

<b>RTIP ID#</b> <i>(required)</i> 20111625				
<b>TCWG Consideration Date</b> January 22, 2013				
<b>Project Description</b> <i>(clearly describe project)</i> The California Department of Transportation (Caltrans), in coordination with the San Bernardino Associated Governments (SANBAG), proposes to widen State Route 210 (SR-210) from just west of Highland Avenue to San Bernardino Avenue.  The proposed improvements are located within Caltrans District 8 jurisdiction, from post mile (PM) R26.0 to R33.2. The project proposes to add one mixed flow lane in each direction within the median of SR-210, create auxiliary lanes between the Base Line and Fifth Street interchanges, and add an acceleration lane at the eastbound Fifth Street on-ramp. The SR-210 project limits of approximately 7.2 miles would transverse portions of multiple jurisdictions that include City of Highland, City of Redlands, and unincorporated portions of San Bernardino County.  All work would occur within the existing Caltrans right-of-way (ROW). Regional vicinity and project location maps are attached as Figure 1-1 and Figure 1-2, respectively.				
<b>Type of Project</b> <i>(use Table 1 on instruction sheet)</i> Change to existing state highway				
<b>County</b> San Bernardino	<b>Narrative Location/Route &amp; Postmiles:</b> SR-210 from just west of Highland Avenue to San Bernardino Avenue (PM R26.0 to R33.2)  <b>Caltrans Projects – EA#</b> OC700			
<b>Lead Agency:</b> San Bernardino Associated Governments				
<b>Contact Person</b> Keith Cooper	<b>Phone#</b> 213-627-5376	<b>Fax#</b> 213-627-6853	<b>Email</b> <a href="mailto:Keith.Cooper@icfi.com">Keith.Cooper@icfi.com</a>	
<b>Hot Spot Pollutant of Concern</b> <i>(check one or both)</i> <b>PM2.5</b> ✓ <b>PM10</b> ✓				
<b>Federal Action for which Project-Level PM Conformity is Needed</b> <i>(check appropriate box)</i>				
<b>Categorical Exclusion (NEPA)</b>	✓ <b>EA or Draft EIS</b>	<b>FONSI or Final EIS</b>	<b>PS&amp;E or Construction</b>	<b>Other</b>
<b>Scheduled Date of Federal Action:</b> 2014				
<b>NEPA Delegation – Project Type</b> <i>(check appropriate box)</i>				
<b>Exempt</b>	<b>Section 6004 – Categorical Exemption</b>	✓ <b>Section 6005 – 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>	2006	2014	N/A	2017
<b>End</b>	2013	2015	N/A	2018

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

Project Purpose

The purpose of the proposed project is to:

- Provide continuity with the number of mixed flow lanes west and east of this freeway segment along SR-210 between Highland Avenue and San Bernardino Avenue;
- Increase the efficiency of this segment of SR-210 by minimizing weaving conflicts at the termini of the third mixed flow lane east and west of this freeway segment, and;
- Reduce congestion and improve operational efficiency along SR-210 within the project limits.

Project Need

Currently, SR-210 consists of a six lane facility (three lanes in each direction) to the west of Highland Avenue. To the east of Highland Avenue the facility is four lanes (two in each direction) to approximately San Bernardino Avenue, where the existing freeway widens to four lanes in each direction at the terminus of SR-210 at Interstate (I-10). This results in a lane imbalance condition and bottleneck within the corridor. In addition, capacity and operating conditions on SR-210 between Highland Avenue and San Bernardino Avenue are projected to operate at Level of Service (LOS) F during the AM and PM peak hours by the year 2040. Freeway congestion has potential negative impacts such as increased air pollution, longer commuter and emergency vehicle delays, increased energy consumption, extended commute periods, increased driver frustration, reduced safety, as well as adverse impacts to the regional and local economy.

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

Sensitive receptors in the vicinity of the project area that could be affected by the proposed project include residential, religious, recreational, convalescent, and school uses within 1,000 feet (304.8 meters) of the project alignment, with the closest receptors within 25 meters of the SR-210 mainline and ramps. Figure 2-1 (attached) provides an illustration of land uses within 1,000 feet (304.8 meters) of the project construction limits.

Traffic generating land uses in the vicinity of the project area (that could affect diesel traffic) include the following:

- Commercial uses, including Lowes and Staples, off 5th Street,
- Commercial uses, including Target, off Highland Avenue, and
- Highland Granite, with access off 5th Street.

