

<b>FTIP ID#</b> ORA151401
<b>TCWG Consideration Date</b> September 27, 2022
<p><b>PROJECT DESCRIPTION</b></p> <p>The California Department of Transportation (Caltrans) District 12 and District 11, in cooperation with the Orange County Transportation Authority (OCTA), and the City of San Clemente, is proposing to reduce delay along Interstate 5 (I-5) between the San Diego County/Orange County Line and the I-5/Avenida Pico Interchange through the addition of a high-occupancy vehicle (HOV) lane. This project would extend the existing HOV lane project that was recently completed on I-5 between San Juan Creek Bridge and Avenida Pico and effectively continue the HOV lane to the Orange/San Diego County line. The project would also reestablish existing auxiliary lanes, widen existing undercrossings, and replace existing overcrossings to accommodate the required I-5 widening. The project objective is to reduce delay along I-5. HOV lane and operational improvements have been made on I-5 throughout Orange County north of the project limits. This project is vital to enable completing the managed lanes network (which is an HOV system throughout the project limits) along the I-5 corridor in Orange County. The project limits on I-5 extend from approximately 1.4 mile (mi) south of the San Diego County/Orange County Line Interchange (11-SD-5, Post Mile [PM] R71.0) to 3.5 mi north of the County Line to Avenida Pico in the City of San Clemente (12-ORA-5, PM 3.4).</p> <p>Two alternatives, including the No Build Alternative are described below.</p> <p><b>Alternative 1 – No Build</b></p> <p>The No Build Alternative proposes no improvements to I-5, maintaining the existing four general-purpose lanes throughout the project limits in the northbound and southbound directions. The freeway facility would remain as is, with the exception of other proposed projects that are either under development or currently under construction.</p> <p><b>Alternative 2 – Add One HOV Lane in Each Direction</b></p> <p>Alternative 2 would install an HOV lane on I-5 in the northbound and southbound directions within the project limits. The new HOV lane would connect to the HOV facility to the north of the project study area and extend south to the San Diego County/Orange County Line. The existing southbound inside general-purpose lane would be converted to an HOV, which would require outside widening to reestablish the fourth general purpose lane south of Avenida Presidio. At the San Diego County/Orange County Line, the southbound HOV would become the inside general-purpose lane, with the outside general-purpose lane converting to an auxiliary lane and ending at the southbound Cristianitos Road exit ramp. In the northbound direction, I-5 will be widened to the outside to accommodate the additional HOV lane. The additional HOV will tie into the existing HOV lane at Avenida Pico. To accommodate the freeway widening, the widening or replacement, of several bridges would be required.</p>
<p><b>Type of Project</b></p> <p>Change to existing State Highway (reduce delay by constructing a new high-occupancy vehicle [HOV] lane.)</p>

PM Conformity Hot Spot Analysis – Project Summary for Interagency Consultation

<b>County</b> Orange & San Diego		<b>Narrative Location/Route &amp; Postmiles:</b> The project limits on I-5 extend from approximately 1.4 mile (mi) south of the San Diego County/Orange County Line Interchange (11-SD-5, Post Mile [PM] R71.0) to 3.4 mi north of the County Line to Avenida Pico in the City of San Clemente (12-ORA-5, PM 3.4).  <b>Caltrans Projects – EA#</b> 0P5500			
<b>Lead Agency:</b>					
<b>Contact Person</b> Rabindra Bade		<b>Phone#</b> (657) 328-6573	<b>Fax#</b>	<b>Email</b> Rabindra.Bade@dot.ca.gov	
<b>Hot Spot Pollutant of Concern</b> ( <i>check one or both</i> ) <b>PM2.5</b> x <b>PM10</b> x					
<b>Federal Action for which Project-Level PM Conformity is Needed</b> ( <i>check appropriate box</i> )					
<b>Categorical Exclusion (NEPA)</b>	x	<b>EA or Draft EIS</b>	<b>FONSI or Final EIS</b>	<b>PS&amp;E or Construction</b>	<b>Other</b>
Note: The FTIP lists the project as Exempt, but is only for FTIP purposes. This PM Hotspot analysis is for the actual project.					
<b>Scheduled Date of Federal Action:</b>					
<b>NEPA Assignment – Project Type</b> ( <i>check appropriate box</i> )					
Exempt		<b>Section 326 –Categorical Exemption</b>		x	<b>Section 327 – Non-Categorical Exemption</b>
<b>Current Programming Dates</b> ( <i>as appropriate</i> )					
	<b>PE/Environmental</b>	<b>ENG</b>	<b>ROW</b>	<b>CON</b>	
<b>Start</b>	March 2021	March 2026	July 2026	January 2030	
<b>End</b>	March 2024	April 2029	February 2029	January 2033	

**Project Purpose and Need (Summary):** *(attach additional sheets as necessary)*

**Purpose**

The primary purpose of the project is to maximize efficiency of the freeway mainline by increasing person and vehicle throughput on the I-5 corridor from Avenida Pico to the San Diego County Line.

