

RTIP ID# <i>(required)</i> RTP (7120018), FTIP (LA0G1290)
TCWG Consideration Date February 6, 2018
Project Description <i>(clearly describe project)</i> The Port of Los Angeles (POLA), in cooperation with the City of Los Angeles and Caltrans District 7, proposes to reconfigure the existing interchange at State Route 47/Vincent Thomas Bridge and Harbor Boulevard/Front Street. The proposed project will improve safety and operation for vehicles exiting the highway. Proposed improvements also include modification of the entrance ramps and modification of Harbor Boulevard and Front Street approaching and between the ramp termini.
Alternatives: Alternative 1 The No Build Alternative maintains the current configuration. As traffic volumes increase, traffic operation will deteriorate. This alternative does not meet the project’s purpose. Alternative 3 proposes to reconfigure the existing interchange at State Route 47/Vincent Thomas Bridge and Harbor Boulevard/Front Street. The proposed improvements would eliminate a bottleneck condition at the shared off-ramp terminus by creating a new, separate terminus for the westbound ramps. Specific improvements are described below: <ul style="list-style-type: none">• The westbound off-ramp is directed over the former Pacific Harbor Line rail right-of-way toward a new ramp terminus on Front Street at the existing West Basin Container Gate signalized intersection.• The westbound on-ramp terminus is located approximately 650 feet north of its existing terminus, sharing the same intersection as the westbound off-ramp. The ramp rises over the former Pacific Harbor Line rail right-of-way and joins the SR-47 mainline at the existing gore location.• The limit of the modified eastbound off-ramp begins at the mainline gore. The ramp cross-section is expanded from three to four lanes at its terminus.• Modification of the eastbound on-ramp entails increasing its acceleration length for traffic merging on the mainline. The extended alignment utilizes space previously occupied by the westbound off-ramp. The ramp gore is shifted away from the Vincent Thomas Bridge by up to 200 feet.• The east end of Knoll Drive is realigned to meet Front Street approximately 250 feet north of the new westbound ramp intersection. The one-way direction of Knoll Drive is changed to westbound.

<p>Project Purpose and Need (Summary): <i>(attach additional sheets as necessary)</i></p> <p>Need Currently, westbound SR-47 traffic and southbound Interstate 110 (I-110) traffic exit to a shared terminus at Harbor Boulevard. This condition creates safety and operational issues caused by vehicle slowing and weaving on the ramp as vehicles approach the terminus. Traffic routinely backs up on both exit ramps during peak periods and this condition is expected to worsen with projected growth. The operational efficiency of the on- and off-ramps is further reduced by the presence of short acceleration/deceleration lanes.</p> <p>Purpose The purpose of the proposed project is to modify the existing on- and off-ramps to improve safety, access, and the efficient operation of the SR-47/Front Street/Harbor Boulevard Interchange; and to improve goods movement and traffic circulation in the area in a manner that is sensitive to the needs of the local community.</p>
<p>Surrounding Land Use/Traffic Generators <i>(especially effect on diesel traffic)</i> The land uses in the project area are predominantly urban and port-related. The development within or adjacent to the project area include a large container terminal to the northeast, several private and public use Port properties directly north, residential properties within and to the south, and Ports of Call cruise terminals to the southeast. The project area is within the San Pedro Community Plan Area and is part of the General Plan of the City of Los Angeles. According to the Draft San Pedro Community Plan, land use designations within the project area and around the immediate vicinity of the project area include public facilities, limited industrial, low residential, and commercial uses. Zoning designations within the project area and around the immediate vicinity of the project site include: PF – Public Facilities; RI - Low Residential; R2- Low Medium Residential; CM, MRI, MI – Limited Industrial; MR2, M2 - Light Industrial; and OS - Open Space. Based on this information, existing land uses within and adjacent to the project area reflect the land use and zoning designations.</p>
<p>Opening Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility N/A</p>
<p>RTP Horizon Year / Design Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility N/A</p>

