GTS Consulting
1396 White Bridge Road
Chittenango, NY 13037
Tel: (315) 391-5110

January 8, 2024

Napierala Consulting
110 Fayette Street
Manlius, NY 13104

Attn: Mr. Rod Ives

Re: Traffic Impact Assessment – Proposed FW Webb Development
South Youngs Road – Town of Amherst, NY

Dear Mr. Ives:

I have completed my review of traffic operations associated with the proposed FW Webb development on the west side of South Youngs Road in the Town of Amherst, NY. This letter summarizes the work completed in this review as well as my findings.

Project Understanding

The project site is located on the west side of South Youngs Road, to the north of Ellicott Creek, in the Town of Amherst, NY. The site is vacant land. The proposed development includes as 110,000 SF FW Webb warehouse (including a 20,000 SF pipe barn) with portions used for 9,000 SF of office space and a 16,200 SF retail area. There are 110 parking spaces proposed with land-banked space for an additional 40 parking spaces if needed in the future. Access to the development is proposed via two full access driveways to South Youngs Road located 635 feet and 1020 feet to the of the Aero Road roundabout. The development is assumed to be completed in 2025.

A site plan developed by Napierala Consulting has been attached.

Data Collection

Site visits were conducted on Thursday – December 14th, 2023 to collect the following:

- Existing Traffic Volume Counts – Traffic turning movement counts were collected at the intersections of Wherle Drive with Youngs Road/South Youngs Road, Wherle Drive with Aero Drive, and South Youngs Road with Aero Drive during the weekday morning (7-9am) and evening (4-6pm) peak travel periods to ensure that actual peak hours of the adjacent streets were captured. The traffic counts included separate heavy vehicle counts per direction. There were negligible pedestrian volumes during the traffic count periods.

- South Youngs Road Gap Data – Gap data was collected to assess the ability for vehicles to turn in and out of the site driveways on South Youngs Road. In order for a vehicle to turn right out of the site, or left into the site, the vehicle only requires a gap in the southbound direction on South Youngs Road. A vehicle requires a gap in traffic in both directions at the same time to turn left out of the site onto South Youngs Road. These gaps in traffic were observed and

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timed on South Youngs Road passing the site during the weekday morning and weekday evening traffic count periods. The gaps were then converted to a number of vehicles that could turn left or right out of the site during each gap and then totaled for the peak hour. For example, one vehicle can turn from the driveway with a 6-9 second gap in traffic, two can turn with a 10-13 second gap, 3 with a 14-17 second gap, 4 with an 18-19 second gap, etc.

- Spot Speed Measurements – Automated traffic recorders (tube counters) were placed on South Youngs Road to collect speed data between December 13th and December 17th to identify average and 85th percentile operating speeds in the area passing the site.

- Sight Distance Measurements – Sight lines looking north/south along South Youngs Road from both of the proposed site driveways were collected for comparison to design standards in order to confirm that adequate sight lines are available for safe ingress and egress from the development.

- Operational Data - Other data needed to evaluate traffic operations, such as intersection geometry, control, and speeds limits were also collected. Existing signal timing data was obtained from the Town of Amherst to ensure that the signals were properly modeled.

Existing Operations

South Youngs Road is classified as a minor urban arterial roadway in the area and has one lane in each direction passing the site. There are auxiliary northbound and southbound left turn lanes, an auxiliary southbound right turn lane, and a second shared northbound through/right turn lane at the Wherle Drive intersection.

Wherle Drive is classified as a minor urban arterial with two through lanes in each direction passing Youngs Road/South Youngs Road, and one through lane in each direction passing Aero Drive. There are auxiliary eastbound/westbound left turn lanes and an auxiliary westbound right turn lane at the Youngs Road/South Youngs Road intersection. There is an auxiliary northbound right turn lane and southbound left turn lane at the Aero Drive intersection.

Aero Drive is also classified as a minor urban arterial roadway in the study area with one lane in each direction through the study area. There is an auxiliary westbound right turn lane at the Wherle Drive intersection.

The intersections of Wherle Drive with Youngs Road/South Youngs Road and Aero Drive are controlled by fully actuated traffic signals. The Youngs Road/South Youngs Road signal has protected/permitted left turn phasing on all four approaches with a westbound right turn overlap phase. The Aero Drive signal operates as a two phase signal. Both signals run free without signal coordination. The intersection of South Youngs Road with Aero Drive operates at a single lane

roundabout with yield controlled entering movements on each approach.

Based on the traffic counts collected, the peak hours were identified as follows:

Morning Peak Hour – 7:30am to 8:30am
Evening Peak Hour – 4:15pm -5:15pm

The 2023 existing traffic volumes collected in December 2023 are shown in the attached Figure 1 for the morning and evening peak hours. The traffic count data has been attached.

South Youngs Road was closed for a number of months associated with a rehab project on the bridge over Ellicott Creek and may still have reduced traffic volumes as people have been using alternate routes in the area. The existing traffic counts were reviewed and compared to historical traffic volumes on South Youngs Road passing the site to identify any necessary volume adjustments to account for the roadway just recently being reopened. Specifically, a March 21st, 2016 traffic count on South Youngs Road showed a total traffic volume passing the site of 1,336 vehicles during the morning peak hour and 1,260 vehicles during the evening peak hour. The 2023 traffic volumes collected in December had 775 vehicles passing the site during the morning peak hour and 833 vehicles passing the site during the evening peak hour. The existing traffic counts were 58% of the historical 2016 value during the morning peak hour and 66% of the historical 2016 value during the evening peak hour. Therefore, the 2023 northbound/southbound traffic counts passing the site were adjusted using the morning peak hour 58% and the evening peak hour 66%. The increased north/south volumes on South Youngs Road were extrapolated through the study area intersections based on existing traffic patterns during each peak hour. The adjusted 2023 traffic volumes used for the existing condition in this study are shown in Figure 2.

Based on the gap data collected, there are sufficient gaps in traffic to accommodate approximately 507 vehicles turning right onto South Youngs Road from the site during the morning peak hour and 465 vehicles turning right during the evening peak hour. These gaps would also be available for vehicles turning left into the site from South Youngs Road. There were sufficient gaps observed to accommodate approximately 341 vehicles turning left out of the site onto South Youngs Road during the morning peak hour and 327 vehicles turning left out during the evening peak hour. With over 16 times the available gaps required compared to the projected site trip generation, there are no concerns with available gaps even with the significant increase in traffic volumes passing the site based on the historical traffic count data. The gap data is attached.

The posted speed limit passing the site is 35 mph on South Youngs Road. The speed data collected indicates that the average speeds passing the site on South Youngs Road are 40 mph northbound and 37 mph southbound. The 85th percentile speeds based on the data collected are 45 mph northbound and 42 mph southbound on South Youngs Road. The speed data has been attached.

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The following table provides a summary of the recommended sight distances along South Youngs Road at the site driveways from the AASHTO A Policy on Design of Highways and Streets as well as the available sight distances based on field measurements. The speed limit in the area is 35 mph on South Youngs Road, however the speed data collected indicates that the operating speed is closer to 45 mph. Therefore 45 mph was used for the sight distance review.

Sight Distance Summary

Location	Operating Speed	Direction	AASHTO Recommended Sight Distance	Available Sight Distance
North Site Access @ South Youngs Road - Turning Left	45 mph	Looking Left Looking Right	500 feet 500 feet	900 feet 1,000 feet
North Site Access @ South Youngs Road - Turning Right	45 mph	Looking Left	430 feet	900 feet
South Site Access @ South Youngs Road - Turning Left	45 mph	Looking Left Looking Right	500 feet 500 feet	1,250 feet 635 feet
North Site Access @ South Youngs Road - Turning Right	45 mph	Looking Left	430 feet	1,250 feet

There are more than adequate sight distances available along South Youngs Road looking in both directions from the site driveways. There are no concerns with sight distances and safety for ingress and egress from either site driveway.

Capacity analysis of the existing traffic operations was completed using Synchro11, an industry accepted standard for the analysis of both signalized and unsignalized intersections that is based on methodologies developed in the Highway Capacity Manual. Intersection and individual movement operations are graded in terms of Level of Service ranging from A to F, as described in the HCM. For example, an unsignalized intersection movement with an average delay of 5 seconds per vehicle is considered a Level of Service A while an average delay per vehicle of 20 seconds is considered a C. A Level of Service D or better is generally considered acceptable for a signalized intersection while a Level of Service E or better is generally considered acceptable for an unsignalized intersection.

The results of the Synchro capacity analysis indicates that the signalized intersections in the study area are both operating at acceptable overall Levels of Service C or better during both peak hours. All individual movements are operating at acceptable Levels of Service D or better. The unsignalized South Youngs Road/Aero Drive roundabout analysis indicates that the westbound Aero Drive approach has longer failing level delays during the morning peak hour. There are longer but acceptable delays on the southbound approach to the roundabout during the evening peak hour with Level of Service E.

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The detailed Level of Service summary, queue summary and capacity analysis printouts have been attached.

There are no concerns with existing traffic operations on South Youngs Road in the vicinity of the project site as there are ample gaps in traffic and clear sight lines in both directions at both proposed site driveway locations. There are acceptable delays at the adjacent signalized intersections with acceptable Level of Service D or better for all traffic movements. There are some longer existing delays at the roundabout to the south of the site, however, these delays do not impact access at the proposed site driveways.

Accident Analysis

An accident analysis was completed for the study area using history reports obtained for a three year period from May 2020 through April 2023. Over the three year period, there were 38 total accidents in the study area.

Of the 13 accidents at the Wherle Drive/Youngs Road/South Youngs Road intersection, 5 were right angle accidents, 4 were left turn accidents, 2 were rearend accidents, 1 was a right turn accident, and 1 was an animal related accident. Assuming that the evening peak hour volumes are 9% of the total daily traffic traveling through the intersection, the accident rate is 0.38 accidents per million entering vehicles, which is below the statewide average of 0.53 accidents per million entering vehicles for similar facilities.

Of the 7 accidents at the Wherle Drive/Aero Drive intersection, 5 were rearend accidents and 2 were left turn accidents. Assuming that the evening peak hour volumes are 9% of the total daily traffic traveling through the intersection, the accident rate is 0.25 accidents per million entering vehicles, which is below the statewide average of 0.31 accidents per million entering vehicles for similar facilities.

There were 7 fixed object accidents and 1 rearned accident at the South Youngs Road/Aero Drive roundabout. Assuming that the evening peak hour volumes are 9% of the total daily traffic traveling through the intersection, the accident rate is 0.35 accidents per million entering vehicles, which is higher than the statewide average of 0.17 accidents per million entering vehicles for a standard three way stop controlled intersection. The primary accident type is single vehicle fixed object accidents associated with speed entering the roundabout.

There were 8 midblock accidents along South Youngs Road including 3 fixed object accidents, 2 right angle accidents, 2 animal related accidents, and 1 rearend accident. Using the AADT of 12,492 vehicles per day, the accident rate is 0.76 accidents per million vehicle miles, which is well below the statewide average of 2.32 accidents per million vehicle miles for similar facilities.

There were 2 midblock accidents along Aero Drive including 1 fixed object accident and 1 right angle accident. Using the AADT of 8,314 vehicles per day, the accident rate is 0.30 accidents per million vehicle miles, which is also well below the statewide average of 2.32 accidents per million vehicle miles for similar facilities.

There was 1 accident on the adjacent airport property included in the data.

Overall, 27 of the accidents in the study area were property damage only accidents with 11 injury accidents and no fatalities. There are no distinct patterns noted other than the fixed object accidents associated with speed in the roundabout.

The detailed accident analysis has been attached.

2025 Background Operations

The proposed FW Webb development is anticipated to be completed in 2025 for the purposes of this traffic study. In order to fully understand the impacts of the development on the adjacent roadway system, analysis of the operations immediately before the project opening must first be completed. The existing traffic volumes were first adjusted by a growth rate to account for any unknown development that may occur prior to completion of the project.

Historical traffic volumes along South Youngs Road between Wherle Drive and Aero Drive, along Aero Drive between Ellicott Creek and South Youngs Road, and along Wherle Drive between Youngs Road and Transit Road, were taken from the NYSDOT Traffic Data Viewer website and reviewed in order to identify an appropriate background growth rate. Long term growth rates in the area have been flat on South Youngs Road around 0.0% per year between 2004 and 2019, positive on Aero Drive around +3.3% per year between 2011 and 2019, and positive on Wherle Drive around +1.2% per year between 2006 and 2019. In order to maintain a conservative analysis, a positive 2.0% per year growth was chosen and used to grow the 2023 existing traffic volumes to the 2025 background condition.

In addition to unknown growth that may occur in the area, specific site generated trips associated with known or approved development must also be incorporated into the growth projections. The Town of Amherst Planning Department indicated that there were no specific approved developments in the area that needed to be included.

The 2025 background morning and evening peak hour volumes for the study area with 4% total growth are shown in Figure 3.

The Synchro capacity analysis of the 2025 background condition shows minimal increases in delay from the existing conditions at the study area intersections during the peak hours. There are no notable

changes in Level of Service during either peak hour. The detailed Level of Service summary, queue summary and capacity analysis printouts have been attached.

Trip Generation Estimate, Parking Generation Estimate and Trip Distribution

The proposed FW Webb development will include approximately 84,800 SF of warehousing space including the pipe barn, a 16,200 SF retail space, and 9,000 SF of office space. Trips generated by the proposed development were estimated using the ITE Trip Generation, 11th Edition, which is the industry accepted standard for estimating traffic generated by new developments. Land Use 150 – Warehousing, Land Use 812 – Building Materials and Lumber Store, and Land Use 715 – Single Tenant Office were used.

The following table summarizes the trip generation estimate for the proposed FW Webb development on South Youngs Road in the Town of Amherst.

Trip Generation Summary

	Morning Peak Hour		**Evening Peak Hour**	
	Entering	**Exiting**	**Entering**	**Exiting**
Warehouse Space – 84,800 SF	12	3	4	11
Retail Space – 16,200 SF	16	10	17	20
Office Space – 9,000 SF	15	2	2	13
Total Trips Generated	**43**	**15**	**23**	**44**

The detailed trip generation calculations have been attached.

The proposed development will be a minor overall traffic generator with less than 50 total vehicles entering or exiting during the peak hours of the adjacent streets. Generally, this level of traffic generation does not typically require a full traffic impact study.

Peak potential parking demands for the development were estimated using the ITE Parking Generation Manual, 6th Edition using Land Uses 150, 812, and 715. The following table provides a summary of the average and 85th percentile parking demands expected for the development.

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Parking Generation Summary

	Average Parking Demand	85th Percentile Parking Demand
Warehouse Space – 84,800 SF	32	95
Retail Space – 16,200 SF	10	13
Office Space – 9,000 SF	29	36
Total Parking Demand	**71**	**144**

The proposed development includes 110 parking spaces with an additional 40 spaces land-banked if needed. With 150 total parking spaces, there is adequate parking proposed on the site to accommodate the maximum parking demands anticipated.

Using existing traffic patterns and population centers in the area, 25% the new trips generated are expected to travel to/from the north on Youngs Road, 25% will travel to from the east on Aero Drive, 20% will travel to/from the east on Wherle Drive, 16% will travel to/from the west of Aero Drive on Wherle Drive, 10% will travel to/from the west of Youngs Road on Wherle Drive, and 4% will travel to/from the north of Aero Drive on Wherle Drive. The anticipated arrival/departure distribution for the morning and evening peak hours are shown in Figure 4. The trips generated during each peak hour are shown in Figure 5, and the resultant full build traffic volumes expected when the development is complete are shown in Figure 6.

Build Operations

Based on the projected turning movements on South Youngs Road, there are more than sufficient gaps available to accommodate the build traffic volumes exiting both site driveways.

Capacity analysis of the build condition with the proposed FW Webb development indicates that the development will minimal impacts on traffic operations in the area. All individual movement Levels of Service are maintained from the background condition during both peak hours with the exception of the westbound left turn movement on Wherle Drive at South Youngs Road, which drops from Level of Service B to C during the morning peak hour. The actual increase in delay is only 3 seconds per vehicle.

The proposed site driveways are projected to operate at acceptable Level of Service E or better during both peak hours with average delays of 20-35 seconds to turn out onto South Youngs Road.

The detailed Level of Service, Queue summary and capacity analysis printouts have been attached.

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Conclusions

The proposed FW Webb development will be minor traffic generator with less than 50 vehicles entering or exiting during the typical morning and evening peak hours. The additional traffic generated by the proposed FW Webb development will have no notable or significant impact on traffic operations along South Youngs Road or at the adjacent intersections. There are ample gaps in traffic to accommodate turning movements into and out of the development, good sight lines in each direction and no significant capacity concerns. There is no significant accident history in the area. The proposed land banked parking spaces will be more than sufficient to accommodate peak projected parking demands.

There are no mitigation measures recommended.

If you have any questions or need additional information, please call.

Sincerely,

Gordon T. Stansbury, P.E., P.T.O.E.
GTS Consulting

Attachments –

Site Plan	Level of Service & Queue Summary
Traffic Volume Figures 1-6	Gap Calculations
Growth Rate Calculations	Trip Generation Estimate
Accident Data	Speed Data
Count Data	Synchro Capacity Printouts

SITE CRITERIA CHECKLIST

PROJECT SITE INFORMATION		
ADDRESS	S. YOUNGS ROAD	
TAX MAP ID NO.	81.03-5-20	
BOUNDARY SURVEY	PROPERTY LINE INFORMATION TAKEN FROM LAND SURVEY PREPARED BY GPI ENGINEERING, LANDSCAPE ARCHITCTURE SURVEYING, LLP DATED 11/16/2010	
TOTAL SITE AREA	20.17 ACRES	
LAND USE	EXISTING: VACANT PROPOSED: RETAIL SALES/WAREHOUSE	
	REQUIRED	PROVIDED
ZONING INFORMATION		
ZONING DISTRICT	GENERAL INDUSTRIAL	
IMPERVIOUS LOT COVERAGE	N/A	40.6% (8.2 ACRES)
BUILDING COVERAGE	N/A	110,250 SF
FRONT YARD SETBACK	30 FT	327.6 FT
REAR YARD SETBACK	25 FT	609.1 FT
SIDE YARD SETBACK	25 FT	26.5 FT
LANDSCAPE SCREENING WHERE PROPOSED COMMERCIAL DEVELOPMENT IS ADJACENT TO EXISTING INDUSTRIAL ZONES, AND THE PROPOSED USE IS 3+ ACRES, MEDIUM IMPACT SCREENING IS TO BE PROVIDED BETWEEN VEHICLE USE AREAS AND THE NEAREST PROPERTY LINE. VEHICLE USE AREAS LOCATED ADJACENT TO A PUBLIC STREET SHALL BE SCREENED FROM THE STREET WITH TREE AND SHRUB PLANTINGS, EARTHEN BERMS, WALLS, OR A COMBINATION OF THESE METHODS SO AS TO ESTABLISH AN EFFECTIVE VISUAL SCREEN WHICH IS NOT LESS THAN 36 INCHES ABOVE AT THE AT THE ADJACENT VEHICLE USE AREA WITHIN TWO YEARS OF INSTALLATION A MINIMUM OF ONE LARGE DECIDUOUS TREE, TWO SMALL DECIDUOUS/ORNAMENTAL TREES OR THREE EVERGREEN TREES OR ANY COMBINATION THEREOF SHALL BE PLANTED WITHIN THE REQUIRED YARD AREA FOR EACH 40 LF OF FRONTAGE ALONG A STREET.		
PARKING DIMENSIONS	9'x19'	10'x20'
PARKING AISLE WIDTH	24 FT	30 FT
PARKING SPACES		
WAREHOUSE SPACE 79,000 SF (GROSS)	1 SPACE/1,00 SF 79 SPACES	
RETAIL SALES SPACE 16,200 SF (NET)	5.5 SPACE/1,000 SF 89 SPACES	
OFFICE SPACE 9,000 SF (NET)	1 SPACE/200 SF 45 SPACES	
	TOTAL: 213 SPACES	110 TOTAL SPACES PROVIDED + 40 ADDITIONAL FUTURE SPACES = 150 TOTAL SPACES

GRAPHIC SCALE
0 60' 120'
(IN FEET)
1 inch = 60 ft

PROJECT TITLE:
F.W. WEBB AMHERST
SOUTH YOUNGS ROAD
TOWN OF AMHERST
ERIE COUNTY, NY

PREPARED FOR:
GREEN LEAF CONSTUCTION
98 ADAMS STREET SUITE 105
LEOMINSTER, MA 01453

SHEET TITLE:
LAYOUT PLAN

NO.	REVISION/ISSUE	DATE

PREPARED BY:
NAPIERALA CONSULTING
PROFESSIONAL ENGINEER, P.C.
SITE • DESIGN • ENGINEERING
110 FAYETTE STREET
MANLIUS, New York 13104
email: MNAP@SNAPCON.COM
PH: (315) 682-5580 FAX: (315) 682-5544

PROJECT NO. 23-2176
DATE 28 AUG 2023
SCALE 1" = 50'

PLAN SEAL BY:
MATTHEW R. NAPIERALA, P.E.
NYS REGISTRATION # 080733

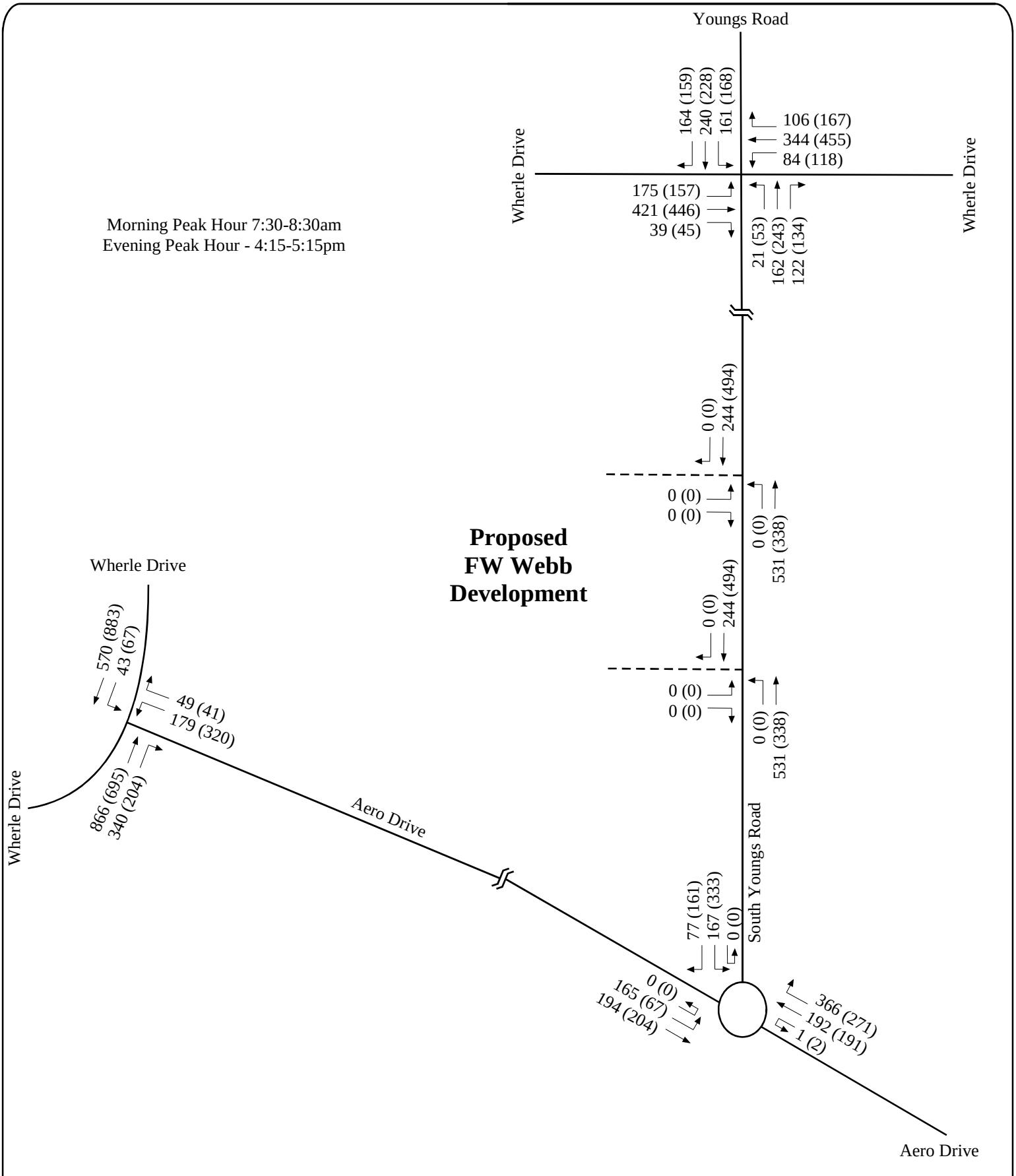
SHEET C-5

Proposed FW Webb Development, South Youngs Road, Town of Amherst, NY Intersection Level of Service & Queue Summary Weekday Morning Peak Hour							
Intersection	**Available Storage**	**2023 Existing LOS(Delay)**	**2023 Existing Max Queue**	**2025 Background LOS(Delay)**	**2025 Background Max Queue**	**2025 Build LOS(Delay)**	**2025 Build Max Queue**
Wherle Drive @ South Youngs Road / Youngs Road		**B(20)**		**C(21)**		**C(21)**	
EB Left	275	C(21)	97	C(23)	100	C(22)	100
EB Through/Right	-	C(23)	149	C(24)	155	C(26)	156
WB Left	375	B(18)	69	B(19)	72	C(22)	77
WB Through	-	C(22)	106	C(23)	110	C(22)	110
WB Right	400	A(3)	21	A(3)	21	A(3)	21
NB Left	185	B(11)	31	B(12)	32	B(12)	33
NB Through/Right	-	B(19)	174	C(21)	190	C(21)	193
SB Left	360	C(22)	94	C(24)	107	C(25)	107
SB Through	-	C(24)	238	C(24)	251	C(25)	262
SB Right	830	A(6)	40	A(6)	41	A(5)	41
Aero Drive @ South Youngs Road							
EB Left/Through	-	c(19)	150	c(21)	175	c(22)	175
WB Through/Right	-	f(97)	650	f(121)	750	f(133)	800
SB Left/Right	635	b(11)	75	b(12)	100	b(12)	100
Wherle Drive @ Aero Drive		**B(16)**		**B(18)**		**B(18)**	
WB Left	-	C(32)	161	C(33)	167	C(32)	168
WB Right	140	A(6)	20	A(7)	21	A(7)	21
NB Through	-	C(21)	699	C(25)	755	C(25)	772
NB Right	-	A(3)	48	A(3)	55	A(3)	57
SB Left	500	C(23)	76	D(42)	96	D(47)	103
SB Through	-	B(11)	292	B(12)	320	B(12)	331
South Youngs Road @ South Site Access							
EB Left/Right	-	-	-	-	-	c(19)	3
NB Left/Through	635	-	-	-	-	a(1)	3
SB Through/Right	385	-	-	-	-	a(0)	0
South Youngs Road @ North Site Access							
EB Left/Right	-	-	-	-	-	e(35)	5
NB Left/Through	385	-	-	-	-	a(0)	0
SB Through/Right	-	-	-	-	-	a(0)	0

A(9) – Signalized Level of Service (Average Delay per Vehicle in Seconds) – Synchro11
a(9) – Unsignalized Level of Service (Average Delay per Vehicle in Seconds) – Synchro11
95th Percentile Queues in Feet - Synchro11

