</b>	<b>3,518,927,142</b>	<b>3,369,925,403</b>	<b>3,283,113,834</b>	<b>3,463,369,151</b>	<b>4,040,480,110</b>

Sources: National Transit Database 2019, 2021; SCAG Modeling (2023)

Many people depend on reliable transit service to participate in the economic, cultural, and social benefits of Southern California, and transit use is growing in the SCAG region (**Table 3.17-9, Statistics for Major Transit Operators for 2019**). According to data reported to the National Transit Database (NTD), transit agencies in the SCAG region experienced approximately 621 million annual boardings and invested \$3.4 billion in operations and maintenance (O&M) in 2019. These services were operated by over 100 agencies, involving a wide variety of bus and rail transit modes.

TABLE 3.17-9 Statistics for Major Transit Operators for 2019

COUNTY	LARGEST TRANSIT OPERATOR	AVERAGE WEEKDAY BOARDINGS	ANNUAL BOARDINGS	ANNUAL VEHICLE REVENUE MILES (VRM)	PASSENGER FARES AS A % OF OPERATION EXPENSES*
<b>Fixed Bus Route Service</b>					
Imperial	ICTC	2,795	783,339	1,269,986	13.2
Los Angeles	Metro	878,862	277,308,845	73,091,103	14.8
Orange	OCTA	131,720	40,743,654	40,333,507	18.9
Riverside	RTA	28,853	8,697,652	13,376,950	13.1
San Bernardino	Omnitrans	35,583	10,863,530	11,425,096	13.9
Ventura	Gold Coast Transit	11,456	3,642,130	2,940,270	13.1
<b>Metro Rail</b>					
Los Angeles	Metro	295,889	93,171,898	24,631,442	12.1
<b>Regional Commuter Rail</b>					
Various	SCRRA (Metrolink)	45,786	12,824,059	13,582,288	33.8

Sources: National Transit Database 2021; Metro 2019.

Although transit/rail ridership has improved over the past several years, it is still significantly less than it was prior to the COVID-19 pandemic and its past ridership peak around 2007 before the Great Recession (SCAG 2023b). Prior to the pandemic, there over 600 million annual transit/rail boardings (see Table 3.17-8). Overall, the region’s bus ridership levels are currently 23 percent below what they were pre-pandemic. For Los Angeles Metro, bus ridership has recovered more than rail ridership. For example, when comparing December 2019 to December 2022, bus ridership was down 21 percent and rail ridership was down 43 percent. The issue with rail ridership recovery extends to Metrolink whose ridership is currently 61 percent lower than it was pre-pandemic. Pre-pandemic, Metrolink was carrying about 45,000 boardings per day. It is now carrying about 19,000 boardings per day. Prior to the pandemic, the Pacific Surfliner’s ridership had grown steadily over the years to nearly 3 million annual passengers. Ridership is slowly coming back and was about half that figure for Fiscal Year 2021-22. Though some transit/rail operators are optimistic that higher gas prices and worsening traffic congestion may motivate ridership, driver shortages present an immediate challenge, and many remain uncertain of what the longer-term future normal may look like, particularly if remote working remains a norm for discretionary riders who tend to take rail.

## METRO RAIL SYSTEM

Existing urban rail lines (Metro Rail) are located in Los Angeles County and are operated by Metro. They include five light rail lines and two subway lines. The Metro A Line from Long Beach to Downtown Los Angeles, the Metro C Line from Redondo Beach to Norwalk, the Metro E Line from Downtown Los Angeles to Santa Monica, the Metro

K Line from West Adams to Westchester, and the Metro B Line subway from Union Station to North Hollywood. The Metro D Line subway follows the B Line from Union Station to Wilshire and Vermont but branches off to Western Avenue, and the Metro L Line that runs from East Los Angeles (Atlantic station) to Azusa via Union Station (shown in Map 2-3, Existing Transit Network [2019], in Chapter 2, *Project Description*, of this 2024 PEIR). The Metro Rail system is operated seven days a week. A system total of 203.8 route miles serves a total of 100 stations (Metro 2023). In 2019, ridership on the Metro Rail system was approximately 296,000 boardings every weekday in 2019 (Metro 2019).

## COMMUTER RAIL AND INTERCITY PASSENGER RAIL

Commuter rail service is operated by the Southern California Regional Rail Authority (SCRRA). In October of 1992, the SCRRA began initial operation of the Metrolink commuter rail system on three lines. Service on the initial system was greatly expanded after the 1994 Northridge earthquake. Currently SCRRA operates seven routes including five from Downtown Los Angeles to Ventura, Lancaster, San Bernardino, Riverside, and Oceanside, from San Bernardino to Oceanside, and from Riverside via Fullerton or City of Industry to Downtown Los Angeles. In 2019, the system operated 195 trains on weekdays, 48 on Saturdays, and 44 on Sundays to 62 stations on 826.8 route miles. Average 2019 weekday ridership was 45,786 passengers (SCRRA 2019).

Amtrak provides significant regional and interregional service on the 351-mile Los Angeles–San Diego–San Luis Obispo (LOSSAN) Corridor (also known as Amtrak’s Pacific Surfliner corridor) operating 13 daily round-trip services between San Diego and Los Angeles, and five between Santa Barbara and San Diego (**Map 3.17-1, Amtrak Railways**). In Spring 2023, due in part to unusually high rainfall since late 2022, a portion of the railroad tracks located along the Pacific coast in the City of San Clemente that serve Amtrak and Metrolink trains was obstructed by landslide debris forcing the closure of this segment of track for rail service. To maintain service between San Juan Capistrano and Oceanside, both Metrolink and Amtrak offered connecting bus service in lieu of passenger train service along the affected segment. As of July 2023, train service has been restored along the affected track segment (SCRRA 2023). Note that a good portion of the region’s rail system, especially the LOSSAN Corridor, runs along the coast on sandstone bluffs that could be significantly affected by erosion from heavy rains as well as sea level rise. Additionally, Amtrak operates four interstate routes within the region (Coast Starlight, Sunset Limited, Southwest Chief and Texas Eagle) that on average have one daily trip (Amtrak 2023).

## SHUTTLES AND DEMAND-RESPONSIVE SERVICES

One component of the region’s public transit system consists of publicly operated or funded demand-response taxis and dial-a-ride services; some open to the general public, others limited to elderly and disabled use. It also includes locally operated or funded shuttle buses (e.g., Los Angeles DASH, Pasadena ARTS, Glendale Beeline, Cerritos on Wheels, El Monte Transit, Riverside Orange Blossom, etc.). Access Paratransit, the largest provider of transportation services for the disabled in the region, operates in the vicinity of fixed-route bus and rail lines in Los Angeles County and extends into portions of the surrounding counties of San Bernardino, Orange and Ventura. These systems serve as local shuttles, internal circulators, connectors to other public transit, or as shoppers’ shuttles. Service on these systems is usually limited to a prescribed geographic area (Access Services 2023).

## AUTONOMOUS VEHICLE PASSENGER SERVICE PROGRAMS

On August 10, 2023, the California Public Utilities Commission (CPUC) approved Resolutions granting additional operating authority for Cruise LLC and Waymo LLC to conduct commercial passenger service using driverless vehicles in San Francisco (CPUC 2023a). The approval includes the ability for both companies to charge fares for

rides at any time of day. The requirements for the Resolutions were established in a CPUC Decision adopted in 2020 (see discussion in Regulatory Framework below). This Decision mandates that autonomous vehicle (AV) companies submit an Advice Letter to enter the market as a passenger carrier using driverless vehicles or to make significant alterations to their current driverless passenger service, particularly those affecting passenger safety measures. The CPUC evaluated the Cruise and Waymo Advice Letters to ensure they met the licensing requirements set forth in the Decision, including passenger safety measures. Prior to the August 2023 approval, both companies operated in San Francisco and other areas with specified limitations:

- Cruise was authorized to offer fared passenger service in limited areas of San Francisco from 10 p.m. to 6 a.m. without a safety driver present, fared passenger service throughout San Francisco at any time with a safety driver present, and non-fared passenger service throughout San Francisco at any time without a safety driver present.
- Waymo was authorized to offer fared passenger service throughout San Francisco at any time with a safety driver present and non-fared passenger service throughout San Francisco at any time without a safety driver present. Waymo is also authorized to offer non-fared passenger service in parts of Los Angeles and in and around Mountain View with or without a safety driver present.

Additionally, both Cruise and Waymo were issued an Autonomous Vehicle Deployment Program Permit from the California Department of Motor Vehicles (DMV). This DMV permit is a prerequisite for AV deployment and is distinct from the CPUC's permit, which is an additional requirement for companies that provide transportation services to the public using AVs. However, on October 24, 2023 the DMV notified Cruise that it is suspending Cruise's autonomous vehicle deployment and driverless testing permits, effective immediately. The DMV provided Cruise with the steps needed to apply to reinstate its suspended permits, which the DMV will not approve until the company has fulfilled the requirements to the DMV's satisfaction. This decision does not impact the company's permit for testing with a safety driver and does not affect Waymo's permit to operate its program (DMV 2023). Participants in the CPUC's AV programs must also maintain the relevant DMV AV permit in good standing. Applicants to the Driverless Pilot Program and the Driverless Phase I Deployment Program are required to submit Passenger Safety Plans that outline their plans to protect passenger safety.

While this emerging technology does not currently represent an established transportation option in the SCAG region, further development and implementation of this technology could affect future mobility trends, particularly in urban areas, as additional programs become available.

## **ACTIVE TRANSPORTATION AND NON-MOTORIZED TRANSPORT**

The California Active Transportation Program (ATP) was created to ensure all active modes of transportation, such as biking and walking, was accounted to meet the development of active transportation plans in disadvantaged communities as well as the implementation of non-infrastructure projects (i.e., education, enforcement activities). The use of bicycle as a means of transportation has several appealing aspects for an increasing share of travelers.

### **BICYCLE AND PEDESTRIAN FACILITIES**

Biking and walking primarily constitute non-motorized transportation. Non-motorized transportation plays a bigger role in the densely-populated, mixed-land-use areas of the region. Bicycling has positive air quality, economic, and health impacts, and can reduce automobile-related congestion and energy use. Similar to bicycle use, walking can also reduce auto emissions of both criteria pollutants and greenhouse gases from auto trips. Health in communities improve when there are options to increase physical outcome of activities, lower body

weight, lower rates of traffic injuries, lower air pollution, and improve mobility for nondrivers. Currently, 66.4 percent of all walking trips are less than half a mile, and 89.3 percent of walking trips are less than a mile. The average bicycle trip is 2.1 miles (the majority of bicycle trips are discretionary). Walking trips made up two percent of all commute trips and 11.7 percent of all trips for the SCAG region. Bicycles make up 0.8 percent of all trips and half a percent of commute trips for the SCAG region (SCAG 2023).

The region's bikeways encourage non-motorized travel, serve as recreational facilities, and provide inexpensive, environmentally friendly transportation opportunities. Some of the strategies to encourage active transportation currently being considered are focused on addressing concerns related to equity and public health, refining models to account for recent changes in shared mobility, improving first-last mile infrastructure, and improving compact community development through targeted Priority Development Areas (PDAs). The bikeways are also designated to provide for allowable use and to encourage active use. Class I bikeways are separate shared-use paths also used by pedestrians, Class II bikeways are striped lanes in streets, and Class III bikeways are signed routes. There are approximately 9,000 bikeway miles in the region, with the majority in Los Angeles County, followed by Riverside and Orange County. Bike rack, locker, and station programs are ongoing in a number of cities and transit operators. In addition, transit operators are integrating bicycle transportation with transit via bus bike racks, bike-on-train programs and bicycle lockers at transit centers. **Map 3.17-2, Existing (2019) and Proposed Regional Bikeways (2050)**, shows the existing bikeways in the SCAG region.

Pedestrian access at and near public transit, in most major commercial areas, and many residential areas is facilitated by sidewalks, a number of pedestrian malls, and in some cases local jogging and pedestrian trails or paths.

## MICRO-TRANSIT

Micro-transit is more flexible than traditional bus service in that it either utilizes dynamic routing, smaller vehicles or on-demand service that allows greater efficiency and convenience. Some micro-transit services exist in Southern California, but it can and must expand to meet riders' shifting needs and expectations. While accommodations should be made for those who do not possess smartphones or other technology to hail a ride or research a route, most transit riders could benefit from micro-transit.

Los Angeles Metro and Orange County Transportation Authority have partnered with private companies to pilot micro-transit services in their respective counties. These are projects that could change the way people ride transit, giving riders more options.

## MICRO-MOBILITY

Micro-mobility strategies provide shared technology infrastructure and regulation frameworks to ensure that new technologies (e.g., app-based e-scooters and e-bikes) can be used safely and responsibly. These strategies range from incentives for the purchase of e-bikes, to the distribution of private micro-mobility devices that help ensure access for low-income communities. While it is expected that many of these devices will be provided through the private sector, they will still use public streets and will likely increase demand for separated facilities that are safe for all ages and abilities. Local cities will likely be tasked with the regulation of these devices and will likely need to manage the locations where parking is allowed and where they can be ridden.

## GOODS MOVEMENT

Goods movement generally refers to the movement of raw, semi-finished, and finished materials and products used by businesses and residents across the transportation system. These goods move in myriad ways and through complex systems, often using multiple modes of transportation (e.g., ships, trucks, trains, planes, etc.). Products can be produced within the U.S. or another country, and make their way to a business, retail store, or directly to consumers versus traditional purchases by consumers at physical retail outlets. The efficient movement of these goods are critical to maintain a strong economy and ensure improvements in the quality of life of regional residents.

Goods movement supports industries and activities that provide jobs, tax revenue, and resources that bolster innovation, creativity, and access to local and world markets through trade. This movement depends directly on the infrastructure that comprises the transportation network such as highways, rail lines, ports, and networks of warehousing and other distribution facilities. Maintaining and improving existing infrastructure, and expanding infrastructure capacity where appropriate, is key to ensuring the competitiveness of a growing economy. However, goods movement also has negative impacts and externalities. Growing trade and increased volumes of goods moving across the transportation system have contributed to greater congestion, safety concerns, harmful emissions of dangerous pollutants, wear-and-tear on roadways and impacts on local neighborhoods. As the Metropolitan Planning Organization (MPO) for the region, SCAG has adopted a vision for the region's goods movement system.

Federal law (23 U.S.C. Sections 134–135) mandates that MPOs encourage and promote the safe and efficient management, operation, and development of surface transportation systems that will serve the mobility needs of people and freight and foster economic growth and development within and between States and urbanized areas. Specifically, MPOs should consider projects and strategies that will increase the accessibility and mobility of people and for freight and enhance the integration and connectivity of the transportation system, across and between modes, for people and freight.

At the state level, MPOS are required to perform regional transportation planning to prepare and provide for the region's mobility in a fiscally and environmentally responsible manner, consistent with the needs, preferences, and sensibilities of the community. This is consistent with California Government Code 65041.1 which identifies state planning priorities, which are intended to promote equity, strengthen the economy, protect the environment, and promote public health and safety in the state, including in urban, suburban, and rural communities.

Wholesale and retail trade, transportation, and manufacturing support over approximately 6 million jobs in the SCAG region according to statistics provided by the State's Employment Development Department (CA EDD 2023).

## HEAVY-DUTY TRUCKS

Map 2-5, Existing Regional Goods Movement System, in Chapter 2, *Project Description*, displays the regional goods movement system. One of the key components of the region's goods movement system is the fleet of heavy-duty trucks, defined as cargo-carrying vehicles with a gross weight rating in excess of 8,500 pounds. Trucks provide a vital link in the distribution of all types of goods between the region's ports (sea and air), railroads, warehouses, factories, farms, construction sites and stores. The size and weight of heavy-duty trucks gives them unique operating characteristics; that is, they accelerate and decelerate more slowly than lighter vehicles and require more road space to maneuver. Dedicated truck lanes currently exist at two major freeway interchanges: the junction of

Interstate 5 (I-5) with the I-210 and State Route 14 (SR-14) and at the junction of the I-405 with the I-110. In addition, truck climbing lanes are located on northbound I-5 in northern Los Angeles County.

The trucking industry, including common carrier, private carrier, contract carrier, drayage and owner-operator services, handles both line-haul and pick-up and delivery. The industry uses the public highway system for over-the-road and local service. However, it is also served by a considerable infrastructure of its own. This infrastructure includes truck terminals, warehousing, consolidation and trans-loading facilities, freight forwarders, truck stops and maintenance facilities. These various facilities are especially prevalent in the South Bay and Gateway Cities areas, including Wilmington and Carson and extending generally between Los Angeles International Airport (LAX) and the San Pedro Bay Ports, along the I-710 Corridor north to Vernon, Commerce, and Downtown Los Angeles, east through the San Gabriel Valley to Industry, Pomona, and Ontario and then to the Inland Empire in Fontana and Rialto as well as in Glendale and Burbank. Specialized facilities for trucking that provide air cargo ground transport are located around regional airport facilities, notably LAX and LA/Ontario International Airport.

