RTIP ID# *(required)*) ORA001103

TCWG Consideration Date December 8, 2020

Project Description *(clearly describe project)*

The Interstate 405 (I-405) improvement project from Interstate 5 (I-5) to Harbor Boulevard (Blvd.) (PM 0.0/11.4) was initiated by District 12 Maintenance Engineering Branch. The project location is within the jurisdictions of the Cities of Irvine, Costa Mesa, and a portion of unincorporated area of Orange County. Following are two alternatives considered and analyzed for this project.

Alternative 1: This is a build alternative. This alternative proposes to extend the life expectancy of pavement, improve safety for all modes of travelers as well as maintenance crews, enhance traffic operation, manage congestion, and provide the ability to collect, analyze, and utilize data for efficient systems performance along I- 405 corridor within the project limits. The project is not considered capacity enhancing and includes widening of auxiliary lanes (less than a mile) as well as on and-off-ramps.

Alternative 2: This is no build alternative.

Following map attachments are provided along with this document.

1. Vicinity Map
2. Exhibit 4 to Exhibit 8

Type of Project *(use Table 1 on instruction sheet)*
Change to existing State Highway

County Orange	**Narrative Location/Route & Postmiles12-ORA-405-PM 0.0/11.4** **Caltrans Projects – EA#** 12-0Q970

Lead Agency: Caltrans District 12

Contact Person	**Phone#**	**Fax#**	**Email**
Rabindra Bade	657 328 6573		Rabindra.bade@dot.ca.gov

Hot Spot Pollutant of Concern *(check one or both)* **PM2.5 ×** **PM10 ×**

Federal Action for which Project-Level PM Conformity is Needed *(check appropriate box)*

	Categorical Exclusion (NEPA)	**EA or Draft EIS**	**FONSI or Final EIS**	**PS&E or Construction**	**Other**
×					

Scheduled Date of Federal Action: 2020

NEPA Assignment – Project Type *(check appropriate box)*

Exempt	**× Section 326 – Categorical Exemption**	**Section 327 – Non-Categorical Exemption**

Current Programming Dates *(as appropriate)*

PE/Environmental	ENG	ROW	CON
July 2020	October 2021	Jan 2022	October 2023
March 2022	April 2023	June 2023	October 2026

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

The purpose of this project is to do the following:
1. Extend the service life of the existing pavement and to improve the ride quality, pavement serviceability, and safety characteristics according to the pavement preservation program of the Federal guidelines.
2. Replace bridges' approach and departure slabs, and upgrade bridge railing at various locations.
3. Remove and replace plant materials that are deficient and deteriorated.
4. Minimize exposure of highway workers to traffic and reduce recurrent maintenance activities.
5. Provide safe access by relocating electrical fixtures away from the recovery zone.
6. Incorporate Intelligent Transportation Systems (ITS) elements for traffic system management for future improvement.
7. Improve operations for motorists and pedestrians.
8.Upgrade safety devices to current standards
9. Provision of Ride and Share facility

Need

This section of I-405 is operating under the following conditions:
1. Need for pavement rehabilitation through a Capital Preventive Maintenance (CAPM) strategy to prevent further deterioration.
2. Bridge approach and departure slabs are cracked and settled. Bridge railing are not standard.
3. Existing plantings, and irrigation systems are damaged.
4. Within the project limits there are unpaved areas, graffiti, minimal maintenance access, and inefficient irrigation facilities adjacent to the shoulders.
5. Maintenance crews are often exposed to live traffic during their routine work.
6. Lack of traffic system management network connectivity.
7. Ramp queuing, mainline delay, and non-standard access for pedestrians.
8. Existing safety devices are not up to current standards
9. Inadequate ride and sharing along the highway Route I-405 within the district.

Project Description of proposed alternate

Alternative 1 would extend the life expectancy of the pavement, improve safety and rideability for all mode of travelers as well as maintenance crews, enhance traffic operation, manage congestion, and provide ability to collect, analyze, and utilize data for systems performance along I-405 corridor by improving the following:

1. Pavement Class I
2. Bridge health
3. Roadside Rehabilitation
4. Roadside Safety Improvement
5. Lighting Rehabilitation
6. Transportation Management Systems

Project Purpose and Need (Summary): (Contd.)