Proposed FW Webb Development, South Youngs Road, Town of Amherst, NY Intersection Level of Service & Queue Summary Weekday Evening Peak Hour							
Intersection	**Available Storage**	**2023 Existing LOS(Delay)**	**2023 Existing Max Queue**	**2025 Background LOS(Delay)**	**2025 Background Max Queue**	**2025 Build LOS(Delay)**	**2025 Build Max Queue**
Wherle Drive @ South Youngs Road / Youngs Road		**C(21)**		**C(22)**		**C(22)**	
EB Left	275	C(24)	86	C(26)	89	C(26)	89
EB Through/Right	-	C(24)	154	C(24)	160	C(24)	161
WB Left	375	C(34)	127	D(40)	142	D(43)	150
WB Through	-	C(23)	139	C(24)	145	C(24)	145
WB Right	400	A(3)	28	A(3)	31	A(4)	34
NB Left	185	B(13)	45	B(14)	47	B(14)	49
NB Through/Right	-	B(19)	135	B(19)	142	B(19)	148
SB Left	360	B(19)	85	C(21)	95	C(22)	99
SB Through	-	C(26)	244	C(27)	255	C(27)	260
SB Right	830	A(5)	37	A(5)	40	A(5)	40
Aero Drive @ South Youngs Road							
EB Left/Through	-	c(16)	75	c(17)	100	c(18)	100
WB Through/Right	-	b(15)	150	c(16)	150	c(16)	150
SB Left/Right	635	e(35)	350	e(44)	400	e(50)	450
Wherle Drive @ Aero Drive		**C(24)**		**C(26)**		**C(27)**	
WB Left	-	D(44)	323	D(47)	344	D(49)	353
WB Right	140	A(7)	23	A(7)	24	A(8)	25
NB Through	-	B(16)	358	B(17)	382	B(17)	382
NB Right	-	A(2)	28	A(2)	29	A(2)	29
SB Left	500	B(14)	51	B(16)	57	B(16)	58
SB Through	-	C(26)	649	C(31)	692	C(31)	692
South Youngs Road @ South Site Access							
EB Left/Right	-	-	-	-	-	c(19)	8
NB Left/Through	635	-	-	-	-	a(1)	0
SB Through/Right	385	-	-	-	-	a(0)	0
South Youngs Road @ North Site Access							
EB Left/Right	-	-	-	-	-	d(33)	13
NB Left/Through	385	-	-	-	-	a(0)	0
SB Through/Right	-	-	-	-	-	a(0)	0

A(9) – Signalized Level of Service (Average Delay per Vehicle in Seconds) – Synchro11
a(9) – Unsignalized Level of Service (Average Delay per Vehicle in Seconds) – Synchro11
95th Percentile Queues in Feet - Synchro11



Proposed FW Webb Development - South Youngs Road - Town of Amherst, NY

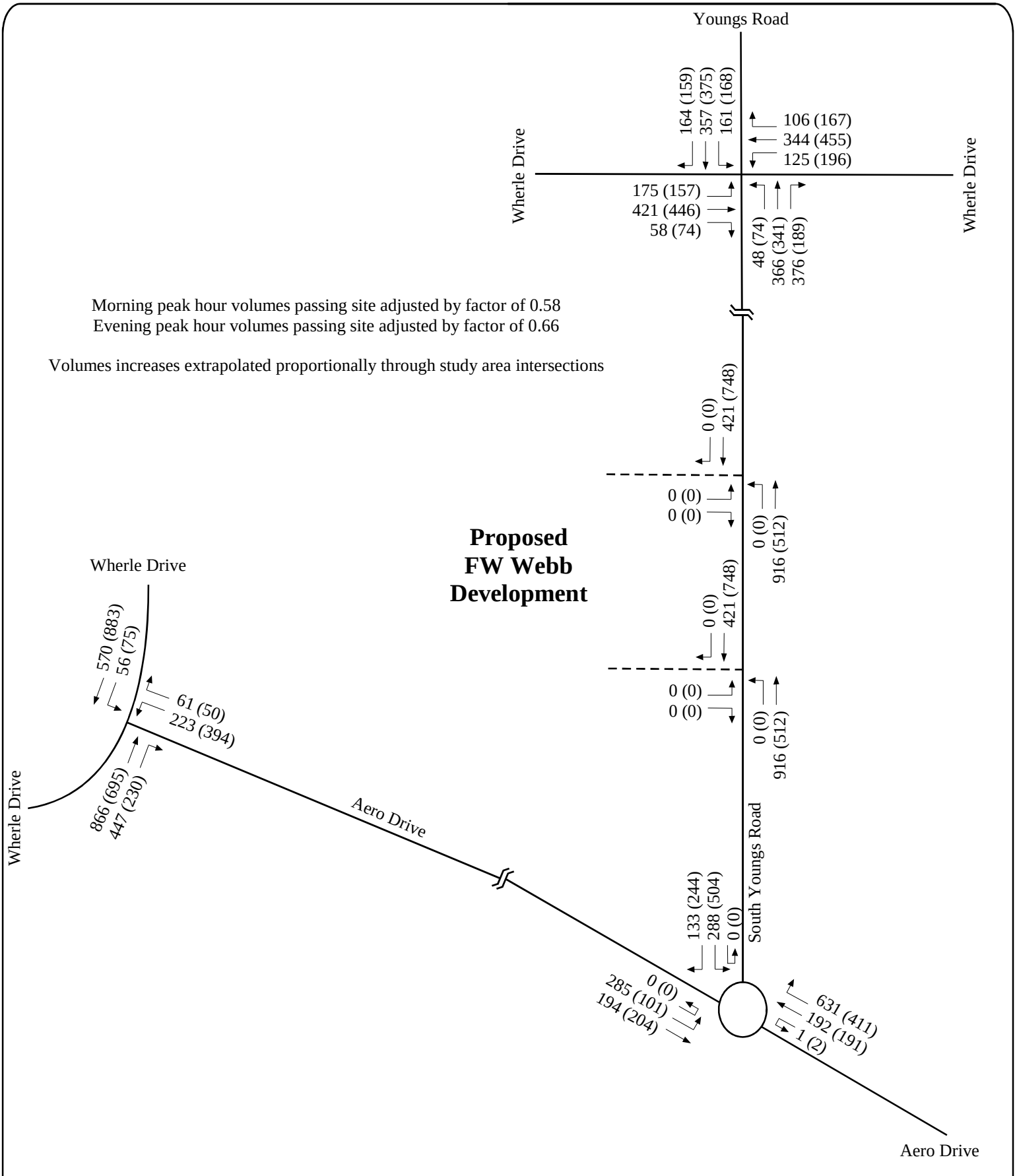
2023 Existing Traffic Volumes - Collected December 14th, 2023
Morning (Evening) Peak Hour

N
W E

Figure 1

Not to Scale

GTS Consulting



Proposed FW Webb Development - South Youngs Road - Town of Amherst, NY

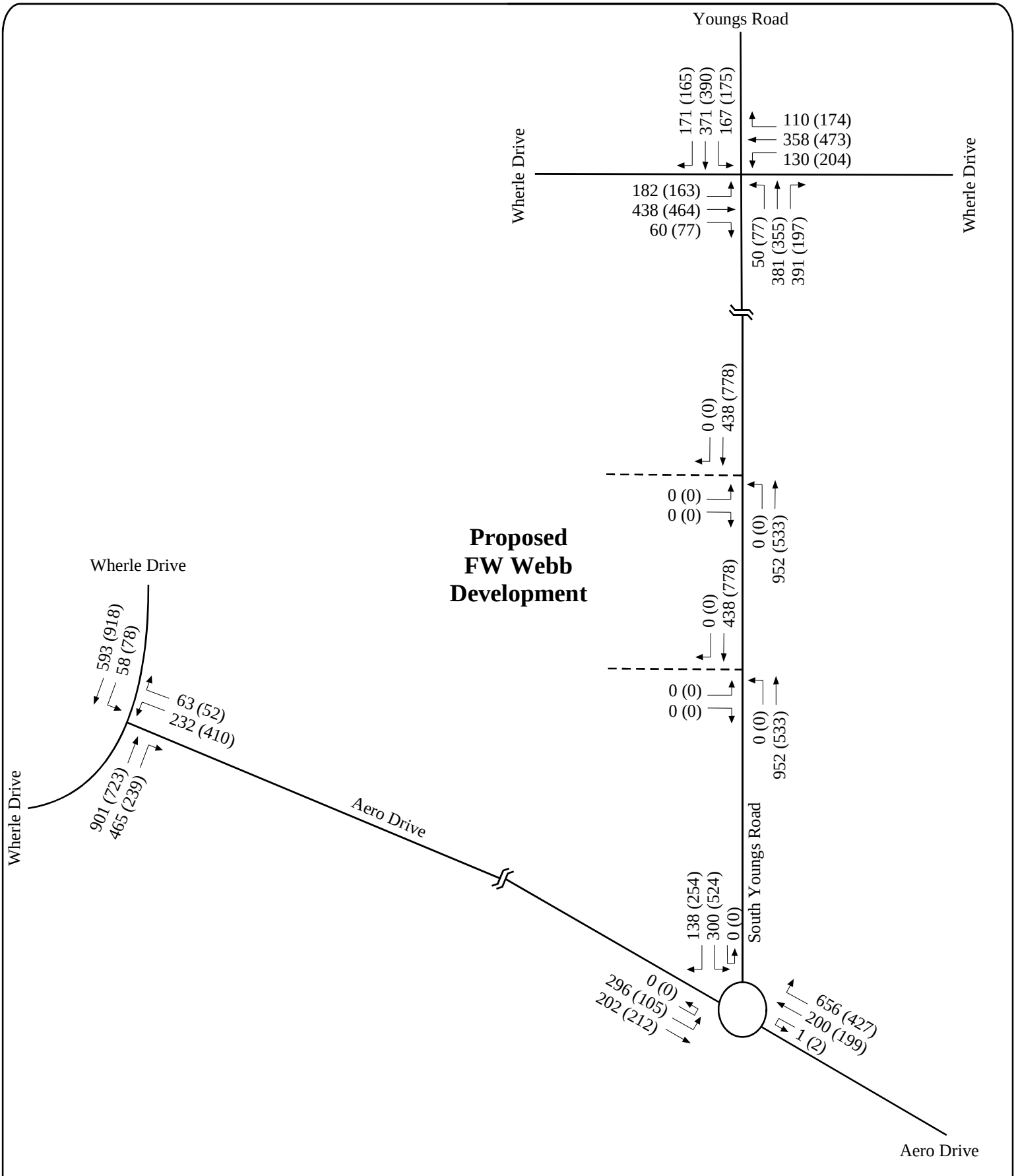
2023 Adjusted Existing Traffic Volumes - Based on Historical Volumes Passing Site
Morning (Evening) Peak Hour

N
W E

Figure 2

Not to Scale

GTS Consulting



Proposed FW Webb Development - South Youngs Road - Town of Amherst, NY

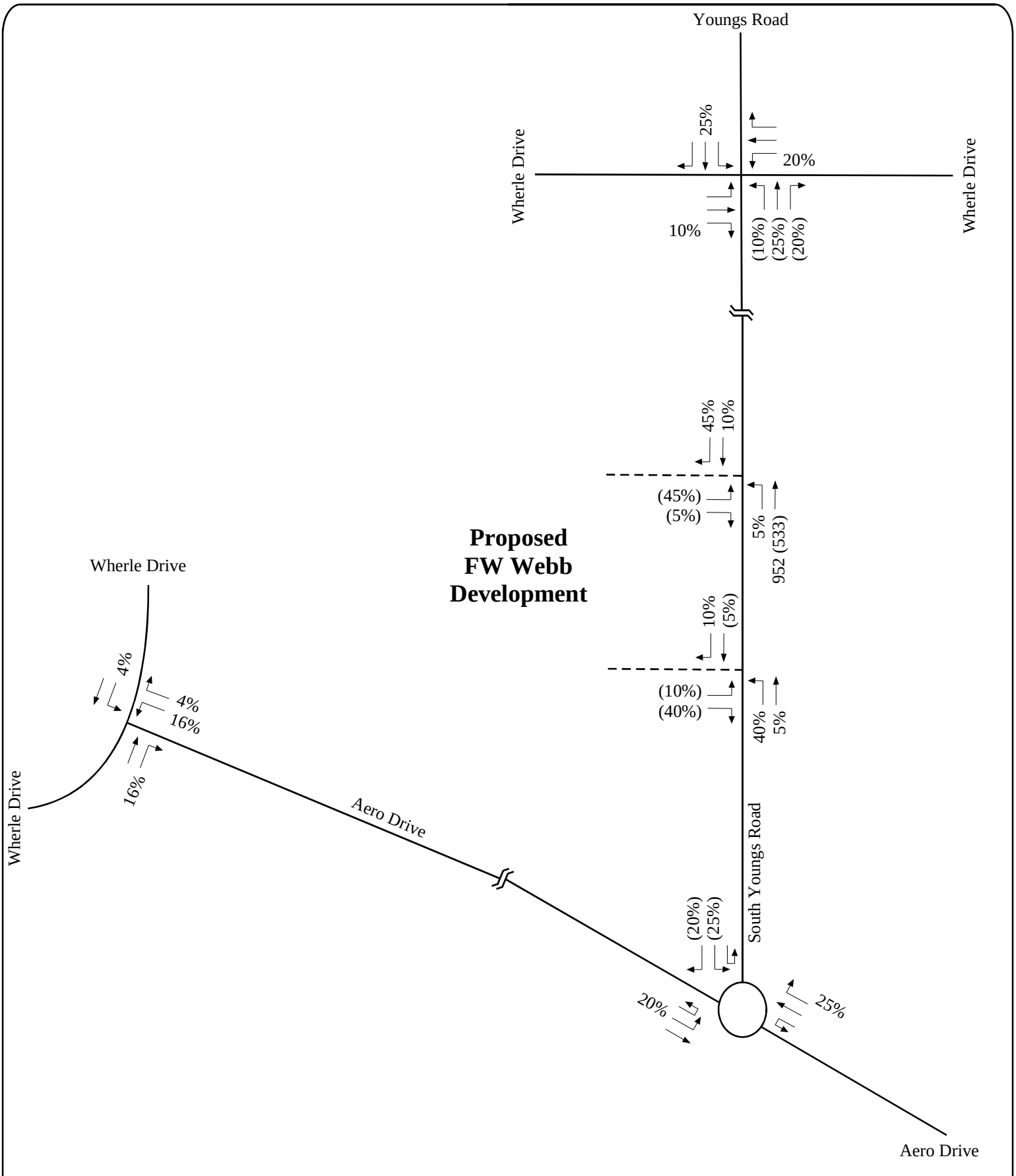
2025 Background Traffic Volumes - With 2% Growth per Year (4% Total)
Morning (Evening) Peak Hour

N
W E

Figure 3

Not to Scale

GTS Consulting



Proposed FW Webb Development - South Youngs Road - Town of Amherst, NY

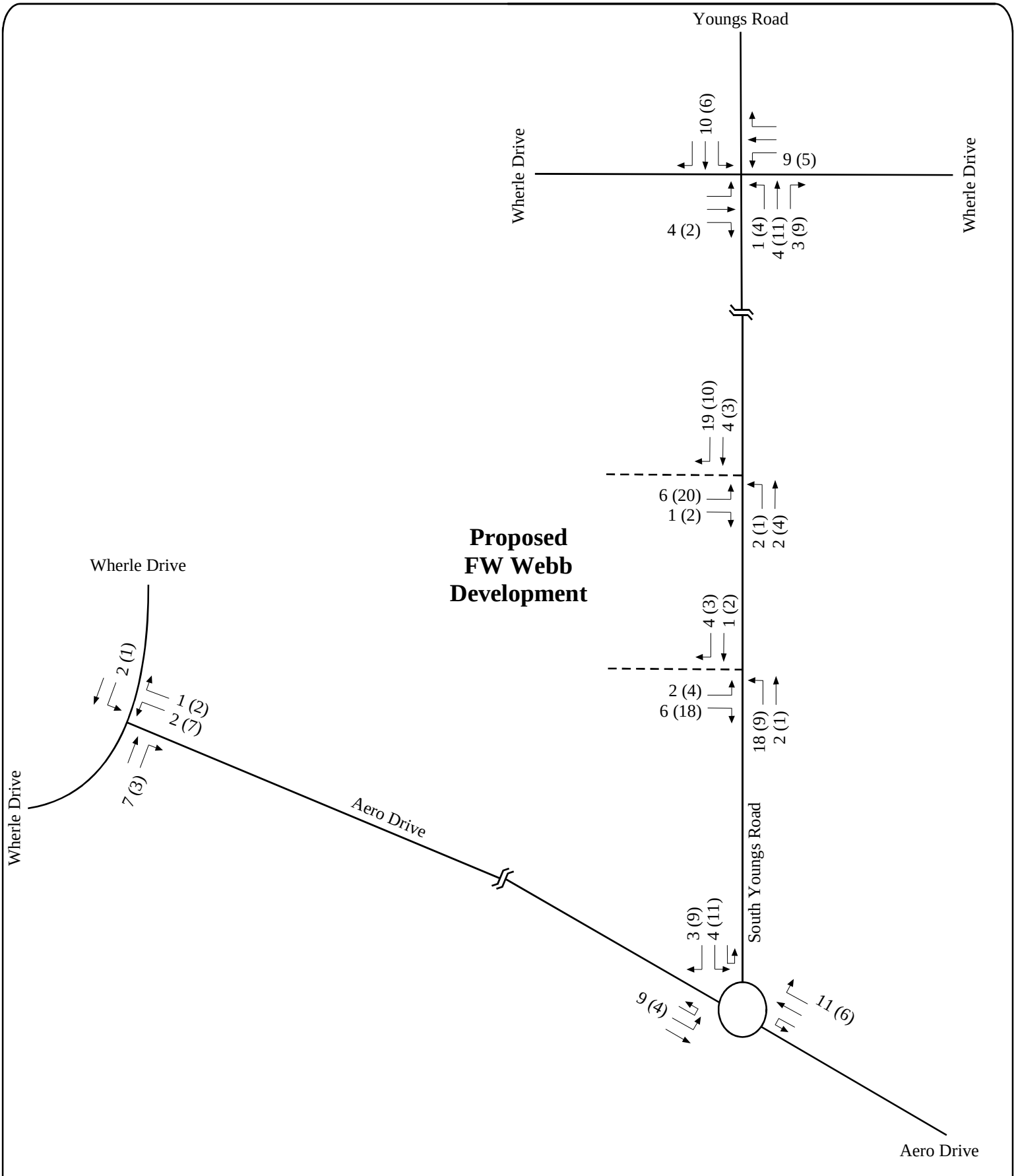
Arrival / Departure Trip Distribution
Entering (Exiting) Trip Percentage

N
W E

Figure 4

Not to Scale

GTS Consulting



Proposed FW Webb Development - South Youngs Road - Town of Amherst, NY

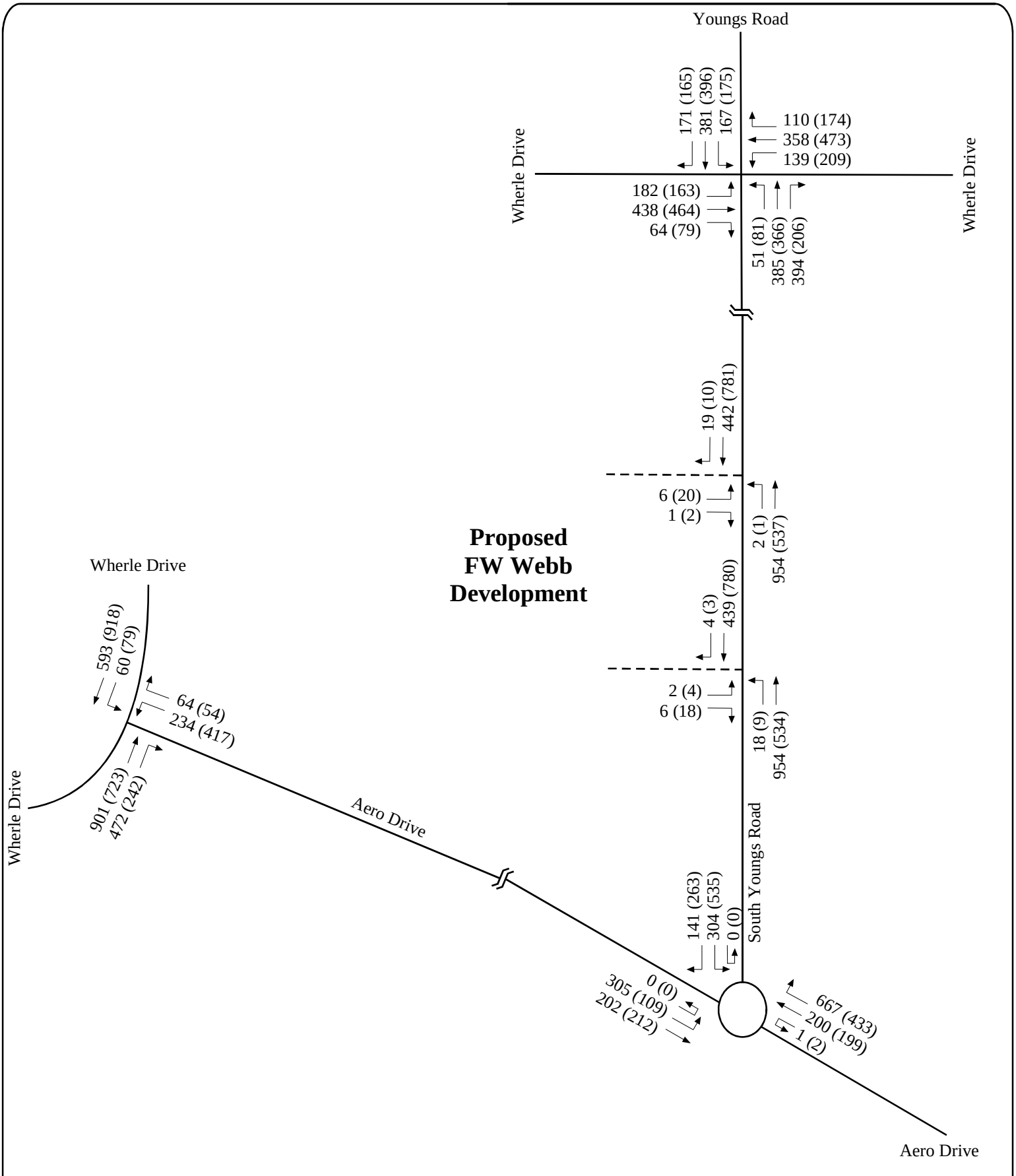
Trips Generated
Morning (Evening) Peak Hour

N
W E

Figure 5

Not to Scale

GTS Consulting



Proposed FW Webb Development - South Youngs Road - Town of Amherst, NY

2025 Build Traffic Volumes
Morning (Evening) Peak Hour

N
W E

Figure 6

Not to Scale

GTS Consulting

Intersection Gap Study

Project: Proposed FW Webb Development - South Youngs Road, Town of Amherst, NY
Date: 12/14/2023

Intersection: Proposed Site Access Drives @ South Youngs Road
Movement: Right Turns Exiting / Left Turns Entering

Time Interval		6-10 sec x 1	11-14 sec x 2	15-18 sec x 3	19-20 sec x 4	21-24 sec x 5	25-26 sec x 6	>27 x 7	Interval Total
Morning Peak Hour									
7:30-8:30am	# of Gaps	28	20	15	5	11	3	43	
	# of Vehicles	**28**	**40**	**45**	**20**	**55**	**18**	**301**	**507**
Evening Peak Hour									
4:15-5:15pm	# of Gaps	78	29	28	8	8	2	23	
	# of Vehicles	**78**	**58**	**84**	**32**	**40**	**12**	**161**	**465**

Intersection: Proposed Site Access Drives @ South Youngs Road
Movement: Left Turns Exiting

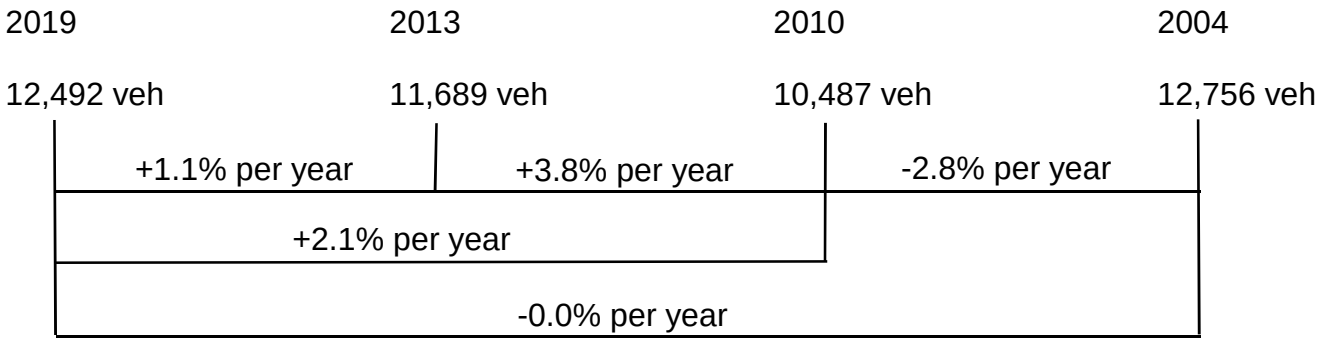
Time Interval		6-10 sec x 1	11-14 sec x 2	15-18 sec x 3	19-20 sec x 4	21-24 sec x 5	25-26 sec x 6	>27 x 7	Interval Total
Morning Peak Hour									
7:30-8:30am	# of Gaps	77	37	22	9	9	6	1	
	# of Vehicles	**77**	**74**	**66**	**36**	**45**	**36**	**7**	**341**
Evening Peak Hour									
4:15-5:15pm	# of Gaps	92	46	26	4	6	2	1	
	# of Vehicles	**92**	**92**	**78**	**16**	**30**	**12**	**7**	**327**

Historical Traffic Growth Calculations

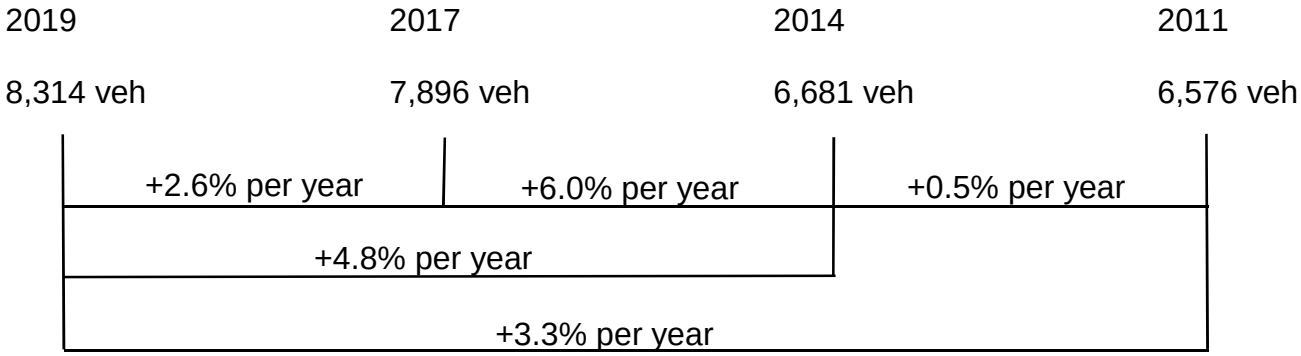
Proposed FW Webb Development
South Youngs Road - Town of Amherst, NY

Historical Traffic Counts Taken from the NYSDOT Traffic Data Viewer Website

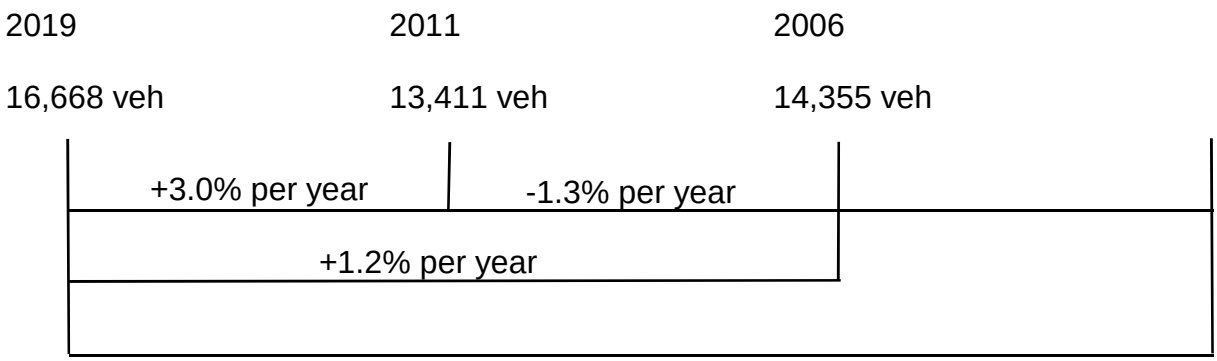
South youngs Road - Between Aero Drive and Wherle Drive



Aero Drive - Between Ellicott Creek Road and South Youngs Road



Wherle Drive - Between Youngs Road and Transit Road



Use +2.0% Annual Growth for Traffic Projections

Proposed FW Webb Development
South Youngs Road - Town of Amherst, NY
Trip Generation Estimate