This I-5 corridor improvement project is intended to achieve the following purposes:

- Increase vehicle occupancy and vehicle throughput;
- Improve mobility and trip reliability;
- Provide inter-county and regional system connectivity;
- Provide improvements to accommodate projected regional growth;
- Incorporate environmentally sustainable design elements by developing efficient transportation improvements; and
- Improve multimodal efficiency and provide advanced technology to meet the current and future transportation demands.

**Need**

Current deficiencies of I-5 within the project limits are summarized below:

- There is a lack of managed/High-Occupancy Vehicle (HOV) lane connectivity from Avenida Pico to San Diego County Line; and
- Existing aging facility lacks advanced technology to meet current and future transportation demands.

Managed/HOV lane and operational improvements have been made on I-5 throughout Orange County north of the project limits. These prior improvements begin at the northern Orange County limit and end just south of Avenida Pico in San Clemente. The Measure M2 Project C constructed immediately north of the project study area will extend managed/HOV lanes from their existing terminus through the Avenida Pico interchange vicinity.

Immediately south of the project study area in San Diego County, SANDAG is planning 2 managed lanes (1 lane in each direction) within the existing footprint of I-5 that will end at the San Diego/Orange County Line by 2050. With no improvements in the project area, these lane drops will further contribute to inter-county and regional congestion.

**Surrounding Land Use/Traffic Generators** *(especially effect on diesel traffic)*

Mix of residential and commercial/retail. Currently trucks comprise 7 percent of the traffic on the project roadway.

<p><b>Opening Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility</b> See Tables 1, 2, 5, and 6 for AADT and LOS, attached.</p>
<p><b>RTP Horizon Year / Design Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility</b> See Tables 3, 4, 7, and 8 for AADT and LOS, attached.</p>
<p><b>Opening Year: If facility is an interchange(s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT</b> The project is not an interchange.</p> <p><b>RTP Horizon Year / Design Year: If facility is an interchange (s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT</b> The project is not an interchange.</p>
<p><b>Describe potential traffic redistribution effects of congestion relief (<i>impact on other facilities</i>)</b> As there are no alternative roads through the project area, no redistribution effects are expected. The implementation of the project will result in a reduction in delay and improve the safety.</p>
<p><b>Comments/Explanation/Details</b> (<i>attach additional sheets as necessary</i>)</p>

### **PM<sub>2.5</sub>/PM<sub>10</sub> Hot-Spot Analysis**

The proposed project is located within a nonattainment area for federal PM<sub>2.5</sub> standards and within an attainment/maintenance area for the federal PM<sub>10</sub> standards. Therefore, per 40 CFR Part 93 hot-spot analyses are required for conformity purposes. However, the EPA does not require hot-spot analyses, qualitative or quantitative, for projects that are not listed in section 93.123(b)(1) as an air quality concern. The project does not qualify as a project of air quality concern (POAQC) because of the following reasons:

- i. The proposed project would extend the existing HOV lane extending approximately 3.4 miles (mi) from Avenida Pico to the Orange/San Diego County line. Tables 1 through 4 list the daily traffic (ADT) volumes along I-5 for the 2033 and 2055 conditions, respectively. These tables show that the traffic volume along the proposed I-5 lanes would not exceed the 125,000 average daily trips threshold for a POAQC, nor would the truck ADT be more than the 10,000 truck trip threshold for a POAQC.
- ii. Tables 5 through 8 list the 2033 and 2055 roadway segment levels of service for the no build and build conditions. As shown, the proposed project does not affect segments that are at LOS D, E, or F with a significant number of diesel vehicles.
- iii. The proposed project does not include the construction of a new bus or rail terminal.
- iv. The proposed project does not expand an existing bus or rail terminal.
- v. The proposed project is not in or affecting locations, areas, or categories of sites that are identified in the PM<sub>2.5</sub> and PM<sub>10</sub> applicable implementation plan or implementation plan submission, as appropriate, as sites of violation or possible violation.