7. Operational Improvements
   a. Construct 1,000' of acceleration lane and an additional lane on the NB I-405 on-ramp from SB Culver Dr. (Exhibit 4).
   b. Construct 1,000' of acceleration lane and an additional lane on the NB I-405 onramp from SB Jeffrey Road. (Exhibit 5)
   c. Provide an auxiliary lane from NB I-405 off-ramp to Sand Canyon Ave. to NB I- 405 on-ramp from Sand Canyon Ave. (loop on-ramp) (Exhibit 6)
   d. Construct 1,000 feet of deceleration lane for the SB I-405 off-ramp to Irvine Center Dr. and add a right turn lane at ramp termini. (Exhibit 7)
   e. Widen SB I-405 off-ramp to Jamboree Rd. to provide an additional lane at ramp termini to provide two left turn lanes, two right turn lanes, and an optional left and right turn lane (Exhibit 8)

8.0 Upgrade safety devices to current standards

9. Provision of Ride and Share facility- Southeast quadrant of Route 405/Bristol Street

Surrounding Land Use/Traffic Generators *(especially effect on diesel traffic)*
Proposed I-405 improvement project is located in the city of Irvine Costa Mesa, and a portion of unincorporated area of Orange County. The area is urbanized in nature. Surrounding land use includes residential, business area and the landscape.
The proposed improvement would improve operation and reduce the congestion problems and the accident rate. The proposed project is not considered capacity enhancing and includes widening of auxiliary lanes (less than a mile) as well as on and-off-ramps.

Opening Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility
The project does not include the construction of a new highway or the expansion of an existing highway. Total AADT and truck AADT are shown in Table 1. There would be no change to daily traffic volume and daily truck volume in the build alternative in the opening year 2026 in the I-405 improvement project. Maximum truck AADT is 7333 and the truck percent in the project range from 0.82% to 8.39% at different segments. LOS in the proposed alternative are shown in the Table 2.

RTP Horizon Year / Design Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility
The project does not include the construction of a new highway or the expansion of an existing highway. Total AADT and truck AADT are shown in Table 1. There would be no change to the daily traffic volume and daily truck volume in the build alternative in the design year 2046 in the I-405 improvement project. Maximum truck AADT is 7333 and the truck percent in the is project range from 0.82% to 8.39% at different segments. LOS in the proposed alternative are shown in the Table 2.

Describe potential traffic redistribution effects of congestion relief *(impact on other facilities)*
By the addition of auxiliary lanes on the I-405 in between On-ramp and Off-ramp improves the vehicle maneuvering. Adding ramps at the on-ramp and off-ramp improves the vehicle storage at the ramp, as a result congestion will be reduced on the I-405 at these segments. It eventually improves vehicle safety by improving mobility of the vehicles.

Table 1 Total AADT & truck AADT in Opening year (2026) and Design Year (2046)

