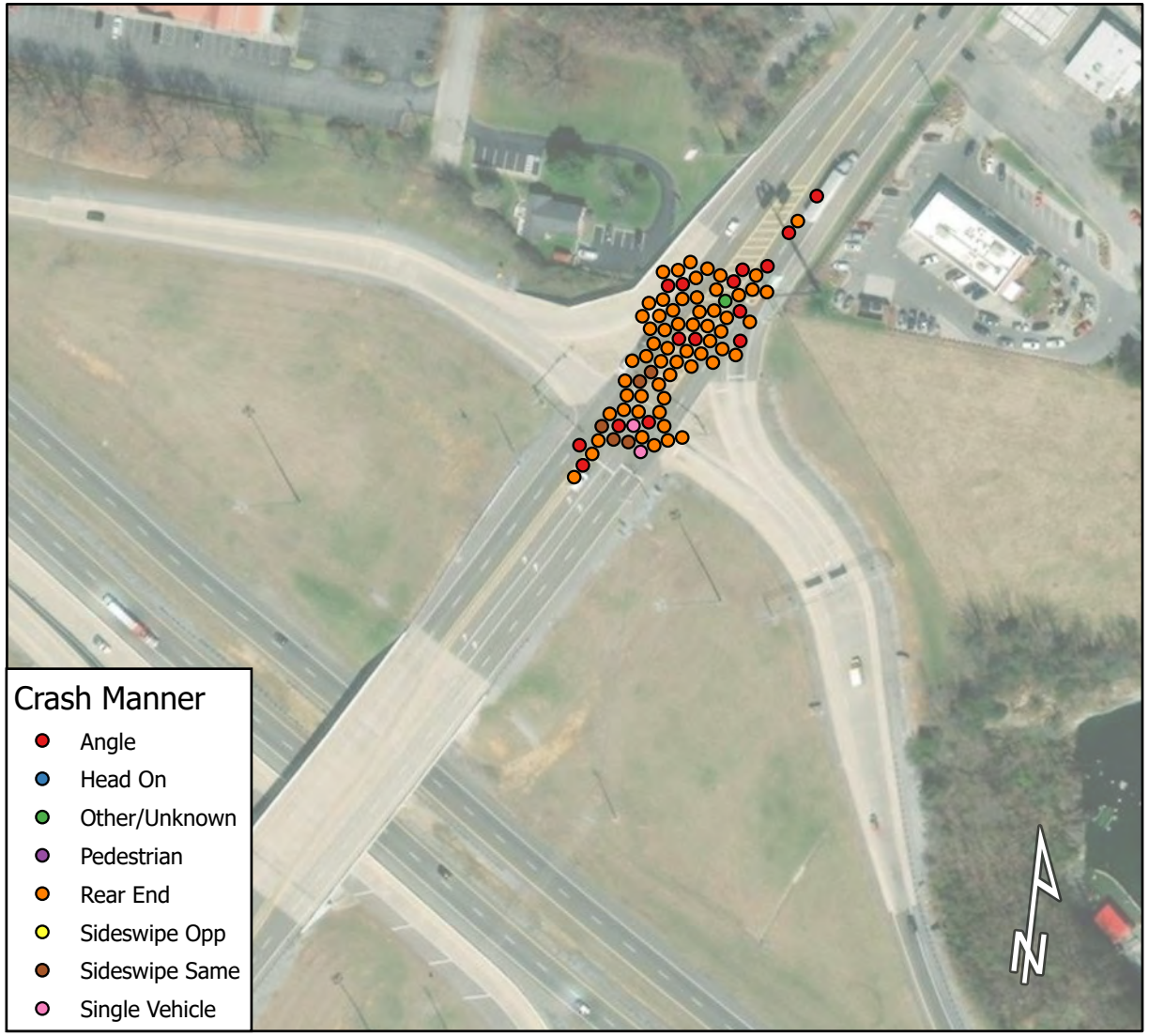
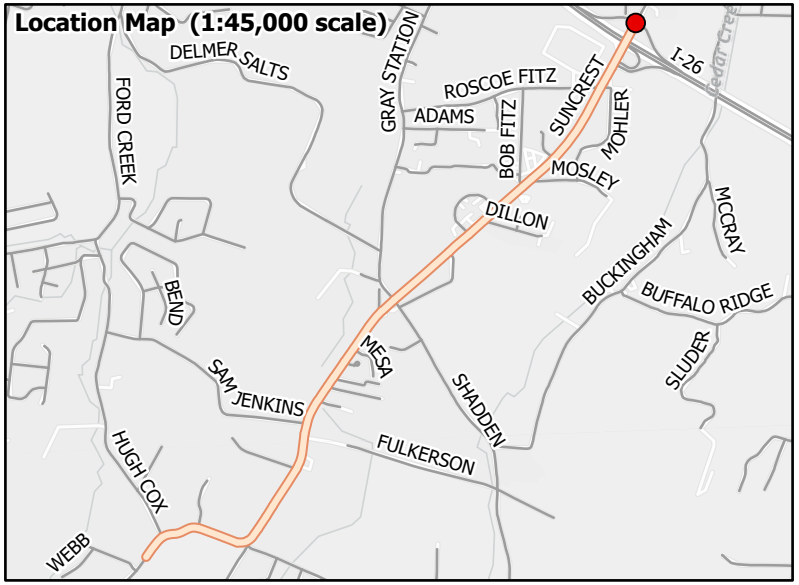
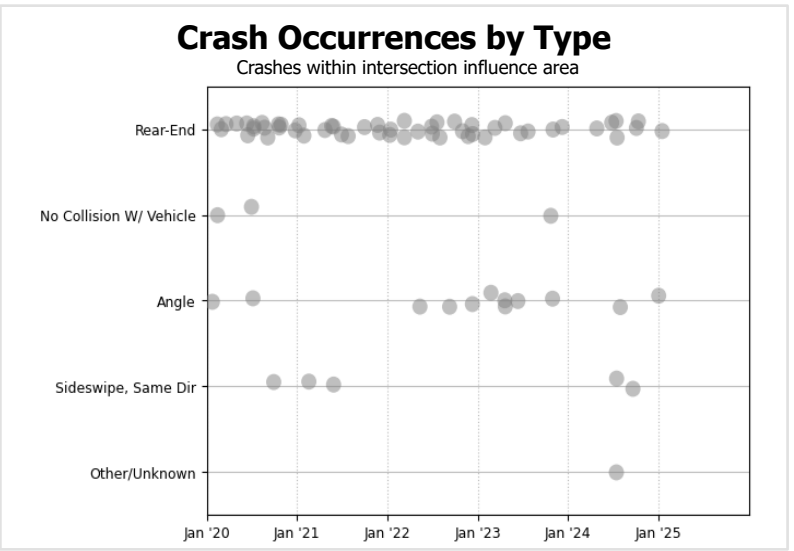
APPENDIX A. CRASHES







Summary 0 200 Feet

Suncrest Dr / Bobby Hicks & I-26W Ramps

Entering Volume:	28100 Veh/Day
Total Crashes:	83 Crashes
Functional Class:	Arterial
Area Type:	Rural
Traffic Control:	Signalized

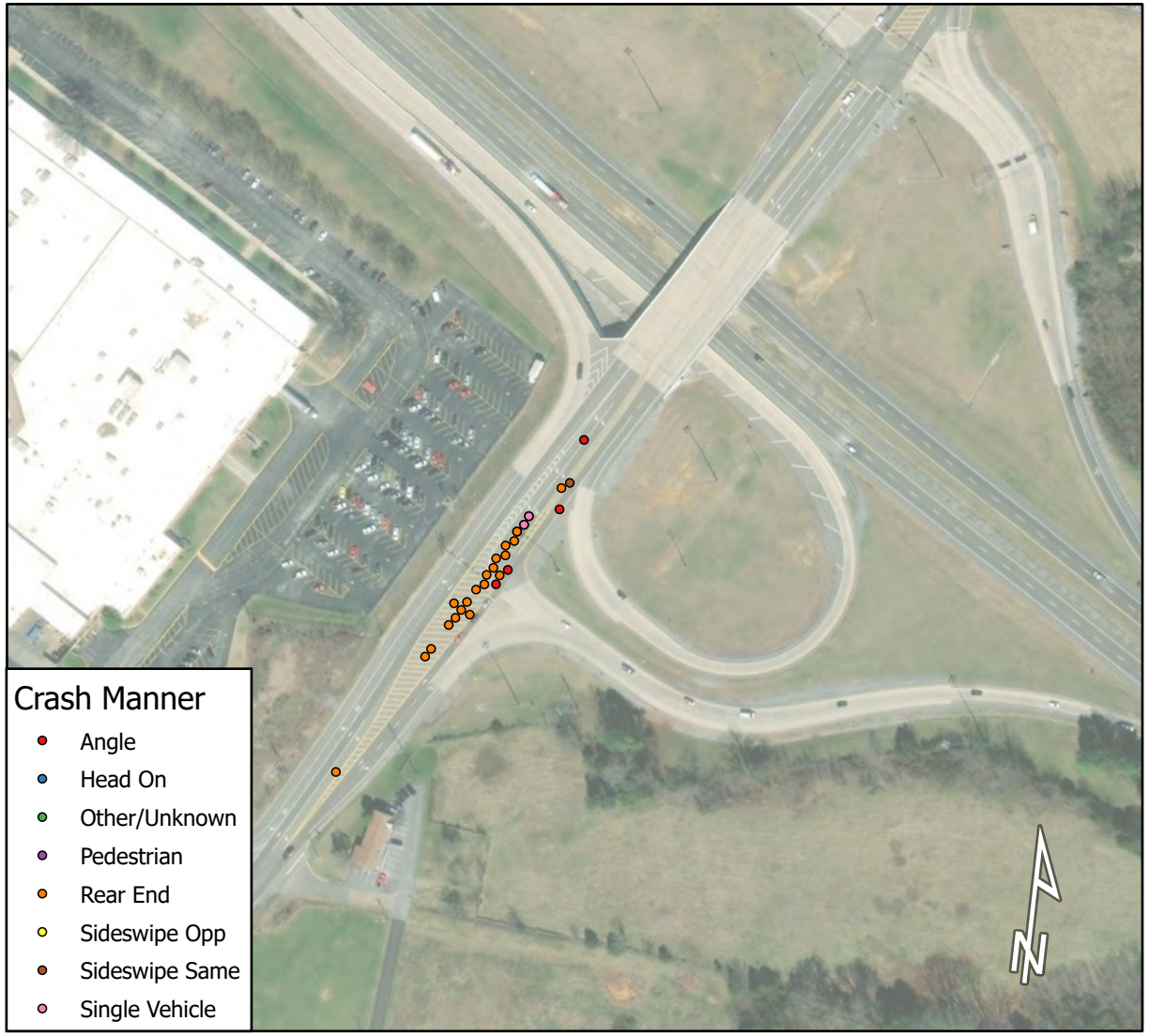
Study Period: 2020 thru 2024

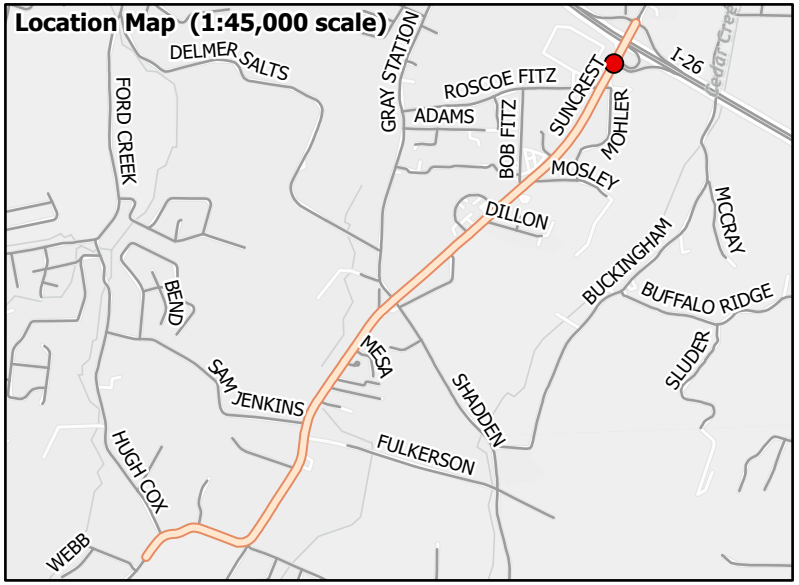
Annual Rates	Severe	Total
Crash Rate:	0.000 / MEV	1.677 / MEV
Statewide Average:	0.024 / MEV	0.537 / MEV
Critical Rate:	0.064 / MEV	0.710 / MEV
Actual/Critical Ratio:	0.000 / MEV	2.280 / MEV

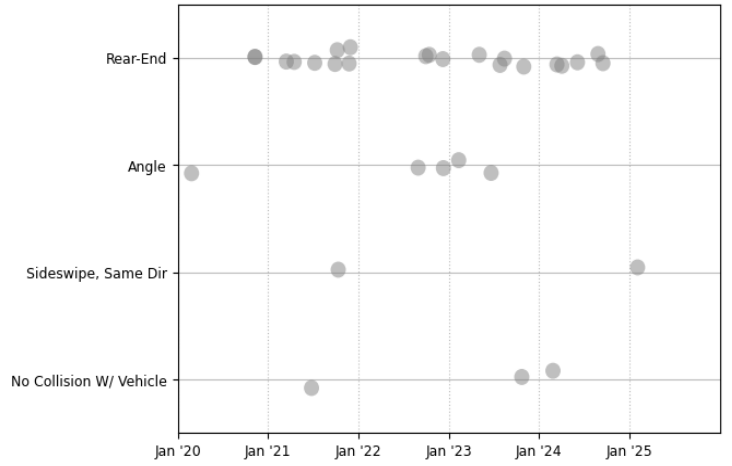
Crash Type	Quantity
Angle	15
Rear-End	60
Head-On	0
Single Vehicle	2
Sideswipe (Opposite)	0
Sideswipe (Same)	5
Bicycle	0
Pedestrian	0
Other / Unknown	1

Injury Type	Quantity
Fatal	0
Incapacitating	0
Non-Incapacitating	2
Possible Injury	5
Property Damage	76

CDM Smith







Summary

0 200 Feet

Suncrest Dr (SR-75) & I-26E On-Ramp

Entering Volume:	24855 Veh/Day
Total Crashes:	27 Crashes
Functional Class:	Arterial
Area Type:	Rural
Traffic Control:	Signalized

Study Period: 2020 thru 2024

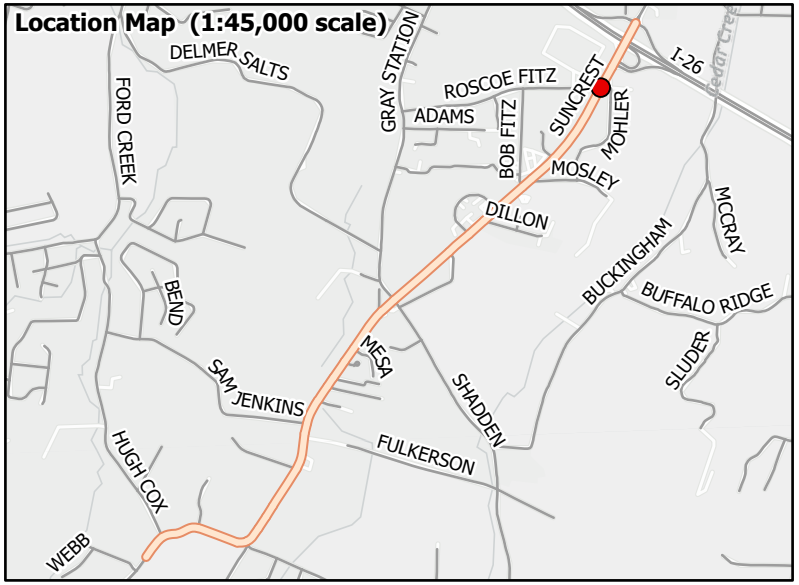
Annual Rates	Severe	Total
Crash Rate:	0.000 / MEV	0.595 / MEV
Statewide Average:	0.012 / MEV	0.495 / MEV
Critical Rate:	0.049 / MEV	0.674 / MEV
Actual/Critical Ratio:	**0.000** / MEV	**0.982** / MEV

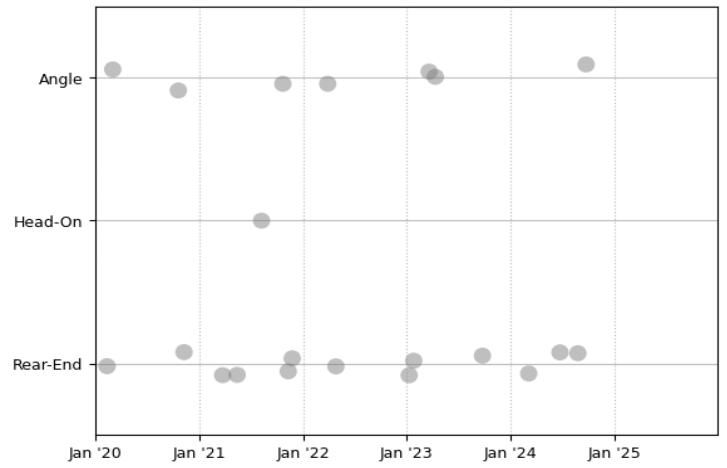
Crash Type	Quantity
Angle	4
Rear-End	20
Head-On	0
Single Vehicle	2
Sideswipe (Opposite)	0
Sideswipe (Same)	1
Bicycle	0
Pedestrian	0
Other / Unknown	0

Injury Type	Quantity
Fatal	0
Incapacitating	0
Non-Incapacitating	0
Possible Injury	1
Property Damage	26

CDM Smith







Summary

0 200 Feet

Suncrest Dr (SR-75) & Roscoe Fitz

Entering Volume:	18320 Veh/Day
Total Crashes:	21 Crashes
Functional Class:	Arterial
Area Type:	Rural
Traffic Control:	Partial Stop

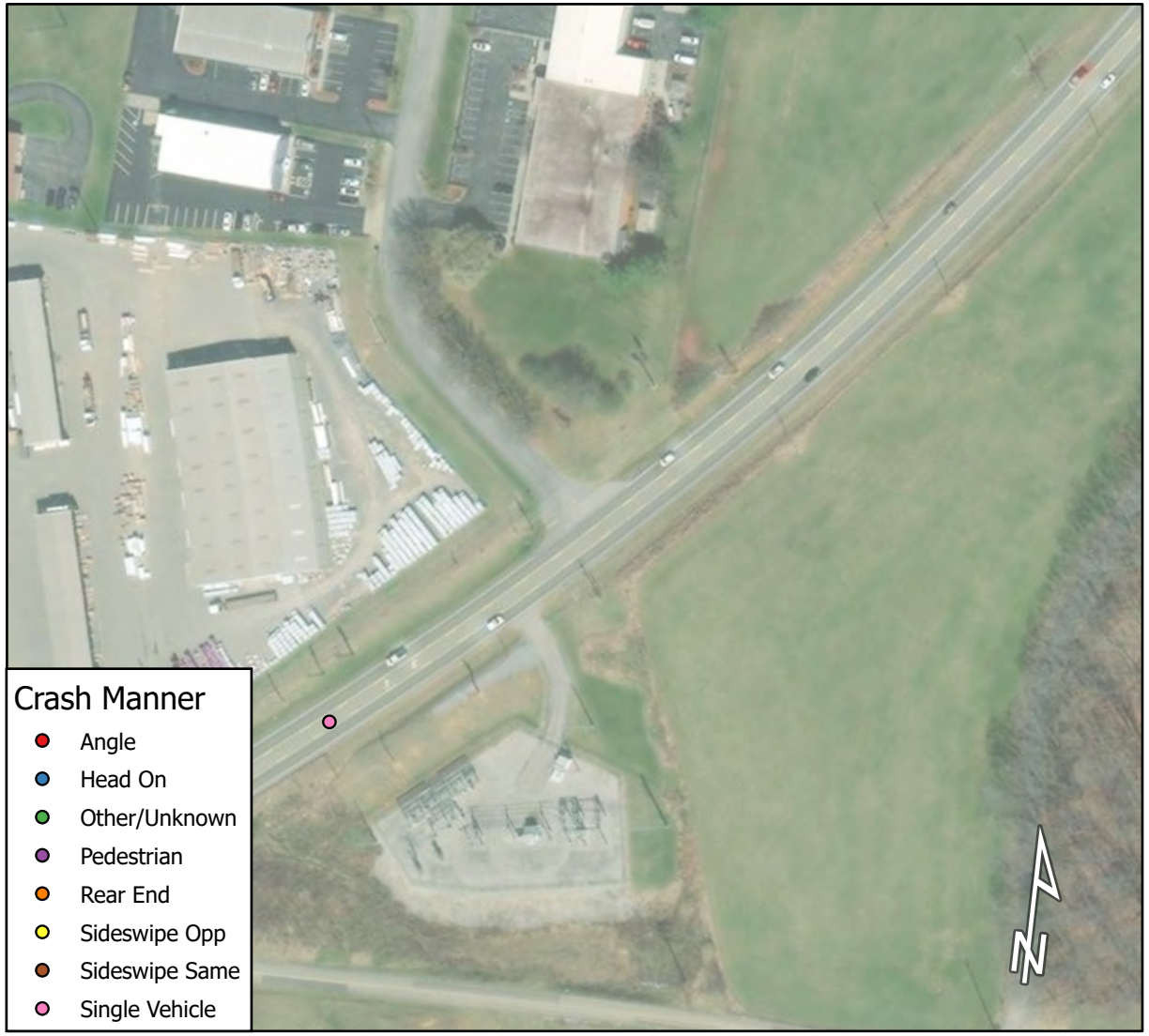
Study Period: 2020 thru 2024

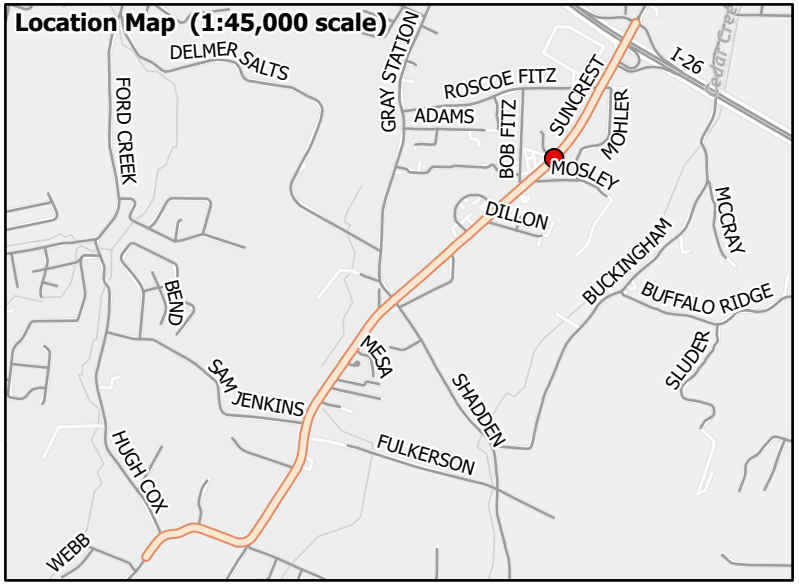
Annual Rates	Severe	Total
Crash Rate:	0.000 / MEV	0.628 / MEV
Statewide Average:	0.004 / MEV	0.099 / MEV
Critical Rate:	0.029 / MEV	0.204 / MEV
Actual/Critical Ratio:	**0.000** / MEV	**3.083** / MEV

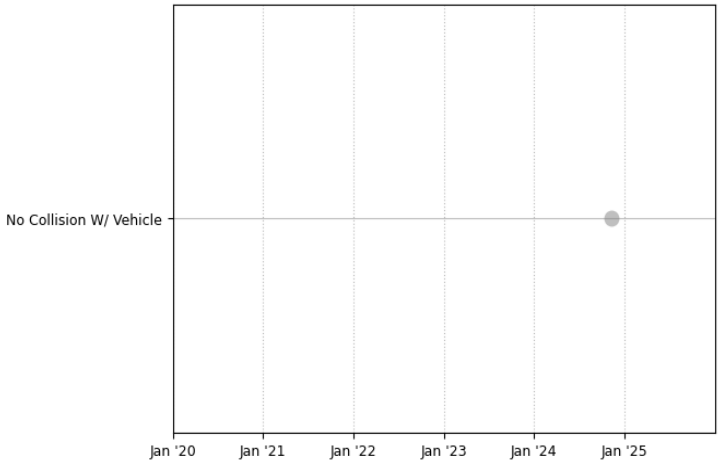
Crash Type	Quantity
Angle	7
Rear-End	13
Head-On	1
Single Vehicle	0
Sideswipe (Opposite)	0
Sideswipe (Same)	0
Bicycle	0
Pedestrian	0
Other / Unknown	0

Injury Type	Quantity
Fatal	0
Incapacitating	0
Non-Incapacitating	1
Possible Injury	0
Property Damage	20

CDM Smith







Summary 0 — 200 Feet

Suncrest Dr (SR-75) & Tri-City Business Park Dr

Entering Volume:	16770 Veh/Day
Total Crashes:	1 Crashes
Functional Class:	Arterial
Area Type:	Rural
Traffic Control:	Partial Stop

Study Period: 2020 thru 2024

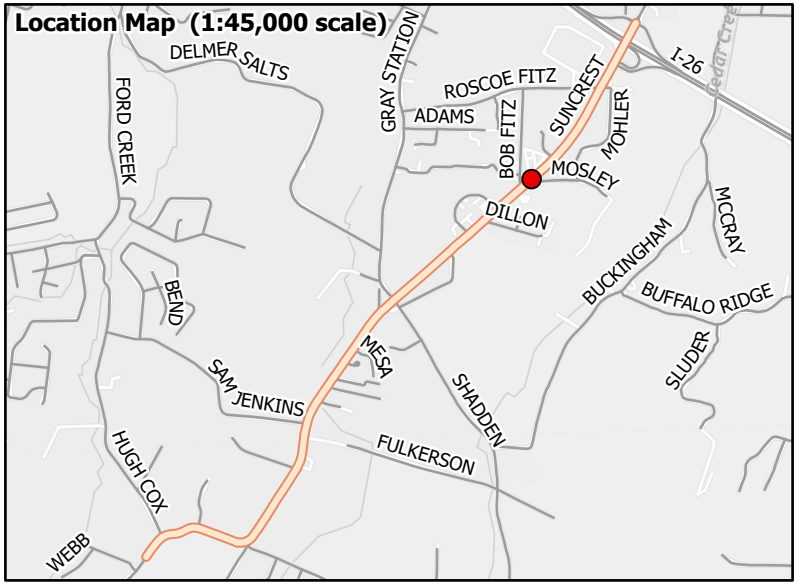
Annual Rates	Severe	Total
Crash Rate:	0.000 / MEV	0.033 / MEV
Statewide Average:	0.005 / MEV	0.099 / MEV
Critical Rate:	0.034 / MEV	0.201 / MEV
Actual/Critical Ratio:	**0.000** / MEV	**0.163** / MEV

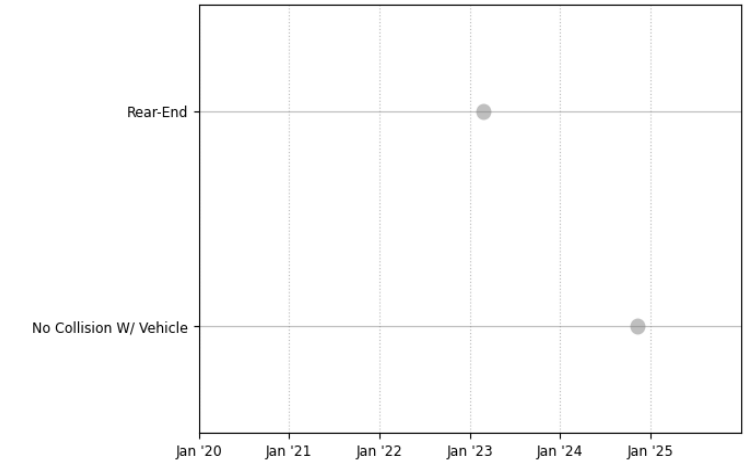
Crash Type	Quantity
Angle	0
Rear-End	0
Head-On	0
Single Vehicle	1
Sideswipe (Opposite)	0
Sideswipe (Same)	0
Bicycle	0
Pedestrian	0
Other / Unknown	0

Injury Type	Quantity
Fatal	0
Incapacitating	0
Non-Incapacitating	0
Possible Injury	0
Property Damage	1

CDM Smith







Summary

0 200 Feet

Suncrest Dr (SR-75) & Mosley Rd

Entering Volume:	16950 Veh/Day
Total Crashes:	2 Crashes
Functional Class:	Arterial
Area Type:	Rural
Traffic Control:	Partial Stop

Study Period: 2020 thru 2024

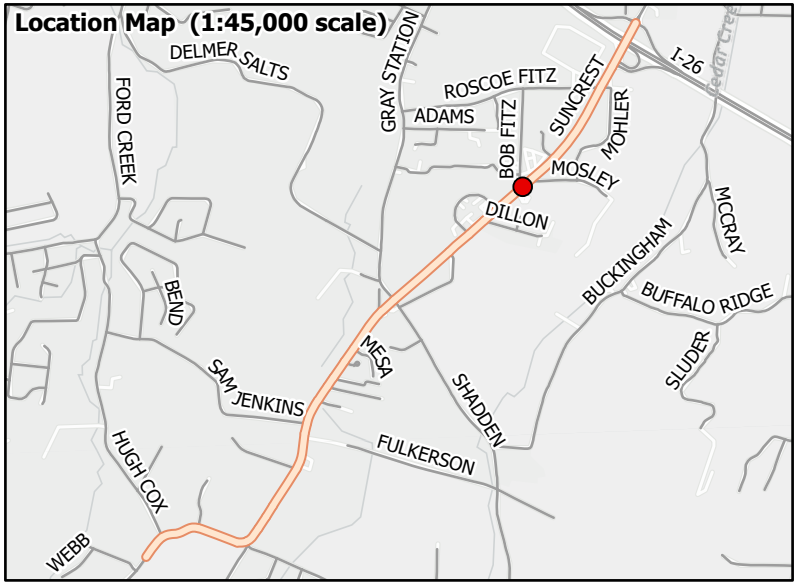
Annual Rates	Severe	Total
Crash Rate:	0.000 / MEV	0.065 / MEV
Statewide Average:	0.005 / MEV	0.099 / MEV
Critical Rate:	0.034 / MEV	0.200 / MEV
Actual/Critical Ratio:	**0.000** / MEV	**0.323** / MEV

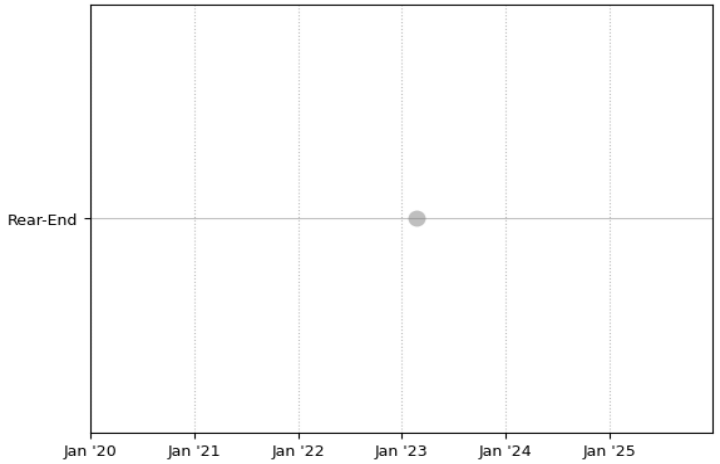
Crash Type	Quantity
Angle	0
Rear-End	1
Head-On	0
Single Vehicle	1
Sideswipe (Opposite)	0
Sideswipe (Same)	0
Bicycle	0
Pedestrian	0
Other / Unknown	0

Injury Type	Quantity
Fatal	0
Incapacitating	0
Non-Incapacitating	0
Possible Injury	0
Property Damage	2

CDM Smith







Summary

0 200 Feet

Suncrest Dr (SR-75) & Bob Fitz Rd

Entering Volume:	16010 Veh/Day
Total Crashes:	1 Crashes
Functional Class:	Arterial
Area Type:	Rural
Traffic Control:	Partial Stop

Study Period: 2020 thru 2024

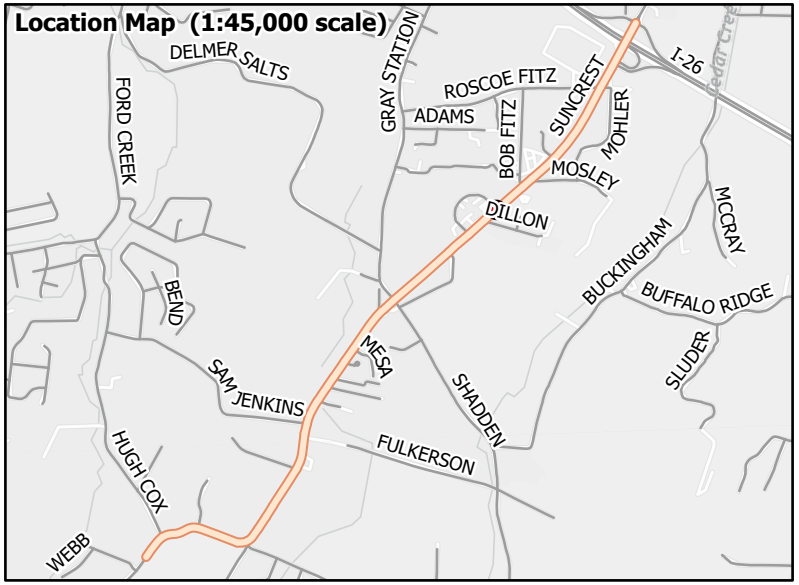
Annual Rates	Severe	Total
Crash Rate:	0.000 / MEV	0.034 / MEV
Statewide Average:	0.005 / MEV	0.099 / MEV
Critical Rate:	0.035 / MEV	0.203 / MEV
Actual/Critical Ratio:	**0.000** / MEV	**0.168** / MEV

Crash Type	Quantity
Angle	0
Rear-End	1
Head-On	0
Single Vehicle	0
Sideswipe (Opposite)	0
Sideswipe (Same)	0
Bicycle	0
Pedestrian	0
Other / Unknown	0

Injury Type	Quantity
Fatal	0
Incapacitating	0
Non-Incapacitating	0
Possible Injury	0
Property Damage	1

CDM Smith





Crash Occurrences by Type

Crashes within intersection influence area

No Crash Data

Summary

0 200 Feet

Suncrest Dr (SR-75) & Gray Commons Cir (N)

Entering Volume:	15375 Veh/Day
Total Crashes:	0 Crashes
Functional Class:	Arterial
Area Type:	Rural
Traffic Control:	Partial Stop

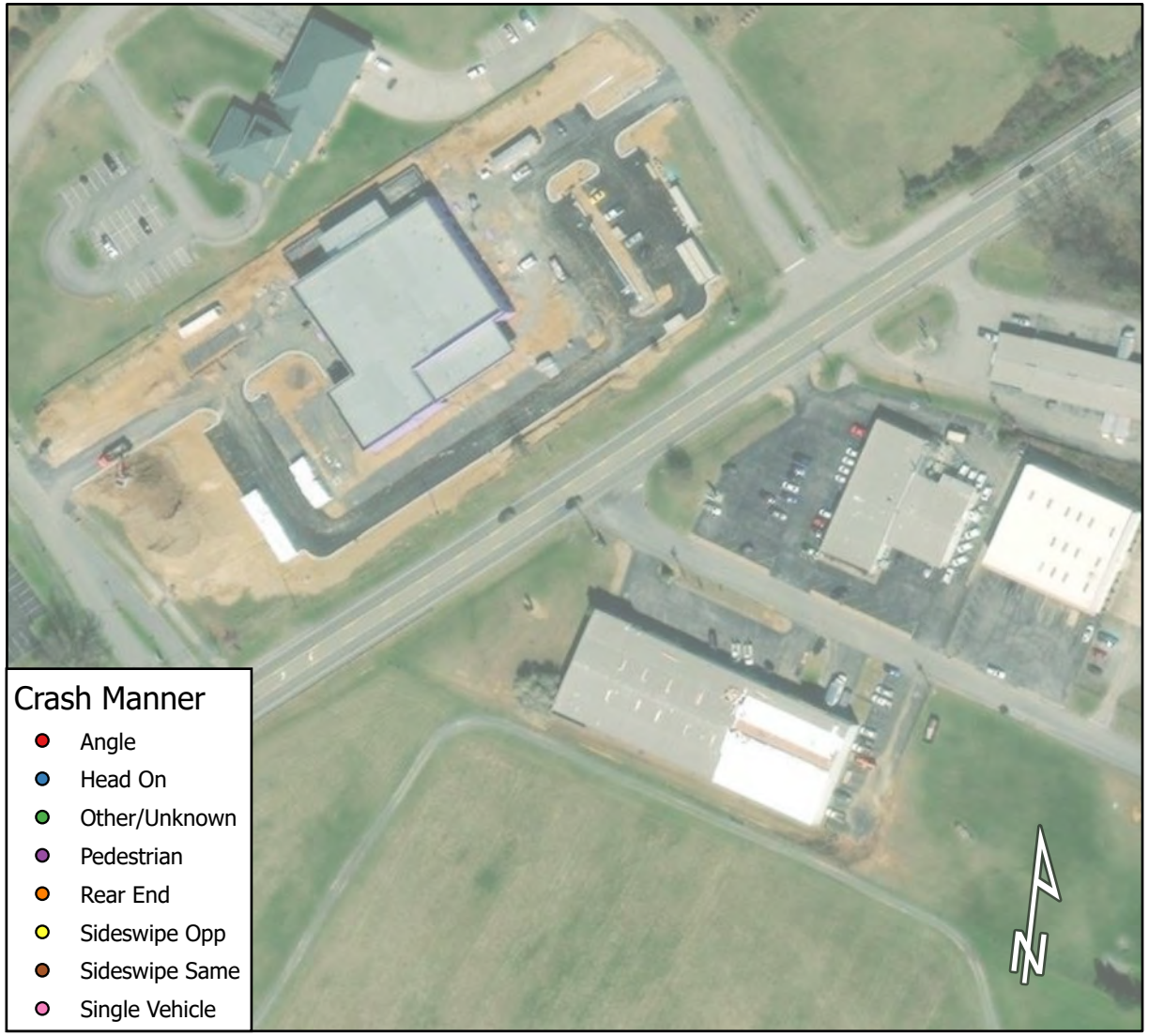
Study Period: 2020 thru 2024

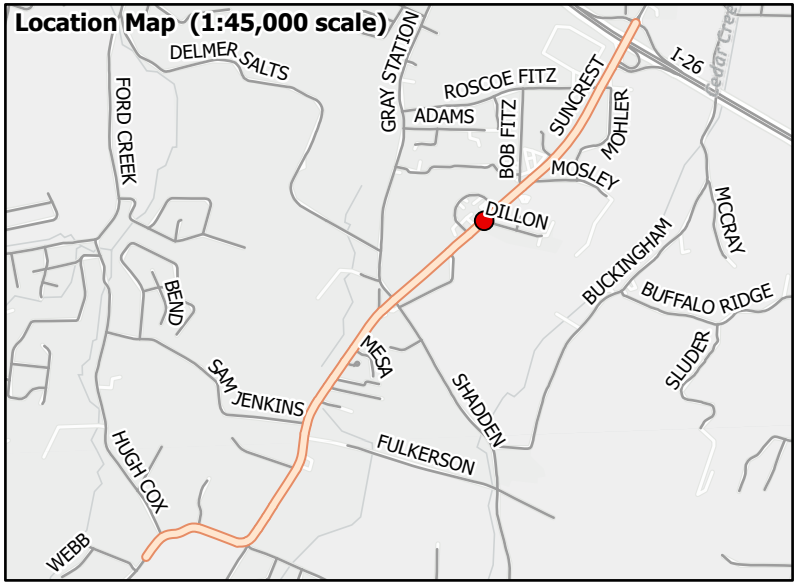
Annual Rates	Severe	Total
Crash Rate:	0.000 / MEV	0.000 / MEV
Statewide Average:	0.005 / MEV	0.099 / MEV
Critical Rate:	0.036 / MEV	0.206 / MEV
Actual/Critical Ratio:	**0.000** / MEV	**0.000** / MEV

Crash Type	Quantity
Angle	0
Rear-End	0
Head-On	0
Single Vehicle	0
Sideswipe (Opposite)	0
Sideswipe (Same)	0
Bicycle	0
Pedestrian	0
Other / Unknown	0

Injury Type	Quantity
Fatal	0
Incapacitating	0
Non-Incapacitating	0
Possible Injury	0
Property Damage	0

CDM Smith





Crash Occurrences by Type

Crashes within intersection influence area

No Crash Data

Summary 0 — 200 Feet

Suncrest Dr (SR-75) & Dillon Ct

Entering Volume:	15125 Veh/Day
Total Crashes:	0 Crashes
Functional Class:	Arterial
Area Type:	Rural
Traffic Control:	Partial Stop

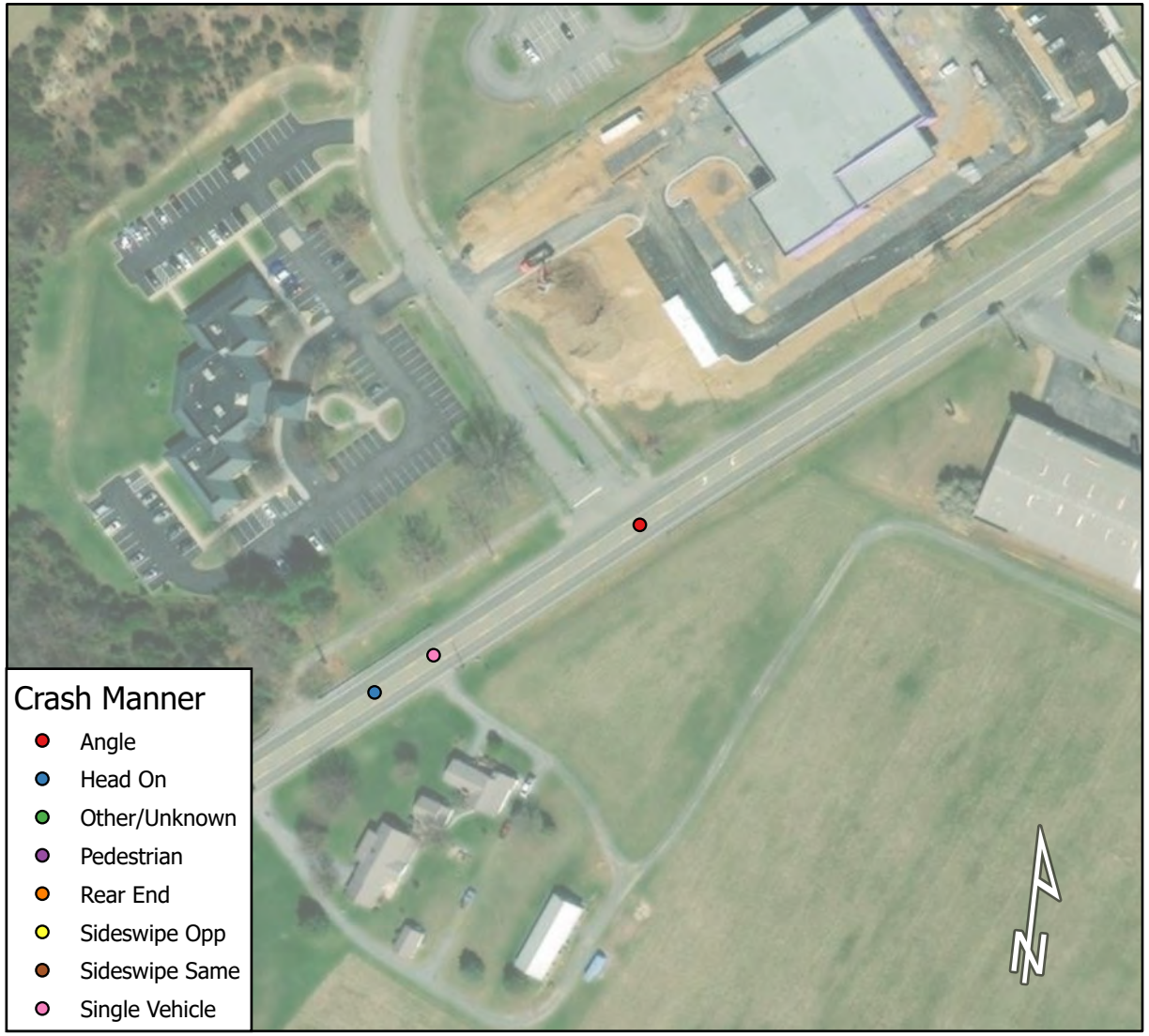
Study Period: 2020 thru 2024

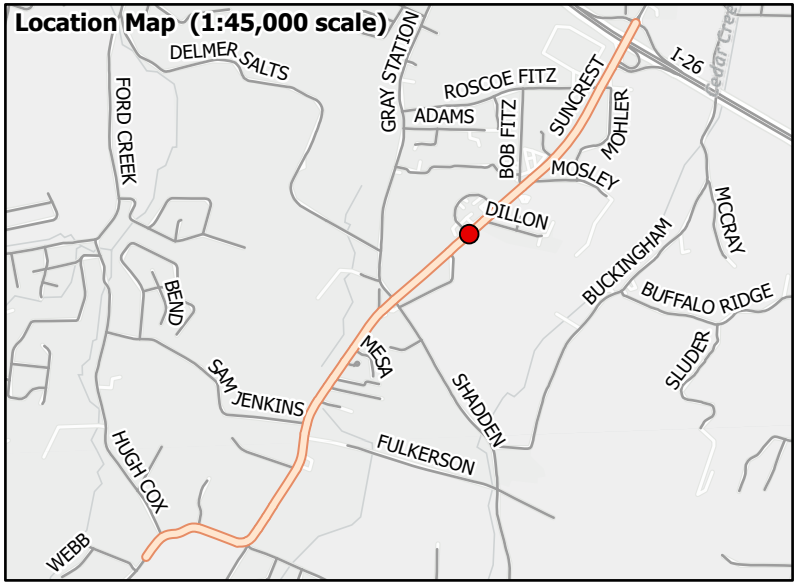
Annual Rates	Severe	Total
Crash Rate:	0.000 / MEV	0.000 / MEV
Statewide Average:	0.005 / MEV	0.099 / MEV
Critical Rate:	0.036 / MEV	0.207 / MEV
Actual/Critical Ratio:	**0.000** / MEV	**0.000** / MEV

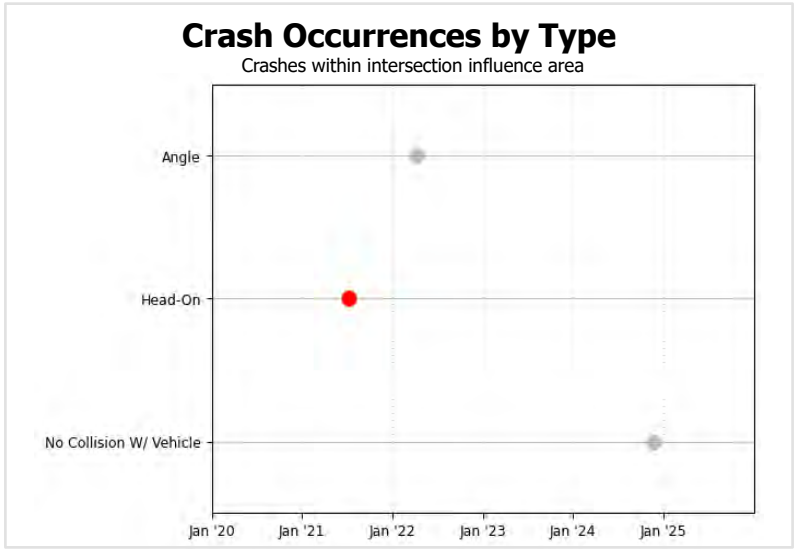
Crash Type	Quantity
Angle	0
Rear-End	0
Head-On	0
Single Vehicle	0
Sideswipe (Opposite)	0
Sideswipe (Same)	0
Bicycle	0
Pedestrian	0
Other / Unknown	0

Injury Type	Quantity
Fatal	0
Incapacitating	0
Non-Incapacitating	0
Possible Injury	0
Property Damage	0

CDM Smith







Summary

Suncrest Dr (SR-75) & Gray Commons Cir (S)

Entering Volume:	14875 Veh/Day
Total Crashes:	3 Crashes
Functional Class:	Arterial
Area Type:	Rural
Traffic Control:	Partial Stop

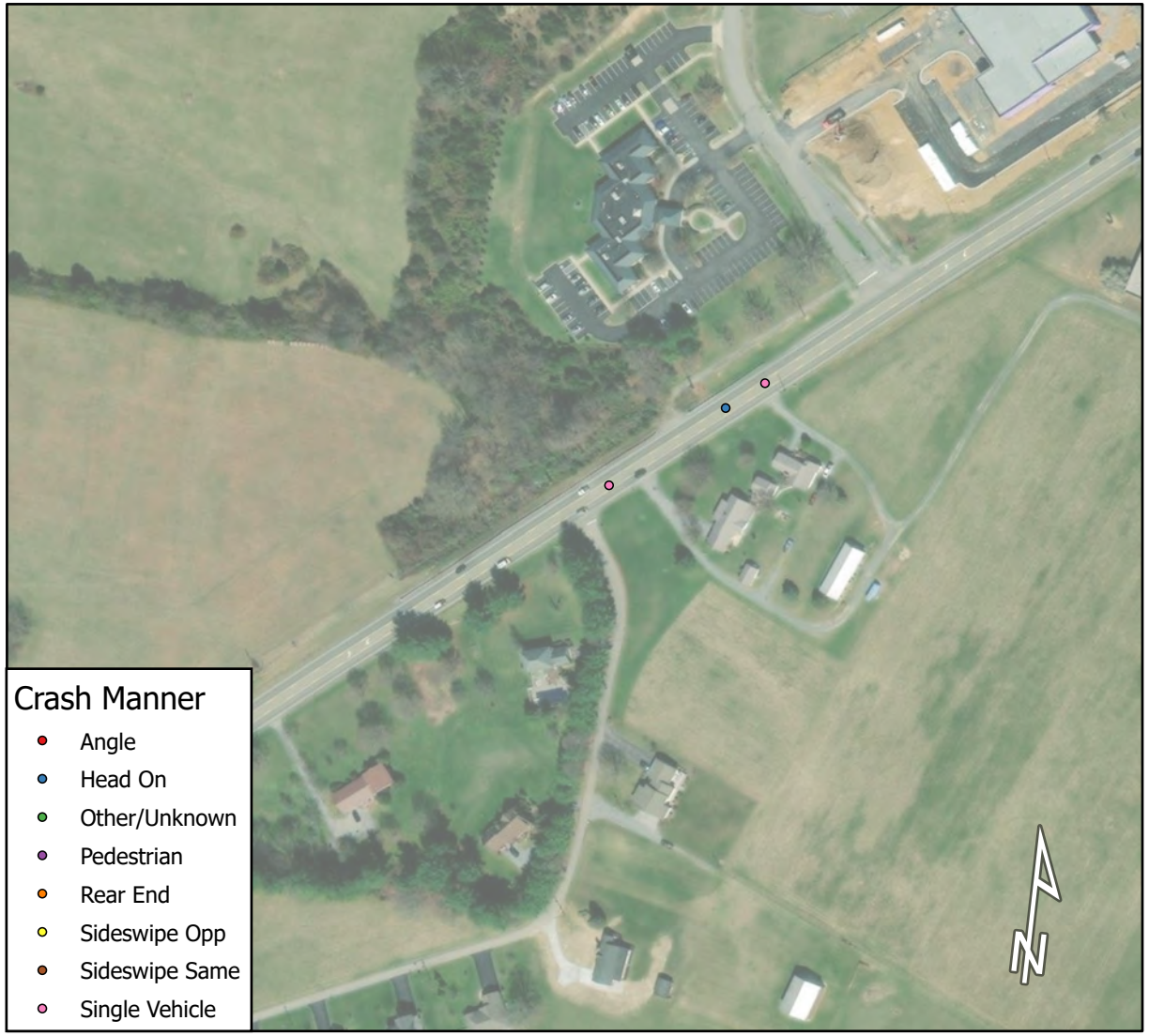
Study Period: 2020 thru 2024

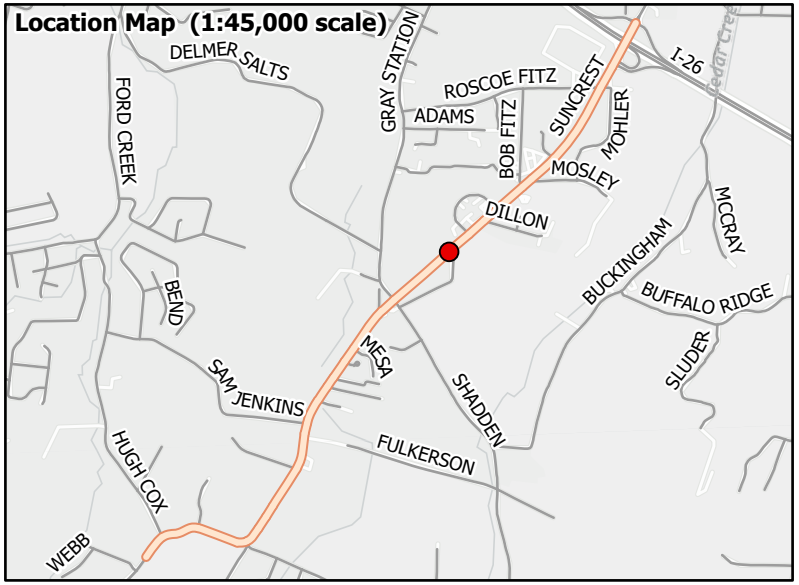
Annual Rates	Severe	Total
Crash Rate:	0.037 / MEV	0.111 / MEV
Statewide Average:	0.004 / MEV	0.099 / MEV
Critical Rate:	0.033 / MEV	0.217 / MEV
Actual/Critical Ratio:	**1.110** / MEV	**0.509** / MEV

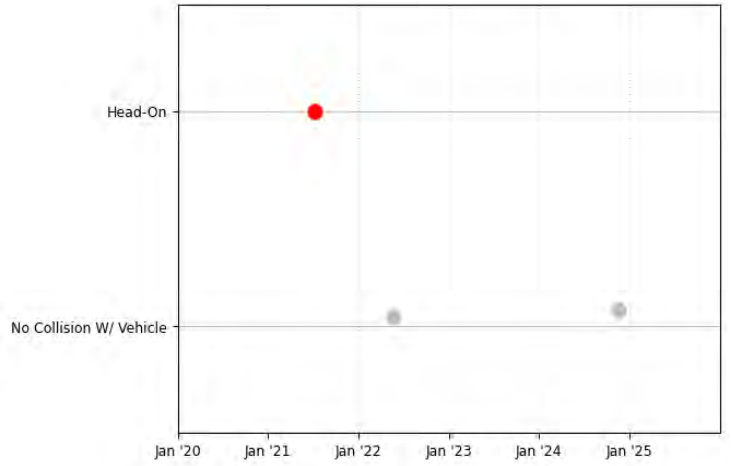
Crash Type	Quantity
Angle	1
Rear-End	0
Head-On	1
Single Vehicle	1
Sideswipe (Opposite)	0
Sideswipe (Same)	0
Bicycle	0
Pedestrian	0
Other / Unknown	0

Injury Type	Quantity
Fatal	1
Incapacitating	0
Non-Incapacitating	0
Possible Injury	0
Property Damage	2

CDM Smith







Summary

0 200 Feet

Suncrest Dr (SR-75) & Victory Ln

Entering Volume:	14550 Veh/Day
Total Crashes:	3 Crashes
Functional Class:	Arterial
Area Type:	Rural
Traffic Control:	Partial Stop

Study Period: 2020 thru 2024

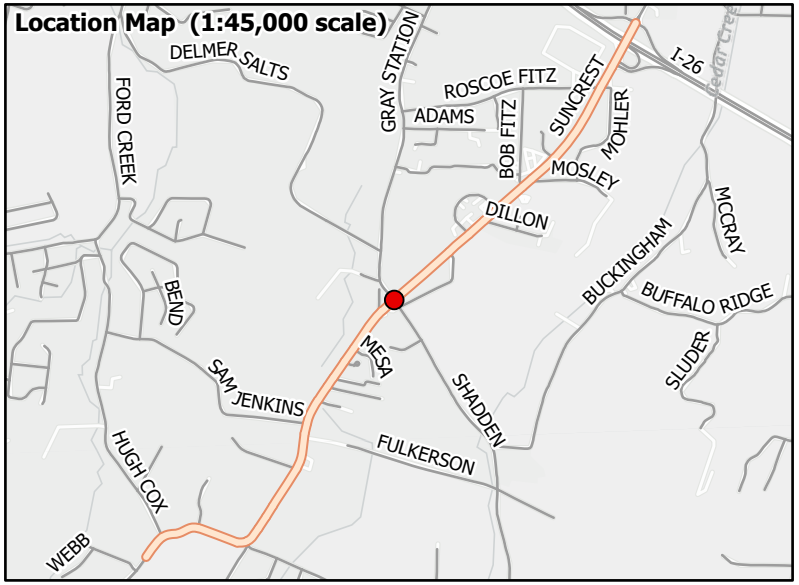
Annual Rates	Severe	Total
Crash Rate:	0.038 / MEV	0.113 / MEV
Statewide Average:	0.005 / MEV	0.099 / MEV
Critical Rate:	0.037 / MEV	0.209 / MEV
Actual/Critical Ratio:	1.018 / MEV	0.541 / MEV

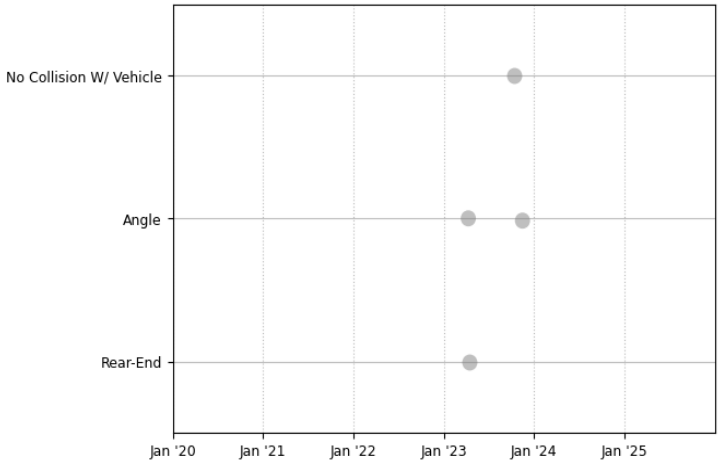
Crash Type	Quantity
Angle	0
Rear-End	0
Head-On	1
Single Vehicle	2
Sideswipe (Opposite)	0
Sideswipe (Same)	0
Bicycle	0
Pedestrian	0
Other / Unknown	0

Injury Type	Quantity
Fatal	1
Incapacitating	0
Non-Incapacitating	0
Possible Injury	0
Property Damage	2

CDM Smith







Summary

Suncrest Dr (SR-75) & Shadden Rd

Entering Volume:	16085 Veh/Day
Total Crashes:	4 Crashes
Functional Class:	Arterial
Area Type:	Rural
Traffic Control:	Partial Stop

Study Period: 2020 thru 2024

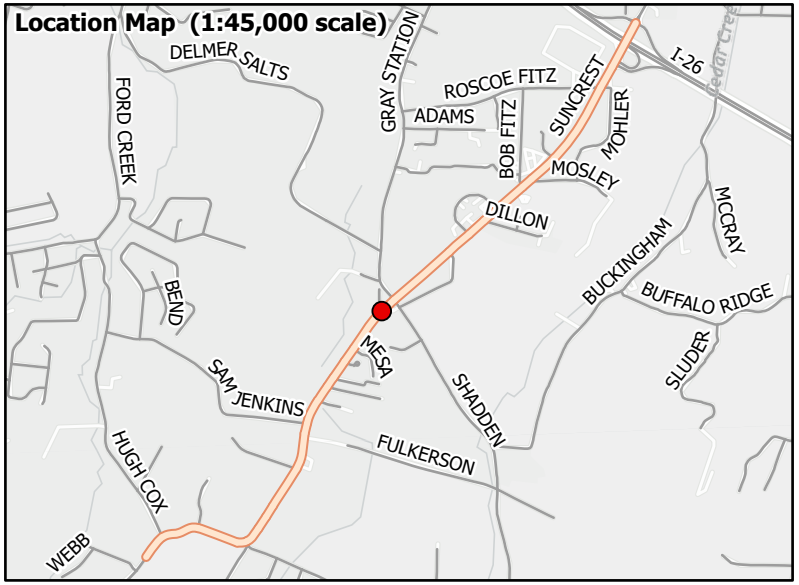
Annual Rates	Severe	Total
Crash Rate:	0.000 / MEV	0.136 / MEV
Statewide Average:	0.004 / MEV	0.099 / MEV
Critical Rate:	0.032 / MEV	0.212 / MEV
Actual/Critical Ratio:	**0.000** / MEV	**0.643** / MEV

Crash Type	Quantity
Angle	2
Rear-End	1
Head-On	0
Single Vehicle	1
Sideswipe (Opposite)	0
Sideswipe (Same)	0
Bicycle	0
Pedestrian	0
Other / Unknown	0

Injury Type	Quantity
Fatal	0
Incapacitating	0
Non-Incapacitating	0
Possible Injury	0
Property Damage	4

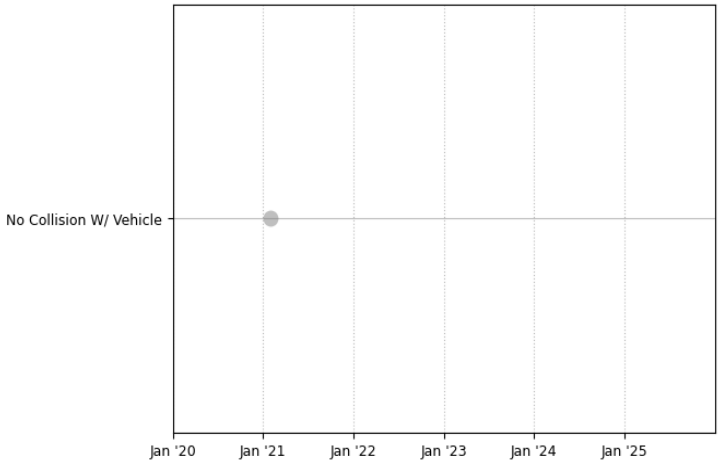
CDM Smith





Crash Occurrences by Type

Crashes within intersection influence area



Summary

0 200 Feet

Suncrest Dr (SR-75) & Shadow Ln

Entering Volume:	13740 Veh/Day
Total Crashes:	1 Crashes
Functional Class:	Arterial
Area Type:	Rural
Traffic Control:	Partial Stop

Study Period: 2020 thru 2024

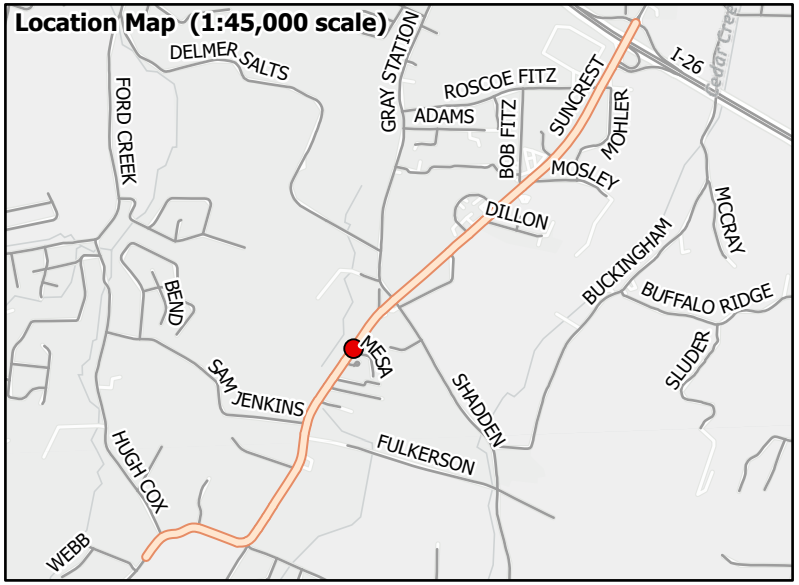
Annual Rates	Severe	Total
Crash Rate:	0.000 / MEV	0.040 / MEV
Statewide Average:	0.005 / MEV	0.099 / MEV
Critical Rate:	0.038 / MEV	0.212 / MEV
Actual/Critical Ratio:	**0.000** / MEV	**0.188** / MEV

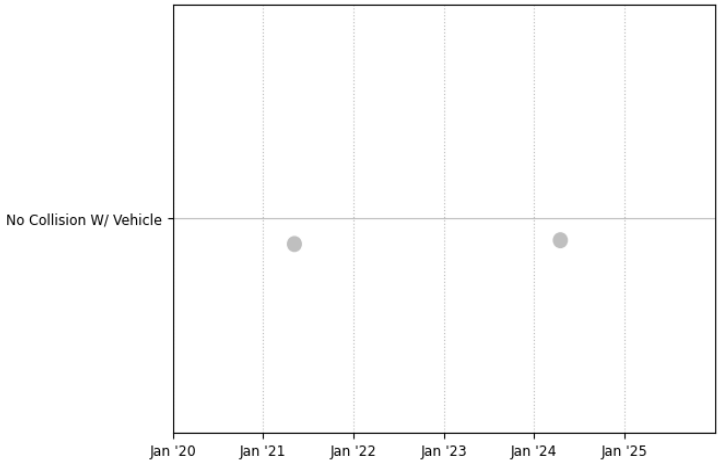
Crash Type	Quantity
Angle	0
Rear-End	0
Head-On	0
Single Vehicle	1
Sideswipe (Opposite)	0
Sideswipe (Same)	0
Bicycle	0
Pedestrian	0
Other / Unknown	0

Injury Type	Quantity
Fatal	0
Incapacitating	0
Non-Incapacitating	0
Possible Injury	0
Property Damage	1

CDM Smith







Summary

0 200 Feet

Suncrest Dr (SR-75) & Mesa Dr

Entering Volume:	13765 Veh/Day
Total Crashes:	2 Crashes
Functional Class:	Arterial
Area Type:	Rural
Traffic Control:	Partial Stop

Study Period: 2020 thru 2024

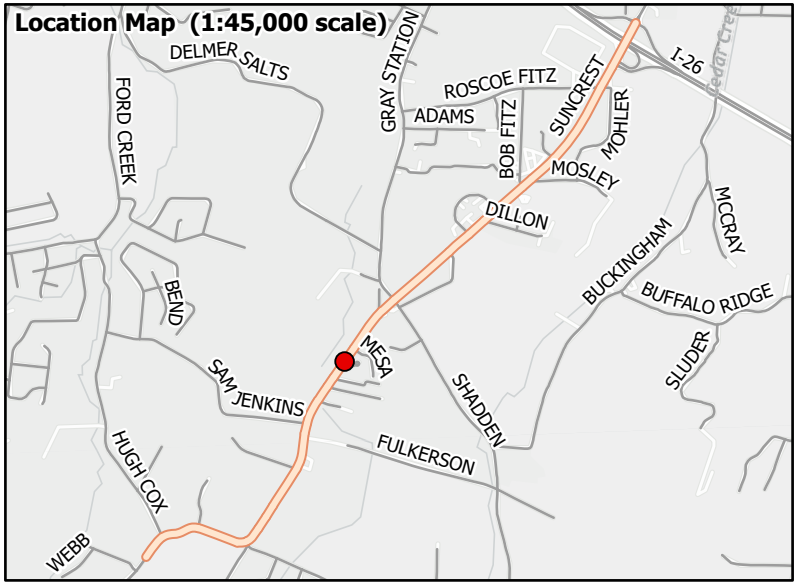
Annual Rates	Severe	Total
Crash Rate:	0.000 / MEV	0.080 / MEV
Statewide Average:	0.005 / MEV	0.099 / MEV
Critical Rate:	0.038 / MEV	0.212 / MEV
Actual/Critical Ratio:	0.000 / MEV	0.375 / MEV

Crash Type	Quantity
Angle	0
Rear-End	0
Head-On	0
Single Vehicle	2
Sideswipe (Opposite)	0
Sideswipe (Same)	0
Bicycle	0
Pedestrian	0
Other / Unknown	0

Injury Type	Quantity
Fatal	0
Incapacitating	0
Non-Incapacitating	0
Possible Injury	1
Property Damage	1

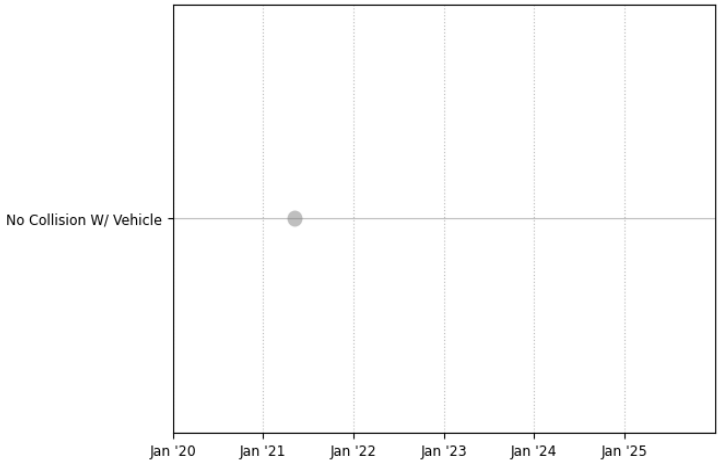
CDM Smith





Crash Occurrences by Type

Crashes within intersection influence area



Summary

0 200 Feet

Suncrest Dr (SR-75) & Haley Cir

Entering Volume:	13765 Veh/Day
Total Crashes:	1 Crashes
Functional Class:	Arterial
Area Type:	Rural
Traffic Control:	Partial Stop

Study Period: 2020 thru 2024

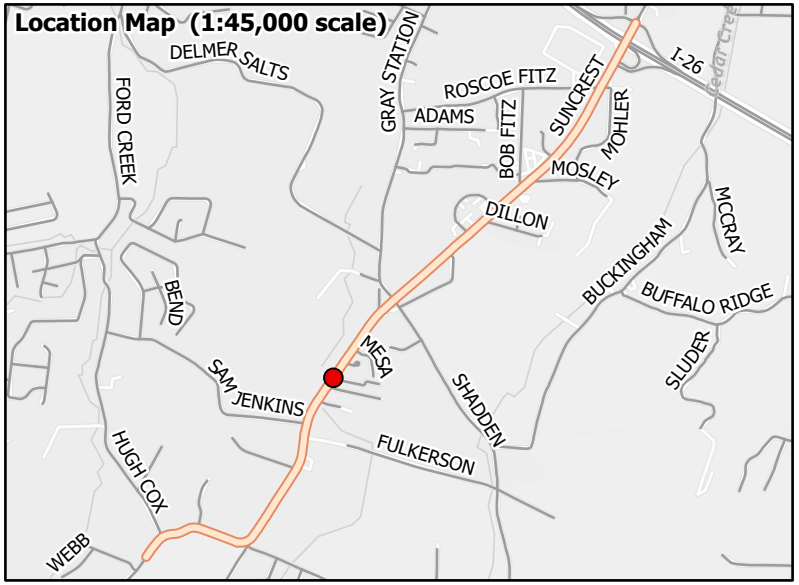
Annual Rates	Severe	Total
Crash Rate:	0.000 / MEV	0.040 / MEV
Statewide Average:	0.005 / MEV	0.099 / MEV
Critical Rate:	0.038 / MEV	0.212 / MEV
Actual/Critical Ratio:	**0.000** / MEV	**0.188** / MEV

Crash Type	Quantity
Angle	0
Rear-End	0
Head-On	0
Single Vehicle	1
Sideswipe (Opposite)	0
Sideswipe (Same)	0
Bicycle	0
Pedestrian	0
Other / Unknown	0

Injury Type	Quantity
Fatal	0
Incapacitating	0
Non-Incapacitating	0
Possible Injury	0
Property Damage	1

CDM Smith





Crash Occurrences by Type

Crashes within intersection influence area

No Crash Data

Summary 0 200 Feet

Suncrest Dr (SR-75) & Chatfield Sq

Entering Volume:	13765 Veh/Day
Total Crashes:	0 Crashes
Functional Class:	Arterial
Area Type:	Rural
Traffic Control:	Partial Stop

Study Period: 2020 thru 2024

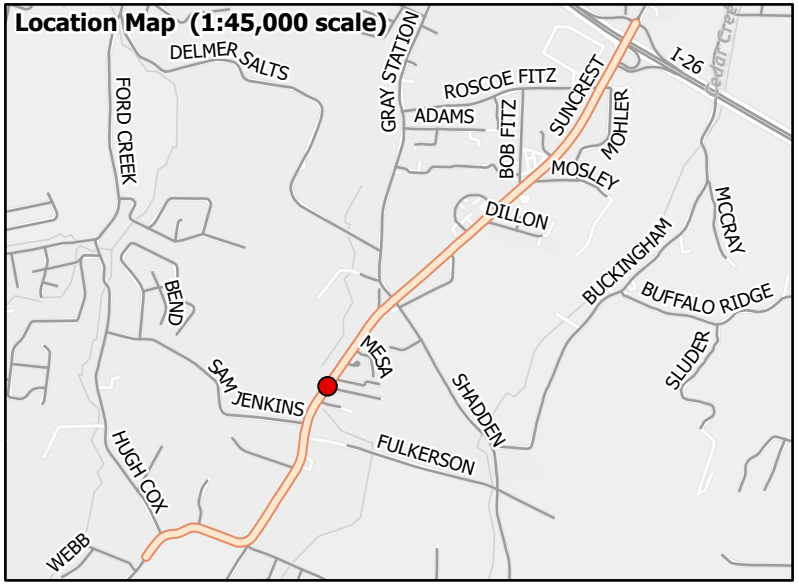
Annual Rates	Severe	Total
Crash Rate:	0.000 / MEV	0.000 / MEV
Statewide Average:	0.005 / MEV	0.099 / MEV
Critical Rate:	0.038 / MEV	0.212 / MEV
Actual/Critical Ratio:	**0.000** / MEV	**0.000** / MEV

Crash Type	Quantity
Angle	0
Rear-End	0
Head-On	0
Single Vehicle	0
Sideswipe (Opposite)	0
Sideswipe (Same)	0
Bicycle	0
Pedestrian	0
Other / Unknown	0

Injury Type	Quantity
Fatal	0
Incapacitating	0
Non-Incapacitating	0
Possible Injury	0
Property Damage	0

CDM Smith





Crash Occurrences by Type

Crashes within intersection influence area

No Crash Data

Summary

0 200 Feet

Suncrest Dr (SR-75) & Hicks Acres Dr

Entering Volume:	13765 Veh/Day
Total Crashes:	0 Crashes
Functional Class:	Arterial
Area Type:	Rural
Traffic Control:	Partial Stop

Study Period: 2020 thru 2024

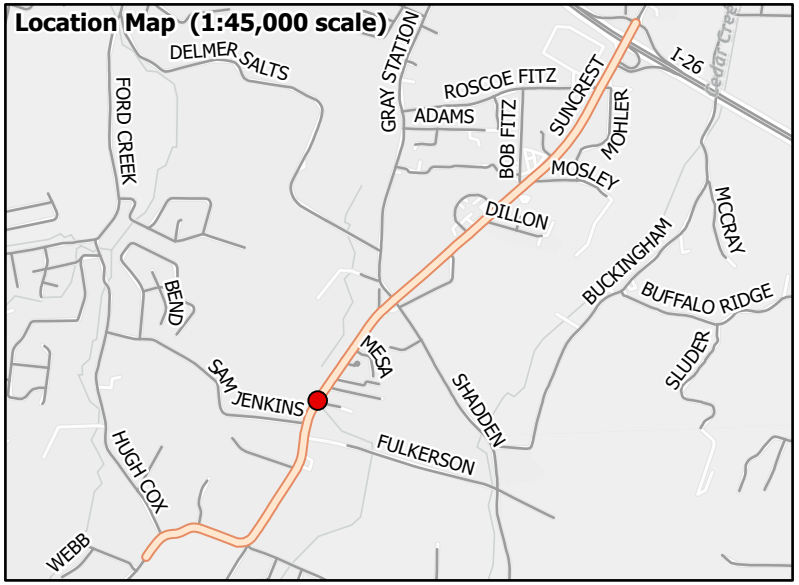
Annual Rates	Severe	Total
Crash Rate:	0.000 / MEV	0.000 / MEV
Statewide Average:	0.005 / MEV	0.099 / MEV
Critical Rate:	0.038 / MEV	0.212 / MEV
Actual/Critical Ratio:	0.000 / MEV	0.000 / MEV

Crash Type	Quantity
Angle	0
Rear-End	0
Head-On	0
Single Vehicle	0
Sideswipe (Opposite)	0
Sideswipe (Same)	0
Bicycle	0
Pedestrian	0
Other / Unknown	0

Injury Type	Quantity
Fatal	0
Incapacitating	0
Non-Incapacitating	0
Possible Injury	0
Property Damage	0

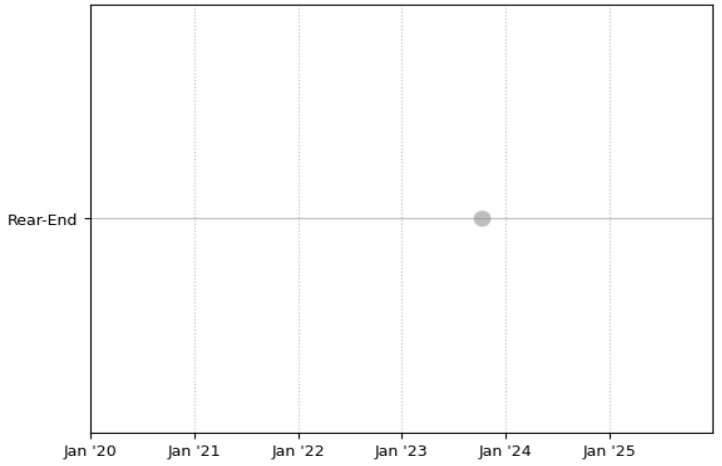
CDM Smith





Crash Occurrences by Type

Crashes within intersection influence area



Summary

0 200 Feet

Suncrest Dr (SR-75) & Jim Richmond Rd

Entering Volume:	13790 Veh/Day
Total Crashes:	1 Crashes
Functional Class:	Arterial
Area Type:	Rural
Traffic Control:	Partial Stop

Study Period: 2020 thru 2024

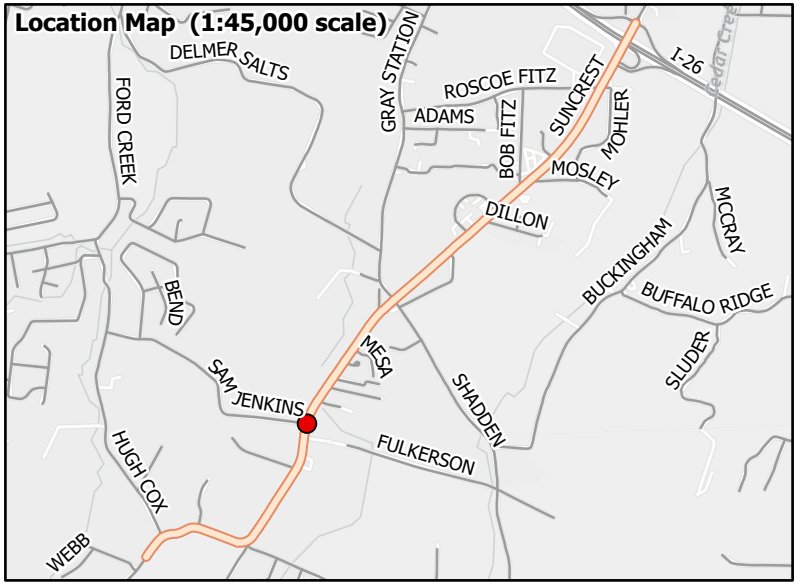
Annual Rates	Severe	Total
Crash Rate:	0.000 / MEV	0.040 / MEV
Statewide Average:	0.005 / MEV	0.099 / MEV
Critical Rate:	0.038 / MEV	0.212 / MEV
Actual/Critical Ratio:	**0.000** / MEV	**0.187** / MEV

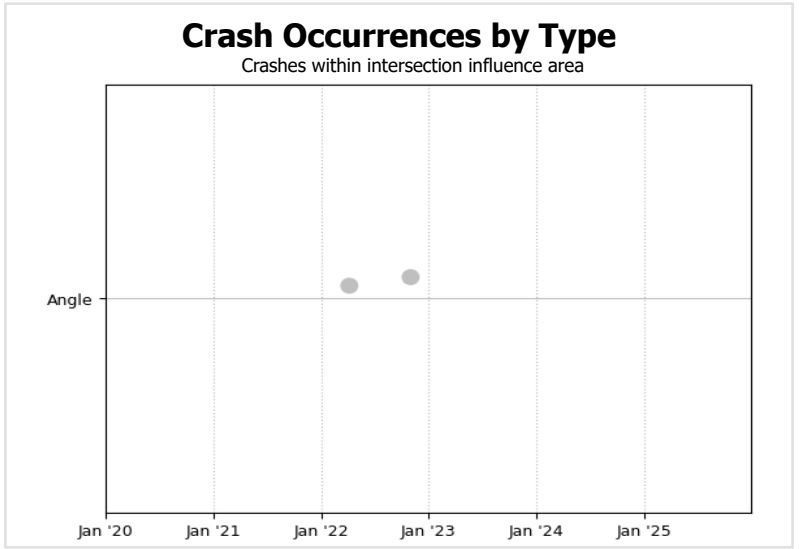
Crash Type	Quantity
Angle	0
Rear-End	1
Head-On	0
Single Vehicle	0
Sideswipe (Opposite)	0
Sideswipe (Same)	0
Bicycle	0
Pedestrian	0
Other / Unknown	0

Injury Type	Quantity
Fatal	0
Incapacitating	0
Non-Incapacitating	0
Possible Injury	0
Property Damage	1

CDM Smith







Summary

Suncrest Dr (SR-75) & Sam Jenkins Rd

Entering Volume:	15280 Veh/Day
Total Crashes:	2 Crashes
Functional Class:	Arterial
Area Type:	Rural
Traffic Control:	Partial Stop

Study Period: 2020 thru 2024

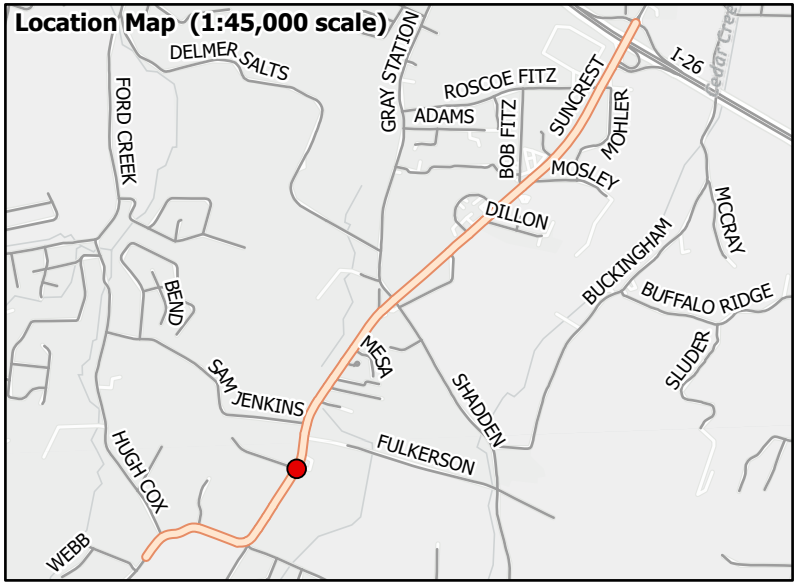
Annual Rates	Severe	Total
Crash Rate:	0.000 / MEV	0.072 / MEV
Statewide Average:	0.005 / MEV	0.099 / MEV
Critical Rate:	0.036 / MEV	0.206 / MEV
Actual/Critical Ratio:	**0.000** / MEV	**0.348** / MEV

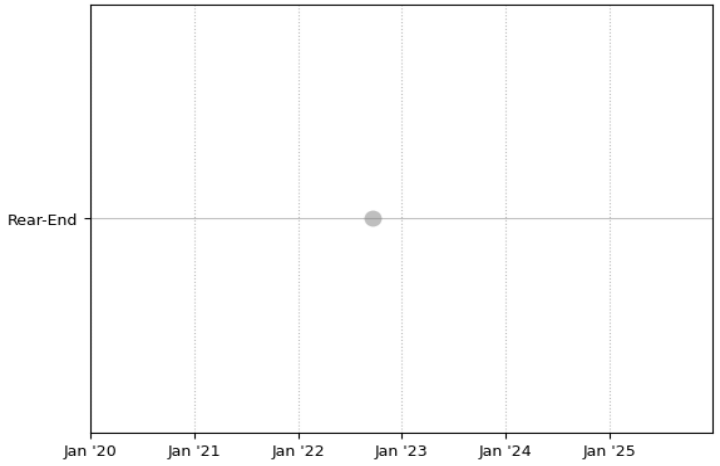
Crash Type	Quantity
Angle	2
Rear-End	0
Head-On	0
Single Vehicle	0
Sideswipe (Opposite)	0
Sideswipe (Same)	0
Bicycle	0
Pedestrian	0
Other / Unknown	0

Injury Type	Quantity
Fatal	0
Incapacitating	0
Non-Incapacitating	0
Possible Injury	0
Property Damage	2

CDM Smith







Summary 0 200 Feet

Suncrest Dr (SR-75) & Blazerview Rd

Entering Volume:	12030 Veh/Day
Total Crashes:	1 Crashes
Functional Class:	Arterial
Area Type:	Rural
Traffic Control:	Partial Stop

Study Period: 2020 thru 2024

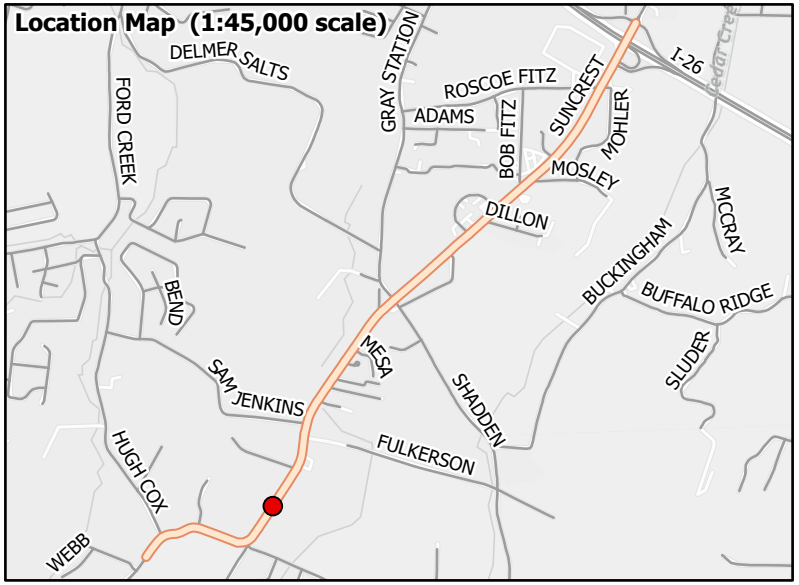
Annual Rates	Severe	Total
Crash Rate:	0.000 / MEV	0.046 / MEV
Statewide Average:	0.005 / MEV	0.099 / MEV
Critical Rate:	0.041 / MEV	0.221 / MEV
Actual/Critical Ratio:	**0.000** / MEV	**0.206** / MEV

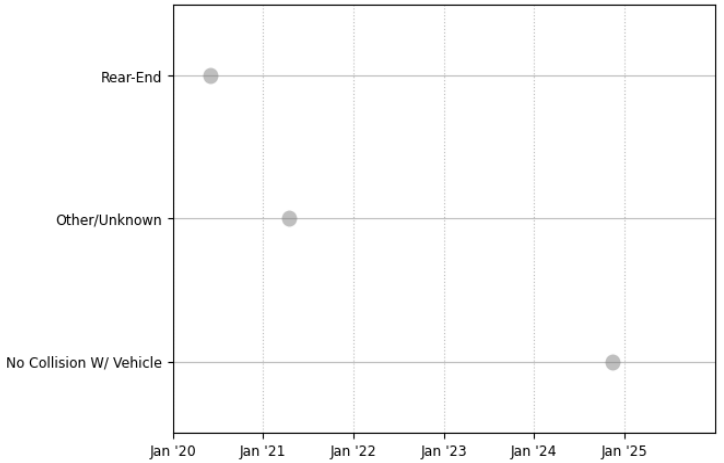
Crash Type	Quantity
Angle	0
Rear-End	1
Head-On	0
Single Vehicle	0
Sideswipe (Opposite)	0
Sideswipe (Same)	0
Bicycle	0
Pedestrian	0
Other / Unknown	0

Injury Type	Quantity
Fatal	0
Incapacitating	0
Non-Incapacitating	0
Possible Injury	0
Property Damage	1

CDM Smith







Summary

Suncrest Dr (SR-75) & Daniel Boone High School N

Entering Volume:	13100 Veh/Day
Total Crashes:	3 Crashes
Functional Class:	Arterial
Area Type:	Rural
Traffic Control:	Partial Stop

Study Period: 2020 thru 2024

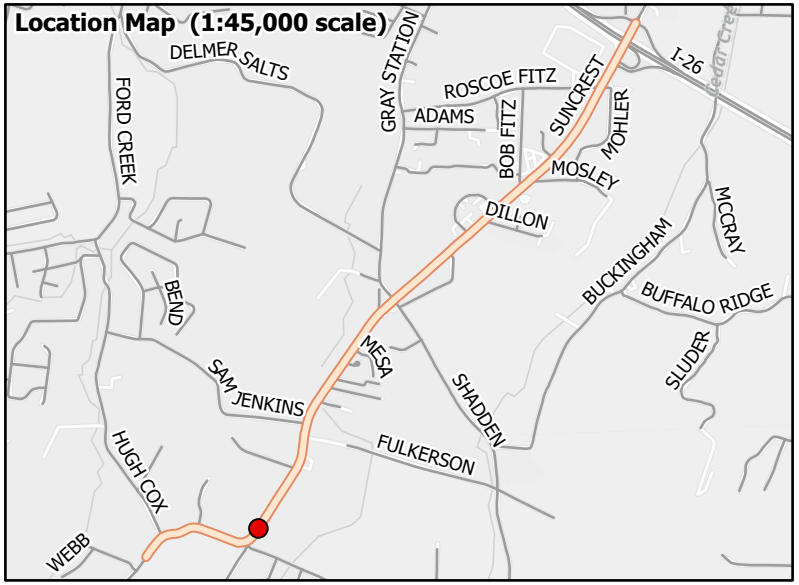
Annual Rates	Severe	Total
Crash Rate:	0.000 / MEV	0.125 / MEV
Statewide Average:	0.005 / MEV	0.099 / MEV
Critical Rate:	0.039 / MEV	0.215 / MEV
Actual/Critical Ratio:	0.000 / MEV	0.583 / MEV

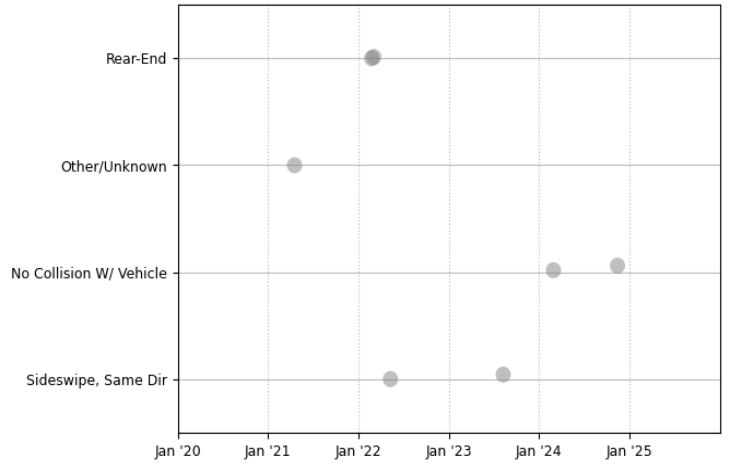
Crash Type	Quantity
Angle	0
Rear-End	1
Head-On	0
Single Vehicle	1
Sideswipe (Opposite)	0
Sideswipe (Same)	0
Bicycle	0
Pedestrian	0
Other / Unknown	1

Injury Type	Quantity
Fatal	0
Incapacitating	0
Non-Incapacitating	0
Possible Injury	0
Property Damage	3

CDM Smith







Summary

0 200 Feet

Suncrest Dr (SR-75) & Daniel Boone High School S

Entering Volume:	10810 Veh/Day
Total Crashes:	7 Crashes
Functional Class:	Arterial
Area Type:	Rural
Traffic Control:	Partial Stop

Study Period: 2020 thru 2024

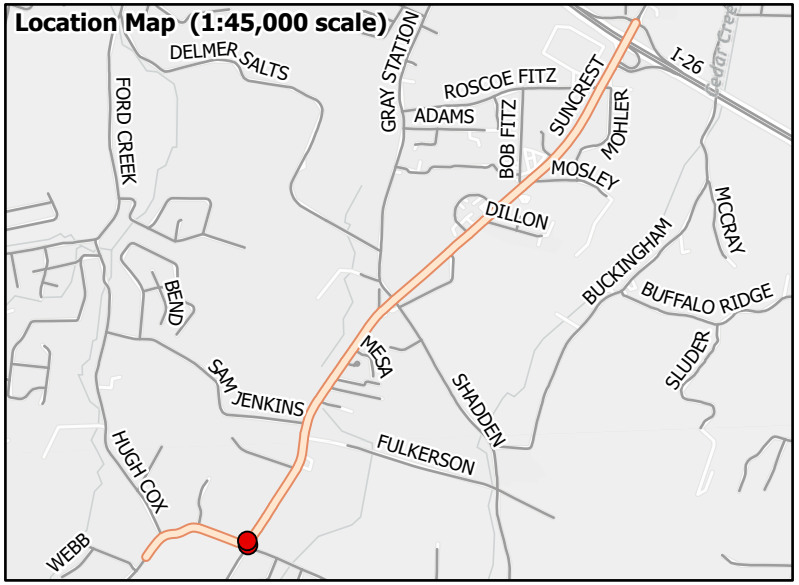
Annual Rates	Severe	Total
Crash Rate:	0.000 / MEV	0.355 / MEV
Statewide Average:	0.005 / MEV	0.099 / MEV
Critical Rate:	0.044 / MEV	0.228 / MEV
Actual/Critical Ratio:	**0.000** / MEV	**1.555** / MEV

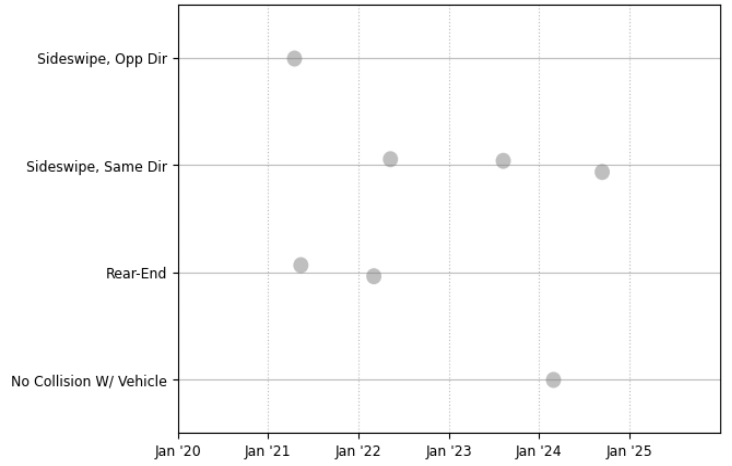
Crash Type	Quantity
Angle	0
Rear-End	2
Head-On	0
Single Vehicle	2
Sideswipe (Opposite)	0
Sideswipe (Same)	2
Bicycle	0
Pedestrian	0
Other / Unknown	1

Injury Type	Quantity
Fatal	0
Incapacitating	0
Non-Incapacitating	0
Possible Injury	0
Property Damage	7

CDM Smith







Summary

0 200 Feet

Suncrest Dr (SR-75) & Boonesboro Rd

Entering Volume:	9770 Veh/Day
Total Crashes:	7 Crashes
Functional Class:	Arterial
Area Type:	Rural
Traffic Control:	Partial Stop

Study Period: 2020 thru 2024

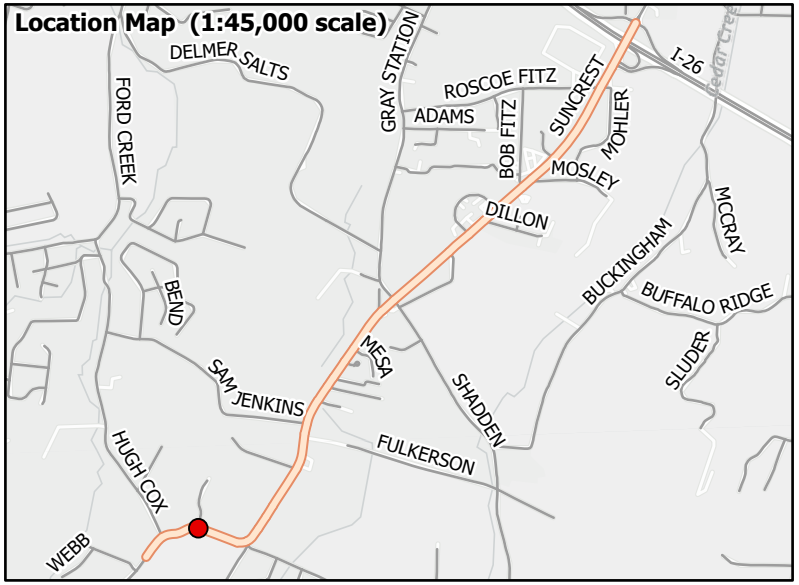
Annual Rates	Severe	Total
Crash Rate:	0.000 / MEV	0.393 / MEV
Statewide Average:	0.004 / MEV	0.099 / MEV
Critical Rate:	0.043 / MEV	0.250 / MEV
Actual/Critical Ratio:	**0.000** / MEV	**1.570** / MEV

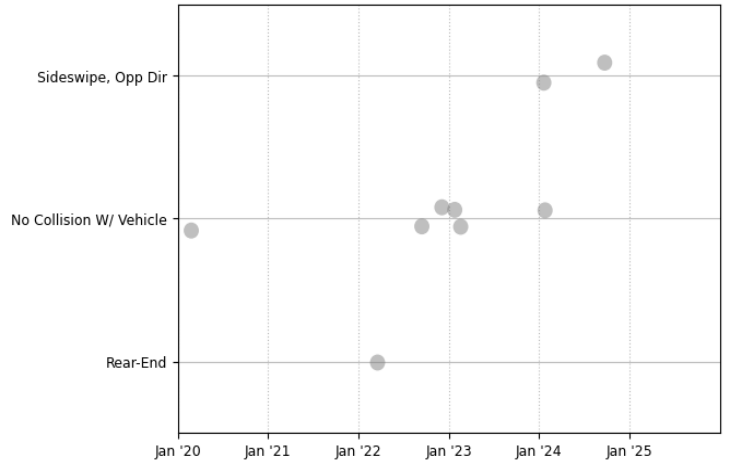
Crash Type	Quantity
Angle	0
Rear-End	2
Head-On	0
Single Vehicle	1
Sideswipe (Opposite)	1
Sideswipe (Same)	3
Bicycle	0
Pedestrian	0
Other / Unknown	0

Injury Type	Quantity
Fatal	0
Incapacitating	0
Non-Incapacitating	0
Possible Injury	0
Property Damage	7

CDM Smith







Summary

Suncrest Dr (SR-75) & Elmer Good Rd

Entering Volume:	7130 Veh/Day
Total Crashes:	9 Crashes
Functional Class:	Arterial
Area Type:	Rural
Traffic Control:	Partial Stop

Study Period: 2020 thru 2024

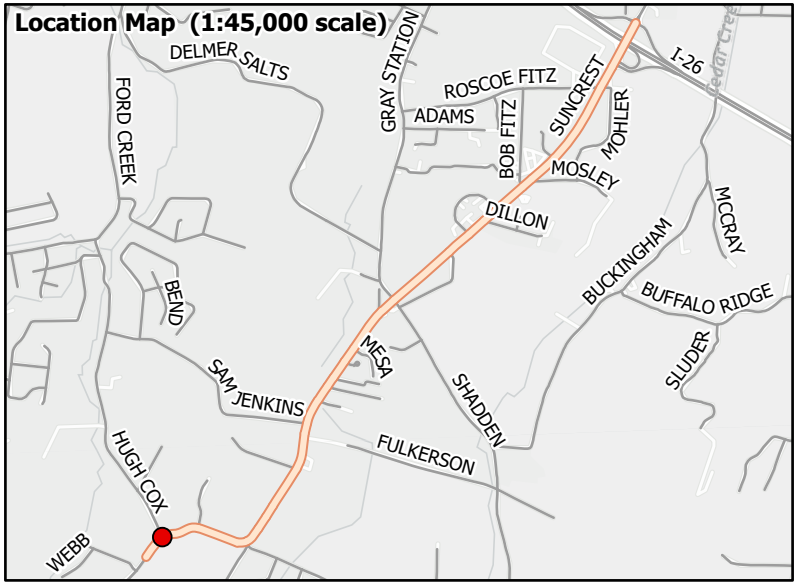
Annual Rates	Severe	Total
Crash Rate:	0.000 / MEV	0.692 / MEV
Statewide Average:	0.005 / MEV	0.099 / MEV
Critical Rate:	0.056 / MEV	0.262 / MEV
Actual/Critical Ratio:	**0.000** / MEV	**2.643** / MEV

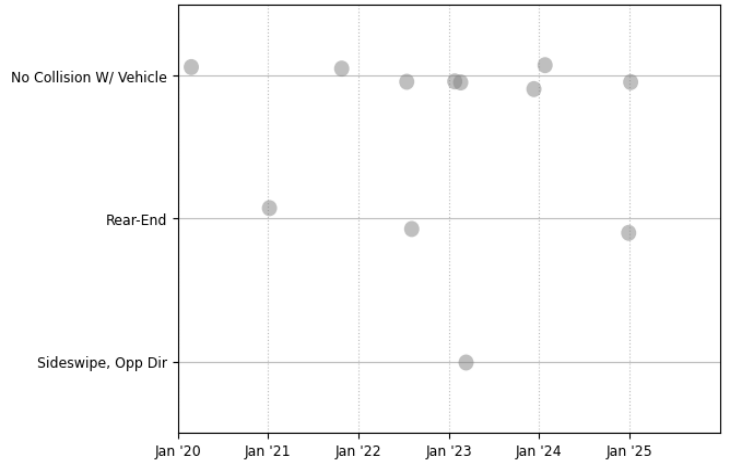
Crash Type	Quantity
Angle	0
Rear-End	1
Head-On	0
Single Vehicle	6
Sideswipe (Opposite)	2
Sideswipe (Same)	0
Bicycle	0
Pedestrian	0
Other / Unknown	0

Injury Type	Quantity
Fatal	0
Incapacitating	0
Non-Incapacitating	1
Possible Injury	0
Property Damage	8

CDM Smith







Summary

Suncrest Dr (SR-75) & Hugh Cox Rd

Entering Volume:	8415 Veh/Day
Total Crashes:	11 Crashes
Functional Class:	Arterial
Area Type:	Rural
Traffic Control:	Partial Stop

Study Period: 2020 thru 2024

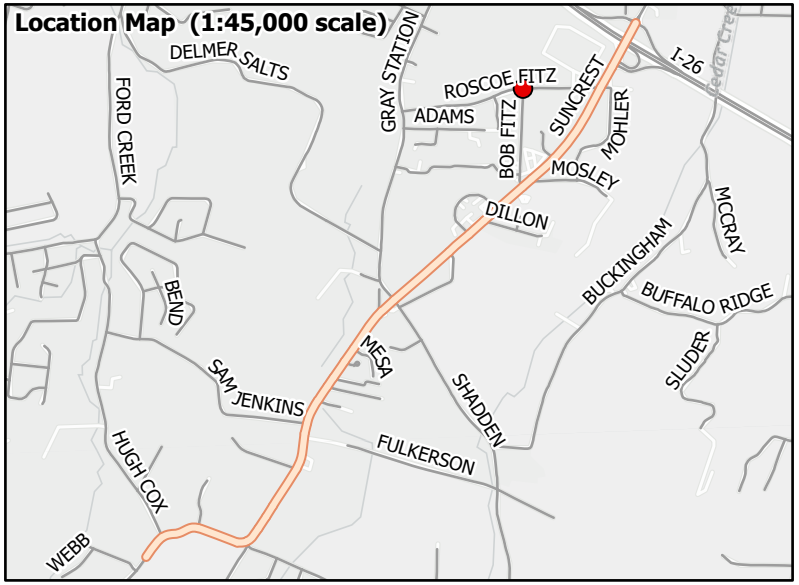
Annual Rates	Severe	Total
Crash Rate:	0.000 / MEV	0.716 / MEV
Statewide Average:	0.005 / MEV	0.099 / MEV
Critical Rate:	0.051 / MEV	0.247 / MEV
Actual/Critical Ratio:	**0.000** / MEV	**2.895** / MEV

Crash Type	Quantity
Angle	0
Rear-End	3
Head-On	0
Single Vehicle	7
Sideswipe (Opposite)	1
Sideswipe (Same)	0
Bicycle	0
Pedestrian	0
Other / Unknown	0

Injury Type	Quantity
Fatal	0
Incapacitating	0
Non-Incapacitating	0
Possible Injury	0
Property Damage	11

CDM Smith





Crash Occurrences by Type

Crashes within intersection influence area

No Crash Data

Summary

0 200 Feet

Roscoe Fitz Rd & Bob Fitz Rd

Entering Volume:	2145 Veh/Day
Total Crashes:	0 Crashes
Functional Class:	Local
Area Type:	Rural
Traffic Control:	Partial Stop

Study Period:	2020 thru 2024

Annual Rates	Severe	Total
Crash Rate:	0.000 / MEV	0.000 / MEV
Statewide Average:	0.005 / MEV	0.099 / MEV
Critical Rate:	0.128 / MEV	0.425 / MEV
Actual/Critical Ratio:	0.000 / MEV	0.000 / MEV

Crash Type	Quantity
Angle	0
Rear-End	0
Head-On	0
Single Vehicle	0
Sideswipe (Opposite)	0
Sideswipe (Same)	0
Bicycle	0
Pedestrian	0
Other / Unknown	0

Injury Type	Quantity
Fatal	0
Incapacitating	0
Non-Incapacitating	0
Possible Injury	0
Property Damage	0

CDM Smith

APPENDIX B. TRAFFIC COUNTS

National Data & Surveying Services

Intersection Turning Movement Count

Location: SR 75/Bobby Hicks Hwy/Suncrest Dr & I-26/US 23/James H. Quillen Pkwy WB Ramps
City: Johnson City
Control: Signalized

Project ID: 25-190011-001
Date: 3/11/2025

Data - Total

NS/EW Streets:	SR 75/Bobby Hicks Hwy/Suncrest Dr				SR 75/Bobby Hicks Hwy/Suncrest Dr				I-26/US 23/James H. Quillen Pkwy WB Ramps				I-26/US 23/James H. Quillen Pkwy WB Ramps				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	2	2	0	0	0	2	1	0	0	0	0	0	2	0	2	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	33	82	0	0	0	165	56	0	0	0	0	0	52	0	73	0	461
7:15 AM	53	106	0	0	0	228	56	0	0	0	0	0	68	0	98	0	609
7:30 AM	53	144	0	0	0	211	90	0	0	0	0	0	86	0	81	0	665
7:45 AM	57	183	0	0	0	170	78	0	0	0	0	0	64	0	121	0	673
8:00 AM	45	136	0	0	0	133	80	0	0	0	0	0	38	0	123	0	555
8:15 AM	31	111	0	0	0	125	50	0	0	0	0	0	41	0	78	0	436
8:30 AM	22	111	0	0	0	119	46	0	0	0	0	0	45	0	85	0	428
8:45 AM	26	93	0	0	0	130	51	0	0	0	0	0	38	0	72	0	410
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	320	966	0	0	0	1281	507	0	0	0	0	0	432	0	731	0	4237
APPROACH %'s :	24.88%	75.12%	0.00%	0.00%	0.00%	71.64%	28.36%	0.00%					37.15%	0.00%	62.85%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	208	569	0	0	0	742	304	0	0	0	0	0	256	0	423	0	2502
PEAK HR FACTOR :	0.912	0.777	0.000	0.000	0.000	0.814	0.844	0.000	0.000	0.000	0.000	0.000	0.744	0.000	0.860	0.000	0.929
	0.809				0.869								0.918				

NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	2	2	0	0	0	2	1	0	0	0	0	0	2	0	2	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
11:00 AM	21	96	0	0	0	128	44	0	0	0	0	0	37	0	84	0	410
11:15 AM	24	97	0	0	0	156	43	0	0	0	0	0	39	0	73	0	432
11:30 AM	28	132	0	0	0	140	42	0	0	0	0	0	67	0	87	0	496
11:45 AM	31	139	0	0	0	162	50	0	0	0	0	0	30	0	90	0	502
12:00 PM	21	134	0	0	0	179	41	0	0	0	0	0	51	0	79	0	505
12:15 PM	20	119	0	0	0	154	50	0	0	0	0	0	57	0	113	0	513
12:30 PM	26	118	0	0	0	181	44	0	0	0	0	0	45	0	103	0	517
12:45 PM	18	87	0	0	0	156	54	0	0	0	0	0	56	0	95	0	466
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	189	922	0	0	0	1256	368	0	0	0	0	0	382	0	724	0	3841
APPROACH %'s :	17.01%	82.99%	0.00%	0.00%	0.00%	77.34%	22.66%	0.00%					34.54%	0.00%	65.46%	0.00%	
PEAK HR :	11:45 AM - 12:45 PM																TOTAL
PEAK HR VOL :	98	510	0	0	0	676	185	0	0	0	0	0	183	0	385	0	2037
PEAK HR FACTOR :	0.790	0.917	0.000	0.000	0.000	0.934	0.925	0.000	0.000	0.000	0.000	0.000	0.803	0.000	0.852	0.000	0.985
	0.894				0.957								0.835				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	2	2	0	0	0	2	1	0	0	0	0	0	2	0	2	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
2:00 PM	16	104	0	0	0	156	50	0	0	0	0	0	59	0	78	0	463
2:15 PM	22	106	0	0	0	172	50	0	0	0	0	0	51	0	95	0	496
2:30 PM	38	115	0	0	0	183	38	0	0	0	0	0	66	0	97	0	537
2:45 PM	32	160	0	0	0	152	39	0	0	0	0	0	69	1	114	0	567
3:00 PM	43	212	0	0	0	170	67	0	0	0	0	0	62	0	119	0	673
3:15 PM	28	155	0	0	0	177	68	0	0	0	0	0	66	1	135	0	630
3:30 PM	37	141	0	0	0	222	76	0	0	0	0	0	74	0	127	0	677
3:45 PM	24	136	0	0	0	178	66	0	0	0	0	0	89	0	130	0	623
4:00 PM	34	174	0	0	0	196	40	0	0	0	0	0	78	0	136	0	658
4:15 PM	38	127	0	1	0	206	51	0	0	0	0	0	109	0	128	0	660
4:30 PM	45	125	0	0	0	192	65	0	0	0	0	0	87	1	141	0	656
4:45 PM	24	152	0	0	0	201	62	0	0	0	0	0	111	0	139	0	689
5:00 PM	35	169	0	0	0	240	74	0	0	0	0	0	93	0	104	0	715
5:15 PM	45	162	0	0	0	190	56	0	0	0	0	0	95	0	106	0	654
5:30 PM	35	150	0	0	0	203	75	0	0	0	0	0	104	1	132	0	700
5:45 PM	34	110	0	1	0	212	72	0	0	0	0	0	88	0	108	0	625
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	530	2298	0	2	0	3050	949	0	0	0	0	0	1301	4	1889	0	10023
APPROACH %'s :	18.73%	81.20%	0.00%	0.07%	0.00%	76.27%	23.73%	0.00%					40.73%	0.13%	59.14%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	139	633	0	0	0	834	267	0	0	0	0	0	403	1	481	0	2758
PEAK HR FACTOR :	0.772	0.936	0.000	0.000	0.000	0.869	0.890	0.000	0.000	0.000	0.000	0.000	0.908	0.250	0.865	0.000	0.964
	0.932				0.877								0.885				

National Data & Surveying Services

Intersection Turning Movement Count

Location: SR 75/Bobby Hicks Hwy/Suncrest Dr & I-26/US 23/James H. Quillen Pkwy EB Off Ramp
City: Johnson City
Control: No Control

Project ID: 25-190011-002
Date: 3/11/2025

Data - Total

NS/EW Streets:	SR 75/Bobby Hicks Hwy/Suncrest Dr				SR 75/Bobby Hicks Hwy/Suncrest Dr				I-26/US 23/James H. Quillen Pkwy EB Off Ramp				I-26/US 23/James H. Quillen Pkwy EB Off Ramp				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	3	0	0	0	0	1	0	0	0	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	90	0	0	0	218	0	0	0	0	46	0	0	0	30	0	384
7:15 AM	0	110	0	0	0	299	0	0	0	0	59	0	0	0	45	0	513
7:30 AM	0	135	0	0	0	292	0	0	0	0	47	0	0	0	64	0	538
7:45 AM	0	166	0	0	0	236	0	0	0	0	41	0	0	0	72	0	515
8:00 AM	0	129	0	0	0	170	0	0	0	0	25	0	0	0	49	0	373
8:15 AM	0	84	0	0	0	165	0	0	0	0	30	0	0	0	58	0	337
8:30 AM	0	84	0	0	0	162	0	0	0	0	29	0	0	0	47	0	322
8:45 AM	0	72	0	0	0	161	0	0	0	0	28	0	0	0	40	0	301
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	870	0	0	0	1703	0	0	0	0	305	0	0	0	405	0	3283
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	0	501	0	0	0	1045	0	0	0	0	193	0	0	0	211	0	1950
PEAK HR FACTOR :	0.000	0.755	0.000	0.000	0.000	0.874	0.000	0.000	0.000	0.000	0.818	0.000	0.000	0.000	0.733	0.000	0.906
		0.755				0.874				0.818				0.733			

NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	3	0	0	0	0	1	0	0	0	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
11:00 AM	0	98	0	0	0	165	0	0	0	0	30	0	0	0	25	0	318
11:15 AM	0	88	0	0	0	187	0	0	0	0	28	0	0	0	24	0	327
11:30 AM	0	120	0	0	0	202	0	0	0	0	19	0	0	0	40	0	381
11:45 AM	0	134	0	0	0	195	0	0	0	0	23	0	0	0	37	0	389
12:00 PM	0	107	0	0	0	232	0	0	0	0	23	0	0	0	46	0	408
12:15 PM	0	92	0	0	0	213	0	0	0	0	25	0	0	0	47	0	377
12:30 PM	0	104	0	0	0	227	0	0	0	0	18	0	0	0	40	0	389
12:45 PM	0	81	0	0	0	209	0	0	0	0	23	0	0	0	25	0	338
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	824	0	0	0	1630	0	0	0	0	189	0	0	0	284	0	2927
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	
PEAK HR :	11:45 AM - 12:45 PM																TOTAL
PEAK HR VOL :	0	437	0	0	0	867	0	0	0	0	89	0	0	0	170	0	1563
PEAK HR FACTOR :	0.000	0.815	0.000	0.000	0.000	0.934	0.000	0.000	0.000	0.000	0.890	0.000	0.000	0.000	0.904	0.000	0.958
		0.815				0.934				0.890				0.904			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	3	0	0	0	0	1	0	0	0	1	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
2:00 PM	0	86	0	0	0	221	0	0	0	0	30	0	0	0	34	0	371
2:15 PM	0	91	0	0	0	225	0	0	0	0	33	0	0	0	37	0	386
2:30 PM	0	114	0	0	0	247	0	0	0	0	39	0	0	0	47	0	447
2:45 PM	0	147	0	0	0	227	0	0	0	0	35	0	0	0	43	0	452
3:00 PM	0	199	0	0	0	232	0	0	0	0	40	0	0	0	57	0	528
3:15 PM	0	132	0	0	0	247	0	0	0	0	39	0	0	0	47	0	465
3:30 PM	0	144	0	0	0	298	0	0	0	0	46	0	0	0	35	0	523
3:45 PM	0	111	0	0	0	263	0	0	0	0	43	0	0	0	52	0	469
4:00 PM	0	143	0	0	0	278	0	0	0	0	35	0	0	0	74	0	530
4:15 PM	0	109	0	0	0	315	0	0	0	0	36	0	0	0	47	0	507
4:30 PM	0	104	0	0	0	276	0	0	0	0	34	0	0	0	63	0	477
4:45 PM	0	101	0	0	0	316	0	0	0	0	38	0	0	0	80	0	535
5:00 PM	0	129	0	0	0	331	0	0	0	0	55	0	0	0	77	0	592
5:15 PM	0	124	0	0	0	283	0	0	0	0	56	0	0	0	78	0	541
5:30 PM	0	128	0	0	0	302	0	0	0	0	46	0	0	0	60	0	536
5:45 PM	0	92	0	0	0	300	0	0	0	0	52	0	0	0	47	0	491
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	1954	0	0	0	4361	0	0	0	0	657	0	0	0	878	0	7850
APPROACH %'s :	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	0.00%	100.00%	0.00%	0.00%	0.00%	100.00%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	0	482	0	0	0	1232	0	0	0	0	195	0	0	0	295	0	2204
PEAK HR FACTOR :	0.000	0.934	0.000	0.000	0.000	0.931	0.000	0.000	0.000	0.000	0.871	0.000	0.000	0.000	0.922	0.000	0.931
		0.934				0.931				0.871				0.922			

National Data & Surveying Services

Intersection Turning Movement Count

Location: SR 75/Bobby Hicks Hwy/Suncrest Dr & I-26/US 23/James H. Quillen Pkwy EB On Ramp
City: Johnson City
Control: Signalized

Project ID: 25-190011-003
Date: 3/11/2025

Data - Total

NS/EW Streets:	SR 75/Bobby Hicks Hwy/Suncrest Dr				SR 75/Bobby Hicks Hwy/Suncrest Dr				I-26/US 23/James H. Quillen Pkwy EB On Ramp				I-26/US 23/James H. Quillen Pkwy EB On Ramp				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	1	0	2	2	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	90	93	0	95	170	0	0	0	0	0	0	0	0	0	0	448
7:15 AM	0	111	112	0	108	249	0	0	0	0	0	0	0	0	0	0	580
7:30 AM	0	136	126	0	113	226	0	0	0	0	0	0	0	0	0	0	601
7:45 AM	0	167	130	0	96	184	0	0	0	0	0	0	0	0	0	0	577
8:00 AM	0	130	98	0	79	127	0	0	0	0	0	0	0	0	0	0	434
8:15 AM	0	85	74	0	89	106	0	1	0	0	0	0	0	0	0	0	355
8:30 AM	0	85	81	0	91	99	0	0	0	0	0	0	0	0	0	0	356
8:45 AM	0	74	70	0	72	119	0	1	0	0	0	0	0	0	0	0	336
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	878	784	0	743	1280	0	2	0	0	0	0	0	0	0	0	3687
APPROACH %'s :	0.00%	52.83%	47.17%	0.00%	36.69%	63.21%	0.00%	0.10%									
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	0	504	461	0	412	829	0	0	0	0	0	0	0	0	0	0	2206
PEAK HR FACTOR :	0.000	0.754	0.887	0.000	0.912	0.832	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.918
		0.812				0.869											

NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	1	0	2	2	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
11:00 AM	0	99	66	0	67	126	0	0	0	0	0	0	0	0	0	0	358
11:15 AM	0	87	59	0	86	134	0	1	0	0	0	0	0	0	0	0	367
11:30 AM	0	121	66	0	57	170	0	0	0	0	0	0	0	0	0	0	414
11:45 AM	0	135	67	0	80	140	0	0	0	0	0	0	0	0	0	0	422
12:00 PM	0	107	58	0	93	162	0	0	0	0	0	0	0	0	0	0	420
12:15 PM	0	93	70	0	90	149	0	0	0	0	0	0	0	0	0	0	402
12:30 PM	0	103	60	0	100	145	0	0	0	0	0	0	0	0	0	0	408
12:45 PM	0	83	67	0	77	157	0	0	0	0	0	0	0	0	0	0	384
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	828	513	0	650	1183	0	1	0	0	0	0	0	0	0	0	3175
APPROACH %'s :	0.00%	61.74%	38.26%	0.00%	35.44%	64.50%	0.00%	0.05%									
PEAK HR :	11:30 AM - 12:30 PM																TOTAL
PEAK HR VOL :	0	456	261	0	320	621	0	0	0	0	0	0	0	0	0	0	1658
PEAK HR FACTOR :	0.000	0.844	0.932	0.000	0.860	0.913	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.982
		0.887				0.923											

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	1	0	2	2	0	0	0	0	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
2:00 PM	0	83	59	0	74	174	0	0	0	0	0	0	0	0	0	0	390
2:15 PM	0	91	58	0	98	160	0	0	0	0	0	0	0	0	0	0	407
2:30 PM	0	111	99	0	84	200	0	0	0	0	0	0	0	0	0	0	494
2:45 PM	0	148	93	0	71	183	0	0	0	0	0	0	0	0	0	0	495
3:00 PM	0	200	103	1	84	185	0	0	0	0	0	0	0	0	0	0	573
3:15 PM	0	129	83	0	104	187	0	0	0	0	0	0	0	0	0	0	503
3:30 PM	0	146	103	0	109	233	0	0	0	0	0	0	0	0	0	0	591
3:45 PM	0	109	94	0	93	220	0	0	0	0	0	0	0	0	0	0	516
4:00 PM	0	143	69	0	99	216	0	0	0	0	0	0	0	0	0	0	527
4:15 PM	0	111	56	0	107	247	0	1	0	0	0	0	0	0	0	0	522
4:30 PM	0	105	75	0	114	196	0	0	0	0	0	0	0	0	0	0	490
4:45 PM	0	104	79	0	115	240	0	0	0	0	0	0	0	0	0	0	538
5:00 PM	0	130	85	0	137	254	0	0	0	0	0	0	0	0	0	0	606
5:15 PM	0	126	68	0	91	252	0	0	0	0	0	0	0	0	0	0	537
5:30 PM	0	129	62	0	90	253	0	0	0	0	0	0	0	0	0	0	534
5:45 PM	0	93	58	0	104	254	0	0	0	0	0	0	0	0	0	0	509
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	1958	1244	1	1574	3454	0	1	0	0	0	0	0	0	0	0	8232
APPROACH %'s :	0.00%	61.13%	38.84%	0.03%	31.30%	68.68%	0.00%	0.02%									
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	0	489	294	0	433	999	0	0	0	0	0	0	0	0	0	0	2215
PEAK HR FACTOR :	0.000	0.940	0.865	0.000	0.790	0.983	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.914
		0.910				0.916											

National Data & Surveying Services

Intersection Turning Movement Count

Location: SR 75/Bobby Hicks Hwy/Suncrest Dr & Roscoe Fitz Rd
City: Johnson City
Control: 2-Way Stop(EB/WB)

Project ID: 25-190011-004
Date: 3/11/2025

Data - Total

NS/EW Streets:	SR 75/Bobby Hicks Hwy/Suncrest Dr				SR 75/Bobby Hicks Hwy/Suncrest Dr				Roscoe Fitz Rd				Roscoe Fitz Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	0	0	1	1	1	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	1	169	0	0	4	158	6	0	20	0	1	0	0	0	0	0	359
7:15 AM	1	201	0	0	14	226	11	0	15	0	3	0	0	0	1	0	472
7:30 AM	1	257	1	0	9	201	18	0	11	0	3	0	0	0	0	0	501
7:45 AM	6	275	1	0	6	139	37	0	17	0	1	0	0	0	2	0	484
8:00 AM	2	206	0	0	2	110	14	0	13	0	2	0	0	0	1	0	350
8:15 AM	1	155	1	0	2	96	7	0	8	0	2	0	1	0	1	0	274
8:30 AM	0	149	1	0	1	94	5	0	11	0	0	0	0	0	5	0	266
8:45 AM	1	136	3	1	0	114	7	0	4	1	1	0	0	0	3	0	271
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	13	1548	7	1	38	1138	105	0	99	1	13	0	1	0	13	0	2977
APPROACH %'s :	0.83%	98.66%	0.45%	0.06%	2.97%	88.84%	8.20%	0.00%	87.61%	0.88%	11.50%	0.00%	7.14%	0.00%	92.86%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	9	902	2	0	33	724	72	0	63	0	8	0	0	0	3	0	1816
PEAK HR FACTOR :	0.375	0.820	0.500	0.000	0.589	0.801	0.486	0.000	0.788	0.000	0.667	0.000	0.000	0.000	0.375	0.000	0.906
	0.809				0.826				0.845				0.375				

NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	0	0	1	1	1	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
11:00 AM	3	137	0	1	1	111	16	0	27	0	3	0	1	0	0	0	300
11:15 AM	3	139	0	0	3	105	18	0	12	0	3	0	0	0	4	0	287
11:30 AM	1	170	0	0	1	155	17	2	5	0	5	0	0	0	8	0	364
11:45 AM	2	171	2	0	4	122	13	0	15	0	4	0	0	0	8	0	341
12:00 PM	2	140	0	1	5	135	19	0	26	0	3	0	0	0	3	0	334
12:15 PM	4	146	0	0	5	131	14	0	9	0	3	0	1	0	3	0	316
12:30 PM	1	145	2	0	3	134	9	0	15	0	2	0	0	0	2	0	313
12:45 PM	4	144	1	0	3	132	20	0	6	0	4	0	0	0	1	0	315
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	20	1192	5	2	25	1025	126	2	115	0	27	0	2	0	29	0	2570
APPROACH %'s :	1.64%	97.79%	0.41%	0.16%	2.12%	87.01%	10.70%	0.17%	80.99%	0.00%	19.01%	0.00%	6.45%	0.00%	93.55%	0.00%	
PEAK HR :	11:30 AM - 12:30 PM																TOTAL
PEAK HR VOL :	9	627	2	1	15	543	63	2	55	0	15	0	1	0	22	0	1355
PEAK HR FACTOR :	0.563	0.917	0.250	0.250	0.750	0.876	0.829	0.250	0.529	0.000	0.750	0.000	0.250	0.000	0.688	0.000	0.931
	0.913				0.890				0.603				0.719				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	0	0	1	1	1	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
2:00 PM	0	134	0	1	3	155	13	1	6	0	1	0	0	0	3	0	317
2:15 PM	1	133	0	0	2	144	9	0	9	0	2	0	0	0	3	0	303
2:30 PM	2	165	0	0	2	191	8	0	45	0	4	0	0	0	3	0	420
2:45 PM	3	235	1	0	3	171	9	1	13	1	2	0	0	0	2	0	441
3:00 PM	3	277	0	0	3	166	14	0	11	0	2	0	0	0	5	0	481
3:15 PM	2	201	0	0	2	174	12	0	10	0	7	0	3	0	1	0	412
3:30 PM	0	216	0	0	2	211	13	0	29	0	4	0	0	0	2	0	477
3:45 PM	2	178	0	0	4	197	14	1	21	0	1	0	0	0	0	0	418
4:00 PM	0	188	0	0	1	194	16	1	16	0	7	0	0	0	2	0	425
4:15 PM	3	156	0	0	2	229	14	0	5	0	0	0	0	0	3	0	412
4:30 PM	1	164	0	0	0	180	18	1	12	0	4	0	1	0	1	0	382
4:45 PM	6	165	0	0	2	215	20	1	18	0	4	0	0	0	1	0	432
5:00 PM	3	184	0	0	2	236	16	0	18	0	2	0	1	0	12	0	474
5:15 PM	2	173	0	0	1	231	17	0	12	0	1	0	0	0	4	0	441
5:30 PM	1	179	0	0	1	227	22	0	5	0	3	0	0	0	1	0	439
5:45 PM	0	150	0	0	2	233	15	0	8	0	2	0	0	0	1	0	411
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	29	2898	1	1	32	3154	230	6	238	1	46	0	5	0	44	0	6685
APPROACH %'s :	0.99%	98.94%	0.03%	0.03%	0.94%	92.17%	6.72%	0.18%	83.51%	0.35%	16.14%	0.00%	10.20%	0.00%	89.80%	0.00%	
PEAK HR :	02:45 PM - 03:45 PM																TOTAL
PEAK HR VOL :	8	929	1	0	10	722	48	1	63	1	15	0	3	0	10	0	1811
PEAK HR FACTOR :	0.667	0.838	0.250	0.000	0.833	0.855	0.857	0.250	0.543	0.250	0.536	0.000	0.250	0.000	0.500	0.000	0.941
	0.838				0.864				0.598				0.650				

National Data & Surveying Services

Intersection Turning Movement Count

Location: SR 75/Suncrest Dr & Mohler Rd
City: Johnson City
Control: 1-Way Stop(WB)

Project ID: 25-190011-005
Date: 3/11/2025

Data - Total

NS/EW Streets:	SR 75/Suncrest Dr				SR 75/Suncrest Dr				Mohler Rd				Mohler Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	0	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	177	1	0	3	148	0	0	0	0	0	0	0	0	0	0	329
7:15 AM	0	193	4	0	3	216	0	0	0	0	0	0	0	0	1	0	417
7:30 AM	0	263	1	0	2	195	0	0	0	0	0	0	2	0	5	0	468
7:45 AM	0	276	0	0	6	124	0	0	0	0	0	0	0	0	5	0	411
8:00 AM	0	186	1	0	4	99	0	0	0	0	0	0	1	0	3	0	294
8:15 AM	0	152	0	0	3	93	0	0	0	0	0	0	1	0	0	0	249
8:30 AM	0	147	0	0	2	83	0	0	0	0	0	0	0	0	1	0	233
8:45 AM	0	137	1	0	2	106	0	0	0	0	0	0	0	0	3	0	249
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	1531	8	0	25	1064	0	0	0	0	0	0	4	0	18	0	2650
APPROACH %'s :	0.00%	99.48%	0.52%	0.00%	2.30%	97.70%	0.00%	0.00%					18.18%	0.00%	81.82%	0.00%	
PEAK HR :	**07:00 AM - 08:00 AM**																TOTAL
PEAK HR VOL :	0	909	6	0	14	683	0	0	0	0	0	0	2	0	11	0	1625
PEAK HR FACTOR :	0.000	0.823	0.375	0.000	0.583	0.791	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.550	0.000	0.868
		0.829				0.796								0.464			

NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	0	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
11:00 AM	0	108	9	0	17	97	0	0	0	0	0	0	6	0	20	0	257
11:15 AM	0	126	9	0	10	93	0	0	0	0	0	0	6	0	20	0	264
11:30 AM	0	134	10	0	15	132	0	0	0	0	0	0	3	0	23	0	317
11:45 AM	0	137	8	0	7	112	0	0	0	0	0	0	0	0	16	0	280
12:00 PM	0	131	14	0	13	121	0	0	0	0	0	0	1	0	12	0	292
12:15 PM	0	124	9	0	7	113	0	0	0	0	0	0	10	0	16	0	279
12:30 PM	0	119	9	0	9	123	0	0	0	0	0	0	6	0	16	0	282
12:45 PM	0	121	4	0	14	105	0	0	0	0	0	0	4	0	16	0	264
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	1000	72	0	92	896	0	0	0	0	0	0	36	0	139	0	2235
APPROACH %'s :	0.00%	93.28%	6.72%	0.00%	9.31%	90.69%	0.00%	0.00%					20.57%	0.00%	79.43%	0.00%	
PEAK HR :	**11:30 AM - 12:30 PM**																TOTAL
PEAK HR VOL :	0	526	41	0	42	478	0	0	0	0	0	0	14	0	67	0	1168
PEAK HR FACTOR :	0.000	0.960	0.732	0.000	0.700	0.905	0.000	0.000	0.000	0.000	0.000	0.000	0.350	0.000	0.728	0.000	0.921
		0.978				0.884								0.779			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	0	0	0	1	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
2:00 PM	0	111	5	0	11	140	0	0	0	0	0	0	3	0	15	0	285
2:15 PM	0	110	13	0	9	136	0	0	0	0	0	0	6	0	15	0	289
2:30 PM	0	151	12	0	15	170	0	0	0	0	0	0	7	0	13	0	368
2:45 PM	0	221	6	0	3	171	0	0	0	0	0	0	2	0	10	0	413
3:00 PM	0	251	8	0	12	156	0	0	0	0	0	0	4	0	14	0	445
3:15 PM	0	168	4	0	11	157	0	0	0	0	0	0	4	0	18	0	362
3:30 PM	0	212	4	0	13	199	0	0	0	0	0	0	5	0	10	0	443
3:45 PM	0	156	5	0	3	194	0	0	0	0	0	0	0	0	10	0	368
4:00 PM	0	170	12	0	10	183	0	0	0	0	0	0	8	0	19	0	402
4:15 PM	0	143	3	0	11	214	0	0	0	0	0	0	4	0	11	0	386
4:30 PM	0	136	5	0	6	180	0	0	0	0	0	0	6	0	9	0	342
4:45 PM	0	150	5	0	4	217	0	0	0	0	0	0	4	0	12	0	392
5:00 PM	0	179	5	0	2	227	0	0	0	0	0	0	1	0	8	0	422
5:15 PM	0	164	2	0	4	228	0	0	0	0	0	0	5	0	3	0	406
5:30 PM	0	156	2	0	1	228	0	0	0	0	0	0	1	0	12	0	400
5:45 PM	0	144	0	0	1	218	0	0	0	0	0	0	0	0	2	0	365
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	2622	91	0	116	3018	0	0	0	0	0	0	60	0	181	0	6088
APPROACH %'s :	0.00%	96.65%	3.35%	0.00%	3.70%	96.30%	0.00%	0.00%					24.90%	0.00%	75.10%	0.00%	
PEAK HR :	**02:45 PM - 03:45 PM**																TOTAL
PEAK HR VOL :	0	852	22	0	39	683	0	0	0	0	0	0	15	0	52	0	1663
PEAK HR FACTOR :	0.000	0.849	0.688	0.000	0.750	0.858	0.000	0.000	0.000	0.000	0.000	0.000	0.750	0.000	0.722	0.000	0.934
		0.844				0.851								0.761			

National Data & Surveying Services

Intersection Turning Movement Count

Location: SR 75/Suncrest Dr & Bob Fitz Rd/Mosley Rd
City: Johnson City
Control: 1-Way Stop(EB)

Project ID: 25-190011-006
Date: 3/11/2025

Data - Total

NS/EW Streets:	SR 75/Suncrest Dr				SR 75/Suncrest Dr				Bob Fitz Rd/Mosley Rd				Bob Fitz Rd/Mosley Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0 NL	1 NT	0 NR	0 NU	0 SL	1 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	TOTAL
7:00 AM	1	170	0	0	0	146	3	0	6	0	3	0	0	0	0	0	329
7:15 AM	1	193	0	0	1	213	2	0	8	0	2	0	0	0	0	0	420
7:30 AM	2	254	0	0	0	193	4	0	6	0	3	0	0	0	0	0	462
7:45 AM	5	270	0	0	0	114	9	0	13	0	0	0	0	0	0	0	411
8:00 AM	0	171	0	0	0	94	6	0	9	0	2	0	0	0	0	0	282
8:15 AM	2	145	0	0	0	85	10	0	8	0	3	0	0	0	0	0	253
8:30 AM	2	141	0	0	0	81	2	0	5	0	0	0	0	0	0	0	231
8:45 AM	0	130	0	0	0	98	6	0	8	0	2	0	0	0	0	0	244
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	13	1474	0	0	1	1024	42	0	63	0	15	0	0	0	0	0	2632
APPROACH %'s :	0.87%	99.13%	0.00%	0.00%	0.09%	95.97%	3.94%	0.00%	80.77%	0.00%	19.23%	0.00%					
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	9	887	0	0	1	666	18	0	33	0	8	0	0	0	0	0	1622
PEAK HR FACTOR :	0.450	0.821	0.000	0.000	0.250	0.782	0.500	0.000	0.635	0.000	0.667	0.000	0.000	0.000	0.000	0.000	0.878
		0.815				0.793				0.788							

NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0 NL	1 NT	0 NR	0 NU	0 SL	1 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	TOTAL
11:00 AM	4	112	0	0	0	98	6	0	6	0	2	0	0	0	0	0	228
11:15 AM	1	128	0	0	0	99	0	0	8	0	4	0	0	0	0	0	240
11:30 AM	1	134	0	0	1	123	11	0	8	0	0	0	0	0	1	0	279
11:45 AM	1	132	0	0	0	107	5	0	11	0	0	0	0	0	1	0	257
12:00 PM	0	138	1	0	0	119	2	0	9	0	1	0	0	0	0	0	270
12:15 PM	2	126	0	0	0	119	5	0	5	0	2	0	0	0	1	0	260
12:30 PM	1	121	0	0	1	121	5	0	6	0	1	0	0	0	0	0	256
12:45 PM	2	116	0	0	0	106	5	0	8	0	4	0	0	0	1	0	242
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	12	1007	1	0	2	892	39	0	61	0	14	0	0	0	4	0	2032
APPROACH %'s :	1.18%	98.73%	0.10%	0.00%	0.21%	95.61%	4.18%	0.00%	81.33%	0.00%	18.67%	0.00%	0.00%	0.00%	100.00%	0.00%	
PEAK HR :	11:30 AM - 12:30 PM																TOTAL
PEAK HR VOL :	4	530	1	0	1	468	23	0	33	0	3	0	0	0	3	0	1066
PEAK HR FACTOR :	0.500	0.960	0.250	0.000	0.250	0.951	0.523	0.000	0.750	0.000	0.375	0.000	0.000	0.000	0.750	0.000	0.955
		0.962				0.911				0.818				0.750			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0 NL	1 NT	0 NR	0 NU	0 SL	1 ST	0 SR	0 SU	0 EL	1 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	TOTAL
2:00 PM	3	110	0	0	1	134	9	0	3	0	1	0	0	0	2	0	263
2:15 PM	1	116	0	0	1	135	5	0	6	0	2	0	0	0	1	0	267
2:30 PM	3	122	0	0	0	173	5	0	42	0	4	0	0	0	0	0	349
2:45 PM	2	220	0	0	1	159	11	0	9	0	2	0	0	0	0	0	404
3:00 PM	3	250	0	0	0	156	5	0	7	0	0	0	0	0	0	0	421
3:15 PM	3	163	0	0	0	152	10	0	8	0	0	0	0	0	0	0	336
3:30 PM	1	166	0	0	0	198	5	0	55	0	3	0	0	0	0	0	428
3:45 PM	1	144	0	0	0	191	2	0	14	0	5	0	0	0	0	0	357
4:00 PM	1	171	0	0	0	184	8	0	9	0	3	0	0	0	0	0	376
4:15 PM	2	143	0	0	0	211	7	0	4	0	2	0	0	0	0	0	369
4:30 PM	1	127	0	0	1	181	3	0	13	0	3	0	0	0	0	0	329
4:45 PM	0	150	0	0	0	219	4	0	8	0	1	0	0	0	0	0	382
5:00 PM	0	162	0	0	0	215	13	0	19	0	5	0	0	0	0	0	414
5:15 PM	1	158	0	0	0	229	4	0	9	0	1	0	0	0	0	0	402
5:30 PM	0	154	0	0	0	225	4	0	3	0	5	0	0	0	0	0	391
5:45 PM	1	139	1	0	0	214	4	0	5	0	0	0	0	0	1	0	365
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	23	2495	1	0	4	2976	99	0	214	0	37	0	0	0	4	0	5853
APPROACH %'s :	0.91%	99.05%	0.04%	0.00%	0.13%	96.65%	3.22%	0.00%	85.26%	0.00%	14.74%	0.00%	0.00%	0.00%	100.00%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	1	624	0	0	0	888	25	0	39	0	12	0	0	0	0	0	1589
PEAK HR FACTOR :	0.250	0.963	0.000	0.000	0.000	0.969	0.481	0.000	0.513	0.000	0.600	0.000	0.000	0.000	0.000	0.000	0.960
		0.965				0.980				0.531							

National Data & Surveying Services

Intersection Turning Movement Count

Location: SR 75/Suncrest Dr & Shadden Rd
City: Johnson City
Control: 2-Way Stop(EB/WB)

Project ID: 25-190011-007
Date: 3/11/2025

Data - Total

NS/EW Streets: SR 75/Suncrest Dr | SR 75/Suncrest Dr | Shadden Rd | Shadden Rd

AM

	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	4	139	7	0	13	112	1	0	3	7	12	0	3	1	22	0	324
7:15 AM	6	158	13	0	14	170	0	0	3	2	16	0	2	1	25	0	410
7:30 AM	13	217	7	0	20	154	3	0	8	1	18	0	7	1	31	0	480
7:45 AM	6	203	14	0	15	75	7	0	7	1	12	0	6	1	29	0	376
8:00 AM	3	141	0	0	12	64	3	0	3	1	3	0	1	1	20	0	252
8:15 AM	2	105	2	0	11	52	4	0	2	1	2	0	2	3	25	0	211
8:30 AM	6	108	3	0	14	48	2	0	2	0	2	0	1	1	21	0	208
8:45 AM	1	97	1	0	16	71	0	0	2	0	4	0	1	1	17	0	211
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	41	1168	47	0	115	746	20	0	30	13	69	0	23	10	190	0	2472
APPROACH %'s :	3.26%	92.99%	3.74%	0.00%	13.05%	84.68%	2.27%	0.00%	26.79%	11.61%	61.61%	0.00%	10.31%	4.48%	85.20%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	29	717	41	0	62	511	11	0	21	11	58	0	18	4	107	0	1590
PEAK HR FACTOR :	0.558	0.826	0.732	0.000	0.775	0.751	0.393	0.000	0.656	0.393	0.806	0.000	0.643	1.000	0.863	0.000	0.828
	0.830				0.793				0.833				0.827				

NOON

	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
11:00 AM	2	79	1	0	14	72	1	0	3	0	1	0	1	0	18	0	192
11:15 AM	2	84	4	0	17	77	3	0	4	0	1	0	1	1	17	0	211
11:30 AM	5	100	1	0	12	88	4	0	1	1	4	0	2	2	12	0	232
11:45 AM	1	95	3	0	11	84	2	0	5	3	3	0	3	0	14	0	224
12:00 PM	2	96	3	0	17	86	2	0	2	1	3	0	0	1	25	0	238
12:15 PM	2	97	3	0	14	90	2	0	1	0	2	0	0	2	8	0	221
12:30 PM	3	92	0	0	14	99	4	0	1	2	6	0	2	2	16	0	241
12:45 PM	0	97	1	0	15	79	2	0	0	1	3	0	1	1	17	0	217
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	17	740	16	0	114	675	20	0	17	8	23	0	10	9	127	0	1776
APPROACH %'s :	2.20%	95.73%	2.07%	0.00%	14.09%	83.44%	2.47%	0.00%	35.42%	16.67%	47.92%	0.00%	6.85%	6.16%	86.99%	0.00%	
PEAK HR :	11:45 AM - 12:45 PM																TOTAL
PEAK HR VOL :	8	380	9	0	56	359	10	0	9	6	14	0	5	5	63	0	924
PEAK HR FACTOR :	0.667	0.979	0.750	0.000	0.824	0.907	0.625	0.000	0.450	0.500	0.583	0.000	0.417	0.625	0.630	0.000	0.959
	0.973				0.908				0.659				0.702				

PM

	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	1	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
2:00 PM	4	85	0	0	15	120	0	0	3	3	3	0	2	0	10	0	245
2:15 PM	1	82	3	0	5	118	2	0	1	3	4	0	3	4	16	0	242
2:30 PM	1	85	5	0	30	139	4	0	1	3	12	0	4	4	21	0	309
2:45 PM	16	210	27	0	18	131	3	0	2	4	12	0	1	0	12	0	436
3:00 PM	17	208	7	0	19	128	5	0	9	2	6	0	1	1	24	0	427
3:15 PM	13	146	10	0	16	127	0	0	4	0	9	0	5	5	10	0	345
3:30 PM	3	118	1	0	25	153	3	0	2	6	10	0	1	2	15	0	339
3:45 PM	2	117	3	0	19	172	0	0	3	2	10	0	1	0	16	0	345
4:00 PM	3	137	4	0	24	152	0	0	3	2	4	0	3	2	15	0	349
4:15 PM	6	108	3	0	18	184	3	0	4	4	6	0	3	2	22	0	363
4:30 PM	4	88	2	0	28	151	3	0	4	1	6	0	2	3	19	0	311
4:45 PM	10	122	4	0	29	180	2	0	1	5	7	0	3	3	16	0	382
5:00 PM	5	122	4	0	26	187	5	0	4	0	4	0	7	3	20	0	387
5:15 PM	10	113	3	0	27	193	8	0	1	1	7	0	4	3	26	0	396
5:30 PM	13	112	7	0	33	188	7	0	2	2	4	0	3	4	26	0	401
5:45 PM	4	111	6	0	23	189	2	0	3	0	4	0	4	4	22	0	372
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	112	1964	89	0	355	2512	47	0	47	38	108	0	47	40	290	0	5649
APPROACH %'s :	5.17%	90.72%	4.11%	0.00%	12.18%	86.20%	1.61%	0.00%	24.35%	19.69%	55.96%	0.00%	12.47%	10.61%	76.92%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	38	469	18	0	115	748	22	0	8	8	22	0	17	13	88	0	1566
PEAK HR FACTOR :	0.731	0.961	0.643	0.000	0.871	0.969	0.688	0.000	0.500	0.400	0.786	0.000	0.607	0.813	0.846	0.000	0.976
	0.965				0.970				0.731				0.894				

National Data & Surveying Services

Intersection Turning Movement Count

Location: SR 75/Suncrest Dr & Sam Jenkins Rd/Gray Fossil Site Pkg Dwy
City: Johnson City
Control: 1-Way Stop(EB)

Project ID: 25-190011-008
Date: 3/11/2025

Data - Total

NS/EW Streets:	SR 75/Suncrest Dr				SR 75/Suncrest Dr				Sam Jenkins Rd/Gray Fossil Site Pkg Dwy				Sam Jenkins Rd/Gray Fossil Site Pkg Dwy				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	1	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	12	125	0	0	0	99	19	0	27	0	8	0	0	0	0	0	290
7:15 AM	29	148	0	0	1	163	31	0	35	0	13	0	0	0	1	0	421
7:30 AM	37	200	0	0	0	123	53	0	39	0	7	0	0	0	0	0	459
7:45 AM	26	150	1	0	0	59	45	0	60	0	7	0	0	0	1	0	349
8:00 AM	2	103	0	0	0	55	14	0	35	0	5	0	0	0	0	0	214
8:15 AM	3	79	0	0	0	42	11	0	26	0	2	0	0	0	0	0	163
8:30 AM	1	81	0	0	2	42	6	0	32	0	0	0	0	0	1	0	165
8:45 AM	0	73	0	0	6	51	14	0	20	0	1	0	0	0	0	0	165
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	110	959	1	0	9	634	193	0	274	0	43	0	0	0	3	0	2226
APPROACH %'s :	10.28%	89.63%	0.09%	0.00%	1.08%	75.84%	23.09%	0.00%	86.44%	0.00%	13.56%	0.00%	0.00%	0.00%	100.00%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	104	623	1	0	1	444	148	0	161	0	35	0	0	0	2	0	1519
PEAK HR FACTOR :	0.703	0.779	0.250	0.000	0.250	0.681	0.698	0.000	0.671	0.000	0.673	0.000	0.000	0.000	0.500	0.000	0.827
	0.768				0.760				0.731				0.500				

NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	1	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
11:00 AM	0	61	0	0	4	49	12	0	17	0	1	0	1	0	1	0	146
11:15 AM	4	61	1	0	0	61	17	0	17	0	3	0	1	0	0	0	165
11:30 AM	3	77	0	0	2	64	19	0	27	0	1	0	0	0	3	0	196
11:45 AM	0	67	0	0	4	64	15	0	19	0	1	0	0	0	4	0	174
12:00 PM	1	68	1	0	4	63	19	0	26	0	0	0	0	0	5	0	187
12:15 PM	1	66	0	0	1	71	14	0	21	0	0	0	0	0	2	0	176
12:30 PM	1	66	0	0	2	74	19	0	22	0	3	0	1	0	6	0	194
12:45 PM	0	73	0	0	3	60	17	0	21	0	0	0	0	0	4	0	178
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	10	539	2	0	20	506	132	0	170	0	9	0	3	0	25	0	1416
APPROACH %'s :	1.81%	97.82%	0.36%	0.00%	3.04%	76.90%	20.06%	0.00%	94.97%	0.00%	5.03%	0.00%	10.71%	0.00%	89.29%	0.00%	
PEAK HR :	12:00 PM - 01:00 PM																TOTAL
PEAK HR VOL :	3	273	1	0	10	268	69	0	90	0	3	0	1	0	17	0	735
PEAK HR FACTOR :	0.750	0.935	0.250	0.000	0.625	0.905	0.908	0.000	0.865	0.000	0.250	0.000	0.250	0.000	0.708	0.000	0.947
	0.949				0.913				0.894				0.643				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	1	1	0	0	0	1	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
2:00 PM	4	68	0	0	4	82	32	0	16	0	0	0	0	0	2	0	208
2:15 PM	10	65	0	0	5	84	26	0	14	0	4	0	2	0	4	0	214
2:30 PM	7	62	0	0	3	117	35	0	23	0	6	0	0	0	1	0	254
2:45 PM	24	239	1	0	0	99	42	0	18	0	4	0	0	0	2	0	429
3:00 PM	22	166	0	0	1	99	28	0	54	0	8	0	0	0	2	0	380
3:15 PM	5	116	0	0	0	105	33	0	52	0	26	0	0	0	2	0	339
3:30 PM	6	82	1	0	0	130	33	0	31	0	7	0	0	0	3	0	293
3:45 PM	5	91	0	0	1	121	42	1	22	0	5	0	0	0	0	0	288
4:00 PM	10	115	0	0	1	117	39	0	23	1	3	0	0	1	6	0	316
4:15 PM	7	87	0	0	0	137	48	0	16	0	5	0	0	1	5	0	306
4:30 PM	9	74	0	0	1	106	55	0	20	0	0	0	0	0	1	0	266
4:45 PM	6	92	1	0	2	149	36	0	38	0	19	0	0	0	4	0	347
5:00 PM	3	107	0	0	2	143	47	0	16	0	5	0	1	0	5	0	329
5:15 PM	13	105	0	0	0	147	54	0	24	0	4	0	0	0	0	0	347
5:30 PM	3	83	0	0	0	144	42	0	37	0	10	0	0	0	0	0	319
5:45 PM	9	87	1	0	1	156	40	0	24	0	12	0	0	0	2	0	332
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	143	1639	4	0	21	1936	632	1	428	1	118	0	3	2	39	0	4967
APPROACH %'s :	8.01%	91.77%	0.22%	0.00%	0.81%	74.75%	24.40%	0.04%	78.24%	0.18%	21.57%	0.00%	6.82%	4.55%	88.64%	0.00%	
PEAK HR :	02:45 PM - 03:45 PM																TOTAL
PEAK HR VOL :	57	603	2	0	1	433	136	0	155	0	45	0	0	0	9	0	1441
PEAK HR FACTOR :	0.594	0.631	0.500	0.000	0.250	0.833	0.810	0.000	0.718	0.000	0.433	0.000	0.000	0.000	0.750	0.000	0.840
	0.627				0.874				0.641				0.750				

National Data & Surveying Services

Intersection Turning Movement Count

Location: SR 75/Suncrest Dr & Daniel Boone High School North Dwy
City: Johnson City
Control: 1-Way Stop(WB)

Project ID: 25-190011-009
Date: 3/11/2025

Data - Total

NS/EW Streets:	SR 75/Suncrest Dr				SR 75/Suncrest Dr				Daniel Boone High School North Dwy				Daniel Boone High School North Dwy				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	0	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	91	7	0	60	32	0	0	0	0	0	0	0	0	42	0	232
7:15 AM	0	107	0	0	112	51	0	0	0	0	0	0	0	0	79	0	349
7:30 AM	0	148	1	0	94	59	0	0	0	0	0	0	0	0	94	0	396
7:45 AM	0	137	2	0	15	50	0	0	0	0	0	0	1	0	25	0	230
8:00 AM	0	90	1	0	7	50	0	0	0	0	0	0	0	0	8	0	156
8:15 AM	0	83	3	0	4	38	0	0	0	0	0	0	0	0	2	0	130
8:30 AM	0	74	2	0	5	36	0	0	0	0	0	0	1	0	4	0	122
8:45 AM	0	69	5	0	16	32	0	0	0	0	0	0	2	0	3	0	127
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	799	21	0	313	348	0	0	0	0	0	0	4	0	257	0	1742
APPROACH %'s :	0.00%	97.44%	2.56%	0.00%	47.35%	52.65%	0.00%	0.00%					1.53%	0.00%	98.47%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	0	483	10	0	281	192	0	0	0	0	0	0	1	0	240	0	1207
PEAK HR FACTOR :	0.000	0.816	0.357	0.000	0.627	0.814	0.000	0.000	0.000	0.000	0.000	0.000	0.250	0.000	0.638	0.000	0.762
		0.827				0.725								0.641			

NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	0	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
11:00 AM	0	55	0	0	9	39	0	0	0	0	0	0	2	0	4	0	109
11:15 AM	0	49	1	0	4	57	0	0	0	0	0	0	2	0	11	0	124
11:30 AM	0	64	0	0	3	61	0	0	0	0	0	0	1	0	11	0	140
11:45 AM	0	56	0	0	2	63	0	0	0	0	0	0	1	0	5	0	127
12:00 PM	0	65	0	0	7	53	0	0	0	0	0	0	0	0	6	0	131
12:15 PM	0	59	0	0	4	63	0	0	0	0	0	0	2	0	4	0	132
12:30 PM	0	65	1	0	6	70	0	0	0	0	0	0	0	0	2	0	144
12:45 PM	0	61	0	0	3	57	0	0	0	0	0	0	1	0	5	0	127
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	474	2	0	38	463	0	0	0	0	0	0	9	0	48	0	1034
APPROACH %'s :	0.00%	99.58%	0.42%	0.00%	7.58%	92.42%	0.00%	0.00%					15.79%	0.00%	84.21%	0.00%	
PEAK HR :	12:00 PM - 01:00 PM																TOTAL
PEAK HR VOL :	0	250	1	0	20	243	0	0	0	0	0	0	3	0	17	0	534
PEAK HR FACTOR :	0.000	0.962	0.250	0.000	0.714	0.868	0.000	0.000	0.000	0.000	0.000	0.000	0.375	0.000	0.708	0.000	0.927
		0.951				0.865								0.833			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	0	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
2:00 PM	0	70	2	0	12	70	0	0	0	0	0	0	5	0	3	0	162
2:15 PM	0	63	3	0	20	50	0	0	0	0	0	0	4	0	7	0	147
2:30 PM	0	59	8	0	31	78	0	0	0	0	0	0	1	0	11	0	188
2:45 PM	0	70	1	0	14	82	0	0	0	0	0	0	1	0	167	0	335
3:00 PM	0	104	3	0	15	87	0	0	0	0	0	0	5	0	76	0	290
3:15 PM	0	90	5	0	19	100	0	0	0	0	0	0	3	0	19	0	236
3:30 PM	0	73	6	0	27	105	0	0	0	0	0	0	3	0	17	0	231
3:45 PM	0	74	12	0	21	102	0	0	0	0	0	0	7	0	23	0	239
4:00 PM	0	81	5	0	26	92	0	0	0	0	0	0	8	0	38	0	250
4:15 PM	0	78	3	0	12	127	0	0	0	0	0	0	7	0	12	0	239
4:30 PM	0	61	6	0	15	89	0	0	0	0	0	0	2	0	16	0	189
4:45 PM	0	87	6	0	28	124	0	0	0	0	0	0	5	0	14	0	264
5:00 PM	0	100	3	0	14	130	0	0	0	0	0	0	5	0	11	0	263
5:15 PM	0	96	3	0	11	124	0	0	0	0	0	0	1	0	19	0	254
5:30 PM	0	74	4	0	17	126	0	0	0	0	0	0	5	0	20	0	246
5:45 PM	0	76	5	0	31	125	0	0	0	0	0	0	2	0	12	0	251
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	1256	75	0	313	1611	0	0	0	0	0	0	64	0	465	0	3784
APPROACH %'s :	0.00%	94.37%	5.63%	0.00%	16.27%	83.73%	0.00%	0.00%					12.10%	0.00%	87.90%	0.00%	
PEAK HR :	02:45 PM - 03:45 PM																TOTAL
PEAK HR VOL :	0	337	15	0	75	374	0	0	0	0	0	0	12	0	279	0	1092
PEAK HR FACTOR :	0.000	0.810	0.625	0.000	0.694	0.890	0.000	0.000	0.000	0.000	0.000	0.000	0.600	0.000	0.418	0.000	0.815
		0.822				0.850								0.433			

National Data & Surveying Services

Intersection Turning Movement Count

Location: SR 75/Suncrest Dr & Daniel Boone High School South Dwy
City: Johnson City
Control: 1-Way Stop(WB)

Project ID: 25-190011-010
Date: 3/11/2025

Data - Total

NS/EW Streets:	SR 75/Suncrest Dr				SR 75/Suncrest Dr				Daniel Boone High School South Dwy				Daniel Boone High School South Dwy				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	1	1	0	0	0	0	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	0	103	44	0	8	24	0	0	0	0	0	0	8	0	1	0	188
7:15 AM	0	101	87	0	27	24	0	0	0	0	0	0	8	0	5	0	252
7:30 AM	0	141	113	0	16	40	0	0	0	0	0	0	21	0	4	0	335
7:45 AM	0	138	5	0	0	54	0	0	0	0	0	0	6	0	0	0	203
8:00 AM	0	92	0	0	0	47	0	0	0	0	0	0	0	0	0	0	139
8:15 AM	0	87	0	0	0	40	0	0	0	0	0	0	0	0	0	0	127
8:30 AM	0	78	0	0	0	35	0	0	0	0	0	0	0	0	0	0	113
8:45 AM	0	72	0	0	0	36	0	0	0	0	0	0	0	0	0	0	108
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	812	249	0	51	300	0	0	0	0	0	0	43	0	10	0	1465
APPROACH %'s :	0.00%	76.53%	23.47%	0.00%	14.53%	85.47%	0.00%	0.00%					81.13%	0.00%	18.87%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	0	483	249	0	51	142	0	0	0	0	0	0	43	0	10	0	978
PEAK HR FACTOR :	0.000	0.856	0.551	0.000	0.472	0.657	0.000	0.000	0.000	0.000	0.000	0.000	0.512	0.000	0.500	0.000	0.730
		0.720				0.862								0.530			

NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	1	1	0	0	0	0	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
11:00 AM	0	54	2	0	0	41	0	0	0	0	0	0	0	0	0	0	97
11:15 AM	0	50	1	0	0	57	0	0	0	0	0	0	2	0	0	0	110
11:30 AM	0	64	1	0	1	61	0	0	0	0	0	0	0	0	0	0	127
11:45 AM	0	58	0	0	0	62	0	0	0	0	0	0	1	0	1	0	122
12:00 PM	0	62	0	0	0	51	0	0	0	0	0	0	0	0	0	0	113
12:15 PM	0	58	1	0	0	68	0	0	0	0	0	0	0	0	0	0	127
12:30 PM	0	66	0	0	0	69	0	0	0	0	0	0	1	0	0	0	136
12:45 PM	0	62	2	0	0	55	0	0	0	0	0	0	0	0	0	0	119
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	474	7	0	1	464	0	0	0	0	0	0	4	0	1	0	951
APPROACH %'s :	0.00%	98.54%	1.46%	0.00%	0.22%	99.78%	0.00%	0.00%					80.00%	0.00%	20.00%	0.00%	
PEAK HR :	11:45 AM - 12:45 PM																TOTAL
PEAK HR VOL :	0	244	1	0	0	250	0	0	0	0	0	0	2	0	1	0	498
PEAK HR FACTOR :	0.000	0.924	0.250	0.000	0.000	0.906	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.250	0.000	0.915
		0.928				0.906								0.375			

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	1	1	0	0	0	0	0	0	0	1	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
2:00 PM	0	70	1	0	4	71	0	0	0	0	0	0	1	0	2	0	149
2:15 PM	0	68	6	0	2	52	0	0	0	0	0	0	0	0	0	0	128
2:30 PM	0	65	15	0	3	73	0	0	0	0	0	0	3	0	0	0	159
2:45 PM	0	69	1	0	3	82	0	0	0	0	0	0	86	0	12	0	253
3:00 PM	0	83	7	0	1	92	0	0	0	0	0	0	21	0	14	0	218
3:15 PM	0	97	3	0	3	100	0	0	0	0	0	0	7	0	0	0	210
3:30 PM	0	75	3	0	3	104	0	0	0	0	0	0	4	0	2	0	191
3:45 PM	0	86	9	0	3	105	0	0	0	0	0	0	2	0	0	0	205
4:00 PM	0	86	2	0	0	102	0	0	0	0	0	0	10	0	2	0	202
4:15 PM	0	80	2	0	1	132	0	0	0	0	0	0	2	0	0	0	217
4:30 PM	0	66	1	0	1	91	0	0	0	0	0	0	1	0	0	0	160
4:45 PM	0	90	1	0	0	125	0	0	0	0	0	0	0	0	1	0	217
5:00 PM	0	104	1	0	4	132	0	0	0	0	0	0	0	0	0	0	241
5:15 PM	0	98	1	0	0	127	0	0	0	0	0	0	3	0	2	0	231
5:30 PM	0	77	3	0	1	131	0	0	0	0	0	0	4	0	0	0	216
5:45 PM	0	81	0	0	0	123	0	0	0	0	0	0	2	0	1	0	207
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	0	1295	56	0	29	1642	0	0	0	0	0	0	146	0	36	0	3204
APPROACH %'s :	0.00%	95.85%	4.15%	0.00%	1.74%	98.26%	0.00%	0.00%					80.22%	0.00%	19.78%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	0	369	6	0	5	515	0	0	0	0	0	0	7	0	3	0	905
PEAK HR FACTOR :	0.000	0.887	0.500	0.000	0.313	0.975	0.000	0.000	0.000	0.000	0.000	0.000	0.438	0.000	0.375	0.000	0.939
		0.893				0.956								0.500			

National Data & Surveying Services

Intersection Turning Movement Count

Location: SR 75/Suncrest Dr/Hillandale Ln & Boonesboro Rd
City: Johnson City
Control: 1-Way Stop(WB)

Project ID: 25-190011-011
Date: 3/11/2025

Data - Total

NS/EW Streets:	SR 75/Suncrest Dr/Hillandale Ln					SR 75/Suncrest Dr/Hillandale Ln					Boonesboro Rd				Boonesboro Rd							
AM	NORTHBOUND					SOUTHBOUND					EASTBOUND				WESTBOUND					NORTHBOUND2			
	0 NL	1 NT	0 NR	0 NU	0 NU2	1 SL	1 ST	0 SR	0 SU	0 ST2	0 EL	0 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	0 WL2	N2T2	N2R2	N2U2	TOTAL
7:00 AM	0	107	7	0	1	5	28	0	0	0	0	0	0	0	1	0	36	0	0	4	3	2	194
7:15 AM	0	120	8	0	0	1	30	0	0	0	0	0	0	0	2	0	58	0	0	10	0	0	229
7:30 AM	0	174	14	0	1	17	44	0	0	1	0	0	0	0	7	0	61	0	0	19	0	1	339
7:45 AM	0	98	19	0	2	11	45	0	0	3	0	0	0	0	3	0	39	0	1	7	0	1	229
8:00 AM	0	71	4	0	2	14	32	0	0	2	0	0	0	0	3	0	15	0	0	6	0	0	149
8:15 AM	0	56	3	0	0	5	29	0	0	6	0	0	0	0	4	0	24	0	1	4	1	2	135
8:30 AM	0	52	2	0	0	5	27	0	0	3	0	0	0	0	2	0	19	0	0	8	2	0	120
8:45 AM	0	50	3	0	0	5	28	0	0	1	0	0	0	0	3	0	16	0	0	5	0	1	112
	NL	NT	NR	NU	NU2	SL	ST	SR	SU	ST2	EL	ET	ER	EU	WL	WT	WR	WU	WL2	N2T2	N2R2	N2U2	TOTAL
TOTAL VOLUMES :	0	728	60	0	6	63	263	0	0	16	0	0	0	0	25	0	268	0	2	63	6	7	1507
APPROACH %'s :	0.00%	91.69%	7.56%	0.00%	0.76%	18.42%	76.90%	0.00%	0.00%	4.68%					8.47%	0.00%	90.85%	0.00%	0.68%	82.89%	7.89%	9.21%	
PEAK HR :	07:00 AM - 08:00 AM																						TOTAL
PEAK HR VOL :	0	499	48	0	4	34	147	0	0	4	0	0	0	0	13	0	194	0	1	40	3	4	991
PEAK HR FACTOR :	0.000	0.717	0.632	0.000	0.500	0.500	0.817	0.000	0.000	0.333	0.000	0.000	0.000	0.000	0.464	0.000	0.795	0.000	0.250	0.526	0.250	0.500	0.731
			0.729					0.746									0.765						

NOON	NORTHBOUND					SOUTHBOUND					EASTBOUND				WESTBOUND								
	0 NL	1 NT	0 NR	0 NU	0 NU2	1 SL	1 ST	0 SR	0 SU	0 ST2	0 EL	0 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	0 WL2	0 N2T2	0 N2R2	0 N2U2	TOTAL
11:00 AM	0	38	2	0	1	10	28	0	0	1	0	0	0	0	1	0	14	0	0	3	0	0	98
11:15 AM	0	36	2	0	1	13	45	0	0	4	0	0	0	0	6	0	13	0	0	3	0	0	123
11:30 AM	0	47	0	0	2	13	44	0	0	3	0	0	0	0	4	0	15	0	0	5	0	0	133
11:45 AM	0	39	2	0	0	17	43	0	0	3	0	0	0	0	3	0	9	0	0	7	0	0	123
12:00 PM	0	44	2	0	0	11	34	0	0	6	0	0	0	0	1	0	16	0	0	2	0	0	116
12:15 PM	0	36	3	0	0	16	48	0	0	3	0	0	0	0	3	0	18	0	2	5	0	0	134
12:30 PM	0	47	1	0	0	12	54	0	0	6	0	0	0	0	0	0	18	0	0	2	0	0	140
12:45 PM	0	45	2	0	1	7	40	0	0	4	0	0	0	0	5	0	14	0	3	4	1	0	126
	NL	NT	NR	NU	NU2	SL	ST	SR	SU	ST2	EL	ET	ER	EU	WL	WT	WR	WU	WL2	N2T2	N2R2	N2U2	TOTAL
TOTAL VOLUMES :	0	332	14	0	5	99	336	0	0	30	0	0	0	0	23	0	117	0	5	31	1	0	993
APPROACH %'s :	0.00%	94.59%	3.99%	0.00%	1.42%	21.29%	72.26%	0.00%	0.00%	6.45%					15.86%	0.00%	80.69%	0.00%	3.45%	96.88%	3.13%	0.00%	
PEAK HR :	12:00 PM - 01:00 PM																						TOTAL
PEAK HR VOL :	0	172	8	0	1	46	176	0	0	19	0	0	0	0	9	0	66	0	5	13	1	0	516
PEAK HR FACTOR :	0.000	0.915	0.667	0.000	0.250	0.719	0.815	0.000	0.000	0.792	0.000	0.000	0.000	0.000	0.450	0.000	0.917	0.000	0.417	0.650	0.250	0.000	0.921
			0.943					0.837									0.870						

PM	NORTHBOUND					SOUTHBOUND					EASTBOUND				WESTBOUND								
	0 NL	1 NT	0 NR	0 NU	0 NU2	1 SL	1 ST	0 SR	0 SU	0 ST2	0 EL	0 ET	0 ER	0 EU	0 WL	1 WT	0 WR	0 WU	0 WL2	0 N2T2	0 N2R2	0 N2U2	TOTAL
2:00 PM	0	54	2	0	1	9	55	0	0	7	0	0	0	0	3	0	14	0	0	3	1	0	149
2:15 PM	0	53	2	0	0	12	32	0	0	6	0	0	0	0	5	0	19	0	0	2	1	0	132
2:30 PM	0	51	2	0	1	17	59	0	0	3	0	0	0	0	3	0	27	0	0	4	0	1	168
2:45 PM	0	48	8	0	1	41	114	0	0	8	0	0	0	0	1	0	14	0	0	6	0	0	241
3:00 PM	0	67	10	0	1	28	82	0	0	6	0	0	0	0	5	0	21	0	0	5	2	0	227
3:15 PM	0	75	11	0	1	39	57	0	0	13	0	0	0	0	9	0	16	0	0	6	2	0	229
3:30 PM	0	56	2	0	0	19	82	0	0	7	0	0	0	0	5	0	17	0	0	7	2	0	197
3:45 PM	0	71	7	0	1	22	77	0	0	6	0	0	0	0	7	0	16	0	0	7	0	0	214
4:00 PM	0	59	5	0	1	23	86	0	0	5	0	0	0	0	3	0	21	0	0	5	1	0	209
4:15 PM	0	53	0	0	1	28	97	0	0	9	0	0	0	0	5	0	25	0	1	4	0	0	223
4:30 PM	0	41	6	0	0	19	65	0	0	6	0	0	0	0	4	0	23	0	1	6	0	0	171
4:45 PM	0	63	5	0	1	40	78	0	0	9	0	0	0	0	2	0	24	0	2	1	1	0	226
5:00 PM	0	76	5	0	2	26	97	0	0	8	0	0	0	0	11	0	26	0	0	3	0	0	254
5:15 PM	0	66	6	0	1	29	90	0	0	7	0	0	0	0	3	0	28	0	1	9	0	0	240
5:30 PM	0	51	3	0	2	26	107	0	0	6	0	0	0	0	10	0	20	0	1	5	1	0	232
5:45 PM	0	59	6	0	0	30	84	0	0	7	0	0	0	0	6	0	18	0	0	4	0	0	214
	NL	NT	NR	NU	NU2	SL	ST	SR	SU	ST2	EL	ET	ER	EU	WL	WT	WR	WU	WL2	N2T2	N2R2	N2U2	TOTAL
TOTAL VOLUMES :	0	943	80	0	14	408	1262	0	0	113	0	0	0	0	82	0	329	0	6	77	11	1	3326
APPROACH %'s :	0.00%	90.94%	7.71%	0.00%	1.35%	22.88%	70.78%	0.00%	0.00%	6.34%					19.66%	0.00%	78.90%	0.00%	1.44%	86.52%	12.36%	1.12%	
PEAK HR :	04:45 PM - 05:45 PM																						TOTAL
PEAK HR VOL :	0	256	19	0	6	121	372	0	0	30	0	0	0	0	26	0	98	0	4	18	2	0	952
PEAK HR FACTOR :	0.000	0.842	0.792	0.000	0.750	0.756	0.869	0.000	0.000	0.833	0.000	0.000	0.000	0.000	0.591	0.000	0.875	0.000	0.500	0.500	0.500	0.000	0.937
			0.846					0.941									0.865						

National Data & Surveying Services

Intersection Turning Movement Count

Location: SR 75/Suncrest Dr/Gray Station Rd & Hugh Cox Rd
City: Johnson City
Control: 1-Way Stop(EB)

Project ID: 25-190011-012
Date: 3/11/2025

Data - Total

NS/EW Streets:	SR 75/Suncrest Dr/Gray Station Rd				SR 75/Suncrest Dr/Gray Station Rd				Hugh Cox Rd				Hugh Cox Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
7:00 AM	9	91	0	0	0	27	2	0	23	0	5	0	0	0	0	0	157
7:15 AM	15	97	0	0	0	27	5	0	35	0	6	0	0	0	0	0	185
7:30 AM	30	126	0	0	0	42	10	0	59	0	8	0	0	0	0	0	275
7:45 AM	25	77	0	0	0	45	6	0	42	0	17	0	0	0	0	0	212
8:00 AM	4	58	0	0	0	34	3	0	12	0	5	0	0	0	0	0	116
8:15 AM	1	62	0	0	0	26	3	0	5	0	3	0	0	0	0	0	100
8:30 AM	5	43	0	0	0	25	3	0	3	0	4	0	0	0	0	0	83
8:45 AM	6	49	0	0	0	28	2	0	4	0	2	0	0	0	0	0	91
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	95	603	0	0	0	254	34	0	183	0	50	0	0	0	0	0	1219
APPROACH %'s :	13.61%	86.39%	0.00%	0.00%	0.00%	88.19%	11.81%	0.00%	78.54%	0.00%	21.46%	0.00%					
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	79	391	0	0	0	141	23	0	159	0	36	0	0	0	0	0	829
PEAK HR FACTOR :	0.658	0.776	0.000	0.000	0.000	0.783	0.575	0.000	0.674	0.000	0.529	0.000	0.000	0.000	0.000	0.000	0.754
	0.753				0.788				0.728								

NOON	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
11:00 AM	5	39	0	0	0	27	1	0	3	0	4	0	0	0	0	0	79
11:15 AM	1	36	0	0	0	46	4	0	2	0	1	0	0	0	0	0	90
11:30 AM	1	48	0	0	0	46	4	0	4	0	1	0	0	0	0	0	104
11:45 AM	0	35	0	0	0	44	1	0	3	0	4	0	0	0	0	0	87
12:00 PM	3	42	0	0	0	32	4	0	4	0	1	0	0	0	0	0	86
12:15 PM	2	36	0	0	0	46	2	0	5	0	1	0	0	0	0	0	92
12:30 PM	3	42	0	0	0	56	1	0	4	0	2	0	0	0	0	0	108
12:45 PM	2	52	0	0	0	42	2	0	1	0	0	0	0	0	0	0	99
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	17	330	0	0	0	339	19	0	26	0	14	0	0	0	0	0	745
APPROACH %'s :	4.90%	95.10%	0.00%	0.00%	0.00%	94.69%	5.31%	0.00%	65.00%	0.00%	35.00%	0.00%					
PEAK HR :	12:00 PM - 01:00 PM																TOTAL
PEAK HR VOL :	10	172	0	0	0	176	9	0	14	0	4	0	0	0	0	0	385
PEAK HR FACTOR :	0.833	0.827	0.000	0.000	0.000	0.786	0.563	0.000	0.700	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.891
	0.843				0.811				0.750								

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				
	0	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
2:00 PM	6	57	0	0	0	50	0	0	3	0	3	0	0	0	0	0	119
2:15 PM	3	48	0	0	0	35	8	0	4	0	3	0	0	0	0	0	101
2:30 PM	4	53	0	0	0	56	2	0	2	0	0	0	0	0	0	0	117
2:45 PM	12	46	0	0	0	90	26	0	9	0	4	0	0	0	0	0	187
3:00 PM	4	58	0	0	0	61	20	0	21	0	20	0	0	0	0	0	184
3:15 PM	3	64	0	0	0	57	17	0	24	0	17	0	0	0	0	0	182
3:30 PM	2	53	0	0	0	72	10	0	6	0	10	0	0	0	0	0	153
3:45 PM	7	72	0	0	0	85	2	0	7	0	10	0	0	0	0	0	183
4:00 PM	6	61	0	0	0	83	5	0	5	0	5	0	0	0	0	0	165
4:15 PM	7	52	0	0	0	98	4	0	2	0	3	0	0	0	0	0	166
4:30 PM	7	43	0	0	0	64	5	0	8	0	5	0	0	0	0	0	132
4:45 PM	6	60	0	0	0	82	3	0	8	0	10	0	0	0	0	0	169
5:00 PM	6	74	0	0	0	105	7	0	7	0	4	0	0	0	0	0	203
5:15 PM	5	60	0	0	0	84	10	0	11	0	3	0	0	0	0	0	173
5:30 PM	11	52	0	0	0	106	7	0	5	0	4	0	0	0	0	0	185
5:45 PM	5	55	0	0	0	91	4	0	7	0	4	0	0	0	0	0	166
	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
TOTAL VOLUMES :	94	908	0	0	0	1219	130	0	129	0	105	0	0	0	0	0	2585
APPROACH %'s :	9.38%	90.62%	0.00%	0.00%	0.00%	90.36%	9.64%	0.00%	55.13%	0.00%	44.87%	0.00%					
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	28	246	0	0	0	377	27	0	31	0	21	0	0	0	0	0	730
PEAK HR FACTOR :	0.636	0.831	0.000	0.000	0.000	0.889	0.675	0.000	0.705	0.000	0.525	0.000	0.000	0.000	0.000	0.000	0.899
	0.856				0.894				0.722								

Prepared by National Data & Surveying Services

VOLUME

SR 75/Suncrest Dr Bet Gray Station Rd/Shadden Rd & Sam Jenkins Rd/Gray Fossil Site Parking Dwy

Day: Tuesday
Date: 3/11/2025

City: Johnson City
Project #: TN25_190012_001

DAILY TOTALS	NB	SB	EB	WB	Total
	6,805	6,813	0	0	13,618

DAILY TOTALS

15-Minutes Interval

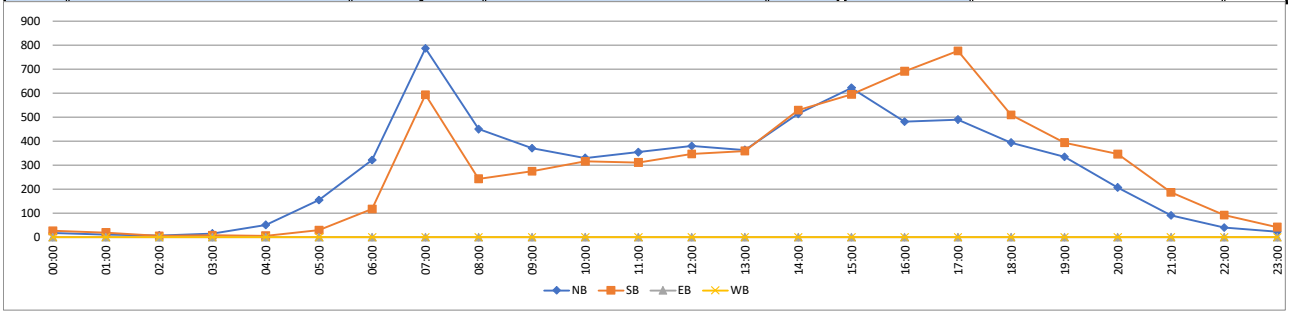
TIME	NB	SB	EB	WB	TOTAL	TIME	NB	SB	EB	WB	TOTAL
0:00	4	8			12	12:00	99	86			185
0:15	6	10			16	12:15	89	86			175
0:30	3	5			8	12:30	94	95			189
0:45	4	3			7	12:45	98	80			178
1:00	0	3			3	13:00	87	98			185
1:15	3	9			12	13:15	91	85			176
1:30	5	3			8	13:30	87	78			165
1:45	3	4			7	13:45	98	98			196
2:00	2	1			3	14:00	86	118			204
2:15	3	1			4	14:15	83	115			198
2:30	1	1			2	14:30	86	155			241
2:45	1	2			3	14:45	259	141			400
3:00	3	4			7	15:00	222	128			350
3:15	2	1			3	15:15	170	138			308
3:30	4	3			7	15:30	116	163			279
3:45	6	0			6	15:45	114	165			279
4:00	8	1			9	16:00	144	157			301
4:15	13	1			14	16:15	108	185			293
4:30	14	3			17	16:30	95	162			257
4:45	16	1			17	16:45	134	187			321
5:00	23	8			31	17:00	128	192			320
5:15	33	4			37	17:15	129	201			330
5:30	40	8			48	17:30	120	186			306
5:45	59	9			68	17:45	113	197			310
6:00	51	15			66	18:00	149	158			307
6:15	63	18			81	18:15	107	142			249
6:30	91	32			123	18:30	65	119			184
6:45	116	52			168	18:45	73	90			163
7:00	152	118			270	19:00	67	111			178
7:15	184	195			379	19:15	72	99			171
7:30	239	176			415	19:30	105	87			192
7:45	211	104			315	19:45	90	97			187
8:00	138	69			207	20:00	66	93			159
8:15	105	53			158	20:15	49	110			159
8:30	114	50			164	20:30	64	86			150
8:45	93	71			164	20:45	28	57			85
9:00	98	72			170	21:00	34	55			89
9:15	102	55			157	21:15	25	60			85
9:30	80	62			142	21:30	17	44			61
9:45	90	85			175	21:45	15	28			43
10:00	78	75			153	22:00	10	32			42
10:15	83	91			174	22:15	9	28			37
10:30	89	74			163	22:30	13	19			32
10:45	80	76			156	22:45	8	13			21
11:00	79	65			144	23:00	5	9			14
11:15	78	78			156	23:15	5	11			16
11:30	107	85			192	23:30	8	15			23
11:45	90	83			173	23:45	4	7			11
TOTALS	2867	1947	0	0	4814	TOTALS	3938	4866	0	0	8804
SPLIT %	60%	40%	0%	0%	35%	SPLIT %	45%	55%	0%	0%	65%

Hourly Intervals

TIME		NB	SB	EB	WB	TOTAL
00:00	01:00	17	26			43
01:00	02:00	11	19			30
02:00	03:00	7	5			12
03:00	04:00	15	8			23
04:00	05:00	51	6			57
05:00	06:00	155	29			184
06:00	07:00	321	117			438
07:00	08:00	786	593			1379
08:00	09:00	450	243			693
09:00	10:00	370	274			644
10:00	11:00	330	316			646
11:00	12:00	354	311			665
12:00	13:00	380	347			727
13:00	14:00	363	359			722
14:00	15:00	514	529			1043
15:00	16:00	622	594			1216
16:00	17:00	481	691			1172
17:00	18:00	490	776			1266
18:00	19:00	394	509			903
19:00	20:00	334	394			728
20:00	21:00	207	346			553
21:00	22:00	91	187			278
22:00	23:00	40	92			132
23:00	00:00	22	42			64

STATISTICS

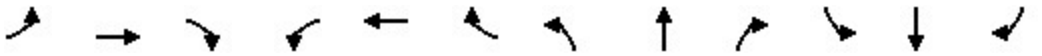
	NB	SB	EB	WB	TOTAL
Peak Period	00:00	to	12:00		
Volume	2867	1947			4814
Peak Hour	7:00	7:00			7:00
Peak Volume	786	593			1379
Peak Hour Factor	0.822	0.760			0.831
Peak Period	12:00	to	00:00		
Volume	3938	4866			8804
Peak Hour	14:45	17:00			14:45
Peak Volume	767	776			1337
Peak Hour Factor	0.740	0.965			0.836
Peak Period	07:00	to	09:00		
Volume	1236	836			2072
Peak Hour	7:00	7:00			7:00
Peak Volume	786	593			1379
Peak Hour Factor	0.822	0.760			0.831
Peak Period	16:00	to	18:00		
Volume	971	1467			2438
Peak Hour	16:45	17:00			16:45
Peak Volume	511	776			1277
Peak Hour Factor	0.953	0.965			0.967



APPENDIX C. SYNCHRO & SIDRA REPORTS

SR 75 CORRIDOR STUDY
2025 EXISTING TRAFFIC CONDITIONS
CAPACITY/LOS REPORT

AM PEAK HOUR



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	270	0	373	196	515	0	0	774	280
Future Volume (vph)	0	0	0	270	0	373	196	515	0	0	774	280
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0		6.0	6.0	6.0			6.0	6.0
Lane Util. Factor				0.97		0.88	0.97	0.95			0.95	1.00
Frt				1.00		0.85	1.00	1.00			1.00	0.85
Flt Protected				0.95		1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)				3400		2682	3242	3471			3438	1553
Flt Permitted				0.95		1.00	0.95	1.00			1.00	1.00
Satd. Flow (perm)				3400		2682	3242	3471			3438	1553
Peak-hour factor, PHF	0.92	0.92	0.92	0.87	0.87	0.87	0.74	0.74	0.74	0.88	0.88	0.88
Adj. Flow (vph)	0	0	0	310	0	429	265	696	0	0	880	318
RTOR Reduction (vph)	0	0	0	0	0	361	0	0	0	0	0	121
Lane Group Flow (vph)	0	0	0	310	0	68	265	696	0	0	880	197
Heavy Vehicles (%)	2%	2%	2%	3%	2%	6%	8%	4%	2%	2%	5%	4%
Turn Type				Prot		Prot	Prot	NA			NA	Perm
Protected Phases				3		3	5	2			6	
Permitted Phases												6
Actuated Green, G (s)				14.2		14.2	18.0	63.8			39.8	39.8
Effective Green, g (s)				14.2		14.2	18.0	63.8			39.8	39.8
Actuated g/C Ratio				0.16		0.16	0.20	0.71			0.44	0.44
Clearance Time (s)				6.0		6.0	6.0	6.0			6.0	6.0
Vehicle Extension (s)				3.0		3.0	3.0	3.0			3.0	3.0
Lane Grp Cap (vph)				536		423	648	2460			1520	686
v/s Ratio Prot				c0.09		0.03	c0.08	0.20			c0.26	
v/s Ratio Perm												0.13
v/c Ratio				0.58		0.16	0.41	0.28			0.58	0.29
Uniform Delay, d1				35.1		32.7	31.4	4.8			18.8	16.0
Progression Factor				1.00		1.00	1.24	1.44			1.00	1.00
Incremental Delay, d2				1.5		0.2	0.4	0.3			1.6	1.1
Delay (s)				36.6		32.9	39.4	7.2			20.4	17.1
Level of Service				D		C	D	A			C	B
Approach Delay (s/veh)		0.0			34.5			16.0			19.5	
Approach LOS		A			C			B			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	22.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	48.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	504	461	412	0
Future Volume (vph)	0	0	504	461	412	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)			6.0	6.0	5.0	
Lane Util. Factor			1.00	1.00	0.97	
Frt			1.00	0.85	1.00	
Flt Protected			1.00	1.00	0.95	
Satd. Flow (prot)			1810	1583	3242	
Flt Permitted			1.00	1.00	0.95	
Satd. Flow (perm)			1810	1583	3242	
Peak-hour factor, PHF	0.92	0.92	0.81	0.81	0.87	0.87
Adj. Flow (vph)	0	0	622	569	474	0
RTOR Reduction (vph)	0	0	0	37	0	0
Lane Group Flow (vph)	0	0	622	532	474	0
Heavy Vehicles (%)	2%	2%	5%	2%	8%	2%
Turn Type			NA	Perm	Prot	
Protected Phases			2		1	
Permitted Phases				2		
Actuated Green, G (s)			60.7	60.7	18.3	
Effective Green, g (s)			60.7	60.7	18.3	
Actuated g/C Ratio			0.67	0.67	0.20	
Clearance Time (s)			6.0	6.0	5.0	
Vehicle Extension (s)			3.0	3.0	3.0	
Lane Grp Cap (vph)			1220	1067	659	
v/s Ratio Prot			c0.34		c0.15	
v/s Ratio Perm				0.34		
v/c Ratio			0.51	0.50	0.72	
Uniform Delay, d1			7.3	7.2	33.5	
Progression Factor			1.00	1.00	0.60	
Incremental Delay, d2			1.5	1.7	3.3	
Delay (s)			8.8	8.8	23.2	
Level of Service			A	A	C	
Approach Delay (s/veh)	0.0		8.8			23.2
Approach LOS	A		A			C

Intersection Summary			
HCM 2000 Control Delay (s/veh)	12.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	49.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	28.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	63	0	8	0	0	3	9	902	2	33	724	72
Future Vol, veh/h	63	0	8	0	0	3	9	902	2	33	724	72
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	-	-	-	-	-	-	100	-	-	150	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	38	38	38	81	81	81	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2	2	3	2	2	4	4
Mvmt Flow	74	0	9	0	0	8	11	1114	2	40	872	87

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2093	2090	872	2094	2089	1115	872	0	0	1116	0	0
Stage 1	952	952	-	1137	1137	-	-	-	-	-	-	-
Stage 2	1141	1138	-	957	952	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	~ 38	53	350	38	53	253	773	-	-	626	-	-
Stage 1	312	338	-	245	277	-	-	-	-	-	-	-
Stage 2	244	276	-	310	338	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 35	49	350	35	49	253	773	-	-	626	-	-
Mov Cap-2 Maneuver	~ 35	49	-	35	49	-	-	-	-	-	-	-
Stage 1	308	316	-	242	273	-	-	-	-	-	-	-
Stage 2	233	272	-	282	316	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	$ 747.9	19.7	0.1	0.4
HCM LOS	F	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	773	-	-	39	253	626	-	-
HCM Lane V/C Ratio	0.014	-	-	2.142	0.031	0.064	-	-
HCM Ctrl Dly (s/v)	9.7	-	-	$ 747.9	19.7	11.1	-	-
HCM Lane LOS	A	-	-	F	C	B	-	-
HCM 95th %tile Q (veh)	0	-	-	9	0.1	0.2	-	-

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	2	11	909	6	14	683
Future Vol, veh/h	2	11	909	6	14	683
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	150	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	46	46	83	83	80	80
Heavy Vehicles, %	100	27	2	2	7	3
Mvmt Flow	4	24	1095	7	18	854

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1989	1099	0	0	1102	0
Stage 1	1099	-	-	-	-	-
Stage 2	890	-	-	-	-	-
Critical Hdwy	7.4	6.47	-	-	4.17	-
Critical Hdwy Stg 1	6.4	-	-	-	-	-
Critical Hdwy Stg 2	6.4	-	-	-	-	-
Follow-up Hdwy	4.4	3.543	-	-	2.263	-
Pot Cap-1 Maneuver	37	231	-	-	615	-
Stage 1	211	-	-	-	-	-
Stage 2	276	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	36	231	-	-	615	-
Mov Cap-2 Maneuver	124	-	-	-	-	-
Stage 1	211	-	-	-	-	-
Stage 2	268	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	25.5	0	0.2
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	204	615	-
HCM Lane V/C Ratio	-	-	0.139	0.028	-
HCM Ctrl Dly (s/v)	-	-	25.5	11	-
HCM Lane LOS	-	-	D	B	-
HCM 95th %tile Q (veh)	-	-	0.5	0.1	-

Intersection	
Int Delay, s/veh	3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	33	0	8	0	0	0	9	887	0	1	666	18
Future Vol, veh/h	33	0	8	0	0	0	9	887	0	1	666	18
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	79	79	79	25	25	25	81	81	81	79	79	79
Heavy Vehicles, %	6	2	13	2	2	2	2	2	2	2	4	2
Mvmt Flow	42	0	10	0	0	0	11	1095	0	1	843	23

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	1974	1974	855	866	0	0	1095	0	0
Stage 1	857	857	-	-	-	-	-	-	-
Stage 2	1117	1117	-	-	-	-	-	-	-
Critical Hdwy	6.46	6.52	6.33	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	5.46	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.46	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.554	4.018	3.417	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	67	62	342	777	-	-	637	-	-
Stage 1	409	374	-	-	-	-	-	-	-
Stage 2	307	283	-	-	-	-	-	-	-
Platoon blocked, %					-	-		-	-
Mov Cap-1 Maneuver	66	0	342	777	-	-	637	-	-
Mov Cap-2 Maneuver	66	0	-	-	-	-	-	-	-
Stage 1	403	0	-	-	-	-	-	-	-
Stage 2	306	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	115.5	0.1	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	SBL	SBT	SBR
Capacity (veh/h)	777	-	-	78	637	-	-
HCM Lane V/C Ratio	0.014	-	-	0.665	0.002	-	-
HCM Ctrl Dly (s/v)	9.7	-	-	115.5	10.7	-	-
HCM Lane LOS	A	-	-	F	B	-	-
HCM 95th %tile Q (veh)	0	-	-	3.1	0	-	-

Intersection	
Int Delay, s/veh	24.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	21	11	58	18	4	107	29	717	41	62	511	11
Future Vol, veh/h	21	11	58	18	4	107	29	717	41	62	511	11
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	83	83	83	83	83	83	79	79	79
Heavy Vehicles, %	5	2	7	11	2	2	7	2	27	3	4	2
Mvmt Flow	25	13	70	22	5	129	35	864	49	78	647	14

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1836	1793	654	1811	1776	889	661	0	0	913	0	0
Stage 1	810	810	-	959	959	-	-	-	-	-	-	-
Stage 2	1026	983	-	852	817	-	-	-	-	-	-	-
Critical Hdwy	7.15	6.52	6.27	7.21	6.52	6.22	4.17	-	-	4.13	-	-
Critical Hdwy Stg 1	6.15	5.52	-	6.21	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.15	5.52	-	6.21	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.545	4.018	3.363	3.599	4.018	3.318	2.263	-	-	2.227	-	-
Pot Cap-1 Maneuver	57	81	458	58	83	342	904	-	-	742	-	-
Stage 1	369	393	-	297	335	-	-	-	-	-	-	-
Stage 2	280	327	-	342	390	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	30	70	458	38	71	342	904	-	-	742	-	-
Mov Cap-2 Maneuver	30	70	-	38	71	-	-	-	-	-	-	-
Stage 1	355	352	-	285	322	-	-	-	-	-	-	-
Stage 2	165	314	-	250	349	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	239.6	135.9	0.3	1.1
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	904	-	-	91	153	742	-	-
HCM Lane V/C Ratio	0.039	-	-	1.192	1.016	0.106	-	-
HCM Ctrl Dly (s/v)	9.1	-	-	239.6	135.9	10.4	-	-
HCM Lane LOS	A	-	-	F	F	B	-	-
HCM 95th %tile Q (veh)	0.1	-	-	7.6	7.8	0.4	-	-

Intersection	
Int Delay, s/veh	203.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↰	↱		↰	↱	
Traffic Vol, veh/h	161	0	35	0	0	2	104	623	1	1	444	148
Future Vol, veh/h	161	0	35	0	0	2	104	623	1	1	444	148
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	73	73	73	50	50	50	77	77	77	76	76	76
Heavy Vehicles, %	2	2	3	2	2	2	6	4	2	2	5	2
Mvmt Flow	221	0	48	0	0	4	135	809	1	1	584	195

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1766	1764	682	1788	1861	810	779	0	0	810	0	0
Stage 1	684	684	-	1080	1080	-	-	-	-	-	-	-
Stage 2	1082	1080	-	708	781	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.23	7.12	6.52	6.22	4.16	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.327	3.518	4.018	3.318	2.254	-	-	2.218	-	-
Pot Cap-1 Maneuver	~ 65	84	448	63	73	380	820	-	-	816	-	-
Stage 1	439	449	-	264	294	-	-	-	-	-	-	-
Stage 2	263	294	-	426	405	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 56	70	448	49	61	380	820	-	-	816	-	-
Mov Cap-2 Maneuver	~ 56	70	-	49	61	-	-	-	-	-	-	-
Stage 1	367	449	-	220	245	-	-	-	-	-	-	-
Stage 2	~ 217	245	-	380	405	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	$ 1509.1	14.6	1.5	0
HCM LOS	F	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	820	-	-	66	380	816	-	-
HCM Lane V/C Ratio	0.165	-	-	4.068	0.011	0.002	-	-
HCM Ctrl Dly (s/v)	10.3	-	-	$ 1509.1	14.6	9.4	-	-
HCM Lane LOS	B	-	-	F	B	A	-	-
HCM 95th %tile Q (veh)	0.6	-	-	28.8	0	0	-	-

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	10.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	1	240	483	10	281	192
Future Vol, veh/h	1	240	483	10	281	192
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	150	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	64	64	83	83	73	73
Heavy Vehicles, %	2	10	2	20	2	12
Mvmt Flow	2	375	582	12	385	263

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1621	588	0	0	594	0
Stage 1	588	-	-	-	-	-
Stage 2	1033	-	-	-	-	-
Critical Hdwy	6.42	6.3	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.39	-	-	2.218	-
Pot Cap-1 Maneuver	113	494	-	-	982	-
Stage 1	555	-	-	-	-	-
Stage 2	343	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	69	494	-	-	982	-
Mov Cap-2 Maneuver	162	-	-	-	-	-
Stage 1	555	-	-	-	-	-
Stage 2	209	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	32.7	0	6.5
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	490	982	-
HCM Lane V/C Ratio	-	-	0.768	0.392	-
HCM Ctrl Dly (s/v)	-	-	32.7	11	-
HCM Lane LOS	-	-	D	B	-
HCM 95th %tile Q (veh)	-	-	6.7	1.9	-

Intersection	
Int Delay, s/veh	2.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	43	10	483	249	51	142
Future Vol, veh/h	43	10	483	249	51	142
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	150	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	53	53	72	72	86	86
Heavy Vehicles, %	14	10	2	6	28	6
Mvmt Flow	81	19	671	346	59	165

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1127	844	0	0	1017	0
Stage 1	844	-	-	-	-	-
Stage 2	283	-	-	-	-	-
Critical Hdwy	6.54	6.3	-	-	4.38	-
Critical Hdwy Stg 1	5.54	-	-	-	-	-
Critical Hdwy Stg 2	5.54	-	-	-	-	-
Follow-up Hdwy	3.626	3.39	-	-	2.452	-
Pot Cap-1 Maneuver	214	351	-	-	590	-
Stage 1	402	-	-	-	-	-
Stage 2	738	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	193	351	-	-	590	-
Mov Cap-2 Maneuver	308	-	-	-	-	-
Stage 1	402	-	-	-	-	-
Stage 2	664	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	21.7	0	3.1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	315	590	-
HCM Lane V/C Ratio	-	-	0.317	0.101	-
HCM Ctrl Dly (s/v)	-	-	21.7	11.8	-
HCM Lane LOS	-	-	C	B	-
HCM 95th %tile Q (veh)	-	-	1.3	0.3	-

Intersection	
Int Delay, s/veh	13.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	17	234	499	52	38	147
Future Vol, veh/h	17	234	499	52	38	147
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	120	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	71	71	73	73	75	75
Heavy Vehicles, %	8	3	3	2	2	10
Mvmt Flow	24	330	684	71	51	196

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1018	720	0	0	755	0
Stage 1	720	-	-	-	-	-
Stage 2	298	-	-	-	-	-
Critical Hdwy	6.48	6.23	-	-	4.12	-
Critical Hdwy Stg 1	5.48	-	-	-	-	-
Critical Hdwy Stg 2	5.48	-	-	-	-	-
Follow-up Hdwy	3.572	3.327	-	-	2.218	-
Pot Cap-1 Maneuver	256	426	-	-	855	-
Stage 1	471	-	-	-	-	-
Stage 2	740	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	241	426	-	-	855	-
Mov Cap-2 Maneuver	241	-	-	-	-	-
Stage 1	471	-	-	-	-	-
Stage 2	696	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	50.9	0	1.9
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	405	855	-
HCM Lane V/C Ratio	-	-	0.873	0.059	-
HCM Ctrl Dly (s/v)	-	-	50.9	9.5	-
HCM Lane LOS	-	-	F	A	-
HCM 95th %tile Q (veh)	-	-	8.7	0.2	-

Intersection	
Int Delay, s/veh	16.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	159	36	79	391	141	23
Future Vol, veh/h	159	36	79	391	141	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	73	73	75	75	79	79
Heavy Vehicles, %	4	6	3	2	10	4
Mvmt Flow	218	49	105	521	178	29

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	924	193	207	0	-	0
Stage 1	193	-	-	-	-	-
Stage 2	731	-	-	-	-	-
Critical Hdwy	6.44	6.26	4.13	-	-	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.354	2.227	-	-	-
Pot Cap-1 Maneuver	297	838	1358	-	-	-
Stage 1	835	-	-	-	-	-
Stage 2	473	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	265	838	1358	-	-	-
Mov Cap-2 Maneuver	265	-	-	-	-	-
Stage 1	744	-	-	-	-	-
Stage 2	473	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	63.9	1.3	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1358	-	303	-	-
HCM Lane V/C Ratio	0.078	-	0.882	-	-
HCM Ctrl Dly (s/v)	7.9	0	63.9	-	-
HCM Lane LOS	A	A	F	-	-
HCM 95th %tile Q (veh)	0.3	-	8	-	-

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	44	3	1	207	116	8
Future Vol, veh/h	44	3	1	207	116	8
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	59	59	76	76	45	45
Heavy Vehicles, %	2	2	2	8	2	2
Mvmt Flow	75	5	1	272	258	18

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	541	267	276	0	-	0
Stage 1	267	-	-	-	-	-
Stage 2	274	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	502	772	1287	-	-	-
Stage 1	778	-	-	-	-	-
Stage 2	772	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	501	772	1287	-	-	-
Mov Cap-2 Maneuver	501	-	-	-	-	-
Stage 1	777	-	-	-	-	-
Stage 2	772	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	13.3	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1287	-	512	-	-
HCM Lane V/C Ratio	0.001	-	0.156	-	-
HCM Ctrl Dly (s/v)	7.8	0	13.3	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q (veh)	0	-	0.5	-	-

SR 75 CORRIDOR STUDY
2025 EXISTING TRAFFIC CONDITIONS
CAPACITY/LOS REPORT

SCHOOL DISMISSAL PEAK HOUR

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	271	0	495	140	668	0	0	721	250
Future Volume (vph)	0	0	0	271	0	495	140	668	0	0	721	250
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0		6.0	6.0	6.0			6.0	6.0
Lane Util. Factor				0.97		0.88	0.97	0.95			0.95	1.00
Frt				1.00		0.85	1.00	1.00			1.00	0.85
Flt Protected				0.95		1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)				3433		2787	3303	3505			3539	1583
Flt Permitted				0.95		1.00	0.95	1.00			1.00	1.00
Satd. Flow (perm)				3433		2787	3303	3505			3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.95	0.95	0.95	0.79	0.79	0.79	0.81	0.81	0.81
Adj. Flow (vph)	0	0	0	285	0	521	177	846	0	0	890	309
RTOR Reduction (vph)	0	0	0	0	0	243	0	0	0	0	0	108
Lane Group Flow (vph)	0	0	0	285	0	278	177	846	0	0	890	201
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	6%	3%	2%	2%	2%	2%
Turn Type				Prot		Prot	Prot	NA			NA	Perm
Protected Phases				3		3	5	2			6	
Permitted Phases												6
Actuated Green, G (s)				14.8		14.8	12.0	63.2			45.2	45.2
Effective Green, g (s)				14.8		14.8	12.0	63.2			45.2	45.2
Actuated g/C Ratio				0.16		0.16	0.13	0.70			0.50	0.50
Clearance Time (s)				6.0		6.0	6.0	6.0			6.0	6.0
Vehicle Extension (s)				3.0		3.0	3.0	3.0			3.0	3.0
Lane Grp Cap (vph)				564		458	440	2461			1777	795
v/s Ratio Prot				0.08		c0.10	0.05	c0.24			c0.25	
v/s Ratio Perm												0.13
v/c Ratio				0.51		0.61	0.40	0.34			0.50	0.25
Uniform Delay, d1				34.3		34.9	35.7	5.3			14.9	12.8
Progression Factor				1.00		1.00	1.18	1.17			1.00	1.00
Incremental Delay, d2				0.7		2.3	0.6	0.4			1.0	0.8
Delay (s)				35.0		37.2	42.7	6.5			15.9	13.5
Level of Service				C		D	D	A			B	B
Approach Delay (s/veh)		0.0			36.4			12.8			15.3	
Approach LOS		A			D			B			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	20.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	45.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	623	382	368	0
Future Volume (vph)	0	0	623	382	368	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)			6.0	6.0	5.0	
Lane Util. Factor			1.00	1.00	0.97	
Frt			1.00	0.85	1.00	
Flt Protected			1.00	1.00	0.95	
Satd. Flow (prot)			1827	1583	3433	
Flt Permitted			1.00	1.00	0.95	
Satd. Flow (perm)			1827	1583	3433	
Peak-hour factor, PHF	0.92	0.92	0.83	0.83	0.85	0.85
Adj. Flow (vph)	0	0	751	460	433	0
RTOR Reduction (vph)	0	0	0	43	0	0
Lane Group Flow (vph)	0	0	751	417	433	0
Heavy Vehicles (%)	2%	2%	4%	2%	2%	2%
Turn Type			NA	Perm	Prot	
Protected Phases			2		1	
Permitted Phases				2		
Actuated Green, G (s)			62.4	62.4	16.6	
Effective Green, g (s)			62.4	62.4	16.6	
Actuated g/C Ratio			0.69	0.69	0.18	
Clearance Time (s)			6.0	6.0	5.0	
Vehicle Extension (s)			3.0	3.0	3.0	
Lane Grp Cap (vph)			1266	1097	633	
v/s Ratio Prot			c0.41		c0.13	
v/s Ratio Perm				0.26		
v/c Ratio			0.59	0.38	0.68	
Uniform Delay, d1			7.2	5.7	34.3	
Progression Factor			1.00	1.00	0.71	
Incremental Delay, d2			2.1	1.0	2.8	
Delay (s)			9.2	6.7	27.1	
Level of Service			A	A	C	
Approach Delay (s/veh)	0.0		8.3			27.1
Approach LOS	A		A			C

Intersection Summary			
HCM 2000 Control Delay (s/veh)	13.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	52.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	59.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	63	1	15	3	0	10	8	929	1	10	722	48
Future Vol, veh/h	63	1	15	3	0	10	8	929	1	10	722	48
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	-	-	-	-	-	-	100	-	-	150	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	60	60	60	65	65	65	84	84	84	86	86	86
Heavy Vehicles, %	3	2	13	2	2	2	2	4	2	2	4	6
Mvmt Flow	105	2	25	5	0	15	10	1106	1	12	840	56

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1998	1991	840	2005	1991	1107	840	0	0	1107	0	0
Stage 1	864	864	-	1127	1127	-	-	-	-	-	-	-
Stage 2	1134	1127	-	878	864	-	-	-	-	-	-	-
Critical Hdwy	7.13	6.52	6.33	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.13	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.13	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.527	4.018	3.417	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	~ 44	61	349	44	61	256	795	-	-	631	-	-
Stage 1	347	371	-	249	280	-	-	-	-	-	-	-
Stage 2	245	280	-	343	371	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 40	59	349	39	59	256	795	-	-	631	-	-
Mov Cap-2 Maneuver	~ 40	59	-	39	59	-	-	-	-	-	-	-
Stage 1	342	364	-	246	276	-	-	-	-	-	-	-
Stage 2	227	276	-	311	364	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	$ 968.6	44	0.1	0.1
HCM LOS	F	E		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	795	-	-	48	112	631	-	-
HCM Lane V/C Ratio	0.012	-	-	2.743	0.179	0.018	-	-
HCM Ctrl Dly (s/v)	9.6	-	-	$ 968.6	44	10.8	-	-
HCM Lane LOS	A	-	-	F	E	B	-	-
HCM 95th %tile Q (veh)	0	-	-	14	0.6	0.1	-	-

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	1.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	15	52	852	22	39	683
Future Vol, veh/h	15	52	852	22	39	683
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	150	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	76	76	84	84	85	85
Heavy Vehicles, %	13	2	3	5	2	5
Mvmt Flow	20	68	1014	26	46	804

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1923	1027	0	0	1040	0
Stage 1	1027	-	-	-	-	-
Stage 2	896	-	-	-	-	-
Critical Hdwy	6.53	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.53	-	-	-	-	-
Critical Hdwy Stg 2	5.53	-	-	-	-	-
Follow-up Hdwy	3.617	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	69	285	-	-	669	-
Stage 1	329	-	-	-	-	-
Stage 2	381	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	64	285	-	-	669	-
Mov Cap-2 Maneuver	185	-	-	-	-	-
Stage 1	329	-	-	-	-	-
Stage 2	355	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	26.5	0	0.6
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	254	669	-
HCM Lane V/C Ratio	-	-	0.347	0.069	-
HCM Ctrl Dly (s/v)	-	-	26.5	10.8	-
HCM Lane LOS	-	-	D	B	-
HCM 95th %tile Q (veh)	-	-	1.5	0.2	-

Intersection	
Int Delay, s/veh	95

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	79	0	5	0	0	0	9	799	0	1	665	31
Future Vol, veh/h	79	0	5	0	0	0	9	799	0	1	665	31
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	36	36	36	25	25	25	80	80	80	86	86	86
Heavy Vehicles, %	3	2	2	2	2	2	2	3	2	2	2	2
Mvmt Flow	219	0	14	0	0	0	11	999	0	1	773	36

Major/Minor	Minor2				Major1			Major2		
Conflicting Flow All	1814	1814	791		809	0	0	999	0	0
Stage 1	793	793	-		-	-	-	-	-	-
Stage 2	1021	1021	-		-	-	-	-	-	-
Critical Hdwy	6.43	6.52	6.22		4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	5.43	5.52	-		-	-	-	-	-	-
Critical Hdwy Stg 2	5.43	5.52	-		-	-	-	-	-	-
Follow-up Hdwy	3.527	4.018	3.318		2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	~ 86	78	390		817	-	-	693	-	-
Stage 1	444	400	-		-	-	-	-	-	-
Stage 2	346	314	-		-	-	-	-	-	-
Platoon blocked, %						-	-		-	-
Mov Cap-1 Maneuver	~ 85	0	390		817	-	-	693	-	-
Mov Cap-2 Maneuver	~ 85	0	-		-	-	-	-	-	-
Stage 1	438	0	-		-	-	-	-	-	-
Stage 2	346	0	-		-	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	$ 835.6	0.1	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	SBL	SBT	SBR
Capacity (veh/h)	817	-	-	89	693	-	-
HCM Lane V/C Ratio	0.014	-	-	2.622	0.002	-	-
HCM Ctrl Dly (s/v)	9.5	-	-	$ 835.6	10.2	-	-
HCM Lane LOS	A	-	-	F	B	-	-
HCM 95th %tile Q (veh)	0	-	-	22	0	-	-

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	12.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	17	12	37	8	8	61	49	682	45	78	539	11
Future Vol, veh/h	17	12	37	8	8	61	49	682	45	78	539	11
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	74	74	74	77	77	77	87	87	87
Heavy Vehicles, %	2	2	2	6	2	5	2	3	6	2	2	5
Mvmt Flow	18	13	40	11	11	82	64	886	58	90	620	13

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1897	1879	627	1876	1856	915	633	0	0	944	0	0
Stage 1	807	807	-	1043	1043	-	-	-	-	-	-	-
Stage 2	1090	1072	-	833	813	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.16	6.52	6.25	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.16	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.16	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.554	4.018	3.345	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	53	71	484	53	74	326	950	-	-	727	-	-
Stage 1	375	394	-	272	306	-	-	-	-	-	-	-
Stage 2	261	297	-	357	392	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	29	58	484	35	60	326	950	-	-	727	-	-
Mov Cap-2 Maneuver	29	58	-	35	60	-	-	-	-	-	-	-
Stage 1	350	345	-	254	285	-	-	-	-	-	-	-
Stage 2	175	277	-	276	343	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	182.2	82.2	0.6	1.3
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	950	-	-	76	140	727	-	-
HCM Lane V/C Ratio	0.067	-	-	0.944	0.743	0.123	-	-
HCM Ctrl Dly (s/v)	9.1	-	-	182.2	82.2	10.6	-	-
HCM Lane LOS	A	-	-	F	F	B	-	-
HCM 95th %tile Q (veh)	0.2	-	-	4.9	4.4	0.4	-	-

Intersection	
Int Delay, s/veh	229.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	155	0	45	0	0	9	57	603	2	1	433	136
Future Vol, veh/h	155	0	45	0	0	9	57	603	2	1	433	136
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	64	64	64	75	75	75	63	63	63	87	87	87
Heavy Vehicles, %	3	2	2	2	2	2	2	5	2	2	3	2
Mvmt Flow	242	0	70	0	0	12	90	957	3	1	498	156

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1723	1718	576	1752	1795	959	654	0	0	960	0	0
Stage 1	578	578	-	1139	1139	-	-	-	-	-	-	-
Stage 2	1145	1140	-	613	656	-	-	-	-	-	-	-
Critical Hdwy	7.13	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.13	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.13	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.527	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	~ 70	90	517	67	80	312	933	-	-	717	-	-
Stage 1	500	501	-	245	276	-	-	-	-	-	-	-
Stage 2	~ 242	276	-	480	462	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 62	81	517	54	72	312	933	-	-	717	-	-
Mov Cap-2 Maneuver	~ 62	81	-	54	72	-	-	-	-	-	-	-
Stage 1	452	500	-	221	250	-	-	-	-	-	-	-
Stage 2	~ 210	250	-	414	462	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	$ 1487.5	17	0.8	0
HCM LOS	F	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	933	-	-	77	312	717	-	-
HCM Lane V/C Ratio	0.097	-	-	4.058	0.038	0.002	-	-
HCM Ctrl Dly (s/v)	9.3	-	-	$ 1487.5	17	10	-	-
HCM Lane LOS	A	-	-	F	C	B	-	-
HCM 95th %tile Q (veh)	0.3	-	-	33	0.1	0	-	-

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	41.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	12	279	337	15	75	374
Future Vol, veh/h	12	279	337	15	75	374
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	150	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	43	43	82	82	85	85
Heavy Vehicles, %	2	7	3	7	2	3
Mvmt Flow	28	649	411	18	88	440

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1036	420	0	0	429	0
Stage 1	420	-	-	-	-	-
Stage 2	616	-	-	-	-	-
Critical Hdwy	6.42	6.27	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.363	-	-	2.218	-
Pot Cap-1 Maneuver	256	~ 623	-	-	1130	-
Stage 1	663	-	-	-	-	-
Stage 2	539	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	236	~ 623	-	-	1130	-
Mov Cap-2 Maneuver	363	-	-	-	-	-
Stage 1	663	-	-	-	-	-
Stage 2	497	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	98.5	0	1.4
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	605	1130	-
HCM Lane V/C Ratio	-	-	1.119	0.078	-
HCM Ctrl Dly (s/v)	-	-	98.5	8.5	-
HCM Lane LOS	-	-	F	A	-
HCM 95th %tile Q (veh)	-	-	21	0.3	-

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	12.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	118	28	324	14	10	378
Future Vol, veh/h	118	28	324	14	10	378
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	150	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	37	37	85	85	91	91
Heavy Vehicles, %	2	2	3	2	20	2
Mvmt Flow	319	76	381	16	11	415

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	826	389	0	0	397	0
Stage 1	389	-	-	-	-	-
Stage 2	437	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.3	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.38	-
Pot Cap-1 Maneuver	342	659	-	-	1070	-
Stage 1	685	-	-	-	-	-
Stage 2	651	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	339	659	-	-	1070	-
Mov Cap-2 Maneuver	457	-	-	-	-	-
Stage 1	685	-	-	-	-	-
Stage 2	644	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	37.2	0	0.2
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	486	1070	-
HCM Lane V/C Ratio	-	-	0.812	0.01	-
HCM Ctrl Dly (s/v)	-	-	37.2	8.4	-
HCM Lane LOS	-	-	E	A	-
HCM 95th %tile Q (veh)	-	-	7.7	0	-

Intersection	
Int Delay, s/veh	3.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	20	92	246	34	161	335
Future Vol, veh/h	20	92	246	34	161	335
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	120	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	80	80	76	76
Heavy Vehicles, %	2	2	4	2	2	2
Mvmt Flow	22	102	308	43	212	441

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1195	330	0	0	351	0
Stage 1	330	-	-	-	-	-
Stage 2	865	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	206	712	-	-	1208	-
Stage 1	728	-	-	-	-	-
Stage 2	412	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	170	712	-	-	1208	-
Mov Cap-2 Maneuver	170	-	-	-	-	-
Stage 1	728	-	-	-	-	-
Stage 2	340	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	15.9	0	2.8
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	454	1208	-
HCM Lane V/C Ratio	-	-	0.274	0.175	-
HCM Ctrl Dly (s/v)	-	-	15.9	8.6	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q (veh)	-	-	1.1	0.6	-

Intersection	
Int Delay, s/veh	3.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	60	51	21	221	280	73
Future Vol, veh/h	60	51	21	221	280	73
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	68	68	90	90	76	76
Heavy Vehicles, %	3	5	4	4	2	4
Mvmt Flow	88	75	23	246	368	96

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	708	416	464	0	-	0
Stage 1	416	-	-	-	-	-
Stage 2	292	-	-	-	-	-
Critical Hdwy	6.43	6.25	4.14	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.345	2.236	-	-	-
Pot Cap-1 Maneuver	400	630	1087	-	-	-
Stage 1	664	-	-	-	-	-
Stage 2	756	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	390	630	1087	-	-	-
Mov Cap-2 Maneuver	390	-	-	-	-	-
Stage 1	647	-	-	-	-	-
Stage 2	756	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	16.6	0.7	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1087	-	473	-	-
HCM Lane V/C Ratio	0.021	-	0.345	-	-
HCM Ctrl Dly (s/v)	8.4	0	16.6	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q (veh)	0.1	-	1.5	-	-

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	24	6	0	88	158	37
Future Vol, veh/h	24	6	0	88	158	37
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	83	83	85	85	76	76
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	29	7	0	104	208	49

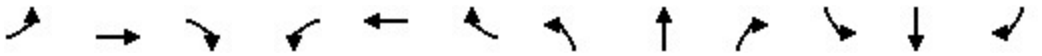
Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	337	233	257	0	-	0
Stage 1	233	-	-	-	-	-
Stage 2	104	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	658	806	1308	-	-	-
Stage 1	806	-	-	-	-	-
Stage 2	920	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	658	806	1308	-	-	-
Mov Cap-2 Maneuver	658	-	-	-	-	-
Stage 1	806	-	-	-	-	-
Stage 2	920	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	10.6	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1308	-	683	-	-
HCM Lane V/C Ratio	-	-	0.053	-	-
HCM Ctrl Dly (s/v)	0	-	10.6	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q (veh)	0	-	0.2	-	-

