

<b>FTIP ID#</b> LA0G949
<b>TCWG Consideration Date</b> December 2, 2014
<b>PROJECT DESCRIPTION</b> The project proposes to improve the existing State Route 138 (SR-138) between Interstate 5 (I-5) and State Route 14 (SR-14) to accommodate future projected traffic based on planned land uses. Project Alternatives have been developed to meet the purpose and need of the project. The common design features of the build alternatives along with a description of each alternative are provided below.  The common design considerations for Alternatives 1 and 2 include: <ul style="list-style-type: none"><li>• The improvement of three non-standard curve locations on existing alignment to 80 miles per hour (mph) design speed;</li><li>• Utility pole relocations throughout the corridor;</li><li>• Existing and Proposed Southern California Edison (SCE) and Los Angeles Department of Water and Power (LADWP) high voltage transmission lines cross the corridor in four locations;</li><li>• Improvements to the interchange at I-5 connectors to and from southbound and northbound I-5;</li><li>• Improvements to the interchange at SR-14 to improve connections to the existing ramps;</li><li>• Use of existing roadway as a local frontage road to provide local circulation or to maintain current parcel access. The existing highway would be relinquished to the County as a local roadway in these areas;</li><li>• Two existing bridges (Bridge #53-1798 L and R) within the project area have non-standard vertical clearance (within one inch of the standard). Improving existing bridges within the project limits to meet current standards.</li></ul> Other considerations for Alternatives 1 and 2 include: <ul style="list-style-type: none"><li>• Alignment options that reduce impacts around Quail Lake. This includes the elimination of the separated median and use of a barrier to reduce the impacts on a residence, hillside adjacent to Quail Lake, and Quail Lake;</li><li>• Traffic Management Plans (TMP) would be developed during final design;</li><li>• Truck inspection facilities within the corridor will be considered;</li><li>• Maintenance pullout locations and other considerations will be coordinated with the Caltrans Maintenance staff;</li><li>• Construction staging would require that one lane of traffic in each direction is open to the public at all times. The anticipated construction staging would allow construction of new lanes adjacent to the existing lanes (either north or south of the existing roadway), allowing traffic to continue to use the existing lanes and then allow traffic to use the new lanes during construction of the remaining lanes over the existing roadway;</li><li>• The type, design and details of at-grade, non-signalized intersections would be considered to provide operational efficiencies.</li></ul>