S. N.	Road Segment	Type	Opening Year 2026			Design Year 2046		
			Total AADT	Truck AADT	Truck %	Total AADT	Truck AADT	Truck %
NB I-405								
1	North of I-5 to I-5 to I-405 Connector on Ramp	ML & HOV	41556	3405	8.19	44258	3712	8.39
2	I-5 to I-405 Connector On-Ramp	Ramp	32915	1109	3.37	35277	1187	3.36
3	I-5 to I-405 Connector On-Ramp -Entertainment Way On-Ramp	ML & HOV	74471	4514	6.06	79485	4899	6.16
4	Entertainment Way on-ramp	Ramp	10127	291	2.87	11174	321	2.87
5	Entertainment Way on-ramp to Irvine Center Dr. Slip On Ramp	ML & HOV	84598	4805	5.68	90659	5220	5.76
6	Irvine Center Dr. Slip On Ramp	Ramp	6939	157	2.26	8527	193	2.26
7	Irvine Center Dr. Slip On Ramp-SR 133 SB connector Off Ramp	ML & HOV	91537	4962	5.42	99186	5413	5.46
8	SR -133 SB connector off ramp	Ramp	4413	200	4.53	4975	225	4.52
9	SR -133 SB connector off ramp - SR 133 SB NB connector on Ramps	ML & HOV	86971	4762	5.48	93714	5188	5.54
10	SR 133 SB NB connector on Ramps	Ramp	26890	1011	3.76	33340	1254	3.76
11	SR 133 SB NB connector On Ramps -Sand Canyon Av Off Ramp	ML & HOV	113861	5773	5.07	127054	6442	5.07
12	Sand Canyon Av off ramp	Ramp	4938	66	1.34	5548	75	1.35
13	Sand Canyon Av off ramp to Sand Canyon AV Loop On Ramp	ML & HOV	112158	5707	5.09	124730	6367	5.10
14	Sand Canyon Av loop On Ramp	Ramp	5811	78	1.34	6246	84	1.34
15	Sand Canyon Av loop On Ramp to Sand Canyon Av slip on Ramp	ML & HOV	117969	5785	4.90	130976	6451	4.93
16	Sand Canyon Av slip on Ramp	Ramp	13843	771	5.57	14468	806	5.57
17	Sand Canyon Av slip on Ramp to Jeffery Road Off Ramp	ML & HOV	131812	6556	4.97	145444	7257	4.98
18	Jeffery Road Off Ramp	Ramp	15638	160	1.02	15860	162	1.02
19	Jeffery Road Off Ramp to Jeffery Road loop on ramp	ML & HOV	116174	6396	5.51	129584	7095	5.48

Table 1 Total AADT & truck AADT in Opening year (2026) and Design Year (2046) (Contd.)

S. N.	Road Segment	Type	Opening Year 2026			Design Year 2046		
			Total AADT	Truck AADT	Truck %	Total AADT	Truck AADT	Truck %
20	Jeffery Road loop on ramp	Ramp	3242	33	1.02	3832	39	1.02
21	Jeffery Road loop on ramp to Jeffery road slip on ramp	ML & HOV	119416	6396	5.36	133415	7134	5.56
22	Jeffery road slip on ramp	Ramp	12418	102	0.82	13020	107	0.82
23	Jeffery Road loop on ramp to Culver Dr Off Ramp	ML & HOV	131263	6531	4.98	145988	7241	4.96
24	Culver Dr Off Ramp	Ramp	8199	82	1.0	9624	97	1.01
25	Culver Dr Off Ramp to culver Dr loop on ramp	ML & HOV	123064	6449	5.24	136364	7144	5.24
26	Culver Dr loop on ramp	Ramp	8289	83	1.0	8552	86	1.01
27	Culver Dr loop on ramp-Culver Dr Slip On Ramp	ML & HOV	131353	6532	4.97	144916	7230	4.99
28	Culver Dr Slip On Ramp	Ramp	12162	81	0.67	12624	84	0.67
29	Culver Dr Slip On Ramp to Jamboree Road Off Ramp	ML & HOV	145634	6613	4.54	160026	7314	4.57
30	Jamboree Road Off Ramp	Ramp	17862	322	1.80	20386	367	1.80
31	Jamboree Road Off Ramp to Jamboree Road loop on ramp	ML & HOV	127773	6291	4.92	139640	6947	4.97
32	Jamboree Road loop on ramp	Ramp	12186	369	3.03	12730	386	3.03
33	Jamboree Road loop on ramp to Jamboree road slip on ramp	ML & HOV	139958	6660	4.76	152370	7333	4.81
34	Jamboree road slip on ramp	Ramp	17731	0	0	17975	40	0.22
35	Jamboree road slip on ramp to MacArthur Blvd off ramp	ML & HOV	157689	6660	4.22	170345	7333	4.30
36	MacArthur Blvd Off Ramp	Ramp	17632	315	1.70	18333	327	1.78
SB I-405								
37	MacArthur Boulevard Off-Ramp to MacArthur Boulevard On-Ramp	ML & HOV	140180	6385	4.55	150427	6975	4.64
38	MacArthur Boulevard On-Ramp	Ramp	14253	200	1.40	15175	212	1.40
39	MacArthur Boulevard On-Ramp to Jamboree Road Off-Ramp	ML & HOV	154433	6585	4.26	165602	7187	4.34
40	Jamboree Road Off-Ramp	Ramp	30906	524	1.70	31667	537	1.70
41	Jamboree Road Off-Ramp to Jamboree Road Loop On Ramp	ML & HOV	123528	6061	4.91	133935	6650	4.97