SR 75 CORRIDOR STUDY
2025 EXISTING TRAFFIC CONDITIONS
CAPACITY/LOS REPORT

PM PEAK HOUR



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	403	0	481	139	633	0	0	834	267
Future Volume (vph)	0	0	0	403	0	481	139	633	0	0	834	267
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0		6.0	6.0	6.0			6.0	6.0
Lane Util. Factor				0.97		0.88	0.97	0.95			0.95	1.00
Frt				1.00		0.85	1.00	1.00			1.00	0.85
Flt Protected				0.95		1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)				3433		2787	3303	3505			3539	1583
Flt Permitted				0.95		1.00	0.95	1.00			1.00	1.00
Satd. Flow (perm)				3433		2787	3303	3505			3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.89	0.89	0.89	0.93	0.93	0.93	0.88	0.88	0.88
Adj. Flow (vph)	0	0	0	453	0	540	149	681	0	0	948	303
RTOR Reduction (vph)	0	0	0	0	0	338	0	0	0	0	0	107
Lane Group Flow (vph)	0	0	0	453	0	202	149	681	0	0	948	196
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	6%	3%	2%	2%	2%	2%
Turn Type				Prot		Prot	Prot	NA			NA	Perm
Protected Phases				3		3	5	2			6	
Permitted Phases												6
Actuated Green, G (s)				18.4		18.4	12.0	59.6			41.6	41.6
Effective Green, g (s)				18.4		18.4	12.0	59.6			41.6	41.6
Actuated g/C Ratio				0.20		0.20	0.13	0.66			0.46	0.46
Clearance Time (s)				6.0		6.0	6.0	6.0			6.0	6.0
Vehicle Extension (s)				3.0		3.0	3.0	3.0			3.0	3.0
Lane Grp Cap (vph)				701		569	440	2321			1635	731
v/s Ratio Prot				c0.13		0.07	0.05	c0.19			c0.27	
v/s Ratio Perm												0.12
v/c Ratio				0.65		0.35	0.34	0.29			0.58	0.27
Uniform Delay, d1				32.8		30.7	35.4	6.4			17.8	14.9
Progression Factor				1.00		1.00	1.17	1.23			1.00	1.00
Incremental Delay, d2				2.1		0.4	0.4	0.3			1.5	0.9
Delay (s)				34.9		31.1	42.0	8.2			19.3	15.8
Level of Service				C		C	D	A			B	B
Approach Delay (s/veh)		0.0			32.8			14.2			18.4	
Approach LOS		A			C			B			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	21.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	51.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	489	294	433	0
Future Volume (vph)	0	0	489	294	433	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)			6.0	6.0	5.0	
Lane Util. Factor			1.00	1.00	0.97	
Frt			1.00	0.85	1.00	
Flt Protected			1.00	1.00	0.95	
Satd. Flow (prot)			1827	1583	3433	
Flt Permitted			1.00	1.00	0.95	
Satd. Flow (perm)			1827	1583	3433	
Peak-hour factor, PHF	0.92	0.92	0.91	0.91	0.92	0.92
Adj. Flow (vph)	0	0	537	323	471	0
RTOR Reduction (vph)	0	0	0	37	0	0
Lane Group Flow (vph)	0	0	537	286	471	0
Heavy Vehicles (%)	2%	2%	4%	2%	2%	2%
Turn Type			NA	Perm	Prot	
Protected Phases			2		1	
Permitted Phases				2		
Actuated Green, G (s)			61.5	61.5	17.5	
Effective Green, g (s)			61.5	61.5	17.5	
Actuated g/C Ratio			0.68	0.68	0.19	
Clearance Time (s)			6.0	6.0	5.0	
Vehicle Extension (s)			3.0	3.0	3.0	
Lane Grp Cap (vph)			1248	1081	667	
v/s Ratio Prot			c0.29		c0.14	
v/s Ratio Perm				0.18		
v/c Ratio			0.43	0.26	0.71	
Uniform Delay, d1			6.4	5.5	33.8	
Progression Factor			1.00	1.00	0.70	
Incremental Delay, d2			1.1	0.6	2.9	
Delay (s)			7.5	6.1	26.5	
Level of Service			A	A	C	
Approach Delay (s/veh)	0.0		7.0			26.5
Approach LOS	A		A			C

Intersection Summary			
HCM 2000 Control Delay (s/veh)	13.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	50.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	14.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	53	0	10	1	0	18	12	701	0	6	909	75
Future Vol, veh/h	53	0	10	1	0	18	12	701	0	6	909	75
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	-	-	-	-	-	-	100	-	-	150	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	72	72	72	37	37	37	95	95	95	97	97	97
Heavy Vehicles, %	3	2	13	2	2	2	2	4	2	2	4	6
Mvmt Flow	74	0	14	3	0	49	13	738	0	6	937	77

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1738	1713	937	1720	1713	738	937	0	0	738	0	0
Stage 1	949	949	-	764	764	-	-	-	-	-	-	-
Stage 2	789	764	-	956	949	-	-	-	-	-	-	-
Critical Hdwy	7.13	6.52	6.33	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.13	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.13	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.527	4.018	3.417	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	~ 68	90	306	70	90	418	731	-	-	868	-	-
Stage 1	312	339	-	396	413	-	-	-	-	-	-	-
Stage 2	382	413	-	310	339	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 59	88	306	66	88	418	731	-	-	868	-	-
Mov Cap-2 Maneuver	~ 59	88	-	66	88	-	-	-	-	-	-	-
Stage 1	306	337	-	389	406	-	-	-	-	-	-	-
Stage 2	332	406	-	294	337	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	$ 309.1	18.1	0.2	0.1
HCM LOS	F	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	731	-	-	68	326	868	-	-
HCM Lane V/C Ratio	0.017	-	-	1.287	0.158	0.007	-	-
HCM Ctrl Dly (s/v)	10	-	-	-$ 309.1	18.1	9.2	-	-
HCM Lane LOS	B	-	-	F	C	A	-	-
HCM 95th %tile Q (veh)	0.1	-	-	7.1	0.6	0	-	-

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	11	35	649	14	11	900
Future Vol, veh/h	11	35	649	14	11	900
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	150	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	72	72	90	90	98	98
Heavy Vehicles, %	13	2	3	5	2	5
Mvmt Flow	15	49	721	16	11	918

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1669	729	0	0	737	0
Stage 1	729	-	-	-	-	-
Stage 2	940	-	-	-	-	-
Critical Hdwy	6.53	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.53	-	-	-	-	-
Critical Hdwy Stg 2	5.53	-	-	-	-	-
Follow-up Hdwy	3.617	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	99	423	-	-	869	-
Stage 1	458	-	-	-	-	-
Stage 2	363	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	98	423	-	-	869	-
Mov Cap-2 Maneuver	227	-	-	-	-	-
Stage 1	458	-	-	-	-	-
Stage 2	358	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	17.5	0	0.1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	351	869	-
HCM Lane V/C Ratio	-	-	0.182	0.013	-
HCM Ctrl Dly (s/v)	-	-	17.5	9.2	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q (veh)	-	-	0.7	0	-

Intersection	
Int Delay, s/veh	4.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	39	0	12	0	0	0	1	624	0	0	888	25
Future Vol, veh/h	39	0	12	0	0	0	1	624	0	0	888	25
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	53	53	53	25	25	25	96	96	96	98	98	98
Heavy Vehicles, %	3	2	2	2	2	2	2	3	2	2	2	2
Mvmt Flow	74	0	23	0	0	0	1	650	0	0	906	26

Major/Minor	Minor2				Major1			Major2		
Conflicting Flow All	1571	1571	919		932	0	0	650	0	0
Stage 1	919	919	-		-	-	-	-	-	-
Stage 2	652	652	-		-	-	-	-	-	-
Critical Hdwy	6.43	6.52	6.22		4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	5.43	5.52	-		-	-	-	-	-	-
Critical Hdwy Stg 2	5.43	5.52	-		-	-	-	-	-	-
Follow-up Hdwy	3.527	4.018	3.318		2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	121	110	329		734	-	-	936	-	-
Stage 1	387	350	-		-	-	-	-	-	-
Stage 2	517	464	-		-	-	-	-	-	-
Platoon blocked, %						-	-		-	-
Mov Cap-1 Maneuver	121	0	329		734	-	-	936	-	-
Mov Cap-2 Maneuver	121	0	-		-	-	-	-	-	-
Stage 1	387	0	-		-	-	-	-	-	-
Stage 2	517	0	-		-	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	71.8	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	SBL	SBT	SBR
Capacity (veh/h)	734	-	-	142	936	-	-
HCM Lane V/C Ratio	0.001	-	-	0.678	-	-	-
HCM Ctrl Dly (s/v)	9.9	-	-	71.8	0	-	-
HCM Lane LOS	A	-	-	F	A	-	-
HCM 95th %tile Q (veh)	0	-	-	3.8	0	-	-

Intersection	
Int Delay, s/veh	6.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↰	↑		↰	↑	
Traffic Vol, veh/h	8	8	22	17	13	88	38	469	18	115	748	22
Future Vol, veh/h	8	8	22	17	13	88	38	469	18	115	748	22
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	73	73	73	89	89	89	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	6	2	5	2	3	6	2	2	5
Mvmt Flow	11	11	30	19	15	99	39	484	19	119	771	23

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1650	1602	783	1613	1604	494	794	0	0	503	0	0
Stage 1	1021	1021	-	572	572	-	-	-	-	-	-	-
Stage 2	629	581	-	1041	1032	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.16	6.52	6.25	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.16	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.16	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.554	4.018	3.345	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	79	106	394	82	105	569	827	-	-	1061	-	-
Stage 1	285	314	-	498	504	-	-	-	-	-	-	-
Stage 2	470	500	-	273	310	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	50	90	394	61	89	569	827	-	-	1061	-	-
Mov Cap-2 Maneuver	50	90	-	61	89	-	-	-	-	-	-	-
Stage 1	272	279	-	475	480	-	-	-	-	-	-	-
Stage 2	359	477	-	215	275	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	53	50.5	0.7	1.1
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	827	-	-	125	204	1061	-	-
HCM Lane V/C Ratio	0.047	-	-	0.416	0.65	0.112	-	-
HCM Ctrl Dly (s/v)	9.6	-	-	53	50.5	8.8	-	-
HCM Lane LOS	A	-	-	F	F	A	-	-
HCM 95th %tile Q (veh)	0.1	-	-	1.8	3.9	0.4	-	-

Intersection	
Int Delay, s/veh	34.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↰	↑		↰	↑	
Traffic Vol, veh/h	115	0	38	1	0	9	25	387	1	4	583	179
Future Vol, veh/h	115	0	38	1	0	9	25	387	1	4	583	179
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	67	67	67	42	42	42	88	88	88	95	95	95
Heavy Vehicles, %	3	2	2	2	2	2	2	5	2	2	3	2
Mvmt Flow	172	0	57	2	0	21	28	440	1	4	614	188

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1223	1213	708	1242	1307	441	802	0	0	441	0	0
Stage 1	716	716	-	497	497	-	-	-	-	-	-	-
Stage 2	507	497	-	745	810	-	-	-	-	-	-	-
Critical Hdwy	7.13	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.13	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.13	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.527	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	~ 155	182	435	152	160	616	822	-	-	1119	-	-
Stage 1	420	434	-	555	545	-	-	-	-	-	-	-
Stage 2	546	545	-	406	393	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 145	175	435	128	154	616	822	-	-	1119	-	-
Mov Cap-2 Maneuver	~ 145	175	-	128	154	-	-	-	-	-	-	-
Stage 1	406	432	-	536	526	-	-	-	-	-	-	-
Stage 2	509	526	-	352	391	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	227	13.5	0.6	0
HCM LOS	F	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	822	-	-	174	446	1119	-	-
HCM Lane V/C Ratio	0.035	-	-	1.312	0.053	0.004	-	-
HCM Ctrl Dly (s/v)	9.5	-	-	227	13.5	8.2	-	-
HCM Lane LOS	A	-	-	F	B	A	-	-
HCM 95th %tile Q (veh)	0.1	-	-	13.3	0.2	0	-	-

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	1.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	16	64	357	16	70	504
Future Vol, veh/h	16	64	357	16	70	504
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	150	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	80	80	91	91	94	94
Heavy Vehicles, %	2	7	3	7	2	3
Mvmt Flow	20	80	392	18	74	536

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1085	401	0	0	410	0
Stage 1	401	-	-	-	-	-
Stage 2	684	-	-	-	-	-
Critical Hdwy	6.42	6.27	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.363	-	-	2.218	-
Pot Cap-1 Maneuver	240	638	-	-	1149	-
Stage 1	676	-	-	-	-	-
Stage 2	501	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	225	638	-	-	1149	-
Mov Cap-2 Maneuver	350	-	-	-	-	-
Stage 1	676	-	-	-	-	-
Stage 2	469	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	13	0	1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	548	1149	-
HCM Lane V/C Ratio	-	-	0.182	0.065	-
HCM Ctrl Dly (s/v)	-	-	13	8.4	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q (veh)	-	-	0.7	0.2	-

Intersection	
Int Delay, s/veh	0.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	7	3	369	6	5	515
Future Vol, veh/h	7	3	369	6	5	515
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	150	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	50	50	89	89	96	96
Heavy Vehicles, %	2	2	3	2	20	2
Mvmt Flow	14	6	415	7	5	536

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	965	419	0	0	422	0
Stage 1	419	-	-	-	-	-
Stage 2	546	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.3	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.38	-
Pot Cap-1 Maneuver	283	634	-	-	1047	-
Stage 1	664	-	-	-	-	-
Stage 2	580	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	282	634	-	-	1047	-
Mov Cap-2 Maneuver	409	-	-	-	-	-
Stage 1	664	-	-	-	-	-
Stage 2	577	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	13.2	0	0.1
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	458	1047	-
HCM Lane V/C Ratio	-	-	0.044	0.005	-
HCM Ctrl Dly (s/v)	-	-	13.2	8.5	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q (veh)	-	-	0.1	0	-

Intersection	
Int Delay, s/veh	3.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	26	116	256	25	151	372
Future Vol, veh/h	26	116	256	25	151	372
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	120	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	89	89	85	85	94	94
Heavy Vehicles, %	2	2	4	2	2	2
Mvmt Flow	29	130	301	29	161	396

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1034	316	0	0	330	0
Stage 1	316	-	-	-	-	-
Stage 2	718	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	257	724	-	-	1229	-
Stage 1	739	-	-	-	-	-
Stage 2	483	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	223	724	-	-	1229	-
Mov Cap-2 Maneuver	223	-	-	-	-	-
Stage 1	739	-	-	-	-	-
Stage 2	420	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	15.2	0	2.4
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	513	1229	-
HCM Lane V/C Ratio	-	-	0.311	0.131	-
HCM Ctrl Dly (s/v)	-	-	15.2	8.4	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q (veh)	-	-	1.3	0.5	-

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	31	21	28	246	377	27
Future Vol, veh/h	31	21	28	246	377	27
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	72	72	86	86	89	89
Heavy Vehicles, %	3	5	4	4	2	4
Mvmt Flow	43	29	33	286	424	30

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	791	439	454	0	-	0
Stage 1	439	-	-	-	-	-
Stage 2	352	-	-	-	-	-
Critical Hdwy	6.43	6.25	4.14	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.345	2.236	-	-	-
Pot Cap-1 Maneuver	357	612	1096	-	-	-
Stage 1	648	-	-	-	-	-
Stage 2	710	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	344	612	1096	-	-	-
Mov Cap-2 Maneuver	344	-	-	-	-	-
Stage 1	625	-	-	-	-	-
Stage 2	710	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	15.4	0.9	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1096	-	418	-	-
HCM Lane V/C Ratio	0.03	-	0.173	-	-
HCM Ctrl Dly (s/v)	8.4	0	15.4	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q (veh)	0.1	-	0.6	-	-

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	18	2	4	124	140	36
Future Vol, veh/h	18	2	4	124	140	36
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	56	56	86	86	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	32	4	5	144	175	45

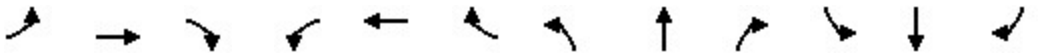
Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	352	198	220	0	-	0
Stage 1	198	-	-	-	-	-
Stage 2	154	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	646	843	1349	-	-	-
Stage 1	835	-	-	-	-	-
Stage 2	874	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	643	843	1349	-	-	-
Mov Cap-2 Maneuver	643	-	-	-	-	-
Stage 1	832	-	-	-	-	-
Stage 2	874	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	10.8	0.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1349	-	659	-	-
HCM Lane V/C Ratio	0.003	-	0.054	-	-
HCM Ctrl Dly (s/v)	7.7	0	10.8	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q (veh)	0	-	0.2	-	-

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CAPACITY/LOS REPORT

AM PEAK HOUR



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	334	0	454	252	667	0	0	955	341
Future Volume (vph)	0	0	0	334	0	454	252	667	0	0	955	341
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0		6.0	6.0	6.0			6.0	6.0
Lane Util. Factor				0.97		0.88	0.97	0.95			0.95	1.00
Frt				1.00		0.85	1.00	1.00			1.00	0.85
Flt Protected				0.95		1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)				3400		2682	3242	3471			3438	1553
Flt Permitted				0.95		1.00	0.95	1.00			1.00	1.00
Satd. Flow (perm)				3400		2682	3242	3471			3438	1553
Peak-hour factor, PHF	0.92	0.92	0.92	0.87	0.87	0.87	0.74	0.74	0.74	0.88	0.88	0.88
Adj. Flow (vph)	0	0	0	384	0	522	341	901	0	0	1085	388
RTOR Reduction (vph)	0	0	0	0	0	301	0	0	0	0	0	71
Lane Group Flow (vph)	0	0	0	384	0	221	341	901	0	0	1085	317
Heavy Vehicles (%)	2%	2%	2%	3%	2%	6%	8%	4%	2%	2%	5%	4%
Turn Type				Prot		Prot	Prot	NA			NA	Perm
Protected Phases				3		3	5	2			6	
Permitted Phases												6
Actuated Green, G (s)				23.2		23.2	27.0	114.8			81.8	81.8
Effective Green, g (s)				23.2		23.2	27.0	114.8			81.8	81.8
Actuated g/C Ratio				0.15		0.15	0.18	0.77			0.55	0.55
Clearance Time (s)				6.0		6.0	6.0	6.0			6.0	6.0
Vehicle Extension (s)				3.0		3.0	3.0	3.0			3.0	3.0
Lane Grp Cap (vph)				525		414	583	2656			1874	846
v/s Ratio Prot				c0.11		0.08	c0.11	0.26			c0.32	
v/s Ratio Perm												0.20
v/c Ratio				0.73		0.53	0.58	0.34			0.58	0.37
Uniform Delay, d1				60.4		58.4	56.4	5.6			22.7	19.5
Progression Factor				1.00		1.00	0.96	1.22			1.00	1.00
Incremental Delay, d2				5.2		1.3	1.4	0.3			1.3	1.3
Delay (s)				65.6		59.7	55.7	7.2			24.0	20.7
Level of Service				E		E	E	A			C	C
Approach Delay (s/veh)		0.0			62.2			20.5			23.1	
Approach LOS		A			E			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	32.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	56.4%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	667	611	501	0
Future Volume (vph)	0	0	667	611	501	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)			6.0	6.0	5.0	
Lane Util. Factor			1.00	1.00	0.97	
Frt			1.00	0.85	1.00	
Flt Protected			1.00	1.00	0.95	
Satd. Flow (prot)			1810	1583	3242	
Flt Permitted			1.00	1.00	0.95	
Satd. Flow (perm)			1810	1583	3242	
Peak-hour factor, PHF	0.92	0.92	0.81	0.81	0.87	0.87
Adj. Flow (vph)	0	0	823	754	576	0
RTOR Reduction (vph)	0	0	0	16	0	0
Lane Group Flow (vph)	0	0	823	738	576	0
Heavy Vehicles (%)	2%	2%	5%	2%	8%	2%
Turn Type			NA	Perm	Prot	
Protected Phases			2		1	
Permitted Phases				2		
Actuated Green, G (s)			107.2	107.2	31.8	
Effective Green, g (s)			107.2	107.2	31.8	
Actuated g/C Ratio			0.71	0.71	0.21	
Clearance Time (s)			6.0	6.0	5.0	
Vehicle Extension (s)			3.0	3.0	3.0	
Lane Grp Cap (vph)			1293	1131	687	
v/s Ratio Prot			0.45		c0.18	
v/s Ratio Perm				c0.47		
v/c Ratio			0.64	0.65	0.84	
Uniform Delay, d1			11.2	11.4	56.6	
Progression Factor			1.00	1.00	0.65	
Incremental Delay, d2			2.4	2.9	7.5	
Delay (s)			13.6	14.4	44.3	
Level of Service			B	B	D	
Approach Delay (s/veh)	0.0		14.0			44.3
Approach LOS	A		B			D

Intersection Summary			
HCM 2000 Control Delay (s/veh)	22.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	61.3%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	131.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	77	0	10	0	0	4	11	1201	2	40	906	88
Future Vol, veh/h	77	0	10	0	0	4	11	1201	2	40	906	88
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	-	-	-	-	-	-	100	-	-	150	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	38	38	38	81	81	81	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2	2	3	2	2	4	4
Mvmt Flow	91	0	12	0	0	11	14	1483	2	48	1092	106

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2706	2701	1092	2706	2700	1484	1092	0	0	1485	0	0
Stage 1	1188	1188	-	1512	1512	-	-	-	-	-	-	-
Stage 2	1518	1513	-	1194	1188	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	~ 14	21	261	14	21	153	639	-	-	453	-	-
Stage 1	230	262	-	150	183	-	-	-	-	-	-	-
Stage 2	149	182	-	228	262	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 12	18	261	12	18	153	639	-	-	453	-	-
Mov Cap-2 Maneuver	~ 12	18	-	12	18	-	-	-	-	-	-	-
Stage 1	225	234	-	147	179	-	-	-	-	-	-	-
Stage 2	136	178	-	195	234	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	$ 3664.9	30.3	0.1	0.5
HCM LOS	F	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	639	-	-	13	153	453	-	-
HCM Lane V/C Ratio	0.021	-	-	7.873	0.069	0.106	-	-
HCM Ctrl Dly (s/v)	10.8	-	-	$ 3664.9	30.3	13.9	-	-
HCM Lane LOS	B	-	-	F	D	B	-	-
HCM 95th %tile Q (veh)	0.1	-	-	13.9	0.2	0.4	-	-

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	2	13	1214	7	17	854
Future Vol, veh/h	2	13	1214	7	17	854
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	150	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	46	46	83	83	80	80
Heavy Vehicles, %	100	27	2	2	7	3
Mvmt Flow	4	28	1463	8	21	1068

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2577	1467	0	0	1471	0
Stage 1	1467	-	-	-	-	-
Stage 2	1110	-	-	-	-	-
Critical Hdwy	7.4	6.47	-	-	4.17	-
Critical Hdwy Stg 1	6.4	-	-	-	-	-
Critical Hdwy Stg 2	6.4	-	-	-	-	-
Follow-up Hdwy	4.4	3.543	-	-	2.263	-
Pot Cap-1 Maneuver	13	138	-	-	444	-
Stage 1	130	-	-	-	-	-
Stage 2	208	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	12	138	-	-	444	-
Mov Cap-2 Maneuver	77	-	-	-	-	-
Stage 1	130	-	-	-	-	-
Stage 2	198	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	43.7	0	0.3
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	125	444	-
HCM Lane V/C Ratio	-	-	0.261	0.048	-
HCM Ctrl Dly (s/v)	-	-	43.7	13.5	-
HCM Lane LOS	-	-	E	B	-
HCM 95th %tile Q (veh)	-	-	1	0.2	-

Intersection	
Int Delay, s/veh	16.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	40	0	10	0	0	0	11	1187	0	1	833	22
Future Vol, veh/h	40	0	10	0	0	0	11	1187	0	1	833	22
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	79	79	79	25	25	25	81	81	81	79	79	79
Heavy Vehicles, %	6	2	13	2	2	2	2	2	2	2	4	2
Mvmt Flow	51	0	13	0	0	0	14	1465	0	1	1054	28

Major/Minor	Minor2				Major1			Major2		
Conflicting Flow All	2563	2563	1068		1082	0	0	1465	0	0
Stage 1	1070	1070	-		-	-	-	-	-	-
Stage 2	1493	1493	-		-	-	-	-	-	-
Critical Hdwy	6.46	6.52	6.33		4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	5.46	5.52	-		-	-	-	-	-	-
Critical Hdwy Stg 2	5.46	5.52	-		-	-	-	-	-	-
Follow-up Hdwy	3.554	4.018	3.417		2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	~ 28	26	256		645	-	-	461	-	-
Stage 1	324	298	-		-	-	-	-	-	-
Stage 2	201	187	-		-	-	-	-	-	-
Platoon blocked, %						-	-		-	-
Mov Cap-1 Maneuver	~ 27	0	256		645	-	-	461	-	-
Mov Cap-2 Maneuver	~ 27	0	-		-	-	-	-	-	-
Stage 1	317	0	-		-	-	-	-	-	-
Stage 2	201	0	-		-	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	$ 690.5	0.1	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	SBL	SBT	SBR
Capacity (veh/h)	645	-	-	33	461	-	-
HCM Lane V/C Ratio	0.021	-	-	1.918	0.003	-	-
HCM Ctrl Dly (s/v)	10.7	-	-	$ 690.5	12.8	-	-
HCM Lane LOS	B	-	-	F	B	-	-
HCM 95th %tile Q (veh)	0.1	-	-	7.1	0	-	-

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	271.6

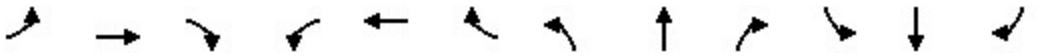
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↰	↱		↰	↱	
Traffic Vol, veh/h	26	13	71	22	5	130	35	970	50	75	651	13
Future Vol, veh/h	26	13	71	22	5	130	35	970	50	75	651	13
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	83	83	83	83	83	83	79	79	79
Heavy Vehicles, %	5	2	7	11	2	2	7	2	27	3	4	2
Mvmt Flow	31	16	86	27	6	157	42	1169	60	95	824	16

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2387	2335	832	2356	2313	1199	840	0	0	1229	0	0
Stage 1	1022	1022	-	1283	1283	-	-	-	-	-	-	-
Stage 2	1365	1313	-	1073	1030	-	-	-	-	-	-	-
Critical Hdwy	7.15	6.52	6.27	7.21	6.52	6.22	4.17	-	-	4.13	-	-
Critical Hdwy Stg 1	6.15	5.52	-	6.21	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.15	5.52	-	6.21	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.545	4.018	3.363	3.599	4.018	3.318	2.263	-	-	2.227	-	-
Pot Cap-1 Maneuver	~ 23	37	362	~ 23	38	226	774	-	-	564	-	-
Stage 1	281	313	-	194	236	-	-	-	-	-	-	-
Stage 2	179	228	-	256	311	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 5	29	362	~ 9	30	226	774	-	-	564	-	-
Mov Cap-2 Maneuver	~ 5	29	-	~ 9	30	-	-	-	-	-	-	-
Stage 1	266	260	-	184	223	-	-	-	-	-	-	-
Stage 2	51	216	-	153	259	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	$ 3088.8	$ 1458.1	0.3	1.3
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	774	-	-	19	49	564	-	-
HCM Lane V/C Ratio	0.054	-	-	6.975	3.86	0.168	-	-
HCM Ctrl Dly (s/v)	9.9	-	-	$ 3088.8	$ 1458.1	12.7	-	-
HCM Lane LOS	A	-	-	F	F	B	-	-
HCM 95th %tile Q (veh)	0.2	-	-	17.1	20.9	0.6	-	-

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	243	0	53	1	0	2	136	792	1	1	582	193
Future Volume (vph)	243	0	53	1	0	2	136	792	1	1	582	193
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	6.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.85		1.00	0.85		1.00	1.00		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	1568		1770	1583		1703	1827		1770	1810	1583
Flt Permitted	0.00	1.00		0.00	1.00		0.11	1.00		0.07	1.00	1.00
Satd. Flow (perm)	0	1568		0	1583		195	1827		124	1810	1583
Peak-hour factor, PHF	0.73	0.73	0.73	0.50	0.50	0.50	0.77	0.77	0.77	0.76	0.76	0.76
Adj. Flow (vph)	333	0	73	2	0	4	177	1029	1	1	766	254
RTOR Reduction (vph)	0	63	0	0	4	0	0	0	0	0	0	68
Lane Group Flow (vph)	333	10	0	2	0	0	177	1030	0	1	766	186
Heavy Vehicles (%)	2%	2%	3%	2%	2%	2%	6%	4%	2%	2%	5%	2%
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases	4			8			2			6		6
Actuated Green, G (s)	28.8	18.5		11.1	0.8		83.5	76.7		60.7	59.9	88.7
Effective Green, g (s)	28.8	18.5		11.1	0.8		83.5	76.7		60.7	59.9	88.7
Actuated g/C Ratio	0.22	0.14		0.08	0.01		0.64	0.59		0.46	0.46	0.68
Clearance Time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	388	221		149	9		326	1068		67	826	1071
v/s Ratio Prot	c0.19	0.01		c0.00	0.00		c0.07	c0.56		0.00	0.42	0.04
v/s Ratio Perm							0.27			0.01		0.08
v/c Ratio	0.86	0.05		0.01	0.00		0.54	0.96		0.01	0.93	0.17
Uniform Delay, d1	49.2	48.7		55.0	64.8		41.6	25.9		60.9	33.5	7.8
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	16.9	0.1		0.0	0.1		1.8	19.4		0.1	16.2	0.1
Delay (s)	66.1	48.8		55.0	64.9		43.5	45.3		61.0	49.8	7.8
Level of Service	E	D		E	E		D	D		E	D	A
Approach Delay (s/veh)		63.0			61.6			45.0			39.3	
Approach LOS		E			E			D			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	45.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	131.1	Sum of lost time (s)	24.0
Intersection Capacity Utilization	82.7%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	33.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	1	292	631	12	342	286
Future Vol, veh/h	1	292	631	12	342	286
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	150	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	64	64	83	83	73	73
Heavy Vehicles, %	2	10	2	20	2	12
Mvmt Flow	2	456	760	14	468	392

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2095	767	0	0	774	0
Stage 1	767	-	-	-	-	-
Stage 2	1328	-	-	-	-	-
Critical Hdwy	6.42	6.3	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.39	-	-	2.218	-
Pot Cap-1 Maneuver	57	~ 390	-	-	842	-
Stage 1	458	-	-	-	-	-
Stage 2	247	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	25	~ 390	-	-	842	-
Mov Cap-2 Maneuver	88	-	-	-	-	-
Stage 1	458	-	-	-	-	-
Stage 2	110	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	139.5	0	7.9
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	385	842	-
HCM Lane V/C Ratio	-	-	1.189	0.556	-
HCM Ctrl Dly (s/v)	-	-	139.5	14.5	-
HCM Lane LOS	-	-	F	B	-
HCM 95th %tile Q (veh)	-	-	18.4	3.5	-

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	3.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	52	12	631	303	62	225
Future Vol, veh/h	52	12	631	303	62	225
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	150	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	53	53	72	72	86	86
Heavy Vehicles, %	14	10	2	6	28	6
Mvmt Flow	98	23	876	421	72	262

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1493	1087	0	0	1297	0
Stage 1	1087	-	-	-	-	-
Stage 2	406	-	-	-	-	-
Critical Hdwy	6.54	6.3	-	-	4.38	-
Critical Hdwy Stg 1	5.54	-	-	-	-	-
Critical Hdwy Stg 2	5.54	-	-	-	-	-
Follow-up Hdwy	3.626	3.39	-	-	2.452	-
Pot Cap-1 Maneuver	127	253	-	-	456	-
Stage 1	307	-	-	-	-	-
Stage 2	648	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	107	253	-	-	456	-
Mov Cap-2 Maneuver	223	-	-	-	-	-
Stage 1	307	-	-	-	-	-
Stage 2	546	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	37.3	0	3.1
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	228	456	-
HCM Lane V/C Ratio	-	-	0.53	0.158	-
HCM Ctrl Dly (s/v)	-	-	37.3	14.4	-
HCM Lane LOS	-	-	E	B	-
HCM 95th %tile Q (veh)	-	-	2.8	0.6	-

Intersection	
Int Delay, s/veh	62.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	21	285	650	63	46	231
Future Vol, veh/h	21	285	650	63	46	231
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	120	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	71	71	73	73	75	75
Heavy Vehicles, %	8	3	3	2	2	10
Mvmt Flow	30	401	890	86	61	308

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1363	933	0	0	976	0
Stage 1	933	-	-	-	-	-
Stage 2	430	-	-	-	-	-
Critical Hdwy	6.48	6.23	-	-	4.12	-
Critical Hdwy Stg 1	5.48	-	-	-	-	-
Critical Hdwy Stg 2	5.48	-	-	-	-	-
Follow-up Hdwy	3.572	3.327	-	-	2.218	-
Pot Cap-1 Maneuver	158	~ 321	-	-	707	-
Stage 1	373	-	-	-	-	-
Stage 2	643	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	144	~ 321	-	-	707	-
Mov Cap-2 Maneuver	144	-	-	-	-	-
Stage 1	373	-	-	-	-	-
Stage 2	588	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	255.8	0	1.8
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	296	707	-
HCM Lane V/C Ratio	-	-	1.456	0.087	-
HCM Ctrl Dly (s/v)	-	-	255.8	10.6	-
HCM Lane LOS	-	-	F	B	-
HCM 95th %tile Q (veh)	-	-	23.7	0.3	-

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	91.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	193	44	96	519	224	28
Future Vol, veh/h	193	44	96	519	224	28
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	73	73	75	75	79	79
Heavy Vehicles, %	4	6	3	2	10	4
Mvmt Flow	264	60	128	692	284	35

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1250	302	319	0	-	0
Stage 1	302	-	-	-	-	-
Stage 2	948	-	-	-	-	-
Critical Hdwy	6.44	6.26	4.13	-	-	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.354	2.227	-	-	-
Pot Cap-1 Maneuver	~ 189	728	1235	-	-	-
Stage 1	745	-	-	-	-	-
Stage 2	373	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 157	728	1235	-	-	-
Mov Cap-2 Maneuver	~ 157	-	-	-	-	-
Stage 1	620	-	-	-	-	-
Stage 2	373	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	$ 409	1.3	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1235	-	184	-	-
HCM Lane V/C Ratio	0.104	-	1.764	-	-
HCM Ctrl Dly (s/v)	8.3	0	$ 409	-	-
HCM Lane LOS	A	A	F	-	-
HCM 95th %tile Q (veh)	0.3	-	22.9	-	-

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	54	4	1	252	141	10
Future Vol, veh/h	54	4	1	252	141	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	59	59	76	76	45	45
Heavy Vehicles, %	2	2	2	8	2	2
Mvmt Flow	92	7	1	332	313	22

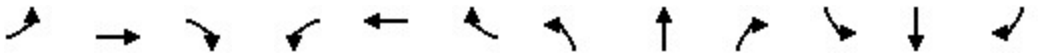
Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	658	324	335	0	-	0
Stage 1	324	-	-	-	-	-
Stage 2	334	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	429	717	1224	-	-	-
Stage 1	733	-	-	-	-	-
Stage 2	725	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	429	717	1224	-	-	-
Mov Cap-2 Maneuver	429	-	-	-	-	-
Stage 1	732	-	-	-	-	-
Stage 2	725	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	15.5	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1224	-	441	-	-
HCM Lane V/C Ratio	0.001	-	0.223	-	-
HCM Ctrl Dly (s/v)	7.9	0	15.5	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q (veh)	0	-	0.8	-	-

SR 75 CORRIDOR STUDY
2030 NO-BUILD TRAFFIC CONDITIONS
CAPACITY/LOS REPORT

SCHOOL DISMISSAL PEAK HOUR



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	354	0	602	177	850	0	0	926	304
Future Volume (vph)	0	0	0	354	0	602	177	850	0	0	926	304
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0		6.0	6.0	6.0			6.0	6.0
Lane Util. Factor				0.97		0.88	0.97	0.95			0.95	1.00
Frt				1.00		0.85	1.00	1.00			1.00	0.85
Flt Protected				0.95		1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)				3433		2787	3303	3505			3539	1583
Flt Permitted				0.95		1.00	0.95	1.00			1.00	1.00
Satd. Flow (perm)				3433		2787	3303	3505			3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.95	0.95	0.95	0.79	0.79	0.79	0.81	0.81	0.81
Adj. Flow (vph)	0	0	0	373	0	634	224	1076	0	0	1143	375
RTOR Reduction (vph)	0	0	0	0	0	160	0	0	0	0	0	85
Lane Group Flow (vph)	0	0	0	373	0	474	224	1076	0	0	1143	290
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	6%	3%	2%	2%	2%	2%
Turn Type				Prot		Prot	Prot	NA			NA	Perm
Protected Phases				3		3	5	2			6	
Permitted Phases												6
Actuated Green, G (s)				25.7		25.7	15.0	82.3			61.3	61.3
Effective Green, g (s)				25.7		25.7	15.0	82.3			61.3	61.3
Actuated g/C Ratio				0.21		0.21	0.13	0.69			0.51	0.51
Clearance Time (s)				6.0		6.0	6.0	6.0			6.0	6.0
Vehicle Extension (s)				3.0		3.0	3.0	3.0			3.0	3.0
Lane Grp Cap (vph)				735		596	412	2403			1807	808
v/s Ratio Prot				0.11		c0.17	c0.07	0.31			c0.32	
v/s Ratio Perm												0.18
v/c Ratio				0.51		0.80	0.54	0.45			0.63	0.36
Uniform Delay, d1				41.6		44.7	49.3	8.5			21.2	17.6
Progression Factor				1.00		1.00	0.95	0.49			1.00	1.00
Incremental Delay, d2				0.6		7.3	1.2	0.5			1.7	1.2
Delay (s)				42.1		51.9	47.9	4.7			22.9	18.8
Level of Service				D		D	D	A			C	B
Approach Delay (s/veh)		0.0			48.3			12.1			21.9	
Approach LOS		A			D			B			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	25.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	54.6%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	812	499	448	0
Future Volume (vph)	0	0	812	499	448	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)			6.0	6.0	5.0	
Lane Util. Factor			1.00	1.00	0.97	
Frt			1.00	0.85	1.00	
Flt Protected			1.00	1.00	0.95	
Satd. Flow (prot)			1827	1583	3433	
Flt Permitted			1.00	1.00	0.95	
Satd. Flow (perm)			1827	1583	3433	
Peak-hour factor, PHF	0.92	0.92	0.83	0.83	0.85	0.85
Adj. Flow (vph)	0	0	978	601	527	0
RTOR Reduction (vph)	0	0	0	12	0	0
Lane Group Flow (vph)	0	0	978	589	527	0
Heavy Vehicles (%)	2%	2%	4%	2%	2%	2%
Turn Type			NA	Perm	Prot	
Protected Phases			2		1	
Permitted Phases				2		
Actuated Green, G (s)			86.1	86.1	22.9	
Effective Green, g (s)			86.1	86.1	22.9	
Actuated g/C Ratio			0.72	0.72	0.19	
Clearance Time (s)			6.0	6.0	5.0	
Vehicle Extension (s)			3.0	3.0	3.0	
Lane Grp Cap (vph)			1310	1135	655	
v/s Ratio Prot			c0.54		c0.15	
v/s Ratio Perm				0.37		
v/c Ratio			0.75	0.52	0.80	
Uniform Delay, d1			10.3	7.6	46.4	
Progression Factor			1.00	1.00	1.00	
Incremental Delay, d2			3.9	1.7	6.0	
Delay (s)			14.2	9.3	52.6	
Level of Service			B	A	D	
Approach Delay (s/veh)	0.0		12.4			52.6
Approach LOS	A		B			D

Intersection Summary			
HCM 2000 Control Delay (s/veh)	22.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	64.7%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	255

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	77	1	18	4	0	12	10	1217	1	12	968	58
Future Vol, veh/h	77	1	18	4	0	12	10	1217	1	12	968	58
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	-	-	-	-	-	-	100	-	-	150	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	60	60	60	65	65	65	84	84	84	86	86	86
Heavy Vehicles, %	3	2	13	2	2	2	2	4	2	2	4	6
Mvmt Flow	128	2	30	6	0	18	12	1449	1	14	1126	67

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2637	2628	1126	2644	2628	1450	1126	0	0	1450	0	0
Stage 1	1154	1154	-	1474	1474	-	-	-	-	-	-	-
Stage 2	1483	1474	-	1170	1154	-	-	-	-	-	-	-
Critical Hdwy	7.13	6.52	6.33	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.13	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.13	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.527	4.018	3.417	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	~ 15	24	237	15	24	161	620	-	-	467	-	-
Stage 1	239	272	-	158	191	-	-	-	-	-	-	-
Stage 2	155	191	-	235	272	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 13	23	237	12	23	161	620	-	-	467	-	-
Mov Cap-2 Maneuver	~ 13	23	-	12	23	-	-	-	-	-	-	-
Stage 1	234	264	-	155	187	-	-	-	-	-	-	-
Stage 2	135	187	-	198	264	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	$ 4516.2	196.3	0.1	0.1
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	620	-	-	16	39	467	-	-
HCM Lane V/C Ratio	0.019	-	-	10	0.631	0.03	-	-
HCM Ctrl Dly (s/v)	10.9	-	-	$ 4516.2	196.3	12.9	-	-
HCM Lane LOS	B	-	-	F	F	B	-	-
HCM 95th %tile Q (veh)	0.1	-	-	20.9	2.3	0.1	-	-

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	2.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	18	63	1121	27	47	926
Future Vol, veh/h	18	63	1121	27	47	926
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	150	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	76	76	84	84	85	85
Heavy Vehicles, %	13	2	3	5	2	5
Mvmt Flow	24	83	1335	32	55	1089

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2550	1351	0	0	1367	0
Stage 1	1351	-	-	-	-	-
Stage 2	1199	-	-	-	-	-
Critical Hdwy	6.53	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.53	-	-	-	-	-
Critical Hdwy Stg 2	5.53	-	-	-	-	-
Follow-up Hdwy	3.617	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	27	184	-	-	502	-
Stage 1	228	-	-	-	-	-
Stage 2	271	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	24	184	-	-	502	-
Mov Cap-2 Maneuver	118	-	-	-	-	-
Stage 1	228	-	-	-	-	-
Stage 2	241	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	60.5	0	0.6
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	164	502	-
HCM Lane V/C Ratio	-	-	0.65	0.11	-
HCM Ctrl Dly (s/v)	-	-	60.5	13.1	-
HCM Lane LOS	-	-	F	B	-
HCM 95th %tile Q (veh)	-	-	3.7	0.4	-

Intersection	
Int Delay, s/veh	345.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	96	0	6	0	0	0	11	1056	0	1	904	38
Future Vol, veh/h	96	0	6	0	0	0	11	1056	0	1	904	38
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	36	36	36	25	25	25	80	80	80	86	86	86
Heavy Vehicles, %	3	2	2	2	2	2	2	3	2	2	2	2
Mvmt Flow	267	0	17	0	0	0	14	1320	0	1	1051	44

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	2423	2423	1073	1095	0	0	1320	0	0
Stage 1	1075	1075	-	-	-	-	-	-	-
Stage 2	1348	1348	-	-	-	-	-	-	-
Critical Hdwy	6.43	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	5.43	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.43	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.527	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	~ 35	32	268	637	-	-	524	-	-
Stage 1	326	296	-	-	-	-	-	-	-
Stage 2	~ 241	219	-	-	-	-	-	-	-
Platoon blocked, %					-	-		-	-
Mov Cap-1 Maneuver	~ 34	0	268	637	-	-	524	-	-
Mov Cap-2 Maneuver	~ 34	0	-	-	-	-	-	-	-
Stage 1	319	0	-	-	-	-	-	-	-
Stage 2	~ 241	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	$ 3307.3	0.1	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	SBL	SBT	SBR
Capacity (veh/h)	637	-	-	36	524	-	-
HCM Lane V/C Ratio	0.022	-	-	7.87	0.002	-	-
HCM Ctrl Dly (s/v)	10.8	-	-	$ 3307.3	11.9	-	-
HCM Lane LOS	B	-	-	F	B	-	-
HCM 95th %tile Q (veh)	0.1	-	-	34	0	-	-

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	184.7

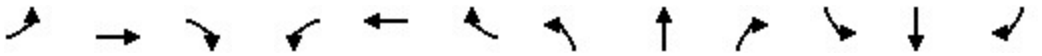
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	21	15	45	10	10	74	60	917	55	95	746	13
Future Vol, veh/h	21	15	45	10	10	74	60	917	55	95	746	13
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	74	74	74	77	77	77	87	87	87
Heavy Vehicles, %	2	2	2	6	2	5	2	3	6	2	2	5
Mvmt Flow	23	16	49	14	14	100	78	1191	71	109	857	15

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2523	2501	865	2498	2473	1227	872	0	0	1262	0	0
Stage 1	1083	1083	-	1383	1383	-	-	-	-	-	-	-
Stage 2	1440	1418	-	1115	1090	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.16	6.52	6.25	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.16	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.16	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.554	4.018	3.345	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	~ 19	29	353	19	30	214	773	-	-	551	-	-
Stage 1	263	293	-	174	211	-	-	-	-	-	-	-
Stage 2	165	203	-	248	291	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 4	21	353	~ 5	22	214	773	-	-	551	-	-
Mov Cap-2 Maneuver	~ 4	21	-	~ 5	22	-	-	-	-	-	-	-
Stage 1	236	235	-	156	190	-	-	-	-	-	-	-
Stage 2	73	182	-	159	233	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	$ 3171.6	$ 1472.8	0.6	1.5
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	773	-	-	13	34	551	-	-
HCM Lane V/C Ratio	0.101	-	-	6.773	3.736	0.198	-	-
HCM Ctrl Dly (s/v)	10.2	-	-	$ 3171.6	$ 1472.8	13.1	-	-
HCM Lane LOS	B	-	-	F	F	B	-	-
HCM 95th %tile Q (veh)	0.3	-	-	12.1	14.8	0.7	-	-

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	221	0	66	1	0	11	77	798	2	1	607	224
Future Volume (vph)	221	0	66	1	0	11	77	798	2	1	607	224
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	6.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.85		1.00	0.85		1.00	1.00		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1752	1583		1770	1583		1770	1809		1770	1845	1583
Flt Permitted	0.00	1.00		0.00	1.00		0.12	1.00		0.07	1.00	1.00
Satd. Flow (perm)	0	1583		0	1583		230	1809		125	1845	1583
Peak-hour factor, PHF	0.64	0.64	0.64	0.75	0.75	0.75	0.63	0.63	0.63	0.87	0.87	0.87
Adj. Flow (vph)	345	0	103	1	0	15	122	1267	3	1	698	257
RTOR Reduction (vph)	0	86	0	0	15	0	0	0	0	0	0	99
Lane Group Flow (vph)	345	17	0	1	0	0	122	1270	0	1	698	158
Heavy Vehicles (%)	3%	2%	2%	2%	2%	2%	2%	5%	2%	2%	3%	2%
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases	4			8			2			6		6
Actuated Green, G (s)	24.1	23.0		4.2	3.1		95.6	88.4		60.9	59.7	83.8
Effective Green, g (s)	24.1	23.0		4.2	3.1		95.6	88.4		60.9	59.7	83.8
Actuated g/C Ratio	0.17	0.16		0.03	0.02		0.68	0.63		0.43	0.42	0.60
Clearance Time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	299	258		52	34		483	1135		68	782	942
v/s Ratio Prot	c0.20	0.01		c0.00	0.00		c0.05	c0.70		0.00	0.38	0.03
v/s Ratio Perm							0.12			0.01		0.07
v/c Ratio	1.15	0.07		0.02	0.01		0.25	1.12		0.01	0.89	0.17
Uniform Delay, d1	58.4	49.8		66.3	67.3		34.8	26.2		65.3	37.6	12.8
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	100.4	0.1		0.1	0.1		0.3	65.7		0.1	12.5	0.1
Delay (s)	158.7	49.9		66.4	67.5		35.1	91.9		65.4	50.1	12.9
Level of Service	F	D		E	E		D	F		E	D	B
Approach Delay (s/veh)		133.7			67.4			86.9			40.1	
Approach LOS		F			E			F			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	78.3	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.09		
Actuated Cycle Length (s)	140.8	Sum of lost time (s)	24.0
Intersection Capacity Utilization	81.9%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	136.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	15	339	482	18	91	545
Future Vol, veh/h	15	339	482	18	91	545
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	150	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	43	43	82	82	85	85
Heavy Vehicles, %	2	7	3	7	2	3
Mvmt Flow	35	788	588	22	107	641

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1454	599	0	0	610	0
Stage 1	599	-	-	-	-	-
Stage 2	855	-	-	-	-	-
Critical Hdwy	6.42	6.27	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.363	-	-	2.218	-
Pot Cap-1 Maneuver	143	~ 492	-	-	969	-
Stage 1	549	-	-	-	-	-
Stage 2	417	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	127	~ 492	-	-	969	-
Mov Cap-2 Maneuver	257	-	-	-	-	-
Stage 1	549	-	-	-	-	-
Stage 2	371	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	$ 361.2	0	1.3
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	474	969	-
HCM Lane V/C Ratio	-	-	1.737	0.11	-
HCM Ctrl Dly (s/v)	-	-	$ 361.2	9.2	-
HCM Lane LOS	-	-	F	A	-
HCM 95th %tile Q (veh)	-	-	49.9	0.4	-

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	53.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	144	34	466	17	12	550
Future Vol, veh/h	144	34	466	17	12	550
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	150	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	37	37	85	85	91	91
Heavy Vehicles, %	2	2	3	2	20	2
Mvmt Flow	389	92	548	20	13	604

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1188	558	0	0	568	0
Stage 1	558	-	-	-	-	-
Stage 2	630	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.3	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.38	-
Pot Cap-1 Maneuver	~ 208	529	-	-	921	-
Stage 1	573	-	-	-	-	-
Stage 2	531	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 205	529	-	-	921	-
Mov Cap-2 Maneuver	~ 343	-	-	-	-	-
Stage 1	573	-	-	-	-	-
Stage 2	524	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	186.6	0	0.2
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	368	921	-
HCM Lane V/C Ratio	-	-	1.307	0.014	-
HCM Ctrl Dly (s/v)	-	-	186.6	9	-
HCM Lane LOS	-	-	F	A	-
HCM 95th %tile Q (veh)	-	-	22.2	0	-

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	4.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	24	112	371	41	196	498
Future Vol, veh/h	24	112	371	41	196	498
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	120	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	80	80	76	76
Heavy Vehicles, %	2	2	4	2	2	2
Mvmt Flow	27	124	464	51	258	655

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1661	490	0	0	515	0
Stage 1	490	-	-	-	-	-
Stage 2	1171	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	107	578	-	-	1051	-
Stage 1	616	-	-	-	-	-
Stage 2	295	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	81	578	-	-	1051	-
Mov Cap-2 Maneuver	81	-	-	-	-	-
Stage 1	616	-	-	-	-	-
Stage 2	223	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	32.4	0	2.7
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	278	1051	-
HCM Lane V/C Ratio	-	-	0.544	0.245	-
HCM Ctrl Dly (s/v)	-	-	32.4	9.5	-
HCM Lane LOS	-	-	D	A	-
HCM 95th %tile Q (veh)	-	-	3	1	-

Intersection	
Int Delay, s/veh	5.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	73	62	26	341	431	89
Future Vol, veh/h	73	62	26	341	431	89
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	68	68	90	90	76	76
Heavy Vehicles, %	3	5	4	4	2	4
Mvmt Flow	107	91	29	379	567	117

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1063	626	684	0	-	0
Stage 1	626	-	-	-	-	-
Stage 2	437	-	-	-	-	-
Critical Hdwy	6.43	6.25	4.14	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.345	2.236	-	-	-
Pot Cap-1 Maneuver	246	479	900	-	-	-
Stage 1	531	-	-	-	-	-
Stage 2	649	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	236	479	900	-	-	-
Mov Cap-2 Maneuver	236	-	-	-	-	-
Stage 1	509	-	-	-	-	-
Stage 2	649	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	35.6	0.6	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	900	-	308	-	-
HCM Lane V/C Ratio	0.032	-	0.645	-	-
HCM Ctrl Dly (s/v)	9.1	0	35.6	-	-
HCM Lane LOS	A	A	E	-	-
HCM 95th %tile Q (veh)	0.1	-	4.2	-	-

Intersection	
Int Delay, s/veh	1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	29	7	1	107	192	45
Future Vol, veh/h	29	7	1	107	192	45
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	83	83	85	85	76	76
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	35	8	1	126	253	59

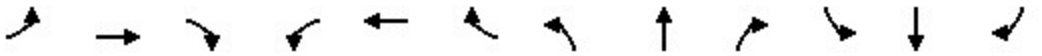
Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	411	283	312	0	-	0
Stage 1	283	-	-	-	-	-
Stage 2	128	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	597	756	1248	-	-	-
Stage 1	765	-	-	-	-	-
Stage 2	898	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	596	756	1248	-	-	-
Mov Cap-2 Maneuver	596	-	-	-	-	-
Stage 1	764	-	-	-	-	-
Stage 2	898	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	11.2	0.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1248	-	622	-	-
HCM Lane V/C Ratio	0.001	-	0.07	-	-
HCM Ctrl Dly (s/v)	7.9	0	11.2	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q (veh)	0	-	0.2	-	-

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PM PEAK HOUR



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	513	0	585	176	805	0	0	1062	325
Future Volume (vph)	0	0	0	513	0	585	176	805	0	0	1062	325
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0		6.0	6.0	6.0			6.0	6.0
Lane Util. Factor				0.97		0.88	0.97	0.95			0.95	1.00
Frt				1.00		0.85	1.00	1.00			1.00	0.85
Flt Protected				0.95		1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)				3433		2787	3303	3505			3539	1583
Flt Permitted				0.95		1.00	0.95	1.00			1.00	1.00
Satd. Flow (perm)				3433		2787	3303	3505			3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.89	0.89	0.89	0.93	0.93	0.93	0.88	0.88	0.88
Adj. Flow (vph)	0	0	0	576	0	657	189	866	0	0	1207	369
RTOR Reduction (vph)	0	0	0	0	0	265	0	0	0	0	0	63
Lane Group Flow (vph)	0	0	0	576	0	392	189	866	0	0	1207	306
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	6%	3%	2%	2%	2%	2%
Turn Type				Prot		Prot	Prot	NA			NA	Perm
Protected Phases				3		3	5	2			6	
Permitted Phases												6
Actuated Green, G (s)				32.5		32.5	17.0	105.5			82.5	82.5
Effective Green, g (s)				32.5		32.5	17.0	105.5			82.5	82.5
Actuated g/C Ratio				0.22		0.22	0.11	0.70			0.55	0.55
Clearance Time (s)				6.0		6.0	6.0	6.0			6.0	6.0
Vehicle Extension (s)				3.0		3.0	3.0	3.0			3.0	3.0
Lane Grp Cap (vph)				743		603	374	2465			1946	870
v/s Ratio Prot				c0.17		0.14	c0.06	0.25			c0.34	
v/s Ratio Perm												0.19
v/c Ratio				0.78		0.65	0.51	0.35			0.62	0.35
Uniform Delay, d1				55.3		53.6	62.5	8.8			23.1	18.8
Progression Factor				1.00		1.00	0.95	1.14			1.00	1.00
Incremental Delay, d2				5.1		2.5	1.0	0.4			1.5	1.1
Delay (s)				60.4		56.1	60.6	10.4			24.5	20.0
Level of Service				E		E	E	B			C	B
Approach Delay (s/veh)		0.0			58.1			19.4			23.5	
Approach LOS		A			E			B			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	33.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	62.3%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	646	390	527	0
Future Volume (vph)	0	0	646	390	527	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)			6.0	6.0	5.0	
Lane Util. Factor			1.00	1.00	0.97	
Frt			1.00	0.85	1.00	
Flt Protected			1.00	1.00	0.95	
Satd. Flow (prot)			1827	1583	3433	
Flt Permitted			1.00	1.00	0.95	
Satd. Flow (perm)			1827	1583	3433	
Peak-hour factor, PHF	0.92	0.92	0.91	0.91	0.92	0.92
Adj. Flow (vph)	0	0	710	429	573	0
RTOR Reduction (vph)	0	0	0	21	0	0
Lane Group Flow (vph)	0	0	710	408	573	0
Heavy Vehicles (%)	2%	2%	4%	2%	2%	2%
Turn Type			NA	Perm	Prot	
Protected Phases			2		1	
Permitted Phases				2		
Actuated Green, G (s)			108.5	108.5	30.5	
Effective Green, g (s)			108.5	108.5	30.5	
Actuated g/C Ratio			0.72	0.72	0.20	
Clearance Time (s)			6.0	6.0	5.0	
Vehicle Extension (s)			3.0	3.0	3.0	
Lane Grp Cap (vph)			1321	1145	698	
v/s Ratio Prot			c0.39		c0.17	
v/s Ratio Perm				0.26		
v/c Ratio			0.54	0.36	0.82	
Uniform Delay, d1			9.4	7.7	57.1	
Progression Factor			1.00	1.00	0.73	
Incremental Delay, d2			1.6	0.9	6.2	
Delay (s)			11.0	8.6	48.1	
Level of Service			B	A	D	
Approach Delay (s/veh)	0.0		10.1			48.1
Approach LOS	A		B			D

Intersection Summary			
HCM 2000 Control Delay (s/veh)	22.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	61.9%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	79.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	64	0	12	1	0	22	15	936	0	7	1192	91
Future Vol, veh/h	64	0	12	1	0	22	15	936	0	7	1192	91
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	-	-	-	-	-	-	100	-	-	150	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	72	72	72	37	37	37	95	95	95	97	97	97
Heavy Vehicles, %	3	2	13	2	2	2	2	4	2	2	4	6
Mvmt Flow	89	0	17	3	0	59	16	985	0	7	1229	94

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2290	2260	1229	2269	2260	985	1229	0	0	985	0	0
Stage 1	1243	1243	-	1017	1017	-	-	-	-	-	-	-
Stage 2	1047	1017	-	1252	1243	-	-	-	-	-	-	-
Critical Hdwy	7.13	6.52	6.33	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.13	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.13	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.527	4.018	3.417	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	~ 27	41	206	29	41	301	567	-	-	701	-	-
Stage 1	213	246	-	287	315	-	-	-	-	-	-	-
Stage 2	274	315	-	211	246	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 21	39	206	26	39	301	567	-	-	701	-	-
Mov Cap-2 Maneuver	~ 21	39	-	26	39	-	-	-	-	-	-	-
Stage 1	207	244	-	279	306	-	-	-	-	-	-	-
Stage 2	214	306	-	192	244	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	$ 1858.4	29.9	0.2	0.1
HCM LOS	F	D		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	567	-	-	24	206	701	-	-
HCM Lane V/C Ratio	0.028	-	-	4.398	0.302	0.01	-	-
HCM Ctrl Dly (s/v)	11.5	-	-	$ 1858.4	29.9	10.2	-	-
HCM Lane LOS	B	-	-	F	D	B	-	-
HCM 95th %tile Q (veh)	0.1	-	-	13.2	1.2	0	-	-

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	13	43	870	17	13	1185
Future Vol, veh/h	13	43	870	17	13	1185
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	150	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	72	72	90	90	98	98
Heavy Vehicles, %	13	2	3	5	2	5
Mvmt Flow	18	60	967	19	13	1209

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2212	977	0	0	986	0
Stage 1	977	-	-	-	-	-
Stage 2	1235	-	-	-	-	-
Critical Hdwy	6.53	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.53	-	-	-	-	-
Critical Hdwy Stg 2	5.53	-	-	-	-	-
Follow-up Hdwy	3.617	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	45	304	-	-	701	-
Stage 1	348	-	-	-	-	-
Stage 2	261	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	44	304	-	-	701	-
Mov Cap-2 Maneuver	154	-	-	-	-	-
Stage 1	348	-	-	-	-	-
Stage 2	256	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	26	0	0.1
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	248	701	-
HCM Lane V/C Ratio	-	-	0.314	0.019	-
HCM Ctrl Dly (s/v)	-	-	26	10.2	-
HCM Lane LOS	-	-	D	B	-
HCM 95th %tile Q (veh)	-	-	1.3	0.1	-

Intersection	
Int Delay, s/veh	23.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	47	0	15	0	0	0	1	839	0	0	1170	30
Future Vol, veh/h	47	0	15	0	0	0	1	839	0	0	1170	30
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	53	53	53	25	25	25	96	96	96	98	98	98
Heavy Vehicles, %	3	2	2	2	2	2	2	3	2	2	2	2
Mvmt Flow	89	0	28	0	0	0	1	874	0	0	1194	31

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	2086	2086	1210	1225	0	0	874	0	0
Stage 1	1210	1210	-	-	-	-	-	-	-
Stage 2	876	876	-	-	-	-	-	-	-
Critical Hdwy	6.43	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	5.43	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.43	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.527	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	~ 58	53	223	569	-	-	772	-	-
Stage 1	281	255	-	-	-	-	-	-	-
Stage 2	406	367	-	-	-	-	-	-	-
Platoon blocked, %					-	-		-	-
Mov Cap-1 Maneuver	~ 58	0	223	569	-	-	772	-	-
Mov Cap-2 Maneuver	~ 58	0	-	-	-	-	-	-	-
Stage 1	280	0	-	-	-	-	-	-	-
Stage 2	406	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	$ 444	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	SBL	SBT	SBR
Capacity (veh/h)	569	-	-	71	772	-	-
HCM Lane V/C Ratio	0.002	-	-	1.648	-	-	-
HCM Ctrl Dly (s/v)	11.3	-	-	$ 444	0	-	-
HCM Lane LOS	B	-	-	F	A	-	-
HCM 95th %tile Q (veh)	0	-	-	10.1	0	-	-

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	57.2

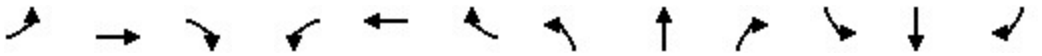
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↰	↱		↰	↱	
Traffic Vol, veh/h	10	10	27	21	16	107	46	654	22	140	996	27
Future Vol, veh/h	10	10	27	21	16	107	46	654	22	140	996	27
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	73	73	73	89	89	89	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	6	2	5	2	3	6	2	2	5
Mvmt Flow	14	14	37	24	18	120	47	674	23	144	1027	28

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2178	2120	1041	2135	2123	686	1055	0	0	697	0	0
Stage 1	1329	1329	-	780	780	-	-	-	-	-	-	-
Stage 2	849	791	-	1355	1343	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.16	6.52	6.25	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.16	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.16	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.554	4.018	3.345	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	33	50	279	35	50	442	660	-	-	899	-	-
Stage 1	191	224	-	382	406	-	-	-	-	-	-	-
Stage 2	356	401	-	181	221	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 13	39	279	~ 19	39	442	660	-	-	899	-	-
Mov Cap-2 Maneuver	~ 13	39	-	~ 19	39	-	-	-	-	-	-	-
Stage 1	177	188	-	355	377	-	-	-	-	-	-	-
Stage 2	229	373	-	122	186	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v	$ 481.7	$ 562.7	0.7	1.2
HCM LOS	F	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	660	-	-	42	82	899	-	-
HCM Lane V/C Ratio	0.072	-	-	1.533	1.973	0.161	-	-
HCM Ctrl Dly (s/v)	10.9	-	-	$ 481.7	$ 562.7	9.8	-	-
HCM Lane LOS	B	-	-	F	F	A	-	-
HCM 95th %tile Q (veh)	0.2	-	-	6.5	14.2	0.6	-	-

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	170	0	56	1	0	11	38	532	1	5	785	274
Future Volume (vph)	170	0	56	1	0	11	38	532	1	5	785	274
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	6.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.85		1.00	0.85		1.00	1.00		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1752	1583		1770	1583		1770	1809		1770	1845	1583
Flt Permitted	0.00	1.00		0.00	1.00		0.10	1.00		0.27	1.00	1.00
Satd. Flow (perm)	0	1583		0	1583		181	1809		505	1845	1583
Peak-hour factor, PHF	0.67	0.67	0.67	0.42	0.42	0.42	0.88	0.88	0.88	0.95	0.95	0.95
Adj. Flow (vph)	254	0	84	2	0	26	43	605	1	5	826	288
RTOR Reduction (vph)	0	71	0	0	25	0	0	0	0	0	0	69
Lane Group Flow (vph)	254	13	0	2	1	0	43	606	0	5	826	219
Heavy Vehicles (%)	3%	2%	2%	2%	2%	2%	2%	5%	2%	2%	3%	2%
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases	4			8			2			6		6
Actuated Green, G (s)	16.8	15.4		6.4	5.0		57.8	52.0		48.6	47.4	64.2
Effective Green, g (s)	16.8	15.4		6.4	5.0		57.8	52.0		48.6	47.4	64.2
Actuated g/C Ratio	0.17	0.16		0.06	0.05		0.58	0.53		0.49	0.48	0.65
Clearance Time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	297	246		114	79		198	950		263	883	1026
v/s Ratio Prot	c0.14	0.01		c0.00	0.00		c0.01	0.33		0.00	c0.45	0.04
v/s Ratio Perm							0.11			0.01		0.10
v/c Ratio	0.86	0.05		0.02	0.02		0.22	0.64		0.02	0.94	0.21
Uniform Delay, d1	39.9	35.6		43.4	44.7		33.7	16.8		23.7	24.4	7.1
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	20.7	0.1		0.1	0.1		0.6	1.4		0.0	16.7	0.1
Delay (s)	60.6	35.7		43.4	44.7		34.2	18.2		23.7	41.0	7.2
Level of Service	E	D		D	D		C	B		C	D	A
Approach Delay (s/veh)		54.4			44.7			19.3			32.2	
Approach LOS		D			D			B			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	32.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	99.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	67.4%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	1.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	19	78	503	19	85	699
Future Vol, veh/h	19	78	503	19	85	699
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	150	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	80	80	91	91	94	94
Heavy Vehicles, %	2	7	3	7	2	3
Mvmt Flow	24	98	553	21	90	744

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1488	564	0	0	574	0
Stage 1	564	-	-	-	-	-
Stage 2	924	-	-	-	-	-
Critical Hdwy	6.42	6.27	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.363	-	-	2.218	-
Pot Cap-1 Maneuver	137	516	-	-	999	-
Stage 1	569	-	-	-	-	-
Stage 2	387	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	125	516	-	-	999	-
Mov Cap-2 Maneuver	251	-	-	-	-	-
Stage 1	569	-	-	-	-	-
Stage 2	352	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	16.7	0	1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	428	999	-
HCM Lane V/C Ratio	-	-	0.283	0.091	-
HCM Ctrl Dly (s/v)	-	-	16.7	9	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q (veh)	-	-	1.2	0.3	-

Intersection	
Int Delay, s/veh	0.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	9	4	518	7	6	713
Future Vol, veh/h	9	4	518	7	6	713
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	150	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	50	50	89	89	96	96
Heavy Vehicles, %	2	2	3	2	20	2
Mvmt Flow	18	8	582	8	6	743

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1341	586	0	0	590	0
Stage 1	586	-	-	-	-	-
Stage 2	755	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.3	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.38	-
Pot Cap-1 Maneuver	168	510	-	-	903	-
Stage 1	556	-	-	-	-	-
Stage 2	464	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	167	510	-	-	903	-
Mov Cap-2 Maneuver	305	-	-	-	-	-
Stage 1	556	-	-	-	-	-
Stage 2	461	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	16.2	0	0.1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	348	903	-
HCM Lane V/C Ratio	-	-	0.075	0.007	-
HCM Ctrl Dly (s/v)	-	-	16.2	9	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q (veh)	-	-	0.2	0	-

Intersection	
Int Delay, s/veh	5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	32	141	380	30	184	539
Future Vol, veh/h	32	141	380	30	184	539
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	120	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	89	89	85	85	94	94
Heavy Vehicles, %	2	2	4	2	2	2
Mvmt Flow	36	158	447	35	196	573

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1430	465	0	0	482	0
Stage 1	465	-	-	-	-	-
Stage 2	965	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	148	597	-	-	1081	-
Stage 1	632	-	-	-	-	-
Stage 2	370	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	121	597	-	-	1081	-
Mov Cap-2 Maneuver	121	-	-	-	-	-
Stage 1	632	-	-	-	-	-
Stage 2	303	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	27.9	0	2.3
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	346	1081	-
HCM Lane V/C Ratio	-	-	0.562	0.181	-
HCM Ctrl Dly (s/v)	-	-	27.9	9.1	-
HCM Lane LOS	-	-	D	A	-
HCM 95th %tile Q (veh)	-	-	3.3	0.7	-

Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	38	26	34	368	545	33
Future Vol, veh/h	38	26	34	368	545	33
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	72	72	86	86	89	89
Heavy Vehicles, %	3	5	4	4	2	4
Mvmt Flow	53	36	40	428	612	37

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1139	631	649	0	-	0
Stage 1	631	-	-	-	-	-
Stage 2	508	-	-	-	-	-
Critical Hdwy	6.43	6.25	4.14	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.345	2.236	-	-	-
Pot Cap-1 Maneuver	222	476	927	-	-	-
Stage 1	528	-	-	-	-	-
Stage 2	602	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	209	476	927	-	-	-
Mov Cap-2 Maneuver	209	-	-	-	-	-
Stage 1	498	-	-	-	-	-
Stage 2	602	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	24.6	0.8	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	927	-	271	-	-
HCM Lane V/C Ratio	0.043	-	0.328	-	-
HCM Ctrl Dly (s/v)	9.1	0	24.6	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q (veh)	0.1	-	1.4	-	-

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	22	2	5	151	170	44
Future Vol, veh/h	22	2	5	151	170	44
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	56	56	86	86	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	39	4	6	176	213	55

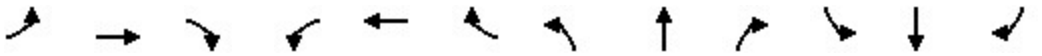
Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	429	241	268	0	-	0
Stage 1	241	-	-	-	-	-
Stage 2	188	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	583	798	1296	-	-	-
Stage 1	799	-	-	-	-	-
Stage 2	844	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	580	798	1296	-	-	-
Mov Cap-2 Maneuver	580	-	-	-	-	-
Stage 1	795	-	-	-	-	-
Stage 2	844	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	11.5	0.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1296	-	594	-	-
HCM Lane V/C Ratio	0.004	-	0.072	-	-
HCM Ctrl Dly (s/v)	7.8	0	11.5	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q (veh)	0	-	0.2	-	-

SR 75 CORRIDOR STUDY
2050 NO-BUILD TRAFFIC CONDITIONS
CAPACITY/LOS REPORT

AM PEAK HOUR



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	725	0	995	535	1414	0	0	2077	747
Future Volume (vph)	0	0	0	725	0	995	535	1414	0	0	2077	747
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0		6.0	6.0	6.0			6.0	6.0
Lane Util. Factor				0.97		0.88	0.97	0.95			0.95	1.00
Frt				1.00		0.85	1.00	1.00			1.00	0.85
Flt Protected				0.95		1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)				3400		2682	3242	3471			3438	1553
Flt Permitted				0.95		1.00	0.95	1.00			1.00	1.00
Satd. Flow (perm)				3400		2682	3242	3471			3438	1553
Peak-hour factor, PHF	0.92	0.92	0.92	0.87	0.87	0.87	0.74	0.74	0.74	0.88	0.88	0.88
Adj. Flow (vph)	0	0	0	833	0	1144	723	1911	0	0	2360	849
RTOR Reduction (vph)	0	0	0	0	0	48	0	0	0	0	0	82
Lane Group Flow (vph)	0	0	0	833	0	1096	723	1911	0	0	2360	767
Heavy Vehicles (%)	2%	2%	2%	3%	2%	6%	8%	4%	2%	2%	5%	4%
Turn Type				Prot		Prot	Prot	NA			NA	Perm
Protected Phases				3		3	5	2			6	
Permitted Phases												6
Actuated Green, G (s)				39.0		39.0	23.0	99.0			70.0	70.0
Effective Green, g (s)				39.0		39.0	23.0	99.0			70.0	70.0
Actuated g/C Ratio				0.26		0.26	0.15	0.66			0.47	0.47
Clearance Time (s)				6.0		6.0	6.0	6.0			6.0	6.0
Vehicle Extension (s)				3.0		3.0	3.0	3.0			3.0	3.0
Lane Grp Cap (vph)				884		697	497	2290			1604	724
v/s Ratio Prot				0.25		c0.41	c0.22	0.55			c0.69	
v/s Ratio Perm												0.49
v/c Ratio				0.94		1.57	1.45	0.83			1.47	1.06
Uniform Delay, d1				54.4		55.5	63.5	19.3			40.0	40.0
Progression Factor				1.00		1.00	0.79	0.42			1.00	1.00
Incremental Delay, d2				17.8		264.4	211.7	2.4			215.5	50.2
Delay (s)				72.2		319.9	262.1	10.5			255.5	90.2
Level of Service				E		F	F	B			F	F
Approach Delay (s/veh)		0.0			215.6			79.6			211.8	
Approach LOS		A			F			E			F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	168.2	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.50		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	106.7%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	1397	1279	1098	0
Future Volume (vph)	0	0	1397	1279	1098	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)			6.0	6.0	5.0	
Lane Util. Factor			1.00	1.00	0.97	
Frt			1.00	0.85	1.00	
Flt Protected			1.00	1.00	0.95	
Satd. Flow (prot)			1810	1583	3242	
Flt Permitted			1.00	1.00	0.95	
Satd. Flow (perm)			1810	1583	3242	
Peak-hour factor, PHF	0.92	0.92	0.81	0.81	0.87	0.87
Adj. Flow (vph)	0	0	1725	1579	1262	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	1725	1579	1262	0
Heavy Vehicles (%)	2%	2%	5%	2%	8%	2%
Turn Type			NA	Perm	Prot	
Protected Phases			2		1	
Permitted Phases				2		
Actuated Green, G (s)			100.0	100.0	39.0	
Effective Green, g (s)			100.0	100.0	39.0	
Actuated g/C Ratio			0.67	0.67	0.26	
Clearance Time (s)			6.0	6.0	5.0	
Vehicle Extension (s)			3.0	3.0	3.0	
Lane Grp Cap (vph)			1206	1055	842	
v/s Ratio Prot			0.95		c0.39	
v/s Ratio Perm				c1.00		
v/c Ratio			1.43	1.50	1.50	
Uniform Delay, d1			25.0	25.0	55.5	
Progression Factor			1.00	1.00	1.18	
Incremental Delay, d2			198.5	228.4	225.0	
Delay (s)			223.5	253.4	290.7	
Level of Service			F	F	F	
Approach Delay (s/veh)	0.0		237.8			290.7
Approach LOS	A		F			F

Intersection Summary			
HCM 2000 Control Delay (s/veh)	252.4	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.50		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	119.7%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	169	0	22	0	0	9	24	2508	4	88	1955	193
Future Vol, veh/h	169	0	22	0	0	9	24	2508	4	88	1955	193
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	-	-	-	-	-	-	100	-	-	150	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	38	38	38	81	81	81	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2	2	3	2	2	4	4
Mvmt Flow	199	0	26	0	0	24	30	3096	5	106	2355	233

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	5738	5728	2355	5739	5726	3099	2355	0	0	3101	0	0
Stage 1	2567	2567	-	3159	3159	-	-	-	-	-	-	-
Stage 2	3171	3161	-	2580	2567	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	0	0	45	0	0	~ 16	208	-	-	~ 105	-	-
Stage 1	~ 36	53	-	15	26	-	-	-	-	-	-	-
Stage 2	~ 15	26	-	35	53	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	0	45	-	0	~ 16	208	-	-	~ 105	-	-
Mov Cap-2 Maneuver	-	0	-	-	0	-	-	-	-	-	-	-
Stage 1	~ 31	0	-	13	22	-	-	-	-	-	-	-
Stage 2	-	22	-	-	0	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v			0.2	6.5
HCM LOS	-	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	208	-	-	-	-	~ 105	-	-
HCM Lane V/C Ratio	0.142	-	-	-	-	1.01	-	-
HCM Ctrl Dly (s/v)	25.2	-	-	-	-	166.3	-	-
HCM Lane LOS	D	-	-	-	-	F	-	-
HCM 95th %tile Q (veh)	0.5	-	-	-	-	6.4	-	-

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	35.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	4	28	2531	15	37	1844
Future Vol, veh/h	4	28	2531	15	37	1844
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	150	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	46	46	83	83	80	80
Heavy Vehicles, %	100	27	2	2	7	3
Mvmt Flow	9	61	3049	18	46	2305

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	5455	3058	0	0	3067	0
Stage 1	3058	-	-	-	-	-
Stage 2	2397	-	-	-	-	-
Critical Hdwy	7.4	6.47	-	-	4.17	-
Critical Hdwy Stg 1	6.4	-	-	-	-	-
Critical Hdwy Stg 2	6.4	-	-	-	-	-
Follow-up Hdwy	4.4	3.543	-	-	2.263	-
Pot Cap-1 Maneuver	0	~ 13	-	-	103	-
Stage 1	14	-	-	-	-	-
Stage 2	36	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	0	~ 13	-	-	103	-
Mov Cap-2 Maneuver	~ 8	-	-	-	-	-
Stage 1	14	-	-	-	-	-
Stage 2	20	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	$ 2779.9	0	1.3
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	12	103	-
HCM Lane V/C Ratio	-	-	5.797	0.449	-
HCM Ctrl Dly (s/v)	-	-	$ 2779.9	65.8	-
HCM Lane LOS	-	-	F	F	-
HCM 95th %tile Q (veh)	-	-	9.8	1.9	-

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	28.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	88	0	22	0	0	0	24	2472	0	2	1798	48
Future Vol, veh/h	88	0	22	0	0	0	24	2472	0	2	1798	48
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	79	79	79	25	25	25	81	81	81	79	79	79
Heavy Vehicles, %	6	2	13	2	2	2	2	2	2	2	4	2
Mvmt Flow	111	0	28	0	0	0	30	3052	0	3	2276	61

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	5425	5425	2307	2337	0	0	3052	0	0
Stage 1	2313	2313	-	-	-	-	-	-	-
Stage 2	3112	3112	-	-	-	-	-	-	-
Critical Hdwy	6.46	6.52	6.33	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	5.46	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.46	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.554	4.018	3.417	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	0	0	45	211	-	-	110	-	-
Stage 1	~ 77	72	-	-	-	-	-	-	-
Stage 2	~ 29	27	-	-	-	-	-	-	-
Platoon blocked, %					-	-		-	-
Mov Cap-1 Maneuver	0	0	45	211	-	-	110	-	-
Mov Cap-2 Maneuver	0	0	-	-	-	-	-	-	-
Stage 1	~ 66	0	-	-	-	-	-	-	-
Stage 2	~ 28	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	$ 1133.6	0.2	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	SBL	SBT	SBR
Capacity (veh/h)	211	-	-	45	110	-	-
HCM Lane V/C Ratio	0.14	-	-	3.094	0.023	-	-
HCM Ctrl Dly (s/v)	24.8	-	-	$ 1133.6	38.5	-	-
HCM Lane LOS	C	-	-	F	E	-	-
HCM 95th %tile Q (veh)	0.5	-	-	15.2	0.1	-	-

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	7.7

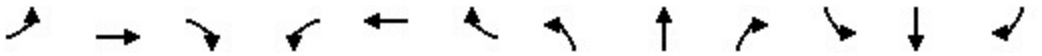
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	57	28	156	48	11	285	77	2009	110	164	1392	28
Future Vol, veh/h	57	28	156	48	11	285	77	2009	110	164	1392	28
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	83	83	83	83	83	83	83	83	83	79	79	79
Heavy Vehicles, %	5	2	7	11	2	2	7	2	27	3	4	2
Mvmt Flow	69	34	188	58	13	343	93	2420	133	208	1762	35

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	5047	4935	1780	4980	4886	2487	1797	0	0	2553	0	0
Stage 1	2196	2196	-	2673	2673	-	-	-	-	-	-	-
Stage 2	2851	2739	-	2307	2213	-	-	-	-	-	-	-
Critical Hdwy	7.15	6.52	6.27	7.21	6.52	6.22	4.17	-	-	4.13	-	-
Critical Hdwy Stg 1	6.15	5.52	-	6.21	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.15	5.52	-	6.21	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.545	4.018	3.363	3.599	4.018	3.318	2.263	-	-	2.227	-	-
Pot Cap-1 Maneuver	0	~ 1	~ 99	0	~ 1	~ 38	331	-	-	~ 172	-	-
Stage 1	~ 58	83	-	~ 29	47	-	-	-	-	-	-	-
Stage 2	~ 23	43	-	~ 48	81	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	0	~ 99	-	0	~ 38	331	-	-	~ 172	-	-
Mov Cap-2 Maneuver	-	0	-	-	0	-	-	-	-	-	-	-
Stage 1	~ 42	0	-	~ 21	34	-	-	-	-	-	-	-
Stage 2	-	~ 31	-	-	0	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v			0.7	19.6
HCM LOS	-	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	331	-	-	-	-	~ 172	-	-
HCM Lane V/C Ratio	0.28	-	-	-	-	1.207	-	-
HCM Ctrl Dly (s/v)	20.1	-	-	-	-	188.8	-	-
HCM Lane LOS	C	-	-	-	-	F	-	-
HCM 95th %tile Q (veh)	1.1	-	-	-	-	11.3	-	-

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	476	0	104	1	0	4	287	1695	2	2	1225	407
Future Volume (vph)	476	0	104	1	0	4	287	1695	2	2	1225	407
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	6.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.85		1.00	0.85		1.00	1.00		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	1568		1770	1583		1703	1827		1770	1810	1583
Flt Permitted	0.00	1.00		0.00	1.00		0.05	1.00		0.05	1.00	1.00
Satd. Flow (perm)	0	1568		0	1583		90	1827		101	1810	1583
Peak-hour factor, PHF	0.73	0.73	0.73	0.50	0.50	0.50	0.77	0.77	0.77	0.76	0.76	0.76
Adj. Flow (vph)	652	0	142	2	0	8	373	2201	3	3	1612	536
RTOR Reduction (vph)	0	119	0	0	8	0	0	0	0	0	0	53
Lane Group Flow (vph)	652	23	0	2	0	0	373	2204	0	3	1612	483
Heavy Vehicles (%)	2%	2%	3%	2%	2%	2%	6%	4%	2%	2%	5%	2%
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases	4			8			2			6		6
Actuated Green, G (s)	28.0	23.8		5.2	1.0		100.0	92.3		75.8	74.1	102.1
Effective Green, g (s)	28.0	23.8		5.2	1.0		100.0	92.3		75.8	74.1	102.1
Actuated g/C Ratio	0.19	0.16		0.04	0.01		0.68	0.63		0.52	0.50	0.69
Clearance Time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	337	253		62	10		279	1147		71	912	1099
v/s Ratio Prot	c0.37	0.01		c0.00	0.00		c0.18	c1.21		0.00	0.89	0.08
v/s Ratio Perm							0.73			0.02		0.22
v/c Ratio	1.93	0.09		0.03	0.01		1.34	1.92		0.04	1.77	0.44
Uniform Delay, d1	59.5	52.4		68.5	72.5		59.2	27.4		68.0	36.5	9.9
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	431.4	0.2		0.2	0.2		173.9	417.9		0.2	349.9	0.3
Delay (s)	490.9	52.6		68.7	72.7		233.2	445.3		68.3	386.3	10.1
Level of Service	F	D		E	E		F	F		E	F	B
Approach Delay (s/veh)		412.5			71.9			414.6			292.1	
Approach LOS		F			E			F			F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	366.1	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.92		
Actuated Cycle Length (s)	147.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	143.2%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	922

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	2	640	1331	26	749	565
Future Vol, veh/h	2	640	1331	26	749	565
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	150	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	64	64	83	83	73	73
Heavy Vehicles, %	2	10	2	20	2	12
Mvmt Flow	3	1000	1604	31	1026	774

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	4446	1620	0	0	1635	0
Stage 1	1620	-	-	-	-	-
Stage 2	2826	-	-	-	-	-
Critical Hdwy	6.42	6.3	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.39	-	-	2.218	-
Pot Cap-1 Maneuver	~ 2	~ 122	-	-	~ 396	-
Stage 1	178	-	-	-	-	-
Stage 2	43	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	0	~ 122	-	-	~ 396	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	178	-	-	-	-	-
Stage 2	0	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	$ 3317.8	0	$ 424.4
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	122	~ 396	-
HCM Lane V/C Ratio	-	-	8.222	2.591	-
HCM Ctrl Dly (s/v)	-	-	$ 3317.8	$ 744.5	-
HCM Lane LOS	-	-	F	F	-
HCM 95th %tile Q (veh)	-	-	113.5	83.4	-

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	177.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	114	26	1331	664	136	431
Future Vol, veh/h	114	26	1331	664	136	431
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	150	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	53	53	72	72	86	86
Heavy Vehicles, %	14	10	2	6	28	6
Mvmt Flow	215	49	1849	922	158	501

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	3127	2310	0	0	2771	0
Stage 1	2310	-	-	-	-	-
Stage 2	817	-	-	-	-	-
Critical Hdwy	6.54	6.3	-	-	4.38	-
Critical Hdwy Stg 1	5.54	-	-	-	-	-
Critical Hdwy Stg 2	5.54	-	-	-	-	-
Follow-up Hdwy	3.626	3.39	-	-	2.452	-
Pot Cap-1 Maneuver	~ 11	~ 46	-	-	~ 112	-
Stage 1	~ 73	-	-	-	-	-
Stage 2	414	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	0	~ 46	-	-	~ 112	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	~ 73	-	-	-	-	-
Stage 2	0	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	$ 2308.2	0	72
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	46	~ 112	-
HCM Lane V/C Ratio	-	-	5.742	1.412	-
HCM Ctrl Dly (s/v)	-	-	$ 2308.2	$ 300.2	-
HCM Lane LOS	-	-	F	F	-
HCM 95th %tile Q (veh)	-	-	30.5	11.1	-

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	2026.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	46	624	1373	138	101	444
Future Vol, veh/h	46	624	1373	138	101	444
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	120	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	71	71	73	73	75	75
Heavy Vehicles, %	8	3	3	2	2	10
Mvmt Flow	65	879	1881	189	135	592

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2838	1976	0	0	2070	0
Stage 1	1976	-	-	-	-	-
Stage 2	862	-	-	-	-	-
Critical Hdwy	6.48	6.23	-	-	4.12	-
Critical Hdwy Stg 1	5.48	-	-	-	-	-
Critical Hdwy Stg 2	5.48	-	-	-	-	-
Follow-up Hdwy	3.572	3.327	-	-	2.218	-
Pot Cap-1 Maneuver	~ 18	~ 77	-	-	269	-
Stage 1	114	-	-	-	-	-
Stage 2	404	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 9	~ 77	-	-	269	-
Mov Cap-2 Maneuver	~ 9	-	-	-	-	-
Stage 1	114	-	-	-	-	-
Stage 2	201	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	$ 8025.9	0	5.8
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	51	269	-
HCM Lane V/C Ratio	-	-	18.503	0.501	-
HCM Ctrl Dly (s/v)	-	-	$ 8025.9	31.1	-
HCM Lane LOS	-	-	F	D	-
HCM 95th %tile Q (veh)	-	-	114.7	2.6	-

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	51.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	423	96	210	1086	429	61
Future Vol, veh/h	423	96	210	1086	429	61
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	73	73	75	75	79	79
Heavy Vehicles, %	4	6	3	2	10	4
Mvmt Flow	579	132	280	1448	543	77

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2590	582	620	0	-	0
Stage 1	582	-	-	-	-	-
Stage 2	2008	-	-	-	-	-
Critical Hdwy	6.44	6.26	4.13	-	-	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.354	2.227	-	-	-
Pot Cap-1 Maneuver	~ 27	505	956	-	-	-
Stage 1	~ 555	-	-	-	-	-
Stage 2	~ 112	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	0	505	956	-	-	-
Mov Cap-2 Maneuver	0	-	-	-	-	-
Stage 1	0	-	-	-	-	-
Stage 2	~ 112	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	217.6	1.7	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	956	-	505	-	-
HCM Lane V/C Ratio	0.293	-	1.408	-	-
HCM Ctrl Dly (s/v)	10.3	0	217.6	-	-
HCM Lane LOS	B	A	F	-	-
HCM 95th %tile Q (veh)	1.2	-	33.7	-	-

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	36

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	118	9	2	552	309	22
Future Vol, veh/h	118	9	2	552	309	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	59	59	76	76	45	45
Heavy Vehicles, %	2	2	2	8	2	2
Mvmt Flow	200	15	3	726	687	49

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1444	712	736	0	-	0
Stage 1	712	-	-	-	-	-
Stage 2	732	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	~ 145	432	870	-	-	-
Stage 1	486	-	-	-	-	-
Stage 2	476	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 144	432	870	-	-	-
Mov Cap-2 Maneuver	~ 144	-	-	-	-	-
Stage 1	483	-	-	-	-	-
Stage 2	476	-	-	-	-	-

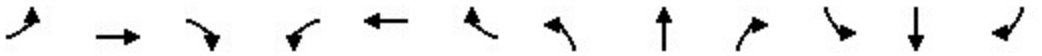
Approach	EB	NB	SB
HCM Ctrl Dly, s/v	281	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	870	-	151	-	-
HCM Lane V/C Ratio	0.003	-	1.426	-	-
HCM Ctrl Dly (s/v)	9.2	0	281	-	-
HCM Lane LOS	A	A	F	-	-
HCM 95th %tile Q (veh)	0	-	13.9	-	-

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

SR 75 CORRIDOR STUDY
2050 NO-BUILD TRAFFIC CONDITIONS
CAPACITY/LOS REPORT

SCHOOL DISMISSAL PEAK HOUR



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	747	0	1319	379	1818	0	0	1971	666
Future Volume (vph)	0	0	0	747	0	1319	379	1818	0	0	1971	666
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0		6.0	6.0	6.0			6.0	6.0
Lane Util. Factor				0.97		0.88	0.97	0.95			0.95	1.00
Frt				1.00		0.85	1.00	1.00			1.00	0.85
Flt Protected				0.95		1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)				3433		2787	3303	3505			3539	1583
Flt Permitted				0.95		1.00	0.95	1.00			1.00	1.00
Satd. Flow (perm)				3433		2787	3303	3505			3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.95	0.95	0.95	0.79	0.79	0.79	0.81	0.81	0.81
Adj. Flow (vph)	0	0	0	786	0	1388	480	2301	0	0	2433	822
RTOR Reduction (vph)	0	0	0	0	0	46	0	0	0	0	0	77
Lane Group Flow (vph)	0	0	0	786	0	1343	480	2301	0	0	2433	745
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	6%	3%	2%	2%	2%	2%
Turn Type				Prot		Prot	Prot	NA			NA	Perm
Protected Phases				3		3	5	2			6	
Permitted Phases												6
Actuated Green, G (s)				45.0		45.0	16.0	93.0			71.0	71.0
Effective Green, g (s)				45.0		45.0	16.0	93.0			71.0	71.0
Actuated g/C Ratio				0.30		0.30	0.11	0.62			0.47	0.47
Clearance Time (s)				6.0		6.0	6.0	6.0			6.0	6.0
Vehicle Extension (s)				3.0		3.0	3.0	3.0			3.0	3.0
Lane Grp Cap (vph)				1029		836	352	2173			1675	749
v/s Ratio Prot				0.23		c0.48	c0.15	0.66			c0.69	
v/s Ratio Perm												0.47
v/c Ratio				0.76		1.61	1.36	1.06			1.45	0.99
Uniform Delay, d1				47.7		52.5	67.0	28.5			39.5	39.3
Progression Factor				1.00		1.00	0.75	0.41			1.00	1.00
Incremental Delay, d2				3.4		278.2	165.3	27.8			207.0	31.7
Delay (s)				51.1		330.7	215.9	39.6			246.5	71.0
Level of Service				D		F	F	D			F	E
Approach Delay (s/veh)		0.0			229.6			70.0			202.2	
Approach LOS		A			F			E			F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	164.7	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.49		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	106.4%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	1715	1053	982	0
Future Volume (vph)	0	0	1715	1053	982	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)			6.0	6.0	5.0	
Lane Util. Factor			1.00	1.00	0.97	
Frt			1.00	0.85	1.00	
Flt Protected			1.00	1.00	0.95	
Satd. Flow (prot)			1827	1583	3433	
Flt Permitted			1.00	1.00	0.95	
Satd. Flow (perm)			1827	1583	3433	
Peak-hour factor, PHF	0.92	0.92	0.83	0.83	0.85	0.85
Adj. Flow (vph)	0	0	2066	1269	1155	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	2066	1269	1155	0
Heavy Vehicles (%)	2%	2%	4%	2%	2%	2%
Turn Type			NA	Perm	Prot	
Protected Phases			2		1	
Permitted Phases				2		
Actuated Green, G (s)			105.0	105.0	34.0	
Effective Green, g (s)			105.0	105.0	34.0	
Actuated g/C Ratio			0.70	0.70	0.23	
Clearance Time (s)			6.0	6.0	5.0	
Vehicle Extension (s)			3.0	3.0	3.0	
Lane Grp Cap (vph)			1278	1108	778	
v/s Ratio Prot			c1.13		c0.34	
v/s Ratio Perm				0.80		
v/c Ratio			1.62	1.15	1.48	
Uniform Delay, d1			22.5	22.5	58.0	
Progression Factor			1.00	1.00	1.09	
Incremental Delay, d2			281.1	76.2	218.7	
Delay (s)			303.6	98.7	281.7	
Level of Service			F	F	F	
Approach Delay (s/veh)	0.0		225.7			281.7
Approach LOS	A		F			F

Intersection Summary			
HCM 2000 Control Delay (s/veh)	240.1	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.58		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	127.4%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	169	2	39	9	0	26	22	2563	2	26	2014	127
Future Vol, veh/h	169	2	39	9	0	26	22	2563	2	26	2014	127
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	-	-	-	-	-	-	100	-	-	150	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	60	60	60	65	65	65	84	84	84	86	86	86
Heavy Vehicles, %	3	2	13	2	2	2	2	4	2	2	4	6
Mvmt Flow	282	3	65	14	0	40	26	3051	2	30	2342	148

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	5526	5507	2342	5540	5506	3052	2342	0	0	3053	0	0
Stage 1	2402	2402	-	3104	3104	-	-	-	-	-	-	-
Stage 2	3124	3105	-	2436	2402	-	-	-	-	-	-	-
Critical Hdwy	7.13	6.52	6.33	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.13	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.13	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.527	4.018	3.417	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	0	0	~ 43	0	0	~ 17	210	-	-	109	-	-
Stage 1	~ 44	65	-	17	27	-	-	-	-	-	-	-
Stage 2	~ 16	27	-	43	65	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	0	~ 43	-	0	~ 17	210	-	-	109	-	-
Mov Cap-2 Maneuver	-	0	-	-	0	-	-	-	-	-	-	-
Stage 1	~ 39	47	-	15	24	-	-	-	-	-	-	-
Stage 2	-	24	-	-	47	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v			0.2	0.6
HCM LOS	-	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	210	-	-	-	-	109	-	-
HCM Lane V/C Ratio	0.125	-	-	-	-	0.277	-	-
HCM Ctrl Dly (s/v)	24.6	-	-	-	-	50.2	-	-
HCM Lane LOS	C	-	-	-	-	F	-	-
HCM 95th %tile Q (veh)	0.4	-	-	-	-	1	-	-

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	512.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	39	138	2356	59	103	1916
Future Vol, veh/h	39	138	2356	59	103	1916
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	150	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	76	76	84	84	85	85
Heavy Vehicles, %	13	2	3	5	2	5
Mvmt Flow	51	182	2805	70	121	2254

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	5336	2840	0	0	2875	0
Stage 1	2840	-	-	-	-	-
Stage 2	2496	-	-	-	-	-
Critical Hdwy	6.53	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.53	-	-	-	-	-
Critical Hdwy Stg 2	5.53	-	-	-	-	-
Follow-up Hdwy	3.617	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	0	~ 23	-	-	129	-
Stage 1	~ 38	-	-	-	-	-
Stage 2	59	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	0	~ 23	-	-	129	-
Mov Cap-2 Maneuver	~ 3	-	-	-	-	-
Stage 1	~ 38	-	-	-	-	-
Stage 2	~ 4	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	$ 12001.4	0	6.6
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	9	129	-
HCM Lane V/C Ratio	-	-	25.877	0.939	-
HCM Ctrl Dly (s/v)	-	-	$ 12001.4	128.7	-
HCM Lane LOS	-	-	F	F	-
HCM 95th %tile Q (veh)	-	-	30.8	6.3	-

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	31089.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	210	0	13	0	0	0	24	2214	0	2	1868	83
Future Vol, veh/h	210	0	13	0	0	0	24	2214	0	2	1868	83
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	36	36	36	25	25	25	80	80	80	86	86	86
Heavy Vehicles, %	3	2	2	2	2	2	2	3	2	2	2	2
Mvmt Flow	583	0	36	0	0	0	30	2768	0	2	2172	97

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	5053	5053	2221	2269	0	0	2768	0	0
Stage 1	2225	2225	-	-	-	-	-	-	-
Stage 2	2828	2828	-	-	-	-	-	-	-
Critical Hdwy	6.43	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	5.43	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.43	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.527	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	~ 1	1	55	225	-	-	142	-	-
Stage 1	~ 87	80	-	-	-	-	-	-	-
Stage 2	~ 42	39	-	-	-	-	-	-	-
Platoon blocked, %					-	-		-	-
Mov Cap-1 Maneuver	~ 1	0	55	225	-	-	142	-	-
Mov Cap-2 Maneuver	~ 1	0	-	-	-	-	-	-	-
Stage 1	~ 75	0	-	-	-	-	-	-	-
Stage 2	~ 41	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v $	285465.3	0.3	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	SBL	SBT	SBR
Capacity (veh/h)	225	-	-	1	142	-	-
HCM Lane V/C Ratio	0.133	-	-	619.444	0.016	-	-
HCM Ctrl Dly (s/v)	23.4	-	-	$ 285465.3	30.8	-	-
HCM Lane LOS	C	-	-	F	D	-	-
HCM 95th %tile Q (veh)	0.5	-	-	80.2	0.1	-	-

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	14.3

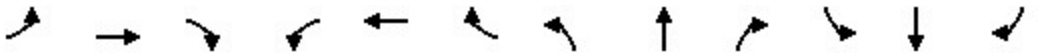
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	46	33	99	22	22	162	131	1906	121	208	1527	28
Future Vol, veh/h	46	33	99	22	22	162	131	1906	121	208	1527	28
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	74	74	74	77	77	77	87	87	87
Heavy Vehicles, %	2	2	2	6	2	5	2	3	6	2	2	5
Mvmt Flow	50	36	108	30	30	219	170	2475	157	239	1755	32

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	5267	5221	1771	5215	5159	2554	1787	0	0	2632	0	0
Stage 1	2249	2249	-	2894	2894	-	-	-	-	-	-	-
Stage 2	3018	2972	-	2321	2265	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.16	6.52	6.25	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.16	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.16	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.554	4.018	3.345	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	0	0	~ 103	0	0	~ 33	346	-	-	~ 161	-	-
Stage 1	55	78	-	~ 22	36	-	-	-	-	-	-	-
Stage 2	~ 19	~ 32	-	49	76	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	0	~ 103	-	0	~ 33	346	-	-	~ 161	-	-
Mov Cap-2 Maneuver	-	0	-	-	0	-	-	-	-	-	-	-
Stage 1	~ 28	0	-	~ 11	~ 18	-	-	-	-	-	-	-
Stage 2	~ 35	~ 16	-	-	0	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v			1.5	35.4
HCM LOS	-	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	346	-	-	-	-	~ 161	-	-
HCM Lane V/C Ratio	0.492	-	-	-	-	1.485	-	-
HCM Ctrl Dly (s/v)	25.1	-	-	-	-	-$ 300.3	-	-
HCM Lane LOS	D	-	-	-	-	F	-	-
HCM 95th %tile Q (veh)	2.6	-	-	-	-	15.5	-	-

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	446	0	132	1	0	24	159	1672	4	2	1235	421
Future Volume (vph)	446	0	132	1	0	24	159	1672	4	2	1235	421
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	6.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.85		1.00	0.85		1.00	1.00		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1752	1583		1770	1583		1770	1809		1770	1845	1583
Flt Permitted	1.00	1.00		1.00	1.00		0.05	1.00		0.06	1.00	1.00
Satd. Flow (perm)	1845	1583		1863	1583		99	1809		107	1845	1583
Peak-hour factor, PHF	0.64	0.64	0.64	0.75	0.75	0.75	0.63	0.63	0.63	0.87	0.87	0.87
Adj. Flow (vph)	697	0	206	1	0	32	252	2654	6	2	1420	484
RTOR Reduction (vph)	0	169	0	0	31	0	0	0	0	0	0	55
Lane Group Flow (vph)	697	37	0	1	1	0	252	2660	0	2	1420	429
Heavy Vehicles (%)	3%	2%	2%	2%	2%	2%	2%	5%	2%	2%	3%	2%
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases	4			8			2			6		6
Actuated Green, G (s)	24.9	24.9		5.5	5.5		91.5	83.6		71.5	69.6	93.6
Effective Green, g (s)	24.9	24.9		5.5	5.5		91.5	83.6		71.5	69.6	93.6
Actuated g/C Ratio	0.18	0.18		0.04	0.04		0.66	0.60		0.51	0.50	0.67
Clearance Time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	330	283		73	62		256	1088		77	923	1065
v/s Ratio Prot	0.36	0.02		0.00	c0.00		c0.11	c1.47		0.00	0.77	0.07
v/s Ratio Perm	c0.03			0.00			0.54			0.01		0.20
v/c Ratio	2.11	0.13		0.01	0.02		0.98	2.44		0.03	1.54	0.40
Uniform Delay, d1	58.2	48.0		61.3	64.2		57.1	27.7		63.8	34.7	10.2
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	510.6	0.2		0.1	0.1		51.5	653.0		0.1	247.8	0.3
Delay (s)	568.8	48.2		61.4	64.3		108.6	680.7		63.9	282.5	10.4
Level of Service	F	D		E	E		F	F		E	F	B
Approach Delay (s/veh)		450.0			64.2			631.2			213.2	
Approach LOS		F			E			F			F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	461.0	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	2.27		
Actuated Cycle Length (s)	139.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	140.5%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	1467

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	33	743	970	39	199	1087
Future Vol, veh/h	33	743	970	39	199	1087
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	150	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	43	43	82	82	85	85
Heavy Vehicles, %	2	7	3	7	2	3
Mvmt Flow	77	1728	1183	48	234	1279

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2954	1207	0	0	1231	0
Stage 1	1207	-	-	-	-	-
Stage 2	1747	-	-	-	-	-
Critical Hdwy	6.42	6.27	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.363	-	-	2.218	-
Pot Cap-1 Maneuver	~ 16	~ 218	-	-	566	-
Stage 1	283	-	-	-	-	-
Stage 2	154	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 9	~ 218	-	-	566	-
Mov Cap-2 Maneuver	~ 65	-	-	-	-	-
Stage 1	283	-	-	-	-	-
Stage 2	90	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	$ 3695	0	2.4
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	198	566	-
HCM Lane V/C Ratio	-	-	9.114	0.414	-
HCM Ctrl Dly (s/v)	-	-	$ 3695	15.8	-
HCM Lane LOS	-	-	F	C	-
HCM 95th %tile Q (veh)	-	-	204.1	2	-

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	812.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	316	74	935	37	26	1098
Future Vol, veh/h	316	74	935	37	26	1098
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	150	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	37	37	85	85	91	91
Heavy Vehicles, %	2	2	3	2	20	2
Mvmt Flow	854	200	1100	44	29	1207

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2387	1122	0	0	1144	0
Stage 1	1122	-	-	-	-	-
Stage 2	1265	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.3	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.38	-
Pot Cap-1 Maneuver	~ 37	251	-	-	550	-
Stage 1	~ 311	-	-	-	-	-
Stage 2	~ 265	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 35	251	-	-	550	-
Mov Cap-2 Maneuver	~ 143	-	-	-	-	-
Stage 1	~ 311	-	-	-	-	-
Stage 2	~ 251	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	$ 2645.4	0	0.3
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	156	550	-
HCM Lane V/C Ratio	-	-	6.757	0.052	-
HCM Ctrl Dly (s/v)	-	-	$ 2645.4	11.9	-
HCM Lane LOS	-	-	F	B	-
HCM 95th %tile Q (veh)	-	-	115.7	0.2	-

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	2643.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	53	245	727	90	429	984
Future Vol, veh/h	53	245	727	90	429	984
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	120	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	90	90	80	80	76	76
Heavy Vehicles, %	2	2	4	2	2	2
Mvmt Flow	59	272	909	113	564	1295

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	3389	966	0	0	1022	0
Stage 1	966	-	-	-	-	-
Stage 2	2423	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	~ 8	309	-	-	679	-
Stage 1	369	-	-	-	-	-
Stage 2	70	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 1	309	-	-	679	-
Mov Cap-2 Maneuver	~ 1	-	-	-	-	-
Stage 1	369	-	-	-	-	-
Stage 2	~ 12	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	$ 25584.8	0	9.4
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	6	679	-
HCM Lane V/C Ratio	-	-	55.185	0.831	-
HCM Ctrl Dly (s/v)	-	-	$ 25584.8	30.9	-
HCM Lane LOS	-	-	F	D	-
HCM 95th %tile Q (veh)	-	-	43.5	9.1	-

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	407.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	160	136	57	661	837	195
Future Vol, veh/h	160	136	57	661	837	195
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	68	68	90	90	76	76
Heavy Vehicles, %	3	5	4	4	2	4
Mvmt Flow	235	200	63	734	1101	257

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2090	1230	1358	0	-	0
Stage 1	1230	-	-	-	-	-
Stage 2	860	-	-	-	-	-
Critical Hdwy	6.43	6.25	4.14	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.345	2.236	-	-	-
Pot Cap-1 Maneuver	~ 57	213	500	-	-	-
Stage 1	275	-	-	-	-	-
Stage 2	413	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 45	213	500	-	-	-
Mov Cap-2 Maneuver	~ 45	-	-	-	-	-
Stage 1	~ 216	-	-	-	-	-
Stage 2	413	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	$ 2423.7	1.1	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	500	-	71	-	-
HCM Lane V/C Ratio	0.127	-	6.131	-	-
HCM Ctrl Dly (s/v)	13.2	$	2423.7	-	-
HCM Lane LOS	B	A	F	-	-
HCM 95th %tile Q (veh)	0.4	-	48.9	-	-

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	64	15	1	234	421	99
Future Vol, veh/h	64	15	1	234	421	99
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	83	83	85	85	76	76
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	77	18	1	275	554	130

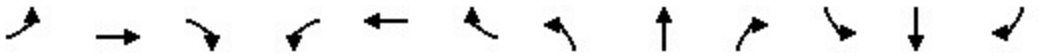
Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	896	619	684	0	-	0
Stage 1	619	-	-	-	-	-
Stage 2	277	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	311	489	909	-	-	-
Stage 1	537	-	-	-	-	-
Stage 2	770	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	311	489	909	-	-	-
Mov Cap-2 Maneuver	311	-	-	-	-	-
Stage 1	536	-	-	-	-	-
Stage 2	770	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	20	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	909	-	334	-	-
HCM Lane V/C Ratio	0.001	-	0.285	-	-
HCM Ctrl Dly (s/v)	9	0	20	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q (veh)	0	-	1.2	-	-