Refer to Figure 2-1 (attached) and click [here](#) for a Google Map image of project vicinity to further explore surrounding land uses.

**Opening Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility**

Table 1 summarizes opening-year (2020) total and truck AADT on SR-210 mainline segments in the study area under build and no-building conditions. Total ADT was obtained from the project traffic consultant, and Truck AADT was calculated based on truck percentage for areas both north and south of the SR-330 connection as obtained from the consultant traffic engineer (Noel Casil pers. comm). Attachment A presents the AADT calculations.

**Table 1. Opening-Year (2020) AADT and Truck AADT**

SR-210 Mainline Segment	2020 No Build Alternative		2020 Build Alternative		Project Effect (Percent increase over No Build)	
	Total AADT	Truck AADT*	Total AADT	Truck AADT*	Total AADT	Truck AADT
West of Highland Ave	95,800	6,706	96,900	6,783	1.1%	1.1%
Highland Ave to SR-330	79,400	5,558	83,200	5,824	4.8%	4.8%
SR-330 to Baseline Rd	78,800	4,728	81,000	4,860	2.8%	2.8%
Baseline Rd to 5th St	84,000	5,040	89,800	5,388	6.9%	6.9%
5th St to San Bernardino Ave	99,000	5,940	107,200	6,432	8.3%	8.3%
South of San Bernardino Ave	95,400	5,724	96,200	5,772	0.8%	0.8%

\*Truck percentage estimated to be 7% AADT volumes north of SR-330 and 6% AADT volumes south of SR-330.  
Adapted from URS Corporation 2012, Noel Casil pers. comm.

AADT on all SR-210 mainline segments within the project limits would be below the FHWA and EPA guidance criterion of 125,000 for all vehicles and 10,000 truck AADT (8% of 125,000 AADT), for a roadway project considered to be a potential project of air quality concern (POAQC). Overall, the project would provide improved LOS conditions throughout the SR-210 project limits under the build condition when compared to no-build at opening-year 2020 (see Attachment A).

**RTP Horizon Year / Design Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility**

Table 2 summarizes horizon-year (2040) total and truck ADT on SR-210 mainline segments in the study area under build and no-building conditions. Total ADT was obtained from the project traffic consultant, and Truck ADT was calculated based on truck percentage for areas both north and south of the SR-330 connection as obtained from the consultant traffic engineer (Noel Casil pers. comm). Attachment A presents the ADT calculations.

**Table 2. Horizon-Year (2040) AADT and Truck ADT**

SR-210 Mainline Segment	2040 No Build Alternative		2040 Build Alternative		Project Effect (Percent increase over No Build)	
	Total AADT	Truck AADT	Total AADT	Truck AADT	Total AADT	Truck AADT
West of Highland Ave	120,600	8,442	118,400	8,288	-1.8%	-1.8%
Highland Ave to Victoria Ave	114,400	8,008	116,600	8,162	1.9%	1.9%
Victoria Ave to SR-330	103,000	7,210	106,000	7,420	2.9%	2.9%
SR-330 to Baseline Rd	102,000	6,120	102,800	6,168	0.8%	0.8%
Baseline Rd to 5th St	103,000	6,180	107,400	6,444	4.3%	4.3%
5th St to San Bernardino Ave	118,000	7,080	<b>126,000</b>	7,560	6.8%	6.8%
South of San Bernardino Ave	115,600	6,969	116,200	6,972	0.5%	0.5%
*Truck percentage estimated to be 7% AADT volumes north of SR-330 and 6% AADT volumes south of SR-330. Adapted from URS Corporation 2012, Noel Casil pers. comm.						

AADT on the one SR-210 segment, 5th Street to San Bernardino Avenue, would be in excess of FHWA and EPA guidance criterion of 125,000 for all vehicles for a roadway project considered to be a potential POAQC. AADT for all other segments would be below 125,000 AADT. In addition, truck AADT volumes on all SR-210 mainline segments would be below 10,000 AADT. Overall, the project would provide improved LOS conditions throughout the SR-210 project limits under the build condition when compared to no-build at horizon-year 2040 (see Attachment A).

**Describe potential traffic redistribution effects of congestion relief** *(impact on other facilities)*

The purpose of the project is to reduce congestion by improving providing continuity with the number of mixed flow lanes west and east of this freeway segment along SR-210 between Highland Avenue and San Bernardino Avenue and increasing efficiency by minimizing weaving conflicts at the termini of the third mixed flow lane east and west of this freeway segment. Specifically, the project would widen SR-210 by adding a mixed flow lane in each direction within the existing median from approximately 400 feet west of Highland Avenue to San Bernardino Avenue.