Table 1 Total AADT & truck AADT in Opening year (2026) and Design Year (2046)

S.N.	Road Segment	Type	Opening Year 2026 (Build)			Design Year (Build)		
			Total AADT	Truck AADT	Truck %	Total AADT	Truck AADT	Truck %
42	Jamboree Road Loop On Ramp	Ramp	8042	136	1.69	9887	168	1.70
43	Jamboree Road Loop On Ramp to Jamboree Road slip On Ramp	ML & HOV	131570	6197	4.71	143822	6818	4.74
44	Jamboree Road slip On Ramp	Ramp	14261	371	2.60	15765	410	2.60
45	Jamboree Road slip On Ramp to Culver Dr. Off Ramp	ML & HOV	145831	6568	4.50	159587	7228	4.53
46	Culver Dr. Off Ramp	Ramp	18216	506	2.78	18908	525	2.78
47	Culver Dr. Off Ramp to Culver Dr. Loop on Ramp	ML & HOV	124510	6062	4.87	136501	6703	4.91
48	Culver Dr. Loop on Ramp	Ramp	4478	124	2.77	5031	140	2.78
49	Culver Dr. Loop on Ramp to Culver Dr. Slip on Ramp	ML & HOV	128988	6186	4.80	141532	6843	4.83
50	Culver Dr. Slip on Ramp	Ramp	6400	208	3.25	7655	248	3.24
51	Culver Dr. Slip on Ramp to University Drive Off Ramp	ML & HOV	135388	6396	4.72	149187	7091	4.75
52	University Drive Off Ramp	Ramp	11819	242	2.05	12320	253	2.05
53	University Drive Off Ramp to University Drive Loop On Ramp	ML & HOV	123811	6152	4.97	137176	6838	4.98
54	University Drive Loop on Ramp	Ramp	4098	84	2.05	5670	116	2.05
55	University Drive Loop on Ramp to University Drive Slip on Ramp	ML & HOV	127909	6236	4.87	142846	6954	4.87
56	University Drive Slip On Ramp	Ramp	13971	206	1.47	14321	211	1.47
57	University Drive Slip On Ramp to Sand Canyon Avenue Off Ramp	ML & HOV	141879	6442	4.54	157167	7165	4.56
58	Sand Canyon Avenue Off Ramp	Ramp	14212	310	2.18	14889	324	2.18
59	Sand Canyon Avenue Off Ramp to Sand Canyon Avenue Loop on Ramp	ML & HOV	127146	6132	4.82	141957	6841	4.82
60	Sand Canyon Avenue Loop On Ramp	Ramp	5223	114	2.18	5287	115	2.18
61	Sand Canyon Avenue Loop On Ramp to SR 133 SB Connector Off Ramp	ML & HOV	132369	6246	4.72	147244	6956	4.72

Table 1 Total AADT & truck AADT in Opening year (2026) and Design Year (2046)

S.N.	Road Segment	Type	Opening Year 2026			Design Year 2046		
			Total AADT	Truck AADT	Truck %	Total AADT	Truck AADT	Truck %
62	SR 133 SB Connector Off Ramp	Ramp	22236	1007	4.53	27861	1262	4.53
63	SR 133 SB Connector Off Ramp to SR 133 NB Connector On Ramp	ML & HOV	108998	5239	4.81	118194	5694	4.82
64	SR 133 NB Connector on ramp	Ramp	14285	194	4.52	4421	200	4.52
65	SR 133 NB Connector on ramp to Irvine Center Dr. Off Ramp	ML & HOV	113283	5433	4.80	122615	5894	4.81
66	Irvine Center Dr. Off Ramp	Ramp	18587	367	1.97	21928	433	1.97
67	Irvine Center Dr. Off Ramp to Irvine Center Dr. loop On Ramp	ML & HOV	94696	5066	5.35	100687	5461	5.42
68	Irvine Center Dr. loop On Ramp	Rramp	10520	208	1.98	10920	215	1.97
69	Irvine Center Dr. loop On Ramp to Irvine Center Dr. Slip on Ramp	ML & HOV	105216	5274	5.01	111607	5676	5.09
70	Irvine Center Dr. Slip on Ramp	Ramp	1607	85	0.0	1668	0	0.0
71	Irvine Center Dr. Slip on Ramp to Bake Parkway Off Ramp	ML & HOV	106823	5274	4.94	113275	5676	5.01

