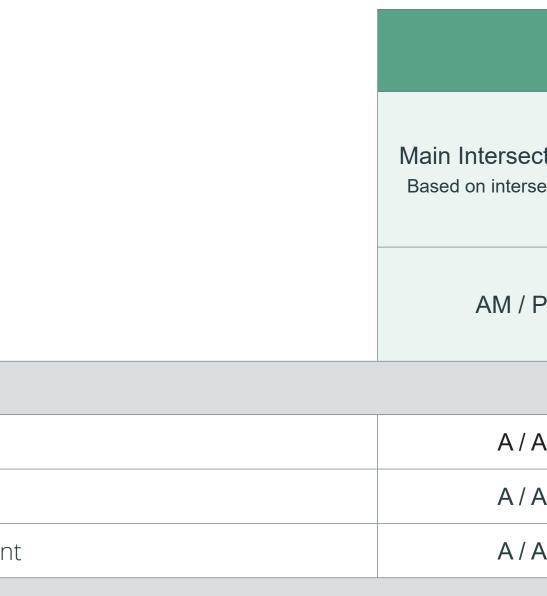
US16/Neck Yoke Road Intersection Traffic Operations, Safety, and Cost Build Option Measures (PRELIMINARY)



		Planning Horizon 2050 Traffic Operations				Crash Prediction Analysis - 2026 Year of Opening to 2050 Planning Horizon	
	Main Intersection LOS ¹ Based on intersection delay	Experienced Travel Time (ETT) through Intersection ¹ [sec] AM / PM	Additional US16 Through Lane Needed to Meet LOS Goals ¹ Yes / No	Does US16 Through Traffic Need to Stop at Bottom of Hill?	Total Crashes ² Change in number of crashes from No-Build condition (-decrease; +increase) # of Access Points 1 (main) / 2 (main + secondary)	Fatal and Injury Crashes ² Change in number of crashes from No-Build condition (-decrease; +increase) # of Access Points 1 (main) / 2 (main + secondary)	Construction Cost + Contingency + ROW Acquisition \$M
	AM / PM						
Reduced Conflict Intersection (RCI)		,				1	1
1.1 RCI at Neck Yoke Road	A/A	4 / 8	No	Νο	-215 / -153	-107 / -76	4.5
1.2 RCI at Central Driveway	A/A	4 / 8	No	Νο	-215 / -153	-107 / -76	3.2
1.3 RCI at Central Driveway with US16 Realignment	A/A	4 / 8	No	Νο	-215 / -153	-107 / -76	5.4
raffic Signal		,					
2.1a Traffic Signal at Neck Yoke Road	B / B	15 / 19	Yes - Eastbound	Yes – traffic signal	-173 / -108	-91 / -59	5.5
2.1b Traffic Signal at Central Driveway	B / B	15 / 19	Yes - Eastbound	Yes – traffic signal	-173 / -108	-91 / -59	5.7
No Build Condition						1	
No Build Condition	C / F	23 / 591	n/a	No	363	163	0
Relation to study/Build Option	Study LOS Goal: B	Comparative measure of how long it will take the average vehicle to traverse through the intersection.	Truck and lane utilization sub-analysis. Contributes to overall Build Option cost and LOS.	Denotes operational benefits afforded to US16 through traffic that does not need to stop, and then accelerate, at the bottom of the hill.	<i>Comparative measure of safety and operational effects of geometric design.</i>	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

¹ Highway Capacity Software measure

²Vissim microsimulation measure

³ Blend of Highway Capacity Software and Vissim microsimulation measures

⁴ Interactive Highway Safety Design Model (IHSDM) measure





US Highway 16

CORRIDOR STUDY





