RTIP ID# *(required)* LA0G830

TCWG Consideration Date July 24, 2018

Project Description *(clearly describe project)*
The City of Long Beach (City), in cooperation with California Department of Transportation (Caltrans), is proposing to replace the Shoemaker Bridge (West Shoreline Drive) in the City of Long Beach, California. The Shoemaker Bridge Replacement Project (Project) is an Early Action Project (EAP) of the Interstate 710 (I-710) Corridor Project and is located at the southern end of State Route 710 (SR-710) in the City of Long Beach, bisected by the Los Angeles River (LA River). The City is the lead agency under the California Environmental Quality Act (CEQA) and Caltrans is the lead agency under the National Environmental Policy Act (NEPA).

Alternative 1 (No Build)
Under the Alternative 1 (No Build), the proposed Project improvements would not be implemented; therefore, no construction activities would occur. The existing structure and highway facility would not meet current structural and geometric design standards and, thus, safety and connectivity would not be improved within the Project area.

Alternative 2
Build Alternative 2 includes the replacement of the ramp structures that connect to the downtown Long Beach roadway system. This alternative would evaluate the roundabout design option (Design Option A) and the "Y" interchange design option (Design Option B) at the east end of the proposed bridge. The new bridge would consist of multiple structures, with numerous spans that cross the LA River, the northbound (NB) lanes of SR-710, and the LA River and Rio Hondo (LARIO) Trail. The new ramps would be located approximately 500 feet (measured from centerline) south of the existing Shoemaker Bridge. A portion of the existing bridge would be repurposed into a nonmotorized recreational public space maintained by the City. The bottom of the new river-spanning structures would exceed the existing 43 foot mean high water level (MHWL).

The deck of the new bridge would accommodate two through ramp lanes in each direction, shoulders, barriers, and a bicycle and pedestrian path on the south side of the bridge. Under Design Option B, the bridge would also include two turn lanes in the southbound (SB) direction. On the west side of the river, the ramps would connect on the left side of the freeway, at approximately the same merge and diverge existing ramp locations. On the east side of the river, a roundabout or controlled intersection would be provided at the ramp termini. The ramp termini would be located at or near the eastern abutment of the river-spanning section of the new Shoemaker Bridge.

In addition to replacing the Shoemaker Bridge, Alternative 2 will include modifications to nine local streets, including West Shoreline Drive, Ocean Boulevard, Golden Shore/Golden Avenue, West Broadway, 3rd Street, 6th Street, 7th Street, 9th Street, 10th Street, and Anaheim Street.

West Shoreline Drive. At the eastern end of the new bridge, a new roundabout or controlled intersection would be constructed to allow West Shoreline Drive and 7th Street ingress and egress. The existing NB and SB West Shoreline Drive is currently separated by Cesar E. Chavez Park and the Southern California Edison (SCE) Seabright Substation. The NB roadbed would be removed and integrated into Cesar E. Chavez Park. The existing SB roadbed, located adjacent to the LA River, would be reconfigured and widened to allow two-way traffic and access from the newly configured West Shoreline Drive to the substation. A new controlled intersection would be introduced at West Shoreline Drive and the termini of West Broadway. The loop ramp connector between NB West Shoreline Drive and Ocean Boulevard would be removed and converted into park space. The existing Golden Shore Bridge that crosses over West Shoreline Drive would be removed, and a new controlled intersection would be created at West Shoreline Drive and Golden Shore.

3rd Street. The existing 3rd Street alignment curves to the north through Cesar E. Chavez Park and merges onto NB West Shoreline Drive. The proposed realignment of 3rd Street would be revised to end at Golden Avenue, and the 3rd Street section that curves into the park would be removed and converted into park space. The street, which currently carries one-way traffic in the westbound (WB) direction, would be reconfigured to allow for two-way traffic between Golden and Magnolia Avenues.

Ocean Boulevard. The loop ramp connecting NB West Shoreline Drive and Ocean Boulevard would be removed and converted into park space. The Ocean Boulevard and Golden Shore intersection would be modified to accommodate two-way traffic on Golden Shore between Ocean Boulevard and West Broadway.

