
APPENDIX 2

TRANSPORTATION OPERATION ANALYSIS

MEMORANDUM

TO: Paul Yanchuk, P.Eng., Transportation Design Engineer
City of London

FROM: Adam Mildenberger, B.A., C.E.T., Transportation Planner
R.V. Anderson Associates Ltd.

DATE: August 26, 2021

SUBJECT: Oxford Street West at Gideon Drive Class EA and Preliminary Intersection Design
Traffic Operations Memorandum

R.V. Anderson Associates Limited (RVA) has been retained by the City of London (City) to undertake the Class Environmental Assessment (EA) and preliminary design for proposed geometric improvements at the intersection of Oxford Street West at Gideon Drive, including reconfiguration of the intersection to either signalized or roundabout control. As part of the overall project, RVA has undertaken traffic operations analysis to confirm the intersection geometry and traffic control required to accommodate future projected traffic volume demands in 2035 and maintain an acceptable level of service, which includes evaluating the justification for a roundabout at the subject intersection.

Our methodology, findings, and recommendations for the traffic operations analysis are presented in this memorandum. Concept Plans for the potential intersection designs which are analyzed and discussed in this memorandum are provided in **Appendix A**.

EXISTING CONDITIONS

Intersection Configuration

Gideon Drive is a rural two-lane roadway (one-lane per direction), referred to as a “rural throughfare”, with a posted maximum speed limit of 80 km/h. The road has a general southwest-to-northeast alignment, forming the south approach at the intersection with Oxford Street. Its’ intersection with Oxford Street is its’ northern limit, with its’ intersection at Longwoods Road (County Road 2) in the community of Delaware being its southern limit. It has a curve in its horizontal alignment just south of the intersection with Oxford

Street, which permits Gideon Drive to have a desirable tangent (approximately 30 metres in length) in approach to the intersection, and it has a generally flat vertical alignment in the vicinity of the intersection. It currently has a shared left-through lane at the intersection, with a large, channelized right-turn lane with a direct taper (approximately 80 metres in length) onto Oxford Street.

Oxford Street West (henceforth referred to as Oxford Street) is a rural two-lane roadway (one-lane per direction), referred to as an “urban throughfare”, with a posted maximum speed limit of 80 km/h west of Gideon Drive, and 60 km/h east of Gideon Drive. The road has a general east-west orientation, traversing through the City of London to the east, and transitioning into Glendon Drive to the west which provides connections to the village of Komoka and the Highway 402 interchange. It has curves in its horizontal alignment immediately east and west of the intersection with Gideon Drive, with a desirable tangent section (approximately 140 metres in length) through the intersection, and it has a noticeable downgrade in the westbound direction in the vicinity of the intersection. It currently has auxiliary left-turn lanes in both the eastbound and westbound directions at the intersection, and an auxiliary right-turn lane in the westbound direction.

Kains Road is an urban two-lane roadway (one-lane per direction), with an assumed maximum speed limit of 50 km/h. The road provides a connection into the ongoing residential development occurring on the north side of Oxford Street. The road has a temporary raised “porkchop” island on its approach to the intersection, restricting outbound left-turn and through movements from Kains Road; it is expected this temporary island will be eliminated in conjunction with proposed intersection improvements.

A new multi-use path was recently constructed on the west side of Kains Road and terminates at Oxford Street. The Thames Valley Trail, which extends from Delaware to St. Mary’s, utilizes the gravel shoulder on the north side of Oxford Street to connect Komoka Provincial Park from the west to Westdel Bourne in the east. There are currently no other dedicated pedestrian or cyclist facilities, or transit service, in the vicinity of the intersection. The existing control at the intersection is two-way stop control (stop controlled in the north-south directions, free flow in the east-west directions).

Existing Traffic Volumes

Intersection turning movement count (TMC) data for 2021 was collected for the subject intersection, and is provided in **Appendix B**. The data was collected in March 2021 during the weekday a.m. and p.m. peak periods, with peak hours identified as being 7:30 a.m. to 8:30 a.m. and 4:00 p.m. to 5:00 p.m.

To reflect the anticipated volume-reducing impacts of Covid-19 restrictions on the intersection at the time of the traffic counts, the City has advised that a one-time 10% growth factor be applied to all movements to represent a pre-Covid condition. These volumes serve as the baseline for projecting out to the 2035 horizon year. The assumed 2021 traffic volumes during weekday a.m. and p.m. peak hours are shown in **Figure 1**.

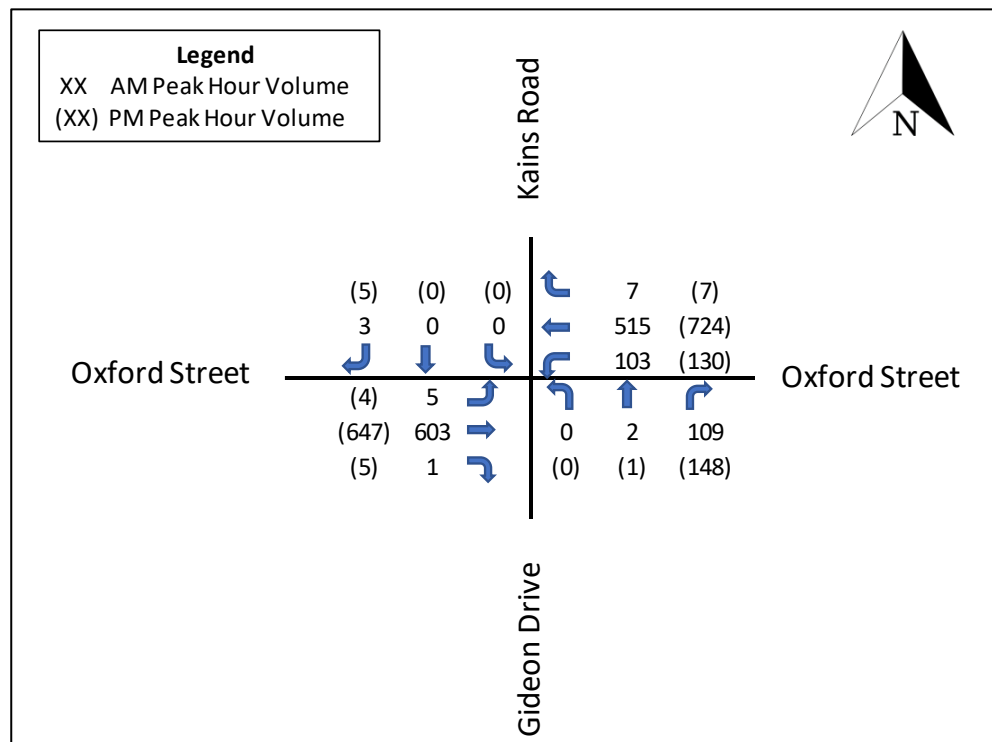


Figure 1: 2021 Existing Volumes

Safety Considerations

Correspondence with City staff has indicated that there were no reported collisions within the past 5-year period (2016-2020) at the intersection.

Oxford Street has two horizontal curves to the east and west of Gideon Drive, with a slight downgrade in the westbound direction. Per Transportation Association of Canada (TAC) geometric guidelines and assuming a 90 km/h design speed for Oxford Street, vehicles

turning left and right onto Oxford Street from Kains Road should have 190 metres and 165 metres, respectively, of unobstructed sightlines. As the current available sightlines are more than 200 metres, the recommended minimum sightline threshold per TAC are currently achieved. With the planned future urbanization and reduction in the maximum posted speed limit to 60 km/h, the recommended minimum sightline threshold per TAC will be reduced, resulting in improved conditions from a visibility and safety standpoint.

FUTURE CONDITIONS

Background Growth Rate

A 1% per annum growth rate has been recommended as a suitable growth rate by City Transportation Planning staff and has been applied to all movements at the intersection. This results in a 15% total growth over the 14-year horizon period, representing a reasonable level of annualized traffic growth for the intersection, and excludes traffic generated by background developments in the immediately vicinity of the intersection. The resulting 2035 corridor growth traffic volumes during weekday a.m. and p.m. peak hours are shown in **Figure 2**.

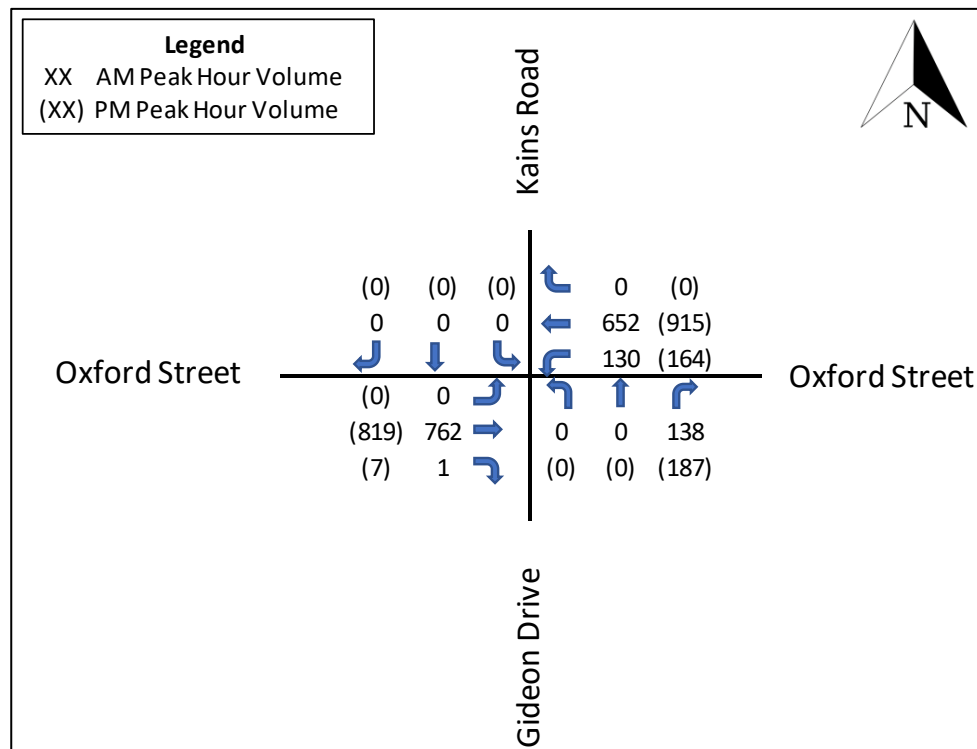


Figure 2: Corridor Growth

Background Development Traffic

The City provided RVA with the TIS Reports for the proposed Eagle Ridge development (October 2017) situated directly north of the intersection, and the Orange Rock (July 2018) development situated at the southeast corner of the intersection.

The Eagle Ridge subdivision is an ongoing development at the time of this study, with partial occupancy of residential homes at the time of the traffic count and therefore some traffic being generated by the site were captured in the 2021 intersection counts.

The Orange Rock development is currently in planning stages.

The assumed 2035 background development traffic volumes during weekday a.m. and p.m. peak hours are shown in **Figure 3**.

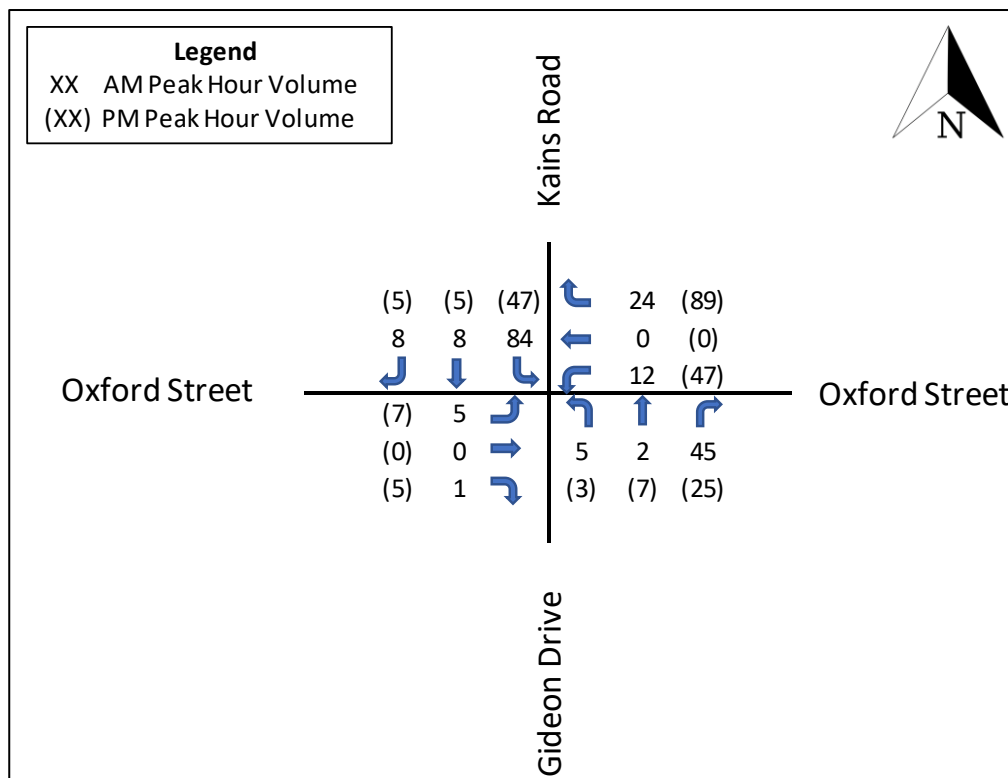


Figure 3: Background Development Traffic

Future Total Traffic

The projected 2035 future total volumes were estimated by combining the 2035 corridor growth volumes with the 2035 background development traffic volumes, which are shown in **Figure 4**.

The temporary raised island on Kains Road restricts outbound left-turn and through movements from Kains Road. This requires vehicles originating from Kains Road that are destined for either Gideon Drive or Oxford Street west of the subject intersection to divert eastwards towards Westdel Bourne, and subsequently turn onto Oxford Street and approach the subject intersection from the east. Under future conditions it is expected the temporary raised island will be removed, permitting full movements from Kains Road. Therefore the 2035 future background volumes include the redistribution of these volumes (identified from the Eagle Ridge TIS) from the east approach to the north approach.

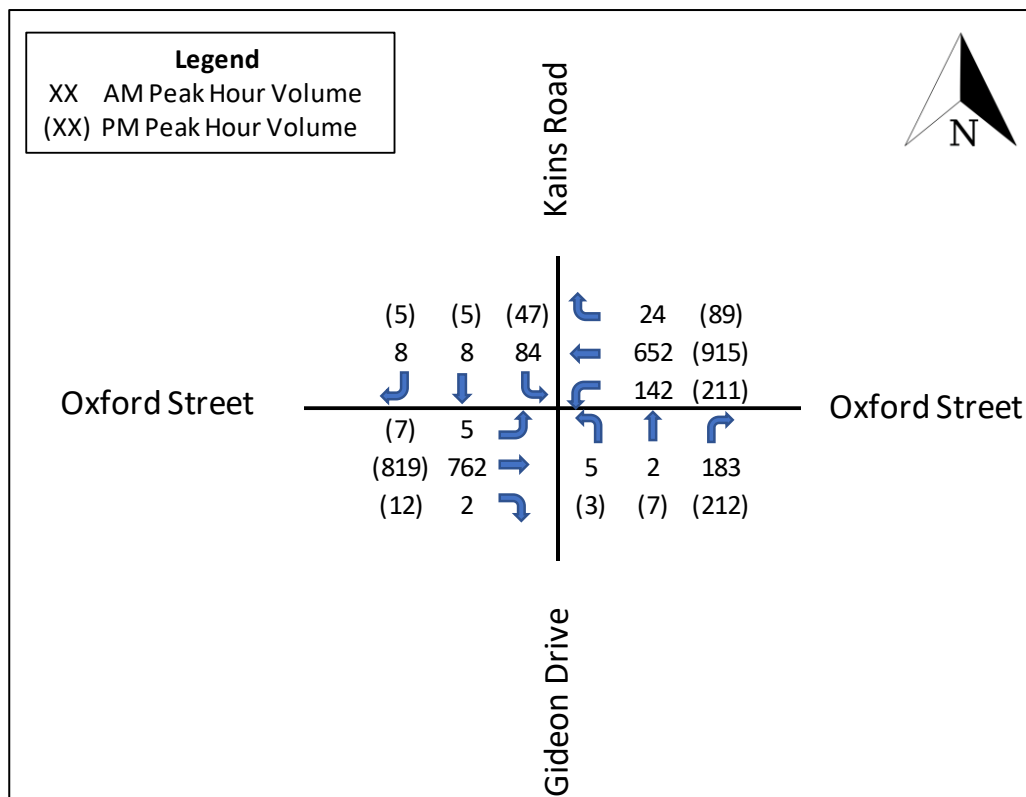


Figure 4: 2035 Traffic Volumes

Planned Transportation Network Improvements

The figures, maps, and site plans described herein are provided in **Appendix C** for reference.

The City's Transportation Master Plan (TMP), dated January 2013, was reviewed to determine if any infrastructure improvements are planned within the study area up to the TMP's 2030 horizon year. Exhibit ES-3 (2030 Baseline Road Network Improvements) indicates that Oxford Street is planned for widening to a 4-lane cross-section east of Westdel Bourne. A transition from 4-lanes to 2-lanes west of the intersection is assumed to be required.

The County's of Middlesex's 2015 Environmental Assessment (EA) for Glendon Drive recommends widening of Glendon Drive to a combination of three and four-lane cross-sections between Highway 402 and Old River Road. East of Old River Road the roadway is planned to transition back to its existing two-lane cross-section at which point the roadway transitions into Oxford Street West under the jurisdiction of the City of London.

The City's Cycling Master Plan (CMP), dated September 2016, was reviewed to determine if any cycling-related infrastructure improvements are planned within the study area up to the TMP's 2031 horizon year. Exhibit 1 (City-wide Map Proposed Cycling Network by Proposed Detailed Facility Types) indicates the following planned improvements:

- Buffered Paved Shoulder on Oxford Street West through the intersection;
- Paved Shoulder on Gideon Drive south of the intersection; and
- Multi-use Path on Kains Road north of the intersection. (recently constructed)

Sidewalk is also planned on both sides of Kains Road north of the intersection.

The preliminary site plan for the Orange Rock development also proposes pathway connections to Oxford Street.

INTERSECTION ANALYSIS

Traffic analysis was completed for the intersection to identify its operational performance and required mitigation measures to maintain an acceptable level of service, under existing conditions, under future 2035 conditions with the existing intersection configuration (a "Do Nothing" scenario), and under 2035 conditions with signalized and roundabout controls. The following sections describe the methodology and findings from the traffic analysis.

Unsignalized & Signalized Intersection Analysis

The intersection under two-way stop-controlled and signalized control was analyzed using the procedures of the Highway Capacity Manual (HCM), as implemented in the Synchro 11 traffic analysis software.

Key performance measures such as Level of Service (LOS), volume-to-capacity ratio (v/c ratio), and 95th percentile queuing was reported, and are defined below:

- **Average vehicle control delay** is used to characterize LOS for the entire intersection, an approach, or movement. Delay quantifies the variations in travel time and is also a surrogate measure of driver discomfort and fuel consumption.
- **V/c ratio** quantifies the degree to which the capacity of each movement is utilized.
- **50th percentile queue (average queue)** is the queue length which is expected to be exceeded 50% of the time and represents typical (average) operating conditions.
- **95th percentile queue** is the queue length which is expected to be exceeded only 5% of the time; although it does not represent typical operating conditions, it is common practice to identify preferred storage length requirements for auxiliary turn lanes at intersections based on estimated peak hour 95th percentile queueing.

Table 1 identifies the control delay thresholds (seconds of delay per vehicle) for each LOS based on Highway Capacity Manual (HCM) methodology.

Table 1: Characteristics of Level of Service at Intersections

LEVEL OF SERVICE (LOS)	CONTROL DELAY (seconds / vehicle)	
	SIGNALIZED INTERSECTION	UNSIGNALIZED INTERSECTION
A	≤ 10	≤ 10
B	> 10 to 20	> 10 to 15
C	> 20 to 35	> 15 to 25
D	> 35 to 55	> 25 to 35
E	> 55 to 80	> 35 to 50
F	> 80	> 50

Table 2 presents the capacity analysis results for the intersection of Oxford Street at Gideon Drive under the existing two-way stop control configuration with both existing (2021) and future (2035) traffic demands, as well under future signalized operation. The detailed output reports from the capacity analysis are provided in **Appendix D**.

Table 2: Synchro Analysis Results – Oxford Street at Gideon Drive

SCENARIO	LEG	MOVEMENT	WEEKDAY AM PEAK HOUR					WEEKDAY PM PEAK HOUR				
			V/C	LOS	DELAY	QUEUE		V/C	LOS	DELAY	QUEUE	
						50 TH %	95 TH %				50 TH %	95 TH %
2021 Unsignalized	EAST	LEFT	0.13	A	9 sec	9m	17m	0.18	B	10 sec	13m	24m
	WEST	LEFT	0.01	A	9 sec	<1 veh	<1 veh	0.01	A	10 sec	<1 veh	<1 veh
	SOUTH	LEFT	0.26	B	15 sec	<1 veh	<1 veh	0.43	C	20 sec	<1 veh	1 veh
		THROUGH										
2035 Unsignalized	EAST	LEFT	0.19	B	11 sec	13m	24m	0.31	B	12 sec	20m	34m
	WEST	LEFT	0.01	A	9 sec	<1 veh	<1 veh	0.01	B	11 sec	<1 veh	<1 veh
	NORTH	LEFT	>1	F	∞	51m	92m	>1	F	∞	61m	99m
		THROUGH										
		RIGHT										
	SOUTH	LEFT	0.52	C	24 sec	10m	47m	0.67	D	34 sec	18m	66m
		THROUGH										
2035 Signalized	EAST	LEFT	0.33	A	9 sec	20m	39m	0.46	A	8 sec	36m	80m
		THROUGH	0.54	A	4 sec	20m	38m	0.67	A	4 sec	24m	57m
		RIGHT	0.02	A	2 sec	<1 veh	<1 veh	0.08	A	2 sec	<1 veh	9m
	WEST	LEFT	0.01	A	5 sec	<1 veh	<1 veh	0.02	A	3 sec	<1 veh	<1 veh
		THROUGH	0.63	A	4 sec	26m	50m	0.61	A	6 sec	24m	52m
		RIGHT										
	NORTH	LEFT	0.37	B	19 sec	13m	25m	0.29	C	26 sec	9m	19m
		THROUGH										
		RIGHT										
	SOUTH	LEFT	0.02	B	18 sec	<1 veh	1 veh	0.05	C	24 sec	<1 veh	9m
		THROUGH										
		RIGHT	0.00	A	0 sec	<1 veh	18m	0.00	A	0 sec	<1 veh	10m

Existing Conditions

The intersection currently has reserve capacity, with delays for most movements not exceeding LOS “B” (10-15 seconds) and no critical queueing concerns, The p.m. peak hour is considered the critical peak hour, with the east approach reporting 95th percentile queueing up to 24 metres (3-4 vehicles) which can be accommodated in the existing storage

length, and the shared left/through lane on the south approach reporting delays of LOS “C” (15-25 seconds).

There are no operational concerns currently at the intersection that require mitigation measures (i.e., geometric improvements).