Proposed Development

84,800 SF - Warehousing
16,200 SF - Retail
9,000 SF - Office
110,000 SF - Total Development - Warehouse, Retail, Office

ITE Trip Generation - 11th Edition

Land Use 150 - Warehousing

Morning Peak Hour	0.17 Trips/1,000 SF	77% Enter	23% Exit
Evening Peak Hour	0.18 Trips/1,000 SF	28% Enter	72% Exit

Land Use 812 - Building Materials and Lumber Store

Morning Peak Hour	1.59 Trips/1,000 SF	62% Enter	38% Exit
Evening Peak Hour	2.25 Trips/1,000 SF	46% Enter	54% Exit

Land Use 715 - Single Tenant Office

Morning Peak Hour	1.85 Trips/1,000 SF	89% Enter	11% Exit
Evening Peak Hour	1.76 Trips/1,000 SF	15% Enter	85% Exit

Trip Generation Estimate - FW Webb Development

	Morning Peak Hour			Evening Peak Hour		
	Total Trips	**Entering**	**Exiting**	**Total Trips**	**Entering**	**Exiting**
Warehousing - 84,800 SF	14	12	3	15	4	11
Retail - 16,200 SF	26	16	10	36	17	20
Office - 9,000 SF	17	15	2	16	2	13
Total Trips Generated	**57**	**43**	**15**	**68**	**23**	**44**

Proposed FW Webb Development - Amherst, NY
Accident History Summaries - May 1 2020 Through April 30, 2023

Accident #	Date	Location	Type	# Cars	Severity	Direction	Conditions	Contributing Factors
1	5/1/2020	S Youngs @ Wehrle	Right Angle	2	INJ	WB / SB Stopped	Wet	Failure To Keep Right
2	7/24/2020	S Youngs @ Wehrle	Left Turn	2	PDO	EB Left / WB	Dry	Failure To Yield ROW
3	7/27/2020	Aero @ Wehrle	Rear End	2	PDO	SB / SB Stopped	Dry	Driver Inattention
4	9/14/2020	Lawrence Bell @ S Youngs	Right Angle	2	PDO	WB Left / NB	Dry	Failure To Yield ROW
5	9/16/2020	S Youngs @ Wehrle	Rear End	2	INJ	WB / WB Left Stopped	Dry	Turning Improper
6	10/6/2020	S Youngs Midblock	Animal	1	PDO	SB / Deer	Dry	Animal's Actions
7	10/30/2020	S Youngs @ Wehrle	Animal	1	PDO	EB / Deer	Dry	Animal's Actions
8	12/25/2020	S Youngs @ Wehrle	Left Turn	2	PDO	EB Left / WB	Wet	Failure To Yield ROW
9	3/26/2021	S Youngs @ Wehrle	Left Turn	2	PDO	EB Left / WB	Dry	Failure To Yield ROW
10	4/3/2021	S Youngs Midblock	Animal	1	PDO	NB / Deer	Dry	Animal's Actions
11	4/17/2021	S Youngs @ Aero	Fixed Object	1	INJ	WB / Street Sign	Dry	Debris In Roadway
12	5/25/2021	Airport Property	Sideswipe	2	PDO	NB Left / Unknown	Dry	Driver Inattention
13	5/25/2021	Aero Midblock	Right Angle	2	INJ	NB Left / EB	Dry	Failure To Yield ROW
14	6/1/2021	S Youngs @ Aero	Fixed Object	1	INJ	WB / Concrete / Guardrail	Dry	Unsafe Speed
15	6/1/2021	S Youngs @ Wehrle	Right Angle	2	INJ	EB / SB	Dry	Traffic Control Disregard
16	7/20/2021	S Youngs @ Wehrle	Right Turn	2	PDO	WB Right / EB Left	Dry	Traffic Control Disregard
17	7/22/2021	S Youngs @ Wehrle	Right Angle	3	INJ	EB / NB / WB Stopped	Dry	Traffic Control Disregard
18	9/7/2021	Aero @ Wehrle	Rear End	3	PDO	NB / NB Stopped / NB Stopped	Dry	Driver Inattention
19	9/5/2021	S Youngs @ Aero	Fixed Object	1	PDO	WB / Guardrail	Wet	Unsafe Speed
20	10/5/2021	S Youngs @ Wehrle	Right Angle	2	PDO	EB Left / NB	Dry	Traffic Control Disregard
21	11/3/2021	Aero @ Wehrle	Left Turn	2	PDO	SB Left / NB	Dry	Failure To Yield ROW
22	11/4/2021	S Youngs Midblock	Rear End	2	PDO	SB / SB	Dry	Following Too Closely
23	11/11/2021	S Youngs Midblock	Fixed Object	1	PDO	SB / Guide Rail	Dry	Driver Inattention
24	11/26/2021	S Youngs Midblock	Fixed Object	1	PDO	NB / Guide Rail	Icy	Slippery Pavement
25	3/16/2022	Aero @ Wehrle	Rear End	2	PDO	SB / SB Stopped	Dry	Driver Inattention
26	3/27/2022	S Youngs Midblock	Fixed Object	1	PDO	NB / Unknown	Icy	Unknown
27	5/31/2022	S Youngs @ Aero	Rear End	2	INJ	SB Right / WB Stopped in Circle	Dry	Driver Inattention
28	6/20/2022	S Youngs @ Wehrle	Rear End	2	PDO	WB / WB Stopped	Dry	Following Too Closely
29	8/27/2022	S Youngs @ Wehrle	Right Angle	2	INJ	EB / NB	Dry	Traffic Control Disregard
30	9/7/2022	Aero @ Wehrle	Rear End	2	PDO	EB Backing / WB Stopped	Wet	Unsafe Backing
31	10/5/2022	Aero @ Wehrle	Rear End	2	PDO	NB / NB Stopped	Dry	Following Too Closely
32	10/16/2022	S Youngs @ Aero	Fixed Object	1	PDO	WB / Guard Rail	Dry	Unsafe Speed
33	12/20/2022	S Youngs @ Aero	Fixed Object	1	PDO	SB / Yield Sign	Dry	Unsafe Lane Change
34	1/10/2023	Aero @ Wehrle	Left Turn	2	INJ	WB Left / NB Right	Dry	Failure To Yield ROW
35	1/28/2023	Aero Midblock	Fixed Object	1	PDO	SB / Low Hanging Wires	Wet	Vehicle Height
36	2/22/2023	S Youngs @ Wehrle	Right Angle	2	PDO	EB / SB	Icy	Traffic Control Disregard

Accident #	Date	Location	Type	# Cars	Severity	Direction	Conditions	Contributing Factors
37	2/21/2023	S Youngs @ Wehrle	Left Turn	2	INJ	SB Left / NB	Wet	Failure To Yield ROW
38	3/10/2023	S Youngs @ Aero	Fixed Object	1	PDO	WB Circulating / Metal Pole	Icy	Slippery Pavement

Youngs @ Wherle - 13 Accidents
5 - Right Angle Accidents
4 - Left Turn Accidents
2 - Rearend Accidents
1 - Right Turn Accident
1 - Animal Accident

Aero @ Wherle - 7 Accidents
5 - Rearend Accidents
2 - Left Turn Accidents

S Youngs @ Aero - 7 Accidents
7 - Fixed Object Accidents
1 - Rearend Accident

S. Youngs Midblock - 8 Accidents
3 - Fixed Object Accidents
2 - Right Angle Accidents
2 - Animal Accidents
1 - Rearend Accident

Aero Midblock - 2 Accidents
1 - Fixed Object Accident
1 - Right Angle Accident

1 Accident on Airport Property

Youngs Road @ Wherle Drive Intersection - Evening Peak Hour - 2,801 Vehicles. Assumed PM Peak is 9% of AADT, AADT = 31,124 Vehicles
Aero Drive @ Wherle Drive Intersection - Evening Peak Hour - 2,327 Vehicles. Assumed PM Peak is 9% of AADT, AADT = 25,856 Vehicles
S Youngs Road @ Aero Drive Intersection - Evening Peak Hour - 1,657 Vehicles. Assumed PM Peak is 9% of AADT, AADT = 18,411 Vehicles

South Youngs Road - NYSDOT Traffic Data Viewer - AADT = 12,492 Vehicles.
Aero Drive - NYSDOT Traffic Data Viewer - AADT = 8,314 Vehicles.

Intersection Accident Rates $\frac{\text{\# Accidents X 1,000,000}}{\text{AADT X \# Years X 365 Days}}$ Time Period = 3 years

Youngs @ Wherle - 13 Accidents
Accident Rate = 0.38 accidents per million entering vehicles
Statewide average for similar facilities = 0.53 accidents per million entering vehicles (Urban - 4 Legged Signal Intersection - 1-4 Lanes)
Intersection Accident History is Below the Statewide Average

Aero @ Wherle - 7 Accidents
Accident Rate = 0.25 accidents per million entering vehicles
Statewide average for similar facilities = 0.31 accidents per million entering vehicles (Urban - 3 Legged Signal Intersection - 1-4 Lanes)
Intersection Accident History is Below the Statewide Average

S Youngs @ Aero - 7 Accidents
Accident Rate = 0.35 accidents per million entering vehicles
Statewide average for similar facilities = 0.17 accidents per million entering vehicles (Urban - 3 Legged Sign Intersection - 1-3 Lanes)
Intersection Accident History is Above the Statewide Average

Link Accident Rates

$$\frac{\text{\# Accidents X 1,000,000}}{\text{Link Length X AADT X \# Years X 365 Days}}$$

Time Period = 3 years
S Youngs Link Length = 0.77 Miles
S Youngs Link Length = 0.73 Miles

S. Youngs Midblock - 8 Accidents
Accident Rate = 0.76 accidents per million vehicle miles
Statewide average for similar facilities = 2.32 accidents per million vehicle miles Urban - Free Access - 2 Lanes (1 per direction) - Undivided - Mainline Only)
Link Accident History is Below the Statewide Average

Aero Midblock - 2 Accidents
Accident Rate = 0.30 accidents per million vehicle miles
Statewide average for similar facilities = 2.32 accidents per million vehicle miles Urban - Free Access - 2 Lanes (1 per direction) - Undivided - Mainline Only)
Link Accident History is Below the Statewide Average

Tri-State Traffic Data

www.TSTDATA.com

"Serving Transportation Professionals Since 1995"

Location: Amherst, New York
Road: S Youngs Rd
Segment: 475 ft N of Aero Dr Traffic Circle
Date: 12/13/2023

GPS: 42.946906, -78.724831

NB

Start Time	1 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 9999	Total
12/13/23	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
02:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
03:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
04:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
05:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
06:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
07:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
08:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
09:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
11:00	4	0	1	18	70	93	34	6	2	1	1	0	0	0	0	230
12 PM	9	0	8	32	105	92	17	8	0	0	0	0	0	0	0	271
13:00	15	0	1	35	125	99	23	5	0	0	0	0	0	0	0	303
14:00	22	2	0	28	85	85	33	6	0	0	1	0	0	0	0	262
15:00	10	0	1	13	98	117	42	4	0	0	0	0	0	0	0	285
16:00	29	0	1	17	106	114	31	4	1	0	0	0	0	0	0	303
17:00	13	0	3	34	107	81	17	4	0	0	0	0	0	0	0	259
18:00	7	0	0	23	54	57	10	2	1	0	0	0	0	0	0	154
19:00	3	0	1	8	31	34	7	3	0	0	0	1	0	0	0	88
20:00	1	0	1	11	16	27	9	0	0	0	0	0	0	0	0	65
21:00	2	0	0	2	18	27	5	2	0	0	0	0	0	0	0	56
22:00	0	0	1	6	15	17	5	1	1	0	0	0	0	0	0	46
23:00	0	0	0	7	7	10	7	1	0	0	0	0	0	0	0	32
Total	115	2	18	234	837	853	240	46	5	1	2	1	0	0	0	2354

Tri-State Traffic Data

www.TSTDATA.com

"Serving Transportation Professionals Since 1995"

Location: Amherst, New York
Road: S Youngs Rd
Segment: 475 ft N of Aero Dr Traffic Circle
Date: 12/13/2023

GPS: 42.946906, -78.724831

NB

Start	1	21	26	31	36	41	46	51	56	61	66	71	76	81	86	
Time	20	25	30	35	40	45	50	55	60	65	70	75	80	85	9999	Total
12/14/23	0	0	0	4	13	8	1	1	0	0	0	0	0	0	0	27
01:00	0	0	0	0	2	2	1	0	0	0	0	0	0	0	0	5
02:00	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2
03:00	0	0	0	1	2	2	1	0	0	0	0	0	0	0	0	6
04:00	0	0	1	3	6	9	3	1	0	0	0	0	0	0	0	23
05:00	0	0	1	6	22	20	6	0	0	0	0	0	0	0	0	55
06:00	4	0	1	21	48	52	14	2	0	0	0	0	0	0	0	142
07:00	11	0	1	19	136	173	29	9	0	0	0	0	0	0	0	378
08:00	18	0	5	20	164	229	69	9	0	0	0	0	0	0	0	514
09:00	9	0	0	14	88	114	51	9	1	0	0	0	0	0	0	286
10:00	4	0	1	12	59	101	46	5	1	1	0	0	0	0	0	230
11:00	10	0	0	5	58	102	31	9	0	0	1	0	0	0	0	216
12 PM	10	0	3	12	85	111	41	9	2	1	0	0	0	0	0	274
13:00	9	1	4	14	88	94	30	3	1	1	0	0	0	0	0	245
14:00	11	0	0	14	89	99	41	13	0	1	0	0	0	0	0	268
15:00	16	0	2	9	97	134	43	6	1	0	0	0	0	0	0	308
16:00	11	0	2	18	105	154	38	7	0	0	0	0	0	0	0	335
17:00	6	0	2	31	135	90	15	3	1	0	0	0	0	0	0	283
18:00	4	0	1	12	54	64	12	3	1	0	0	0	0	0	0	151
19:00	2	0	2	7	36	23	8	2	0	0	0	0	0	0	0	80
20:00	0	0	0	5	33	18	7	1	0	0	0	0	0	0	0	64
21:00	0	0	3	4	16	28	7	1	0	0	0	0	0	0	0	59
22:00	0	0	0	1	15	11	6	1	0	0	0	0	0	0	0	34
23:00	0	0	0	9	16	12	6	1	0	0	0	0	0	0	0	44
Total	125	1	29	241	1369	1650	506	95	8	4	1	0	0	0	0	4029

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Segment: 475 ft N of Aero Dr Traffic Circle
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GPS: 42.946906, -78.724831

NB

Start	1	21	26	31	36	41	46	51	56	61	66	71	76	81	86	
Time	20	25	30	35	40	45	50	55	60	65	70	75	80	85	9999	Total
12/15/23	0	0	0	0	3	5	0	1	0	0	0	0	0	0	0	9
01:00	0	0	0	0	2	2	1	0	0	0	0	0	0	0	0	5
02:00	0	0	0	1	0	3	0	0	0	0	0	0	0	0	0	4
03:00	0	0	0	1	4	3	2	0	0	0	0	0	0	0	0	10
04:00	0	0	0	2	9	8	3	1	0	0	0	0	0	0	0	23
05:00	0	0	0	6	13	17	7	2	1	0	0	0	0	0	0	46
06:00	1	0	4	23	38	36	14	1	1	0	0	0	0	0	0	118
07:00	7	1	4	17	101	143	46	3	1	1	0	0	0	0	0	324
08:00	9	0	0	20	105	232	74	8	1	0	0	0	0	0	0	449
09:00	7	1	1	9	61	116	51	3	4	0	0	0	0	0	0	253
10:00	8	0	1	4	62	87	43	11	2	2	0	0	0	0	0	220
11:00	11	1	0	20	62	110	45	12	1	1	0	0	0	0	0	263
12 PM	12	0	4	28	91	115	38	11	1	0	1	0	0	0	0	301
13:00	14	0	1	24	91	108	39	5	1	1	0	0	0	0	0	284
14:00	8	0	1	9	84	94	42	3	2	2	0	0	0	0	0	245
15:00	12	0	1	9	69	119	45	3	1	0	0	0	0	0	0	259
16:00	25	2	1	27	95	116	39	7	0	0	0	0	0	0	0	312
17:00	6	1	11	32	93	80	24	2	1	0	0	0	0	0	0	250
18:00	2	0	2	13	48	44	18	1	1	0	1	0	0	0	0	130
19:00	2	0	2	16	45	39	11	1	0	0	0	0	0	0	0	116
20:00	0	0	1	8	25	29	6	1	0	0	0	0	0	0	0	70
21:00	2	0	2	7	21	14	8	0	0	0	0	0	0	0	0	54
22:00	0	0	1	8	21	26	11	0	0	0	0	0	0	0	0	67
23:00	0	0	0	7	18	13	4	1	0	0	0	0	0	0	0	43
Total	126	6	37	291	1161	1559	571	77	18	7	2	0	0	0	0	3855

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Location: Amherst, New York
Road: S Youngs Rd
Segment: 475 ft N of Aero Dr Traffic Circle
Date: 12/13/2023

GPS: 42.946906, -78.724831

NB

Start	1	21	26	31	36	41	46	51	56	61	66	71	76	81	86	
Time	20	25	30	35	40	45	50	55	60	65	70	75	80	85	9999	Total
12/16/23	0	0	2	3	13	10	6	2	0	0	0	0	0	0	0	36
01:00	0	0	0	1	2	3	1	0	0	0	0	0	0	0	0	7
02:00	0	0	0	0	4	0	1	0	0	0	0	0	0	0	0	5
03:00	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	3
04:00	0	0	1	1	4	3	1	0	0	0	0	0	0	0	0	10
05:00	1	0	0	1	4	9	2	2	0	0	0	0	0	0	0	19
06:00	0	0	0	4	6	8	2	1	0	0	0	0	0	0	0	21
07:00	0	0	1	1	14	24	9	2	0	0	0	0	0	0	0	51
08:00	0	0	0	4	21	35	18	8	1	0	1	0	0	0	0	88
09:00	1	0	1	5	30	54	31	7	0	0	1	0	0	0	0	130
10:00	0	0	0	3	41	67	28	10	1	0	0	0	0	0	0	150
11:00	5	0	0	7	42	62	31	3	2	0	0	0	0	0	0	152
12 PM	2	0	0	7	44	76	28	5	0	1	0	0	0	0	0	163
13:00	2	0	0	8	45	69	28	9	0	0	0	0	0	0	0	161
14:00	3	0	0	2	36	59	38	6	1	0	0	0	0	0	0	145
15:00	3	0	0	7	39	64	24	4	1	0	0	0	0	0	0	142
16:00	0	0	0	7	43	44	23	3	0	0	0	0	0	0	0	120
17:00	1	0	0	14	51	42	12	3	0	0	0	0	0	0	0	123
18:00	2	0	1	13	26	19	9	1	0	0	0	0	0	0	0	71
19:00	0	0	2	6	35	25	5	1	0	0	0	0	0	0	0	74
20:00	0	0	2	8	19	25	3	0	0	0	0	0	0	0	0	57
21:00	0	0	0	7	22	21	7	1	2	0	0	0	0	0	0	60
22:00	0	0	0	5	17	16	9	1	0	0	0	0	0	0	0	48
23:00	0	0	0	4	13	13	4	1	0	0	0	0	0	0	0	35
Total	20	0	10	118	571	748	323	70	8	1	2	0	0	0	0	1871

Tri-State Traffic Data

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Location: Amherst, New York
Road: S Youngs Rd
Segment: 475 ft N of Aero Dr Traffic Circle
Date: 12/13/2023

GPS: 42.946906, -78.724831

NB

Start	1	21	26	31	36	41	46	51	56	61	66	71	76	81	86	
Time	20	25	30	35	40	45	50	55	60	65	70	75	80	85	9999	Total
12/17/23	0	0	0	0	10	9	1	1	0	0	0	0	0	0	0	21
01:00	0	0	1	1	2	4	1	0	0	0	0	0	0	0	0	9
02:00	0	0	0	1	4	0	1	0	0	0	0	0	0	0	0	6
03:00	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	4
04:00	0	0	2	0	6	1	1	0	0	0	0	0	0	0	0	10
05:00	0	0	0	0	4	8	0	0	0	0	0	0	0	0	0	12
06:00	0	0	0	1	5	9	2	1	0	0	0	0	0	0	0	18
07:00	0	0	0	2	7	6	6	0	0	0	0	0	0	0	0	21
08:00	0	0	0	3	11	11	6	3	0	0	0	0	0	0	0	34
09:00	0	0	0	3	14	23	10	3	1	0	0	0	0	0	0	54
10:00	0	0	1	3	27	36	18	3	0	0	0	1	0	0	0	89
11:00	3	0	0	4	39	38	18	4	2	1	0	0	0	0	0	109
12 PM	2	0	0	2	31	38	22	2	0	0	1	0	0	0	0	98
13:00	1	0	0	6	33	44	14	0	0	0	0	0	0	0	0	98
14:00	0	0	0	10	26	40	11	3	0	0	0	0	0	0	0	90
15:00	2	0	1	2	36	35	14	4	1	0	0	0	0	0	0	95
16:00	0	0	0	3	31	31	9	3	0	0	0	0	0	0	0	77
17:00	0	0	0	6	21	20	6	0	0	0	0	0	0	0	0	53
18:00	1	0	3	5	18	9	2	1	0	0	0	0	0	0	0	39
19:00	0	0	0	11	21	21	10	0	1	0	0	0	0	0	0	64
20:00	0	0	1	11	16	14	5	2	0	0	0	0	0	0	0	49
21:00	0	0	0	1	13	14	4	0	0	0	0	0	0	0	0	32
22:00	0	0	0	3	17	13	3	1	0	0	0	0	0	0	0	37
23:00	0	0	0	0	15	8	1	0	0	0	0	0	0	0	0	24
Total	9	0	9	78	408	433	166	32	5	1	1	1	0	0	0	1143

Tri-State Traffic Data

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"Serving Transportation Professionals Since 1995"

Location: Amherst, New York
Road: S Youngs Rd
Segment: 475 ft N of Aero Dr Traffic Circle
Date: 12/13/2023

GPS: 42.946906, -78.724831

NB

Start	1	21	26	31	36	41	46	51	56	61	66	71	76	81	86	
Time	20	25	30	35	40	45	50	55	60	65	70	75	80	85	9999	Total
12/18/23	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
01:00	0	0	0	2	4	4	1	0	0	0	0	0	0	0	0	11
02:00	0	0	0	2	4	0	1	0	0	0	0	0	0	0	0	7
03:00	0	0	0	2	1	3	0	0	0	0	0	0	0	0	0	6
04:00	0	0	0	2	6	4	2	0	0	0	0	0	0	0	0	14
05:00	0	0	1	6	19	14	4	0	0	0	0	0	0	0	0	44
06:00	3	0	2	20	64	44	19	5	0	0	0	0	0	0	0	157
07:00	14	0	2	21	125	154	30	4	1	1	1	0	0	0	0	353
08:00	17	1	1	27	158	216	58	3	1	0	2	0	0	0	0	484
09:00	9	0	0	19	106	115	35	3	0	0	0	0	0	0	0	287
10:00	13	0	1	28	68	70	39	2	1	2	0	0	0	0	0	224
11:00	5	0	4	14	62	105	31	5	0	0	0	0	0	0	0	226
12 PM	9	0	0	22	90	127	38	18	1	0	1	0	0	0	0	306
13:00	5	1	0	21	95	96	25	5	1	0	0	0	0	0	0	249
14:00	9	0	1	25	76	98	29	6	0	0	0	0	0	0	0	244
15:00	15	0	1	16	76	108	31	5	1	0	0	0	0	0	0	253
16:00	11	0	0	19	117	134	35	6	1	0	0	0	0	0	0	323
17:00	16	0	8	43	127	57	10	4	0	0	0	0	0	0	0	265
18:00	3	0	0	26	67	34	11	0	0	0	0	0	0	0	0	141
19:00	0	1	2	17	32	12	5	0	0	0	0	0	0	0	0	69
20:00	1	0	3	11	16	12	4	1	0	0	0	0	0	0	0	48
21:00	0	0	1	6	15	13	4	2	0	0	0	0	0	0	0	41
22:00	0	1	3	8	21	12	1	1	0	0	0	0	0	0	0	47
23:00	0	0	2	7	15	11	0	0	0	0	0	0	0	0	0	35
Total	130	4	32	364	1365	1443	413	70	7	3	4	0	0	0	0	3835

Tri-State Traffic Data

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Location: Amherst, New York
Road: S Youngs Rd
Segment: 475 ft N of Aero Dr Traffic Circle
Date: 12/13/2023

GPS: 42.946906, -78.724831

NB

Start	1	21	26	31	36	41	46	51	56	61	66	71	76	81	86	
Time	20	25	30	35	40	45	50	55	60	65	70	75	80	85	9999	Total
12/19/23	0	0	1	4	10	1	0	0	0	0	0	0	0	0	0	16
01:00	0	0	2	2	2	1	1	0	0	0	0	0	0	0	0	8
02:00	2	0	0	0	4	0	1	0	0	0	0	0	0	0	0	7
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	3	0	3	6	16	2	2	0	0	0	0	0	0	0	0	32

Tri-State Traffic Data

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Location: Amherst, New York
Road: S Youngs Rd
Segment: 475 ft N of Aero Dr Traffic Circle
Date: 12/13/2023

GPS: 42.946906, -78.724831

NB

Start Time	1 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 9999	Total
12/20/23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12 PM	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
16:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
17:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
18:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
21:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
22:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
23:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Grand Total	531	13	138	1332	5727	6688	2221	390	51	17	12	2	0	0	0	17122

Stats

15th Percentile :	35 MPH
50th Percentile :	40 MPH
85th Percentile :	45 MPH
95th Percentile :	49 MPH
Mean Speed(Average) :	40 MPH
10 MPH Pace Speed :	36-45 MPH
Number in Pace :	12415
Percent in Pace :	72.5%
Number of Vehicles > 40 MPH :	9381
Percent of Vehicles > 40 MPH :	54.8%

Tri-State Traffic Data

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Location: Amherst, New York
Road: S Youngs Rd
Segment: 475 ft N of Aero Dr Traffic Circle
Date: 12/13/2023

GPS: 42.946906, -78.724831

SB

Start	1	21	26	31	36	41	46	51	56	61	66	71	76	81	86	
Time	20	25	30	35	40	45	50	55	60	65	70	75	80	85	9999	Total
12/13/23	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
01:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
02:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
03:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
04:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
05:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
06:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
07:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
08:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
09:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
10:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
11:00	3	0	3	42	105	51	11	2	0	0	0	0	0	0	0	217
12 PM	7	0	9	46	121	69	18	1	0	0	0	0	0	0	0	271
13:00	10	4	0	50	130	63	12	0	0	0	0	0	0	0	0	269
14:00	14	4	10	68	129	72	12	3	0	0	0	0	0	0	0	312
15:00	7	3	17	122	171	64	13	1	0	0	0	0	0	0	0	398
16:00	12	15	54	158	216	71	4	0	0	0	0	0	0	0	0	530
17:00	8	2	41	154	182	40	7	0	0	0	0	0	0	0	0	434
18:00	3	1	15	52	82	30	11	0	0	0	0	0	0	0	0	194
19:00	0	0	4	30	57	18	6	0	0	1	0	0	0	0	0	116
20:00	2	0	5	17	33	11	1	1	0	1	0	0	0	0	0	71
21:00	0	0	3	16	37	10	1	2	0	0	0	0	0	0	0	69
22:00	0	0	2	6	14	9	4	0	0	0	0	0	0	0	0	35
23:00	0	0	2	20	21	5	2	0	0	0	0	0	0	0	0	50
Total	66	29	165	781	1298	513	102	10	0	2	0	0	0	0	0	2966

Tri-State Traffic Data

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Location: Amherst, New York
Road: S Youngs Rd
Segment: 475 ft N of Aero Dr Traffic Circle
Date: 12/13/2023

