

Appendix I  
**Updated Tables for the 2024  
Final PEIR**





As discussed in Chapter 9, *Clarifications and Revisions*, the following PEIR tables are updated based on the final modeling results for traffic, criteria pollutant emissions, GHG emissions, and SPM data for Connect SoCal 2024. These are the latest tables and should be used as the basis for future environmental reviews; they do not differ substantially from those circulated with the 2024 Draft PEIR and do not substantially affect the PEIR analyses or conclusions. For legibility, the updated tables are reproduced in their entirety and are not shown in underline or strikethrough mode. Tables duplicated in multiple sections are presented only once with both table numbers added to the title.

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TABLES ES-1 &amp; 2-1 2019–2050 Population, Households, and Employment Projections in the SCAG Region

COUNTY NAME	POPULATION 2019	POPULATION 2050	PERCENTAGE INCREASE	HOUSEHOLDS 2019	HOUSEHOLDS 2050	PERCENTAGE INCREASE	EMPLOYMENT 2019	EMPLOYMENT 2050	PERCENTAGE INCREASE
Imperial	181,000	210,000	16%	52,000	72,000	39%	69,000	91,000	32%
Los Angeles	10,046,000	10,793,000	7%	3,393,000	4,155,000	23%	5,031,000	5,461,000	9%
Orange	3,191,000	3,439,000	8%	1,069,000	1,253,000	17%	1,805,000	2,019,000	12%
Riverside	2,386,000	2,992,000	25%	744,000	1,062,000	43%	847,000	1,185,000	40%
San Bernardino	2,175,000	2,623,000	21%	657,000	953,000	45%	860,000	1,145,000	33%
Ventura	849,000	852,000	<1%	278,000	318,000	14%	363,000	376,000	4%
<b>SCAG Region</b>	<b>18,827,000</b>	<b>20,909,000</b>	<b>11%</b>	<b>6,193,000</b>	<b>7,814,000</b>	<b>26%</b>	<b>8,976,000</b>	<b>10,276,000</b>	<b>14%</b>

Source: SCAG 2023

Table Note: Numbers may not sum to total due to rounding.

TABLE 2-4 Connect SoCal 2024 Revenue Sources (in billions)

REVENUE SOURCE	AMOUNT
<b>Local</b>	
Sales Tax:	\$256.8
• Local Option Sales Tax Measures	\$207.6
• Transportation Development Act (TDA)—Local Transportation Fund	\$49.2
Transit Farebox Revenue	\$29.7
Highway Tolls (in core revenue forecast)	\$27.3
Mitigation Fees	\$5.7
Other Local Sources	\$38.4
<i>Local Revenue Subtotal</i>	<i>\$357.9</i>
<b>State</b>	
State Transportation Improvement Program (STIP):	\$6.9
• Regional Transportation Improvement Program (RTIP)	\$5.7
• Interregional Transportation Improvement Program (ITIP)	\$1.1
State Highway Operation and Protection Plan (SHOPP)	\$70.4
Highway Users Tax Account (HUTA)	\$42.2
Road Maintenance and Rehabilitation Account (RMRA)	\$33.8
State Transit Assistance Fund (STA)	\$18.8
Cap-and-Trade Auction Proceeds	\$1.8
Other State Sources	\$15.3
<i>State Revenue Subtotal</i>	<i>\$189.0</i>
<b>Federal</b>	
Federal Transit:	\$24.9
• Federal Transit Formula	\$16.7
• Federal Transit Non-Formula	\$8.2
Federal Highway & Other:	\$17.6
• Congestion Mitigation and Air Quality (CMAQ)	\$5.1
• Surface Transportation Block Grant (STBG)	\$6.6
• Other Federal Sources	\$5.9
<i>Federal Revenue Subtotal</i>	<i>\$42.5</i>
<b>New Reasonably Available</b>	
Federal Gas Excise Tax Adjustment	\$7.6
Mileage-Based User Fee (Replacement)	\$48.0
Federal Credit Assistance; Bond Proceeds	\$2.2
Private Equity Participation	\$9.3
Local Road Charge Program	\$92.2
Value Capture Strategies	\$3.0
<i>New Revenue Subtotal</i>	<i>\$162.2</i>
<b>Revenue Total</b>	<b>\$751.7</b>

Source: SCAG 2023b

Table Note: Numbers may not sum to total due to rounding.

TABLE 2-5 Connect 2024 SoCal Expenditure (in billions)

EXPENDITURE TYPE	AMOUNT
<b>Capital Projects and Other Programs</b>	
Arterials	\$25.3
Goods Movement (including Grade Separations)	\$62.6
High-Occupancy Vehicle/Express Lanes	\$10.0
Mixed-Flow and Interchange Improvements	\$11.9
Transportation System Management (Including ITS)	\$11.9
Transit	\$54.6
Passenger Rail	\$45.0
Active Transportation	\$29.2
Transportation Demand Management	\$17.4
Other*	\$10.0
<i>Subtotal Capital Projects and Other Programs</i>	<i>\$277.7</i>
<b>Operations and Maintenance</b>	
State Highways	\$75.4
Transit	\$248.7
Passenger Rail	\$42.5
Regionally Significant Local Streets and Roads**	\$87.7
<i>Subtotal Operations and Maintenance</i>	<i>\$454.3</i>
<i>Debt Service</i>	<i>\$19.7</i>
<b>Cost Total</b>	<b>\$751.7</b>

Source: SCAG 2023b

Table Notes: Numbers may not sum to total due to rounding.