SR 75 CORRIDOR STUDY
2050 NO-BUILD TRAFFIC CONDITIONS
CAPACITY/LOS REPORT

PM PEAK HOUR



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	1097	0	1282	377	1722	0	0	2271	712
Future Volume (vph)	0	0	0	1097	0	1282	377	1722	0	0	2271	712
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0		6.0	6.0	6.0			6.0	6.0
Lane Util. Factor				0.97		0.88	0.97	0.95			0.95	1.00
Frt				1.00		0.85	1.00	1.00			1.00	0.85
Flt Protected				0.95		1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)				3433		2787	3303	3505			3539	1583
Flt Permitted				0.95		1.00	0.95	1.00			1.00	1.00
Satd. Flow (perm)				3433		2787	3303	3505			3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.89	0.89	0.89	0.93	0.93	0.93	0.88	0.88	0.88
Adj. Flow (vph)	0	0	0	1233	0	1440	405	1852	0	0	2581	809
RTOR Reduction (vph)	0	0	0	0	0	45	0	0	0	0	0	71
Lane Group Flow (vph)	0	0	0	1233	0	1395	405	1852	0	0	2581	738
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	6%	3%	2%	2%	2%	2%
Turn Type				Prot		Prot	Prot	NA			NA	Perm
Protected Phases				3		3	5	2			6	
Permitted Phases												6
Actuated Green, G (s)				46.0		46.0	13.0	92.0			73.0	73.0
Effective Green, g (s)				46.0		46.0	13.0	92.0			73.0	73.0
Actuated g/C Ratio				0.31		0.31	0.09	0.61			0.49	0.49
Clearance Time (s)				6.0		6.0	6.0	6.0			6.0	6.0
Vehicle Extension (s)				3.0		3.0	3.0	3.0			3.0	3.0
Lane Grp Cap (vph)				1052		854	286	2149			1722	770
v/s Ratio Prot				0.36		c0.50	c0.12	0.53			c0.73	
v/s Ratio Perm												0.47
v/c Ratio				1.17		1.63	1.42	0.86			1.50	0.96
Uniform Delay, d1				52.0		52.0	68.5	23.8			38.5	37.0
Progression Factor				1.00		1.00	0.76	0.37			1.00	1.00
Incremental Delay, d2				87.7		290.4	198.9	2.9			227.6	23.7
Delay (s)				139.7		342.4	250.7	11.6			266.1	60.7
Level of Service				F		F	F	B			F	E
Approach Delay (s/veh)		0.0			248.9			54.5			217.1	
Approach LOS		A			F			D			F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	183.2	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.54		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	118.2%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	1355	816	1155	0
Future Volume (vph)	0	0	1355	816	1155	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)			6.0	6.0	5.0	
Lane Util. Factor			1.00	1.00	0.97	
Frt			1.00	0.85	1.00	
Flt Protected			1.00	1.00	0.95	
Satd. Flow (prot)			1827	1583	3433	
Flt Permitted			1.00	1.00	0.95	
Satd. Flow (perm)			1827	1583	3433	
Peak-hour factor, PHF	0.92	0.92	0.91	0.91	0.92	0.92
Adj. Flow (vph)	0	0	1489	897	1255	0
RTOR Reduction (vph)	0	0	0	1	0	0
Lane Group Flow (vph)	0	0	1489	896	1255	0
Heavy Vehicles (%)	2%	2%	4%	2%	2%	2%
Turn Type			NA	Perm	Prot	
Protected Phases			2		1	
Permitted Phases				2		
Actuated Green, G (s)			96.0	96.0	43.0	
Effective Green, g (s)			96.0	96.0	43.0	
Actuated g/C Ratio			0.64	0.64	0.29	
Clearance Time (s)			6.0	6.0	5.0	
Vehicle Extension (s)			3.0	3.0	3.0	
Lane Grp Cap (vph)			1169	1013	984	
v/s Ratio Prot			c0.82		c0.37	
v/s Ratio Perm				0.57		
v/c Ratio			1.27	0.88	1.28	
Uniform Delay, d1			27.0	22.4	53.5	
Progression Factor			1.00	1.00	1.13	
Incremental Delay, d2			130.0	11.2	124.7	
Delay (s)			157.0	33.6	185.1	
Level of Service			F	C	F	
Approach Delay (s/veh)	0.0		110.6		185.1	
Approach LOS	A		F		F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	136.3	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.27		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	11.0
Intersection Capacity Utilization	125.2%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	140	0	26	2	0	48	33	1952	0	15	2509	199
Future Vol, veh/h	140	0	26	2	0	48	33	1952	0	15	2509	199
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	-	-	-	-	-	-	100	-	-	150	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	72	72	72	37	37	37	95	95	95	97	97	97
Heavy Vehicles, %	3	2	13	2	2	2	2	4	2	2	4	6
Mvmt Flow	194	0	36	5	0	130	35	2055	0	15	2587	205

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	4807	4742	2587	4760	4742	2055	2587	0	0	2055	0	0
Stage 1	2617	2617	-	2125	2125	-	-	-	-	-	-	-
Stage 2	2190	2125	-	2635	2617	-	-	-	-	-	-	-
Critical Hdwy	7.13	6.52	6.33	7.12	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.13	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.13	5.52	-	6.12	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.527	4.018	3.417	3.518	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	0	1	~ 30	0	1	~ 69	168	-	-	272	-	-
Stage 1	~ 33	50	-	66	90	-	-	-	-	-	-	-
Stage 2	~ 60	90	-	32	50	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	1	~ 30	-	1	~ 69	168	-	-	272	-	-
Mov Cap-2 Maneuver	-	1	-	-	1	-	-	-	-	-	-	-
Stage 1	~ 26	47	-	52	71	-	-	-	-	-	-	-
Stage 2	-	71	-	-	47	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v			0.5	0.1
HCM LOS	-	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	168	-	-	-	-	272	-	-
HCM Lane V/C Ratio	0.207	-	-	-	-	0.057	-	-
HCM Ctrl Dly (s/v)	31.9	-	-	-	-	19	-	-
HCM Lane LOS	D	-	-	-	-	C	-	-
HCM 95th %tile Q (veh)	0.7	-	-	-	-	0.2	-	-

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	39.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	28	94	1811	37	28	2489
Future Vol, veh/h	28	94	1811	37	28	2489
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	150	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	72	72	90	90	98	98
Heavy Vehicles, %	13	2	3	5	2	5
Mvmt Flow	39	131	2012	41	29	2540

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	4631	2033	0	0	2053	0
Stage 1	2033	-	-	-	-	-
Stage 2	2598	-	-	-	-	-
Critical Hdwy	6.53	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.53	-	-	-	-	-
Critical Hdwy Stg 2	5.53	-	-	-	-	-
Follow-up Hdwy	3.617	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	~ 1	~ 72	-	-	273	-
Stage 1	103	-	-	-	-	-
Stage 2	52	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 1	~ 72	-	-	273	-
Mov Cap-2 Maneuver	~ 29	-	-	-	-	-
Stage 1	103	-	-	-	-	-
Stage 2	46	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	$ 1123.2	0	0.2
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	54	273	-
HCM Lane V/C Ratio	-	-	3.138	0.105	-
HCM Ctrl Dly (s/v)	-	-	$ 1123.2	19.7	-
HCM Lane LOS	-	-	F	C	-
HCM 95th %tile Q (veh)	-	-	18	0.3	-

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	2231.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	103	0	33	0	0	0	2	1743	0	0	2456	66
Future Vol, veh/h	103	0	33	0	0	0	2	1743	0	0	2456	66
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	53	53	53	25	25	25	96	96	96	98	98	98
Heavy Vehicles, %	3	2	2	2	2	2	2	3	2	2	2	2
Mvmt Flow	194	0	62	0	0	0	2	1816	0	0	2506	67

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	4360	4360	2540	2573	0	0	1816	0	0
Stage 1	2540	2540	-	-	-	-	-	-	-
Stage 2	1820	1820	-	-	-	-	-	-	-
Critical Hdwy	6.43	6.52	6.22	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	5.43	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	5.43	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.527	4.018	3.318	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	~ 2	2	~ 35	170	-	-	338	-	-
Stage 1	~ 60	55	-	-	-	-	-	-	-
Stage 2	~ 141	129	-	-	-	-	-	-	-
Platoon blocked, %					-	-		-	-
Mov Cap-1 Maneuver	~ 2	0	~ 35	170	-	-	338	-	-
Mov Cap-2 Maneuver	~ 2	0	-	-	-	-	-	-	-
Stage 1	~ 59	0	-	-	-	-	-	-	-
Stage 2	~ 141	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	$ 40423.3	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	SBL	SBT	SBR
Capacity (veh/h)	170	-	-	3	338	-	-
HCM Lane V/C Ratio	0.012	-	-	85.535	-	-	-
HCM Ctrl Dly (s/v)	26.4	-	-	$ 40423.3	0	-	-
HCM Lane LOS	D	-	-	F	A	-	-
HCM 95th %tile Q (veh)	0	-	-	34.5	0	-	-

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	2.5

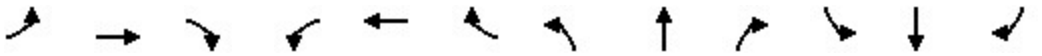
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↰	↱		↰	↱	
Traffic Vol, veh/h	22	22	59	46	35	234	101	1334	48	307	2080	59
Future Vol, veh/h	22	22	59	46	35	234	101	1334	48	307	2080	59
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	150	-	-	150	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	73	73	73	89	89	89	97	97	97	97	97	97
Heavy Vehicles, %	2	2	2	6	2	5	2	3	6	2	2	5
Mvmt Flow	30	30	81	52	39	263	104	1375	49	316	2144	61

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	4566	4439	2175	4470	4445	1400	2205	0	0	1424	0	0
Stage 1	2807	2807	-	1608	1608	-	-	-	-	-	-	-
Stage 2	1759	1632	-	2862	2837	-	-	-	-	-	-	-
Critical Hdwy	7.12	6.52	6.22	7.16	6.52	6.25	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.12	5.52	-	6.16	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.12	5.52	-	6.16	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.518	4.018	3.318	3.554	4.018	3.345	2.218	-	-	2.218	-	-
Pot Cap-1 Maneuver	~ 1	~ 1	~ 59	~ 1	~ 1	~ 169	238	-	-	478	-	-
Stage 1	~ 25	40	-	129	164	-	-	-	-	-	-	-
Stage 2	108	159	-	~ 23	~ 38	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	0	~ 59	-	0	~ 169	238	-	-	478	-	-
Mov Cap-2 Maneuver	-	0	-	-	0	-	-	-	-	-	-	-
Stage 1	~ 14	~ 14	-	73	92	-	-	-	-	-	-	-
Stage 2	-	90	-	~ 3	~ 13	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Ctrl Dly, s/v			2.1	3.3
HCM LOS	-	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	238	-	-	-	-	478	-	-
HCM Lane V/C Ratio	0.437	-	-	-	-	0.662	-	-
HCM Ctrl Dly (s/v)	31.4	-	-	-	-	26.1	-	-
HCM Lane LOS	D	-	-	-	-	D	-	-
HCM 95th %tile Q (veh)	2.1	-	-	-	-	4.8	-	-

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	337	0	111	2	0	24	74	1093	2	11	1630	534
Future Volume (vph)	337	0	111	2	0	24	74	1093	2	11	1630	534
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	6.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.85		1.00	0.85		1.00	1.00		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1752	1583		1770	1583		1770	1809		1770	1845	1583
Flt Permitted	1.00	1.00		1.00	1.00		0.05	1.00		0.05	1.00	1.00
Satd. Flow (perm)	1845	1583		1863	1583		88	1809		94	1845	1583
Peak-hour factor, PHF	0.67	0.67	0.67	0.42	0.42	0.42	0.88	0.88	0.88	0.95	0.95	0.95
Adj. Flow (vph)	503	0	166	5	0	57	84	1242	2	12	1716	562
RTOR Reduction (vph)	0	134	0	0	54	0	0	0	0	0	0	54
Lane Group Flow (vph)	503	32	0	5	3	0	84	1244	0	12	1716	508
Heavy Vehicles (%)	3%	2%	2%	2%	2%	2%	2%	5%	2%	2%	3%	2%
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases	4			8			2			6		6
Actuated Green, G (s)	29.2	29.2		8.0	8.0		97.3	87.3		83.1	79.1	105.1
Effective Green, g (s)	29.2	29.2		8.0	8.0		97.3	87.3		83.1	79.1	105.1
Actuated g/C Ratio	0.20	0.20		0.05	0.05		0.65	0.58		0.56	0.53	0.70
Clearance Time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	360	309		99	84		194	1057		97	977	1114
v/s Ratio Prot	0.24	0.02		0.00	0.00		c0.04	c0.69		0.00	c0.93	0.08
v/s Ratio Perm	c0.04			c0.00			0.25			0.07		0.24
v/c Ratio	1.40	0.11		0.05	0.04		0.43	1.18		0.12	1.76	0.46
Uniform Delay, d1	60.7	49.3		66.3	67.0		60.6	31.0		67.3	35.1	9.6
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	194.9	0.2		0.2	0.2		1.5	89.7		0.6	344.6	0.3
Delay (s)	255.6	49.5		66.5	67.2		62.2	120.7		67.9	379.7	9.9
Level of Service	F	D		E	E		E	F		E	F	A
Approach Delay (s/veh)		204.5			67.1			117.0			287.3	
Approach LOS		F			E			F			F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	219.4	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.50		
Actuated Cycle Length (s)	149.3	Sum of lost time (s)	24.0
Intersection Capacity Utilization	121.1%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	35.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	42	171	1020	42	186	1429
Future Vol, veh/h	42	171	1020	42	186	1429
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	150	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	80	80	91	91	94	94
Heavy Vehicles, %	2	7	3	7	2	3
Mvmt Flow	53	214	1121	46	198	1520

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	3060	1144	0	0	1167	0
Stage 1	1144	-	-	-	-	-
Stage 2	1916	-	-	-	-	-
Critical Hdwy	6.42	6.27	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.363	-	-	2.218	-
Pot Cap-1 Maneuver	~ 14	238	-	-	599	-
Stage 1	304	-	-	-	-	-
Stage 2	127	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 9	238	-	-	599	-
Mov Cap-2 Maneuver	63	-	-	-	-	-
Stage 1	304	-	-	-	-	-
Stage 2	85	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	$ 404.7	0	1.6
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	154	599	-
HCM Lane V/C Ratio	-	-	1.729	0.33	-
HCM Ctrl Dly (s/v)	-	-	$ 404.7	13.9	-
HCM Lane LOS	-	-	F	B	-
HCM 95th %tile Q (veh)	-	-	19.2	1.4	-

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	1.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	20	9	1053	15	13	1460
Future Vol, veh/h	20	9	1053	15	13	1460
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	150	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	50	50	89	89	96	96
Heavy Vehicles, %	2	2	3	2	20	2
Mvmt Flow	40	18	1183	17	14	1521

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2741	1192	0	0	1200	0
Stage 1	1192	-	-	-	-	-
Stage 2	1549	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.3	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.38	-
Pot Cap-1 Maneuver	~ 22	228	-	-	523	-
Stage 1	288	-	-	-	-	-
Stage 2	193	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 21	228	-	-	523	-
Mov Cap-2 Maneuver	113	-	-	-	-	-
Stage 1	288	-	-	-	-	-
Stage 2	188	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	50.9	0	0.1
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	134	523	-
HCM Lane V/C Ratio	-	-	0.433	0.026	-
HCM Ctrl Dly (s/v)	-	-	50.9	12.1	-
HCM Lane LOS	-	-	F	B	-
HCM 95th %tile Q (veh)	-	-	1.9	0.1	-

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	756.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	70	309	750	66	403	1079
Future Vol, veh/h	70	309	750	66	403	1079
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	120	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	89	89	85	85	94	94
Heavy Vehicles, %	2	2	4	2	2	2
Mvmt Flow	79	347	882	78	429	1148

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2927	921	0	0	960	0
Stage 1	921	-	-	-	-	-
Stage 2	2006	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	~ 17	~ 328	-	-	717	-
Stage 1	388	-	-	-	-	-
Stage 2	114	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 7	~ 328	-	-	717	-
Mov Cap-2 Maneuver	~ 7	-	-	-	-	-
Stage 1	388	-	-	-	-	-
Stage 2	~ 46	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	$ 5242.7	0	4.7
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	35	717	-
HCM Lane V/C Ratio	-	-	12.167	0.598	-
HCM Ctrl Dly (s/v)	-	-	$ 5242.7	17.2	-
HCM Lane LOS	-	-	F	C	-
HCM 95th %tile Q (veh)	-	-	51.9	4	-

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	131

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	83	57	74	724	1092	72
Future Vol, veh/h	83	57	74	724	1092	72
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	72	72	86	86	89	89
Heavy Vehicles, %	3	5	4	4	2	4
Mvmt Flow	115	79	86	842	1227	81

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2282	1268	1308	0	-	0
Stage 1	1268	-	-	-	-	-
Stage 2	1014	-	-	-	-	-
Critical Hdwy	6.43	6.25	4.14	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.345	2.236	-	-	-
Pot Cap-1 Maneuver	~ 43	203	523	-	-	-
Stage 1	263	-	-	-	-	-
Stage 2	349	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 30	203	523	-	-	-
Mov Cap-2 Maneuver	~ 30	-	-	-	-	-
Stage 1	182	-	-	-	-	-
Stage 2	349	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	$ 1631.6	1.2	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	523	-	46	-	-
HCM Lane V/C Ratio	0.165	-	4.227	-	-
HCM Ctrl Dly (s/v)	13.2	$	1631.6	-	-
HCM Lane LOS	B	A	F	-	-
HCM 95th %tile Q (veh)	0.6	-	21.9	-	-

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	48	4	11	331	372	96
Future Vol, veh/h	48	4	11	331	372	96
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	56	56	86	86	80	80
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	86	7	13	385	465	120

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	936	525	585	0	-	0
Stage 1	525	-	-	-	-	-
Stage 2	411	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	294	552	990	-	-	-
Stage 1	593	-	-	-	-	-
Stage 2	669	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	289	552	990	-	-	-
Mov Cap-2 Maneuver	289	-	-	-	-	-
Stage 1	583	-	-	-	-	-
Stage 2	669	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	22.3	0.3	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	990	-	300	-	-
HCM Lane V/C Ratio	0.013	-	0.31	-	-
HCM Ctrl Dly (s/v)	8.7	0	22.3	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q (veh)	0	-	1.3	-	-

SR 75 CORRIDOR STUDY
2030 PROPOSED TRAFFIC CONDITIONS
CAPACITY/LOS REPORT

AM PEAK HOUR

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	334	0	454	252	667	0	0	955	341
Future Volume (vph)	0	0	0	334	0	454	252	667	0	0	955	341
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0		6.0	6.0	6.0			6.0	6.0
Lane Util. Factor				0.97		0.88	0.97	0.95			0.95	1.00
Frt				1.00		0.85	1.00	1.00			1.00	0.85
Flt Protected				0.95		1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)				3400		2682	3242	3471			3438	1553
Flt Permitted				0.95		1.00	0.95	1.00			1.00	1.00
Satd. Flow (perm)				3400		2682	3242	3471			3438	1553
Peak-hour factor, PHF	0.92	0.92	0.92	0.87	0.87	0.87	0.74	0.74	0.74	0.88	0.88	0.88
Adj. Flow (vph)	0	0	0	384	0	522	341	901	0	0	1085	388
RTOR Reduction (vph)	0	0	0	0	0	301	0	0	0	0	0	71
Lane Group Flow (vph)	0	0	0	384	0	221	341	901	0	0	1085	317
Heavy Vehicles (%)	2%	2%	2%	3%	2%	6%	8%	4%	2%	2%	5%	4%
Turn Type				Prot		Prot	Prot	NA			NA	Perm
Protected Phases				3		3	5	2			6	
Permitted Phases												6
Actuated Green, G (s)				23.2		23.2	27.0	114.8			81.8	81.8
Effective Green, g (s)				23.2		23.2	27.0	114.8			81.8	81.8
Actuated g/C Ratio				0.15		0.15	0.18	0.77			0.55	0.55
Clearance Time (s)				6.0		6.0	6.0	6.0			6.0	6.0
Vehicle Extension (s)				3.0		3.0	3.0	3.0			3.0	3.0
Lane Grp Cap (vph)				525		414	583	2656			1874	846
v/s Ratio Prot				c0.11		0.08	c0.11	0.26			c0.32	
v/s Ratio Perm												0.20
v/c Ratio				0.73		0.53	0.58	0.34			0.58	0.37
Uniform Delay, d1				60.4		58.4	56.4	5.6			22.7	19.5
Progression Factor				1.00		1.00	0.97	1.04			1.00	1.00
Incremental Delay, d2				5.2		1.3	1.4	0.3			1.3	1.3
Delay (s)				65.6		59.7	56.2	6.1			24.0	20.7
Level of Service				E		E	E	A			C	C
Approach Delay (s/veh)		0.0			62.2			19.9			23.1	
Approach LOS		A			E			B			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	31.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	56.4%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	257	667	611	501	0
Future Volume (vph)	0	257	667	611	501	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.5	6.5	6.5	6.5	
Lane Util. Factor		1.00	0.95	1.00	0.97	
Frt		0.87	1.00	0.85	1.00	
Flt Protected		1.00	1.00	1.00	0.95	
Satd. Flow (prot)		1580	3438	1583	3242	
Flt Permitted		1.00	1.00	1.00	0.95	
Satd. Flow (perm)		1580	3438	1583	3242	
Peak-hour factor, PHF	0.73	0.73	0.81	0.81	0.87	0.87
Adj. Flow (vph)	0	352	823	754	576	0
RTOR Reduction (vph)	0	157	0	21	0	0
Lane Group Flow (vph)	0	195	823	733	576	0
Heavy Vehicles (%)	2%	4%	5%	2%	8%	2%
Turn Type		Over	NA	Perm	Prot	
Protected Phases		1	2		1	
Permitted Phases				2		
Actuated Green, G (s)		32.9	104.1	104.1	32.9	
Effective Green, g (s)		32.9	104.1	104.1	32.9	
Actuated g/C Ratio		0.22	0.69	0.69	0.22	
Clearance Time (s)		6.5	6.5	6.5	6.5	
Vehicle Extension (s)		3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		346	2385	1098	711	
v/s Ratio Prot		0.12	0.24		c0.18	
v/s Ratio Perm				c0.46		
v/c Ratio		0.56	0.35	0.67	0.81	
Uniform Delay, d1		52.2	9.2	13.1	55.6	
Progression Factor		1.00	0.45	0.40	0.67	
Incremental Delay, d2		2.1	0.2	2.0	5.9	
Delay (s)		54.3	4.4	7.2	43.4	
Level of Service		D	A	A	D	
Approach Delay (s/veh)	54.3		5.8			43.4
Approach LOS	D		A			D

Intersection Summary			
HCM 2000 Control Delay (s/veh)	21.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	60.9%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	0	0	4	0	1278	2	40	906	88
Future Vol, veh/h	0	0	0	0	0	4	0	1278	2	40	906	88
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Free
Storage Length	-	-	-	-	-	0	-	-	-	150	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	3	2	2	4	4
Mvmt Flow	0	0	0	0	0	4	0	1389	2	43	985	96

Major/Minor	Minor1			Major1			Major2		
Conflicting Flow All	-	-	1390	-	0	0	1391	0	0
Stage 1	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.22	-	-	-	4.12	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.318	-	-	-	2.218	-	-
Pot Cap-1 Maneuver	0	0	174	0	-	-	492	-	0
Stage 1	0	0	-	0	-	-	-	-	0
Stage 2	0	0	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	-	0	174	-	-	-	492	-	-
Mov Cap-2 Maneuver	-	0	-	-	-	-	-	-	-
Stage 1	-	0	-	-	-	-	-	-	-
Stage 2	-	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	26.2	0	0.6
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	174	492	-
HCM Lane V/C Ratio	-	-	0.025	0.088	-
HCM Ctrl Dly (s/v)	-	-	26.2	13	-
HCM Lane LOS	-	-	D	B	-
HCM 95th %tile Q (veh)	-	-	0.1	0.3	-

Intersection	
Int Delay, s/veh	0.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	2	13	1185	7	17	854
Future Vol, veh/h	2	13	1185	7	17	854
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	150	150	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	46	46	83	83	80	80
Heavy Vehicles, %	100	27	2	2	7	3
Mvmt Flow	4	28	1428	8	21	1068

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2538	1428	0	0	1436	0
Stage 1	1428	-	-	-	-	-
Stage 2	1110	-	-	-	-	-
Critical Hdwy	7.4	6.47	-	-	4.17	-
Critical Hdwy Stg 1	6.4	-	-	-	-	-
Critical Hdwy Stg 2	6.4	-	-	-	-	-
Follow-up Hdwy	4.4	3.543	-	-	2.263	-
Pot Cap-1 Maneuver	14	145	-	-	458	-
Stage 1	137	-	-	-	-	-
Stage 2	208	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	13	145	-	-	458	-
Mov Cap-2 Maneuver	80	-	-	-	-	-
Stage 1	137	-	-	-	-	-
Stage 2	198	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	41.4	0	0.3
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	131	458	-
HCM Lane V/C Ratio	-	-	0.249	0.046	-
HCM Ctrl Dly (s/v)	-	-	41.4	13.2	-
HCM Lane LOS	-	-	E	B	-
HCM 95th %tile Q (veh)	-	-	0.9	0.1	-

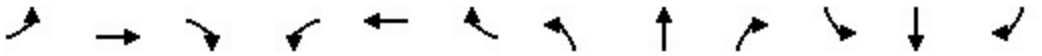
Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	10	0	0	0	0	1198	0	1	833	22
Future Vol, veh/h	0	0	10	0	0	0	0	1198	0	1	833	22
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	100	-	150
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	79	79	79	25	25	25	81	81	81	79	79	79
Heavy Vehicles, %	6	2	13	2	2	2	2	2	2	2	4	2
Mvmt Flow	0	0	13	0	0	0	0	1479	0	1	1054	28

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	-	2535	1054	-	0	0	1479	0	0
Stage 1	-	1056	-	-	-	-	-	-	-
Stage 2	-	1479	-	-	-	-	-	-	-
Critical Hdwy	-	6.52	6.33	-	-	-	4.12	-	-
Critical Hdwy Stg 1	-	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	-	4.018	3.417	-	-	-	2.218	-	-
Pot Cap-1 Maneuver	0	27	261	0	-	-	455	-	-
Stage 1	0	302	-	0	-	-	-	-	-
Stage 2	0	190	-	0	-	-	-	-	-
Platoon blocked, %					-	-		-	-
Mov Cap-1 Maneuver	-	0	261	-	-	-	455	-	-
Mov Cap-2 Maneuver	-	0	-	-	-	-	-	-	-
Stage 1	-	0	-	-	-	-	-	-	-
Stage 2	-	0	-	-	-	-	-	-	-

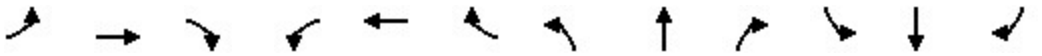
Approach	EB	NB	SB
HCM Ctrl Dly, s/v	19.5	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	SBL	SBT	SBR
Capacity (veh/h)	-	-	261	455	-	-
HCM Lane V/C Ratio	-	-	0.048	0.003	-	-
HCM Ctrl Dly (s/v)	-	-	19.5	12.9	-	-
HCM Lane LOS	-	-	C	B	-	-
HCM 95th %tile Q (veh)	-	-	0.2	0	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	26	13	71	22	5	130	35	970	50	75	651	13
Future Volume (vph)	26	13	71	22	5	130	35	970	50	75	651	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.87		1.00	0.86		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1719	1563		1626	1594		1687	1863	1272	1752	1827	1583
Flt Permitted	0.56	1.00		0.57	1.00		0.25	1.00	1.00	0.07	1.00	1.00
Satd. Flow (perm)	1005	1563		978	1594		450	1863	1272	131	1827	1583
Peak-hour factor, PHF	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.79	0.79	0.79
Adj. Flow (vph)	31	16	86	27	6	157	42	1169	60	95	824	16
RTOR Reduction (vph)	0	82	0	0	150	0	0	0	16	0	0	4
Lane Group Flow (vph)	31	20	0	27	13	0	42	1169	44	95	824	12
Heavy Vehicles (%)	5%	2%	7%	11%	2%	2%	7%	2%	27%	3%	4%	2%
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA	pm+ov
Protected Phases	3	8		7	4		1	6	7	5	2	3
Permitted Phases	8			4			6		6	2		2
Actuated Green, G (s)	12.2	7.2		11.8	7.0		111.7	104.9	109.7	116.3	107.2	112.2
Effective Green, g (s)	12.2	7.2		11.8	7.0		111.7	104.9	109.7	116.3	107.2	112.2
Actuated g/C Ratio	0.08	0.05		0.08	0.05		0.74	0.70	0.73	0.78	0.71	0.75
Clearance Time (s)	6.0	6.0		6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	105	75		97	74		391	1302	981	199	1305	1247
v/s Ratio Prot	c0.01	0.01		0.01	0.01		0.00	c0.63	0.00	c0.03	0.45	0.00
v/s Ratio Perm	c0.01			0.01			0.08		0.03	0.34		0.01
v/c Ratio	0.30	0.27		0.28	0.18		0.11	0.90	0.04	0.48	0.63	0.01
Uniform Delay, d1	67.4	68.9		67.2	68.7		16.7	18.2	5.6	51.6	11.1	4.8
Progression Factor	1.00	1.00		1.00	1.00		1.02	0.82	1.94	0.84	0.17	1.00
Incremental Delay, d2	1.6	1.9		1.6	1.2		0.1	5.4	0.0	1.4	1.8	0.0
Delay (s)	69.0	70.8		68.8	69.9		17.1	20.4	10.9	44.9	3.7	4.8
Level of Service	E	E		E	E		B	C	B	D	A	A
Approach Delay (s/veh)		70.4			69.8			19.8			7.9	
Approach LOS		E			E			B			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	21.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	87.7%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	446	0	132	1	0	24	159	1672	4	2	1235	421
Future Volume (vph)	446	0	132	1	0	24	159	1672	4	2	1235	421
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	6.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.85		1.00	0.85		1.00	1.00		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1752	1583		1770	1583		1770	1809		1770	1845	1583
Flt Permitted	1.00	1.00		1.00	1.00		0.05	1.00		0.06	1.00	1.00
Satd. Flow (perm)	1845	1583		1863	1583		95	1809		103	1845	1583
Peak-hour factor, PHF	0.64	0.64	0.64	0.75	0.75	0.75	0.63	0.63	0.63	0.87	0.87	0.87
Adj. Flow (vph)	697	0	206	1	0	32	252	2654	6	2	1420	484
RTOR Reduction (vph)	0	163	0	0	31	0	0	0	0	0	0	76
Lane Group Flow (vph)	697	43	0	1	1	0	252	2660	0	2	1420	408
Heavy Vehicles (%)	3%	2%	2%	2%	2%	2%	2%	5%	2%	2%	3%	2%
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	Perm
Protected Phases	7	3		4	8		5	2		1	6	
Permitted Phases	3			8			2			6		6
Actuated Green, G (s)	28.9	28.9		6.3	6.3		89.5	81.6		74.4	72.5	72.5
Effective Green, g (s)	28.9	28.9		6.3	6.3		89.5	81.6		74.4	72.5	72.5
Actuated g/C Ratio	0.21	0.21		0.05	0.05		0.64	0.58		0.53	0.52	0.52
Clearance Time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	381	327		83	71		192	1055		77	956	820
v/s Ratio Prot	0.34	0.03		0.00	c0.00		c0.10	c1.47		0.00	0.77	
v/s Ratio Perm	c0.05			0.00			0.74			0.01		0.26
v/c Ratio	1.83	0.13		0.01	0.02		1.31	2.52		0.03	1.49	0.50
Uniform Delay, d1	56.2	45.3		62.7	63.9		48.4	29.2		32.1	33.7	21.9
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	383.4	0.2		0.1	0.1		172.7	687.4		0.1	224.0	0.5
Delay (s)	439.6	45.4		62.8	64.0		221.1	716.6		32.3	257.7	22.4
Level of Service	F	D		E	E		F	F		C	F	C
Approach Delay (s/veh)		349.7			63.9			673.7			197.7	
Approach LOS		F			E			F			F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	461.7	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	2.29		
Actuated Cycle Length (s)	139.9	Sum of lost time (s)	24.0
Intersection Capacity Utilization	143.0%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	2.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	52	12	631	303	62	225
Future Vol, veh/h	52	12	631	303	62	225
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	150	150	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	53	53	72	72	86	86
Heavy Vehicles, %	14	10	2	6	28	6
Mvmt Flow	98	23	876	421	72	262

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1282	876	0	0	1297	0
Stage 1	876	-	-	-	-	-
Stage 2	406	-	-	-	-	-
Critical Hdwy	6.54	6.3	-	-	4.38	-
Critical Hdwy Stg 1	5.54	-	-	-	-	-
Critical Hdwy Stg 2	5.54	-	-	-	-	-
Follow-up Hdwy	3.626	3.39	-	-	2.452	-
Pot Cap-1 Maneuver	172	337	-	-	456	-
Stage 1	388	-	-	-	-	-
Stage 2	648	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	145	337	-	-	456	-
Mov Cap-2 Maneuver	270	-	-	-	-	-
Stage 1	388	-	-	-	-	-
Stage 2	546	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	27.3	0	3.1
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	280	456	-
HCM Lane V/C Ratio	-	-	0.431	0.158	-
HCM Ctrl Dly (s/v)	-	-	27.3	14.4	-
HCM Lane LOS	-	-	D	B	-
HCM 95th %tile Q (veh)	-	-	2.1	0.6	-

Intersection	
Int Delay, s/veh	74.7

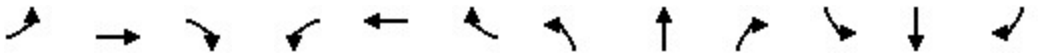
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	193	44	96	519	224	28
Future Vol, veh/h	193	44	96	519	224	28
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	150	-	-	150
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	73	73	75	75	79	79
Heavy Vehicles, %	4	6	3	2	10	4
Mvmt Flow	264	60	128	692	284	35

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1232	284	319	0	-	0
Stage 1	284	-	-	-	-	-
Stage 2	948	-	-	-	-	-
Critical Hdwy	6.44	6.26	4.13	-	-	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.354	2.227	-	-	-
Pot Cap-1 Maneuver	~ 194	746	1235	-	-	-
Stage 1	760	-	-	-	-	-
Stage 2	373	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 174	746	1235	-	-	-
Mov Cap-2 Maneuver	~ 174	-	-	-	-	-
Stage 1	681	-	-	-	-	-
Stage 2	373	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	$ 333.5	1.3	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1235	-	203	-	-
HCM Lane V/C Ratio	0.104	-	1.599	-	-
HCM Ctrl Dly (s/v)	8.3	-	$ 333.5	-	-
HCM Lane LOS	A	-	F	-	-
HCM 95th %tile Q (veh)	0.3	-	21	-	-

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	117	2	10	17	1	13	22	1176	20	15	906	5
Future Volume (vph)	117	2	10	17	1	13	22	1176	20	15	906	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.87		1.00	0.86		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1626		1770	1602		1770	1863	1583	1770	1863	1583
Flt Permitted	0.75	1.00		1.00	1.00		0.17	1.00	1.00	0.04	1.00	1.00
Satd. Flow (perm)	1393	1626		1863	1602		313	1863	1583	71	1863	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	127	2	11	18	1	14	24	1278	22	16	985	5
RTOR Reduction (vph)	0	10	0	0	14	0	0	0	5	0	0	1
Lane Group Flow (vph)	127	3	0	18	1	0	24	1278	17	16	985	4
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA	pm+ov
Protected Phases	7	4		3	8		5	2	3	1	6	7
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	21.2	7.7		11.6	2.9		111.9	107.4	116.1	107.3	105.1	118.6
Effective Green, g (s)	21.2	7.7		11.6	2.9		111.9	107.4	116.1	107.3	105.1	118.6
Actuated g/C Ratio	0.14	0.05		0.08	0.02		0.75	0.72	0.77	0.72	0.70	0.79
Clearance Time (s)	6.0	6.0		6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	230	83		138	30		277	1333	1288	75	1305	1314
v/s Ratio Prot	c0.05	0.00		0.01	0.00		0.00	c0.69	0.00	c0.00	0.53	0.00
v/s Ratio Perm	c0.03			0.00			0.06		0.01	0.15		0.00
v/c Ratio	0.55	0.03		0.13	0.04		0.09	0.96	0.01	0.21	0.75	0.00
Uniform Delay, d1	59.3	67.6		63.7	72.2		26.0	19.3	3.9	67.2	14.3	3.3
Progression Factor	1.00	1.01		1.00	1.00		0.38	0.32	1.00	0.61	0.52	1.00
Incremental Delay, d2	2.9	0.2		0.4	0.6		0.1	12.1	0.0	1.3	3.8	0.0
Delay (s)	62.3	68.5		64.1	72.8		10.1	18.2	3.9	42.1	11.3	3.3
Level of Service	E	E		E	E		B	B	A	D	B	A
Approach Delay (s/veh)		62.9			68.0			17.8			11.7	
Approach LOS		E			E			B			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	18.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	85.0%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Intersection	
Int Delay, s/veh	1.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	129	5	88	23	0
Future Vol, veh/h	0	129	5	88	23	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	140	5	96	25	0

Major/Minor	Major2		Minor1	
Conflicting Flow All	0	0	106	-
Stage 1	-	-	0	-
Stage 2	-	-	106	-
Critical Hdwy	4.12	-	6.42	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	5.42	-
Follow-up Hdwy	2.218	-	3.518	-
Pot Cap-1 Maneuver	-	-	892	0
Stage 1	-	-	-	0
Stage 2	-	-	918	0
Platoon blocked, %		-		
Mov Cap-1 Maneuver	-	-	892	-
Mov Cap-2 Maneuver	-	-	892	-
Stage 1	-	-	-	-
Stage 2	-	-	918	-

Approach	WB	NB
HCM Ctrl Dly, s/v		9.2
HCM LOS		A

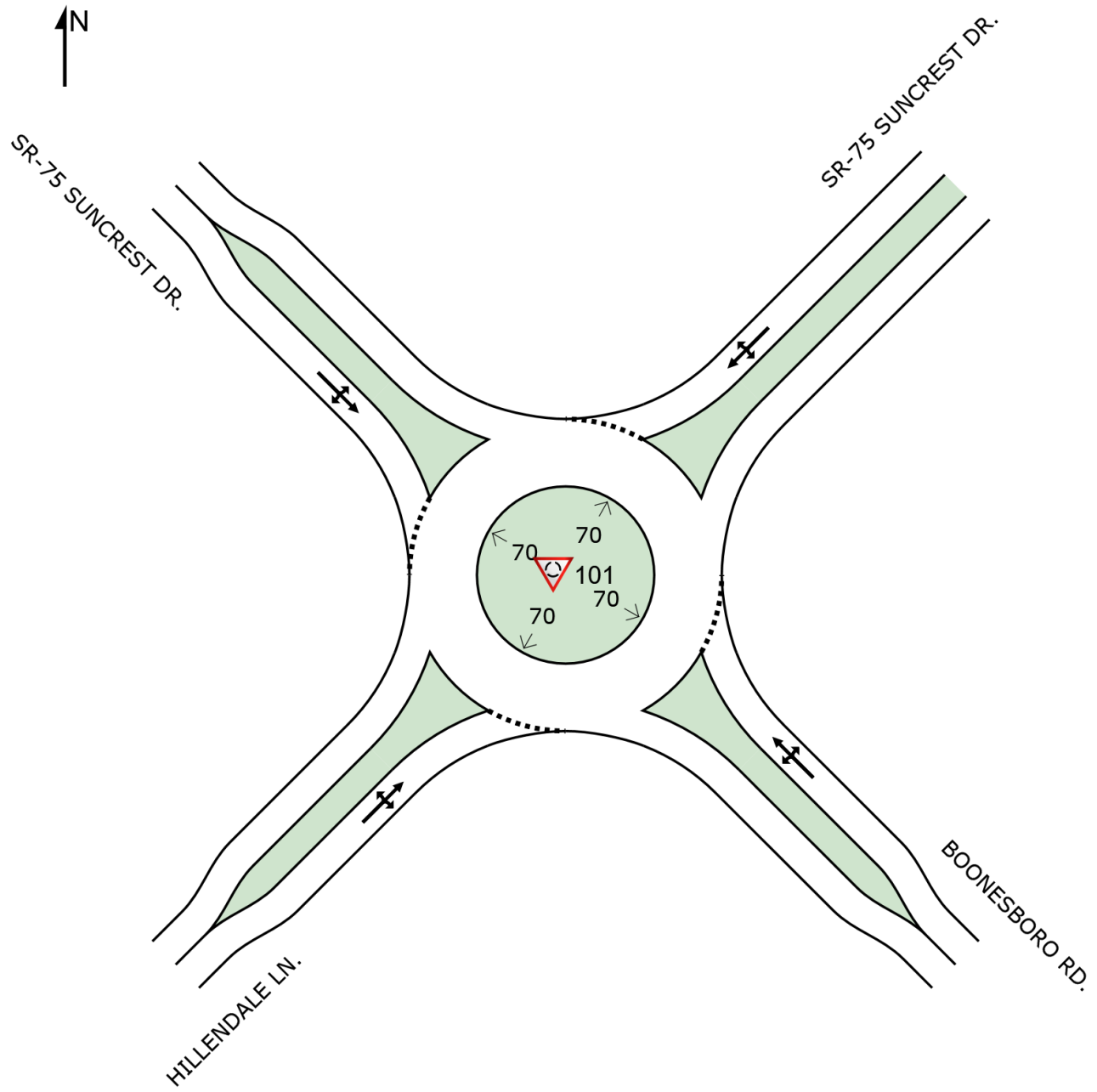
Minor Lane/Major Mvmt	NBLn1	WBL	WBT
Capacity (veh/h)	892	-	-
HCM Lane V/C Ratio	0.028	-	-
HCM Ctrl Dly (s/v)	9.2	-	-
HCM Lane LOS	A	-	-
HCM 95th %tile Q (veh)	0.1	-	-

SITE LAYOUT

Site: 101 [HILLENDALE LN./BOONESBORO RD. 2030 AM PEAK (Site Folder: General)]

2030 AM PEAK
Site Category: (None)
Roundabout

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



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LANE SUMMARY

Site: 101 [HILLENDALE LN./BOONESBORO RD. 2030 AM PEAK (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

2030 AM PEAK
Site Category: (None)
Roundabout

Lane Use and Performance

	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh	Dist] ft	Lane Config	Lane Length ft	Cap. Adj. %	Prob. Block. %
SouthEast: BOONESBORO RD.															
Lane 1[d]	329	3.0	329	3.0	468	0.702	100	27.0	LOS D	4.6	118.5	Full	1600	0.0	0.0
Approach	329	3.0	329	3.0		0.702		27.0	LOS D	4.6	118.5				
NorthEast: SR-75 SUNCREST DR.															
Lane 1[d]	360	8.6	360	8.6	1234	0.292	100	5.3	LOS A	1.6	42.0	Full	1600	0.0	0.0
Approach	360	8.6	360	8.6		0.292		5.3	LOS A	1.6	42.0				
NorthWest: SR-75 SUNCREST DR.															
Lane 1[d]	949	2.9	949	2.9	1257	0.755	100	13.0	LOS B	10.4	267.1	Full	1600	0.0	0.0
Approach	949	2.9	949	2.9		0.755		13.0	LOS B	10.4	267.1				
SouthWest: HILLENDALE LN.															
Lane 1[d]	116	2.0	116	2.0	464	0.250	100	11.5	LOS B	0.9	23.8	Full	1600	0.0	0.0
Approach	116	2.0	116	2.0		0.250		11.5	LOS B	0.9	23.8				
All Vehicles	1754	4.0	1754	4.0		0.755		14.0	LOS B	10.4	267.1				

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Roundabout LOS Method: Same as Sign Control.
Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
Delay Model: HCM Delay Formula (Stopline Delay: Geometric Delay is not included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: Siegloch M1 implied by US HCM 6 Roundabout Capacity Model.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

d Dominant lane on roundabout approach

Approach Lane Flows (veh/h)

SouthEast: BOONESBORO RD.

Mov. From SE To Exit:	L2 SW	T1 NW	R2 NE	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
Lane 1	1	21	306	329	3.0	468	0.702	100	NA	NA
Approach	1	21	306	329	3.0		0.702			

NorthEast: SR-75 SUNCREST DR.

Mov. From NE	L2	T1	R2	Total	%HV	Cap.	Deg. Satn	Lane Util.	Prob. SL Ov.	Ov. Lane

To Exit:	SE	SW	NW			veh/h	v/c	%	%	No.
Lane 1	55	7	299	360	8.6	1234	0.292	100	NA	NA
Approach	55	7	299	360	8.6		0.292			
NorthWest: SR-75 SUNCREST DR.										
Mov. From NW To Exit:	L2 NE	T1 SE	R2 SW	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
Lane 1	863	79	7	949	2.9	1257	0.755	100	NA	NA
Approach	863	79	7	949	2.9		0.755			
SouthWest: HILLENDALE LN.										
Mov. From SW To Exit:	L2 NW	T1 NE	R2 SE	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
Lane 1	10	98	8	116	2.0	464	0.250	100	NA	NA
Approach	10	98	8	116	2.0		0.250			

	Total	%HV	Deg.Satn (v/c)
All Vehicles	1754	4.0	0.755

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Merge Analysis

	Exit Lane Number	Short Lane Length ft	Percent Opng in Lane %	Opposing Flow Rate veh/h	Opposing Flow Rate pcu/h	Critical Gap sec	Follow-up Headway sec	Lane Flow Rate veh/h	Capacity veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay sec
There are no Exit Short Lanes for Merge Analysis at this Site.												

Variable Demand Analysis

	Initial Queued Demand veh	Residual Queued Demand veh	Time for Residual Demand to Clear sec	Duration of Oversatn sec
SouthEast: BOONESBORO RD.				
Lane 1	0.0	0.0	0.0	0.0
NorthEast: SR-75 SUNCREST DR.				
Lane 1	0.0	0.0	0.0	0.0
NorthWest: SR-75 SUNCREST DR.				
Lane 1	0.0	0.0	0.0	0.0
SouthWest: HILLENDALE LN.				
Lane 1	0.0	0.0	0.0	0.0

LEVEL OF SERVICE

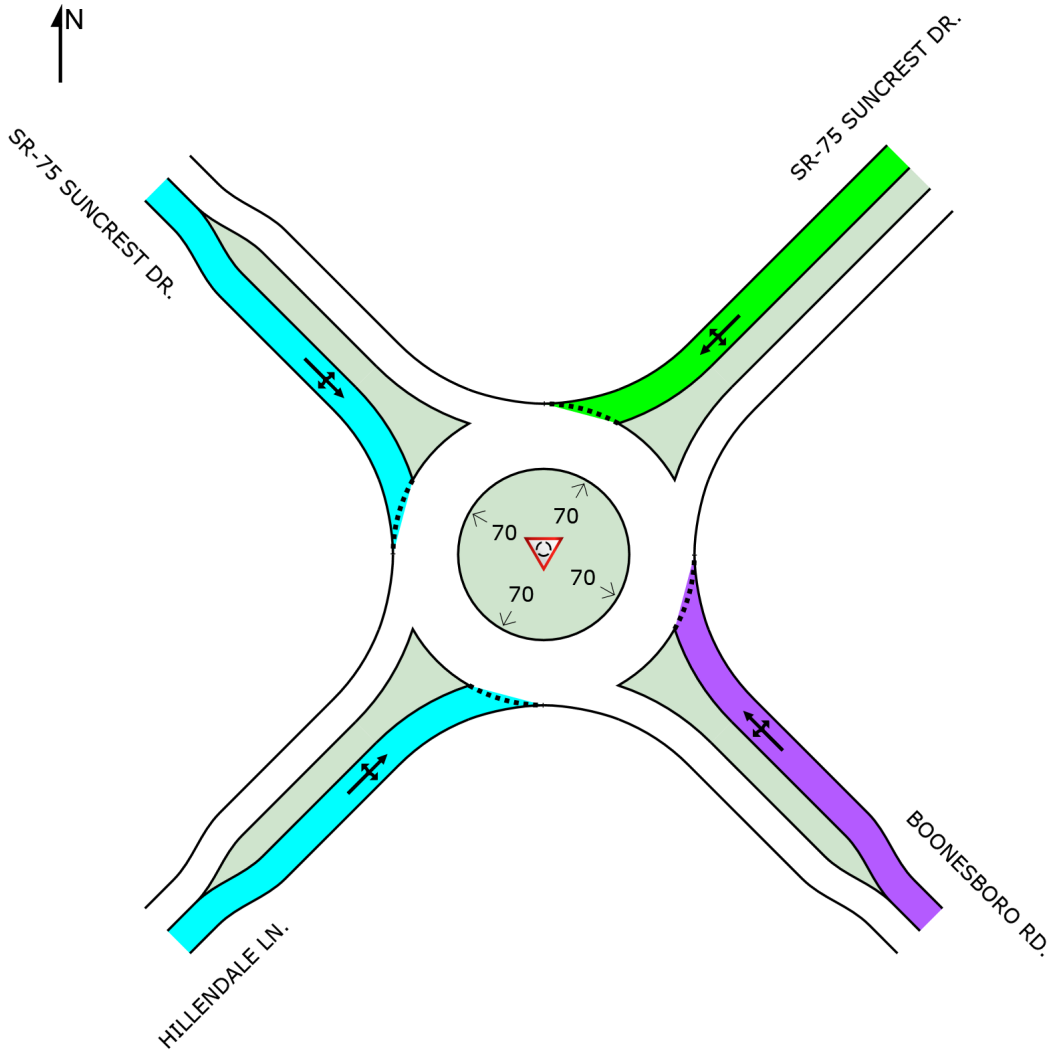
Lane Level of Service

Site: 101 [HILLENDALE LN./BOONESBORO RD. 2030 AM PEAK (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

2030 AM PEAK
Site Category: (None)
Roundabout

	Approaches				Intersection
	Southeast	Northeast	Northwest	Southwest	
LOS	D	A	B	B	B



Colour code based on Level of Service

LOS A | LOS B | LOS C | LOS D | LOS E | LOS F

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Roundabout Level of Service Method: Same as Sign Control
Delay Model: HCM Delay Formula (Stopline Delay: Geometric Delay is not included).

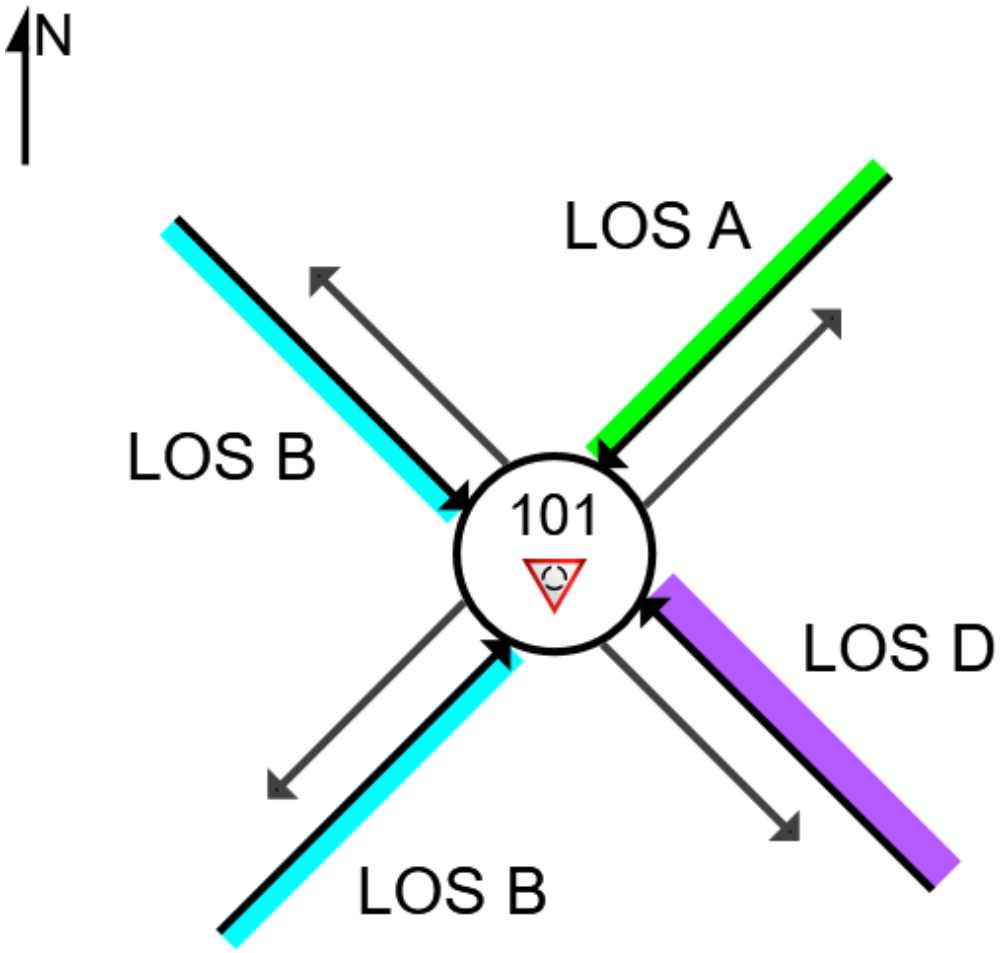
LEVEL OF SERVICE

Approach Level of Service

Site: 101 [HILLENDALE LN./BOONESBORO RD. 2030 AM PEAK (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

2030 AM PEAK
Site Category: (None)
Roundabout



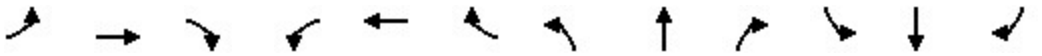
Colour code based on Level of Service

LOS A	LOS B	LOS C	LOS D	LOS E	LOS F

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Roundabout Level of Service Method: Same as Sign Control
Delay Model: HCM Delay Formula (Stopline Delay: Geometric Delay is not included).

SR 75 CORRIDOR STUDY
2030 PROPOSED TRAFFIC CONDITIONS
CAPACITY/LOS REPORT

SCHOOL DISMISSAL PEAK HOUR



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	354	0	602	177	850	0	0	926	304
Future Volume (vph)	0	0	0	354	0	602	177	850	0	0	926	304
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0		6.0	6.0	6.0			6.0	6.0
Lane Util. Factor				0.97		0.88	0.97	0.95			0.95	1.00
Frt				1.00		0.85	1.00	1.00			1.00	0.85
Flt Protected				0.95		1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)				3433		2787	3303	3505			3539	1583
Flt Permitted				0.95		1.00	0.95	1.00			1.00	1.00
Satd. Flow (perm)				3433		2787	3303	3505			3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.95	0.95	0.95	0.79	0.79	0.79	0.81	0.81	0.81
Adj. Flow (vph)	0	0	0	373	0	634	224	1076	0	0	1143	375
RTOR Reduction (vph)	0	0	0	0	0	164	0	0	0	0	0	65
Lane Group Flow (vph)	0	0	0	373	0	470	224	1076	0	0	1143	310
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	6%	3%	2%	2%	2%	2%
Turn Type				Prot		Prot	Prot	NA			NA	Perm
Protected Phases				3		3	5	2			6	
Permitted Phases												6
Actuated Green, G (s)				31.5		31.5	19.0	106.5			81.5	81.5
Effective Green, g (s)				31.5		31.5	19.0	106.5			81.5	81.5
Actuated g/C Ratio				0.21		0.21	0.13	0.71			0.54	0.54
Clearance Time (s)				6.0		6.0	6.0	6.0			6.0	6.0
Vehicle Extension (s)				3.0		3.0	3.0	3.0			3.0	3.0
Lane Grp Cap (vph)				720		585	418	2488			1922	860
v/s Ratio Prot				0.11		c0.17	c0.07	0.31			c0.32	
v/s Ratio Perm												0.20
v/c Ratio				0.52		0.80	0.54	0.43			0.59	0.36
Uniform Delay, d1				52.5		56.3	61.4	9.1			23.1	19.5
Progression Factor				1.00		1.00	0.86	1.00			1.00	1.00
Incremental Delay, d2				0.6		7.8	1.2	0.5			1.4	1.2
Delay (s)				53.2		64.1	54.2	9.6			24.5	20.6
Level of Service				D		E	D	A			C	C
Approach Delay (s/veh)		0.0			60.1			17.3			23.5	
Approach LOS		A			E			B			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	31.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	54.6%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	221	812	499	448	0
Future Volume (vph)	0	221	812	499	448	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.5	6.5	6.5	6.5	
Lane Util. Factor		1.00	0.95	1.00	0.97	
Frt		0.87	1.00	0.85	1.00	
Flt Protected		1.00	1.00	1.00	0.95	
Satd. Flow (prot)		1611	3471	1583	3433	
Flt Permitted		1.00	1.00	1.00	0.95	
Satd. Flow (perm)		1611	3471	1583	3433	
Peak-hour factor, PHF	0.80	0.80	0.83	0.83	0.85	0.85
Adj. Flow (vph)	0	276	978	601	527	0
RTOR Reduction (vph)	0	111	0	28	0	0
Lane Group Flow (vph)	0	165	978	573	527	0
Heavy Vehicles (%)	2%	2%	4%	2%	2%	2%
Turn Type		Over	NA	Perm	Prot	
Protected Phases		1	2		1	
Permitted Phases				2		
Actuated Green, G (s)		29.1	107.9	107.9	29.1	
Effective Green, g (s)		29.1	107.9	107.9	29.1	
Actuated g/C Ratio		0.19	0.72	0.72	0.19	
Clearance Time (s)		6.5	6.5	6.5	6.5	
Vehicle Extension (s)		3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		312	2496	1138	666	
v/s Ratio Prot		0.10	0.28		c0.15	
v/s Ratio Perm				c0.36		
v/c Ratio		0.53	0.39	0.50	0.79	
Uniform Delay, d1		54.3	8.2	9.3	57.6	
Progression Factor		1.00	0.84	0.86	0.75	
Incremental Delay, d2		1.6	0.3	0.9	5.5	
Delay (s)		55.9	7.2	8.9	48.5	
Level of Service		E	A	A	D	
Approach Delay (s/veh)	55.9		7.8			48.5
Approach LOS	E		A			D

Intersection Summary			
HCM 2000 Control Delay (s/veh)	22.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	52.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	0	0	12	0	1294	1	12	968	58
Future Vol, veh/h	0	0	0	0	0	12	0	1294	1	12	968	58
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Free
Storage Length	-	-	-	-	-	0	-	-	-	150	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	60	60	60	65	65	65	84	84	84	86	86	86
Heavy Vehicles, %	3	2	13	2	2	2	2	4	2	2	4	6
Mvmt Flow	0	0	0	0	0	18	0	1540	1	14	1126	67

Major/Minor	Minor1			Major1			Major2		
Conflicting Flow All	-	-	1541	-	0	0	1541	0	0
Stage 1	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.22	-	-	-	4.12	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.318	-	-	-	2.218	-	-
Pot Cap-1 Maneuver	0	0	142	0	-	-	431	-	0
Stage 1	0	0	-	0	-	-	-	-	0
Stage 2	0	0	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	-	0	142	-	-	-	431	-	-
Mov Cap-2 Maneuver	-	0	-	-	-	-	-	-	-
Stage 1	-	0	-	-	-	-	-	-	-
Stage 2	-	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	34.1	0	0.2
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	142	431	-
HCM Lane V/C Ratio	-	-	0.13	0.032	-
HCM Ctrl Dly (s/v)	-	-	34.1	13.6	-
HCM Lane LOS	-	-	D	B	-
HCM 95th %tile Q (veh)	-	-	0.4	0.1	-

Intersection	
Int Delay, s/veh	2.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	22	63	1036	27	48	922
Future Vol, veh/h	22	63	1036	27	48	922
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	150	150	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	76	76	84	84	85	85
Heavy Vehicles, %	13	2	3	5	2	5
Mvmt Flow	29	83	1233	32	56	1085

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2430	1233	0	0	1265	0
Stage 1	1233	-	-	-	-	-
Stage 2	1197	-	-	-	-	-
Critical Hdwy	6.53	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.53	-	-	-	-	-
Critical Hdwy Stg 2	5.53	-	-	-	-	-
Follow-up Hdwy	3.617	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	32	216	-	-	549	-
Stage 1	261	-	-	-	-	-
Stage 2	272	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	29	216	-	-	549	-
Mov Cap-2 Maneuver	128	-	-	-	-	-
Stage 1	261	-	-	-	-	-
Stage 2	244	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	51.5	0	0.6
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	183	549	-
HCM Lane V/C Ratio	-	-	0.611	0.103	-
HCM Ctrl Dly (s/v)	-	-	51.5	12.3	-
HCM Lane LOS	-	-	F	B	-
HCM 95th %tile Q (veh)	-	-	3.4	0.3	-

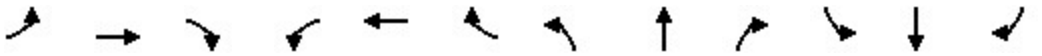
Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	6	0	0	0	0	1067	0	1	904	38
Future Vol, veh/h	0	0	6	0	0	0	0	1067	0	1	904	38
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	100	-	150
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	36	36	36	25	25	25	80	80	80	86	86	86
Heavy Vehicles, %	3	2	2	2	2	2	2	3	2	2	2	2
Mvmt Flow	0	0	17	0	0	0	0	1334	0	1	1051	44

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	-	2387	1051	-	0	0	1334	0	0
Stage 1	-	1053	-	-	-	-	-	-	-
Stage 2	-	1334	-	-	-	-	-	-	-
Critical Hdwy	-	6.52	6.22	-	-	-	4.12	-	-
Critical Hdwy Stg 1	-	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	-	4.018	3.318	-	-	-	2.218	-	-
Pot Cap-1 Maneuver	0	34	276	0	-	-	517	-	-
Stage 1	0	303	-	0	-	-	-	-	-
Stage 2	0	223	-	0	-	-	-	-	-
Platoon blocked, %					-	-		-	-
Mov Cap-1 Maneuver	-	0	276	-	-	-	517	-	-
Mov Cap-2 Maneuver	-	0	-	-	-	-	-	-	-
Stage 1	-	0	-	-	-	-	-	-	-
Stage 2	-	0	-	-	-	-	-	-	-

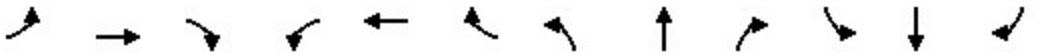
Approach	EB	NB	SB
HCM Ctrl Dly, s/v	18.9	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	SBL	SBT	SBR
Capacity (veh/h)	-	-	276	517	-	-
HCM Lane V/C Ratio	-	-	0.06	0.002	-	-
HCM Ctrl Dly (s/v)	-	-	18.9	12	-	-
HCM Lane LOS	-	-	C	B	-	-
HCM 95th %tile Q (veh)	-	-	0.2	0	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	21	15	45	10	10	74	60	917	55	95	746	13
Future Volume (vph)	21	15	45	10	10	74	60	917	55	95	746	13
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.89		1.00	0.87		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1652		1703	1577		1770	1845	1524	1770	1863	1538
Flt Permitted	0.67	1.00		0.71	1.00		0.23	1.00	1.00	0.05	1.00	1.00
Satd. Flow (perm)	1242	1652		1281	1577		425	1845	1524	96	1863	1538
Peak-hour factor, PHF	0.92	0.92	0.92	0.74	0.74	0.74	0.77	0.77	0.77	0.87	0.87	0.87
Adj. Flow (vph)	23	16	49	14	14	100	78	1191	71	109	857	15
RTOR Reduction (vph)	0	47	0	0	94	0	0	0	17	0	0	4
Lane Group Flow (vph)	23	18	0	14	20	0	78	1191	54	109	857	11
Heavy Vehicles (%)	2%	2%	2%	6%	2%	5%	2%	3%	6%	2%	2%	5%
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA	pm+ov
Protected Phases	3	8		7	4		1	6	7	5	2	3
Permitted Phases	8			4			6		6	2		2
Actuated Green, G (s)	9.7	6.0		16.7	9.5		112.8	104.5	111.7	112.8	104.5	108.2
Effective Green, g (s)	9.7	6.0		16.7	9.5		112.8	104.5	111.7	112.8	104.5	108.2
Actuated g/C Ratio	0.06	0.04		0.11	0.06		0.75	0.70	0.74	0.75	0.70	0.72
Clearance Time (s)	6.0	6.0		6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	93	66		162	99		394	1285	1195	164	1297	1170
v/s Ratio Prot	c0.01	0.01		c0.00	c0.01		0.01	c0.65	0.00	c0.04	0.46	0.00
v/s Ratio Perm	0.01			0.01			0.14		0.03	0.46		0.01
v/c Ratio	0.25	0.27		0.09	0.21		0.20	0.93	0.05	0.66	0.66	0.01
Uniform Delay, d1	68.3	69.9		59.9	66.7		20.0	19.5	5.1	57.4	12.8	5.9
Progression Factor	1.00	1.00		1.00	1.00		0.87	0.87	0.35	0.82	0.24	1.00
Incremental Delay, d2	1.4	2.2		0.2	1.0		0.0	1.5	0.0	6.6	1.8	0.0
Delay (s)	69.7	72.1		60.1	67.7		17.3	18.5	1.8	53.8	4.9	5.9
Level of Service	E	E		E	E		B	B	A	D	A	A
Approach Delay (s/veh)		71.5			66.9			17.6			10.3	
Approach LOS		E			E			B			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	19.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	76.4%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	221	0	66	1	0	11	77	798	2	1	607	224
Future Volume (vph)	221	0	66	1	0	11	77	798	2	1	607	224
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	6.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.85		1.00	0.85		1.00	1.00		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1752	1583		1770	1583		1770	1809		1770	1845	1583
Flt Permitted	0.00	1.00		0.00	1.00		0.13	1.00		0.06	1.00	1.00
Satd. Flow (perm)	0	1583		0	1583		240	1809		115	1845	1583
Peak-hour factor, PHF	0.64	0.64	0.64	0.75	0.75	0.75	0.63	0.63	0.63	0.87	0.87	0.87
Adj. Flow (vph)	345	0	103	1	0	15	122	1267	3	1	698	257
RTOR Reduction (vph)	0	80	0	0	15	0	0	0	0	0	0	78
Lane Group Flow (vph)	345	23	0	1	0	0	122	1270	0	1	698	179
Heavy Vehicles (%)	3%	2%	2%	2%	2%	2%	2%	5%	2%	2%	3%	2%
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases	4			8			2			6		6
Actuated Green, G (s)	34.9	33.2		4.9	3.2		93.9	86.5		66.2	64.8	99.7
Effective Green, g (s)	34.9	33.2		4.9	3.2		93.9	86.5		66.2	64.8	99.7
Actuated g/C Ratio	0.23	0.22		0.03	0.02		0.63	0.58		0.44	0.43	0.66
Clearance Time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	407	350		57	33		385	1043		66	797	1052
v/s Ratio Prot	c0.20	0.01		c0.00	0.00		c0.05	c0.70		0.00	0.38	0.04
v/s Ratio Perm							0.15			0.01		0.07
v/c Ratio	0.85	0.07		0.02	0.01		0.32	1.22		0.02	0.88	0.17
Uniform Delay, d1	55.0	46.1		70.2	71.8		43.2	31.8		69.7	38.9	9.5
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.08	0.74	1.07
Incremental Delay, d2	15.0	0.1		0.1	0.1		0.5	106.8		0.1	10.7	0.1
Delay (s)	70.0	46.2		70.3	72.0		43.6	138.5		75.7	39.5	10.2
Level of Service	E	D		E	E		D	F		E	D	B
Approach Delay (s/veh)		64.6			71.9			130.2			31.7	
Approach LOS		E			E			F			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	85.9	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.08		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	81.9%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	52.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	144	34	466	17	12	550
Future Vol, veh/h	144	34	466	17	12	550
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	150	150	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	37	37	85	85	91	91
Heavy Vehicles, %	2	2	3	2	20	2
Mvmt Flow	389	92	548	20	13	604

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1178	548	0	0	568	0
Stage 1	548	-	-	-	-	-
Stage 2	630	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.3	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.38	-
Pot Cap-1 Maneuver	~ 211	536	-	-	921	-
Stage 1	579	-	-	-	-	-
Stage 2	531	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 208	536	-	-	921	-
Mov Cap-2 Maneuver	~ 346	-	-	-	-	-
Stage 1	579	-	-	-	-	-
Stage 2	524	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	182.1	0	0.2
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	371	921	-
HCM Lane V/C Ratio	-	-	1.297	0.014	-
HCM Ctrl Dly (s/v)	-	-	182.1	9	-
HCM Lane LOS	-	-	F	A	-
HCM 95th %tile Q (veh)	-	-	22	0	-

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

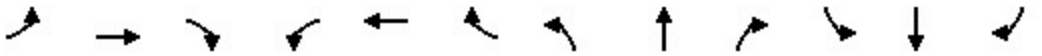
Intersection	
Int Delay, s/veh	4.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	73	62	26	341	431	89
Future Vol, veh/h	73	62	26	341	431	89
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	150	-	-	150
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	68	68	90	90	76	76
Heavy Vehicles, %	3	5	4	4	2	4
Mvmt Flow	107	91	29	379	567	117

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1004	567	684	0	-	0
Stage 1	567	-	-	-	-	-
Stage 2	437	-	-	-	-	-
Critical Hdwy	6.43	6.25	4.14	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.345	2.236	-	-	-
Pot Cap-1 Maneuver	267	517	900	-	-	-
Stage 1	566	-	-	-	-	-
Stage 2	649	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	258	517	900	-	-	-
Mov Cap-2 Maneuver	258	-	-	-	-	-
Stage 1	548	-	-	-	-	-
Stage 2	649	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	30.2	0.6	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	900	-	335	-	-
HCM Lane V/C Ratio	0.032	-	0.593	-	-
HCM Ctrl Dly (s/v)	9.1	0	30.2	-	-
HCM Lane LOS	A	A	D	-	-
HCM 95th %tile Q (veh)	0.1	-	3.6	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	173	7	19	47	8	41	21	1078	43	38	972	5
Future Volume (vph)	173	7	19	47	8	41	21	1078	43	38	972	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.89		1.00	0.88		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1660		1770	1630		1770	1863	1583	1770	1863	1583
Flt Permitted	0.72	1.00		0.74	1.00		0.10	1.00	1.00	0.04	1.00	1.00
Satd. Flow (perm)	1345	1660		1375	1630		177	1863	1583	75	1863	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	188	8	21	51	9	45	23	1172	47	41	1057	5
RTOR Reduction (vph)	0	20	0	0	43	0	0	0	12	0	0	1
Lane Group Flow (vph)	188	9	0	51	11	0	23	1172	35	41	1057	4
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA	pm+ov
Protected Phases	7	4		3	8		5	2	3	1	6	7
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	25.0	8.9		19.2	6.0		101.6	97.7	110.9	106.2	100.0	116.1
Effective Green, g (s)	25.0	8.9		19.2	6.0		101.6	97.7	110.9	106.2	100.0	116.1
Actuated g/C Ratio	0.17	0.06		0.13	0.04		0.68	0.65	0.74	0.71	0.67	0.77
Clearance Time (s)	6.0	6.0		6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	269	98		210	65		161	1213	1233	123	1242	1288
v/s Ratio Prot	c0.07	0.01		0.02	0.01		0.00	c0.63	0.00	c0.01	0.57	0.00
v/s Ratio Perm	c0.04			0.01			0.09		0.02	0.22		0.00
v/c Ratio	0.70	0.09		0.24	0.17		0.14	0.97	0.03	0.33	0.85	0.00
Uniform Delay, d1	57.8	66.7		59.2	69.6		44.9	24.6	5.2	64.1	19.3	3.8
Progression Factor	1.00	1.00		1.00	1.00		0.31	0.34	0.11	0.63	0.49	1.00
Incremental Delay, d2	7.7	0.4		0.6	1.2		0.2	13.1	0.0	1.5	6.9	0.0
Delay (s)	65.4	67.1		59.8	70.8		14.2	21.3	0.6	41.6	16.4	3.8
Level of Service	E	E		E	E		B	C	A	D	B	A
Approach Delay (s/veh)		65.7			65.5			20.4			17.3	
Approach LOS		E			E			C			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	24.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	83.0%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Intersection	
Int Delay, s/veh	2.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	199	5	58	29	0
Future Vol, veh/h	0	199	5	58	29	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	216	5	63	32	0

Major/Minor	Major2		Minor1	
Conflicting Flow All	0	0	73	-
Stage 1	-	-	0	-
Stage 2	-	-	73	-
Critical Hdwy	4.12	-	6.42	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	5.42	-
Follow-up Hdwy	2.218	-	3.518	-
Pot Cap-1 Maneuver	-	-	931	0
Stage 1	-	-	-	0
Stage 2	-	-	950	0
Platoon blocked, %		-		
Mov Cap-1 Maneuver	-	-	931	-
Mov Cap-2 Maneuver	-	-	931	-
Stage 1	-	-	-	-
Stage 2	-	-	950	-

Approach	WB	NB
HCM Ctrl Dly, s/v		9
HCM LOS		A

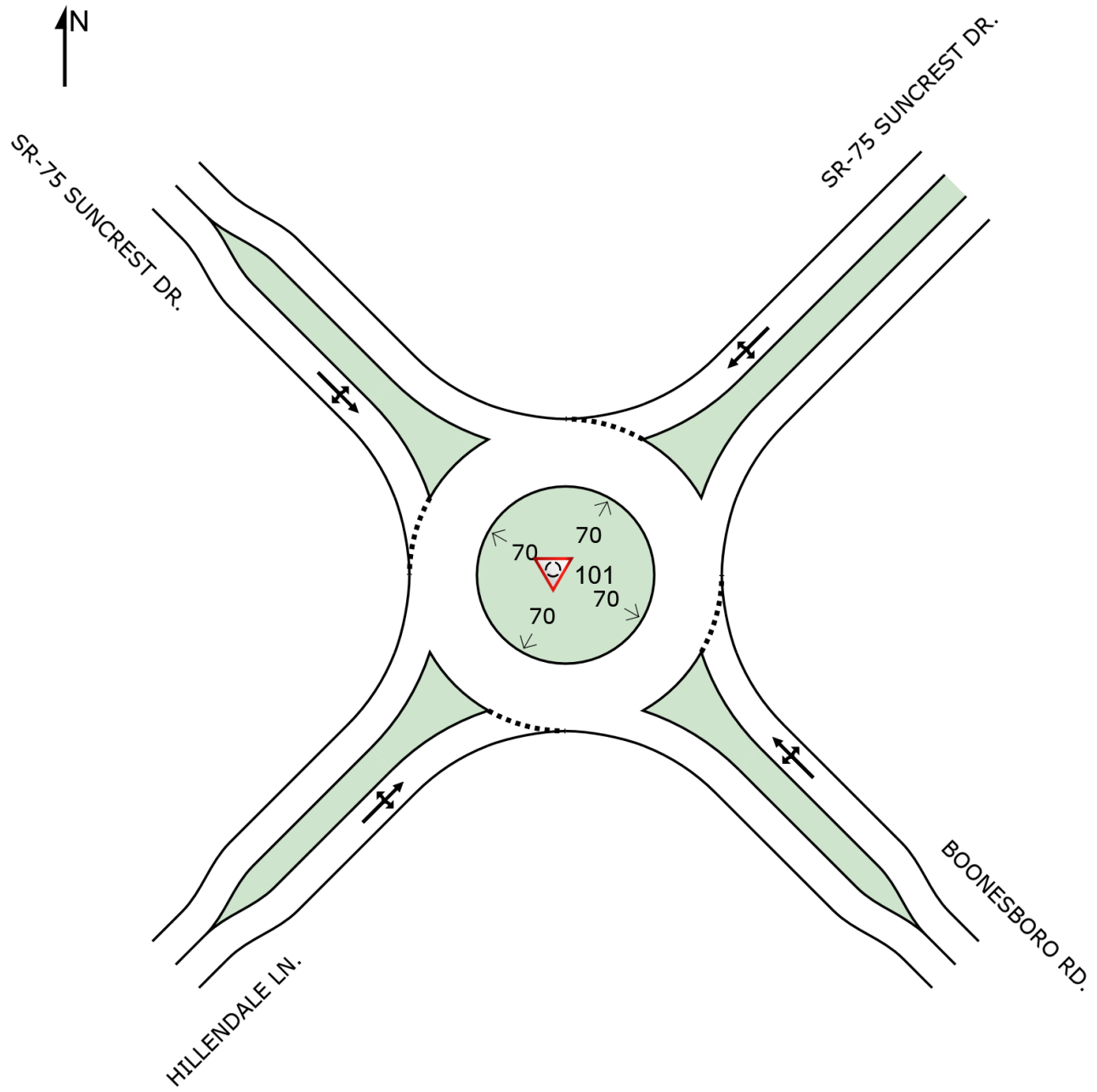
Minor Lane/Major Mvmt	NBLn1	WBL	WBT
Capacity (veh/h)	931	-	-
HCM Lane V/C Ratio	0.034	-	-
HCM Ctrl Dly (s/v)	9	-	-
HCM Lane LOS	A	-	-
HCM 95th %tile Q (veh)	0.1	-	-

SITE LAYOUT

Site: 101 [HILLENDALE LN./BOONESBORO RD. 2030 School (Site Folder: General)]

2030 School
Site Category: (None)
Roundabout

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



LANE SUMMARY

Site: 101 [HILLENDALE LN./BOONESBORO RD. 2030 School (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

2030 School
Site Category: (None)
Roundabout

Lane Use and Performance

	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh	Dist] ft	Lane Config	Lane Length ft	Cap. Adj. %	Prob. Block. %
SouthEast: BOONESBORO RD.															
Lane 1[d]	124	2.0	124	2.0	824	0.151	100	5.9	LOS A	0.6	16.0	Full	1600	0.0	0.0
Approach	124	2.0	124	2.0		0.151		5.9	LOS A	0.6	16.0				
NorthEast: SR-75 SUNCREST DR.															
Lane 1[d]	686	2.0	686	2.0	1312	0.523	100	7.4	LOS A	4.3	110.4	Full	1600	0.0	0.0
Approach	686	2.0	686	2.0		0.523		7.4	LOS A	4.3	110.4				
NorthWest: SR-75 SUNCREST DR.															
Lane 1[d]	449	3.8	449	3.8	1064	0.422	100	7.8	LOS A	2.5	64.2	Full	1600	0.0	0.0
Approach	449	3.8	449	3.8		0.422		7.8	LOS A	2.5	64.2				
SouthWest: HILLENDALE LN.															
Lane 1[d]	74	2.0	74	2.0	703	0.105	100	6.2	LOS A	0.4	10.4	Full	1600	0.0	0.0
Approach	74	2.0	74	2.0		0.105		6.2	LOS A	0.4	10.4				
All Vehicles	1334	2.6	1334	2.6		0.523		7.4	LOS A	4.3	110.4				

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Roundabout LOS Method: Same as Sign Control.
Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
Delay Model: HCM Delay Formula (Stopline Delay: Geometric Delay is not included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: Siegloch M1 implied by US HCM 6 Roundabout Capacity Model.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

d Dominant lane on roundabout approach

Approach Lane Flows (veh/h)

SouthEast: BOONESBORO RD.

Mov. From SE To Exit:	L2 SW	T1 NW	R2 NE	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
Lane 1	1	28	95	124	2.0	824	0.151	100	NA	NA
Approach	1	28	95	124	2.0		0.151			

NorthEast: SR-75 SUNCREST DR.

Mov. From NE	L2	T1	R2	Total	%HV	Cap.	Deg. Satn	Lane Util.	Prob. SL Ov.	Ov. Lane

To Exit:	SE	SW	NW			veh/h	v/c	%	%	No.
Lane 1	165	44	478	686	2.0	1312	0.523	100	NA	NA
Approach	165	44	478	686	2.0		0.523			
NorthWest: SR-75 SUNCREST DR.										
Mov. From NW To Exit:	L2 NE	T1 SE	R2 SW	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
Lane 1	400	45	5	449	3.8	1064	0.422	100	NA	NA
Approach	400	45	5	449	3.8		0.422			
SouthWest: HILLENDALE LN.										
Mov. From SW To Exit:	L2 NW	T1 NE	R2 SE	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
Lane 1	2	58	14	74	2.0	703	0.105	100	NA	NA
Approach	2	58	14	74	2.0		0.105			

	Total	%HV	Deg.Satn (v/c)
All Vehicles	1334	2.6	0.523

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Merge Analysis

	Exit Lane Number	Short Lane Length ft	Percent Opng in Lane %	Opposing Flow Rate veh/h	Opposing Flow Rate pcu/h	Critical Gap sec	Follow-up Headway sec	Lane Flow Rate veh/h	Capacity veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay sec
There are no Exit Short Lanes for Merge Analysis at this Site.												

Variable Demand Analysis

	Initial Queued Demand veh	Residual Queued Demand veh	Time for Residual Demand to Clear sec	Duration of Oversatn sec
SouthEast: BOONESBORO RD.				
Lane 1	0.0	0.0	0.0	0.0
NorthEast: SR-75 SUNCREST DR.				
Lane 1	0.0	0.0	0.0	0.0
NorthWest: SR-75 SUNCREST DR.				
Lane 1	0.0	0.0	0.0	0.0
SouthWest: HILLENDALE LN.				
Lane 1	0.0	0.0	0.0	0.0

LEVEL OF SERVICE

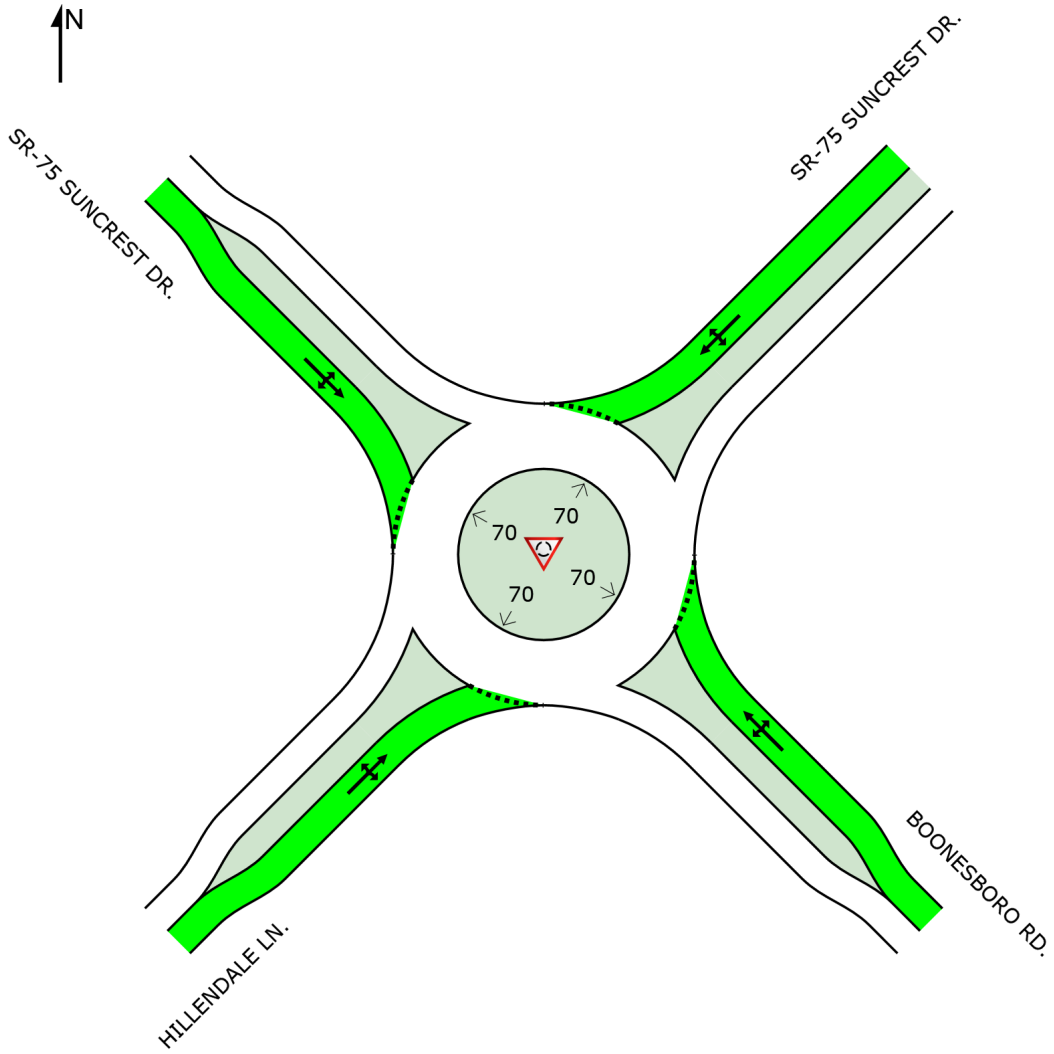
Lane Level of Service

Site: 101 [HILLENDALE LN./BOONESBORO RD. 2030 School (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

2030 School
Site Category: (None)
Roundabout

	Approaches				Intersection
	Southeast	Northeast	Northwest	Southwest	
LOS	A	A	A	A	A



Colour code based on Level of Service

LOS A | LOS B | LOS C | LOS D | LOS E | LOS F

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Roundabout Level of Service Method: Same as Sign Control
Delay Model: HCM Delay Formula (Stopline Delay: Geometric Delay is not included).

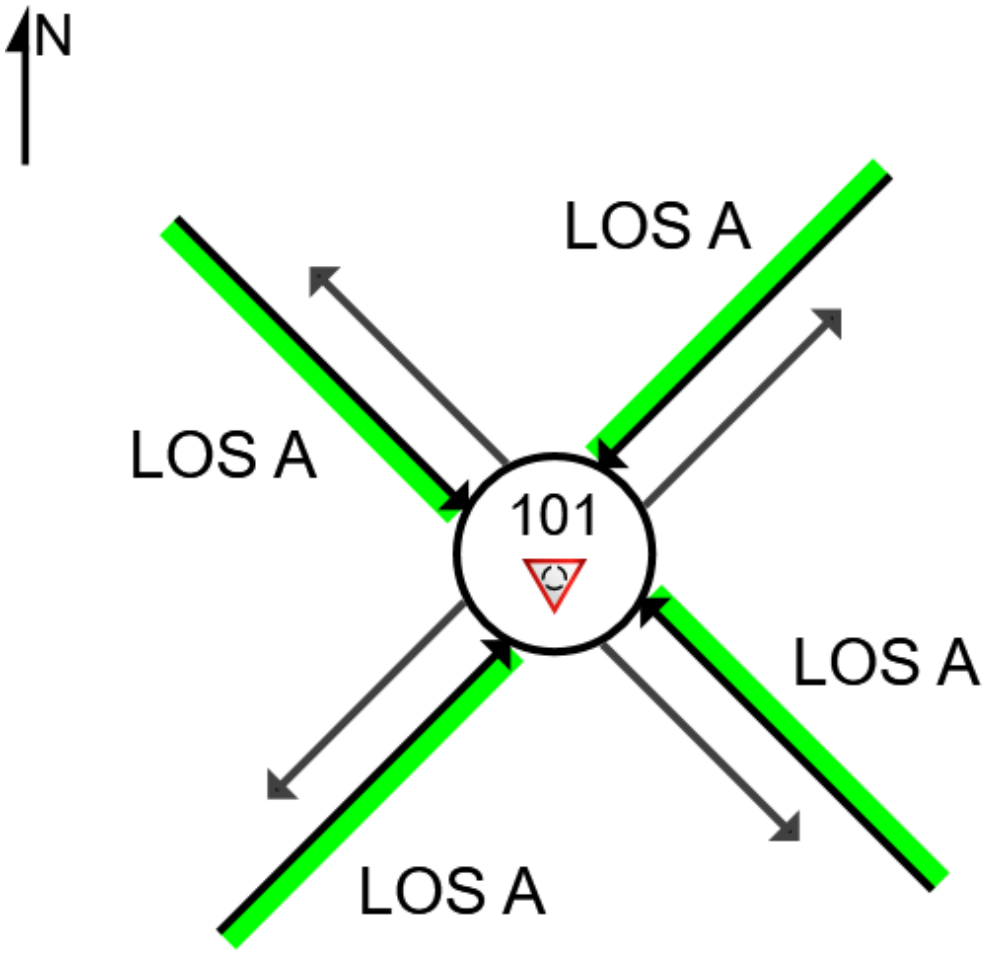
LEVEL OF SERVICE

Approach Level of Service

Site: 101 [HILLENDALE LN./BOONESBORO RD. 2030 School (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

2030 School
Site Category: (None)
Roundabout



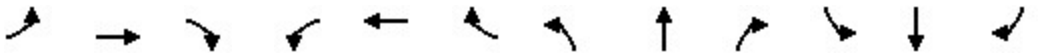
Colour code based on Level of Service

LOS A	LOS B	LOS C	LOS D	LOS E	LOS F

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Roundabout Level of Service Method: Same as Sign Control
Delay Model: HCM Delay Formula (Stopline Delay: Geometric Delay is not included).

SR 75 CORRIDOR STUDY
2030 PROPOSED TRAFFIC CONDITIONS
CAPACITY/LOS REPORT

PM PEAK HOUR



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	513	0	585	176	805	0	0	1062	325
Future Volume (vph)	0	0	0	513	0	585	176	805	0	0	1062	325
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0		6.0	6.0	6.0			6.0	6.0
Lane Util. Factor				0.97		0.88	0.97	0.95			0.95	1.00
Frt				1.00		0.85	1.00	1.00			1.00	0.85
Flt Protected				0.95		1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)				3433		2787	3303	3505			3539	1583
Flt Permitted				0.95		1.00	0.95	1.00			1.00	1.00
Satd. Flow (perm)				3433		2787	3303	3505			3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.89	0.89	0.89	0.93	0.93	0.93	0.88	0.88	0.88
Adj. Flow (vph)	0	0	0	576	0	657	189	866	0	0	1207	369
RTOR Reduction (vph)	0	0	0	0	0	244	0	0	0	0	0	129
Lane Group Flow (vph)	0	0	0	576	0	413	189	866	0	0	1207	240
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	6%	3%	2%	2%	2%	2%
Turn Type				Prot		Prot	Prot	NA			NA	Perm
Protected Phases				3		3	5	2			6	
Permitted Phases												6
Actuated Green, G (s)				17.4		17.4	8.0	50.6			36.6	36.6
Effective Green, g (s)				17.4		17.4	8.0	50.6			36.6	36.6
Actuated g/C Ratio				0.22		0.22	0.10	0.63			0.46	0.46
Clearance Time (s)				6.0		6.0	6.0	6.0			6.0	6.0
Vehicle Extension (s)				3.0		3.0	3.0	3.0			3.0	3.0
Lane Grp Cap (vph)				746		606	330	2216			1619	724
v/s Ratio Prot				c0.17		0.15	c0.06	0.25			c0.34	
v/s Ratio Perm												0.15
v/c Ratio				0.77		0.68	0.57	0.39			0.75	0.33
Uniform Delay, d1				29.4		28.8	34.4	7.2			17.9	13.9
Progression Factor				1.00		1.00	1.05	1.10			1.00	1.00
Incremental Delay, d2				5.0		3.2	2.2	0.5			3.2	1.2
Delay (s)				34.4		31.9	38.2	8.4			21.0	15.1
Level of Service				C		C	D	A			C	B
Approach Delay (s/veh)		0.0			33.1			13.7			19.6	
Approach LOS		A			C			B			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	22.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	62.3%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	359	646	390	527	0
Future Volume (vph)	0	359	646	390	527	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.5	6.5	6.5	6.5	
Lane Util. Factor		1.00	0.95	1.00	0.97	
Frt		0.87	1.00	0.85	1.00	
Flt Protected		1.00	1.00	1.00	0.95	
Satd. Flow (prot)		1611	3471	1583	3433	
Flt Permitted		1.00	1.00	1.00	0.95	
Satd. Flow (perm)		1611	3471	1583	3433	
Peak-hour factor, PHF	0.92	0.92	0.91	0.91	0.92	0.92
Adj. Flow (vph)	0	390	710	429	573	0
RTOR Reduction (vph)	0	103	0	64	0	0
Lane Group Flow (vph)	0	287	710	365	573	0
Heavy Vehicles (%)	2%	2%	4%	2%	2%	2%
Turn Type		Over	NA	Perm	Prot	
Protected Phases		1	2		1	
Permitted Phases				2		
Actuated Green, G (s)		21.1	45.9	45.9	21.1	
Effective Green, g (s)		21.1	45.9	45.9	21.1	
Actuated g/C Ratio		0.26	0.57	0.57	0.26	
Clearance Time (s)		6.5	6.5	6.5	6.5	
Vehicle Extension (s)		3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		424	1991	908	905	
v/s Ratio Prot		c0.18	0.20		0.17	
v/s Ratio Perm				c0.23		
v/c Ratio		0.68	0.36	0.40	0.63	
Uniform Delay, d1		26.4	9.1	9.4	26.0	
Progression Factor		1.00	1.00	1.00	0.60	
Incremental Delay, d2		4.2	0.5	1.3	1.0	
Delay (s)		30.6	9.6	10.8	16.5	
Level of Service		C	A	B	B	
Approach Delay (s/veh)	30.6		10.1			16.5
Approach LOS	C		B			B

Intersection Summary			
HCM 2000 Control Delay (s/veh)	15.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	50.9%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	0	0	22	0	1000	0	7	1192	91
Future Vol, veh/h	0	0	0	0	0	22	0	1000	0	7	1192	91
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Free
Storage Length	-	-	-	-	-	0	-	-	-	150	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	72	72	72	37	37	37	95	95	95	97	97	97
Heavy Vehicles, %	3	2	13	2	2	2	2	4	2	2	4	6
Mvmt Flow	0	0	0	0	0	59	0	1053	0	7	1229	94

Major/Minor	Minor1			Major1			Major2		
Conflicting Flow All	-	-	1053	-	0	0	1053	0	0
Stage 1	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.22	-	-	-	4.12	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.318	-	-	-	2.218	-	-
Pot Cap-1 Maneuver	0	0	275	0	-	-	661	-	0
Stage 1	0	0	-	0	-	-	-	-	0
Stage 2	0	0	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	-	0	275	-	-	-	661	-	-
Mov Cap-2 Maneuver	-	0	-	-	-	-	-	-	-
Stage 1	-	0	-	-	-	-	-	-	-
Stage 2	-	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	21.7	0	0.1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	275	661	-
HCM Lane V/C Ratio	-	-	0.216	0.011	-
HCM Ctrl Dly (s/v)	-	-	21.7	10.5	-
HCM Lane LOS	-	-	C	B	-
HCM 95th %tile Q (veh)	-	-	0.8	0	-

Intersection	
Int Delay, s/veh	0.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	14	43	824	17	13	1184
Future Vol, veh/h	14	43	824	17	13	1184
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	150	150	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	72	72	90	90	98	98
Heavy Vehicles, %	13	2	3	5	2	5
Mvmt Flow	19	60	916	19	13	1208

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2150	916	0	0	935	0
Stage 1	916	-	-	-	-	-
Stage 2	1234	-	-	-	-	-
Critical Hdwy	6.53	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.53	-	-	-	-	-
Critical Hdwy Stg 2	5.53	-	-	-	-	-
Follow-up Hdwy	3.617	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	49	330	-	-	732	-
Stage 1	373	-	-	-	-	-
Stage 2	261	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	48	330	-	-	732	-
Mov Cap-2 Maneuver	160	-	-	-	-	-
Stage 1	373	-	-	-	-	-
Stage 2	256	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	24.6	0	0.1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	262	732	-
HCM Lane V/C Ratio	-	-	0.302	0.018	-
HCM Ctrl Dly (s/v)	-	-	24.6	10	-
HCM Lane LOS	-	-	C	B	-
HCM 95th %tile Q (veh)	-	-	1.2	0.1	-

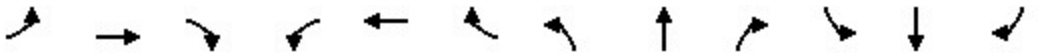
Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	15	0	0	0	0	840	0	0	1170	30
Future Vol, veh/h	0	0	15	0	0	0	0	840	0	0	1170	30
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	100	-	150
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	53	53	53	25	25	25	96	96	96	98	98	98
Heavy Vehicles, %	3	2	2	2	2	2	2	3	2	2	2	2
Mvmt Flow	0	0	28	0	0	0	0	875	0	0	1194	31

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	-	2069	1194	-	0	0	875	0	0
Stage 1	-	1194	-	-	-	-	-	-	-
Stage 2	-	875	-	-	-	-	-	-	-
Critical Hdwy	-	6.52	6.22	-	-	-	4.12	-	-
Critical Hdwy Stg 1	-	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	-	4.018	3.318	-	-	-	2.218	-	-
Pot Cap-1 Maneuver	0	54	227	0	-	-	771	-	-
Stage 1	0	260	-	0	-	-	-	-	-
Stage 2	0	367	-	0	-	-	-	-	-
Platoon blocked, %					-	-		-	-
Mov Cap-1 Maneuver	-	0	227	-	-	-	771	-	-
Mov Cap-2 Maneuver	-	0	-	-	-	-	-	-	-
Stage 1	-	0	-	-	-	-	-	-	-
Stage 2	-	0	-	-	-	-	-	-	-

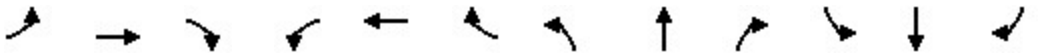
Approach	EB	NB	SB
HCM Ctrl Dly, s/v	23.1	0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	SBL	SBT	SBR
Capacity (veh/h)	-	-	227	771	-	-
HCM Lane V/C Ratio	-	-	0.125	-	-	-
HCM Ctrl Dly (s/v)	-	-	23.1	0	-	-
HCM Lane LOS	-	-	C	A	-	-
HCM 95th %tile Q (veh)	-	-	0.4	0	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	10	27	21	16	107	46	654	22	140	996	27
Future Volume (vph)	10	10	27	21	16	107	46	654	22	140	996	27
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.89		1.00	0.87		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1660		1703	1579		1770	1845	1524	1770	1863	1538
Flt Permitted	0.56	1.00		0.72	1.00		0.13	1.00	1.00	0.32	1.00	1.00
Satd. Flow (perm)	1049	1660		1297	1579		235	1845	1524	588	1863	1538
Peak-hour factor, PHF	0.73	0.73	0.73	0.89	0.89	0.89	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	14	14	37	24	18	120	47	674	23	144	1027	28
RTOR Reduction (vph)	0	35	0	0	113	0	0	0	7	0	0	8
Lane Group Flow (vph)	14	16	0	24	25	0	47	674	16	144	1027	20
Heavy Vehicles (%)	2%	2%	2%	6%	2%	5%	2%	3%	6%	2%	2%	5%
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA	pm+ov
Protected Phases	3	8		7	4		1	6	7	5	2	3
Permitted Phases	8			4			6		6	2		2
Actuated Green, G (s)	10.4	7.1		11.4	7.6		87.8	82.7	86.5	92.4	85.0	88.3
Effective Green, g (s)	10.4	7.1		11.4	7.6		87.8	82.7	86.5	92.4	85.0	88.3
Actuated g/C Ratio	0.08	0.06		0.09	0.06		0.70	0.66	0.69	0.74	0.68	0.71
Clearance Time (s)	6.0	6.0		6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	106	94		130	96		227	1220	1127	504	1266	1160
v/s Ratio Prot	0.00	0.01		c0.01	c0.02		0.01	0.37	0.00	c0.02	c0.55	0.00
v/s Ratio Perm	0.01			0.01			0.14		0.01	0.19		0.01
v/c Ratio	0.13	0.17		0.18	0.26		0.21	0.55	0.01	0.29	0.81	0.02
Uniform Delay, d1	55.8	56.1		52.6	56.0		31.1	11.3	6.0	13.3	14.3	5.5
Progression Factor	1.00	1.00		1.00	1.00		0.53	0.82	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.6	0.9		0.7	1.5		0.4	1.5	0.0	0.3	5.7	0.0
Delay (s)	56.4	57.0		53.3	57.5		17.0	10.8	6.0	13.6	20.0	5.5
Level of Service	E	E		D	E		B	B	A	B	B	A
Approach Delay (s/veh)		56.9			56.9			11.0			18.9	
Approach LOS		E			E			B			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	20.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	125.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	79.9%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	170	0	56	1	0	11	38	532	1	5	785	274
Future Volume (vph)	170	0	56	1	0	11	38	532	1	5	785	274
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	6.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.85		1.00	0.85		1.00	1.00		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1752	1583		1770	1583		1770	1809		1770	1845	1583
Flt Permitted	1.00	1.00		1.00	1.00		0.13	1.00		0.29	1.00	1.00
Satd. Flow (perm)	1845	1583		1863	1583		235	1809		544	1845	1583
Peak-hour factor, PHF	0.67	0.67	0.67	0.42	0.42	0.42	0.88	0.88	0.88	0.95	0.95	0.95
Adj. Flow (vph)	254	0	84	2	0	26	43	605	1	5	826	288
RTOR Reduction (vph)	0	69	0	0	25	0	0	0	0	0	0	65
Lane Group Flow (vph)	254	15	0	2	1	0	43	606	0	5	826	223
Heavy Vehicles (%)	3%	2%	2%	2%	2%	2%	2%	5%	2%	2%	3%	2%
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA		pm+pt	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases	4			8			2			6		6
Actuated Green, G (s)	22.8	22.8		5.7	5.7		79.6	71.4		66.6	64.4	86.1
Effective Green, g (s)	22.8	22.8		5.7	5.7		79.6	71.4		66.6	64.4	86.1
Actuated g/C Ratio	0.18	0.18		0.05	0.05		0.64	0.57		0.53	0.52	0.69
Clearance Time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	336	288		84	72		262	1033		311	950	1090
v/s Ratio Prot	0.13	0.01		0.00	0.00		c0.01	c0.33		0.00	c0.45	0.04
v/s Ratio Perm	c0.01			c0.00			0.09			0.01		0.11
v/c Ratio	0.76	0.05		0.02	0.02		0.16	0.59		0.02	0.87	0.20
Uniform Delay, d1	48.9	42.2		54.4	57.0		35.3	17.3		25.5	26.6	7.0
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		1.61	1.33	2.52
Incremental Delay, d2	9.3	0.1		0.1	0.1		0.3	2.4		0.0	7.5	0.1
Delay (s)	58.3	42.3		54.5	57.1		35.6	19.7		41.1	42.9	17.8
Level of Service	E	D		D	E		D	B		D	D	B
Approach Delay (s/veh)		54.3			56.9			20.8			36.4	
Approach LOS		D			E			C			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	34.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	125.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	67.4%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	0.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	9	4	518	7	6	713
Future Vol, veh/h	9	4	518	7	6	713
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	150	150	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	50	50	89	89	96	96
Heavy Vehicles, %	2	2	3	2	20	2
Mvmt Flow	18	8	582	8	6	743

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1337	582	0	0	590	0
Stage 1	582	-	-	-	-	-
Stage 2	755	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.3	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.38	-
Pot Cap-1 Maneuver	169	513	-	-	903	-
Stage 1	559	-	-	-	-	-
Stage 2	464	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	168	513	-	-	903	-
Mov Cap-2 Maneuver	306	-	-	-	-	-
Stage 1	559	-	-	-	-	-
Stage 2	461	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	16.1	0	0.1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	349	903	-
HCM Lane V/C Ratio	-	-	0.074	0.007	-
HCM Ctrl Dly (s/v)	-	-	16.1	9	-
HCM Lane LOS	-	-	C	A	-
HCM 95th %tile Q (veh)	-	-	0.2	0	-

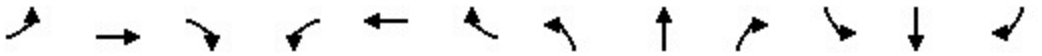
Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	38	26	34	368	545	33
Future Vol, veh/h	38	26	34	368	545	33
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	150	-	-	150
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	72	72	86	86	89	89
Heavy Vehicles, %	3	5	4	4	2	4
Mvmt Flow	53	36	40	428	612	37

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1120	612	649	0	-	0
Stage 1	612	-	-	-	-	-
Stage 2	508	-	-	-	-	-
Critical Hdwy	6.43	6.25	4.14	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.345	2.236	-	-	-
Pot Cap-1 Maneuver	227	488	927	-	-	-
Stage 1	539	-	-	-	-	-
Stage 2	602	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	217	488	927	-	-	-
Mov Cap-2 Maneuver	217	-	-	-	-	-
Stage 1	516	-	-	-	-	-
Stage 2	602	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	23.7	0.8	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	927	-	280	-	-
HCM Lane V/C Ratio	0.043	-	0.317	-	-
HCM Ctrl Dly (s/v)	9.1	-	23.7	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q (veh)	0.1	-	1.3	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	111	5	12	36	5	50	16	851	33	46	1193	5
Future Volume (vph)	111	5	12	36	5	50	16	851	33	46	1193	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.89		1.00	0.86		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1661		1770	1607		1770	1863	1583	1770	1863	1583
Flt Permitted	0.72	1.00		0.75	1.00		0.04	1.00	1.00	0.18	1.00	1.00
Satd. Flow (perm)	1338	1661		1389	1607		74	1863	1583	335	1863	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	121	5	13	39	5	54	17	925	36	50	1297	5
RTOR Reduction (vph)	0	12	0	0	52	0	0	0	9	0	0	1
Lane Group Flow (vph)	121	6	0	39	7	0	17	925	27	50	1297	4
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA	pm+ov
Protected Phases	7	4		3	8		5	2	3	1	6	7
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	19.1	6.2		18.5	5.9		102.6	100.3	112.9	111.8	104.9	117.8
Effective Green, g (s)	19.1	6.2		18.5	5.9		102.6	100.3	112.9	111.8	104.9	117.8
Actuated g/C Ratio	0.13	0.04		0.12	0.04		0.68	0.67	0.75	0.75	0.70	0.79
Clearance Time (s)	6.0	6.0		6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	207	68		203	63		76	1245	1254	315	1302	1306
v/s Ratio Prot	c0.05	0.00		0.02	0.00		0.00	0.50	0.00	c0.01	c0.70	0.00
v/s Ratio Perm	c0.02			0.01			0.15		0.02	0.11		0.00
v/c Ratio	0.58	0.08		0.19	0.11		0.22	0.74	0.02	0.16	1.00	0.00
Uniform Delay, d1	61.0	69.2		59.3	69.5		69.5	16.4	4.7	26.1	22.4	3.5
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	4.2	0.5		0.5	0.8		1.5	4.0	0.0	0.2	24.0	0.0
Delay (s)	65.2	69.7		59.8	70.3		71.0	20.4	4.7	26.3	46.4	3.5
Level of Service	E	E		E	E		E	C	A	C	D	A
Approach Delay (s/veh)		65.7			66.1			20.7			45.5	
Approach LOS		E			E			C			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	37.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	85.6%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Intersection	
Int Delay, s/veh	1.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	128	5	91	21	0
Future Vol, veh/h	0	128	5	91	21	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	139	5	99	23	0

Major/Minor	Major2		Minor1	
Conflicting Flow All	0	0	109	-
Stage 1	-	-	0	-
Stage 2	-	-	109	-
Critical Hdwy	4.12	-	6.42	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	5.42	-
Follow-up Hdwy	2.218	-	3.518	-
Pot Cap-1 Maneuver	-	-	888	0
Stage 1	-	-	-	0
Stage 2	-	-	916	0
Platoon blocked, %		-		
Mov Cap-1 Maneuver	-	-	888	-
Mov Cap-2 Maneuver	-	-	888	-
Stage 1	-	-	-	-
Stage 2	-	-	916	-

Approach	WB	NB
HCM Ctrl Dly, s/v		9.2
HCM LOS		A

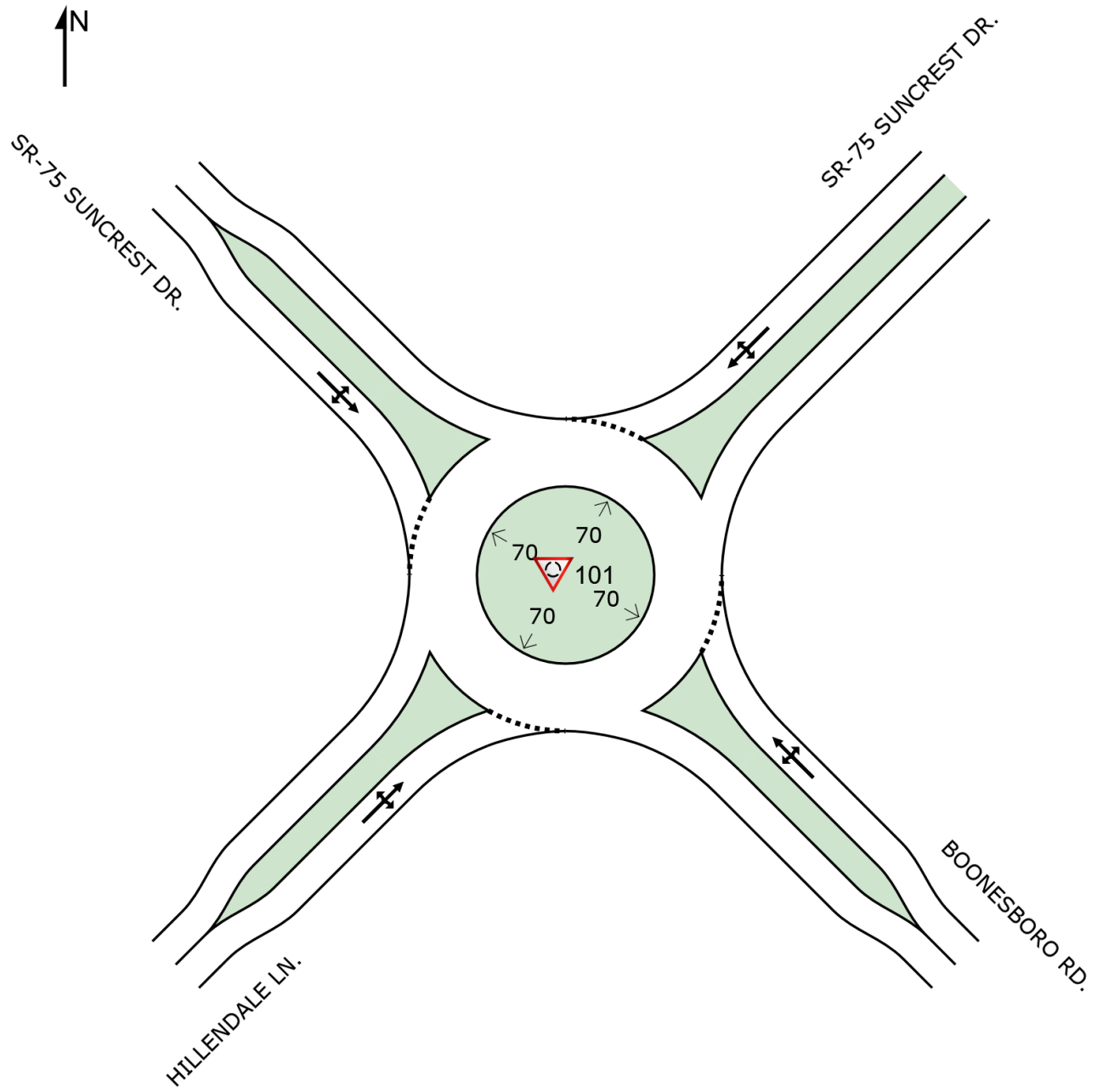
Minor Lane/Major Mvmt	NBLn1	WBL	WBT
Capacity (veh/h)	888	-	-
HCM Lane V/C Ratio	0.026	-	-
HCM Ctrl Dly (s/v)	9.2	-	-
HCM Lane LOS	A	-	-
HCM 95th %tile Q (veh)	0.1	-	-

SITE LAYOUT

Site: 101 [HILLENDALE LN./BOONESBORO RD. 2030 PM PEAK (Site Folder: General)]

2030 PM PEAK
Site Category: (None)
Roundabout

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



LANE SUMMARY

Site: 101 [HILLENDALE LN./BOONESBORO RD. 2030 PM PEAK (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

2030 PM PEAK
Site Category: (None)
Roundabout

Lane Use and Performance

	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh	Dist] ft	Lane Config	Lane Length ft	Cap. Adj. %	Prob. Block. %
SouthEast: BOONESBORO RD.															
Lane 1[d]	179	2.0	179	2.0	826	0.217	100	6.6	LOS A	0.9	24.1	Full	1600	0.0	0.0
Approach	179	2.0	179	2.0		0.217		6.6	LOS A	0.9	24.1				
NorthEast: SR-75 SUNCREST DR.															
Lane 1[d]	718	2.0	718	2.0	1293	0.556	100	8.2	LOS A	4.8	122.9	Full	1600	0.0	0.0
Approach	718	2.0	718	2.0		0.556		8.2	LOS A	4.8	122.9				
NorthWest: SR-75 SUNCREST DR.															
Lane 1[d]	447	3.8	447	3.8	1074	0.416	100	7.7	LOS A	2.5	63.2	Full	1600	0.0	0.0
Approach	447	3.8	447	3.8		0.416		7.7	LOS A	2.5	63.2				
SouthWest: HILLENDALE LN.															
Lane 1[d]	50	2.0	50	2.0	714	0.070	100	5.8	LOS A	0.3	6.8	Full	1600	0.0	0.0
Approach	50	2.0	50	2.0		0.070		5.8	LOS A	0.3	6.8				
All Vehicles	1394	2.6	1394	2.6		0.556		7.8	LOS A	4.8	122.9				

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Roundabout LOS Method: Same as Sign Control.
Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
Delay Model: HCM Delay Formula (Stopline Delay: Geometric Delay is not included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: Siegloch M1 implied by US HCM 6 Roundabout Capacity Model.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

d Dominant lane on roundabout approach

Approach Lane Flows (veh/h)

SouthEast: BOONESBORO RD.