GPS: 42.946906, -78.724831

SB

Start	1	21	26	31	36	41	46	51	56	61	66	71	76	81	86	
Time	20	25	30	35	40	45	50	55	60	65	70	75	80	85	9999	Total
12/14/23	0	0	0	6	7	1	1	0	1	0	0	0	0	0	0	16
01:00	0	0	1	2	1	0	0	0	0	0	0	0	0	0	0	4
02:00	0	0	1	1	2	2	0	0	0	0	0	0	0	0	0	6
03:00	0	0	0	3	4	2	0	0	0	0	0	0	0	0	0	9
04:00	0	0	0	8	6	5	0	0	0	0	0	0	0	0	0	19
05:00	0	0	2	5	18	5	2	0	0	0	0	0	0	0	0	32
06:00	2	0	3	21	35	21	1	0	0	0	0	0	0	0	0	83
07:00	11	0	4	55	106	58	6	0	0	0	0	0	0	0	0	240
08:00	13	0	6	35	94	53	9	0	1	0	0	0	0	0	0	211
09:00	3	0	21	46	72	54	7	1	0	0	0	0	0	0	0	204
10:00	5	1	4	46	82	67	12	4	0	0	0	0	0	0	0	221
11:00	5	0	5	25	113	79	15	2	0	0	1	0	0	0	0	245
12 PM	7	3	8	43	117	78	24	3	0	0	0	0	0	0	0	283
13:00	5	0	7	34	124	74	14	1	0	0	0	0	0	0	0	259
14:00	9	0	3	60	113	81	8	1	1	0	0	0	0	0	0	276
15:00	8	5	8	90	178	68	10	1	1	0	0	0	0	0	0	369
16:00	8	6	39	154	193	63	10	0	0	0	0	0	0	0	0	473
17:00	3	4	39	158	167	34	0	0	0	0	0	0	0	0	0	405
18:00	2	0	7	51	79	26	3	0	0	0	0	0	0	0	0	168
19:00	2	0	7	38	49	17	4	2	0	0	0	0	0	0	0	119
20:00	0	0	3	17	25	16	3	0	0	0	0	0	0	0	0	64
21:00	0	0	3	18	22	11	0	0	0	0	0	0	0	0	0	54
22:00	0	0	1	22	13	5	1	0	0	0	0	0	0	0	0	42
23:00	0	0	3	14	16	11	1	1	0	0	0	0	0	0	0	46
Total	83	19	175	952	1636	831	131	16	4	0	1	0	0	0	0	3848

Tri-State Traffic Data

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"Serving Transportation Professionals Since 1995"

Location: Amherst, New York
Road: S Youngs Rd
Segment: 475 ft N of Aero Dr Traffic Circle
Date: 12/13/2023

GPS: 42.946906, -78.724831

SB

Start	1	21	26	31	36	41	46	51	56	61	66	71	76	81	86	
Time	20	25	30	35	40	45	50	55	60	65	70	75	80	85	9999	Total
12/15/23	0	0	1	2	10	2	1	0	0	0	0	0	0	0	0	16
01:00	0	0	1	1	3	0	0	1	0	0	0	0	0	0	0	6
02:00	0	0	0	2	2	2	0	0	0	0	0	0	0	0	0	6
03:00	0	0	1	1	1	3	0	0	0	0	0	0	0	0	0	6
04:00	0	0	2	4	9	4	0	1	0	0	0	0	0	0	0	20
05:00	0	0	0	4	16	3	1	1	0	0	0	0	0	0	0	25
06:00	1	0	3	18	33	16	1	0	0	0	0	0	0	0	0	72
07:00	15	0	14	36	90	55	8	1	0	0	0	0	0	0	0	219
08:00	4	0	8	23	75	60	18	6	0	0	0	0	0	0	0	194
09:00	4	0	1	31	89	52	16	1	0	0	0	0	0	0	0	194
10:00	5	0	9	26	90	60	10	1	0	0	0	0	0	0	0	201
11:00	9	0	3	33	101	91	15	1	0	0	0	0	0	0	0	253
12 PM	9	2	0	52	144	88	23	2	1	0	0	0	0	0	0	321
13:00	8	0	3	45	105	90	15	1	0	0	0	0	0	0	0	267
14:00	5	0	8	76	113	95	17	1	0	0	0	0	0	0	0	315
15:00	6	12	15	95	173	68	13	0	0	0	0	1	0	0	0	383
16:00	9	6	41	144	176	63	3	1	0	0	0	0	0	0	0	443
17:00	4	3	14	93	119	38	2	2	0	0	0	0	0	0	0	275
18:00	1	0	9	49	77	21	1	1	0	0	0	0	0	0	0	159
19:00	3	0	5	29	36	14	1	0	0	0	0	0	0	0	0	88
20:00	0	0	3	14	21	10	3	0	0	0	0	0	0	0	0	51
21:00	1	0	4	15	21	9	4	0	0	0	0	0	0	0	0	54
22:00	0	0	0	15	34	13	4	0	0	0	0	0	0	0	0	66
23:00	0	1	3	17	24	7	3	0	0	0	0	0	0	0	0	55
Total	84	24	148	825	1562	864	159	21	1	0	0	1	0	0	0	3689

Tri-State Traffic Data

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"Serving Transportation Professionals Since 1995"

Location: Amherst, New York
Road: S Youngs Rd
Segment: 475 ft N of Aero Dr Traffic Circle
Date: 12/13/2023

GPS: 42.946906, -78.724831

SB

Start	1	21	26	31	36	41	46	51	56	61	66	71	76	81	86	
Time	20	25	30	35	40	45	50	55	60	65	70	75	80	85	9999	Total
12/16/23	0	0	2	7	4	3	1	0	0	0	0	0	0	0	0	17
01:00	0	0	0	4	1	0	1	0	0	0	0	0	0	0	0	6
02:00	0	0	0	2	1	1	0	0	0	0	0	0	0	0	0	4
03:00	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	3
04:00	0	0	1	2	11	2	1	0	0	0	0	0	0	0	0	17
05:00	1	0	1	11	9	4	1	1	0	0	0	0	0	0	0	28
06:00	0	0	0	7	13	7	2	0	0	0	0	0	0	0	0	29
07:00	0	0	0	10	13	6	1	0	0	0	0	0	0	0	0	30
08:00	0	0	3	14	20	15	6	0	0	0	0	0	0	0	0	58
09:00	0	1	0	13	28	31	12	3	0	0	0	0	0	0	0	88
10:00	0	0	0	14	36	41	11	4	0	0	0	0	0	0	0	106
11:00	4	0	0	16	61	43	4	2	0	0	0	0	0	0	0	130
12 PM	0	0	2	22	66	39	13	2	1	0	0	0	0	0	0	145
13:00	1	0	2	15	59	51	7	1	0	0	0	0	0	0	0	136
14:00	3	0	1	14	64	55	9	1	0	0	0	0	0	0	0	147
15:00	1	0	2	19	55	40	13	0	0	0	0	0	0	0	0	130
16:00	1	0	1	32	58	31	7	0	0	0	0	0	0	0	0	130
17:00	1	2	10	49	54	20	2	0	0	0	0	0	0	0	0	138
18:00	1	0	4	32	47	13	3	1	0	0	0	0	0	0	0	101
19:00	0	1	4	15	21	12	3	0	0	0	0	0	0	0	0	56
20:00	0	0	4	20	29	7	0	0	0	0	0	0	0	0	0	60
21:00	0	0	2	11	24	14	0	0	0	0	0	0	0	0	0	51
22:00	0	0	1	15	15	6	1	0	0	0	0	0	0	0	0	38
23:00	0	0	2	11	9	3	1	0	0	0	0	0	0	0	0	26
Total	13	4	44	356	698	444	99	15	1	0	0	0	0	0	0	1674

Tri-State Traffic Data

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Location: Amherst, New York
Road: S Youngs Rd
Segment: 475 ft N of Aero Dr Traffic Circle
Date: 12/13/2023

GPS: 42.946906, -78.724831

SB

Start	1	21	26	31	36	41	46	51	56	61	66	71	76	81	86	
Time	20	25	30	35	40	45	50	55	60	65	70	75	80	85	9999	Total
12/17/23	0	0	2	4	7	2	1	1	0	0	0	0	0	0	0	17
01:00	0	0	2	2	2	1	0	0	0	0	0	0	0	0	0	7
02:00	0	0	1	3	3	0	0	0	0	0	0	0	0	0	0	7
03:00	0	0	0	1	2	1	0	0	0	0	0	0	0	0	0	4
04:00	0	0	2	3	6	5	0	1	0	0	0	0	0	0	0	17
05:00	0	0	0	3	4	2	1	0	0	0	0	0	0	0	0	10
06:00	0	0	1	2	9	3	2	0	0	0	0	0	0	0	0	17
07:00	0	0	2	1	2	3	1	0	0	0	0	0	0	0	0	9
08:00	0	0	2	2	19	11	2	0	0	0	0	0	0	0	0	36
09:00	0	0	2	10	21	17	2	1	0	0	0	0	0	0	0	53
10:00	1	0	3	21	31	26	4	1	0	0	0	0	0	0	0	87
11:00	1	1	3	19	42	31	2	0	1	0	0	0	0	0	0	100
12 PM	0	1	0	23	54	31	4	1	0	0	0	0	0	0	0	114
13:00	0	0	1	18	56	31	9	0	1	0	0	0	0	0	0	116
14:00	0	0	2	19	45	29	4	0	0	0	0	0	0	0	0	99
15:00	2	0	1	18	43	24	4	0	0	0	0	0	0	0	0	92
16:00	0	0	1	10	37	20	5	1	0	0	0	0	0	0	0	74
17:00	0	0	2	22	22	10	0	0	0	0	0	0	0	0	0	56
18:00	1	0	3	17	17	8	1	0	0	0	0	0	0	0	0	47
19:00	0	0	3	16	34	10	0	0	0	0	0	0	0	0	0	63
20:00	0	0	5	12	15	7	1	0	0	0	0	0	0	0	0	40
21:00	0	0	0	8	11	3	0	0	0	0	0	0	0	0	0	22
22:00	0	0	2	7	8	5	0	0	0	0	0	0	0	0	0	22
23:00	1	1	2	6	6	7	0	0	0	0	0	0	0	0	0	23
Total	6	3	42	247	496	287	43	6	2	0	0	0	0	0	0	1132

Tri-State Traffic Data

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Location: Amherst, New York
Road: S Youngs Rd
Segment: 475 ft N of Aero Dr Traffic Circle
Date: 12/13/2023

GPS: 42.946906, -78.724831

SB

Start	1	21	26	31	36	41	46	51	56	61	66	71	76	81	86	
Time	20	25	30	35	40	45	50	55	60	65	70	75	80	85	9999	Total
12/18/23	0	0	0	2	4	4	0	0	0	0	0	0	0	0	0	10
01:00	0	0	0	2	4	3	0	0	0	0	0	0	0	0	0	9
02:00	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	4
03:00	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	3
04:00	0	0	1	4	4	3	1	0	0	0	0	0	0	0	0	13
05:00	0	0	1	16	13	1	0	0	0	0	0	0	0	0	0	31
06:00	2	1	0	21	40	17	3	1	0	0	0	0	0	0	0	85
07:00	6	1	9	56	106	22	5	1	0	0	0	0	0	0	0	206
08:00	12	0	3	41	110	39	6	0	0	0	0	0	0	0	0	211
09:00	7	2	10	54	75	20	4	1	0	0	0	0	0	0	0	173
10:00	7	0	5	43	91	32	4	0	0	0	0	0	0	0	0	182
11:00	2	1	0	49	94	39	12	0	0	0	0	0	0	0	0	197
12 PM	3	1	10	76	112	71	6	1	0	0	0	0	0	0	0	280
13:00	6	1	5	29	91	55	18	2	0	0	0	0	0	0	0	207
14:00	5	3	7	76	139	50	6	1	0	0	0	0	0	0	0	287
15:00	13	0	8	98	189	53	12	1	0	0	0	0	0	0	0	374
16:00	16	1	31	131	204	59	4	0	0	0	0	0	0	0	0	446
17:00	9	1	25	172	143	36	2	0	0	0	0	0	0	0	0	388
18:00	0	0	11	34	69	29	1	0	0	0	0	0	0	0	0	144
19:00	0	0	4	26	45	22	1	0	0	0	0	0	0	0	0	98
20:00	1	2	1	22	24	14	2	0	0	0	0	0	0	0	0	66
21:00	0	1	1	10	23	14	1	0	0	0	0	0	0	0	0	50
22:00	0	1	2	14	14	8	0	1	0	0	0	0	0	0	0	40
23:00	0	1	5	13	9	2	0	0	0	0	0	0	0	0	0	30
Total	89	17	139	989	1606	597	88	9	0	0	0	0	0	0	0	3534

Tri-State Traffic Data

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Location: Amherst, New York
Road: S Youngs Rd
Segment: 475 ft N of Aero Dr Traffic Circle
Date: 12/13/2023

GPS: 42.946906, -78.724831

SB

Start	1	21	26	31	36	41	46	51	56	61	66	71	76	81	86	
Time	20	25	30	35	40	45	50	55	60	65	70	75	80	85	9999	Total
12/19/23	0	0	0	10	5	2	0	0	0	0	0	0	0	0	0	17
01:00	0	0	2	3	4	1	0	0	0	0	0	0	0	0	0	10
02:00	2	0	2	3	1	1	0	0	0	0	0	0	0	0	0	9
03:00	8	1	2	1	0	1	0	0	0	0	0	0	0	0	0	13
04:00	4	0	1	1	0	0	0	0	0	0	0	0	0	0	0	6
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
19:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
20:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	14	1	7	18	10	5	0	0	0	0	0	0	0	0	0	55

Tri-State Traffic Data

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Location: Amherst, New York
Road: S Youngs Rd
Segment: 475 ft N of Aero Dr Traffic Circle
Date: 12/13/2023

GPS: 42.946906, -78.724831

SB

Start Time	1 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 9999	Total
12/20/23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
09:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
13:00	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
14:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
15:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
16:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
17:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
18:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
19:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
20:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
21:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
22:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
23:00	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
Total	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Grand Total	357	97	720	4168	7306	3541	622	77	8	2	1	1	0	0	0	16900

Stats

15th Percentile :	31 MPH
50th Percentile :	37 MPH
85th Percentile :	42 MPH
95th Percentile :	44 MPH
Mean Speed(Average) :	37 MPH
10 MPH Pace Speed :	31-40 MPH
Number in Pace :	11474
Percent in Pace :	67.9%
Number of Vehicles > 40 MPH :	4252
Percent of Vehicles > 40 MPH :	25.2%

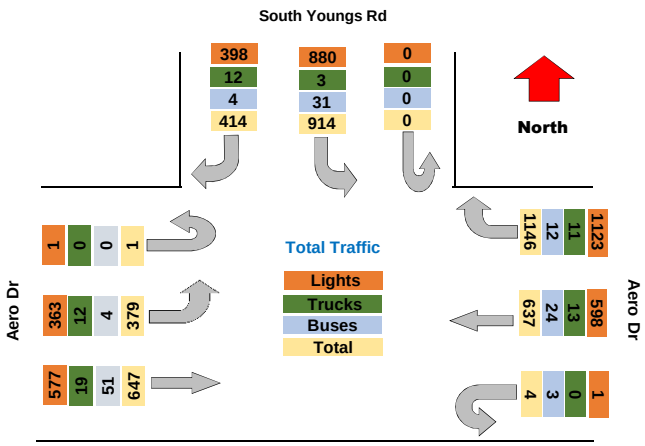
TRI-STATE

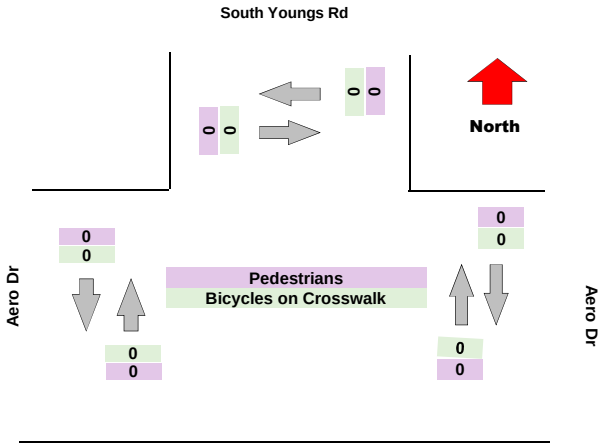
Turning Movement Data

Leg	South Youngs Rd						Aero Dr						Aero Dr						
Direction	Southbound						Westbound						Eastbound						
Start Time	Right	Left	U-Turn	App Total	Peds CW	Peds CCW	Right	Thru	U-Turn	App Total	Peds CW	Peds CCW	Thru	Left	U-Turn	App Total	Peds CW	Peds CCW	Total
7:00:00 AM	16	28	0	**44**	0	0	56	22	0	**78**	0	0	26	15	0	**41**	0	0	**163**
7:15:00 AM	16	27	0	**43**	0	0	43	44	0	**87**	0	0	31	22	0	**53**	0	0	**183**
7:30:00 AM	32	44	0	**76**	0	0	69	76	1	**146**	0	0	58	27	0	**85**	0	0	**307**
7:45:00 AM	13	58	0	**71**	0	0	98	50	0	**148**	0	0	60	44	0	**104**	0	0	**323**
Hourly Total	77	157	0	**234**	0	0	266	192	1	**459**	0	0	175	108	0	**283**	0	0	**976**
8:00:00 AM	16	47	0	**63**	0	0	88	29	0	**117**	0	0	45	48	0	**93**	0	0	**273**
8:15:00 AM	16	38	0	**54**	0	0	111	37	0	**148**	0	0	31	46	0	**77**	0	0	**279**
8:30:00 AM	10	39	0	**49**	0	0	101	28	0	**129**	0	0	23	28	0	**51**	0	0	**229**
8:45:00 AM	12	36	0	**48**	0	0	73	32	0	**105**	0	0	41	30	0	**71**	0	0	**224**
Hourly Total	54	160	0	**214**	0	0	373	126	0	**499**	0	0	140	152	0	**292**	0	0	**1005**
4:00:00 PM	27	83	0	**110**	0	0	65	48	1	**114**	0	0	42	16	1	**59**	0	0	**283**
4:15:00 PM	37	79	0	**116**	0	0	69	43	1	**113**	0	0	51	13	0	**64**	0	0	**293**
4:30:00 PM	48	86	0	**134**	0	0	68	45	1	**114**	0	0	54	16	0	**70**	0	0	**318**
4:45:00 PM	32	80	0	**112**	0	0	70	38	0	**108**	0	0	55	23	0	**78**	0	0	**298**
Hourly Total	144	328	0	**472**	0	0	272	174	3	**449**	0	0	202	68	1	**271**	0	0	**1192**
5:00:00 PM	44	88	0	**132**	0	0	64	65	0	**129**	0	0	44	15	0	**59**	0	0	**320**
5:15:00 PM	46	63	0	**109**	0	0	61	30	0	**91**	0	0	24	13	0	**37**	0	0	**237**
5:30:00 PM	30	69	0	**99**	0	0	68	27	0	**95**	0	0	25	10	0	**35**	0	0	**229**
5:45:00 PM	19	49	0	**68**	0	0	42	23	0	**65**	0	0	37	13	0	**50**	0	0	**183**
Hourly Total	139	269	0	**408**	0	0	235	145	0	**380**	0	0	130	51	0	**181**	0	0	**969**
Grand Total	414	914	0	**1328**	0	0	1146	637	4	**1787**	0	0	647	379	1	**1027**	0	0	**4142**
% Approach	31.2%	68.8%	0.0%	**0.0%**	0.0%	0.0%	64.1%	35.6%	0.2%	**0.0%**	0.0%	0.0%	63.0%	36.9%	0.1%	**0.0%**	0.0%	0.0%	**0.0%**
% Total	10.0%	22.1%	0.0%	**32.1%**	0.0%	0.0%	27.7%	15.4%	0.1%	**43.1%**	0.0%	0.0%	15.6%	9.2%	0.0%	**24.8%**	0.0%	0.0%	**0.0%**
Lights	398	880	0	**1278**	0	0	1123	598	1	**1722**	0	0	577	363	1	**941**	0	0	**3941**
% Lights	96.1%	96.3%	0.0%	**96.2%**	0.0%	0.0%	98.0%	93.9%	25.0%	**96.4%**	0.0%	0.0%	89.2%	95.8%	100.0%	**91.6%**	0.0%	0.0%	**95.1%**
Trucks	12	3	0	**15**	0	0	11	13	0	**24**	0	0	19	12	0	**31**	0	0	**70**
% Trucks	2.9%	0.3%	0.0%	**1.1%**	0.0%	0.0%	1.0%	2.0%	0.0%	**1.3%**	0.0%	0.0%	2.9%	3.2%	0.0%	**3.0%**	0.0%	0.0%	**1.7%**
Buses	4	31	0	**35**	0	0	12	24	3	**39**	0	0	51	4	0	**55**	0	0	**129**
% Buses	1.0%	3.4%	0.0%	**2.6%**	0.0%	0.0%	0.0%	3.8%	75.0%	**2.2%**	0.0%	0.0%	7.9%	1.1%	0.0%	**5.4%**	0.0%	0.0%	**3.1%**
Pedestrians	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0
% Pedestrians	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	**0.0%**
Bicycles on Crosswalk	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0
% Bicycles on Crosswalk	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	**0.0%**

TRI-STATE

Turning Movement Data Plot



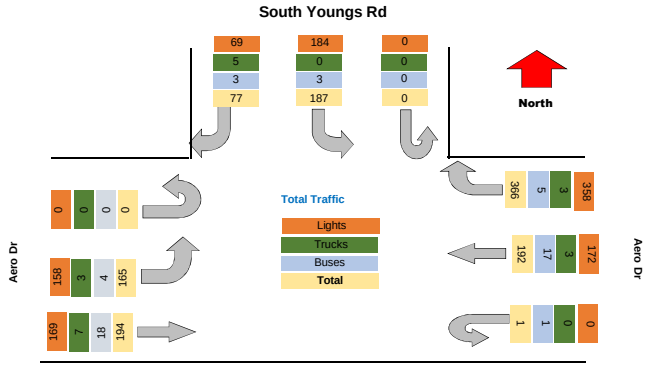


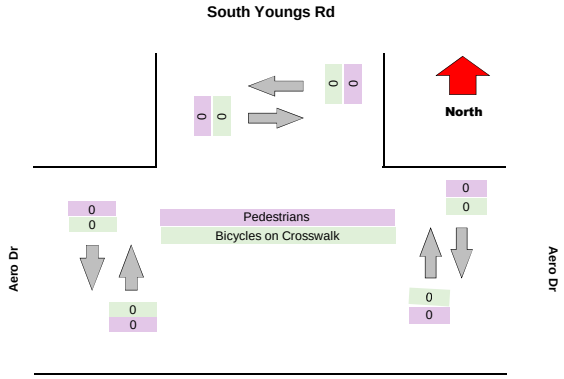
TRI-STATE

Turning Movement Peak Hour Data (AM)

7:30:00 AM

Leg	South Youngs Rd						Aero Dr						Aero Dr						
Direction	Southbound						Westbound						Eastbound						
Start Time	Right	Left	U-Turn	App Total	Peds CW	Peds CCW	Right	Thru	U-Turn	App Total	Peds CW	Peds CCW	Thru	Left	U-Turn	App Total	Peds CW	Peds CCW	Total
7:30:00 AM	32	44	0	**76**	0	0	69	76	1	**146**	0	0	58	27	0	**85**	0	0	**307**
7:45:00 AM	13	58	0	**71**	0	0	98	50	0	**148**	0	0	60	44	0	**104**	0	0	**323**
8:00:00 AM	16	47	0	**63**	0	0	88	29	0	**117**	0	0	45	48	0	**93**	0	0	**273**
8:15:00 AM	16	38	0	**54**	0	0	111	37	0	**148**	0	0	31	46	0	**77**	0	0	**279**
Grand Total	77	187	0	**264**	0	0	366	192	1	**559**	0	0	194	165	0	**359**	0	0	**1182**
% Approach	29.2%	70.8%	0.0%	**0.0%**	0.0%	0.0%	65.5%	34.3%	0.2%	**0.0%**	0.0%	0.0%	54.0%	46.0%	0.0%	**0.0%**	0.0%	0.0%	
% Total	6.5%	15.8%	0.0%	**22.3%**	0.0%	0.0%	31.0%	16.2%	0.1%	**47.3%**	0.0%	0.0%	16.4%	14.0%	0.0%	**30.4%**	0.0%	0.0%	
PHF	0.602	0.806	0.000	**0.868**	0.000	0.000	0.824	0.632	0.250	**0.944**	0.000	0.000	0.808	0.859	0.000	**0.863**	0.000	0.000	**0.915**
Lights	69	184	0	**253**	0	0	358	172	0	**530**	0	0	169	158	0	**327**	0	0	**1110**
% Lights	89.6%	98.4%	0.0%	**95.8%**	0.0%	0.0%	97.8%	89.6%	0.0%	**94.8%**	0.0%	0.0%	87.1%	95.8%	0.0%	**91.1%**	0.0%	0.0%	**93.9%**
Trucks	5	0	0	**5**	0	0	3	3	0	**6**	0	0	7	3	0	**10**	0	0	**21**
% Trucks	6.5%	0.0%	0.0%	**1.9%**	0.0%	0.0%	0.8%	1.6%	0.0%	**1.1%**	0.0%	0.0%	3.6%	1.8%	0.0%	**2.8%**	0.0%	0.0%	**1.8%**
Buses	3	3	0	**6**	0	0	5	17	1	**23**	0	0	18	4	0	**22**	0	0	**51**
% Buses	3.9%	1.6%	0.0%	**2.3%**	0.0%	0.0%	1.4%	8.9%	100.0%	**4.1%**	0.0%	0.0%	9.3%	2.4%	0.0%	**6.1%**	0.0%	0.0%	**4.3%**
Pedestrians	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0
% Pedestrians	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	**0.0%**
Bicycles on Crosswalk	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0
% Bicycles on Crosswalk	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	**0.0%**

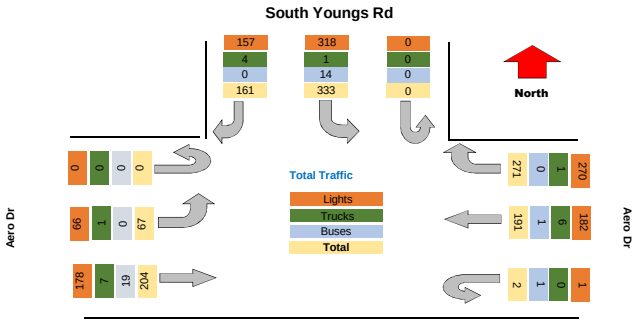


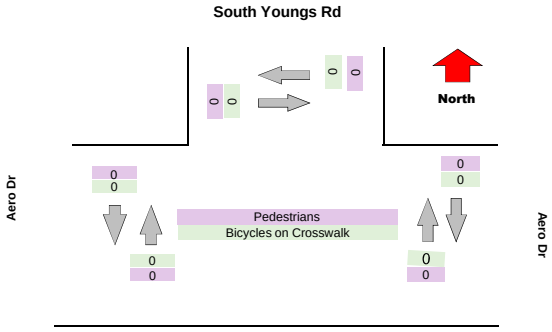


Turning Movement Peak Hour Data (PM)