\* Includes Mobility Equity Fund, Regional Advance Mitigation, and Others

\*\* Includes \$8.8 billion for active transportation in addition to capital project investment of \$29.2 billion for a total of \$38 billion for active transportation improvements.

TABLE 3.2-4 SCAG Region Estimated Maximum Direct Potential Loss of Important Agricultural Land, 2019–2050

IMPORTANT FARMLAND (ACRES)				TOTAL OF IMPORTANT FARMLAND (ACRES)	PERCENT POTENTIALLY LOST IN SCAG REGION
PRIME FARMLAND	FARMLAND OF STATEWIDE IMPORTANCE	UNIQUE FARMLAND	FARMLAND OF LOCAL IMPORTANCE		
-1,868	-288	-1,147	-10,647	-13,950	0.71%

Source: SCAG Scenario Planning Model

TABLE 3.3-7 On-Road Transportation Criteria Pollutant Emissions by County – Existing Conditions (2019)

COUNTY	[TONS/DAY]								
	ROG		NOX			CO	PM10	PM2.5	SOX
	SUMMER	ANNUAL	SUMMER	ANNUAL	WINTER	WINTER	ANNUAL	ANNUAL	ANNUAL
Imperial	2	2	5	6	6	16	0.3	0.1	<0.1
Los Angeles	53	52	84	92	91	498	6.9	2.9	1.0
Orange	16	16	22	24	24	150	2.2	0.9	0.3
Riverside	14	13	28	30	30	115	2.0	0.9	0.3
San Bernardino	16	15	32	34	34	129	2.2	1.0	0.3
Ventura	3	3	6	6	6	25	0.5	0.2	0.1

Source: SCAG 2023b

Table Note: Numbers may not sum to total due to rounding.

TABLE 3.3-14 On-Road Mobile Source Criteria Air Pollutant Emissions by County – Existing Condition (2019) vs Year 2030, 2040, and 2050 Plan

COUNTY		[TONS/DAY]								
		ROG		NOX			CO	PM10	PM2.5	SOX
		SUMMER	ANNUAL	SUMMER	ANNUAL	WINTER	WINTER	ANNUAL	ANNUAL	ANNUAL
Imperial	Existing	2	2	5	6	6	16	0.3	0.1	<0.1
	Plan (Year 2030)	1	1	2	2	2	7	0.3	0.1	<0.1
	Plan (Year 2040)	1	1	2	2	2	6	0.3	0.1	<0.1
	Plan (Year 2050)	1	1	2	2	2	6	0.3	0.1	<0.1
	Difference (Year 2030)	-1	-1	-3	-4	-4	-9	<0.1	<0.1	<0.1
	Difference (Year 2040)	-1	-1	-4	-4	-4	-10	<0.1	<0.1	<0.1
	Difference (Year 2050)	-2	-1	-4	-4	-4	-10	<0.1	<0.1	<0.1
Los Angeles	Existing	53	52	84	92	91	498	6.9	2.9	1.0
	Plan (Year 2030)	26	26	27	30	30	234	5.7	2.0	0.7
	Plan (Year 2040)	20	20	19	21	21	175	5.5	1.9	0.6
	Plan (Year 2050)	18	18	18	19	19	161	5.6	1.9	0.6
	Difference (Year 2030)	-26	-26	-57	-62	-61	-264	-1.2	-0.9	-0.2
	Difference (Year 2040)	-33	-32	-65	-71	-70	-324	-1.4	-1.0	-0.3
	Difference (Year 2050)	-34	-34	-66	-73	-71	-338	-1.2	-1.0	-0.4
Orange	Existing	16	16	22	24	24	150	2.2	0.9	0.3
	Plan (Year 2030)	9	9	8	9	9	77	1.9	0.7	0.2
	Plan (Year 2040)	7	7	5	6	6	58	1.8	0.6	0.2
	Plan (Year 2050)	6	6	5	5	5	54	1.8	0.6	0.2
	Difference (Year 2030)	-7	-7	-14	-16	-15	-73	-0.3	-0.2	-0.1
	Difference (Year 2040)	-9	-9	-17	-18	-18	-92	-0.4	-0.3	-0.1
	Difference (Year 2050)	-10	-10	-18	-19	-19	-95	-0.4	-0.3	-0.1
Riverside	Existing	14	13	28	30	30	115	2.0	0.9	0.3
	Plan (Year 2030)	8	8	11	12	12	62	1.8	0.7	0.2
	Plan (Year 2040)	7	6	9	9	9	52	1.9	0.7	0.2
	Plan (Year 2050)	6	6	9	10	10	52	2.1	0.7	0.2
	Difference (Year 2030)	-6	-5	-17	-19	-18	-52	-0.2	-0.2	0.0
	Difference (Year 2040)	-7	-6	-20	-21	-21	-62	-0.1	-0.2	-0.1
	Difference (Year 2050)	-8	-7	-19	-21	-20	-63	0.1	-0.2	<0.1
San Bernardino	Existing	16	15	32	34	34	129	2.2	1.0	0.3
	Plan (Year 2030)	9	8	12	13	12	64	1.9	0.7	0.2
	Plan (Year 2040)	6	6	9	10	10	52	2.0	0.7	0.2
	Plan (Year 2050)	6	6	9	10	10	51	2.2	0.8	0.2
	Difference (Year 2030)	-7	-7	-20	-22	-21	-65	-0.3	-0.3	-0.1