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

Approach Leg	Description	Vehicle Type	2023 No-Build			2023 Build		
			Traffic Volume		Daily Stop Delay (hr/day)	Traffic Volume		Daily Stop Delay (hr/day)
			AM Peak (veh/hr)	Daily (veh/day)		AM Peak (veh/hr)	Daily (veh/day)	
Intersection of Front St & Knoll Dr/WBCT Gate 2								
EB	SR-47 WB Off-ramp	Autos	n/a	n/a	n/a	472	8,507	48.9
		Trucks	n/a	n/a	n/a	140	981	8.8
WB	Gate 2	Autos	76	1,376	7.2	76	1,363	3.4
		Trucks	99	692	3.7	99	697	2.2
NB	Front Street	Autos	326	5,880	8.8	772	13,900	116.9
		Trucks	178	1,247	2.1	89	626	4.3
SB	Front Street	Autos	118	2,128	2.4	118	2,128	18.6
		Trucks	13	90	0.1	13	90	0.9
Intersection of Harbor Blvd/Front St & SR47 Ramps/Swinford St								
EB	SR-47 Off-ramp	Autos	1,213	21,845	145.5	741	13,341	114.2
		Trucks	228	1,602	13.6	88	620	7.7
WB	Swinford Street	Autos	118	2,130	31.0	118	2,130	33.6
		Trucks	10	68	0.8	10	68	1.0
NB	Harbor Blvd	Autos	1,241	22,343	315.3	1,241	22,343	184.6
		Trucks	36	256	3.6	36	256	2.1
SB	Front Street	Autos	131	2,358	31.5	507	9,137	97.5
		Trucks	48	338	4.7	68	475	3.0

Notes:

1. Source: POLA, email from Prashant Konareddy, 11/9/17.
2. Conversion factor for autos, AM Peak to Daily: 18.01 veh/hr = vehicles per hour
3. Conversion factor for trucks, AM Peak to Daily: 7.022 hr/day = hours per day

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

Horizon Year No-Build and Build Cross-Street Traffic Data

Approach Leg	Description	Vehicle Type	2045 No-Build			2045 Build		
			Traffic Volume		Daily Stop Delay (hr/day)	Traffic Volume		Daily Stop Delay (hr/day)
			AM Peak (veh/hr)	Daily (veh/day)		AM Peak (veh/hr)	Daily (veh/day)	
Intersection of Front St & Knoll Dr/WBCT Gate 2								
EB	SR-47 WB Off-ramp	Autos	n/a	n/a	n/a	639	11,501	58.4
		Trucks	n/a	n/a	n/a	252	1,772	38.4
WB	Gate 2	Autos	67	1,213	5.4	68	1,217	18.5
		Trucks	240	1,683	8.4	239	1,681	3.3
NB	Front Street	Autos	344	6,202	16.9	1,374	24,750	503.6
		Trucks	282	1,978	6.1	343	2,407	47.0
SB	Front Street	Autos	285	5,141	10.4	279	5,019	92.2
		Trucks	19	130	0.3	17	122	2.2
Intersection of Harbor Blvd/Front St & SR47 Ramps/Swinford St								
EB	SR-47 Off-ramp	Autos	1,202	21,657	1,308.3	532	9,575	194.4
		Trucks	830	5,825	284.0	609	4,279	91.7
WB	Swinford Street	Autos	410	7,386	312.3	410	7,386	158.6
		Trucks	69	484	28.4	69	484	12.0
NB	Harbor Blvd	Autos	2,077	37,412	3,015.6	2,077	37,412	615.2
		Trucks	194	1,360	86.5	194	1,360	20.0
SB	Front Street	Autos	283	5,092	82.1	865	15,578	289.7
		Trucks	29	205	3.3	89	625	9.3

Notes:

