

<b>RTIP ID# (required):</b> <u>550</u>				
<b>TCWG Consideration Date:</b> <u>September 28, 2010</u>				
<b>Project Description (clearly describe project)</b>				
<p>The Cities of Santa Ana and Irvine propose to build an overcrossing structure over State Route (SR-55), the Costa Mesa Freeway, between the eastern terminus of Alton Avenue in the City of Santa Ana and the western terminus of Alton Parkway in the City of Irvine, Orange County. The project area includes SR-55 from 0.06 mile north of MacArthur Boulevard to 0.06 mile south of Warner Avenue and Alton Avenue from Main Street (City of Santa Ana) to 0.06 mile east of Red Hill Avenue (City of Irvine). The proposed project would involve constructing an overcrossing on Alton Avenue/Alton Parkway, with high-occupancy vehicle (HOV) direct-access drop ramps connecting to SR-55; adding a signalized intersection along with the HOV ramps; widening SR-55 to accommodate median ramps (no new travel lanes); widening Alton Avenue; relocating an existing drainage channel; relocating two sections of Pullman Avenue; widening the Dyer Road undercrossing structure; and modifying the existing ramps at MacArthur Boulevard and Dyer Road to connect with the widened freeway. Regional and local vicinity maps are provided in Figures 1 and 2, respectively. Build alternative drawings are provided in Figures 3 and 4.</p> <p>The proposed project is included in the Southern California Association of Governments (SCAG) 2008 Regional Transportation Improvement Program (RTIP) (Project Number 550), which was found to be conforming by the Federal Highway Administration (FHWA) on November 17, 2008.</p> <p>A final Environmental Impact Report/Environmental Assessment (EIR/EA) was prepared for the proposed project in July 2005, pursuant to the California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA). The final EIR/EA identified Alternative 2 (Construct the Alton Avenue Overcrossing and HOV Direct-Access Drop Ramps and Spot-Widen Alton Avenue to Secondary Arterial Standards) as the preferred alternative.</p>				
<b>Type of Project (use Table 1 on instruction sheet):</b> <u>Change to existing regionally significant street</u>				
<b>County</b> Orange	<b>Narrative Location/Route &amp; Postmiles:</b> <u>SR-55 at Alton Avenue/Parkway (PM 7.5/7.6)</u>			
	<b>Caltrans Projects – EA#</b> <u>005500</u>			
<b>Lead Agency:</b> City of Santa Ana				
<b>Contact Person</b> Arman Behtash	<b>Phone#</b> 949-724-2029	<b>Fax#</b>	<b>Email</b> Arman_behtash@dot.ca.gov	
<b>Hot Spot Pollutant of Concern (check one or both)</b> <b>PM2.5</b> <input checked="" type="checkbox"/> <b>PM10</b> <input checked="" type="checkbox"/>				
<b>Federal Action for which Project-Level PM Conformity is Needed (check appropriate box)</b>				
<input type="checkbox"/> <b>Categorical Exclusion (NEPA)</b>	<input type="checkbox"/> <b>EA or Draft EIS</b>	<input type="checkbox"/> <b>FONSI or Final EIS</b>	<input type="checkbox"/> <b>PS&amp;E or Construction</b>	<input checked="" type="checkbox"/> <b>Other (Re-validation)</b>
<b>Scheduled Date of Federal Action:</b> 2012				
<b>NEPA Delegation – Project Type (check appropriate box)</b>				
<input type="checkbox"/> <b>Exempt</b>	<input type="checkbox"/> <b>Section 6004 – Categorical Exemption</b>		<input checked="" type="checkbox"/> <b>Section 6005 – Non-Categorical Exemption</b>	
<b>Current Programming Dates (as appropriate)</b>				
	<b>PE/Environmental</b>	<b>ENG</b>	<b>ROW</b>	<b>CON</b>
<b>Start</b>	June 1994	April 2009	2012	2014
<b>End</b>	June 2011	June 2009	2013	2015

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

The construction of the Alton Avenue Overcrossing is an integral part of an overall transportation improvement program being implemented by Orange County Transportation Authority (OCTA), the Department, FHWA, and the Cities of Santa Ana and Irvine.

The primary purpose of the proposed project is to facilitate local traffic distribution and access by providing an additional overcrossing connecting to SR-55 connecting the Cities of Santa Ana and Irvine. The SR-55 freeway acts as a jurisdictional and physical boundary separating the Cities of Santa Ana and Irvine. Roadway connections linking the two Cities currently exist at MacArthur Boulevard and Dyer Road.