<p><b>No Build Alternative</b>                  Implementation of the No-Build Alternative would maintain the existing configuration of SR-138. It would not result in improvements to SR-138. The No-Build Alternative provides a baseline for comparing the impacts associated with the Build Alternatives.</p> <p><b>Alternative 1 (Freeway/Expressway)</b>                  Alternative 1 (Freeway/Expressway) would include a 6-lane freeway from the I-5 interchange to 300th Street West, and a 4-lane expressway from 300th Street West to the SR-14 interchange generally following the existing alignment of SR-138.</p> <p><b>Alternative 2 (Expressway/Limited Access Conventional Highway)</b>                  Alternative 2 (Expressway/Highway) would include a 6-lane expressway from the I-5 interchange to 300th Street West, a 4-lane expressway from 300th Street West to 240th Street West, and a limited access Conventional Highway from 240th Street West to the SR-14 interchange, generally following the existing alignment of SR-138.</p> <p><b>Alternative 3 (Transportation System Management [TSM])</b>                  Alternative 3 (TSM) would include improvements to the facility without major changes to the overall capacity of the corridor. This alternative would improve the vertical and horizontal roadway alignment in areas that are currently non-standard, widen shoulders, provide localized improvements at accident hot spots, improve intersections and add additional lanes to improve safety and traffic flow at focused areas. In addition, upgrades to signage and lighting are included to improve safety and operations.</p> <p><b>Air Basin</b>                  The proposed project is located within the South Coast Air Basin (SCAB) and the Mojave Desert Air Basin (MDAB). The SCAB is in nonattainment for the federal PM<sub>2.5</sub> standard and in attainment/maintenance for the federal PM<sub>10</sub> standard. The MDAB is in attainment for the federal PM<sub>2.5</sub> and PM<sub>10</sub> standards. Therefore, this PM hot-spot form is submitted for review and concurrence by the interagency consultation only on the portion of the project that is located within the SCAB, from I-5 to Old Ridge Route.</p>				
<p><b>Type of Project</b>                  Alternative 1: Change to existing highway                  Alternative 2: Change to existing highway                  Alternative 3: Change to existing regionally significant street</p>				
<p><b>County</b>                  Los Angeles</p>		<p><b>Narrative Location/Route &amp; Postmiles:</b> 07-LA-138 PM 0.0/36.8  <b>Caltrans Projects – EA#</b> 26510</p>		
<p><b>Lead Agency:</b> Caltrans District 7</p>				
<p><b>Contact Person</b>                  Andrew Yoon</p>		<p><b>Phone#</b>                  213.897.6117</p>	<p><b>Fax#</b>                  213.897.1634</p>	<p><b>Email</b>                  andrew_yoon@dot.ca.gov</p>
<p><b>Hot Spot Pollutant of Concern</b> (<i>check one or both</i>)      <b>PM2.5</b> x      <b>PM10</b> x</p>				
<p><b>Federal Action for which Project-Level PM Conformity is Needed</b> (<i>check appropriate box</i>)</p>				
<p><b>Categorical Exclusion (NEPA)</b></p>	<p>X    <b>EA or Draft EIS</b></p>	<p><b>FONSI or Final EIS</b></p>	<p><b>PS&amp;E or Construction</b></p>	<p><b>Other</b></p>
<p><b>Scheduled Date of Federal Action:</b> 2016</p>				
<p><b>NEPA Assignment – Project Type</b> (<i>check appropriate box</i>)</p>				
<p><b>Exempt</b></p>		<p><b>Section 326 –Categorical Exemption</b></p>		<p>X    <b>Section 327 – Non-Categorical Exemption</b></p>

<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>	2014	2013	2017	2018
<b>End</b>	2016	2017	2018	2020-2025 <sup>1</sup>

**Project Purpose and Need (Summary):** *(attach additional sheets as necessary)*  
 SR-138 is one of the primary routes for east-west traffic in northwest Los Angeles County, and is an important strategic route during emergency closures of I-5 or SR-14. In the coming decades, northwest Los Angeles County is expected to experience large-scale growth and increasing economic activity, which is projected to generate travel demands beyond the capacity of the existing SR-138 facility. The purpose of this project is to:

- Accommodate projected short- and long-term growth, and associated increases in travel and goods movement, within northwest Los Angeles County;
- Improve mobility and operations in northwest Los Angeles County;
- Enhance safety and improve non-standard design features within the SR-138 Corridor;
- Improve mobility for all modes, including motorists, pedestrians, bicyclists and wildlife;
- Minimize impacts to communities and sensitive resources throughout the corridor.

The project is needed for the following reasons:

- Future travel demand will exceed the current capacity of the SR-138 corridor;
- Mobility linkages to connect existing and planned communities are needed to provide an integrated system of vehicular, transit, pedestrian and bicycle connectivity within the area;
- Roadway deficiencies need to be brought to current design standards, including paved shoulders, horizontal and vertical roadway alignments, and pedestrian and bicycle facilities;
- The accident rate will likely increase if improvements are not made to SR-138 as the traffic volumes will increase and compound the number and severity of those accidents; non-standard roadway features (horizontal and vertical curves with limited sight distance), limited passing opportunities, steeper grades with slower moving vehicles, limited or no paved shoulders, utility poles within roadway right-of-way, unlimited access to the roadway from adjoining parcels, and the lack of intersection channelization are contributing factors to the current rate of collisions along the corridor.

**Surrounding Land Use/Traffic Generators** *(especially effect on diesel traffic)*  
 Land uses within the project area include residential, agriculture, office, utility, and vacant land. The majority of the sensitive receptors within or adjacent to the project area are residential uses.

<sup>1</sup> Alternatives 1 and 2 will open to traffic in 2025. Alternative 3 will open to traffic in 2020.