COUNTY		[TONS/DAY]								
		ROG		NOX			CO	PM10	PM2.5	SOX
		SUMMER	ANNUAL	SUMMER	ANNUAL	WINTER	WINTER	ANNUAL	ANNUAL	ANNUAL
	Difference (Year 2040)	-10	-9	-23	-25	-24	-77	-0.2	-0.3	-0.1
	Difference (Year 2050)	-10	-9	-23	-25	-24	-78	0.0	-0.2	-0.1
Ventura	Existing	3	3	6	6	6	25	0.5	0.2	0.1
	Plan (Year 2030)	2	2	2	2	2	12	0.4	0.1	<0.1
	Plan (Year 2040)	1	1	1	1	1	9	0.4	0.1	<0.1
	Plan (Year 2050)	1	1	1	1	1	8	0.4	0.1	<0.1
	Difference (Year 2030)	-1	-1	-4	-4	-4	-13	-0.1	-0.1	<-0.1
	Difference (Year 2040)	-2	-2	-5	-5	-5	-17	-0.1	-0.1	<-0.1
	Difference (Year 2050)	-2	-2	-5	-5	-5	-18	-0.1	-0.1	0.0

Source: SCAG 2023b

Table Note: Numbers may not sum to total due to rounding.

TABLE 3.6-1 Residential Energy Use and Cost per Household

	2019	PLAN 2050	PERCENTAGE DIFFERENCE FROM 2019 TO PLAN
Residential energy use per household (Btu in millions)	61.2	44.7	-27.0%
Residential electricity use per household (kWh)	6,962	5,155	-26.0%
Number of households	6,193,000	7,814,000	26.2%
Residential energy use (Btu in trillions)	379	349	-7.9%
Residential energy cost (in billions \$)	9.0	11.0	22.2%

Source: SCAG Scenario Planning Model

Table Note: Numbers may not sum to total due to rounding.

TABLE 3.6-2 Residential Energy and Water Cost per Household

	BASE YEAR (2019)	PLAN (2050)	PERCENTAGE DIFFERENCE FROM 2019 TO PLAN
Residential energy cost per household	\$1,453	\$1,409	-3.0%
Residential water cost per household	\$308	\$293	-4.9%
<b>Total utilities (energy + water) cost per household</b>	<b>\$1,761</b>	<b>\$1,702</b>	<b>-3.4%</b>

Source: SCAG Scenario Planning Model

Table Note: Numbers may not sum to total due to rounding.

TABLE 3.6-3 Building Energy Consumption – Residential and Commercial

	BASE YEAR (2019)	PLAN (2050)	PERCENTAGE DIFFERENCE FROM BASE YEAR
Residential electricity consumed (GWh)	43,116	40,284	-6.6%
Residential natural gas consumed (therms in billions)	2.3	2.1	-8.7%
Residential energy consumed (Btu in trillions)	379	349	-7.9%
Commercial electricity consumed (GWh)	81,589	68,906	-15.5%
Commercial natural gas consumed (therms in billions)	2.6	2.6	—
Commercial energy consumed (Btu in trillions)	536	498	-7.1%
<b>Total energy consumed (Btu in trillions)</b>	<b>915</b>	<b>846</b>	<b>-7.5%</b>

Source: SCAG Scenario Planning Model

Table Note: Numbers may not sum to total due to rounding.

TABLE 3.6-4 SCAG Region Estimated Transportation Fuel Consumption

	FUEL CONSUMED		PERCENTAGE REDUCTION COMPARED TO 2019
	BILLION GALLONS PER YEAR	THOUSAND GALLONS PER DAY	
2019	7.6	20,771	—
2050 Plan	5.2	14,331	-31.2%

Source: SCAG 2023b

TABLE 3.6-5 Water Use – Residential and Commercial

	2019	2050 PLAN	PERCENTAGE DIFFERENCE FROM 2019
Indoor residential water use (af)	1,036,738	954,553	-8.0%
Outdoor residential water use (af)	1,024,858	834,481	-18.6%
Residential water use (af)	2,061,596	1,789,034	-13.2%
Indoor commercial water use (af)	574,080	893,448	53.3%
Outdoor commercial water use (af)	389,727	446,990	14.7%
Commercial water use (af)	963,807	1,340,438	39.1%
<b>Total water use (af)</b>	<b>3,025,403</b>	<b>3,129,472</b>	<b>3.4%</b>

Source: SCAG Scenario Planning Model

Table Note: Numbers may not sum to total due to rounding.

TABLE 3.6-6 Water-Related Energy Use

	2019	2050 PLAN	PERCENTAGE DIFFERENCE FROM 2019
Water-related electricity use (GWh)	12,475	13,023	4.4%

Source: SCAG Scenario Planning Model

Table Note: Numbers may not sum to total due to rounding.