Therefore, the proposed project meets the Clean Air Act requirements and 40 CFR 93.116 without any explicit hot-spot analysis. The proposed project would not create a new, or worsen an existing, PM<sub>10</sub> or PM<sub>2.5</sub> violation. Thus, this project would not be considered a POAQC.

**Table 1: Opening Year (2033) No Build Traffic Volumes**

I-5 Mainline Location		ADT (GP+Aux+HOV)	TRUCK	TRUCK PERCENTAGE
<b>North Bound</b>				
Segment 1	Between Avenida Pico On-Ramp and Avenida Pico Off-Ramp	88,204	6,174	7.00%
Segment 2	Between Avenida Pico Off-Ramp and Avenida Palizada On-Ramp	103,459	7,242	7.00%
Segment 3	Between Avenida Palizada On-Ramp and Avenida Presidio On-Ramp	92,143	6,450	7.00%
Segment 4	Between Avenida Presidio On-Ramp and Avenida Presidio Off-Ramp	83,977	5,878	7.00%
Segment 5	Between Avenida Presidio Off-Ramp and El Camino Real On-Ramp	90,620	6,343	7.00%
Segment 6	Between El Camino Real On-Ramp and El Camino Real Off-Ramp	79,534	5,567	7.00%
Segment 7	Between El Camino Real Off-Ramp and El Camino Real/ Avenida Mendocino NB On-Ramp	81,938	5,736	7.00%
Segment 8	Between El Camino Real/ Avenida Mendocino On-Ramp and El Camino Real/ Avenida Mendocino Off-Ramp	81,938	5,736	7.00%
Segment 9	Between El Camino Real/ Avenida Mendocino Off-Ramp and Cristianitos Road On-Ramp	78,591	5,501	7.00%
Segment 10	Between Cristianitos Road On-Ramp and Cristianitos Road Off-Ramp	77,034	5,392	7.00%
<b>South Bound</b>				
Segment 1	Between Avenida Pico Off-Ramp and Avenida Pico On-Ramp	95,494	6,685	7.00%
Segment 2	Between Avenida Pico On-Ramp and Avenida Palizada Off-Ramp	109,771	7,684	7.00%
Segment 3	Between Avenida Palizada Off-Ramp and Avenida Presidio On-Ramp	91,618	6,413	7.00%
Segment 4	Between Avenida Presidio On-Ramp and El Camino Real Off-Ramp	92,006	6,440	7.00%
Segment 5	Between El Camino Real Off-Ramp and El Camino Real On-Ramp	81,159	5,681	7.00%
Segment 6	Between El Camino Real On-Ramp and Avenida Calafia Off-Ramp	84,100	5,887	7.00%
Segment 7	Between Avenida Calafia Off-Ramp and Avenida Calafia On-Ramp	78,035	5,462	7.00%
Segment 8	Between Avenida Calafia On-Ramp and Cristianitos Road Off-Ramp	81,164	5,681	7.00%
Segment 9	Between Cristianitos Road Off-Ramp and Cristianitos Road On-Ramp	80,770	5,654	7.00%

Source: Kittelson & Associates (August, 2022).