<p><b>Opening Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility</b>  <b>2020 – SR-138</b></p> <p>No Build: ADT = 20,600, Truck ADT = 2,678 (13%), LOS = A/C                  Alternative 3 ADT = 20,600, Truck ADT = 2,678 (13%), LOS = A/C</p> <p><b>2025 – SR-138</b></p> <p>No Build: ADT = 20,600, Truck ADT = 2,678 (13%), LOS = A/C                  Alternative 1 ADT = 35,200, Truck ADT = 2,816 (8%), LOS = A                  Alternative 2 ADT = 34,300, Truck ADT = 2,744 (8%), LOS = A</p>
<p><b>RTP Horizon Year / Design Year: Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed</b>  <b>2040 – SR-138</b></p> <p>No Build: ADT = 40,700, Truck ADT = 2,442 (6%), LOS = B/E                  Alternative 1 ADT = 73,600, Truck ADT = 3,680 (5%), LOS = B/E                  Alternative 2 ADT = 71,500, Truck ADT = 3,575 (5%), LOS = B                  Alternative 3 ADT = 40,700, Truck ADT = 2,442 (6%), LOS = B</p>
<p><b>Opening Year: If facility is an interchange(s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT</b>  <b>2020 – I-5</b></p> <p>No Build: ADT = 82,000, Truck ADT = 1,640 (2%), LOS = NA                  Alternative 3 ADT = 82,000, Truck ADT = 1,640 (2%), LOS = NA</p> <p><b>2025 – I-5</b></p> <p>No Build: ADT = 90,100, Truck ADT = 1,842 (2%), LOS = NA                  Alternative 1 ADT = 93,600, Truck ADT = 1,872 (2%), LOS = NA                  Alternative 2 ADT = 93,600, Truck ADT = 1,872 (2%), LOS = NA</p> <p><b>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</b>  <b>2040 – I-5</b></p> <p>No Build: ADT = 122,300, Truck ADT = 2,446 (2%), LOS = NA                  Alternative 1 ADT = 125,800, Truck ADT = 2,516 (2%), LOS = NA                  Alternative 2 ADT = 125,800, Truck ADT = 2,516 (2%), LOS = NA                  Alternative 3 ADT = 122,300, Truck ADT = 2,446 (2%), LOS = NA</p>
<p><b>Describe potential traffic redistribution effects of congestion relief</b> <i>(impact on other facilities)</i>                  See attached analysis</p>
<p><b>Comments/Explanation/Details</b> <i>(attach additional sheets as necessary)</i>                  See attached analysis</p>

### **PM<sub>2.5</sub>/PM<sub>10</sub> Hot-Spot Analysis**

The proposed project is located within a nonattainment area for federal PM<sub>2.5</sub> and PM<sub>10</sub> 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 would improve SR-138 either by changing the existing highway or changing an existing regionally significant streets. As shown in Tables 1 through 6, traffic volumes along SR-138 would not exceed the 125,000 average daily trips criteria for a POAQC. In addition, although the truck percentage exceeds 8 percent, the truck traffic volumes would not exceed the 10,000 daily trip criteria for POAQC. For I-5, traffic volumes would exceed the 125,000 average daily trips criteria for a POAQC. However, the truck percentage would not exceed 8 percent and the truck traffic volumes would not exceed the 10,000 daily trip criteria for POAQC.
- ii. The proposed project does not affect intersections that are at LOS D, E, or F with a significant number of diesel vehicles. Based on the Transportation Analysis Report (Fehr & Peers, September 2014), the proposed project would reduce the delay and improve the LOS at intersections within the project vicinity. The LOS conditions in the project vicinity with and without the proposed project are shown in Tables 7 through 10.
- iii. The proposed project does not include the construction of a new bus or rail terminal that would have a significant number of diesel vehicles congregating at a single location.
- iv. The proposed project does not expand an existing bus or rail terminal that would significantly increase the number of diesel vehicles congregating at a single location.
- v. The proposed project is not in or affecting locations, areas, or categories of sites that are identified in the PM<sub>2.5</sub> and PM<sub>10</sub> 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, PM<sub>10</sub> or PM<sub>2.5</sub> violation.