Table 1 shows Total AADT and Truck AADT for the Opening year (2026) and Design year (2044). The project is not considered capacity enhancing. The build alternate would not increase the total traffic or truck traffic along the road segments. Maximum truck AADT is 7333 and the truck percent in the project range from 0.82% to 8.39% at different segments.

Table 2 LOS in Opening year (2026) and Design Year (2046)

S.N.	Road Segment	Type	Opening Year 2026				Design Year 2046			
			No Build		Build		No Build		Build	
			AM	PM	AM	PM	AM	PM	AM	PM
NB-I-405										
1	North of I-5 to I-5 to I-405 Connector on Ramp	ML	C	B	C	B	C	B	C	B
2	I-5 to I-405 Connector On-Ramp	Ramp	C	F	C	F	C	F	C	C
3	I-5 to I-405 Connector On-Ramp - Entertainment Way On-Ramp	ML	C	C	C	C	C	C	C	F
4	Entertainment Way on-ramp	Ramp	B	B	B	B	B	B	B	B
5	Entertainment Way on-ramp to Irvine Center Dr. Slip On Ramp	ML	B	B	B	B	B	C	B	C
6	Irvine Center Dr. Slip On Ramp	Ramp	B	C	B	C	B	C	B	C
7	Irvine Center Dr. Slip On Ramp-SR 133 SB connector Off Ramp	ML	B	C	B	C	B	C	B	C
8	SR -133 SB connector off ramp	Ramp	C	C	C	C	C	C	C	C
9	SR -133 SB connector off ramp – SR 133 SB NB connector on Ramps	ML	C	F	C	F	C	F	C	F
10	SR 133 SB NB connector on Ramps	Ramp	F	F	D	F	F	F	D	F
11	SR 133 SB NB connector On Ramps -Sand Canyon Av Off Ramp	ML	F	F	D	F	F	F	D	F
12	Sand Canyon Av off ramp	Ramp	F	F	D	F	F	F	D	F
13	Sand Canyon Av off ramp to Sand Canyon AV Loop On Ramp	ML	F	F	D	D	F	F	D	D
14	Sand Canyon Av loop On Ramp	Ramp	F	F	F	F	F	F	F	F
15	Sand Canyon Av loop On Ramp to Sand Canyon Av slip on Ramp	ML	C	C	F	F	C	F	F	F
16	Sand Canyon Av slip on Ramp	Ramp	C	F	F	F	C	F	F	F
17	Sand Canyon Av slip on Ramp to Jeffery Road Off Ramp	ML	D	F	F	F	F	F	F	F
18	Jeffery Road Off Ramp	Ramp	F	F	F	F	F	F	F	F
19	Jeffery Road Off Ramp to Jeffery Road loop on ramp	ML	F	F	F	F	F	F	F	F

Table 2 LOS in Opening year (2026) and Design Year (2046) (Contd.)