**Table 2: Opening Year (2033) Build Traffic Volumes**

I-5 Mainline Location		ADT (GP+Aux+HOV)	TRUCK	TRUCK PERCENTAGE
<b>North Bound</b>				
Segment 1	Between Avenida Pico On-Ramp and Avenida Pico Off-Ramp	88,624	6,204	7.00%
Segment 2	Between Avenida Pico Off-Ramp and Avenida Palizada On-Ramp	103,884	7,272	7.00%
Segment 3	Between Avenida Palizada On-Ramp and Avenida Presidio On-Ramp	92,568	6,480	7.00%
Segment 4	Between Avenida Presidio On-Ramp and Avenida Presidio Off-Ramp	84,402	5,908	7.00%
Segment 5	Between Avenida Presidio Off-Ramp and El Camino Real On-Ramp	91,048	6,373	7.00%
Segment 6	Between El Camino Real On-Ramp and El Camino Real Off-Ramp	79,962	5,597	7.00%
Segment 7	Between El Camino Real Off-Ramp and El Camino Real/ Avenida Mendocino NB On-Ramp	82,366	5,766	7.00%
Segment 8	Between El Camino Real/ Avenida Mendocino On-Ramp and El Camino Real/ Avenida Mendocino Off-Ramp	82,366	5,766	7.00%
Segment 9	Between El Camino Real/ Avenida Mendocino Off-Ramp and Cristianitos Road On-Ramp	79,009	5,531	7.00%
Segment 10	Between Cristianitos Road On-Ramp and Cristianitos Road Off-Ramp	77,452	5,422	7.00%
<b>South Bound</b>				
Segment 1	Between Avenida Pico Off-Ramp and Avenida Pico On-Ramp	95,923	6,715	7.00%
Segment 2	Between Avenida Pico On-Ramp and Avenida Palizada Off-Ramp	110,210	7,715	7.00%
Segment 3	Between Avenida Palizada Off-Ramp and Avenida Presidio On-Ramp	92,057	6,444	7.00%
Segment 4	Between Avenida Presidio On-Ramp and El Camino Real Off-Ramp	92,430	6,470	7.00%
Segment 5	Between El Camino Real Off-Ramp and El Camino Real On-Ramp	81,583	5,711	7.00%
Segment 6	Between El Camino Real On-Ramp and Avenida Calafia Off-Ramp	84,524	5,917	7.00%
Segment 7	Between Avenida Calafia Off-Ramp and Avenida Calafia On-Ramp	78,459	5,492	7.00%
Segment 8	Between Avenida Calafia On-Ramp and Cristianitos Road Off-Ramp	81,600	5,712	7.00%
Segment 9	Between Cristianitos Road Off-Ramp and Cristianitos Road On-Ramp	81,206	5,684	7.00%

Source: Kittelson & Associates (August 2022).

**Table 3: Future Year (2055) No Build Traffic Volumes**

I-5 Mainline Location		ADT (GP+Aux+HOV)	TRUCK	TRUCK PERCENTAGE
<b>North Bound</b>				
Segment 1	Between Avenida Pico On-Ramp and Avenida Pico Off-Ramp	93,565	6,550	7.00%
Segment 2	Between Avenida Pico Off-Ramp and Avenida Palizada On-Ramp	108,884	7,622	7.00%
Segment 3	Between Avenida Palizada On-Ramp and Avenida Presidio On-Ramp	97,260	6,808	7.00%
Segment 4	Between Avenida Presidio On-Ramp and Avenida Presidio Off-Ramp	89,094	6,237	7.00%
Segment 5	Between Avenida Presidio Off-Ramp and El Camino Real On-Ramp	96,553	6,759	7.00%
Segment 6	Between El Camino Real On-Ramp and El Camino Real Off-Ramp	84,745	5,932	7.00%
Segment 7	Between El Camino Real Off-Ramp and El Camino Real/ Avenida Mendocino NB On-Ramp	89,073	6,235	7.00%
Segment 8	Between El Camino Real/ Avenida Mendocino On-Ramp and El Camino Real/ Avenida Mendocino Off-Ramp	89,073	6,235	7.00%
Segment 9	Between El Camino Real/ Avenida Mendocino Off-Ramp and Cristianitos Road On-Ramp	85,221	5,965	7.00%
Segment 10	Between Cristianitos Road On-Ramp and Cristianitos Road Off-Ramp	83,393	5,838	7.00%
<b>South Bound</b>				
Segment 1	Between Avenida Pico Off-Ramp and Avenida Pico On-Ramp	101,466	7,103	7.00%
Segment 2	Between Avenida Pico On-Ramp and Avenida Palizada Off-Ramp	116,391	8,147	7.00%
Segment 3	Between Avenida Palizada Off-Ramp and Avenida Presidio On-Ramp	98,040	6,863	7.00%
Segment 4	Between Avenida Presidio On-Ramp and El Camino Real Off-Ramp	98,229	6,876	7.00%
Segment 5	Between El Camino Real Off-Ramp and El Camino Real On-Ramp	87,382	6,117	7.00%
Segment 6	Between El Camino Real On-Ramp and Avenida Calafia Off-Ramp	90,323	6,323	7.00%
Segment 7	Between Avenida Calafia Off-Ramp and Avenida Calafia On-Ramp	84,258	5,898	7.00%
Segment 8	Between Avenida Calafia On-Ramp and Cristianitos Road Off-Ramp	87,559	6,129	7.00%
Segment 9	Between Cristianitos Road Off-Ramp and Cristianitos Road On-Ramp	87,165	6,102	7.00%

Source: Kittelson & Associates (August, 2022).