The traffic consultant evaluated mainline and ramp conditions for both the eastbound/southbound and westbound/northbound directions peak hours (URS Corporation 2012). Roadway ADT, LOS, density, and speed for both AM and PM peak hours for all segments (including both freeway ramps and mainline segments) in both directions are contained within Attachment A. As shown in Attachment A, the majority of roadway segments would see an improvement in LOS, reduction in density, and increased speed during both opening-year and horizon year peak hour conditions. The traffic modeling indicates the project will provide additional roadway capacity and reduce existing and projected congestion, consistent with the project's purpose and need.

In summary, the project's effect on improving freeway capacity would result in some redistribution of arterial and collector surface street traffic onto the freeway mainline, as shown in Attachment B. The redistribution of traffic from surface streets to the freeway is noteworthy in that surface street emissions occur closer to sensitive receptors and at lower speeds.

**Comments/Explanation/Details** (attach additional sheets as necessary)

The proposed project is not a project of air quality concern because the project does not meet the following criteria (underlined text indicates answers to 40 CFR 93.123(b)(1) criteria for Projects of Air Quality Concern:

- (i) New or expanded highway projects that have a significant number of or significant increase in diesel vehicles.

*Truck traffic volumes along the SR-210 project limits are expected to increase by a maximum of 8.3 % at opening year 2020, and 6.8% at horizon year 2040, under the build condition, when compared to no-build. Even with these truck traffic increases, total truck traffic volumes would continue to remain below the EPA/FHWA screening criterion of 10,000 truck AADT volumes for projects considered to have potential to be a POAQC. Maximum truck AADT volumes are estimated to be no more than 6,800 and 8,300 during opening year 2020 and horizon year 2040, along any SR-210 mainline segment.*

- (ii) Projects affecting intersections that are at 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.

*Attachment A indicates that several roadway segments in the study area will operate at LOS D, E, or F under existing and future no-build conditions. The project is not expected to cause a deterioration of these levels. Rather, as shown in Attachment A, the project would improve LOS for the majority of roadway segments, with only a maximum of 2 segments degrading over no-build conditions (during the 2040 Horizon Year PM hour). By improving traffic flow and reducing conditions at the majority of roadway segments, the project would, therefore, be expected to reduce localized PM concentrations at surrounding land uses.*

- (iii) New bus and rail terminals and transfer points than have a significant number of diesel vehicles congregating at a single location.

*The project does not include new bus or rail terminals and transfer points.*

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

*The project does not include expanded bus or rail terminals and transfer points.*

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

*The project site is not in or affecting an area or location identified in any PM10 or PM2.5 implementation plan. The immediate project area is not considered to be a site of violation or possible violation.*

Based on the information provided above, the proposed project is not expected to introduce significant amounts of diesel truck traffic or negatively affect intersections with a significant number of diesel vehicles. Therefore, the project is not considered to be a POAQC based on the definition contained in 40 CFR 93.123(b)(1). The proposed project would also not be considered a project of air quality concern with respect to PM10 or PM2.5 emissions as defined by 40 CFR 93.123(b) (1). Therefore, a PM10/PM2.5 hot-spot evaluation is not required.

# ATTACHMENT A

## ROADWAY CONDITIONS AT PROJECT SEGMENTS

### Summary of Opening Year and Horizon Year Freeway Conditions

Number of Segments and Ramps where:	Opening Year 2020						Horizon Year 2040					
	Eastbound			Westbound			Eastbound			Westbound		
	AM	PM		AM	PM		AM	PM		AM	PM	
LOS improves	16	14		16	14		15	14		17	17	
LOS worsens	0	1		1	1		1	0		1	2	
LOS NA or no change	11	12		10	12		11	13		9	8	
Speed improves	12	12		13	14		12	12		14	14	
Speed worsens	4	5		5	5		5	6		5	6	
Speed NA or no change	11	10		9	8		10	9		8	7	