## RAILROADS

The SCAG region is served by two main line commercial freight railroads—the Burlington Northern/Santa Fe Railway Co. (BNSF) and the Union Pacific Railroad (UP). These railroads link Southern California with other United States regions, Mexico, and Canada either directly or via their connections with other railroads. They also provide freight rail service within California. In 2017, approximately 162.3 million tons of cargo either originated or terminated on railroads throughout California; in 2021 (a year potentially still experiencing pandemic affects) 164.6 million tons of cargo was moved by rail (Association of American Railroads 2021).

The SCAG region is also served by three short line or switching railroads:

- The Pacific Harbor Line (formerly the Harbor Belt Railroad), which handles all rail coordination involving the Ports of Los Angeles and Long Beach, including dispatching and local switching in the harbor area;
- Los Angeles Junction Railway Company, owned by BNSF, which provides switching service in the Vernon area for both the BNSF and UP;
- The Ventura County Railroad, owned by Rail America, Inc., which serves the Port of Hueneme and connects with the UP in Oxnard.

These railroads perform specific local functions and serve as feeder lines to the trunk line railroads for moving goods to and from Southern California.

The two main line railroads also maintain and serve major facilities in the SCAG region. Intermodal facilities in Commerce (BNSF-Hobart), East Los Angeles (UP), San Bernardino (BNSF), and Carson near the San Pedro Bay Ports (UP-ICTF), the Los Angeles Transportation Center (UP-LATC), and the UP-City of Industry yards serve on-dock rail capacity at the Ports of Los Angeles (UP/BNSF) and Long Beach (UP/BNSF).

All major rail freight corridors in the region have some degree of grade separation, but most still have a substantial number of at-grade crossings on major streets with high volumes of vehicular traffic. These crossings cause both safety and reliability problems for the railroads and for those in motor vehicles at the affected crossings. Trespassing on railroad rights of way by pedestrians is another safety issue affecting both freight and commuter railroads.

## REGIONAL AVIATION SYSTEM

The SCAG region supports the nation's largest regional airport system in terms of number of airports and aircraft operations, operating in a very complex airspace environment. The SCAG region contains eight commercial airports with scheduled passenger service, seven government/military airfields, and over 30 reliever and general aviation airports. The existing active commercial service airports handle the majority of passenger air traffic (see Map 2-6, Airports in the SCAG Region, in Chapter 2, *Project Description*):

- Los Angeles International Airport (LAX)
- Ontario International Airport (ONT)
- John Wayne/Orange County Airport (SNA)
- Hollywood Burbank Airport (BUR)
- Imperial County Airport (limited commercial service) (IPL)
- Long Beach Airport (LGB)
- Palm Springs International Airport (PSP)
- San Bernardino International (SBD)

Airport passenger, cargo, and operations data including forecasts are developed and provided by the airports. In all, approximately 116.5 million annual passengers (MAP) were served in the region in 2019, an overall 32-percent increase since 2000. The level of regional aviation demand forecasts related to MAP has generally been decreasing, with approximately 165.3 MAP by 2035 in the 2008 RTP, 145.9 MAP by 2035 in the 2012 RTP/SCS, 136.2 MAP by 2040 in the 2016 RTP/SCS, and 197.1 MAP by 2045 in the 2020 RTP/SCS (SCAG 2020, 2023a). In 2021, Los Angeles International Airport (LAX) led the largest share of air passengers with approximately 70 percent, followed by John Wayne Airport at 11 percent, Hollywood Burbank Airport at 6 percent, and Ontario International Airport at 7 percent (SCAG 2023a). The SCAG region is forecast to have 182.4 MAP by 2050, according to the passenger forecasts provided to SCAG by the airports. In 2019, the SCAG region was one of the most active and fastest growing regions for air passenger traffic in the United States, second only to the New York/New Jersey region for air passenger traffic. Moreover, the growth rate of 4.65 percent for the SCAG region from 2014 to 2019 was second only to the Bay Area. LAX accounts for the largest proportion of passenger volume, cargo, and annual operations. A brief discussion of the location, major access routes, and facilities at eight major airports is provided below.

### HOLLYWOOD BURBANK/BOB HOPE AIRPORT (BUR)

Located in the San Fernando Valley northwest of downtown Burbank, the Hollywood Burbank Airport (also known as Bob Hope Airport) is a publicly owned airport operated by the Burbank-Glendale-Pasadena Airport Authority. Major vehicular access is provided by I-5, Hollywood Way, San Fernando Road, and Vanowen Street. Burbank Airport is currently in the project planning process for a new, relocated terminal, which would enable faster processing while maintaining existing capacity. Burbank Airport has dedicated transit and rail facilities for passengers coming to and from the airport and is the only airport in the SCAG region with a direct rail connection to Downtown Los Angeles via Amtrak and Metrolink. Burbank Airport served 5.9 MAP in 2019, a 53-percent increase over 2015 (SCAG 2023). In 2022 (a year potentially still experiencing pandemic effects), Burbank Airport averaged 386 aircraft operations per day, including 42 percent commercial and 20 percent transient general aviation.

### IMPERIAL COUNTY AIRPORT (IPL)

Imperial County Airport is located in the City of Imperial, approximately 12 miles north of the California-Mexico border. The airport provides limited scheduled air service and serves the general aviation needs of the surrounding communities. It is part of the Essential Air Service (EAS) program through the US Department of Transportation, providing residents of Imperial County a connection to the national aviation system by subsidizing air service to

eligible small community airports. Only one scheduled passenger airline operates out of IPL, carrying passengers to LAX or BUR. IPL averages 39 aircraft operations per day, including 57 percent military and 17 percent general aviation. IPL served 10,756 passengers in 2019, down from a peak of approximately 30,000 passengers in 2001.

### **LONG BEACH AIRPORT/DAUGHERTY FIELD (LGB)**

Long Beach Airport is located approximately four miles northeast of downtown Long Beach. Built in 1941, the Long Beach Airport terminal is a Cultural Historic Landmark. In 2017, a new concourse was opened, and a new ground transportation center is currently being constructed. The arrival of low-cost carrier JetBlue in 2001 led to a rapid increase in air traffic and solidified the airport as an alternative to LAX for east coast destinations. The airport primarily serves general aviation aircraft. Passenger activity at LGB was at approximately 3 million annual passengers (MAP) per year from 2010 until 2019. In 2018, passenger traffic hit 3.9 MAP. Although passenger activity dipped to 1.04 MAP in 2020 due to the COVID-19 pandemic, as of 2022, LGB passenger activity was back to 3.24 MAP. As for cargo, from 2010 to 2019, LGB averaged approximately 24,000 tons of air cargo movement a year. However, in the early 2000s, from 2000 to 2005, LGB averaged approximately 55,000 tons of cargo per year. Finally, the COVID-19 pandemic impacted LGB cargo, with air cargo activity going down to 15,712 tons in 2020 and remaining at 14,384 tons as of 2022.

### **LOS ANGELES INTERNATIONAL AIRPORT (LAX)**

Located 18 miles southwest of Downtown Los Angeles, LAX is the publicly owned primary airport serving the Greater Los Angeles Area. As the largest airport in the region and the fourth busiest in the world for passenger traffic, LAX plays a critical role in the movement of people and cargo throughout the region. When factoring out connecting flights, LAX is the busiest origin and destination airport in the world for passenger traffic. LAX is also the 13th busiest cargo airport in the world by tonnage. LAX is currently undergoing a major renovation known as the Landside Access Modernization Program, which will include an elevated Automated People Mover; two Intermodal Transportation Facilities with drop-off areas; a Consolidated Rental Car Facility; and a comprehensive series of roadway improvements. In addition, Metro's Crenshaw/LAX Line is set to reach the LAX/Metro Transit Center in 2024, providing a light rail connection from the Automated People Mover to destinations throughout South Los Angeles, ultimately connecting to the Expo and Green Lines. LAX averages 1,548 aircraft operations per day, including 92 percent commercial aviation. Passenger traffic at LAX has steadily increased since the 2008 Recession, from 59 MAP in 2010 to 88.1 MAP in 2019; in 2022, passenger traffic at LAX was at 65.9 MAP, reflecting the lingering effects of the COVID-19 pandemic on air travel. LAX accommodates approximately 69 percent of the air passenger travel in the SCAG region.

### **ONTARIO INTERNATIONAL AIRPORT (ONT)**

Ontario International Airport is located in the city of Ontario in San Bernardino County. It is accessed primarily via I-10 and SR-60. Southwest Airlines is the largest carrier operating at the airport, and ONT is also a major cargo hub for UPS, due to its long runways and relatively limited noise restrictions. In recent years, passenger traffic at ONT reached as high as 5.6 MAP in 2019 just prior to the COVID-19 pandemic. Despite falling to 2.5 MAP in 2020, ONT has rebounded to 5.7 MAP in 2022, which is well below the 2007 peak of 7.2 MAP. As of 2022, Ontario Airport averages 282 aircraft operations per day, including 71 percent commercial and 12 percent air taxi.

### **PALM SPRINGS INTERNATIONAL AIRPORT (PSP)**

Palm Springs International Airport is located in the desert resort city of Palm Springs in the Coachella Valley of Riverside County. The airport primarily caters to seasonal leisure travelers visiting during the winter. PSP averages 169 aircraft operations per day, including 48 percent commercial and 28 percent transient general aviation. Despite a significant decrease of 54 percent from 2.7 MAP in 2019 to 1.25 MAP in 2020 due to the COVID-19 pandemic, PSP recovered quickly. In 2021, PSP accommodated 2.1 MAP, which was a 68 percent increase from the previous year. As of 2022, PSP was at 2.98 MAP, the highest passenger demand for PSP in the 21<sup>st</sup> century.

### **JOHN WAYNE AIRPORT (SNA)**

John Wayne Airport is owned and operated by the County of Orange and is not located in an incorporated city. However, it is surrounded by the cities of Santa Ana, Irvine, Newport Beach, and Costa Mesa and accessible by the I-405 and SR-73 freeways. SNA is 503 acres with 20 gates for commercial airlines and two commuter terminals, and general aviation outnumbers commercial operations. Strict noise regulations impact when flights can fly in and out of John Wayne Airport. Commercial departures between 10 PM and 7 AM (8 AM on Sundays) and arrivals between 11:00 PM and 7 AM (8 AM on Sundays) are prohibited. Additionally, special takeoff procedures for most aircraft require a steep climb followed by an abrupt power reduction at approximately 500 feet for quiet passage over Newport Beach. From 2010 to 2019, it averaged 9.7 MAP per year. Furthermore, passenger traffic at the airport has been more resilient to exogenous shocks than the other airports in the area. Air travel demand at SNA recovered relatively quickly after 9/11 and the Great Recession. Although passenger demand decreased 64 percent from 10.66 MAP in 2019 to 3.8 MAP in 2020, as of 2022, SNA was at 11.4 MAP. SNA in 2022 averages 834 operations per day, including 33 percent commercial, 32 percent local general aviation, and 26 percent transient general aviation.

### **SAN BERNARDINO INTERNATIONAL AIRPORT (SBD)**

Formerly known as the Norton Air Force Base, San Bernardino International Airport (SBD) is located two miles southeast of downtown San Bernardino and six miles northwest of downtown Redlands in San Bernardino, California. Norton Air Force Base closed in 1989. SBD has two passenger terminals: one terminal is for domestic travel and the other is for international travel. In August 2022, Breeze Airways became the first commercial airline to operate scheduled passenger flights out of SBD. Currently, there are no flights out of the SBD international terminal. And SBD has an average of 134 aircraft operations per day. Although SBD only moved approximately 3,466 air passengers in 2019, that number is anticipated to increase significantly with the recently added scheduled commercial passenger flights by Breeze Airways (1.81 MAP is forecast in 2050). In addition to the domestic and international terminals, which can accommodate scheduled commercial passenger services, SBD also has the fixed-base operator Luxivair executive terminal for corporate and general aviation customers. It should be noted that since SBD only began offering commercial passenger service in late 2022 and current operations are relatively limited, this airport is considered to have a minimal effect on the regional transit system under existing conditions.

## **MARITIME PORTS**

Southern California is served by three major deep-water seaports. These ports—Hueneme, Long Beach, and Los Angeles—handle Asia–North America trade and are served by the two major railroads and numerous trucking companies in Southern California. The Port of Hueneme, with its recent expansion, ranks as one of the premier automobile and agricultural product-handling facilities in California. The Ports of Long Beach and Los Angeles are full-service ports with facilities for containers, autos and various bulk cargoes. With an extensive landside

transportation network, the three ports moved approximately 350 million metric tons of cargo in 2019 (Port of Los Angeles 2020, Port of Long Beach 2023, Port of Hueneme 2019).

In particular, the San Pedro Bay Ports (Long Beach and Los Angeles) dominate the container trade in the Americas by shipping and receiving nearly 17 million 20-foot Equivalent Units (TEUs) of containers in 2019 (Port of Los Angeles 2020, Port of Long Beach 2023). Together these two ports rank third in the world, behind Rotterdam and Hong Kong, as the busiest maritime ports.

## TRANSPORTATION HAZARDS

Based on average accident rates provided by Caltrans, transportation-related fatalities in 2019 occurred at an overall rate of 1.06 fatalities per 100 million vehicle miles traveled, taking into account the varying accident rates on different facility types (freeway, arterials) and travel modes (bus transit, rail transit) (California Office of Traffic Safety 2023).

## SAFETY, SECURITY, AND EMERGENCY ACCESS

Southern California is home to significant natural disasters, including earthquakes, wildfires, flooding, and mudslides (discussed in Section 3.7, *Geology and Soils*, and Section 3.20, *Wildfire*). Although natural disasters, such as earthquakes and hurricanes, have produced significant regional casualties and property damage, none had the serious disruption to national travel and the national economy as the September 11, 2001, terrorist attacks. The 9/11 attacks created a new awareness of the vulnerabilities of transportation fleets and facilities. As concern about the threat of terrorism and consequences of natural disasters has grown, government (at all levels) has taken new measures to secure the welfare of its citizens. Transportation and transit agencies throughout the United States are taking increasing steps to protect their facilities against the threats of crime, terrorist activity, and natural disasters.

A large-scale evacuation would be difficult in the SCAG region. The region already has severe traffic congestion and mobility issues. The region encompasses 38,000 square miles with a diverse geography, ranging from dense urban areas to mountain ranges to vast deserts. The interdependency of the jurisdictions and organizations makes regional cooperation and coordination essential to security and emergency preparedness. Typically, no single agency is responsible for transportation security. At the local level, especially within transit agencies, safety may be handled within one office. However, it is far less likely that the security of a surface transportation mode is managed by one entity and that this entity is even controlled by the transportation organization. For example, highways and transit networks traverse multiple police jurisdictions, local fire departments generally fill the incident command role after terrorist events, regional command and control centers respond to both natural and intentional disasters, and federal agencies intervene as needed and based on specific guidelines such as the crossing of state boundaries.

The complexity of the SCAG region, with a range of potential terrorism targets, presents significant challenges in coordinating and implementing effective homeland security programs. The unexpected and complex nature of these natural and human-caused incidents require extensive coordination, collaboration and flexibility among agencies and organizations involved in planning, mitigation, response, and recovery.

As described above, the SCAG region has an extensive transportation system, with more than 73,000 lane miles of freeways, highways, and arterials and more than 9,000 miles of bikeways. As of 2019, the region had 15.9 million licensed drivers and 12.7 million registered vehicles (SCAG 2021). On average, 1,600 people are killed and 140,000

are injured (with more than 7,000 seriously injured) in traffic collisions in the region annually. Therefore, safeguarding the Southern California transportation system to minimize accidents on-road for vehicles and pedestrians is an important focus of the region.

The Transportation Research Board has classified emergency events that affect transportation agencies into several categories (**Table 3.17-10, Transportation Security Vulnerabilities**).

TABLE 3.17-10 Transportation Security Vulnerabilities

CATEGORY	NUMBER/QUANTITY WITHIN SYSTEM
<b>Roadways and Freeway</b>	
Freeway Lane Miles (excluding carpool)	11,195 miles
Carpool Lane Miles	927 miles
Road Lane Miles	Over 73,000 miles
<b>Public Transit</b>	
Buses	4,887 vehicles
Metro Rail	106 miles and 102 stations
Metrolink	538 miles and 66 stations
<b>Aviation/Ports</b>	
Commercial/General Aviation Airports	54
Regional Airport Activity Levels	95.2 MAP to 200 nonstop destinations
Long Beach/Los Angeles rank among world container ports	9th
Share of United States Maritime Trade	30 percent

Source: SCAG Modeling (2023); Metrolink Fact Sheet; SCAG Regional Guide 2021; Port of Los Angeles 2020.