**Table 4: Future Year (2055) Build Traffic Volumes**

I-5 Mainline Location		ADT (GP+Aux+HOV)	TRUCK	TRUCK PERCENTAGE
<b>North Bound</b>				
Segment 1	Between Avenida Pico On-Ramp and Avenida Pico Off-Ramp	94,018	6,581	7.00%
Segment 2	Between Avenida Pico Off-Ramp and Avenida Palizada On-Ramp	109,342	7,654	7.00%
Segment 3	Between Avenida Palizada On-Ramp and Avenida Presidio On-Ramp	97,718	6,840	7.00%
Segment 4	Between Avenida Presidio On-Ramp and Avenida Presidio Off-Ramp	89,552	6,269	7.00%
Segment 5	Between Avenida Presidio Off-Ramp and El Camino Real On-Ramp	97,016	6,791	7.00%
Segment 6	Between El Camino Real On-Ramp and El Camino Real Off-Ramp	85,855	6,010	7.00%
Segment 7	Between El Camino Real Off-Ramp and El Camino Real/ Avenida Mendocino NB On-Ramp	89,536	6,268	7.00%
Segment 8	Between El Camino Real/ Avenida Mendocino On-Ramp and El Camino Real/ Avenida Mendocino Off-Ramp	89,536	6,268	7.00%
Segment 9	Between El Camino Real/ Avenida Mendocino Off-Ramp and Cristianitos Road On-Ramp	85,672	5,997	7.00%
Segment 10	Between Cristianitos Road On-Ramp and Cristianitos Road Off-Ramp	83,844	5,869	7.00%
<b>South Bound</b>				
Segment 1	Between Avenida Pico Off-Ramp and Avenida Pico On-Ramp	101,930	7,135	7.00%
Segment 2	Between Avenida Pico On-Ramp and Avenida Palizada Off-Ramp	116,865	8,181	7.00%
Segment 3	Between Avenida Palizada Off-Ramp and Avenida Presidio On-Ramp	98,514	6,896	7.00%
Segment 4	Between Avenida Presidio On-Ramp and El Camino Real Off-Ramp	98,687	6,908	7.00%
Segment 5	Between El Camino Real Off-Ramp and El Camino Real On-Ramp	87,840	6,149	7.00%
Segment 6	Between El Camino Real On-Ramp and Avenida Calafia Off-Ramp	90,781	6,355	7.00%
Segment 7	Between Avenida Calafia Off-Ramp and Avenida Calafia On-Ramp	84,716	5,930	7.00%
Segment 8	Between Avenida Calafia On-Ramp and Cristianitos Road Off-Ramp	88,029	6,162	7.00%
Segment 9	Between Cristianitos Road Off-Ramp and Cristianitos Road On-Ramp	87,635	6,134	7.00%

Source: Kittelson & Associates (August, 2022).

**Table 5: Opening Year (2033) No Build LOS**

I-5 Mainline Location		AM Peak Hour		PM Peak Hour	
		Mainline (GP+Aux)	HOV	Mainline (GP+Aux)	HOV
<b>North Bound</b>					
Segment 1	Between Avenida Pico On-Ramp and Avenida Pico Off-Ramp	C	B	B	A
Segment 2	Between Avenida Pico Off-Ramp and Avenida Palizada On-Ramp	C	-	C	-
Segment 3	Between Avenida Palizada On-Ramp and Avenida Presidio On-Ramp	C	-	C	-
Segment 4	Between Avenida Presidio On-Ramp and Avenida Presidio Off-Ramp	C	-	C	-
Segment 5	Between Avenida Presidio Off-Ramp and El Camino Real On-Ramp	C	-	B	-
Segment 6	Between El Camino Real On-Ramp and El Camino Real Off-Ramp	C	-	C	-
Segment 7	Between El Camino Real Off-Ramp and El Camino Real/ Avenida Mendocino NB On-Ramp	B	-	B	-
Segment 8	Between El Camino Real/ Avenida Mendocino On-Ramp and El Camino Real/ Avenida Mendocino Off-Ramp	B	-	C	-
Segment 9	Between El Camino Real/ Avenida Mendocino Off-Ramp and Cristianitos Road On-Ramp	C	-	C	-
Segment 10	Between Cristianitos Road On-Ramp and Cristianitos Road Off-Ramp	C	-	C	-
<b>South Bound</b>					
Segment 1	Between Avenida Pico Off-Ramp and Avenida Pico On-Ramp	C	A	C	B
Segment 2	Between Avenida Pico On-Ramp and Avenida Palizada Off-Ramp	B	-	C	-
Segment 3	Between Avenida Palizada Off-Ramp and Avenida Presidio On-Ramp	C	-	C	-
Segment 4	Between Avenida Presidio On-Ramp and El Camino Real Off-Ramp	B	-	C	-
Segment 5	Between El Camino Real Off-Ramp and El Camino Real On-Ramp	C	-	C	-
Segment 6	Between El Camino Real On-Ramp and Avenida Calafia Off-Ramp	B	-	B	-
Segment 7	Between Avenida Calafia Off-Ramp and Avenida Calafia On-Ramp	B	-	C	-
Segment 8	Between Avenida Calafia On-Ramp and Cristianitos Road Off-Ramp	B	-	C	-
Segment 9	Between Cristianitos Road Off-Ramp and Cristianitos Road On-Ramp	B	-	C	-