4:15:00 PM

Leg	South Youngs Rd						Aero Dr						Aero Dr						
Direction	Southbound						Westbound						Eastbound						
Start Time	Right	Left	U-Turn	App Total	Peds CW	Peds CCW	Right	Thru	U-Turn	App Total	Peds CW	Peds CCW	Thru	Left	U-Turn	App Total	Peds CW	Peds CCW	Total
4:15:00 PM	37	79	0	**116**	0	0	69	43	1	**113**	0	0	51	13	0	**64**	0	0	**293**
4:30:00 PM	48	86	0	**134**	0	0	68	45	1	**114**	0	0	54	16	0	**70**	0	0	**318**
4:45:00 PM	32	80	0	**112**	0	0	70	38	0	**108**	0	0	55	23	0	**78**	0	0	**298**
5:00:00 PM	44	88	0	**132**	0	0	64	65	0	**129**	0	0	44	15	0	**59**	0	0	**320**
Grand Total	161	333	0	**494**	0	0	271	191	2	**464**	0	0	204	67	0	**271**	0	0	**1229**
% Approach	32.6%	67.4%	0.0%	**0.0%**	0.0%	0.0%	58.4%	41.2%	0.4%	**0.0%**	0.0%	0.0%	75.3%	24.7%	0.0%	**0.0%**	0.0%	0.0%	
% Total	13.1%	27.1%	0.0%	**40.2%**	0.0%	0.0%	22.1%	15.5%	0.2%	**37.8%**	0.0%	0.0%	16.6%	5.5%	0.0%	**22.1%**	0.0%	0.0%	
PHF	0.839	0.946	0.000	**0.922**	0.000	0.000	0.968	0.735	0.500	**0.899**	0.000	0.000	0.927	0.728	0.000	**0.869**	0.000	0.000	**0.960**
Lights	157	318	0	**475**	0	0	270	182	1	**453**	0	0	178	66	0	**244**	0	0	**1172**
% Lights	97.5%	95.5%	0.0%	**96.2%**	0.0%	0.0%	99.6%	95.3%	50.0%	**97.6%**	0.0%	0.0%	87.3%	98.5%	0.0%	**90.0%**	0.0%	0.0%	**95.4%**
Trucks	4	1	0	**5**	0	0	1	6	0	**7**	0	0	7	1	0	**8**	0	0	**20**
% Trucks	2.5%	0.3%	0.0%	**1.0%**	0.0%	0.0%	0.4%	3.1%	0.0%	**1.5%**	0.0%	0.0%	3.4%	1.5%	0.0%	**3.0%**	0.0%	0.0%	**1.6%**
Buses	0	14	0	**14**	0	0	0	1	1	**2**	0	0	19	0	0	**19**	0	0	**35**
% Buses	0.0%	4.2%	0.0%	**2.8%**	0.0%	0.0%	0.0%	0.5%	50.0%	**0.4%**	0.0%	0.0%	9.3%	0.0%	0.0%	**7.0%**	0.0%	0.0%	**2.8%**
Pedestrians	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0
% Pedestrians	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	**0.0%**
Bicycles on Crosswalk	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0	0	0	**0**	0	0	0
% Bicycles on Crosswalk	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	**0.0%**



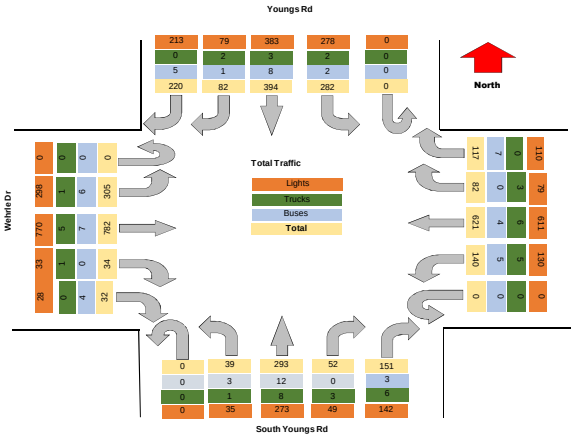


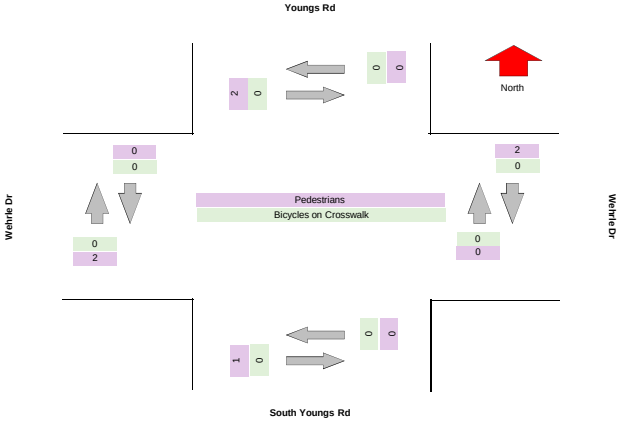
TRI-STATE TRAFFIC DATA

Turning Movement Data

Leg	Youngs Rd								Wehrle Dr								South Youngs Rd								Wehrle Dr								
Direction	Southbound								Westbound								Northbound								Eastbound								
Start Time	Right	RTOR	Thru	Left	U-Turn	App Total	Peds CW	Peds CCW	Right	RTOR	Thru	Left	U-Turn	App Total	Peds CW	Peds CCW	Right	RTOR	Thru	Left	U-Turn	App Total	Peds CW	Peds CCW	Right	RTOR	Thru	Left	U-Turn	App Total	Peds CW	Peds CCW	Total
7:00:00 AM	18	11	33	17	0	**79**	0	0	6	7	52	9	0	**74**	1	0	8	3	24	5	0	**40**	0	0	4	4	52	18	0	**78**	0	0	**271**
7:15:00 AM	31	7	36	23	0	**97**	0	0	8	11	55	13	0	**87**	1	0	12	2	25	3	0	**42**	0	0	1	5	74	31	0	**111**	0	0	**337**
7:30:00 AM	30	10	63	33	0	**136**	0	0	16	8	79	21	0	**124**	0	0	16	6	34	6	0	**62**	0	1	6	4	95	36	0	**141**	0	0	**463**
7:45:00 AM	25	9	67	43	0	**144**	0	0	14	13	76	22	0	**125**	0	0	26	8	43	4	0	**81**	0	0	4	4	104	45	0	**157**	0	0	**507**
Hourly Total	104	37	199	116	0	**456**	0	0	44	39	262	65	0	**410**	2	0	62	19	126	18	0	**225**	0	1	15	17	325	130	0	**487**	0	0	**1578**
8:00:00 AM	31	13	54	48	0	**146**	0	0	12	11	87	13	0	**123**	0	0	27	6	45	4	0	**82**	0	0	9	4	114	54	0	**181**	0	0	**532**
8:15:00 AM	37	9	56	37	0	**139**	0	0	23	9	102	28	0	**162**	0	0	20	13	40	7	0	**80**	0	0	3	5	108	40	0	**156**	0	0	**537**
8:30:00 AM	28	12	55	32	0	**127**	2	0	17	12	83	14	0	**126**	0	0	22	7	38	7	0	**74**	0	0	4	4	111	29	0	**148**	2	0	**475**
8:45:00 AM	20	11	30	49	0	**110**	0	0	21	11	87	20	0	**139**	0	0	20	7	44	3	0	**74**	0	0	1	4	124	52	0	**181**	0	0	**504**
Hourly Total	116	45	195	166	0	**522**	2	0	73	43	359	75	0	**550**	0	0	89	33	167	21	0	**310**	0	0	17	17	457	175	0	**666**	2	0	**2048**
4:00:00 PM	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	0	0	**0**
4:15:00 PM	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	0	0	**0**
4:30:00 PM	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	0	0	**0**
4:45:00 PM	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	0	0	**0**
Hourly Total	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	0	0	**0**
5:00:00 PM	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	0	0	**0**
5:15:00 PM	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	0	0	**0**
5:30:00 PM	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	0	0	**0**
5:45:00 PM	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	0	0	**0**
Hourly Total	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	0	0	**0**
Grand Total	220	82	394	282	0	**978**	2	0	117	82	621	140	0	**960**	2	0	151	52	293	39	0	**535**	0	1	32	34	782	305	0	**1153**	2	0	**3626**
% Approach	22.5%	8.4%	40.3%	28.8%	0.0%	**0.0%**	0.0%	0.0%	12.2%	8.5%	64.7%	14.6%	0.0%	**0.0%**	0.0%	0.0%	28.2%	9.7%	54.8%	7.3%	0.0%	**0.0%**	0.0%	0.0%	2.8%	2.9%	67.8%	26.5%	0.0%	**0.0%**	0.0%	0.0%	**0.0%**
% Total	6.1%	2.3%	10.9%	7.8%	0.0%	**27.0%**	0.0%	0.0%	3.2%	2.3%	17.1%	3.9%	0.0%	**26.5%**	0.0%	0.0%	4.2%	1.4%	8.1%	1.1%	0.0%	**14.8%**	0.0%	0.0%	0.9%	0.9%	21.6%	8.4%	0.0%	**31.8%**	0.0%	0.0%	**0.0%**
Lights	213	79	383	278	0	**953**	0	0	110	79	611	130	0	**930**	0	0	142	49	273	35	0	**499**	0	0	28	33	770	298	0	**1129**	0	0	**3511**
% Lights	96.8%	96.3%	97.2%	98.6%	0.0%	**97.4%**	0.0%	0.0%	94.0%	96.3%	98.4%	92.9%	0.0%	**96.9%**	0.0%	0.0%	94.0%	94.2%	93.2%	89.7%	0.0%	**93.3%**	0.0%	0.0%	87.5%	97.1%	98.5%	97.7%	0.0%	**97.9%**	0.0%	0.0%	**96.8%**
Trucks	0	2	3	2	0	**7**	0	0	0	3	6	5	0	**14**	0	0	6	3	8	1	0	**18**	0	0	0	1	5	1	0	**7**	0	0	**46**
% Trucks	0.0%	2.4%	0.8%	0.7%	0.0%	**0.7%**	0.0%	0.0%	0.0%	3.7%	1.0%	3.6%	0.0%	**1.5%**	0.0%	0.0%	4.0%	5.8%	2.7%	2.6%	0.0%	**3.4%**	0.0%	0.0%	0.0%	2.9%	0.6%	0.3%	0.0%	**0.6%**	0.0%	0.0%	**1.3%**
Buses	5	1	8	2	0	**16**	0	0	7	0	4	5	0	**16**	0	0	3	0	12	3	0	**18**	0	0	4	0	7	6	0	**17**	0	0	**67**
% Buses	2.3%	1.2%	2.0%	0.7%	0.0%	**1.6%**	0.0%	0.0%	0.0%	0.0%	0.6%	3.6%	0.0%	**1.7%**	0.0%	0.0%	2.0%	0.0%	4.1%	7.7%	0.0%	**3.4%**	0.0%	0.0%	12.5%	0.0%	0.9%	2.0%	0.0%	**1.5%**	0.0%	0.0%	**1.8%**
Pedestrians	0	0	0	0	0	**0**	2	0	0	0	0	0	0	**0**	2	0	0	0	0	0	0	**0**	0	1	0	0	0	0	0	**0**	2	0	0
% Pedestrians	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	100.0%	0.0%	**0.0%**
Bicycles on Crosswalk	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	0	0	0
% Bicycles on Crosswalk	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	**0.0%**

Turning Movement Data Plot



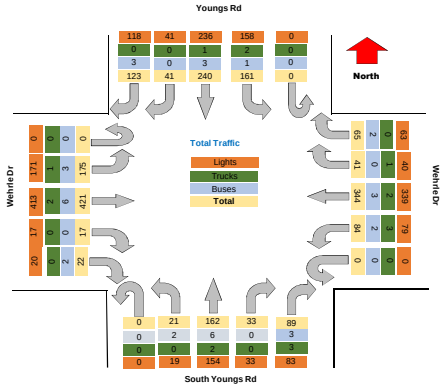


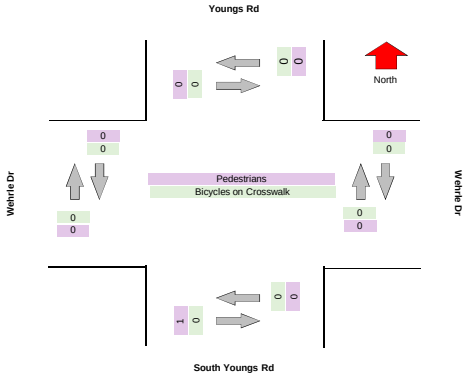
TRI-STATE TRAFFIC DATA

Turning Movement Peak Hour Data (AM)

#######

Leg	Youngs Rd								Wehrle Dr								South Youngs Rd								Wehrle Dr								
Direction	Southbound								Westbound								Northbound								Eastbound								
Start Time	Right	RTOR	Thru	Left	U-Turn	App Total	Peds CW	Peds CCW	Right	RTOR	Thru	Left	U-Turn	App Total	Peds CW	Peds CCW	Right	RTOR	Thru	Left	U-Turn	App Total	Peds CW	Peds CCW	Right	RTOR	Thru	Left	U-Turn	App Total	Peds CW	Peds CCW	Total
7:30:00 AM	30	10	63	33	0	**136**	0	0	16	8	79	21	0	**124**	0	0	16	6	34	6	0	**62**	0	1	6	4	95	36	0	**141**	0	0	**463**
7:45:00 AM	25	9	67	43	0	**144**	0	0	14	13	76	22	0	**125**	0	0	26	8	43	4	0	**81**	0	0	4	4	104	45	0	**157**	0	0	**507**
8:00:00 AM	31	13	54	48	0	**146**	0	0	12	11	87	13	0	**123**	0	0	27	6	45	4	0	**82**	0	0	9	4	114	54	0	**181**	0	0	**532**
8:15:00 AM	37	9	56	37	0	**139**	0	0	23	9	102	28	0	**162**	0	0	20	13	40	7	0	**80**	0	0	3	5	108	40	0	**156**	0	0	**537**
Grand Total	123	41	240	161	0	**565**	0	0	65	41	344	84	0	**534**	0	0	89	33	162	21	0	**305**	0	1	22	17	421	175	0	**635**	0	0	**2039**
% Approach	21.8%	7.3%	42.5%	28.5%	0.0%	**0.0%**	0.0%	0.0%	12.2%	7.7%	64.4%	15.7%	0.0%	**0.0%**	0.0%	0.0%	29.2%	10.8%	53.1%	6.9%	0.0%	**0.0%**	0.0%	0.0%	3.5%	2.7%	66.3%	27.6%	0.0%	**0.0%**	0.0%	0.0%	
% Total	6.0%	2.0%	11.8%	7.9%	0.0%	**27.7%**	0.0%	0.0%	3.2%	2.0%	16.9%	4.1%	0.0%	**26.2%**	0.0%	0.0%	4.4%	1.6%	7.9%	1.0%	0.0%	**15.0%**	0.0%	0.0%	1.1%	0.8%	20.6%	8.6%	0.0%	**31.1%**	0.0%	0.0%	
PHF	0.831	0.788	0.896	0.839	0.000	**0.967**	0.000	0.000	0.707	0.788	0.843	0.750	0.000	**0.824**	0.000	0.000	0.824	0.635	0.900	0.750	0.000	**0.930**	0.000	0.000	0.611	0.850	0.923	0.810	0.000	**0.877**	0.000	0.000	**0.949**
Lights	118	41	236	158	0	**553**	0	0	63	40	339	79	0	**521**	0	0	83	33	154	19	0	**289**	0	0	20	17	413	171	0	**621**	0	0	**1984**
% Lights	95.9%	100.0%	98.3%	98.1%	0.0%	**97.9%**	0.0%	0.0%	96.9%	97.6%	98.5%	94.0%	0.0%	**97.6%**	0.0%	0.0%	93.3%	100.0%	95.1%	90.5%	0.0%	**94.8%**	0.0%	0.0%	90.9%	100.0%	98.1%	97.7%	0.0%	**97.8%**	0.0%	0.0%	**97.3%**
Trucks	0	0	1	2	0	**3**	0	0	0	1	2	3	0	**6**	0	0	3	0	2	0	0	**5**	0	0	0	0	2	1	0	**3**	0	0	**17**
% Trucks	0.0%	0.0%	0.4%	1.2%	0.0%	**0.5%**	0.0%	0.0%	0.0%	2.4%	0.6%	3.6%	0.0%	**1.1%**	0.0%	0.0%	3.4%	0.0%	1.2%	0.0%	0.0%	**1.6%**	0.0%	0.0%	0.0%	0.0%	0.5%	0.6%	0.0%	**0.5%**	0.0%	0.0%	**0.8%**
Buses	3	0	3	1	0	**7**	0	0	2	0	3	2	0	**7**	0	0	3	0	6	2	0	**11**	0	0	2	0	6	3	0	**11**	0	0	**36**
% Buses	2.4%	0.0%	1.3%	0.6%	0.0%	**1.2%**	0.0%	0.0%	3.1%	0.0%	0.9%	2.4%	0.0%	**1.3%**	0.0%	0.0%	3.4%	0.0%	3.7%	9.5%	0.0%	**3.6%**	0.0%	0.0%	9.1%	0.0%	1.4%	1.7%	0.0%	**1.7%**	0.0%	0.0%	**1.8%**
Pedestrians	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	0	1	0	0	0	0	0	**0**	0	0	0
% Pedestrians	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	**0.0%**
Bicycles on Crosswalk	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	0	0	0
% Bicycles on Crosswalk	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	**0.0%**



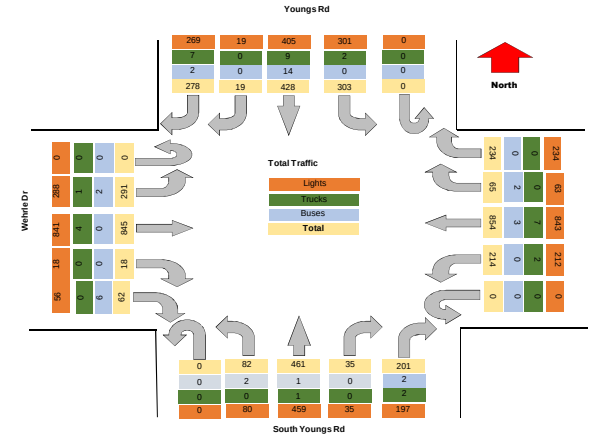


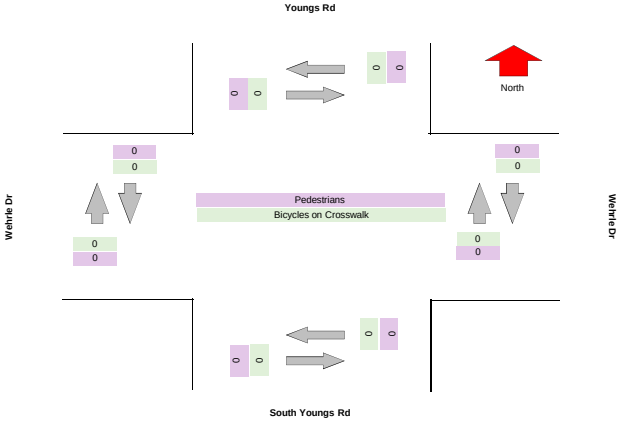
TRI-STATE TRAFFIC DATA

Turning Movement Data

Leg	Youngs Rd								Wehrle Dr								South Youngs Rd								Wehrle Dr								
Direction	Southbound								Westbound								Northbound								Eastbound								
Start Time	Right	RTOR	Thru	Left	U-Turn	**App Total**	Peds CW	Peds CCW	Right	RTOR	Thru	Left	U-Turn	**App Total**	Peds CW	Peds CCW	Right	RTOR	Thru	Left	U-Turn	**App Total**	Peds CW	Peds CCW	Right	RTOR	Thru	Left	U-Turn	**App Total**	Peds CW	Peds CCW	**Total**
4:00:00 PM	44	2	51	32	0	**129**	0	0	57	2	131	43	0	**233**	0	0	29	0	68	12	0	**109**	0	0	8	0	87	33	0	**128**	0	0	**599**
4:15:00 PM	41	2	53	46	0	**142**	0	0	42	1	106	21	0	**170**	0	0	27	2	67	5	0	**101**	0	0	7	0	100	43	0	**150**	0	0	**563**
4:30:00 PM	25	0	61	48	0	**134**	0	0	46	4	129	38	0	**217**	0	0	44	1	62	17	0	**124**	0	0	12	0	122	39	0	**173**	0	0	**648**
4:45:00 PM	50	1	51	38	0	**140**	0	0	25	0	106	26	0	**157**	0	0	28	2	57	17	0	**104**	0	0	10	0	105	36	0	**151**	0	0	**552**
Hourly Total	160	5	216	164	0	**545**	0	0	170	7	472	128	0	**777**	0	0	128	5	254	51	0	**438**	0	0	37	0	414	151	0	**602**	0	0	**2362**
5:00:00 PM	36	4	63	36	0	**139**	0	0	23	26	114	33	0	**196**	0	0	22	8	57	14	0	**101**	0	0	10	6	119	39	0	**174**	0	0	**610**
5:15:00 PM	29	5	52	40	0	**126**	0	0	14	9	110	22	0	**155**	0	0	21	12	50	6	0	**89**	0	0	5	3	104	33	0	**145**	0	0	**515**
5:30:00 PM	27	2	59	32	0	**120**	0	0	19	12	94	20	0	**145**	0	0	19	5	58	6	0	**88**	0	0	6	6	122	30	0	**164**	0	0	**517**
5:45:00 PM	26	3	38	31	0	**98**	0	0	8	11	64	11	0	**94**	0	0	11	5	42	5	0	**63**	0	0	4	3	86	38	0	**131**	0	0	**386**
Hourly Total	118	14	212	139	0	**483**	0	0	64	58	382	86	0	**590**	0	0	73	30	207	31	0	**341**	0	0	25	18	431	140	0	**614**	0	0	**2028**
Grand Total	278	19	428	303	0	**1028**	0	0	234	65	854	214	0	**1367**	0	0	201	35	461	82	0	**779**	0	0	62	18	845	291	0	**1216**	0	0	**4390**
% Approach	27.0%	1.8%	41.6%	29.5%	0.0%	**0.0%**	0.0%	0.0%	17.1%	4.8%	62.5%	15.7%	0.0%	**0.0%**	0.0%	0.0%	25.8%	4.5%	59.2%	10.5%	0.0%	**0.0%**	0.0%	0.0%	5.1%	1.5%	69.5%	23.9%	0.0%	**0.0%**	0.0%	0.0%	**0.0%**
% Total	6.3%	0.4%	9.7%	6.9%	0.0%	**23.4%**	0.0%	0.0%	5.3%	1.5%	19.5%	4.9%	0.0%	**31.1%**	0.0%	0.0%	4.6%	0.8%	10.5%	1.9%	0.0%	**17.7%**	0.0%	0.0%	1.4%	0.4%	19.2%	6.6%	0.0%	**27.7%**	0.0%	0.0%	**0.0%**
Lights	269	19	405	301	0	**994**	0	0	234	63	843	212	0	**1352**	0	0	197	35	459	80	0	**771**	0	0	56	18	841	288	0	**1203**	0	0	**4320**
% Lights	96.8%	100.0%	94.6%	99.3%	0.0%	**96.7%**	0.0%	0.0%	100.0%	96.9%	98.7%	99.1%	0.0%	**98.9%**	0.0%	0.0%	98.0%	100.0%	99.6%	97.6%	0.0%	**99.0%**	0.0%	0.0%	90.3%	100.0%	99.5%	99.0%	0.0%	**98.9%**	0.0%	0.0%	**98.4%**
Trucks	7	0	9	2	0	**18**	0	0	0	0	7	2	0	**9**	0	0	2	0	1	0	0	**3**	0	0	0	0	4	1	0	**5**	0	0	**35**
% Trucks	2.5%	0.0%	2.1%	0.7%	0.0%	**1.8%**	0.0%	0.0%	0.0%	0.0%	0.8%	0.9%	0.0%	**0.7%**	0.0%	0.0%	1.0%	0.0%	0.2%	0.0%	0.0%	**0.4%**	0.0%	0.0%	0.0%	0.0%	0.5%	0.3%	0.0%	**0.4%**	0.0%	0.0%	**0.8%**
Buses	2	0	14	0	0	**16**	0	0	0	2	3	0	0	**5**	0	0	2	0	1	2	0	**5**	0	0	6	0	0	2	0	**8**	0	0	**34**
% Buses	0.7%	0.0%	3.3%	0.0%	0.0%	**1.6%**	0.0%	0.0%	0.0%	3.1%	0.4%	0.0%	0.0%	**0.4%**	0.0%	0.0%	1.0%	0.0%	0.2%	2.4%	0.0%	**0.6%**	0.0%	0.0%	9.7%	0.0%	0.0%	0.7%	0.0%	**0.7%**	0.0%	0.0%	**0.8%**
Pedestrians	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	0	0	0
% Pedestrians	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	**0.0%**
Bicycles on Crosswalk	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	0	0	0
% Bicycles on Crosswalk	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	**0.0%**

Turning Movement Data Plot



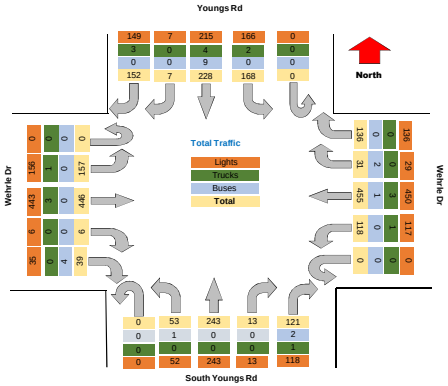


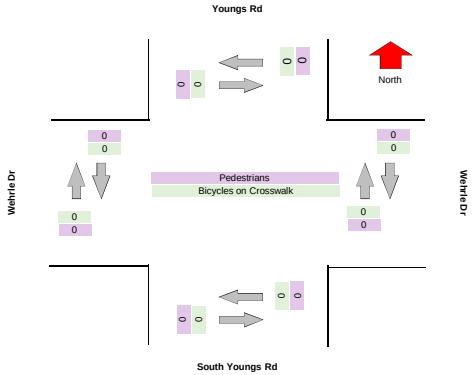
TRI-STATE TRAFFIC DATA

Turning Movement Peak Hour Data (PM)

########

Leg	Youngs Rd								Wehrle Dr								South Youngs Rd								Wehrle Dr								
Direction	Southbound								Westbound								Northbound								Eastbound								
Start Time	Right	RTOR	Thru	Left	U-Turn	App Total	Peds CW	Peds CCW	Right	RTOR	Thru	Left	U-Turn	App Total	Peds CW	Peds CCW	Right	RTOR	Thru	Left	U-Turn	App Total	Peds CW	Peds CCW	Right	RTOR	Thru	Left	U-Turn	App Total	Peds CW	Peds CCW	Total
4:15:00 PM	41	2	53	46	0	**142**	0	0	42	1	106	21	0	**170**	0	0	27	2	67	5	0	**101**	0	0	7	0	100	43	0	**150**	0	0	**563**
4:30:00 PM	25	0	61	48	0	**134**	0	0	46	4	129	38	0	**217**	0	0	44	1	62	17	0	**124**	0	0	12	0	122	39	0	**173**	0	0	**648**
4:45:00 PM	50	1	51	38	0	**140**	0	0	25	0	106	26	0	**157**	0	0	28	2	57	17	0	**104**	0	0	10	0	105	36	0	**151**	0	0	**552**
5:00:00 PM	36	4	63	36	0	**139**	0	0	23	26	114	33	0	**196**	0	0	22	8	57	14	0	**101**	0	0	10	6	119	39	0	**174**	0	0	**610**
Grand Total	152	7	228	168	0	**555**	0	0	136	31	455	118	0	**740**	0	0	121	13	243	53	0	**430**	0	0	39	6	446	157	0	**648**	0	0	**2373**
% Approach	27.4%	1.3%	41.1%	30.3%	0.0%	**0.0%**	0.0%	0.0%	18.4%	4.2%	61.5%	15.9%	0.0%	**0.0%**	0.0%	0.0%	28.1%	3.0%	56.5%	12.3%	0.0%	**0.0%**	0.0%	0.0%	6.0%	0.9%	68.8%	24.2%	0.0%	**0.0%**	0.0%	0.0%	
% Total	6.4%	0.3%	9.6%	7.1%	0.0%	**23.4%**	0.0%	0.0%	5.7%	1.3%	19.2%	5.0%	0.0%	**31.2%**	0.0%	0.0%	5.1%	0.5%	10.2%	2.2%	0.0%	**18.1%**	0.0%	0.0%	1.6%	0.3%	18.8%	6.6%	0.0%	**27.3%**	0.0%	0.0%	
PHF	0.760	0.438	0.905	0.875	0.000	**0.977**	0.000	0.000	0.739	0.298	0.882	0.776	0.000	**0.853**	0.000	0.000	0.688	0.406	0.907	0.779	0.000	**0.867**	0.000	0.000	0.813	0.250	0.914	0.913	0.000	**0.931**	0.000	0.000	**0.916**
Lights	149	7	215	166	0	**537**	0	0	136	29	450	117	0	**732**	0	0	118	13	243	52	0	**426**	0	0	35	6	443	156	0	**640**	0	0	**2335**
% Lights	98.0%	100.0%	94.3%	98.8%	0.0%	**96.8%**	0.0%	0.0%	100.0%	93.5%	98.9%	99.2%	0.0%	**98.9%**	0.0%	0.0%	97.5%	100.0%	100.0%	98.1%	0.0%	**99.1%**	0.0%	0.0%	89.7%	100.0%	99.3%	99.4%	0.0%	**98.8%**	0.0%	0.0%	**98.4%**
Trucks	3	0	4	2	0	**9**	0	0	0	0	3	1	0	**4**	0	0	1	0	0	0	0	**1**	0	0	0	0	3	1	0	**4**	0	0	**18**
% Trucks	2.0%	0.0%	1.8%	1.2%	0.0%	**1.6%**	0.0%	0.0%	0.0%	0.0%	0.7%	0.8%	0.0%	**0.5%**	0.0%	0.0%	0.8%	0.0%	0.0%	0.0%	0.0%	**0.2%**	0.0%	0.0%	0.0%	0.0%	0.7%	0.6%	0.0%	**0.6%**	0.0%	0.0%	**0.8%**
Buses	0	0	9	0	0	**9**	0	0	0	2	1	0	0	**3**	0	0	2	0	0	1	0	**3**	0	0	4	0	0	0	0	**4**	0	0	**19**
% Buses	0.0%	0.0%	3.9%	0.0%	0.0%	**1.6%**	0.0%	0.0%	0.0%	6.5%	0.2%	0.0%	0.0%	**0.4%**	0.0%	0.0%	1.7%	0.0%	0.0%	1.9%	0.0%	**0.7%**	0.0%	0.0%	10.3%	0.0%	0.0%	0.0%	0.0%	**0.6%**	0.0%	0.0%	**0.8%**
Pedestrians	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	0	0	0
% Pedestrians	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	**0.0%**
Bicycles on Crosswalk	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	0	0	0	0	0	0	0	**0**	0	0	0
% Bicycles on Crosswalk	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	**0.0%**