**Table 1: Alternative 1 Opening Year Traffic Volumes**

Roadway Segment	No Build (2025)			Alternative 1 (2025)			Project Increase	
	ADT	Truck ADT	Truck %	ADT	Truck ADT	Truck %	ADT	Truck ADT
I-5 North of SR-138 <sup>1</sup>	88,500	1,770	2%	94,500	1,890	2%	6,000	120
I-5 South of SR-138	92,100	1,842	2%	93,600	1,872	2%	1,500	30
SR-138 East of I-5	20,600	2,678	13%	35,200	2,816	8%	14,600	138
SR-138 West of 300th Street	16,100	2,093	13%	32,900	2,632	8%	16,800	539
SR-138 West of 245th Street	12,700	1,651	13%	26,500	2,120	8%	13,800	469
SR-138 West of 190th Street	9,700	1,261	13%	23,400	1,872	8%	13,700	611
SR-138 West of 110th Street	10,100	1,313	13%	22,400	1,792	8%	12,300	479
SR-138 West of 60th Street	9,900	1,782	18%	20,800	1,872	9%	10,900	90
SR-138 West of SR-14	9,700	1,746	18%	19,500	1,755	9%	9,800	9
SR-14 North of SR-138	53,100	9,558	18%	49,800	4,482	9%	-3,300	-5,076
SR-14 South of SR-138	55,200	9,936	18%	56,100	5,049	9%	900	-4,887

Source: Transportation Analysis Report, September 2014.

1. The highlighted segments are partially or completely located within the SCAB and are subject to Transportation Conformity. All other roadway segments are located within the MDAB.

**Table 2: Alternative 2 Opening Year Traffic Volumes**

Roadway Segment	No Build (2025)			Alternative 2 (2025)			Project Increase	
	ADT	Truck ADT	Truck %	ADT	Truck ADT	Truck %	ADT	Truck ADT
I-5 North of SR-138	88,500	1,770	2%	93,700	1,874	2%	5,200	104
I-5 South of SR-138	92,100	1,842	2%	93,600	1,872	2%	1,500	30
SR-138 East of I-5	20,600	2,678	13%	34,300	2,744	8%	13,700	66
SR-138 West of 300th Street	16,100	2,093	13%	31,900	2,552	8%	15,800	459
SR-138 West of 245th Street	12,700	1,651	13%	25,700	2,056	8%	13,000	405
SR-138 West of 190th Street	9,700	1,261	13%	22,400	1,792	8%	12,700	531
SR-138 West of 110th Street	10,100	1,313	13%	21,300	1,917	9%	11,200	604
SR-138 West of 60th Street	9,900	1,782	18%	19,200	1,728	9%	9,300	-54
SR-138 West of SR-14	9,700	1,746	18%	18,000	1,620	9%	8,300	-126
SR-14 North of SR-138	53,100	9,558	18%	50,500	4,545	9%	-2,600	-5,013
SR-14 South of SR-138	55,200	9,936	18%	56,000	5,040	9%	800	-4,896

Source: Transportation Analysis Report, September 2014.

1. The highlighted segments are partially or completely located within the SCAB and are subject to Transportation Conformity. All other roadway segments are located within the MDAB.

**Table 3: Alternative 3 Opening Year Traffic Volumes**

Roadway Segment	No Build (2020)			Alternative 3 (2020)			Project Increase	
	ADT	Truck ADT	Truck %	ADT	Truck ADT	Truck %	ADT	Truck ADT
I-5 North of SR-138	81,000	1,620	2%	81,000	1,620	2%	0	0
I-5 South of SR-138	82,000	1,640	2%	82,000	1,640	2%	0	0
SR-138 East of I-5	13,900	1,807	13%	13,900	1,807	13%	0	0
SR-138 West of 300th Street	11,200	1,456	13%	11,200	1,456	13%	0	0
SR-138 West of 245th Street	9,100	1,183	13%	9,100	1,183	13%	0	0
SR-138 West of 190th Street	7,100	923	13%	7,100	923	13%	0	0
SR-138 West of 110th Street	7,500	975	13%	7,500	975	13%	0	0
SR-138 West of 60th Street	7,400	1,332	18%	7,400	1,332	18%	0	0
SR-138 West of SR-14	7,200	1,296	18%	7,200	1,296	18%	0	0
SR-14 North of SR-138	49,500	8,910	18%	49,500	8,910	18%	0	0
SR-14 South of SR-138	51,600	9,288	18%	51,600	9,288	18%	0	0

Source: Transportation Analysis Report, September 2014.