Golden Shore/Golden Avenue. Golden Shore is currently a two-way street from Queensway Drive to Ocean Boulevard. North of Ocean Boulevard, Golden Shore becomes Golden Avenue and the roadway splits, providing connections to and from NB West Shoreline Drive and West Broadway. The proposed Project would eliminate the existing Golden Shore Bridge over West Shoreline Drive and reconstruct the street at a lower elevation to create a new controlled intersection at West Shoreline Drive. The connector ramps from SB West Shoreline Drive to Golden Shore and from NB Golden Shore to eastbound (EB) West Shoreline Drive would be removed. The intersection of Golden Shore and West Seaside Way would be eliminated. The proposed Project would also eliminate the ramp connection from NB West Shoreline Drive and realign Golden Avenue to provide connections to and from West Broadway. Access from West Broadway to Golden Avenue would be limited to right-in and right-out only.

West Seaside Way. West Seaside Way between Golden Shore and Queens Way would be reconfigured, and the controlled intersection at Golden Shore would be eliminated. The street would continue to provide access to parking structures and local office buildings. A new intersection allowing access between West Shoreline Drive and West Seaside Way would be constructed approximately 675 feet east of Golden Shore.

West Broadway. The existing terminus of West Broadway is uncontrolled and diverges from the left side of SB West Shoreline Drive. The portion of West Broadway from West Shoreline Drive to Maine Avenue, including its grade separation structure, would be removed. The connection would be replaced by a controlled intersection at West Shoreline Drive and West Broadway. West Broadway would be configured for two-way traffic from West Shoreline Drive to Magnolia Avenue. Traveling EB, a right turn pocket would be provided on West Broadway at the approach to Magnolia Avenue.

6th Street. The existing terminus of 6th Street is uncontrolled and diverges from the right side of SB West Shoreline Drive, on the Shoemaker Bridge. The existing grade separated structure would be removed. The portion of 6th Street from SB West Shoreline Drive to Golden Avenue would be reconfigured to provide access to the warehouse properties located at Topaz Court and Golden Avenue and would not provide connectivity to West Shoreline Drive. 6th Street would be converted from one-way WB to two-way traffic flow between Golden Avenue and Atlantic Avenue. Additionally, a new bicycle path would extend from the new 6th Street terminus, providing connections to the LARIO Trail and the proposed Shoemaker Bridge. A new roadway would also extend from the existing 6th Street terminus to provide access to Drake Park.

7th Street. The existing terminus of 7th Street is uncontrolled and merges on the right side of NB West Shoreline Drive, on the Shoemaker Bridge. The portion of 7th Street from Golden Avenue to West Shoreline Drive, including its grade separation structure, would be removed and reconstructed. The connection would be replaced by a roundabout or Y intersection at West Shoreline Drive. 7th Street would be reconfigured from one-way EB to two-way traffic between West Shoreline Drive and Atlantic Avenue and would feature two lanes in each direction.

9th Street. The existing terminus of 9th Street is uncontrolled and merges on the right side of SB West Shoreline Drive, on the Shoemaker Bridge. The portion of 9th Street from Fashion Avenue to West Shoreline Drive, including its grade separation structure, would be removed. The connection would not be replaced. The Project would also evaluate traffic calming and signal improvements on 9th Street between Caspian Avenue and Anaheim Street.

10th Street. The existing terminus of 10th Street is uncontrolled and diverges from the right side of NB West Shoreline Drive, on the Shoemaker Bridge. The portion of 10th Street from West Shoreline Drive to Fashion Avenue, including its grade separation structure, would be removed. The connection would not be replaced.

Anaheim Street. The Project would evaluate traffic calming and signal improvements on Anaheim Street between West 9th Street and Atlantic Avenue.

Alternative 3
Similar to Alternative 2, Alternative 3 includes the replacement of the ramp structures that connect to the downtown Long Beach roadway system. It would also evaluate both Design Options A and B at the east end of the proposed bridge. In addition, similar to Alternative 2, the bridge under Alternative 3 with Design Option B would include two turn lanes in the SB direction. On the west side of the river, the ramps would connect on the left side of the freeway, at the same merge and diverge locations of the existing ramps. On the east side of the river, a roundabout (Design Option A) or a controlled intersection (Design Option B) would be provided at the ramp termini. The ramp termini are located at or near the eastern abutment of the river-spanning section of the new Shoemaker Bridge. Local street improvements described under Alternative 2 would also apply under Alternative 3. The difference between Alternatives 2 and 3 is the removal of the existing Shoemaker Bridge. The same ramp/connectors proposed under Alternative 2 would apply under Alternative 3. The traffic data included in Tables 1-5 and 1-6 for Alternative 2 also apply to Alternative 3.