S.N.	Road Segment	Type	Opening Year 2026				Design Year 2046			
			No Build		Build		No Build		Build	
			AM	PM	AM	PM	AM	PM	AM	PM
20	Jeffery Road loop on ramp	Ramp	F	F	F	F	F	F	F	F
21	Jeffery Road loop on ramp to Jeffery road slip on ramp	ML	F	F	C	C	F	F	C	F
22	Jeffery road slip on ramp	Ramp	F	F	F F	B	F	F	F	F
23	Jeffery Road loop on ramp to Culver Dr Off Ramp	ML	F	F	F	C	F	F	F	C
24	Culver Dr Off Ramp	Ramp	F	F	F	F	F	F	F	F
25	Culver Dr Off Ramp to culver Dr loop on ramp	ML	F	F	F	F	F	F	F	F
26	Culver Dr loop on ramp	Ramp	F	F	F	F	F	F	F	F
27	Culver Dr loop on ramp-Culver Dr Slip On Ramp	ML	C	C	F	C	F	C	F	C
28	Culver Dr Slip On Ramp	Ramp	F	B	F	B	F	B	F	B
29	Culver Dr Slip On Ramp to Jamboree Road Off Ramp	ML	F	C	C	C	F	C	C	C
30	Jamboree Road Off Ramp	Ramp	F	B	F	B	F	F	F	F
31	Jamboree Road Off Ramp to Jamboree Road loop on ramp	ML/HOV	C	C	C	C	C	B	C	B
32	Jamboree Road loop on ramp	Ramp	F	B	F	B	F	B	F	B
33	Jamboree Road loop on ramp to Jamboree road slip on ramp	ML/HOV	F	C	F	C	F	C	F	C
34	Jamboree road slip on ramp	Ramp	E	C	E	D	D	C	D	C
35	Jamboree road slip on ramp to MacArthur Blvd off ramp	ML	E	C	E	D	D	C	D	D
36	MacArthur Blvd off ramp	Ramp	E	C	E	D	D	C	D	C
SB I-405										
37	MacArthur Boulevard Off-Ramp to MacArthur Boulevard On-Ramp	ML	F	D	F	D	F	D	F	D
38	MacArthur Boulevard On-Ramp	Ramp	E	D	E	D	E	D	E	D
39	MacArthur Boulevard On-Ramp to Jamboree Road Off-Ramp	ML	E	D	E	D	E	D	E	D

Table 2 LOS in Opening year (2026) and Design Year (2046) (Contd.)

S.N.	Road Segment	Type	Opening Year 2026				Design Year 2046			
			No Build		Build		No Build		Build	
			AM	PM	AM	PM	AM	PM	AM	PM
40	Jamboree Road Off-Ramp	Ramp	E	D	E	D	E	D	E	D
41	Jamboree Road Off-Ramp to Jamboree Road Loop On Ramp	ML	C	C	C	C	C	C	C	C
42	Jamboree Road Loop On Ramp	Ramp	B	B	B	B	B	B	B	B
43	Jamboree Road Loop On Ramp to Jamboree Road slip On Ramp	ML	C	C	C	C	C	C	C	C
44	Jamboree Road slip On Ramp	Ramp	B	C	B	C	B	C	B	C
45	Jamboree Road slip On Ramp to Culver Dr. Off Ramp	ML	C	C	C	C	C	C	C	C
46	Culver Dr. Off Ramp	Ramp	B	B	B	B	B	B	B	B
47	Culver Dr. Off Ramp to Culver Dr. Loop on Ramp	ML	C	D	C	D	C	D	C	D
48	Culver Dr. Loop on Ramp	Ramp	C	C	C	C	C	C	C	C
49	Culver Dr. Loop on Ramp to Culver Dr. Slip on Ramp	ML	D	D	D	D	D	D	D	D
50	Culver Dr. Slip on Ramp	Ramp	C	C	C	C	C	C	C	C
51	Culver Dr. Slip on Ramp to University Drive Off Ramp	ML	C	F	C	F	F	F	F	F
52	University Drive Off Ramp	Ramp	F	F	F	F	F	F	F	F
53	University Drive Off Ramp to University Drive Loop on Ramp	ML	F	F	F	F	F	F	F	F
54	University Drive Loop on Ramp	Ramp	F	F	F	F	F	F	F	F
55	University Drive Loop on Ramp to University Drive Slip on Ramp	ML	F	F	F	F	F	F	F	F
67	University Drive Slip on Ramp	Ramp	F	F	F	F	F	F	F	F
57	University Drive Slip on Ramp to Sand Canyon Avenue Off Ramp	ML	F	F	F	C	F	F	F	F
58	Sand Canyon Avenue Off Ramp	Ramp	F	F	F	F	F	F	F	F

Table 2 LOS in Opening year (2026) and Design Year (2046) (Contd.)