## RAIL AND MASS TRANSIT

As summarized in Table 3.17-10 the regional transit system includes the following:

- 115 miles of heavy and light rail
- 885 miles of commuter rail (including 538 miles of Metrolink rail)
- 33,485 miles of bus routes (including local bus, rapid bus, and bus rapid transit routes)
- Over 5,000 miles of bikeways
- Over 73,000 total lane miles of roadways
- 2,302 miles of express bus lanes

The dispersed nature and the daily volume of passengers using public transportation services, which include intercity passenger rail, commuter rail, subway systems, and bus transportation, make it an attractive target for terrorists and criminals. The numbers of customers using public transportation every day creates ongoing challenges for enhancing security within transit environments. Plans have been implemented to provide for basic protection. In the early 1990s, the California Public Utilities Commission required that transit agencies operating

rail systems prepare a comprehensive System Safety Program Plan (SSPP) that also included a security component. Since 2004, all transit agencies are required to include a security and emergency management plan, which details how the agency would coordinate with first responder (law enforcement and fire) agencies, their respective County Office of Emergency Services and the Statewide Standardized Emergency Management System (SSEMS).

## INTERNATIONAL BORDER CROSSINGS

Within the SCAG region, there are three international ports of entry along the Mexico–Imperial County border: two at Calexico (Calexico and Calexico-East); and one at Andrade (near Yuma, Arizona). Traffic from these ports enters California on the I-8 corridor. U.S. Customs and the Border Protection Agency within the Department of Homeland Security (DHS) are charged with the management and control of the official ports of entry. Security planning includes local emergency services, as well as the CHP.

Caltrans District 11 has prepared the 2021 California–Baja California Border Master Plan (Caltrans 2021a), which is a binational comprehensive approach to coordinate planning and delivery of international land Ports of Entry (POEs) and transportation infrastructure projects serving the POEs in the region. The initial Border Master Plan was completed in 2008, and later updated in 2014 with the participation of government agencies from both sides of the international border. The 2021 update reflects a more innovative and sustainable approach to address the transportation needs at the border region. Security was a major consideration in the development of the Border Master Plan.

## SECURITY AT SEAPORTS

Security at the ports is the joint responsibility of the U.S. Coast Guard, the U.S. Customs and Border Protection Agency, federal and State Homeland Security offices, Port police agencies, Harbor Patrols and emergency service agencies. The U.S. Coast Guard leads the local Area Maritime Security Commission, which coordinates activities and resources for all port stakeholders.

The POLA has a dedicated police force, the Los Angeles Port Police, to patrol the area within the jurisdiction of the Port of Los Angeles (Port of Los Angeles 2023). The Port Police enforce federal, state, and local public safety statutes, as well as environmental and maritime safety regulations, in order to maintain the free flow of commerce and produce a safe, secure environment that promotes uninterrupted Port operations. In addition, the Port Police partner with other law enforcement agencies, such as the Los Angeles Police Department, CHP, and Customs and Border Protection in the Cargo Theft Interdiction Program (CTIP), which investigates cargo theft, and the High Intensity Drug Trafficking Area, which targets drug trafficking at the Ports of Los Angeles and Long Beach (Port of Los Angeles 2023). Furthermore, per the Maritime Transportation Security Act of 2002, the Port of Los Angeles works with the Coast Guard to develop security plans for facilities at the port.

Similar to the Port of Los Angeles, security at the Port of Long Beach entails physical security enhancements, police patrols, coordination with federal, State, and local jurisdictions to develop security plans for the port area and investigate suspicious incidents and obtaining federal funding to pay for these enhancements (Port of Long Beach 2023). As with the Port of Los Angeles, the Port of Long Beach works with the Coast Guard to develop security plans for facilities at the port. In contrast to the Port of Los Angeles, however, the Port of Long Beach does not have its own dedicated police force. Instead, the Long Beach Police Department is responsible for patrolling the port area (Long Beach Police Department 2023). In doing so, the Port reimburses the Long Beach Police and Fire Departments for their port-related activities and expenses. The Port also funds its own Harbor Patrol to supplement law enforcement work conducted by other agencies such as the Coast Guard.

In addition to the above, several programs are in place to effectively monitor and screen seaport cargo. They include the following.

### INVESTIGATIONS

The federal Container Security Initiative (CSI) directs Customs agents, working with host governments, to inspect and examine all cargo containers deemed high-risk before they are loaded on U.S.-bound vessels. The CSI contains four core elements: identifying high-risk containers, pre-screening containers before they reach U.S. ports of entry, using technology to prescreen high-risk containers and developing and using smart and secure containers.

### INSPECTIONS

The 24-hour rule requires manifest information on cargo containers to be delivered to U.S. Customs 24 hours before the container is loaded onto a vessel in a foreign port. Customs has the right to stop any container from being loaded, for any reason, while the container is still overseas.

### PARTNERSHIPS

Most of the largest U.S. importers and their trading partners participate in the Customs-Trade Partnership Against Terrorism (C-TPAT), a public-private partnership designed to improve security standards throughout the cargo supply chain.

### TECHNOLOGY

U.S. Customs uses X-ray, gamma ray and radiation-detection devices to screen incoming cargo at U.S. ports.

## 3.17.2 REGULATORY FRAMEWORK

This regulatory framework focuses on the federal, state, and local statutes and regulations where the primary objective is improvement of transportation systems, standards, and travel demand measures. However, there are other regulations that are focused on increased energy efficiency and reduction of greenhouse gas emissions, that if accomplished would be expected to contribute to improvement in traffic levels. Those regulations have been addressed respectively in Section 3.6, *Energy*, and Section 3.8, *Greenhouse Gases*, of this 2024 PEIR.

### FEDERAL

#### FEDERAL CLEAN AIR ACT (CAA) TRANSPORTATION CONFORMITY

The federal CAA requirements for transportation conformity are discussed in detail in Section 3.3, *Air Quality*, of this 2024 PEIR.

#### METROPOLITAN TRANSPORTATION PLANNING

The provisions of Title 23 USC Section 134 *et seq.* provides direct authority for Metropolitan Planning Organizations (MPOs) such as SCAG to act as a regional transportation planning organization with direct responsibility for carrying out the Regional Transportation Plan (RTP). SCAG is tasked with carrying out the transportation planning process and adopting long-range transportation plans. Collaborating with state and public transportation operators, SCAG undertakes a performance-driven, outcome-based approach to planning for the six county

regions. SCAG must prepare a transportation plan to be updated every four years, including identification of transportation facilities and factors for each mode of non-motorized transport to major roadways, transit, multimodal and intermodal facilities, and connectors that should function as an integrated system serving regional transportation functions. The scope of transportation planning process is to provide consideration of projects and strategies that will achieve the following objectives (23 U.S.C. Section 134(g)(3)(A)):

- Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency;
- Increase the safety of the transportation system for motorized and non-motorized users;
- Increase the security of the transportation system for motorized and non-motorized users;
- Increase the accessibility and mobility of people and for freight;
- Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns; Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight;
- Promote efficient system management and operation;
- Emphasize the preservation of the existing transportation system;
- Improve the resiliency of and reliability of the transportation system, and reduce stormwater impacts of surface transportation; and
- Enhance travel and tourism

### **INFRASTRUCTURE INVESTMENT AND JOBS ACT (IIJA)**

On November 15, 2021, President Biden signed the Infrastructure Investment and Jobs Act (IIJA) (Public Law 117-58, also known as the “Bipartisan Infrastructure Law”) into law. The Bipartisan Infrastructure Law is the largest long-term investment in our infrastructure and economy in US history. It provides \$550 billion over fiscal years 2022 through 2026 in new Federal investment in infrastructure, including in roads, bridges, and mass transit, water infrastructure, resilience, and broadband.

### **FIXING AMERICA’S SURFACE TRANSPORTATION ACT (FAST)**

The Fixing America’s Surface Transportation (FAST) Act (Pub. L. No. 114-94), enacted in 2015, builds on the changes to federal transportation planning law made by MAP-21. It was the first long-term surface transportation authorization enacted in a decade that provides long-term funding certainty for surface transportation (FHWA 2018). The FAST Act authorized \$305 billion over fiscal years 2016 through 2020 for highway improvements, highway and motor vehicle safety, public transportation, motor carrier safety, hazardous materials safety, rail, and research, technology, and statistics programs. The FAST Act maintains the focus on safety, keeps intact the established structure of the various highway-related programs, continues efforts to streamline project delivery, and provides a dedicated source of federal dollars for freight projects.

Under the FAST Act and its predecessors, MPOs such as SCAG must prepare long-range transportation plans and update them every four years if they are in areas designated as “nonattainment” or “maintenance” for federal air quality standards. Per federal requirements, long-range transportation plans must (Public Law 114–94):

- Be developed through an open and inclusive process, that ensures public input; seeks out and considers the needs of those traditionally underserved by existing transportation systems;
- Consults with resource agencies to ensure potential problems are discovered early in the planning process;
- Be developed for a period of not less than 20 years into the future; long-range transportation plans must reflect the most recent assumptions for population, travel, land use, congestion, employment and economic activity;
- Have a financially-constrained element, transportation revenue assumptions must be reasonable, and the long range financial estimate must take into account construction-related inflation costs;
- Include a description of the performance measures and performance targets used in assessing the performance of the transportation system;
- Include a system performance report evaluating the condition and performance of the system with respect to performance targets adopted by the state that detail progress over time;
- Include multiple scenarios for consideration and evaluation relative to the state performance targets as well as locally-developed measures;
- Conform to the applicable federal air quality plan, called the State Implementation Plan, for ozone and other pollutants for which an area is not in attainment; and
- Consider planning factors and strategies in the local context.

### **CONGESTION MANAGEMENT PROCESS (23 USC SECTION 134(K))**

A congestion management process (CMP) is a systematic and regionally-accepted approach for managing congestion that provides accurate, up-to-date information on transportation system performance and assesses alternative strategies for congestion management that meet state and local needs. A CMP is required in metropolitan areas with a population exceeding 200,000, known as Transportation Management Areas (TMAs). Federal requirements state that in all TMAs the CMP must be developed and implemented as an integrated part of the metropolitan transportation planning process (23 U.S.C. Section 134).

### **FEDERAL HIGHWAY ADMINISTRATION CONGESTION MANAGEMENT PROCESS**

23 CFR Section 450.320 requires transportation management agencies like SCAG to address congestion management through a process that provides for safe and effective integrated management and operation of the multimodal transportation system, based on a cooperatively developed and implemented metropolitan-wide strategy, of new and existing transportation facilities through the use of travel demand reduction and operational management strategies. Federal guidance recommends use of performance measures that includes vehicle-to-capacity ratios and level of service on a selected network of significant routes in a region.

## STATE

### REGIONAL TRANSPORTATION PLAN REQUIREMENTS

MPOs are required to prepare RTPs that also meet state requirements. Pursuant to Government Code Sections 65080 et seq. each MPO must prepare and adopt a regional transportation plan directed at achieving a coordinated and balanced regional transportation system, including, but not limited to, mass transportation, highway, railroad, maritime, bicycle, pedestrian, goods movement, and aviation facilities and services. The plan must be action-oriented and pragmatic, considering both the short-term and long-term future, and shall present clear, concise policy guidance to local and state officials.

Under California Code Section 14522, the California Transportation Commission (CTC) is authorized to prepare guidelines to assist in the preparation of RTPs. The CTC's RTP guidelines identify state and federal requirements for the development of RTPs, and methods to achieve these requirements. The guidelines suggest that projections used in the development of an RTP should be based upon available data (such as from the Bureau of the Census), use acceptable forecasting methodologies, and be consistent with the Department of Finance baseline projections for the region. The guidelines further state that the RTP should identify and discuss any differences between the agency projections and those of the Department of Finance. The RTP guidelines include provisions for complying with Senate Bill 375 (see below), as well as guidelines for regional travel demand modeling (CTC 2017).

### SUSTAINABLE COMMUNITIES AND CLIMATE PROTECTION ACT (SENATE BILL 375)

A detailed discussion of the Sustainable Communities and Climate Protection Act of 2008 (Senate Bill [SB] 375, Chapter 728, Statutes of 2008), including subsequent updates such as the 2022 Scoping Plan, is provided in Section 3.8, *Greenhouse Gas Emissions*.

As noted in Section 3.8, *Greenhouse Gas Emissions*, of this 2024 PEIR, the revised (2018) SB 375 GHG emissions reduction targets for all the state's MPOs would result in a statewide reduction of 19 percent (compared to 18 percent from the prior SCS achievement). However, a 25 percent reduction is needed to meet the transportation-sector GHG emissions reduction goals of the 2017 Scoping Plan. The difference between the 19 percent reduction resulting from CARB's updated SB 375 targets and the 25 percent necessary reduction is referred to in other various CARB documents as the "gap." In order to reduce the "gap" a transformation in the State's transportation system is necessary. As discussed in the 2022 Scoping Plan, transforming the transportation sector goes beyond phasing out combustion technology and producing cleaner fuels. CARB explains that managing total demand for transportation energy by reducing the miles people need to drive on a daily basis is also critical as the state aims for a sustainable transportation sector in a carbon neutral economy. Though GHG emissions are declining due to cleaner vehicles and fuels, rising VMT can offset the effective benefits of adopted regulations.

Even under full implementation of Executive Order N-79-20 and CARB's Advanced Clean Cars II Regulations (see Section 3.8 for further discussion), with 100 percent ZEV sales in the light-duty vehicle sector by 2035, a significant portion of passenger vehicles will still rely on internal combustion engine technology. Accordingly, VMT reductions will play an indispensable role in reducing overall transportation energy demand and achieving the state's climate, air quality, and equity goals. After a significant pandemic-induced reduction in VMT during 2020, passenger VMT has steadily climbed back up and is now closing in on pre-pandemic levels. Driving alone with no passengers remains the primary mode of travel in California, amounting to 75 percent of the mode share for daily commute trips. Conversely, the transit industry, which was significantly impacted during the lockdown months, and has struggled to recover; ridership only averages two-thirds of pre-pandemic levels, and service levels also lag behind.

Sustained VMT reductions have been difficult to achieve for much of the past decade, in large part due to entrenched transportation, land use, and housing policies and practices. Specifically, historic decision-making favoring single-occupancy vehicle travel has shaped development patterns and transportation policy, generating further growth in driving (and making transit, biking and walking less viable alternatives). These policies have also reinforced long-standing racial and economic injustices that leave people with little choice but to spend significant time and money commuting long distances, placing a disproportionate burden on low-income Californians, who pay the highest proportion of their wages on housing and transportation. While CARB has included VMT reduction targets and strategies in the Scoping Plan and appendices, these targets are not regulatory requirements, but would inform future planning processes. CARB is not setting regulatory limits on VMT in the 2022 Scoping Plan; the authority to reduce VMT largely lies with state, regional, and local transportation, land use, and housing agencies, along with the Legislature and its budgeting choices.

Appendix E (Sustainable and Equitable Communities) of the 2022 Scoping Plan elaborates on reasons for reducing VMT and identifies a series of policies that, if implemented by various responsible authorities, could help to achieve the recommended VMT reduction trajectory (and related mode share increases for transit and active transportation). These policies aim to advance four strategic objectives:

1. Align current and future funding for transportation infrastructure with the state's climate goals, preventing new state-funded projects from inducing significant VMT growth and supporting an ambitious expansion of transit service and other multimodal alternatives.
2. Move funding for transportation beyond the gasoline and diesel taxes and implement fuel-agnostic pricing strategies that accomplish more productive uses of the roadway network and generate revenues to further improve transit and other multimodal alternatives.
3. Deploy autonomous vehicles, ride-hailing services, and other new mobility options toward high passenger-occupancy and low VMT-impact service models that complement transit and ensure equitable access for priority populations.
4. Encourage future housing production and multi-use development in infill locations and other areas in ways that make future trip origins and destinations closer together and create more viable environments for transit, walking, and biking.

The 2022 Scoping Plan also includes the following strategies for achieving success with regard to VMT:

- Achieve a per capita VMT reduction of at least 25 percent below 2019 levels by 2030 and 30 percent below 2019 levels by 2045.<sup>1</sup>
- Reimagine new roadway projects that decrease VMT in a way that meets community needs and reduces the need to drive.