# ATTACHMENT A ROADWAY CONDITIONS AT PROJECT SEGMENTS

## Opening Year 2020 Freeway Conditions

Location Description	AM PEAK HOUR								PM PEAK HOUR							
	No Build			Build			LOS Improves?	Change in Speed	No Build			Build			LOS Improves?	Change in Speed
	LOS	Den	Speed	LOS	Den	Speed			LOS	Den	Speed	LOS	Den	Speed		
<b>EASTBOUND/SOUTHBOUND</b>																
<i>MAINLINE</i>																
West of Arden Ave	C	20.0	65.0	C	21.3	65.0	NC	0.0	C	20.0	65.0	C	23.4	64.8	NC	-0.2
Highland Ave (before OFF)	C	22.7	64.9	B	16.8	65.0	Yes	+0.1	C	22.7	64.9	C	19.4	65.0	NC	+0.7
Highland Ave (after ON)	D	28.4	62.9	C	20.0	65.0	Yes	+2.1	D	28.4	62.9	C	21.9	65.0	Yes	+3.2
Victoria Ave (before OFF)	D	26.2	63.9	C	18.2	65.0	Yes	+1.1	D	26.2	63.9	C	19.4	65.0	Yes	+1.9
Victoria Ave (after ON)	D	26.9	63.6	C	18.8	65.0	Yes	+1.4	D	26.9	63.6	C	20.9	65.0	Yes	+2.4
SR-330 (before OFF)	C	23.0	64.9	B	16.5	65.0	Yes	+0.1	C	23.0	64.9	C	18.8	65.0	NC	+0.7
SR-330 On / Baseline Rd (at Off)	C	20.5	56.2	B	16.2	57.1	Yes	+0.9	C	20.5	56.2	B	17.4	57.6	Yes	+0.2
Baseline Rd (after OFF)	C	23.5	64.8	B	17.0	65.0	Yes	+0.2	C	23.5	64.8	B	17.7	65.0	Yes	+0.4
Baseline Rd (after ON)	D	32.9	60.2	C	21.1	51.0	Yes	-9.2	D	32.9	60.2	B	19.9	52.0	Yes	-10.0
5th Street (after OFF)	D	27.8	63.2	C	19.7	65.0	Yes	+1.8	D	27.8	63.2	C	18.1	65.0	Yes	+0.6
5th Street (before ON)	E	44.3	52.6	D	26.3	63.9	Yes	+11.2	E	44.3	52.6	C	23.3	64.8	Yes	+6.2
5th St Lane Addition	C	24.1	64.7	--	--	--	--	--	C	24.1	64.7	--	--	--	--	--
San Bernardino (after OFF)	C	20.5	65.0	C	22.3	65.0	NC	0.0	C	20.5	65.0	C	19.5	65.0	NC	0.0
Lane Add	B	15.4	65.0	B	16.7	65.0	NC	0.0	B	15.4	65.0	B	14.6	65.0	NC	0.0
To I-10	C	18.2	65.0	C	19.5	65.0	NC	0.0	C	18.2	65.0	B	16.6	65.0	Yes	0.0
<i>RAMPS</i>																
Highland Ave offramp	N/A	N/A	N/A	N/A	N/A	N/A	--	--	N/A	N/A	N/A	N/A	N/A	N/A	--	--
Highland Ave onramp	D	29.3	55.0	C	21.6	57.0	Yes	+2.0	D	30.7	55.0	C	22.8	57.0	Yes	+2.0
Victoria Ave offramp	D	33.7	54.7	C	25.8	54.4	Yes	-0.3	E	35.2	54.7	C	27.7	54.1	Yes	-0.6
Victoria Ave onramp	D	28.3	56.0	B	19.0	58.0	Yes	+2.0	D	29.9	55.0	C	21.4	57.0	Yes	+2.0
SR-330 offramp	C	23.0	54.3	B	15.4	54.2	Yes	-0.1	C	24.7	54.4	B	17.3	54.3	Yes	-0.1
SR-330 onramp	N/A	N/A	N/A	N/A	N/A	N/A	--	--	N/A	N/A	N/A	N/A	N/A	N/A	--	--
Basline Rd offramp	N/A	N/A	N/A	N/A	N/A	N/A	--	--	N/A	N/A	N/A	N/A	N/A	N/A	--	--
Basline Rd onramp	D	32.2	54.0	N/A	N/A	N/A	--	--	D	30.5	55.0	N/A	N/A	N/A	--	--
5th St offramp	D	30.8	54.2	N/A	N/A	N/A	--	--	D	28.7	54.1	N/A	N/A	N/A	--	--
5th St onramp	E	37.6	49.0	D	28.4	56.0	Yes	+7.0	D	33.6	53.0	C	25.4	57.0	Yes	+4.0
San Bernardino Ave offramp	D	29.8	53.8	D	31.5	53.7	NC	-0.1	C	27.5	53.7	D	29.3	53.6	No	-0.1
San Bernardino Ave onramp	B	19.6	58.0	C	20.7	58.0	Yes	0.0	B	16.6	58.0	B	17.3	58.0	NC	0.0
<b>WESTBOUND/NORTHBOUND</b>																
<i>MAINLINE</i>																
West of Arden Ave	C	21.5	65.0	C	23.8	64.7	NC	-0.3	C	22.2	65.0	C	25.5	64.2	NC	-0.8
At Highland Ave onramp	B	17.9	65.0	--	--	--	--	--	B	17.7	65.0	--	--	--	--	--
At Highland Ave offramp	D	27.6	63.3	C	21.4	65.0	Yes	+1.7	D	27.1	63.5	C	22.9	64.9	Yes	+1.4
At Victoria Ave onramp	D	32.9	60.2	C	23.4	64.8	Yes	+4.6	D	30.7	61.6	C	24.5	64.5	Yes	+2.9
At Victoria Ave offramp	D	30.8	61.5	C	21.5	65.0	Yes	+3.5	D	28.5	62.9	C	22.9	64.9	Yes	+2.0
At SR-330 offramp	D	32.0	60.8	C	22.7	64.9	Yes	+4.1	D	29.0	62.6	C	24.0	64.7	Yes	+2.1
At SR-330 onramp and Baseline Rd offramp	C	25.3	64.3	C	19.3	65.0		+0.7	C	24.4	64.6	C	20.9	65.0	NC	+0.4
At Baseline Rd offramp	C	21.5	54.0	B	18.3	54.4	Yes	+0.4	C	21.8	55.3	C	20.4	55.9	NC	+0.6