S.N.	Road Segment	Type	Opening Year 2026				Design Year 2046			
			No Build		Build		No Build		Build	
			AM	PM	AM	PM	AM	PM	AM	PM
59	Sand Canyon Avenue Off Ramp to Sand Canyon Avenue Loop on Ramp	ML	C	F	C	C	C	F	C	F
60	Sand Canyon Avenue Loop on Ramp	Ramp	F	F	F	F	F	F	F	F
61	Sand Canyon Avenue Loop On Ramp to SR 133 SB Connector Off Ramp	ML	F	F	F	F	F	F	F	F
62	SR 133 SB Connector Off Ramp	Ramp	F	F	F	F	F	F	F	F
63	SR 133 SB Connector Off Ramp to SR 133 NB Connector on Ramp	ML	F	F	F	F	F	F	F	F
64	SR 133 NB Connector on ramp	Ramp	C	C	B	B	C	C	B	B
65	SR 133 NB Connector on ramp to Irvine Center Dr. Off Ramp	ML	C	C	B	B	C	C	B	B
66	Irvine Center Dr. Off Ramp	Ramp	C	C	B	B	C	C	B	B
67	Irvine Center Dr. Off Ramp to Irvine Center Dr. loop On Ramp	ML	B	B	B	B	B	B	A	B
68	Irvine Center Dr. loop On Ramp	ramp	B	C	B	C	B	F	B	F
69	Irvine Center Dr. loop On Ramp to Irvine Center Dr. Slip on Ramp	ML	A	B	A	B	A	B	A	B
70	Irvine Center Dr. Slip on Ramp	Ramp	B	B	B	B	B	B	B	B
71	Irvine Center Dr. Slip on Ramp to Bake Parkway Off Ramp	ML	B	B	B	B	B	B	B	B

The LOS conditions in the project with and without the project are shown in Table 2. LOS in some of the segments are improved after the addition of the auxiliary lane.

Comments/Explanation/Details *(attach additional sheets as necessary)*
Located in the nonattainment area for federal PM2.5 standards and within an attainment/maintenance area for the federal PM10 standards. Therefore, per 40 CFR Part 93 hot-spot analysis 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.

According to 40 CFR Part 93.123 (b) (1), the following are Projects of Air Quality Concern:

i. New highway projects that have a significant number of diesel vehicles, and expanded highway project that have a significant increase in the number for diesel vehicles;

ii. Projects affecting intersections that are at a level of Service D, E, or F with a significant number of diesel vehicles or those that will change to Level of Service D, E, or F because of increased traffic volumes from a significant number of diesel vehicles related to the project;

iii. New bus and rail terminals and transfer points that have a significant number of diesel vehicles congregating at a single location;

iv. Expanded bus and rail terminals and transfer points that significantly increase the number of diesel vehicles congregating at a single location; and

v. Project in or affecting locations, areas or categories of sites which are identified in the PM2.5 and PM10 applicable implementation plan or implementation plan submission, as appropriate as sites of violation or possible violation.

The project does not quality as a Project of Air Quality Concern (POAQC) because of the following reasons:

i. The proposed Project is not a new or expanded highway project. The proposed Project would reduce traffic congestion at the ramps and provide easy maneuvering in the I-405 without increasing capacity. Truck volume would not exceed 10,000 average daily truck trip criteria for a POAQC.

ii. The LOS conditions at different segments in the project with and without the project are shown in Table 2. LOS in some of the segments are improved after the addition of the auxiliary lane. The project would not result in a significant increase in the number of diesel vehicles in the project limits.

iii. The proposed build alternative does not include the construction of a new bus or rail terminal.

iv. The proposed build alternative does not expand an existing bus or rail terminal.

v. The proposed build alternative is not in or affection locations, areas, or categories of sites that are identified in the PM2.5 and PM10 applicable implementation plan or implementation plan submission, as appropriate, as sites of violation or possible violation.

Therefore, the proposed Project meets the CAA requirements and 40 CFR 93.116 without any explicit hot-spot analysis. The proposed Project would not create a new, or worsen an existing, PM10 or PM2.5 violation. Therefore, the project would not be considered a Project of Air Quality Concern under this criterion.