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<sup>1</sup> While the per capita VMT reductions from the 2022 Scoping Plan are not regulatory targets or requirements, they should inform future policy and planning discussions. SCAG has expressed concern regarding the documentation and support for CARB's 2022 Scoping Plan VMT reduction targets and that these targets may not be wholly achievable through SCS strategies. As acknowledged by CARB's SB 150 report, achieving VMT reductions in California is extremely difficult. The 2022 Scoping Plan relies on many of the same or similar strategies already included in the SCS, and it is unclear whether implementation of the suggested strategies in Appendix E of the Scoping Plan would be sufficient to reach the VMT and GHG reduction targets in the 2022 Scoping Plan. See SCAG's June 24, 2022 letter to CARB re: Draft 2022 Climate Change Scoping Plan. See <https://www.arb.ca.gov/lists/com-attach/4427-scopingplan2022-AXICZwZmVGBVDANg.pdf>.

- Invest in making public transit a viable alternative to driving by increasing affordability, reliability, coverage, service frequency, and consumer experience.
- Implement equitable roadway pricing strategies based on local context and need, reallocating revenues to improve transit, bicycling, and other sustainable transportation choices.
- Expand and complete planned networks of high-quality active transportation infrastructure.
- Channel the deployment of autonomous vehicles, ride-hailing services, and other new mobility options toward high passenger-occupancy and low VMT-impact service models that complement transit and ensure equitable access for priority populations.
- Streamline access to public transportation through programs such as the California Integrated Travel Project.
- Ensure alignment of land use, housing, transportation, and conservation planning in adopted regional plans, such as RTP/SCSs, regional housing needs assessments (RHNA), and local plans (e.g., general plans, zoning, and local transportation plans), and develop tools to support implementation of these plans.
- Accelerate infill development and housing production at all affordability levels in transportation-efficient places, with a focus on housing for lower-income residents.

### SENATE BILL 743

SB 743 (Steinberg) was signed into law by Governor Jerry Brown on September 27, 2013, and encourages development of mixed-use, transit-oriented infill projects by: (1) establishing new CEQA exemptions for transit-oriented developments located in Transit Priority Areas (TPAs) that are consistent with an adopted Specific Plan; (2) eliminating the requirement to evaluate aesthetic and parking impacts in those targeted development areas; and (3) directing the OPR to develop an alternative metric to evaluate transportation-related impacts under CEQA.

SB 743 exempts from CEQA, a residential, employment center, or mixed-use development project, including any subdivision, or any zoning, change that meets all of the following criteria:

- The project is proposed within a transit priority area.
- The project is undertaken to implement and is consistent with a specific plan for which an environmental impact report has been certified.
- The project is consistent with the general use designation, density, building intensity, and applicable policies specified for the project area in either a sustainable communities strategy or an alternative planning strategy accepted by the State Air Resources Board (Cal. Pub. Res. Code Section 21155.4).

Furthermore, “[a]esthetic and parking impacts of a residential, mixed-use residential, or employment center project on an infill site within a transit priority area shall not be considered significant impacts on the environment.” (Cal. Pub. Res. Code Section 21099(d)). However, the exemption for aesthetic impacts does not include impacts to historic or cultural resources. Local governments retain their ability to regulate a project’s transportation, aesthetics, and parking impacts outside of the CEQA process pursuant to local design review ordinances or other discretionary powers.

A TPA is an area that is located within one-half mile of an existing or planned major transit stop. A “major transit stop” refers to a site containing an existing rail transit station or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods.

To qualify as a TPA, a planned major transit stop needs to be scheduled for completion within the planning horizon included in the adopted FTIP or RTP.

For infill development, including transit-oriented development (TODs), SB 743 provides a rationale for the development of a new metric to evaluate CEQA transportation impacts. Prior to SB 743, CEQA transportation impacts were primarily assessed (at least at the project level) through “Level of Service” (LOS) and other congestion or delay-based analyses, which focused exclusively on motor vehicle delay. This often penalizes infill and active transportation projects. SB 743 establishes that the new transportation impact analysis methodology should appropriately balance the needs of congestion management with statewide goals related to transit-oriented mixed-use infill development, promotion of public health through active transportation, and reduction of GHG emissions. These principles complement the goals and policies of the Plan outlined in Chapter 2, *Project Description*, of this 2024 PEIR.

SB 743 directed OPR to identify appropriate criteria for the evaluation of transportation impacts. OPR selected VMT as the preferred transportation impact metric for statewide application. SB 743 also established that aesthetic and parking effects of a residential, mixed-use residential, or employment center projects on an infill site within a TPA are not significant impacts on the environment. The revised CEQA Guidelines that implement SB 743 became effective on December 28, 2018, and indicate that VMT is the basis for evaluation of transportation impacts (CEQA Guidelines Section 15064.3). Vehicle LOS and similar measures related to delay are not identified as appropriate metrics for determining the significance of transportation impacts under CEQA, although they may still be appropriate for evaluation of projects as part of the planning process.

CEQA Guidelines section 15064.3(c) indicates that each jurisdiction throughout the state has until July 1, 2020, this requirement to adopt VMT as the metric for evaluation of transportation impacts shall apply statewide, but that until that date, lead agencies may elect to use VMT and/or LOS to analyze transportation impacts (although CEQA has already been revised to indicate VMT as the appropriate metric for evaluation of transportation impacts). It is important to note that SB 743 is not intended to require the inclusion of heavy-duty truck trips, utility vehicles, or other trips from non-passenger vehicles or light-duty truck in the VMT analysis.

The following state guidance has been produced:

- Technical Advisory on Evaluating Transportation Impacts in CEQA (OPR 2018b);
- The 2017 and 2022 Scoping Plan-Identified VMT Reductions and Relationship to State Climate Goals (CARB 2019; CARB 2022);
- Caltrans 2020-2024 Strategic Plan (Caltrans 2021b); and
- Caltrans Interim Local Development Intergovernmental Review Safety Review Practitioners Guidance (Caltrans 2020).

With respect to identifying what represents an appropriate threshold of significance for VMT impacts, the California Air Resources Board (CARB) published the *2017 Scoping Plan-Identified VMT Reductions and Relationship to State Climate Goals* (CARB 2019) which included *non-binding* technical information on what level of statewide VMT reduction, in the judgment of CARB staff, would promote achievement of statewide GHG emission reduction targets. CARB asserted at that time that the then-adopted SCSs throughout the state “would achieve in aggregate, a nearly 18 percent reduction in statewide per capita on-road light-duty transportation-related GHG emissions relative to 2005 by 2035, if those SCSs were successfully implemented.” The 2019 CARB Report was based on modeling that incorporated cleaner technologies and fuels (CTF) assumptions consistent with the 2017 Scoping

Plan Update and the 2016 Mobile Source and provided an “alternate assessment tool for jurisdictions that choose to use them to complete analyses directed by the CEQA Guidelines.” The CARB Report found that (CARB 2019):

*Certain land use development projects located in areas that would produce **rates of total** VMT per capita that are approximately 14.3 percent lower than existing conditions, or **rates of light-duty** VMT per capita that are approximately 16.8 percent lower than existing conditions (either lower than the regional average or other appropriate planning context) could be, by virtue of their location and land use context, interpreted to be consistent with the transportation assumptions embedded in the 2017 Scoping Plan and with 2050 State climate goals. (Emphasis in original).*

However, CARB noted that the modeling used for the CTF forecast identifies ratios of total statewide VMT to population and that the suggested per capita reductions are not household generated VMT and that values are not directly comparable to output from a local or regional travel demand model.

Published prior to the 2022 Scoping Plan, the *Technical Advisory on Evaluating Transportation Impacts in CEQA* (OPR Technical Advisory) also provided non-binding recommendations regarding assessment of VMT, thresholds of significance, and mitigation measures. OPR cited to CARB’s 2017 *Scoping Plan-Identified VMT Reductions and Relationship to State Climate Goals* to reiterate that “at present, consistency with RTP/SCSs does not necessarily lead to a less-than-significant VMT impact.” (OPR 2018b)

OPR found at that time that (OPR 2018b):

*Based on OPR’s extensive review of the applicable research, and in light of an assessment by the California Air Resources Board quantifying the need for VMT reduction in order to meet the State’s long-term climate goals, OPR recommends that a per capita [residential] or per employee [office] VMT that is fifteen percent below that of existing [2017] development may be a reasonable threshold.*

OPR further recommended a net increase in total retail VMT compared to then existing (2017) may indicate a significant transportation impact (OPR 2018b).

OPR went on to indicate that (OPR 2018b):

*Lead agencies can evaluate each component of a mixed-use project independently and apply the significance threshold for each project type included (e.g., residential and retail). Alternatively, a lead agency may consider only the project’s dominant use. In the analysis of each use, a project should take credit for internal capture. Combining different land uses and applying one threshold to those land uses may result in an inaccurate impact assessment.*

Since the SCAG Regional Travel Demand Model generates VMT from all uses within the region, the estimated VMT cannot be compared to OPRs targets because it is not possible to separate out the land uses.

For roadway capacity projects, the OPR Technical Advisory recommends developing a project-level threshold based on VMT levels required to achieve legally mandated GHG emission reduction targets (OPR 2018b):

- Propose a fair-share allocation of those budgets to their jurisdiction (e.g., by population);
- Determine the amount of VMT growth likely to result from background population growth, and subtract that from their “budget”;

- Allocate their jurisdiction's share between their various VMT-increasing transportation projects, using whatever criteria the lead agency prefers.

OPR also provides guidance on how to estimate VMT impacts from roadway expansion projects and suggests the following general mitigation and alternatives (OPR 2018b):

- Tolling new lanes to encourage carpools and fund transit improvements
- Converting existing general purpose lanes to HOV or HOT lanes
- Implementing or funding off-site travel demand management
- Implementing Intelligent Transportation Systems (ITS) strategies to improve passenger throughput on existing lanes

Additional project-level mitigation measures including in lieu mitigation fees to reduce VMTs are also identified.

### **SENATE BILL 695 STATE HIGHWAY SYSTEM DATA AND INFORMATION**

Signed into law in October 2023, SB 695 requires DOT to prepare and make available on its internet website historical data and information about projects on the state highway system covering the projects on a fiscal year basis on the state highway system from July 1, 2018, to June 30, 2023, inclusive. DOT is also required to make this data and information available no later than January 1, 2025. DOT, in consultation with the commission, shall develop a format for the data and information. The historical data and information shall include, but is not limited to, all of the following:

- The number of total lane miles in the state highway system.
- The number of new total lane miles added to the state highway system.
- Of the lane miles added to the state highway system, a breakdown of the number of miles added by type, including, but not limited to, general purpose lanes, auxiliary lanes, managed lanes, including high-occupancy vehicle lanes, and interchanges, as well as information on improvements to interchanges.
- A project description of each project that added lane miles to the state highway system.
- The number of miles of the state highway system that were relinquished.
- The number of miles of the state highway system that were converted from a general purpose lane to a managed lane, including a high-occupancy vehicle lane, and a high-occupancy vehicle lane to a high-occupancy toll lane or other type of lane.
- The number of homes and businesses that were relocated due to the acquisition of rights-of-way for the new lane miles on the state highway system.
- The number of new bike lane miles added to state highways, broken down by Class I, Class II, Class III, and Class IV.
- The number of new sidewalk miles added to state highways and the number of existing sidewalks that were reconstructed to improve accessibility and the safety of pedestrians.

### **CEQA STREAMLINING FOR INFILL PROJECTS SENATE BILL (SB) 226**

This regulation is addressed in detail in Section 3.11, *Land Use and Planning*, of this 2024 PEIR.

## CALIFORNIA TRANSPORTATION PLAN (CTP)

The CTP (SB 64; Chapter 711 Section 14536 amended 65073.1) is prepared by the California Department of Transportation every 5 years to provide a long-range policy framework to meet our future mobility needs and reduce greenhouse gas emissions. The CTP defines goals, performance-based policies, and strategies to achieve our collective vision for California's future statewide, integrated, multimodal transportation system by envisioning a sustainable system that improves mobility and enhances our quality of life. The CTP is developed in collaboration with transportation stakeholders such as SCAG. Through ongoing engagement, the CTP is intended to provide goals and visions to support a fully integrated, multimodal, sustainable transportation system that supports the quality of life: prosperous economy, human and environmental health, and social equity. The CTP fulfills the state's goal to meet the Federal Transportation Improvement Program.

## SENATE BILL 391

Senate Bill 391 was signed into law in October 2009 by Governor Schwarzenegger and requires the CTP to support 80 percent reduction in GHGs below 1990 levels by 2050. The bill also requires Caltrans to update the CTP every five years and provide an assessment of how the implementation of sustainable communities strategies will influence the configuration of the statewide multimodal transportation system. The bill requires Caltrans to consult with and coordinate its planning activities with specified entities and to provide an opportunity for public input.

## ASSEMBLY BILL 1358

AB 1358, also known as the Complete Streets Act of 2008, amended the California Government Code Section 65302 to require that any substantive revisions to a city or county's Circulation Element include provisions for accommodations of all roadway users, including bicyclists and pedestrians.

## 2020 MOBILE SOURCE STRATEGY

This regulation is addressed in detail in Section 3.8, *Greenhouse Gas Emissions*, of this 2024 PEIR.

## CALIFORNIA CONGESTION MANAGEMENT PROGRAM

The CMP is the State mandated program (Government Code 65089) aimed at reducing congestion on highways and roads in California. The CMP establishes a designated roadway network of regional significance, roadway service standards, multi-modal performance standards and a land use analysis element to identify and mitigate multijurisdictional transportation impacts resulting from local land use decisions. Federal, State and local transportation funding is contingent upon local jurisdiction compliance with the CMP.

## CALIFORNIA VEHICLE CODE

The California Vehicle Code (CVC) provides requirements for ensuring emergency vehicle access regardless of traffic conditions. CVC sections 21806(a)(1), 21806(a)(2), and 21806(c) define how motorists and pedestrians are required to yield the right-of-way to emergency vehicles.

## EXECUTIVE ORDER (EO) B-16-2012 AND B-48-2018 ON ZERO-EMISSIONS VEHICLES

EO B-16-2-12 was signed by Governor Brown on March 23, 2012, to encourage development of the zero-emissions vehicles (ZEVs) and related infrastructure to protect the environment, stimulate the economy, and improve the

quality of life in the region. The goals that are promulgated include setting aggressive targets to meet goals in 2015, 2020, and 2025, supporting the rapid commercialization of clean vehicles, and pursuing policies to promote private sector investment and made-in-California technologies. Refer to Section 3.8, *Greenhouse Gas Emissions*, of this 2024 PEIR for additional information regarding EO B-16-2-12.

In February 2013, an interagency working group developed the ZEV Action Plan which identifies specific strategies and actions that state agencies will take to meet the milestones of the Executive Order. The ZEV Action Plan states that EVs are crucial to achieving the state's 2050 greenhouse gas goal of 80 percent emission reductions below 1990 levels, as well as meeting federal air quality standards, and that achieving 1.5 million ZEVs by 2025 is essential to advance the market and put the state on a path to meet these requirements (Governor's Interagency Working Group on Zero-Emission Vehicles 2013). The ZEV Action Plan was updated in 2016 and again in 2018, with targets of 200 hydrogen fueling stations and 250,000 electric vehicle chargers to support 1.5 million ZEVs on California roads by 2025 and 5 million by 2030. (Governor's Interagency Working Group on Zero-Emission Vehicles 2016 and 2018). Building on the success and lessons of California's three ZEV Action Plans in 2013, 2016, and 2018, the state is developing the ZEV Market Development Strategy, which is designed to help California collectively move forward and deliver zero-emission benefits to all Californians (Governor's Office of Business and Economic Development 2023). Refer to Section 3.8, *Greenhouse Gas Emissions*, of this 2024 PEIR for additional information.

### **EO B-32-15 INTEGRATED ACTION PLAN TO IMPROVE CALIFORNIA'S FREIGHT SYSTEM**

On July 16, 2015, Governor Brown issued EO B-32-15, which orders the Secretary of the California State Transportation Agency, the Secretary of the California Environmental Protection Agency, and the Secretary of the Natural Resources Agency to lead other relevant state departments including the California Air Resources Board, the California Department of Transportation, the California Energy Commission, and the Governor's Office of Business and Economic Development to develop an integrated action plan by July 2016 that establishes clear targets to improve freight efficiency, transition to zero-emissions technologies, and increase competitiveness of California's freight system. The action plan shall identify state policies, programs, and investments to achieve these targets, and be informed by existing state agency strategies, including the California Freight Mobility Plan, Sustainable Freight Pathways to Zero and Near-Zero Emissions, Integrated Energy Policy Report, as well as broad stakeholder input. The California Sustainable Freight Action Plan was adopted in July 2016 (Office of Governor Edmund G. Brown Jr. 2015).