Future Conditions, Unsignalized

Under future conditions with the projected increase in traffic demands to 2035, the unsignalized intersection is expected to reach capacity. The north approach (Kains Road) is expected to have insufficient capacity to service traffic demands. Although the south approach (Gideon Drive) is expected to have reserve capacity (v/c ratio reaching 0.67 during the p.m. peak hour), delays for the shared left/through lane is expected to increase to LOS “D” (25-35 seconds) with 95th percentile queueing reaching 66 metres (9-10 vehicles).

With the increased growth in peak hour traffic volumes on the Oxford Street approaches and with only one through-lane per direction, gaps in the east-west flow will be reduced and result in increased delays for side-street traffic entering the intersection. A sensitivity analysis has confirmed that modifications to the lane arrangement for the side-street approaches (i.e., introduction of an auxiliary left-turn lane on the north and south legs) does not resolve the issue.

With the Oxford Street approaches remaining under free flow operations, there are no operational concerns expected for east-west moving traffic.

Future Conditions, Signalized

To better service the side-street traffic demand, signalization of the intersection has been considered.

An MTO Signal Warrant was completed utilizing the projected 2035 intersection volumes, which found signalization not being warranted due to insufficient side-street traffic volumes. The average hourly volume for the minor approaches (Gideon Drive and Kains Road) would have to increase by approximately 50% from the 2035 projections to reach the threshold required to warrant a signal. The completed signal warrant sheet is provided in **Appendix E**.

Despite signalization not being warranted per the MTO Signal Warrant methodology, traffic analysis was nonetheless completed for the intersection under signal operations to determine if signalization would mitigate the projected operational concerns. Signalizing

the intersection under future conditions would likely be implemented with a semi-actuated operation, meaning the signal will rest in green phase for the east-west approaches (not actuated) and the north-south approaches would receive a green phase only when vehicle demand is detected using detectors (actuated). The capacity analysis assumed a cycle length of 90 seconds for the weekday a.m. and p.m. peak hours. Clearance intervals (i.e., amber time, all-red time), among other signal timing parameters, were selected or calculated based on Ontario Traffic Manual (OTM) Book 12 methodology.

A sensitivity analysis determined that although left-turn phasing for the east-west approaches would yield some reduction in queueing, it would also result in a noticeable increase in queuing and delay for the opposing through movement. For example, introducing a left-turn phase for the westbound left-turn movement during the p.m. peak hour reduces the 95th percentile queue from 80 metres to 36 metres, however the opposing eastbound through movement increases from 52 metres to 127 metres and delays increase from 3 seconds (LOS "A") to 60 seconds (LOS "C").

Under signal operation, delays are expected to improve for the side-street approaches, as expected, with delays at LOS "C" (20 to 35 seconds) or better, and the 95th percentile queueing for the side-street approaches have reduced to less than 25 metres (3-4 vehicles).

Although signalization has improved the intersection's ability to service side-street traffic demands, it has resulted in the Oxford Street approaches experiencing increased queueing associated with the signal control. Although delays remain low for the Oxford Street approaches at LOS "A" (less than 10 seconds), the 95th percentile queue for the left-turn on the east approach has increased to 80 metres (11-12 vehicles), and through movements for the east and west approaches report 95th percentile queues of approximately 50-60 metres (7-9 vehicles). Average queueing (50th percentile) for the east and west through movements are approximately 25 metres (3-4 vehicles), representing anticipated typical operating conditions.

Roundabout Analysis

Roundabout analysis was conducted utilizing PTV Vissim microscopic traffic simulation analysis software for detailed roundabout analysis and simulation of the proposed roundabout concepts. Key performance measures from the HCM methodology are like those reported for the Synchro analysis.

The following three roundabout scenarios were analyzed:

- **Standard Roundabout:** single lane roundabout (single internal circulatory lane, with single entering and exiting lanes for each approach);
- **Turbo Roundabout:** like the standard roundabout, but with the introduction of an auxiliary left-turn lane for the east approach that extends into the roundabout as an additional circulatory lane for a portion of the roundabout; and
- **Widened (Westbound Only) Roundabout:** like the standard roundabout, but with road widening (2 to 4 lanes) on Oxford Street east of the intersection, resulting in two general purpose lanes in the westbound direction through the roundabout that merge into a single westbound lane west of the intersection.

Table 3 presents the capacity analysis results for the roundabout configurations at the intersection of Oxford Street at Gideon Drive. The Vissim output reports for the roundabout analysis are provided in **Appendix F**.

Table 3: Vissim Analysis Results – Oxford Street at Gideon Drive

SCENARIO	LEG	MOVEMENT	WEEKDAY AM PEAK HOUR				WEEKDAY PM PEAK HOUR			
			LOS	DELAY	QUEUE		LOS	DELAY	QUEUE	
					50 TH %	95 TH %			50 TH %	95 TH %
Standard Roundabout	EAST	LEFT	A	3 sec	28m	38m	A	9 sec	106m	153m
		THROUGH	A	3 sec			A	10 sec		
		RIGHT	A	3 sec			A	9 sec		
	WEST	LEFT	A	5 sec	45m	57m	A	9 sec	67m	92m
		THROUGH	A	5 sec			A	9 sec		
		RIGHT	A	4 sec			A	10 sec		
	NORTH	LEFT	A	9 sec	11m	13m	D	31 sec	11m	15m
		THROUGH	A	10 sec			D	29 sec		
		RIGHT	A	7 sec			D	29 sec		
	SOUTH	LEFT	C	18 sec	23m	27m	B	13 sec	27m	33m
		THROUGH	B	11 sec			C	19 sec		
		RIGHT	B	13 sec			C	16 sec		
Turbo Roundabout	EAST	LEFT	A	1 sec	<1 veh	<1 veh	A	2 sec	<1 veh	<1 veh
		THROUGH	A	1 sec	<1 veh	10m	A	3 sec	13m	28m
		RIGHT	A	1 sec			A	2 sec		

SCENARIO	LEG	MOVEMENT	WEEKDAY AM PEAK HOUR				WEEKDAY PM PEAK HOUR			
			LOS	DELAY	QUEUE		LOS	DELAY	QUEUE	
					50 TH %	95 TH %			50 TH %	95 TH %
	WEST	LEFT	A	2 sec	38m	47m	A	5 sec	50m	61m
		THROUGH	A	4 sec			A	6 sec		
		RIGHT	A	3 sec			A	6 sec		
	NORTH	LEFT	A	10 sec	<1 veh	8m	C	17 sec	<1 veh	<1 veh
		THROUGH	A	9 sec			C	23 sec		
		RIGHT	A	4 sec			A	7 sec		
	SOUTH	LEFT	C	17 sec	20m	24m	B	11 sec	23m	29m
		THROUGH	A	10 sec			B	15 sec		
		RIGHT	B	11 sec			B	13 sec		
Widened Roundabout (Two Westbound Lanes)	EAST	LEFT	A	1 sec	<1 veh	<1 veh	A	2 sec	<1 veh	10m
		THROUGH	A	1 sec			A	1 sec		
		RIGHT	A	1 sec			A	2 sec		
	WEST	LEFT	A	4 sec	40m	51m	A	9 sec	60m	67m
		THROUGH	A	5 sec			A	7 sec		
		RIGHT	A	4 sec			A	7 sec		
	NORTH	LEFT	A	6 sec	<1 veh	<1 veh	B	11 sec	<1 veh	<1 veh
		THROUGH	A	5 sec			B	11 sec		
		RIGHT	A	4 sec			A	4 sec		
	SOUTH	LEFT	C	17 sec	21m	25m	C	17 sec	25m	33m
		THROUGH	C	19 sec			B	12 sec		
		RIGHT	B	12 sec			B	15 sec		

Standard Roundabout

The standard roundabout configuration is expected to result in delays of LOS “A” (less than 10 second) for the east and west approaches, but the reported 95th percentile queueing is notable at 153 metres and 92 metres, respectively, during the p.m. peak hour. Long queues can result in increased read-end collisions, as well as safety concerns with respect to pedestrians and cyclists crossing within the queues.

The north and south approaches are reporting delays reaching LOS “D” (25-35 seconds) and LOS “C” (15-25 seconds), respectively, with 95th percentile queueing reaching 15 metres and 33 metres respectively.

Like the signalized control, the introduction of a standard single-lane roundabout is expected to result in the Oxford Street approaches experiencing increased queueing associated with the new intersection control, whereas under the current intersection configuration the east-west approaches remain under free flow operation.

Based on the queueing results and the projected traffic demands for the east approach (over 1,200 vehicles during the p.m. peak hour in a single approach lane), it is expected a standard single lane roundabout will have insufficient capacity to accommodate projected demands.

Turbo Roundabout

To provide additional capacity for the east approach (the critical movement) a Turbo roundabout configuration was developed which introduces an auxiliary left-turn lane for the east approach.

The results of the operational analysis indicate a notable improvement in operations for the east approach, with a significant reduction in the 95th percentile queue from 153 metres down to 28 metres, as well as reduction in delay from 10 seconds to 3 seconds. Operations also improve for the west approach, with 95th percentile queues reducing from 92 metres down to 61 metres, and delays reduced from 9 seconds to 5 seconds.

Providing two lanes for the westbound approach also results in reductions in queueing and delays for the north approach given improved gaps in the circulating traffic. The south approach exhibits only a minor reduction in delays and queueing.

Widened Roundabout (Two Westbound Lanes)

Given the heavy traffic demands projected for the east approach, and with Oxford Street planned for widening to a 4-lane cross-section east of Westdel Bourne (approximately 480 metres east of the roundabout), the City has requested an additional scenario be analyzed that reflects an extension of the widening westerly to the roundabout. This would result in two general purpose lanes in the westbound direction through the roundabout that merge into a single westbound lane west of the intersection.

The results of the analysis indicate a further improvement in operations for the east approach, with the 95th percentile queueing reducing from 28 metres under the Turbo configuration to only 10 metres under the widened configuration. Operations for the remaining movements remain generally consistent with nominal changes in delay and queueing.

SAFETY CONSIDERATIONS

It has become common industry knowledge that the prevailing research generally finds roundabouts to result in an overall reduction of collisions compared to signalized control. As shown in **Table 4**, several studies referenced in the *Crash Modification Factors (CMF) Clearinghouse* found that conversion of a signalized intersection to a roundabout resulted in a decrease in overall collisions or injury-related collisions, represented by CMFs less than 1.0. However, studies have found that with respect to “property damage only” (PDO) collisions specifically, there can be an increase in reported collisions with conversion to a roundabout, represented by CMFs greater than 1.0.

Table 4: Crash Modification Factors - Signal to Roundabout Conversion

CMF ID	CMF	REFERENCE STUDY
All collision severities		
224	0.33	Rodegerdts et al., 2007. NCHRP Report 572: Applying Roundabouts in the United States.
4186	0.58	Gross et al., 2012. Safety Effectiveness of Converting Signalized Intersections to Roundabouts.
4258	0.576	Srinivasan et al., Evaluation of Safety Strategies at Signalized Intersections.
Property damage collisions only		
9887	3.333	Zhao et al., 2018. Whether Conversion and Weather Matter to Roundabout Safety.
6163	1.132	Hu et al., 2014. Public Opinion, Traffic Performance, The Environment, and Safety After the Construction of Double-Lane Roundabouts.
Injury collisions only		
223	0.40	Rodegerdts et al., 2007. NCHRP Report 572: Applying Roundabouts in the United States.
4195	0.29	Gross et al., 2012. Safety Effectiveness of Converting Signalized Intersections to Roundabouts.
4935	0.348	Qin et al., 2013. Evaluation of Roundabout Safety

ACTIVE TRANSPORTATION ACCOMMODATION

The proposed roundabout concepts include the following key active transportation considerations:

- Proposed multi-use path around the perimeter of the roundabout (shared by pedestrians and cyclists), with designated crosswalks on all four approaches (cyclists required to dismount at roundabout crossings);
- The City’s planned buffered paved shoulder on Oxford Street West and planned paved shoulder on Gideon Drive would transition to an off-road paved bike path in

approach to the roundabout, via a ramp, and connect to the proposed multi-use path system around the roundabout; and

- The City's planned multi-use path approaching the intersection from the northwest of the intersection would connect to the proposed multi-use path system around the roundabout.

CONCLUSIONS

Summary of Findings

The findings of this study are summarized as follows:

- Under future conditions with the projected 2035 traffic demands, gap availability for side street movements in the east-west traffic will be significantly reduced and will result in excessive delays and queueing for side street traffic (Kains Road and Gideon Drive), which could result in increased driver frustration, unsafe turning movements, and potentially an increase in angle and crossing collisions.
- Signalizing the intersection improves the intersection's ability to service side-street traffic demands given the heavy demands on the major approaches, however the traffic control is expected to result in notable queueing on Oxford Street.
- A Turbo roundabout configuration, which provides an auxiliary left-turn lane for the east approach to provide additional capacity, is expected to result in a notable improvement with reduced levels of queueing.
- Extending the planned widening of Oxford Street to a 4-lane cross-section from Westdel Bourne to the roundabout, with two general purpose lanes in the westbound direction traversing through the roundabout before merging into a single lane west of the roundabout, will result in a further reduction in queueing for the east approach alone.

Recommendations

Based on the findings of this study, it is recommended at a minimum the intersection should be re-configured to a Turbo Roundabout to service projected peak hour traffic demands adequately, especially heavy demands from the east approach.

Extending the planned widening of Oxford Street from Westdel Bourne to the roundabout (an approximate 480 metre distance) would provide further capacity to the roundabout, if implemented.

It is recommended lands be protected for a potential future right-turn channelization (bypass lane) from the south approach to the east approach, in the vicinity of the existing bypass currently provided in the southeast quadrant of the intersection. If the City chooses to extend the planned road widening from Westdel Bourne to the roundabout, it is expected the introduction of the right-turn channelization would be a desirable improvement in conjunction with the widening, as the right-turn channel would transition directly into the new additional curbside lane on Oxford Drive in the eastbound direction. Alternatively, the City may consider extending the full widening through the roundabout to just west of the roundabout, providing two-through lanes in both directions through the roundabout, resulting in even further roundabout capacity for future growth and a more common roundabout configuration (compared to the Turbo configuration).

It is recommended that active transportation facilities be provided in accordance with the City's Cycling Master Plan with consideration for connections to the Thames Valley Parkway along Kains Road, the Thames Valley Trail and proposed new developments. Active transportation crossings of the roundabout should have a sufficient refuge area between opposing traffic movements.

Closing.

Thank you for providing us with the opportunity to undertake this study. If there is any query related to this memorandum, please feel free to contact Adam Mildenberger at 905-818-2542 or by email at AMildenberger@rvanderson.com.

Yours very truly,

R.V. ANDERSON ASSOCIATES LIMITED

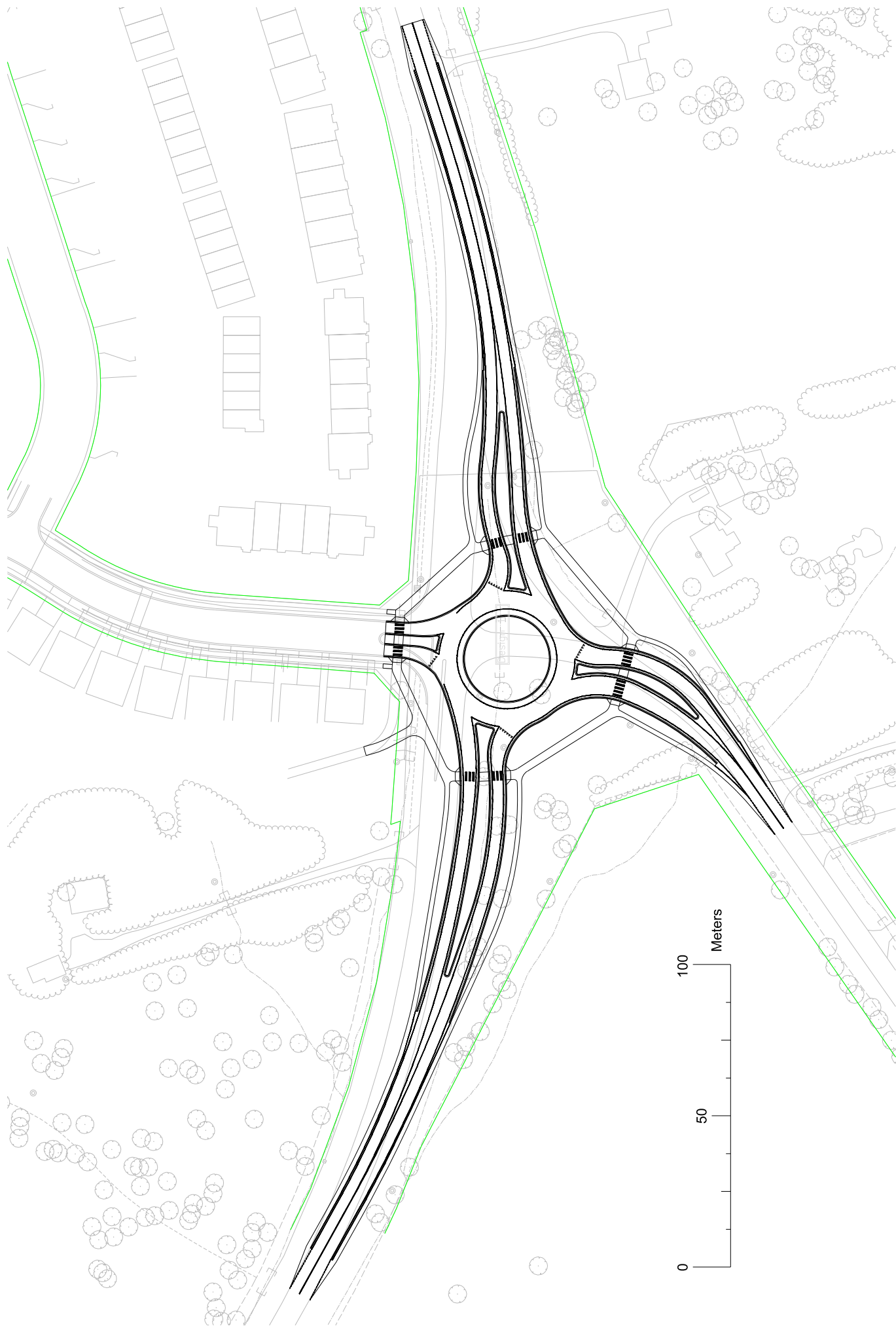


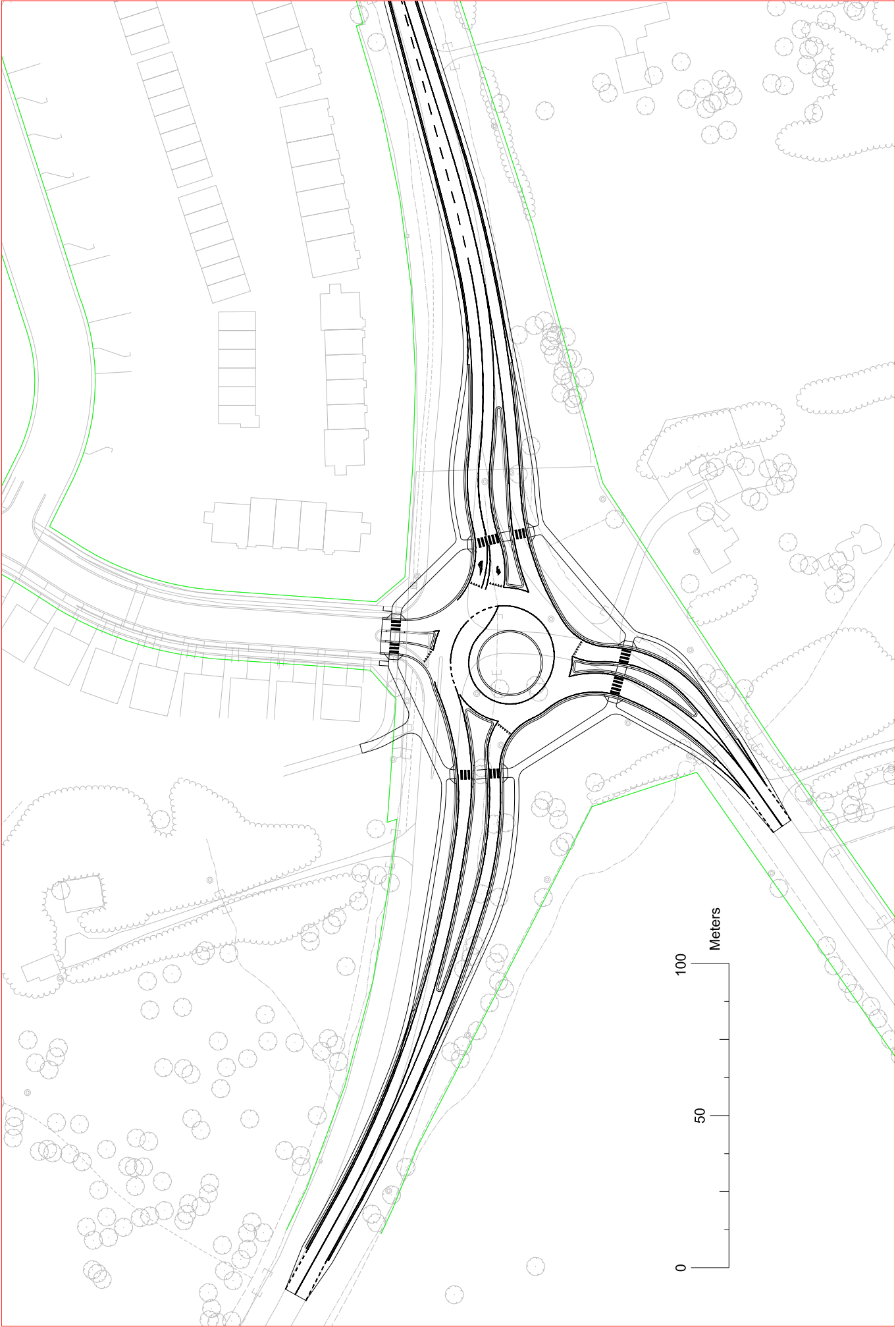
Adam Mildenberger, B.A., C.E.T.
Transportation Planner