Source: Kittelson & Associates (August,2022).

**Table 6: Opening Year (2033) Build LOS**

I-5 Mainline Location		AM Peak Hour		PM Peak Hour	
		Mainline (GP+Aux)	HOV	Mainline (GP+Aux)	HOV
<b>North Bound</b>					
Segment 1	Between Avenida Pico On-Ramp and Avenida Pico Off-Ramp	C	B	B	A
Segment 2	Between Avenida Pico Off-Ramp and Avenida Palizada On-Ramp	C	B	C	A
Segment 3	Between Avenida Palizada On-Ramp and Avenida Presidio On-Ramp	C	B	C	A
Segment 4	Between Avenida Presidio On-Ramp and Avenida Presidio Off-Ramp	B	A	B	A
Segment 5	Between Avenida Presidio Off-Ramp and El Camino Real On-Ramp	B	A	B	A
Segment 6	Between El Camino Real On-Ramp and El Camino Real Off-Ramp	B	A	B	A
Segment 7	Between El Camino Real Off-Ramp and El Camino Real/ Avenida Mendocino NB On-Ramp	B	A	B	A
Segment 8	Between El Camino Real/ Avenida Mendocino On-Ramp and El Camino Real/ Avenida Mendocino Off-Ramp	B	A	B	A
Segment 9	Between El Camino Real/ Avenida Mendocino Off-Ramp and Cristianitos Road On-Ramp	B	A	B	A
Segment 10	Between Cristianitos Road On-Ramp and Cristianitos Road Off-Ramp	C	-	C	-
<b>South Bound</b>					
Segment 1	Between Avenida Pico Off-Ramp and Avenida Pico On-Ramp	C	A	C	B
Segment 2	Between Avenida Pico On-Ramp and Avenida Palizada Off-Ramp	C	A	C	B
Segment 3	Between Avenida Palizada Off-Ramp and Avenida Presidio On-Ramp	B	A	C	B
Segment 4	Between Avenida Presidio On-Ramp and El Camino Real Off-Ramp	B	A	C	B
Segment 5	Between El Camino Real Off-Ramp and El Camino Real On-Ramp	B	A	B	A
Segment 6	Between El Camino Real On-Ramp and Avenida Calafia Off-Ramp	B	A	B	A
Segment 7	Between Avenida Calafia Off-Ramp and Avenida Calafia On-Ramp	B	A	B	A
Segment 8	Between Avenida Calafia On-Ramp and Cristianitos Road Off-Ramp	B	A	B	A
Segment 9	Between Cristianitos Road Off-Ramp and Cristianitos Road On-Ramp	B	-	C	-

Source: Kittelson & Associates (August,2022).