TABLE 3.8-7 Greenhouse Gas Emissions from All On-Road Vehicles in the SCAG Region  
(million metric tons per year)

ON-ROAD VEHICLES	2019 (MMT/YEAR)			2030 (PLAN) (MMT/YEAR)			2045 (PLAN) (MMT/YEAR)			2050 (PLAN) (MMT/YEAR)		
	CO2	CH4	N2O	CO2	CH4	N2O	CO2	CH4	N2O	CO2	CH4	N2O
Light- and Medium-Duty Vehicles	49.38	0.0025	0.0010	36.78	0.0011	0.0004	32.87	0.0007	0.0002	32.85	0.0007	0.0002
Heavy-Duty Vehicles	12.31	0.0005	0.0014	11.87	0.0003	0.0006	10.29	0.0002	0.0005	10.50	0.0002	0.0005
Buses	1.54	0.0008	0.0001	1.22	0.0008	0.0000	0.61	0.0001	0.0000	0.58	0.0001	0.0000
<i>Subtotal On-Road Vehicles in CO2</i>	<i>63.23</i>	<i>0.0039</i>	<i>0.0025</i>	<i>49.87</i>	<i>0.00</i>	<i>0.00</i>	<i>43.77</i>	<i>0.00</i>	<i>0.00</i>	<i>43.94</i>	<i>0.00</i>	<i>0.00</i>
<i>Subtotal On-Road Vehicles in CO2e*</i>	<i>63.23</i>	<i>0.0812</i>	<i>0.78</i>	<i>49.87</i>	<i>0.05</i>	<i>0.32</i>	<i>43.77</i>	<i>0.02</i>	<i>0.23</i>	<i>43.94</i>	<i>0.02</i>	<i>0.24</i>
<b>Total GHG Emissions from On-Road Vehicles in CO2e</b>	<b>64.09</b>			<b>50.23</b>			<b>44.03</b>			<b>44.20</b>		

Source: SCAG Modeling (2023)

Table Notes: Numbers may not sum to total due to rounding.

\* CO2 was converted to CO2e based on the Global Warming Potential (GWP) (CARB, undated[b]).

TABLE 3.8-9 Greenhouse Gas Emissions (CO<sub>2</sub>e) from All On-Road and Other Transportation Sources in the SCAG Region (million metric tons per year)

	2019 BASE YEAR	2030 (PLAN)	2045 (PLAN)	2050 (PLAN)
Total GHG Emissions from On-Road Vehicles in CO <sub>2</sub> e	64.09	50.23	44.03	44.20
Total GHG Emissions from Other Transportation Sources in CO <sub>2</sub> e*	2.07	2.51	3.03	3.21
<b>All Transportation Sector (On-Road and Other Sources) in CO<sub>2</sub>e</b>	<b>66.42</b>	<b>52.74</b>	<b>47.06</b>	<b>47.41</b>
<b>2030, 2045, 205 Plan vs. 2019 Base Year</b>		<b>-20.6%</b>	<b>-29.1%</b>	<b>-28.62%</b>

Source: SCAG Modeling (2023)

Table Notes: CO<sub>2</sub> was converted to CO<sub>2</sub>e based on the Global Warming Potential (GWP) (CARB, undated[b]). Numbers may not sum to total due to rounding.

\* Emission sources include rail, aviation, GSE, and ocean-going vessels. Rail, aviation, and ocean-going vessels are regulated at the federal level. Airport Ground Support (GSE) sources are regulated at the state level.

TABLE 3.8-10 Greenhouse Gas Emissions Light-, Medium-, and Heavy-Duty On-Road Vehicle Transportation by County and Other Transportation Sources in the SCAG Region (CO<sub>2</sub>e) (million metric tons per year)

COUNTY	2005 BASE YEAR	2019 PEIR BASE YEAR	2030 PLAN	2045 PLAN	2050 PLAN	2019 COMPARED TO PLAN YEAR (2050)	2005 COMPARED TO PLAN YEAR (2050)
<b>Light-, Medium-, and Heavy-Duty On-Road Vehicle Transportation</b>							
Imperial	1.27	1.26	1.10	1.08	1.11	-11.8%	-12.7%
Los Angeles	42.47	30.98	23.24	19.85	19.75	-36.3%	-53.5%
Orange	12.77	10.12	7.72	6.57	6.45	-36.3%	-49.5%
Riverside	10.70	8.99	7.75	7.47	7.71	-14.3%	-28.0%
San Bernardino	11.84	9.60	7.94	7.43	7.62	-20.6%	-35.6%
Ventura	3.34	1.55	1.23	1.01	0.98	-36.7%	-70.5%
<b>SCAG Subtotal</b>	<b>82.39</b>	<b>62.50</b>	<b>48.98</b>	<b>43.41</b>	<b>43.61</b>	<b>-30.2%</b>	<b>-47.1%</b>
<b>Other Transportation</b>							
Bus (Region)	—	1.59	1.25	0.62	0.59	-63.0%	—
Rail (Region)	—	0.20	0.23	0.14	0.12	-38.1%	—
Aviation*	—	1.29	1.66	2.17	2.34	81.3%	—
Airport Ground Support (GSE)	—	0.12	0.14	0.16	0.16	32.7%	—
OGV (Region)	—	0.47	0.48	0.57	0.59	26.8%	—
<b>Total All Sectors</b>	<b>—</b>	<b>66.17</b>	<b>52.74</b>	<b>47.07</b>	<b>47.41</b>	<b>-28.6%</b>	<b>—</b>

Source: SCAG Modeling (2023)

Table Notes: On-Road Transportation sources include light- and medium-duty vehicles and heavy-duty trucks.

No Plan emissions were not presented as they incrementally as compared to Plan emissions. For discussion of emissions related to Plan Alternatives please refer to Chapter 4, *Alternatives*, of this PEIR.

Other Transportation Sources include bus rail, aviation, GSE, and ocean-going vessels. Rail, aviation, and ocean-going vessels are regulated at the federal level. Airport Ground Support (GSE) sources are regulated at the state level.

Numbers may not sum to total due to rounding.