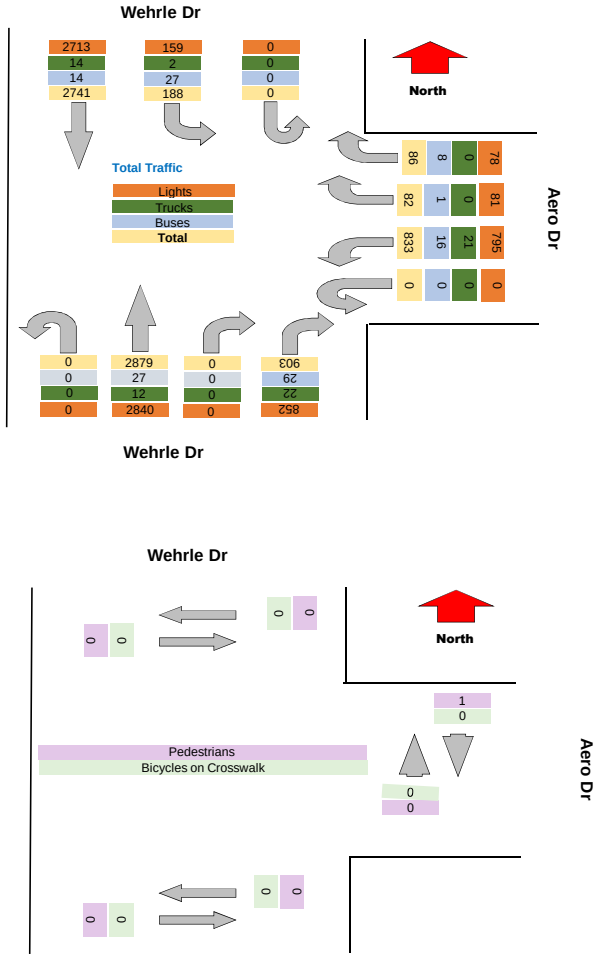
TRI-STATE

Turning Movement Data

Leg	Wehrle Dr						Aero Dr							Wehrle Dr							
Direction	Southbound						Westbound							Northbound							
Start Time	Thru	Left	U-Turn	App Total	Peds CW	Peds CCW	Right	RTOR	Left	U-Turn	App Total	Peds CW	Peds CCW	Right	RTOR	Thru	U-Turn	App Total	Peds CW	Peds CCW	Total
7:00:00 AM	100	5	0	**105**	0	0	4	0	25	0	**29**	0	0	53	0	108	0	**161**	0	0	**295**
7:15:00 AM	118	16	0	**134**	0	0	6	3	25	0	**34**	0	0	62	0	141	0	**203**	0	0	**371**
7:30:00 AM	147	21	0	**168**	0	0	5	9	60	0	**74**	0	0	92	0	198	0	**290**	0	0	**532**
7:45:00 AM	137	9	0	**146**	0	0	16	1	38	0	**55**	0	0	110	0	229	0	**339**	0	0	**540**
Hourly Total	502	51	0	**553**	0	0	31	13	148	0	**192**	0	0	317	0	676	0	**993**	0	0	**1738**
8:00:00 AM	140	7	0	**147**	0	0	4	4	41	0	**49**	0	0	79	0	212	0	**291**	0	0	**487**
8:15:00 AM	146	6	0	**152**	0	0	6	4	40	0	**50**	0	0	59	0	227	0	**286**	0	0	**488**
8:30:00 AM	133	4	0	**137**	0	0	3	3	32	0	**38**	0	0	52	0	198	0	**250**	0	0	**425**
8:45:00 AM	133	20	0	**153**	0	0	7	8	28	0	**43**	0	0	60	0	211	0	**271**	0	0	**467**
Hourly Total	552	37	0	**589**	0	0	20	19	141	0	**180**	0	0	250	0	848	0	**1098**	0	0	**1867**
4:00:00 PM	245	9	0	**254**	0	0	7	10	65	0	**82**	0	0	40	0	177	0	**217**	0	0	**553**
4:15:00 PM	212	21	0	**233**	0	0	3	9	72	0	**84**	1	0	51	0	174	0	**225**	0	0	**542**
4:30:00 PM	235	18	0	**253**	0	0	1	3	87	0	**91**	0	0	52	0	161	0	**213**	0	0	**557**
4:45:00 PM	210	12	0	**222**	0	0	7	6	63	0	**76**	0	0	59	0	176	0	**235**	0	0	**533**
Hourly Total	902	60	0	**962**	0	0	18	28	287	0	**333**	1	0	202	0	688	0	**890**	0	0	**2185**
5:00:00 PM	226	16	0	**242**	0	0	5	7	98	0	**110**	0	0	42	0	184	0	**226**	0	0	**578**
5:15:00 PM	203	5	0	**208**	0	0	2	8	68	0	**78**	0	0	26	0	162	0	**188**	0	0	**474**
5:30:00 PM	209	8	0	**217**	0	0	3	3	58	0	**64**	0	0	32	0	159	0	**191**	0	0	**472**
5:45:00 PM	147	11	0	**158**	0	0	7	4	33	0	**44**	0	0	34	0	162	0	**196**	0	0	**398**
Hourly Total	785	40	0	**825**	0	0	17	22	257	0	**296**	0	0	134	0	667	0	**801**	0	0	**1922**
Grand Total	2741	188	0	**2929**	0	0	86	82	833	0	**1001**	1	0	903	0	2879	0	**3782**	0	0	**7712**
% Approach	93.6%	6.4%	0.0%	**0.0%**	0.0%	0.0%	8.6%	8.2%	83.2%	0.0%	**0.0%**	0.0%	0.0%	23.9%	0.0%	76.1%	0.0%	**0.0%**	0.0%	0.0%	**0.0%**
% Total	35.5%	2.4%	0.0%	**38.0%**	0.0%	0.0%	1.1%	1.1%	10.8%	0.0%	**13.0%**	0.0%	0.0%	11.7%	0.0%	37.3%	0.0%	**49.0%**	0.0%	0.0%	**0.0%**
Lights	2713	159	0	**2872**	0	0	78	81	795	0	**954**	0	0	852	0	2840	0	**3692**	0	0	**7518**
% Lights	99.0%	84.6%	0.0%	**98.1%**	0.0%	0.0%	90.7%	98.8%	95.4%	0.0%	**95.3%**	0.0%	0.0%	94.4%	0.0%	98.6%	0.0%	**97.6%**	0.0%	0.0%	**97.5%**
Trucks	14	2	0	**16**	0	0	0	0	21	0	**21**	0	0	22	0	12	0	**34**	0	0	**71**
% Trucks	0.5%	1.1%	0.0%	**0.5%**	0.0%	0.0%	0.0%	0.0%	2.5%	0.0%	**2.1%**	0.0%	0.0%	2.4%	0.0%	0.4%	0.0%	**0.9%**	0.0%	0.0%	**0.9%**
Buses	14	27	0	**41**	0	0	8	1	16	0	**25**	0	0	29	0	27	0	**56**	0	0	**122**
% Buses	0.5%	14.4%	0.0%	**1.4%**	0.0%	0.0%	0.0%	1.2%	1.9%	0.0%	**2.5%**	0.0%	0.0%	3.2%	0.0%	0.9%	0.0%	**1.5%**	0.0%	0.0%	**1.6%**
Pedestrians	0	0	0	**0**	0	0	0	0	0	0	**0**	1	0	0	0	0	0	**0**	0	0	0
% Pedestrians	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	**0.0%**
Bicycles on Crosswalk	0	0	0	**0**	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	0	0	0
% Bicycles on Crosswalk	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	**0.0%**

TRI-STATE

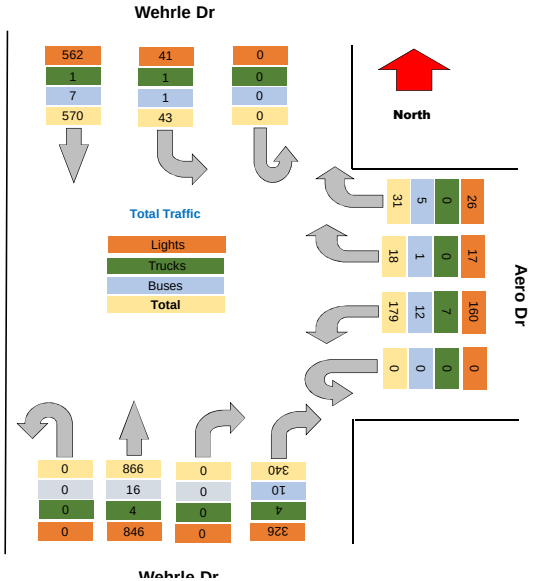
Turning Movement Data Plot

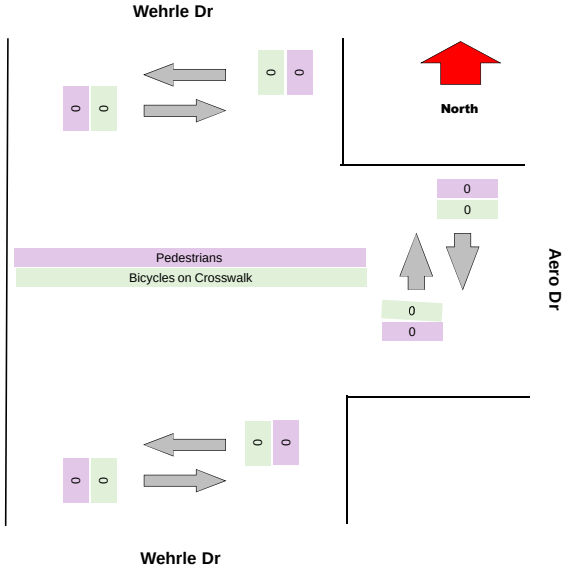


Turning Movement Peak Hour Data (AM)

7:30:00 AM

Leg	Wehrle Dr						Aero Dr							Wehrle Dr							
Direction	Southbound						Westbound							Northbound							
Start Time	Thru	Left	U-Turn	App Total	Peds CW	Peds CCW	Right	RTOR	Left	U-Turn	App Total	Peds CW	Peds CCW	Right	RTOR	Thru	U-Turn	App Total	Peds CW	Peds CCW	Total
7:30:00 AM	147	21	0	**168**	0	0	5	9	60	0	**74**	0	0	92	0	198	0	**290**	0	0	**532**
7:45:00 AM	137	9	0	**146**	0	0	16	1	38	0	**55**	0	0	110	0	229	0	**339**	0	0	**540**
8:00:00 AM	140	7	0	**147**	0	0	4	4	41	0	**49**	0	0	79	0	212	0	**291**	0	0	**487**
8:15:00 AM	146	6	0	**152**	0	0	6	4	40	0	**50**	0	0	59	0	227	0	**286**	0	0	**488**
Grand Total	570	43	0	**613**	0	0	31	18	179	0	**228**	0	0	340	0	866	0	**1206**	0	0	**2047**
% Approach	93.0%	7.0%	0.0%	**0.0%**	0.0%	0.0%	13.6%	7.9%	78.5%	0.0%	**0.0%**	0.0%	0.0%	28.2%	0.0%	71.8%	0.0%	**0.0%**	0.0%	0.0%	
% Total	27.8%	2.1%	0.0%	**29.9%**	0.0%	0.0%	1.5%	0.9%	8.7%	0.0%	**11.1%**	0.0%	0.0%	16.6%	0.0%	42.3%	0.0%	**58.9%**	0.0%	0.0%	
PHF	0.969	0.512	0.000	**0.912**	0.000	0.000	0.484	0.500	0.746	0.000	**0.770**	0.000	0.000	0.773	0.000	0.945	0.000	**0.889**	0.000	0.000	**0.948**
Lights	562	41	0	**603**	0	0	26	17	160	0	**203**	0	0	326	0	846	0	**1172**	0	0	**1978**
% Lights	98.6%	95.3%	0.0%	**98.4%**	0.0%	0.0%	83.9%	94.4%	89.4%	0.0%	**89.0%**	0.0%	0.0%	95.9%	0.0%	97.7%	0.0%	**97.2%**	0.0%	0.0%	**96.6%**
Trucks	1	1	0	**2**	0	0	0	0	7	0	**7**	0	0	4	0	4	0	**8**	0	0	**17**
% Trucks	0.2%	2.3%	0.0%	**0.3%**	0.0%	0.0%	0.0%	0.0%	3.9%	0.0%	**3.1%**	0.0%	0.0%	1.2%	0.0%	0.5%	0.0%	**0.7%**	0.0%	0.0%	**0.8%**
Buses	7	1	0	**8**	0	0	5	1	12	0	**18**	0	0	10	0	16	0	**26**	0	0	**52**
% Buses	1.2%	2.3%	0.0%	**1.3%**	0.0%	0.0%	16.1%	5.6%	6.7%	0.0%	**7.9%**	0.0%	0.0%	2.9%	0.0%	1.8%	0.0%	**2.2%**	0.0%	0.0%	**2.5%**
Pedestrians	0	0	0	**0**	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	0	0	0
% Pedestrians	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	**0.0%**
Bicycles on Crosswalk	0	0	0	**0**	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	0	0	0
% Bicycles on Crosswalk	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	**0.0%**

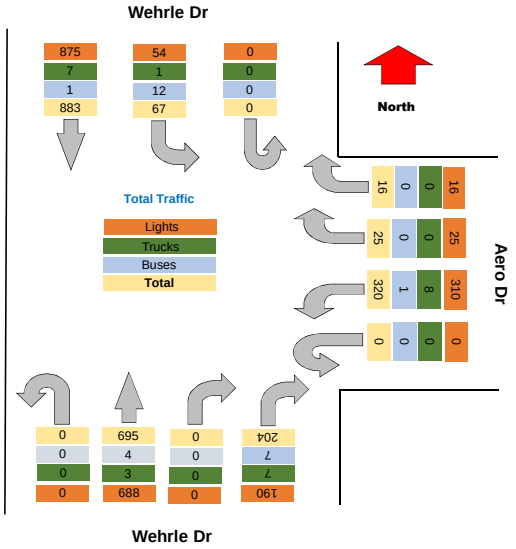


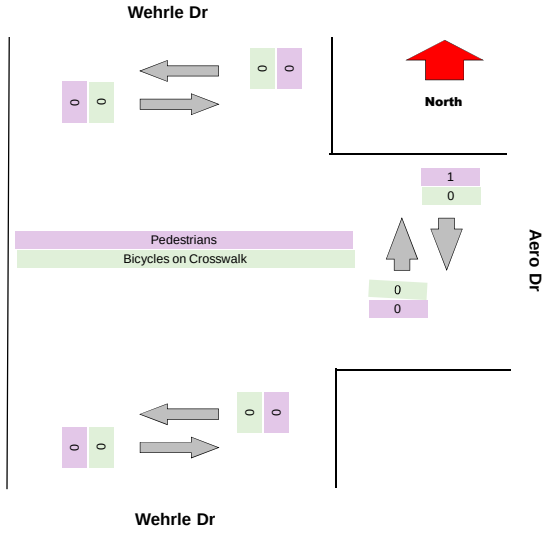


Turning Movement Peak Hour Data (PM)

4:15:00 PM

Leg	Wehrle Dr						Aero Dr							Wehrle Dr							
Direction	Southbound						Westbound							Northbound							
Start Time	Thru	Left	U-Turn	App Total	Peds CW	Peds CCW	Right	RTOR	Left	U-Turn	App Total	Peds CW	Peds CCW	Right	RTOR	Thru	U-Turn	App Total	Peds CW	Peds CCW	Total
4:15:00 PM	212	21	0	**233**	0	0	3	9	72	0	**84**	1	0	51	0	174	0	**225**	0	0	**542**
4:30:00 PM	235	18	0	**253**	0	0	1	3	87	0	**91**	0	0	52	0	161	0	**213**	0	0	**557**
4:45:00 PM	210	12	0	**222**	0	0	7	6	63	0	**76**	0	0	59	0	176	0	**235**	0	0	**533**
5:00:00 PM	226	16	0	**242**	0	0	5	7	98	0	**110**	0	0	42	0	184	0	**226**	0	0	**578**
Grand Total	883	67	0	**950**	0	0	16	25	320	0	**361**	1	0	204	0	695	0	**899**	0	0	**2210**
% Approach	92.9%	7.1%	0.0%	**0.0%**	0.0%	0.0%	4.4%	6.9%	88.6%	0.0%	**0.0%**	0.0%	0.0%	22.7%	0.0%	77.3%	0.0%	**0.0%**	0.0%	0.0%	
% Total	40.0%	3.0%	0.0%	**43.0%**	0.0%	0.0%	0.7%	1.1%	14.5%	0.0%	**16.3%**	0.0%	0.0%	9.2%	0.0%	31.4%	0.0%	**40.7%**	0.0%	0.0%	
PHF	0.939	0.798	0.000	**0.939**	0.000	0.000	0.571	0.694	0.816	0.000	**0.820**	0.000	0.000	0.864	0.000	0.944	0.000	**0.956**	0.000	0.000	**0.956**
Lights	875	54	0	**929**	0	0	16	25	310	0	**351**	0	0	190	0	688	0	**878**	0	0	**2158**
% Lights	99.1%	80.6%	0.0%	**97.8%**	0.0%	0.0%	100.0%	100.0%	96.9%	0.0%	**97.2%**	0.0%	0.0%	93.1%	0.0%	99.0%	0.0%	**97.7%**	0.0%	0.0%	**97.6%**
Trucks	7	1	0	**8**	0	0	0	0	8	0	**8**	0	0	7	0	3	0	**10**	0	0	**26**
% Trucks	0.8%	1.5%	0.0%	**0.8%**	0.0%	0.0%	0.0%	0.0%	2.5%	0.0%	**2.2%**	0.0%	0.0%	3.4%	0.0%	0.4%	0.0%	**1.1%**	0.0%	0.0%	**1.2%**
Buses	1	12	0	**13**	0	0	0	0	1	0	**1**	0	0	7	0	4	0	**11**	0	0	**25**
% Buses	0.1%	17.9%	0.0%	**1.4%**	0.0%	0.0%	0.0%	0.0%	0.3%	0.0%	**0.3%**	0.0%	0.0%	3.4%	0.0%	0.6%	0.0%	**1.2%**	0.0%	0.0%	**1.1%**
Pedestrians	0	0	0	**0**	0	0	0	0	0	0	**0**	1	0	0	0	0	0	**0**	0	0	0
% Pedestrians	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	**0.0%**
Bicycles on Crosswalk	0	0	0	**0**	0	0	0	0	0	0	**0**	0	0	0	0	0	0	**0**	0	0	0
% Bicycles on Crosswalk	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	**0.0%**	0.0%	0.0%	**0.0%**





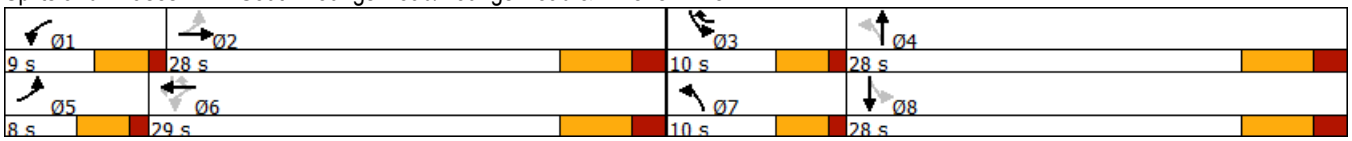
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	175	421	58	125	344	106	48	366	376	161	357	164
Future Volume (vph)	175	421	58	125	344	106	48	366	376	161	357	164
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	275		0	375		440	185		165	360		830
Storage Lanes	1		0	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	3466	0	1787	3574	1599	1770	3270	0	1787	1881	1599
Flt Permitted	0.472			0.371			0.468			0.183		
Satd. Flow (perm)	879	3466	0	698	3574	1599	872	3270	0	344	1881	1599
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		20				129		267				169
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		1782			2401			2170			1408	
Travel Time (s)		34.7			46.8			42.3			27.4	
Confl. Peds. (#/hr)			1	1								
Peak Hour Factor	0.88	0.88	0.88	0.82	0.82	0.82	0.93	0.93	0.93	0.97	0.97	0.97
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	2%	2%	2%	1%	1%	1%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	199	544	0	152	420	129	52	798	0	166	368	169
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA	custom
Protected Phases	5	2		1	6	3	7	4		3	8	
Permitted Phases	2			6		6	4			8		6
Detector Phase	5	2		1	6	3	7	4		3	8	6
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	8.0	10.0		8.0	10.0	8.0	8.0	10.0		8.0	10.0	10.0
Total Split (s)	8.0	28.0		9.0	29.0	10.0	10.0	28.0		10.0	28.0	29.0
Total Split (%)	10.7%	37.3%		12.0%	38.7%	13.3%	13.3%	37.3%		13.3%	37.3%	38.7%
Maximum Green (s)	4.0	22.0		5.0	23.0	6.0	6.0	22.0		6.0	22.0	23.0
Yellow Time (s)	3.0	4.0		3.0	4.0	3.0	3.0	4.0		3.0	4.0	4.0
All-Red Time (s)	1.0	2.0		1.0	2.0	1.0	1.0	2.0		1.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0		4.0	6.0	4.0	4.0	6.0		4.0	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag	Lead	Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	Min		None	Min	None	None	None		None	None	Min
Act Effct Green (s)	22.3	17.2		23.0	15.8	28.1	25.1	17.0		27.1	21.8	15.8
Actuated g/C Ratio	0.35	0.27		0.36	0.25	0.44	0.40	0.27		0.43	0.34	0.25
v/c Ratio	0.55	0.57		0.45	0.47	0.17	0.12	0.75		0.58	0.57	0.32

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay	21.4	23.2		17.8	22.4	3.1	11.4	19.0		21.8	23.9	5.6
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	21.4	23.2		17.8	22.4	3.1	11.4	19.0		21.8	23.9	5.6
LOS	C	C		B	C	A	B	B		C	C	A
Approach Delay		22.8			17.8			18.5			19.0	
Approach LOS		C			B			B			B	
Queue Length 50th (ft)	50	97		37	73	0	11	95		36	128	0
Queue Length 95th (ft)	97	149		69	106	21	31	174		#94	238	40
Internal Link Dist (ft)		1702			2321			2090			1328	
Turn Bay Length (ft)	275			375		440	185			360		830
Base Capacity (vph)	365	1240		340	1323	779	432	1330		286	682	698
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	0
Reduced v/c Ratio	0.55	0.44		0.45	0.32	0.17	0.12	0.60		0.58	0.54	0.24

Intersection Summary

Area Type: Other
Cycle Length: 75
Actuated Cycle Length: 63.5
Natural Cycle: 55
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.75
Intersection Signal Delay: 19.5 Intersection LOS: B
Intersection Capacity Utilization 68.2% ICU Level of Service C
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: South Youngs Road/Youngs Road & Wherle Drive



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	285	194	192	631	288	133
Future Volume (vph)	285	194	192	631	288	133
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1791	1637	0	1724	0
Flt Permitted		0.971			0.967	
Satd. Flow (perm)	0	1791	1637	0	1724	0
Link Speed (mph)		35	35		35	
Link Distance (ft)		1190	951		651	
Travel Time (s)		23.2	18.5		12.7	
Peak Hour Factor	0.86	0.86	0.94	0.94	0.87	0.87
Heavy Vehicles (%)	3%	3%	4%	4%	2%	2%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	557	875	0	484	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Yield	Yield		Yield	

Intersection Summary

Area Type: Other
Control Type: Roundabout
Intersection Capacity Utilization 109.0% ICU Level of Service H
Analysis Period (min) 15

Intersection	
Intersection Delay, s/veh	52.4
Intersection LOS	F

Approach	EB	WB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	557	875	484
Demand Flow Rate, veh/h	574	910	494
Vehicles Circulating, veh/h	338	341	212
Vehicles Exiting, veh/h	368	571	1039
Follow-Up Headway, s	3.186	3.186	3.186
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	18.7	96.6	11.3
Approach LOS	C	F	B

Lane	Left	Left	Left
Designated Moves	LT	TR	LR
Assumed Moves	LT	TR	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Critical Headway, s	5.193	5.193	5.193
Entry Flow, veh/h	574	910	494
Cap Entry Lane, veh/h	806	803	914
Entry HV Adj Factor	0.971	0.961	0.980
Flow Entry, veh/h	557	875	484
Cap Entry, veh/h	782	772	896
V/C Ratio	0.712	1.133	0.540
Control Delay, s/veh	18.7	96.6	11.3
LOS	C	F	B
95th %tile Queue, veh	6	26	3

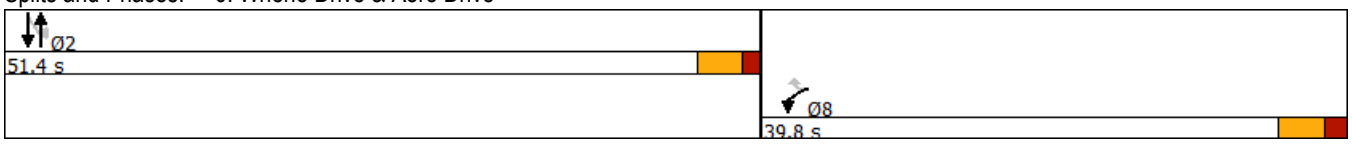
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	223	61	866	447	56	570
Future Volume (vph)	223	61	866	447	56	570
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	140		0	500	
Storage Lanes	1	1		1	1	
Taper Length (ft)	25				25	
Satd. Flow (prot)	1752	1568	1863	1583	1787	1881
Flt Permitted	0.950				0.117	
Satd. Flow (perm)	1752	1568	1863	1583	220	1881
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		79		462		
Link Speed (mph)	30		35			35
Link Distance (ft)	1388		1390			1241
Travel Time (s)	31.5		27.1			24.2
Peak Hour Factor	0.77	0.77	0.89	0.89	0.91	0.91
Heavy Vehicles (%)	3%	3%	2%	2%	1%	1%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	290	79	973	502	62	626
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Turn Type	Prot	Perm	NA	Perm	Perm	NA
Protected Phases	8		2			2
Permitted Phases		8		2	2	
Detector Phase	8	8	2	2	2	2
Switch Phase						
Minimum Initial (s)	15.0	15.0	40.0	40.0	40.0	40.0
Minimum Split (s)	19.8	19.8	44.4	44.4	44.4	44.4
Total Split (s)	39.8	39.8	51.4	51.4	51.4	51.4
Total Split (%)	43.6%	43.6%	56.4%	56.4%	56.4%	56.4%
Maximum Green (s)	35.0	35.0	47.0	47.0	47.0	47.0
Yellow Time (s)	3.2	3.2	3.0	3.0	3.0	3.0
All-Red Time (s)	1.6	1.6	1.4	1.4	1.4	1.4
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.8	4.8	4.4	4.4	4.4	4.4
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	4.0	4.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	Min	Min	Min	Min
Act Effct Green (s)	19.4	19.4	47.1	47.1	47.1	47.1
Actuated g/C Ratio	0.26	0.26	0.62	0.62	0.62	0.62
v/c Ratio	0.65	0.17	0.84	0.43	0.46	0.54
Control Delay	32.3	6.4	21.3	2.5	23.4	11.1