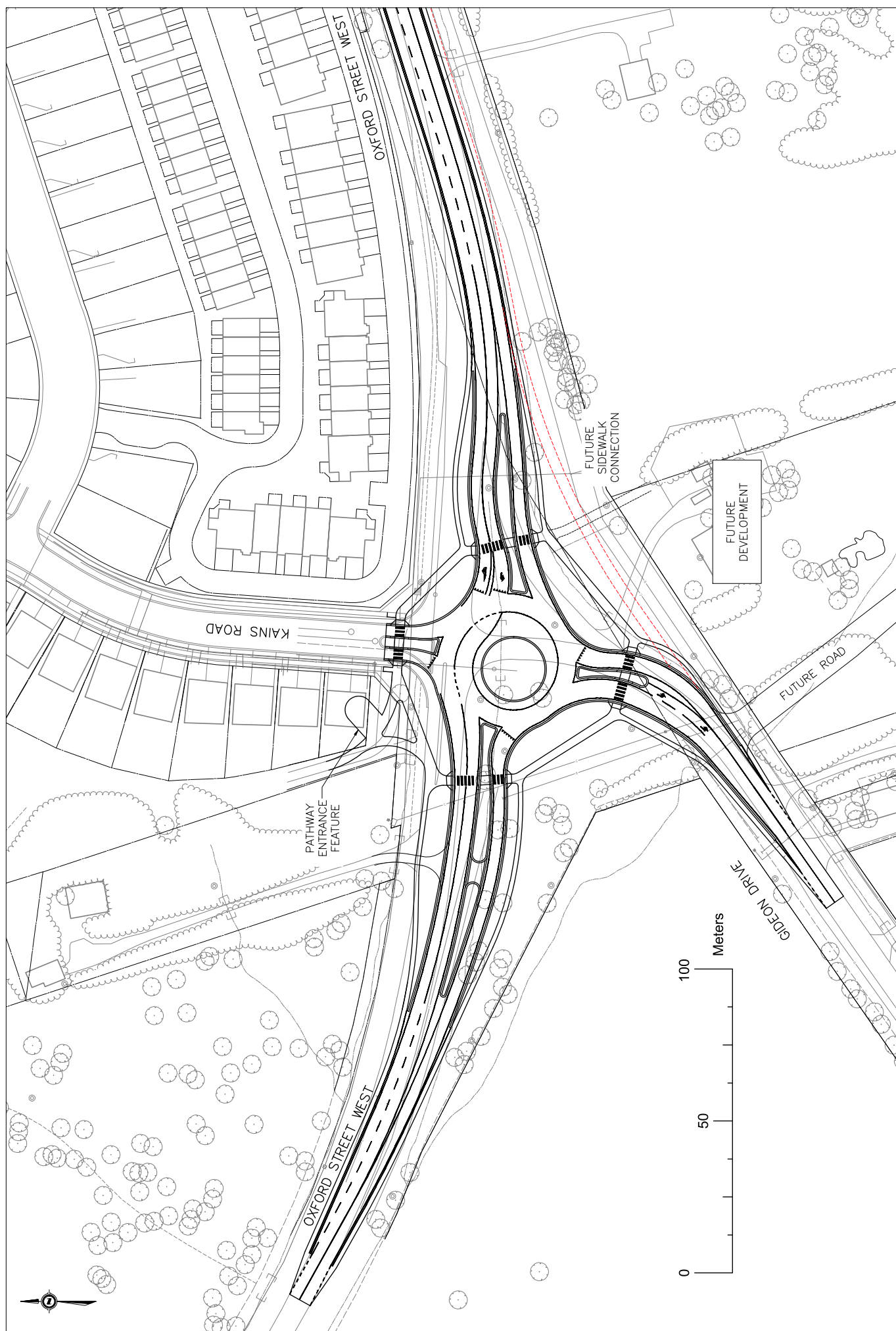
Henry Huotari, P.Eng.
Project Manager

APPENDIX A

CONCEPT PLANS







APPENDIX B

TURNING MOVEMENT COUNTS

Oxford St W @ Gideon Dr

Morning Peak Diagram

Specified Period

From: 6:45:00

To: 9:45:00

One Hour Peak

From: 7:30:00

To: 8:30:00

Municipality: London

Site #: 0000000001

Intersection: Oxford St W & Gideon Dr

TFR File #: 1

Count date: 9-Mar-2021

Weather conditions:

Clear/Dry

Person(s) who counted:

Cam

**** Non-Signalized Intersection ****

Major Road: Oxford St W runs W/E

North Leg Total: 17

North Entering: 3

North Peds: 0

Peds Cross: $\times$

Heavys	0	0	0	0
Trucks	0	0	0	0
Cars	3	0	0	3
Totals	3	0	0	0



Heavys	0
Trucks	3
Cars	11
Totals	14

East Leg Total: 1337

East Entering: 625

East Peds: 0

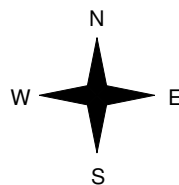
Peds Cross: $\times$

Heavys	Trucks	Cars	Totals
4	11	503	518



Oxford St W

Heavys	Trucks	Cars	Totals
0	1	4	5
2	10	591	603
0	0	1	1
2	11	596	



Gideon Dr

Cars	Trucks	Heavys	Totals
5	2	0	7
500	11	4	515
98	3	2	103
603	16	6	

Oxford St W



Cars	Trucks	Heavys	Totals
697	10	5	712

Peds Cross: $\times$

West Peds: 0

West Entering: 609

West Leg Total: 1127

Cars	99	Cars	0	2	106	108
Trucks	3	Trucks	0	0	0	0
Heavys	2	Heavys	0	0	3	3
Totals	104	Totals	0	2	109	



Peds Cross: $\times$

South Peds: 0

South Entering: 111

South Leg Total: 215

Comments

Oxford St W @ Gideon Dr

Mid-day Peak Diagram

Specified Period

From: 12:00:00

To: 14:00:00

One Hour Peak

From: 13:00:00

To: 14:00:00

Municipality: London

Site #: 0000000001

Intersection: Oxford St W & Gideon Dr

TFR File #: 1

Count date: 9-Mar-2021

Weather conditions:

Clear/Dry

Person(s) who counted:

Cam

**** Non-Signalized Intersection ****

Major Road: Oxford St W runs W/E

North Leg Total: 20

North Entering: 7

North Peds: 0

Peds Cross: $\times$

Heavys	0	0	0	0
Trucks	1	0	0	1
Cars	4	1	1	6
Totals	5	1	1	



Heavys 0

Trucks 1

Cars 12

Totals 13

East Leg Total: 1187

East Entering: 613

East Peds: 0

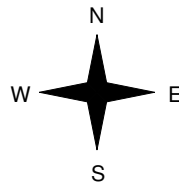
Peds Cross: $\times$

Heavys	Trucks	Cars	Totals
0	14	510	524



Oxford St W

Heavys	Trucks	Cars	Totals
0	1	3	4
2	13	458	473
0	0	5	5
2	14	466	



Gideon Dr

Cars	Trucks	Heavys	Totals
7	0	0	7
503	12	0	515
86	5	0	91
596	17	0	

Oxford St W



Cars	Trucks	Heavys	Totals
554	18	2	574

Peds Cross: $\times$

West Peds: 0

West Entering: 482

West Leg Total: 1006

Cars	92	Cars	3	2	95	100
Trucks	5	Trucks	1	0	5	6
Heavys	0	Heavys	0	0	0	0
Totals	97	Totals	4	2	100	



Peds Cross: $\times$

South Peds: 0

South Entering: 106

South Leg Total: 203

Comments

Oxford St W @ Gideon Dr

Afternoon Peak Diagram

Specified Period

From: 15:30:00

To: 18:30:00

One Hour Peak

From: 16:00:00

To: 17:00:00

Municipality: London

Site #: 0000000001

Intersection: Oxford St W & Gideon Dr

TFR File #: 1

Count date: 9-Mar-2021

Weather conditions:

Clear/Dry

Person(s) who counted:

Cam

** Non-Signalized Intersection **

Major Road: Oxford St W runs W/E

North Leg Total: 18

North Entering: 6

North Peds: 0

Peds Cross: $\times$

Heavys	0	0	0	0
Trucks	0	0	0	0
Cars	5	0	1	6
Totals	5	0	1	



Heavys 0

Trucks 1

Cars 11

Totals 12

East Leg Total: 1657

East Entering: 861

East Peds: 0

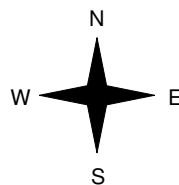
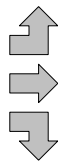
Peds Cross: $\times$

Heavys	Trucks	Cars	Totals
5	8	716	729



Oxford St W

Heavys	Trucks	Cars	Totals
0	0	4	4
2	5	640	647
0	0	5	5
2	5	649	



Gideon Dr

Cars	Trucks	Heavys	Totals
6	1	0	7
711	8	5	724
127	1	2	130
844	10	7	

Oxford St W



Cars	Trucks	Heavys	Totals
788	5	3	796

Peds Cross: $\times$

West Peds: 0

West Entering: 656

West Leg Total: 1385

Cars	132
Trucks	1
Heavys	2
Totals	135



Cars	0	1	147	148
Trucks	0	0	0	0
Heavys	0	0	1	1
Totals	0	1	148	

Peds Cross: $\times$

South Peds: 0

South Entering: 149

South Leg Total: 284

Comments

Oxford St W @ Gideon Dr

Total Count Diagram

Municipality: London
Site #: 0000000001
Intersection: Oxford St W & Gideon Dr
TFR File #: 1
Count date: 9-Mar-2021

Weather conditions:
 Clear/Dry
Person(s) who counted:
 Cam

**** Non-Signalized Intersection ****

Major Road: Oxford St W runs W/E

North Leg Total: 123
 North Entering: 41
 North Peds: 0
 Peds Cross: $\nlessgtr$

	Heavys	Trucks	Cars	Totals
North	0	0	0	0
East	4	1	0	5
South	29	5	2	36
Totals	33	6	2	



	Heavys	Trucks	Cars	Totals
North	0	11	71	82

East Leg Total: 9957
 East Entering: 4882
 East Peds: 0
 Peds Cross: $\nlessgtr$

Heavys	Trucks	Cars	Totals
21	83	4025	4129

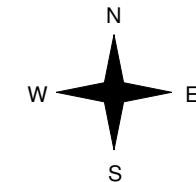
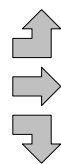


Gideon Dr



Oxford St W

Heavys	Trucks	Cars	Totals
0	4	23	27
15	77	4116	4208
0	1	27	28
15	82	4166	



Cars	Trucks	Heavys	Totals
40	6	0	46
3990	78	21	4089
722	21	4	747
4752	105	25	



Oxford St W



Cars	Trucks	Heavys	Totals
4958	95	22	5075

Peds Cross: $\nlessgtr$
 West Peds: 0
 West Entering: 4263
 West Leg Total: 8392

	Cars	Trucks	Heavys	Totals
West	754	23	4	781



	Cars	Trucks	Heavys	Totals
West	6	1	0	7
East	8	1	0	9
South	840	18	7	865
Totals	7	9		

Peds Cross: $\nlessgtr$
 South Peds: 0
 South Entering: 881
 South Leg Total: 1662

Comments

APPENDIX C

**RELEVANT TRANSPORTATION
EXCERPTS**

GLENDON DRIVE STREETSCAPE SCHEDULE C MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT

Cost and Implementation Timeframe
August 3, 2018

Figure 14.16 Old River Road and Pulham Road (19-24)

15.0 COST AND IMPLEMENTATION TIMEFRAME

The Recommended Strategy proposes improvements that will benefit Middlesex County and the Municipality of Middlesex Centre by providing a more versatile traffic network and promoting active transportation within the community.

The implementation of the improvements is dependent on both the background traffic growth and the rate of development improvements. The implementation timeline below is primarily based on the forecasted traffic volumes in the area. As development progresses, servicing needs may drive some of these improvements to avoid duplicate reconstruction costs.

The primary focus of the improvement phasing is to follow a timeline that alleviate congestions when required and prioritize the needed safety improvements.

The Recommended Strategy involves a number of interconnected projects. Table 15.1 provides an outline of the recommended improvements, scope, implementation timeframe, and opinion of probable cost.

Table 15.1 Cost and Implementation Timing

Improvement	Scope	Implementation Timeframe	Cost (excludes contingency & engineering)
Highway 402 easterly to west of Komoka Road	Three lane reconstruction and widening, rural cross section with enhanced ditches. Provision for future watermain and sanitary sewer(s).	10 – 15 years for road works; servicing timing to meet development needs long term.	\$8,700,000
Komoka Rd intersection improvements	Reconstruction of the intersection with a two lane entry roundabout with pedestrian and cyclist connections. Landscape of the centre island.	5 – 10 years and be implemented with the road works. Depending on the final rate of development in the area, the roundabout could be implemented as a single lane with the corridor expansion and use of parking lanes. Once volumes warrant the conversion of the	\$1,400,000



**GLENDON DRIVE STREETSCAPE
SCHEDULE C MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT**

Cost and Implementation Timeframe
August 3, 2018

Improvement	Scope	Implementation Timeframe	Cost (excludes contingency & engineering)
		parking lanes to travel lanes during peak time, the roundabout can be expanded to the ultimate two lane entry.	
East of Komoka Rd easterly to Jefferies Rd	Four lane reconstruction and widening with an urban cross section, storm sewers, illumination and utility relocations. Implementation of water and sanitary services (as needs warrant). Multi-use pathways on both sides of the corridor and signalized control at the intersections of Tunks Lane, Future Street 'A' and Springfield Way. Localized landscape features and street furniture.	5 – 10 years for road works; servicing to be implemented with road widening to minimize road reconstruction costs. Interim servicing may be required due to progression of localized development. The corridor can be widened to provide parking lanes in the interim, then converted over to travel lanes as volumes warrant.	\$13,000,000
Jefferies Rd / Vanneck Rd / Coldstream Rd intersection improvements	Reconstruction of the intersection with a two lane entry roundabout with pedestrian and cyclist connections. Landscape of the centre island. Design of the roundabout would incorporate the realignment of Coldstream Road and connection to Springfield Way.	0 – 5 years to improve safety of the intersection as a phased in single lane roundabout and Coldstream Road realignment. Two lane entry roundabout to be implemented in 5 – 10 year timeframe as adjacent sections are developed to four lanes.	\$2,750,000
Jefferies Rd easterly to Kilworth Park Dr	Four lane reconstruction with semi-urban cross section, with curb and gutter on the south and rural shoulders on the westbound and eastbound lanes. Storm sewers and centerline culverts implemented as required for road drainage. Multi-use	5 – 10 years for road works; active transportation within corridor could potentially be implemented in advance of road reconstruction by reconfiguring the ditch on the south side and	\$2,250,000



**GLENDON DRIVE STREETSCAPE
SCHEDULE C MUNICIPAL CLASS ENVIRONMENTAL ASSESSMENT**

Cost and Implementation Timeframe
August 3, 2018

Improvement	Scope	Implementation Timeframe	Cost (excludes contingency & engineering)
	pathway implemented on south side of corridor, along with illumination and utility relocations. Traffic signals at Kilworth Park Drive. South boulevard to include localized landscape features.	implementing the multi-use pathway between the utility lines and the right-of-way.	
Kilworth Park Dr easterly to Thames River bridge	Three lane reconstruction and widening, rural cross section with ditches.	0 – 5 years with the implementation of the improvements to the road platform for the Old River Road intersection being phased first.	\$1,050,000
Old River Road intersection improvements	Reconstruction and relocation of the intersection westerly to improve safety. Widening the Glendon Drive platform to accommodate a new left turn lane and runout with shoulders. Partial intersection illumination to be included.	0 – 5 years with a priority to relocate the intersection westerly in order to implement the left turn lane on Glendon Drive and improve the safety.	\$350,000
Old River Road Corridor	Implement 2011 Class EA recommendations to reconstruct with a partial road relocation and bank stabilization. Reconstruct the intersection of Old River Road and Pulham Road to prevent access across the CN tracks through the use of a security barrier. Pullham Road to have cul de sac south of residence north of track crossing (MN 20636) to maintain full access to Vanneck Road. Establish section of Pulham Road as new service road.	0 – 5 years in conjunction with the implementation of the Old River Road and Glendon Drive relocation and left turn lane reconstruction.	\$2,100,000
Corridor Subtotal			\$31,600,000.00



City of London Cycling Master Plan Update

Final September 2016

Map

EX-1

**City-wide Map
Proposed Cycling Network by
Proposed Detailed Facility Types**

Legend

Existing Cycling Routes

- Multi-Use Pathway
- In-Boulevard Facility
- Bike Lane
- Signed Bike Route with Sharrow
- Signed Bike Route

Proposed Facility Types

- Multi-Use Pathway
- In-Boulevard Facility
- Cycle Track
- Buffered Bike Lane
- Bike Lane
- Buffered Paved Shoulder
- Paved Shoulder
- Signed Route with Edgeline
- Signed Bike Route with Sharrow
- Signed Bike Route
- Desired Connection¹

Key Destinations

- Community Destination
- Potential Rapid Transit Station
- Hospital
- Public Library
- School
- Sport Facility
- Transit Hub
- Potential Transit Village

Other

- Road Network
- Railway
- Potential Future Rapid Transit Route²
- Future Development Lands
- Connection to Surrounding Municipality³
- Environmentally Significant Area
- Future / On-going / Completed Environmental Assessments (Sturdy Area)⁴
- Park
- Conservation Authority Land
- Provincial Park
- Watercourse

**LONDON
BIKES**

MVM GROUP

0 1 2 4 Kilometres



Notes:

1. Desired connections include suggested routes that are found on lands not under the City's jurisdiction at this time, and owned by private land owners, or future development areas.
2. Based on Shift's recommended corridors for potential future rapid transit routes. Preliminary design has not been completed and is subject to further assessment once Shift Rapid Transit impacts are known.
3. Portions of the cycling network drawn outside of the city boundary are for illustrative purposes only, to indicate connectivity to surrounding municipalities. As such the length and cost to construct these portions are not included in any calculations or summaries contained in the report.
4. Based on the City of London's Environmental Assessments (<https://www.london.ca/residents/Environment/EAs/Pages/default.aspx>) and staff input.



OXFORD STREET WEST

GIDEON DRIVE

BLOCK 44
MEDIUM DENSITY
2.387 ha

FUTURE DEVELOPMENT
2.390 ha

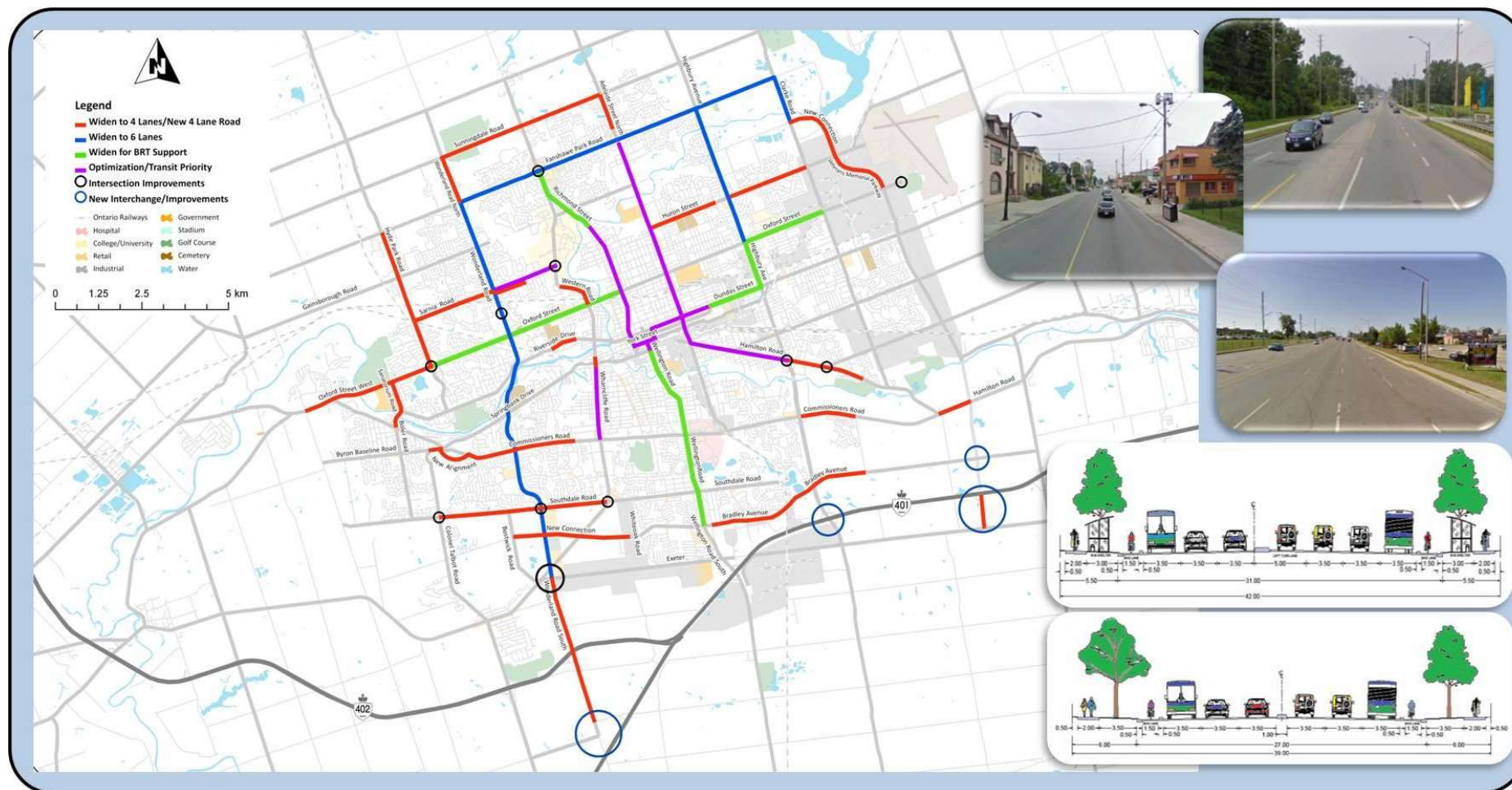
STREET B

STREET A

APPROXIMATE LIMIT OF URBAN
GROWTH BOUNDARY

Conceptual design for discussion purposes only
This is a compiled plan and should not be considered
a plan of survey

Exhibit ES-3. 2030 Baseline Road Network Improvements



More Strategic Program of Road Network Improvements

APPENDIX D

HCM REPORTS

Intersection: 3: Gideon Drive/Kains Road & Oxford Street West

Movement	EB	EB	WB	WB	NB
Directions Served	L	TR	L	T	TR
Maximum Queue (m)	3.4	2.4	20.3	0.7	10.5
Average Queue (m)	0.2	0.1	9.1	0.0	1.0
95th Queue (m)	2.2	1.9	17.2	0.7	5.7
Link Distance (m)		107.1		147.1	103.6
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (m)	60.0		90.0		
Storage Blk Time (%)					
Queuing Penalty (veh)					

Network Summary

Network wide Queuing Penalty: 0

HCM 2010 TWSC
3: Gideon Drive/Kains Road & Oxford Street West

2021 Existing AM
Oxford Street at Gideon Drive Intersection Design

Intersection												
Int Delay, s/veh	2.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	567	1	113	567	7	0	2	120	0	0	3
Future Vol, veh/h	5	567	1	113	567	7	0	2	120	0	0	3
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	Yield	-	-	Yield
Storage Length	600	-	-	900	-	600	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	-	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	610	1	122	610	8	0	2	129	0	0	3
Major/Minor	Major1			Major2			Minor1					
Conflicting Flow All	618	0	0	611	0	0	-	1483	611			
Stage 1	-	-	-	-	-	-	-	621	-			
Stage 2	-	-	-	-	-	-	-	862	-			
Critical Hdwy	4.12	-	-	4.12	-	-	-	6.52	6.22			
Critical Hdwy Stg 1	-	-	-	-	-	-	-	5.52	-			
Critical Hdwy Stg 2	-	-	-	-	-	-	-	5.52	-			
Follow-up Hdwy	2.218	-	-	2.218	-	-	-	4.018	3.318			
Pot Cap-1 Maneuver	962	-	-	968	-	-	0	125	494			
Stage 1	-	-	-	-	-	-	0	479	-			
Stage 2	-	-	-	-	-	-	0	372	-			
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	962	-	-	968	-	-	-	0	494			
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	0	-			
Stage 1	-	-	-	-	-	-	-	0	-			
Stage 2	-	-	-	-	-	-	-	0	-			
Approach	EB			WB			NB					
HCM Control Delay, s	0.1			1.5				14.7				
HCM LOS								B				
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR					
Capacity (veh/h)	502	962	-	-	968	-	-					
HCM Lane V/C Ratio	0.261	0.006	-	-	0.126	-	-					
HCM Control Delay (s)	14.7	8.8	-	-	9.3	-	-					
HCM Lane LOS	B	A	-	-	A	-	-					
HCM 95th %tile Q(veh)	1	0	-	-	0.4	-	-					