## ATTACHMENT A ROADWAY CONDITIONS AT PROJECT SEGMENTS

At Baseline Rd onramp	C	20.2	65.0	B	16.0	65.0	Yes	+0.0	C	22.9	64.9	C	20.7	65.0	NC	+0.1
At 5th Street offramp	C	25.1	64.3	B	17.3	54.3	Yes	-10.1	D	28.1	63.0	C	22.7	51.9	Yes	-11.2
At 5th Street onramp	C	23.2	64.8	B	17.8	65.0	Yes	+0.2	C	25.2	64.3	C	21.7	65.0	NC	+0.7
At 5th St Lane Addition	D	30.2	61.9	C	22.0	65.0	Yes	+3.1	E	37.5	57.2	D	29.3	62.4	Yes	+5.2
At San Bernardino Ave offramp	C	22.9	64.9	B	17.5	65.0	Yes	+0.1	D	27.0	63.6	C	22.2	65.0	Yes	+1.4
At San Bernardino Lane Addition	B	15.3	65.0	--	--	--	--	--	B	17.6	65.0	--	--	--	--	--
To I-10	B	16.7	65.0	C	19.0	65.0	<b>No</b>	0.0	C	22.4	65.0	D	27.7	63.3	<b>No</b>	-1.7
<b>RAMPS</b>																
Highland Ave	C	23.1	57.0	C	24.3	57.0	NC	0.0	C	24.1	57.0	C	24.3	57.0	NC	0.0
Highland Ave	E	37.0	54.2	D	28.8	54.4	Yes	0.2	E	35.5	54.5	D	28.8	54.4	Yes	+0.1
Victoria Ave	D	32.5	54.0	C	23.8	57.0	Yes	+3.0	D	31.1	55.0	C	23.8	57.0	Yes	+2.0
Victoria Ave	E	36.4	55.0	C	28.0	54.7	Yes	-0.3	D	34.2	55.0	C	28.0	54.7	Yes	-0.3
SR-330	D	31.7	54.0	C	24.0	57.0	Yes	+3.0	D	29.8	55.0	C	24.0	57.0	Yes	+2.0
SR-330	N/A	N/A	N/A	N/A	N/A	N/A	--	--	--	--	--	--	--	--	--	--
Baseline Rd	N/A	N/A	N/A	N/A	N/A	N/A	--	--	--	--	--	--	--	--	--	--
Baseline Rd	C	24.4	53.9	N/A	N/A	N/A	--	--	C	27.1	54.0	--	--	--	--	--
5th St	C	26.8	56.0	N/A	N/A	N/A	--	--	D	29.2	55.0	--	--	--	--	--
5th St	E	35.1	53.7	D	28.4	53.4	Yes	-0.3	E	39.8	53.0	D	28.4	53.4	Yes	-0.4
San Bernardino Ave	D	30.5	55.0	C	23.9	57.0	Yes	+2.0	D	34.7	52.0	C	23.9	57.0	Yes	+3.0
San Bernardino Ave	C	22.4	54.6	C	24.7	54.5	NC	-0.1	D	29.0	53.2	C	24.7	54.5	Yes	0.0

Reductions in speed shown in **BOLD**

NC = No Change in LOS

Source: Adapted from URS Corporation 2012.