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	32.3	6.4	21.3	2.5	23.4	11.1
LOS	C	A	C	A	C	B
Approach Delay	26.7		14.9			12.2
Approach LOS	C		B			B
Queue Length 50th (ft)	121	0	304	6	13	140
Queue Length 95th (ft)	161	20	#699	48	#76	292
Internal Link Dist (ft)	1308		1310			1161
Turn Bay Length (ft)		140			500	
Base Capacity (vph)	812	769	1159	1159	136	1170
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.36	0.10	0.84	0.43	0.46	0.54

Intersection Summary

Area Type: Other
Cycle Length: 91.2
Actuated Cycle Length: 75.7
Natural Cycle: 65
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.84
Intersection Signal Delay: 15.9 Intersection LOS: B
Intersection Capacity Utilization 74.0% ICU Level of Service D
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 6: Wherle Drive & Aero Drive



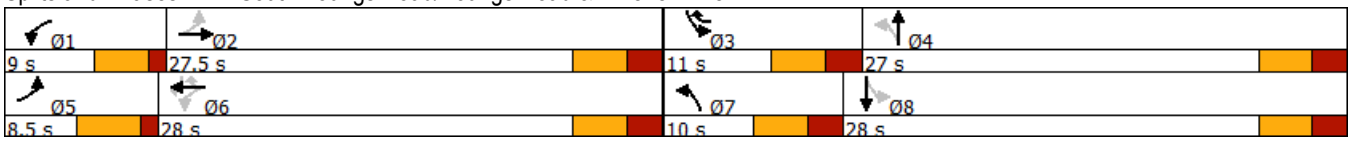
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	157	446	74	196	455	167	74	341	189	168	375	159
Future Volume (vph)	157	446	74	196	455	167	74	341	189	168	375	159
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	275		0	375		440	185		165	360		830
Storage Lanes	1		0	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1787	3488	0	1787	3574	1599	1787	3385	0	1770	1863	1583
Flt Permitted	0.358			0.309			0.399			0.267		
Satd. Flow (perm)	673	3488	0	581	3574	1599	751	3385	0	497	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		26				196		143				168
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		1782			2401			2170			1408	
Travel Time (s)		34.7			46.8			42.3			27.4	
Confl. Peds. (#/hr)			1	1								
Peak Hour Factor	0.93	0.93	0.93	0.85	0.85	0.85	0.87	0.87	0.87	0.98	0.98	0.98
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	2%	2%	2%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	169	560	0	231	535	196	85	609	0	171	383	162
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA	custom
Protected Phases	5	2		1	6	3	7	4		3	8	
Permitted Phases	2			6		6	4			8		6
Detector Phase	5	2		1	6	3	7	4		3	8	6
Switch Phase												
Minimum Initial (s)	4.0	4.0		3.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	8.5	9.0		7.0	9.0	9.0	9.0	9.0		9.0	9.0	9.0
Total Split (s)	8.5	27.5		9.0	28.0	11.0	10.0	27.0		11.0	28.0	28.0
Total Split (%)	11.4%	36.9%		12.1%	37.6%	14.8%	13.4%	36.2%		14.8%	37.6%	37.6%
Maximum Green (s)	4.0	22.5		5.0	23.0	6.0	5.0	22.0		6.0	23.0	23.0
Yellow Time (s)	3.5	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	1.0	2.0		1.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.5	5.0		4.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0
Lead/Lag	Lead	Lag		Lead	Lag	Lead	Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	Min		None	Min	None	None	None		None	None	Min
Act Effct Green (s)	20.1	15.5		22.2	16.0	27.3	21.3	16.2		24.4	19.8	16.0
Actuated g/C Ratio	0.32	0.25		0.36	0.26	0.44	0.34	0.26		0.39	0.32	0.26
v/c Ratio	0.58	0.63		0.76	0.58	0.24	0.25	0.62		0.54	0.65	0.31

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay	23.8	23.7		33.7	23.4	3.0	13.3	18.5		19.1	26.2	5.1
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	23.8	23.7		33.7	23.4	3.0	13.3	18.5		19.1	26.2	5.1
LOS	C	C		C	C	A	B	B		B	C	A
Approach Delay		23.7			21.7			17.9			19.7	
Approach LOS		C			C			B			B	
Queue Length 50th (ft)	41	94		57	93	0	17	77		37	128	0
Queue Length 95th (ft)	86	154		#127	139	28	45	135		85	244	37
Internal Link Dist (ft)		1702			2321			2090			1328	
Turn Bay Length (ft)	275			375		440	185			360		830
Base Capacity (vph)	289	1302		305	1346	809	341	1311		319	702	700
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	0
Reduced v/c Ratio	0.58	0.43		0.76	0.40	0.24	0.25	0.46		0.54	0.55	0.23

Intersection Summary

Area Type: Other
Cycle Length: 74.5
Actuated Cycle Length: 62.4
Natural Cycle: 60
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.76
Intersection Signal Delay: 20.9 Intersection LOS: C
Intersection Capacity Utilization 66.2% ICU Level of Service C
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: South Youngs Road/Youngs Road & Wherle Drive



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	101	204	191	411	504	244
Future Volume (vph)	101	204	191	411	504	244
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1815	1691	0	1705	0
Flt Permitted		0.984			0.967	
Satd. Flow (perm)	0	1815	1691	0	1705	0
Link Speed (mph)		35	35		35	
Link Distance (ft)		1190	951		651	
Travel Time (s)		23.2	18.5		12.7	
Peak Hour Factor	0.87	0.87	0.90	0.90	0.92	0.92
Heavy Vehicles (%)	3%	3%	2%	2%	3%	3%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	350	669	0	813	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Yield	Yield		Yield	

Intersection Summary

Area Type: Other
Control Type: Roundabout
Intersection Capacity Utilization 104.5% ICU Level of Service G
Analysis Period (min) 15

Intersection	
Intersection Delay, s/veh	24.0
Intersection LOS	C

Approach	EB	WB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	350	669	813
Demand Flow Rate, veh/h	360	682	837
Vehicles Circulating, veh/h	564	119	216
Vehicles Exiting, veh/h	489	805	585
Follow-Up Headway, s	3.186	3.186	3.186
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	15.6	14.5	35.4
Approach LOS	C	B	E

Lane	Left	Left	Left
Designated Moves	LT	TR	LR
Assumed Moves	LT	TR	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Critical Headway, s	5.193	5.193	5.193
Entry Flow, veh/h	360	682	837
Cap Entry Lane, veh/h	643	1003	910
Entry HV Adj Factor	0.972	0.981	0.971
Flow Entry, veh/h	350	669	813
Cap Entry, veh/h	625	984	884
V/C Ratio	0.560	0.680	0.919
Control Delay, s/veh	15.6	14.5	35.4
LOS	C	B	E
95th %tile Queue, veh	3	6	14

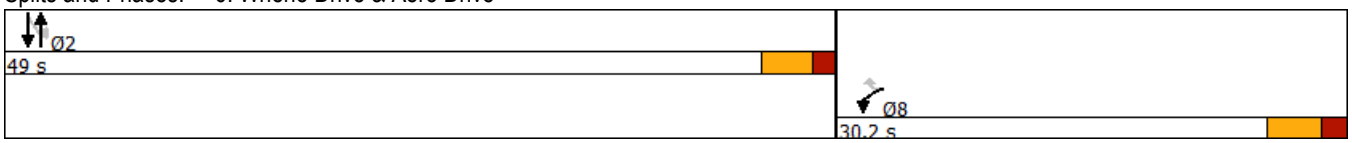
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	394	50	695	230	75	883
Future Volume (vph)	394	50	695	230	75	883
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	140		0	500	
Storage Lanes	1	1		1	1	
Taper Length (ft)	25				25	
Satd. Flow (prot)	1770	1583	1881	1599	1787	1881
Flt Permitted	0.950				0.231	
Satd. Flow (perm)	1770	1583	1881	1566	434	1881
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		56		240		
Link Speed (mph)	30		35			35
Link Distance (ft)	1388		1390			1241
Travel Time (s)	31.5		27.1			24.2
Confl. Peds. (#/hr)				1	1	
Peak Hour Factor	0.82	0.82	0.96	0.96	0.94	0.94
Heavy Vehicles (%)	2%	2%	1%	1%	1%	1%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	480	61	724	240	80	939
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Turn Type	Prot	Perm	NA	Perm	Perm	NA
Protected Phases	8		2			2
Permitted Phases		8		2	2	
Detector Phase	8	8	2	2	2	2
Switch Phase						
Minimum Initial (s)	15.0	15.0	40.0	40.0	40.0	40.0
Minimum Split (s)	19.8	19.8	44.4	44.4	44.4	44.4
Total Split (s)	30.2	30.2	49.0	49.0	49.0	49.0
Total Split (%)	38.1%	38.1%	61.9%	61.9%	61.9%	61.9%
Maximum Green (s)	25.4	25.4	44.6	44.6	44.6	44.6
Yellow Time (s)	3.2	3.2	3.0	3.0	3.0	3.0
All-Red Time (s)	1.6	1.6	1.4	1.4	1.4	1.4
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.8	4.8	4.4	4.4	4.4	4.4
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	4.0	4.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	Min	Min	Min	Min
Act Effct Green (s)	23.8	23.8	43.7	43.7	43.7	43.7
Actuated g/C Ratio	0.31	0.31	0.57	0.57	0.57	0.57
v/c Ratio	0.87	0.12	0.68	0.24	0.32	0.88

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Control Delay	44.1	7.2	16.0	1.9	13.9	26.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	44.1	7.2	16.0	1.9	13.9	26.3
LOS	D	A	B	A	B	C
Approach Delay	40.0		12.5			25.4
Approach LOS	D		B			C
Queue Length 50th (ft)	219	2	234	0	20	373
Queue Length 95th (ft)	#323	23	358	28	51	#649
Internal Link Dist (ft)	1308		1310			1161
Turn Bay Length (ft)		140			500	
Base Capacity (vph)	587	562	1096	1012	252	1096
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.82	0.11	0.66	0.24	0.32	0.86

Intersection Summary

Area Type: Other
Cycle Length: 79.2
Actuated Cycle Length: 76.8
Natural Cycle: 70
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.88
Intersection Signal Delay: 23.6 Intersection LOS: C
Intersection Capacity Utilization 91.8% ICU Level of Service F
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 6: Wherle Drive & Aero Drive



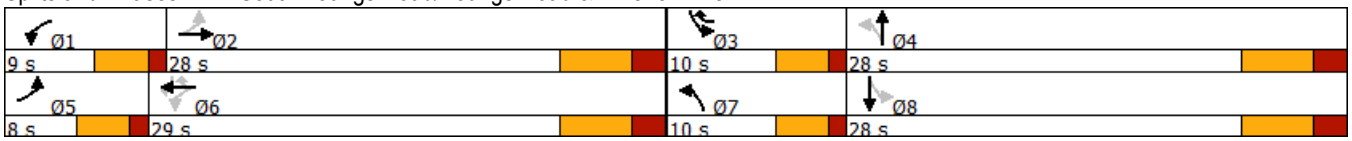
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	182	438	60	130	358	110	50	381	391	167	371	171
Future Volume (vph)	182	438	60	130	358	110	50	381	391	167	371	171
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	275		0	375		440	185		165	360		830
Storage Lanes	1		0	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	3466	0	1787	3574	1599	1770	3270	0	1787	1881	1599
Flt Permitted	0.452			0.350			0.447			0.176		
Satd. Flow (perm)	842	3466	0	658	3574	1599	833	3270	0	331	1881	1599
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		20				134		256				176
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		1782			2401			2170			1408	
Travel Time (s)		34.7			46.8			42.3			27.4	
Confl. Peds. (#/hr)			1	1								
Peak Hour Factor	0.88	0.88	0.88	0.82	0.82	0.82	0.93	0.93	0.93	0.97	0.97	0.97
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	2%	2%	2%	1%	1%	1%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	207	566	0	159	437	134	54	830	0	172	382	176
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA	custom
Protected Phases	5	2		1	6	3	7	4		3	8	
Permitted Phases	2			6		6	4			8		6
Detector Phase	5	2		1	6	3	7	4		3	8	6
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	8.0	10.0		8.0	10.0	8.0	8.0	10.0		8.0	10.0	10.0
Total Split (s)	8.0	28.0		9.0	29.0	10.0	10.0	28.0		10.0	28.0	29.0
Total Split (%)	10.7%	37.3%		12.0%	38.7%	13.3%	13.3%	37.3%		13.3%	37.3%	38.7%
Maximum Green (s)	4.0	22.0		5.0	23.0	6.0	6.0	22.0		6.0	22.0	23.0
Yellow Time (s)	3.0	4.0		3.0	4.0	3.0	3.0	4.0		3.0	4.0	4.0
All-Red Time (s)	1.0	2.0		1.0	2.0	1.0	1.0	2.0		1.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0		4.0	6.0	4.0	4.0	6.0		4.0	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag	Lead	Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	Min		None	Min	None	None	None		None	None	Min
Act Effct Green (s)	22.9	17.8		23.7	16.5	28.8	26.1	18.0		28.0	22.7	16.5
Actuated g/C Ratio	0.35	0.27		0.36	0.25	0.44	0.40	0.28		0.43	0.35	0.25
v/c Ratio	0.58	0.59		0.49	0.48	0.17	0.13	0.76		0.62	0.58	0.33

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay	23.0	23.7		18.9	22.6	3.1	11.6	20.3		24.1	24.4	5.5
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	23.0	23.7		18.9	22.6	3.1	11.6	20.3		24.1	24.4	5.5
LOS	C	C		B	C	A	B	C		C	C	A
Approach Delay		23.5			18.2			19.7			19.8	
Approach LOS		C			B			B			B	
Queue Length 50th (ft)	55	105		41	78	0	12	110		40	140	0
Queue Length 95th (ft)	100	155		72	110	21	32	190		#107	251	41
Internal Link Dist (ft)		1702			2321			2090			1328	
Turn Bay Length (ft)	275			375		440	185			360		830
Base Capacity (vph)	354	1207		327	1287	781	422	1294		279	669	688
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	0
Reduced v/c Ratio	0.58	0.47		0.49	0.34	0.17	0.13	0.64		0.62	0.57	0.26

Intersection Summary

Area Type: Other
Cycle Length: 75
Actuated Cycle Length: 65.1
Natural Cycle: 55
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.76
Intersection Signal Delay: 20.3 Intersection LOS: C
Intersection Capacity Utilization 70.2% ICU Level of Service C
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: South Youngs Road/Youngs Road & Wherle Drive



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	296	202	200	656	300	138
Future Volume (vph)	296	202	200	656	300	138
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1791	1639	0	1724	0
Flt Permitted		0.971			0.967	
Satd. Flow (perm)	0	1791	1639	0	1724	0
Link Speed (mph)		35	35		35	
Link Distance (ft)		1190	951		651	
Travel Time (s)		23.2	18.5		12.7	
Peak Hour Factor	0.86	0.86	0.94	0.94	0.87	0.87
Heavy Vehicles (%)	3%	3%	4%	4%	2%	2%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	579	911	0	504	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Yield	Yield		Yield	

Intersection Summary

Area Type: Other
Control Type: Roundabout
Intersection Capacity Utilization 113.0% ICU Level of Service H
Analysis Period (min) 15

Intersection	
Intersection Delay, s/veh	64.2
Intersection LOS	F

Approach	EB	WB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	579	911	504
Demand Flow Rate, veh/h	596	948	514
Vehicles Circulating, veh/h	352	354	222
Vehicles Exiting, veh/h	384	594	1080
Follow-Up Headway, s	3.186	3.186	3.186
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	21.0	120.5	12.1
Approach LOS	C	F	B

Lane	Left	Left	Left
Designated Moves	LT	TR	LR
Assumed Moves	LT	TR	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Critical Headway, s	5.193	5.193	5.193
Entry Flow, veh/h	596	948	514
Cap Entry Lane, veh/h	795	793	905
Entry HV Adj Factor	0.971	0.961	0.981
Flow Entry, veh/h	579	911	504
Cap Entry, veh/h	772	763	887
V/C Ratio	0.750	1.195	0.568
Control Delay, s/veh	21.0	120.5	12.1
LOS	C	F	B
95th %tile Queue, veh	7	30	4

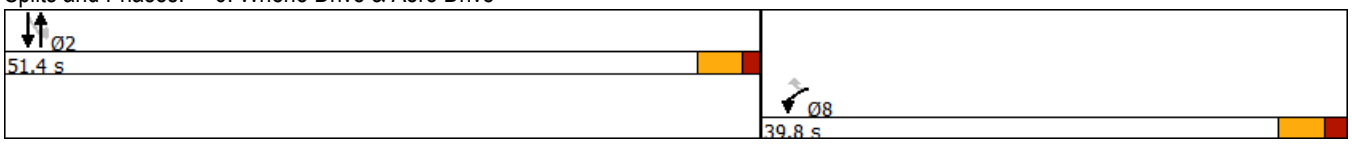
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	232	63	901	465	58	593
Future Volume (vph)	232	63	901	465	58	593
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	140		0	500	
Storage Lanes	1	1		1	1	
Taper Length (ft)	25				25	
Satd. Flow (prot)	1752	1568	1863	1583	1787	1881
Flt Permitted	0.950				0.091	
Satd. Flow (perm)	1752	1568	1863	1583	171	1881
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		80		462		
Link Speed (mph)	30		35			35
Link Distance (ft)	1388		1390			1241
Travel Time (s)	31.5		27.1			24.2
Peak Hour Factor	0.77	0.77	0.89	0.89	0.91	0.91
Heavy Vehicles (%)	3%	3%	2%	2%	1%	1%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	301	82	1012	522	64	652
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Turn Type	Prot	Perm	NA	Perm	Perm	NA
Protected Phases	8		2			2
Permitted Phases		8		2	2	
Detector Phase	8	8	2	2	2	2
Switch Phase						
Minimum Initial (s)	15.0	15.0	40.0	40.0	40.0	40.0
Minimum Split (s)	19.8	19.8	44.4	44.4	44.4	44.4
Total Split (s)	39.8	39.8	51.4	51.4	51.4	51.4
Total Split (%)	43.6%	43.6%	56.4%	56.4%	56.4%	56.4%
Maximum Green (s)	35.0	35.0	47.0	47.0	47.0	47.0
Yellow Time (s)	3.2	3.2	3.0	3.0	3.0	3.0
All-Red Time (s)	1.6	1.6	1.4	1.4	1.4	1.4
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.8	4.8	4.4	4.4	4.4	4.4
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	4.0	4.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	Min	Min	Min	Min
Act Effct Green (s)	19.8	19.8	47.2	47.2	47.2	47.2
Actuated g/C Ratio	0.26	0.26	0.62	0.62	0.62	0.62
v/c Ratio	0.66	0.18	0.88	0.45	0.61	0.56
Control Delay	32.6	6.5	24.6	2.8	41.6	11.7

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	32.6	6.5	24.6	2.8	41.6	11.7
LOS	C	A	C	A	D	B
Approach Delay	27.0		17.2			14.4
Approach LOS	C		B			B
Queue Length 50th (ft)	127	1	338	10	16	152
Queue Length 95th (ft)	167	21	#755	55	#96	320
Internal Link Dist (ft)	1308		1310			1161
Turn Bay Length (ft)		140			500	
Base Capacity (vph)	807	765	1153	1155	105	1164
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.37	0.11	0.88	0.45	0.61	0.56

Intersection Summary

Area Type: Other
Cycle Length: 91.2
Actuated Cycle Length: 76.2
Natural Cycle: 65
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.88
Intersection Signal Delay: 17.9 Intersection LOS: B
Intersection Capacity Utilization 74.0% ICU Level of Service D
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 6: Wherle Drive & Aero Drive



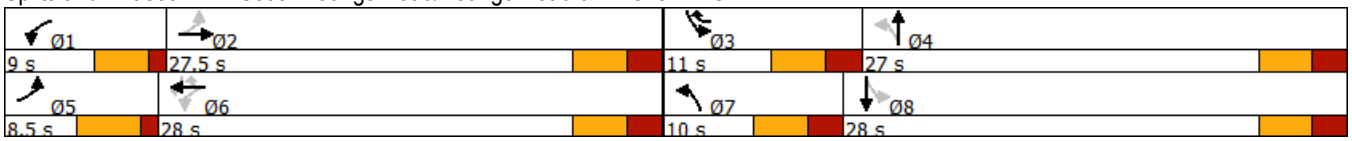
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	163	464	77	204	473	174	77	355	197	175	390	165
Future Volume (vph)	163	464	77	204	473	174	77	355	197	175	390	165
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	275		0	375		440	185		165	360		830
Storage Lanes	1		0	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1787	3488	0	1787	3574	1599	1787	3385	0	1770	1863	1583
Flt Permitted	0.340			0.292			0.375			0.252		
Satd. Flow (perm)	640	3488	0	549	3574	1599	705	3385	0	469	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		26				193		143				168
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		1782			2401			2170			1408	
Travel Time (s)		34.7			46.8			42.3			27.4	
Confl. Peds. (#/hr)			1	1								
Peak Hour Factor	0.93	0.93	0.93	0.85	0.85	0.85	0.87	0.87	0.87	0.98	0.98	0.98
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	2%	2%	2%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	175	582	0	240	556	205	89	634	0	179	398	168
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA	custom
Protected Phases	5	2		1	6	3	7	4		3	8	
Permitted Phases	2			6		6	4			8		6
Detector Phase	5	2		1	6	3	7	4		3	8	6
Switch Phase												
Minimum Initial (s)	4.0	4.0		3.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	8.5	9.0		7.0	9.0	9.0	9.0	9.0		9.0	9.0	9.0
Total Split (s)	8.5	27.5		9.0	28.0	11.0	10.0	27.0		11.0	28.0	28.0
Total Split (%)	11.4%	36.9%		12.1%	37.6%	14.8%	13.4%	36.2%		14.8%	37.6%	37.6%
Maximum Green (s)	4.0	22.5		5.0	23.0	6.0	5.0	22.0		6.0	23.0	23.0
Yellow Time (s)	3.5	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	1.0	2.0		1.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.5	5.0		4.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0
Lead/Lag	Lead	Lag		Lead	Lag	Lead	Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	Min		None	Min	None	None	None		None	None	Min
Act Effct Green (s)	20.7	16.1		22.8	16.6	27.9	21.9	16.8		24.9	20.3	16.6
Actuated g/C Ratio	0.33	0.25		0.36	0.26	0.44	0.34	0.26		0.39	0.32	0.26
v/c Ratio	0.62	0.64		0.81	0.59	0.25	0.27	0.64		0.58	0.67	0.31

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay	25.9	24.1		40.0	23.7	3.4	13.7	19.1		21.2	26.9	5.4
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	25.9	24.1		40.0	23.7	3.4	13.7	19.1		21.2	26.9	5.4
LOS	C	C		D	C	A	B	B		C	C	A
Approach Delay		24.5			23.5			18.4			20.7	
Approach LOS		C			C			B			C	
Queue Length 50th (ft)	44	101		62	99	3	19	85		41	139	0
Queue Length 95th (ft)	89	160		#142	145	31	47	142		#95	255	40
Internal Link Dist (ft)		1702			2321			2090			1328	
Turn Bay Length (ft)	275			375		440	185			360		830
Base Capacity (vph)	282	1277		296	1321	809	329	1289		309	688	691
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	0
Reduced v/c Ratio	0.62	0.46		0.81	0.42	0.25	0.27	0.49		0.58	0.58	0.24

Intersection Summary

Area Type: Other
Cycle Length: 74.5
Actuated Cycle Length: 63.5
Natural Cycle: 60
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.81
Intersection Signal Delay: 21.9 Intersection LOS: C
Intersection Capacity Utilization 68.2% ICU Level of Service C
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: South Youngs Road/Youngs Road & Wherle Drive



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	105	212	199	427	524	254
Future Volume (vph)	105	212	199	427	524	254
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1815	1691	0	1705	0
Flt Permitted		0.984			0.967	
Satd. Flow (perm)	0	1815	1691	0	1705	0
Link Speed (mph)		35	35		35	
Link Distance (ft)		1190	951		651	
Travel Time (s)		23.2	18.5		12.7	
Peak Hour Factor	0.87	0.87	0.90	0.90	0.92	0.92
Heavy Vehicles (%)	3%	3%	2%	2%	3%	3%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	365	695	0	846	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Yield	Yield		Yield	

Intersection Summary

Area Type: Other
Control Type: Roundabout
Intersection Capacity Utilization 108.2% ICU Level of Service G
Analysis Period (min) 15

Intersection	
Intersection Delay, s/veh	28.6
Intersection LOS	D

Approach	EB	WB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	365	695	846
Demand Flow Rate, veh/h	376	708	871
Vehicles Circulating, veh/h	587	125	225
Vehicles Exiting, veh/h	509	838	608
Follow-Up Headway, s	3.186	3.186	3.186
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	17.3	15.7	44.1
Approach LOS	C	C	E

Lane	Left	Left	Left
Designated Moves	LT	TR	LR
Assumed Moves	LT	TR	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Critical Headway, s	5.193	5.193	5.193
Entry Flow, veh/h	376	708	871
Cap Entry Lane, veh/h	628	997	902
Entry HV Adj Factor	0.970	0.981	0.971
Flow Entry, veh/h	365	695	846
Cap Entry, veh/h	609	978	876
V/C Ratio	0.598	0.710	0.965
Control Delay, s/veh	17.3	15.7	44.1
LOS	C	C	E
95th %tile Queue, veh	4	6	16

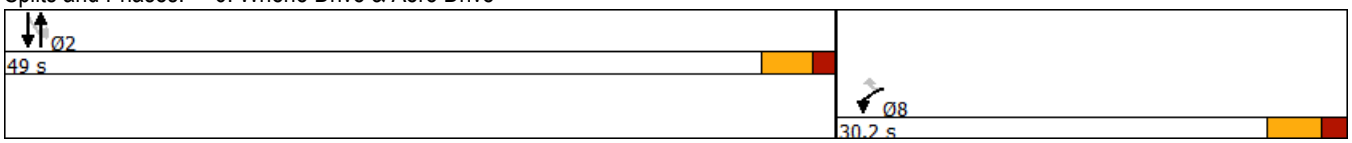
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	410	52	723	239	78	918
Future Volume (vph)	410	52	723	239	78	918
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	140		0	500	
Storage Lanes	1	1		1	1	
Taper Length (ft)	25				25	
Satd. Flow (prot)	1770	1583	1881	1599	1787	1881
Flt Permitted	0.950				0.209	
Satd. Flow (perm)	1770	1583	1881	1566	393	1881
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		56		249		
Link Speed (mph)	30		35			35
Link Distance (ft)	1388		1390			1241
Travel Time (s)	31.5		27.1			24.2
Confl. Peds. (#/hr)				1	1	
Peak Hour Factor	0.82	0.82	0.96	0.96	0.94	0.94
Heavy Vehicles (%)	2%	2%	1%	1%	1%	1%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	500	63	753	249	83	977
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Turn Type	Prot	Perm	NA	Perm	Perm	NA
Protected Phases	8		2			2
Permitted Phases		8		2	2	
Detector Phase	8	8	2	2	2	2
Switch Phase						
Minimum Initial (s)	15.0	15.0	40.0	40.0	40.0	40.0
Minimum Split (s)	19.8	19.8	44.4	44.4	44.4	44.4
Total Split (s)	30.2	30.2	49.0	49.0	49.0	49.0
Total Split (%)	38.1%	38.1%	61.9%	61.9%	61.9%	61.9%
Maximum Green (s)	25.4	25.4	44.6	44.6	44.6	44.6
Yellow Time (s)	3.2	3.2	3.0	3.0	3.0	3.0
All-Red Time (s)	1.6	1.6	1.4	1.4	1.4	1.4
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.8	4.8	4.4	4.4	4.4	4.4
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	4.0	4.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	Min	Min	Min	Min
Act Effct Green (s)	24.3	24.3	43.7	43.7	43.7	43.7
Actuated g/C Ratio	0.31	0.31	0.57	0.57	0.57	0.57
v/c Ratio	0.90	0.12	0.71	0.25	0.37	0.92