Intersection: 3: Gideon Drive/Kains Road & Oxford Street West

Movement	EB	WB	NB
Directions Served	L	L	TR
Maximum Queue (m)	5.5	31.5	8.0
Average Queue (m)	0.3	13.3	0.3
95th Queue (m)	2.8	24.1	7.3
Link Distance (m)			103.6
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)	60.0	90.0	
Storage Blk Time (%)			
Queuing Penalty (veh)			

Network Summary

Network wide Queuing Penalty: 0

HCM 2010 TWSC
3: Gideon Drive/Kains Road & Oxford Street West

2021 Existing PM
Oxford Street at Gideon Drive Intersection Design

Intersection												
Int Delay, s/veh	2.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	712	6	143	796	7	0	1	163	0	0	5
Future Vol, veh/h	4	712	6	143	796	7	0	1	163	0	0	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	Yield	-	-	Yield
Storage Length	600	-	-	900	-	600	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	-	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	757	6	152	847	7	0	1	173	0	0	5

Major/Minor	Major1			Major2			Minor1		
Conflicting Flow All	854	0	0	763	0	0	-	1926	760
Stage 1	-	-	-	-	-	-	-	768	-
Stage 2	-	-	-	-	-	-	-	1158	-
Critical Hdwy	4.12	-	-	4.12	-	-	-	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	-	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	-	4.018	3.318
Pot Cap-1 Maneuver	785	-	-	850	-	-	0	67	406
Stage 1	-	-	-	-	-	-	0	411	-
Stage 2	-	-	-	-	-	-	0	270	-
Platoon blocked, %	-	-	-	-	-	-	-	-	-
Mov Cap-1 Maneuver	785	-	-	850	-	-	-	0	406
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	0	-
Stage 1	-	-	-	-	-	-	-	0	-
Stage 2	-	-	-	-	-	-	-	0	-

Approach	EB			WB			NB		
HCM Control Delay, s	0.1			1.5			20.3		
HCM LOS							C		

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR
Capacity (veh/h)	408	785	-	-	850	-	-
HCM Lane V/C Ratio	0.428	0.005	-	-	0.179	-	-
HCM Control Delay (s)	20.3	9.6	-	-	10.2	-	-
HCM Lane LOS	C	A	-	-	B	-	-
HCM 95th %tile Q(veh)	2.1	0	-	-	0.6	-	-

Intersection: 3: Gideon Drive/Kains Road & Oxford Street West

Movement	EB	EB	WB	WB	NB	SB
Directions Served	L	TR	L	T	LTR	LTR
Maximum Queue (m)	7.8	19.1	31.8	12.9	66.9	75.3
Average Queue (m)	0.8	1.1	13.0	0.6	9.5	50.7
95th Queue (m)	4.7	9.8	24.1	6.9	47.1	91.8
Link Distance (m)		107.2		147.1	103.6	73.4
Upstream Blk Time (%)					0	31
Queuing Penalty (veh)					0	0
Storage Bay Dist (m)	60.0		50.0			
Storage Blk Time (%)		0				
Queuing Penalty (veh)		0				

Network Summary

Network wide Queuing Penalty: 0

3: Gideon Drive/Kains Road & Oxford Street West

Intersection												
Int Delay, s/veh	105.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	5	762	2	142	652	24	5	2	183	84	8	8
Future Vol, veh/h	5	762	2	142	652	24	5	2	183	84	8	8
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	Yield	-	-	None
Storage Length	600	-	-	500	-	750	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	828	2	154	709	26	5	2	199	91	9	9

Major/Minor	Major1			Major2			Minor1			Minor2			
Conflicting Flow All	735	0	0	830	0	0	1878	1882	829	1857	1857	709	
Stage 1	-	-	-	-	-	-	839	839	-	1017	1017	-	
Stage 2	-	-	-	-	-	-	1039	1043	-	840	840	-	
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22	
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-	
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-	
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318	
Pot Cap-1 Maneuver	870	-	-	802	-	-	54	71	370	~ 56	74	434	
Stage 1	-	-	-	-	-	-	360	381	-	287	315	-	
Stage 2	-	-	-	-	-	-	279	306	-	360	381	-	
Platoon blocked, %		-	-		-	-							
Mov Cap-1 Maneuver	870	-	-	802	-	-	40	57	370	~ 21	59	434	
Mov Cap-2 Maneuver	-	-	-	-	-	-	40	57	-	~ 21	59	-	
Stage 1	-	-	-	-	-	-	358	379	-	285	255	-	
Stage 2	-	-	-	-	-	-	213	247	-	165	379	-	

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	1.8	24.2	\$ 1916.6
HCM LOS			C	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	384	870	-	-	802	-	-	24
HCM Lane V/C Ratio	0.524	0.006	-	-	0.192	-	-	4.529
HCM Control Delay (s)	24.2	9.2	-	-	10.6	-	-	\$ 1916.6
HCM Lane LOS	C	A	-	-	B	-	-	F
HCM 95th %tile Q(veh)	2.9	0	-	-	0.7	-	-	13.6

Notes

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

Intersection: 3: Gideon Drive/Kains Road & Oxford Street West

Movement	EB	EB	WB	WB	WB	NB	SB
Directions Served	L	TR	L	T	R	LTR	LTR
Maximum Queue (m)	10.0	11.8	41.5	14.0	1.4	81.9	80.6
Average Queue (m)	1.3	0.8	19.5	0.7	0.1	17.9	61.3
95th Queue (m)	6.3	6.7	34.3	7.7	1.6	65.5	99.2
Link Distance (m)		107.2		147.1		103.6	73.4
Upstream Blk Time (%)						1	58
Queuing Penalty (veh)						0	0
Storage Bay Dist (m)	60.0		50.0		75.0		
Storage Blk Time (%)			0	0			
Queuing Penalty (veh)			1	0			

Network Summary

Network wide Queuing Penalty: 1

2035 Future PM (Existing Lane Configuration)

Intersection

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	7	819	12	211	915	89	3	7	212	47	5	5
Future Vol, veh/h	7	819	12	211	915	89	3	7	212	47	5	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	Yield	-	-	None
Storage Length	600	-	-	500	-	750	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	8	890	13	229	995	97	3	8	230	51	5	5

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	2.1	33.5	\$ 6541.3
HCM LOS			D	F

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	355	639	-	-	753	-	-	5
HCM Lane V/C Ratio	0.671	0.012	-	-	0.305	-	-	12.391
HCM Control Delay (s)	33.5	10.7	-	-	11.9	-	-	\$ 6541.3
HCM Lane LOS	D	B	-	-	B	-	-	F
HCM 95th %tile Q(veh)	4.6	0	-	-	1.3	-	-	9.6

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

Queuing and Blocking Report
Oxford Street at Gideon Drive Intersection Design

2035 Future AM (Signalized)
Oxford Street at Gideon Drive Intersection Design

Intersection: 3: Gideon Drive/Kains Road & Oxford Street West

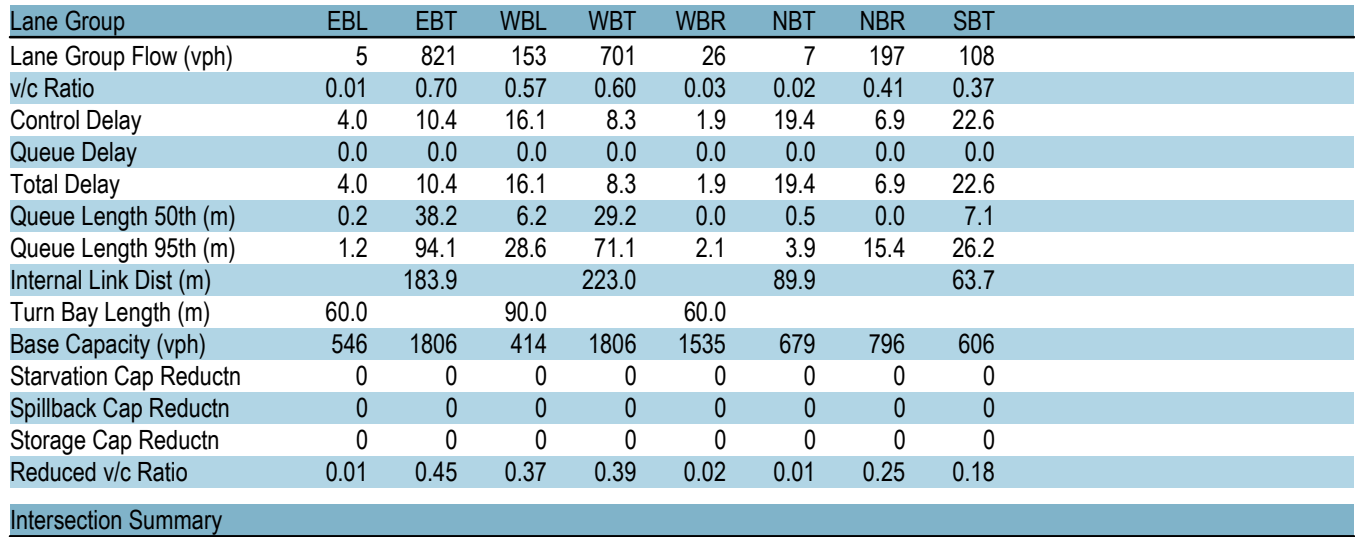
Movement	EB	EB	WB	WB	WB	NB	NB	SB
Directions Served	L	TR	L	T	R	LT	R	LTR
Maximum Queue (m)	7.8	62.1	46.6	46.8	9.3	8.5	18.9	28.8
Average Queue (m)	1.0	26.0	20.4	19.6	1.3	1.4	1.2	12.6
95th Queue (m)	5.2	49.5	38.8	37.9	6.4	6.7	18.2	24.5
Link Distance (m)		199.1		238.2		103.8	103.8	73.1
Upstream Blk Time (%)							0	
Queuing Penalty (veh)							0	
Storage Bay Dist (m)	60.0		90.0		60.0			
Storage Blk Time (%)		0		0				
Queuing Penalty (veh)		0		0				

Network Summary

Network wide Queuing Penalty: 0

3: Gideon Drive/Kains Road & Oxford Street West

Oxford Street at Gideon Drive Intersection Design



2035 Future AM (Signalized)
Oxford Street at Gideon Drive Intersection Design

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	762	2	142	652	24	5	2	183	84	8	8
Future Volume (veh/h)	5	762	2	142	652	24	5	2	183	84	8	8
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1900	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	5	819	2	153	701	26	5	2	0	90	9	9
Adj No. of Lanes	1	1	0	1	1	1	0	1	1	0	1	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	541	1303	3	470	1289	1096	247	76	164	291	14	14
Arrive On Green	0.70	0.70	0.66	0.69	0.69	0.69	0.10	0.10	0.00	0.10	0.11	0.10
Sat Flow, veh/h	725	1857	5	664	1863	1583	1001	732	1583	1220	122	122
Grp Volume(v), veh/h	5	0	821	153	701	26	7	0	0	108	0	0
Grp Sat Flow(s),veh/h/ln	725	0	1862	664	1863	1583	1732	0	1583	1464	0	0
Q Serve(g_s), s	0.1	0.0	10.1	7.0	8.0	0.2	0.0	0.0	0.0	2.9	0.0	0.0
Cycle Q Clear(g_c), s	8.1	0.0	10.1	17.2	8.0	0.2	0.1	0.0	0.0	3.1	0.0	0.0
Prop In Lane	1.00		0.00	1.00		1.00	0.71		1.00	0.83		0.08
Lane Grp Cap(c), veh/h	541	0	1306	470	1289	1096	311	0	164	295	0	0
V/C Ratio(X)	0.01	0.00	0.63	0.33	0.54	0.02	0.02	0.00	0.00	0.37	0.00	0.00
Avail Cap(c_a), veh/h	1058	0	2636	950	2637	2242	886	0	772	838	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	5.1	0.0	3.4	8.3	3.3	2.1	17.5	0.0	0.0	18.6	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.5	0.4	0.4	0.0	0.0	0.0	0.0	0.8	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	5.2	1.3	4.0	0.1	0.1	0.0	0.0	1.3	0.0	0.0
LnGrp Delay(d),s/veh	5.1	0.0	3.9	8.7	3.6	2.1	17.5	0.0	0.0	19.4	0.0	0.0
LnGrp LOS	A		A	A	A	A	B			B		
Approach Vol, veh/h		826			880			7			108	
Approach Delay, s/veh		3.9			4.5			17.5			19.4	
Approach LOS		A			A			B			B	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		8.9		34.2		8.9		34.2				
Change Period (Y+Rc), s		* 4.7		5.6		* 4.7		* 5.6				
Max Green Setting (Gmax), s		* 21		59.4		* 20		* 60				
Max Q Clear Time (g_c+l1), s		2.1		12.1		5.1		19.2				
Green Ext Time (p_c), s		0.0		9.2		0.5		9.5				
Intersection Summary												
HCM 2010 Ctrl Delay			5.2									
HCM 2010 LOS			A									
Notes												

Queuing and Blocking Report
Oxford Street at Gideon Drive Intersection Design

2035 Future PM (Signalized)
Oxford Street at Gideon Drive Intersection Design

Intersection: 3: Gideon Drive/Kains Road & Oxford Street West

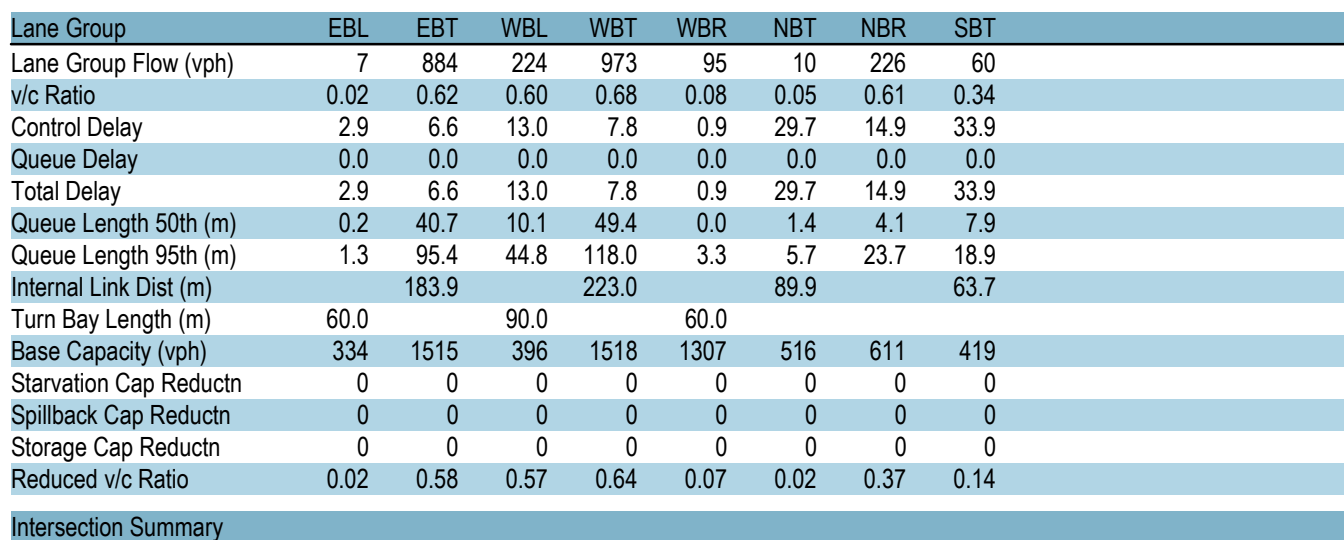
Movement	EB	EB	WB	WB	WB	NB	NB	SB
Directions Served	L	TR	L	T	R	LT	R	LTR
Maximum Queue (m)	9.3	64.9	90.7	77.7	12.7	14.3	43.3	25.1
Average Queue (m)	1.5	24.1	36.3	23.9	2.6	2.5	4.9	8.7
95th Queue (m)	6.4	51.8	80.0	56.7	9.3	9.7	37.0	18.8
Link Distance (m)		199.1		238.2		103.8	103.8	73.1
Upstream Blk Time (%)							0	
Queuing Penalty (veh)							0	
Storage Bay Dist (m)	60.0		90.0		60.0			
Storage Blk Time (%)		0	4	0				
Queuing Penalty (veh)		0	37	0				

Network Summary

Network wide Queuing Penalty: 38

3: Gideon Drive/Kains Road & Oxford Street West

Oxford Street at Gideon Drive Intersection Design



2035 Future PM (Signalized)
Oxford Street at Gideon Drive Intersection Design

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	7	819	12	211	915	89	3	7	212	47	5	5
Future Volume (veh/h)	7	819	12	211	915	89	3	7	212	47	5	5
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1900	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	7	871	13	224	973	95	3	7	0	50	5	5
Adj No. of Lanes	1	1	0	1	1	1	0	1	1	0	1	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	413	1433	21	492	1445	1228	109	93	103	208	9	9
Arrive On Green	0.78	0.78	0.75	0.78	0.78	0.78	0.06	0.07	0.00	0.06	0.07	0.06
Sat Flow, veh/h	526	1831	27	626	1863	1583	371	1425	1583	1229	123	123
Grp Volume(v), veh/h	7	0	884	224	973	95	10	0	0	60	0	0
Grp Sat Flow(s),veh/h/ln	526	0	1858	626	1863	1583	1796	0	1583	1475	0	0
Q Serve(g_s), s	0.3	0.0	10.9	13.0	13.6	0.8	0.0	0.0	0.0	1.9	0.0	0.0
Cycle Q Clear(g_c), s	13.9	0.0	10.9	23.9	13.6	0.8	0.3	0.0	0.0	2.2	0.0	0.0
Prop In Lane	1.00		0.01	1.00		1.00	0.30		1.00	0.83		0.08
Lane Grp Cap(c), veh/h	413	0	1455	492	1445	1228	192	0	103	207	0	0
V/C Ratio(X)	0.02	0.00	0.61	0.46	0.67	0.08	0.05	0.00	0.00	0.29	0.00	0.00
Avail Cap(c_a), veh/h	573	0	2018	687	2024	1720	756	0	631	679	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	6.0	0.0	2.5	7.6	2.9	1.5	24.3	0.0	0.0	25.1	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.4	0.7	0.6	0.0	0.1	0.0	0.0	0.8	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	5.6	2.3	6.7	0.4	0.2	0.0	0.0	0.9	0.0	0.0
LnGrp Delay(d),s/veh	6.0	0.0	2.9	8.3	3.5	1.5	24.4	0.0	0.0	25.8	0.0	0.0
LnGrp LOS	A		A	A	A	A	C			C		
Approach Vol, veh/h		891			1292			10			60	
Approach Delay, s/veh		2.9			4.2			24.4			25.8	
Approach LOS		A			A			C			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4		6		8				
Phs Duration (G+Y+Rc), s		8.0		47.2		8.0		47.2				
Change Period (Y+Rc), s		* 4.7		5.6		* 4.7		* 5.6				
Max Green Setting (Gmax), s		* 22		58.4		* 21		* 59				
Max Q Clear Time (g_c+I1), s		2.3		15.9		4.2		25.9				
Green Ext Time (p_c), s		0.0		10.4		0.2		15.8				
Intersection Summary												
HCM 2010 Ctrl Delay			4.3									
HCM 2010 LOS			A									
Notes												

APPENDIX E

TRAFFIC SIGNAL WARRANT

Signal Warrant Analysis



OXFORD STREET ENVIRONMENTAL ASSESSMENT

Major Street: Oxford Street

Minor Street: Gideon Drive

Comment

Number of Approach Lanes:

T-Intersection Configuration:

Flow Condition:

2035 Traffic Volumes

1	☒	2	☐
Yes	☐	No	☒
	Free Flow		Free Flow (Rural)
			Restricted Flow (Urban)

VOLUME	AM	PM	FACTOR *
1A - All	1,877	2,332	1,052
1B - Minor	290	279	142
2A - Major	1,561	1,952	878
2B - Crossing	99	62	40

OVERALL WARRANT

150% Satisfied: Yes
120% Satisfied: Yes
100% Satisfied: Yes
80% Satisfied: Yes

☐
☐
☐
☒

No	☒
No	☒
No	☒
No	☐

Warrant for new intersection with forecast traffic
Warrant for existing intersection with forecast traffic
Warrant for existing intersection with existing traffic *
Warrant for existing intersection with existing traffic

* Consider full underground provisions if 100% for forecast traffic

WARRANT 1 - MINIMUM VEHICULAR VOLUME

APPROACH LANES		1		2 OR MORE		AVERAGE HOUR PERIOD
FLOW CONDITION		FREE FLOW	REST. FLOW	FREE FLOW	REST. FLOW	
			☒			
ALL APPROACHES		480	720	600	900	1052
		% FULFILLED				146.1%
APPROACH LANES		1		2 OR MORE		AVERAGE HOUR PERIOD
FLOW CONDITION		FREE FLOW	REST. FLOW	FREE FLOW	REST. FLOW	
			☒			
MINOR STREET APPROACHES		120	170	120	170	142
		% FULFILLED				83.7%

150% Satisfied: Yes ☐ No ☒
120% Satisfied: Yes ☐ No ☒
100% Satisfied: Yes ☐ No ☒
80% Satisfied: Yes ☒ No ☐

WARRANT 2 - DELAY TO CROSS TRAFFIC

APPROACH LANES		1		2 OR MORE		AVERAGE HOUR PERIOD
FLOW CONDITION		FREE FLOW	REST. FLOW	FREE FLOW	REST. FLOW	
			☒			
MAJOR STREET APPROACHES		480	720	600	900	878
		% FULFILLED				122.0%
APPROACH LANES		1		2 OR MORE		AVERAGE HOUR PERIOD
FLOW CONDITION		FREE FLOW	REST. FLOW	FREE FLOW	REST. FLOW	
		☒	☒	☒	☒	
TRAFFIC CROSSING MAJOR STREET		50	75	120	170	40
		% FULFILLED				80.5%

150% Satisfied: Yes ☐ No ☒
120% Satisfied: Yes ☐ No ☒
100% Satisfied: Yes ☐ No ☒
80% Satisfied: Yes ☒ No ☐

1A - MINIMUM VEHICULAR VOLUME: Total vehicle volume on all approaches for average day

1B - MINIMUM VEHICULAR VOLUME: Total vehicle volume on minor streets

2A - DELAY TO CROSS TRAFFIC: Total vehicle volume on major street for average day

2B - DELAY TO CROSS TRAFFIC: Total vehicle and pedestrian volume crossing major street, comprising: (1) lefts from both minor streets, (2) heaviest through from minor street, (3) 50% of heavier left turn from major street when following criteria met: (a) left turn volume >120 and (b) left turn volume plus opposing volume > 720, (4) pedestrians crossing the major street.