Mov. From SE To Exit:	L2 SW	T1 NW	R2 NE	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
Lane 1	6	37	137	179	2.0	826	0.217	100	NA	NA
Approach	6	37	137	179	2.0		0.217			

NorthEast: SR-75 SUNCREST DR.

Mov. From NE	L2	T1	R2	Total	%HV	Cap.	Deg. Satn	Lane Util.	Prob. SL Ov.	Ov. Lane

To Exit:	SE	SW	NW			veh/h	v/c	%	%	No.
Lane 1	156	38	523	718	2.0	1293	0.556	100	NA	NA
Approach	156	38	523	718	2.0		0.556			
NorthWest: SR-75 SUNCREST DR.										
Mov. From NW To Exit:	L2 NE	T1 SE	R2 SW	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
Lane 1	412	27	8	447	3.8	1074	0.416	100	NA	NA
Approach	412	27	8	447	3.8		0.416			
SouthWest: HILLENDALE LN.										
Mov. From SW To Exit:	L2 NW	T1 NE	R2 SE	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
Lane 1	2	44	4	50	2.0	714	0.070	100	NA	NA
Approach	2	44	4	50	2.0		0.070			

	Total	%HV	Deg.Satn (v/c)
All Vehicles	1394	2.6	0.556

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Merge Analysis

	Exit Lane Number	Short Lane Length ft	Percent Opng in Lane %	Opposing Flow Rate veh/h	Opposing Flow Rate pcu/h	Critical Gap sec	Follow-up Headway sec	Lane Flow Rate veh/h	Capacity veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay sec
There are no Exit Short Lanes for Merge Analysis at this Site.												

Variable Demand Analysis

	Initial Queued Demand veh	Residual Queued Demand veh	Time for Residual Demand to Clear sec	Duration of Oversatn sec
SouthEast: BOONESBORO RD.				
Lane 1	0.0	0.0	0.0	0.0
NorthEast: SR-75 SUNCREST DR.				
Lane 1	0.0	0.0	0.0	0.0
NorthWest: SR-75 SUNCREST DR.				
Lane 1	0.0	0.0	0.0	0.0
SouthWest: HILLENDALE LN.				
Lane 1	0.0	0.0	0.0	0.0

LEVEL OF SERVICE

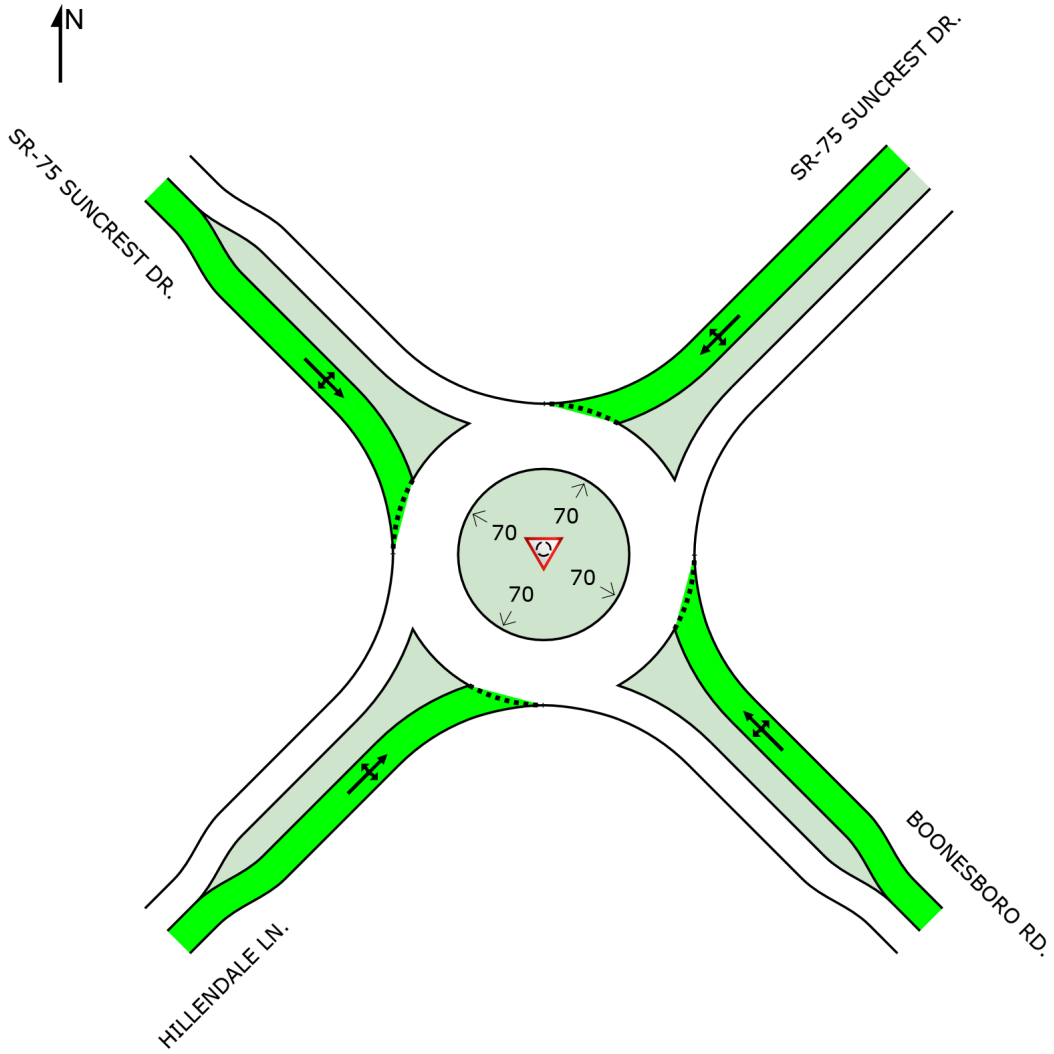
Lane Level of Service

Site: 101 [HILLENDALE LN./BOONESBORO RD. 2030 PM PEAK (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

2030 PM PEAK
Site Category: (None)
Roundabout

	Approaches				Intersection
	Southeast	Northeast	Northwest	Southwest	
LOS	A	A	A	A	A



Colour code based on Level of Service

LOS A | LOS B | LOS C | LOS D | LOS E | LOS F

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Roundabout Level of Service Method: Same as Sign Control
Delay Model: HCM Delay Formula (Stopline Delay: Geometric Delay is not included).

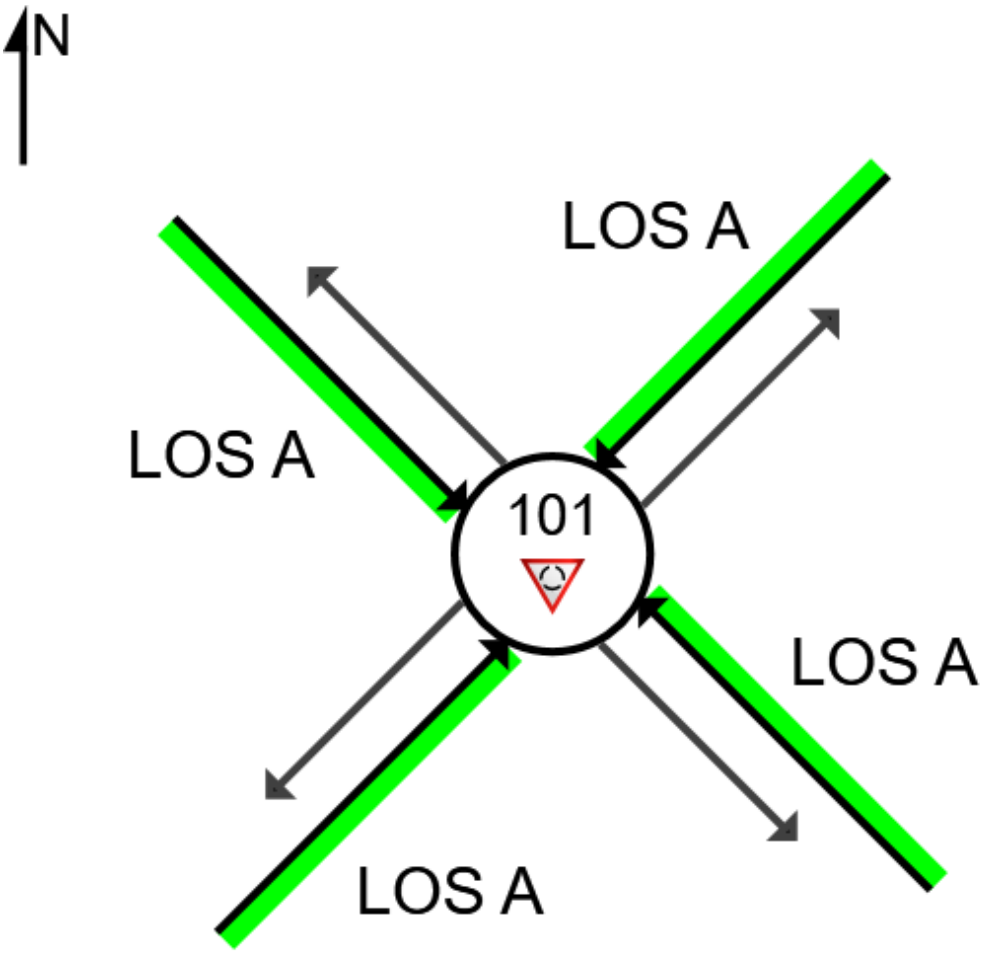
LEVEL OF SERVICE

Approach Level of Service

Site: 101 [HILLENDALE LN./BOONESBORO RD. 2030 PM PEAK (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

2030 PM PEAK
Site Category: (None)
Roundabout



Colour code based on Level of Service

LOS A	LOS B	LOS C	LOS D	LOS E	LOS F

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Roundabout Level of Service Method: Same as Sign Control
Delay Model: HCM Delay Formula (Stopline Delay: Geometric Delay is not included).

SR 75 CORRIDOR STUDY
2050 PROPOSED TRAFFIC CONDITIONS
CAPACITY/LOS REPORT

AM PEAK HOUR

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	725	0	995	535	1414	0	0	2077	747
Future Volume (vph)	0	0	0	725	0	995	535	1414	0	0	2077	747
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0		6.0	6.0	6.0			6.0	6.0
Lane Util. Factor				0.97		0.88	0.97	0.95			0.95	1.00
Frt				1.00		0.85	1.00	1.00			1.00	0.85
Flt Protected				0.95		1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)				3400		2682	3242	3471			3438	1553
Flt Permitted				0.95		1.00	0.95	1.00			1.00	1.00
Satd. Flow (perm)				3400		2682	3242	3471			3438	1553
Peak-hour factor, PHF	0.92	0.92	0.92	0.87	0.87	0.87	0.74	0.74	0.74	0.88	0.88	0.88
Adj. Flow (vph)	0	0	0	833	0	1144	723	1911	0	0	2360	849
RTOR Reduction (vph)	0	0	0	0	0	48	0	0	0	0	0	82
Lane Group Flow (vph)	0	0	0	833	0	1096	723	1911	0	0	2360	767
Heavy Vehicles (%)	2%	2%	2%	3%	2%	6%	8%	4%	2%	2%	5%	4%
Turn Type				Prot		Prot	Prot	NA			NA	Perm
Protected Phases				3		3	5	2			6	
Permitted Phases												6
Actuated Green, G (s)				39.0		39.0	21.0	99.0			72.0	72.0
Effective Green, g (s)				39.0		39.0	21.0	99.0			72.0	72.0
Actuated g/C Ratio				0.26		0.26	0.14	0.66			0.48	0.48
Clearance Time (s)				6.0		6.0	6.0	6.0			6.0	6.0
Vehicle Extension (s)				3.0		3.0	3.0	3.0			3.0	3.0
Lane Grp Cap (vph)				884		697	453	2290			1650	745
v/s Ratio Prot				0.25		c0.41	c0.22	0.55			c0.69	
v/s Ratio Perm												0.49
v/c Ratio				0.94		1.57	1.60	0.83			1.43	1.03
Uniform Delay, d1				54.4		55.5	64.5	19.3			39.0	39.0
Progression Factor				1.00		1.00	0.96	0.96			1.00	1.00
Incremental Delay, d2				17.8		264.4	273.4	1.9			197.2	40.7
Delay (s)				72.2		319.9	335.6	20.4			236.2	79.7
Level of Service				E		F	F	C			F	E
Approach Delay (s/veh)		0.0			215.6			106.9			194.8	
Approach LOS		A			F			F			F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	170.5	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.50		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	106.7%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	563	1397	1279	1098	0
Future Volume (vph)	0	563	1397	1279	1098	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.5	6.5	6.5	6.5	
Lane Util. Factor		1.00	0.95	1.00	0.97	
Frt		0.87	1.00	0.85	1.00	
Flt Protected		1.00	1.00	1.00	0.95	
Satd. Flow (prot)		1580	3438	1583	3242	
Flt Permitted		1.00	1.00	1.00	0.95	
Satd. Flow (perm)		1580	3438	1583	3242	
Peak-hour factor, PHF	0.73	0.73	0.81	0.81	0.87	0.87
Adj. Flow (vph)	0	771	1725	1579	1262	0
RTOR Reduction (vph)	0	18	0	1	0	0
Lane Group Flow (vph)	0	753	1725	1578	1262	0
Heavy Vehicles (%)	2%	4%	5%	2%	8%	2%
Turn Type		Over	NA	Perm	Prot	
Protected Phases		1	2		1	
Permitted Phases				2		
Actuated Green, G (s)		43.5	93.5	93.5	43.5	
Effective Green, g (s)		43.5	93.5	93.5	43.5	
Actuated g/C Ratio		0.29	0.62	0.62	0.29	
Clearance Time (s)		6.5	6.5	6.5	6.5	
Vehicle Extension (s)		3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		458	2143	986	940	
v/s Ratio Prot		c0.48	0.50		0.39	
v/s Ratio Perm				c1.00		
v/c Ratio		1.64	0.80	1.60	1.34	
Uniform Delay, d1		53.3	21.4	28.3	53.3	
Progression Factor		1.00	0.44	0.51	1.01	
Incremental Delay, d2		299.1	1.1	271.9	154.8	
Delay (s)		352.4	10.6	286.4	208.4	
Level of Service		F	B	F	F	
Approach Delay (s/veh)	352.4		142.4			208.4
Approach LOS	F		F			F

Intersection Summary			
HCM 2000 Control Delay (s/veh)	188.3	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.61		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	119.3%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	5.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	0	0	9	0	2677	4	88	1955	193
Future Vol, veh/h	0	0	0	0	0	9	0	2677	4	88	1955	193
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Free
Storage Length	-	-	-	-	-	0	-	-	-	150	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	85	85	85	38	38	38	81	81	81	83	83	83
Heavy Vehicles, %	2	2	2	2	2	2	2	3	2	2	4	4
Mvmt Flow	0	0	0	0	0	24	0	3305	5	106	2355	233

Major/Minor	Minor1			Major1			Major2		
Conflicting Flow All	-	-	1655	-	0	0	3310	0	0
Stage 1	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.94	-	-	-	4.14	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.32	-	-	-	2.22	-	-
Pot Cap-1 Maneuver	0	0	87	0	-	-	~ 85	-	0
Stage 1	0	0	-	0	-	-	-	-	0
Stage 2	0	0	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	-	0	87	-	-	-	~ 85	-	-
Mov Cap-2 Maneuver	-	0	-	-	-	-	-	-	-
Stage 1	-	0	-	-	-	-	-	-	-
Stage 2	-	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	61.2	0	11.5
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	87	~ 85	-
HCM Lane V/C Ratio	-	-	0.272	1.247	-
HCM Ctrl Dly (s/v)	-	-	61.2	266.9	-
HCM Lane LOS	-	-	F	F	-
HCM 95th %tile Q (veh)	-	-	1	7.8	-

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	16

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	4	28	2467	15	37	1844
Future Vol, veh/h	4	28	2467	15	37	1844
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	150	150	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	46	46	83	83	80	80
Heavy Vehicles, %	100	27	2	2	7	3
Mvmt Flow	9	61	2972	18	46	2305

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	4217	1486	0	0	2990	0
Stage 1	2972	-	-	-	-	-
Stage 2	1245	-	-	-	-	-
Critical Hdwy	8.8	7.44	-	-	4.24	-
Critical Hdwy Stg 1	7.8	-	-	-	-	-
Critical Hdwy Stg 2	7.8	-	-	-	-	-
Follow-up Hdwy	4.5	3.57	-	-	2.27	-
Pot Cap-1 Maneuver	0	89	-	-	104	-
Stage 1	~ 5	-	-	-	-	-
Stage 2	106	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	0	89	-	-	104	-
Mov Cap-2 Maneuver	~ 4	-	-	-	-	-
Stage 1	~ 5	-	-	-	-	-
Stage 2	59	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	$ 1197.1	0	1.3
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	24	104	-
HCM Lane V/C Ratio	-	-	2.899	0.445	-
HCM Ctrl Dly (s/v)	-	-	$ 1197.1	64.8	-
HCM Lane LOS	-	-	F	F	-
HCM 95th %tile Q (veh)	-	-	8.7	1.9	-

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

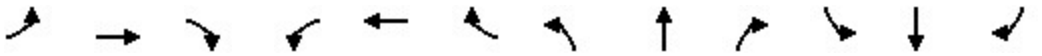
Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	22	0	0	0	0	2496	0	2	1798	48
Future Vol, veh/h	0	0	22	0	0	0	0	2496	0	2	1798	48
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	100	-	150
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	79	79	79	25	25	25	81	81	81	79	79	79
Heavy Vehicles, %	6	2	13	2	2	2	2	2	2	2	4	2
Mvmt Flow	0	0	28	0	0	0	0	3081	0	3	2276	61

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	-	5363	1138	-	0	0	3081	0	0
Stage 1	-	2282	-	-	-	-	-	-	-
Stage 2	-	3081	-	-	-	-	-	-	-
Critical Hdwy	-	6.54	7.16	-	-	-	4.14	-	-
Critical Hdwy Stg 1	-	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	-	4.02	3.43	-	-	-	2.22	-	-
Pot Cap-1 Maneuver	0	0	179	0	-	-	105	-	-
Stage 1	0	74	-	0	-	-	-	-	-
Stage 2	0	28	-	0	-	-	-	-	-
Platoon blocked, %					-	-		-	-
Mov Cap-1 Maneuver	-	0	179	-	-	-	105	-	-
Mov Cap-2 Maneuver	-	0	-	-	-	-	-	-	-
Stage 1	-	0	-	-	-	-	-	-	-
Stage 2	-	0	-	-	-	-	-	-	-

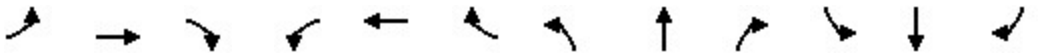
Approach	EB	NB	SB
HCM Ctrl Dly, s/v	28.8	0	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	SBL	SBT	SBR
Capacity (veh/h)	-	-	179	105	-	-
HCM Lane V/C Ratio	-	-	0.156	0.024	-	-
HCM Ctrl Dly (s/v)	-	-	28.8	40.1	-	-
HCM Lane LOS	-	-	D	E	-	-
HCM 95th %tile Q (veh)	-	-	0.5	0.1	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	57	28	156	48	11	285	77	2009	110	164	1392	28
Future Volume (vph)	57	28	156	48	11	285	77	2009	110	164	1392	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	0.87		1.00	0.86		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1719	1561		1626	1594		1687	3539	1272	1752	3471	1583
Flt Permitted	0.31	1.00		0.22	1.00		0.05	1.00	1.00	0.04	1.00	1.00
Satd. Flow (perm)	565	1561		380	1594		97	3539	1272	80	3471	1583
Peak-hour factor, PHF	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.79	0.79	0.79
Adj. Flow (vph)	69	34	188	58	13	343	93	2420	133	208	1762	35
RTOR Reduction (vph)	0	131	0	0	110	0	0	0	20	0	0	12
Lane Group Flow (vph)	69	91	0	58	246	0	93	2420	113	208	1762	23
Heavy Vehicles (%)	5%	2%	7%	11%	2%	2%	7%	2%	27%	3%	4%	2%
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA	pm+ov
Protected Phases	3	8		7	4		5	2	7	1	6	3
Permitted Phases	8			4			2		2	6		6
Actuated Green, G (s)	19.0	12.8		29.4	18.0		101.8	92.8	104.2	101.8	92.8	99.0
Effective Green, g (s)	19.0	12.8		29.4	18.0		101.8	92.8	104.2	101.8	92.8	99.0
Actuated g/C Ratio	0.13	0.09		0.20	0.12		0.68	0.62	0.69	0.68	0.62	0.66
Clearance Time (s)	6.0	6.0		6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	119	133		169	191		161	2189	934	154	2147	1108
v/s Ratio Prot	c0.02	0.06		c0.03	c0.15		0.03	0.68	0.01	c0.08	0.51	0.00
v/s Ratio Perm	0.05			0.04			0.36		0.08	c0.84		0.01
v/c Ratio	0.58	0.69		0.34	1.29		0.58	1.11	0.12	1.35	0.82	0.02
Uniform Delay, d1	67.2	66.6		61.7	66.0		48.9	28.6	7.6	67.2	22.2	8.8
Progression Factor	1.00	1.00		1.00	1.00		1.41	1.23	0.92	0.84	0.17	0.00
Incremental Delay, d2	6.7	13.7		1.2	163.1		0.5	48.3	0.0	179.9	2.1	0.0
Delay (s)	73.9	80.3		62.9	229.1		69.6	83.4	7.0	236.4	5.8	0.0
Level of Service	E	F		E	F		E	F	A	F	A	A
Approach Delay (s/veh)		78.8			205.8			79.0			29.7	
Approach LOS		E			F			E			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	70.3	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.29		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	107.0%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	476	0	104	1	0	4	287	1695	2	2	1225	407
Future Volume (vph)	476	0	104	1	0	4	287	1695	2	2	1225	407
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		4.5	6.0		6.0	6.0		6.0	6.0	6.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	1.00
Frt	1.00	0.85		1.00	0.85		1.00	1.00		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1770	1568		1770	1583		1703	3471		1770	3438	1583
Flt Permitted	0.95	1.00		1.00	1.00		0.95	1.00		0.09	1.00	1.00
Satd. Flow (perm)	1770	1568		1863	1583		1703	3471		161	3438	1583
Peak-hour factor, PHF	0.73	0.73	0.73	0.50	0.50	0.50	0.77	0.77	0.77	0.76	0.76	0.76
Adj. Flow (vph)	652	0	142	2	0	8	373	2201	3	3	1612	536
RTOR Reduction (vph)	0	102	0	0	8	0	0	0	0	0	0	111
Lane Group Flow (vph)	652	40	0	2	0	0	373	2204	0	3	1612	425
Heavy Vehicles (%)	2%	2%	3%	2%	2%	2%	6%	4%	2%	2%	5%	2%
Turn Type	Prot	NA		pm+pt	NA		Prot	NA		pm+pt	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases				8						6		6
Actuated Green, G (s)	49.7	42.7		10.7	1.1		28.8	73.4		48.2	46.4	96.1
Effective Green, g (s)	49.7	42.7		10.7	1.1		28.8	73.4		48.2	46.4	96.1
Actuated g/C Ratio	0.33	0.28		0.07	0.01		0.19	0.49		0.32	0.31	0.64
Clearance Time (s)	6.0	6.0		4.5	6.0		6.0	6.0		6.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	586	446		126	11		326	1698		71	1063	1077
v/s Ratio Prot	c0.37	c0.03		0.00	0.00		c0.22	c0.64		0.00	c0.47	0.13
v/s Ratio Perm				0.00						0.01		0.14
v/c Ratio	1.11	0.09		0.02	0.01		1.14	1.30		0.04	1.52	0.39
Uniform Delay, d1	50.1	39.4		62.3	73.9		60.6	38.3		69.4	51.8	13.0
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		0.49	0.72	0.71
Incremental Delay, d2	72.0	0.1		0.1	0.2		94.8	138.6		0.2	235.6	0.2
Delay (s)	122.2	39.5		62.3	74.1		155.4	176.9		34.4	272.8	9.4
Level of Service	F	D		E	E		F	F		C	F	A
Approach Delay (s/veh)		107.4			71.7			173.8			206.8	
Approach LOS		F			E			F			F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	176.9	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.28		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	99.1%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	80.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	2	640	104	26	0	0
Future Vol, veh/h	2	640	104	26	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	64	64	83	83	73	73
Heavy Vehicles, %	2	10	2	20	2	12
Mvmt Flow	3	1000	125	31	0	0

Major/Minor	Minor1		Major1	
Conflicting Flow All	141	141	0	0
Stage 1	141	-	-	-
Stage 2	0	-	-	-
Critical Hdwy	6.42	6.3	-	-
Critical Hdwy Stg 1	5.42	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	3.518	3.39	-	-
Pot Cap-1 Maneuver	852	~ 886	-	-
Stage 1	886	-	-	-
Stage 2	-	-	-	-
Platoon blocked, %			-	-
Mov Cap-1 Maneuver	852	~ 886	-	-
Mov Cap-2 Maneuver	810	-	-	-
Stage 1	886	-	-	-
Stage 2	-	-	-	-

Approach	WB	NB
HCM Ctrl Dly, s/v	93.2	0
HCM LOS	F	

Minor Lane/Major Mvmt	NBT	NBR	WBLn1
Capacity (veh/h)	-	-	886
HCM Lane V/C Ratio	-	-	1.132
HCM Ctrl Dly (s/v)	-	-	93.2
HCM Lane LOS	-	-	F
HCM 95th %tile Q (veh)	-	-	28.1

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	1.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	114	26	104	1549	0	2
Future Vol, veh/h	114	26	104	1549	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	150	150	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	53	53	72	72	86	86
Heavy Vehicles, %	14	10	2	6	28	6
Mvmt Flow	215	49	144	2151	0	2

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	146	144	0	0	2295	0
Stage 1	144	-	-	-	-	-
Stage 2	2	-	-	-	-	-
Critical Hdwy	6.54	6.3	-	-	4.38	-
Critical Hdwy Stg 1	5.54	-	-	-	-	-
Critical Hdwy Stg 2	5.54	-	-	-	-	-
Follow-up Hdwy	3.626	3.39	-	-	2.452	-
Pot Cap-1 Maneuver	819	883	-	-	178	-
Stage 1	855	-	-	-	-	-
Stage 2	991	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	819	883	-	-	178	-
Mov Cap-2 Maneuver	775	-	-	-	-	-
Stage 1	855	-	-	-	-	-
Stage 2	991	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	11.8	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	793	178	-
HCM Lane V/C Ratio	-	-	0.333	-	-
HCM Ctrl Dly (s/v)	-	-	11.8	0	-
HCM Lane LOS	-	-	B	A	-
HCM 95th %tile Q (veh)	-	-	1.5	0	-

Intersection	
Int Delay, s/veh	527.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	423	96	210	1086	429	61
Future Vol, veh/h	423	96	210	1086	429	61
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	150	-	-	150
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	73	73	75	75	79	79
Heavy Vehicles, %	4	6	3	2	10	4
Mvmt Flow	579	132	280	1448	543	77

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2551	543	620	0	-	0
Stage 1	543	-	-	-	-	-
Stage 2	2008	-	-	-	-	-
Critical Hdwy	6.44	6.26	4.13	-	-	-
Critical Hdwy Stg 1	5.44	-	-	-	-	-
Critical Hdwy Stg 2	5.44	-	-	-	-	-
Follow-up Hdwy	3.536	3.354	2.227	-	-	-
Pot Cap-1 Maneuver	~ 29	532	956	-	-	-
Stage 1	~ 578	-	-	-	-	-
Stage 2	~ 112	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 21	532	956	-	-	-
Mov Cap-2 Maneuver	~ 103	-	-	-	-	-
Stage 1	~ 409	-	-	-	-	-
Stage 2	~ 112	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	$ 2264.1	1.7	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	956	-	121	-	-
HCM Lane V/C Ratio	0.293	-	5.876	-	-
HCM Ctrl Dly (s/v)	10.3	$	2264.1	-	-
HCM Lane LOS	B	A	F	-	-
HCM 95th %tile Q (veh)	1.2	-	77.2	-	-

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	192.2

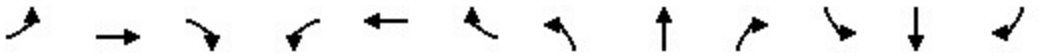
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	452	218	1437	218	21	95
Future Vol, veh/h	452	218	1437	218	21	95
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	0	150	-
Veh in Median Storage, #	2	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	491	237	1562	237	23	103

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1711	1562	0	0	1799	0
Stage 1	1562	-	-	-	-	-
Stage 2	149	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	~ 100	~ 138	-	-	343	-
Stage 1	~ 190	-	-	-	-	-
Stage 2	879	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 93	~ 138	-	-	343	-
Mov Cap-2 Maneuver	~ 179	-	-	-	-	-
Stage 1	~ 190	-	-	-	-	-
Stage 2	820	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	$ 699.7	0	2.9
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	179	138	343	-
HCM Lane V/C Ratio	-	-	2.745	1.717	0.067	-
HCM Ctrl Dly (s/v)	-	-	$ 840.7	$ 407.3	16.2	-
HCM Lane LOS	-	-	F	F	C	-
HCM 95th %tile Q (veh)	-	-	43.3	17.5	0.2	-

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	257	2	22	16	2	13	48	2447	20	15	1955	15
Future Volume (vph)	257	2	22	16	2	13	48	2447	20	15	1955	15
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	0.86		1.00	0.87		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1605		1770	1618		1770	3539	1583	1770	3539	1583
Flt Permitted	0.75	1.00		1.00	1.00		0.04	1.00	1.00	0.04	1.00	1.00
Satd. Flow (perm)	1392	1605		1863	1618		78	3539	1583	82	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	279	2	24	17	2	14	52	2660	22	16	2125	16
RTOR Reduction (vph)	0	21	0	0	14	0	0	0	7	0	0	4
Lane Group Flow (vph)	279	5	0	17	2	0	52	2660	15	16	2125	12
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA	pm+ov
Protected Phases	7	4		3	8		5	2	3	1	6	7
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	33.4	17.9		12.4	2.9		103.2	95.4	104.9	94.0	90.8	115.3
Effective Green, g (s)	33.4	17.9		12.4	2.9		103.2	95.4	104.9	94.0	90.8	115.3
Actuated g/C Ratio	0.22	0.12		0.08	0.02		0.69	0.64	0.70	0.63	0.61	0.77
Clearance Time (s)	6.0	6.0		6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	371	191		148	31		141	2250	1170	87	2142	1280
v/s Ratio Prot	c0.12	0.00		0.01	0.00		c0.02	c0.75	0.00	0.00	0.60	0.00
v/s Ratio Perm	c0.04			0.00			0.23		0.01	0.11		0.01
v/c Ratio	0.75	0.03		0.11	0.07		0.37	1.18	0.01	0.18	0.99	0.01
Uniform Delay, d1	52.9	58.3		62.9	72.2		65.2	27.3	6.8	68.6	29.2	4.0
Progression Factor	1.00	1.00		1.00	1.00		0.65	0.42	1.00	0.47	0.37	1.00
Incremental Delay, d2	8.4	0.1		0.3	1.0		0.4	83.3	0.0	0.4	10.0	0.0
Delay (s)	61.3	58.4		63.2	73.2		43.1	94.8	6.8	32.6	20.8	4.0
Level of Service	E	E		E	E		D	F	A	C	C	A
Approach Delay (s/veh)		61.0			68.1			93.1			20.8	
Approach LOS		E			E			F			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	61.2	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.10		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	98.5%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Intersection	
Int Delay, s/veh	2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	281	5	193	50	0
Future Vol, veh/h	0	281	5	193	50	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	305	5	210	54	0

Major/Minor	Major2		Minor1	
Conflicting Flow All	0	0	220	-
Stage 1	-	-	0	-
Stage 2	-	-	220	-
Critical Hdwy	4.12	-	6.42	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	5.42	-
Follow-up Hdwy	2.218	-	3.518	-
Pot Cap-1 Maneuver	-	-	768	0
Stage 1	-	-	-	0
Stage 2	-	-	817	0
Platoon blocked, %		-		
Mov Cap-1 Maneuver	-	-	768	-
Mov Cap-2 Maneuver	-	-	768	-
Stage 1	-	-	-	-
Stage 2	-	-	817	-

Approach	WB	NB
HCM Ctrl Dly, s/v		10
HCM LOS		B

Minor Lane/Major Mvmt	NBLn1	WBL	WBT
Capacity (veh/h)	768	-	-
HCM Lane V/C Ratio	0.071	-	-
HCM Ctrl Dly (s/v)	10	-	-
HCM Lane LOS	B	-	-
HCM 95th %tile Q (veh)	0.2	-	-



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	141	406	821	690	965	349
Future Volume (vph)	141	406	821	690	965	349
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lane Util. Factor	1.00	1.00	0.95	1.00	0.97	1.00
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	3433	1863
Flt Permitted	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	1770	1583	3539	1583	3433	1863
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	153	441	892	750	1049	379
RTOR Reduction (vph)	0	9	0	5	0	0
Lane Group Flow (vph)	153	432	892	746	1049	379
Turn Type	Prot	pt+ov	NA	pm+ov	Prot	NA
Protected Phases	8	8 1	2	8	1	6
Permitted Phases				2		
Actuated Green, G (s)	17.2	50.2	27.8	45.0	27.0	60.8
Effective Green, g (s)	17.2	50.2	27.8	45.0	27.0	60.8
Actuated g/C Ratio	0.19	0.56	0.31	0.50	0.30	0.68
Clearance Time (s)	6.0		6.0	6.0	6.0	6.0
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	338	882	1093	897	1029	1258
v/s Ratio Prot	0.09	0.27	0.25	c0.16	c0.31	0.20
v/s Ratio Perm				0.31		
v/c Ratio	0.45	0.49	0.82	0.83	1.02	0.30
Uniform Delay, d1	32.2	12.1	28.7	19.2	31.5	5.9
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.0	0.4	6.8	6.6	33.0	0.6
Delay (s)	33.2	12.5	35.5	25.9	64.5	6.6
Level of Service	C	B	D	C	E	A
Approach Delay (s/veh)	17.9		31.1			49.2
Approach LOS	B		C			D

Intersection Summary			
HCM 2000 Control Delay (s/veh)	36.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	90.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	80.3%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Intersection	
Int Delay, s/veh	3.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	217	22	2	552	118	9
Future Vol, veh/h	217	22	2	552	118	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	236	24	2	600	128	10

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	260	0	852	248
Stage 1	-	-	-	-	248	-
Stage 2	-	-	-	-	604	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1304	-	330	791
Stage 1	-	-	-	-	793	-
Stage 2	-	-	-	-	546	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1304	-	329	791
Mov Cap-2 Maneuver	-	-	-	-	329	-
Stage 1	-	-	-	-	793	-
Stage 2	-	-	-	-	545	-

Approach	EB	WB	NB
HCM Ctrl Dly, s/v	0	0	22.4
HCM LOS			C

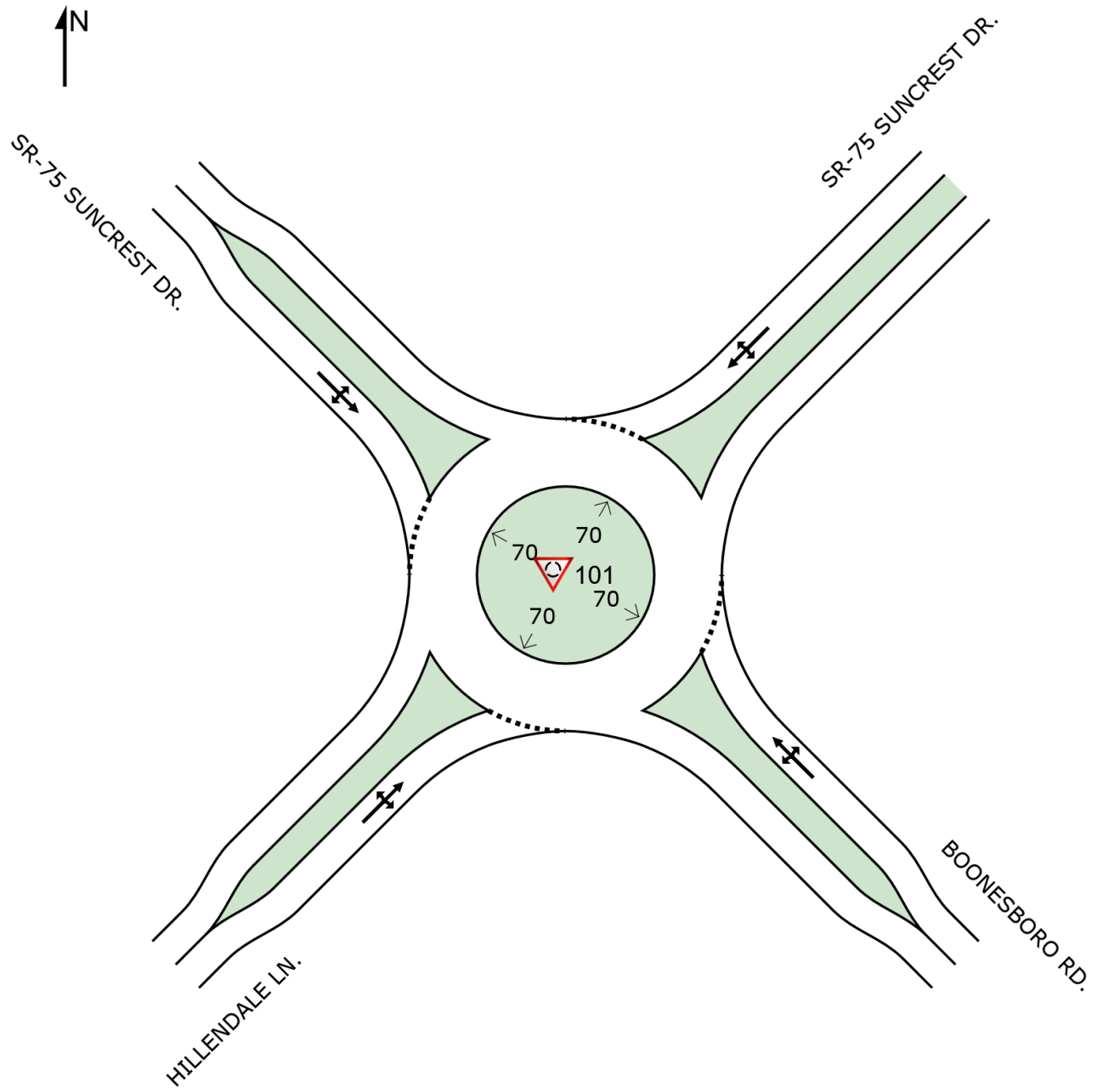
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	343	-	-	1304	-
HCM Lane V/C Ratio	0.402	-	-	0.002	-
HCM Ctrl Dly (s/v)	22.4	-	-	7.8	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q (veh)	1.9	-	-	0	-

SITE LAYOUT

Site: 101 [HILLENDALE LN./BOONESBORO RD. 2050 AM PEAK (Site Folder: General)]

2050 AM PEAK
Site Category: (None)
Roundabout

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



LANE SUMMARY

Site: 101 [HILLENDALE LN./BOONESBORO RD. 2050 AM PEAK (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

2050 AM PEAK
Site Category: (None)
Roundabout

Lane Use and Performance

	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh	Dist] ft	Lane Config	Lane Length ft	Cap. Adj. %	Prob. Block. %
SouthEast: BOONESBORO RD.															
Lane 1[d]	721	3.0	721	3.0	333	2.167	100	557.7	LOS F	125.4	3208.7	Full	1600	0.0	32.5
Approach	721	3.0	721	3.0		2.167		557.7	LOS F	125.4	3208.7				
NorthEast: SR-75 SUNCREST DR.															
Lane 1[d]	791	8.6	791	8.6	1218	0.649	100	10.2	LOS B	6.6	175.9	Full	1600	0.0	0.0
Approach	791	8.6	791	8.6		0.649		10.2	LOS B	6.6	175.9				
NorthWest: SR-75 SUNCREST DR.															
Lane 1[d]	2081	2.9	2081	2.9	1160	1.794	100	362.2	LOS F	325.2	8318.5	Full	1600	0.0	100.0
Approach	2081	2.9	2081	2.9		1.794		362.2	LOS F	325.2	8318.5				
SouthWest: HILLENDALE LN.															
Lane 1[d]	252	2.0	252	2.0	344	0.732	100	37.4	LOS E	3.8	97.2	Full	1600	0.0	0.0
Approach	252	2.0	252	2.0		0.732		37.4	LOS E	3.8	97.2				
All Vehicles	3844	4.0	3844	4.0		2.167		305.2	LOS F	325.2	8318.5				

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Roundabout LOS Method: Same as Sign Control.
Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
Delay Model: HCM Delay Formula (Stopline Delay: Geometric Delay is not included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: Siegloch M1 implied by US HCM 6 Roundabout Capacity Model.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

d Dominant lane on roundabout approach

Approach Lane Flows (veh/h)

SouthEast: BOONESBORO RD.

Mov. From SE To Exit:	L2 SW	T1 NW	R2 NE	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
Lane 1	4	45	671	721	3.0	333	2.167	100	NA	NA
Approach	4	45	671	721	3.0		2.167			

NorthEast: SR-75 SUNCREST DR.

Mov. From NE	L2	T1	R2	Total	%HV	Cap.	Deg. Satn	Lane Util.	Prob. SL Ov.	Ov. Lane

To Exit:	SE	SW	NW			veh/h	v/c	%	%	No.
Lane 1	121	15	655	791	8.6	1218	0.649	100	NA	NA
Approach	121	15	655	791	8.6		0.649			
NorthWest: SR-75 SUNCREST DR.										
Mov. From NW To Exit:	L2 NE	T1 SE	R2 SW	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
Lane 1	1890	175	15	2081	2.9	1160	1.794	100	NA	NA
Approach	1890	175	15	2081	2.9		1.794			
SouthWest: HILLENDALE LN.										
Mov. From SW To Exit:	L2 NW	T1 NE	R2 SE	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
Lane 1	22	214	16	252	2.0	344	0.732	100	NA	NA
Approach	22	214	16	252	2.0		0.732			

	Total	%HV	Deg.Satn (v/c)
All Vehicles	3844	4.0	2.167

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Merge Analysis

	Exit Lane Number	Short Lane Length ft	Percent Opng in Lane %	Opposing Flow Rate veh/h	Opposing Flow Rate pcu/h	Critical Gap sec	Follow-up Headway sec	Lane Flow Rate veh/h	Capacity veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay sec
There are no Exit Short Lanes for Merge Analysis at this Site.												

Variable Demand Analysis

	Initial Queued Demand veh	Residual Queued Demand veh	Time for Residual Demand to Clear sec	Duration of Oversatn sec
SouthEast: BOONESBORO RD.				
Lane 1	0.0	97.0	1049.9	NA
NorthEast: SR-75 SUNCREST DR.				
Lane 1	0.0	0.0	0.0	0.0
NorthWest: SR-75 SUNCREST DR.				
Lane 1	0.0	230.2	714.6	NA
SouthWest: HILLENDALE LN.				
Lane 1	0.0	0.0	0.0	0.0

LEVEL OF SERVICE

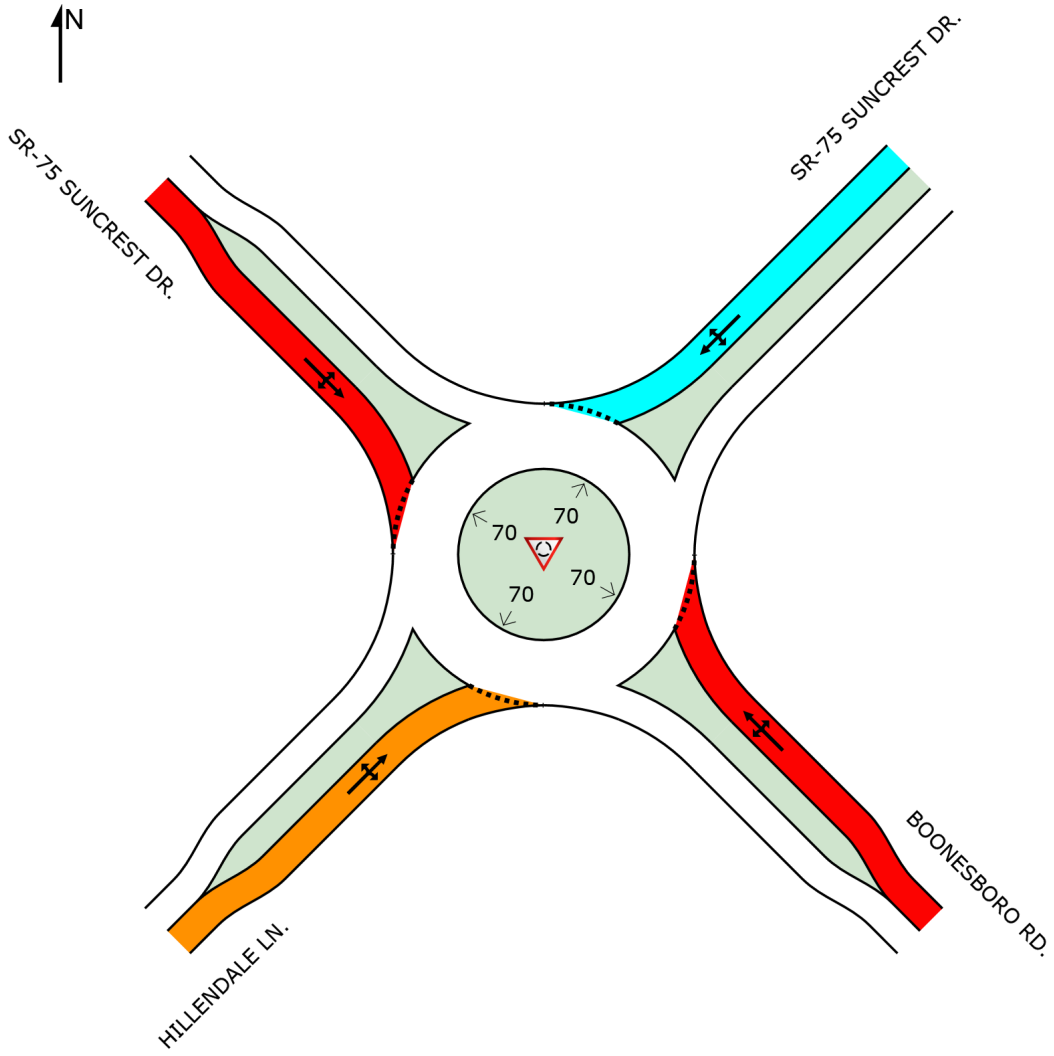
Lane Level of Service

Site: 101 [HILLENDALE LN./BOONESBORO RD. 2050 AM PEAK (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

2050 AM PEAK
Site Category: (None)
Roundabout

	Approaches				Intersection
	Southeast	Northeast	Northwest	Southwest	
LOS	F	B	F	E	F



Colour code based on Level of Service

LOS A | LOS B | LOS C | LOS D | LOS E | LOS F

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Roundabout Level of Service Method: Same as Sign Control
Delay Model: HCM Delay Formula (Stopline Delay: Geometric Delay is not included).

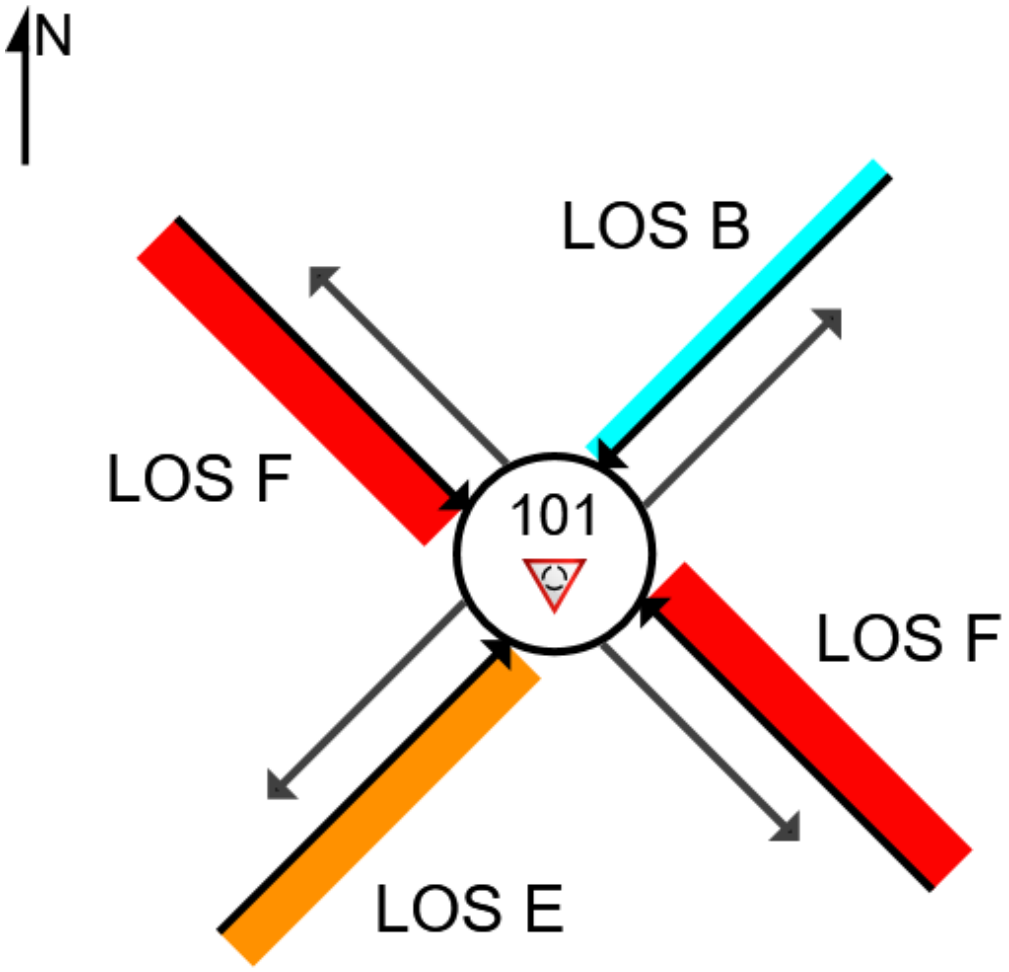
LEVEL OF SERVICE

Approach Level of Service

Site: 101 [HILLENDALE LN./BOONESBORO RD. 2050 AM PEAK (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

2050 AM PEAK
Site Category: (None)
Roundabout



Colour code based on Level of Service

LOS A	LOS B	LOS C	LOS D	LOS E	LOS F

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Roundabout Level of Service Method: Same as Sign Control
Delay Model: HCM Delay Formula (Stopline Delay: Geometric Delay is not included).

SR 75 CORRIDOR STUDY
2050 PROPOSED TRAFFIC CONDITIONS
CAPACITY/LOS REPORT

SCHOOL DISMISSAL PEAK HOUR

Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	0	0	26	0	2732	2	26	2014	127
Future Vol, veh/h	0	0	0	0	0	26	0	2732	2	26	2014	127
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Free
Storage Length	-	-	-	-	-	0	-	-	-	150	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	60	60	60	65	65	65	84	84	84	86	86	86
Heavy Vehicles, %	3	2	13	2	2	2	2	4	2	2	4	6
Mvmt Flow	0	0	0	0	0	40	0	3252	2	30	2342	148

Major/Minor	Minor1			Major1			Major2		
Conflicting Flow All	-	-	1627	-	0	0	3254	0	0
Stage 1	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.94	-	-	-	4.14	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.32	-	-	-	2.22	-	-
Pot Cap-1 Maneuver	0	0	91	0	-	-	89	-	0
Stage 1	0	0	-	0	-	-	-	-	0
Stage 2	0	0	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	-	0	91	-	-	-	89	-	-
Mov Cap-2 Maneuver	-	0	-	-	-	-	-	-	-
Stage 1	-	0	-	-	-	-	-	-	-
Stage 2	-	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	72.5	0	0.8
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	91	89	-
HCM Lane V/C Ratio	-	-	0.44	0.34	-
HCM Ctrl Dly (s/v)	-	-	72.5	65	-
HCM Lane LOS	-	-	F	F	-
HCM 95th %tile Q (veh)	-	-	1.8	1.3	-

Intersection	
Int Delay, s/veh	91

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	48	138	2170	59	105	1907
Future Vol, veh/h	48	138	2170	59	105	1907
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	150	150	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	76	76	84	84	85	85
Heavy Vehicles, %	13	2	3	5	2	5
Mvmt Flow	63	182	2583	70	124	2244

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	3953	1292	0	0	2653	0
Stage 1	2583	-	-	-	-	-
Stage 2	1370	-	-	-	-	-
Critical Hdwy	7.06	6.94	-	-	4.14	-
Critical Hdwy Stg 1	6.06	-	-	-	-	-
Critical Hdwy Stg 2	6.06	-	-	-	-	-
Follow-up Hdwy	3.63	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	~ 2	~ 154	-	-	156	-
Stage 1	~ 36	-	-	-	-	-
Stage 2	182	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	0	~ 154	-	-	156	-
Mov Cap-2 Maneuver	~ 17	-	-	-	-	-
Stage 1	~ 36	-	-	-	-	-
Stage 2	~ 37	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	$ 1915.9	0	4.3
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	50	156	-
HCM Lane V/C Ratio	-	-	4.895	0.792	-
HCM Ctrl Dly (s/v)	-	-	$ 1915.9	83.3	-
HCM Lane LOS	-	-	F	F	-
HCM 95th %tile Q (veh)	-	-	27.7	5.1	-

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	13	0	0	0	0	2238	0	2	1868	83
Future Vol, veh/h	0	0	13	0	0	0	0	2238	0	2	1868	83
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	100	-	150
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	36	36	36	25	25	25	80	80	80	86	86	86
Heavy Vehicles, %	3	2	2	2	2	2	2	3	2	2	2	2
Mvmt Flow	0	0	36	0	0	0	0	2798	0	2	2172	97

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	-	4974	1086	-	0	0	2798	0	0
Stage 1	-	2176	-	-	-	-	-	-	-
Stage 2	-	2798	-	-	-	-	-	-	-
Critical Hdwy	-	6.54	6.94	-	-	-	4.14	-	-
Critical Hdwy Stg 1	-	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	-	4.02	3.32	-	-	-	2.22	-	-
Pot Cap-1 Maneuver	0	1	212	0	-	-	136	-	-
Stage 1	0	84	-	0	-	-	-	-	-
Stage 2	0	39	-	0	-	-	-	-	-
Platoon blocked, %					-	-		-	-
Mov Cap-1 Maneuver	-	0	212	-	-	-	136	-	-
Mov Cap-2 Maneuver	-	0	-	-	-	-	-	-	-
Stage 1	-	0	-	-	-	-	-	-	-
Stage 2	-	0	-	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	25.4	0	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	SBL	SBT	SBR
Capacity (veh/h)	-	-	212	136	-	-
HCM Lane V/C Ratio	-	-	0.17	0.017	-	-
HCM Ctrl Dly (s/v)	-	-	25.4	31.9	-	-
HCM Lane LOS	-	-	D	D	-	-
HCM 95th %tile Q (veh)	-	-	0.6	0.1	-	-

Intersection	
Int Delay, s/veh	412.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	33	743	70	39	0	0
Future Vol, veh/h	33	743	70	39	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	43	43	82	82	85	85
Heavy Vehicles, %	2	7	3	7	2	3
Mvmt Flow	77	1728	85	48	0	0

Major/Minor	Minor1		Major1	
Conflicting Flow All	109	109	0	0
Stage 1	109	-	-	-
Stage 2	0	-	-	-
Critical Hdwy	6.42	6.27	-	-
Critical Hdwy Stg 1	5.42	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	3.518	3.363	-	-
Pot Cap-1 Maneuver	888	~ 931	-	-
Stage 1	916	-	-	-
Stage 2	-	-	-	-
Platoon blocked, %			-	-
Mov Cap-1 Maneuver	888	~ 931	-	-
Mov Cap-2 Maneuver	837	-	-	-
Stage 1	916	-	-	-
Stage 2	-	-	-	-

Approach	WB	NB
HCM Ctrl Dly, s/v	$ 442.8	0
HCM LOS	F	

Minor Lane/Major Mvmt	NBT	NBR	WBLn1
Capacity (veh/h)	-	-	927
HCM Lane V/C Ratio	-	-	1.947
HCM Ctrl Dly (s/v)	-	-	-$ 442.8
HCM Lane LOS	-	-	F
HCM 95th %tile Q (veh)	-	-	115.6

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	80.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	316	74	35	262	0	37
Future Vol, veh/h	316	74	35	262	0	37
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	150	150	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	37	37	85	85	91	91
Heavy Vehicles, %	2	2	3	2	20	2
Mvmt Flow	854	200	41	308	0	41

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	82	41	0	0	349	0
Stage 1	41	-	-	-	-	-
Stage 2	41	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.3	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.38	-
Pot Cap-1 Maneuver	920	1030	-	-	1116	-
Stage 1	981	-	-	-	-	-
Stage 2	981	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	920	1030	-	-	1116	-
Mov Cap-2 Maneuver	868	-	-	-	-	-
Stage 1	981	-	-	-	-	-
Stage 2	981	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	110.1	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	895	1116	-
HCM Lane V/C Ratio	-	-	1.178	-	-
HCM Ctrl Dly (s/v)	-	-	110.1	0	-
HCM Lane LOS	-	-	F	A	-
HCM 95th %tile Q (veh)	-	-	32.2	0	-

Intersection	
Int Delay, s/veh	72.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	160	136	57	661	837	195
Future Vol, veh/h	160	136	57	661	837	195
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	150	-	-	150
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	68	68	90	90	76	76
Heavy Vehicles, %	3	5	4	4	2	4
Mvmt Flow	235	200	63	734	1101	257

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1961	1101	1358	0	-	0
Stage 1	1101	-	-	-	-	-
Stage 2	860	-	-	-	-	-
Critical Hdwy	6.43	6.25	4.14	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.345	2.236	-	-	-
Pot Cap-1 Maneuver	~ 69	254	500	-	-	-
Stage 1	317	-	-	-	-	-
Stage 2	413	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 60	254	500	-	-	-
Mov Cap-2 Maneuver	~ 224	-	-	-	-	-
Stage 1	277	-	-	-	-	-
Stage 2	413	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	$ 427.5	1.1	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	500	-	237	-	-
HCM Lane V/C Ratio	0.127	-	1.837	-	-
HCM Ctrl Dly (s/v)	13.2	-	-$ 427.5	-	-
HCM Lane LOS	B	-	F	-	-
HCM 95th %tile Q (veh)	0.4	-	30.2	-	-

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	4.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	212	86	211	412	107	245
Future Vol, veh/h	212	86	211	412	107	245
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	0	150	-
Veh in Median Storage, #	2	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	230	93	229	448	116	266

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	727	229	0	0	677	0
Stage 1	229	-	-	-	-	-
Stage 2	498	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	391	810	-	-	915	-
Stage 1	809	-	-	-	-	-
Stage 2	611	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	341	810	-	-	915	-
Mov Cap-2 Maneuver	486	-	-	-	-	-
Stage 1	809	-	-	-	-	-
Stage 2	533	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	16.3	0	2.9
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	486	810	915	-
HCM Lane V/C Ratio	-	-	0.474	0.115	0.127	-
HCM Ctrl Dly (s/v)	-	-	18.9	10	9.5	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q (veh)	-	-	2.5	0.4	0.4	-

Intersection	
Int Delay, s/veh	2.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	427	5	127	54	0
Future Vol, veh/h	0	427	5	127	54	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	464	5	138	59	0

Major/Minor	Major2		Minor1	
Conflicting Flow All	0	0	148	-
Stage 1	-	-	0	-
Stage 2	-	-	148	-
Critical Hdwy	4.12	-	6.42	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	5.42	-
Follow-up Hdwy	2.218	-	3.518	-
Pot Cap-1 Maneuver	-	-	844	0
Stage 1	-	-	-	0
Stage 2	-	-	880	0
Platoon blocked, %		-		
Mov Cap-1 Maneuver	-	-	844	-
Mov Cap-2 Maneuver	-	-	844	-
Stage 1	-	-	-	-
Stage 2	-	-	880	-

Approach	WB	NB
HCM Ctrl Dly, s/v		9.6
HCM LOS		A

Minor Lane/Major Mvmt	NBLn1	WBL	WBT
Capacity (veh/h)	844	-	-
HCM Lane V/C Ratio	0.07	-	-
HCM Ctrl Dly (s/v)	9.6	-	-
HCM Lane LOS	A	-	-
HCM 95th %tile Q (veh)	0.2	-	-

Intersection	
Int Delay, s/veh	1.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	420	99	1	234	64	15
Future Vol, veh/h	420	99	1	234	64	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	457	108	1	254	70	16

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	565	0	767	511
Stage 1	-	-	-	-	511	-
Stage 2	-	-	-	-	256	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1007	-	370	563
Stage 1	-	-	-	-	602	-
Stage 2	-	-	-	-	787	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1007	-	370	563
Mov Cap-2 Maneuver	-	-	-	-	370	-
Stage 1	-	-	-	-	602	-
Stage 2	-	-	-	-	786	-

Approach	EB	WB	NB
HCM Ctrl Dly, s/v	0	0	16.6
HCM LOS			C

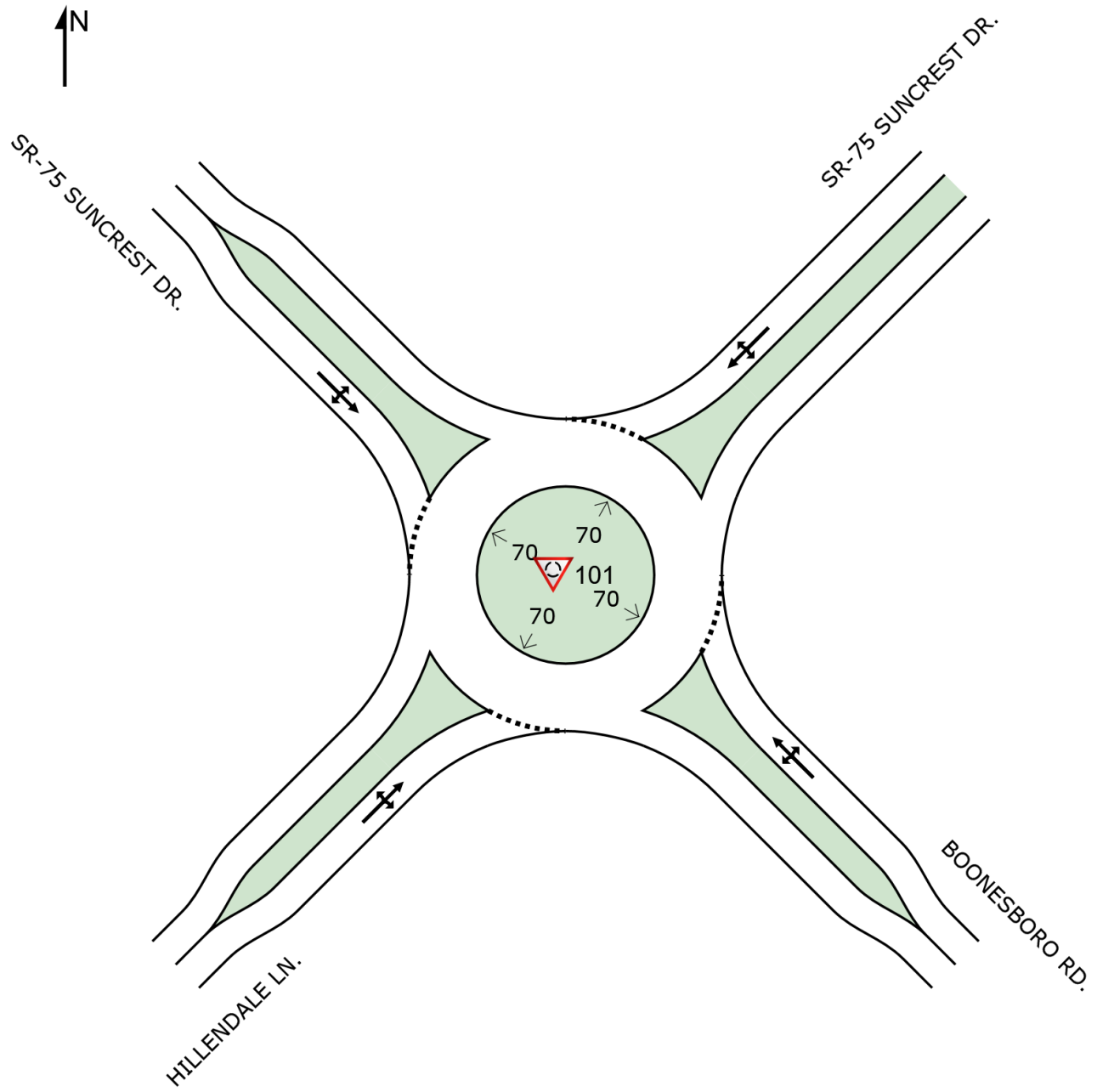
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	396	-	-	1007	-
HCM Lane V/C Ratio	0.217	-	-	0.001	-
HCM Ctrl Dly (s/v)	16.6	-	-	8.6	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q (veh)	0.8	-	-	0	-

SITE LAYOUT

Site: 101 [HILLENDALE LN./BOONESBORO RD. 2050 School (Site Folder: General)]

2050 School
Site Category: (None)
Roundabout

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



LANE SUMMARY

Site: 101 [HILLENDALE LN./BOONESBORO RD. 2050 School (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

2050 School
Site Category: (None)
Roundabout

Lane Use and Performance

	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh	Dist] ft	Lane Config	Lane Length ft	Cap. Adj. %	Prob. Block. %
SouthEast: BOONESBORO RD.															
Lane 1[d]	270	2.0	270	2.0	508	0.531	100	17.4	LOS C	2.8	72.0	Full	1600	0.0	0.0
Approach	270	2.0	270	2.0		0.531		17.4	LOS C	2.8	72.0				
NorthEast: SR-75 SUNCREST DR.															
Lane 1[d]	1504	2.0	1504	2.0	1266	1.188	100	84.0	LOS F	146.4	3719.0	Full	1600	0.0	43.1
Approach	1504	2.0	1504	2.0		1.188		84.0	LOS F	146.4	3719.0				
NorthWest: SR-75 SUNCREST DR.															
Lane 1[d]	984	3.8	984	3.8	879	1.119	100	85.1	LOS F	59.7	1538.0	Full	1600	0.0	3.8
Approach	984	3.8	984	3.8		1.119		85.1	LOS F	59.7	1538.0				
SouthWest: HILLENDALE LN.															
Lane 1[d]	162	2.0	162	2.0	385	0.421	100	18.1	LOS C	1.8	44.9	Full	1600	0.0	0.0
Approach	162	2.0	162	2.0		0.421		18.1	LOS C	1.8	44.9				
All Vehicles	2920	2.6	2920	2.6		1.188		74.6	LOS F	146.4	3719.0				

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Roundabout LOS Method: Same as Sign Control.
Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
Delay Model: HCM Delay Formula (Stopline Delay: Geometric Delay is not included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: Siegloch M1 implied by US HCM 6 Roundabout Capacity Model.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

d Dominant lane on roundabout approach

Approach Lane Flows (veh/h)

SouthEast: BOONESBORO RD.

Mov. From SE To Exit:	L2 SW	T1 NW	R2 NE	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
Lane 1	1	61	208	270	2.0	508	0.531	100	NA	NA
Approach	1	61	208	270	2.0		0.531			

NorthEast: SR-75 SUNCREST DR.

Mov. From NE	L2	T1	R2	Total	%HV	Cap.	Deg. Satn	Lane Util.	Prob. SL Ov.	Ov. Lane

To Exit:	SE	SW	NW			veh/h	v/c	%	%	No.
Lane 1	361	97	1047	1504	2.0	1266	1.188	100	NA	NA
Approach	361	97	1047	1504	2.0		1.188			
NorthWest: SR-75 SUNCREST DR.										
Mov. From NW To Exit:	L2 NE	T1 SE	R2 SW	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
Lane 1	876	98	9	984	3.8	879	1.119	100	NA	NA
Approach	876	98	9	984	3.8		1.119			
SouthWest: HILLENDALE LN.										
Mov. From SW To Exit:	L2 NW	T1 NE	R2 SE	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
Lane 1	2	128	32	162	2.0	385	0.421	100	NA	NA
Approach	2	128	32	162	2.0		0.421			

	Total	%HV	Deg.Satn (v/c)
All Vehicles	2920	2.6	1.188

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Merge Analysis

	Exit Lane Number	Short Lane Length ft	Percent Opng in Lane %	Opposing Flow Rate veh/h	Opposing Flow Rate pcu/h	Critical Gap sec	Follow-up Headway sec	Lane Flow Rate veh/h	Capacity veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay sec
There are no Exit Short Lanes for Merge Analysis at this Site.												

Variable Demand Analysis

	Initial Queued Demand veh	Residual Queued Demand veh	Time for Residual Demand to Clear sec	Duration of Oversatn sec
SouthEast: BOONESBORO RD.				
Lane 1	0.0	0.0	0.0	0.0
NorthEast: SR-75 SUNCREST DR.				
Lane 1	0.0	59.5	169.2	NA
NorthWest: SR-75 SUNCREST DR.				
Lane 1	0.0	26.2	107.2	NA
SouthWest: HILLENDALE LN.				
Lane 1	0.0	0.0	0.0	0.0

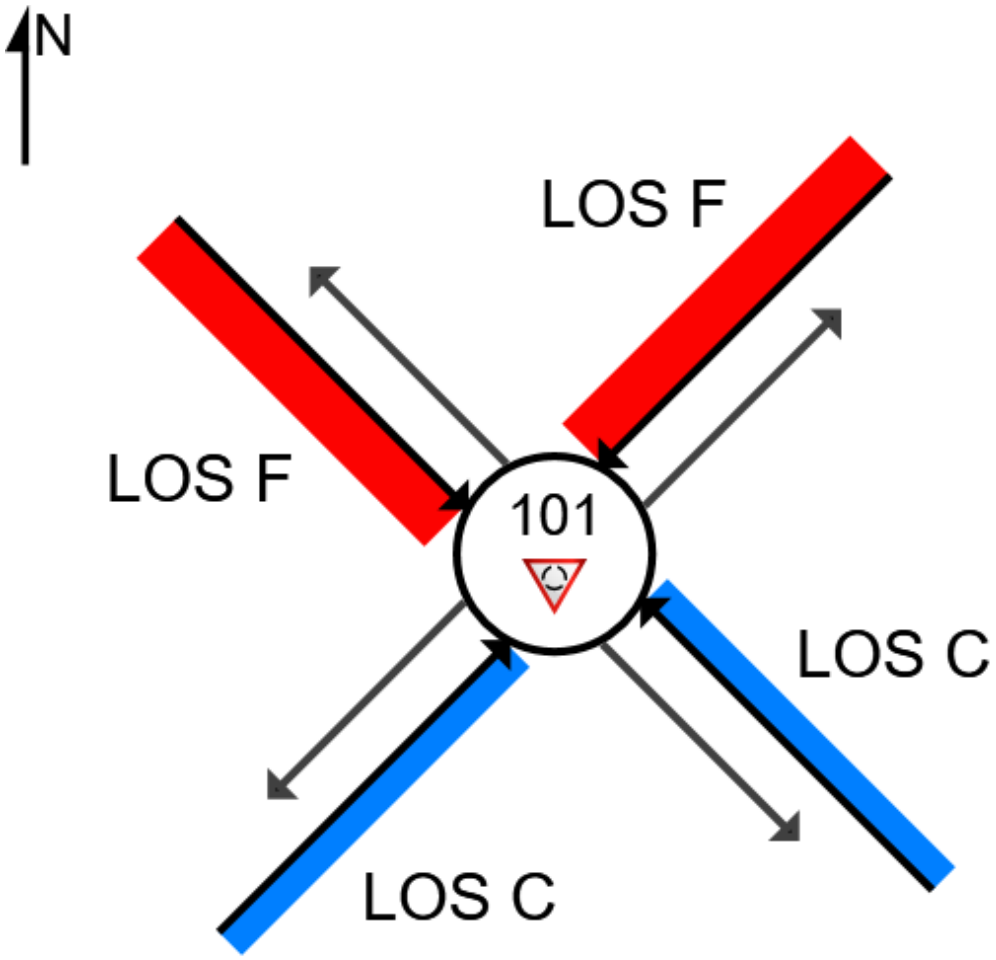
LEVEL OF SERVICE

Approach Level of Service

Site: 101 [HILLENDALE LN./BOONESBORO RD. 2050 School (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

2050 School
Site Category: (None)
Roundabout



Colour code based on Level of Service

LOS A	LOS B	LOS C	LOS D	LOS E	LOS F

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Roundabout Level of Service Method: Same as Sign Control
Delay Model: HCM Delay Formula (Stopline Delay: Geometric Delay is not included).

LEVEL OF SERVICE

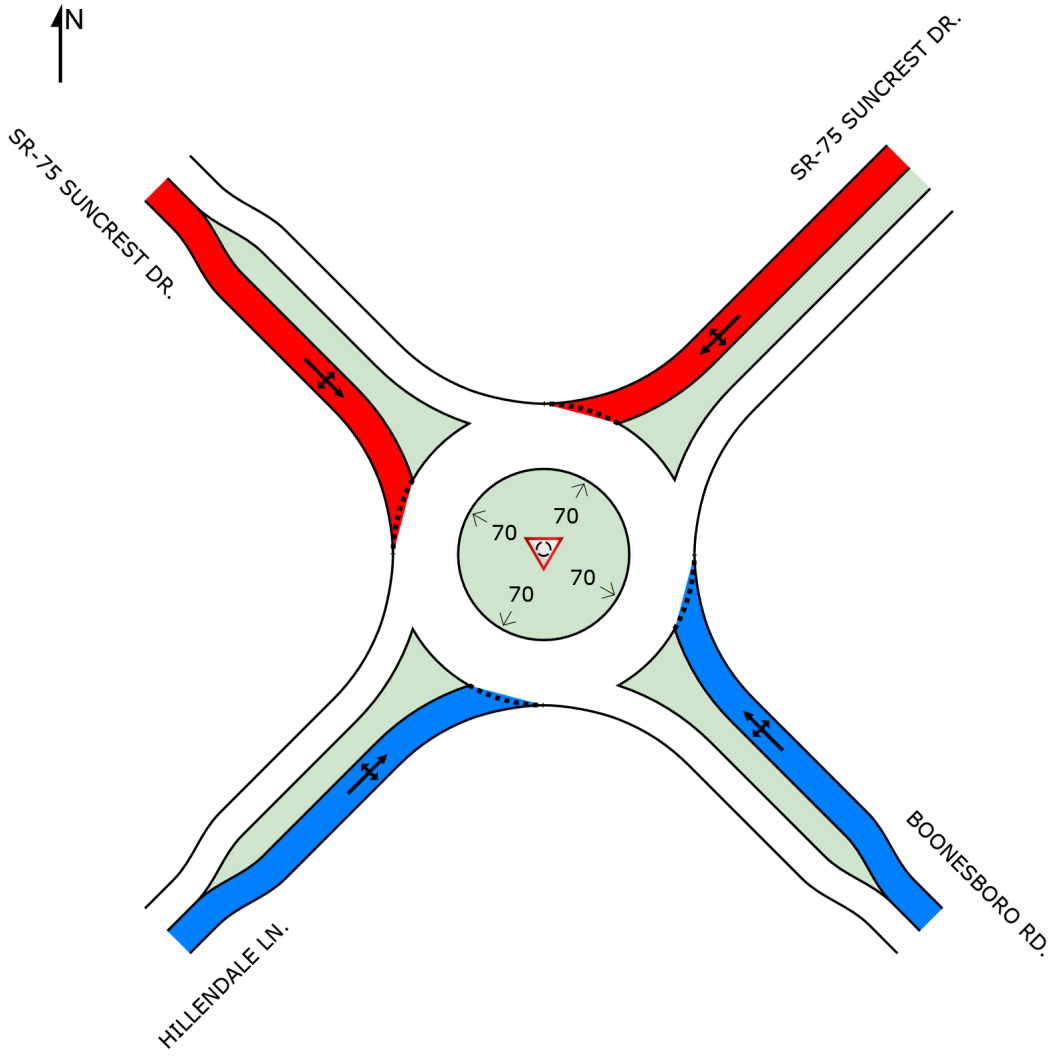
Lane Level of Service

Site: 101 [HILLENDALE LN./BOONESBORO RD. 2050 School (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

2050 School
Site Category: (None)
Roundabout

	Approaches				Intersection
	Southeast	Northeast	Northwest	Southwest	
LOS	C	F	F	C	F



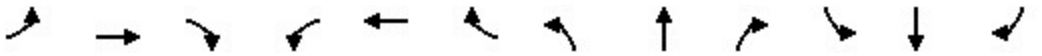
Colour code based on Level of Service

LOS A | LOS B | LOS C | LOS D | LOS E | LOS F

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Roundabout Level of Service Method: Same as Sign Control
Delay Model: HCM Delay Formula (Stopline Delay: Geometric Delay is not included).

SR 75 CORRIDOR STUDY
2050 PROPOSED TRAFFIC CONDITIONS
CAPACITY/LOS REPORT

PM PEAK HOUR



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	1097	0	1282	377	1722	0	0	2271	712
Future Volume (vph)	0	0	0	1097	0	1282	377	1722	0	0	2271	712
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				6.0		6.0	6.0	6.0			6.0	6.0
Lane Util. Factor				0.97		0.88	0.97	0.95			0.95	1.00
Frt				1.00		0.85	1.00	1.00			1.00	0.85
Flt Protected				0.95		1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)				3433		2787	3303	3505			3539	1583
Flt Permitted				0.95		1.00	0.95	1.00			1.00	1.00
Satd. Flow (perm)				3433		2787	3303	3505			3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.89	0.89	0.89	0.93	0.93	0.93	0.88	0.88	0.88
Adj. Flow (vph)	0	0	0	1233	0	1440	405	1852	0	0	2581	809
RTOR Reduction (vph)	0	0	0	0	0	45	0	0	0	0	0	71
Lane Group Flow (vph)	0	0	0	1233	0	1395	405	1852	0	0	2581	738
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	6%	3%	2%	2%	2%	2%
Turn Type				Prot		Prot	Prot	NA			NA	Perm
Protected Phases				3		3	5	2			6	
Permitted Phases												6
Actuated Green, G (s)				46.0		46.0	13.0	92.0			73.0	73.0
Effective Green, g (s)				46.0		46.0	13.0	92.0			73.0	73.0
Actuated g/C Ratio				0.31		0.31	0.09	0.61			0.49	0.49
Clearance Time (s)				6.0		6.0	6.0	6.0			6.0	6.0
Vehicle Extension (s)				3.0		3.0	3.0	3.0			3.0	3.0
Lane Grp Cap (vph)				1052		854	286	2149			1722	770
v/s Ratio Prot				0.36		c0.50	c0.12	0.53			c0.73	
v/s Ratio Perm												0.47
v/c Ratio				1.17		1.63	1.42	0.86			1.50	0.96
Uniform Delay, d1				52.0		52.0	68.5	23.8			38.5	37.0
Progression Factor				1.00		1.00	0.84	0.57			1.00	1.00
Incremental Delay, d2				87.7		290.4	189.1	0.5			227.6	23.7
Delay (s)				139.7		342.4	246.9	14.0			266.1	60.7
Level of Service				F		F	F	B			F	E
Approach Delay (s/veh)		0.0			248.9			55.8			217.1	
Approach LOS		A			F			E			F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	183.5	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.54		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	118.2%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	787	1355	816	1155	0
Future Volume (vph)	0	787	1355	816	1155	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		6.5	6.5	6.5	6.5	
Lane Util. Factor		1.00	0.95	1.00	0.97	
Frt		0.87	1.00	0.85	1.00	
Flt Protected		1.00	1.00	1.00	0.95	
Satd. Flow (prot)		1611	3471	1583	3433	
Flt Permitted		1.00	1.00	1.00	0.95	
Satd. Flow (perm)		1611	3471	1583	3433	
Peak-hour factor, PHF	0.92	0.92	0.91	0.91	0.92	0.92
Adj. Flow (vph)	0	855	1489	897	1255	0
RTOR Reduction (vph)	0	9	0	11	0	0
Lane Group Flow (vph)	0	846	1489	886	1255	0
Heavy Vehicles (%)	2%	2%	4%	2%	2%	2%
Turn Type		Over	NA	Perm	Prot	
Protected Phases		1	2		1	
Permitted Phases				2		
Actuated Green, G (s)		64.5	72.5	72.5	64.5	
Effective Green, g (s)		64.5	72.5	72.5	64.5	
Actuated g/C Ratio		0.43	0.48	0.48	0.43	
Clearance Time (s)		6.5	6.5	6.5	6.5	
Vehicle Extension (s)		3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		692	1677	765	1476	
v/s Ratio Prot		c0.52	0.43		0.37	
v/s Ratio Perm				c0.56		
v/c Ratio		1.22	0.89	1.16	0.85	
Uniform Delay, d1		42.8	35.1	38.7	38.4	
Progression Factor		1.00	0.51	0.55	1.14	
Incremental Delay, d2		112.8	4.8	80.6	0.5	
Delay (s)		155.5	22.8	101.7	44.1	
Level of Service		F	C	F	D	
Approach Delay (s/veh)	155.5		52.5			44.1
Approach LOS	F		D			D

Intersection Summary			
HCM 2000 Control Delay (s/veh)	69.7	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.19		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	13.0
Intersection Capacity Utilization	97.0%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	0	0	48	0	2092	0	15	2509	199
Future Vol, veh/h	0	0	0	0	0	48	0	2092	0	15	2509	199
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Free
Storage Length	-	-	-	-	-	0	-	-	-	150	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	72	72	72	37	37	37	95	95	95	97	97	97
Heavy Vehicles, %	3	2	13	2	2	2	2	4	2	2	4	6
Mvmt Flow	0	0	0	0	0	130	0	2202	0	15	2587	205

Major/Minor	Minor1			Major1			Major2		
Conflicting Flow All	-	-	1101	-	0	0	2202	0	0
Stage 1	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.94	-	-	-	4.14	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.32	-	-	-	2.22	-	-
Pot Cap-1 Maneuver	0	0	207	0	-	-	236	-	0
Stage 1	0	0	-	0	-	-	-	-	0
Stage 2	0	0	-	0	-	-	-	-	0
Platoon blocked, %					-	-		-	
Mov Cap-1 Maneuver	-	0	207	-	-	-	236	-	-
Mov Cap-2 Maneuver	-	0	-	-	-	-	-	-	-
Stage 1	-	0	-	-	-	-	-	-	-
Stage 2	-	0	-	-	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	47.8	0	0.1
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	207	236	-
HCM Lane V/C Ratio	-	-	0.627	0.066	-
HCM Ctrl Dly (s/v)	-	-	47.8	21.3	-
HCM Lane LOS	-	-	E	C	-
HCM 95th %tile Q (veh)	-	-	3.7	0.2	-

Intersection	
Int Delay, s/veh	7.9

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	30	94	1710	37	28	2487
Future Vol, veh/h	30	94	1710	37	28	2487
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	150	150	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	72	72	90	90	98	98
Heavy Vehicles, %	13	2	3	5	2	5
Mvmt Flow	42	131	1900	41	29	2538

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	3227	950	0	0	1941	0
Stage 1	1900	-	-	-	-	-
Stage 2	1327	-	-	-	-	-
Critical Hdwy	7.06	6.94	-	-	4.14	-
Critical Hdwy Stg 1	6.06	-	-	-	-	-
Critical Hdwy Stg 2	6.06	-	-	-	-	-
Follow-up Hdwy	3.63	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	~ 6	261	-	-	298	-
Stage 1	91	-	-	-	-	-
Stage 2	193	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 5	261	-	-	298	-
Mov Cap-2 Maneuver	57	-	-	-	-	-
Stage 1	91	-	-	-	-	-
Stage 2	174	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	212.6	0	0.2
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	140	298	-
HCM Lane V/C Ratio	-	-	1.23	0.096	-
HCM Ctrl Dly (s/v)	-	-	212.6	18.4	-
HCM Lane LOS	-	-	F	C	-
HCM 95th %tile Q (veh)	-	-	10.3	0.3	-

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

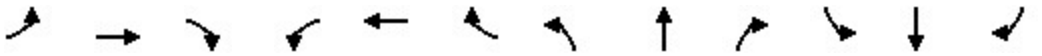
Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	33	0	0	0	0	1745	0	0	2456	66
Future Vol, veh/h	0	0	33	0	0	0	0	1745	0	0	2456	66
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	100	-	150
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	53	53	53	25	25	25	96	96	96	98	98	98
Heavy Vehicles, %	3	2	2	2	2	2	2	3	2	2	2	2
Mvmt Flow	0	0	62	0	0	0	0	1818	0	0	2506	67

Major/Minor	Minor2			Major1			Major2		
Conflicting Flow All	-	4324	1253	-	0	0	1818	0	0
Stage 1	-	2506	-	-	-	-	-	-	-
Stage 2	-	1818	-	-	-	-	-	-	-
Critical Hdwy	-	6.54	6.94	-	-	-	4.14	-	-
Critical Hdwy Stg 1	-	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	-	4.02	3.32	-	-	-	2.22	-	-
Pot Cap-1 Maneuver	0	2	163	0	-	-	333	-	-
Stage 1	0	56	-	0	-	-	-	-	-
Stage 2	0	128	-	0	-	-	-	-	-
Platoon blocked, %					-	-		-	-
Mov Cap-1 Maneuver	-	0	163	-	-	-	333	-	-
Mov Cap-2 Maneuver	-	0	-	-	-	-	-	-	-
Stage 1	-	0	-	-	-	-	-	-	-
Stage 2	-	0	-	-	-	-	-	-	-

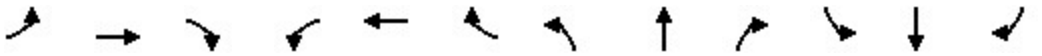
Approach	EB	NB	SB
HCM Ctrl Dly, s/v	40.1	0	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBR	EBLn1	SBL	SBT	SBR
Capacity (veh/h)	-	-	163	333	-	-
HCM Lane V/C Ratio	-	-	0.382	-	-	-
HCM Ctrl Dly (s/v)	-	-	40.1	0	-	-
HCM Lane LOS	-	-	E	A	-	-
HCM 95th %tile Q (veh)	-	-	1.6	0	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	22	22	59	46	35	234	101	1334	48	307	2080	59
Future Volume (vph)	22	22	59	46	35	234	101	1334	48	307	2080	59
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	0.89		1.00	0.87		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1659		1703	1579		1770	3505	1524	1770	3539	1538
Flt Permitted	0.37	1.00		0.54	1.00		0.05	1.00	1.00	0.11	1.00	1.00
Satd. Flow (perm)	684	1659		966	1579		91	3505	1524	203	3539	1538
Peak-hour factor, PHF	0.73	0.73	0.73	0.89	0.89	0.89	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	30	30	81	52	39	263	104	1375	49	316	2144	61
RTOR Reduction (vph)	0	67	0	0	162	0	0	0	19	0	0	19
Lane Group Flow (vph)	30	44	0	52	140	0	104	1375	30	316	2144	42
Heavy Vehicles (%)	2%	2%	2%	6%	2%	5%	2%	3%	6%	2%	2%	5%
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA	pm+ov
Protected Phases	3	8		7	4		5	2	7	1	6	3
Permitted Phases	8			4			2		2	6		6
Actuated Green, G (s)	15.7	10.9		23.3	14.7		90.5	82.3	90.9	112.5	98.3	103.1
Effective Green, g (s)	15.7	10.9		23.3	14.7		90.5	82.3	90.9	112.5	98.3	103.1
Actuated g/C Ratio	0.10	0.07		0.16	0.10		0.60	0.55	0.61	0.75	0.66	0.69
Clearance Time (s)	6.0	6.0		6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	106	120		192	154		146	1923	984	405	2319	1118
v/s Ratio Prot	0.01	0.03		c0.02	c0.09		0.04	0.39	0.00	c0.13	c0.61	0.00
v/s Ratio Perm	0.02			0.03			0.39		0.02	0.46		0.03
v/c Ratio	0.28	0.37		0.27	0.91		0.71	0.72	0.03	0.78	0.92	0.04
Uniform Delay, d1	67.5	66.3		58.7	67.0		66.2	25.1	11.9	35.9	22.6	7.5
Progression Factor	1.00	1.00		1.00	1.00		1.07	1.40	1.00	0.77	0.10	0.00
Incremental Delay, d2	1.5	1.9		0.8	45.7		9.9	1.5	0.0	0.9	0.8	0.0
Delay (s)	69.0	68.2		59.4	112.7		80.4	36.7	11.9	28.5	3.1	0.0
Level of Service	E	E		E	F		F	D	B	C	A	A
Approach Delay (s/veh)		68.4			104.9			38.8			6.2	
Approach LOS		E			F			D			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	26.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.91		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	96.4%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	337	0	111	2	0	24	74	1093	2	11	1630	534
Future Volume (vph)	337	0	111	2	0	24	74	1093	2	11	1630	534
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	6.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95		1.00	0.95	1.00
Frt	1.00	0.85		1.00	0.85		1.00	1.00		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1752	1583		1770	1583		1770	3437		1770	3505	1583
Flt Permitted	0.95	1.00		0.83	1.00		0.95	1.00		0.08	1.00	1.00
Satd. Flow (perm)	1752	1583		1552	1583		1770	3437		149	3505	1583
Peak-hour factor, PHF	0.67	0.67	0.67	0.42	0.42	0.42	0.88	0.88	0.88	0.95	0.95	0.95
Adj. Flow (vph)	503	0	166	5	0	57	84	1242	2	12	1716	562
RTOR Reduction (vph)	0	117	0	0	55	0	0	0	0	0	0	149
Lane Group Flow (vph)	503	49	0	5	2	0	84	1244	0	12	1716	413
Heavy Vehicles (%)	3%	2%	2%	2%	2%	2%	2%	5%	2%	2%	3%	2%
Turn Type	Prot	NA		pm+pt	NA		Prot	NA		pm+pt	NA	pm+ov
Protected Phases	7	4		3	8		5	2		1	6	7
Permitted Phases				8						6		6
Actuated Green, G (s)	47.0	44.7		11.9	4.8		12.6	70.2		65.6	61.6	108.6
Effective Green, g (s)	47.0	44.7		11.9	4.8		12.6	70.2		65.6	61.6	108.6
Actuated g/C Ratio	0.31	0.30		0.08	0.03		0.08	0.47		0.44	0.41	0.72
Clearance Time (s)	6.0	6.0		6.0	6.0		6.0	6.0		6.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	548	471		133	50		148	1608		108	1439	1209
v/s Ratio Prot	c0.29	c0.03		0.00	0.00		c0.05	c0.36		0.00	c0.49	0.11
v/s Ratio Perm				0.00						0.05		0.15
v/c Ratio	0.92	0.11		0.04	0.04		0.57	0.77		0.11	1.19	0.34
Uniform Delay, d1	49.6	38.2		64.5	70.4		66.1	33.3		52.8	44.2	7.6
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00		0.50	0.70	3.51
Incremental Delay, d2	20.3	0.1		0.1	0.3		4.9	3.7		0.2	90.0	0.1
Delay (s)	69.9	38.3		64.6	70.7		71.0	37.0		26.8	120.8	26.7
Level of Service	E	D		E	E		E	D		C	F	C
Approach Delay (s/veh)		62.1			70.2			39.1			97.2	
Approach LOS		E			E			D			F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	73.7	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.99		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	92.9%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	7.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	42	171	60	42	0	0
Future Vol, veh/h	42	171	60	42	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	80	80	91	91	94	94
Heavy Vehicles, %	2	7	3	7	2	3
Mvmt Flow	53	214	66	46	0	0

Major/Minor	Minor1		Major1	
Conflicting Flow All	89	89	0	0
Stage 1	89	-	-	-
Stage 2	0	-	-	-
Critical Hdwy	6.42	6.27	-	-
Critical Hdwy Stg 1	5.42	-	-	-
Critical Hdwy Stg 2	-	-	-	-
Follow-up Hdwy	3.518	3.363	-	-
Pot Cap-1 Maneuver	912	955	-	-
Stage 1	934	-	-	-
Stage 2	-	-	-	-
Platoon blocked, %			-	-
Mov Cap-1 Maneuver	912	955	-	-
Mov Cap-2 Maneuver	853	-	-	-
Stage 1	934	-	-	-
Stage 2	-	-	-	-

Approach	WB	NB
HCM Ctrl Dly, s/v	10.4	0
HCM LOS	B	

Minor Lane/Major Mvmt	NBT	NBR	WBLn1
Capacity (veh/h)	-	-	933
HCM Lane V/C Ratio	-	-	0.285
HCM Ctrl Dly (s/v)	-	-	10.4
HCM Lane LOS	-	-	B
HCM 95th %tile Q (veh)	-	-	1.2

Intersection	
Int Delay, s/veh	1.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	20	9	93	214	0	44
Future Vol, veh/h	20	9	93	214	0	44
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	150	150	-
Veh in Median Storage, #	1	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	50	50	89	89	96	96
Heavy Vehicles, %	2	2	3	2	20	2
Mvmt Flow	40	18	104	240	0	46

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	150	104	0	0	344	0
Stage 1	104	-	-	-	-	-
Stage 2	46	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.3	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.38	-
Pot Cap-1 Maneuver	842	951	-	-	1121	-
Stage 1	920	-	-	-	-	-
Stage 2	976	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	842	951	-	-	1121	-
Mov Cap-2 Maneuver	814	-	-	-	-	-
Stage 1	920	-	-	-	-	-
Stage 2	976	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	9.5	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	852	1121	-
HCM Lane V/C Ratio	-	-	0.068	-	-
HCM Ctrl Dly (s/v)	-	-	9.5	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q (veh)	-	-	0.2	0	-

Intersection	
Int Delay, s/veh	9.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	83	57	74	724	1092	72
Future Vol, veh/h	83	57	74	724	1092	72
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	150	-	-	150
Veh in Median Storage, #	2	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	72	72	86	86	89	89
Heavy Vehicles, %	3	5	4	4	2	4
Mvmt Flow	115	79	86	842	1227	81

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2241	1227	1308	0	-	0
Stage 1	1227	-	-	-	-	-
Stage 2	1014	-	-	-	-	-
Critical Hdwy	6.43	6.25	4.14	-	-	-
Critical Hdwy Stg 1	5.43	-	-	-	-	-
Critical Hdwy Stg 2	5.43	-	-	-	-	-
Follow-up Hdwy	3.527	3.345	2.236	-	-	-
Pot Cap-1 Maneuver	~ 46	214	523	-	-	-
Stage 1	276	-	-	-	-	-
Stage 2	349	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 38	214	523	-	-	-
Mov Cap-2 Maneuver	184	-	-	-	-	-
Stage 1	231	-	-	-	-	-
Stage 2	349	-	-	-	-	-

Approach	EB	NB	SB
HCM Ctrl Dly, s/v	113.8	1.2	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	523	-	195	-	-
HCM Lane V/C Ratio	0.165	-	0.997	-	-
HCM Ctrl Dly (s/v)	13.2	-	113.8	-	-
HCM Lane LOS	B	-	F	-	-
HCM 95th %tile Q (veh)	0.6	-	8.5	-	-

Notes	
~: Volume exceeds capacity	$: Delay exceeds 300s
+: Computation Not Defined	*: All major volume in platoon

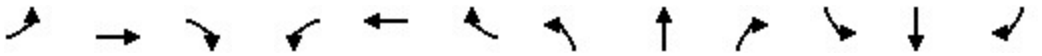
Intersection	
Int Delay, s/veh	4.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	271	108	190	451	18	48
Future Vol, veh/h	271	108	190	451	18	48
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	0	200	-
Veh in Median Storage, #	2	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	295	117	207	490	20	52

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	299	207	0	0	697	0
Stage 1	207	-	-	-	-	-
Stage 2	92	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	692	833	-	-	899	-
Stage 1	828	-	-	-	-	-
Stage 2	932	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	677	833	-	-	899	-
Mov Cap-2 Maneuver	757	-	-	-	-	-
Stage 1	828	-	-	-	-	-
Stage 2	911	-	-	-	-	-

Approach	WB	NB	SB
HCM Ctrl Dly, s/v	12	0	2.5
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	757	833	899	-
HCM Lane V/C Ratio	-	-	0.389	0.141	0.022	-
HCM Ctrl Dly (s/v)	-	-	12.8	10	9.1	-
HCM Lane LOS	-	-	B	B	A	-
HCM 95th %tile Q (veh)	-	-	1.9	0.5	0.1	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	243	5	26	36	5	50	35	1769	33	46	2511	5
Future Volume (vph)	243	5	26	36	5	50	35	1769	33	46	2511	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0		6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	0.87		1.00	0.86		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1626		1770	1607		1770	3539	1583	1770	3539	1583
Flt Permitted	0.72	1.00		0.74	1.00		0.04	1.00	1.00	0.04	1.00	1.00
Satd. Flow (perm)	1338	1626		1370	1607		78	3539	1583	78	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	264	5	28	39	5	54	38	1923	36	50	2729	5
RTOR Reduction (vph)	0	25	0	0	52	0	0	0	10	0	0	1
Lane Group Flow (vph)	264	8	0	39	7	0	38	1923	26	50	2729	4
Turn Type	pm+pt	NA		pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA	pm+ov
Protected Phases	7	4		3	8		5	2	3	1	6	7
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	31.1	13.6		17.2	5.7		100.9	95.6	107.1	100.9	95.6	115.0
Effective Green, g (s)	31.1	13.6		17.2	5.7		100.9	95.6	107.1	100.9	95.6	115.0
Actuated g/C Ratio	0.21	0.09		0.11	0.04		0.67	0.64	0.71	0.67	0.64	0.77
Clearance Time (s)	6.0	6.0		6.0	6.0		6.0	6.0	6.0	6.0	6.0	6.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	333	147		187	61		112	2255	1193	112	2255	1276
v/s Ratio Prot	c0.10	0.00		0.02	0.00		0.01	0.54	0.00	c0.02	c0.77	0.00
v/s Ratio Perm	c0.06			0.01			0.22		0.01	0.28		0.00
v/c Ratio	0.79	0.05		0.21	0.12		0.34	0.85	0.02	0.45	1.21	0.00
Uniform Delay, d1	54.8	62.3		60.5	69.7		67.4	21.6	6.2	54.1	27.2	4.1
Progression Factor	1.00	1.00		1.00	1.00		1.04	0.68	0.10	0.97	1.07	1.00
Incremental Delay, d2	12.2	0.1		0.6	0.8		1.5	3.6	0.0	0.8	95.9	0.0
Delay (s)	67.0	62.5		61.1	70.6		71.6	18.3	0.6	53.2	124.9	4.1
Level of Service	E	E		E	E		E	B	A	D	F	A
Approach Delay (s/veh)		66.5			66.8			19.0			123.4	
Approach LOS		E			E			B			F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	78.8	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.13		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	99.5%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Intersection	
Int Delay, s/veh	1.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	274	5	199	40	0
Future Vol, veh/h	0	274	5	199	40	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	298	5	216	43	0

Major/Minor	Major2		Minor1	
Conflicting Flow All	0	0	226	-
Stage 1	-	-	0	-
Stage 2	-	-	226	-
Critical Hdwy	4.12	-	6.42	-
Critical Hdwy Stg 1	-	-	-	-
Critical Hdwy Stg 2	-	-	5.42	-
Follow-up Hdwy	2.218	-	3.518	-
Pot Cap-1 Maneuver	-	-	762	0
Stage 1	-	-	-	0
Stage 2	-	-	812	0
Platoon blocked, %		-		
Mov Cap-1 Maneuver	-	-	762	-
Mov Cap-2 Maneuver	-	-	762	-
Stage 1	-	-	-	-
Stage 2	-	-	812	-

Approach	WB	NB
HCM Ctrl Dly, s/v		10
HCM LOS		B

Minor Lane/Major Mvmt	NBLn1	WBL	WBT
Capacity (veh/h)	762	-	-
HCM Lane V/C Ratio	0.057	-	-
HCM Ctrl Dly (s/v)	10	-	-
HCM Lane LOS	B	-	-
HCM 95th %tile Q (veh)	0.2	-	-



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	118	201	759	57	584	1031
Future Volume (vph)	118	201	759	57	584	1031
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	6.0	6.0	6.0	6.0	6.0	6.0
Lane Util. Factor	1.00	1.00	0.95	1.00	0.97	1.00
Frt	1.00	0.85	1.00	0.85	1.00	1.00
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1770	1583	3539	1583	3433	1863
Flt Permitted	0.95	1.00	1.00	1.00	0.26	1.00
Satd. Flow (perm)	1770	1583	3539	1583	948	1863
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	128	218	825	62	635	1121
RTOR Reduction (vph)	0	39	0	24	0	0
Lane Group Flow (vph)	128	179	825	38	635	1121
Turn Type	Prot	pt+ov	NA	pm+ov	pm+pt	NA
Protected Phases	8	1 8	2	8	1	6
Permitted Phases				2	6	
Actuated Green, G (s)	11.1	35.1	32.9	44.0	56.9	56.9
Effective Green, g (s)	11.1	35.1	32.9	44.0	56.9	56.9
Actuated g/C Ratio	0.14	0.44	0.41	0.55	0.71	0.71
Clearance Time (s)	6.0		6.0	6.0	6.0	6.0
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	245	694	1455	989	1233	1325
v/s Ratio Prot	c0.07	0.11	0.23	0.01	0.12	c0.60
v/s Ratio Perm				0.02	0.25	
v/c Ratio	0.52	0.26	0.57	0.04	0.52	0.85
Uniform Delay, d1	32.0	14.2	18.1	8.3	12.6	8.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.0	0.2	1.6	0.0	0.4	6.8
Delay (s)	34.0	14.4	19.7	8.3	13.0	15.2
Level of Service	C	B	B	A	B	B
Approach Delay (s/veh)	21.7		18.9			14.4
Approach LOS	C		B			B

Intersection Summary			
HCM 2000 Control Delay (s/veh)	16.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	80.0	Sum of lost time (s)	18.0
Intersection Capacity Utilization	70.8%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Intersection	
Int Delay, s/veh	1.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	373	96	11	331	48	4
Future Vol, veh/h	373	96	11	331	48	4
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	405	104	12	360	52	4

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	509	0	841	457
Stage 1	-	-	-	-	457	-
Stage 2	-	-	-	-	384	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	1056	-	335	604
Stage 1	-	-	-	-	638	-
Stage 2	-	-	-	-	688	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1056	-	330	604
Mov Cap-2 Maneuver	-	-	-	-	330	-
Stage 1	-	-	-	-	638	-
Stage 2	-	-	-	-	678	-

Approach	EB	WB	NB
HCM Ctrl Dly, s/v	0	0.3	17.6
HCM LOS			C

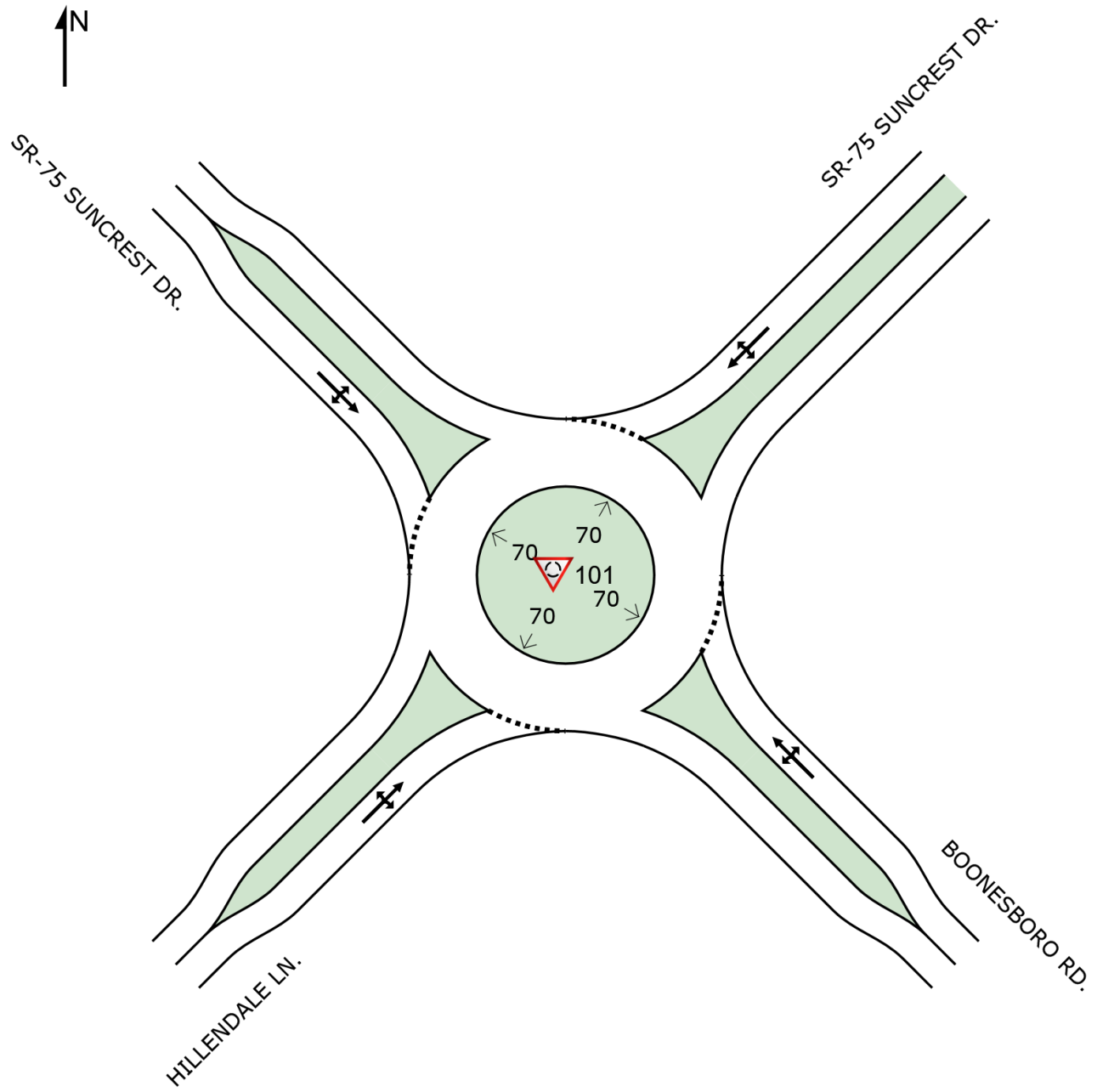
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	342	-	-	1056	-
HCM Lane V/C Ratio	0.165	-	-	0.011	-
HCM Ctrl Dly (s/v)	17.6	-	-	8.4	0
HCM Lane LOS	C	-	-	A	A
HCM 95th %tile Q (veh)	0.6	-	-	0	-

SITE LAYOUT

Site: 101 [HILLENDALE LN./BOONESBORO RD. 2050 PM PEAK (Site Folder: General)]

2050 PM PEAK
Site Category: (None)
Roundabout

Layout pictures are schematic functional drawings reflecting input data. They are not design drawings.



