

DEPARTMENT OF TRANSPORTATION

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August 11, 2016

Southern California Association Of Governments

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ORA-100511
E.A. 0J340

Attention: **Mr. Rongsheng Luo**
Program Manager

Subject: **Additional Alternative to the Previously Accepted PM Conformity Form**

Background

A Qualitative PM Hot-spot Analysis was prepared for the proposed project (for four Build Alternatives and a No Build Alternative) and underwent Interagency Consultation (IAC) on December 3, 2013. The TCWG determined that the proposed hot-spot analysis was acceptable for NEPA circulation. On March 25, 2014 an updated PM Hot-spot analysis, with minor changes to the project description, was submitted to the TCWG. The TCWG determined that no additional PM analysis was required. The November 2013/February 2014 analysis included four build alternatives (Alternatives 1, 2, 3, and 4) and one no build alternative.

Purpose

The purpose of this memorandum is to inform the Transportation Conformity Working Group (TCWG) that a new alternative (Alternative 3M) is being considered for the SR-55 Improvement Project between I-405 and I-5 (Project). Our previous memorandum to TCWG dated July 10, 2015 included an update of the Traffic Volumes for the Project. The Project alternatives included addition of a General Purpose Lane (Alternative 3) and addition of a High Occupancy Lane (Alternative 4). TCWG's concurred that since the new volumes did not significantly change the emissions for the Project, there was no need for additional modeling and calculations.

Recently, the 2014 California High Occupancy Vehicle Lane Degradation Determination Report dated September 2, 2015 has shown that many HOV lanes in Orange County are degraded. As a result, the vehicle speed in HOV lanes during the peak hours are less than 45 miles per hour. FHWA and Caltrans have agreed that action will be taken on facilities identified as degraded. To rectify the speed degradation and in order to comply with this agreement, a new alternative (Alternative 3M) is being considered for this Project. This alternative includes a GP Lane as well as one HOV Lane. What this alternative presents is combining the previous alternatives, one with only GP lane (Alternative 3); and one only with HOV lane (Alternative 4). Therefore, basically we are considering one additional HOV lane compared to the worst case scenario (Alternative 3) of the previous submittal.

Traffic volume data for this Alternative 3M was compared with the traffic volume data for Alternative 3. As shown in Tables B and D, the difference between traffic volumes of the Alternative 3 and Alternative 3M are insignificant. The comparison between the two sets of traffic data is presented in “Bold Borders” in those two tables. As a result, we like to obtain TCWG’s concurrence that the traffic data for the new Alternative 3M does not significantly change from the previously approved alternatives; thus does not generate significant additional emissions for the entire Project.

If you have any questions, please call Arman Behtash of my staff at (949) 724-2029.

Sincerely,



Reza Aurasteh, PhD, P.E.
District 12, Environmental Engineering

Attachment: Tables B, D

Table B: Updated 2020 SR-55 Traffic Volumes

Segment	No Build		Alternative 1		Alternative 2		Alternative 3		Alternative 3M		Percent Change in Volumes (3M/3)		Alternative 4	
	ADT	Truck ADT	ADT	Truck ADT	ADT	Truck ADT	ADT	Truck ADT	ADT	Truck ADT	ADT	Truck ADT	ADT	Truck ADT
South of I-405	171,505	9,947	171,855	9,968	172,395	9,999	172,630	10,013	173,600	10,069	+0.56%	+0.56%	172,095	9,982
Between I-405 and Main Street	251,275	14,574	252,730	14,658	255,070	14,794	256,180	14,858	257,770	14,951	+0.62%	+0.62%	253,340	14,694
Between Main Street and Dyer Road	264,935	15,366	266,940	15,483	269,450	15,628	271,115	15,725	271,735	15,761	+0.23%	+0.23%	269,200	15,614
Between Dyer Road and Edinger Avenue	278,450	16,150	281,380	16,320	283,445	16,440	285,410	16,554	286,490	16,616	+0.38%	+0.38%	283,590	16,448
Between Edinger Avenue and McFadden Avenue	290,425	16,845	293,180	17,004	294,905	17,104	296,590	17,202	298,105	17,290	+0.51%	+0.51%	295,570	17,143
Between McFadden Avenue and I-5	253,450	14,700	255,595	14,825	256,780	14,893	258,260	14,979	254,065	14,736	-1.62%	-1.62%	257,775	14,951
North of Irvine Boulevard/4th Street	219,860	12,752	220,585	12,794	220,850	12,809	221,395	12,841	221,275	12,834	-0.05%	-0.05%	221,665	12,857

Source: LSA Associates, Inc. and Fehr & Peers (July 2015) & Caltrans System Planning (August 2016).

Note: Roadway segments where the 2015 traffic projections are higher than the 2013 projections are highlighted

ADT = average daily trips

I-405 = Interstate 405

I-5 = Interstate 5

SR-55 = State Route 55

Table D: Updated 2040 SR-55 Traffic Volumes

Segment	No Build		Alternative 1		Alternative 2		Alternative 3		Alternative 3M		Percent Change in Volumes (3M/3)		Alternative 4	
	ADT	Truck ADT	ADT	Truck ADT	ADT	Truck ADT	ADT	Truck ADT	ADT	Truck ADT	ADT	Truck ADT	ADT	Truck ADT
South of I-405	176,250	10,223	176,910	10,261	178,365	10,345	179,070	10,386	182,195	10,567	+1.75%	177,185	10,277	
Between I-405 and Main Street	255,255	14,805	258,930	15,018	265,425	15,395	268,440	15,570	278,385	16,146	+3.70%	260,245	15,094	
Between Main Street and Dyer Road	273,770	15,879	278,675	16,163	284,960	16,528	288,705	16,745	291,330	16,897	+0.91%	282,955	16,411	
Between Dyer Road and Edinger Avenue	285,900	16,582	293,460	17,021	299,060	17,345	303,740	17,617	306,820	17,796	+1.01%	298,100	17,290	
Between Edinger Avenue and McFadden Avenue	296,890	17,220	304,445	17,658	309,615	17,958	313,625	18,190	317,170	18,396	+1.13%	310,045	17,983	
Between McFadden Avenue and I-5	268,445	15,570	275,010	15,951	278,400	16,147	282,360	16,377	266,295	15,445	-5.69%	279,495	16,211	
North of Irvine Boulevard/4 th Street	262,630	15,233	263,910	15,307	265,045	15,373	266,180	15,438	264,720	15,354	-0.55%	265,250	15,385	

Source: LSA Associates, Inc. and Fehr & Peers (July 2015) & Caltrans System Planning (August 2016).

Note: Roadway segments where the 2015 traffic projections are higher than the 2013 projections are highlighted

ADT = average daily trips

I-405 = Interstate 405

I-5 = Interstate 5

SR-55 = State Route 55