### Horizon Year 2040 Freeway Conditions

Location Description	AM PEAK HOUR								PM PEAK HOUR							
	No Build			Build			LOS Improves?	Change in Speed	No Build			Build			LOS Improves?	Change in Speed
	LOS	Den	Speed	LOS	Den	Speed			LOS	Den	Speed	LOS	Den	Speed		
<b>EASTBOUND</b>																
<b>MAINLINE</b>																
West of Arden Ave	D	29.2	62.5	D	31	61	NC	-1.1	D	30.0	62.0	D	33.3	59.9	NC	-2.1
Highland Ave (before OFF)	E	39.8	55.6	C	25	65	Yes	+8.9	E	44.2	52.7	D	27.3	63.4	Yes	+10.7
Highland Ave (after ON)	F	52.7	47.6	D	28	63	Yes	+15.3	F	54.9	46.4	D	30.3	61.8	Yes	+15.4
Victoria Ave (before OFF)	E	37.3	57.3	C	23	65	Yes	+7.6	E	37.5	57.2	C	23.4	64.8	Yes	+7.6
Victoria Ave (after ON)	E	41.6	54.4	C	25	64	Yes	+10.1	E	43.1	53.4	D	26.5	63.8	Yes	+10.4
SR-330 (before OFF)	D	33.5	59.8	C	22	65	Yes	+5.2	D	34.9	58.9	C	23.2	64.8	Yes	+6.0
SR-330 On / Baseline Rd (at Off)	D	28.7	53.9	C	22	55	Yes	+1.1	C	26.3	55.9	C	21.8	56.3	NC	+0.5
Baseline Rd (after OFF)	D	31.3	61.2	C	21	65	Yes	+3.8	D	32.6	60.4	C	22.0	65.0	Yes	+4.6
Baseline Rd (after ON)	F	48.5	50.1	C	26	49	Yes	-1.1	E	42.7	53.7	C	25.2	49.6	Yes	-4.0
5th Street (after OFF)	E	38.0	56.8	C	24	65	Yes	+7.9	D	31.6	61.0	C	21.4	65.0	Yes	+4.0
5th Street (before ON)	F	73.1	38.0	D	33	60	Yes	+22.2	F	49.6	49.4	D	27.9	63.1	Yes	+13.7
5th St Lane Addition	D	29.8	62.1	--	--	--	--	--	C	25.4	64.2	--	--	--	--	--
San Bernardino (after OFF)	C	24.8	64.5	D	27	64	<b>No</b>	-0.8	C	21.0	65.0	C	22.9	64.9	NC	-0.1
Lane Add	C	18.4	65.0	C	20	65	NC	0.0	B	15.8	65.0	B	17.1	65.0	NC	0.0