\* Aviation CO<sub>2</sub> MMT values linearly interpolated from presented years 2012 and 2040 for the SCAQMD. Note CH<sub>4</sub> and N<sub>2</sub>O not presented. Aviation GHG emissions from other jurisdictions unavailable.

TABLE 3.8-11 Greenhouse Gas Emissions for the SCAG Region from Three Primary Sources (CO<sub>2</sub>e)  
(million metric tons per year)

AREA	2005 BASE YEAR	2019 BASE YEAR	2030 PLAN	2045 PLAN	2050 PLAN	2019 VS 2050 PLAN	2005 VS 2050 PLAN
Transportation <sup>a</sup>	82.39	66.17	52.74	47.07	47.41	-28.4%	-42.5%
Building Energy <sup>b</sup>	44.50	64.64	57.30	47.30	44.02	-31.9%	-1.08%
Water-Related Energy <sup>c</sup>	3.82	2.89	2.26	1.40	1.12	-61.3%	-70.8%
<b>Total</b>	<b>130.71</b>	<b>133.70</b>	<b>112.30</b>	<b>95.77</b>	<b>92.55</b>	<b>-30.8%</b>	<b>-29.2%</b>

Source: SCAG Modeling (2023)

Table Notes: Numbers may not sum to total due to rounding.

The Scenario Planning Model provides estimates of energy and water consumption; it is a scenario planning tool used for developing scenarios for the Plan during the scenario planning process to compare relative differences among scenarios and does not account for emissions reductions from cleaner fuels and technologies in the future.

The estimates of GHG emissions in this table do not include the following sources: construction, solid waste, agriculture, wildfires, industrial process or other sources.

- Transportation emissions include On-Road and Other Transportation Sources. On-Road Transportation sources include light- and medium-duty vehicles and heavy-duty trucks. On-road transportation based on EMFAC and conversion from CO<sub>2</sub> to CO<sub>2</sub>e. Other Transportation Sources include bus rail, aviation, GSE, and ocean-going vessels. Rail, aviation, and ocean-going vessels are regulated at the federal level. Airport Ground Support (GSE) sources are regulated at the state level. Note, transportation source emissions from the 2005 Base Year do not include emissions from Other Transportation Sources as these emissions are unavailable.
- Includes estimates of emissions from energy used in the region but generated outside the region. Values for 2030 and 2045 are linearly interpolated from SCAG SPM Modeling results for year 2019 and 2050. The 2005 base year value is from the 2012 RTP/SCS PEIR.
- Water related estimates of energy consumption includes the electricity used in the transport, treatment, and distribution of water. Values for 2030 and 2045 are linearly interpolated from SCAG SPM Modeling results for year 2019 and 2050. The 2005 base year value is from the 2012 RTP/SCS PEIR.

TABLES 3.8-12 & 3.17-14		Population and VMT (2019 and 2050)		
	2019	2050	2050 VS 2019	
Total Population	18,827,000	20,909,000	11.1%	
Light Duty Vehicle VMT	413,950,174	406,531,128	-1.79%	
Total VMT	444,221,295	449,922,574	1.28%	
VMT Per Capita Light Duty Vehicles	21.99	19.44	-11.6%	
VMT Per Capita All Vehicles	23.60	21.52	-8.80%	

Source: SCAG modeling (2023)

Table Note: Numbers may not sum to total due to rounding.

TABLE 3.14-6 Employment Growth for 2000 to 2019

COUNTY	2000 (JOBS) <sup>1</sup>	2019 (JOBS) <sup>2</sup>	2000-2019 GROWTH (JOBS)	PERCENT CHANGE (2000-2019)
Imperial	56,000	70,000	14,000	25.00%
Los Angeles	4,504,000	5,031,000	527,000	11.70%
Orange	1,522,000	1,805,000	283,000	18.59%
Riverside	520,000	847,000	327,000	62.88%
San Bernardino	589,000	860,000	271,000	46.01%
Ventura	325,000	363,000	38,000	11.69%
<b>SCAG</b>	<b>7,516,000</b>	<b>8,976,000</b>	<b>1,460,000</b>	<b>19.43</b>

Sources: 1. CA EDD 2019, Wage and Salary employment plus self-employment, as processed by SCAG.  
 2. Based on 2020 decennial Census PL-94 redistricting file and 2019 DOF E-5 estimates.

Table Notes: Numbers are rounded to the nearest thousand. Numbers may not sum to total due to rounding.

TABLE 3.14-8 Population Projections in the SCAG Region (2019, 2020, 2030, 2045, and 2050)

COUNTY NAME	POPULATION 2019	POPULATION 2020	POPULATION 2030	POPULATION 2045	POPULATION 2050	PERCENTAGE INCREASE 2019-2050
Imperial	181,000	180,000	193,000	207,000	210,000	16.0%
Los Angeles	10,046,000	10,018,000	10,214,000	10,757,000	10,793,000	7.4%
Orange	3,191,000	3,188,000	3,247,000	3,401,000	3,439,000	7.8%
Riverside	2,386,000	2,418,000	2,674,000	2,927,000	2,992,000	25.4%
San Bernardino	2,175,000	2,182,000	2,298,000	2,534,000	2,623,000	20.6%
Ventura	849,000	844,000	849,000	858,000	852,000	0.4%
<b>SCAG Region</b>	<b>18,827,000</b>	<b>18,830,000</b>	<b>19,476,000</b>	<b>20,684,000</b>	<b>20,909,000</b>	<b>11.1%</b>

Source: SCAG 2023a, Table 12: Region and county forecast of population, households, and employment

Table Note: Numbers are rounded to the nearest thousand and may not sum to total.