1. The highlighted segments are partially or completely located within the SCAB and are subject to Transportation Conformity. All other roadway segments are located within the MDAB.

**Table 4: Alternative 1 2040 Year Traffic Volumes**

Roadway Segment	No Build (2040)			Alternative 1 (2040)			Project Increase	
	ADT	Truck ADT	Truck %	ADT	Truck ADT	Truck %	ADT	Truck ADT
I-5 North of SR-138 <sup>1</sup>	110,900	2,218	2%	124,500	2,490	2%	13,600	272
I-5 South of SR-138	122,300	2,446	2%	125,800	2,516	2%	3,500	70
SR-138 East of I-5	40,700	2,442	6%	73,600	3,680	5%	32,900	1,238
SR-138 West of 300th Street	30,500	1,830	6%	68,400	3,420	5%	37,900	1,590
SR-138 West of 245th Street	23,500	1,410	6%	54,700	2,735	5%	31,200	1,325
SR-138 West of 190th Street	17,500	1,050	6%	48,300	2,415	5%	30,800	1,365
SR-138 West of 110th Street	18,200	1,092	6%	45,800	2,290	5%	27,600	1,198
SR-138 West of 60th Street	17,500	700	4%	42,000	2,100	5%	24,500	1,400
SR-138 West of SR-14	17,100	684	4%	39,100	1,955	5%	22,000	1,271
SR-14 North of SR-138	64,200	2,568	4%	56,700	2,835	5%	-7,500	267
SR-14 South of SR-138	66,300	2,652	4%	68,100	3,405	5%	1,800	753

Source: Transportation Analysis Report, September 2014.

1. The highlighted segments are partially or completely located within the SCAB and are subject to Transportation Conformity. All other roadway segments are located within the MDAB.

**Table 5: Alternative 2 2040 Year Traffic Volumes**

Roadway Segment	No Build (2040)			Alternative 2 (2040)			Project Increase	
	ADT	Truck ADT	Truck %	ADT	Truck ADT	Truck %	ADT	Truck ADT
I-5 North of SR-138 <sup>1</sup>	110,900	2,218	2%	122,600	2,452	2%	11,700	234
I-5 South of SR-138	122,300	2,446	2%	125,800	2,516	2%	3,500	70
SR-138 East of I-5	40,700	2,442	6%	71,500	3,575	5%	30,800	1,133
SR-138 West of 300th Street	30,500	1,830	6%	66,200	3,310	5%	35,700	1,480
SR-138 West of 245th Street	23,500	1,410	6%	52,700	2,635	5%	29,200	1,225
SR-138 West of 190th Street	17,500	1,050	6%	46,100	2,305	5%	28,600	1,255
SR-138 West of 110th Street	18,200	1,092	6%	43,200	2,160	5%	25,000	1,068
SR-138 West of 60th Street	17,500	700	4%	38,500	1,925	5%	21,000	1,225
SR-138 West of SR-14	17,100	684	4%	35,700	1,785	5%	18,600	1,101
SR-14 North of SR-138	64,200	2,568	4%	58,300	2,915	5%	-5,900	347
SR-14 South of SR-138	66,300	2,652	4%	68,000	3,400	5%	1,700	748

Source: Transportation Analysis Report, September 2014.

1. The highlighted segments are partially or completely located within the SCAB and are subject to Transportation Conformity. All other roadway segments are located within the MDAB.

