

# US16/US16B/Catron Boulevard Intersection

## Traffic Operations, Safety, and Cost Build Option Measures (PRELIMINARY)

		Planning Horizon 2050 Traffic Operations				Crash Prediction Analysis - 2026 Year of Opening to 2050 Planning Horizon		Total Cost
		Main Intersection LOS <sup>1</sup> Based on intersection delay	Experienced Travel Time (ETT) through Intersection <sup>3</sup> [sec]	Microsimulation Intersection Area Average Travel Time <sup>2</sup> [sec]	US16 Corridor Travel Time <sup>1</sup> [sec] Promise Road to Moon Meadows Drive	Total Crashes Change in number of crashes from No-Build condition (-decrease; +increase)	Fatal and Injury Crashes Change in number of crashes from No-Build condition (-decrease; +increase)	Construction Cost + Contingency + ROW Acquisition
		AM / PM	AM / PM	AM / PM	Range of AM and PM travel time	Addison & Tucker Access: Closed / Full	Addison & Tucker Access: Closed / Full	\$M
<b>Single Point Interchange (SPI)</b>								
1.1a	SPI with Separated, Free NB and SB Right Turn Lanes	C / C	26 / 22	85 / 85	120 – 130	-190 / -	-91 / -	29.9
1.1b	SPI with Separated, Free NB and SB Right Turn Lanes; EB Right Turn Lane at Healing Way	C / C	26 / 22	85 / 85	120 – 130	-190 / -	-91 / -	30.1
1.2	SPI with Signalized NB and SB Dual Right Turn Lanes; EB Right Turn Lane at Healing Way	C / C	33 / 31	90 / 91	120 – 130	-190 / -	-91 / -	28.8
<b>Displaced Left Turn Intersection (DLT)</b>								
2.1a	DLT with Separated, Free NB and SB Right Turn Lanes	C / C	28 / 32	94 / 102	148 - 158	-155 / -52	-82 / -37	14.6
2.1b	DLT with Separated, Free Right Turn Lanes at Main Intersection (all Quadrants)	C / C	28 / 31	Not measured	139 - 148	-155 / -52	-82 / -37	17.8
2.2a	DLT with Signalized Right Turn Lanes (all Quadrants): NB and SB Right Turns Signalized at Crossover Intersections	C / C	32 / 37	96 / 106	148 - 158	-155 / -52	-82 / -37	14.7
2.2b	DLT with NB and SB Signalized Right Turn Lanes, Free EB and WB Right Turn Lanes: NB and SB Right Turns Signalized at Crossover Intersections	C / C	32 / 36	Not measured	139 - 148	-155 / -52	-82 / -37	17.9
2.3	DLT with Unseparated, Signalized Right Turn Lanes at Main Intersection NB and SB Right Turns Signalized at Main Intersection	C / C	38 / 45	Not measured	139 - 148	-155 / -52	-82 / -37	13.7
<b>No Build Condition</b>								
	No Build Condition	E / F	75 / 137	- / -	- / -	965	356	0
	Relation to study/Build Option	Study LOS Goal: C	Comparative measure of how long it will take the average vehicle to traverse through the intersection.	Comparative measure of how long it will take the average vehicle to traverse through the intersection.	Comparative measure of how long it will take the average vehicle to traverse US16 between Promise Road and Moon Meadows Drive.	Comparative measure of safety and operational effects of geometric design.	Comparative measure of safety and operational effects of geometric design.	Comparative measure of total cost to construct.

**Key:**

■ Greatest Improvement/Benefit

■ Least Improvement/Benefit

Experienced Travel Time (ETT) = control delay + extra distance travel time

<sup>1</sup> Highway Capacity Software measure

<sup>2</sup> Vissim microsimulation measure

<sup>3</sup> Blend of Highway Capacity Software and Vissim microsimulation measures

<sup>4</sup> Interactive Highway Safety Design Model (IHSDM) measure