# ATTACHMENT A

## ROADWAY CONDITIONS AT PROJECT SEGMENTS

To I-10	C	22.3	65.0	C	24	65	NC	-0.2	C	18.7	65.0	C	19.9	65.0	NC	0.0	
<b>RAMPS</b>																	
Highland Ave	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Highland Ave	F	40.5	45.0	D	28	56	Yes	+11.0	F	41.2	44.0	D	28.9	56.0	Yes	+12.0	
Victoria Ave	F	46.1	53.6	D	33	53	Yes	-0.3	F	46.7	53.5	D	34.5	52.9	Yes	-0.6	
Victoria Ave	E	36.9	50.0	C	25	57	Yes	+7.0	E	37.5	50.0	C	26.6	56.0	Yes	+6.0	
SR-330	D	32.5	54.1	C	21	54	Yes	0.0	D	33.2	54.1	C	22.0	54.0	Yes	-0.1	
SR-330	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Baseline Rd	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Baseline Rd	F	39.1	47.0	--	--	--	--	--	E	37.2	50.0	--	--	--	--	--	--
5th St	F	38.4	54.1	--	--	--	--	--	E	36.1	53.6	--	--	--	--	--	--
5th St	F	44.5	35.0	D	33	53	Yes	+18.0	F	39.4	47.0	D	29.2	55.0	Yes	+8.0	
San Bernardino Ave	D	33.7	53.6	--	--	--	--	--	D	31.0	53.5	D	32.7	53.4	NC	-0.1	
San Bernardino Ave	C	24.0	57.0	C	25	57	NC	0.0	C	20.1	58.0	C	20.8	58.0	NC	0.0	
<b>WESTBOUND</b>																	
<b>MAINLINE</b>																	
West of Arden Ave	D	30.1	62.0	D	33.4	59.9	NC	-2.1	D	32.6	60.4	E	38.2	56.7	No	-3.7	
Highland Ave (before OFF)	C	25.0	64.4	--	--	--	--	--	C	24.4	64.6	--	--	--	--	--	--
Highland Ave (after ON)	F	47.9	50.4	D	29.4	62.3	Yes	+11.9	F	45.6	51.8	D	31.2	61.3	Yes	+9.4	
Victoria Ave (before OFF)	F	60.2	43.7	D	32.0	60.8	Yes	+17.1	F	56.2	45.7	D	34.3	59.3	Yes	+13.6	
Victoria Ave (after ON)	E	44.1	52.8	D	26.4	63.8	Yes	+11.1	E	39.4	55.9	D	27.9	63.1	Yes	+7.3	
SR-330 (before OFF)	F	52.1	47.9	D	29.6	62.2	Yes	+14.3	E	43.1	53.4	D	30.4	61.7	Yes	+8.3	
SR-330 On / Baseline Rd (at Off)	E	37.3	57.3	C	24.7	64.5	Yes	+7.2	D	33.1	60.1	C	25.5	64.2	Yes	+4.1	
Baseline Rd (after OFF)	D	29.3	51.7	C	24.1	52.5	Yes	+0.8	D	28.6	52.5	C	25.6	53.3	Yes	+0.8	
Baseline Rd (after ON)	D	28.3	62.9	C	20.8	65.0	Yes	+2.1	D	28.6	62.8	C	24.0	64.7	Yes	+1.9	
5th Street (after OFF)	E	36.4	57.9	C	22.4	52.8	Yes	-5.1	E	36.2	58.1	C	26.5	50.7	Yes	-7.3	
5th Street (before ON)	D	33.0	60.1	C	22.7	64.9	Yes	+4.8	D	31.8	60.9	C	25.2	64.3	Yes	+3.4	
5th St Lane Addition	F	46.0	51.6	D	28.0	63.1	Yes	+11.5	F	52.4	47.8	E	35.3	58.6	Yes	+10.9	
San Bernardino (after OFF)	D	30.2	61.9	C	21.4	65.0	Yes	+3.1	D	32.9	60.2	C	25.1	64.3	Yes	+4.1	
Lane Add	C	19.2	65.0	--	--	--	--	--	C	20.3	65.0	--	--	--	--	--	--
To I-10	C	21.4	65.0	C	23.9	64.7	NC	-0.3	D	27.0	63.6	D	33.7	59.7	NC	-3.9	
<b>RAMPS</b>																	
Highland Ave	D	29.7	55.0	D	30.9	55.0	NC	+0.0	D	32.3	54.0	D	33.9	53.0	NC	-1.0	
Highland Ave	F	--*	54.3	D	34.2	54.5	Yes	+0.2	F	--	54.3	E	35.3	54.4	Yes	+0.1	
Victoria Ave	F	--*	41.0	D	30.9	55.0	Yes	+14.0	F	--	43.0	D	32.2	54.0	Yes	+11.0	
Victoria Ave	F	--*	54.5	D	33.1	54.2	Yes	-0.3	E	42.6	54.7	D	33.4	54.4	Yes	-0.3	
SR-330	F	--*	45.0	D	29.3	55.0	Yes	+10.0	E	37.3	50.0	D	29.8	55.0	Yes	+5.0	
SR-330	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Baseline Rd	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Baseline Rd	D	32.8	53.8	--	--	--	--	--	D	32.7	53.9	--	--	--	--	--	--
5th St	D	34.4	53.0	--	--	--	--	--	D	34.3	53.0	--	--	--	--	--	--
5th St	F	--	53.6	D	32.8	53.4	Yes	-0.2	F	--*	52.8	E	37.2	52.4	Yes	-0.4	
San Bernardino Ave	F	--	48.0	D	29.3	55.0	Yes	+7.0	F	--*	45.0	D	34.2	52.0	Yes	+7.0	
San Bernardino Ave	C	27.2	54.2	D	29.3	54.2	No	0.0	D	32.9	52.7	E	36.3	52.7	No	0.0	

Worsening of LOS and reductions in speed shown in **BOLD**

NC = No Change in LOS

Source: Adapted from URS Corporation 2012.