**Table 6: Alternative 3 2040 Year Traffic Volumes**

Roadway Segment	No Build (2040)			Alternative 3 (2040)			Project Increase	
	ADT	Truck ADT	Truck %	ADT	Truck ADT	Truck %	ADT	Truck ADT
I-5 North of SR-138 <sup>1</sup>	110,900	2,218	2%	110,900	2,218	2%	0	0
I-5 South of SR-138	122,300	2,446	2%	122,300	2,446	2%	0	0
SR-138 East of I-5	40,700	2,442	6%	40,700	2,442	6%	0	0
SR-138 West of 300th Street	30,500	1,830	6%	30,500	1,830	6%	0	0
SR-138 West of 245th Street	23,500	1,410	6%	23,500	1,410	6%	0	0
SR-138 West of 190th Street	17,500	1,050	6%	17,500	1,050	6%	0	0
SR-138 West of 110th Street	18,200	1,092	6%	18,200	1,092	6%	0	0
SR-138 West of 60th Street	17,500	700	4%	17,500	700	4%	0	0
SR-138 West of SR-14	17,100	684	4%	17,100	684	4%	0	0
SR-14 North of SR-138	64,200	2,568	4%	64,200	2,568	4%	0	0
SR-14 South of SR-138	66,300	2,652	4%	66,300	2,652	4%	0	0

Source: Transportation Analysis Report, September 2014.

1. The highlighted segments are partially or completely located within the SCAB and are subject to Transportation Conformity. All other roadway segments are located within the MDAB.

**Table 7: 2025 with Project Intersection Level of Service**

No.	Intersection	2025 No Build		2025 Alternative 1		2025 Alternative 2	
		AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
1	Highway 138 & Gorman Post Road EB Ramps	F	F	B	B	B	A
2	Highway 138 & Gorman Post Road WB Ramps	F	F	A	B	B	A
3	Highway 138 & Private Road EB Ramps	C	C	A	A	B	B
4	Highway 138 & Private Road WB Ramps	C	C	A	A	B	B
5	Highway 138 & 300th Street W EB Ramps	B	B	A	A	B	B
6	Highway 138 & 300th Street W WB Ramps	B	B	A	A	B	B
7	Highway 138 & Margalo Drive	B	C	-- <sup>1</sup>	--	B	B
8	Highway 138 & 3 Points Road	F	F	-- <sup>2</sup>	--	C	B
9	Highway 138 & 230th Street W	B	B	B	B	B	B
10	Highway 138 & 210th Street W	C	C	-- <sup>2</sup>	--	A	A
11	Highway 138 & 190th Street W	C	C	B	B	B	B
12	Highway 138 & 170th Street W	D	C	-- <sup>2</sup>	--	A	A
13	Highway 138 & 110th Street W	C	C	B	B	B	B
14	Highway 138 & 90th Street W	C	D	-- <sup>2</sup>	--	B	B
15	Highway 138 & 80th Street W	C	C	B	B	B	B
16	Highway 138 & 70th Street W	C	C	B	B	B	B
17	Highway 138 & 60th Street W	C	C	-- <sup>2</sup>	--	B	B
18	Highway 138 & 30th Street W	B	C	B	B	B	B
19	Highway 138 & Highway 14 SB Off-Ramp	B	C	B	B	B	B
20	Highway 138 & Highway 14 NB Off-Ramp	B	B	A	A	A	A

Source: Transportation Analysis Report, September 2014.

<sup>1</sup> Displaced left (free-flow).

<sup>2</sup> Median U-turn (free-flow).

**Table 8: 2020 with Project Intersection Level of Service**

No.	Intersection	2020 No Build		2020 Alternative 3	
		AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
1	Highway 138 & Gorman Post Road	C	C	B	B
2	Highway 138 & Old Ridge Route Road	C	C	C	C
3	Highway 138 & Private Road	B	B	B	C
4	Highway 138 & 300th Street W	B	B	B	B
5	Highway 138 & Margalo Drive	B	B	B	B
6	Highway 138 & 280th Street W	B	B	B	B
7	Highway 138 & 3 Points Road	C	D	C	D
8	Highway 138 & La Petite Avenue	B	B	B	B
9	Highway 138 & 230th Street W	B	B	B	B
10	Highway 138 & 210th Street W	B	B	B	C
11	Highway 138 & 190th Street W	B	C	B	C
12	Highway 138 & 170th Street W	C	B	C	C
13	Highway 138 & 110th Street W	B	B	B	C
14	Highway 138 & 90th Street W	C	C	C	C
15	Highway 138 & 85th Street W	B	C	B	C
16	Highway 138 & 80th Street W	B	B	B	C
17	Highway 138 & 70th Street W	B	B	B	B
18	Highway 138 & 60th Street W	B	C	B	C
19	Highway 138 & 30th Street W	B	B	B	B
20	Highway 138 & Highway 14 SB Off-Ramp	B	B	B	B
21	Highway 138 & Highway 14 NB Off-Ramp	B	B	B	B

Source: Transportation Analysis Report, September 2014.