MacArthur Boulevard and Dyer Road are approximately 0.9 kilometer (0.5 mile) apart in Santa Ana, with Main Street linking the two east-west roadways, and approximately 1.5 kilometers (0.9 mile) apart in Irvine, with Red Hill Avenue providing the link between the two roadways. The construction of the proposed Alton Avenue Overcrossing would provide another east-west connector over the SR-55 freeway allowing local traffic to use an alternate roadway to bypass congestion on MacArthur Boulevard and Dyer Road.

The proposed project will also provide additional access to the high occupancy vehicle (HOV) regional system and relieve traffic congestion that results from weaving deficiencies on SR-55 between MacArthur Boulevard and Dyer Road. The proposed overcrossing would provide HOV direct-access drop-ramps (northbound and southbound) to SR-55. The HOV direct-access ramps would facilitate local access to and from the HOV facility on SR-55 and would encourage ridesharing and use of public transit. The proposed improvements are consistent with all of the major regional planning studies for the Department, Orange County, and the Cities of Santa Ana and Irvine.

The proposed project is intended to achieve the following goals:

- Provide a roadway link across SR-55
- Support circulation between the Cities of Santa Ana and Irvine
- Relieve traffic on MacArthur Boulevard and Dyer Road
- Accommodate projected traffic between, and planned development in the Irvine Business Complex (IBC) in Irvine and MacArthur Place in Santa Ana
- Improve HOV access as indicated by OCTA plans

The need for the proposed project is based on an assessment of existing and projected traffic demand on the local transportation network and SR-55, the lack of adequate HOV access to SR-55, the existing weaving deficiencies on SR-55, and the degree to which accidents are caused by poor traffic conditions that occur on SR-55 between the Dyer Road and MacArthur Boulevard on-ramps and off-ramps.

Alton Avenue has been identified as a key link in the Orange County Master Plan of Arterial Highways (MPAH). The Cities of Santa Ana and Irvine have recognized the importance in providing traffic relief to the parallel streets, Dyer Road and MacArthur Boulevard.

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

Surrounding land uses consist primarily of low-density office/business park uses that are not associated with high volumes of heavy-truck traffic. Figure 5 presents aerial photography depicting the surrounding area. Figure 6 provides the General Plan land use designations for all parcels located within the project vicinity. In addition, a Google Map link to the project location has been provided [here](#).

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

Roadway Segment/Traffic Data	Opening Year 2015 Forecast	
	No Action Conditions	Build Conditions
<b>SR-55 Mainline, MacArthur to Alton</b>		
Average Daily Traffic (ADT)	341,000	341,000
Design Hour Volume (DHV)	34,100	34,100
Level of Service (LOS) AM/PM	E/D	E/D
Directional Split (DS)	48/52	48/52
Truck % in ADT	5.8%	5.8%
Truck % in DHV	5.8%	5.8%
<b>SR-55 Mainline, Alton to Dyer</b>		
Average Daily Traffic (ADT)	340,000	340,000
Design Hour Volume (DHV)	34,000	34,000
Level of Service (LOS) AM/PM	E/D	E/D
Directional Split (DS)	48/52	48/52
Truck % in ADT	5.8%	5.8%
Truck % in DHV	5.8%	5.8%
<b>Alton Avenue, east of SR-55</b>		
Average Daily Traffic (ADT)	5,700	8,900
Design Hour Volume (DHV)	570	890
Level of Service (LOS) AM/PM	A/A	A/A
Directional Split (DS)	54/46	51/49
Truck % in ADT	3.5%	3.5%
Truck % in DHV	3.5%	3.5%
<b>Alton Avenue, west of SR-55</b>		
Average Daily Traffic (ADT)	3,900	6,500
Design Hour Volume (DHV)	390	650
Level of Service (LOS) AM/PM	A/A	A/A
Directional Split (DS)	41/59	57/43
Truck % in ADT	3.5%	3.5%
Truck % in DHV	3.5%	3.5%
<b>Alton Avenue Overcrossing</b>		
Average Daily Traffic (ADT)		6,500
Design Hour Volume (DHV)		650
Level of Service (LOS) AM/PM		A/A
Directional Split (DS)		57/43
Truck % in ADT		3.5%
Truck % in DHV		3.5%