**Table 7: Future Year (2055) No Build LOS**

I-5 Mainline Location		AM Peak Hour		PM Peak Hour	
		Mainline (GP+Aux)	HOV	Mainline (GP+Aux)	HOV
<b>North Bound</b>					
Segment 1	Between Avenida Pico On-Ramp and Avenida Pico Off-Ramp	C	B	C	A
Segment 2	Between Avenida Pico Off-Ramp and Avenida Palizada On-Ramp	D	-	C	-
Segment 3	Between Avenida Palizada On-Ramp and Avenida Presidio On-Ramp	C	-	C	-
Segment 4	Between Avenida Presidio On-Ramp and Avenida Presidio Off-Ramp	C	-	C	-
Segment 5	Between Avenida Presidio Off-Ramp and El Camino Real On-Ramp	C	-	C	-
Segment 6	Between El Camino Real On-Ramp and El Camino Real Off-Ramp	C	-	C	-
Segment 7	Between El Camino Real Off-Ramp and El Camino Real/ Avenida Mendocino NB On-Ramp	B	-	C	-
Segment 8	Between El Camino Real/ Avenida Mendocino On-Ramp and El Camino Real/ Avenida Mendocino Off-Ramp	C	-	C	-
Segment 9	Between El Camino Real/ Avenida Mendocino Off-Ramp and Cristianitos Road On-Ramp	C	-	C	-
Segment 10	Between Cristianitos Road On-Ramp and Cristianitos Road Off-Ramp	C	-	C	-
<b>South Bound</b>					
Segment 1	Between Avenida Pico Off-Ramp and Avenida Pico On-Ramp	C	A	C	B
Segment 2	Between Avenida Pico On-Ramp and Avenida Palizada Off-Ramp	C	-	C	-
Segment 3	Between Avenida Palizada Off-Ramp and Avenida Presidio On-Ramp	C	-	C	-
Segment 4	Between Avenida Presidio On-Ramp and El Camino Real Off-Ramp	C	-	C	-
Segment 5	Between El Camino Real Off-Ramp and El Camino Real On-Ramp	C	-	C	-
Segment 6	Between El Camino Real On-Ramp and Avenida Calafia Off-Ramp	B	-	C	-
Segment 7	Between Avenida Calafia Off-Ramp and Avenida Calafia On-Ramp	C	-	C	-
Segment 8	Between Avenida Calafia On-Ramp and Cristianitos Road Off-Ramp	C	-	C	-
Segment 9	Between Cristianitos Road Off-Ramp and Cristianitos Road On-Ramp	C	-	C	-

Source: Kittelson & Associates (August,2022).

**Table 8: Future Year (2055) Build LOS**

I-5 Mainline Location		AM Peak Hour		PM Peak Hour	
		Mainline (GP+Aux)	HOV	Mainline (GP+Aux)	HOV
<b>North Bound</b>					
Segment 1	Between Avenida Pico On-Ramp and Avenida Pico Off-Ramp	C	B	C	A
Segment 2	Between Avenida Pico Off-Ramp and Avenida Palizada On-Ramp	C	B	C	A
Segment 3	Between Avenida Palizada On-Ramp and Avenida Presidio On-Ramp	C	B	C	A
Segment 4	Between Avenida Presidio On-Ramp and Avenida Presidio Off-Ramp	C	B	C	A
Segment 5	Between Avenida Presidio Off-Ramp and El Camino Real On-Ramp	C	A	B	A
Segment 6	Between El Camino Real On-Ramp and El Camino Real Off-Ramp	B	A	B	A
Segment 7	Between El Camino Real Off-Ramp and El Camino Real/ Avenida Mendocino NB On-Ramp	B	A	B	A
Segment 8	Between El Camino Real/ Avenida Mendocino On-Ramp and El Camino Real/ Avenida Mendocino Off-Ramp	B	A	B	A
Segment 9	Between El Camino Real/ Avenida Mendocino Off-Ramp and Cristianitos Road On-Ramp	B	B	C	A
Segment 10	Between Cristianitos Road On-Ramp and Cristianitos Road Off-Ramp	C	-	C	-
<b>South Bound</b>					
Segment 1	Between Avenida Pico Off-Ramp and Avenida Pico On-Ramp	C	A	C	B
Segment 2	Between Avenida Pico On-Ramp and Avenida Palizada Off-Ramp	C	A	D	B
Segment 3	Between Avenida Palizada Off-Ramp and Avenida Presidio On-Ramp	C	A	C	B
Segment 4	Between Avenida Presidio On-Ramp and El Camino Real Off-Ramp	B	A	C	B
Segment 5	Between El Camino Real Off-Ramp and El Camino Real On-Ramp	B	A	C	B
Segment 6	Between El Camino Real On-Ramp and Avenida Calafia Off-Ramp	B	A	B	B
Segment 7	Between Avenida Calafia Off-Ramp and Avenida Calafia On-Ramp	B	A	C	B
Segment 8	Between Avenida Calafia On-Ramp and Cristianitos Road Off-Ramp	B	A	C	B
Segment 9	Between Cristianitos Road Off-Ramp and Cristianitos Road On-Ramp	C	-	C	-

Source: Kittelson & Associates (August,2022).