### **EXECUTIVE ORDER N-8-23**

On July 10, 2023, Governor Newsom issued Executive Order N-8-23, creating an Infrastructure Strike Team to work across state agencies to maximize federal and state funding opportunities for California innovation and infrastructure projects. Executive Order N-8-23 has the potential to facilitate coordinated and streamlined project review and permitting processes in California, as well as the development of a robust California-specific project tracking system. Under the order, the Infrastructure Strike Team is tasked with identifying priority infrastructure projects; supporting governmental coordination on review, permitting, and approvals; and creating working groups focused on specific project categories, such as transportation, energy, hydrogen, environmental remediation, broadband, water, and zero-emission vehicles. The order's approach is similar to that taken in the federal Fixing America's Surface Transportation Act (FAST-41), designed to improve the timeliness, predictability, and transparency of the federal environmental review and authorization process for covered infrastructure projects. The Infrastructure Strike Team is also tasked with holding government oversight bodies accountable to "deliver results in an expedited and effective fashion" and establishing dashboards to track the progress of priority

projects, including milestones, funding, federal application deadlines, workforce development, and progress toward equity goals.

### **CALTRANS 2020-2024 STRATEGIC PLAN**

The most recent Caltrans 2020-2024 Strategic Plan (Caltrans 2021b) redefines the Caltrans mission statement and provides a vision statement. The Caltrans mission statement is: *Provide a safe and reliable transportation network that serves all people and respects the environment.* The Caltrans vision is: *A brighter future for all through a world-class transportation network.* Unlike the previous Strategic Plan (2015-202), the 2020-2024 Caltrans Strategic Plan does not have a specific goal focused on sustainability. Instead, this Strategic Plan integrates sustainability principles across all goals, addressing people, planet, and prosperity comprehensively as we implement the Plan's strategies. The document identifies six goals: (1) Safety First; (2) Cultivate Excellence; (3) Enhance and Connect the Multimodal Transportation Network; (4) Strengthen Stewardship and Drive Efficiency; (5) Lead Climate Action; and (6) Advance Equity and Livability in All Communities. The document identifies numerous strategies including the following strategies with respect to multimodal travel: Use operational strategies and incentives to reduce VMT through increased high occupancy modes, active transportation, and other TDM methods; improve network operations and invest in networks for walking, cycling, transit, and multimodal trips; better utilize technology and data to create a seamless multimodal travel experience and improve travel demand management; and optimize and expand equitable pricing.

### **CALTRANS INTERIM LOCAL DEVELOPMENT INTERGOVERNMENTAL REVIEW SAFETY REVIEW PRACTITIONERS GUIDANCE**

Caltrans developed this guidance for Caltrans use in providing comments to local jurisdictions through the Intergovernmental Review process (Caltrans 2020). This guidance document supports the implementation of the Strategic Management Plan including achieving the identified targets.

### **2023 CALIFORNIA INFRASTRUCTURE AND BUDGET LEGISLATION**

On July 10, 2023, Governor Gavin Newsom signed into law a slate of bills to accelerate critical infrastructure projects across California that help build a 100-percent clean electric grid, ensure safe drinking water, augment the state's water supply, and modernize its transportation system (Office of Governor Gavin Newsom 2023). The legislation facilitates the Governor's intent to take full advantage of approximately \$180 billion in state, local, and federal infrastructure funds over the next ten years, which is critical to achieving California's climate and clean energy goals while also creating up to 400,000 jobs. By streamlining permitting and allowing state agencies to use new project delivery methods, this legislation will maximize taxpayer dollars and accelerate timelines of projects throughout the state, while ensuring appropriate environmental review and community engagement. Governor Newsom also signed components of the 2023-24 state budget agreement, which includes \$37.8 billion in total budgetary reserves, the largest in state history, including \$22.3 billion in the "Rainy Day Fund" amid continued global economic uncertainty. The budget closes a shortfall of more than \$30 billion while preserving major investments in public education, health care, climate action, addressing homelessness, and other priorities.

## AUTONOMOUS VEHICLE PROGRAM REGULATION

On May 31, 2018, pursuant to Decision 18-05-043, the CPUC authorized two pilot programs for the private prearranged transportation of passengers in test AVs (CPUC 2023b):

- The "Drivered AV Passenger Service" pilot program allows for the provision of passenger service in test AVs with a driver in the vehicle. Under this pilot program, a safety driver is available to assist with operations if needed.
- The "Driverless AV Passenger Service" pilot program allows for the provision of passenger service in test AVs without a driver in the vehicle. Under this pilot program, a communication link between passengers and "remote operators" of the vehicle must be available and maintained at all times during passenger service.

To be eligible to participate in the CPUC's AV Passenger Service pilot programs, participants must possess the appropriate corresponding Autonomous Vehicle Tester Program Manufacturer's Testing Permit from the California DMV for AV testing with a driver or testing without a driver and comply fully with DMV's AV testing regulations (California Code of Regulations, Title 13, Article 3.7). Under the AV Passenger Service pilot programs, monetary compensation may not be charged for any rides in test AVs. On November 20, 2020, pursuant to Decision 20-11-046 as modified by Decision 21-05-017, the CPUC authorized Phase I of two deployment programs: one for drivered and one for driverless autonomous vehicle service. Under the Phase I Deployment Programs, participants are authorized to charge fares for AV passenger service (see further discussion above in Environmental Setting). In addition, applicants to the Driverless Pilot Program and the Driverless Phase I Deployment Program are required to submit Passenger Safety Plans that outline their plans to protect passenger safety. Applicants in the CPUC's AV deployment programs must obtain an Autonomous Vehicle Deployment Permit from the California DMV.

## REGIONAL

### CALIFORNIA TRANSPORTATION COMMISSION ACTIVE TRANSPORTATION PROGRAM GUIDELINES

Under Senate Bill (SB) 99 (Chapter 359, Statutes 2013) and AB 101 (Chapter 354, Statutes of 2013), the CTC is authorized to prepare guidelines to assist in the preparation of Active Transportation Plans (ATPs). An ATP includes bicycle, pedestrian, safe-routes to-school, and other comprehensive criteria to be included in the circulation element of its general plan in compliance with Complete Streets Act. The CTC's RTP guidelines suggest that all projects within the SCAG region must be selected through a competitive process that meets the federal aid goals. These goals are included in the environmental, design, right-of-way, and construction phases of the infrastructure and non-infrastructure projects. All projects that are selected in the ATP are required to include a discussion of the estimated bicycle and pedestrian trips, facilities report, proposed land use and bicycle transportation facilities, and policies related to parking and ADA compliance (CTC 2023).

### TRANSIT DEVELOPMENT PLANS

A Transportation Development Plan (TDP) updates a municipal or county operated transit system's goals and objectives, develops service alternatives, provides funding estimates, and produces a plan to implement recommended service improvements for a five-year period. A number of agencies within the SCAG have TDPs.

## **PLANS AND POLICIES RELATED TO COMPLETE STREET ACT OF 2008 (AB 1358; S. 2686)**

The Complete Streets Act of 2008 (AB 1358) required cities and counties to incorporate Complete Streets in their general plan updates to ensure that transportation plans meet the needs of all users, including pedestrians, bicyclists, and transit users as well as children, older individuals, and individuals with disabilities, to travel safely and conveniently on streets and highways. In the SCAG region, all six of the counties have developed their own bicycle and pedestrian plans. Majority of these bicycle pathways are part of existing Class II path which provides on-street bike lanes, although a few are in Class I category, which mean that the path is separate from automobile traffic, and some are categorized as Class III pathways with on-street bike lanes further designated by signs.

## **LOCAL**

### **COUNTY GENERAL PLAN CIRCULATION ELEMENTS**

Each of the six counties within the SCAG region has prepared a Transportation or Circulation Element, as a required component of the General Plan. The Transportation or Circulation Element provides a summary of the existing conditions in the planning area, major issues, goals, and policies, as well as pertinent action programs related to traffic and circulation related to a variety of transportation systems (highway and local road networks, bus, rail, high speed rail, aviation network, harbors, bicycles, pedestrians, and rideshare). The Transportation or Circulation Element describes the major locations and corridors for existing and future travel based on land use patterns in order to develop a comprehensive, coordinated, and continuing transportation system for the region. Relevant policies include encouraging provision of transit service at a reasonable cost to the users and the community, encouraging the efficient use and conservation of energy and ease congestion, and, where the land use would support, providing for development of a mass transportation system that will provide a viable alternative to the automobile, and support a balance in transportation modes with public transit system that provides accessible service, particularly to the transit dependent. A transportation system will operate at regional, countywide, community, and neighborhood scales to provide connectivity between communities and mobility between jobs, residences, and recreational opportunities.

### **COUNTY GENERAL PLAN SAFETY ELEMENTS**

Each of the six counties in the SCAG region prepared a Safety Element as a required component of the General Plan. The Safety Element generally discusses measures to abate the impacts in case of catastrophe for maintenance of the transportation infrastructure. The Traffic and Transportation Division under each county is responsible for developing plans and guidelines for the maintenance of traffic control devices, emergency travel routes in the event of an emergency, placement of barricades, and control of traffic and coordination with other departments to promote integrated disaster planning, response and mitigation efforts. Included in the Safety Element discussion are strategies for continuation of adequate critical infrastructure systems and services to assure adequate circulation, communications, and transportation services for emergency response in the event of disaster related systems disruptions.

### **IMPERIAL COUNTY BICYCLE MASTER PLAN**

In February 2022, Imperial County updated its Regional Active Transportation Plan (Imperial County Transportation Commission 2022). In developing the Plan, the Imperial County Transportation Commission (ICTC) embarked on a mission to research, analyze, and engage with communities to understand how to best meet the active transportation needs of the Imperial Valley. As a county transportation commission, it is ICTC's responsibility to

work with their partners to plan and build an active transportation network that reflects the existing and future needs of the 180,000 plus residents of Imperial County. This plan is a tool that will help ICTC achieve short, mid, and long-term projects for walking, bicycling, use of public transit, and other related transportation modes.

### **LOS ANGELES COUNTY BICYCLE MASTER PLAN**

Metro developed a Bicycle Transportation Strategic Plan (BTSP) in 2006 (Metro 2006) to be used by “the cities, the County of Los Angeles and transit agencies in planning bicycle facilities around transit and setting priorities that contribute to regional improvements. The goal is to integrate bicycle use in transportation projects.” In addition, Metro also created a Bicycle Transportation Account Compliance Document (BTA Document) to provide an “inventory and mapping of existing and proposed facilities, and an estimate of past and future expenditures for bicycle facilities.” In 2013, SCAG and Metro developed the Bike County Data Clearinghouse to assist LA County conduct bicycle counts. The Los Angeles County Department of Public Works adopted a Countywide Bicycle Master Plan in 2012, which was developed with the over-arching goal of increasing “bicycling throughout the County of Los Angeles through the development and implementation of bicycle-friendly policies, programs, and infrastructure.” The plan recommends the development of an interconnected network of bicycle corridors, with approximately 695 miles of bikeway facilities. This plan looks at the ridership and air quality benefits from cycling and also includes a list of existing and proposed bikeways in LA County (Los Angeles County Department of Public Works 2012).

### **ORANGE COUNTY BIKEWAYS STRATEGIC PLAN**

The 2009 Orange County Commuter Bikeways Strategic Plan was developed “to encourage the enhancement of Orange County’s regional bikeways network, in order to make bicycle commuting a more viable and attractive travel option” (OCTA 2009). The plan identifies approximately 116 miles of priority bikeway projects. In 2012, the Orange County Transportation Authority provides an addendum to the existing plan with a Commuter Bikeways Strategic Plan (CBSP) that refines the regional bikeway networks and specified which bikeways are connected to priority locations including major transit investment areas, employment centers, stations, colleges, and universities (OCTA 2012).

### **RIVERSIDE COUNTY ACTIVE TRANSPORTATION PLANS**

The Western Riverside Council of Governments (WRCOG) and the Coachella Valley Association of Governments (CVAG) have developed Active Transportation Plans for their respective jurisdictions covering most of Riverside County. The Western Riverside County Active Transportation Plan, released in June 2018, builds on the Western Riverside County Non-Motorized Transportation Plan (NMTP) (June 2010), by “updating active transportation network improvement projects, implementation strategies, and funding opportunities found in that plan” (Western Riverside Council of Governments 2018). The CVAG Active Transportation Plan, released in 2016 and revised in 2017, recognizes the “value of providing opportunities for local residents and visitors to bicycle for transportation and recreation and to have attractive opportunities to walk to transit stops, as well as to encourage people to use neighborhood electric vehicles (NEVs)” (Coachella Valley Association of Governments 2017).

### **SAN BERNARDINO COUNTY NON-MOTORIZED TRANSPORTATION PLAN**

The Revised 2018 San Bernardino County Non-Motorized Transportation Plan’s goals include: (1) Increased bicycle and pedestrian access; (2) Increased travel by cycling and walking; (3) Routine accommodation in transportation

and land use planning; and (4) Improved bicycle and pedestrian safety (San Bernardino County Transportation Authority 2018).

## VENTURA COUNTY BICYCLE MASTER PLAN

The 2007 Ventura County Bicycle Master Plan “provides a broad vision, strategies and actions for the improvement of bicycling” by maximizing funding sources for implementation; improving safety and encouraging cycling; expanding the network and support facilities; and enhancing the quality of life in and overall environmental benefits. Within the County of Ventura, many jurisdictions and municipalities also have a bicycle plan to encourage non-motorized commutes.

## TRANSPORTATION DEMAND MANAGEMENT POLICIES AND ORDINANCES

Most local jurisdictions in California, including those within the SCAG region, have incorporated TDM policies into their General Plans and/or adopted TDM programs and ordinances as a means to address VMT reduction for development projects. Among the local jurisdictions in the region, the City of Los Angeles’ TDM program is well established and exemplifies programs being implemented throughout Southern California. The City adopted its first TDM Ordinance in 1993, which required non-residential developments of more than 25,000 square feet to implement a limited set of TDM strategies (Los Angeles Department of Transportation 2023). Since then, transportation options have expanded, including the regional rail and bike networks, new options such as bike share, carshare, and rideshare services, and alternatives such as telecommuting. The currently proposed update of the TDM Program responds to these changes, as well as changes in California state law that shape how cities analyze transportation. With the goal of reducing single-occupancy vehicle trips and the distances people travel in cars, updating the TDM Program is part of a larger state-mandated effort to improve air quality and reduce greenhouse gas emissions by promoting more sustainable transportation options. In addition, the proposed TDM Program aligns with City policies and planning documents. Mobility Plan 2035, the transportation element of the City’s General Plan, encourages greater use of TDM strategies to reduce drive-alone trips and includes updating the TDM ordinance as an implementation program. Both the City Council and the Mayor have identified updating the TDM ordinance as a priority, and it is an initiative in LA’s Green New Deal (the Sustainable City pLAN).

The updated ordinance would effectuate changes to the City’s TDM Program, which attempts to reduce the number of new car trips generated by large developments. Various strategies that have been promoted under TDM plans include alternate modes of transportation, including cycling and transit, as well as steps to redistribute trips outside of peak hours (Urbanize Los Angeles. 2021). While the existing program is currently limited to large commercial projects, the updated ordinance would expand the TDM program’s application to most multi-family residential developments with 16 or more residential units. Projects exempt from the updated TDM ordinance would include new buildings with:

- Less than 25,000 square feet of office space;
- Less than 50,000 square feet of retail or medical space;
- Less than 250,000 square feet of warehouse or industrial floor area;
- 50 or fewer hotel rooms;
- Fewer than 9,000 seats or 250,000 square feet in any arena or theater; and
- Fewer than 250 students in any charter or private school.

Requirements would be scaled for projects subject to the ordinance based on size and scope. Three different tiers are proposed, including Level 1, Level 2, and Level 3, which correspond to the size/intensity of projects of various land use types. A TDM calculator created by the City will allow project applicants to generate a "point target," based on the size of a development and estimated parking capacity. From there, developers would choose from a menu of pre-approved TDM strategies which include incentives for transit use, cycling, carpooling, and car sharing.

### ACTIVE TRANSPORTATION PLANS/MOBILITY PLANS

In addition to county plans, many local jurisdictions have developed their own mobility plans and active transportation plans, or include active transportation components in the Circulation Element of their General Plan. Many street enhancement projects or capital improvement projects include active transportation elements as well. For example, many street improvement projects may include the striping of bikeways or new developments may include sidewalk enhancements. For example, the City of Los Angeles' Mobility Plan 2035 – one of the Elements of the City's General Plan – lays out the policy foundation for achieving a transportation system that balances the needs of all road users (Los Angeles Department of City Planning 2023). The priorities of the Mobility Plan 2035 include:

- Safety First: Focusing on safety, education, and enforcement
- Access for all Angelenos: Increasing access through greater community connections
- World Class Infrastructure: Investing in the construction of Complete Streets Networks
- Collaboration, Communications, and Informed Choices: Using open data and information to inform future policy considerations
- Clean Environment & Healthy Communities: Tackling issues related to the overall health and sustainability of Los Angeles' neighborhoods

The Complete Streets Design Guide accompanies the Mobility Plan 2035, outlining the vision for designing safe, accessible, and vibrant streets in Los Angeles. The guide compiles design concepts and best practices that promote safe and accessible streets. The updated Streets Dimension Standard Plan (Standards S-470-1) reflects an expanded suite of street arterials and non-arterials to align with the goals and policies of the Mobility Plan 2035.