**Table 9: 2040 with Project Intersection Level of Service**

No.	Intersection	2040 No Build		2040 Alternative 1		2040 Alternative 2	
		AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
1	Highway 138 & Gorman Post Road EB Ramps	F	F	C	D	C	C
2	Highway 138 & Gorman Post Road WB Ramps	F	F	B	C	C	C
3	Highway 138 & Private Road EB Ramps	F	F	A	A	C	B
4	Highway 138 & Private Road WB Ramps	F	F	A	A	C	B
5	Highway 138 & 300th Street W EB Ramps	C	F	A	B	C	C
6	Highway 138 & 300th Street W WB Ramps	C	F	A	B	C	C
7	Highway 138 & Margalo Drive	B	C	-- <sup>1</sup>	--	C	D
8	Highway 138 & 3 Points Road	F	F	-- <sup>2</sup>	--	C	D
9	Highway 138 & 230th Street W	C	C	C	D	C	C
10	Highway 138 & 210th Street W	E	F	-- <sup>2</sup>	--	B	D
11	Highway 138 & 190th Street W	E	E	C	C	C	C
12	Highway 138 & 170th Street W	F	F	-- <sup>2</sup>	--	B	C
13	Highway 138 & 110th Street W	F	E	C	C	C	C
14	Highway 138 & 90th Street W	F	F	-- <sup>2</sup>	--	C	C
15	Highway 138 & 80th Street W	D	E	C	C	C	C
16	Highway 138 & 70th Street W	D	D	C	C	C	C
17	Highway 138 & 60th Street W	F	F	-- <sup>2</sup>	--	B	C
18	Highway 138 & 30th Street W	D	D	C	C	B	C
19	Highway 138 & Highway 14 SB Off-Ramp	B	C	C	B	B	B
20	Highway 138 & Highway 14 NB Off-Ramp	B	C	C	C	B	C

Source: Transportation Analysis Report, September 2014.

<sup>1</sup> Displaced left (free-flow).

<sup>2</sup> Median U-turn (free-flow).

**Table 10: 2040 with Project Intersection Level of Service**

No.	Intersection	2040 No Build		2040 Alternative 3	
		AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour
1	Highway 138 & Gorman Post Road	F	F	F	F
2	Highway 138 & Old Ridge Route Road	F	F	F	F
3	Highway 138 & Private Road	F	F	F	F
4	Highway 138 & 300th Street W	C	F	C	F
5	Highway 138 & Margalo Drive	B	C	B	C
6	Highway 138 & 280th Street W	D	D	C	C
7	Highway 138 & 3 Points Road	F	F	B	B
8	Highway 138 & La Petite Avenue	F	F	F	F
9	Highway 138 & 230th Street W	C	C	C	C
10	Highway 138 & 210th Street W	E	F	D	F
11	Highway 138 & 190th Street W	E	E	E	E
12	Highway 138 & 170th Street W	F	F	F	F
13	Highway 138 & 110th Street W	F	E	F	F
14	Highway 138 & 90th Street W	F	F	F	F
15	Highway 138 & 85th Street W	D	E	D	E
16	Highway 138 & 80th Street W	D	E	D	F
17	Highway 138 & 70th Street W	D	D	D	D
18	Highway 138 & 60th Street W	F	F	F	F
19	Highway 138 & 30th Street W	D	D	D	D
20	Highway 138 & Highway 14 SB Off-Ramp	B	C	B	C
21	Highway 138 & Highway 14 NB Off-Ramp	B	C	B	C

Source: Transportation Analysis Report, September 2014.