APPENDIX F

VISSIM OUTPUTS

STANDARD ROUNDABOUT (AM PEAK HOUR) - NODE RESULTS

SIMRUN	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	EMISSIONSCO	EMISSIONSNOX	EMISSIONSVOC	FUELCONSUMPTION	
AVG	600-960	1-5: WB IN@62.5-6: EB OUT@14.0	0.85	24.73	0								
AVG	600-960	1-5: WB IN@62.5-12: SB OUT@7.4	0.85	24.73	14	2.74	0.02	0.01	5.881	1.144	1.363	0.084	
AVG	600-960	1-5: WB IN@62.5-16: WB OUT@13.0	0.85	24.73	65	3	0.06	0.03	26.795	5.213	6.21	0.383	
AVG	600-960	1-5: WB IN@62.5-18: NB OUT@16.2	0.85	24.73	3	3.14	0.02	0.03	1.149	0.224	0.266	0.016	
AVG	600-960	1-11: NB IN@46.0-6: EB OUT@14.0	3.9	28.1	19	13.75	7.28	0.86	20.639	4.016	4.783	0.295	
AVG	600-960	1-11: NB IN@46.0-12: SB OUT@7.4	3.9	28.1	0								
AVG	600-960	1-11: NB IN@46.0-16: WB OUT@13.0	3.9	28.1	1	8.63	3.33	0.6	1.011	0.197	0.234	0.014	
AVG	600-960	1-11: NB IN@46.0-18: NB OUT@16.2	3.9	28.1	0	15.83	9.01	1	1.57	0.306	0.364	0.022	
AVG	600-960	1-15: EB IN@106.6-6: EB OUT@14.0	2.64	36.58	72	4.38	0.38	0.18	38.174	7.427	8.847	0.546	
AVG	600-960	1-15: EB IN@106.6-12: SB OUT@7.4	2.64	36.58	0	0.61	0	0	0.295	0.057	0.068	0.004	
AVG	600-960	1-15: EB IN@106.6-16: WB OUT@13.0	2.64	36.58	0								
AVG	600-960	1-15: EB IN@106.6-18: NB OUT@16.2	2.64	36.58	1	3.65	0	0	0.564	0.11	0.131	0.008	
AVG	600-960	1-17: SB IN@110.7-6: EB OUT@14.0	0.87	11.52	7	7.55	3.36	0.57	6.352	1.236	1.472	0.091	
AVG	600-960	1-17: SB IN@110.7-12: SB OUT@7.4	0.87	11.52	1	8.07	3.74	0.5	1.455	0.283	0.337	0.021	
AVG	600-960	1-17: SB IN@110.7-16: WB OUT@13.0	0.87	11.52	1	5.87	1.51	0.5	0.714	0.139	0.166	0.01	
AVG	600-960	1-17: SB IN@110.7-18: NB OUT@16.2	0.87	11.52	0								
AVG	600-960		1	2.07	47.15	183	4.96	1.14	0.2	101.347	19.718	23.488	1.45
AVG	960-1320	1-5: WB IN@62.5-6: EB OUT@14.0	0.65	21.33	0								
AVG	960-1320	1-5: WB IN@62.5-12: SB OUT@7.4	0.65	21.33	16	2.27	0.04	0.03	6.982	1.358	1.618	0.1	
AVG	960-1320	1-5: WB IN@62.5-16: WB OUT@13.0	0.65	21.33	62	2.53	0.05	0.03	24.976	4.859	5.788	0.357	
AVG	960-1320	1-5: WB IN@62.5-18: NB OUT@16.2	0.65	21.33	2	2.46	0	0	0.88	0.171	0.204	0.013	
AVG	960-1320	1-11: NB IN@46.0-6: EB OUT@14.0	2.59	18.81	17	10.7	5.15	0.72	15.962	3.106	3.699	0.228	
AVG	960-1320	1-11: NB IN@46.0-12: SB OUT@7.4	2.59	18.81	0								
AVG	960-1320	1-11: NB IN@46.0-16: WB OUT@13.0	2.59	18.81	0	8.15	2.39	0.25	0.648	0.126	0.15	0.009	
AVG	960-1320	1-11: NB IN@46.0-18: NB OUT@16.2	2.59	18.81	0	10.33	5.2	0.75	1.23	0.239	0.285	0.018	
AVG	960-1320	1-15: EB IN@106.6-6: EB OUT@14.0	5.17	47	74	5.61	0.57	0.3	46.457	9.039	10.767	0.665	
AVG	960-1320	1-15: EB IN@106.6-12: SB OUT@7.4	5.17	47	0	5.51	0.62	0.25	0.561	0.109	0.13	0.008	
AVG	960-1320	1-15: EB IN@106.6-16: WB OUT@13.0	5.17	47	0								
AVG	960-1320	1-15: EB IN@106.6-18: NB OUT@16.2	5.17	47	0	6.14	0	0	0.659	0.128	0.153	0.009	
AVG	960-1320	1-17: SB IN@110.7-6: EB OUT@14.0	1.03	11.76	7	9.39	5.03	0.6	6.83	1.329	1.583	0.098	
AVG	960-1320	1-17: SB IN@110.7-12: SB OUT@7.4	1.03	11.76	0	5.5	1.11	0.5	0.789	0.154	0.183	0.011	
AVG	960-1320	1-17: SB IN@110.7-16: WB OUT@13.0	1.03	11.76	2	7.59	3.64	0.4	1.447	0.282	0.335	0.021	
AVG	960-1320	1-17: SB IN@110.7-18: NB OUT@16.2	1.03	11.76	0								
AVG	960-1320		1	2.36	47	182	4.94	1.01	0.24	104.259	20.285	24.163	1.492
AVG	1320-1680	1-5: WB IN@62.5-6: EB OUT@14.0	1.66	34.48	0								
AVG	1320-1680	1-5: WB IN@62.5-12: SB OUT@7.4	1.66	34.48	15	2.76	0.05	0.03	6.442	1.253	1.493	0.092	
AVG	1320-1680	1-5: WB IN@62.5-16: WB OUT@13.0	1.66	34.48	67	3.12	0.07	0.07	29.739	5.786	6.892	0.425	
AVG	1320-1680	1-5: WB IN@62.5-18: NB OUT@16.2	1.66	34.48	2	2.33	0	0	0.888	0.173	0.206	0.013	
AVG	1320-1680	1-11: NB IN@46.0-6: EB OUT@14.0	2.71	24.04	20	9.37	3.99	0.62	16.489	3.208	3.821	0.236	
AVG	1320-1680	1-11: NB IN@46.0-12: SB OUT@7.4	2.71	24.04	0								
AVG	1320-1680	1-11: NB IN@46.0-16: WB OUT@13.0	2.71	24.04	0	7.3	3.22	0.25	0.643	0.125	0.149	0.009	
AVG	1320-1680	1-11: NB IN@46.0-18: NB OUT@16.2	2.71	24.04	0	0.2	0	0	0.368	0.072	0.085	0.005	
AVG	1320-1680	1-15: EB IN@106.6-6: EB OUT@14.0	2.99	39.14	69	4.52	0.35	0.22	39.528	7.691	9.161	0.565	
AVG	1320-1680	1-15: EB IN@106.6-12: SB OUT@7.4	2.99	39.14	0	3.81	0	0	0.539	0.105	0.125	0.008	
AVG	1320-1680	1-15: EB IN@106.6-16: WB OUT@13.0	2.99	39.14	0								
AVG	1320-1680	1-15: EB IN@106.6-18: NB OUT@16.2	2.99	39.14	1	7.56	0.28	0.4	0.723	0.141	0.168	0.01	
AVG	1320-1680	1-17: SB IN@110.7-6: EB OUT@14.0	1.3	13.23	9	11.1	6.33	0.76	9.453	1.839	2.191	0.135	
AVG	1320-1680	1-17: SB IN@110.7-12: SB OUT@7.4	1.3	13.23	1	8.12	4.06	0.66	1.396	0.272	0.324	0.02	
AVG	1320-1680	1-17: SB IN@110.7-16: WB OUT@13.0	1.3	13.23	1	5.8	1.79	0.5	0.997	0.194	0.231	0.014	
AVG	1320-1680	1-17: SB IN@110.7-18: NB OUT@16.2	1.3	13.23	0								
AVG	1320-1680		1	2.16	50.02	186	4.76	0.91	0.22	104.688	20.368	24.262	1.498
AVG	1680-2040	1-5: WB IN@62.5-6: EB OUT@14.0	2.81	41.87	0								
AVG	1680-2040	1-5: WB IN@62.5-12: SB OUT@7.4	2.81	41.87	14	3.38	0.13	0.07	6.817	1.326	1.58	0.098	
AVG	1680-2040	1-5: WB IN@62.5-16: WB OUT@13.0	2.81	41.87	65	4.1	0.23	0.13	32.385	6.301	7.505	0.463	
AVG	1680-2040	1-5: WB IN@62.5-18: NB OUT@16.2	2.81	41.87	2	6.86	0.2	0.25	0.944	0.184	0.219	0.014	
AVG	1680-2040	1-11: NB IN@46.0-6: EB OUT@14.0	2.79	20.63	16	11.49	5.39	0.76	16.709	3.251	3.872	0.239	
AVG	1680-2040	1-11: NB IN@46.0-12: SB OUT@7.4	2.79	20.63	0								
AVG	1680-2040	1-11: NB IN@46.0-16: WB OUT@13.0	2.79	20.63	0	5.41	3.09	0.33	0.797	0.155	0.185	0.011	
AVG	1680-2040	1-11: NB IN@46.0-18: NB OUT@16.2	2.79	20.63	0	4.33	0.9	0.5	0.631	0.123	0.146	0.009	
AVG	1680-2040	1-15: EB IN@106.6-6: EB OUT@14.0	5.41	48.38	78	5.81	0.52	0.28	48.862	9.507	11.324	0.699	
AVG	1680-2040	1-15: EB IN@106.6-12: SB OUT@7.4	5.41	48.38	0	7.44	1.65	0.33	0.705	0.137	0.163	0.01	
AVG	1680-2040	1-15: EB IN@106.6-16: WB OUT@13.0	5.41	48.38	0								
AVG	1680-2040	1-15: EB IN@106.6-18: NB OUT@16.2	5.41	48.38	1	5.77	0.03	0.5	1.021	0.199	0.237	0.015	
AVG	1680-2040	1-17: SB IN@110.7-6: EB OUT@14.0	0.89	10.48	10	7.42	3.25	0.52	8.191	1.594	1.898	0.117	
AVG	1680-2040	1-17: SB IN@110.7-12: SB OUT@7.4	0.89	10.48	1	6.63	2.32	0.66	1.282	0.249	0.297	0.018	
AVG	1680-2040	1-17: SB IN@110.7-16: WB OUT@13.0	0.89	10.48	1	5.24	0.81	0.5	0.81	0.158	0.188	0.012	
AVG	1680-2040	1-17: SB IN@110.7-18: NB OUT@16.2	0.89	10.48	0								
AVG	1680-2040		1	2.97	60.98	189	5.72	1.01	0.27	116.184	22.605	26.927	1.662
AVG	2040-2400	1-5: WB IN@62.5-6: EB OUT@14.0	1.34	27.53	0								
AVG	2040-2400	1-5: WB IN@62.5-12: SB OUT@7.4	1.34	27.53	14	2.13	0.05	0.02	6.282	1.222	1.456	0.09	
AVG	2040-2400	1-5: WB IN@62.5-16: WB OUT@13.0	1.34	27.53	63	2.58	0.05	0.04	25.91	5.041	6.005	0.371	
AVG	2040-2400	1-5: WB IN@62.5-18: NB OUT@16.2	1.34	27.53	2	3.21	0.04	0.05	0.711	0.138	0.165	0.01	
AVG	2040-2400	1-11: NB IN@46.0-6: EB OUT@14.0	4.93	26.25	20	14.89	8.19	0.86	21.714	4.225	5.032	0.311	
AVG	2040-2400	1-11: NB IN@46.0-12: SB OUT@7.4	4.93	26.25	0								
AVG	2040-2400	1-11: NB IN@46.0-16: WB OUT@13.0	4.93	26.25	1	23.25	11.97	1.5	2.144	0.417	0.497	0.031	
AVG	2040-2400	1-11: NB IN@46.0-18: NB OUT@16.2	4.93	26.25	0	32.88	15.9	1.75	2.786	0.542	0.646	0.04	
AVG	2040-2400	1-15: EB IN@106.6-6: EB OUT@14.0	4.72	52.96	76	5.7	0.57	0.26	46.1	8.969	10.684	0.66	
AVG	2040-2400	1-15: EB IN@106.6-12: SB OUT@7.4	4.72	52.96	1	7.61	0.74	0.33	0.864	0.168	0.2	0.012	
AVG	2040-2400	1-15: EB IN@106.6-16: WB OUT@13.0	4.72	52.96	0								
AVG	2040-2400	1-15: EB IN@106.6-18: NB OUT@16.2	4.72	52.96	0	9.8	0.06	0.33	0.729	0.142	0.169	0.01	
AVG	2040-2400	1-17: SB IN@110.7-6: EB OUT@14.0	1.65	15.29	8	7.59	3.9	0.41	6.521	1.269	1.511	0.093	
AVG	2040-2400	1-17: SB IN@110.7-12: SB OUT@7.4	1.65	15.29	1	13.98	9.49	0.92	2.61	0.508	0.605	0.037	
AVG	2040-2400	1-17: SB IN@110.7-16: WB OUT@13.0	1.65	15.29	1	6	2.69	0.53	1.217	0.237	0.282	0.017	
AVG	2040-2400	1-17: SB IN@110.7-18: NB OUT@16.2	1.65	15.29	0								
AVG	2040-2400		1	3.16	60.64	187	5.62	1.45	0.25	111.155	21.627	25.761	1.59
AVG	2400-2760	1-5: WB IN@62.5-6: EB OUT@14.0	1.21	29.91	0								
AVG	2400-2760	1-5: WB IN@62.5-12: SB OUT@7.4	1.21	29.91	15	3.73	0.25	0.13	7.93	1.543	1.838	0.113	
AVG	2400-2760	1-5: WB IN@62.5-16: WB OUT@13.0	1.21	29.91	67	3.45	0.15	0.07	29.822	5.802	6.911	0.427	
AVG	2400-2760	1-5: WB IN@62.5-18: NB OUT@16.2	1.21	29.91	2	4.45	0.59	0.11	0.904	0.176	0.209	0.013	
AVG	2400-2760	1-11: NB IN@46.0-6: EB OUT@14.0	2.68	20.63	17	11.26	5.87	0.66	15.372	2.991	3.563	0.22	
AVG	2400-2760	1-11: NB IN@46.0-12: SB OUT@7.4	2.68	20.63	0								
AVG	2400-2760	1-11: NB IN@46.0-16: WB OUT@13.0	2.68	20.63	0	34.41							

AVG	2400-2760	1-15: EB IN@106.6-12: SB OUT@7.4	3.78	40.39	0	4.41	0	0	0.536	0.104	0.124	0.008
AVG	2400-2760	1-15: EB IN@106.6-16: WB OUT@13.0	3.78	40.39	0							
AVG	2400-2760	1-15: EB IN@106.6-18: NB OUT@16.2	3.78	40.39	0	2.72	0.42	0.67	0.803	0.156	0.186	0.011
AVG	2400-2760	1-17: SB IN@110.7-6: EB OUT@14.0	1.13	12.6	8	13.32	8.01	0.85	9.685	1.884	2.245	0.139
AVG	2400-2760	1-17: SB IN@110.7-12: SB OUT@7.4	1.13	12.6	1	14.24	9.43	0.83	1.122	0.218	0.26	0.016
AVG	2400-2760	1-17: SB IN@110.7-16: WB OUT@13.0	1.13	12.6	1	16.63	10.92	0.92	1.435	0.279	0.333	0.021
AVG	2400-2760	1-17: SB IN@110.7-18: NB OUT@16.2	1.13	12.6	0							
AVG	2400-2760		1	2.2	52.67	188	5.51	1.38	0.26	112.346	21.858	1.607
AVG	2760-3120	1-5: WB IN@62.5-6: EB OUT@14.0	1.22	32.7	0							
AVG	2760-3120	1-5: WB IN@62.5-12: SB OUT@7.4	1.22	32.7	12	3.14	0.22	0.06	5.559	1.082	1.288	0.08
AVG	2760-3120	1-5: WB IN@62.5-16: WB OUT@13.0	1.22	32.7	69	2.95	0.07	0.06	29.475	5.735	6.831	0.422
AVG	2760-3120	1-5: WB IN@62.5-18: NB OUT@16.2	1.22	32.7	3	3.77	0.12	0.13	1.466	0.285	0.34	0.021
AVG	2760-3120	1-11: NB IN@46.0-6: EB OUT@14.0	3.19	25.26	19	10.79	5.34	0.68	16.392	3.189	3.799	0.235
AVG	2760-3120	1-11: NB IN@46.0-12: SB OUT@7.4	3.19	25.26	0							
AVG	2760-3120	1-11: NB IN@46.0-16: WB OUT@13.0	3.19	25.26	1	16.68	9.98	1	1.361	0.265	0.315	0.019
AVG	2760-3120	1-11: NB IN@46.0-18: NB OUT@16.2	3.19	25.26	0	10.95	3.99	0.33	0.676	0.132	0.157	0.01
AVG	2760-3120	1-15: EB IN@106.6-6: EB OUT@14.0	5.31	50.06	74	5.58	0.52	0.25	44.188	8.597	10.241	0.632
AVG	2760-3120	1-15: EB IN@106.6-12: SB OUT@7.4	5.31	50.06	0	2.29	0	0	0.324	0.063	0.075	0.005
AVG	2760-3120	1-15: EB IN@106.6-16: WB OUT@13.0	5.31	50.06	0							
AVG	2760-3120	1-15: EB IN@106.6-18: NB OUT@16.2	5.31	50.06	1	2.66	0.38	0.1	0.671	0.131	0.156	0.01
AVG	2760-3120	1-17: SB IN@110.7-6: EB OUT@14.0	0.92	11.05	8	7.45	3.32	0.63	8.719	1.696	2.021	0.125
AVG	2760-3120	1-17: SB IN@110.7-12: SB OUT@7.4	0.92	11.05	1	10.7	5.44	0.69	1.06	0.206	0.246	0.015
AVG	2760-3120	1-17: SB IN@110.7-16: WB OUT@13.0	0.92	11.05	1	4.19	0.42	0.2	0.472	0.092	0.109	0.007
AVG	2760-3120	1-17: SB IN@110.7-18: NB OUT@16.2	0.92	11.05	0							
AVG	2760-3120		1	2.66	58.27	188	5.08	0.98	0.23	106.744	20.768	1.527
AVG	3120-3480	1-5: WB IN@62.5-6: EB OUT@14.0	0.35	15	0							
AVG	3120-3480	1-5: WB IN@62.5-12: SB OUT@7.4	0.35	15	14	3.1	0.11	0.03	6.275	1.221	1.454	0.09
AVG	3120-3480	1-5: WB IN@62.5-16: WB OUT@13.0	0.35	15	63	2.55	0.02	0.01	24.363	4.74	5.646	0.349
AVG	3120-3480	1-5: WB IN@62.5-18: NB OUT@16.2	0.35	15	2	1.98	0	0	0.889	0.173	0.206	0.013
AVG	3120-3480	1-11: NB IN@46.0-6: EB OUT@14.0	5.81	28.15	20	18.67	10.36	1.12	26.325	5.122	6.101	0.377
AVG	3120-3480	1-11: NB IN@46.0-12: SB OUT@7.4	5.81	28.15	0							
AVG	3120-3480	1-11: NB IN@46.0-16: WB OUT@13.0	5.81	28.15	0	50.66	22.64	2.17	2.967	0.577	0.688	0.042
AVG	3120-3480	1-11: NB IN@46.0-18: NB OUT@16.2	5.81	28.15	0	6.02	0	0	0.44	0.086	0.102	0.006
AVG	3120-3480	1-15: EB IN@106.6-6: EB OUT@14.0	8.09	63.42	77	8.09	1.15	0.41	57.087	11.107	13.23	0.817
AVG	3120-3480	1-15: EB IN@106.6-12: SB OUT@7.4	8.09	63.42	0	0.95	0	0	0.303	0.059	0.07	0.004
AVG	3120-3480	1-15: EB IN@106.6-16: WB OUT@13.0	8.09	63.42	0							
AVG	3120-3480	1-15: EB IN@106.6-18: NB OUT@16.2	8.09	63.42	1	1.91	0	0	0.459	0.089	0.106	0.007
AVG	3120-3480	1-17: SB IN@110.7-6: EB OUT@14.0	0.84	12.29	9	7.81	4.31	0.43	7.301	1.42	1.692	0.104
AVG	3120-3480	1-17: SB IN@110.7-12: SB OUT@7.4	0.84	12.29	1	9.79	5.17	0.33	0.752	0.146	0.174	0.011
AVG	3120-3480	1-17: SB IN@110.7-16: WB OUT@13.0	0.84	12.29	1	6.87	2.64	0.61	1.105	0.215	0.256	0.016
AVG	3120-3480	1-17: SB IN@110.7-18: NB OUT@16.2	0.84	12.29	0							
AVG	3120-3480		1	3.77	63.42	188	6.96	1.84	0.32	124.906	24.302	1.787
AVG	3480-3840	1-5: WB IN@62.5-6: EB OUT@14.0	1.45	35.14	0							
AVG	3480-3840	1-5: WB IN@62.5-12: SB OUT@7.4	1.45	35.14	13	3.31	0.05	0.03	6.052	1.177	1.403	0.087
AVG	3480-3840	1-5: WB IN@62.5-16: WB OUT@13.0	1.45	35.14	66	3.31	0.06	0.07	28.903	5.623	6.698	0.413
AVG	3480-3840	1-5: WB IN@62.5-18: NB OUT@16.2	1.45	35.14	3	2.54	0.01	0.02	1.216	0.237	0.282	0.017
AVG	3480-3840	1-11: NB IN@46.0-6: EB OUT@14.0	4.04	22.74	20	14.3	7.84	0.89	21.215	4.128	4.917	0.303
AVG	3480-3840	1-11: NB IN@46.0-12: SB OUT@7.4	4.04	22.74	0							
AVG	3480-3840	1-11: NB IN@46.0-16: WB OUT@13.0	4.04	22.74	1	22.2	13.81	1.1	1.74	0.339	0.403	0.025
AVG	3480-3840	1-11: NB IN@46.0-18: NB OUT@16.2	4.04	22.74	0	18.17	9.08	1	1.064	0.207	0.247	0.015
AVG	3480-3840	1-15: EB IN@106.6-6: EB OUT@14.0	4.42	46.83	74	5.22	0.45	0.23	42.86	8.339	9.933	0.613
AVG	3480-3840	1-15: EB IN@106.6-12: SB OUT@7.4	4.42	46.83	0	2.44	0	0	0.323	0.063	0.075	0.005
AVG	3480-3840	1-15: EB IN@106.6-16: WB OUT@13.0	4.42	46.83	0							
AVG	3480-3840	1-15: EB IN@106.6-18: NB OUT@16.2	4.42	46.83	1	6.45	0.15	0.14	0.868	0.169	0.201	0.012
AVG	3480-3840	1-17: SB IN@110.7-6: EB OUT@14.0	0.93	9.78	7	7.79	4.44	0.48	6.247	1.215	1.448	0.089
AVG	3480-3840	1-17: SB IN@110.7-12: SB OUT@7.4	0.93	9.78	1	16.43	9.14	1.3	1.975	0.384	0.458	0.028
AVG	3480-3840	1-17: SB IN@110.7-16: WB OUT@13.0	0.93	9.78	1	9.84	5.54	1.08	2.151	0.419	0.499	0.031
AVG	3480-3840	1-17: SB IN@110.7-18: NB OUT@16.2	0.93	9.78	0							
AVG	3480-3840		1	2.71	54.13	187	5.58	1.33	0.25	110.493	21.498	1.581
AVG	3840-4200	1-5: WB IN@62.5-6: EB OUT@14.0	1.23	27.37	0							
AVG	3840-4200	1-5: WB IN@62.5-12: SB OUT@7.4	1.23	27.37	14	2.76	0.06	0.06	6.469	1.259	1.499	0.093
AVG	3840-4200	1-5: WB IN@62.5-16: WB OUT@13.0	1.23	27.37	66	3.07	0.05	0.06	28.912	5.625	6.701	0.414
AVG	3840-4200	1-5: WB IN@62.5-18: NB OUT@16.2	1.23	27.37	2	2.2	0.03	0.04	0.953	0.185	0.221	0.014
AVG	3840-4200	1-11: NB IN@46.0-6: EB OUT@14.0	2.58	24.29	20	10.38	4.62	0.74	18.17	3.535	4.211	0.26
AVG	3840-4200	1-11: NB IN@46.0-12: SB OUT@7.4	2.58	24.29	0							
AVG	3840-4200	1-11: NB IN@46.0-16: WB OUT@13.0	2.58	24.29	0	5.07	0	0	0.445	0.087	0.103	0.006
AVG	3840-4200	1-11: NB IN@46.0-18: NB OUT@16.2	2.58	24.29	0	6.02	0	0	0.433	0.084	0.1	0.006
AVG	3840-4200	1-15: EB IN@106.6-6: EB OUT@14.0	3.42	41.98	76	4.81	0.52	0.26	44.901	8.736	10.406	0.642
AVG	3840-4200	1-15: EB IN@106.6-12: SB OUT@7.4	3.42	41.98	0	0.43	0	0	0.294	0.057	0.068	0.004
AVG	3840-4200	1-15: EB IN@106.6-16: WB OUT@13.0	3.42	41.98	0							
AVG	3840-4200	1-15: EB IN@106.6-18: NB OUT@16.2	3.42	41.98	1	1.86	0	0	0.458	0.089	0.106	0.007
AVG	3840-4200	1-17: SB IN@110.7-6: EB OUT@14.0	0.66	9	8	6.45	2.97	0.49	6.684	1.3	1.549	0.096
AVG	3840-4200	1-17: SB IN@110.7-12: SB OUT@7.4	0.66	9	1	2.19	0	0	0.517	0.101	0.12	0.007
AVG	3840-4200	1-17: SB IN@110.7-16: WB OUT@13.0	0.66	9	1	5.18	2.15	0.5	1.114	0.217	0.258	0.016
AVG	3840-4200	1-17: SB IN@110.7-18: NB OUT@16.2	0.66	9	0							
AVG	3840-4200		1	1.97	51.43	190	4.64	0.84	0.23	107.227	20.863	1.534