LANE SUMMARY

Site: 101 [HILLENDALE LN./BOONESBORO RD. 2050 PM PEAK (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

2050 PM PEAK
Site Category: (None)
Roundabout

Lane Use and Performance

	Demand Flows [Total veh/h	HV] %	Arrival Flows [Total veh/h	HV] %	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Aver. Delay sec	Level of Service	95% Back Of Queue [Veh	Dist] ft	Lane Config	Lane Length ft	Cap. Adj. %	Prob. Block. %
SouthEast: BOONESBORO RD.															
Lane 1[d]	392	2.0	392	2.0	491	0.798	100	33.8	LOS D	6.2	158.6	Full	1600	0.0	0.0
Approach	392	2.0	392	2.0		0.798		33.8	LOS D	6.2	158.6				
NorthEast: SR-75 SUNCREST DR.															
Lane 1[d]	1576	2.0	1576	2.0	1227	1.284	100	132.0	LOS F	162.3	4122.3	Full	1600	0.0	54.6
Approach	1576	2.0	1576	2.0		1.284		132.0	LOS F	162.3	4122.3				
NorthWest: SR-75 SUNCREST DR.															
Lane 1[d]	981	3.8	981	3.8	917	1.070	100	67.5	LOS F	53.5	1377.9	Full	1600	0.0	0.7
Approach	981	3.8	981	3.8		1.070		67.5	LOS F	53.5	1377.9				
SouthWest: HILLENDALE LN.															
Lane 1[d]	108	2.0	108	2.0	386	0.280	100	14.3	LOS B	1.0	26.4	Full	1600	0.0	0.0
Approach	108	2.0	108	2.0		0.280		14.3	LOS B	1.0	26.4				
All Vehicles	3057	2.6	3057	2.6		1.284		94.6	LOS F	162.3	4122.3				

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
Roundabout LOS Method: Same as Sign Control.
Lane LOS values are based on average delay and v/c ratio (degree of saturation) per lane.
LOS F will result if v/c > 1 irrespective of lane delay value (does not apply for approaches and intersection).
Intersection and Approach LOS values are based on average delay for all lanes (v/c not used as specified in HCM 6).
Roundabout Capacity Model: US HCM 6.
Delay Model: HCM Delay Formula (Stopline Delay: Geometric Delay is not included).
Queue Model: SIDRA queue estimation methods are used for Back of Queue and Queue at Start of Gap.
Gap-Acceptance Capacity Formula: Siegloch M1 implied by US HCM 6 Roundabout Capacity Model.
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.
Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

d Dominant lane on roundabout approach

Approach Lane Flows (veh/h)

SouthEast: BOONESBORO RD.

Mov. From SE To Exit:	L2 SW	T1 NW	R2 NE	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
Lane 1	13	79	300	392	2.0	491	0.798	100	NA	NA
Approach	13	79	300	392	2.0		0.798			

NorthEast: SR-75 SUNCREST DR.

Mov. From NE	L2	T1	R2	Total	%HV	Cap.	Deg. Satn	Lane Util.	Prob. SL Ov.	Ov. Lane

To Exit:	SE	SW	NW			veh/h	v/c	%	%	No.
Lane 1	344	85	1147	1576	2.0	1227	1.284	100	NA	NA
Approach	344	85	1147	1576	2.0		1.284			
NorthWest: SR-75 SUNCREST DR.										
Mov. From NW To Exit:	L2 NE	T1 SE	R2 SW	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
Lane 1	902	60	19	981	3.8	917	1.070	100	NA	NA
Approach	902	60	19	981	3.8		1.070			
SouthWest: HILLENDALE LN.										
Mov. From SW To Exit:	L2 NW	T1 NE	R2 SE	Total	%HV	Cap. veh/h	Deg. Satn v/c	Lane Util. %	Prob. SL Ov. %	Ov. Lane No.
Lane 1	2	96	10	108	2.0	386	0.280	100	NA	NA
Approach	2	96	10	108	2.0		0.280			

	Total	%HV	Deg.Satn (v/c)
All Vehicles	3057	2.6	1.284

Arrival Flows used in performance calculations are adjusted to include any Initial Queued Demand and Upstream Capacity Constraint effects.

Merge Analysis

	Exit Lane Number	Short Lane Length ft	Percent Opng in Lane %	Opposing Flow Rate veh/h	Opposing Flow Rate pcu/h	Critical Gap sec	Follow-up Headway sec	Lane Flow Rate veh/h	Capacity veh/h	Deg. Satn v/c	Min. Delay sec	Merge Delay sec
There are no Exit Short Lanes for Merge Analysis at this Site.												

Variable Demand Analysis

	Initial Queued Demand veh	Residual Queued Demand veh	Time for Residual Demand to Clear sec	Duration of Oversatn sec
SouthEast: BOONESBORO RD.				
Lane 1	0.0	0.0	0.0	0.0
NorthEast: SR-75 SUNCREST DR.				
Lane 1	0.0	87.2	256.0	NA
NorthWest: SR-75 SUNCREST DR.				
Lane 1	0.0	16.1	63.1	NA
SouthWest: HILLENDALE LN.				
Lane 1	0.0	0.0	0.0	0.0

LEVEL OF SERVICE

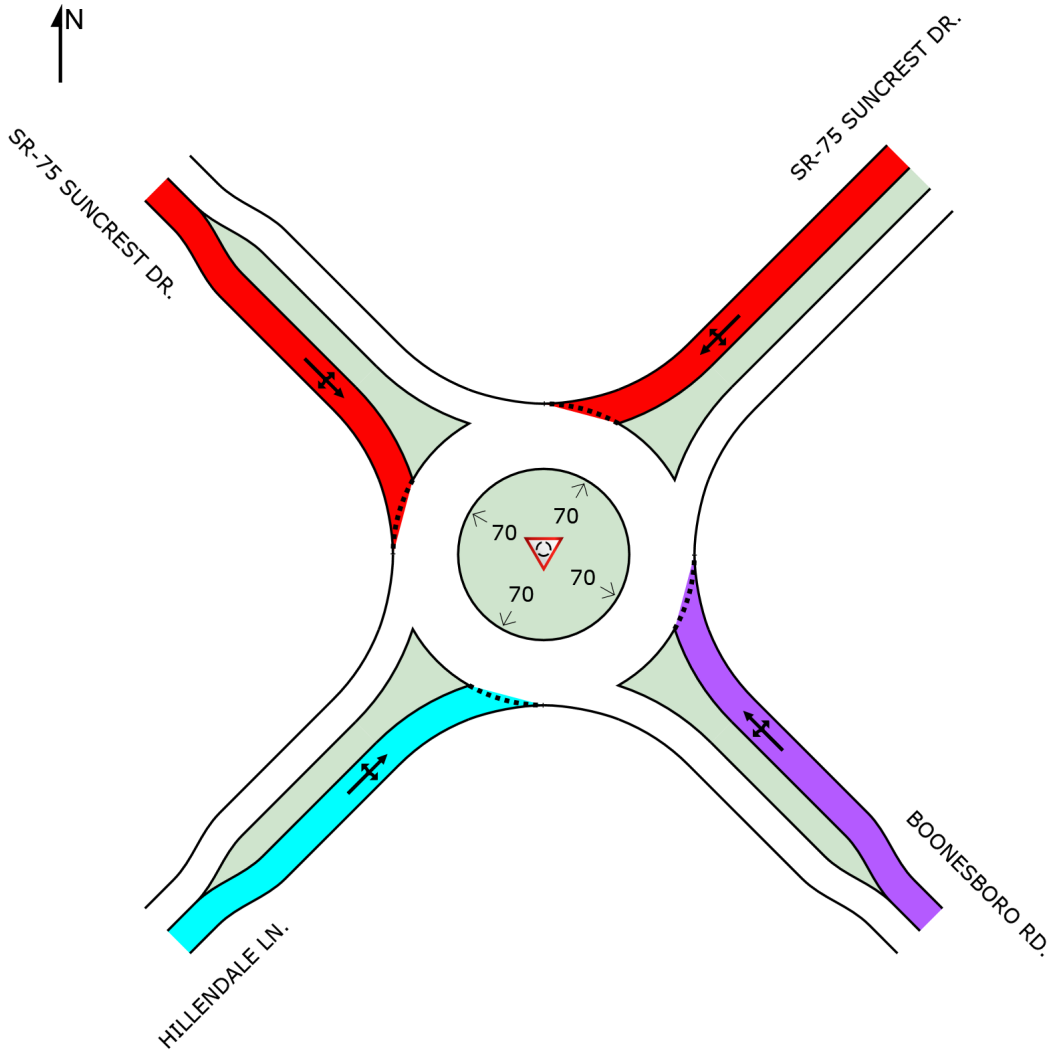
Lane Level of Service

Site: 101 [HILLENDALE LN./BOONESBORO RD. 2050 PM PEAK (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

2050 PM PEAK
Site Category: (None)
Roundabout

	Approaches				Intersection
	Southeast	Northeast	Northwest	Southwest	
LOS	D	F	F	B	F



Colour code based on Level of Service

LOS A | LOS B | LOS C | LOS D | LOS E | LOS F

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Roundabout Level of Service Method: Same as Sign Control
Delay Model: HCM Delay Formula (Stopline Delay: Geometric Delay is not included).

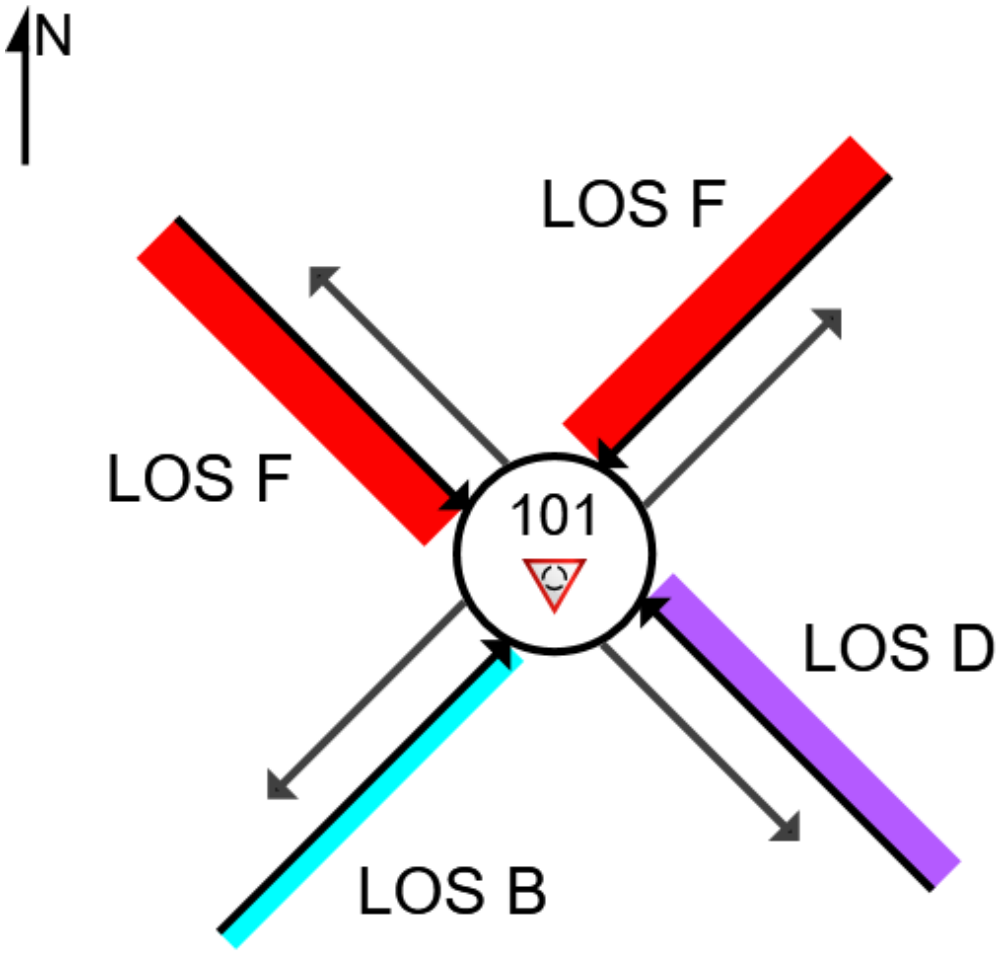
LEVEL OF SERVICE

Approach Level of Service

Site: 101 [HILLENDALE LN./BOONESBORO RD. 2050 PM PEAK (Site Folder: General)]

Output produced by SIDRA INTERSECTION Version: 9.1.3.210

2050 PM PEAK
Site Category: (None)
Roundabout



Colour code based on Level of Service

LOS A	LOS B	LOS C	LOS D	LOS E	LOS F

Site Level of Service (LOS) Method: Delay & v/c (HCM 6). Site LOS Method is specified in the Parameter Settings dialog (Options tab).
LOS F will result if v/c > 1 irrespective of movement delay value (does not apply for approaches and intersection).
Roundabout Level of Service Method: Same as Sign Control
Delay Model: HCM Delay Formula (Stopline Delay: Geometric Delay is not included).

APPENDIX D. PUBLIC SURVEY SUMMARY & PUBLIC MEETINGS

TDOT Johnson City Public Survey Results

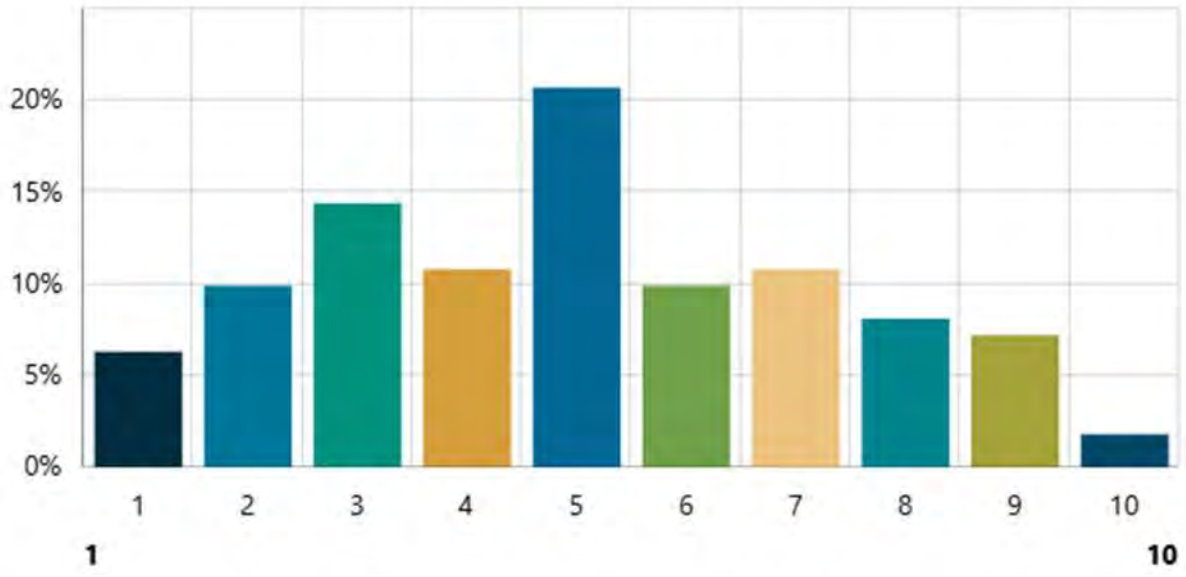
Performance Summary

- **454 Contributions**
- 1,779 Views
- 1,264 Visits
- 1,068 Visitors
- 227 Contributors

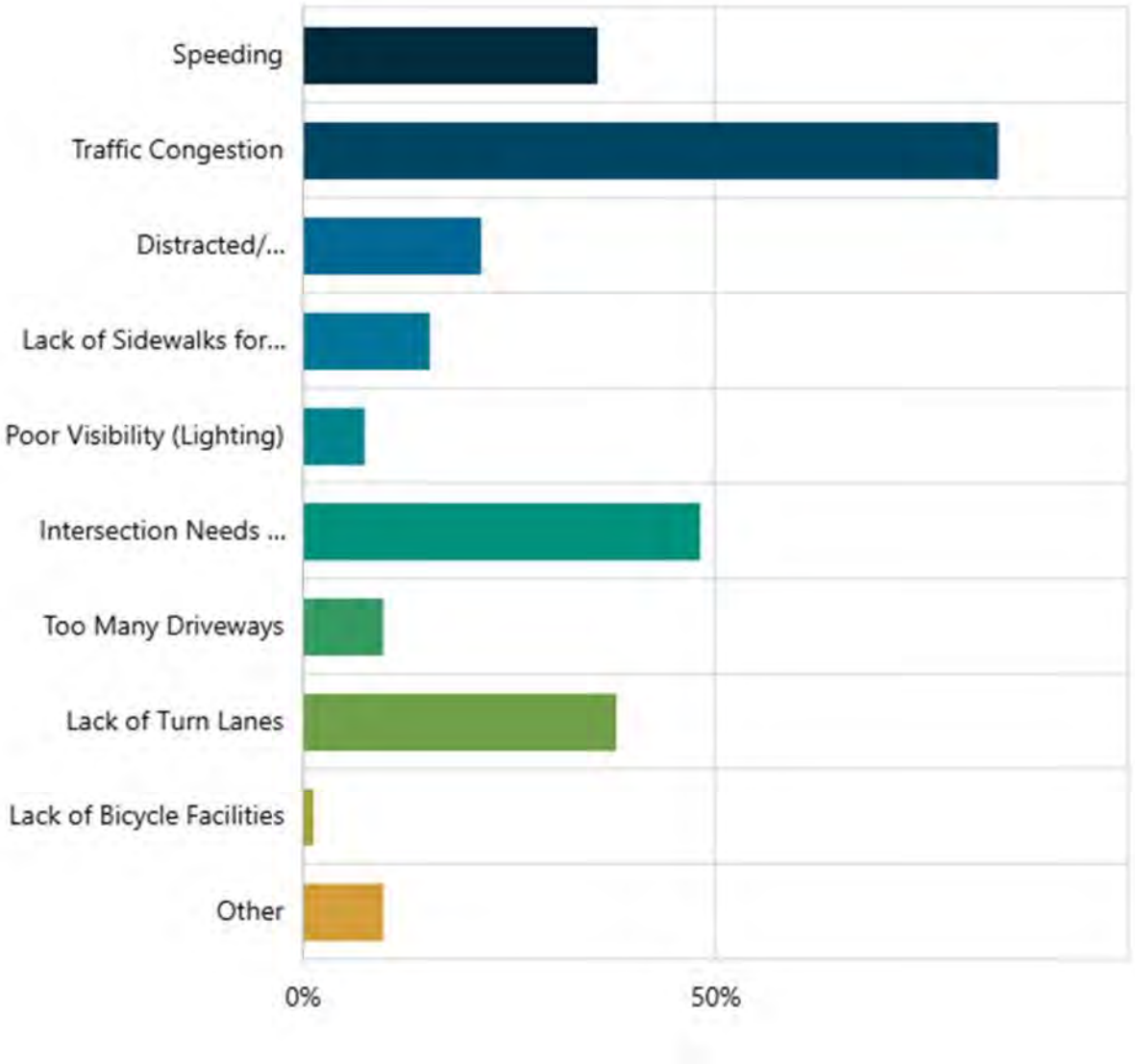
Quick Questions Section

On a scale from 1-10 (with 1 being very unsafe and 10 being very safe), how safe do you feel traveling along SR 75 (Suncrest Drive)

Average Safety Rating of 4.99



What are your top three (3) traffic and safety concerns along SR 75 (Suncrest Drive)?



Top 3 Traffic and Safety Concerns:

1. *Traffic Congestion (149)*
2. *Intersection Needs Improvement (Sight Distance or Difficult to Turn) (85)*
3. *Lack of Turn Lanes (67)*

What transportation-related improvements would make the corridor better?

1. **Slow development** to keep up with infrastructure/proactive infrastructure
2. Increased **traffic lights**
    a. *Traffic lights at Sam Jenkins and Hwy 75, fossil site, Shadeen Road and Gray Station*
3. Speed limit and traffic **enforcement**
4. Increased **lighting**
5. **Sidewalks** for pedestrians
6. **More lanes** – at least four with a turning lane

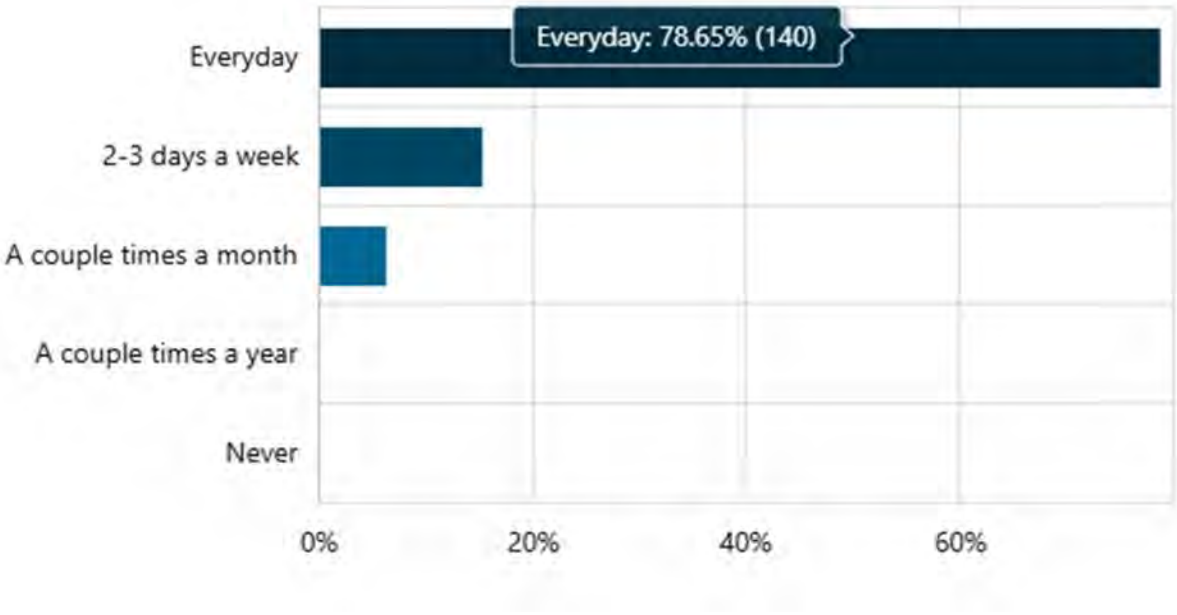
Using one word, how would you describe the corridor today?



Using one word, how would you describe the ideal future of the corridor?

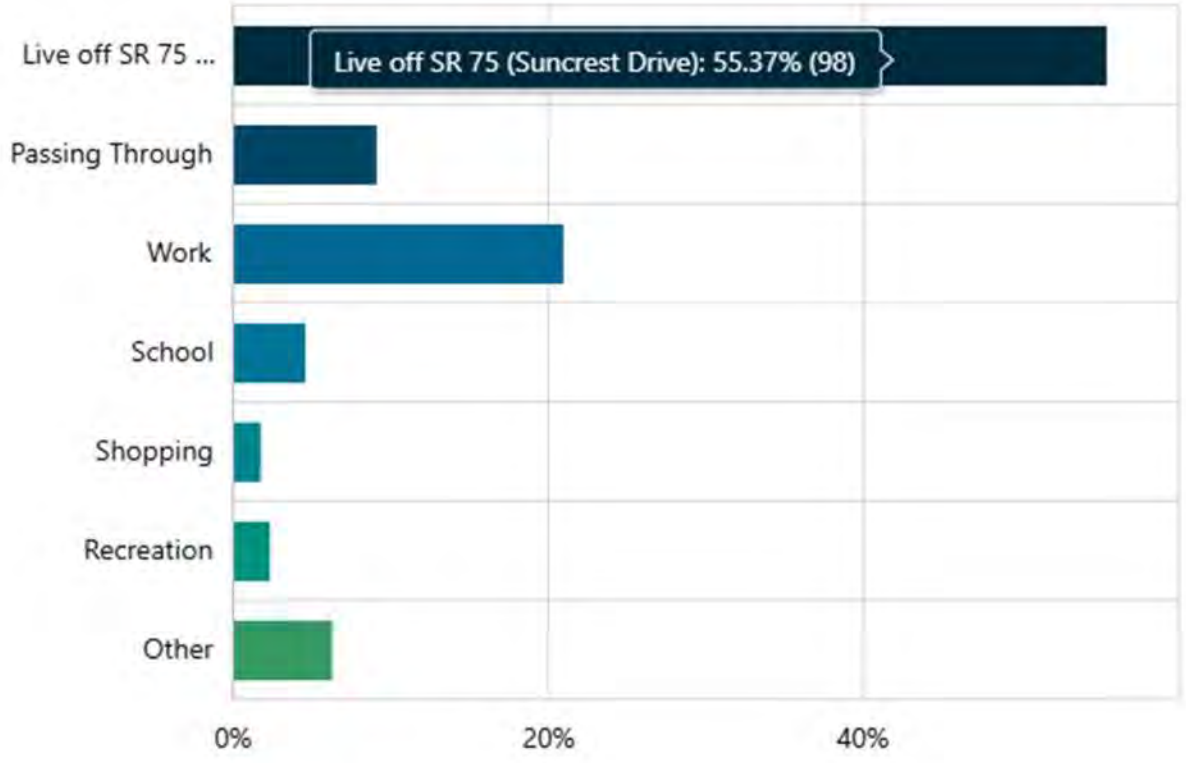


How often do you travel the corridor?



*Nearly 79% of respondents **travel the corridor daily**.*

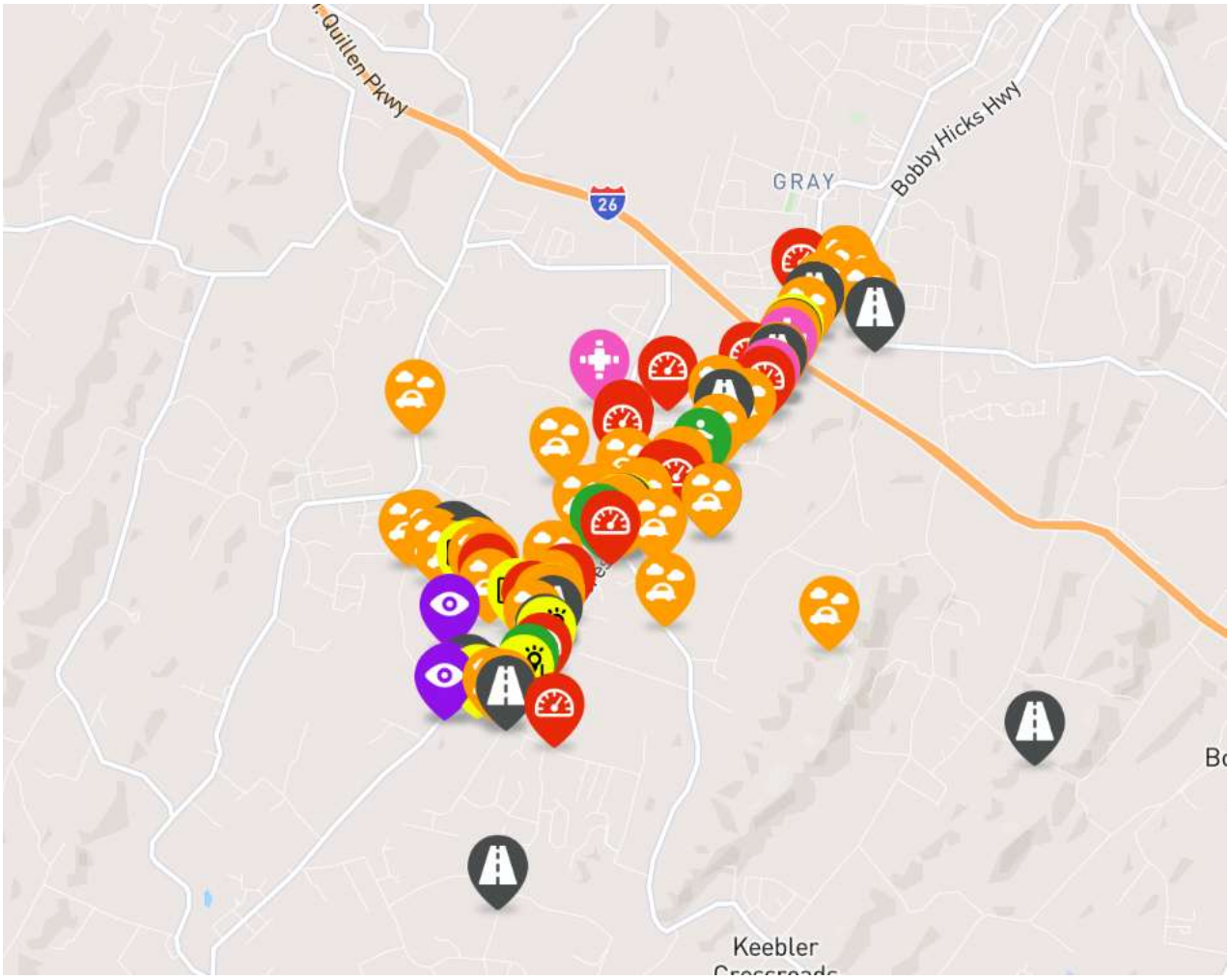
What is your main purpose for traveling along the corridor?



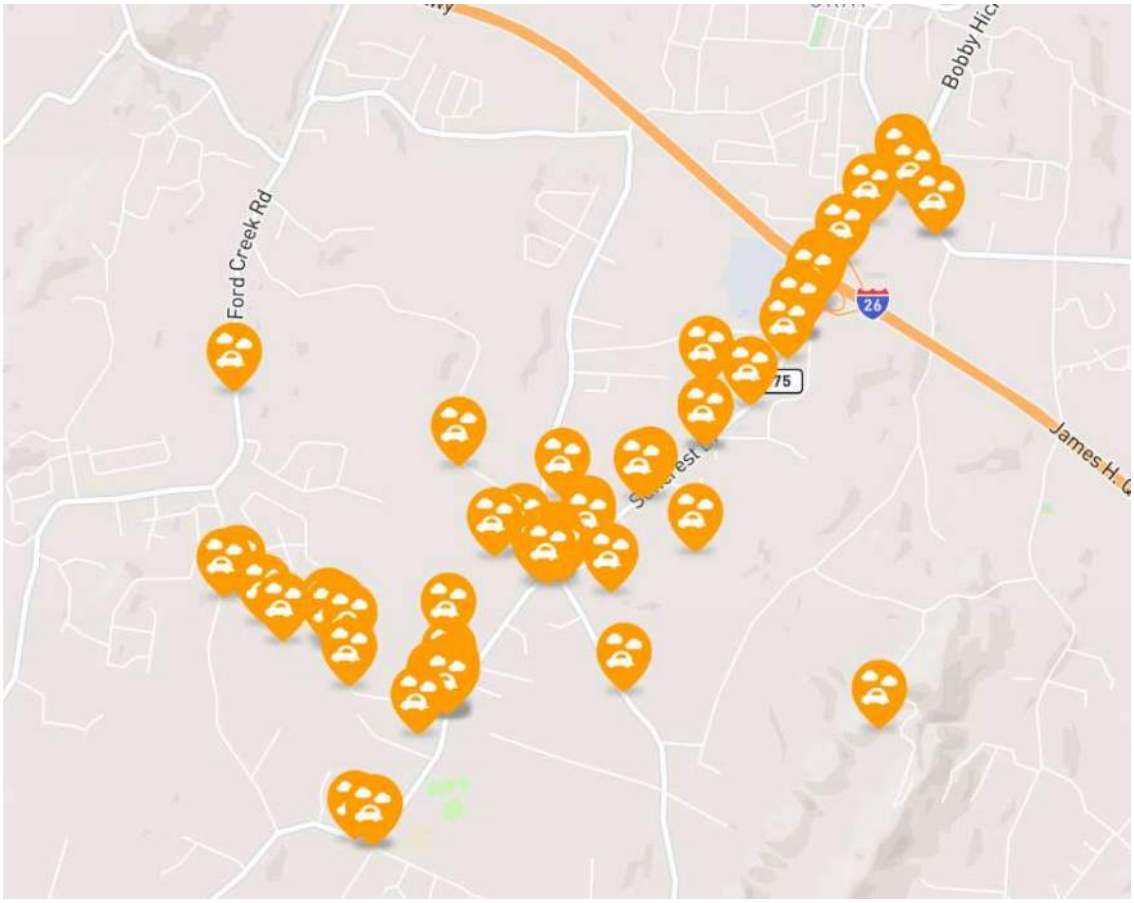
*55% of respondents travel the corridor because **they live off SR 75.***

Map Your Concerns Section

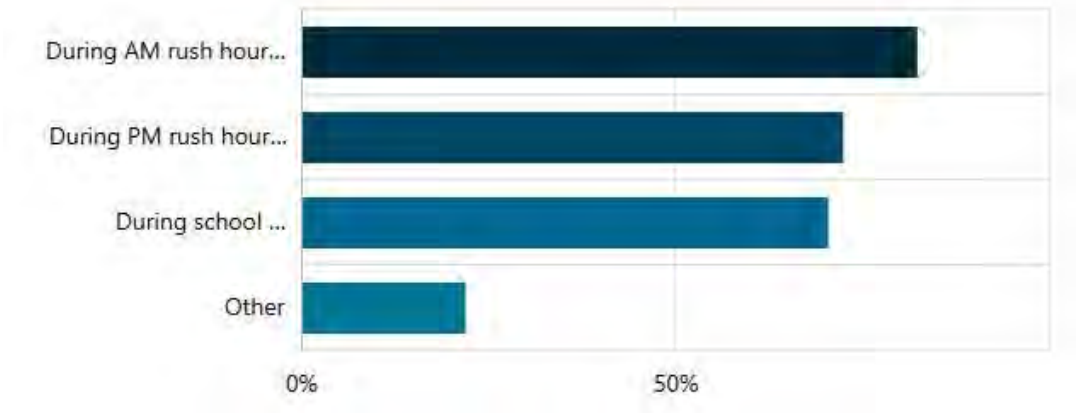
Map Post Summary



Map of Traffic Congestion

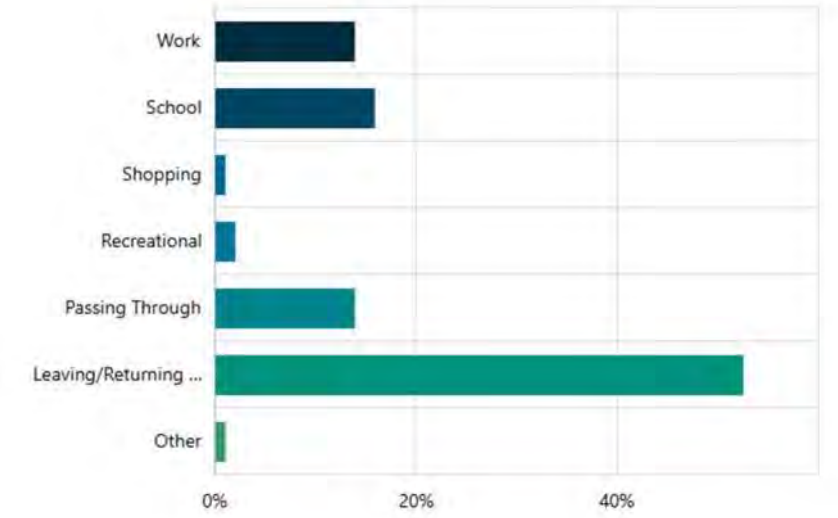


At what time do you regularly experience congestion?



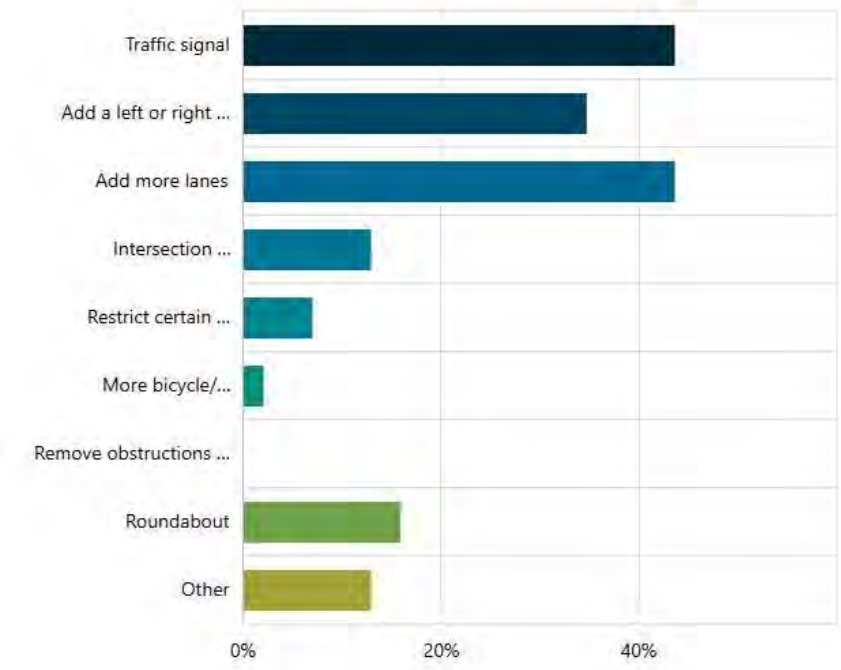
82%** of respondents regularly experience congestion during **AM rush hour**; **72%** experience congestion during **PM rush hour**; and **70%** experience congestion during **school pickup and drop-off.

What is the main purpose of your trip when you encounter congestion here?



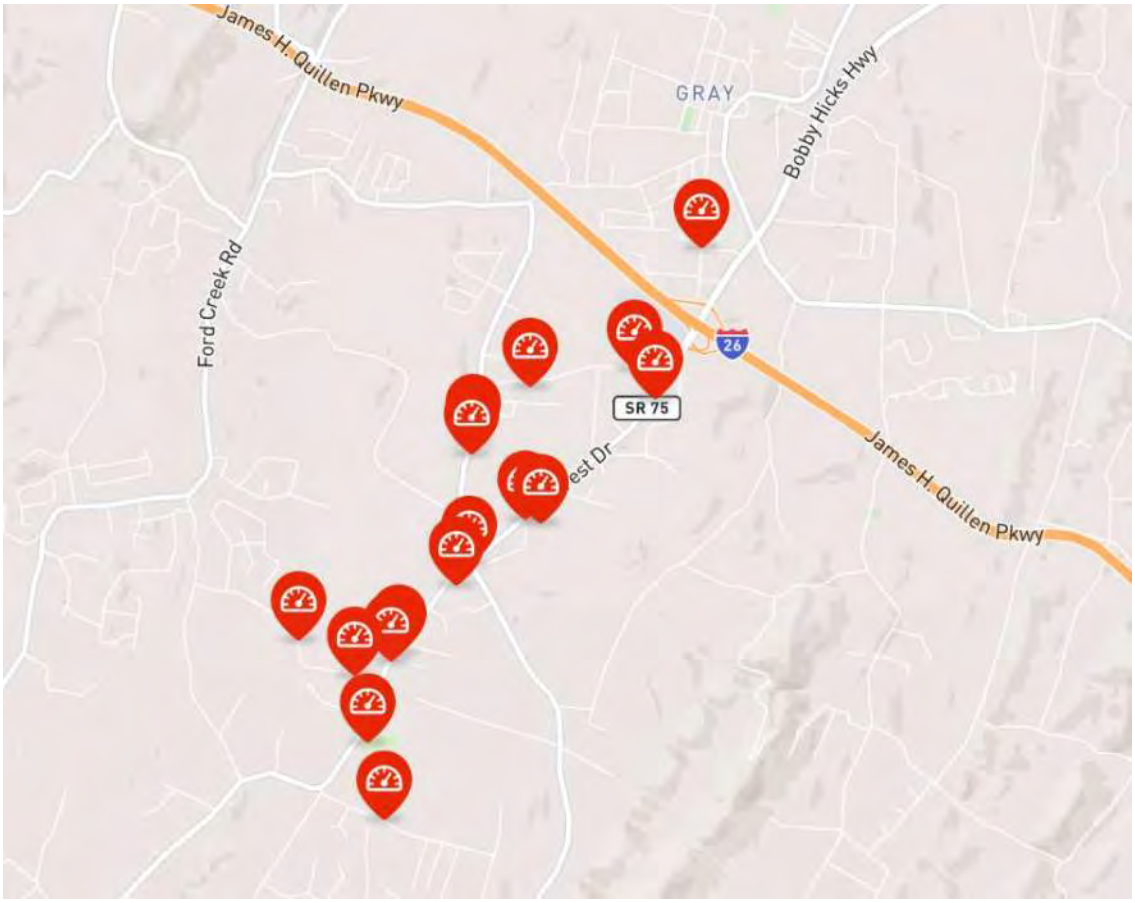
*52% of respondents said they encounter congestion **leaving/returning home.***

What do you think would help to relieve congestion here?

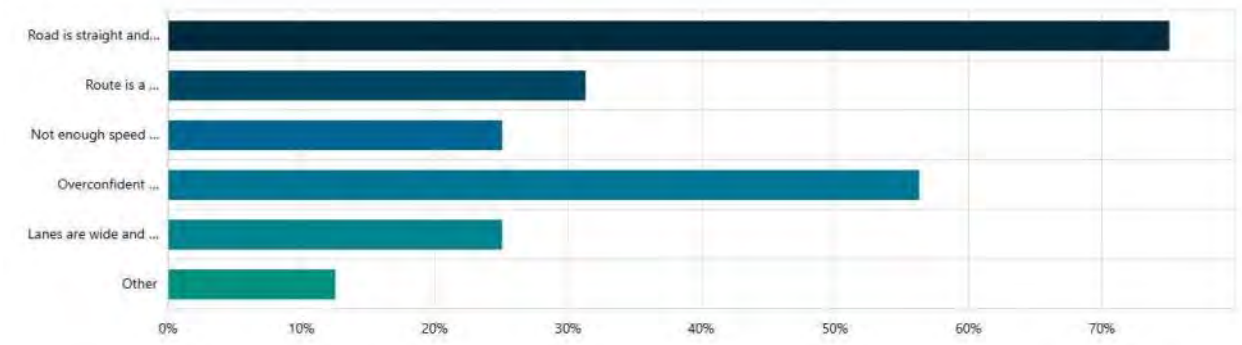


*44% of respondents said **a traffic signal** would relieve congestion, and another 44% said **adding more lanes** would relieve congestion.*

Map of Speeding Concerns



Why do you feel there is excessive speeding at this location?

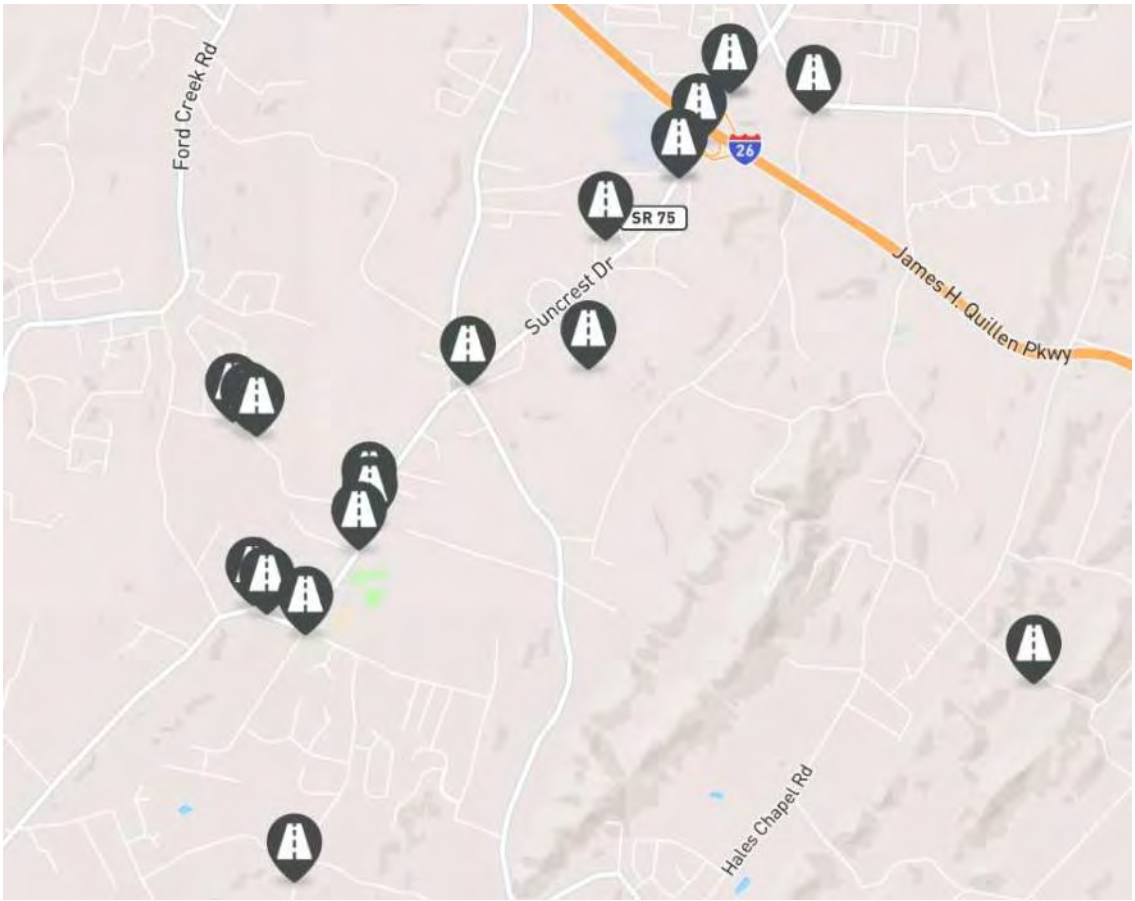


*75% of respondents said **excessive speeding** is caused by **the road being straight** and therefore promoting higher speeds.*

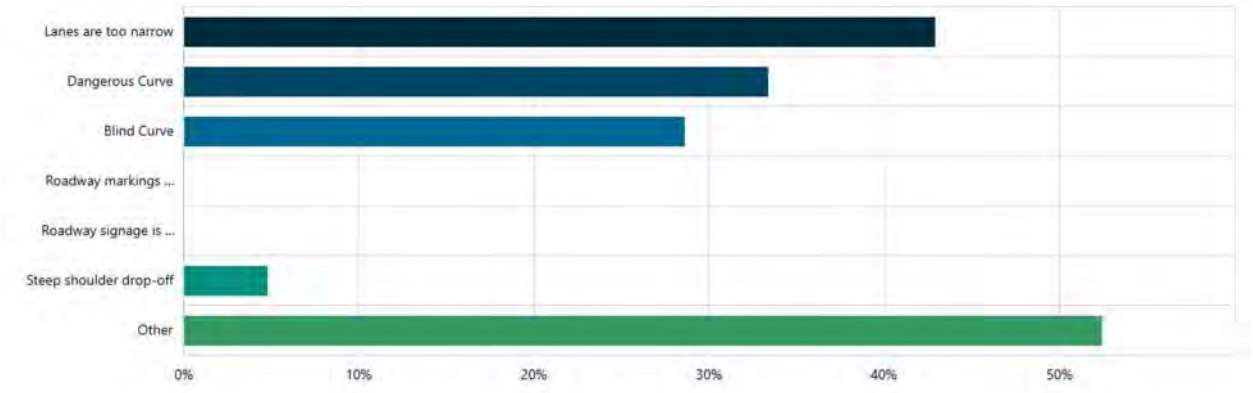
Additional Comments

- *"Between speeds, congestion, development and DGF Market more bad auto accidents are bound to happen either side of DG and Shadden Rd. Infrastructure should have preceded development. At the rate of construction, you'll be playing catch up for some time."*
- *"Not patrolled often by law enforcement. Dean Archer Rd also high traffic volume with excessive speed. Speed limit on both Boonesboro and Dean Archer is 20 mph."*
- *"There are I believe two (maybe three) speed limit signs on this road, but they do not stand out enough. There either needs to be more signs or flashing lights should be added to the ones already in existence."*

Map of Roadway Concerns



What is the roadway concern in this location?

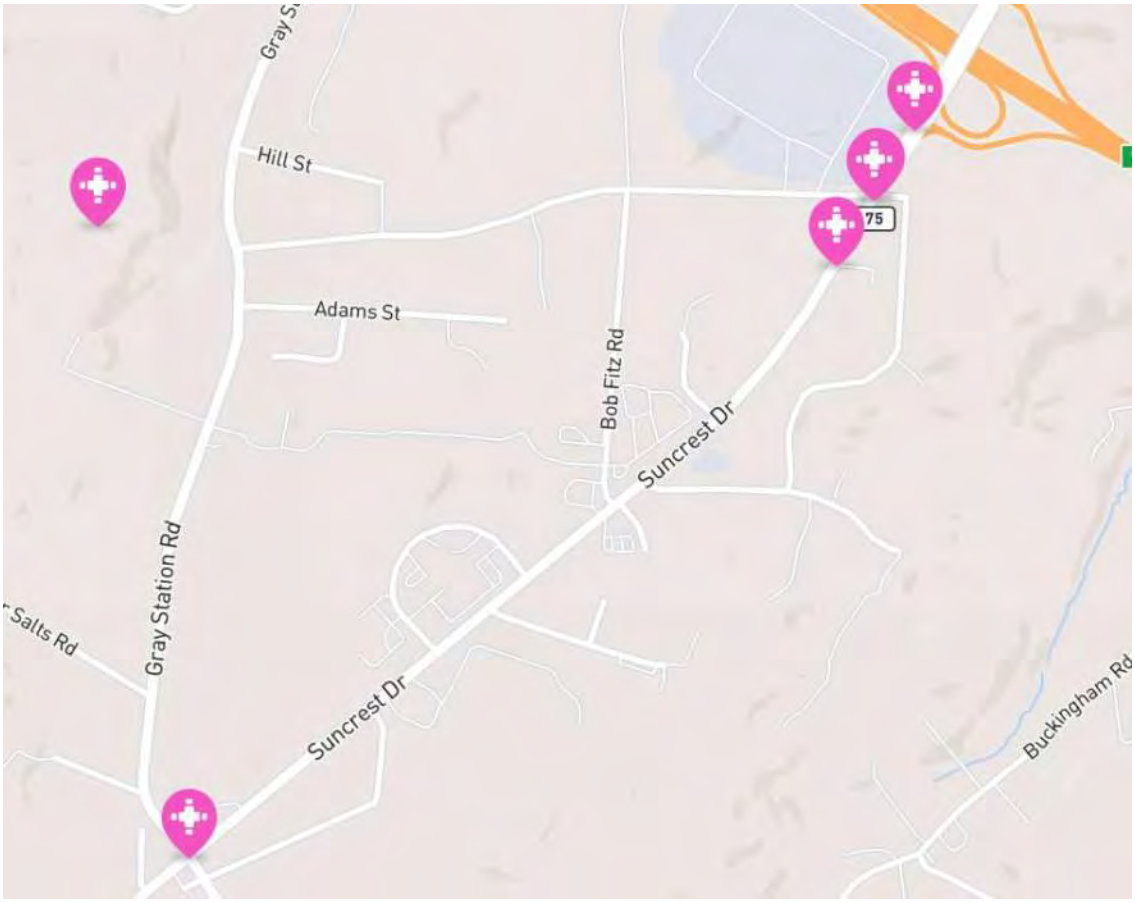


Most respondents have their own top concerns, while others believe ***the lanes are too narrow*** *and that* ***the curve is dangerous and blind.***

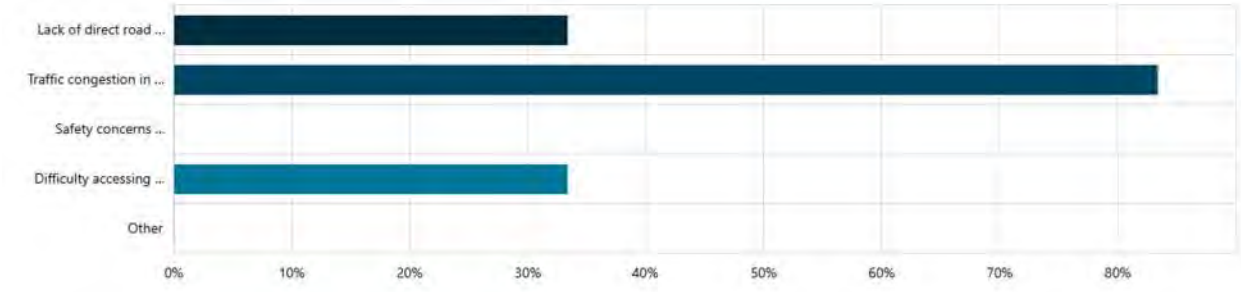
Additional Comments

- *"There is no turning lane in to McDonald's coming from Walgreens without crossing a double yellow line and that lane is for traffic turning left coming from the interstate. There have been several near misses there. If you stop in the regular lane people honk and almost rear end you. It's very dangerous there no matter where you are going. Coming out of there is another nightmare."*
- *"Whole intersection needs revamped. Congestion during school hours is terrible. Traffic coming from Sulphur Springs usually speeding and often straddling the yellow lines. Drivers coming off Hillendale Lane ignore stop sign completely."*

Map of Connectivity Concerns



What type of roadway connectivity issue do you experience at this location?

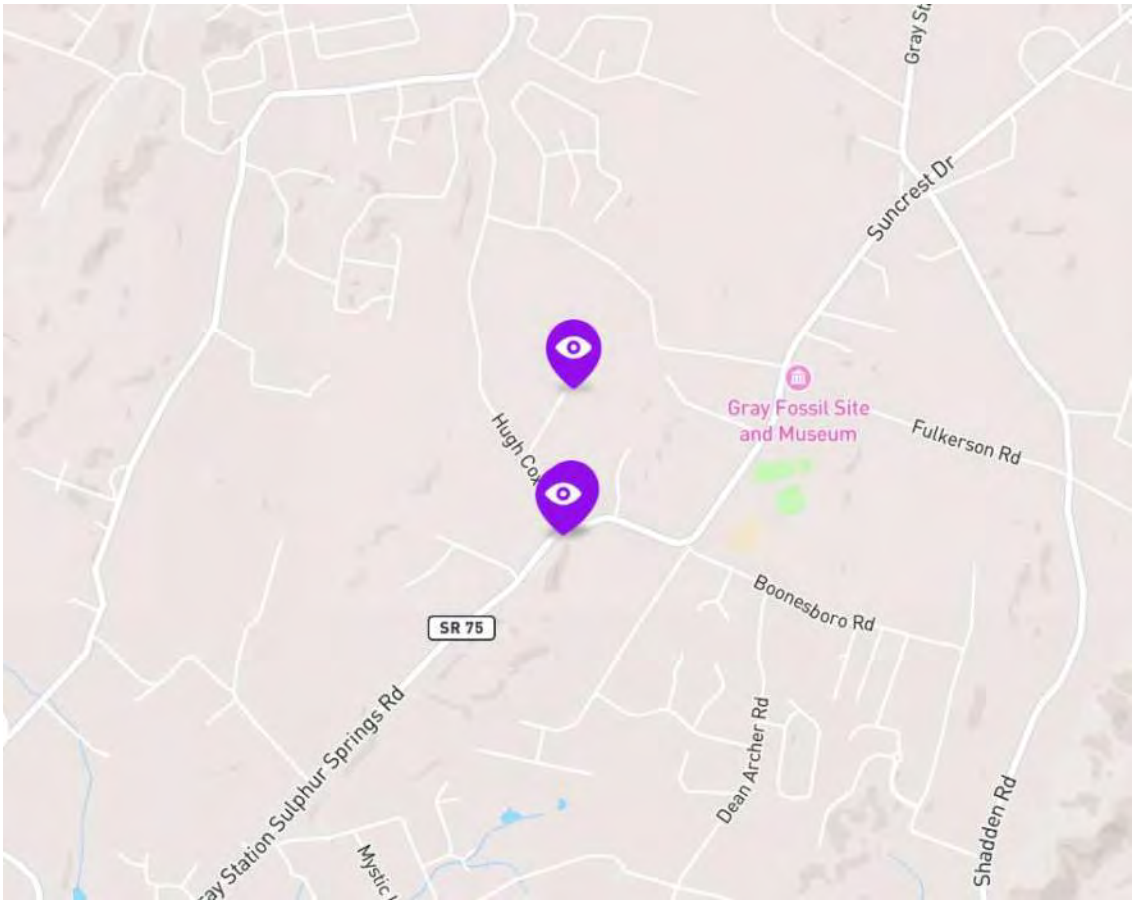


*83% of respondents experience **traffic congestion** in this area, followed by **a lack of direct road connections** and **difficulty accessing key destinations.***

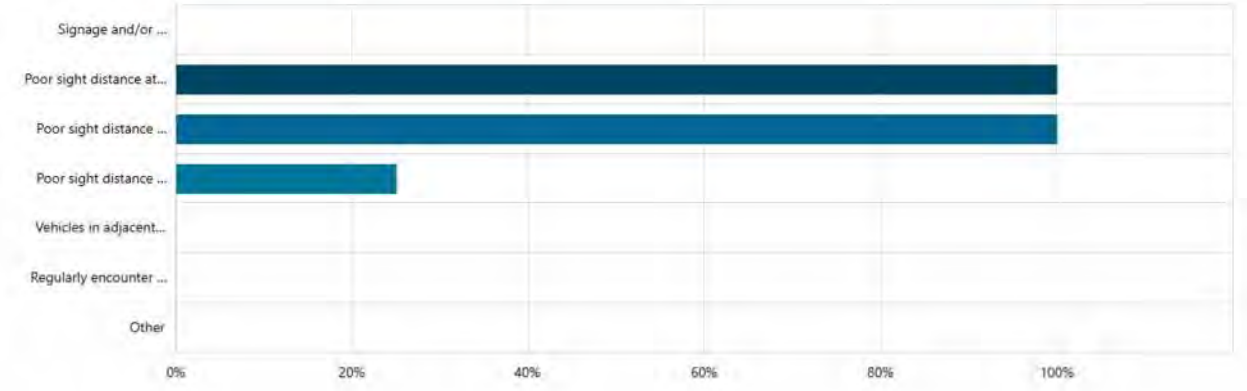
Additional Comments

- *“Nearly impossible to make a left turn out of Roscoe Fitz onto SR75. Suncrest Drive westbound traffic is approaching the intersection at a fast rate of speed since there is no stoplight for that direction. The stoplight for the eastbound traffic on Suncrest causes traffic to back up, not allowing a clear left turn from Roscoe Fritz onto SR75.”*

Map of Visibility Concerns



What factors are contributing to the poor visibility at this location?

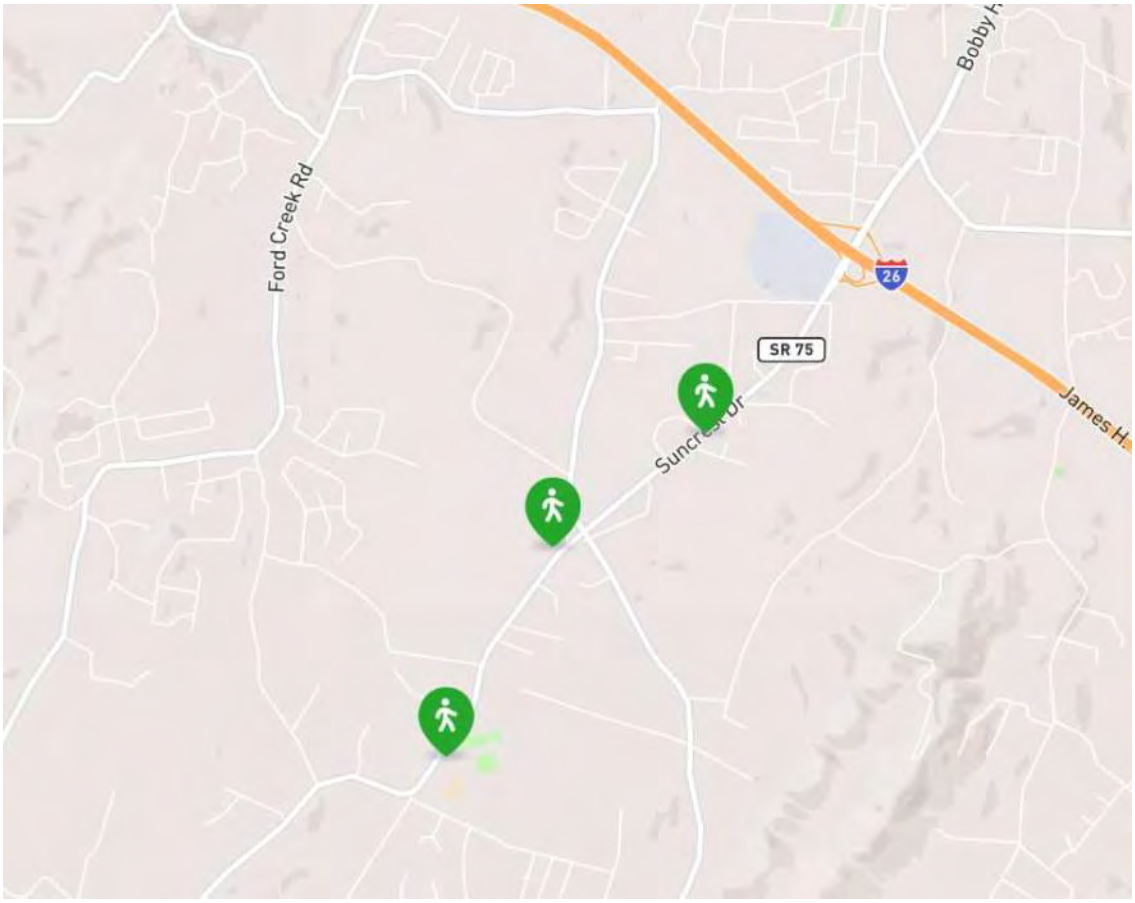


Poor sight distance at intersection due to hill blocking view *and* ***poor sight distance at intersection due to curve blocking view*** *led to respondents' main visibility issues.*

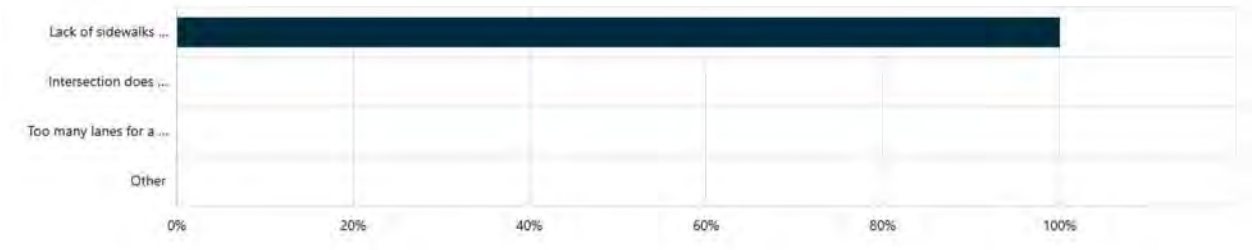
Additional Comments

- *"Speeding downhill makes it difficult to cross over to head north on 75."*
- *"Living on Hugh Cox Rd we often go to 75 at the time school is letting out due to the congestion on Sam Jenkins Rd. Traffic is speeding and very dangerous to cross over 75 to head north at that intersection."*

Map of Bike/Ped Concerns

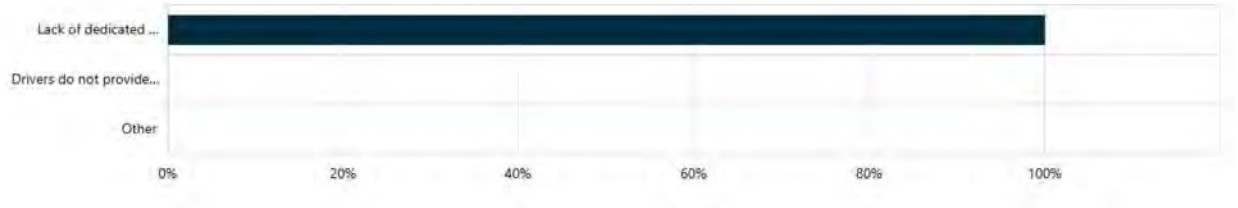


What is contributing to the unsafe pedestrian condition at this location?



*100% of respondents said a **lack of sidewalks** along the roadway contribute to unsafe pedestrian conditions.*

What is contributing to the unsafe bicycle conditions?

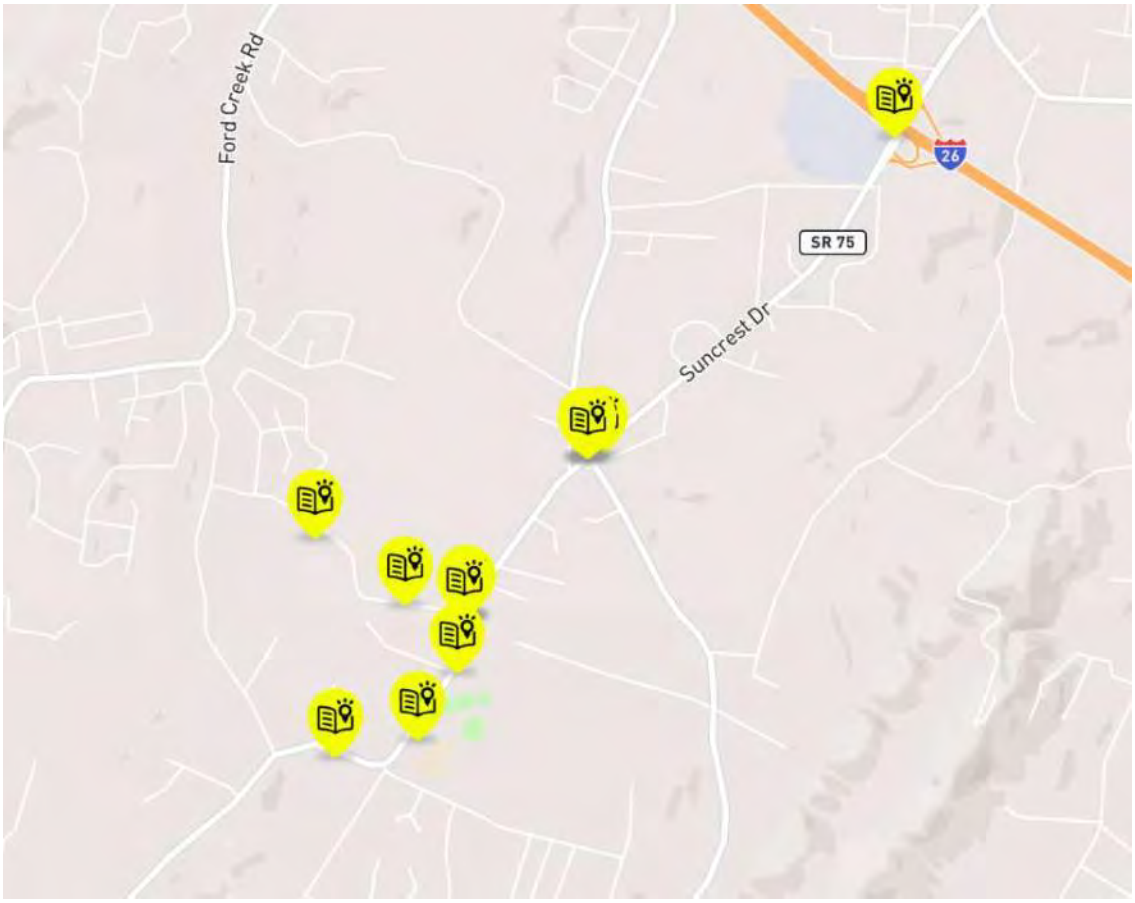


*100% of respondents said a **lack of dedicated bike lanes or multi-use paths** separated from the roadway contributes to unsafe bicycle conditions.*

Additional Comments

- *"There are children present, running walking to and from school. And if there were sidewalks, those who lived close could walk or ride bikes to school."*

Map of Ideas



Additional Comments

- *"With all the traffic that goes through this intersection, a traffic light should be considered."*
- *"Straighten, widen and/or divide this section of road. Vehicles frequently come through these curves on the wrong side of the dividing line, posing potential for fatal accidents."*
- *"I suggest that anywhere a new stop light is being considered on Hwy 75 that we actually utilize roundabouts if it's determined that there's a need for better traffic control."*
- *"There are no school zone ending signs at the high school."*

“Using a few words, describe what you would like the future SR 75 (Suncrest Drive) to look like” Section

The public has concerns pertaining to...



The public would like to see...

- Extended/increased lanes and turn lanes
- Slow development
- More traffic lights
- Increased police enforcement
- Roadway safety
- Pedestrian/bike safety
- Less traffic
- Increase roadway lighting

SR 75 CORRIDOR STUDY

PUBLIC MEETING #1

MAY 8, 2025

JOHNSON CITY MTPO
METROPOLITAN TRANSPORTATION PLANNING ORGANIZATION

You are invited!

Join us to learn about the SR 75 Corridor Study



Where

Ridgeview Elementary School Gymnasium
252 Sam Jenkins Rd
Johnson City, TN 37615

When

Thursday, May 8, 2025
5:30 - 7:30 PM

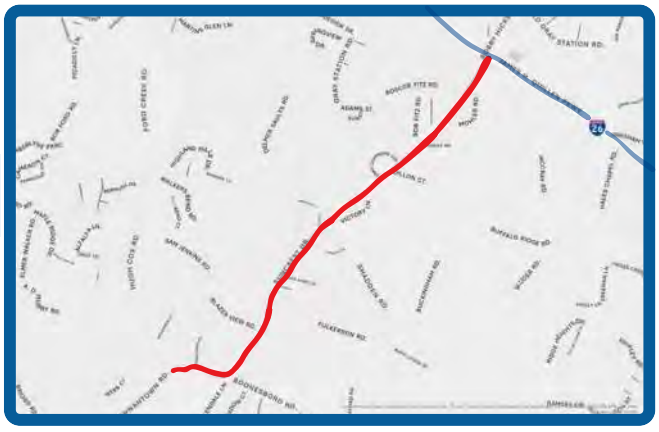
Open House meeting with formal presentation at 6:00 PM

Meeting Purpose

Learn about the project and share your ideas for improvements you would like to see in the community.

Study Description

A corridor study along State Route 75 (Suncrest Drive) between Hugh Cox Road and I-26 to address traffic, safety, and connectivity as development continues throughout the Gray Community.



SR 75 (Suncrest Dr) Corridor Study
Interstate 26 (I-26)

Mary Butler
Marybutler@jcmpo.org
423-434-6277

Contact us!

https://jcmpo.org/

Johnson City SR-75 Corridor Study
Johnson City, TN
May 8, 2025

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Johnson City SR-75 Corridor Study

Johnson City, TN

May 8, 2025

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Johnson City SR-75 Corridor Study

Johnson City, TN

May 8, 2025

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Johnson City SR-75 Corridor Study

Johnson City, TN

May 8, 2025

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JOHNSON CITY MTPO

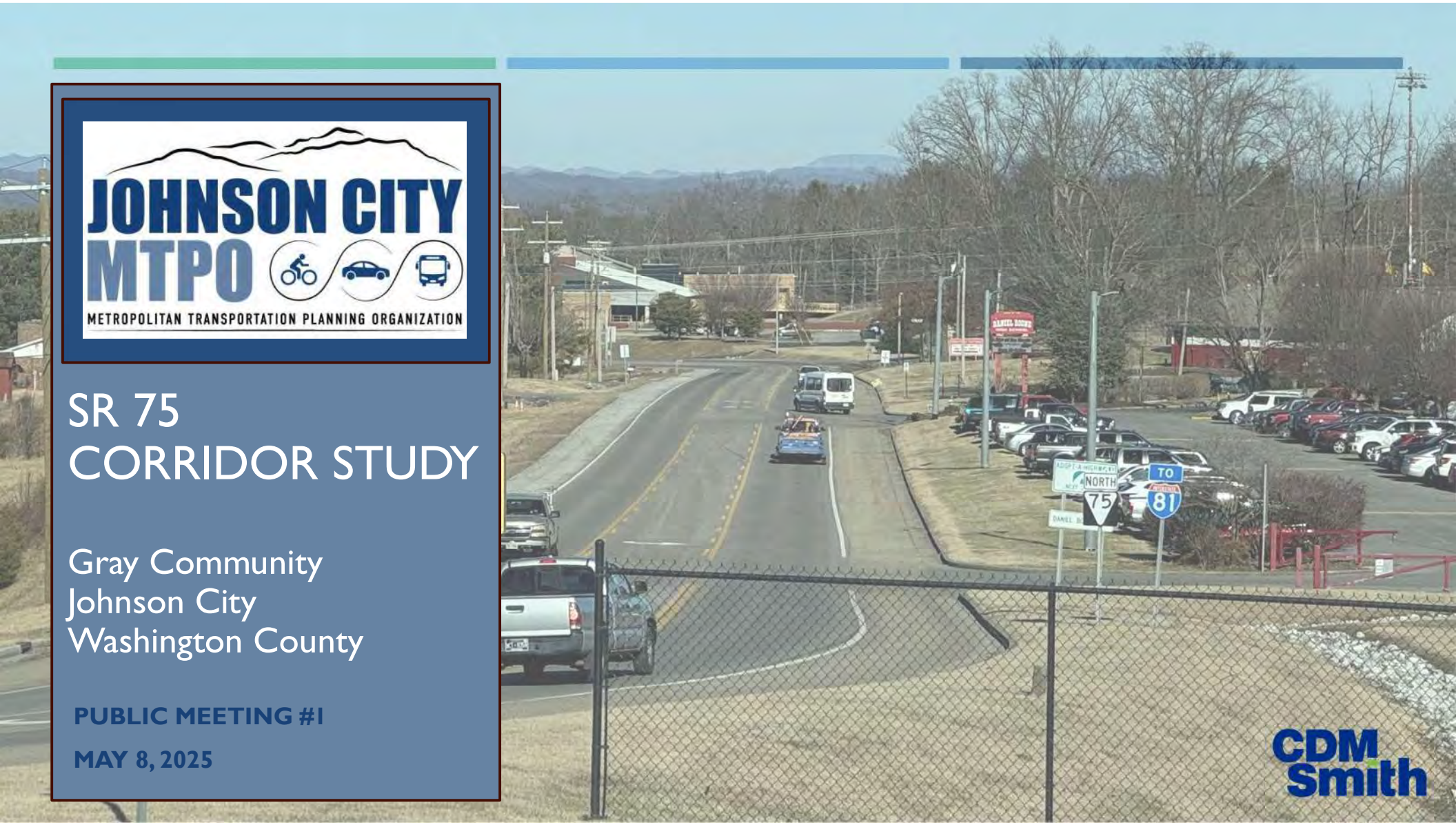
METROPOLITAN TRANSPORTATION PLANNING ORGANIZATION

SR 75 CORRIDOR STUDY

Gray Community
Johnson City
Washington County

PUBLIC MEETING #1

MAY 8, 2025



CDM Smith

AGENDA

- Introductions
- Project Purpose
- Meeting Purpose
- Project Timeline
- Existing Analysis
- Map Exercise/Discussion - Identify Corridor Issues

INTRODUCTIONS – PROJECT TEAM

01

Melody Butler,
PE, RSP1, AICP, PMP
(CDM Smith)

02

Jordan Clark,
AICP
(CDM Smith)

03

Stephanie Hargrove,
PE, Ph.D., PMP
(CDM Smith)

04

Jeff Mize,
PE
(CDM Smith)

PROJECT PURPOSE



PROJECT PURPOSE

- **SR 75 (Suncrest Dr) between I-26 and Hugh Cox Rd**
  - **Traffic**
    - Critical access for the Gray Community
    - Corridor with a varied mixture of uses (residential neighborhoods, schools, churches, manufacturing, and commercial)
    - Convenient regional access to Kingsport, Johnson City, and the Tri-Cities airport
  - **Multimodal Accessibility**
    - Sidewalks near Gray Commons along the perimeter of Mountain Commerce Bank (MCB)
    - Need for multimodal infrastructure for new and existing residential areas, schools and commercial areas
  - **Safety**
    - 106 crashes; 7 injury crashes in past 5 years, 1 fatality

MEETING PURPOSE



GATHER INPUT



IDENTIFY ISSUES



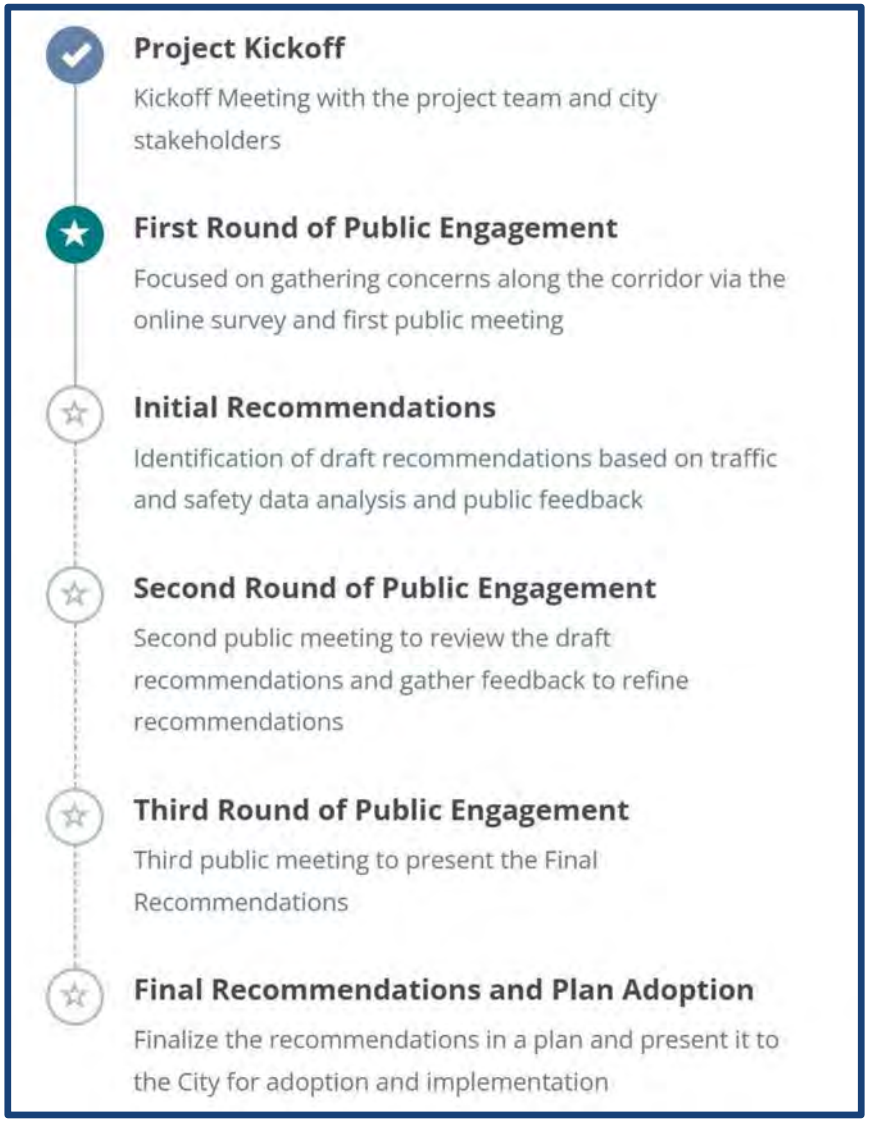
BRAINSTORM IDEAS



START A CONVERSATION

Introduce the project and solicit community input/vision for corridor

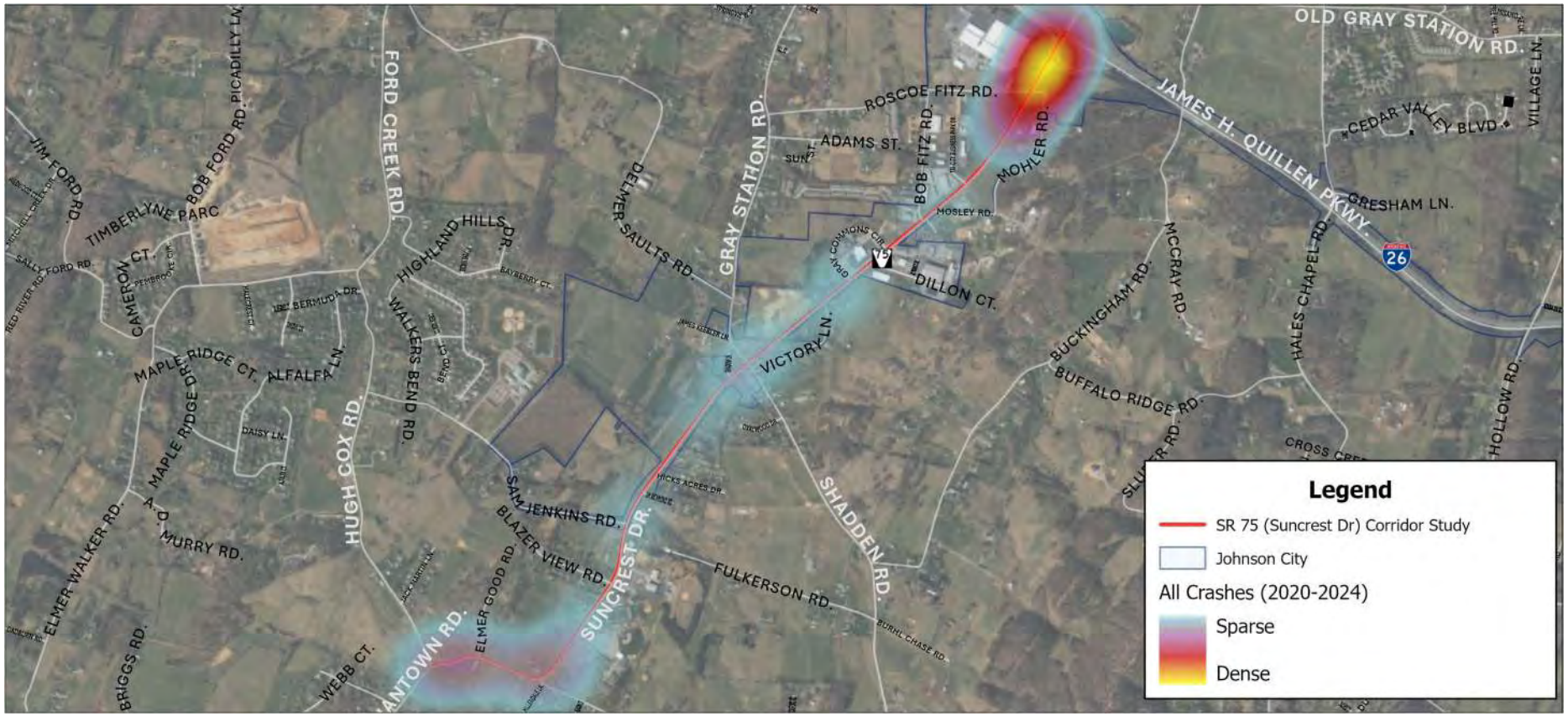
PROJECT TIMELINE



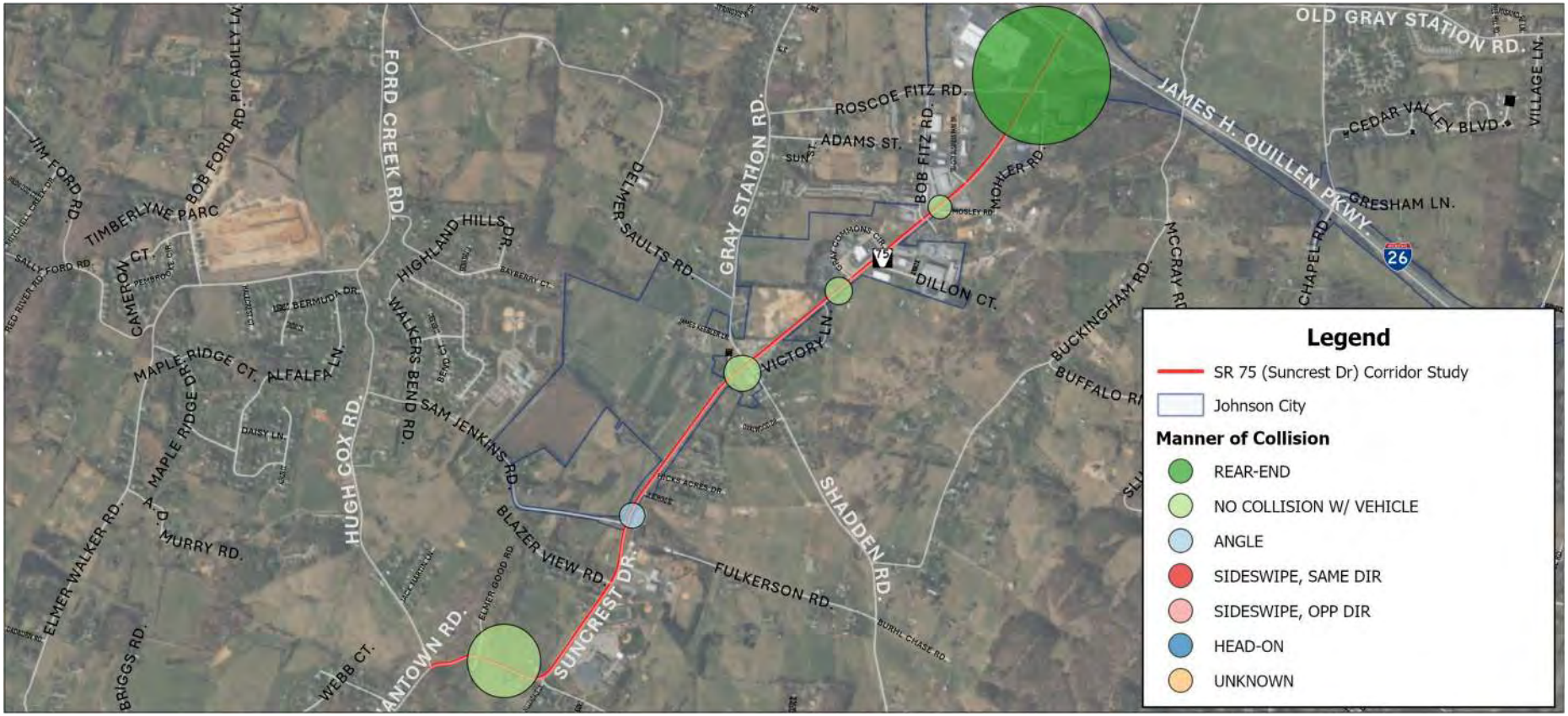
SAFETY ANALYSIS



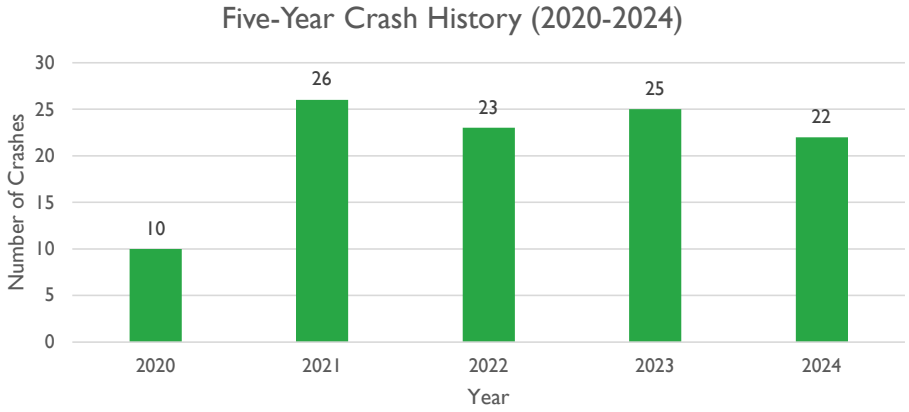
SAFETY ANALYSIS

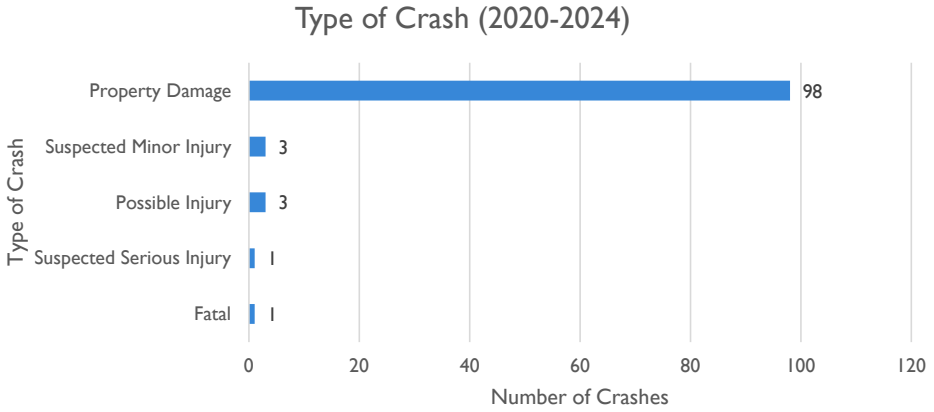


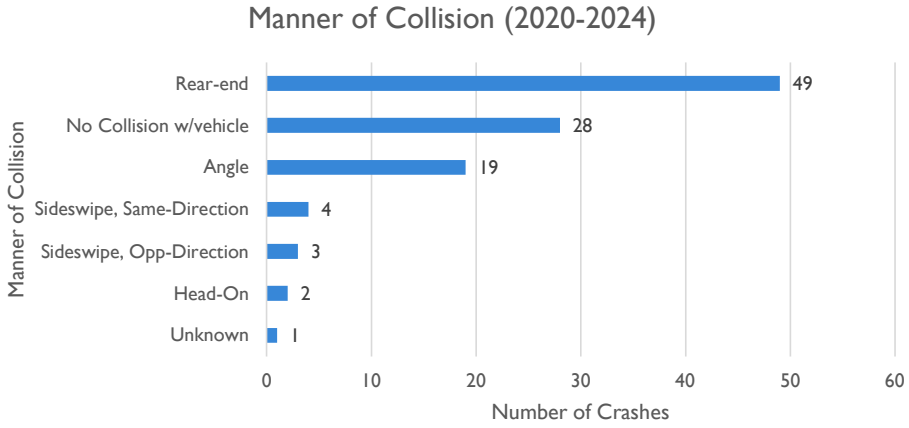
SAFETY ANALYSIS



SAFETY ANALYSIS







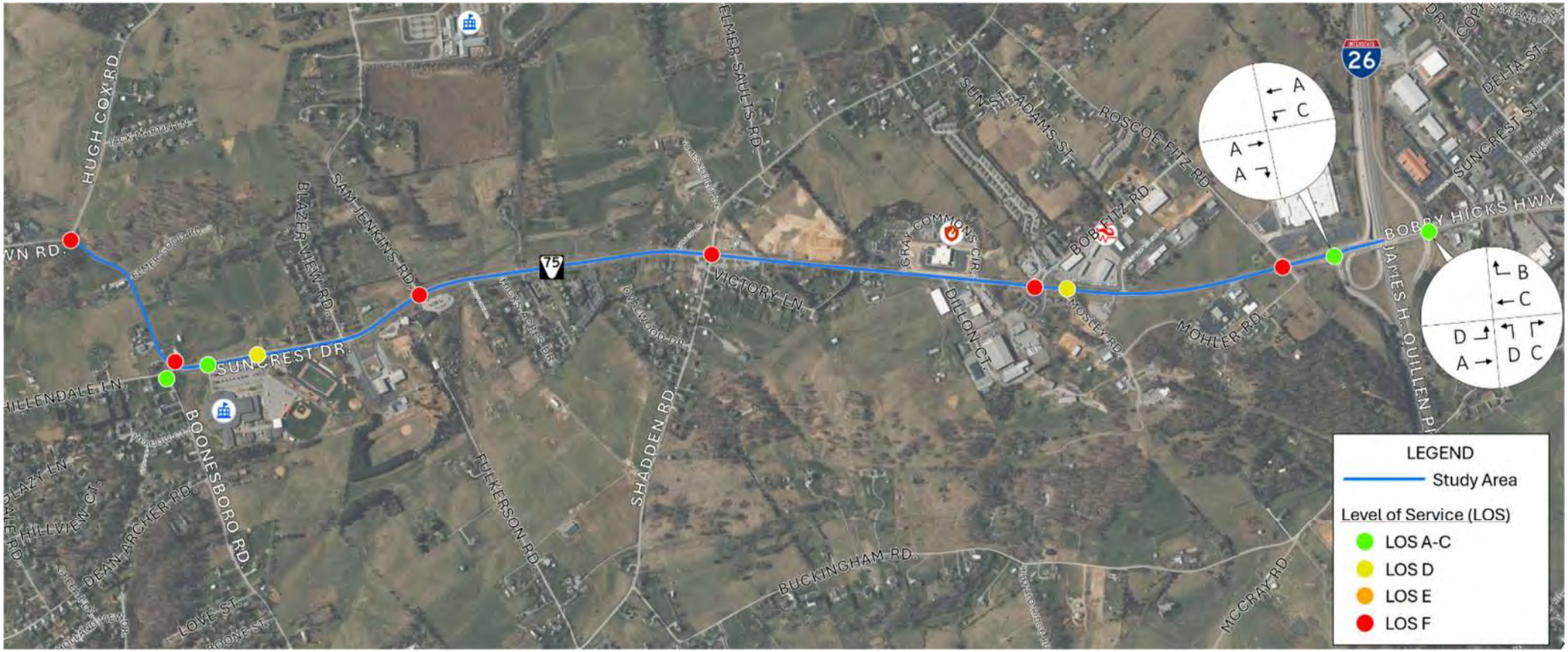
Between 2020 and 2024:

- No pedestrian or bicycle crashes reported
- Seven crashes involved animals (5 deer)
- 17 crashes involved a ditch, fence, embankment, or other obstruction

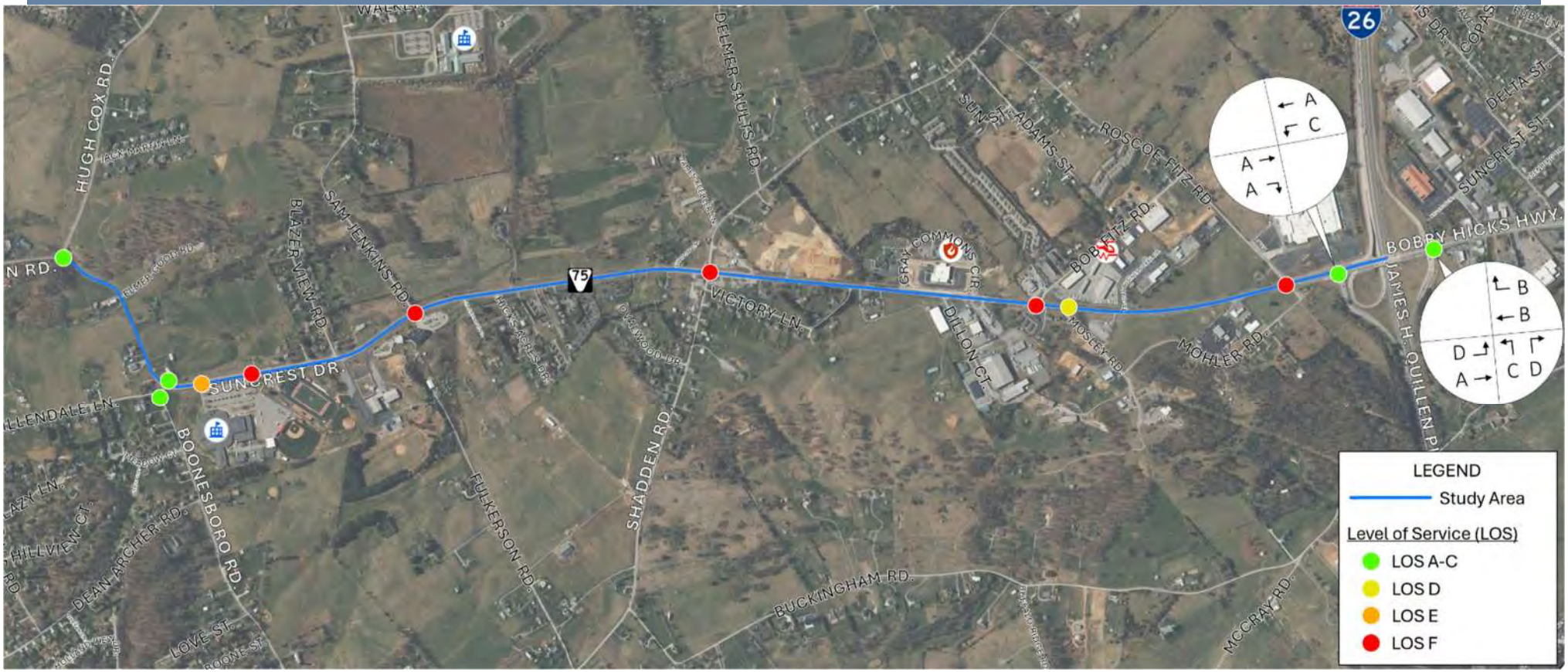
Critical Locations:

- S-curve between Hugh Cox Road and Daniel Boone High School
- Daniel Boone High School South Driveway
- I-26 Ramps Intersection

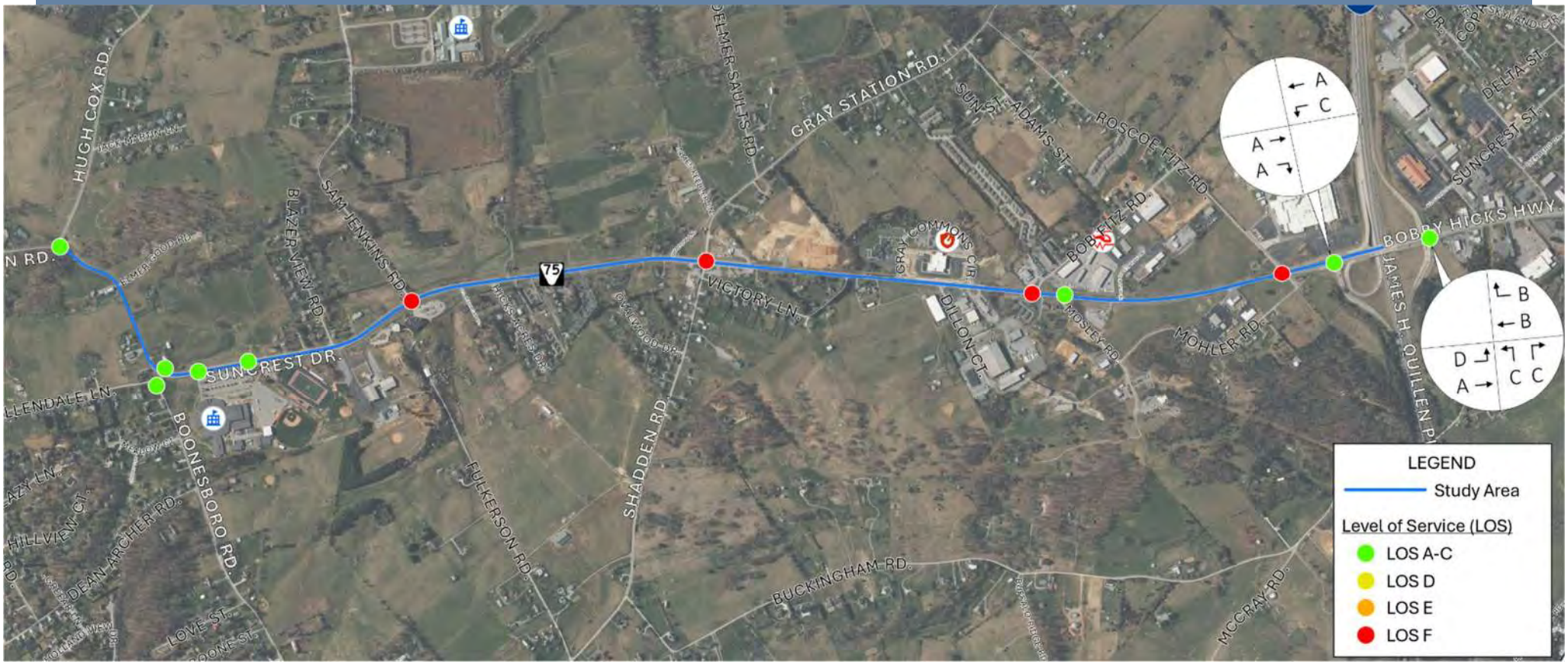
EXISTING 2025 AM PEAK LOS



EXISTING 2025 SCHOOL DISMISSAL LOS



EXISTING 2025 PM PEAK LOS



MAP EXERCISE - INSTRUCTIONS

- Think about where the major issues are within the project area:
  - **High crash areas** or near-miss locations
  - Where are **multimodal** improvements needed?
  - Where is **congestion** a problem?
  - Where you feel additional consideration needs to be given – **access management** improvements, **turn lanes**, **intersection** improvements, signals, etc.?

NEXT STEPS

- Public Survey
- Prepare Initial Recommendations
- Public Meeting #2
  - Tentatively August 2025

Scan to take the Public Survey





Caleb Kontos

May 15th 2025

Glenn K Berry
MPO Manager and Executive Secretary to the Executive Board, Johnson City's
Metropolitan Planning Transportation Organization
137 W Market St
Johnson City, TN 37604

Dear Government Official Berry,

I am a high school student from Daniel Boone and I appreciate that you have taken time out of your day to look at this letter. I am writing to address a problem, whether this is best suited for you or others I am not sure, but I found that this would suit you best. Gray is experiencing some problems. I'm sure you are aware that many people are moving into the Gray, Kingsport, Johnson City area at the moment. This movement of people is taking a heavy toll on the infrastructure. From what I know in Gray, neighborhoods are being constructed left and right. However these neighborhoods don't always get finished by the time a new one is started and it slows down progress and nothing ever gets finished. I believe that this issue could be fixed if the construction was more focused on 1 or 2 projects at a time instead of being spread thin. Another issue with the multitude of people moving in is roads. The roads in Gray seem to not be fit for this many people, some intersections don't even have traffic lights. This problem leads to traffic getting worse where it doesn't need to. Car crashes are already high in death and injury tolls, with the standards for the driving test being significantly lowered, this number will only continue to rise. Driving safety should be a high priority on the roads, and in some places it seems like it's not.

Thank you for your time and consideration,

Caleb Kontos

Connor Davis

13th May 2025

Glenn K. Berry
MPO Manager and Executive Secretary to the Executive Board, Johnson City's Metropolitan Planning Transportation Organization
137 W Market St
Johnson City, TN 37604

Dear Mr. Berry,

I am a high school student who travels along Suncrest Drive on a daily basis for a multitude of reasons, including attending Daniel Boone High School. With the recent rise of housing developments such as the Keebler project, I genuinely feel as though it is necessary to widen Suncrest Drive.

I understand that this would be a very costly investment. However, considering that the Keebler project is set to contain 350 homes, there will be an inevitable impact on traffic levels within the area, especially on Suncrest Drive, and this increase is likely to result in traffic jams, which, as I am sure you already know, can cause a variety of issues, including car accidents, air pollution, road rage, and more.

Plus, the widening would prepare Suncrest Drive for many years to come. As the area's population continues to climb, the expansion should still allow Suncrest Drive to accommodate traffic levels many years down the road.

In conclusion, although the widening of Suncrest Drive would be costly, I personally feel as though it is a necessary and worthwhile step to support the community.

Sincerely,

Connor Davis

Map	Location	Comment / Colored Dot
Vision Board	N/A	Traffic lights
		Speed bumps on Victory Ln.
		Extra lane or two
		Traffic lights
		Speed enforcement
		More traffic lanes on HWY.75
		Traffic lights
		Safe intersection
		Speed bumps in all neighbourhoods
		Speed bumps
		Straighten and widen curves near Hugh Cox Rd
		Turning lanes
		Stop light
		Traffic light on Shadden Rd
		Lighting
		Fix curve by Hugh Cox Rd. People always crossing into the other lane - car, trucks - big trucks
		Dim the bright street lights that make you think a car is coming
		The 3 stop lights that already planned
		Don't allow people to move here
		Zoning laws for subdivision developments
		Traffic light on Shadden Rd
		No more new subdivisions
Rollout Maps	SR 75 (Suncrest Dr) Overall	Sight pulling on + off from homes on Suncrest Dr.
		Sight distance is dangerous pulling in + out of farmhouse in curve
		Better visibility in s-curve
		School traffic queues and blocks intersections
		Light during peak hours (AM)
		Need turning lane into Daniel Boone High School
		Alternate route carry traffic, avoiding SR75
	SR 75 at Sam Jenkins Rd	Traffic is dangerous here in the AM + afternoon
		Install Communications between signals from I-26 ramps to Sam Jenkis. Provide coordinated timings
		Install sidewalk to connect segments that already exist.
		Improve s-curve west of DBHS. Curvature + superelevation is substandard
		off-peak flashing st signal
		Lights at Sam Jenkins and right turn lane
		Add traffic signals at Shadden and Sam Jenkins
		Lights
	SR 75 at Shadden Rd	Traffic light at Shadden Rd
		Need traffic lights at Shadden Road. Needs to come soon.
		Use Victory lane as a cut-through to avoid congestion at Shadden Rd. & Sunchrest Dr.
		Lights
		Add traffic signals at Shadden and Sam Jenkins
	Shadow Ln - Shadden Rd	Redesign turn lane into DG Market
	SR 75 at Hugh Cox Rd	This is a dangerous turn coming from Sulphur Springs
	Boonesboro Rd	Sidewalks
	SR 75 at Roscoe Fitz Rd	Since Continous green signal was installed, very difficult to find a gap to turn out of Roscoe Fitz Rd. Many people usr Bob Fitz to access Sunchrest Dr.
	SR 75 at Roscoe Fitz Rd & Mohler Rd	Redesign to remove the intersection of Roscoe Fitz, Mohler Rd., and SR 75. Reroute traffic to better location with a new or improved acress.
	Midlands Apartments - Sunchrest Dr	TDOT drive way permits for town homes? Ask Nick Kandy
	Blazerview Rd	School hours issues, turning left
	Suncrest Dr - Blazer View Rd	Lighting and visibility issues at intersection
	Daniel Boone High School	School circulation plan done by D.B. a few years ago.
	Victory Ln (West)	TWLTL head-on conflict at driveway
	Mosley Rd.	Traffic light in this area
		Convinience Center traffic from Mosley - realign Mosley to new JC road
		Hard to left turn off Mosley Rd.
	Forest Dr.	TWLTL driveway conflicts at Forest Dr
	Bownantown Rd.	Road needs widening as large trucks, busses etc. cross the line
	Hicks Acres Dr	Turn lane in Hicks Acres Dr. (right)
		School traffic backs up
		Fix dip at Hicks Acres Dr
	James H. Quillen Pkwy - Bobby Hicks Hwy	Signal timing for LT lanes
	James H. Quillen Pkwy - SR 75	Make light turn red for SW traffic to Mdow, traffic from TPI to get onto 75
	Knob Creek Rd	New road to the S.E. to Knob Creek Rd.