TABLE 3.14-9 Household Projections in the SCAG Region (2019, 2020, 2030, 2045, and 2050)

COUNTY NAME	HOUSEHOLDS 2019	HOUSEHOLDS 2020	HOUSEHOLDS 2030	HOUSEHOLDS 2045	HOUSEHOLDS 2050	PERCENTAGE INCREASE 2019-2050
Imperial	52,000	52,000	61,000	70,000	72,000	38.5%
Los Angeles	3,393,000	3,423,000	3,784,000	4,120,000	4,155,000	22.5%
Orange	1,069,000	1,080,000	1,164,000	1,239,000	1,253,000	17.2%
Riverside	744,000	763,000	903,000	1,033,000	1,062,000	42.7%
San Bernardino	657,000	668,000	786,000	918,000	953,000	45.1%
Ventura	278,000	280,000	307,000	321,000	318,000	14.4%
<b>SCAG Region</b>	<b>6,193,000</b>	<b>6,265,000</b>	<b>7,006,000</b>	<b>7,701,000</b>	<b>7,814,000</b>	<b>26.2%</b>

Source: SCAG 2023a, Table 12: Region and county forecast of population, households, and employment

Table Note: Numbers are rounded to the nearest thousand and may not sum to total.

TABLE 3.14-10 Employment Projections in the SCAG Region (2019, 2022, 2030, 2045, and 2050)

COUNTY NAME	EMPLOYMENT 2019	EMPLOYMENT 2022	EMPLOYMENT 2030	EMPLOYMENT 2045	EMPLOYMENT 2050	PERCENTAGE INCREASE 2019-2050
Imperial	69,000	70,000	78,000	88,000	91,000	31.9%
Los Angeles	5,031,000	4,942,000	5,277,000	5,497,000	5,461,000	8.6%
Orange	1,805,000	1,806,000	1,903,000	1,998,000	2,019,000	11.9%
Riverside	847,000	897,000	983,000	1,147,000	1,185,000	39.9%
San Bernardino	860,000	856,000	962,000	1,079,000	1,145,000	33.1%
Ventura	363,000	367,000	379,000	380,000	376,000	3.6%
<b>SCAG Region</b>	<b>8,976,000</b>	<b>8,937,000</b>	<b>9,581,000</b>	<b>10,190,000</b>	<b>10,276,000</b>	<b>14.5%</b>

Source: SCAG 2023a, Table 12: Region and county forecast of population, households, and employment

Table Note: Numbers are rounded to the nearest thousand and may not sum to total.

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	1,198,378	1%	1,806,535	1%	6,962,616	2%	181,000	38.47
Los Angeles	44,031,036	50%	62,685,241	50%	220,260,539	50%	10,046,000	21.93
Orange	15,239,282	17%	21,583,718	17%	76,501,002	17%	3,191,000	23.97
Riverside	11,435,005	13%	16,225,311	13%	59,085,390	13%	2,386,000	24.76
San Bernardino	11,945,291	14%	16,680,845	13%	62,790,479	14%	2,175,000	28.87
Ventura	3,813,047	4%	5,321,262	4%	18,621,270	4%	846,000	22.01
<b>Total</b>	<b>87,662,040</b>	<b>100%</b>	<b>124,302,913</b>	<b>100%</b>	<b>444,221,295</b>	<b>100%</b>	<b>18,827,000</b>	<b>23.60</b>

Source: SCAG Modeling (2023)

Table Notes: Numbers may not sum to total due to rounding.

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	23,677	1%	36,894	1%	132,302	1%	181,000	0.73
Los Angeles	1,548,505	57%	2,270,723	57%	6,774,989	55%	10,046,000	0.67
Orange	458,256	17%	664,112	17%	2,082,081	17%	3,191,000	0.65
Riverside	292,394	11%	403,386	10%	1,354,690	11%	2,386,000	0.57
San Bernardino	306,933	11%	428,382	11%	1,452,496	12%	2,175,000	0.67
Ventura	101,859	4%	147,158	4%	462,101	4%	846,000	0.55
<b>Total</b>	<b>2,731,623</b>	<b>100%</b>	<b>,950,655</b>	<b>100%</b>	<b>12,258,659</b>	<b>100%</b>	<b>18,827,000</b>	<b>0.65</b>

Source: SCAG Modeling (2023)

Table Notes: Numbers may not sum to total due to rounding.

1. Percentage of region

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	15.20	17.83	57.56	20.64
	Non-Work Trips	3.77			
Los Angeles	Home-Based Work Trips	15.32	29.35	65.56	25.26
	Non-Work Trips	6.12			
Orange	Home-Based Work Trips	15.20	23.45	81.66	22.82
	Non-Work Trips	6.09			
Riverside	Home-Based Work Trips	21.11	31.77	93.25	22.97
	Non-Work Trips	6.28			
San Bernardino	Home-Based Work Trips	21.51	32.52	108.95	22.86
	Non-Work Trips	6.12			
Ventura	Home-Based Work Trips	16.50	28.51	107.99	21.22
	Non-Work Trips	5.73			
<b>Region</b>	<b>Home-Based Work Trips</b>	<b>16.63</b>	<b>28.73</b>	<b>69.56</b>	<b>24.24</b>
	<b>Non-Work Trips</b>	<b>6.10</b>	<b>—</b>	<b>—</b>	<b>—</b>

Source: SCAG Modeling (2023)

Table Notes: Only considers Home to work/business direct trips. Numbers may not sum to total due to rounding.