STANDARD ROUNDABOUT (PM PEAK HOUR) - NODE RESULTS

SIMRUN	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	EMISSIONSCO	EMISSIONSNOX	EMISSIONSVOC	FUELCONSUMPTION	
AVG	1320-1680		1	8.73	119.23	229	9.53	1.55	0.34	161.432	31.409	37.413	2.309
AVG	1680-2040		1	9.6	143.05	237	11.84	2.06	0.5	199.422	38.8	46.218	2.853
AVG	2040-2400		1	5.64	109.53	231	9.52	1.73	0.36	165.047	32.112	38.251	2.361
AVG	2400-2760		1	8.73	125.19	236	11.22	2.27	0.49	197.489	38.424	45.77	2.825
AVG	2760-3120		1	15.23	177.64	236	12.71	2.42	0.57	216.301	42.084	50.13	3.094
AVG	3120-3480		1	13.65	156.34	232	11.8	2.54	0.52	199.814	38.877	46.309	2.859
AVG	3480-3840		1	8.41	121.8	234	11.52	2.58	0.47	193.303	37.61	44.8	2.765
AVG	3840-4200		1	5.39	96.09	229	8.75	1.55	0.35	159.54	31.041	36.975	2.282
AVG	600-960		1	6.39	87.02	230	10.57	1.85	0.4	173.943	33.843	40.313	2.488
AVG	960-1320		1	15.23	167.65	227	9.49	1.55	0.41	171.34	33.337	39.71	2.451
AVG	1320-1680	1-11: NB IN@46.0-12: SB OUT@7.4		4.44	26.57	0							
AVG	1680-2040	1-11: NB IN@46.0-12: SB OUT@7.4		7.08	31.3	0							
AVG	2040-2400	1-11: NB IN@46.0-12: SB OUT@7.4		4.78	28.36	0							
AVG	2400-2760	1-11: NB IN@46.0-12: SB OUT@7.4		8.06	34.32	0							
AVG	2760-3120	1-11: NB IN@46.0-12: SB OUT@7.4		7.6	35.25	0							
AVG	3120-3480	1-11: NB IN@46.0-12: SB OUT@7.4		4.56	26.78	0							
AVG	3480-3840	1-11: NB IN@46.0-12: SB OUT@7.4		4.36	25.95	0							
AVG	3840-4200	1-11: NB IN@46.0-12: SB OUT@7.4		5.49	30.48	0							
AVG	600-960	1-11: NB IN@46.0-12: SB OUT@7.4		5.83	28.69	0							
AVG	960-1320	1-11: NB IN@46.0-12: SB OUT@7.4		3.49	22.31	0							
AVG	1320-1680	1-11: NB IN@46.0-16: WB OUT@13.0		4.44	26.57	0	8.46	2.83	0.67	0.939	0.183	0.218	0.013
AVG	1680-2040	1-11: NB IN@46.0-16: WB OUT@13.0		7.08	31.3	0	6.43	0	0	0.48	0.093	0.111	0.007
AVG	2040-2400	1-11: NB IN@46.0-16: WB OUT@13.0		4.78	28.36	0	7.87	3.13	0.5	1.381	0.269	0.32	0.02
AVG	2400-2760	1-11: NB IN@46.0-16: WB OUT@13.0		8.06	34.32	0	24.65	14.51	1.75	3.1	0.603	0.718	0.044
AVG	2760-3120	1-11: NB IN@46.0-16: WB OUT@13.0		7.6	35.25	0	24.24	14.48	1.33	1.696	0.33	0.393	0.024
AVG	3120-3480	1-11: NB IN@46.0-16: WB OUT@13.0		4.56	26.78	0	1.64	0	0.408	0.079	0.095	0.006	0.006
AVG	3480-3840	1-11: NB IN@46.0-16: WB OUT@13.0		4.36	25.95	0	14.76	3.08	2	2.101	0.409	0.487	0.03
AVG	3840-4200	1-11: NB IN@46.0-16: WB OUT@13.0		5.49	30.48	0	7.58	3.41	0.5	0.832	0.162	0.193	0.012
AVG	600-960	1-11: NB IN@46.0-16: WB OUT@13.0		5.83	28.69	0	12.4	5.2	1	1.179	0.229	0.273	0.017
AVG	960-1320	1-11: NB IN@46.0-16: WB OUT@13.0		3.49	22.31	0	24.62	18.41	1	1.428	0.278	0.331	0.02
AVG	1320-1680	1-11: NB IN@46.0-18: NB OUT@16.2		4.44	26.57	1	15.54	6.4	1.2	2.04	0.397	0.473	0.029
AVG	1680-2040	1-11: NB IN@46.0-18: NB OUT@16.2		7.08	31.3	1	35.85	18.15	1.92	2.1	0.409	0.487	0.03
AVG	2040-2400	1-11: NB IN@46.0-18: NB OUT@16.2		4.78	28.36	1	26.81	15.34	2	2.159	0.42	0.5	0.031
AVG	2400-2760	1-11: NB IN@46.0-18: NB OUT@16.2		8.06	34.32	1	22.14	12.08	1.4	2.806	0.546	0.65	0.04
AVG	2760-3120	1-11: NB IN@46.0-18: NB OUT@16.2		7.6	35.25	1	19.98	9.29	1.71	1.391	0.271	0.322	0.02
AVG	3120-3480	1-11: NB IN@46.0-18: NB OUT@16.2		4.56	26.78	1	11.59	7.43	0.4	0.708	0.138	0.164	0.01
AVG	3480-3840	1-11: NB IN@46.0-18: NB OUT@16.2		4.36	25.95	0	34.14	26.83	1	1.384	0.269	0.321	0.02
AVG	3840-4200	1-11: NB IN@46.0-18: NB OUT@16.2		5.49	30.48	1	15.65	8	1.06	1.733	0.337	0.402	0.025
AVG	600-960	1-11: NB IN@46.0-18: NB OUT@16.2		5.83	28.69	1	7.7	2.59	0.6	1.727	0.336	0.4	0.025
AVG	960-1320	1-11: NB IN@46.0-18: NB OUT@16.2		3.49	22.31	1	3.85	0.48	0.2	0.516	0.1	0.12	0.007
AVG	1320-1680	1-11: NB IN@46.0-6: EB OUT@14.0		4.44	26.57	19	13.15	5.94	0.92	22.467	4.371	5.207	0.321
AVG	1680-2040	1-11: NB IN@46.0-6: EB OUT@14.0		7.08	31.3	22	18.61	10.04	1.14	28.864	5.616	6.689	0.413
AVG	2040-2400	1-11: NB IN@46.0-6: EB OUT@14.0		4.78	28.36	20	15.65	7.97	1.03	24.539	4.774	5.687	0.351
AVG	2400-2760	1-11: NB IN@46.0-6: EB OUT@14.0		8.06	34.32	23	20.42	11.31	1.17	31.234	6.077	7.239	0.447
AVG	2760-3120	1-11: NB IN@46.0-6: EB OUT@14.0		7.6	35.25	22	20.27	11.05	1.18	30.158	5.868	6.989	0.431
AVG	3120-3480	1-11: NB IN@46.0-6: EB OUT@14.0		4.56	26.78	24	14.8	6.78	0.98	26.947	5.243	6.245	0.386
AVG	3480-3840	1-11: NB IN@46.0-6: EB OUT@14.0		4.36	25.95	21	13.37	6.97	0.83	21.785	4.238	5.049	0.312
AVG	3840-4200	1-11: NB IN@46.0-6: EB OUT@14.0		5.49	30.48	22	15.69	7.9	0.99	26.168	5.091	6.065	0.374
AVG	600-960	1-11: NB IN@46.0-6: EB OUT@14.0		5.83	28.69	23	16.57	8.06	1.05	28.799	5.603	6.675	0.412
AVG	960-1320	1-11: NB IN@46.0-6: EB OUT@14.0		3.49	22.31	23	10.8	4.98	0.66	19.743	3.841	4.576	0.282
AVG	1320-1680	1-15: EB IN@106.6-12: SB OUT@7.4		6.36	49.33	1	7.81	0.76	0.38	1.1	0.214	0.255	0.016
AVG	1680-2040	1-15: EB IN@106.6-12: SB OUT@7.4		14.59	69.61	2	13.43	1.49	0.6	1.794	0.349	0.416	0.026
AVG	2040-2400	1-15: EB IN@106.6-12: SB OUT@7.4		10.38	73.03	2	5.94	0.22	0.24	2.417	0.47	0.56	0.035
AVG	2400-2760	1-15: EB IN@106.6-12: SB OUT@7.4		13.01	86.7	2	16.5	1.93	1.31	2.073	0.403	0.48	0.03
AVG	2760-3120	1-15: EB IN@106.6-12: SB OUT@7.4		17.68	82.31	1	9.01	0.75	0.64	1.117	0.217	0.259	0.016
AVG	3120-3480	1-15: EB IN@106.6-12: SB OUT@7.4		11.29	67.83	1	8.89	0.81	0.46	1.309	0.255	0.303	0.019
AVG	3480-3840	1-15: EB IN@106.6-12: SB OUT@7.4		17.67	98.88	2	12.24	0.92	0.72	1.841	0.358	0.427	0.026
AVG	3840-4200	1-15: EB IN@106.6-12: SB OUT@7.4		9.43	63.56	1	7.09	0.5	0.17	0.552	0.107	0.128	0.008
AVG	600-960	1-15: EB IN@106.6-12: SB OUT@7.4		10.14	61.46	2	7.47	0.64	0.27	1.25	0.243	0.29	0.018
AVG	960-1320	1-15: EB IN@106.6-12: SB OUT@7.4		6.75	60.11	1	7.77	1.08	0.31	0.936	0.182	0.217	0.013
AVG	1320-1680	1-15: EB IN@106.6-16: WB OUT@13.0		6.36	49.33	0							
AVG	1680-2040	1-15: EB IN@106.6-16: WB OUT@13.0		14.59	69.61	0							
AVG	2040-2400	1-15: EB IN@106.6-16: WB OUT@13.0		10.38	73.03	0							
AVG	2400-2760	1-15: EB IN@106.6-16: WB OUT@13.0		13.01	86.7	0							
AVG	2760-3120	1-15: EB IN@106.6-16: WB OUT@13.0		17.68	82.31	0							
AVG	3120-3480	1-15: EB IN@106.6-16: WB OUT@13.0		11.29	67.83	0							
AVG	3480-3840	1-15: EB IN@106.6-16: WB OUT@13.0		17.67	98.88	0							
AVG	3840-4200	1-15: EB IN@106.6-16: WB OUT@13.0		9.43	63.56	0							
AVG	600-960	1-15: EB IN@106.6-16: WB OUT@13.0		10.14	61.46	0							
AVG	960-1320	1-15: EB IN@106.6-16: WB OUT@13.0		6.75	60.11	0							
AVG	1320-1680	1-15: EB IN@106.6-18: NB OUT@16.2		6.36	49.33	1	7.01	0.05	0.1	0.948	0.184	0.22	0.014
AVG	1680-2040	1-15: EB IN@106.6-18: NB OUT@16.2		14.59	69.61	0	7.82	0.67	0.33	0.688	0.134	0.16	0.01
AVG	2040-2400	1-15: EB IN@106.6-18: NB OUT@16.2		10.38	73.03	1	8.98	0.56	0.58	0.969	0.189	0.225	0.014
AVG	2400-2760	1-15: EB IN@106.6-18: NB OUT@16.2		13.01	86.7	1	4.46	0.52	0.25	0.954	0.186	0.221	0.014
AVG	2760-3120	1-15: EB IN@106.6-18: NB OUT@16.2		17.68	82.31	1	6.18	0.09	0.07	0.74	0.144	0.171	0.011
AVG	3120-3480	1-15: EB IN@106.6-18: NB OUT@16.2		11.29	67.83	1	6.35	0.86	0.38	1.043	0.203	0.242	0.015
AVG	3480-3840	1-15: EB IN@106.6-18: NB OUT@16.2		17.67	98.88	1	15.91	2.59	1.25	1.491	0.29	0.346	0.021
AVG	3840-4200	1-15: EB IN@106.6-18: NB OUT@16.2		9.43	63.56	1	12.14	2.97	0.75	1.696	0.33	0.393	0.024
AVG	600-960	1-15: EB IN@106.6-18: NB OUT@16.2		10.14	61.46	1	9.76	0.71	0.43	1.193	0.232	0.277	0.017
AVG	960-1320	1-15: EB IN@106.6-18: NB OUT@16.2		6.75	60.11	1	7.11	0.25	0.08	0.887	0.173	0.206	0.013
AVG	1320-1680	1-15: EB IN@106.6-6: EB OUT@14.0		6.36	49.33	78	6.91	0.67	0.37	54.031	10.512	12.522	0.773
AVG	1680-2040	1-15: EB IN@106.6-6: EB OUT@14.0		14.59	69.61	84	11.03	1.07	0.62	78.696	15.311	18.239	1.126
AVG	2040-2400	1-15: EB IN@106.6-6: EB OUT@14.0		10.38	73.03	79	8.27	0.82	0.42	60.022	11.678	13.911	0.859
AVG	2400-2760	1-15: EB IN@106.6-6: EB OUT@14.0		13.01	86.7	83	9.67	0.85	0.57	71.974	14.004	16.681	1.03
AVG	2760-3120	1-15: EB IN@106.6-6: EB OUT@14.0		17.68	82.31	82	10.63	1.15	0.63	78.614	15.295	18.22	1.125
AVG	3120-3480	1-15: EB IN@106.6-6: EB OUT@14.0		11.29	67.83	78	8.88	1.35	0.52	64.331	12.517	14.909	0.92
AVG	3480-3840	1-15: EB IN@106.6-6: EB OUT@14.0		17.67	98.88	82	12.72	1.59	0.72	84.141	16.371	19.501	1.204
AVG	3840-4200	1-15: EB IN@106.6-6: EB OUT@14.0		9.43	63.56	80	8.05	1.07	0.4	57.942	11.273	13.429	0.829
AVG	600-960	1-15: EB IN@10											

AVG	2760-3120	1-17: SB IN@110.7-12: SB OUT@7.4	3.27	13.66	0	26.31	21.09	1.75	2.26	0.44	0.524	0.032
AVG	3120-3480	1-17: SB IN@110.7-12: SB OUT@7.4	5.7	16.47	1	60.42	54.57	1.17	2.119	0.412	0.491	0.03
AVG	3480-3840	1-17: SB IN@110.7-12: SB OUT@7.4	2.98	12.67	1	17.53	12.08	0.75	1.175	0.229	0.272	0.017
AVG	3840-4200	1-17: SB IN@110.7-12: SB OUT@7.4	1.48	10.3	0	7.63	4.84	0.5	1.286	0.25	0.298	0.018
AVG	600-960	1-17: SB IN@110.7-12: SB OUT@7.4	2.16	11.61	1	34.31	24.41	1.5	2.969	0.578	0.688	0.042
AVG	960-1320	1-17: SB IN@110.7-12: SB OUT@7.4	1.21	9.67	0	15.18	12.29	0.5	0.856	0.167	0.198	0.012
AVG	1320-1680	1-17: SB IN@110.7-16: WB OUT@13.0	2.35	9.15	1	66.72	57.95	1.5	2.769	0.539	0.642	0.04
AVG	1680-2040	1-17: SB IN@110.7-16: WB OUT@13.0	1.93	11.62	1	23.25	19.87	0.5	1.01	0.196	0.234	0.014
AVG	2040-2400	1-17: SB IN@110.7-16: WB OUT@13.0	2.49	15.75	1	23.19	18.51	1.11	2.124	0.413	0.492	0.03
AVG	2400-2760	1-17: SB IN@110.7-16: WB OUT@13.0	2.13	12.67	1	8.9	4.67	0.75	1.028	0.2	0.238	0.015
AVG	2760-3120	1-17: SB IN@110.7-16: WB OUT@13.0	3.27	13.66	0	25.42	19.58	1	2.045	0.398	0.474	0.029
AVG	3120-3480	1-17: SB IN@110.7-16: WB OUT@13.0	5.7	16.47	1	39	31.21	1.87	2.677	0.521	0.62	0.038
AVG	3480-3840	1-17: SB IN@110.7-16: WB OUT@13.0	2.98	12.67	1	28.27	22.87	1.38	2.065	0.402	0.479	0.03
AVG	3840-4200	1-17: SB IN@110.7-16: WB OUT@13.0	1.48	10.3	1	18	12.52	0.73	1.57	0.305	0.364	0.022
AVG	600-960	1-17: SB IN@110.7-16: WB OUT@13.0	2.16	11.61	0	37.92	29.22	2.25	2.327	0.453	0.539	0.033
AVG	960-1320	1-17: SB IN@110.7-16: WB OUT@13.0	1.21	9.67	0	23.73	19.5	0.67	1.055	0.205	0.244	0.015
AVG	1320-1680	1-17: SB IN@110.7-18: NB OUT@16.2	2.35	9.15	0							
AVG	1680-2040	1-17: SB IN@110.7-18: NB OUT@16.2	1.93	11.62	0							
AVG	2040-2400	1-17: SB IN@110.7-18: NB OUT@16.2	2.49	15.75	0							
AVG	2400-2760	1-17: SB IN@110.7-18: NB OUT@16.2	2.13	12.67	0							
AVG	2760-3120	1-17: SB IN@110.7-18: NB OUT@16.2	3.27	13.66	0							
AVG	3120-3480	1-17: SB IN@110.7-18: NB OUT@16.2	5.7	16.47	0							
AVG	3480-3840	1-17: SB IN@110.7-18: NB OUT@16.2	2.98	12.67	0							
AVG	3840-4200	1-17: SB IN@110.7-18: NB OUT@16.2	1.48	10.3	0							
AVG	600-960	1-17: SB IN@110.7-18: NB OUT@16.2	2.16	11.61	0							
AVG	960-1320	1-17: SB IN@110.7-18: NB OUT@16.2	1.21	9.67	0							
AVG	1320-1680	1-17: SB IN@110.7-6: EB OUT@14.0	2.35	9.15	4	21.58	16.15	0.87	6.384	1.242	1.48	0.091
AVG	1680-2040	1-17: SB IN@110.7-6: EB OUT@14.0	1.93	11.62	5	23.32	17.42	1.15	6.791	1.321	1.574	0.097
AVG	2040-2400	1-17: SB IN@110.7-6: EB OUT@14.0	2.49	15.75	4	25.02	18.31	1.33	8.016	1.56	1.858	0.115
AVG	2400-2760	1-17: SB IN@110.7-6: EB OUT@14.0	2.13	12.67	5	25.75	18.48	1.31	8.612	1.676	1.996	0.123
AVG	2760-3120	1-17: SB IN@110.7-6: EB OUT@14.0	3.27	13.66	4	37.67	31.32	1.21	7.233	1.407	1.676	0.103
AVG	3120-3480	1-17: SB IN@110.7-6: EB OUT@14.0	5.7	16.47	5	56.7	49.82	1.34	10.267	1.998	2.38	0.147
AVG	3480-3840	1-17: SB IN@110.7-6: EB OUT@14.0	2.98	12.67	6	52.35	42.73	1.52	13.302	2.588	3.083	0.19
AVG	3840-4200	1-17: SB IN@110.7-6: EB OUT@14.0	1.48	10.3	5	14.49	9.48	0.77	5.86	1.14	1.358	0.084
AVG	600-960	1-17: SB IN@110.7-6: EB OUT@14.0	2.16	11.61	4	34	27.35	1.19	6.686	1.301	1.55	0.096
AVG	960-1320	1-17: SB IN@110.7-6: EB OUT@14.0	1.21	9.67	4	18.34	13.48	0.79	5.004	0.974	1.16	0.072
AVG	1320-1680	1-5: WB IN@62.5-12: SB OUT@7.4	21.77	110.46	23	8.85	0.24	0.14	13.774	2.68	3.192	0.197
AVG	1680-2040	1-5: WB IN@62.5-12: SB OUT@7.4	14.79	128.58	20	10.92	0.57	0.29	14.053	2.734	3.257	0.201
AVG	2040-2400	1-5: WB IN@62.5-12: SB OUT@7.4	4.89	93.05	20	8.74	0.24	0.15	11.823	2.3	2.74	0.169
AVG	2400-2760	1-5: WB IN@62.5-12: SB OUT@7.4	11.74	103.83	22	10.08	0.64	0.25	15.158	2.949	3.513	0.217
AVG	2760-3120	1-5: WB IN@62.5-12: SB OUT@7.4	32.37	151.09	20	11.62	0.51	0.36	15.971	3.107	3.701	0.228
AVG	3120-3480	1-5: WB IN@62.5-12: SB OUT@7.4	33.07	138.61	23	10.95	0.5	0.34	18.275	3.556	4.235	0.261
AVG	3480-3840	1-5: WB IN@62.5-12: SB OUT@7.4	8.64	94.06	24	7.92	0.17	0.13	14.369	2.796	3.33	0.206
AVG	3840-4200	1-5: WB IN@62.5-12: SB OUT@7.4	5.15	68.28	20	7.85	0.29	0.2	12.497	2.431	2.896	0.179
AVG	600-960	1-5: WB IN@62.5-12: SB OUT@7.4	7.44	81.22	23	8.61	0.17	0.1	13.167	2.562	3.052	0.188
AVG	960-1320	1-5: WB IN@62.5-12: SB OUT@7.4	49.46	155.87	21	8.64	0.65	0.27	13.717	2.669	3.179	0.196
AVG	1320-1680	1-5: WB IN@62.5-16: WB OUT@13.0	21.77	110.46	92	9.21	0.22	0.18	55.479	10.794	12.858	0.794
AVG	1680-2040	1-5: WB IN@62.5-16: WB OUT@13.0	14.79	128.58	96	10.41	0.52	0.25	63.396	12.335	14.693	0.907
AVG	2040-2400	1-5: WB IN@62.5-16: WB OUT@13.0	4.89	93.05	92	8.05	0.21	0.13	50.135	9.755	11.619	0.717
AVG	2400-2760	1-5: WB IN@62.5-16: WB OUT@13.0	11.74	103.83	90	9.53	0.54	0.25	59.062	11.491	13.688	0.845
AVG	2760-3120	1-5: WB IN@62.5-16: WB OUT@13.0	32.37	151.09	96	11.78	0.74	0.39	75.408	14.672	17.477	1.079
AVG	3120-3480	1-5: WB IN@62.5-16: WB OUT@13.0	33.07	138.61	89	11.22	0.58	0.39	69.65	13.551	16.142	0.996
AVG	3480-3840	1-5: WB IN@62.5-16: WB OUT@13.0	8.64	94.06	89	7.97	0.28	0.17	51.494	10.019	11.934	0.737
AVG	3840-4200	1-5: WB IN@62.5-16: WB OUT@13.0	5.15	68.28	89	7.37	0.18	0.15	48.883	9.511	11.329	0.699
AVG	600-960	1-5: WB IN@62.5-16: WB OUT@13.0	7.44	81.22	89	9.18	0.23	0.16	51.935	10.105	12.036	0.743
AVG	960-1320	1-5: WB IN@62.5-16: WB OUT@13.0	49.46	155.87	90	11.05	1.06	0.39	70.463	13.71	16.331	1.008
AVG	1320-1680	1-5: WB IN@62.5-18: NB OUT@16.2	21.77	110.46	9	9.66	0.25	0.22	4.894	0.952	1.134	0.07
AVG	1680-2040	1-5: WB IN@62.5-18: NB OUT@16.2	14.79	128.58	7	9.94	0.29	0.2	4.227	0.823	0.98	0.06
AVG	2040-2400	1-5: WB IN@62.5-18: NB OUT@16.2	4.89	93.05	10	7.9	0.1	0.14	5.301	1.031	1.229	0.076
AVG	2400-2760	1-5: WB IN@62.5-18: NB OUT@16.2	11.74	103.83	9	8.9	0.56	0.28	5.457	1.062	1.265	0.078
AVG	2760-3120	1-5: WB IN@62.5-18: NB OUT@16.2	32.37	151.09	8	12.01	0.73	0.39	5.338	1.039	1.237	0.076
AVG	3120-3480	1-5: WB IN@62.5-18: NB OUT@16.2	33.07	138.61	9	11.08	0.55	0.38	5.557	1.081	1.288	0.079
AVG	3480-3840	1-5: WB IN@62.5-18: NB OUT@16.2	8.64	94.06	9	8.33	0.23	0.18	4.748	0.924	1.1	0.068
AVG	3840-4200	1-5: WB IN@62.5-18: NB OUT@16.2	5.15	68.28	8	7.43	0.13	0.13	3.765	0.733	0.873	0.054
AVG	600-960	1-5: WB IN@62.5-18: NB OUT@16.2	7.44	81.22	10	8.67	0.24	0.12	4.76	0.926	1.103	0.068
AVG	960-1320	1-5: WB IN@62.5-18: NB OUT@16.2	49.46	155.87	9	9.31	0.88	0.31	5.437	1.058	1.26	0.078
AVG	1320-1680	1-5: WB IN@62.5-6: EB OUT@14.0	21.77	110.46	0							
AVG	1680-2040	1-5: WB IN@62.5-6: EB OUT@14.0	14.79	128.58	0							
AVG	2040-2400	1-5: WB IN@62.5-6: EB OUT@14.0	4.89	93.05	0							
AVG	2400-2760	1-5: WB IN@62.5-6: EB OUT@14.0	11.74	103.83	0							
AVG	2760-3120	1-5: WB IN@62.5-6: EB OUT@14.0	32.37	151.09	0							
AVG	3120-3480	1-5: WB IN@62.5-6: EB OUT@14.0	33.07	138.61	0							
AVG	3480-3840	1-5: WB IN@62.5-6: EB OUT@14.0	8.64	94.06	0							
AVG	3840-4200	1-5: WB IN@62.5-6: EB OUT@14.0	5.15	68.28	0							
AVG	600-960	1-5: WB IN@62.5-6: EB OUT@14.0	7.44	81.22	0							
AVG	960-1320	1-5: WB IN@62.5-6: EB OUT@14.0	49.46	155.87	0							