Type of Project *(use Table 1 on instruction sheet)*
Bridge replacement, local street modification

County	**Narrative Location/Route & Postmiles:** I-710 PM 6.0/6.4
Los Angeles	**Caltrans Projects – EA#** 27300

Lead Agency: Caltrans/City of Long Beach

Contact Person	**Phone#**	**Fax#**	**Email**
Andrew Yoon	213.897.6117	213.897.1634	andrew_yoon@dot.ca.gov

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

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**
	x				

Scheduled Date of Federal Action: 2019

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

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

Current Programming Dates *(as appropriate)*

	PE/Environmental	**ENG**	**ROW**	**CON**
Start	2016	2019	2021	2022
End	2019	2021	2022	2024

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

The purpose of the proposed Project is to:

- Provide a structure and highway facility that meets current structural and geometric design standards
- Provide a facility that is compatible with planned freeway improvements and downtown development projects
- Improve connectivity from the downtown area to surrounding communities and adjacent recreational use areas
- Improve safety and operations for all modes of transportation

Need

The existing Shoemaker Bridge has structural deficiencies and a high accident rate due to nonstandard geometric features that cannot be upgraded to current State highway standards. The Project is needed to improve safety, operations, and connectivity between downtown Long Beach and regional transportation facilities. It is also needed to accommodate planned improvements in the area, such as the City's planned expansion of Cesar E. Chavez and Drake Parks.

If the existing Shoemaker Bridge were to continue to be used for vehicular traffic, the nonstandard features would remain, and the existing bridge alignment would preclude planned improvements by other locally and regionally significant projects, specifically, the I-710 Corridor Project. Implementation of the proposed Project would provide consistency with the improvements proposed as part of the I-710 Corridor Project and the Mobility Element of the City of Long Beach General Plan (City of Long Beach 2013), in addition to meeting the needs for traffic safety and accommodating the projected increase in demand for the City's nonmotorized transportation facilities

Surrounding Land Use/Traffic Generators *(especially effect on diesel traffic)*
The existing land uses within the project area include schools, residences, public parks, and commercial structures.

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

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

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

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
See attached analysis

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

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

$PM_{2.5}$/PM_{10} Hot-Spot Analysis

The Shoemaker Bridge project is located within a nonattainment area for federal $PM_{2.5}$ standards and within an attainment/maintenance area for the federal PM_{10} 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.

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

i. New highway projects have a significant number of diesel vehicles, and expanded highway projects that have a significant increase in the number of 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. Projects in or affecting locations, areas or categories of sites which are identified in the $PM_{2.5}$ and PM_{10} applicable implementation plan or implementation plan submission, as appropriate, as sites of violation or possible violation.

The project does not qualify 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 realigns Shoemaker Bridge and Shoreline Drive without increasing capacity. However, in addition to realigning Shoemaker Bridge, the Project will alter the traffic flow on local streets within the project area. As shown in Table A, the proposed Project would increase the traffic volumes along multiple roads within the Project limits. While the number of diesel trucks would increase along these roadways, the future with project volumes would not exceed the 10,000 average daily truck trip criteria for a POAQC.

ii) The LOS conditions in the project vicinity with and without the proposed project are shown in Tables B through E. As shown, the realignment of Shoemaker Bridge would result in a small decrease in the level of service (LOS) at several intersections within the Project limits. However, as discussed above, the Project would not result in a significant increase in the number of diesel vehicles in the Project limits.

iii) The proposed build alternatives do not include the construction of a new bus or rail terminal.

iv) The proposed build alternatives do not expand an existing bus or rail terminal.

v) The proposed build alternatives are not in or affecting locations, areas, or categories of sites that are identified in the $PM_{2.5}$ and PM_{10} 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.