1. Source: POLA, email from Prashant Konareddy, 11/9/17.
2. Conversion factor for autos, AM Peak to Daily: 18.01 veh/hr = vehicles per hour
3. Conversion factor for trucks, AM Peak to Daily: 7.022 hr/day = hours per day

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

Areas surrounding the proposed project are built-out with limited opportunities for new development. Build Alternatives would improve the operational efficiency, goods movement, and safety of the SR-47/Vincent Thomas Bridge and Front Street/Harbor Boulevard interchange. The apparent increase in traffic volumes and stop delays for the Build scenarios at the Front Street & Knoll Drive/WBCT Gate 2 intersection is actually just the relocation of traffic from the existing Front Street/Harbor Boulevard & SR47 Ramps/Swinford Street intersection. Given that the area adjacent to the proposed project is fully urbanized, the proposed project would not be considered growth-inducing, and no growth would be anticipated as a result of the proposed project.

Implementation of the proposed project will have long-term beneficial impacts to local residents, businesses, and visitors to the area by improving safety, operation efficiency, and goods movement in the project area.

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

See attached analysis

PM_{2.5}/PM₁₀ Hot-Spot Analysis

The proposed project is located within a nonattainment area for federal PM_{2.5} standards and within an attainment/maintenance area for the federal PM₁₀ 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 will improve safety and operation for vehicles exiting the SR-47. Proposed improvements also include modification of the entrance ramps and modification of Harbor Boulevard and Front Street approaching and between the ramp termini. As shown in Table 1, the existing traffic on the SR-47 near the project intersection is well below the criteria of 125,000 average daily trips or 10,000 truck trips. The project is not expected to result in a substantial change to auto or truck volumes on the SR-47 or adjacent streets. Thus, none of the future traffic volumes are likely to exceed the POAQC criteria of 125,000 average daily trips or 10,000 truck trips.
- ii. The two Tables above list the average daily stop delay for autos and trucks on the adjacent streets for the 2023 and 2045 conditions. The apparent increase in stop delays for the Build scenarios at the Front Street & Knoll Drive/WBCT Gate 2 intersection is actually just the relocation of traffic from the existing Front Street/Harbor Boulevard & SR47 Ramps/Swinford Street intersection. As shown in Tables 2 and 3, the total delay for autos and trucks for the two intersections combined would be lower for the Build scenario compared to the No-Build scenario and there would not be a significant number of diesel vehicles (trucks) at the intersections.
- 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_{2.5} and PM₁₀ applicable implementation plan or implementation plan submission, as appropriate, as sites of violation or possible violation.

Therefore, the proposed project meets the 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, PM₁₀ or PM_{2.5} violation.

Table 1: 2016 Traffic Volumes

Roadway	Existing (2016)	
	ADT	Truck ADT
SR-47 at Harbor Blvd.	53,000	4,663

Source: Caltrans Traffic Census Program Website: <http://www.dot.ca.gov/trafficops/census/> (accessed January 2018).

Table 2: Opening Year Total ADT and Delay

Description	Vehicle Type	2023 No-Build		2023 Build	
		Daily Traffic Volume (veh/day)	Daily Stop Delay (hr/day)	Daily Traffic Volume (veh/day)	Daily Stop Delay (hr/day)
Grand Totals for both Intersections	Autos	79,905	687	77,683	683
	Trucks	5,895	42	3,452	29

Note: These values are the summation of the values shown in the “Opening Year No-Build and Build Cross-Street Traffic Data” table above.

Table 3: Horizon Year Total ADT and Delay

Description	Vehicle Type	2045 No-Build		2045 Build	
		Daily Traffic Volume (veh/day)	Daily Stop Delay (hr/day)	Daily Traffic Volume (veh/day)	Daily Stop Delay (hr/day)
Grand Totals for both Intersections	Autos	105,760	6,059	110,512	2,067
	Trucks	17,490	701	15,237	277

Note: These values are the summation of the values shown in the “Horizon Year No-Build and Build Cross-Street Traffic Data” table above.