**ATTACHMENT B**  
**VMT SUMMARY BY ROAD TYPE**

Roadway Type	2020 No Build						2020 Build						% of daily VMT change by road type relative to No Build
	AM Peak	PM Peak	Mid-day	Night	TOTAL DAILY	% of daily VMT	AM Peak	PM Peak	Mid-day	Night	TOTAL DAILY	% of daily VMT	
Freeway	369,998	583,914	618,208	392,920	1,965,040	56%	376,420	604,911	622,319	394,135	1,997,785	57%	0.61%
HOV	1,533	191	411	718	2,853	0%	1,666	2,052	428	726	4,873	0%	0.06%
Ramps	37,120	58,830	63,954	37,691	197,594	6%	37,800	60,962	64,675	37,970	201,407	6%	0.08%
Truck	0	0	0	0	0	0%	0	0	0	0	0	0%	0.00%
Expressway/Parkway	0	0	0	0	0	0%	0	0	0	0	0	0%	0.00%
Principal Arterial	73,666	127,522	128,718	66,509	396,415	11%	72,507	123,135	127,785	66,421	389,848	11%	-0.25%
Minor Arterial	124,663	229,549	211,332	96,748	662,292	19%	122,696	221,383	210,519	96,640	651,238	19%	-0.42%
Major Collector	22,290	40,408	37,660	16,531	116,888	3%	22,241	39,509	37,637	16,537	115,923	3%	-0.05%
Minor Collector	429	781	750	357	2,317	0%	430	783	751	357	2,321	0%	0.00%
Centroid	25,482	45,124	45,571	21,963	138,139	4%	25,480	45,104	45,569	21,965	138,117	4%	-0.02%
Other	0	0	0	0	0	0%	0	0	0	0	0	0%	0.00%
<b>Total</b>	<b>655,180</b>	<b>1,086,319</b>	<b>1,106,604</b>	<b>633,437</b>	<b>3,481,540</b>	<b>100%</b>	<b>659,240</b>	<b>1,097,839</b>	<b>1,109,683</b>	<b>634,751</b>	<b>3,501,513</b>	<b>100%</b>	

Roadway Type	2040 No Build						2040 Build						% of daily VMT change by road type relative to No Build
	AM Peak	PM Peak	Mid-day	Night	TOTAL DAILY	% of daily VMT	AM Peak	PM Peak	Mid-day	Night	TOTAL DAILY	% of daily VMT	
Freeway	485,702	751,150	828,732	514,282	2,579,867	56%	508,179	824,641	843,120	518,534	2,694,474	58%	1.61%
HOV	5,367	669	1,440	2,512	9,987	0%	5,833	7,183	1,500	2,540	17,055	0%	0.15%
Ramps	46,407	71,204	81,693	45,838	245,142	5%	48,788	78,665	84,217	46,816	258,486	6%	0.21%
Truck	0	0	0	0	0	0%	0	0	0	0	0	0%	0.00%
Expressway/Parkway	0	0	0	0	0	0%	0	0	0	0	0	0%	0.00%
Principal Arterial	97,500	175,939	166,676	85,337	525,452	11%	93,444	160,585	163,410	85,031	502,469	11%	-0.66%
Minor Arterial	171,774	325,917	289,342	129,351	916,385	20%	164,891	297,335	286,496	128,975	877,696	19%	-1.12%
Major Collector	26,260	51,474	44,262	19,437	141,434	3%	26,089	48,328	44,183	19,456	138,057	3%	-0.12%
Minor Collector	465	825	814	389	2,492	0%	469	833	815	389	2,506	0%	0.00%
Centroid	35,028	63,500	64,193	30,343	193,063	4%	35,021	63,429	64,187	30,349	192,986	4%	-0.06%
Other	0	0	0	0	0	0%	0	0	0	0	0	0%	0.00%
<b>Total</b>	<b>868,503</b>	<b>1,440,679</b>	<b>1,477,151</b>	<b>827,489</b>	<b>4,613,823</b>	<b>100%</b>	<b>882,714</b>	<b>1,480,999</b>	<b>1,487,927</b>	<b>832,089</b>	<b>4,683,730</b>	<b>100%</b>	