Table A. Traffic Volumes (ADT/Truck ADT/Truck Percentage)

Roadway	2025 No Build	2025 Build	2025 Percent Increase	2035 No Build	2035 Build	2035 Percent Increase
Anaheim	34,800/3,445/9.9	45,000/4,455/9.9	29.3	36,500/3,614/9.9	46,900/4,554/9.9	28.5
7th Street	13,000/728/5.6	14,100/790/5.6	8.5	13,300/202/5.6	14,600/818/5.6	9.8
6th Street	16,500/726/4.4	900/40/4.4	-94.5	16,700/735/4.4	900/40/4.4	-94.6
3rd Street	10,600/254/2.4	4,900/118/2.4	-53.8	10,300/247/2.4	5,100/122/2.4	-50.5
Broadway	15,100/1,072/7.1	15,900/1,129/7.1	5.3	15,500/1,101/7.1	13,700/973/7.1	-16.1
Ocean Boulevard	36,700/3,633/9.9	44,200/4,376/9.9	20.4	38,300/3,792/9.9	46,000/4,554/9.9	20.1
Shoemaker Bridge	77,300/2,164/2.8	76,000/2,128/2.8	-1.7	78,900/2,209/2.8	79,500/2,226/2.8	0.8

Source: HDR, June 2018

Table B. 2025 No Build Condition Intersection Level of Service

	Intersection	A.M. Peak Hour		P.M. Peak Hour	
		Delay (sec)	LOS	Delay (sec)	LOS
1	Harbor Avenue/Anaheim Street	9.1	A	12.4	B
2	Santa Fe Avenue/Anaheim Street	27.6	C	31.7	C
3	Santa Fe Avenue/9th Street	12.0	B	43.5	D
4	Pier B Street/Pico Avenue/I-710 Ramps	197.8	**F**	24.1	C
5	Pico Avenue/Ocean Boulevard Ramps	20.6	C	26.4	C
6	Golden Shore/Ocean Boulevard	24.0	C	25.8	C
7	Magnolia Avenue/Queens Way/Ocean Boulevard	18.1	B	14.6	B
8	Magnolia Avenue/Broadway	20.0	B	20.2	C
9	Maine Avenue/Broadway	3.0	A	6.1	A
10	Golden Avenue/3rd Street	16.1	B	12.3	B
11	Maine Avenue/3rd Street	13.2	B	13.0	B
12	Magnolia Avenue/3rd Street	17.0	B	17.0	B
13	Magnolia Avenue/6th Street	17.2	B	29.0	C
14	Daisy Avenue/6th Street	6.5	A	5.8	A
15	Daisy Avenue/7th Street	16.0	B	13.8	B
16	Magnolia Avenue/7th Street	17.9	B	19.1	B
17	Magnolia Avenue/10th Street	13.3	B	14.0	B
18	Pacific Avenue/Anaheim Street	16.7	B	13.1	B
19	Magnolia Avenue/Anaheim Street	19.8	B	15.1	B
20	Oregon Avenue/Anaheim Street	4.2	A	14.6	B
21	Cedar Avenue/Anaheim Street	12.4	B	6.7	A
22	Pacific Avenue/7th Street	28.2	C	15.3	B
23	Pacific Avenue/6th Street	16.9	B	23.4	C
24	Pacific Avenue/3rd Street	22.9	C	12.4	B
25	Pacific Avenue/Broadway	18.4	B	18.4	B
26	Pacific Avenue/Ocean Boulevard	26.4	C	11.4	B
27	Atlantic Avenue/Anaheim Street	25.2	C	28.3	C
28	Atlantic Avenue/7th Street	21.2	C	16.4	B
29	Atlantic Avenue/6th Street	18.5	B	23.6	C
30	Atlantic Avenue/3rd Street	11.9	B	20.2	C
31	Golden Shore/Broadway	NA	NA	NA	NA
32	Shoreline Drive/Broadway	NA	NA	NA	NA
33	Shoreline Drive/7th Street	NA	NA	NA	NA
34	Shoreline Drive/Golden Shore	NA	NA	NA	NA