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	61.6%	11.2%	10.9%	4.5%	0.2%	11.6%	100.0%
	All Daily Trips	30.2%	13.3%	10.4%	27.9%	1.1%	17.1%	100.0%
Los Angeles	Home Based Work	65.5%	9.6%	7.4%	6.5%	5.4%	5.7%	100.0%
	All Daily Trips	35.9%	12.8%	9.2%	27.8%	3.5%	10.9%	100.0%
Orange	Home Based Work	72.9%	9.1%	7.5%	5.4%	0.9%	4.2%	100.0%
	All Daily Trips	39.5%	12.5%	9.1%	28.1%	1.2%	9.5%	100.0%
Riverside	Home Based Work	71.8%	10.3%	8.7%	4.8%	0.8%	3.6%	100.0%
	All Daily Trips	35.3%	12.9%	10.3%	31.3%	1.4%	8.8%	100.0%
San Bernardino	Home Based Work	71.3%	10.5%	8.7%	5.0%	1.1%	3.3%	100.0%
	All Daily Trips	37.1%	13.5%	10.1%	28.8%	1.5%	9.0%	100.0%
Ventura	Home Based Work	72.2%	8.4%	6.7%	4.7%	0.6%	7.5%	100.0%
	All Daily Trips	37.4%	12.0%	9.2%	28.0%	1.2%	12.3%	100.0%
<b>Total</b>	<b>Home Based Work</b>	<b>68.4%</b>	<b>9.6%</b>	<b>7.7%</b>	<b>5.8%</b>	<b>3.4%</b>	<b>5.1%</b>	<b>100.0%</b>
	<b>All Daily Trips</b>	<b>36.6%</b>	<b>12.8%</b>	<b>9.5%</b>	<b>28.4%</b>	<b>2.5%</b>	<b>10.3%</b>	<b>100.0%</b>

Source: SCAG Modeling (2023)

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

TABLE 3.17-11 Daily Transit Boardings

DAILY TRANSIT BOARDING	EXISTING (2019)	2050 PLAN
Commuter Rail	46,537	232,397
Local Bus	1,238,924	3,009,374
Local Rail	330,055	894,343
Bus Rapid Transit	25,615	92,091
Express Bus	18,717	25,604
HSR	0	10,779
Rapid Bus	187,831	125,549
Transitway	40,568	47,835
<b>Total (Transit)</b>	<b>1,888,246</b>	<b>4,437,972</b>

Source: SCAG Modeling (2023)

Table Note: Numbers may not sum to total due to rounding.

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	188,000	206,000
Orange	72,000	77,000	70,000	75,000
Riverside	54,000	59,000	63,000	72,000
San Bernardino	57,000	63,000	63,000	72,000
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 Notes: Numbers may not sum to total due to rounding.

1. Numbers are rounded to nearest thousand.

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	32.98	35.04	38.47	42.31
Los Angeles	20.61	17.40	21.93	19.05
Orange	22.65	20.28	23.97	21.82
Riverside	22.67	21.18	24.77	23.95
San Bernardino	26.24	23.83	28.87	27.27
Ventura	20.63	18.54	21.94	20.16
<b>Regional</b>	<b>21.99</b>	<b>19.44</b>	<b>23.60</b>	<b>21.52</b>

Source: SCAG modeling (2023); SCAG 2023c

Table Note: Numbers may not sum to total due to rounding.

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

COUNTY	2019	2050 PLAN
Imperial	6,726	11,207
Los Angeles	1,533,818	1,095,027
Orange	364,635	242,399
Riverside	142,765	167,402
San Bernardino	169,850	161,121
Ventura	64,782	33,840
<b>Regional</b>	<b>2,282,577</b>	<b>1,710,995</b>

Source: SCAG modeling (2023)

Table Note: Numbers may not sum to total due to rounding.

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

COUNTY	2019	2050 PLAN
<b>Single Occupant Vehicles</b>		
Imperial	89.09%	85.32%
Los Angeles	74.04%	84.50%
Orange	85.98%	91.30%
Riverside	71.16%	83.74%
San Bernardino	68.41%	80.86%
Ventura	77.34%	86.16%
<b>Region</b>	<b>75.69%</b>	<b>85.31%</b>
<b>High Occupancy Vehicles</b>		
Imperial	88.87%	78.40%
Los Angeles	75.80%	83.35%
Orange	86.19%	90.18%
Riverside	71.48%	83.42%
San Bernardino	72.22%	80.94%
Ventura	79.83%	87.36%
<b>Region</b>	<b>77.01%</b>	<b>84.44%</b>
<b>Transit</b>		
Imperial	46.00%	25.40%
Los Angeles	37.22%	39.54%
Orange	42.07%	45.40%
Riverside	59.56%	55.90%
San Bernardino	55.06%	47.72%
Ventura	46.63%	54.04%
<b>Region</b>	<b>38.87%</b>	<b>41.70%</b>

Source: SCAG Modeling (2023)

Table Note: Numbers may not sum to total due to rounding.