## 3.17.3 ENVIRONMENTAL IMPACTS

### THRESHOLDS OF SIGNIFICANCE

For the purposes of this 2024 PEIR, SCAG has determined that implementation of Connect SoCal 2024 could result in significant adverse impacts to transportation, if the Plan would exceed the following significance criteria, in accordance with Appendix G of the CEQA Guidelines:

- Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.
- Conflict or be inconsistent with CEQA Guidelines Section 15064.3(b).
- Substantially increase hazards due to geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

- Result in inadequate emergency access (this impact is addressed in Impact HAZ-6, in Section 3.9, *Hazards and Hazardous Materials*).

The objective of VMT thresholds is to meet statewide GHG emissions targets through VMT reductions from the transportation sector. Both CARB and OPR acknowledge that MPOs are tasked with meeting SB 375 GHG emissions targets, and while CARB has determined that meeting the current SB 375 GHG emission reduction targets will not be sufficient to attain state climate goals, more can be done at the project level. At the project level, lead agencies may consider recommended thresholds of significance and determine which ones are appropriate and feasible for their jurisdiction and/or a particular project, or apply alternative thresholds, consistent with CEQA Guidelines Section 15064.3 which states “A lead agency has discretion to choose the most appropriate methodology to evaluate a project’s vehicle miles traveled, including whether to express the change in absolute terms, per capita, per household or in any other measure. A lead agency may use models to estimate a project’s vehicle miles traveled and may revise those estimates to reflect professional judgment based on substantial evidence.” See also Section 3.8, *Greenhouse Gases*, of this 2024 PEIR for additional discussion on the connection between GHG and VMT and SCAG’s ability to meet SB 375 and consistency with SB 743 guidance as well as statewide climate goals.

## METHODOLOGY

Chapter 2, *Project Description*, describes the Plan’s vision, goals, forecasted regional development pattern, policies and strategies, and individual transportation projects and investments. The Plan has policies and strategies that aim to increase mobility, promote sustainability, and improve the regional economy. Although land use development is anticipated to occur within the region even without the Plan, the Plan could influence distribution patterns. To address this, the 2024 PEIR includes an analysis on the implementation of the Plan, including policies and strategies as well as transportation projects and evaluates how conditions in 2050 under the Plan would differ from existing conditions. As such, the CEQA significance determination for Plan’s transportation impacts is based on a comparison between future (2050) with the Plan and the 2019 actual baseline (e.g., existing conditions). The comparison of transportation impacts in the future with the Plan as compared to future with no Plan is included in Chapter 4, *Alternatives*, of this PEIR. The analysis of transportation considered public comments received on the NOP and feedback and discussions at the various public and stakeholder outreach meetings.

Transportation-related impacts were evaluated in accordance with Appendix G of the CEQA Guidelines. Transportation-related impacts within the SCAG region were evaluated at a programmatic level of detail, in relation to the General Plans of the six counties and the 191 cities within the SCAG region review of general information characterizing transportation and review of published and unpublished literature germane to the SCAG region.

The methodology for determining the significance of impacts on transportation impacts compares current regional transportation conditions to expected future 2050 conditions with the Plan, as allowed by CEQA Guidelines. SCAG utilized the Regional Travel Demand Model (RTDM) to compare the existing conditions to the Plan’s 2050 condition. SCAG’s role as the MPO for the region and as the preparer of the Plan is to evaluate the regional network. For CEQA purposes, and pursuant to SB 743, the most appropriate metric for such regional analysis is VMT which measures overall network efficiency, rather than LOS which is generally used to evaluate local (i.e., intersection level) impacts. Total daily VMT is used as a measure of overall utilization of roadways which relates to vehicle emissions, traffic congestion, and the effectiveness of land use patterns and alternate mode options in reducing the need for vehicular travel. Vehicle hours of delay (VHD) measures the congestion level of the roadway. Other measures such as transportation system accident rates measure the effect of other modal choices from vehicles to active transportation. Performance measures for the Plan’s horizon year 2050 were

compared to the existing regional conditions for each significance criterion to determine the significance of impacts. The 2050 transportation model output provides a regional and cumulative level of analysis for the transportation impacts of the Plan.

As discussed in Chapter 2 *Project Description*, and Chapter 3.0, *Introduction to the Analysis*, Connect SoCal 2024 includes Regional Planning Policies and Implementation Strategies, some of which will effectively reduce impacts in the various resource areas. Furthermore, compliance with all applicable laws and regulations (as set forth in the Regulatory Framework) would be reasonably expected to reduce impacts of the Plan. See CEQA Guidelines Section 15126.4(a)(1)(B). As discussed in Chapter 3.0 *Introduction to the Analysis*, where remaining potentially significant impacts are identified, SCAG mitigation measures are incorporated to reduce these impacts. If SCAG cannot mitigate impacts of the Plan to less than significant, project-level mitigation measures are identified which can and should be considered and implemented by lead agencies as applicable and feasible.

## IMPACTS AND MITIGATION MEASURES

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**IMPACT TRA-1      Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities.**

### ***Significant and Unavoidable Impact – Mitigation Required***

The SCAG region provides a large and growing amount of transit service. In Fiscal Year 2020-2021, the region supplied 15 million revenue hours of service, transit/rail riders traveled more than one billion passenger miles (or about 4.12 miles per passenger), a 63-percent decrease from the more than three billion passenger miles in 2019 (SCAG 2023b). As noted above in Environmental Setting, although transit/rail ridership has improved over the past several years, it is still significantly less than it was prior to the COVID-19 pandemic and its past ridership peak around 2007 before the Great Recession. Prior to the pandemic, there were 600 million annual transit/rail boardings. Overall, the region's bus ridership levels are currently 23 percent below what they were pre-pandemic (SCAG 2023b). This trend impacts agencies' ability to continue to provide these levels of service, as declining fare revenues will eventually lead to budgetary challenges.

The Plan calls for a substantial expansion of transit facilities and service over the next 25 years. While these projects would provide the SCAG region with a more comprehensive public transportation system, operational improvements and new transit programs and policies would also contribute to attracting more trips to transit and away from single-occupant vehicle travel. Expanding HOV and express lane networks calls for the development of an extensive express bus point-to-point network. In addition, transit oriented and land use strategies call for increasing the frequency and quality of fixed-route bus service by virtue of adding new bus rapid transit service, limited-stop service, increased frequencies along targeted corridors, and the introduction of local community circulators to provide residents of smart growth developments with the option of taking transit over using a car to make short, local trips.

Since the adoption of Connect SoCal 2020, many of Metro's Measure R projects have made significant construction progress, including the Crenshaw/LAX Transit Corridor (K Line), the Regional Connector, the Purple Line (D Line) Extension to the Westside (Sections 1, 2, and 3), and the Foothill Extension (L Line) from Glendora to Montclair. Additionally, work concluded on a partial segment of the K Line, which includes seven of nine total stations; this partial segment of the K Line entered revenue service in 2022 (Metro 2023).

On the November 2016 ballot, Los Angeles County voters approved Measure M, a fourth Local Option Sales Tax to fund both capital and operations within Los Angeles County. The tax was part of a forty-one-year, \$120 billion plan to expand upon Measure R, adding new transit projects and expediting others previously approved under Measure R. The plan, known as Measure M, would be paid for by an additional permanent half-cent sales tax increase. Measure M passed with 70.15 percent of the vote, clearing the two-thirds majority required. The combined expenditure plan provides \$432.29 billion for transit operations, \$41.86 billion for capital construction of corridor improvements and facilities and \$2.39 billion for capital replacement to achieve a state of good repair. Additionally, the expenditure plan programs \$19.13 billion in local return funds, which are often used to fund transit operations (Metro 2016). A map of the 2050 Transit Network is provided in Map 2-12, 2050 Plan Transit Network, in Chapter 2, *Project Description*, of this 2024 PEIR.

**Table 3.17-11, Daily Transit Boardings**, shows that daily transit boarding in the region would increase over the lifetime of the Plan.

**TABLE 3.17-11 Daily Transit Boardings**

<b>DAILY TRANSIT BOARDING</b>	<b>EXISTING (2019)</b>	<b>2050 PLAN</b>
Commuter Rail	48,165	130,426
Local Bus	1,194,448	2,254,503
Local Rail	346,169	733,094
Bus Rapid Transit	27,209	85,997
Express Bus	14,446	19,824
HSR	0	10,779
Rapid Bus	174,317	107,054
Transitway	34,052	36,321
<b>Total (Transit)</b>	<b>1,838,807</b>	<b>3,377,998</b>

Source: SCAG Modeling (2023)

Connect SoCal 2024 proposes a variety of active transportation investments to improve conditions for people who walk, bike, and use micro-mobility (see Chapter 2, *Project Description*). Current rates of funding and the speed of implementation will need to be accelerated to complete the proposed projects within the Plan. This will require additional community engagement to build support for changes to roadway networks such as active mobility lanes and other safety improvements. SCAG has identified implementation actions that an agency can pursue toward active transportation goals. These actions will serve as broad direction for the agency to support equity, short and regional trips, safety, and complete streets.

The Plan calls for a substantial expansion of transit facilities and service to attract trips to transit and away from single-occupancy vehicle travel. Transit-oriented land use strategies would increase the frequency and quality of fixed-route bus service by adding new rapid service, express service, and community circulators for short trips.

Each RTP/SCS cycle, SCAG has expanded and improved its analysis of active transportation planning processes to better integrate people walking and bicycling into the regional transportation network. The Plan would increase the mode share of transit and active transportation in the SCAG region, from 12.4 percent in 2019 to 16.8 percent in 2050 (**Table 3.17-12, Percentage of Mode Share on Transit and Active Transportation**).

TABLE 3.17-12 Percentage of Mode Share on Transit and Active Transportation

MODE SHARE	2019	2050 PLAN
Walk	8.7%	9.4%
Bike	1.2%	2.9%
Transit	2.4%	4.5%
<b>Total</b>	<b>12.4%</b>	<b>16.8%</b>

Source: SCAG 2023c

Since 2020, county transportation commissions and councils of governments within SCAG’s region have also completed notable active transportation planning initiatives including countywide pedestrian plans, multi-jurisdictional bicycle master plans, comprehensive Safe Routes to School (SRTS) plans, active transportation plans, and first-last mile policies and plans. The SCAG region benefits from having robust Safe Routes efforts across most of the counties and numerous cities, with 49 percent having completed Safe Routes to School Plans and another five percent reporting that their SRTS Plans are in progress (SCAG 2023b). In addition, nearly half of the cities in the SCAG region have developed, or are in the process of developing, pedestrian master plans that aim to improve the existing pedestrian networks and fill in gaps to get more people safely walking (SCAG 2023b).

SCAG’s analytic approach for its active transportation plans included a combination of outreach processes and data gathering efforts, including but not limited to SCAG’s local input process with cities, county agencies, councils of governments, working groups, and technical advisory committees that review active transportation projects and programs, input collected through the scenario development process from agency partners, health departments, community based organizations and members of the public, input gathered through SCAG’s Go Human events.

As described within the Environmental Setting, there are numerous plans and policies that address the circulation system. At the transit agency level, it is unlikely that conflicts would occur, as SCAG incorporates local transit plans into the RTP through regular amendments to the Plan. With regard to bicycle and pedestrian plans, as described above, SCAG has done extensive outreach and coordination across numerous groups to capture local input. Further, SCAG regularly assists local jurisdiction in planning for these types of projects through grant funding.

SCAG and the six Counties have worked towards the development of a metropolitan-wide strategy for new and existing transportation facilities eligible for funding under Title 23 U.S.C, and Title 49 U.S.C., to optimize the transportation system for safety and improve effectiveness. This strategy includes the development of a coherent and integrated regional goods movement system. Strategies include a Regional Freight Corridor System which would create a system of truck-only lanes for major freeway systems that are affected by haul trucks used for the goods movement; a Truck Bottleneck Relief Strategy which would mitigate top-priority truck bottlenecks; a Rail Strategy which would allow shippers the ability to move over long distances at lower costs, utilizing efficient rail strategies to include expansion and modernization of intermodal facilities; a Good Movement Environmental Strategy which would focus on a two-pronged approach for achieving an efficient, safe and economically sound freight system that reduces environmental impacts.

In order to meet federal certification requirements, SCAG and county transportation commissions (CTCs), specifically LA County Metro, OCTA, RCTC, SANBAG, and VCTC are developing means to monitor and maintain the existing roadway infrastructure through demand reduction techniques, land-use and operation management strategies, and strategic capacity enhancement strategies. Additional strategies include supporting land use

policies aimed to focus growth in PDAs with enhanced opportunities for Southern California residents to access destinations without the use of an automobile. As described in Chapter 2, *Project Description*, SCAG worked with CTCs through the Project List solicitation process to reflect the Plan's transportation investments. The Plan's transportation projects and programs were sourced from the CTCs.

SCAG has also worked with local CTCs to support strategies for diversifying mode choices by encouraging public transit use and non-motorized forms of commute such as walking and other active transportation in the Plan. While the actual benefits of these alternative and active transportation modes are modest, SCAG transportation modeling indicates a potential for notable overall improvement in the percentage of peak period work trips completed within 45 minutes by personal vehicle with implementation of the Plan, with a slight decrease in the percentage of peak hour trips completed within 45 minutes by transit. To determine these findings, PM peak period work trips were used to assess impacts to work commute as PM trips are prone to the greatest amount of vehicle delay.

Lastly, the Plan includes land use strategies to focus development in PDAs such as TPAs, Neighborhood Mobility Areas (NMAs), and Livable Corridors with convenient access to housing options, employment opportunities, and goods and services, as well as within High Quality Transit Corridors (HQTCs). The strategies focus development in transit-rich areas allow transit and land use to work together. CARB's 2020 Mobile Source Strategy recognizes that coordinated regional planning can improve California's land use patterns and transportation policy in a way that reduces transportation-related emissions by reducing growth in VMT. The SCS is one mechanism to pursue these reductions. The Plan includes policies to incentivize land use changes and promote communities that are designed to foster use of ZEVs and Near-Zero Emission Vehicles (NZEVs) and new modes of personal mobility consistent with the Mobile Source Strategy (CARB 2021).

As discussed above, implementation of the Plan would result in the construction of new and expanded transit, active transportation, and other transportation facilities in the region, and would also focus future development in proximity to various transportation options. While the Plan would generally result in an overall increase in accessibility to a wider variety of transportation choices and services at a regional level, it is possible that some individual transportation and land use development projects constructed as a result of the Plan would not be consistent with applicable plans, policies, and programs that affect the circulation system. Therefore, it is conservatively assumed that Plan implementation could result in conflicts with programs, plans, ordinances, or policies addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities. Therefore, this impact is considered significant and mitigation measures are required.

## MITIGATION MEASURES

### SCAG MITIGATION MEASURES

See SMM LU-3 and SMM-POP-2.

### PROJECT-LEVEL MITIGATION MEASURES

**PMM-TRA-1** In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the CEQA Guidelines, a lead agency for a project can and should consider mitigation measures to reduce substantial adverse effects related to transportation impacts. Such measures may include the following or other comparable measures identified by the lead agency:

- For future land use development projects, lead agencies shall encourage the incorporation of transit, bicycle, pedestrian, and micro-mobility facilities, features, and services in project designs, as well as encourage developers to provide information regarding the availability of these facilities and services to residents, tenants, and owners in order to facilitate increased access to and utilization of transit and active transportation services and facilities.

### LEVEL OF SIGNIFICANCE AFTER MITIGATION

As previously discussed, the Plan's Regional Planning Policies and Implementation Strategies (see Chapter 2 *Project Description*, and Chapter 3.0, *Introduction to Analysis*) and compliance with existing laws and regulations would reduce impacts; however, given the regional scale of the analysis in this 2024 PEIR, it is not possible or feasible to determine if all impacts would be fully mitigated. Therefore, this 2024 PEIR identifies SCAG and project-level mitigation measures. At the project-level, lead agencies can and should consider the identified project-level mitigation measures during subsequent review of transportation and land use projects as appropriate and feasible. While the mitigation measures will reduce the impacts related to conflict with programs, plans, ordinances, or policies addressing the circulation system, due to the regional nature of the analysis, unknown site conditions and project specific-details, and SCAG's lack of land use authority over individual projects, SCAG finds that the impact could be **significant and unavoidable** even with mitigation.