Source: HDR, June 2018

LOS = level of service sec = seconds

Table C. 2025 Build Condition Intersection Level of Service

	Intersection	A.M. Peak Hour		P.M. Peak Hour	
		Delay (sec)	LOS	Delay (sec)	LOS
1	Harbor Avenue/Anaheim Street	22.2	C	12.2	B
2	Santa Fe Avenue/Anaheim Street	44.2	D	42.5	D
3	Santa Fe Avenue/9th Street	31.7	C	22.7	C
4	Pier B Street/Pico Avenue/I-710 Ramps	>100	**F**	24.1	C
5	Pico Avenue/Ocean Boulevard Ramps	20.6	C	26.3	C
6	Golden Shore/Ocean Boulevard	22.3	C	19.9	B
7	Magnolia Avenue/Queens Way/Ocean Boulevard	47.5	D	36.4	D
8	Magnolia Avenue/Broadway	33.0	C	35.3	D
9	Maine Avenue/Broadway	25.0	C	18.9	B
10	Golden Avenue/3rd Street	9.2	A	8.7	A
11	Maine Avenue/3rd Street	17.3	B	16.2	B
12	Magnolia Avenue/3rd Street	27.8	C	20.8	C
13	Magnolia Avenue/6th Street	28.8	C	33.2	C
14	Daisy Avenue/6th Street	20.0	B	18.2	B
15	Daisy Avenue/7th Street	6.0	A	6.1	A
16	Magnolia Avenue/7th Street	46.7	D	29.7	C
17	Magnolia Avenue/10th Street	12.1	B	13.8	B
18	Pacific Avenue/Anaheim Street	24.4	C	20.9	C
19	Magnolia Avenue/Anaheim Street	18.0	B	27.1	C
20	Oregon Avenue/Anaheim Street	4.9	A	15.5	B
21	Cedar Avenue/Anaheim Street	9.5	A	16.0	B
22	Pacific Avenue/7th Street	40.7	D	35.7	D
23	Pacific Avenue/6th Street	12.0	B	19.9	B
24	Pacific Avenue/3rd Street	16.7	B	13.8	B
25	Pacific Avenue/Broadway	15.3	B	15.4	B
26	Pacific Avenue/Ocean Boulevard	24.1	C	15.7	B
27	Atlantic Avenue/Anaheim Street	21.5	C	23.6	C
28	Atlantic Avenue/7th Street	29.4	C	25.2	C
29	Atlantic Avenue/6th Street	10.3	B	23.7	C
30	Atlantic Avenue/3rd Street	10.2	B	15.2	B
31	Golden Shore/Broadway	14.8	B	14.1	B
32	Shoreline Drive/Broadway	10.8	B	25.7	C
33	Shoreline Drive/7th Street	46.7	D	>100	**F**
34	Shoreline Drive/Golden Shore	27.7	C	18.1	B

Source: HDR, June 2018

LOS = level of service sec = seconds

Table D. 2035 No Build Condition Intersection Level of Service

	Intersection	A.M. Peak Hour		P.M. Peak Hour	
		Delay (sec)	LOS	Delay (sec)	LOS
1	Harbor Avenue/Anaheim Street	9.2	A	12.5	B
2	Santa Fe Avenue/Anaheim Street	30.8	C	40.6	D
3	Santa Fe Avenue/9th Street	12.0	B	47.6	D
4	Pier B Street/Pico Avenue/I-710 Ramps	>100	**F**	30.0	C
5	Pico Avenue/Ocean Boulevard Ramps	28.9	C	44.7	D
6	Golden Shore/Ocean Boulevard	24.2	C	26.2	C
7	Magnolia Avenue/Queens Way/Ocean Boulevard	18.3	B	15.1	B
8	Magnolia Avenue/Broadway	20.0	B	20.3	C
9	Maine Avenue/Broadway	3.0	A	6.1	A
10	Golden Avenue/3rd Street	16.1	B	13.4	B
11	Maine Avenue/3rd Street	13.4	B	13.2	B
12	Magnolia Avenue/3rd Street	17.2	B	17.2	B
13	Magnolia Avenue/6th Street	17.8	B	29.6	C
14	Daisy Avenue/6th Street	6.5	A	5.9	A
15	Daisy Avenue/7th Street	16.2	B	14.8	B
16	Magnolia Avenue/7th Street	18.3	B	19.4	B
17	Magnolia Avenue/10th Street	13.4	B	14.0	B
18	Pacific Avenue/Anaheim Street	16.9	B	13.4	B
19	Magnolia Avenue/Anaheim Street	20.0	B	15.8	B
20	Oregon Avenue/Anaheim Street	4.3	A	15.9	B
21	Cedar Avenue/Anaheim Street	12.4	B	6.8	A
22	Pacific Avenue/7th Street	28.7	C	15.4	B
23	Pacific Avenue/6th Street	17.0	B	23.7	C
24	Pacific Avenue/3rd Street	23.0	C	12.4	B
25	Pacific Avenue/Broadway	18.5	B	18.5	B
26	Pacific Avenue/Ocean Boulevard	28.3	C	11.4	B
27	Atlantic Avenue/Anaheim Street	25.4	C	34.3	C
28	Atlantic Avenue/7th Street	21.3	C	16.8	B
29	Atlantic Avenue/6th Street	18.4	B	24.5	C
30	Atlantic Avenue/3rd Street	12.1	B	20.2	C
31	Golden Shore/Broadway	NA	NA	NA	NA
32	Shoreline Drive/Broadway	NA	NA	NA	NA
33	Shoreline Drive/7th Street	NA	NA	NA	NA
34	Shoreline Drive/Golden Shore	NA	NA	NA	NA