TURBO ROUNABOUT (PM PEAK HOUR) - NODE RESULTS

SIMRUN	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	EMISSIONSCO	EMISSIONSNOX	EMISSIONSVOC	FUELCONSUMPTION	
AVG	600-960	1-5: WBTR IN@61.2-16: WB OUT@12.8	0.42	17.17	88	2.66	0.01	0.02	34.287	6.671	7.946	0.491	
AVG	600-960	1-5: WBTR IN@61.2-18: NB OUT@18.0	0	0.5	10	1.96	0	0	3.354	0.653	0.777	0.048	
AVG	600-960	1-11: NB IN@43.4-6: EB OUT@4.5	5.84	28.38	22	17.14	9.49	1.02	27.594	5.369	6.395	0.395	
AVG	600-960	1-11: NB IN@43.4-16: WB OUT@12.8	5.84	28.38	0	6.52	1.7	0.5	0.781	0.152	0.181	0.011	
AVG	600-960	1-11: NB IN@43.4-18: NB OUT@18.0	5.84	28.38	1	9.35	4.67	0.65	1.626	0.316	0.377	0.023	
AVG	600-960	1-15: EB IN@94.7-6: EB OUT@4.5	5.12	55.55	78	6.06	0.54	0.29	49.369	9.605	11.442	0.706	
AVG	600-960	1-15: EB IN@94.7-12: SB OUT@8.2	5.12	55.55	2	3.5	0.09	0.13	1.151	0.224	0.267	0.016	
AVG	600-960	1-15: EB IN@94.7-16: WB OUT@12.8	5.12	55.55	0								
AVG	600-960	1-15: EB IN@94.7-18: NB OUT@18.0	5.12	55.55	1	3.69	0.12	0.07	0.69	0.134	0.16	0.01	
AVG	600-960	1-17: SB IN@108.9-6: EB OUT@4.5	0.84	7.53	4	16.87	12.12	0.9	4.825	0.939	1.118	0.069	
AVG	600-960	1-17: SB IN@108.9-12: SB OUT@8.2	0.84	7.53	1	19.16	13.44	1.63	1.865	0.363	0.432	0.027	
AVG	600-960	1-17: SB IN@108.9-16: WB OUT@12.8	0.44	7.53	0	9.54	5.25	0.75	0.868	0.169	0.201	0.012	
AVG	600-960	1-17: SB IN@108.9-18: NB OUT@18.0	0.84	7.53	0								
AVG	600-960	1-21: WBL IN@74.4-6: EB OUT@4.5	0.08	7.25	0								
AVG	600-960	1-21: WBL IN@74.4-12: SB OUT@8.2	0.08	7.25	23	1.41	0.03	0.03	9.4	1.829	2.179	0.134	
AVG	600-960	1-21: WBL IN@74.4-16: WB OUT@12.8	0.08	7.25	0								
AVG	600-960	1-21: WBL IN@74.4-18: NB OUT@18.0	0.08	7.25	0								
AVG	600-960		1	1.76	59.89	229	5.49	1.4	0.24	131.958	25.674	30.582	1.888
AVG	960-1320	1-5: WBTR IN@61.2-16: WB OUT@12.8	2.44	37.28	93	3.23	0.12	0.06	40.724	7.924	9.438	0.583	
AVG	960-1320	1-5: WBTR IN@61.2-18: NB OUT@18.0	0.01	1.18	9	2.66	0.16	0.08	3.391	0.66	0.786	0.049	
AVG	960-1320	1-11: NB IN@43.4-6: EB OUT@4.5	2.67	20.27	23	8.98	3.65	0.6	18.825	3.663	4.363	0.269	
AVG	960-1320	1-11: NB IN@43.4-16: WB OUT@12.8	2.67	20.27	0	21.28	15.68	1	1.381	0.269	0.32	0.02	
AVG	960-1320	1-11: NB IN@43.4-18: NB OUT@18.0	2.67	20.27	1	3.26	0.69	0.4	0.595	0.116	0.138	0.009	
AVG	960-1320	1-15: EB IN@94.7-6: EB OUT@4.5	3.53	48.66	78	4.61	0.38	0.18	41.855	8.144	9.7	0.599	
AVG	960-1320	1-15: EB IN@94.7-12: SB OUT@8.2	3.53	48.66	1	2.57	0.25	0.06	0.605	0.118	0.14	0.009	
AVG	960-1320	1-15: EB IN@94.7-16: WB OUT@12.8	3.53	48.66	0								
AVG	960-1320	1-15: EB IN@94.7-18: NB OUT@18.0	3.53	48.66	1	8.88	0.53	0.25	1.03	0.2	0.239	0.015	
AVG	960-1320	1-17: SB IN@108.9-6: EB OUT@4.5	1.04	7.92	4	20.26	15.36	0.8	4.747	0.924	1.1	0.068	
AVG	960-1320	1-17: SB IN@108.9-12: SB OUT@8.2	1.04	7.92	0	16.76	11.39	0.75	1.057	0.206	0.245	0.015	
AVG	960-1320	1-17: SB IN@108.9-16: WB OUT@12.8	0.54	7.92	0	7.1	3.66	0.33	1.045	0.203	0.242	0.015	
AVG	960-1320	1-17: SB IN@108.9-18: NB OUT@18.0	1.04	7.92	0								
AVG	960-1320	1-21: WBL IN@74.4-6: EB OUT@4.5	0.11	7.51	0								
AVG	960-1320	1-21: WBL IN@74.4-12: SB OUT@8.2	0.11	7.51	21	1.67	0.05	0.05	9.021	1.755	2.091	0.129	
AVG	960-1320	1-21: WBL IN@74.4-16: WB OUT@12.8	0.11	7.51	0								
AVG	960-1320	1-21: WBL IN@74.4-18: NB OUT@18.0	0.11	7.51	0								
AVG	960-1320		1	1.4	63.64	231	4.48	0.84	0.18	120.403	23.426	27.905	1.723
AVG	1320-1680	1-5: WBTR IN@61.2-16: WB OUT@12.8	0.19	15.08	92	2.69	0	0.01	35.645	6.935	8.261	0.51	
AVG	1320-1680	1-5: WBTR IN@61.2-18: NB OUT@18.0	0.01	1.19	8	2.48	0.01	0.02	2.911	0.566	0.675	0.042	
AVG	1320-1680	1-11: NB IN@43.4-6: EB OUT@4.5	3.02	22.9	19	10.65	4.44	0.83	19.681	3.829	4.561	0.282	
AVG	1320-1680	1-11: NB IN@43.4-16: WB OUT@12.8	3.02	22.9	0	7.42	2.7	0.33	0.707	0.138	0.164	0.01	
AVG	1320-1680	1-11: NB IN@43.4-18: NB OUT@18.0	3.02	22.9	1	9.17	3.53	0.67	1.521	0.296	0.352	0.022	
AVG	1320-1680	1-15: EB IN@94.7-6: EB OUT@4.5	3.44	38.37	79	4.28	0.37	0.17	41.366	8.048	9.587	0.592	
AVG	1320-1680	1-15: EB IN@94.7-12: SB OUT@8.2	3.44	38.37	1	2.97	0	0	0.632	0.123	0.147	0.009	
AVG	1320-1680	1-15: EB IN@94.7-16: WB OUT@12.8	3.44	38.37	0								
AVG	1320-1680	1-15: EB IN@94.7-18: NB OUT@18.0	3.44	38.37	1	7.41	0	0	0.862	0.168	0.2	0.012	
AVG	1320-1680	1-17: SB IN@108.9-6: EB OUT@4.5	1.34	9.1	4	18.66	14.03	0.8	4.987	0.97	1.156	0.071	
AVG	1320-1680	1-17: SB IN@108.9-12: SB OUT@8.2	1.34	9.1	0	43.6	35.51	1	2.705	0.526	0.627	0.039	
AVG	1320-1680	1-17: SB IN@108.9-16: WB OUT@12.8	0.69	9.15	0	10.79	4.66	1	1.528	0.297	0.354	0.022	
AVG	1320-1680	1-17: SB IN@108.9-18: NB OUT@18.0	1.34	9.1	0								
AVG	1320-1680	1-21: WBL IN@74.4-6: EB OUT@4.5	0.15	6.31	0								
AVG	1320-1680	1-21: WBL IN@74.4-12: SB OUT@8.2	0.15	6.31	23	1.45	0.15	0.06	10.073	1.96	2.334	0.144	
AVG	1320-1680	1-21: WBL IN@74.4-16: WB OUT@12.8	0.15	6.31	0								
AVG	1320-1680	1-21: WBL IN@74.4-18: NB OUT@18.0	0.15	6.31	0								
AVG	1320-1680		1	1.17	40.87	229	4.32	0.91	0.16	117.649	22.89	27.266	1.683
AVG	1680-2040	1-5: WBTR IN@61.2-16: WB OUT@12.8	0.78	23.47	94	2.43	0.04	0.03	36.81	7.162	8.531	0.527	
AVG	1680-2040	1-5: WBTR IN@61.2-18: NB OUT@18.0	0	0.58	8	1.92	0	0	2.578	0.502	0.597	0.037	
AVG	1680-2040	1-11: NB IN@43.4-6: EB OUT@4.5	5.42	30.77	23	14.94	7.34	1.1	27.996	5.447	6.488	0.401	
AVG	1680-2040	1-11: NB IN@43.4-16: WB OUT@12.8	5.42	30.77	0	6.73	0.21	0.33	0.672	0.131	0.156	0.01	
AVG	1680-2040	1-11: NB IN@43.4-18: NB OUT@18.0	5.42	30.77	1	28.04	13.64	1.83	2.325	0.452	0.539	0.033	
AVG	1680-2040	1-15: EB IN@94.7-6: EB OUT@4.5	6.37	55.26	81	6.3	0.58	0.24	49.614	9.653	11.499	0.71	
AVG	1680-2040	1-15: EB IN@94.7-12: SB OUT@8.2	6.37	55.26	2	6.28	1.81	0.33	1.183	0.23	0.274	0.017	
AVG	1680-2040	1-15: EB IN@94.7-16: WB OUT@12.8	6.37	55.26	0								
AVG	1680-2040	1-15: EB IN@94.7-18: NB OUT@18.0	6.37	55.26	0	2.75	0	0	0.46	0.09	0.107	0.007	
AVG	1680-2040	1-17: SB IN@108.9-6: EB OUT@4.5	1.44	10.1	5	22.44	16.96	1.3	7.209	1.403	1.671	0.103	
AVG	1680-2040	1-17: SB IN@108.9-12: SB OUT@8.2	1.44	10.1	0	25.88	19.45	1	1.455	0.283	0.337	0.021	
AVG	1680-2040	1-17: SB IN@108.9-16: WB OUT@12.8	0.73	10.1	1	3.38	1.13	0.29	0.569	0.111	0.132	0.008	
AVG	1680-2040	1-17: SB IN@108.9-18: NB OUT@18.0	1.44	10.1	0								
AVG	1680-2040	1-21: WBL IN@74.4-6: EB OUT@4.5	0.07	3.66	0								
AVG	1680-2040	1-21: WBL IN@74.4-12: SB OUT@8.2	0.07	3.66	20	1.29	0.05	0.01	7.921	1.541	1.836	0.113	
AVG	1680-2040	1-21: WBL IN@74.4-16: WB OUT@12.8	0.07	3.66	0								
AVG	1680-2040	1-21: WBL IN@74.4-18: NB OUT@18.0	0.07	3.66	0								
AVG	1680-2040		1	2.01	62.33	234	5.47	1.36	0.24	135.268	26.318	31.35	1.935
AVG	2040-2400	1-5: WBTR IN@61.2-16: WB OUT@12.8	0.3	13.46	91	2.41	0.03	0.02	35.114	6.832	8.138	0.502	
AVG	2040-2400	1-5: WBTR IN@61.2-18: NB OUT@18.0	0.01	1.64	10	1.72	0.02	0.03	3.483	0.678	0.807	0.05	
AVG	2040-2400	1-11: NB IN@43.4-6: EB OUT@4.5	4.3	23.95	20	13.23	5.87	1.01	23.663	4.604	5.484	0.339	
AVG	2040-2400	1-11: NB IN@43.4-16: WB OUT@12.8	4.3	23.95	0	4.83	1.94	0.5	1.336	0.26	0.31	0.019	
AVG	2040-2400	1-11: NB IN@43.4-18: NB OUT@18.0	4.3	23.95	1	17.28	8.08	1.28	1.759	0.342	0.408	0.025	
AVG	2040-2400	1-15: EB IN@94.7-6: EB OUT@4.5	6.01	55.92	81	5.78	0.72	0.28	50.332	9.793	11.665	0.72	
AVG	2040-2400	1-15: EB IN@94.7-12: SB OUT@8.2	6.01	55.92	2	4.46	0.73	0.22	2.216	0.431	0.514	0.032	
AVG	2040-2400	1-15: EB IN@94.7-16: WB OUT@12.8	6.01	55.92	0								
AVG	2040-2400	1-15: EB IN@94.7-18: NB OUT@18.0	6.01	55.92	1	4.2	0.07	0.17	0.64	0.125	0.148	0.009	
AVG	2040-2400	1-17: SB IN@108.9-6: EB OUT@4.5	1.05	9.59	4	13.17	8.27	0.78	4.997	0.972	1.158	0.071	
AVG	2040-2400	1-17: SB IN@108.9-12: SB OUT@8.2	1.05	9.59	1	18.49	13.25	1.33	2.835	0.552	0.657	0.041	
AVG	2040-2400	1-17: SB IN@108.9-16: WB OUT@12.8	0.6	9.59	1	9.56	6.58	0.38	0.992	0.193	0.23	0.014	
AVG	2040-2400	1-17: SB IN@108.9-18: NB OUT@18.0	1.05	9.59	0								
AVG	2040-2400	1-21: WBL IN@74.4-6: EB OUT@4.5	0.05	5.09	0								
AVG	2040-2400	1-21: WBL IN@74.4-12: SB OUT@8.2	0.05	5.09	20	1.32	0.01	0.01	7.929	1.543	1.838	0.113	
AVG	2040-2400	1-21: WBL IN@74.4-16: WB OUT@12.8	0.05	5.09	0								
AVG	2040-2400	1-21: WBL IN@74.4-18: NB OUT@18.0	0.05	5.09	0								
AVG	2040-2400		1	1.69	57.41	230	4.87	1.07	0.23	129.274	25.152	29.961	1.849
AVG	2400-2760	1-5: WBTR IN@61.2-16: WB OUT@12.8	0.63	18.59	91	2.27	0.01	0.02	34.987	6.807	8.109	0.501	
AVG	2400-2760	1-5: WBTR IN@61.2-18: NB OUT@18.0	0	1.19	9	1.66	0.05	0.0					

