

Preliminary Intersection Control Evaluation Findings: TH 14 at TH 111 TH 14/111 ICE Report & Preliminary Concepts SP 5203-106

Stantec

Preliminary Intersection Control Evaluation Findings							
Alternative	Traffic Operations PM Peak Hour						
	Existing Conditions		20-Year Traffic Projections (2035)		Anticipated Crash Reduction	Estimated Cost	Benefit/Cost Ratio
	LOS (average delay)	Maximum Delay (movement)	LOS (average delay)	Maximum Delay (movement)			
New Hwy 14/111 Intersection (at-grade two-way stop-control)	A (5.4 seconds)	21 seconds (SB left-turn)	F (105.5 seconds)	> 3 minutes	N/A	None	N/A
Alternative No. 2: Roundabout	A (3.1 seconds)	5.4 seconds (SB approach)	A (5.5 seconds)	13.2 seconds (SB approach)	40 – 60 %	\$0.6 - \$0.9 million	4.3
Alternative No. 3: Reduced Conflict (RCUT) Intersection	A (2.4 seconds)	4.9 seconds (SB right-turn)	A (7.8 seconds)	23.5 seconds (SB right-turn)	40 – 60%	\$0.7 - \$1.0 million	3.6
Alternative No. 1: Traffic Signal	B (10.1 seconds)	23.6 seconds (WB left-turn)	B (17.1 seconds)	40.2 seconds (WB left-turn)	30 – 50%	\$1.3 – \$1.8 million	2.2
Alternative No. 5: Interchange with Limited Local Access	A (3.7 seconds)	6.9 seconds (EB left-turn)	A (8.8 seconds)	18.8 seconds (EB left-turn)	70 – 90%	\$7.2 - \$10.0 million	0.8
Alternative No. 4: Interchange with Local Access	A (3.2 seconds)	6.3 seconds (EB left-turn)	A (5.9 seconds)	11.6 seconds (WB left-turn)	70 – 90%	\$8.1 - \$11.3 million	0.7