Source: HDR, June 2018
LOS = level of service sec = seconds

Table E. 2035 Build Condition Intersection Level of Service

	Intersection	A.M. Peak Hour		P.M. Peak Hour	
		Delay (sec)	LOS	Delay (sec)	LOS
1	Harbor Avenue/Anaheim Street	22.3	C	12.5	B
2	Santa Fe Avenue/Anaheim Street	46.1	D	52.6	D
3	Santa Fe Avenue/9th Street	33.8	C	25.9	C
4	Pier B Street/Pico Avenue/I-710 Ramps	>100	**F**	30.0	C
5	Pico Avenue/Ocean Boulevard Ramps	28.9	C	34.3	C
6	Golden Shore/Ocean Boulevard	22.7	C	21.0	C
7	Magnolia Avenue/Queens Way/Ocean Boulevard	51.4	D	38.6	D
8	Magnolia Avenue/Broadway	34.7	C	38.5	D
9	Maine Avenue/Broadway	25.4	C	21.5	C
10	Golden Avenue/3rd Street	9.2	A	8.7	A
11	Maine Avenue/3rd Street	17.6	B	16.7	B
12	Magnolia Avenue/3rd Street	28.4	C	21.1	C
13	Magnolia Avenue/6th Street	33.1	C	34.1	C
14	Daisy Avenue/6th Street	20.0	B	18.2	B
15	Daisy Avenue/7th Street	6.2	A	6.8	A
16	Magnolia Avenue/7th Street	51.7	D	31.4	C
17	Magnolia Avenue/10th Street	12.3	B	14.2	B
18	Pacific Avenue/Anaheim Street	25.1	C	21.6	C
19	Magnolia Avenue/Anaheim Street	19.6	B	33.5	C
20	Oregon Avenue/Anaheim Street	5.1	A	16.2	B
21	Cedar Avenue/Anaheim Street	9.6	A	18.3	B
22	Pacific Avenue/7th Street	41.4	D	38.7	D
23	Pacific Avenue/6th Street	13.6	B	20.3	C
24	Pacific Avenue/3rd Street	16.7	B	15.2	B
25	Pacific Avenue/Broadway	15.4	B	15.5	B
26	Pacific Avenue/Ocean Boulevard	25.6	C	16.3	B
27	Atlantic Avenue/Anaheim Street	22.2	C	26.1	C
28	Atlantic Avenue/7th Street	30.4	C	25.4	C
29	Atlantic Avenue/6th Street	10.4	B	23.7	C
30	Atlantic Avenue/3rd Street	10.4	B	15.2	B
31	Golden Shore/Broadway	15.7	C	14.5	B
32	Shoreline Drive/Broadway	16.4	B	25.7	C
33	Shoreline Drive/7th Street	55.8	E	>100	**F**
34	Shoreline Drive/Golden Shore	28.8	C	18.2	B

Source: HDR, June 2018
LOS = level of service sec = seconds