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#### IMPACT TRA-2      **Conflict or be inconsistent with CEQA Guidelines Section 15064.3(b).**

##### ***Significant and Unavoidable Impact – Mitigation Required***

CEQA Guidelines Section 15064.3(b) is intended to be applied at the project level; therefore, the myriad transportation and urban land use development projects that will occur under the Plan will be required to address the specific requirements, as follows:

*(b) Criteria for Analyzing Transportation Impacts.*

- (1) Land Use Projects. Vehicle miles traveled exceeding an applicable threshold of significance may indicate a significant impact. Generally, projects within one-half mile of either an existing major transit stop or a stop along an existing high quality transit corridor should be presumed to cause a less than significant transportation impact. Projects that decrease vehicle miles traveled in the project area compared to existing conditions should be considered to have a less than significant transportation impact.*
- (2) Transportation Projects. Transportation projects that reduce, or have no impact on, vehicle miles traveled should be presumed to cause a less than significant transportation impact. For roadway capacity projects, agencies have discretion to determine the appropriate measure of transportation impact consistent with CEQA and other applicable requirements. To the extent that such impacts have already been adequately addressed at a programmatic level, a lead agency may tier from that analysis as provided in Section 15152.*
- (3) Qualitative Analysis. If existing models or methods are not available to estimate the vehicle miles traveled for the particular project being considered, a lead agency may analyze the project's vehicle miles traveled qualitatively. Such a qualitative analysis would evaluate factors such as the availability of transit, proximity to other destinations, etc. For many projects, a qualitative analysis of construction traffic may be appropriate.*

- (4) *Methodology. A lead agency has discretion to choose the most appropriate methodology to evaluate a project's vehicle miles traveled, including whether to express the change in absolute terms, per capita, per household or in any other measure. A lead agency may use models to estimate a project's vehicle miles traveled, and may revise those estimates to reflect professional judgment based on substantial evidence. Any assumptions used to estimate vehicle miles traveled and any revisions to model outputs should be documented and explained in the environmental document prepared for the project. The standard of adequacy in Section 15151 shall apply to the analysis described in this section.*

Connect SoCal 2024 is based on a regional employment and population forecast and accommodates this growth through the implementation of transportation projects and land use strategies. The Plan includes strategies to accommodate projected growth in a manner that increases transportation system efficiency and reduces VMT. Metrics such as VMT, VHT, and VHD have been used throughout the history of the Plan as a measure of the performance of the region's transportation system. SCAG has traditionally used VMT to assess transportation impacts as it is a more useful tool to evaluate impacts at the regional-scale than delay-based metrics for roadways such as LOS. In addition, the regional models used by SCAG do not include the LOS metric.

Traditionally, project-level analysis of transportation impacts focused on local-level congestion and delay-based impacts (e.g., intersection and roadway LOS). The analysis of the Plan is at the regional level and evaluates total regional VMT (including consideration of per capita data) and overall efficiency of the network.

CEQA Guidelines section 15064.3(b) provides that local jurisdictions are responsible for determining the most appropriate methodology for their jurisdiction or project. As discussed above, historically, methodologies and thresholds have been identified by OPR and CARB, as well as local jurisdictions. SCAG discusses these thresholds in the Regulatory Framework discussion above.

As noted above in the Regulatory Framework discussion, the CARB 2022 Scoping Plan recommends a per capita reduction of at least 25 percent below 2019 levels by 2030 and 30 percent below 2019 levels by 2045 in light-duty VMT to reduce overall transportation energy demand and meet the state's climate, air quality, and equity goals. However, the 2022 Scoping Plan also acknowledges that these targets are not regulatory requirements but that they should inform future planning processes. Moreover, these targets are identified as applicable to statewide VMT, and it is likely that VMT targets for the SCAG region would differ from these statewide targets. As part of the target setting for the next SB 375 GHG reduction targets (anticipated for 2026), the 2022 Scoping Plan data and VMT reduction targets would likely be taken into account. How the 2022 Scoping Plan VMT reduction targets will translate into GHG reduction targets for SCAG and how such GHG reduction targets and shared responsibilities will be distributed across the various State's MPOs has not yet been identified and likely will not be identified until 2026. Nevertheless, for informational purposes, the per capita VMT targets from the 2022 Scoping Plan are discussed as reference points for assessing VMT performance at the regional level.

As shown in **Table 3.17-13, VMT 2019 and 2050 By County**, per capita VMT in 2050 would decrease when compared to current per capita VMT. However, total VMT for all vehicles is expected to grow from 444 million in 2019 to 450 million in 2050. This change constitutes a 1.4-percent increase and includes light, medium, and heavy-duty vehicle VMT in all six counties compared to existing conditions. However, the Plan is expected to reduce VMT per capita in most of the SCAG region encompassing five counties: Los Angeles, Orange, Riverside, San Bernardino, and Ventura County, and would increase VMT per capita only in Imperial County in 2050 (Table 3.17-15). Note that a detailed discussion of VMT under "No Project" conditions in 2050 (i.e., 2050 VMT without implementation of the Plan) is provided in Chapter 4, *Alternatives*, of this 2024 PEIR.

TABLE 3.17-13 VMT 2019 and 2050 By County

COUNTY	IN THOUSANDS <sup>1</sup>			
	2019		2050 PLAN	
	LIGHT-MEDIUM DUTY VEHICLES	ALL VEHICLES	LIGHT-MEDIUM DUTY VEHICLES	ALL VEHICLES
Imperial	6,000	7,000	7,000	9,000
Los Angeles	207,000	220,000	190,000	208,000
Orange	72,000	77,000	70,000	75,000
Riverside	54,000	59,000	63,000	71,000
San Bernardino	57,000	63,000	62,000	71,000
Ventura	18,000	19,000	16,000	17,000
<b>SCAG Region</b>	<b>414,000</b>	<b>444,000</b>	<b>407,000</b>	<b>450,000</b>

Source: SCAG modeling (2023)

Table Note:

1. Numbers are rounded to nearest thousand.

Studies have found that by adding roadway capacity in congested areas, network-wide VMT is increased by a nearly equivalent proportion within a few years, which results in reducing the initial congestion relief (National Center for Sustainable Transportation 2022). This increase in VMT is called “induced travel.”

Emerging technologies vary widely when it comes to their effect on VMT, and therefore GHG emissions. Some of these technologies, such as alternative fuel vehicles, micro-mobility, bikesharing, and microtransit, have a mitigating influence on GHG emissions. Others, such as ride-hailing and automated vehicles, are expected to increase VMT and GHG emissions if their business models do not adapt.

**Table 3.17-14, Population and Daily VMT (2019 and 2050)**, presents information related to population, daily VMT, and VMT per capita for the years 2019 and 2050.

TABLE 3.17-14 Population and VMT (2019 and 2050)

CATEGORY	2019	2050	2050 VS 2019
Total Population	18,827,000	20,882,000	10.9%
Light Duty Vehicle VMT	413,969,000	407,065,000	-1.67%
Total VMT	444,240,000	450,428,000	1.39%
VMT Per Capita Light Duty Vehicles	21.99	19.49	-11.4%
VMT Per Capita All Vehicles	23.60	21.57	-8.6%

Source: SCAG modeling (2023)

By 2050, per capita public transit boardings are projected to increase by approximately 80 percent, and transit’s mode share will also rise. The share of trips by bicycle and walking will rise and such active modes as well as transit will represent 16.8 percent of all trips. The share of trips by single-occupancy vehicles will fall from 68.7 percent to 62.3 percent of home-to-work trips for the region. The combined effect of these transportation mode shifts, and the SCS

land use pattern will result in a reduction in VMT per capita by 2050. Overall, VMT per capita is forecast to decline by approximately 11.4 percent for all vehicles and 8.6 percent for light, medium duty vehicles between 2019 and 2050.

As shown in **Table 3.17-15-15, VMT Per Capita by County (2019 and 2050)**, Los Angeles County will experience the largest decline in per capita VMT for both all vehicles and light, medium duty vehicles in 2050, while Imperial County will experience the only increase for both all vehicles and light, medium duty vehicles. In addition, as shown in **Table 3.17-16, Total Daily Vehicle Hours of Delay**, total delay in the region will increase in Imperial and Riverside counties. Los Angeles, Orange, San Bernardino, and Ventura counties would all experience decreases in delay.

TABLE 3.17-15 VMT Per Capita by County (2019 and 2050)

COUNTY	TOTAL VMT PER CAPITA			
	LIGHT/MEDIUM-DUTY VEHICLES		ALL VEHICLES	
	2019	2050	2019	2050
Imperial	33.03	34.29	38.53	41.56
Los Angeles	20.61	17.63	21.93	19.29
Orange	22.65	20.29	23.97	21.81
Riverside	22.67	21.02	24.77	23.79
San Bernardino	26.25	23.54	28.88	26.99
Ventura	20.63	18.35	21.94	19.97
<b>Regional Average</b>	<b>21.99</b>	<b>19.49</b>	<b>23.60</b>	<b>21.57</b>

Source: SCAG modeling (2023); SCAG 2023c

TABLE 3.17-16 Total Daily Vehicle Hours of Delay (2019 and 2050)

COUNTY	2019	2050 PLAN
Imperial	6,593	10,087
Los Angeles	1,482,991	1,126,307
Orange	356,500	221,469
Riverside	139,772	151,841
San Bernardino	166,077	131,054
Ventura	62,476	32,196
<b>Regional</b>	<b>2,214,408</b>	<b>1,672,954</b>

Source: SCAG modeling (2023)

The forecast VMT per-capita decline between 2019 and 2050 indicates that transportation projects, as well as anticipated growth patterns under the Plan, if implemented, would effectively work together to improve system efficiency and minimize increases in total VMT and decrease per capita VMT. This is because the Plan includes a more compact forecasted regional development pattern providing growth in areas with greater transportation options. Compact land uses are more efficiently served by transit, support potentially higher rates of walking and

biking, and generate less vehicle travel. The Plan also places an emphasis on transit service and complete streets near transit, pedestrian-oriented, and bicycle-supportive land uses with higher density and a mix of uses most likely to generate a mix of travel modes. Road and highway projects concentrate on alleviating major bottlenecks and congestion points, while other programs and transportation systems management strategies, including technology and demand management programs, allow for greater optimization of existing transportation infrastructure. Other factors affecting future VMT are aging of the population and forecasted increases in auto operating costs.

As discussed above, the Plan is projected to increase total VMT in the SCAG region between 2019 and 2050 by approximately 1.39 percent, constituting a significant impact. However, the Plan is projected to decrease total daily hours of delay from approximately 2.21 million to 1.67 million hours between 2019 and 2050 (Table 3.17-16).

As discussed in the Transportation Finance Technical Report, Connect SoCal 2024 commits billions of dollars for various highway improvements, including mixed-flow and interchange improvements, HOV/Express lanes, and transportation system management. For example, in Orange County, an approximately \$2 billion project would add one mixed-flow lane in each direction, convert an HOV lane to HOT lane, and add an additional HOT lane on I-405. In addition, numerous projects are scheduled for completion that would result in an Express Lane on I-405 from its northern terminus to the Los Angeles/Orange County border (see the Project List Technical Report in the Plan for a complete list of projects).

Policies that aim to charge drivers user fees to cover the costs of services they use can be effective in lowering emission and delays from increased VMTs. For example, Connect SoCal 2024 includes a local road charge program in the form of mileage-based user fees regionally, which can be adjusted by time-of-day at major activity centers. SCAG assumed congestion pricing during peak periods along with increases in parking pricing at major job centers in Los Angeles. The implementation of user-fees and pricing strategies can be structured to increase equity and mobility while reducing environmental impacts.

**Table 3.17-17, Percent of PM Work Trips Completed within 45 Minutes**, shows percent of work trips completed within 45 minutes. As shown in this table, by 2050 there would be an increase of PM work trips by single-occupancy vehicles that take 45 minutes or less (from 75.63 percent to 84.41 percent). HOV PM trips within 45 minutes would increase from 77.35 percent to 84.47 percent and transit trips completed within 45 minutes would decline from 28.39 to 27.64 percent. Despite the decline for transit trips, this indicates that the Plan's strategies are improving overall congestion.

TABLE 3.17-17 Percent of PM Work Trips Completed within 45 Minutes

COUNTY	2019	2050 PLAN
<b>Single Occupant Vehicles</b>		
Imperial	88.70%	84.89%
Los Angeles	74.23%	83.63%
Orange	85.85%	90.34%
Riverside	70.55%	82.88%
San Bernardino	67.86%	80.01%
Ventura	77.38%	85.28%
<b>Region</b>	<b>75.63%</b>	<b>84.41%</b>
<b>High Occupancy Vehicles</b>		
Imperial	89.87%	81.13%
Los Angeles	76.29%	83.21%
Orange	86.18%	90.19%
Riverside	71.42%	83.27%
San Bernardino	72.32%	81.62%
Ventura	80.59%	87.12%
<b>Region</b>	<b>77.35%</b>	<b>84.47%</b>
<b>Transit</b>		
Imperial	50.00%	22.67%
Los Angeles	28.97%	28.80%
Orange	21.56%	21.51%
Riverside	22.83%	17.81%
San Bernardino	21.64%	18.37%
Ventura	26.38%	17.60%
<b>Region</b>	<b>28.39%</b>	<b>27.64%</b>

Source: SCAG Modeling (2023)

In general, many projects located within PDAs are anticipated to have less than significant transportation impacts as they would be consistent with CEQA Guidelines Section 15064.3(b)1 (i.e., generally within one-half mile of either an existing major transit stop or a stop along an existing high quality transit corrido) or other location where VMT is minimized. For those projects located outside of PDAs, transportation impacts would be determined based on each project’s ability to reduce VMT.

For transportation projects under the Plan, those projects that reduce VMT, such as most transit and bike projects, the assumption is impacts will be less than significant. However, consistency with the RTP/SCS does not necessarily lead to a less than significant impact. Further, OPR’s technical guidance on SB 743 states “building new roadways, adding roadway capacity in congested areas, or adding roadway capacity to areas where congestion is expected in the future, typically induces additional vehicle travel. For the types of projects previously indicated as likely to

lead to additional vehicle travel, an estimate should be made of the change in vehicle travel resulting from the project.”

Ultimately, the determination of VMT impacts for projects implemented under the Plan will be made at the project level. As discussed above and elsewhere in this 2024 PEIR (see Section 3.8, *Greenhouse Gases*), lead agencies have the discretion to determine the appropriate methodology and level of analysis, including establishing appropriate reduction targets. As described above, there are multiple potential VMT targets. CARB’s 2022 Scoping Plan is the most recent and recommends a per capita reduction of 25 percent below 2019 levels by 2030 and 30 percent below 2019 levels by 2045 in light-duty VMT. As noted above, these targets are not regulatory requirements; CARB is not setting regulatory limits on VMT in the 2022 Scoping Plan. The Scoping Plan also indicates that although ZEVs and NZEVs will help to reduce emissions, 30 percent of vehicles on the road in 2045 are still expected to burn fossil fuels, and thus infill development is still an important way to achieve the stated reduction targets.

In sum, the region is making progress in per capita VMT reductions and is also making significant strides in the development of new initiatives, projects, policies, and strategies in the Plan to support, and align with AB 32 and SB 32 (as well as associated SB 743 guidance) GHG reduction goals. While the Plan achieves the SB 375 GHG reduction targets, given the "gap" (as discussed above and in Section 3.8, *Greenhouse Gases*) between the current MPO emissions reductions targets and the emissions/VMT reductions necessary to meet the state’s climate action goals (per the 2017 Scoping Plan), additional progress by every sector of the economy in the state is needed. That includes the transportation planning by MPOs. As one of the largest four MPOs in the state, SCAG has a unique perspective to offer in the next round of SB 375 GHG reduction target setting and will lead by example in working together with CARB and all other involved agencies in setting ambitious and yet appropriate, achievable, and equitable targets.

Despite the benefits shown by implementing the Plan, the Plan would result in an increase in total regional VMT and may not support achievement of the state’s VMT reduction goals which could be inconsistent with CEQA Guidelines Section 15064.3(b). Therefore, this impact is considered significant and mitigation measures are required.

## MITIGATION MEASURES

### SCAG MITIGATION MEASURES

See **SMM-POP-2**.

**SMM-TRA-1** SCAG shall facilitate the reduction of vehicle miles traveled (VMT) and impacts to circulation and access through mobility improvements and by encouraging transit/rail and active transportation use via stakeholder forums (e.g., quarterly Safe and Active Streets Working Group meetings, bimonthly Regional Transit Technical Advisory Committee meetings, monthly Active Transportation Program check-ins with County Transportation Commissions). These objectives will also be facilitated through the hosting of regional forums for policy makers, County Transportation Commissions, planning agencies, local jurisdictions, and state partners to promote information sharing.

**SMM-TRA-2** SCAG shall continue to support development of local and regional SB 743 implementation programs.

**SMM-TRA-3** SCAG shall continue to develop and support its program for reducing average daily number of SCAG employees' commute vehicle trips.