Tell us how you feel!			
	Like	Neutral	Dislike
Right-Turn Lanes	19	0	2
Sidewalks	11	3	3
Multi-Use Paths	5	6	1
Median Landscaping	1	1	4
Lighting	14	0	1


Study Area Limit - Hugh Cox Rd
Study Area Limit - Interstate 26
James H. Quillen Parkway
WEBB CT.
PERKINS FARMS DR.
JACK MARTIN LN.
ELMER GOOD RD.
BOWMANTOWN RD.
WALKER BEND RD.
BEND CT.
ZAYBERN CT.
SAM PERKINS RD.
DRIVER SAULTS RD.
JAMES KESTERSON LN.
GRAY COMMONS CIR.
MCB
ADAMS ST.
ROSCOE FITZ RD.
BOB FITZ RD.
ELIZABETH AVE.
LOIS DR.
COPAS DR.
DELTA ST.
BOBBY HICKS HWY.
HICKS FORBES DR.
PILLON CT.
HOSLEY RD.
MOELLER TR.
HILLENDALE LN.
MEADOW CT.
LAZY LN.
HILLVIEW CT.
DEAN ARCHER RD.
HILLENDALE RD.
GREENBRIER DR.
HOLLAND VIEW DR.
LEFDY LN.
LOVE ST.
BOONE ST.
FULKERSON RD.
BUCKINGHAM RD.
BUFFALO RIDGE RD.
MCCRAY RD.
CROSSROADS
B
Legend
SR 75 (Suncrest Dr) Corridor Study
Johnson City
School
EMS Station
Fire Station


Study Area Limit - Hugh Cox Rd
Study Area Limit - Interstate 26
James H. Quillen Parkway
Road needs widening as large trucks have to cross the line
This is a dangerous road section
Off-peak flashing signal
School traffic - parents and visibility/vehicles backs obstructed
Better visability in S curve
Traffic light Shadden Rd
Need traffic light at Shadden Road Needs to come soon
Signal timing for 11 lanes
Legend
SR 75 (Suncrest Dr) Corridor Study
Johnson City
School
EMS Station
Fire Station
JACK MARTIN LN
ELMER GOOD RD
BLAZER VIEW RD
SAM JENKINS RD
WALKERS BLAND RD
BARBERRY CT
DELMER SAULS RD
JAMES KEEBLEPATH
SHADDEN LN
GRAY COMMONS CIR
SUN ST
ADAMS ST
ROSCOE FITZ RD
ROB FITZ RD
GRAY STATION RD
ELIZABETH AVE
LOIS DR
CORA DR
DELTA ST
SUNCREST ST
HICKS ACRES DR
OVALWOOD DR
DILLON CT
MOSLEY RD
HILLENDALE LN
LAZY LN
HILLVIEW CT
DEAN ARCHER RD
HILLENDALE RD
GREEN VIEW DR
HOLLAND VIEW DR
LEEDY LN
LOVE ST
BOONE ST
FULKERSON RD
BUCKINGHAM RD
BUFFALO RIDGE RD
MCCRAY RD
MCB
GRAND
CROSSROADS
26


Study Area Limit - Hugh Cox Rd
WEBB CT
DEKINS ESTATES DR
POWNINGTOWN RD
JACK MARTIN LN
ELMER GOOD RD
WALKER ST
BEND CT
WALKERS BEND RD
BAYBERRY CT
SAM TEVIS LN
DELMER SAULTS RD
GRAY STATION RD
ADAMS ST
GRAY COMMONS CIR
MCB
ROSCOE
ROB ELIZ RD
ELIZABETH AVE
LOIS DR
CORAS DR
DELTA ST
26
Fix Dip at Hack Arbesbo
Crosswalk
Signal
Turn Lane Aligns Across
Add turning Lane into Bowers
Signal
Signal this!
NEW ROAD TO THE SE TO KNOB CREEK ROAD
Yes!
HARD TO TURN LEFT OFF MOSLEY RD
Use Victory Lane as cut-through to avoid congestion at Suncrest & Sunset
SCHOOL CIRCLE THIS PLAN DONE BY D.B. A FEW YEARS AGO
CROSSROADS
HILLENDALE RD
LAZY LN
HILLVIEW CT
DEAN ARCHER RD
LEEDY LN
GREENFIELD DR
HOLLAND VIEW DR
LOVE ST
BOONE ST
FULKERSON RD
OVALWOOD DR
HIGHLAND AVE
BUCKINGHAM RD
BUFFALO RIDGE RD
MCCRAY RD
Legend
SR 75 (Suncrest Dr) Corridor Study
Johnson City
School
EMS Station
Fire Station

SR 75 CORRIDOR STUDY

PUBLIC MEETING #2

AUGUST 28, 2025

JOHNSON CITY MTPO
METROPOLITAN TRANSPORTATION PLANNING ORGANIZATION

You are invited!

Join us to learn about the SR 75 (Suncrest Drive) Corridor Study

Where

Ridgeview Elementary School Gymnasium
252 Sam Jenkins Road
Johnson City, TN 37615

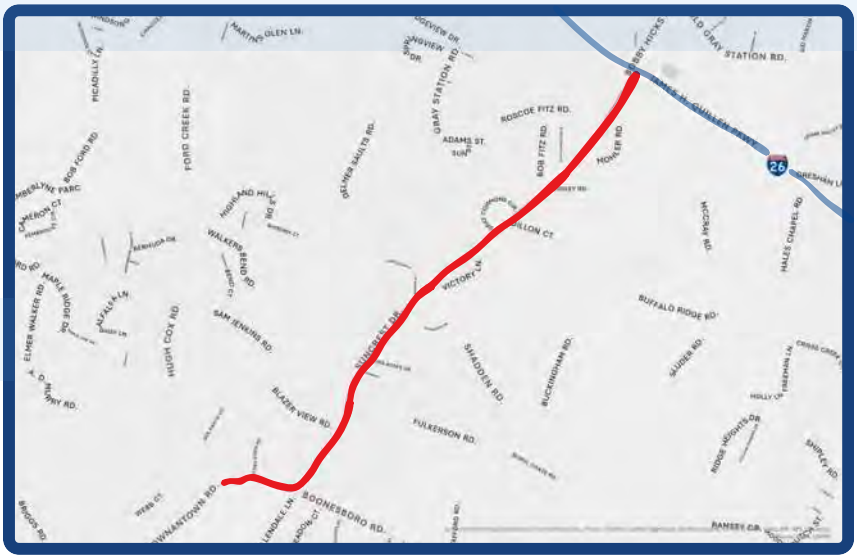


When

Thursday, August 28, 2025
5:30 - 7:30 PM
Formal presentation at 6:00 PM

Meeting Purpose

Review the draft recommendations for the corridor and share your feedback.



Study Description

A corridor study along State Route 75 (Suncrest Drive) between Hugh Cox Road and I-26 to address traffic, safety, and connectivity as development continues throughout the Gray community.

Mary Butler
Marybutler@jcmpo.org
423-434-6277

Contact us!

https://jcmpo.org/

Johnson City SR-75 Corridor Study
Johnson City, TN
August 28, 2025

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Johnson City SR-75 Corridor Study
Johnson City, TN
August 28, 2025

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Johnson City, TN
August 28, 2025

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Johnson City SR-75 Corridor Study
Johnson City, TN
August 28, 2025

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Troy Ebbert -TDOT	
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JOHNSON CITY MTPO

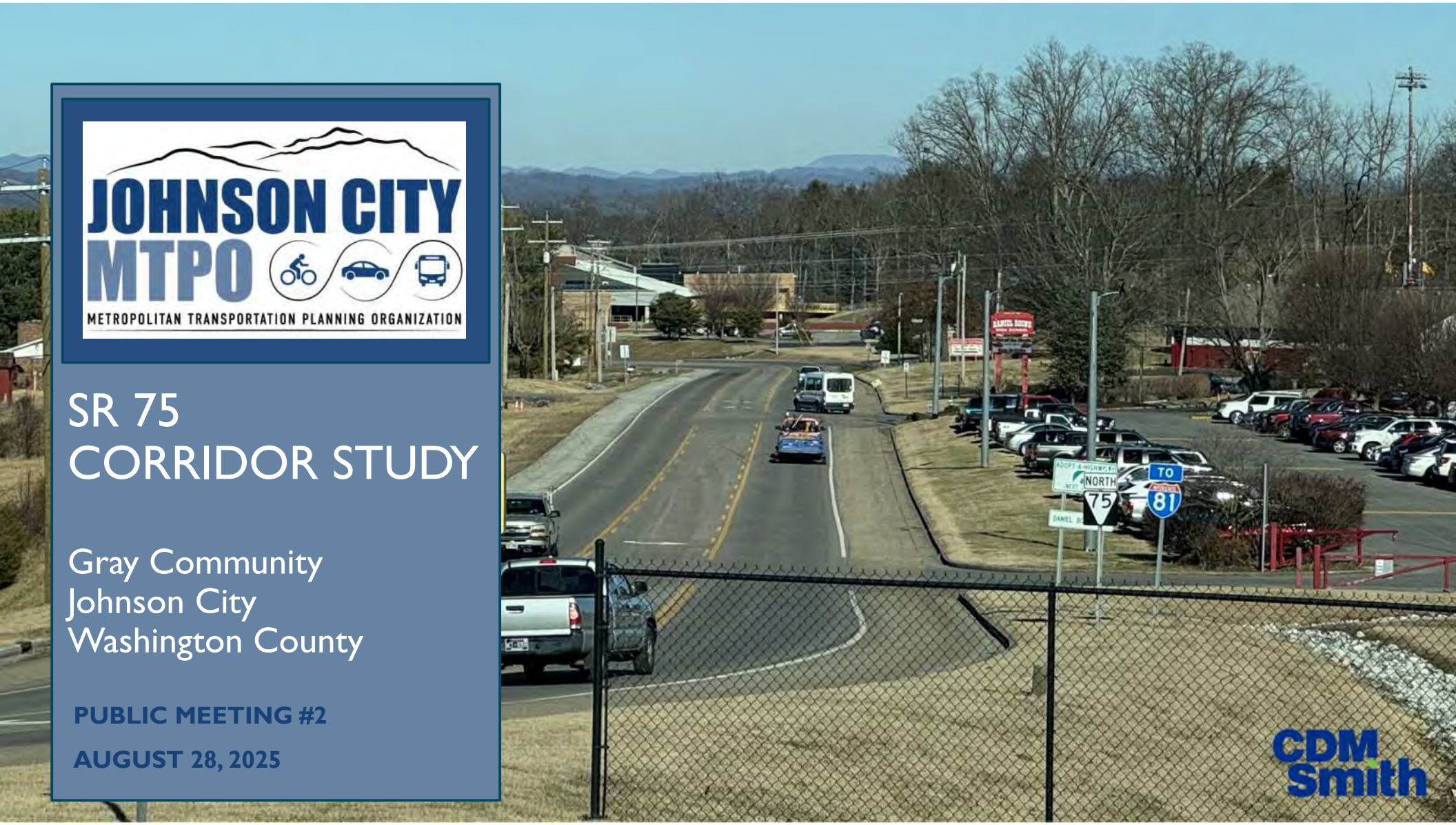
METROPOLITAN TRANSPORTATION PLANNING ORGANIZATION

SR 75 CORRIDOR STUDY

Gray Community
Johnson City
Washington County

PUBLIC MEETING #2

AUGUST 28, 2025



CDM Smith

AGENDA

- Introductions
- Project Purpose
- Meeting Purpose
- Project Timeline
- Public Survey Responses
- Draft Recommendations

INTRODUCTIONS – PROJECT TEAM

01

Melody Butler,
PE, RSP1, AICP, PMP
(CDM Smith)

02

Stephanie Hargrove,
PE, Ph.D., PMP
(CDM Smith)

03

Chris Kirby,
PE, PMP
(CDM Smith)

04

Zach Roberts
PE, PTOE, RSP2I
(CDM Smith)

05

Kyle Rogers,
EIT
(CDM Smith)

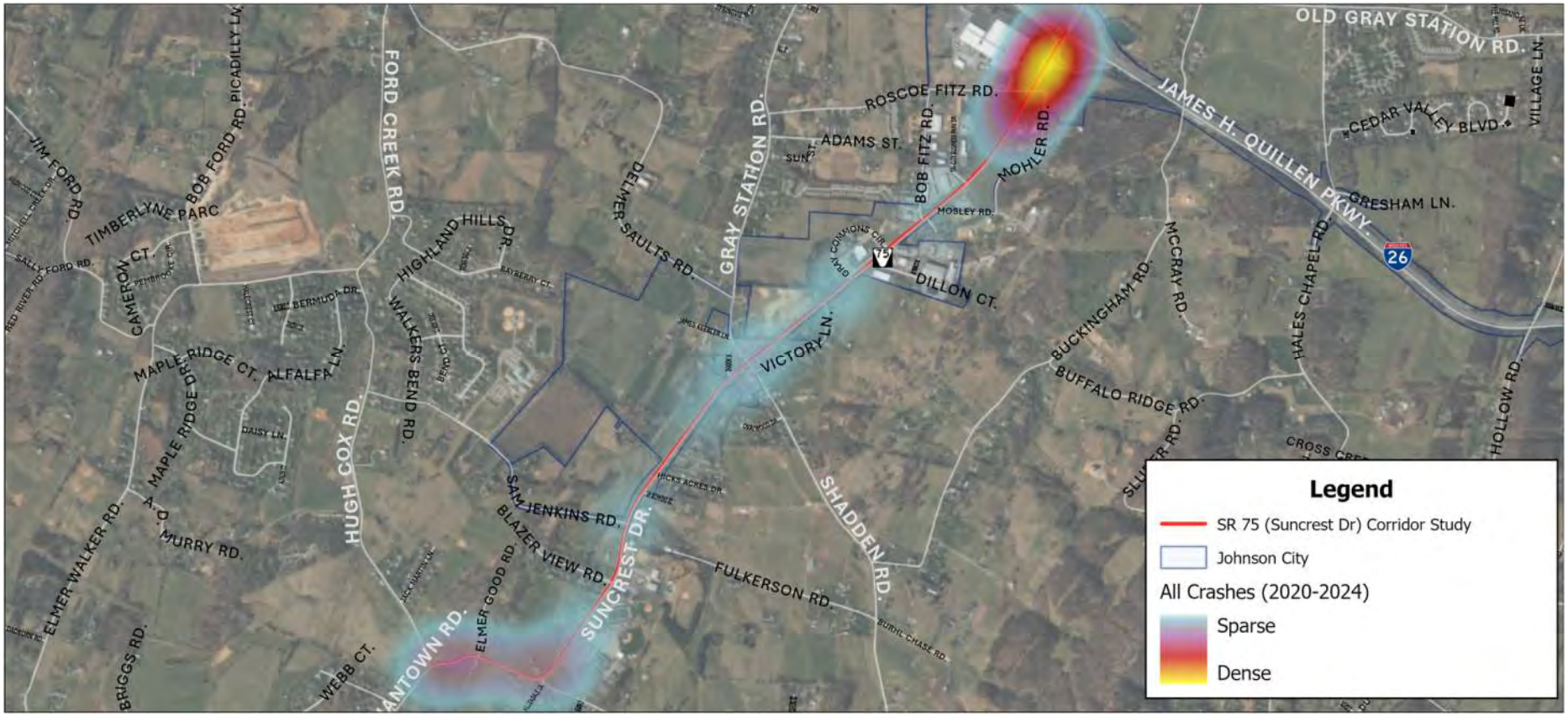
PROJECT PURPOSE

- **SR 75 (Suncrest Dr) between I-26 and Hugh Cox Rd**
  - **Traffic**
    - Critical access for the Gray Community
    - Corridor with a varied mixture of uses (residential neighborhoods, schools, churches, manufacturing, and commercial)
    - Convenient regional access to Kingsport, Johnson City, and the Tri-Cities airport
  - **Multimodal Accessibility**
    - Sidewalks near Gray Commons along the perimeter of Mountain Commerce Bank (MCB)
    - Need for multimodal infrastructure for new and existing residential areas, schools and commercial areas
  - **Safety**
    - 106 crashes; 7 injury crashes in past 5 years, 1 fatality

PROJECT PURPOSE



SAFETY ANALYSIS



MEETING PURPOSE



PRESENT RECOMMENDATIONS



GATHER FEEDBACK



NEXT STEPS

PROJECT TIMELINE

Project Kickoff

Kickoff Meeting with the project team and city stakeholders

First Round of Public Engagement

Focused on gathering concerns along the corridor via the online survey and first public meeting

Initial Recommendations

Identification of draft recommendations based on traffic and safety data analysis and public feedback

Second Round of Public Engagement

Second public meeting to review the draft recommendations and gather feedback to refine recommendations

Third Round of Public Engagement

Third public meeting to present the Final Recommendations

Final Recommendations and Plan Adoption

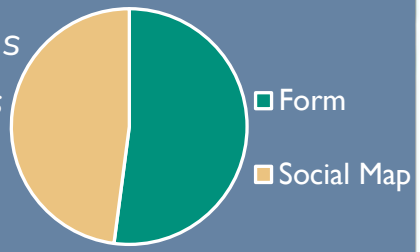
Finalize the recommendations in a plan and present it to the City for adoption and implementation

PUBLIC SURVEY RESPONSES

*52% of respondents said they encounter congestion **leaving or returning home**.*

*44% of respondents said **traffic signals** would relieve congestion, and another 44% said **adding more lanes** would relieve congestion.*

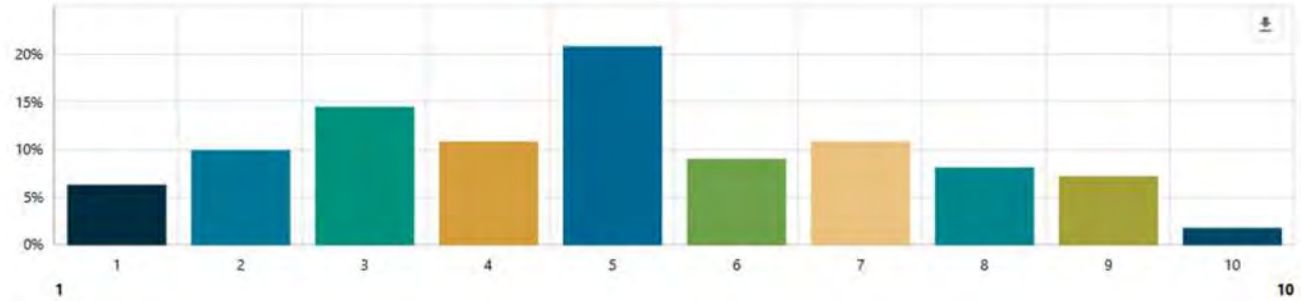
439 Contributions
226 Contributors



1 On a scale from 1-10 (with 1 being very unsafe and 10 being very safe), how safe do you feel traveling along SR 75 (Suncrest Drive)

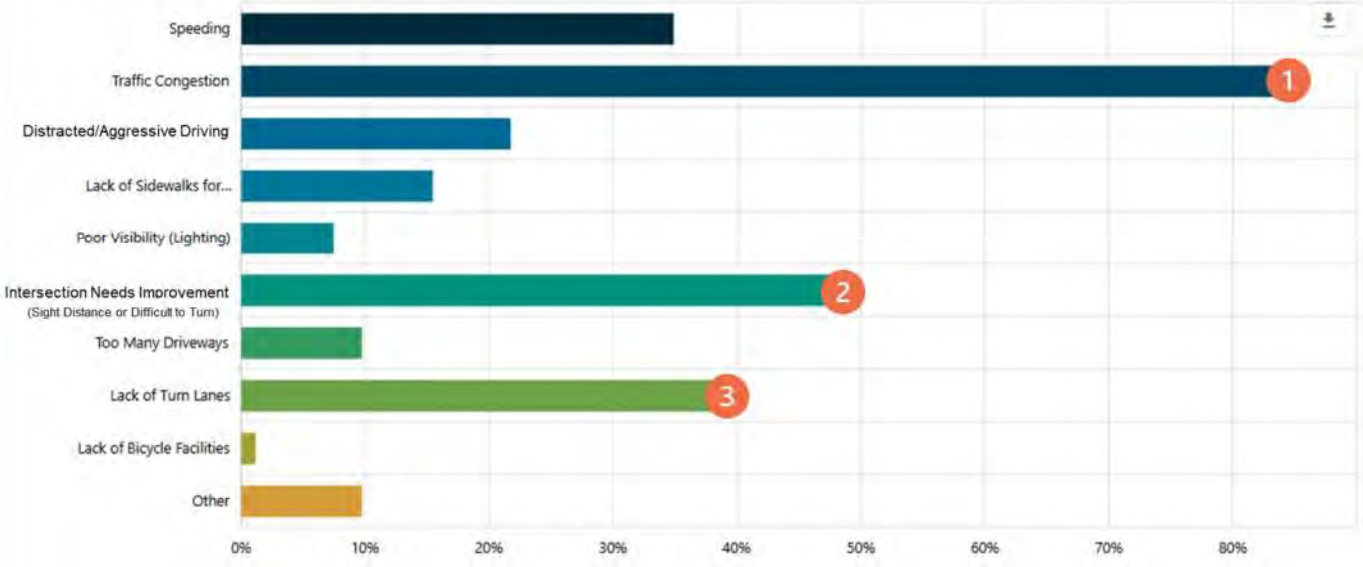
Average 4.98

Slider | Skipped: 66 | Answered: 110 (62.5%)



2 What are your top three (3) traffic and safety concerns along SR 75 (Suncrest Drive)?

Multi Choice | Skipped: 1 | Answered: 175 (99.43%)

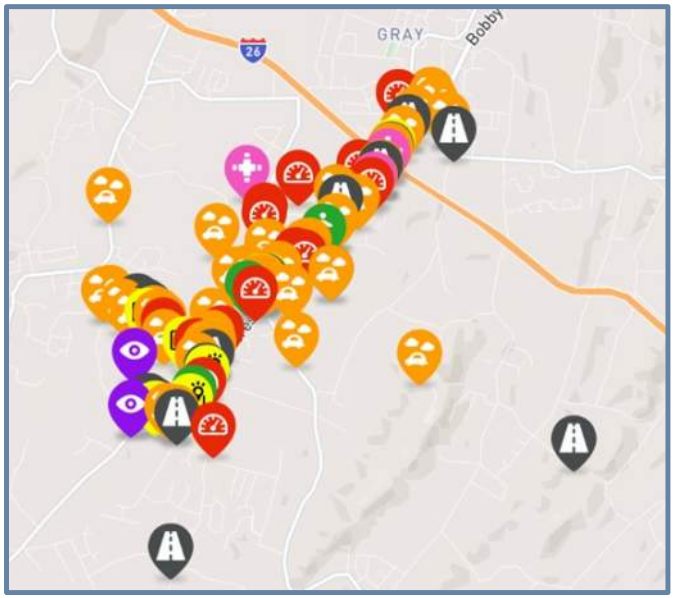


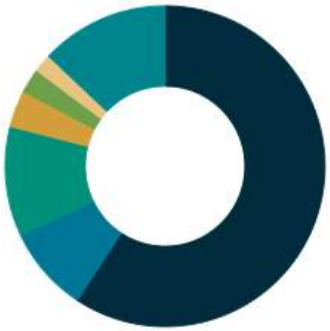
PUBLIC SURVEY RESPONSES

- Extended/increased lanes and turn lanes
- Slow development
- More traffic lights
- Increased police enforcement
- Roadway safety
- Pedestrian/bike safety
- Less traffic
- Increase roadway lighting

Using a few words, describe what you would like the future SR 75 to look like:







- Traffic Congestion 96
- Ideas or Suggestions 21
- Roadway Concern 18
- Speeding Concern 14
- Connectivity Concern 6
- Visibility Concern 4
- Bike/Ped Concern 3
- Accessibility 0

HUGH COX ROAD – EXISTING INTERSECTION



SUNCREST DRIVE AT HUGH COX ROAD – PHASE I



SUNCREST DRIVE AT HUGH COX ROAD – PHASE 2

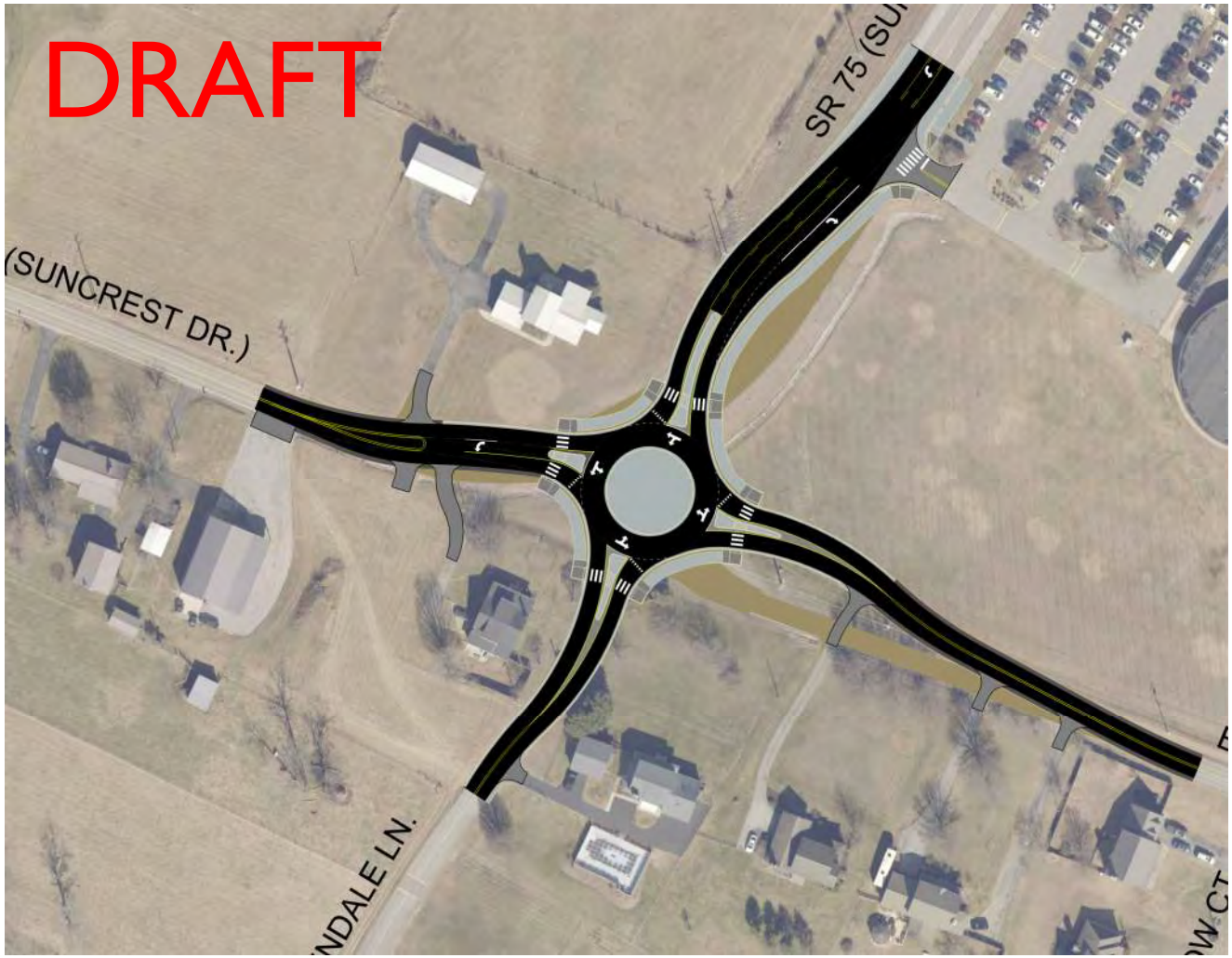


BOONESBORO RD/HILLENDALE RD – EXISTING INTERSECTION









SUNCREST DRIVE AT BOONESBORO ROAD

ROUNDABOUT

SUNCREST DRIVE WEST OF SAM JENKINS – COMBINED IMPROVEMENTS



SAM JENKINS ROAD – EXISTING INTERSECTION





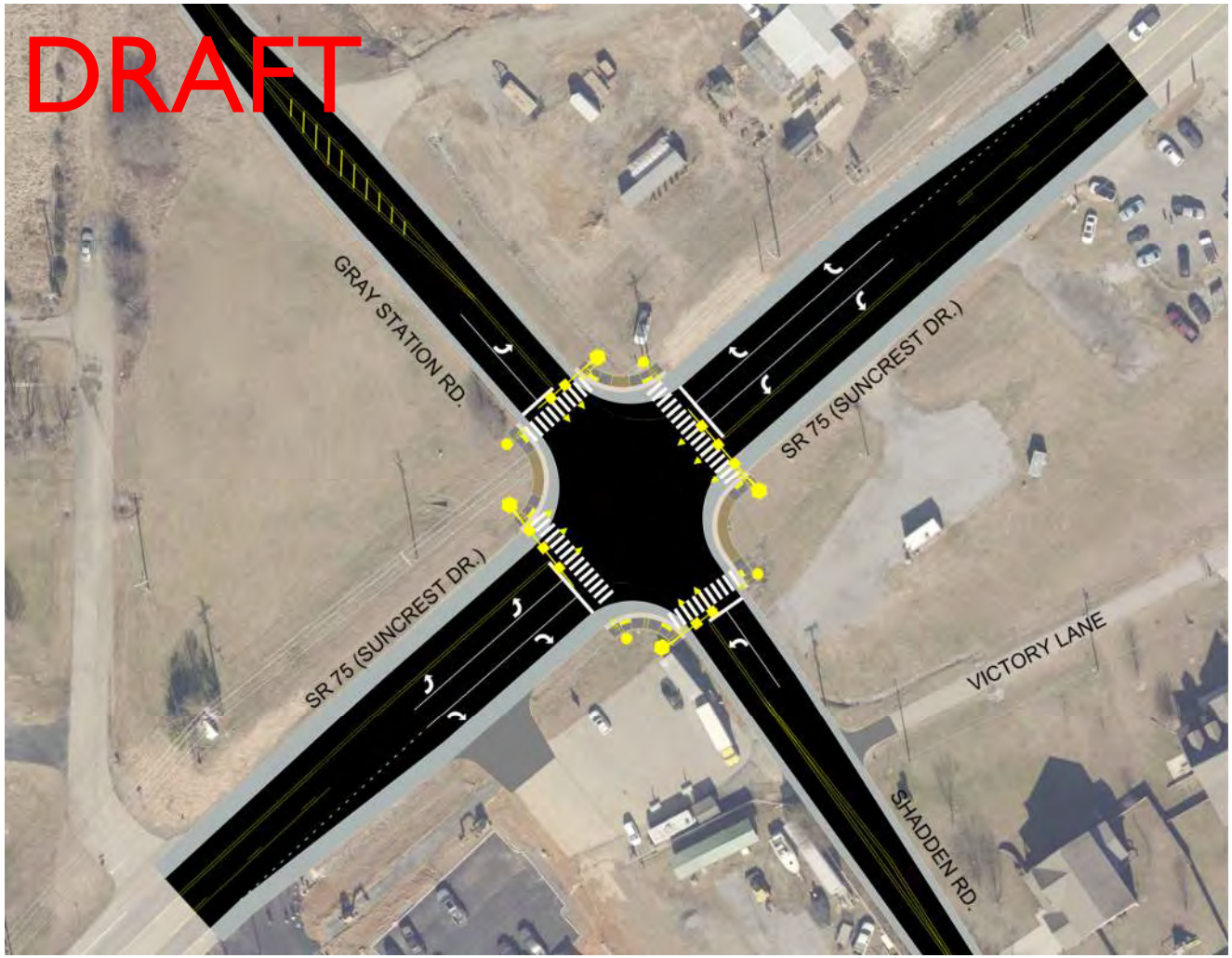






SAM JENKINS RD INTERSECTION

SIGNAL



SHADDEN RD/ GRAY STATION RD INTERSECTION

SIGNAL

BOB FITZ ROAD – EXISTING INTERSECTION







BOB FITZ ROAD – ACCESS MANAGEMENT



ROSCOE FITZ ROAD – EXISTING INTERSECTION









ROSCOE FITZ ROAD

REALIGNMENT

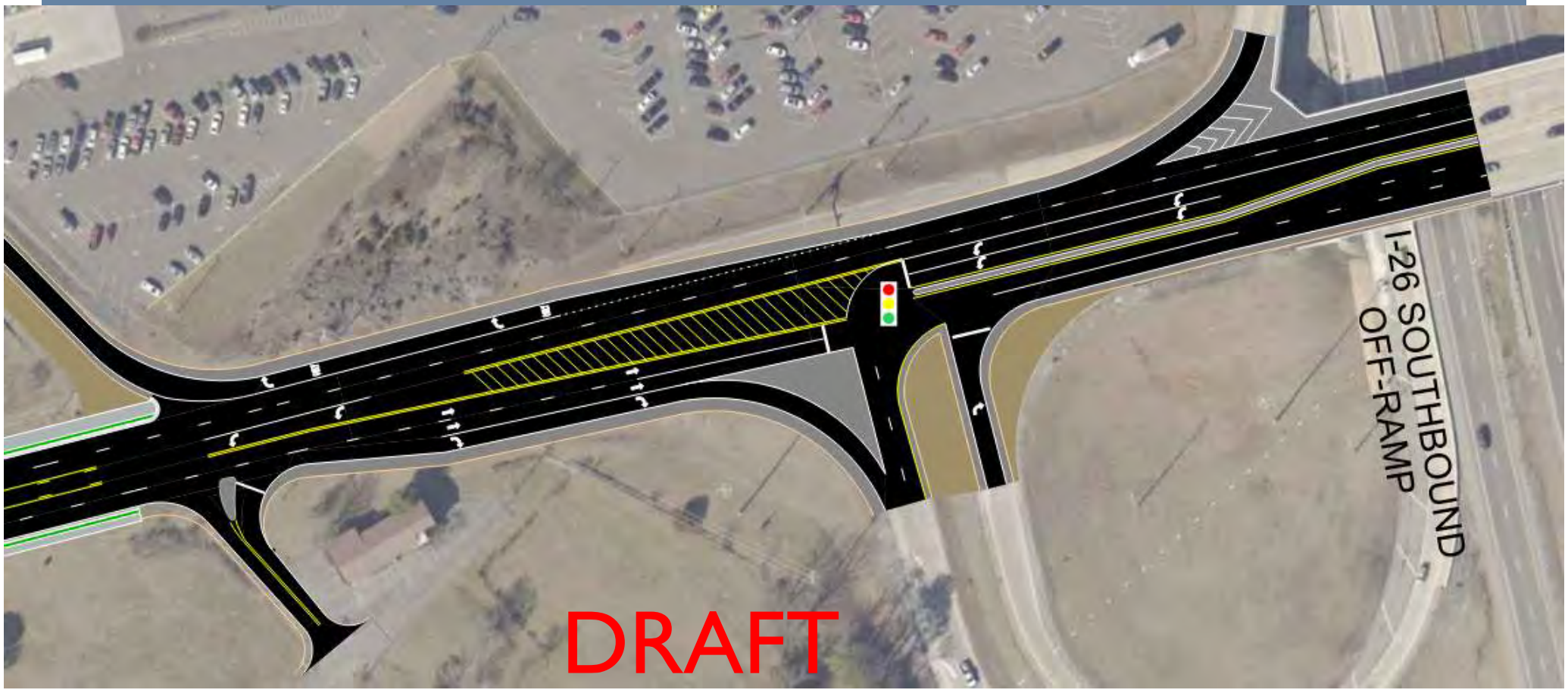
I-26 INTERCHANGE - EXISTING







I-26 INTERCHANGE



FUTURE 3-LANE WITH MID-TERM IMPROVEMENTS (ROLL OUT MAP ON TABLE)



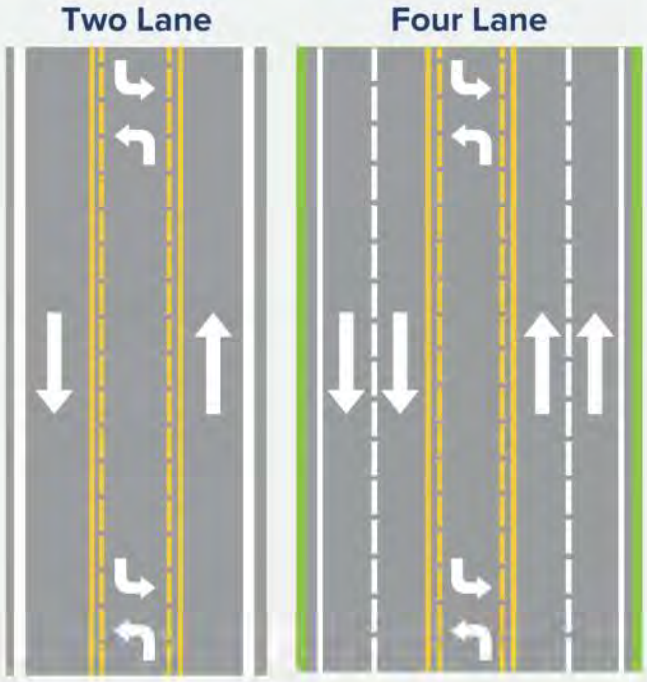
FUTURE 3-LANE WITH MID-TERM IMPROVEMENTS (ROLL OUT MAP ON TABLE)



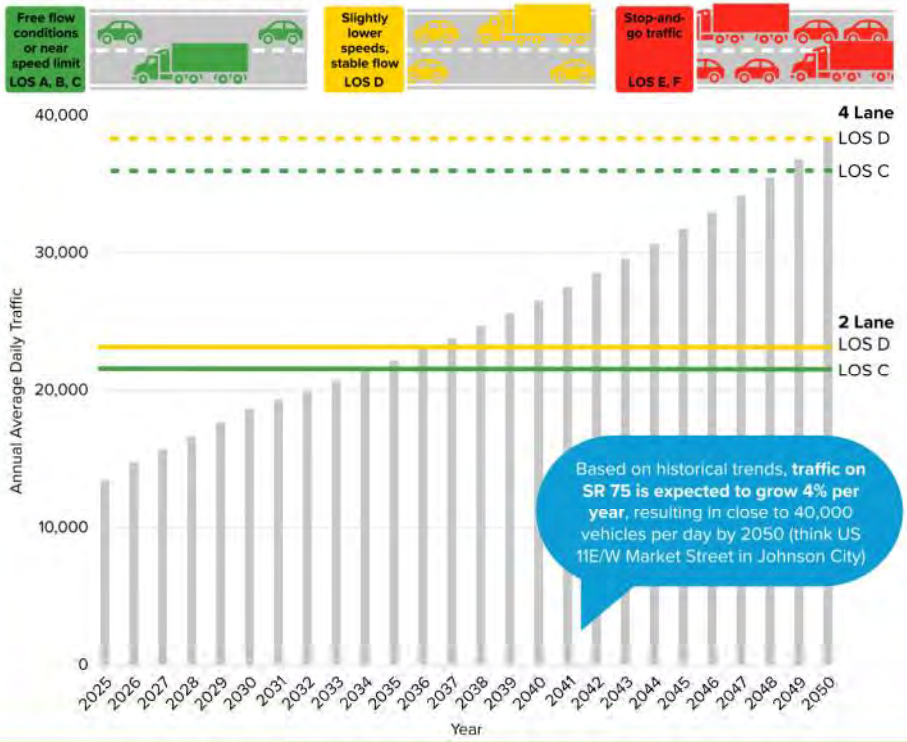
SR 75 Future Traffic

The study team reviewed how the existing two-lane roadway is expected to handle traffic in the years ahead if current travel and growth trends continue. Using a system called Level of Service (LOS), which rates traffic flow from A (free-flow) to F (stop-and-go), we analyzed how well the roadway can keep traffic moving. **The results show that a four-lane roadway will better handle future traffic and reduce congestion if growth continues the way it has over the past several years.**

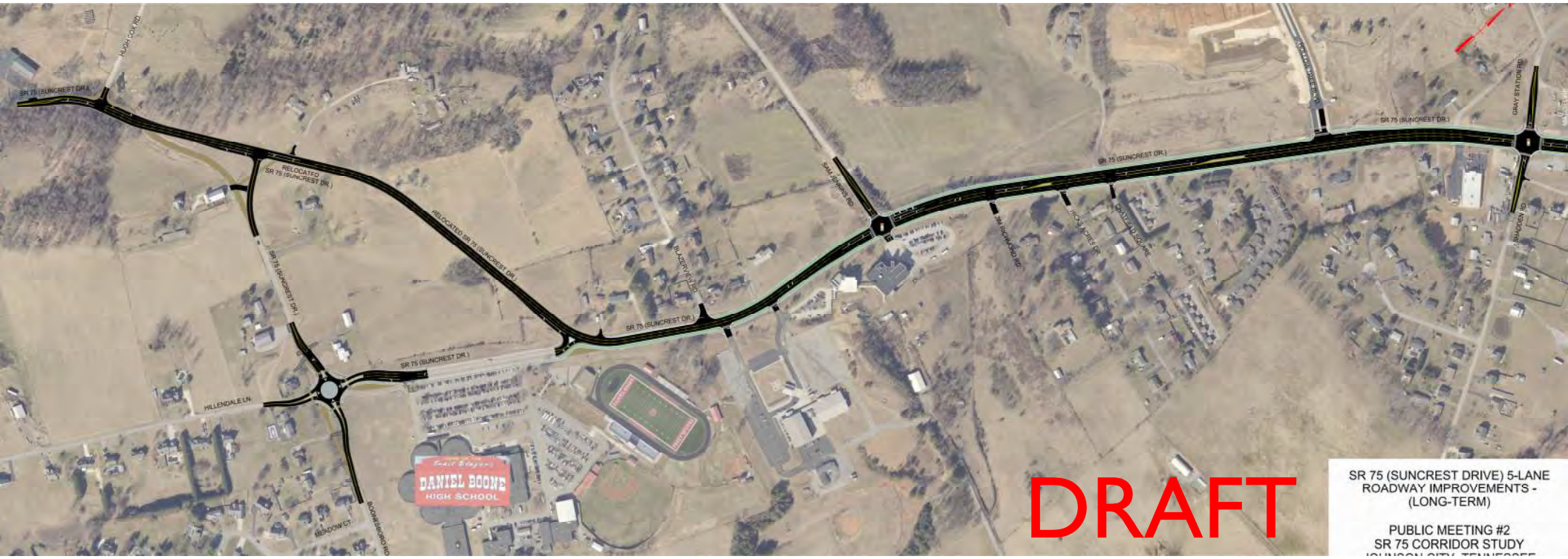
What will the road look like?



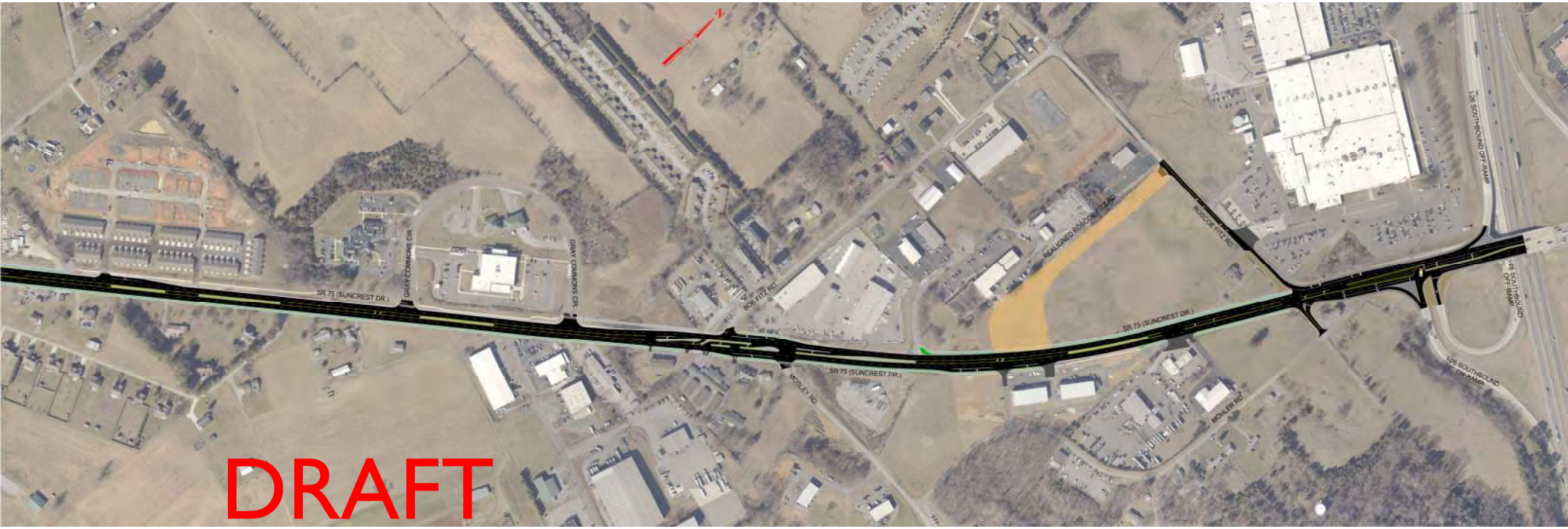
What will traffic look like?

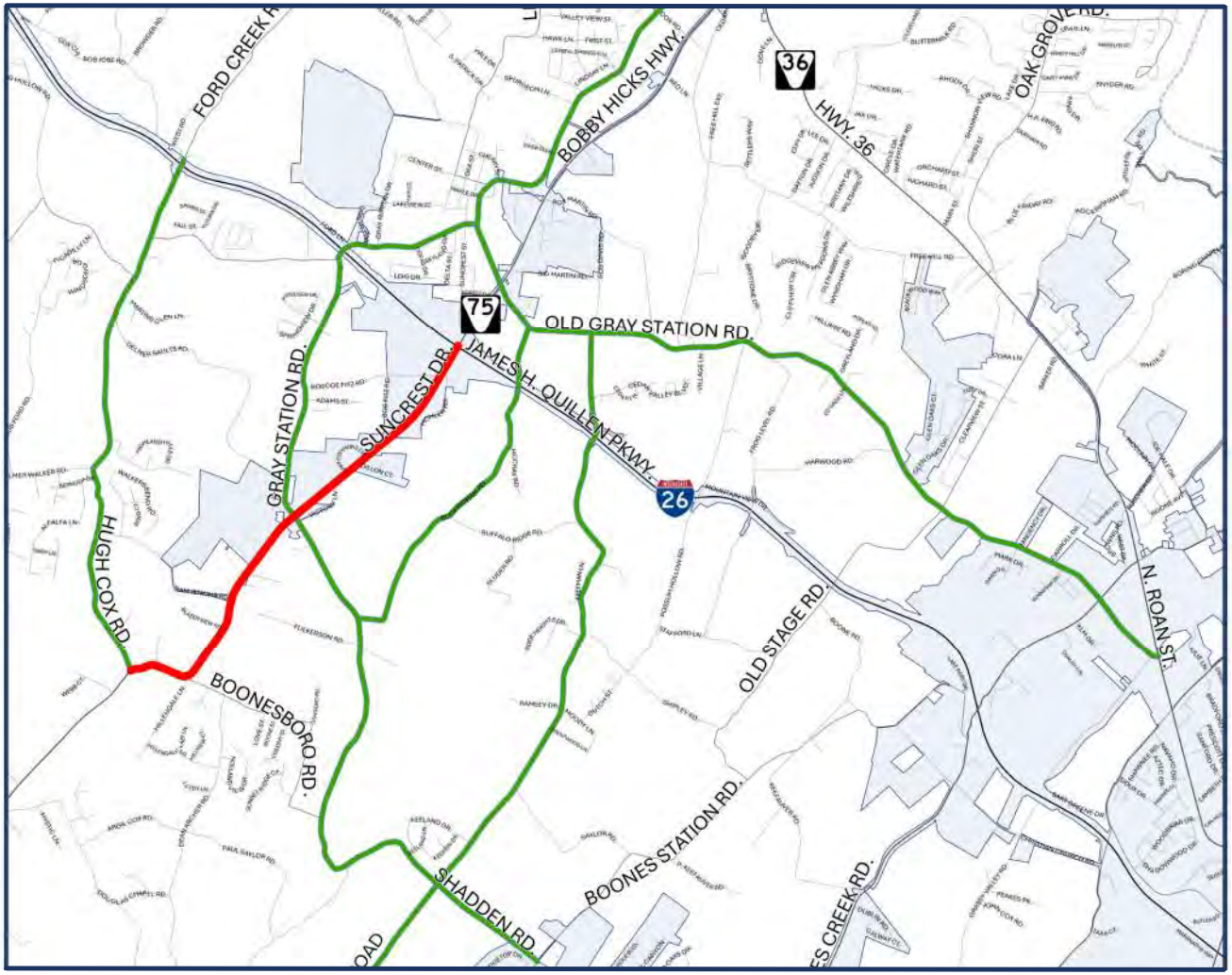


FUTURE 5-LANE WITH LONG-TERM IMPROVEMENTS (ROLL OUT MAP ON TABLE)



FUTURE 5-LANE LONG-TERM IMPROVEMENTS (ROLL OUT MAP ON TABLE)





ALTERNATE ROUTE EXERCISE

INTERACTIVE EXERCISES

- RECOMMENDATION BOARDS
  - Use post-it notes to provide feedback (positive or negative)
  - How can we tweak recommendations to better suit your needs?

- ALTERNATE ROUTE EXERCISE
  - Think about the alternate routes you travel when SR 75 is congested: Use a sticky dot on the map to show us your alternate routes and how often you use them.



Road I use **very often** to avoid SR 75



Road I use **sometimes** to avoid SR 75

NEXT STEPS

- Review Today's Feedback
- Prepare Final Recommendations
- Finalize Corridor Study Report
- Public Meeting #3
  - Tentatively October 2025

Display	Location	Comment / Colored Dot
Traffic Signal at Sam Jenkins Rd	SR 75 at Sam Jenkins Rd	Need traffic light
Hugh Cox Road Phase 2	SR 75 in front of Daniel Boone High School	One-Way
	SR 75 West leg of the roundabout	Reconsider to use existing road
	Realigned SR 75 Section	Need a greenway
Boonesboro Rd/Hillendale Ln Roundabout	SR 75 at Boonesboro Rd Roundabout	Roundabout would be dangerous, especially for inexperienced drivers - Need drivers education on roundabout etiquette and rules
		4-Way intersection when/if "by-pass" is constructed
		Roundabout must be wide enough to let large trucks, buses, and farm equipment to make safe turns
SR 75 3-Lane Improvements (Mid-Term) - South/West Side	SR 75 at Boonesboro Rd Roundabout	Love the roundabout. Mirrors Crockett. Hard to see with the hill. This will slow traffic.
		Bypassing the school is preferable to the roundabout - would be safer for the school/kids and would keep traffic moving.
	SR 75 in front of Daniel Boone High School	Greenway could connect residential neighborhoods. Also, having trees or greenery as a buffer between the road and greenway would make it more pleasant and accessible.
	SR 75 at Sam Jenkins Rd	Traffic light a must
	Overall	Adding a bus route to this corridor would help the growth of 4% traffic feel less impactful to this area over a larger period of time.
	SR 75 at Shadden Rd	Traffic would further increase on Shadden from neighborhoods that would begin prioritizing Shadden over Boonesboro. It's also quite narrow.
SR 75 3-Lane Improvements (Mid-Term) - North/East Side	Victory Ln	Need speed bumps on Victory Lane!
	Overall	Please mail surveys to area residents - today is the first we are hearing about SR 75 improvements!
SR 75 5-Lane Improvements (Long-Term) - South/West Side	SR 75 at Hugh Cox Rd	Heavy traffic High speeds In Sulphur Springs Hwy 75
	SR 75 at Realigned SR 75 - West Intersection	Prob need traffic light
	SR 75 West leg of the roundabout	Consider widening the existing road so as not to interrupt multiple farmers. We love our farmers in Gray!
	SR 75 at Boonesboro Rd Roundabout	No roundabout at school
		Love the roundabout!
	SR 75 in front of Daniel Boone High School	Love this!
	Realigned SR 75 Section	Way better than the roundabout
		Consider caution lights for tractor crossing for this landowner
	SR 75 at Realigned SR 75 - East Intersection	Love this concept - Prob need traffic light
		Great idea to reduce school traffic in front of Blazer view
	SR 75 at Gray Station Rd	Yes!
SR 75 5-Lane Improvements (Long-Term) - North/East Side	Overall	Widening the road and expanding the lanes has a potential of cearting a dragway affect when drivers are behind the wheel. They will feel more inclined to drive faster due to more space. This will cause higher rates of speed for accidents and make the road less safe.

Alternate Route	Very Often	Sometimes
Hugh Cox Rd	7	0
Delmer Salts Rd	3	0
Hog Hollow Rd	1	0
Picadilly Ln	1	0
Fordtown Rd	1	0
Gray Station Sulphur Springs Rd	1	0
Gray Station Rd	5	0
Douglas Shed Rd	3	0
Shadden Rd	3	3
Hales Chapel Rd	0	1
Boones Station Rd	2	0
Buckingham Rd	2	1
Bob Fitz Rd	1	0
Old Gray Station Rd	4	0
Liberty Church Rd	1	0
Comment: Hog Hollow Rd to Eastern Star Rd		


FLOOD PRONE
WELLS SINK HOLES POSSIBLE?
CROSS COUNTRY POINTS
DANIEL BOONE
TRAILBLAZERS
N

SR 75 (SUNCREST DR.)

SR 75 (SUNCREST DR.)

HILLENDALE LN.

BOONESBORO RD.

MEADOW CT.

Roundabout
Must be wide
enough to let
large trucks, buses
and farm equip.
make save turns

Roundabout
could be dangerous,
esp for inexperienced
drivers –
Need drivers Ed
re Roundabout
etiquette & Rules

intersection
4 way
What if "Bypass"
is constructed

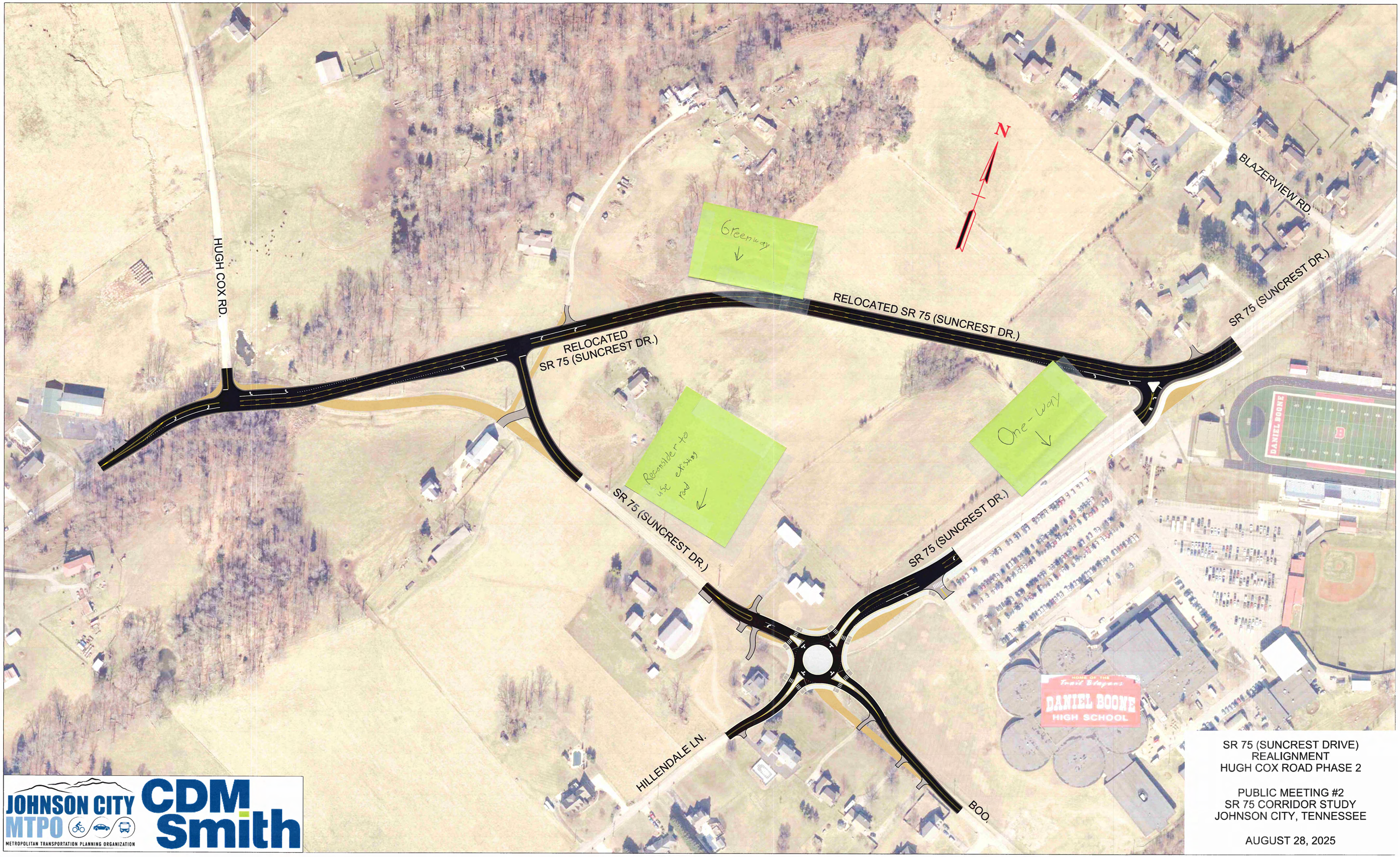
JOHNSON CITY MTPO
METROPOLITAN TRANSPORTATION PLANNING ORGANIZATION

CDM Smith

BOONESBORO ROAD/
HILLENDALE LN.
ROUNDABOUT

PUBLIC MEETING #2
SR 75 CORRIDOR STUDY
JOHNSON CITY, TENNESSEE

AUGUST 28, 2025



JOHNSON CITY MTPO
METROPOLITAN TRANSPORTATION PLANNING ORGANIZATION

CDM Smith

SR 75 (SUNCREST DRIVE)
REALIGNMENT
HUGH COX ROAD PHASE 2

PUBLIC MEETING #2
SR 75 CORRIDOR STUDY
JOHNSON CITY, TENNESSEE

AUGUST 28, 2025



JOHNSON CITY MTPO
METROPOLITAN TRANSPORTATION PLANNING ORGANIZATION

CDM Smith

SR 75 (SUNCREST DRIVE)
AT SAM JENKINS ROAD
SIGNAL BY OTHERS
UNDER CONSTRUCTION

PUBLIC MEETING #2
SR 75 CORRIDOR STUDY
JOHNSON CITY, TENNESSEE

AUGUST 28, 2025

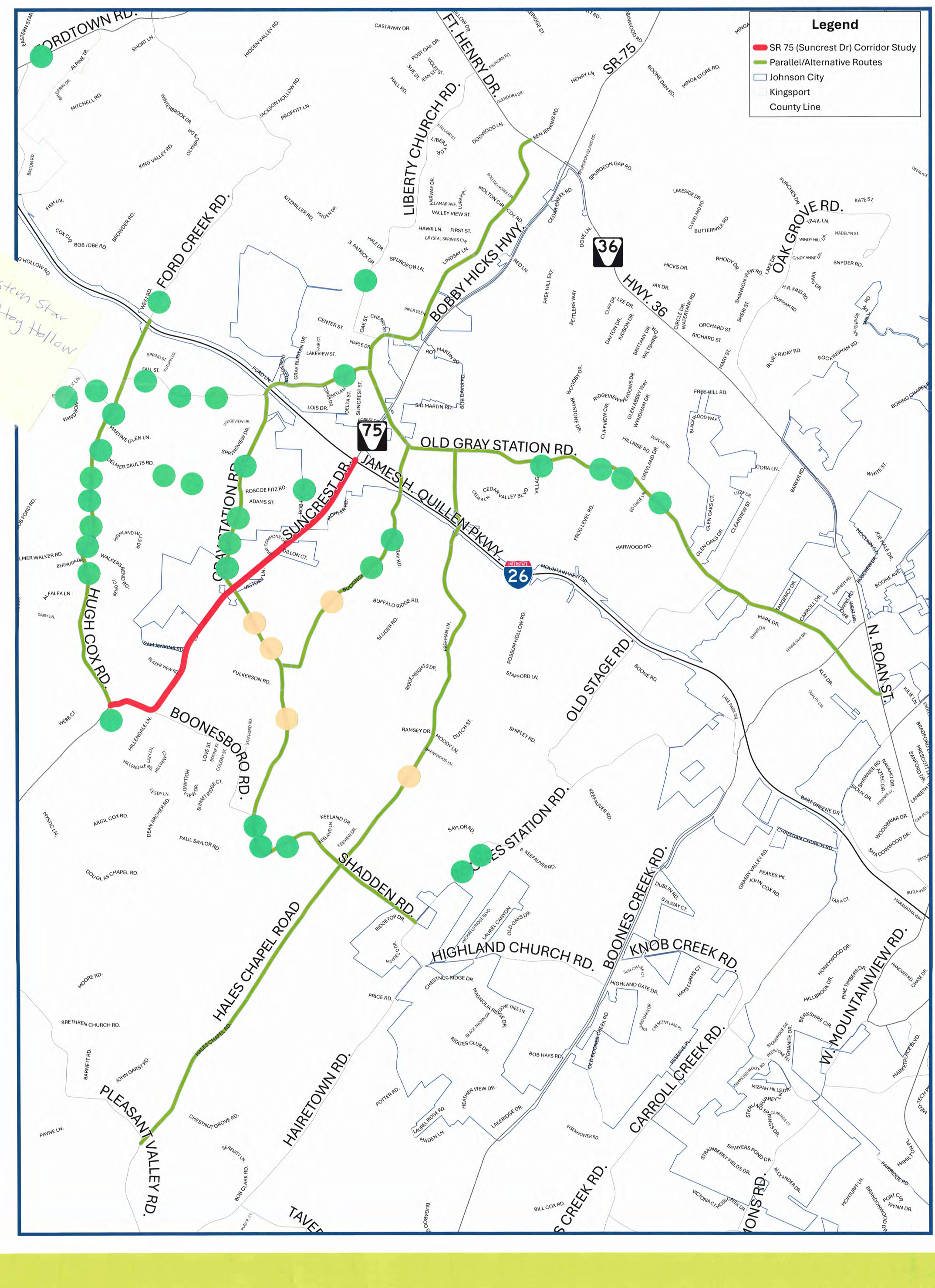
JOHNSON CITY MTPO
METROPOLITAN TRANSPORTATION PLANNING ORGANIZATION

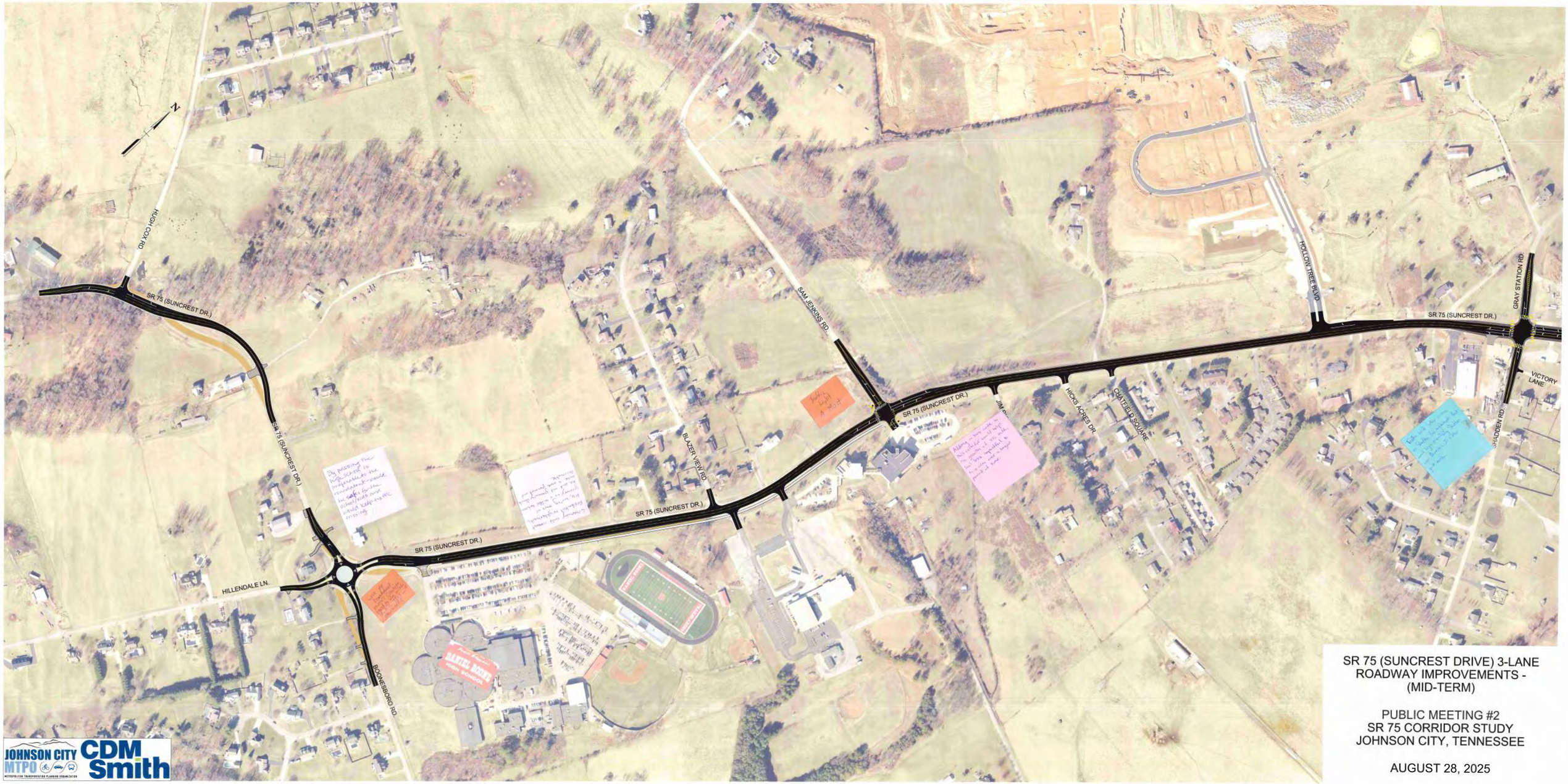
Alternate Routes

We want to hear from you! When SR 75 gets congested, which roads do you take instead? Use a sticky dot on the map below to show us your alternate routes and how often you use them.

Road I use **very often** to avoid SR 75

Road I use **sometimes** to avoid SR 75

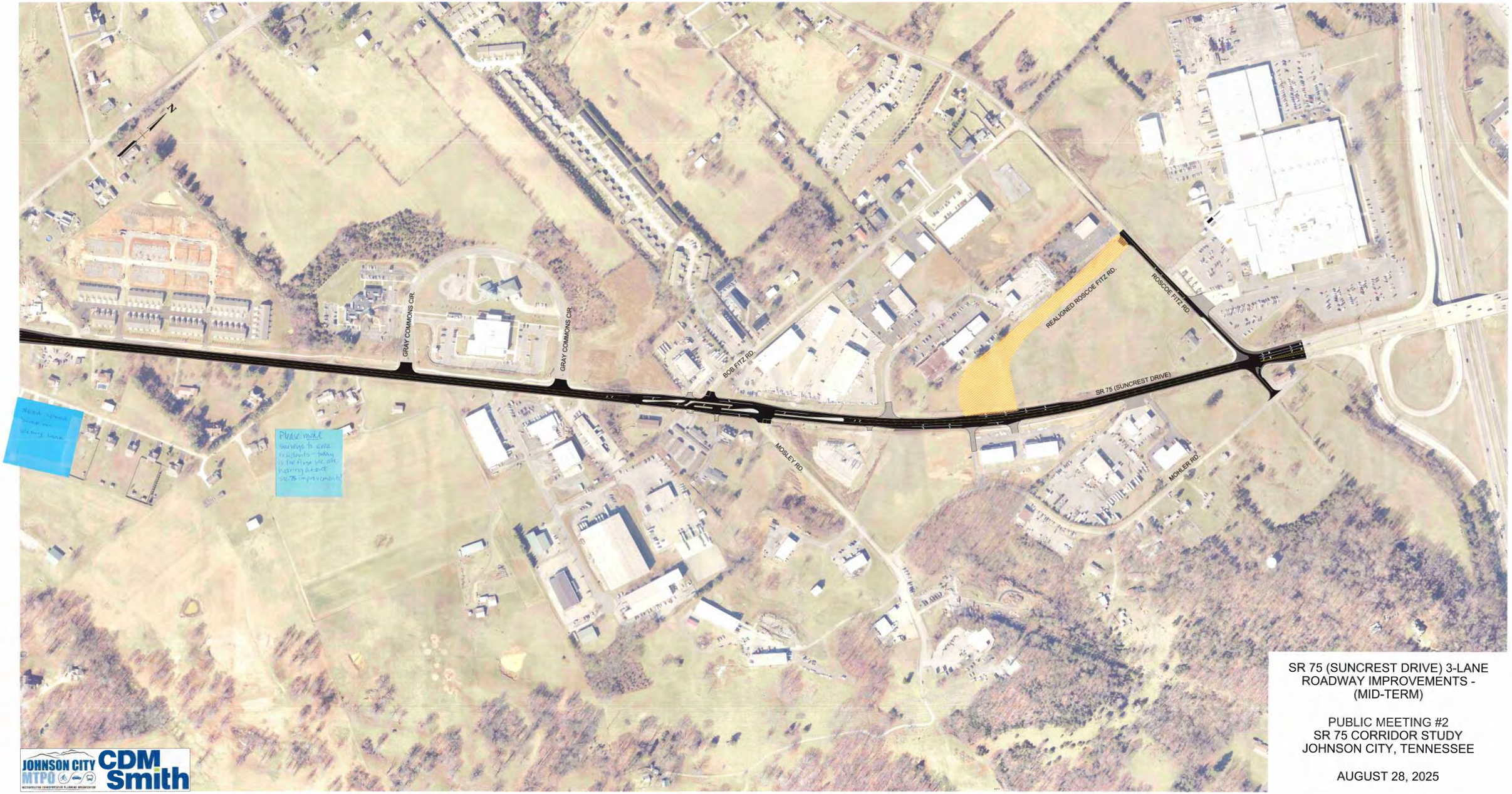




SR 75 (SUNCREST DRIVE) 3-LANE ROADWAY IMPROVEMENTS - (MID-TERM)

PUBLIC MEETING #2
SR 75 CORRIDOR STUDY
JOHNSON CITY, TENNESSEE

AUGUST 28, 2025



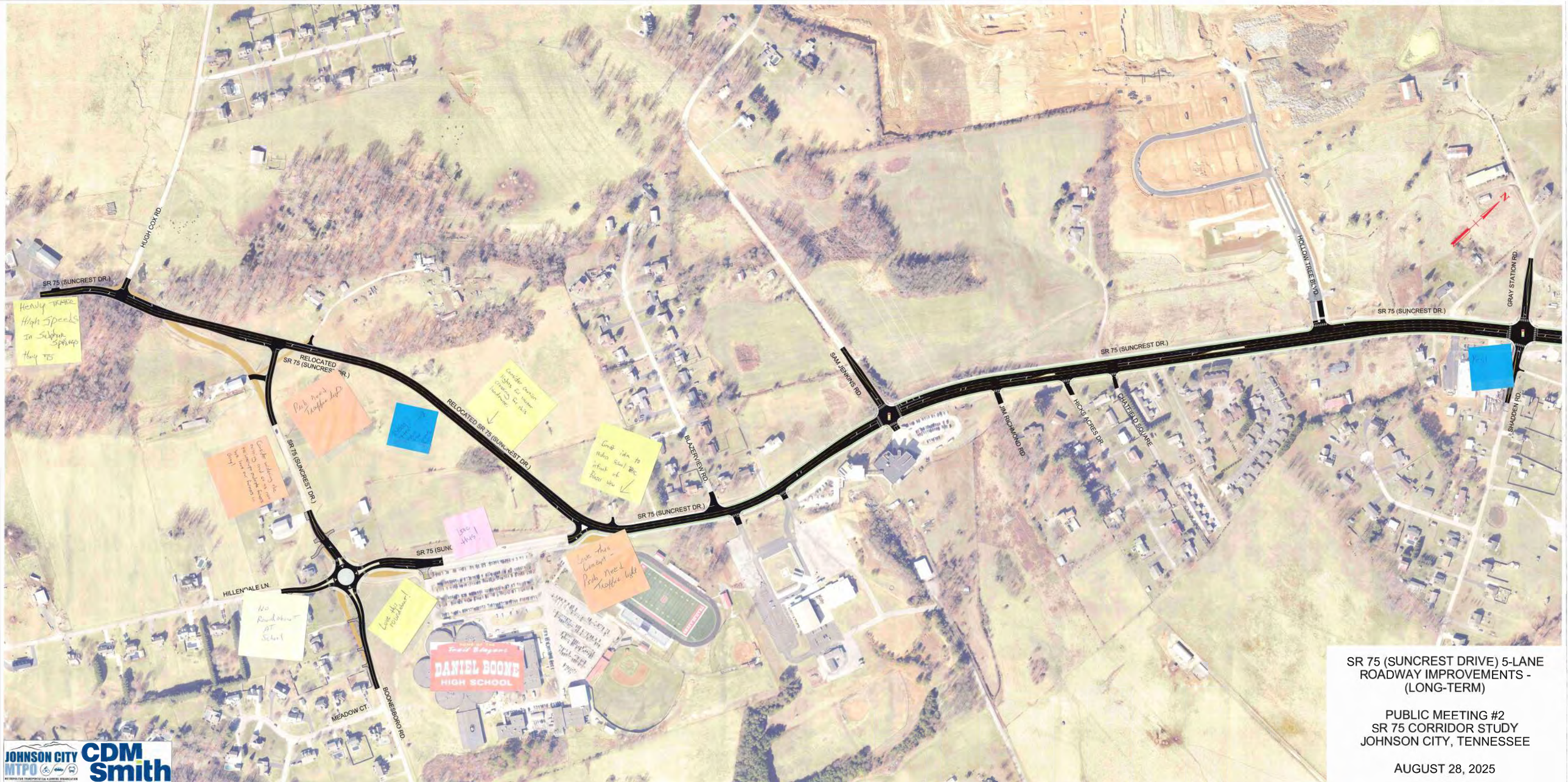
JOHNSON CITY MTPO

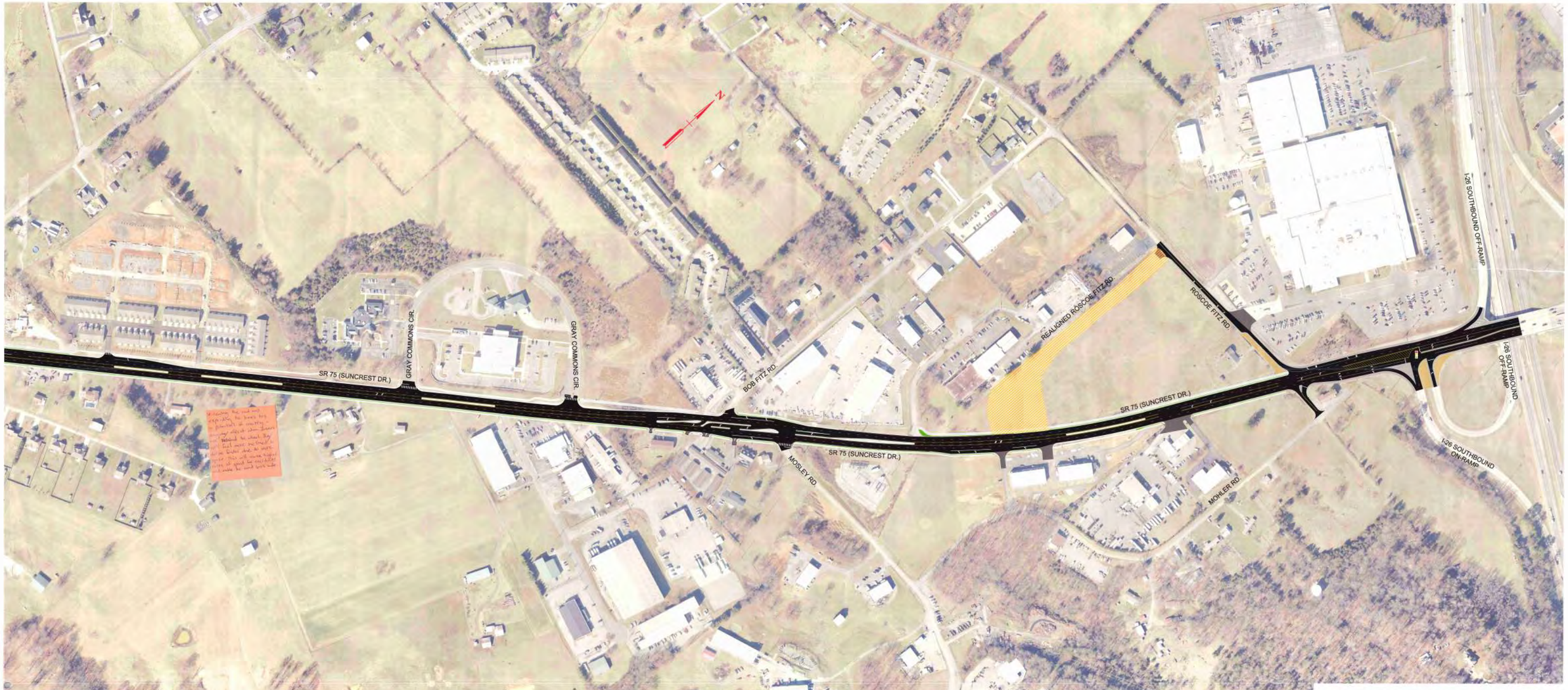
CDM Smith

SR 75 (SUNCREST DRIVE) 3-LANE
ROADWAY IMPROVEMENTS -
(MID-TERM)

PUBLIC MEETING #2
SR 75 CORRIDOR STUDY
JOHNSON CITY, TENNESSEE

AUGUST 28, 2025


HUGH COX RD
SR 75 (SUNCREST DR.)
RELOCATED SR 75 (SUNCREST DR.)
SR 75 (SUNCREST DR.)
HILLENDALE LN.
MEADOW CT.
BOONESBORO RD.
DANIEL BOONE HIGH SCHOOL
BLAZERVIEW RD.
SAM JENKINS RD.
JIM RICHMOND RD.
HICKS ACRES DR.
CHATFIELD SQUARE
HOLLOW TREE BLVD.
GRAY STATION RD.
SHADDEN RD.
N
SR 75 (SUNCREST DRIVE) 5-LANE ROADWAY IMPROVEMENTS - (LONG-TERM)
PUBLIC MEETING #2
SR 75 CORRIDOR STUDY
JOHNSON CITY, TENNESSEE
AUGUST 28, 2025
JOHNSON CITY MTPO
CDM Smith



SR 75 (SUNCREST DRIVE) 5-LANE ROADWAY IMPROVEMENTS - (LONG-TERM)

PUBLIC MEETING #2
SR 75 CORRIDOR STUDY
JOHNSON CITY, TENNESSEE

AUGUST 28, 2025

JOHNSON CITY MTPO
CDM Smith

1. Public Survey

For the following recommendations, participants were able to read details about the improvements, view drawings, and then were asked a general question regarding how they feel about the improvements and follow-up questions about specific portions of the recommendations. The sections below detail the responses and comments received.

1.1 Roundabout

Number of Respondents: 4

Figure 1.1: Roundabout Sentiments

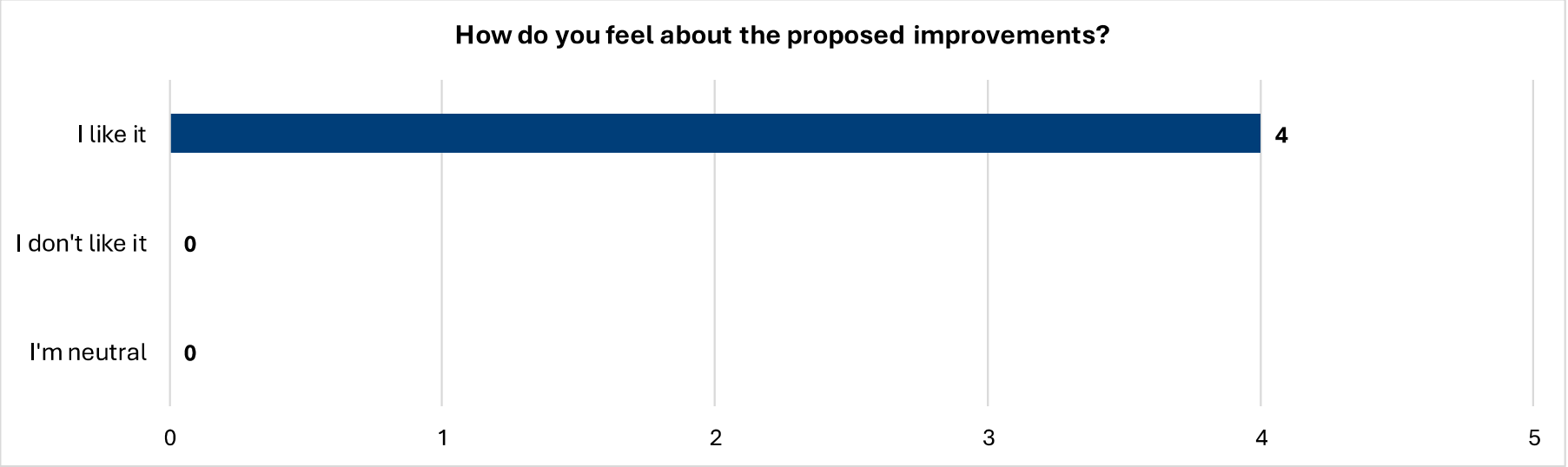


Table 1.1: Roundabout Comments

Question	Comments
Please provide any additional comments.	I like the idea of a roundabout here, but this will not work if the "by pass" of SR-75 is not constructed first. Too much traffic on SR-75 and a roundabout could cause congestion.
	A roundabout here is a good solution.

1.2 SR 75 Realignment

Number of Respondents: 3

Figure 1.2: SR 75 Realignment Sentiments

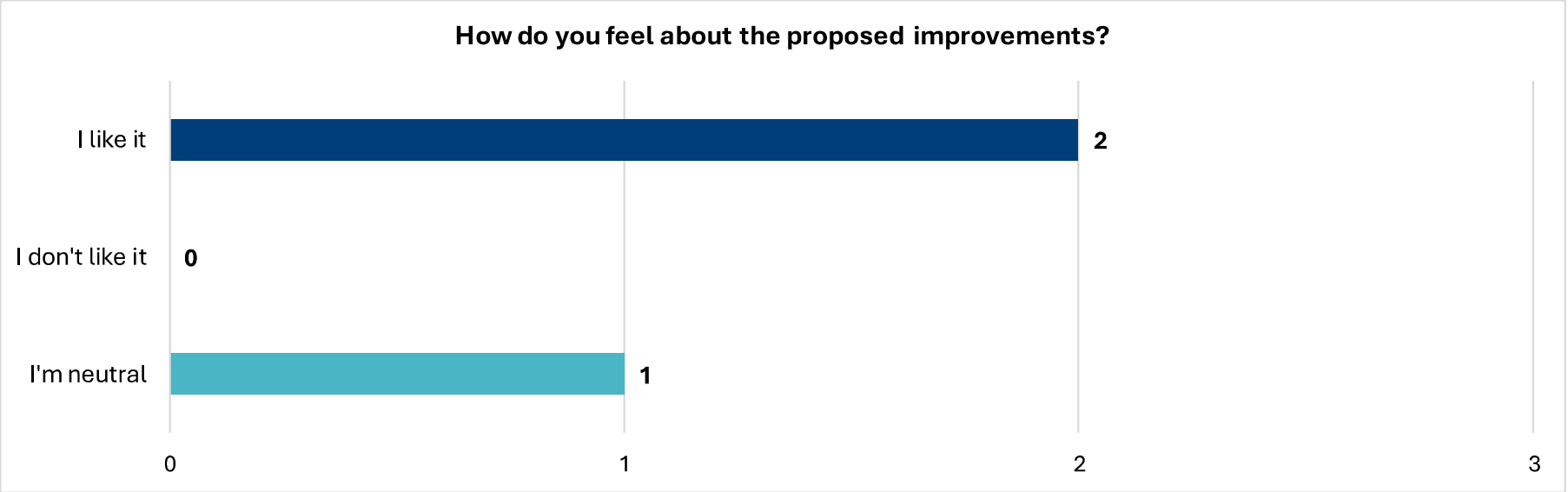


Table 1.2: SR 75 Realignment Comments

Question	Comments
What do you think about the new realigned road?	The new aligned road is a great alternative to the existing conditions. I don't like seeing family farms be broken up, but this is ultimately needed for this corridor.
	If the purpose of the realigned road is to provide for additional storage area for school traffic, it seems to be an expensive fix to a problem that may have other less costly solutions. Potential solutions include construction of storage on-site for the high school, or extensive methods by the school system to encourage students to ride the bus rather than individual vehicle drop-offs and pick-ups. If the new road realignment moves forward, there needs to be extensive planning for the property that would lie between the old alignment and the new alignment. There would likely be a market shift in

Question	Comments
	demand resulting in pressure for a higher intensive use for that property such as commercial or multi-family. If that happens, benefits from the alignment would diminish as increased traffic results from the higher intensity land use.
What do you think about the roundabout?	The roundabout is a great idea for this particular intersection. I don't think that it should be constructed before SR-75 realignment is completed. Constructing this roundabout with the traffic along SR-75 will be difficult and the volume of traffic on SR-75 could be congested by a roundabout without the alignment bypassing it.
	The roundabout is a great idea.
What do you think about the multi-use path in front of Daniel Boone High School?	Multi-use paths are always a nice addition to a roadway project. If there is a logical end point and means to construct it, it would be good. It might make more sense to dedicate right of way and a graded location for the future construction of it when there is more of a demand for it.
	This is the best component of the recommendation. There should be intensive multimodal infrastructure throughout the corridor.

1.3 Phase 1 Realignment

Number of Respondents: 3

Figure 1.3: Phase 1 Realignment Sentiments

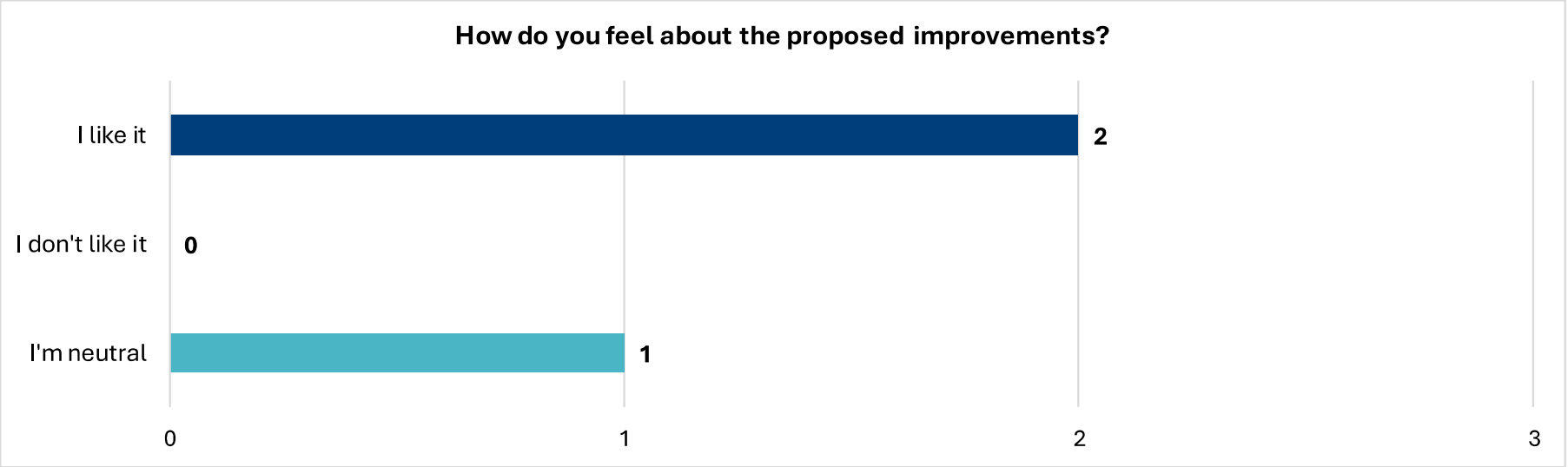


Table 1.3: Phase 1 Realignment Comments

Question	Comments
Please provide any additional comments.	Realignment of this section of the corridor would be good. This should improve sight distance and improve safety of the intersection.

1.4 Shadden Road/Gray Station Road Signal

Number of Respondents: 3

Figure 1.4: Shadden Road/Gray Station Road Signal Sentiments

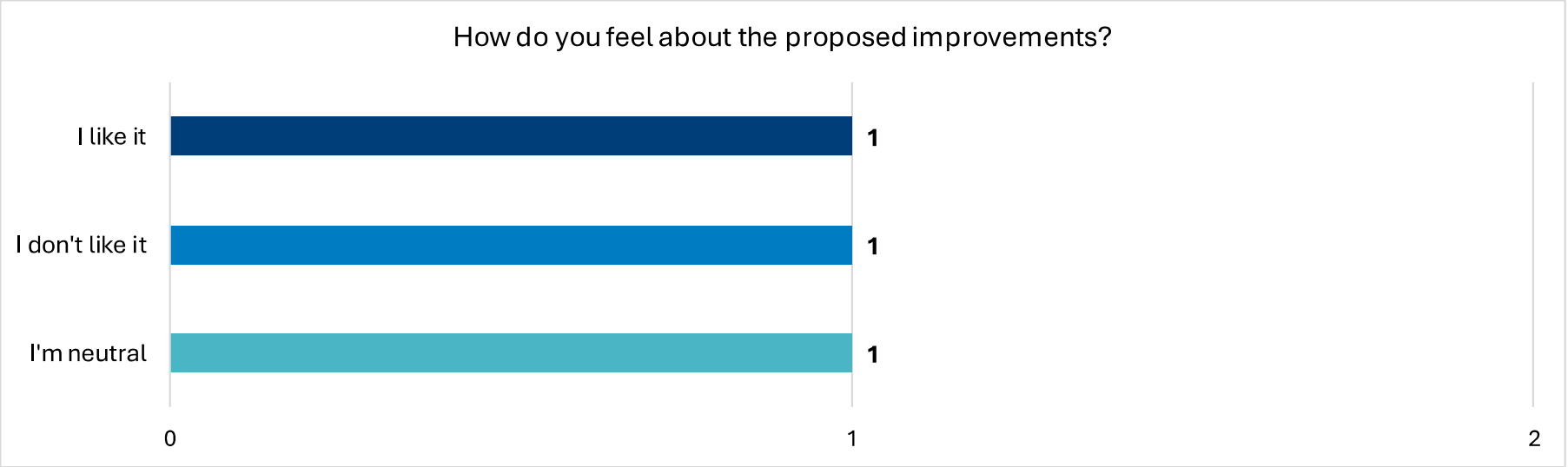


Table 1.4: Shadden Road/Gray Station Road Signal Comments

Question	Comments
Please provide any additional comments.	A roundabout would be better. Traffic signals should be a last resort.

1.5 Roscoe Fitz

Figure 1.5: Roscoe Fitz Sentiments

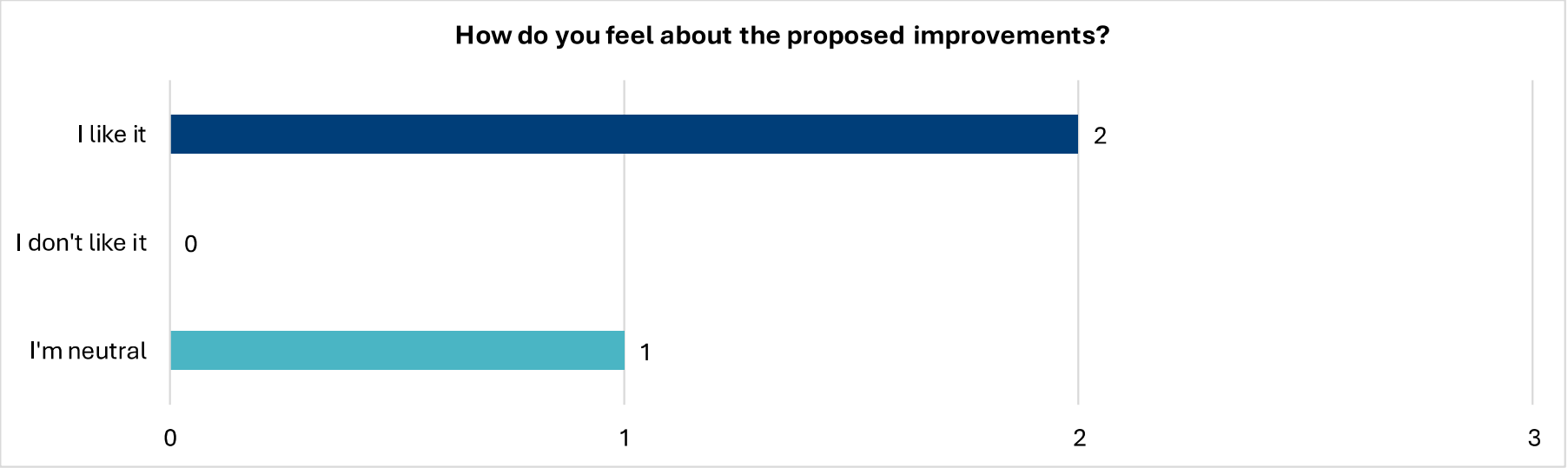


Table 1.5: Roscoe Fitz Comments

Question	Comments
Please provide any additional comments.	This is needed for a variety of reasons. I would be in favor of the traffic signal aligning with the further southwest driveway to the development to allow for a safe connection to Mohler Road.
	I like the realigned Roscoe Fitz, but I would prefer a roundabout over a traffic signal at the new intersection.

1.6 Sam Jenkins Road Signal

Number of Respondents: 2

Figure 1.6: Sam Jenkins Road Signal Sentiments

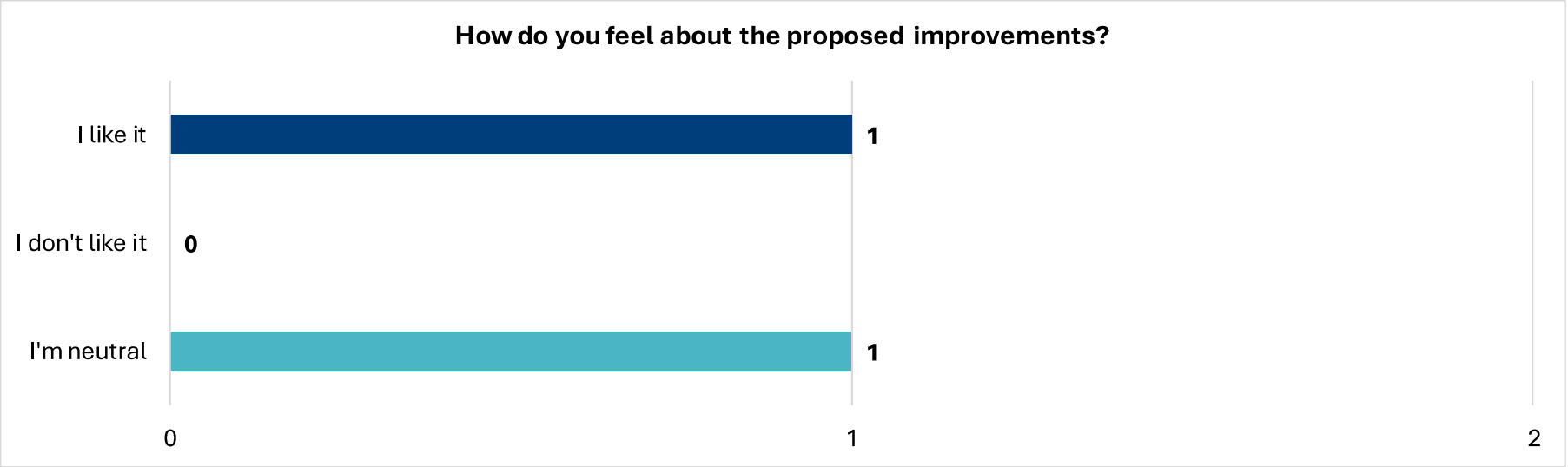


Table 1.6: Sam Jenkins Road Signal Comments

Question	Comments
Please provide any additional comments.	I think this is a much needed improvement, especially during peak hours. However, the left turn storage length is not long enough. More improvements along Sam Jenkins should be considered at this time, while there are fields on either side and relatively inexpensive right of way opportunities are available. Possibly widen it to a three lane section out to the school, then taper down. The area is only becoming more densely developed and traffic along this corridor will only increase.
	I guess it's okay, but I'd rather have a roundabout than a traffic signal even if it's a multi-lane roundabout.

1.7 Bob Fitz Road Access Management

Number of Respondents: 2

Figure 1.7:Bob Fitz Road Access Management Sentiments

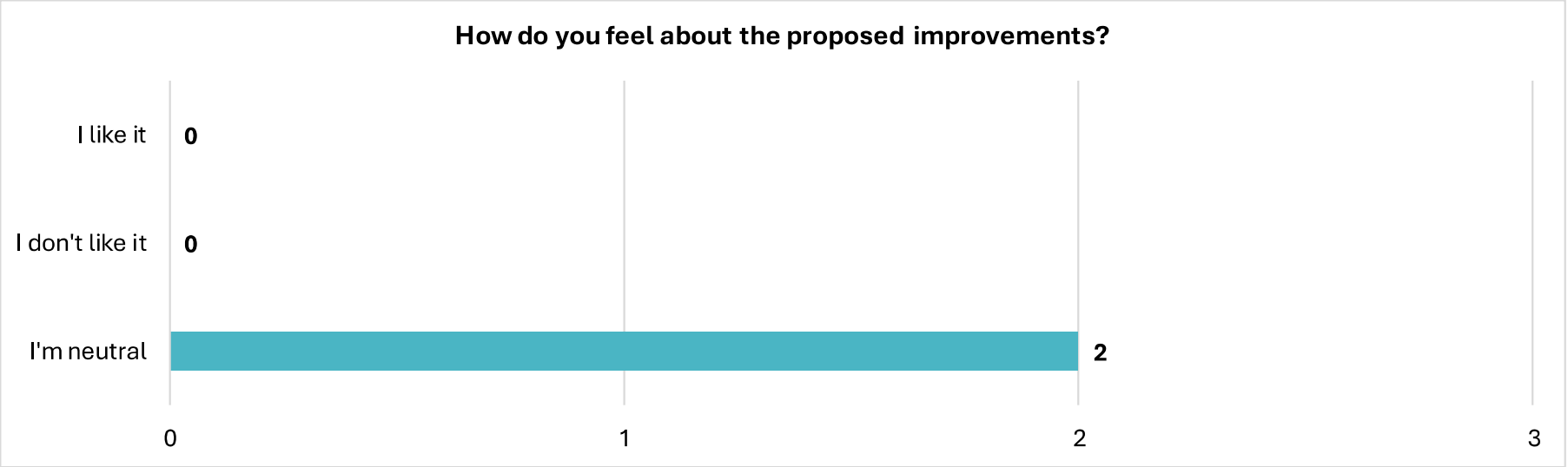


Table 1.7: 1.7 Bob Fitz Road Access Management Comments

Question	Comments
Please provide any additional comments.	As a local, I do not use Bob Fitz Road. I do, however, use Mosley Road. At first glance I do not like this option. I understand that it is intended to reduce safety at this location but I am concerned about operations. Often times now, people will use the TWLTL as an acceleration lane or a holding lane when exiting Mosley to the west. As you know, this is not the intended use of this lane, but it often times is the only way someone can find two gaps in traffic on SR-75 to get out of Mosley. There may not be If the connection is made from Mosley along Mohler Road to a traffic signal at the new development on SR-75, then this option would be great. Without that connection, I am concerned about people safely and timely exiting Mosley at certain times of the day.

Question	Comments
	This is fine so long as the medians are not concrete. The medians should be landscaped features with a minimum of grass, ideally trees, and no damn river rock. If they could be made into stormwater features such as bioswales, that would even better. Concrete medians represent one of the worst design aspects of any road contributing to a poor sense of place, urban heat island, and increased runoff.

1.8 Mid-Term Improvements (All)

Number of Respondents: 2

Figure 1.8: Mid-Term Improvements (All) Sentiments

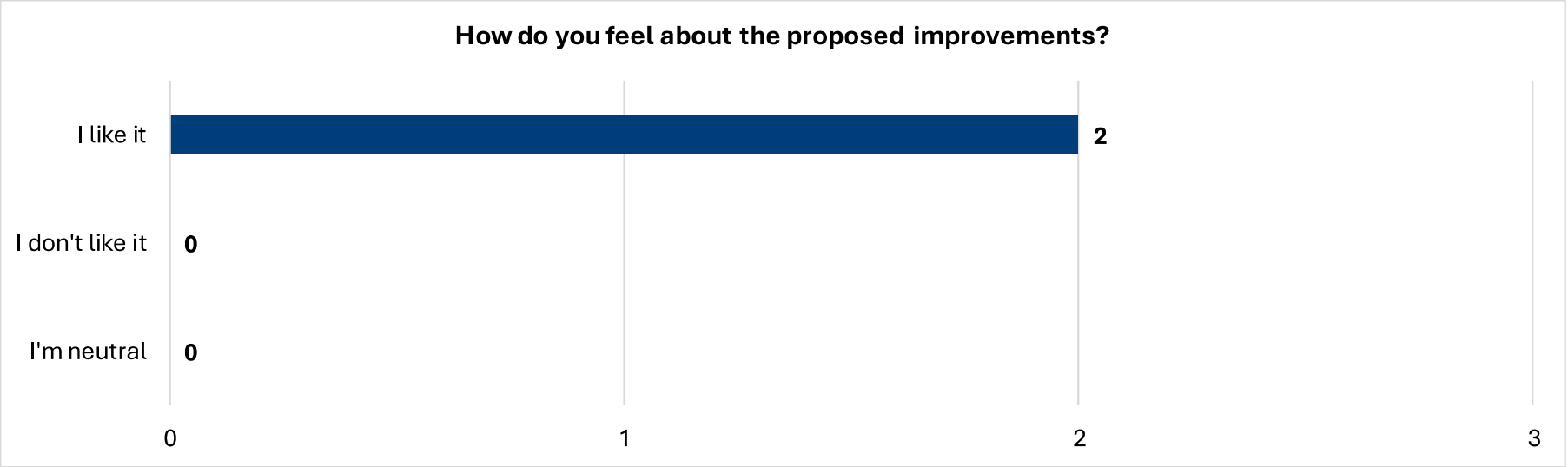


Table 1.8: Mid-Term Improvements (All) Comments

Question	Comments
What do you think about the Phase 1 improvement at Hugh Cox Road?	I like it, but more consideration for extending turn lanes or widening to a three lane section to the school should be given.
	Good.

Question	Comments
What do you think about the roundabout at Boonesboro Road and Hillendale Lane?	What do you think about the roundabout at Boonesboro Road and Hillendale Lane?
	Excellent - Do this tomorrow please.
What do you think about the multi-use path from Daniel Boone High School to Sam Jenkins Road?	Unless it extends to the school on Sam Jenkins, or all the way to the interstate, I think it would be best to dedicate ROW and grade for the future addition of it. Without meaningful termini, it will not be utilized to its potential.
	Fantastic.
What do you think about the traffic signal at Sam Jenkins Road?	In favor of this traffic signal.
	A roundabout would be better.
What do you think about the traffic signal at Shadden Road/Gray Station Road?	In favor of this traffic signal.
	A roundabout would be better.
What do you think about the access management around Bob Fitz Road?	Indifferent to these improvements. I see the good, but I am concerned about operations without an alternate left turn option from Mosley/the convenience center.
	Good - but make the medians landscaped.
What do you think about the realignment of Roscoe Fitz Road?	In favor of this improvement. There is a big need for this improvement.

Question	Comments
	Good, but make it a roundabout.
Please provide any additional comments.	Overall, great job on these improvements. Well thought out and considered improvements.

1.9 Long-Term Improvements (All)

Number of Respondents: 2

Figure 1.9: Long-Term Improvements (All) Sentiments

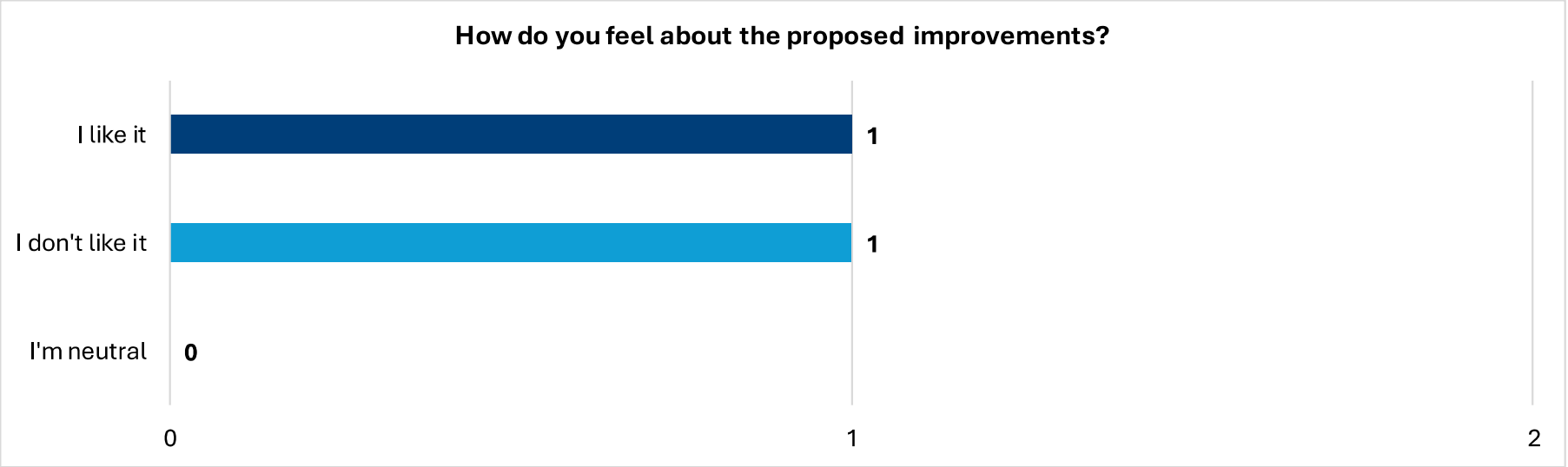


Table 1.9: Long-Term Improvements (All) Comments

Question	Comments
What do you think about the relocated SR 75?	Great idea. Only draw back is the necessary right of way requirements.
	Plan for an intensification of land use.
	Great idea, after the relocated SR-75 is completed.

Question	Comments
What do you think about the roundabout at Boonesboro Road and Hillendale Lane?	It's excellent.
What do you think about the multi-use path from Daniel Boone High School to Sam Jenkins Road?	Without meaningful termini, not in favor of its full construction at this time.
	Fantastic.
What do you think about the traffic signal at Sam Jenkins Road?	In favor.
	Make it a roundabout.
What do you think about strategically placed concrete medians?	In general I am in favor of this option. The locations would need to consider alternate left turning options. I see it often people utilizing the TWLTL as a refuge due to lack of adequate gaps in traffic on SR-75 for a full left turn movement.
	Great - but they shouldn't be concrete, landscape them or make them stormwater features.
What do you think about the traffic signal at Shadden Road/Gray Station Road?	In favor
	Make it a roundabout.
	In favor if an alternate signalized left turn option is available for Mosley/Mohler

Question	Comments
What do you think about the access management around Bob Fitz Road?	Good, but make the medians landscaped or stormwater features.
What do you think about the realignment of Roscoe Fitz Road?	In favor
	Good.
What do you think about the four-lane divided design of SR 75?	I am not in favor of this particular improvement. This would help traffic LOS on SR-75, but ultimately hurt sideroads and driveways without signal control. This could also lead to increased travel speeds on SR-75.
	I don't like it. Widening the road will increase speeds and induce travel demand. An increase in the maintenance costs would also result that adjacent tax revenue is unlikely to cover. The road widening would also invite an intensification of land use that it's unclear as to whether this is the ultimate vision for the corridor. This would continue the often-repeated cycle of widening roads, more traffic, more demand, widening roads, more traffic, etc. This cycle is insidious as it doesn't create real wealth and drains government revenues that could be directed to more impactful areas. More traffic accidents would result, and demand pressure will continue to build. An alternative is a coordinated vision for the Gray area that limits road widening while strategically improving alternate routes within the area. Combining this with a cohesive land use strategy would produce a better long-term outcome that is fiscally responsible and sustainable.
Please provide any additional comments.	Great job on putting these options together and the presentation.