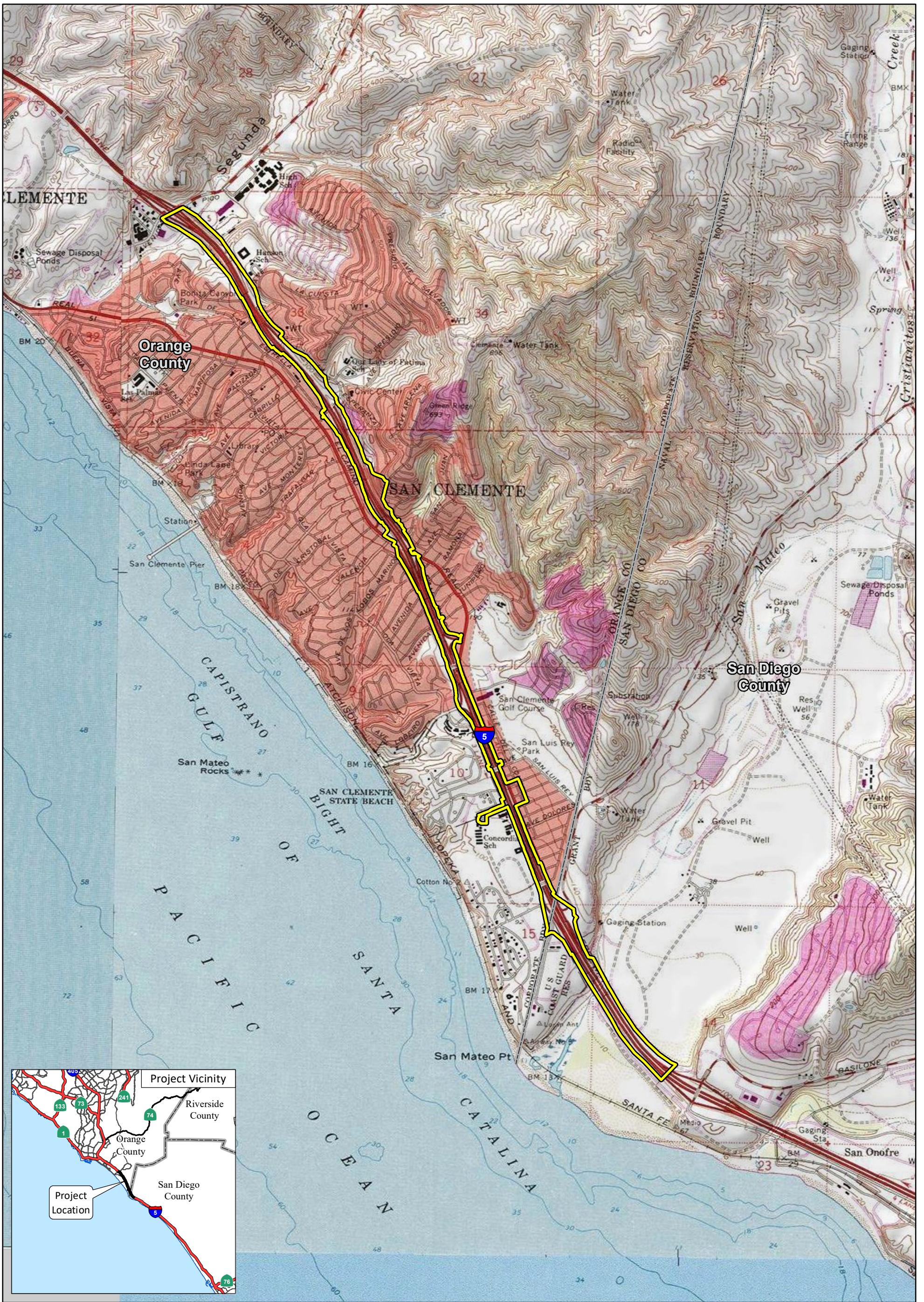
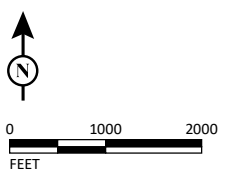


FIGURE 1

LEGEND

 Project Location



SOURCE: USGS 7.5' Quad - Dana Point (1975), San Clemente (1975), CA  
 I:\ACT2101\GIS\MXD\Project\_Location\_USGS.mxd (6/7/2022)

*I-5 Improvement Project  
 from San Diego County Line to Avenida Pico*

Project Location and Vicinity  
 11-SD-5-PM R71.0/R72.4, 12-ORA-5-PM 0.0/3.4  
 EA OP5500