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Control Delay	47.3	7.4	17.0	1.9	15.8	31.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	47.3	7.4	17.0	1.9	15.8	31.0
LOS	D	A	B	A	B	C
Approach Delay	42.9		13.2			29.8
Approach LOS	D		B			C
Queue Length 50th (ft)	231	2	249	0	21	404
Queue Length 95th (ft)	#344	24	382	29	57	#692
Internal Link Dist (ft)	1308		1310			1161
Turn Bay Length (ft)		140			500	
Base Capacity (vph)	583	559	1090	1011	227	1090
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.86	0.11	0.69	0.25	0.37	0.90

Intersection Summary

Area Type: Other
Cycle Length: 79.2
Actuated Cycle Length: 77.2
Natural Cycle: 75
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.92
Intersection Signal Delay: 26.3 Intersection LOS: C
Intersection Capacity Utilization 95.2% ICU Level of Service F
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 6: Wherle Drive & Aero Drive



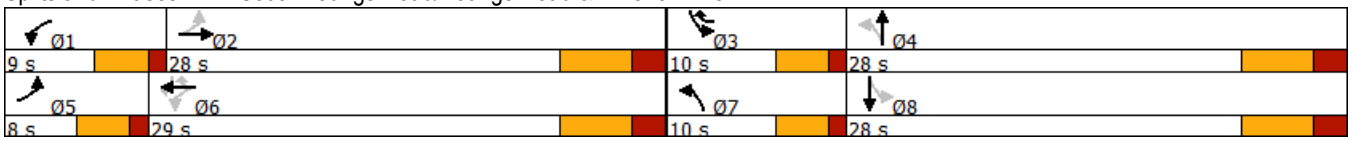
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	182	438	64	139	358	110	51	385	394	167	381	171
Future Volume (vph)	182	438	64	139	358	110	51	385	394	167	381	171
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	275		0	375		440	185		165	360		830
Storage Lanes	1		0	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1770	3462	0	1787	3574	1599	1770	3270	0	1787	1881	1599
Flt Permitted	0.488			0.304			0.432			0.176		
Satd. Flow (perm)	909	3462	0	572	3574	1599	805	3270	0	331	1881	1599
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		22				134		256				176
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		1782			2401			2170			1408	
Travel Time (s)		34.7			46.8			42.3			27.4	
Confl. Peds. (#/hr)			1	1								
Peak Hour Factor	0.88	0.88	0.88	0.82	0.82	0.82	0.93	0.93	0.93	0.97	0.97	0.97
Heavy Vehicles (%)	2%	2%	2%	1%	1%	1%	2%	2%	2%	1%	1%	1%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	207	571	0	170	437	134	55	838	0	172	393	176
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA	custom
Protected Phases	5	2		1	6	3	7	4		3	8	
Permitted Phases	2			6		6	4			8		6
Detector Phase	5	2		1	6	3	7	4		3	8	6
Switch Phase												
Minimum Initial (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	8.0	10.0		8.0	10.0	8.0	8.0	10.0		8.0	10.0	10.0
Total Split (s)	8.0	28.0		9.0	29.0	10.0	10.0	28.0		10.0	28.0	29.0
Total Split (%)	10.7%	37.3%		12.0%	38.7%	13.3%	13.3%	37.3%		13.3%	37.3%	38.7%
Maximum Green (s)	4.0	22.0		5.0	23.0	6.0	6.0	22.0		6.0	22.0	23.0
Yellow Time (s)	3.0	4.0		3.0	4.0	3.0	3.0	4.0		3.0	4.0	4.0
All-Red Time (s)	1.0	2.0		1.0	2.0	1.0	1.0	2.0		1.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.0	6.0		4.0	6.0	4.0	4.0	6.0		4.0	6.0	6.0
Lead/Lag	Lead	Lag		Lead	Lag	Lead	Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	Min		None	Min	None	None	None		None	None	Min
Act Effct Green (s)	22.3	16.2		24.4	17.2	29.4	26.1	18.1		28.1	22.7	17.2
Actuated g/C Ratio	0.34	0.25		0.37	0.26	0.45	0.40	0.28		0.43	0.34	0.26
v/c Ratio	0.57	0.66		0.56	0.47	0.17	0.13	0.77		0.63	0.61	0.32

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay	22.4	25.6		21.5	22.4	3.0	11.7	20.7		24.5	25.2	5.4
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	22.4	25.6		21.5	22.4	3.0	11.7	20.7		24.5	25.2	5.4
LOS	C	C		C	C	A	B	C		C	C	A
Approach Delay		24.7			18.7			20.2			20.3	
Approach LOS		C			B			C			C	
Queue Length 50th (ft)	55	106		44	80	0	12	112		40	145	0
Queue Length 95th (ft)	100	156		77	110	21	33	193		#107	#262	41
Internal Link Dist (ft)		1702			2321			2090			1328	
Turn Bay Length (ft)	275			375		440	185			360		830
Base Capacity (vph)	361	1190		305	1268	789	410	1279		275	661	681
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	0
Reduced v/c Ratio	0.57	0.48		0.56	0.34	0.17	0.13	0.66		0.63	0.59	0.26

Intersection Summary

Area Type: Other
Cycle Length: 75
Actuated Cycle Length: 65.8
Natural Cycle: 60
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.77
Intersection Signal Delay: 21.0 Intersection LOS: C
Intersection Capacity Utilization 71.1% ICU Level of Service C
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: South Youngs Road/Youngs Road & Wherle Drive



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	305	202	200	667	304	141
Future Volume (vph)	305	202	200	667	304	141
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1791	1637	0	1724	0
Flt Permitted		0.971			0.967	
Satd. Flow (perm)	0	1791	1637	0	1724	0
Link Speed (mph)		35	35		35	
Link Distance (ft)		1190	951		651	
Travel Time (s)		23.2	18.5		12.7	
Peak Hour Factor	0.86	0.86	0.94	0.94	0.87	0.87
Heavy Vehicles (%)	3%	3%	4%	4%	2%	2%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	590	923	0	511	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Yield	Yield		Yield	

Intersection Summary

Area Type: Other
Control Type: Roundabout
Intersection Capacity Utilization 114.6% ICU Level of Service H
Analysis Period (min) 15

Intersection	
Intersection Delay, s/veh	70.0
Intersection LOS	F

Approach	EB	WB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	590	923	511
Demand Flow Rate, veh/h	608	960	521
Vehicles Circulating, veh/h	356	366	222
Vehicles Exiting, veh/h	387	598	1104
Follow-Up Headway, s	3.186	3.186	3.186
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	22.3	132.5	12.3
Approach LOS	C	F	B

Lane	Left	Left	Left
Designated Moves	LT	TR	LR
Assumed Moves	LT	TR	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Critical Headway, s	5.193	5.193	5.193
Entry Flow, veh/h	608	960	521
Cap Entry Lane, veh/h	791	784	905
Entry HV Adj Factor	0.970	0.962	0.981
Flow Entry, veh/h	590	923	511
Cap Entry, veh/h	768	754	888
V/C Ratio	0.768	1.225	0.576
Control Delay, s/veh	22.3	132.5	12.3
LOS	C	F	B
95th %tile Queue, veh	7	32	4

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	2	6	18	954	439	4
Future Volume (vph)	2	6	18	954	439	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	1649	0	0	1861	1861	0
Flt Permitted	0.989			0.999		
Satd. Flow (perm)	1649	0	0	1861	1861	0
Link Speed (mph)	30			35	35	
Link Distance (ft)	330			651	388	
Travel Time (s)	7.5			12.7	7.6	
Peak Hour Factor	0.90	0.90	0.87	0.87	0.87	0.87
Shared Lane Traffic (%)						
Lane Group Flow (vph)	9	0	0	1118	510	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 74.6% ICU Level of Service D
Analysis Period (min) 15

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	2	6	18	954	439	4
Future Vol, veh/h	2	6	18	954	439	4
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	90	90	87	87	87	87
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2	7	21	1097	505	5

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1647	508	510	0	-	0
Stage 1	508	-	-	-	-	-
Stage 2	1139	-	-	-	-	-
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	109	565	1055	-	-	-
Stage 1	604	-	-	-	-	-
Stage 2	305	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	103	565	1055	-	-	-
Mov Cap-2 Maneuver	103	-	-	-	-	-
Stage 1	573	-	-	-	-	-
Stage 2	305	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	19	0.2	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1055	-	266	-	-
HCM Lane V/C Ratio	0.02	-	0.033	-	-
HCM Control Delay (s)	8.5	0	19	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-

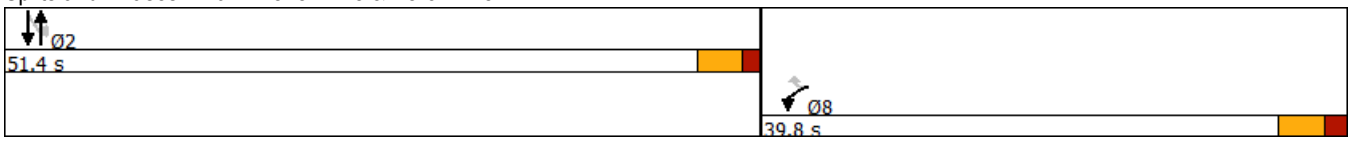
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	234	64	901	472	60	593
Future Volume (vph)	234	64	901	472	60	593
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	140		0	500	
Storage Lanes	1	1		1	1	
Taper Length (ft)	25				25	
Satd. Flow (prot)	1752	1568	1863	1583	1787	1881
Flt Permitted	0.950				0.088	
Satd. Flow (perm)	1752	1568	1863	1583	166	1881
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		80		469		
Link Speed (mph)	30		35			35
Link Distance (ft)	1388		1390			1241
Travel Time (s)	31.5		27.1			24.2
Peak Hour Factor	0.77	0.77	0.89	0.89	0.91	0.91
Heavy Vehicles (%)	3%	3%	2%	2%	1%	1%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	304	83	1012	530	66	652
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Turn Type	Prot	Perm	NA	Perm	Perm	NA
Protected Phases	8		2			2
Permitted Phases		8		2	2	
Detector Phase	8	8	2	2	2	2
Switch Phase						
Minimum Initial (s)	15.0	15.0	40.0	40.0	40.0	40.0
Minimum Split (s)	19.8	19.8	44.4	44.4	44.4	44.4
Total Split (s)	39.8	39.8	51.4	51.4	51.4	51.4
Total Split (%)	43.6%	43.6%	56.4%	56.4%	56.4%	56.4%
Maximum Green (s)	35.0	35.0	47.0	47.0	47.0	47.0
Yellow Time (s)	3.2	3.2	3.0	3.0	3.0	3.0
All-Red Time (s)	1.6	1.6	1.4	1.4	1.4	1.4
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.8	4.8	4.4	4.4	4.4	4.4
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	4.0	4.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	Min	Min	Min	Min
Act Effct Green (s)	20.1	20.1	47.2	47.2	47.2	47.2
Actuated g/C Ratio	0.26	0.26	0.62	0.62	0.62	0.62
v/c Ratio	0.66	0.18	0.88	0.46	0.65	0.56
Control Delay	32.4	6.6	25.2	2.9	47.3	12.0

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	32.4	6.6	25.2	2.9	47.3	12.0
LOS	C	A	C	A	D	B
Approach Delay	26.8		17.5			15.3
Approach LOS	C		B			B
Queue Length 50th (ft)	128	1	342	10	17	154
Queue Length 95th (ft)	168	21	#772	57	#103	331
Internal Link Dist (ft)	1308		1310			1161
Turn Bay Length (ft)		140			500	
Base Capacity (vph)	804	763	1148	1155	102	1159
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.38	0.11	0.88	0.46	0.65	0.56

Intersection Summary

Area Type: Other
Cycle Length: 91.2
Actuated Cycle Length: 76.5
Natural Cycle: 65
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.88
Intersection Signal Delay: 18.3 Intersection LOS: B
Intersection Capacity Utilization 74.0% ICU Level of Service D
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 6: Wherle Drive & Aero Drive



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	6	1	2	954	442	19
Future Volume (vph)	6	1	2	954	442	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	1754	0	0	1863	1852	0
Flt Permitted	0.958					
Satd. Flow (perm)	1754	0	0	1863	1852	0
Link Speed (mph)	30			35	35	
Link Distance (ft)	321			388	817	
Travel Time (s)	7.3			7.6	15.9	
Peak Hour Factor	0.90	0.90	0.87	0.87	0.87	0.87
Shared Lane Traffic (%)						
Lane Group Flow (vph)	8	0	0	1099	530	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 61.8% ICU Level of Service B
Analysis Period (min) 15

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	6	1	2	954	442	19
Future Vol, veh/h	6	1	2	954	442	19
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	90	90	87	87	87	87
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	7	1	2	1097	508	22

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1620	519	530	0	-	0
Stage 1	519	-	-	-	-	-
Stage 2	1101	-	-	-	-	-
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	113	557	1037	-	-	-
Stage 1	597	-	-	-	-	-
Stage 2	318	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	112	557	1037	-	-	-
Mov Cap-2 Maneuver	112	-	-	-	-	-
Stage 1	594	-	-	-	-	-
Stage 2	318	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	35.4	0	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1037	-	126	-	-
HCM Lane V/C Ratio	0.002	-	0.062	-	-
HCM Control Delay (s)	8.5	0	35.4	-	-
HCM Lane LOS	A	A	E	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

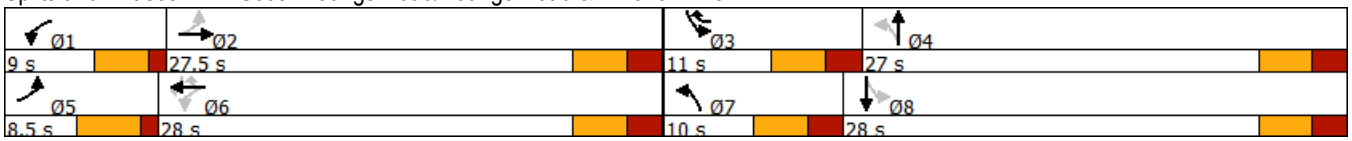
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	163	464	79	209	473	174	81	366	206	175	396	165
Future Volume (vph)	163	464	79	209	473	174	81	366	206	175	396	165
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (ft)	275		0	375		440	185		165	360		830
Storage Lanes	1		0	1		1	1		1	1		1
Taper Length (ft)	25			25			25			25		
Satd. Flow (prot)	1787	3485	0	1787	3574	1599	1787	3381	0	1770	1863	1583
Flt Permitted	0.340			0.290			0.367			0.238		
Satd. Flow (perm)	640	3485	0	545	3574	1599	690	3381	0	443	1863	1583
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		27				184		149				168
Link Speed (mph)		35			35			35			35	
Link Distance (ft)		1782			2401			2170			1408	
Travel Time (s)		34.7			46.8			42.3			27.4	
Confl. Peds. (#/hr)			1	1								
Peak Hour Factor	0.93	0.93	0.93	0.85	0.85	0.85	0.87	0.87	0.87	0.98	0.98	0.98
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	2%	2%	2%
Shared Lane Traffic (%)												
Lane Group Flow (vph)	175	584	0	246	556	205	93	658	0	179	404	168
Enter Blocked Intersection	No	No	No	No	No	No	No	No	No	No	No	No
Lane Alignment	Left	Left	Right	Left	Left	Right	Left	Left	Right	Left	Left	Right
Median Width(ft)		12			12			12			12	
Link Offset(ft)		0			0			0			0	
Crosswalk Width(ft)		16			16			16			16	
Two way Left Turn Lane												
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15		9	15		9	15		9	15		9
Turn Type	pm+pt	NA		pm+pt	NA	pm+ov	pm+pt	NA		pm+pt	NA	custom
Protected Phases	5	2		1	6	3	7	4		3	8	
Permitted Phases	2			6		6	4			8		6
Detector Phase	5	2		1	6	3	7	4		3	8	6
Switch Phase												
Minimum Initial (s)	4.0	4.0		3.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Minimum Split (s)	8.5	9.0		7.0	9.0	9.0	9.0	9.0		9.0	9.0	9.0
Total Split (s)	8.5	27.5		9.0	28.0	11.0	10.0	27.0		11.0	28.0	28.0
Total Split (%)	11.4%	36.9%		12.1%	37.6%	14.8%	13.4%	36.2%		14.8%	37.6%	37.6%
Maximum Green (s)	4.0	22.5		5.0	23.0	6.0	5.0	22.0		6.0	23.0	23.0
Yellow Time (s)	3.5	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
All-Red Time (s)	1.0	2.0		1.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Lost Time (s)	4.5	5.0		4.0	5.0	5.0	5.0	5.0		5.0	5.0	5.0
Lead/Lag	Lead	Lag		Lead	Lag	Lead	Lead	Lag		Lead	Lag	Lag
Lead-Lag Optimize?	Yes	Yes		Yes	Yes	Yes	Yes	Yes		Yes	Yes	Yes
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	Min		None	Min	None	None	None		None	None	Min
Act Effct Green (s)	20.8	16.2		22.8	16.7	27.9	22.1	17.0		25.2	20.6	16.7
Actuated g/C Ratio	0.33	0.25		0.36	0.26	0.44	0.35	0.27		0.39	0.32	0.26
v/c Ratio	0.62	0.65		0.84	0.60	0.26	0.29	0.65		0.59	0.67	0.31

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay	26.1	24.2		43.4	23.8	3.7	13.9	19.4		22.2	27.2	5.4
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
Total Delay	26.1	24.2		43.4	23.8	3.7	13.9	19.4		22.2	27.2	5.4
LOS	C	C		D	C	A	B	B		C	C	A
Approach Delay		24.6			24.5			18.7			21.1	
Approach LOS		C			C			B			C	
Queue Length 50th (ft)	44	102		64	100	5	20	90		41	142	0
Queue Length 95th (ft)	89	161		#150	145	34	49	148		#99	260	40
Internal Link Dist (ft)		1702			2321			2090			1328	
Turn Bay Length (ft)	275			375		440	185			360		830
Base Capacity (vph)	281	1272		294	1315	802	326	1287		302	685	688
Starvation Cap Reductn	0	0		0	0	0	0	0		0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0		0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0		0	0	0
Reduced v/c Ratio	0.62	0.46		0.84	0.42	0.26	0.29	0.51		0.59	0.59	0.24

Intersection Summary

Area Type: Other
Cycle Length: 74.5
Actuated Cycle Length: 63.8
Natural Cycle: 60
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.84
Intersection Signal Delay: 22.4 Intersection LOS: C
Intersection Capacity Utilization 69.2% ICU Level of Service C
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: South Youngs Road/Youngs Road & Wherle Drive



Lane Group	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	109	212	199	433	535	263
Future Volume (vph)	109	212	199	433	535	263
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	0	1813	1690	0	1707	0
Flt Permitted		0.983			0.968	
Satd. Flow (perm)	0	1813	1690	0	1707	0
Link Speed (mph)		35	35		35	
Link Distance (ft)		1190	951		651	
Travel Time (s)		23.2	18.5		12.7	
Peak Hour Factor	0.87	0.87	0.90	0.90	0.92	0.92
Heavy Vehicles (%)	3%	3%	2%	2%	3%	3%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	0	369	702	0	868	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Left	Left	Right	Left	Right
Median Width(ft)		0	0		12	
Link Offset(ft)		0	0		0	
Crosswalk Width(ft)		16	16		16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15			9	15	9
Sign Control		Yield	Yield		Yield	

Intersection Summary

Area Type: Other
Control Type: Roundabout
Intersection Capacity Utilization 110.0% ICU Level of Service H
Analysis Period (min) 15

Intersection	
Intersection Delay, s/veh	31.6
Intersection LOS	D

Approach	EB	WB	SB
Entry Lanes	1	1	1
Conflicting Circle Lanes	1	1	1
Adj Approach Flow, veh/h	369	702	868
Demand Flow Rate, veh/h	380	716	894
Vehicles Circulating, veh/h	599	129	225
Vehicles Exiting, veh/h	520	850	620
Follow-Up Headway, s	3.186	3.186	3.186
Ped Vol Crossing Leg, #/h	0	0	0
Ped Cap Adj	1.000	1.000	1.000
Approach Delay, s/veh	18.0	16.2	49.9
Approach LOS	C	C	E

Lane	Left	Left	Left
Designated Moves	LT	TR	LR
Assumed Moves	LT	TR	LR
RT Channelized			
Lane Util	1.000	1.000	1.000
Critical Headway, s	5.193	5.193	5.193
Entry Flow, veh/h	380	716	894
Cap Entry Lane, veh/h	621	993	902
Entry HV Adj Factor	0.970	0.980	0.971
Flow Entry, veh/h	369	702	868
Cap Entry, veh/h	602	973	876
V/C Ratio	0.612	0.721	0.991
Control Delay, s/veh	18.0	16.2	49.9
LOS	C	C	E
95th %tile Queue, veh	4	7	18

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	4	18	9	535	780	3
Future Volume (vph)	4	18	9	535	780	3
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	1639	0	0	1843	1845	0
Flt Permitted	0.992			0.999		
Satd. Flow (perm)	1639	0	0	1843	1845	0
Link Speed (mph)	30			35	35	
Link Distance (ft)	330			651	388	
Travel Time (s)	7.5			12.7	7.6	
Peak Hour Factor	0.90	0.90	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	3%	3%	2%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	24	0	0	592	851	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 51.2% ICU Level of Service A
Analysis Period (min) 15

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	4	18	9	535	780	3
Future Vol, veh/h	4	18	9	535	780	3
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	90	90	92	92	92	92
Heavy Vehicles, %	2	2	2	3	3	2
Mvmt Flow	4	20	10	582	848	3

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1452	850	851	0	-	0
Stage 1	850	-	-	-	-	-
Stage 2	602	-	-	-	-	-
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	144	360	788	-	-	-
Stage 1	419	-	-	-	-	-
Stage 2	547	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	141	360	788	-	-	-
Mov Cap-2 Maneuver	141	-	-	-	-	-
Stage 1	411	-	-	-	-	-
Stage 2	547	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	19	0.2	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	788	-	281	-	-
HCM Lane V/C Ratio	0.012	-	0.087	-	-
HCM Control Delay (s)	9.6	0	19	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0	-	0.3	-	-

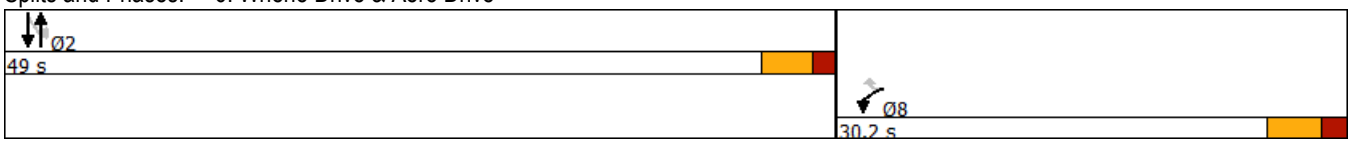
Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	417	54	723	242	79	918
Future Volume (vph)	417	54	723	242	79	918
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Storage Length (ft)	0	140		0	500	
Storage Lanes	1	1		1	1	
Taper Length (ft)	25				25	
Satd. Flow (prot)	1770	1583	1881	1599	1787	1881
Flt Permitted	0.950				0.208	
Satd. Flow (perm)	1770	1583	1881	1566	391	1881
Right Turn on Red		Yes		Yes		
Satd. Flow (RTOR)		57		252		
Link Speed (mph)	30		35			35
Link Distance (ft)	1388		1390			1241
Travel Time (s)	31.5		27.1			24.2
Confl. Peds. (#/hr)				1	1	
Peak Hour Factor	0.82	0.82	0.96	0.96	0.94	0.94
Heavy Vehicles (%)	2%	2%	1%	1%	1%	1%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	509	66	753	252	84	977
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Right	Left	Left
Median Width(ft)	12		0			12
Link Offset(ft)	0		0			0
Crosswalk Width(ft)	16		16			16
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9		9	15	
Turn Type	Prot	Perm	NA	Perm	Perm	NA
Protected Phases	8		2			2
Permitted Phases		8		2	2	
Detector Phase	8	8	2	2	2	2
Switch Phase						
Minimum Initial (s)	15.0	15.0	40.0	40.0	40.0	40.0
Minimum Split (s)	19.8	19.8	44.4	44.4	44.4	44.4
Total Split (s)	30.2	30.2	49.0	49.0	49.0	49.0
Total Split (%)	38.1%	38.1%	61.9%	61.9%	61.9%	61.9%
Maximum Green (s)	25.4	25.4	44.6	44.6	44.6	44.6
Yellow Time (s)	3.2	3.2	3.0	3.0	3.0	3.0
All-Red Time (s)	1.6	1.6	1.4	1.4	1.4	1.4
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	4.8	4.8	4.4	4.4	4.4	4.4
Lead/Lag						
Lead-Lag Optimize?						
Vehicle Extension (s)	4.0	4.0	3.0	3.0	3.0	3.0
Recall Mode	None	None	Min	Min	Min	Min
Act Effct Green (s)	24.4	24.4	43.7	43.7	43.7	43.7
Actuated g/C Ratio	0.32	0.32	0.57	0.57	0.57	0.57
v/c Ratio	0.91	0.12	0.71	0.25	0.38	0.92

Lane Group	WBL	WBR	NBT	NBR	SBL	SBT
Control Delay	49.1	7.6	17.1	1.9	16.1	31.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	49.1	7.6	17.1	1.9	16.1	31.2
LOS	D	A	B	A	B	C
Approach Delay	44.3		13.3			30.0
Approach LOS	D		B			C
Queue Length 50th (ft)	237	3	249	0	21	404
Queue Length 95th (ft)	#353	25	382	29	58	#692
Internal Link Dist (ft)	1308		1310			1161
Turn Bay Length (ft)		140			500	
Base Capacity (vph)	582	559	1087	1011	226	1087
Starvation Cap Reductn	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0
Reduced v/c Ratio	0.87	0.12	0.69	0.25	0.37	0.90

Intersection Summary

Area Type: Other
Cycle Length: 79.2
Actuated Cycle Length: 77.3
Natural Cycle: 75
Control Type: Actuated-Uncoordinated
Maximum v/c Ratio: 0.92
Intersection Signal Delay: 26.8 Intersection LOS: C
Intersection Capacity Utilization 96.4% ICU Level of Service F
Analysis Period (min) 15
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 6: Wherle Drive & Aero Drive



Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	20	2	1	537	781	10
Future Volume (vph)	20	2	1	537	781	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Satd. Flow (prot)	1761	0	0	1845	1841	0
Flt Permitted	0.956					
Satd. Flow (perm)	1761	0	0	1845	1841	0
Link Speed (mph)	30			35	35	
Link Distance (ft)	321			388	817	
Travel Time (s)	7.3			7.6	15.9	
Peak Hour Factor	0.90	0.90	0.92	0.92	0.92	0.92
Heavy Vehicles (%)	2%	2%	2%	3%	3%	2%
Shared Lane Traffic (%)						
Lane Group Flow (vph)	24	0	0	585	860	0
Enter Blocked Intersection	No	No	No	No	No	No
Lane Alignment	Left	Right	Left	Left	Left	Right
Median Width(ft)	12			0	0	
Link Offset(ft)	0			0	0	
Crosswalk Width(ft)	16			16	16	
Two way Left Turn Lane						
Headway Factor	1.00	1.00	1.00	1.00	1.00	1.00
Turning Speed (mph)	15	9	15			9
Sign Control	Stop			Free	Free	

Intersection Summary

Area Type: Other
Control Type: Unsignalized
Intersection Capacity Utilization 51.7% ICU Level of Service A
Analysis Period (min) 15

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	20	2	1	537	781	10
Future Vol, veh/h	20	2	1	537	781	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	90	90	92	92	92	92
Heavy Vehicles, %	2	2	2	3	3	2
Mvmt Flow	22	2	1	584	849	11

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1441	855	860	0	-	0
Stage 1	855	-	-	-	-	-
Stage 2	586	-	-	-	-	-
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	146	358	781	-	-	-
Stage 1	417	-	-	-	-	-
Stage 2	556	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	146	358	781	-	-	-
Mov Cap-2 Maneuver	146	-	-	-	-	-
Stage 1	416	-	-	-	-	-
Stage 2	556	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	32.7	0	0
HCM LOS	D		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	781	-	154	-	-
HCM Lane V/C Ratio	0.001	-	0.159	-	-
HCM Control Delay (s)	9.6	0	32.7	-	-
HCM Lane LOS	A	A	D	-	-
HCM 95th %tile Q(veh)	0	-	0.5	-	-