SR 75 CORRIDOR STUDY

PUBLIC MEETING #3

NOVEMBER 6, 2025

Johnson City SR-75 Corridor Study
Johnson City, TN
November 6, 2025

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Sarah Flaifel	sflaifel@johnsoncitytn.org
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Johnson City SR-75 Corridor Study
Johnson City, TN
November 6, 2025

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Johnson City SR-75 Corridor Study
Johnson City, TN
November 6, 2025

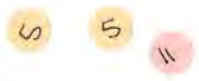
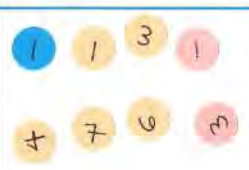
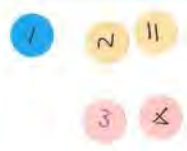
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Jarrod Adams	adamsj@wcde.org
David Houston	dhous3@yahoo.com
Charlie Buckingham	cbuck259@gmail.com
Ceilya Campbell	cacamp@gmail.com

Johnson City SR-75 Corridor Study
Johnson City, TN
November 6, 2025

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Troy Ebbert	TDOT
Michael Dice	Michael.dice@tn.gov
Wayne Browder	
Jerry Hale	
Nancy Hale	
David Hutchins	
Sally Hicks	sdhicks42@gmail.com

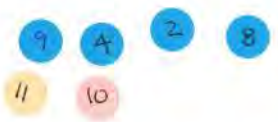
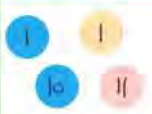
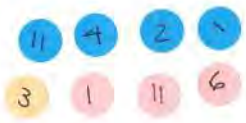
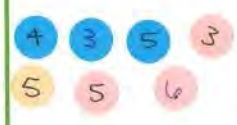
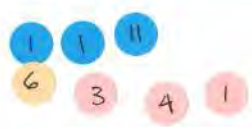
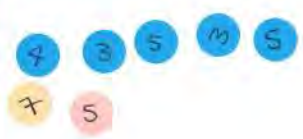
JOHNSON CITY MTPO
METROPOLITAN TRANSPORTATION PLANNING ORGANIZATION

SR 75 Recommendations

Location	Recommendation	Ranking
Daniel Boone High School South Driveway	Right-Turn Lane	
Mosley Road	Right-Turn Lane	
Daniel Boone High School to Sam Jenkins Road	Multi-Use Path	
SR 75 from Hugh Cox Road to Boonesboro Road	Phase 1 Realignment of SR 75 and Intersection Improvements at Hugh Cox Road	
Boonesboro Road at Hilldendale Lane	Intersection Realignment	
SR 75 at Boonesboro Road & Hilldendale Road	Roundabout	
Bob Fitz Road	Access Management	
SR 75 from Hugh Cox Road to Blazerview Road	Phase 2 Realignment of SR 75 and Widen Existing SR 75 between Boonesboro Road and Relocated SR 75	
Roscoe Fitz Road	Realignment and Signalization	
SR 75 from Sam Jenkins Road to I-26	5-lane Widening	
I-26 Eastbound Off Ramp	Ramp Reconfiguration and Signal Modifications	

JOHNSON CITY MTPO
METROPOLITAN TRANSPORTATION PLANNING ORGANIZATION

SR 75 Recommendations

Location	Recommendation	Ranking
Daniel Boone High School South Driveway	Right-Turn Lane	
Mosley Road	Right-Turn Lane	
Daniel Boone High School to Sam Jenkins Road	Multi-Use Path	
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SR 75 at Boonesboro Road & Hilldendale Road	Roundabout	
Bob Fitz Road	Access Management	
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Roscoe Fitz Road	Realignment and Signalization	
SR 75 from Sam Jenkins Road to I-26	5-lane Widening	
I-26 Eastbound Off Ramp	Ramp Reconfiguration and Signal Modifications	

APPENDIX E. TRIP GENERATION

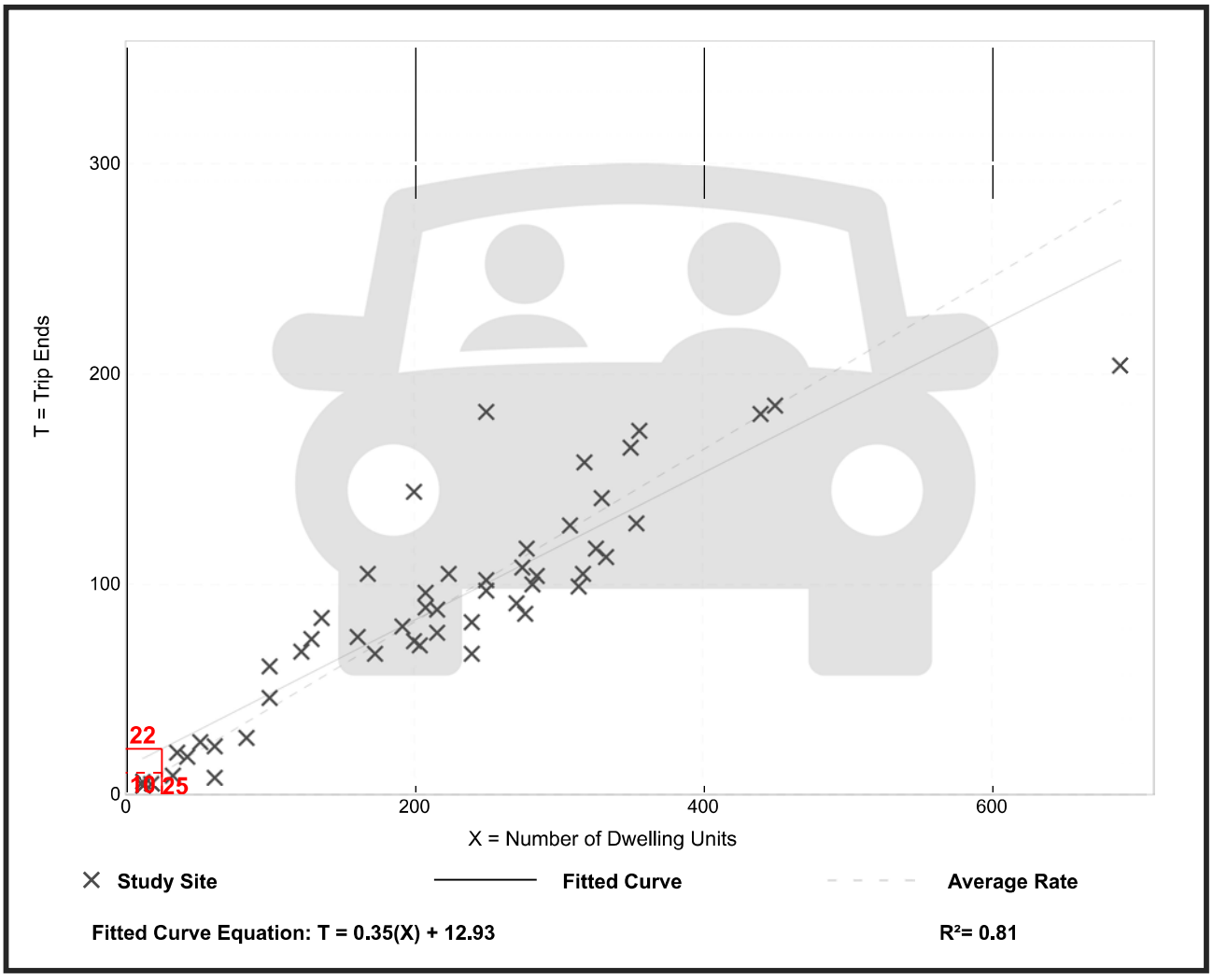
Multifamily Housing (Low-Rise)
Not Close to Rail Transit (220)

Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 51
Avg. Num. of Dwelling Units: 219
Directional Distribution: 24% entering, 76% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.41	0.13 - 0.73	0.10

Data Plot and Equation



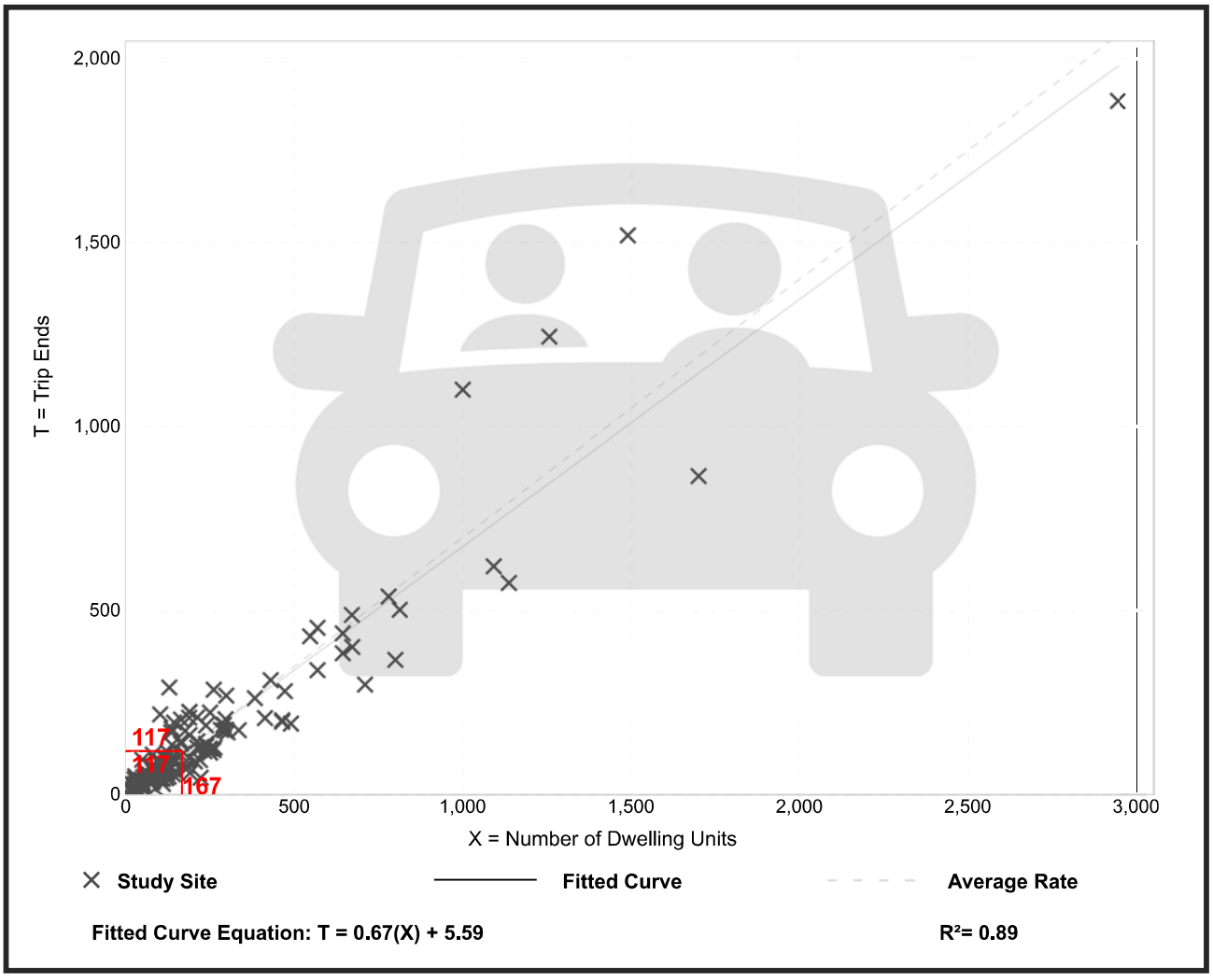
Single-Family Detached Housing
(210)

Vehicle Trip Ends vs:	**Dwelling Units**
On a:	**Weekday,**
	Peak Hour of Adjacent Street Traffic,
	One Hour Between 7 and 9 a.m.
Setting/Location:	**General Urban/Suburban**
Number of Studies:	153
Avg. Num. of Dwelling Units:	239
Directional Distribution:	27% entering, 73% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.70	0.22 - 2.27	0.26

Data Plot and Equation



Multifamily Housing (Low-Rise)
Not Close to Rail Transit (220)

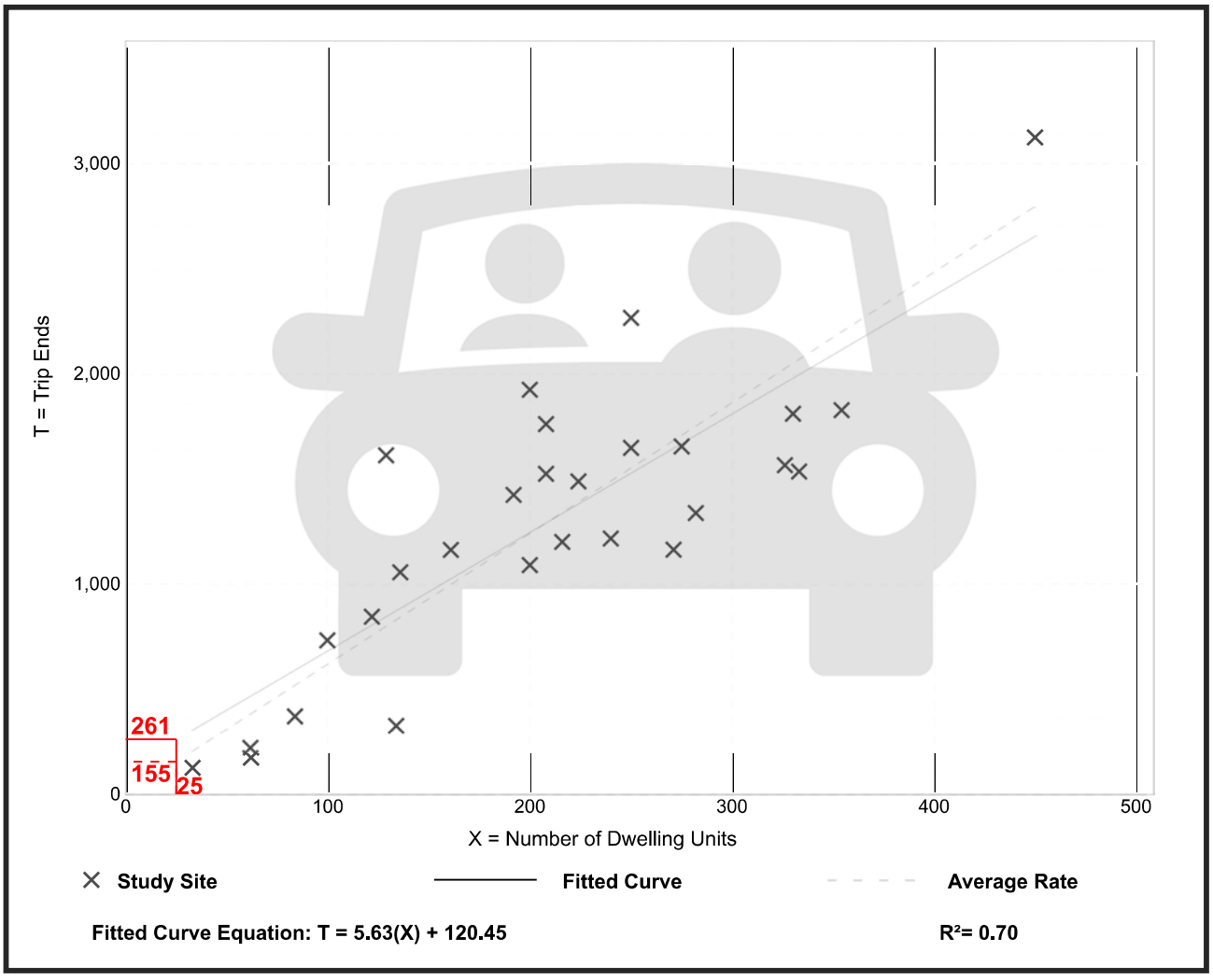
Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday**

Setting/Location: **General Urban/Suburban**
Number of Studies: 28
Avg. Num. of Dwelling Units: 208
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
6.21	2.46 - 12.50	1.87

Data Plot and Equation



Single-Family Detached Housing
(210)

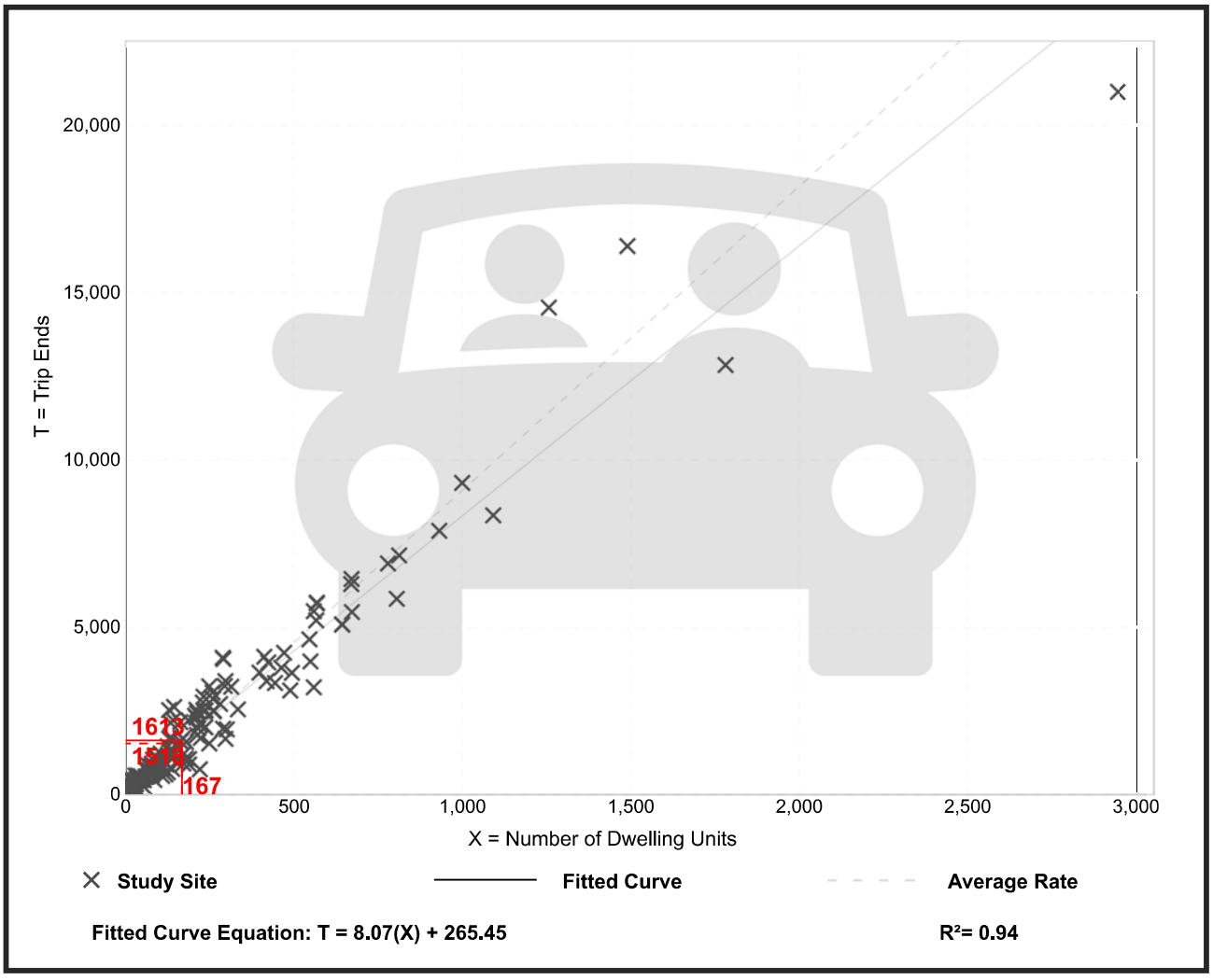
Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday**

Setting/Location: **General Urban/Suburban**
Number of Studies: 155
Avg. Num. of Dwelling Units: 261
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
9.09	3.47 - 23.80	2.29

Data Plot and Equation



Trip Gen Manual, 12th Edition • Institute of Transportation Engineers

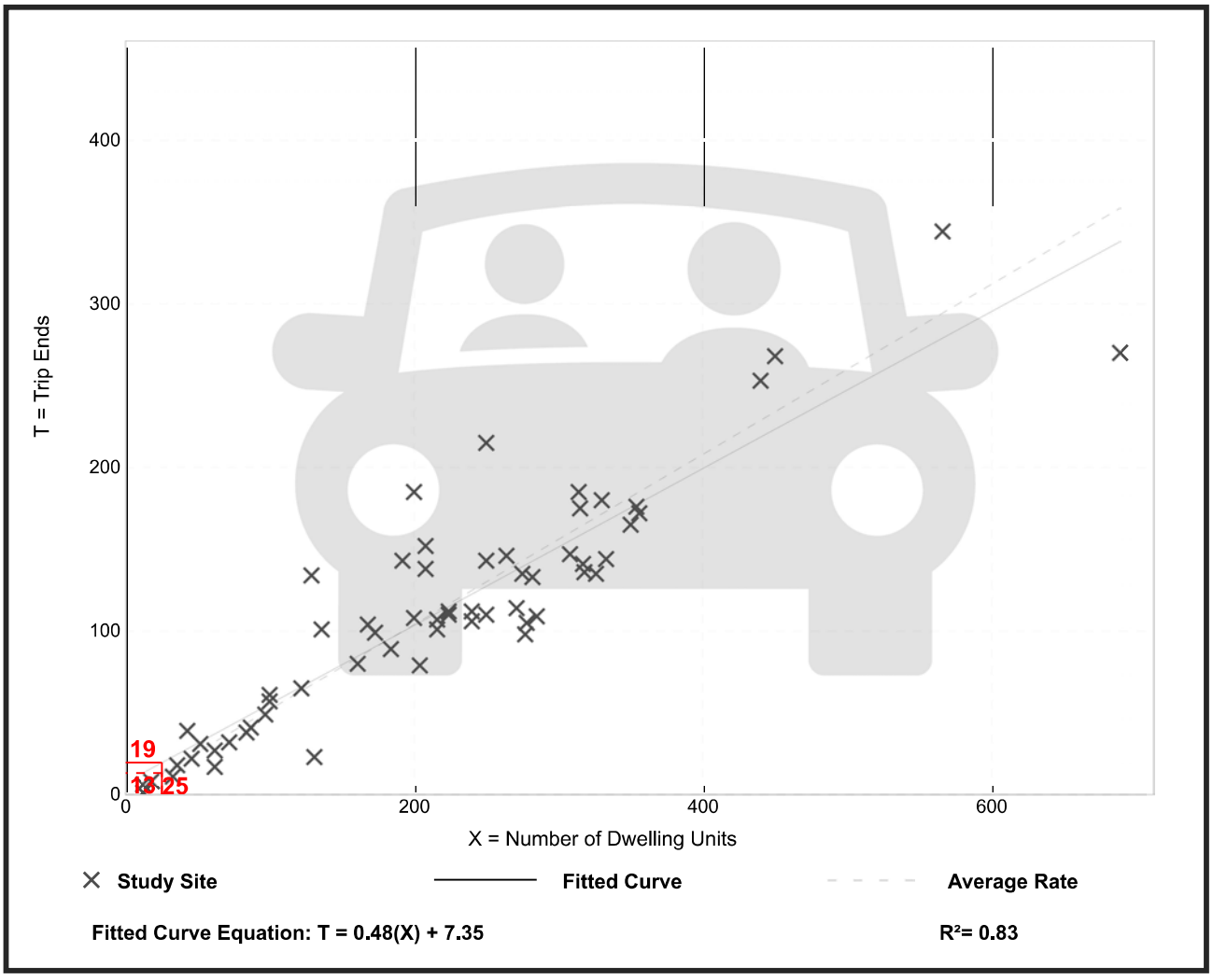
Multifamily Housing (Low-Rise)
Not Close to Rail Transit (220)

Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 61
Avg. Num. of Dwelling Units: 215
Directional Distribution: 62% entering, 38% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.52	0.08 - 1.04	0.13

Data Plot and Equation



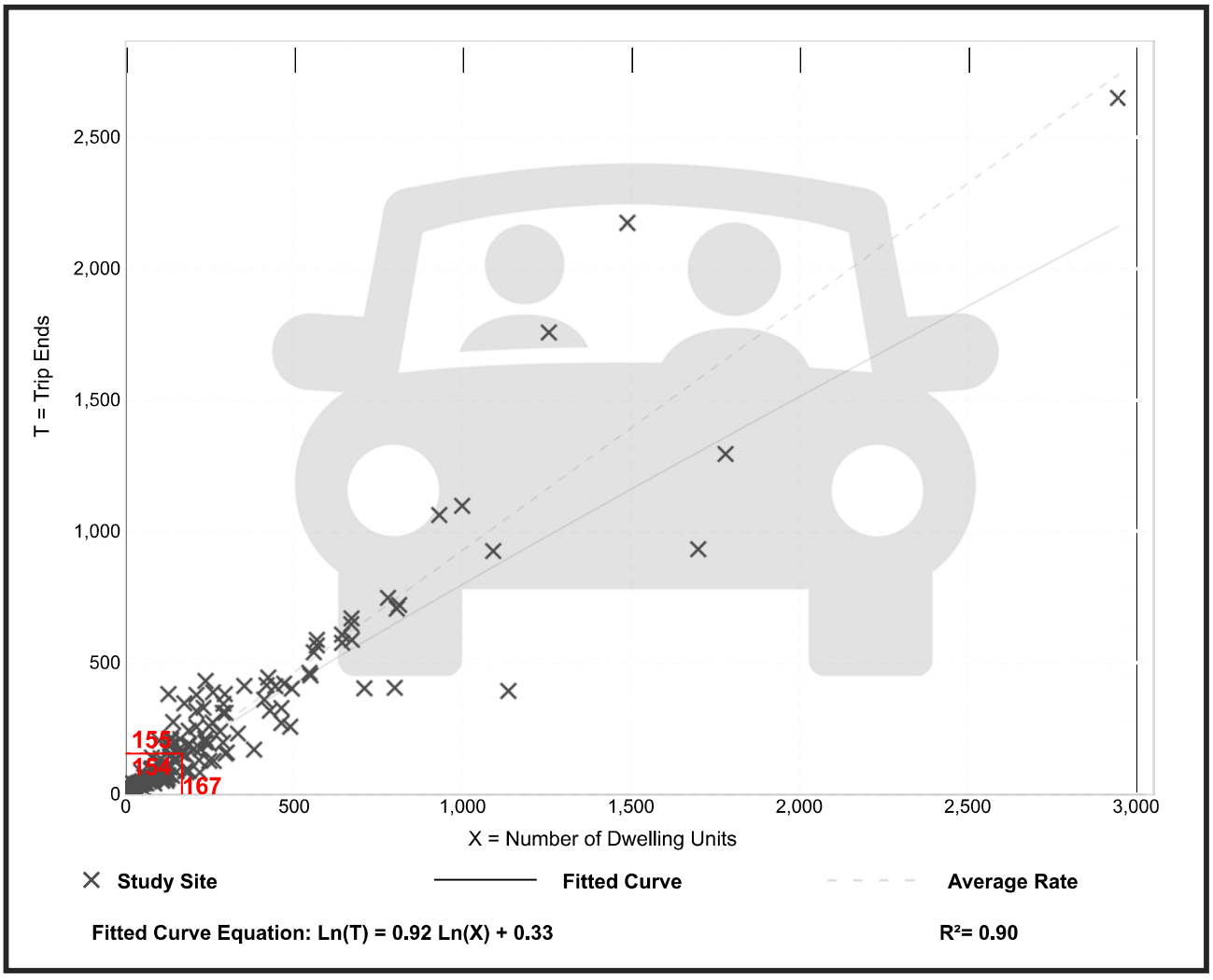
Single-Family Detached Housing
(210)

Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 166
Avg. Num. of Dwelling Units: 266
Directional Distribution: 62% entering, 38% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.93	0.35 - 2.98	0.33

Data Plot and Equation



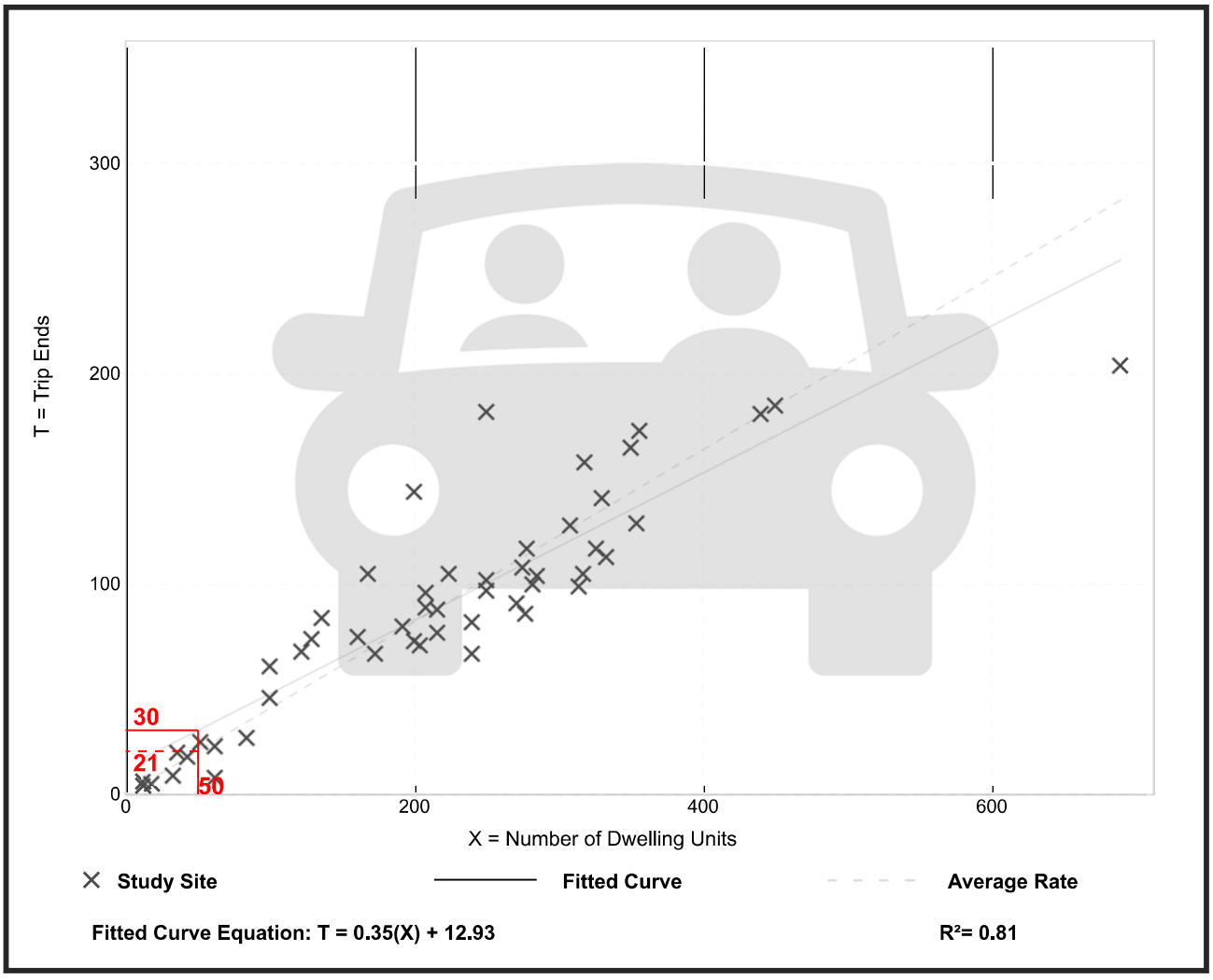
Multifamily Housing (Low-Rise)
Not Close to Rail Transit (220)

Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 51
Avg. Num. of Dwelling Units: 219
Directional Distribution: 24% entering, 76% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.41	0.13 - 0.73	0.10

Data Plot and Equation



Multifamily Housing (Low-Rise)
Not Close to Rail Transit (220)

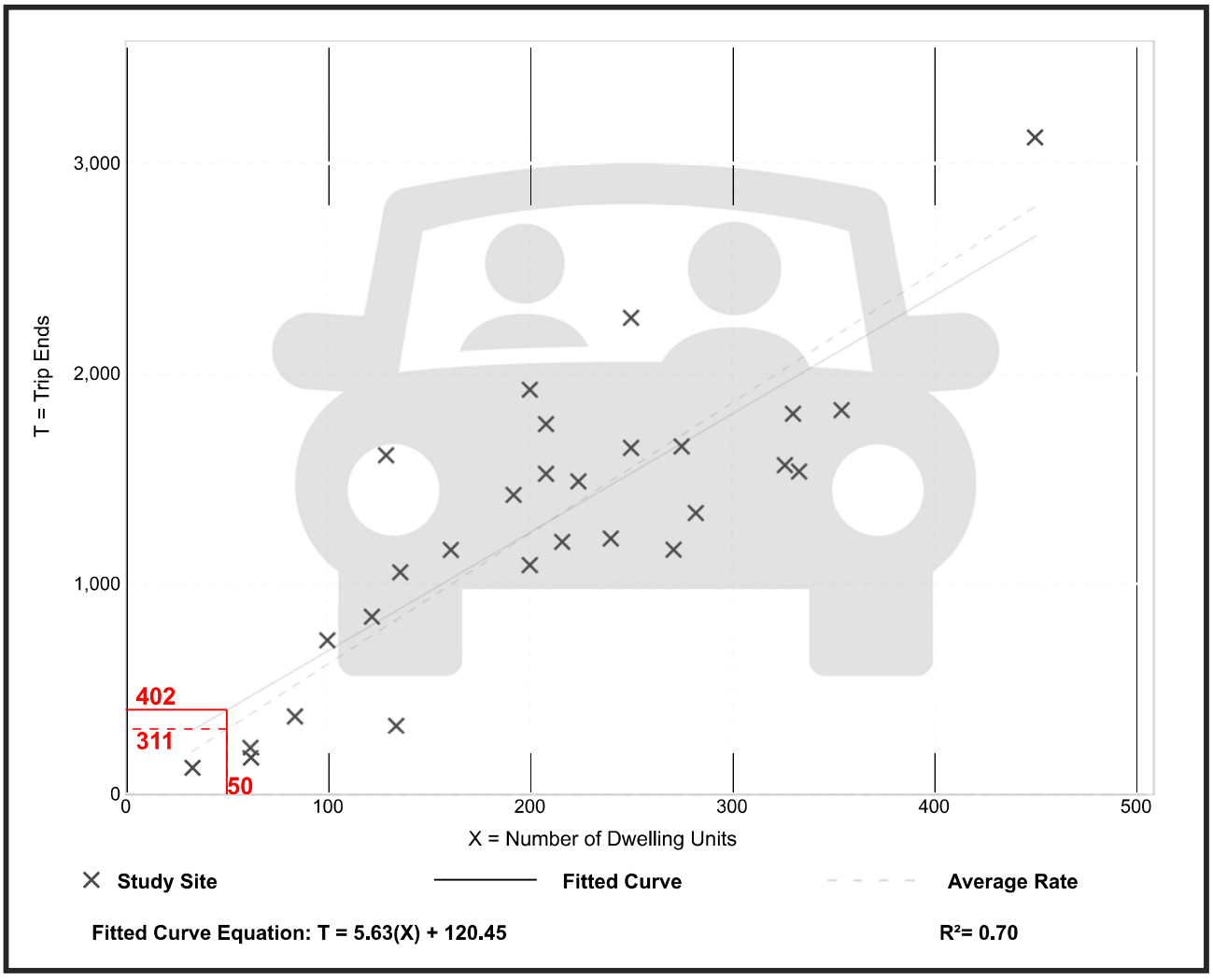
Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday**

Setting/Location: **General Urban/Suburban**
Number of Studies: 28
Avg. Num. of Dwelling Units: 208
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
6.21	2.46 - 12.50	1.87

Data Plot and Equation



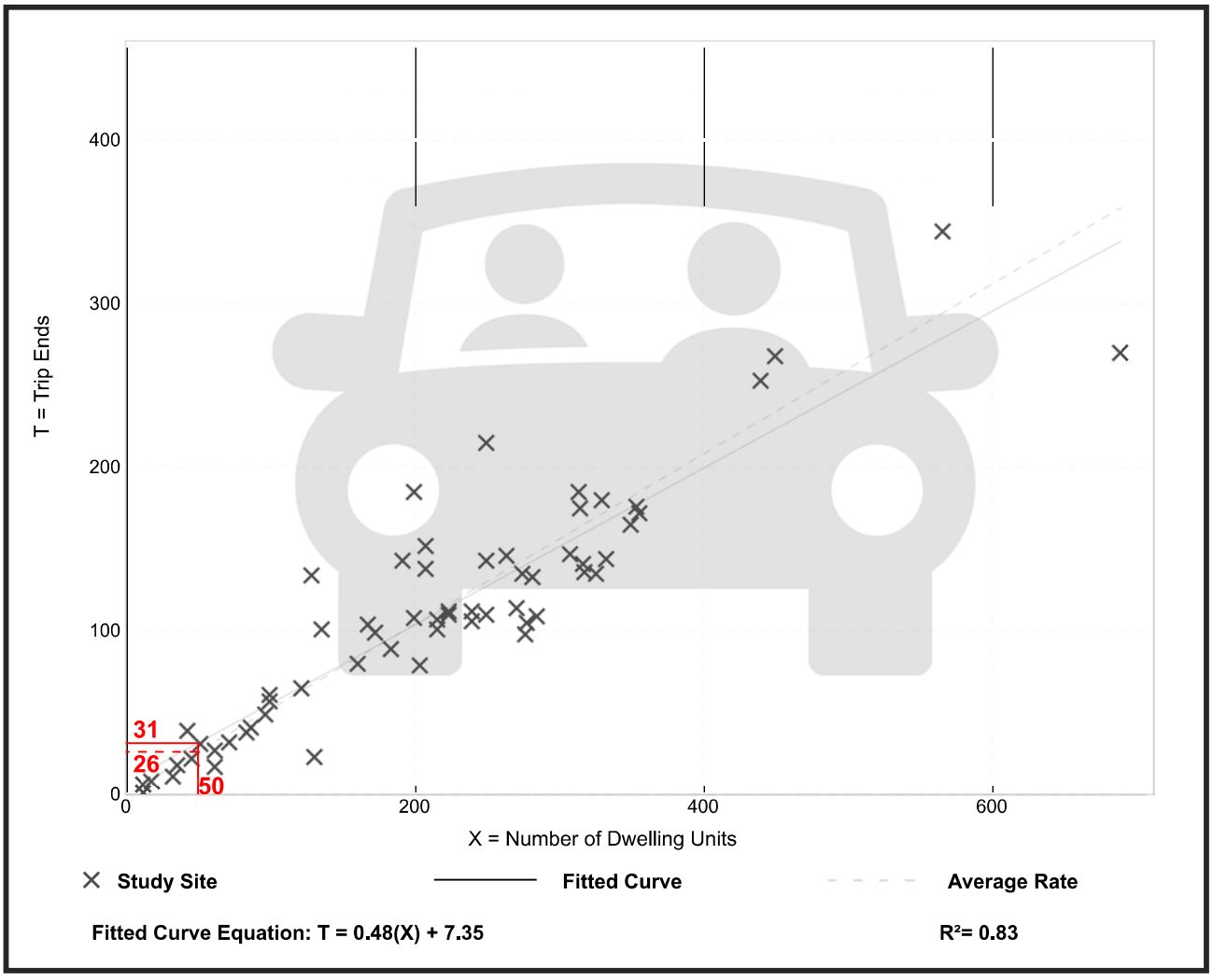
Multifamily Housing (Low-Rise)
Not Close to Rail Transit (220)

Vehicle Trip Ends vs: **Dwelling Units**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 61
Avg. Num. of Dwelling Units: 215
Directional Distribution: 62% entering, 38% exiting

Vehicle Trip Generation per Dwelling Unit

Average Rate	Range of Rates	Standard Deviation
0.52	0.08 - 1.04	0.13

Data Plot and Equation



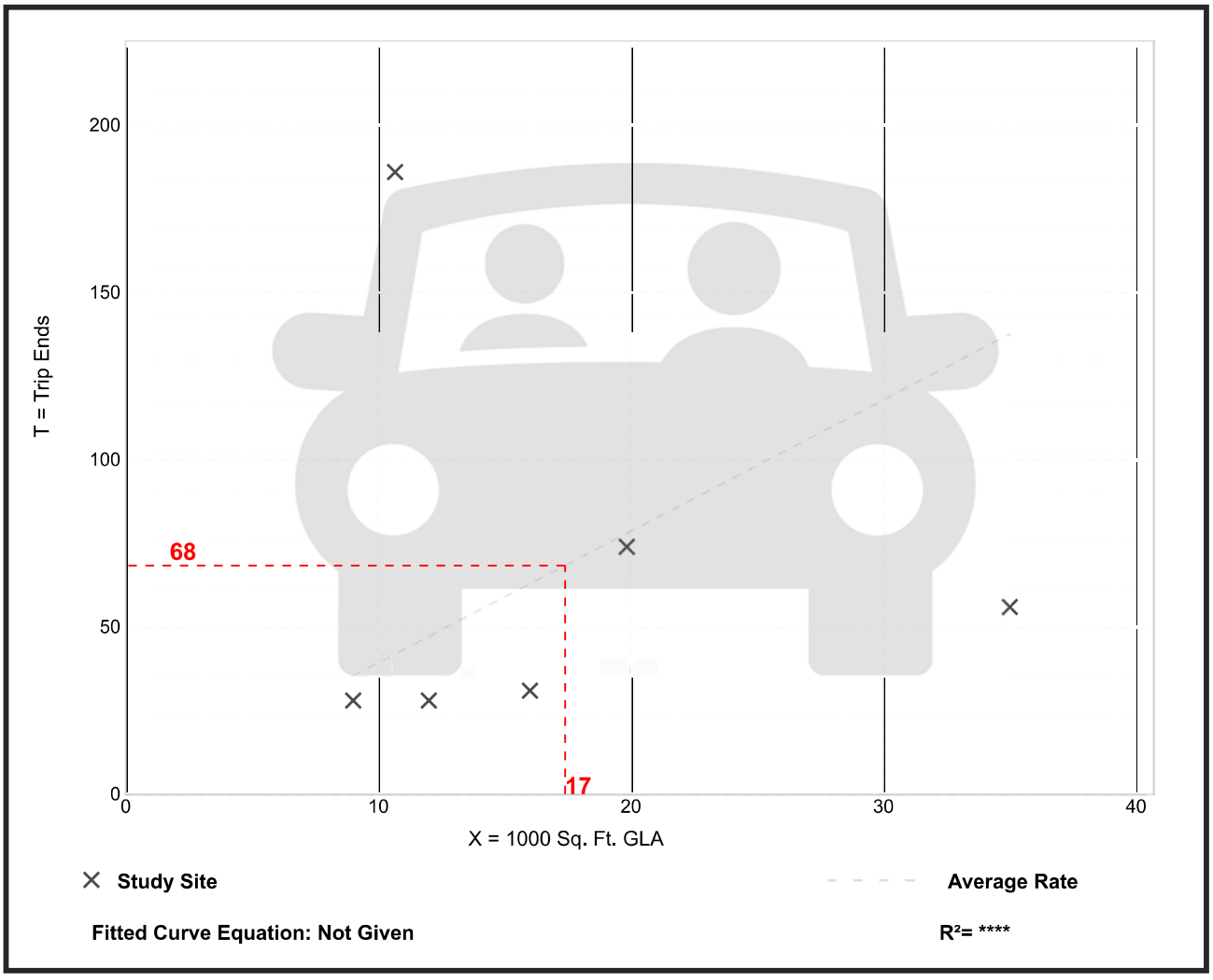
Strip Retail Plaza (<40k)
(822)

Vehicle Trip Ends vs: **1000 Sq. Ft. GLA**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 6
Avg. 1000 Sq. Ft. GLA: 17
Directional Distribution: 55% entering, 45% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GLA

Average Rate	Range of Rates	Standard Deviation
3.93	1.60 - 17.44	5.12

Data Plot and Equation



Strip Retail Plaza (<40k)
(822)

Vehicle Trip Ends vs: **1000 Sq. Ft. GLA**
On a: **Weekday**

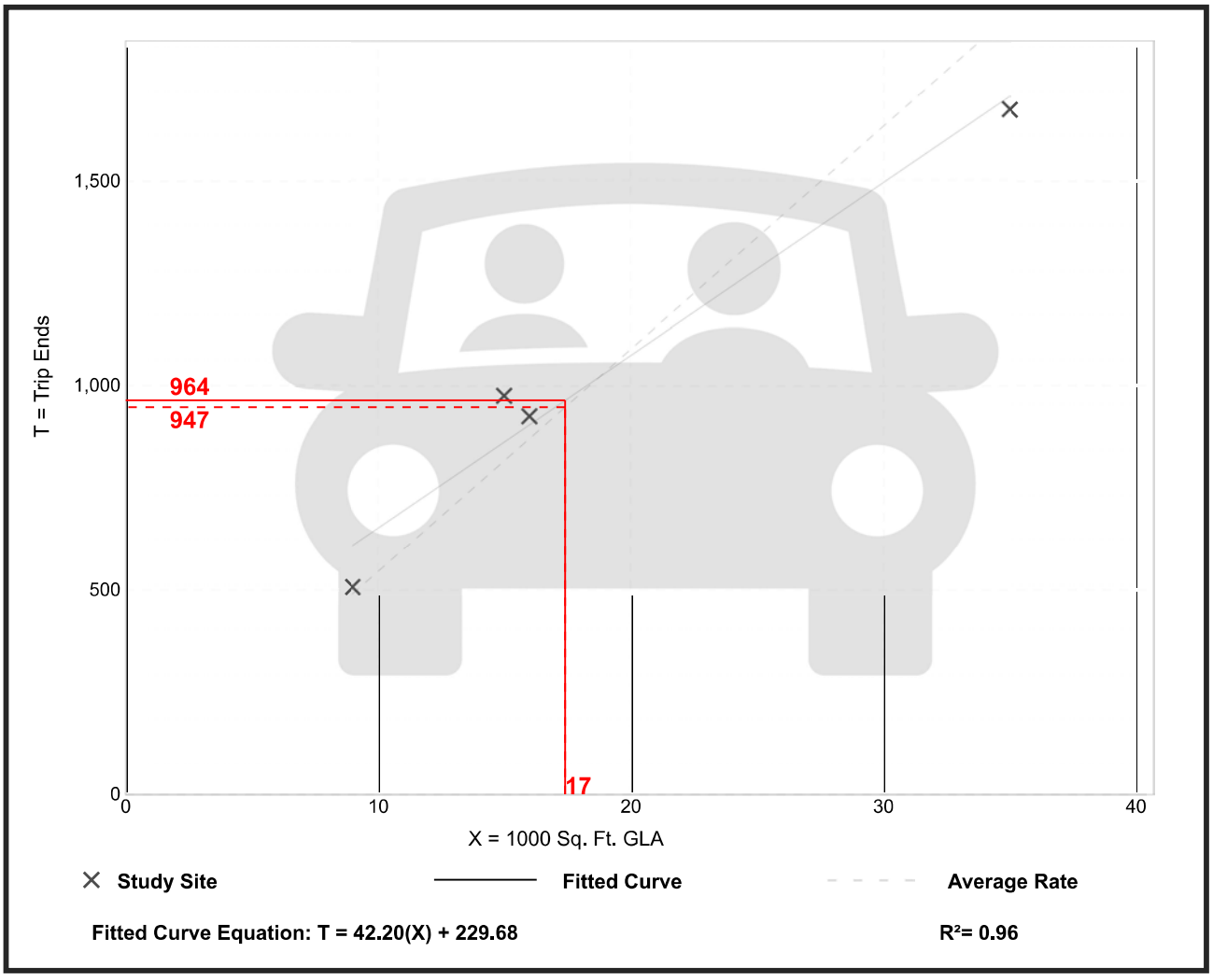
Setting/Location: **General Urban/Suburban**
Number of Studies: 4
Avg. 1000 Sq. Ft. GLA: 19
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GLA

Average Rate	Range of Rates	Standard Deviation
54.45	47.86 - 65.07	7.81

Data Plot and Equation

Caution – Small Sample Size



Fitted Curve Equation: T = 42.20(X) + 229.68

R^2= 0.96

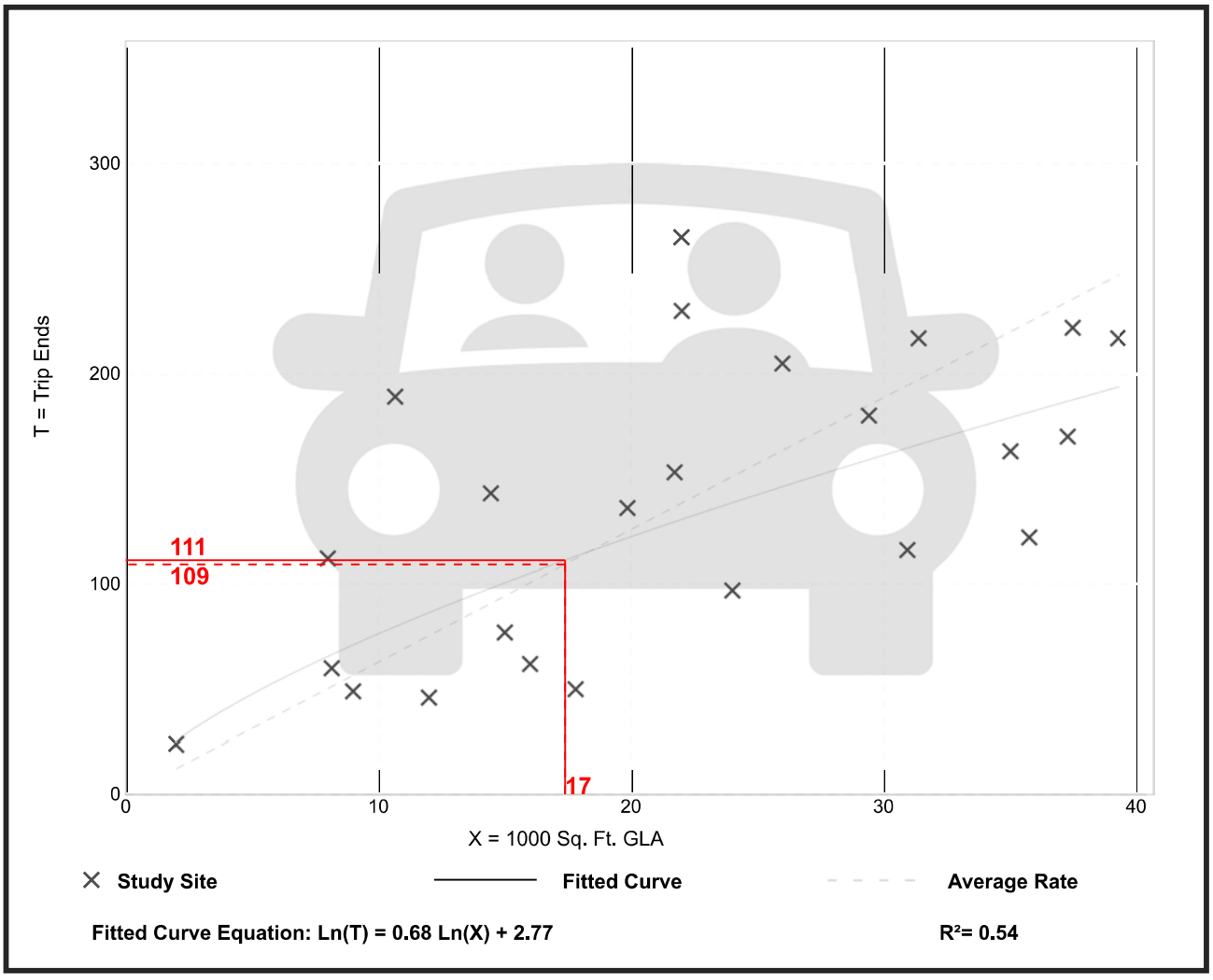
Strip Retail Plaza (<40k)
(822)

Vehicle Trip Ends vs: **1000 Sq. Ft. GLA**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 24
Avg. 1000 Sq. Ft. GLA: 22
Directional Distribution: 50% entering, 50% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GLA

Average Rate	Range of Rates	Standard Deviation
6.29	2.81 - 17.72	3.02

Data Plot and Equation



Walk-in Bank
(911)

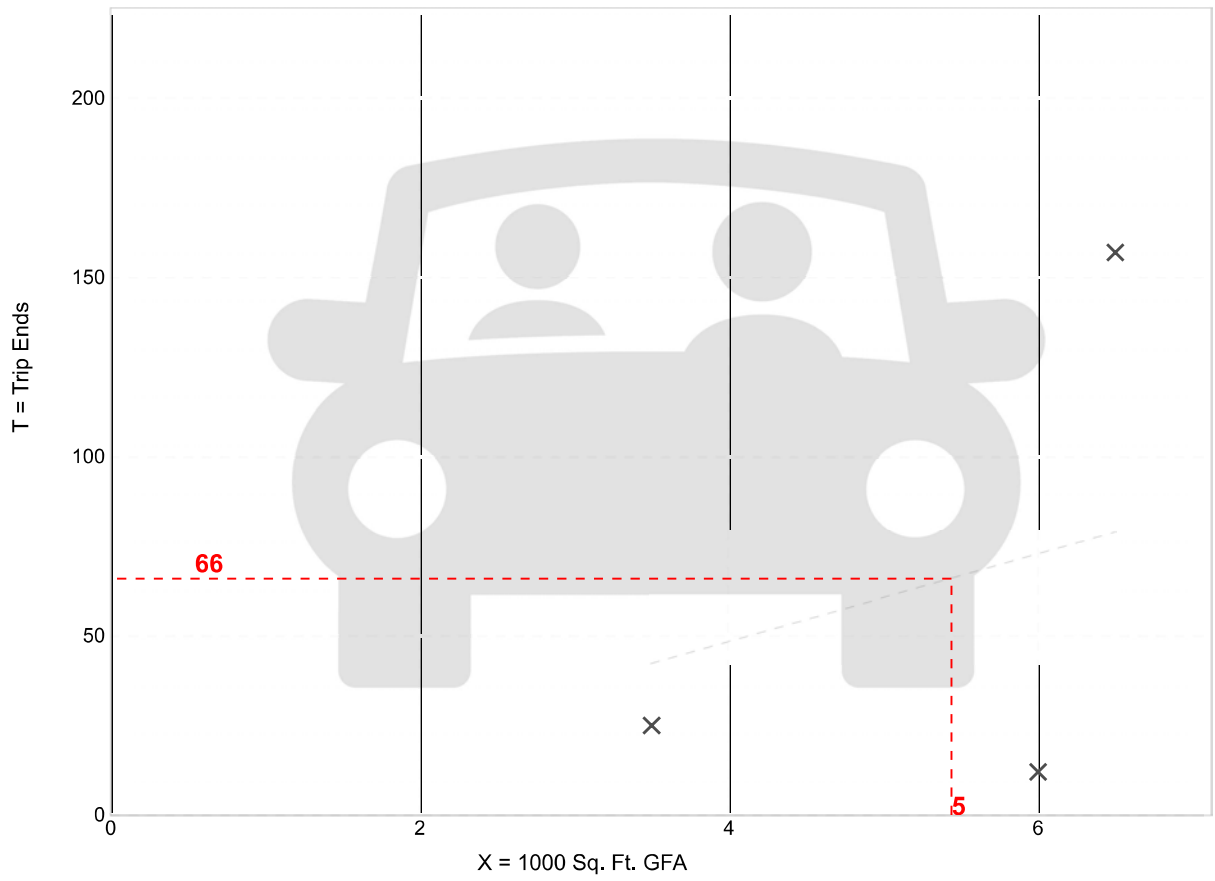
Vehicle Trip Ends vs: **1000 Sq. Ft. GFA**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 4 and 6 p.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 3
Avg. 1000 Sq. Ft. GFA: 5
Directional Distribution: 44% entering, 56% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

Average Rate	Range of Rates	Standard Deviation
12.13	2.00 - 24.15	12.41

Data Plot and Equation

Caution – Small Sample Size



Fitted Curve Equation: Not Given

R^2= ****

APPENDIX F. RECOMMENDATION CONCEPTS



BOONESBORO ROAD
AT HILLENDALE LANE
INTERSECTION
REALIGNMENT

PUBLIC MEETING #3
SR 75 CORRIDOR STUDY
JOHNSON CITY, TENNESSEE

NOVEMBER 6, 2025



BOB FITZ ROAD
ACCESS MANAGEMENT

MOSLEY ROAD
RIGHT-TURN LANE

PUBLIC MEETING #3
SR 75 CORRIDOR STUDY
JOHNSON CITY, TENNESSEE

NOVEMBER 6, 2025



SR 75 (SUNCREST DRIVE)
PHASE 1 REALIGNMENT

HUGH COX ROAD
INTERSECTION IMPROVEMENTS

PUBLIC MEETING #3
SR 75 CORRIDOR STUDY
JOHNSON CITY, TENNESSEE

NOVEMBER 6, 2025



SR 75 (SUNCREST DRIVE)
AT BOONESBORO ROAD
& HILLENDALE LANE
ROUNDABOUT

PUBLIC MEETING #3
SR 75 CORRIDOR STUDY
JOHNSON CITY, TENNESSEE

NOVEMBER 6, 2025



SR 75 (SUNCREST DRIVE)
3-LANE WITH MID-TERM ROADWAY IMPROVEMENTS

PUBLIC MEETING #3
SR 75 CORRIDOR STUDY
JOHNSON CITY, TENNESSEE

NOVEMBER 6, 2025



SR 75 (SUNCREST DRIVE)
PHASE 2 REALIGNMENT

EXISTING SR 75 (SUNCREST DRIVE)
WIDEN

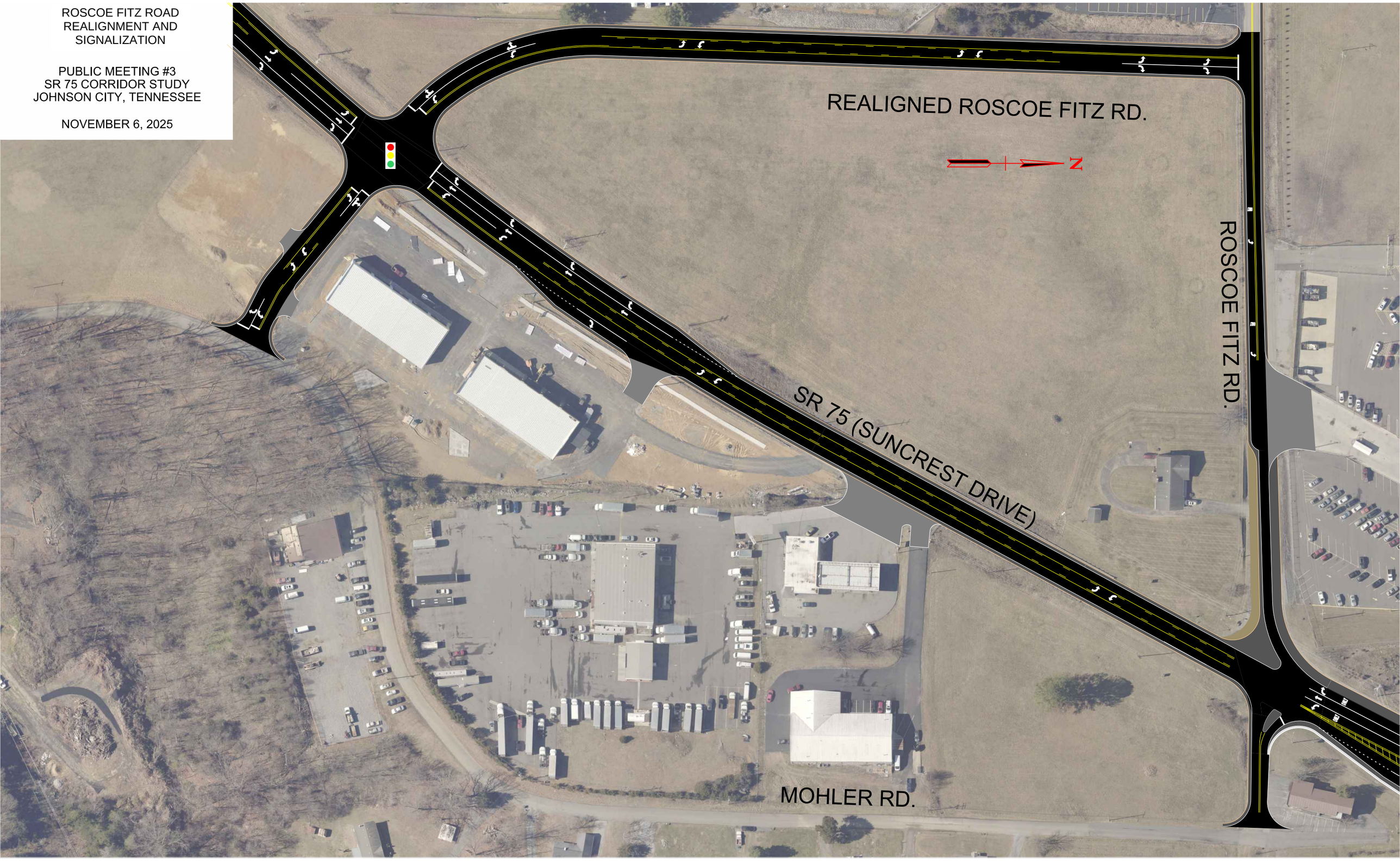
PUBLIC MEETING #3
SR 75 CORRIDOR STUDY
JOHNSON CITY, TENNESSEE

NOVEMBER 6, 2025

ROSCOE FITZ ROAD
REALIGNMENT AND
SIGNALIZATION

PUBLIC MEETING #3
SR 75 CORRIDOR STUDY
JOHNSON CITY, TENNESSEE

NOVEMBER 6, 2025





SR 75 (SUNCREST DRIVE)
3-LANE WITH MID-TERM ROADWAY
IMPROVEMENTS

PUBLIC MEETING #3
SR 75 CORRIDOR STUDY
JOHNSON CITY, TENNESSEE

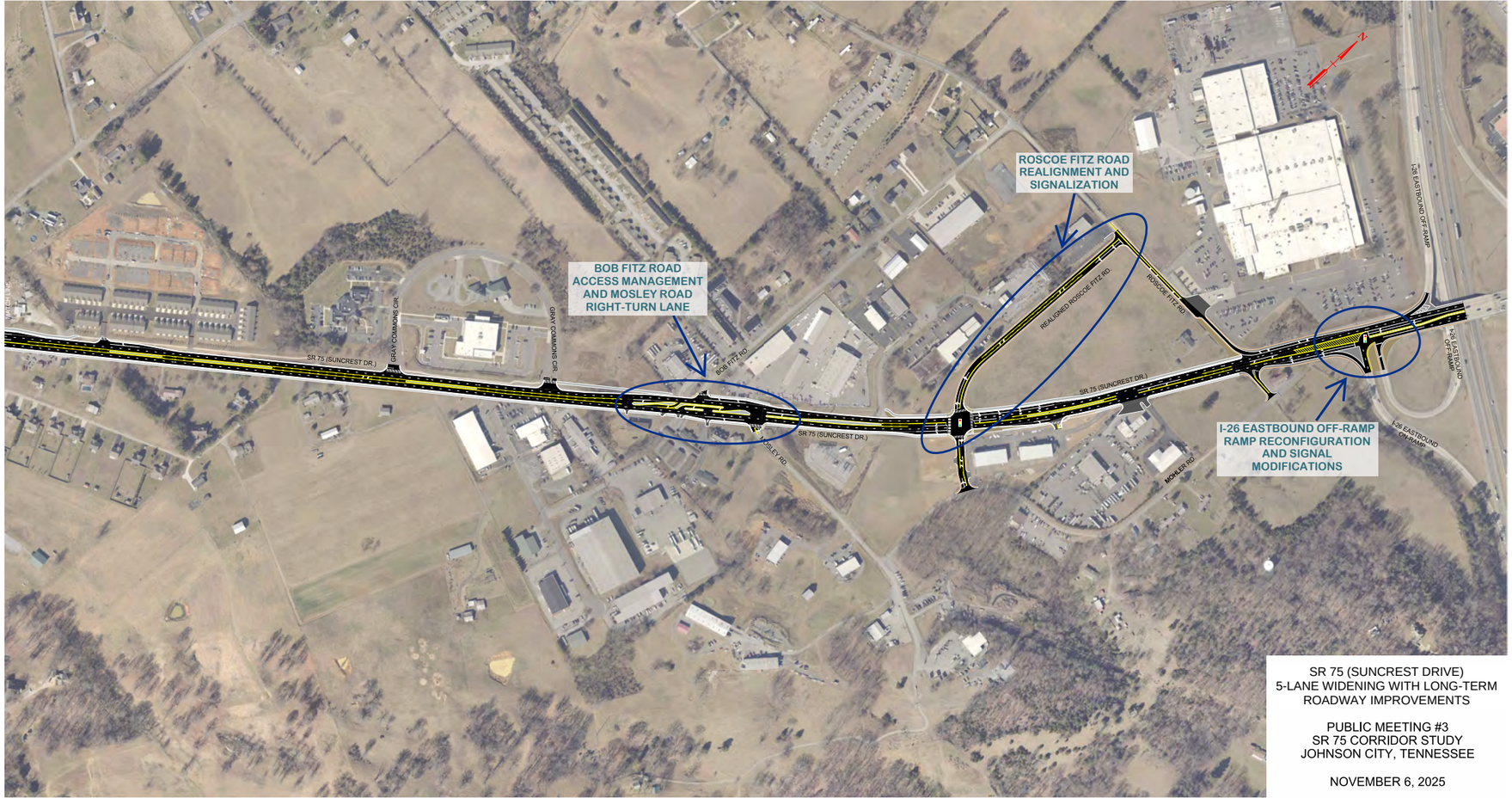
NOVEMBER 6, 2025



SR 75 (SUNCREST DRIVE)
5-LANE WIDENING WITH LONG-TERM ROADWAY IMPROVEMENTS

PUBLIC MEETING #3
SR 75 CORRIDOR STUDY
JOHNSON CITY, TENNESSEE

NOVEMBER 6, 2025



SR 75 (SUNCREST DRIVE)
5-LANE WIDENING WITH LONG-TERM
ROADWAY IMPROVEMENTS

PUBLIC MEETING #3
SR 75 CORRIDOR STUDY
JOHNSON CITY, TENNESSEE

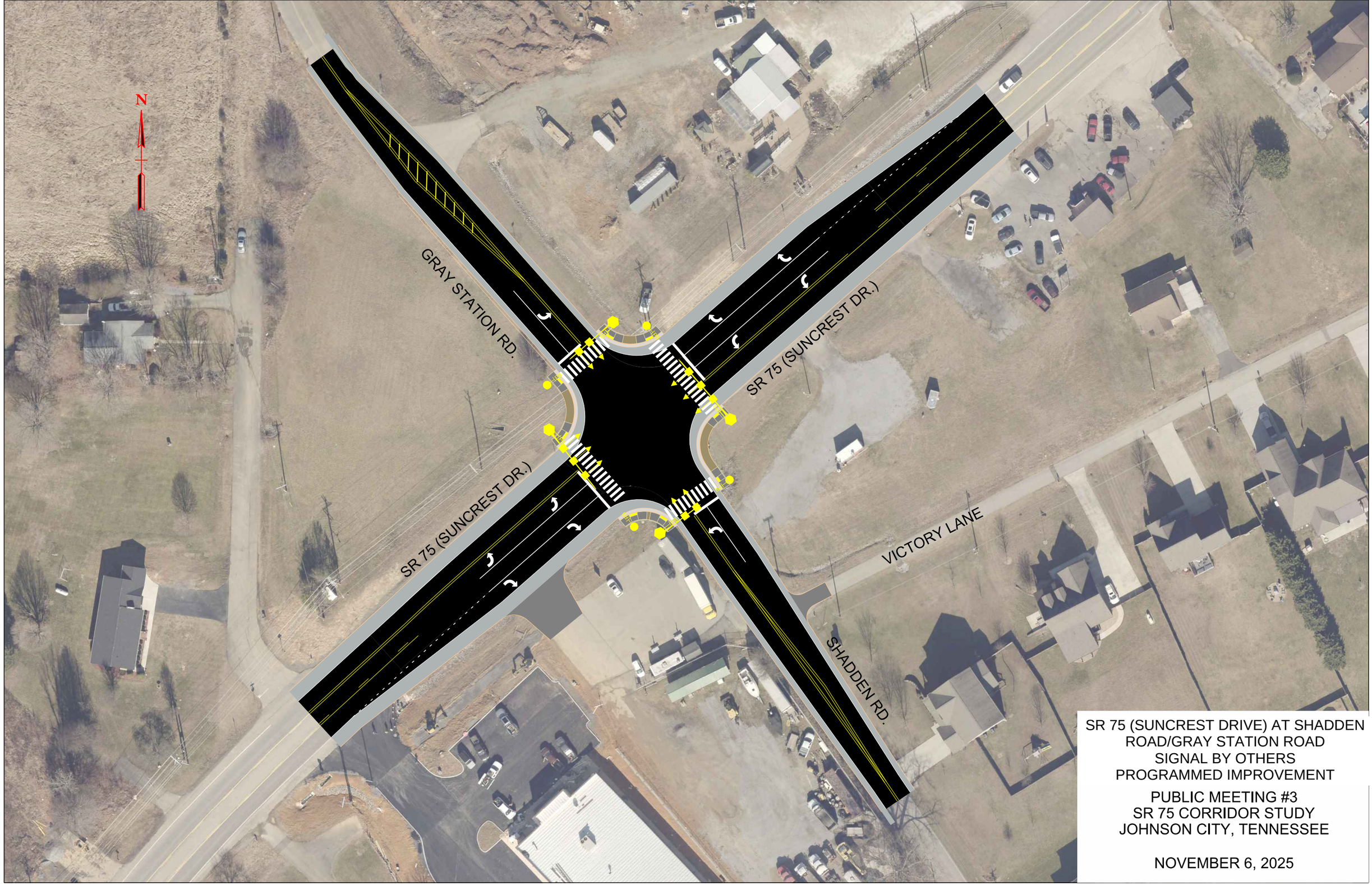
NOVEMBER 6, 2025



SR 75 (SUNCREST DRIVE)
AT SAM JENKINS ROAD
SIGNAL BY OTHERS
UNDER CONSTRUCTION

PUBLIC MEETING #3
SR 75 CORRIDOR STUDY
JOHNSON CITY, TENNESSEE

NOVEMBER 6, 2025



SR 75 (SUNCREST DRIVE) AT SHADDEN ROAD/GRAY STATION ROAD
SIGNAL BY OTHERS
PROGRAMMED IMPROVEMENT

PUBLIC MEETING #3
SR 75 CORRIDOR STUDY
JOHNSON CITY, TENNESSEE

NOVEMBER 6, 2025

APPENDIX G. COST ESTIMATES

COST ESTIMATE SUMMARY

COST ESTIMATE SUMMARY

Route:	SR-75 Suncrest
Termini:	Daniel Boone High School
Scope of Work:	Add right turn lane to high school entrance
Project Type of Work:	Turn Lanes
County:	Washington
Length:	0.10 Miles
Date:	December 19, 2025
Estimate Type:	Design-Bid-Build
Years Inflated:	

TN TDOT Department of Transportation

Estimate Developed By
Initial/Organization

DESCRIPTION		LOCAL	STATE	FEDERAL	TOTAL
		0%	0%	0%	
Construction Items					
Removal Items		$0	$0	$0	$0
Asphalt Paving		$0	$0	$0	$27,887
Concrete Pavement		$0	$0	$0	$0
Drainage		$0	$0	$0	$85,300
Appurtenances		$0	$0	$0	$0
Structures & Contingency		$0	$0	$0	$0
Fencing		$0	$0	$0	$0
Signalization & Lighting		$0	$0	$0	$0
Railroad Crossing		$0	$0	$0	$0
Earthwork		$0	$0	$0	$10,667
Clearing and Grubbing		$0	$0	$0	$0
Seeding & Sodding		$0	$0	$0	$500
Rip-Rap or Slope Protection		$0	$0	$0	$0
Guardrail		$0	$0	$0	$0
Signing		$0	$0	$0	$2,500
Pavement Markings		$0	$0	$0	$1,000
Traffic Control		$0	$0	$0	$15,000
Construction Lines and Stakes		$0	$0	$0	$30,000
DESIGN-BID-BUILD & DESIGN-BUILD PERCENTAGES					
Mobilization	5%	$0	$0	$0	$6,390
Allowances	10%	$0	$0	$0	$12,800
Const. Contingency (Structures Not Included)	30%	$0	$0	$0	$44,100
Const. Eng. & Inspec.	10.0%	$0	$0	$0	$23,600
Construction Estimate - DBB & DB		$0	$0	$0	$260,000
Right-of-Way & Utilties		**LOCAL**	**STATE**	**FEDERAL**	**TOTAL**
		0%	0%	0%	
Right-of-Way		$0	$0	$0	$0
Utilities		$0	$0	$0	$125,000
Preliminary Engineering		**LOCAL**	**STATE**	**FEDERAL**	**TOTAL**
		0%	0%	0%	
Prelim. Eng.	10.0%	$0	$0	$0	$23,600
Design-Bid-Build Project Cost		$0	$0	$0	$ 409,000

COST ESTIMATE SUMMARY

COST ESTIMATE SUMMARY

Route:	SR-75 Suncrest
Termini:	Mosley Road
Scope of Work:	Add right turn lane to Mosley Road
Project Type of Work:	Turn Lanes
County:	Washington
Length:	0.10 Miles
Date:	December 19, 2025
Estimate Type:	Design-Bid-Build
Years Inflated:	

TN TDOT Department of Transportation

Estimate Developed By
Initial/Organization

DESCRIPTION		LOCAL	STATE	FEDERAL	TOTAL
		0%	0%	0%	
Construction Items					
Removal Items		$0	$0	$0	$0
Asphalt Paving		$0	$0	$0	$27,887
Concrete Pavement		$0	$0	$0	$0
Drainage		$0	$0	$0	$85,300
Appurtenances		$0	$0	$0	$0
Structures & Contingency		$0	$0	$0	$0
Fencing		$0	$0	$0	$0
Signalization & Lighting		$0	$0	$0	$0
Railroad Crossing		$0	$0	$0	$0
Earthwork		$0	$0	$0	$10,680
Clearing and Grubbing		$0	$0	$0	$0
Seeding & Sodding		$0	$0	$0	$253
Rip-Rap or Slope Protection		$0	$0	$0	$0
Guardrail		$0	$0	$0	$0
Signing		$0	$0	$0	$2,500
Pavement Markings		$0	$0	$0	$529
Traffic Control		$0	$0	$0	$15,000
Construction Lines and Stakes		$0	$0	$0	$30,000
DESIGN-BID-BUILD & DESIGN-BUILD PERCENTAGES					
Mobilization	5%	$0	$0	$0	$6,360
Allowances	10%	$0	$0	$0	$12,700
Const. Contingency (Structures Not Included)	30%	$0	$0	$0	$43,900
Const. Eng. & Inspec.	10.0%	$0	$0	$0	$23,500
Construction Estimate - DBB & DB		$0	$0	$0	$259,000
Right-of-Way & Utilties		**LOCAL**	**STATE**	**FEDERAL**	**TOTAL**
		0%	0%	0%	
Right-of-Way		$0	$0	$0	$0
Utilities		$0	$0	$0	$75,000
Preliminary Engineering		**LOCAL**	**STATE**	**FEDERAL**	**TOTAL**
		0%	0%	0%	
Prelim. Eng.	10.0%	$0	$0	$0	$23,500
Design-Bid-Build Project Cost		$0	$0	$0	$ 358,000

COST ESTIMATE SUMMARY

COST ESTIMATE SUMMARY

Route:	SR-75 Suncrest
Termini:	Daniel Boone High School to Sam Jenkins Intersection
Scope of Work:	Multi-Use Path
Project Type of Work:	Safety
County:	Washington
Length:	0.43 Miles
Date:	December 19, 2025
Estimate Type:	Design-Bid-Build
Years Inflated:	

TN TDOT Department of Transportation

Estimate Developed By
Initial/Organization

DESCRIPTION		LOCAL	STATE	FEDERAL	TOTAL
		0%	0%	0%	
Construction Items					
Removal Items		$0	$0	$0	$0
Asphalt Paving		$0	$0	$0	$142,594
Concrete Pavement		$0	$0	$0	$0
Drainage		$0	$0	$0	$70,300
Appurtenances		$0	$0	$0	$29,376
Structures & Contingency		$0	$0	$0	$0
Fencing		$0	$0	$0	$0
Signalization & Lighting		$0	$0	$0	$0
Railroad Crossing		$0	$0	$0	$0
Earthwork		$0	$0	$0	$107,947
Clearing and Grubbing		$0	$0	$0	$0
Seeding & Sodding		$0	$0	$0	$2,118
Rip-Rap or Slope Protection		$0	$0	$0	$0
Guardrail		$0	$0	$0	$0
Signing		$0	$0	$0	$1,500
Pavement Markings		$0	$0	$0	$0
Traffic Control		$0	$0	$0	$15,000
Construction Lines and Stakes		$0	$0	$0	$15,000
DESIGN-BID-BUILD & DESIGN-BUILD PERCENTAGES					
Mobilization	5%	$0	$0	$0	$17,700
Allowances	10%	$0	$0	$0	$35,400
Const. Contingency (Structures Not Included)	30%	$0	$0	$0	$122,000
Const. Eng. & Inspec.	10.0%	$0	$0	$0	$55,900
Construction Estimate - DBB & DB		$0	$0	$0	$615,000
Right-of-Way & Utilties		**LOCAL**	**STATE**	**FEDERAL**	**TOTAL**
		0%	0%	0%	
Right-of-Way		$0	$0	$0	$90,000
Utilities		$0	$0	$0	$80,000
Preliminary Engineering		**LOCAL**	**STATE**	**FEDERAL**	**TOTAL**
		0%	0%	0%	
Prelim. Eng.	10.0%	$0	$0	$0	$55,900
Design-Bid-Build Project Cost		$0	$0	$0	$ 841,000

COST ESTIMATE SUMMARY

COST ESTIMATE SUMMARY

Route:	SR-75 Suncrest Relocation Phase 1
Termini:	SR-75 Suncrest from Hugh Cox Rd. to south of Boonesboro Rd.
Scope of Work:	Relocate SR-75 Suncrest
Project Type of Work:	Realignment
County:	Washington
Length:	0.30 Miles
Date:	December 19, 2025
Estimate Type:	Design-Bid-Build
Years Inflated:	

TN TDOT Department of Transportation

Estimate Developed By
Initial/Organization

DESCRIPTION		LOCAL	STATE	FEDERAL	TOTAL
		0%	0%	0%	
Construction Items					
Removal Items		$0	$0	$0	$39,402
Asphalt Paving		$0	$0	$0	$447,801
Concrete Pavement		$0	$0	$0	$0
Drainage		$0	$0	$0	$85,300
Appurtenances		$0	$0	$0	$0
Structures & Contingency		$0	$0	$0	$0
Fencing		$0	$0	$0	$0
Signalization & Lighting		$0	$0	$0	$0
Railroad Crossing		$0	$0	$0	$0
Earthwork		$0	$0	$0	$363,278
Clearing and Grubbing		$0	$0	$0	$0
Seeding & Sodding		$0	$0	$0	$1,507
Rip-Rap or Slope Protection		$0	$0	$0	$0
Guardrail		$0	$0	$0	$0
Signing		$0	$0	$0	$2,500
Pavement Markings		$0	$0	$0	$7,185
Traffic Control		$0	$0	$0	$40,000
Construction Lines and Stakes		$0	$0	$0	$30,000
DESIGN-BID-BUILD & DESIGN-BUILD PERCENTAGES					
Mobilization	5%	$0	$0	$0	$47,300
Allowances	10%	$0	$0	$0	$94,700
Const. Contingency (Structures Not Included)	30%	$0	$0	$0	$327,000
Const. Eng. & Inspec.	10.0%	$0	$0	$0	$149,000
Construction Estimate - DBB & DB		$0	$0	$0	$1,630,000
Right-of-Way & Utilties		**LOCAL**	**STATE**	**FEDERAL**	**TOTAL**
		0%	0%	0%	
Right-of-Way		$0	$0	$0	$150,000
Utilities		$0	$0	$0	$500,000
Preliminary Engineering		**LOCAL**	**STATE**	**FEDERAL**	**TOTAL**
		0%	0%	0%	
Prelim. Eng.	10.0%	$0	$0	$0	$149,000
Design-Bid-Build Project Cost		$0	$0	$0	$ 2,430,000

COST ESTIMATE SUMMARY

COST ESTIMATE SUMMARY

Route:	SR-75 Suncrest
Termini:	SR-75 Suncrest at Boonesboro Rd.
Scope of Work:	Intersection Improvements SR-75 Suncrest at Boonesboro Rd.
Project Type of Work:	Intersection Improvements
County:	Washington
Length:	0.20 Miles
Date:	December 19, 2025
Estimate Type:	Design-Bid-Build
Years Inflated:	

TN TDOT Department of Transportation

Estimate Developed By
Initial/Organization

DESCRIPTION		LOCAL	STATE	FEDERAL	TOTAL
		0%	0%	0%	
Construction Items					
Removal Items		$0	$0	$0	$14,636
Asphalt Paving		$0	$0	$0	$78,036
Concrete Pavement		$0	$0	$0	$0
Drainage		$0	$0	$0	$85,300
Appurtenances		$0	$0	$0	$0
Structures & Contingency		$0	$0	$0	$0
Fencing		$0	$0	$0	$0
Signalization & Lighting		$0	$0	$0	$0
Railroad Crossing		$0	$0	$0	$0
Earthwork		$0	$0	$0	$21,667
Clearing and Grubbing		$0	$0	$0	$0
Seeding & Sodding		$0	$0	$0	$469
Rip-Rap or Slope Protection		$0	$0	$0	$0
Guardrail		$0	$0	$0	$0
Signing		$0	$0	$0	$2,500
Pavement Markings		$0	$0	$0	$1,304
Traffic Control		$0	$0	$0	$15,000
Construction Lines and Stakes		$0	$0	$0	$30,000
DESIGN-BID-BUILD & DESIGN-BUILD PERCENTAGES					
Mobilization	5%	$0	$0	$0	$10,200
Allowances	10%	$0	$0	$0	$20,400
Const. Contingency (Structures Not Included)	30%	$0	$0	$0	$70,400
Const. Eng. & Inspec.	10.0%	$0	$0	$0	$35,000
Construction Estimate - DBB & DB		$0	$0	$0	$385,000
Right-of-Way & Utilties		**LOCAL**	**STATE**	**FEDERAL**	**TOTAL**
		0%	0%	0%	
Right-of-Way		$0	$0	$0	$16,500
Utilities		$0	$0	$0	$75,000
Preliminary Engineering		**LOCAL**	**STATE**	**FEDERAL**	**TOTAL**
		0%	0%	0%	
Prelim. Eng.	10.0%	$0	$0	$0	$35,000
Design-Bid-Build Project Cost		$0	$0	$0	$ 512,000

COST ESTIMATE SUMMARY

COST ESTIMATE SUMMARY

Route:	SR-75 Suncrest Roundabout
Termini:	SR-75 at Boonesboro Rd.
Scope of Work:	intersection Improvement SR-75 Suncrest at Boonesboro Rd.
Project Type of Work:	Intersection Improvements
County:	Washington
Length:	0.20 Miles
Date:	December 19, 2025
Estimate Type:	Design-Bid-Build
Years Inflated:	

TN TDOT Department of Transportation

Estimate Developed By
Initial/Organization

DESCRIPTION		LOCAL	STATE	FEDERAL	TOTAL
		0%	0%	0%	
Construction Items					
Removal Items		$0	$0	$0	$37,197
Asphalt Paving		$0	$0	$0	$301,536
Concrete Pavement		$0	$0	$0	$93,353
Drainage		$0	$0	$0	$223,500
Concrete Islands, Curb and Gutter		$0	$0	$0	$416,554
Structures & Contingency		$0	$0	$0	$0
Fencing		$0	$0	$0	$0
Signalization & Lighting		$0	$0	$0	$80,000
Railroad Crossing		$0	$0	$0	$0
Earthwork		$0	$0	$0	$141,534
Clearing and Grubbing		$0	$0	$0	$0
Seeding & Sodding		$0	$0	$0	$2,444
Rip-Rap or Slope Protection		$0	$0	$0	$0
Guardrail		$0	$0	$0	$0
Signing		$0	$0	$0	$8,000
Pavement Markings		$0	$0	$0	$14,489
Traffic Control		$0	$0	$0	$40,000
Construction Lines and Stakes		$0	$0	$0	$15,000
DESIGN-BID-BUILD & DESIGN-BUILD PERCENTAGES					
Mobilization	5%	$0	$0	$0	$65,900
Allowances	10%	$0	$0	$0	$132,000
Const. Contingency (Structures Not Included)	30%	$0	$0	$0	$455,000
Const. Eng. & Inspec.	10.0%	$0	$0	$0	$203,000
Construction Estimate - DBB & DB		$0	$0	$0	$2,230,000
Right-of-Way & Utilties		**LOCAL**	**STATE**	**FEDERAL**	**TOTAL**
		0%	0%	0%	
Right-of-Way		$0	$0	$0	$100,000
Utilities		$0	$0	$0	$75,000
Preliminary Engineering		**LOCAL**	**STATE**	**FEDERAL**	**TOTAL**
		0%	0%	0%	
Prelim. Eng.	10.0%	$0	$0	$0	$203,000
Design-Bid-Build Project Cost		$0	$0	$0	$ 2,610,000

COST ESTIMATE SUMMARY

COST ESTIMATE SUMMARY

Route:	SR-75 Suncrest
Termini:	South of Bob Fitz Road to north of Mosley Road
Scope of Work:	Access Management and median islands with right turn lane
Project Type of Work:	Widen and Resurfacing
County:	Washington
Length:	0.30 Miles
Date:	December 19, 2025
Estimate Type:	Design-Bid-Build
Years Inflated:	

TN TDOT Department of Transportation

Estimate Developed By
Initial/Organization

DESCRIPTION		LOCAL	STATE	FEDERAL	TOTAL
		0%	0%	0%	
Construction Items					
Removal Items		$0	$0	$0	$14,894
Asphalt Paving		$0	$0	$0	$280,287
Concrete Pavement		$0	$0	$0	$0
Drainage		$0	$0	$0	$85,300
Concrete Median Islands		$0	$0	$0	$707,300
Structures & Contingency		$0	$0	$0	$0
Fencing		$0	$0	$0	$0
Signalization & Lighting		$0	$0	$0	$0
Railroad Crossing		$0	$0	$0	$0
Earthwork		$0	$0	$0	$64,312
Clearing and Grubbing		$0	$0	$0	$0
Seeding & Sodding		$0	$0	$0	$1,401
Rip-Rap or Slope Protection		$0	$0	$0	$0
Guardrail		$0	$0	$0	$0
Signing		$0	$0	$0	$2,500
Pavement Markings		$0	$0	$0	$7,211
Traffic Control		$0	$0	$0	$15,000
Construction Lines and Stakes		$0	$0	$0	$30,000
DESIGN-BID-BUILD & DESIGN-BUILD PERCENTAGES					
Mobilization	5%	$0	$0	$0	$58,200
Allowances	10%	$0	$0	$0	$116,000
Const. Contingency (Structures Not Included)	30%	$0	$0	$0	$401,000
Const. Eng. & Inspec.	10.0%	$0	$0	$0	$178,000
Construction Estimate - DBB & DB		$0	$0	$0	$1,960,000
Right-of-Way & Utilties		**LOCAL**	**STATE**	**FEDERAL**	**TOTAL**
		0%	0%	0%	
Right-of-Way		$0	$0	$0	$10,000
Utilities		$0	$0	$0	$100,000
Preliminary Engineering		**LOCAL**	**STATE**	**FEDERAL**	**TOTAL**
		0%	0%	0%	
Prelim. Eng.	10.0%	$0	$0	$0	$178,000
Design-Bid-Build Project Cost		$0	$0	$0	$ 2,250,000

COST ESTIMATE SUMMARY

COST ESTIMATE SUMMARY

Route:	SR-75 Suncrest
Termini:	Hugh Cox Rd to Sam Jenkins Rd
Scope of Work:	5 Lane Roadway Realignment & Widening
Project Type of Work:	Realignment
County:	Washington
Length:	0.83 Miles
Date:	December 19, 2025
Estimate Type:	Design-Bid-Build
Years Inflated:	

TN TDOT Department of Transportation

Estimate Developed By
Initial/Organization

DESCRIPTION		LOCAL	STATE	FEDERAL	TOTAL
		0%	0%	0%	
Construction Items					
Removal Items		$0	$0	$0	$95,694
Asphalt Paving		$0	$0	$0	$2,082,742
Concrete Pavement		$0	$0	$0	$0
Drainage		$0	$0	$0	$330,500
Curb and Gutter		$0	$0	$0	$143,362
Structures & Contingency		$0	$0	$0	$0
Fencing		$0	$0	$0	$0
Signalization & Lighting		$0	$0	$0	$400,000
Railroad Crossing		$0	$0	$0	$0
Earthwork		$0	$0	$0	$1,017,400
Clearing and Grubbing		$0	$0	$0	$0
Seeding & Sodding		$0	$0	$0	$5,019
Rip-Rap or Slope Protection		$0	$0	$0	$0
Guardrail		$0	$0	$0	$0
Signing		$0	$0	$0	$2,500
Pavement Markings		$0	$0	$0	$40,650
Traffic Control		$0	$0	$0	$75,000
Construction Lines and Stakes		$0	$0	$0	$30,000
DESIGN-BID-BUILD & DESIGN-BUILD PERCENTAGES					
Mobilization	5%	$0	$0	$0	$206,000
Allowances	10%	$0	$0	$0	$412,000
Const. Contingency (Structures Not Included)	30%	$0	$0	$0	$1,420,000
Const. Eng. & Inspec.	10.0%	$0	$0	$0	$626,000
Construction Estimate - DBB & DB		$0	$0	$0	$6,890,000
Right-of-Way & Utilties		**LOCAL**	**STATE**	**FEDERAL**	**TOTAL**
		0%	0%	0%	
Right-of-Way		$0	$0	$0	$535,767
Utilities		$0	$0	$0	$75,000
Preliminary Engineering		**LOCAL**	**STATE**	**FEDERAL**	**TOTAL**
		0%	0%	0%	
Prelim. Eng.	10.0%	$0	$0	$0	$626,000
Design-Bid-Build Project Cost		$0	$0	$0	$ 8,130,000

COST ESTIMATE SUMMARY

COST ESTIMATE SUMMARY

Route:	Roscoe Fritz Relocation
Termini:	SR-75 Suncrest
Scope of Work:	Relocate Roscoe Fritz Rd to new Intersection at SR-75
Project Type of Work:	Realignment
County:	Washington
Length:	0.50 Miles
Date:	December 19, 2025
Estimate Type:	Design-Bid-Build
Years Inflated:	

TN TDOT Department of Transportation

Estimate Developed By
Initial/Organization

DESCRIPTION		LOCAL	STATE	FEDERAL	TOTAL
		0%	0%	0%	
Construction Items					
Removal Items		$0	$0	$0	$29,440
Asphalt Paving		$0	$0	$0	$502,049
Concrete Pavement		$0	$0	$0	$0
Drainage		$0	$0	$0	$150,500
Appurtenances		$0	$0	$0	$160,779
Structures & Contingency		$0	$0	$0	$0
Fencing		$0	$0	$0	$0
Signalization & Lighting		$0	$0	$0	$400,000
Railroad Crossing		$0	$0	$0	$0
Earthwork		$0	$0	$0	$154,086
Clearing and Grubbing		$0	$0	$0	$0
Seeding & Sodding		$0	$0	$0	$3,397
Rip-Rap or Slope Protection		$0	$0	$0	$0
Guardrail		$0	$0	$0	$0
Signing		$0	$0	$0	$2,500
Pavement Markings		$0	$0	$0	$17,898
Traffic Control		$0	$0	$0	$25,000
Construction Lines and Stakes		$0	$0	$0	$25,000
DESIGN-BID-BUILD & DESIGN-BUILD PERCENTAGES					
Mobilization	5%	$0	$0	$0	$71,000
Allowances	10%	$0	$0	$0	$142,000
Const. Contingency (Structures Not Included)	30%	$0	$0	$0	$490,000
Const. Eng. & Inspec.	10.0%	$0	$0	$0	$217,000
Construction Estimate - DBB & DB		$0	$0	$0	$2,390,000
Right-of-Way & Utilties		**LOCAL**	**STATE**	**FEDERAL**	**TOTAL**
		0%	0%	0%	
Right-of-Way		$0	$0	$0	$180,000
Utilities		$0	$0	$0	$0
Preliminary Engineering		**LOCAL**	**STATE**	**FEDERAL**	**TOTAL**
		0%	0%	0%	
Prelim. Eng.	10.0%	$0	$0	$0	$217,000
Design-Bid-Build Project Cost		$0	$0	$0	$ 2,790,000

COST ESTIMATE SUMMARY

COST ESTIMATE SUMMARY

Route:	SR-75 Suncrest Dr
Termini:	Sam Jenkins Rd to I-26
Scope of Work:	5 Lane Roadway Widening
Project Type of Work:	Widen
County:	Washington
Length:	1.86 Miles
Date:	December 19, 2025
Estimate Type:	Design-Bid-Build
Years Inflated:	

TN TDOT Department of Transportation

Estimate Developed By
Initial/Organization

DESCRIPTION		LOCAL	STATE	FEDERAL	TOTAL
		0%	0%	0%	
Construction Items					
Removal Items		$0	$0	$0	$444,000
Asphalt Paving		$0	$0	$0	$4,140,000
Concrete Pavement		$0	$0	$0	$0
Drainage		$0	$0	$0	$2,710,000
Appurtenances		$0	$0	$0	$1,430,000
Structures & Contingency		$0	$0	$0	$0
Fencing		$0	$0	$0	$0
Signalization & Lighting		$0	$0	$0	$938,000
Railroad Crossing		$0	$0	$0	$0
Earthwork		$0	$0	$0	$2,370,000
Clearing and Grubbing		$0	$0	$0	$215,000
Seeding & Sodding		$0	$0	$0	$32,300
Rip-Rap or Slope Protection		$0	$0	$0	$0
Guardrail		$0	$0	$0	$292,000
Signing		$0	$0	$0	$12,600
Pavement Markings		$0	$0	$0	$196,000
Traffic Control		$0	$0	$0	$120,000
Construction Lines and Stakes		$0	$0	$0	$18,000
DESIGN-BID-BUILD & DESIGN-BUILD PERCENTAGES					
Mobilization	5%	$0	$0	$0	$639,000
Allowances	10%	$0	$0	$0	$1,280,000
Const. Contingency (Structures Not Included)	30%	$0	$0	$0	$4,410,000
Const. Eng. & Inspec.	10.0%	$0	$0	$0	$1,920,000
Construction Estimate - DBB & DB		$0	$0	$0	$21,200,000
Right-of-Way & Utilties		**LOCAL**	**STATE**	**FEDERAL**	**TOTAL**
		0%	0%	0%	
Right-of-Way		$0	$0	$0	$250,000
Utilities		$0	$0	$0	$450,000
Preliminary Engineering		**LOCAL**	**STATE**	**FEDERAL**	**TOTAL**
		0%	0%	0%	
Prelim. Eng.	10.0%	$0	$0	$0	$1,920,000
Design-Bid-Build Project Cost		$0	$0	$0	$ 23,800,000

COST ESTIMATE SUMMARY

COST ESTIMATE SUMMARY

Route:	SR-75 Suncrest
Termini:	I-26 Eastbound off-ramp
Scope of Work:	Realign I-26 Eastbound off-ramp to tie into signal
Project Type of Work:	Realignment
County:	Washington
Length:	0.10 Miles
Date:	December 19, 2025
Estimate Type:	Design-Bid-Build
Years Inflated:	

TN TDOT Department of Transportation

Estimate Developed By
Initial/Organization

DESCRIPTION		LOCAL	STATE	FEDERAL	TOTAL
		0%	0%	0%	
Construction Items					
Removal Items		$0	$0	$0	$27,291
Asphalt Paving		$0	$0	$0	$122,445
Concrete Pavement		$0	$0	$0	$0
Drainage		$0	$0	$0	$85,300
Appurtenances		$0	$0	$0	$0
Structures & Contingency		$0	$0	$0	$0
Fencing		$0	$0	$0	$0
Signalization & Lighting		$0	$0	$0	$180,000
Railroad Crossing		$0	$0	$0	$0
Earthwork		$0	$0	$0	$10,112
Clearing and Grubbing		$0	$0	$0	$0
Seeding & Sodding		$0	$0	$0	$106
Rip-Rap or Slope Protection		$0	$0	$0	$0
Guardrail		$0	$0	$0	$0
Signing		$0	$0	$0	$2,500
Pavement Markings		$0	$0	$0	$222
Traffic Control		$0	$0	$0	$30,000
Construction Lines and Stakes		$0	$0	$0	$30,000
DESIGN-BID-BUILD & DESIGN-BUILD PERCENTAGES					
Mobilization	5%	$0	$0	$0	$21,400
Allowances	10%	$0	$0	$0	$42,800
Const. Contingency (Structures Not Included)	30%	$0	$0	$0	$148,000
Const. Eng. & Inspec.	10.0%	$0	$0	$0	$70,000
Construction Estimate - DBB & DB		$0	$0	$0	$770,000
Right-of-Way & Utilties		**LOCAL**	**STATE**	**FEDERAL**	**TOTAL**
		0%	0%	0%	
Right-of-Way		$0	$0	$0	$0
Utilities		$0	$0	$0	$75,000
Preliminary Engineering		**LOCAL**	**STATE**	**FEDERAL**	**TOTAL**
		0%	0%	0%	
Prelim. Eng.	10.0%	$0	$0	$0	$70,000
Design-Bid-Build Project Cost		$0	$0	$0	$ 915,000

APPENDIX H. SIGNAL WARRANTS

2009 Edition Chapter 4C. Traffic Control Signal Needs Studies

Location
NB SR 75
SB SR 75
EB Roscoe Fitz Rd
WB Mohler Rd

Traffic Volume Date
03.11.2025

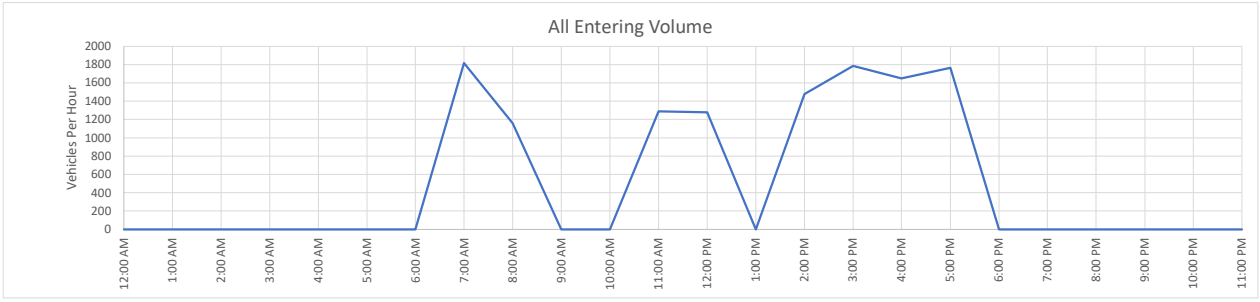
Municipality
Johnson City, TN

		Warranted?
Warrant 1	Eight-Hour Vehicular Volume	No
Warrant 2	Four-Hour Vehicular Volume	Yes
Warrant 3	Peak Hour	Yes
Warrant 4	Pedestrian Volume	No
Warrant 5	School Crossing	No
Warrant 6	Coordinated Signal System	No
Warrant 7	Crash Experience	No
Warrant 8	Roadway Network	No
Warrant 9	Intersection Near a Grade Crossing	No

Analyst
KJR 03.21.2025
CDM Smith, 2022

https://mutcd.fhwa.dot.gov/htm/2009/part4/part4c.htm
FHWA, 2009





2009 Edition Chapter 4C. Traffic Control Signal Needs Studies

Location
NB SR 75
SB SR 75
EB Bob Fitz Rd
WB Mosley Rd

Traffic Volume Date
03.11.2025

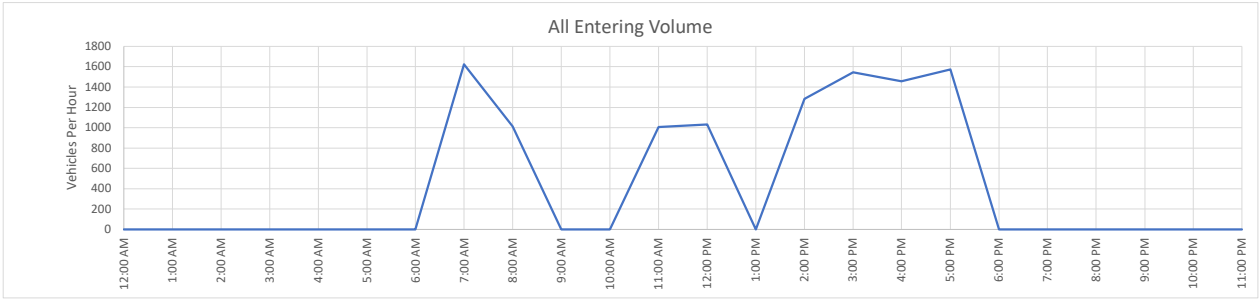
Municipality
Johnson City, TN

		Warranted?
Warrant 1	Eight-Hour Vehicular Volume	No
Warrant 2	Four-Hour Vehicular Volume	No
Warrant 3	Peak Hour	Yes
Warrant 4	Pedestrian Volume	No
Warrant 5	School Crossing	No
Warrant 6	Coordinated Signal System	No
Warrant 7	Crash Experience	No
Warrant 8	Roadway Network	No
Warrant 9	Intersection Near a Grade Crossing	No

Analyst
KJR 03.21.2025
CDM Smith, 2022

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2009 Edition Chapter 4C. Traffic Control Signal Needs Studies

Location
NB SR 75
SB SR 75
EB Shadden Rd
WB Shadden Rd

Traffic Volume Date
03.11.2025

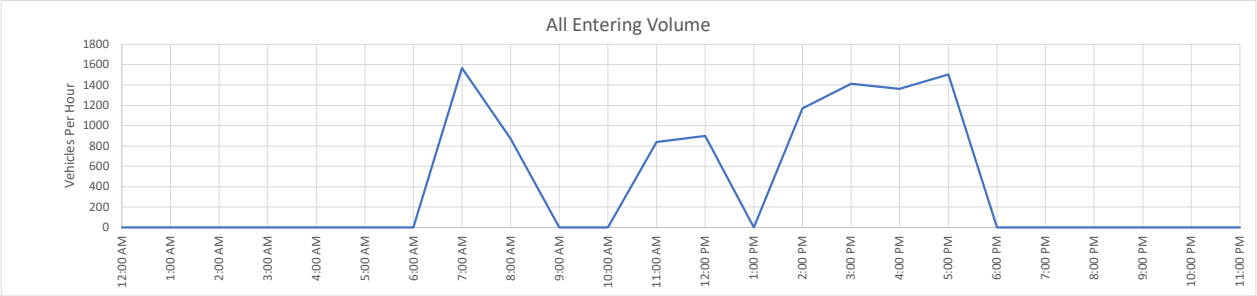
Municipality
Johnson City, TN

		Warranted?
Warrant 1	Eight-Hour Vehicular Volume	Yes
Warrant 2	Four-Hour Vehicular Volume	Yes
Warrant 3	Peak Hour	Yes
Warrant 4	Pedestrian Volume	No
Warrant 5	School Crossing	No
Warrant 6	Coordinated Signal System	No
Warrant 7	Crash Experience	No
Warrant 8	Roadway Network	No
Warrant 9	Intersection Near a Grade Crossing	No

Analyst
KJR 03.21.2025
CDM Smith, 2022

https://mutcd.fhwa.dot.gov/htm/2009/part4/part4c.htm
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2009 Edition Chapter 4C. Traffic Control Signal Needs Studies

Location
NB SR 75
SB SR 75
EB Sam Jenkins Rd
WB Gray Fossil Site

Traffic Volume Date
03.11.2025

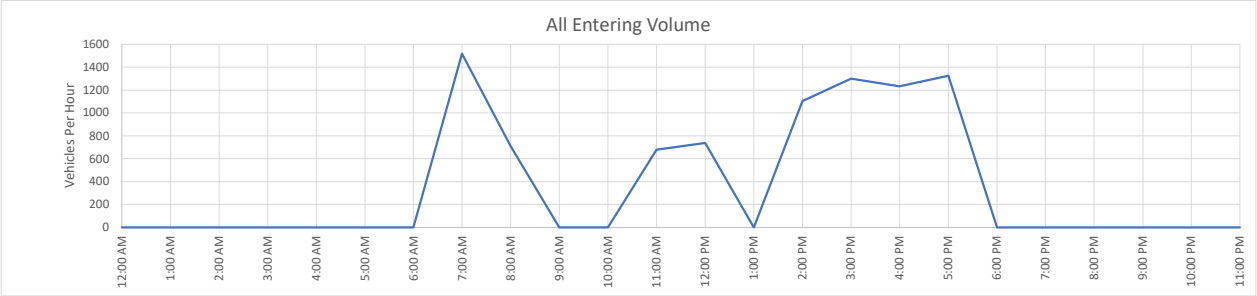
Municipality
Johnson City, TN

		Warranted?
Warrant 1	Eight-Hour Vehicular Volume	Yes
Warrant 2	Four-Hour Vehicular Volume	Yes
Warrant 3	Peak Hour	Yes
Warrant 4	Pedestrian Volume	No
Warrant 5	School Crossing	No
Warrant 6	Coordinated Signal System	No
Warrant 7	Crash Experience	No
Warrant 8	Roadway Network	No
Warrant 9	Intersection Near a Grade Crossing	No

Analyst
KJR 03.24.2025
CDM Smith, 2022

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FHWA, 2009





2009 Edition Chapter 4C. Traffic Control Signal Needs Studies

Location
NB SR 75
SB SR 75
EB N Daniel Boone HS Driveway
WB N Daniel Boone HS Driveway

Traffic Volume Date
03.11.2025

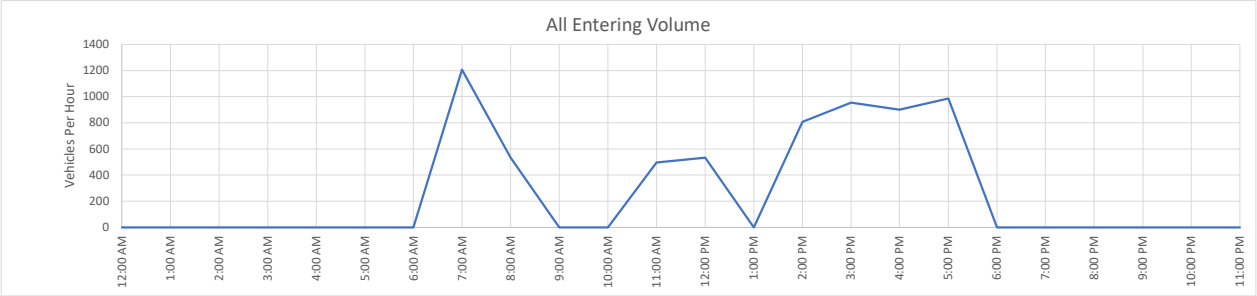
Municipality
Johnson City, TN

		Warranted?
Warrant 1	Eight-Hour Vehicular Volume	No
Warrant 2	Four-Hour Vehicular Volume	Yes
Warrant 3	Peak Hour	Yes
Warrant 4	Pedestrian Volume	No
Warrant 5	School Crossing	No
Warrant 6	Coordinated Signal System	No
Warrant 7	Crash Experience	No
Warrant 8	Roadway Network	No
Warrant 9	Intersection Near a Grade Crossing	No

Analyst
KJR 03.24.2025
CDM Smith, 2022

https://mutcd.fhwa.dot.gov/htm/2009/part4/part4c.htm
FHWA, 2009





2009 Edition Chapter 4C. Traffic Control Signal Needs Studies

Location
NB SR 75
SB SR 75
EB S Daniel Boone HS Driveway
WB S Daniel Boone HS Driveway

Traffic Volume Date
03.11.2025

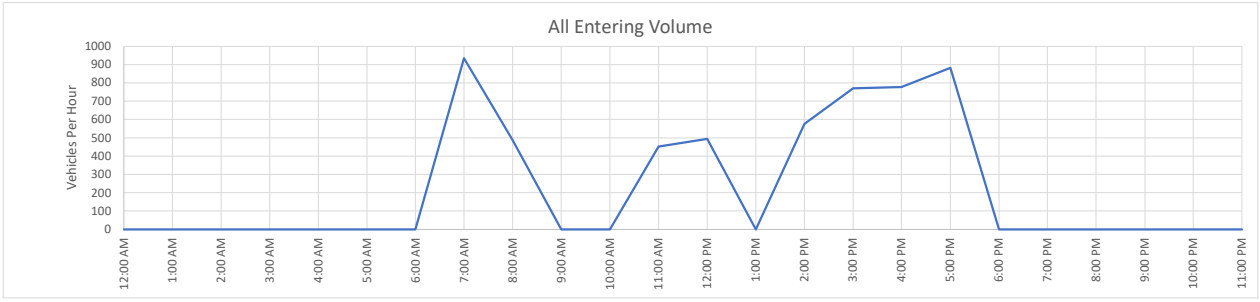
Municipality
Johnson City, TN

		Warranted?
Warrant 1	Eight-Hour Vehicular Volume	No
Warrant 2	Four-Hour Vehicular Volume	No
Warrant 3	Peak Hour	No
Warrant 4	Pedestrian Volume	No
Warrant 5	School Crossing	No
Warrant 6	Coordinated Signal System	No
Warrant 7	Crash Experience	No
Warrant 8	Roadway Network	No
Warrant 9	Intersection Near a Grade Crossing	No

Analyst
KJR 03.24.2025
CDM Smith, 2022

https://mutcd.fhwa.dot.gov/htm/2009/part4/part4c.htm
FHWA, 2009





2009 Edition Chapter 4C. Traffic Control Signal Needs Studies

Location
NB SR 75
SB SR 75
EB Hugh Cox Rd
0

Traffic Volume Date
03.11.2025

Municipality
Johnson City, TN

		Warranted?
Warrant 1	Eight-Hour Vehicular Volume	No
Warrant 2	Four-Hour Vehicular Volume	No
Warrant 3	Peak Hour	Yes
Warrant 4	Pedestrian Volume	No
Warrant 5	School Crossing	No
Warrant 6	Coordinated Signal System	No
Warrant 7	Crash Experience	No
Warrant 8	Roadway Network	No
Warrant 9	Intersection Near a Grade Crossing	No

Analyst
KJR 08.20.2025
CDM Smith, 2022

https://mutcd.fhwa.dot.gov/htm/2009/part4/part4c.htm
FHWA, 2009