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

Roadway Segment/Traffic Data	Horizon Year 2035 Forecast	
	No Action Conditions	No Action Conditions
<b>SR-55 Mainline, MacArthur to Alton</b>		
Average Daily Traffic (ADT)	361,000	361,000
Design Hour Volume (DHV)	36,100	36,100
Level of Service (LOS) AM/PM	E/E	E/E
Directional Split (DS)	48/52	48/52
Truck % in ADT	5.8%	5.8%
Truck % in DHV	5.8%	5.8%
<b>SR-55 Mainline, Alton to Dyer</b>		
Average Daily Traffic (ADT)	365,000	365,000
Design Hour Volume (DHV)	36,500	36,500
Level of Service (LOS) AM/PM	E/E	E/E
Directional Split (DS)	49/51	49/51
Truck % in ADT	5.8%	5.8%
Truck % in DHV	5.8%	5.8%
<b>Alton Avenue, east of SR-55</b>		
Average Daily Traffic (ADT)	7,200	24,600
Design Hour Volume (DHV)	720	2,460
Level of Service (LOS) AM/PM	A/A	B/B
Directional Split (DS)	53/47	49/51
Truck % in ADT	3.5%	3.5%
Truck % in DHV	3.5%	3.5%
<b>Alton Avenue, west of SR-55</b>		
Average Daily Traffic (ADT)	8,100	14,400
Design Hour Volume (DHV)	810	1,440
Level of Service (LOS) AM/PM	A/A	A/A
Directional Split (DS)	38/62	57/53
Truck % in ADT	3.5%	3.5%
Truck % in DHV	3.5%	3.5%
<b>Alton Avenue Overcrossing</b>		
Average Daily Traffic (ADT)		21,800
Design Hour Volume (DHV)		2,180
Level of Service (LOS) AM/PM		A/A
Directional Split (DS)		59/41
Truck % in ADT		3.5%
Truck % in DHV		3.5%

**Opening Year: If facility is an interchange(s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT**

Facility is not an interchange.

**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**

Facility is not an interchange.

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

Under the Build Alternative, AADT volumes would increase considerably within the project limits of Alton Avenue/Parkway 24,600 compared to the No Action Alternative volume of just 7,200. This increase in AADT volumes along Alton Avenue/Parkway would be the result of traffic redistribution from MacArthur Boulevard (south of Alton overcrossing) and Dyer Road (north of Alton overcrossing) to the newly constructed Alton overcrossing.

It is important to note the project would construct a new freeway overcrossing; and not an interchange. The project would provide no ingress or egress to the SR-55 mainline from Alton Avenue/Parkway, which would minimize potential redistribution effects.

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

The EPA's March 2006 guidance document *Transportation Guidance for Qualitative Hot-spot Analysis in PM<sub>2.5</sub> and PM<sub>10</sub> Nonattainment and Maintenance Areas* references a two step criteria to identify "a significant volume of diesel truck traffic." The first criterion is facilities with greater than 125,000 AADT volumes. If the first criterion is met, the second criterion is that 8 percent or more of said traffic volumes (i.e., 10,000 vehicles or more) are diesel truck traffic volumes. With respect to traffic volumes along the project limits of Alton Avenue/Parkway, both opening year and horizon year ADT volumes are forecast to be below the above-mentioned screening-level criteria of 125,000 total AADT traffic volumes. Most importantly, the proposed project would have no effect on SR-55 mainline AADT or truck traffic volumes. As such, the project does not have potential to result in a substantial number of diesel vehicles within the project area.

The tables provided above summarize mainline truck percentages for opening- and design-year conditions, and indicate that implementation of the proposed project would not affect diesel truck traffic volumes or percentages between no build and build conditions. Consequently, the build alternative is not considered a POAQC for PM<sub>10</sub> and PM<sub>2.5</sub> because it would not have no effect on SR-55 mainline diesel truck traffic volumes or percentages (i.e., effects to truck percentages would remain constant at 5.8% under both the no-build and build alternatives); and traffic volumes along the Alton Overcrossing at horizon year 2035 would be well below 125,000 AADT, at 24,600 AADT. Because the project is not considered a POAQC, the CAA and 40 CFR 93.116 requirements were met without a hot-spot analysis. According to the *Transportation Guidance for Qualitative Hot-spot Analysis in PM<sub>2.5</sub> and PM<sub>10</sub> Nonattainment and Maintenance Areas*, this project is not a project of air quality concern under 40 CFR 93.123(b)(1) (i) and (ii).

**References**

Federal Highway Administration and U.S. Environmental Protection Agency. 2006. *Transportation conformity guidance for qualitative hot-spot analyses in PM<sub>2.5</sub> and PM<sub>10</sub> nonattainment and maintenance areas*. Washington, D.C.

Huitt-Zollars. 2010. *Segment AADT Volumes for Alton Avenue Overcrossing at State Route 55 Freeway and Arterial Widening Project*. July.

KOA Corporation. 2010. *Updated Traffic Study for Alton Avenue Overcrossing at State Route 55 Freeway and Arterial Widening*. May.