TABLE 3.19-11 2050 Plan Lane Miles by County

COUNTY	FREEWAY (MIXED-FLOW)	TOLL*	TRUCK	EXPRESSWAY/PARKWAY	PRINCIPAL ARTERIAL	MINOR ARTERIAL	COLLECTOR	FREEWAY (HOV)	RAMP	TOTAL (ALL FACILITIES)
Imperial	417	—	—	324	413	529	2,479	—	38	4,199
Los Angeles	4,684	376	141	206	7,909	8,965	7,085	354	925	30,645
Orange	1,424	521	16	4	3,853	3,087	1,101	145	376	10,525
Riverside	1,937	221	13	122	1,359	3,695	5,837	80	361	13,625
San Bernardino	2,596	280	55	263	1,992	4,623	6,800	138	352	17,098
Ventura	570	—	—	—	848	989	1,076	68	122	3,673
<b>Total</b>	<b>11,627</b>	<b>1,398</b>	<b>224</b>	<b>918</b>	<b>16,372</b>	<b>21,888</b>	<b>24,377</b>	<b>786</b>	<b>2,173</b>	<b>79,764</b>

Source: SCAG Transportation Modeling (2023)

Table Notes: Numbers may not sum to total due to rounding.

\* Toll includes truck and High-occupancy toll (HOT)

TABLE 4-6 VMT 2050 by County

COUNTY	IN THOUSANDS <sup>a</sup>			
	2050 NO PLAN		2050 PLAN	
	LIGHT-MEDIUM-DUTY VEHICLES	ALL VEHICLES	LIGHT-MEDIUM-DUTY VEHICLES	ALL VEHICLES
Imperial	7,000	9,000	7,000	9,000
Los Angeles	205,000	223,000	188,000	206,000
Orange	73,000	78,000	70,000	75,000
Riverside	65,000	73,000	63,000	72,000
San Bernardino	67,000	76,000	63,000	72,000
Ventura	17,000	18,000	16,000	17,000
<b>SCAG Region</b>	<b>434,000</b>	<b>477,000</b>	<b>407,000</b>	<b>450,000</b>

Source: SCAG Connect SoCal 2024 modeling (2023)

Table Note:

a. Numbers are rounded to nearest thousand and may not sum to totals.

TABLE 4-7 Population and VMT (2050)

	2050 NO PLAN	2050 PLAN	2050 PLAN VS. 2050 NO PLAN
Total Population	20,909,000	20,909,000	0%
Light-Duty Vehicle VMT	433,567,363	406,531,128	-6.2%
Total VMT	477,132,165	449,922,574	-5.7%
VMT per Capita Light-Duty Vehicles	20.74	19.44	-6.2%
VMT per Capita All Vehicles	22.82	21.52	-5.7%

Source: SCAG Connect SoCal 2024 modeling (2023)

Table Note: Numbers may not sum to total due to rounding.

TABLE 4-8 Daily Transit Boardings

DAILY TRANSIT BOARDING	2050 NO PLAN	2050 PLAN
Commuter Rail	53,011	232,397
Local Bus	1,933,545	3,009,374
Local Rail	554,161	894,343
Bus Rapid Transit	35,658	92,091
Express Bus	21,876	25,604
HSR	0	10,779
Rapid Bus	62,270	125,549
Transitway	41,514	47,835
<b>Total (Transit)</b>	<b>2,702,034</b>	<b>4,437,972</b>

Source: SCAG Connect SoCal 2024 (2023)

Table Note: Numbers may not sum to total due to rounding.

TABLE 4-9 Percentage of Mode Share on Transit and Active Transportation

MODE SHARE	2050 NO PLAN	2050 PLAN
Walk	8.8%	10.2%
Bike	1.6%	3.5%
Transit	2.9%	4.3%
<b>Total</b>	<b>13.3%</b>	<b>17.9%</b>

Source: SCAG Connect SoCal 2024 modeling (2023)

Table Note: Numbers may not sum to total due to rounding.

TABLE 4-10 Total Daily Vehicle Hours of Delay (2050)

COUNTY	2050 NO PLAN	2050 PLAN
Imperial	17,139	11,207
Los Angeles	1,321,497	1,095,027
Orange	346,065	242,399
Riverside	237,612	167,402
San Bernardino	295,584	161,121
Ventura	54,020	33,840
<b>Regional</b>	<b>2,271,918</b>	<b>1,710,995</b>

Source: SCAG modeling (2023)

Table Note: Numbers may not sum to total due to rounding.

TABLE 4-11 Percent of PM Work Trips Completed within 45 Minutes

COUNTY	2050 NO PLAN	2050 PLAN
<b>Autos – Single Occupancy Vehicles</b>		
Imperial	84.82%	85.32%
Los Angeles	77.98%	84.50%
Orange	88.12%	91.30%
Riverside	77.99%	83.74%
San Bernardino	74.39%	80.86%
Ventura	81.64%	86.16%
<b>Region</b>	<b>79.66%</b>	<b>85.31%</b>
<b>Autos – High Occupancy Vehicles</b>		
Imperial	80.37%	78.40%
Los Angeles	79.69%	83.35%
Orange	88.04%	90.18%
Riverside	77.95%	83.42%
San Bernardino	76.06%	80.94%
Ventura	83.18%	87.36%
<b>Region</b>	<b>80.67%</b>	<b>84.44%</b>
<b>Transit</b>		
Imperial	31.25%	25.40%
Los Angeles	37.87%	39.54%
Orange	38.51%	45.40%
Riverside	54.57%	55.90%
San Bernardino	47.84%	47.72%
Ventura	45.49%	54.04%
<b>Region</b>	<b>38.61%</b>	<b>41.70%</b>

Source: SCAG modeling (2023)

Table Note: Numbers are rounded to nearest thousand and may not sum precisely.