### PROJECT-LEVEL MITIGATION MEASURES

**PMM-TRA-2** In accordance with provisions of sections 15091(a)(2) and 15126.4(a)(1)(B) of the CEQA Guidelines, a lead agency for a project can and should consider mitigation measures to reduce substantial adverse effects related to transportation impacts. Such measures may include the following or other comparable measures identified by the lead agency:

- Transportation demand management (TDM) strategies should be incorporated into individual land use and transportation projects and plans, as part of the planning process. Local jurisdictions should incorporate strategies identified in the Federal Highway Administration's publication: Integrating Demand Management into the Transportation Planning Process: A Desk Reference (August 2012) into the planning process (FHWA 2012). For example, the following strategies may be included to encourage use of transit and non-motorized modes of transportation and reduce vehicle miles traveled on the region's roadways:
  - Include TDM mitigation requirements for new developments;
  - Incorporate supporting infrastructure for non-motorized modes, such as, bike lanes, secure bike parking, sidewalks, and crosswalks;
  - Provide incentives to use alternative modes and reduce driving, such as, universal transit passes, road and parking pricing;
  - Implement parking management programs, such as parking cash-out, priority parking for carpools and vanpools;
  - Develop TDM-specific performance measures to evaluate project-specific and system-wide performance;
  - Incorporate TDM performance measures in the decision-making process for identifying transportation investments;
  - Implement data collection programs for TDM to determine the effectiveness of certain strategies and to measure success over time; and
  - Set aside funding for TDM initiatives.

### LEVEL OF SIGNIFICANCE AFTER MITIGATION

As previously discussed, the Plan's Regional Planning Policies and Implementation Strategies (see Chapter 2 *Project Description and Chapter 3.0 Introduction to Analysis*) and compliance with existing laws and regulations would reduce impacts; however, given the regional scale of the analysis in this 2024 PEIR, it is not possible or feasible to determine if all impacts would be fully mitigated. Therefore, this 2024 PEIR identifies SCAG and project-level mitigation measures. At the project-level, lead agencies can and should consider the identified project-level mitigation measures during subsequent review of transportation and land use projects as appropriate and feasible. While the mitigation measures will reduce the impacts related to conflicts or inconsistencies with CEQA Guidelines Section 15064.3(b), due to the regional nature of the analysis, unknown site conditions and project specific-details, and SCAG's lack of land use authority over individual projects, SCAG finds that the impact could be **significant and unavoidable** even with mitigation.

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**IMPACT TRA-3    Substantially increase hazards due to geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).**

***Significant and Unavoidable Impact – Mitigation Required***

SCAG adopted its 2023 Regional Safety targets in February 2023. SCAG recommends maintaining a long-term Zero Deaths aspirational focus toward regional transportation safety, while adopting evidence-based near-term targets. The modeled safety targets for the SCAG region forecast a 1.7 percent decrease in fatalities, a 3.9 percent increase in serious injuries, and a 4.5 percent increase in non-motorized fatalities and serious injuries in 2023. Connect SoCal 2024 prioritizes ensuring the safety and mobility of the region’s residents, including drivers and passengers, transit riders, pedestrians, and bicyclists. The Plan includes regional planning policies that support safety and security needs related to transportation systems. The Plan also aims to address actionable strategies in which SCAG can support local jurisdictions.

SCAG completed a comprehensive update of its multi-county Regional Intelligent Transportation System (ITS) Architecture in November 2019 (SCAG 2019). The Regional ITS makes use of advanced detection, communications, and computing technology to improve transportation safety. ITS allows surveillance technologies to collect data about the status of highways, traffic signals, transit vehicles, and rideshare vehicles to improve the efficiency of the system. In addition to this framework, SCAG supports the efforts of local jurisdictions to improve transportation safety through a safe systems approach which utilizes systems thinking to design transportation systems with no deaths or serious injuries. A safe systems approach includes programs such as Vision Zero, which aims to eliminate traffic fatalities and severe injuries by promoting roadway design and policy that recognizes human error and prevents severe injury incidents. Connect SoCal 2024 land use strategies aim to focus growth in PDAs, which are generally located away from high-speed transportation corridors or other facilities where potential hazards due to design features tend to be high (e.g., desert/rural highways, mountain roads with steep inclines and limited sight distances, etc.). Moreover, development in PDAs would generally increase the number of SCAG region residents in proximity to transit and in areas with good opportunities for active transportation, making it imperative to design facilities with bike racks, improved sidewalks with shade, bikeways, and welcoming transit stations to promote an active streetscape.

Bicycling has continued to become a more popular activity across the SCAG region. Fatalities and serious injuries between motor vehicles and bicycles have steadily increased throughout the years and remain high. SCAG recommends strategies for local jurisdictions to improve safety for bicyclists, including connecting bicycle facilities, implementing active transportation plans, complete streets policies and intersection control for bicyclists.

On average, approximately 1,600 people are killed, and 7 and 140,000 are injured (with more than 7,000 seriously injured) in traffic collisions in the region annually. While traffic collisions occur in communities all over the region, 90 percent occur in urban areas, and about 65 percent of collision-related fatalities happen on local roads as compared to 15 percent on arterials and 20 percent on highways.

To examine where fatalities and serious injuries are occurring across the region, SCAG developed a regional High Injury Network (HIN). The HIN identifies roadways throughout the region where high concentrations of collisions are occurring. SCAG’s regional HIN shows that 65 percent of all fatal and serious injuries occurred on just 5.5 percent of the regional transportation network. Through the HIN development, it became clear that transportation safety is an equity issue as 69.5 percent of HIN roadway miles are within Priority Equity Communities (71.9 percent and 80.1 percent for bicyclist and pedestrian HINs, respectively).

The Plan includes strategies to encourage a complete streets approach to roadway improvements which would include design of facilities to enhance the safety of riders, bicyclists, and pedestrians and minimize hazards. These enhancements would also reduce hazards for drivers. Comprehensive road education, safe pedestrian routes to schools, and other safety campaigns would also occur.

In accordance with the provisions governing hazard designs from the Southern California Regional ITS, implementation of the Plan would not be expected to result in an overall increase in hazards due to geometric design features or increase conflicts between incompatible uses. However, given the size of the region, number of transportation and urban land use projects to be developed through the 2050 Plan horizon, wide range of safety-related conditions, specific nature of potential land use incompatibilities, and variability in application of appropriate design measures affecting safety hazards for vehicles, bicycles, and pedestrians in the region, it is conservatively concluded that Plan implementation could create hazards due to hazardous design features or incompatible uses. Therefore, this impact is considered significant and mitigation measures are required.

## MITIGATION MEASURES

### SCAG MITIGATION MEASURES

See SMM-GEN-1.

### PROJECT-LEVEL MITIGATION MEASURE

**PMM-TRA-3** Prepare a sight distance analysis as needed for locations where sight lines could be impeded. The sight distance analysis to be prepared according to the jurisdiction's applicable Municipal Code requirements and the Caltrans Highway Design Manual (HCM) standards and guidelines, and should recommend safety improvements as appropriate such as limited use areas (e.g., low-height landscaping), on-street parking restrictions (e.g., red curb), and any turning restrictions (e.g., right-in/right-out).

### LEVEL OF SIGNIFICANCE AFTER MITIGATION

As previously discussed, the Plan's Regional Planning Policies and Implementation Strategies (see Chapter 2 *Project Description and Chapter 3.0 Introduction to Analysis*) and compliance with existing laws and regulations would reduce impacts; however, given the regional scale of the analysis in this 2024 PEIR, it is not possible or feasible to determine if all impacts would be fully mitigated. Therefore, this 2024 PEIR identifies SCAG and project-level mitigation measures. At the project-level, lead agencies can and should consider the identified project-level mitigation measures during subsequent review of transportation and land use projects as appropriate and feasible. While the mitigation measures will reduce the impacts related to hazardous design features or incompatible uses, due to the regional nature of the analysis, unknown site conditions and project specific-details, and SCAG's lack of land use authority over individual projects, SCAG finds that the impact could be **significant and unavoidable** even with mitigation.

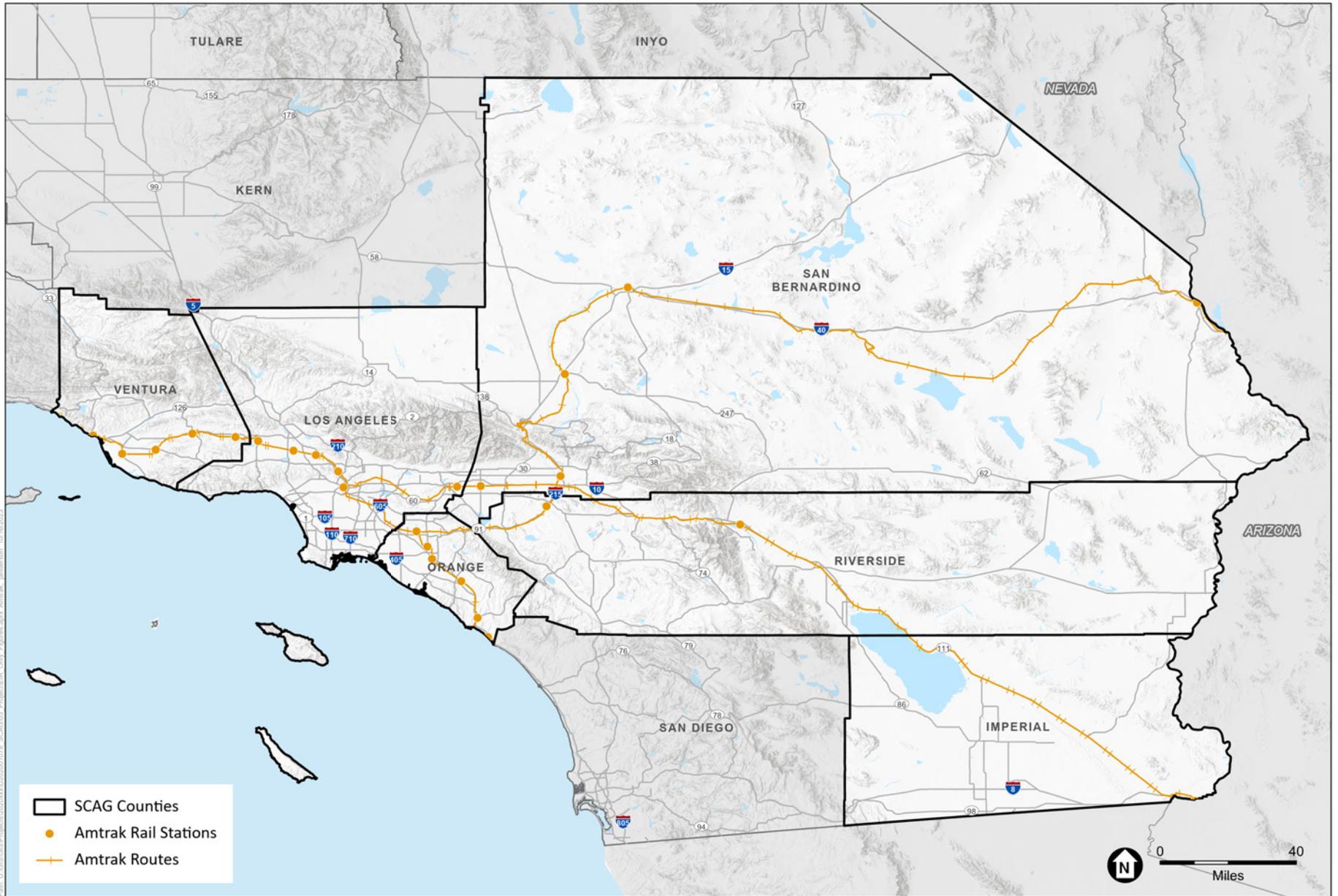
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### IMPACT TRA-4 Result in inadequate emergency access.

As discussed in Section 3.0, *Introduction to the Analysis*, due to the interrelationship of the threshold topic areas, Impacts TRA-4, WF-1, and HAZ-6 are addressed together in Section 3.9, *Hazards and Hazardous Materials*, of this 2024 PEIR.

## **CUMULATIVE IMPACTS**

Connect SoCal 2024 is a regional-scale Plan comprised of policies and strategies, a regional growth forecast and land use pattern, and individual projects and investments. At this regional-scale, a cumulative or related project to the Plan is another regional-scale plan (such as Air Quality Management Plans within the region) and similar regional plans for adjacent regions. Because the Plan, in and of itself, would result in significant adverse environmental impacts with respect to transportation, these impacts would add to the environmental impacts of other cumulative or related projects. Mitigation measures that reduce the Plan's impacts would similarly reduce the Plan's contribution to cumulative impacts.

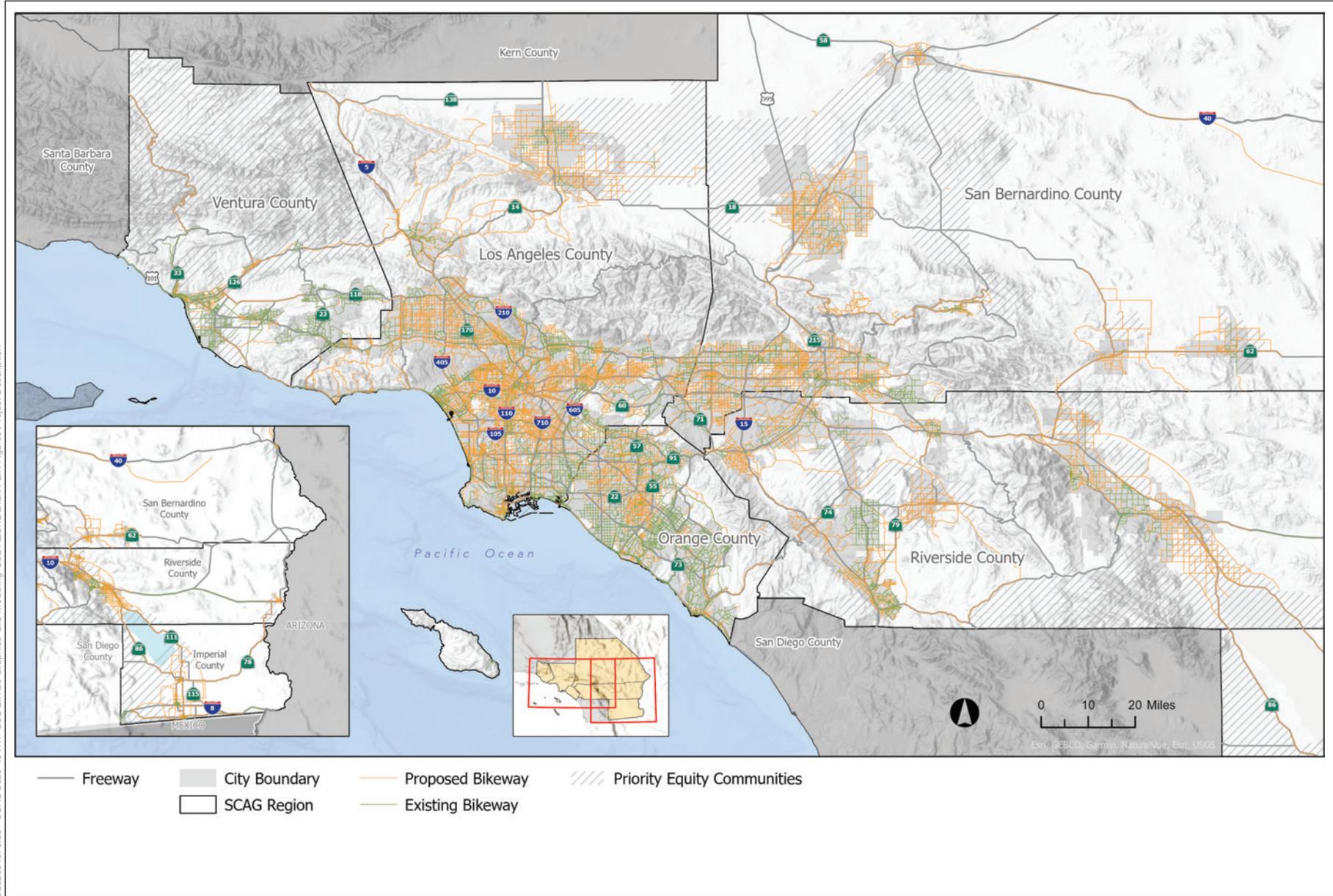


SOURCE: NTAD, 2019

Connect SoCal 2024 PEIR

**Map 3.17-1**  
Amtrak Railways





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SOURCE: SCAG, 2022

Connect SoCal 2024 PEIR

**Map 3.17-2**  
Existing (2019) and Proposed Regional Bikeways (2050)



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