AVG	2400-2760	1-11: NB IN@43.4-18: NB OUT@18.0	5.47	30.41	1	16.33	10.43	1	1.701	0.331	0.394	0.024	
AVG	2400-2760	1-15: EB IN@94.7-6: EB OUT@4.5	5.01	51.76	83	5.54	0.57	0.24	49.381	9.608	11.445	0.706	
AVG	2400-2760	1-15: EB IN@94.7-12: SB OUT@8.2	5.01	51.76	2	10.42	1.67	0.63	1.449	0.282	0.336	0.021	
AVG	2400-2760	1-15: EB IN@94.7-16: WB OUT@12.8	5.01	51.76	0								
AVG	2400-2760	1-15: EB IN@94.7-18: NB OUT@18.0	5.01	51.76	1	2.27	0	0	0.686	0.133	0.159	0.01	
AVG	2400-2760	1-17: SB IN@108.9-6: EB OUT@4.5	1.51	10.64	5	19.47	13.31	1.27	7.856	1.528	1.821	0.112	
AVG	2400-2760	1-17: SB IN@108.9-12: SB OUT@8.2	1.51	10.64	1	15.83	11.65	0.75	1.294	0.252	0.3	0.019	
AVG	2400-2760	1-17: SB IN@108.9-16: WB OUT@12.8	0.85	10.65	1	6.59	3.81	0.5	0.927	0.18	0.215	0.013	
AVG	2400-2760	1-17: SB IN@108.9-18: NB OUT@18.0	1.51	10.64	0								
AVG	2400-2760	1-21: WBL IN@74.4-6: EB OUT@4.5	0.41	13.99	0								
AVG	2400-2760	1-21: WBL IN@74.4-12: SB OUT@8.2	0.41	13.99	22	2.17	0.37	0.11	10.587	2.06	2.454	0.151	
AVG	2400-2760	1-21: WBL IN@74.4-16: WB OUT@12.8	0.41	13.99	0								
AVG	2400-2760	1-21: WBL IN@74.4-18: NB OUT@18.0	0.41	13.99	0								
AVG	2400-2760		1	1.89	51.76	237	5.23	1.44	0.23	135.852	26.432	31.485	1.944
AVG	2760-3120	1-5: WBTR IN@61.2-16: WB OUT@12.8	0.89	30.19	97	2.84	0.01	0.02	38.646	7.519	8.957	0.553	
AVG	2760-3120	1-5: WBTR IN@61.2-18: NB OUT@18.0	0.03	2.25	8	2.94	0.12	0.11	3.218	0.626	0.746	0.046	
AVG	2760-3120	1-11: NB IN@43.4-6: EB OUT@4.5	5.97	29.89	22	16.7	8.56	0.99	26.474	5.151	6.136	0.379	
AVG	2760-3120	1-11: NB IN@43.4-16: WB OUT@12.8	5.97	29.89	0	1.75	0	0	0.618	0.12	0.143	0.009	
AVG	2760-3120	1-11: NB IN@43.4-18: NB OUT@18.0	5.97	29.89	1	16.3	4.29	1.29	1.187	0.231	0.275	0.017	
AVG	2760-3120	1-15: EB IN@94.7-6: EB OUT@4.5	4.69	46.91	82	5.47	0.5	0.22	48.158	9.37	11.161	0.689	
AVG	2760-3120	1-15: EB IN@94.7-12: SB OUT@8.2	4.69	46.91	1	5.24	0.2	0.14	0.566	0.11	0.131	0.008	
AVG	2760-3120	1-15: EB IN@94.7-16: WB OUT@12.8	4.69	46.91	0								
AVG	2760-3120	1-15: EB IN@94.7-18: NB OUT@18.0	4.69	46.91	1	5.69	1.69	0.31	0.796	0.155	0.185	0.011	
AVG	2760-3120	1-17: SB IN@108.9-6: EB OUT@4.5	1.65	10.72	5	20.49	14.78	1.18	6.725	1.308	1.559	0.096	
AVG	2760-3120	1-17: SB IN@108.9-12: SB OUT@8.2	1.65	10.72	0	47.47	41.58	1	1.806	0.351	0.418	0.026	
AVG	2760-3120	1-17: SB IN@108.9-16: WB OUT@12.8	0.95	10.72	0	3.13	0.66	0.25	0.989	0.192	0.229	0.014	
AVG	2760-3120	1-17: SB IN@108.9-18: NB OUT@18.0	1.65	10.72	0								
AVG	2760-3120	1-21: WBL IN@74.4-6: EB OUT@4.5	0.06	5.59	0								
AVG	2760-3120	1-21: WBL IN@74.4-12: SB OUT@8.2	0.06	5.59	20	1.43	0.03	0.02	8.049	1.566	1.866	0.115	
AVG	2760-3120	1-21: WBL IN@74.4-16: WB OUT@12.8	0.06	5.59	0								
AVG	2760-3120	1-21: WBL IN@74.4-18: NB OUT@18.0	0.06	5.59	0								
AVG	2760-3120		1	1.93	57.71	237	5.38	1.31	0.21	134.133	26.097	31.087	1.919
AVG	3120-3480	1-5: WBTR IN@61.2-16: WB OUT@12.8	1.54	28.73	91	2.88	0.08	0.04	36.936	7.186	8.56	0.528	
AVG	3120-3480	1-5: WBTR IN@61.2-18: NB OUT@18.0	0.01	0.58	9	1.88	0.07	0.03	3.082	0.6	0.714	0.044	
AVG	3120-3480	1-11: NB IN@43.4-6: EB OUT@4.5	3.81	24.01	23	11.69	5.08	0.85	22.875	4.451	5.301	0.327	
AVG	3120-3480	1-11: NB IN@43.4-16: WB OUT@12.8	3.81	24.01	0	19.86	5.93	2	1.875	0.365	0.435	0.027	
AVG	3120-3480	1-11: NB IN@43.4-18: NB OUT@18.0	3.81	24.01	1	14.37	9.67	0.8	0.916	0.178	0.212	0.013	
AVG	3120-3480	1-15: EB IN@94.7-6: EB OUT@4.5	7.26	52.89	78	6.28	0.85	0.35	52.875	10.288	12.254	0.756	
AVG	3120-3480	1-15: EB IN@94.7-12: SB OUT@8.2	7.26	52.89	1	7.1	0.59	0.24	0.961	0.187	0.223	0.014	
AVG	3120-3480	1-15: EB IN@94.7-16: WB OUT@12.8	7.26	52.89	0								
AVG	3120-3480	1-15: EB IN@94.7-18: NB OUT@18.0	7.26	52.89	1	3.57	0.11	0.19	0.773	0.15	0.179	0.011	
AVG	3120-3480	1-17: SB IN@108.9-6: EB OUT@4.5	1.3	10.5	5	17.23	12.23	0.77	6.424	1.25	1.489	0.092	
AVG	3120-3480	1-17: SB IN@108.9-12: SB OUT@8.2	1.3	10.5	1	20.9	16.54	0.83	1.52	0.296	0.352	0.022	
AVG	3120-3480	1-17: SB IN@108.9-16: WB OUT@12.8	0.67	10.52	1	7.19	2.64	0.33	0.916	0.178	0.212	0.013	
AVG	3120-3480	1-17: SB IN@108.9-18: NB OUT@18.0	1.3	10.5	0								
AVG	3120-3480	1-21: WBL IN@74.4-6: EB OUT@4.5	0.1	7.49	0								
AVG	3120-3480	1-21: WBL IN@74.4-12: SB OUT@8.2	0.1	7.49	24	1.54	0.01	0.02	9.976	1.941	2.312	0.143	
AVG	3120-3480	1-21: WBL IN@74.4-16: WB OUT@12.8	0.1	7.49	0								
AVG	3120-3480	1-21: WBL IN@74.4-18: NB OUT@18.0	0.1	7.49	0								
AVG	3120-3480		1	2.01	66.94	234	5.18	1.17	0.24	135.347	26.334	31.368	1.936
AVG	3480-3840	1-5: WBTR IN@61.2-16: WB OUT@12.8	0.15	9.08	87	2.09	0	0.01	32.535	6.33	7.54	0.465	
AVG	3480-3840	1-5: WBTR IN@61.2-18: NB OUT@18.0	0	1.08	8	1.5	0	0	2.79	0.543	0.647	0.04	
AVG	3480-3840	1-11: NB IN@43.4-6: EB OUT@4.5	3.06	23.96	21	10.54	4.72	0.71	19.472	3.789	4.513	0.279	
AVG	3480-3840	1-11: NB IN@43.4-16: WB OUT@12.8	3.06	23.96	0	28.24	16.89	2	2.293	0.446	0.531	0.033	
AVG	3480-3840	1-11: NB IN@43.4-18: NB OUT@18.0	3.06	23.96	0	28.3	16.12	2	1.853	0.361	0.429	0.027	
AVG	3480-3840	1-15: EB IN@94.7-6: EB OUT@4.5	7.08	69.86	81	6.5	0.64	0.31	53.406	10.391	12.377	0.764	
AVG	3480-3840	1-15: EB IN@94.7-12: SB OUT@8.2	7.08	69.86	2	8.11	0.58	0.38	1.099	0.214	0.255	0.016	
AVG	3480-3840	1-15: EB IN@94.7-16: WB OUT@12.8	7.08	69.86	0								
AVG	3480-3840	1-15: EB IN@94.7-18: NB OUT@18.0	7.08	69.86	1	7.29	0.31	0.33	0.865	0.168	0.2	0.012	
AVG	3480-3840	1-17: SB IN@108.9-6: EB OUT@4.5	1.08	9.44	5	13	8.01	0.84	6.136	1.194	1.422	0.088	
AVG	3480-3840	1-17: SB IN@108.9-12: SB OUT@8.2	1.08	9.44	1	13.47	9.06	0.75	1.874	0.365	0.434	0.027	
AVG	3480-3840	1-17: SB IN@108.9-16: WB OUT@12.8	0.55	9.44	1	5.72	3.21	0.38	0.789	0.153	0.183	0.011	
AVG	3480-3840	1-17: SB IN@108.9-18: NB OUT@18.0	1.08	9.44	0								
AVG	3480-3840	1-21: WBL IN@74.4-6: EB OUT@4.5	0.07	5.17	0								
AVG	3480-3840	1-21: WBL IN@74.4-12: SB OUT@8.2	0.07	5.17	23	1.42	0.06	0.04	9.596	1.867	2.224	0.137	
AVG	3480-3840	1-21: WBL IN@74.4-16: WB OUT@12.8	0.07	5.17	0								
AVG	3480-3840	1-21: WBL IN@74.4-18: NB OUT@18.0	0.07	5.17	0								
AVG	3480-3840		1	1.64	69.86	229	4.81	0.98	0.21	126.42	24.597	29.299	1.809
AVG	3840-4200	1-5: WBTR IN@61.2-16: WB OUT@12.8	0.39	18.3	88	2.04	0.01	0.02	33.821	6.58	7.838	0.484	
AVG	3840-4200	1-5: WBTR IN@61.2-18: NB OUT@18.0	0.01	1.72	8	1.76	0	0	2.566	0.499	0.595	0.037	
AVG	3840-4200	1-11: NB IN@43.4-6: EB OUT@4.5	4.77	25.65	22	13.31	6.43	0.89	24.451	4.757	5.667	0.35	
AVG	3840-4200	1-11: NB IN@43.4-16: WB OUT@12.8	4.77	25.65	0	3.61	0.15	0.5	0.776	0.151	0.18	0.011	
AVG	3840-4200	1-11: NB IN@43.4-18: NB OUT@18.0	4.77	25.65	1	11.86	6.15	0.75	1.466	0.285	0.34	0.021	
AVG	3840-4200	1-15: EB IN@94.7-6: EB OUT@4.5	3.08	40.46	81	4.19	0.31	0.15	41.706	8.114	9.666	0.597	
AVG	3840-4200	1-15: EB IN@94.7-12: SB OUT@8.2	3.08	40.46	1	4.46	0.02	0.08	0.593	0.115	0.137	0.008	
AVG	3840-4200	1-15: EB IN@94.7-16: WB OUT@12.8	3.08	40.46	0								
AVG	3840-4200	1-15: EB IN@94.7-18: NB OUT@18.0	3.08	40.46	1	5.37	0.93	0.31	1.141	0.222	0.265	0.016	
AVG	3840-4200	1-17: SB IN@108.9-6: EB OUT@4.5	0.71	7.97	5	11.39	6.69	0.73	4.537	0.883	1.051	0.065	
AVG	3840-4200	1-17: SB IN@108.9-12: SB OUT@8.2	0.71	7.97	0	10.63	3.74	0.5	1.102	0.214	0.255	0.016	
AVG	3840-4200	1-17: SB IN@108.9-16: WB OUT@12.8	0.37	7.97	1	3.56	0.93	0.27	1.023	0.199	0.237	0.015	
AVG	3840-4200	1-17: SB IN@108.9-18: NB OUT@18.0	0.71	7.97	0								
AVG	3840-4200	1-21: WBL IN@74.4-6: EB OUT@4.5	0.08	5.25	0								
AVG													

TURBO ROUNABOUT (AM PEAK HOUR) - NODE RESULTS

SIMRUN	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	EMISSIONSCO	EMISSIONSNOX	EMISSIONSVOC	FUELCONSUMPTION	
AVG	600-960	1-5: WBTR IN@61.2-16: WB OUT@12.8	0.1	6.46	65	1.43	0	0.01	23.705	4.612	5.494	0.339	
AVG	600-960	1-5: WBTR IN@61.2-18: NB OUT@18.0	0	0	3	1.21	0	0	0.994	0.193	0.23	0.014	
AVG	600-960	1-11: NB IN@43.4-6: EB OUT@4.5	3.29	26.82	19	12.41	5.99	0.81	18.667	3.632	4.326	0.267	
AVG	600-960	1-11: NB IN@43.4-16: WB OUT@12.8	3.29	26.82	1	7.61	2.27	0.7	1.124	0.219	0.261	0.016	
AVG	600-960	1-11: NB IN@43.4-18: NB OUT@18.0	3.29	26.82	0	14.35	6.96	1	1.553	0.302	0.36	0.022	
AVG	600-960	1-15: EB IN@94.7-6: EB OUT@4.5	1.33	25.98	71	3.02	0.16	0.08	31.86	6.199	7.384	0.456	
AVG	600-960	1-15: EB IN@94.7-12: SB OUT@8.2	1.33	25.98	0	0.84	0	0	0.299	0.058	0.069	0.004	
AVG	600-960	1-15: EB IN@94.7-16: WB OUT@12.8	1.33	25.98	0								
AVG	600-960	1-15: EB IN@94.7-18: NB OUT@18.0	1.33	25.98	1	1.99	0	0	0.537	0.104	0.124	0.008	
AVG	600-960	1-17: SB IN@108.9-6: EB OUT@4.5	1.01	11.44	7	10.07	6	0.76	7.444	1.448	1.725	0.107	
AVG	600-960	1-17: SB IN@108.9-12: SB OUT@8.2	1.01	11.44	1	9.53	6.28	0.9	1.706	0.332	0.395	0.024	
AVG	600-960	1-17: SB IN@108.9-16: WB OUT@12.8	0.54	11.44	1	2.6	0	0	0.384	0.075	0.089	0.005	
AVG	600-960	1-17: SB IN@108.9-18: NB OUT@18.0	1.01	11.44	0								
AVG	600-960	1-21: WBL IN@74.4-6: EB OUT@4.5	0	0	0								
AVG	600-960	1-21: WBL IN@74.4-12: SB OUT@8.2	0	0	14	0.94	0	0	5.217	1.015	1.209	0.075	
AVG	600-960	1-21: WBL IN@74.4-16: WB OUT@12.8	0	0	0								
AVG	600-960	1-21: WBL IN@74.4-18: NB OUT@18.0	0	0	0								
AVG	600-960		1	0.83	32.57	183	3.55	0.95	0.15	90.27	17.563	20.921	1.291
AVG	960-1320	1-5: WBTR IN@61.2-16: WB OUT@12.8	0.05	4.56	62	1.29	0	0	22.368	4.352	5.184	0.32	
AVG	960-1320	1-5: WBTR IN@61.2-18: NB OUT@18.0	0	0	2	0.98	0	0	0.843	0.164	0.195	0.012	
AVG	960-1320	1-11: NB IN@43.4-6: EB OUT@4.5	2.25	18.34	17	8.95	3.88	0.59	13.804	2.686	3.199	0.197	
AVG	960-1320	1-11: NB IN@43.4-16: WB OUT@12.8	2.25	18.34	0	19.42	11.68	1.25	1.409	0.274	0.326	0.02	
AVG	960-1320	1-11: NB IN@43.4-18: NB OUT@18.0	2.25	18.34	0	6.98	3.05	0.25	0.932	0.181	0.216	0.013	
AVG	960-1320	1-15: EB IN@94.7-6: EB OUT@4.5	3.39	41.3	75	4.44	0.39	0.18	39.9	7.763	9.247	0.571	
AVG	960-1320	1-15: EB IN@94.7-12: SB OUT@8.2	3.39	41.3	0	4.19	0.3	0.25	0.543	0.106	0.126	0.008	
AVG	960-1320	1-15: EB IN@94.7-16: WB OUT@12.8	3.39	41.3	0								
AVG	960-1320	1-15: EB IN@94.7-18: NB OUT@18.0	3.39	41.3	0	2.4	0	0	0.603	0.117	0.14	0.009	
AVG	960-1320	1-17: SB IN@108.9-6: EB OUT@4.5	0.74	10.4	7	10.11	5.25	0.94	8.338	1.622	1.932	0.119	
AVG	960-1320	1-17: SB IN@108.9-12: SB OUT@8.2	0.74	10.4	0	5.14	0.82	0.25	0.59	0.115	0.137	0.008	
AVG	960-1320	1-17: SB IN@108.9-16: WB OUT@12.8	0.4	10.4	2	3.79	2.11	0.06	0.778	0.151	0.18	0.011	
AVG	960-1320	1-17: SB IN@108.9-18: NB OUT@18.0	0.74	10.4	0								
AVG	960-1320	1-21: WBL IN@74.4-6: EB OUT@4.5	0.04	3.44	0								
AVG	960-1320	1-21: WBL IN@74.4-12: SB OUT@8.2	0.04	3.44	16	1.15	0.03	0.02	6.487	1.262	1.503	0.093	
AVG	960-1320	1-21: WBL IN@74.4-16: WB OUT@12.8	0.04	3.44	0								
AVG	960-1320	1-21: WBL IN@74.4-18: NB OUT@18.0	0.04	3.44	0								
AVG	960-1320		1	0.93	42.46	183	3.74	0.78	0.17	93.589	18.209	21.69	1.339
AVG	1320-1680	1-5: WBTR IN@61.2-16: WB OUT@12.8	0.47	11.53	67	1.45	0.02	0.02	25.635	4.988	5.941	0.367	
AVG	1320-1680	1-5: WBTR IN@61.2-18: NB OUT@18.0	0	0	2	0.73	0	0	0.854	0.166	0.198	0.012	
AVG	1320-1680	1-11: NB IN@43.4-6: EB OUT@4.5	3.08	23.54	20	9.95	4.59	0.67	17.407	3.387	4.034	0.249	
AVG	1320-1680	1-11: NB IN@43.4-16: WB OUT@12.8	3.08	23.54	0	6.88	3.09	0.5	0.8	0.156	0.185	0.011	
AVG	1320-1680	1-11: NB IN@43.4-18: NB OUT@18.0	3.08	23.54	0	0.22	0	0	0.367	0.071	0.085	0.005	
AVG	1320-1680	1-15: EB IN@94.7-6: EB OUT@4.5	1.71	32.63	69	3.25	0.28	0.13	33.382	6.495	7.737	0.478	
AVG	1320-1680	1-15: EB IN@94.7-12: SB OUT@8.2	1.71	32.63	0	3.82	0	0	0.52	0.101	0.12	0.007	
AVG	1320-1680	1-15: EB IN@94.7-16: WB OUT@12.8	1.71	32.63	0								
AVG	1320-1680	1-15: EB IN@94.7-18: NB OUT@18.0	1.71	32.63	1	1.33	0	0	0.45	0.088	0.104	0.006	
AVG	1320-1680	1-17: SB IN@108.9-6: EB OUT@4.5	1.56	10.92	9	12.07	7.44	0.72	9.509	1.85	2.204	0.136	
AVG	1320-1680	1-17: SB IN@108.9-12: SB OUT@8.2	1.56	10.92	1	9.85	5.92	0.91	2.155	0.419	0.5	0.031	
AVG	1320-1680	1-17: SB IN@108.9-16: WB OUT@12.8	0.79	11.53	1	3.42	0.8	0.37	0.958	0.186	0.222	0.014	
AVG	1320-1680	1-17: SB IN@108.9-18: NB OUT@18.0	1.56	10.92	0								
AVG	1320-1680	1-21: WBL IN@74.4-6: EB OUT@4.5	0.01	1.1	0								
AVG	1320-1680	1-21: WBL IN@74.4-12: SB OUT@8.2	0.01	1.1	15	0.97	0.01	0.01	5.755	1.12	1.334	0.082	
AVG	1320-1680	1-21: WBL IN@74.4-16: WB OUT@12.8	0.01	1.1	0								
AVG	1320-1680	1-21: WBL IN@74.4-18: NB OUT@18.0	0.01	1.1	0								
AVG	1320-1680		1	0.98	41.28	185	3.65	1.04	0.18	95.138	18.51	22.049	1.361
AVG	1680-2040	1-5: WBTR IN@61.2-16: WB OUT@12.8	0.11	10.46	65	1.66	0	0	23.972	4.664	5.556	0.343	
AVG	1680-2040	1-5: WBTR IN@61.2-18: NB OUT@18.0	0	0	2	2.14	0	0	0.725	0.141	0.168	0.01	
AVG	1680-2040	1-11: NB IN@43.4-6: EB OUT@4.5	2.8	20.04	17	12.6	5.95	0.9	18.615	3.622	4.314	0.266	
AVG	1680-2040	1-11: NB IN@43.4-16: WB OUT@12.8	2.8	20.04	0	7.82	5.5	1.33	1.444	0.281	0.335	0.021	
AVG	1680-2040	1-11: NB IN@43.4-18: NB OUT@18.0	2.8	20.04	0	6.77	0.81	1	0.921	0.179	0.213	0.013	
AVG	1680-2040	1-15: EB IN@94.7-6: EB OUT@4.5	3.3	42.06	79	4.18	0.39	0.16	40.945	7.966	9.489	0.586	
AVG	1680-2040	1-15: EB IN@94.7-12: SB OUT@8.2	3.3	42.06	0	1.54	0	0	0.421	0.082	0.097	0.006	
AVG	1680-2040	1-15: EB IN@94.7-16: WB OUT@12.8	3.3	42.06	0								
AVG	1680-2040	1-15: EB IN@94.7-18: NB OUT@18.0	3.3	42.06	1	4.18	0.24	0.5	0.977	0.19	0.227	0.014	
AVG	1680-2040	1-17: SB IN@108.9-6: EB OUT@4.5	1.04	10.9	10	8.8	4.69	0.69	9.534	1.855	2.21	0.136	
AVG	1680-2040	1-17: SB IN@108.9-12: SB OUT@8.2	1.04	10.9	1	5.89	1.27	0.56	1.202	0.234	0.279	0.017	
AVG	1680-2040	1-17: SB IN@108.9-16: WB OUT@12.8	0.53	10.9	1	3.61	0	0	0.465	0.09	0.108	0.007	
AVG	1680-2040	1-17: SB IN@108.9-18: NB OUT@18.0	1.04	10.9	0								
AVG	1680-2040	1-21: WBL IN@74.4-6: EB OUT@4.5	0.02	1.14	0								
AVG	1680-2040	1-21: WBL IN@74.4-12: SB OUT@8.2	0.02	1.14	14	1.06	0.01	0.02	5.748	1.118	1.332	0.082	
AVG	1680-2040	1-21: WBL IN@74.4-16: WB OUT@12.8	0.02	1.14	0								
AVG	1680-2040	1-21: WBL IN@74.4-18: NB OUT@18.0	0.02	1.14	0								
AVG	1680-2040		1	1.04	44.72	190	4.12	0.98	0.2	101.776	19.802	23.588	1.456
AVG	2040-2400	1-5: WBTR IN@61.2-16: WB OUT@12.8	0.18	9.98	64	1.35	0	0.01	23.294	4.532	5.399	0.333	
AVG	2040-2400	1-5: WBTR IN@61.2-18: NB OUT@18.0	0	0	2	1.11	0	0	0.625	0.122	0.145	0.009	
AVG	2040-2400	1-11: NB IN@43.4-6: EB OUT@4.5	4.3	25.1	21	13.11	6.79	0.83	20.819	4.051	4.825	0.298	
AVG	2040-2400	1-11: NB IN@43.4-16: WB OUT@12.8	4.3	25.1	1	21.02	11.01	1.33	2.019	0.393	0.468	0.029	
AVG	2040-2400	1-11: NB IN@43.4-18: NB OUT@18.0	4.3	25.1	0	28.1	13.16	1.5	2.424	0.472	0.562	0.035	
AVG	2040-2400	1-15: EB IN@94.7-6: EB OUT@4.5	3	45.32	76	4.3	0.5	0.16	39.618	7.708	9.182	0.567	
AVG	2040-2400	1-15: EB IN@94.7-12: SB OUT@8.2	3	45.32	1	6.16	0	0	0.605	0.118	0.14	0.009	
AVG	2040-2400	1-15: EB IN@94.7-16: WB OUT@12.8	3	45.32	0								
AVG	2040-2400	1-15: EB IN@94.7-18: NB OUT@18.0	3	45.32	0	6.84	2.22	0.33	0.686	0.133	0.159	0.01	
AVG	2040-2400	1-17: SB IN@108.9-6: EB OUT@4.5	1.76	14.75	8	8.79	4.84	0.5	7.626	1.484	1.767	0.109	
AVG	2040-2400	1-17: SB IN@108.9-12: SB OUT@8.2	1.76	14.75	1	15.19	8.54	1.1	2.127	0.414	0.493	0.03	
AVG	2040-2400	1-17: SB IN@108.9-16: WB OUT@12.8	1.24	15.26	1	2.98	0.47	0.27	0.839	0.163	0.195	0.012	
AVG	2040-2400	1-17: SB IN@108.9-18: NB OUT@18.0	1.76	14.75	0								
AVG	2040-2400	1-21: WBL IN@74.4-6: EB OUT@4.5	0.02	1.73	0								
AVG	2040-2400	1-21: WBL IN@74.4-12: SB OUT@8.2	0.02	1.73	15	0.93	0.02	0.02	5.876	1.143	1.362	0.084	
AVG	2040-2400	1-21: WBL IN@74.4-16: WB OUT@12.8	0.02	1.73	0								
AVG	2040-2400	1-21: WBL IN@74.4-18: NB OUT@18.0	0.02	1.73	0								
AVG	2040-2400		1	1.43	45.72	188	4.36	1.28	0.2	101.597	19.767	23.546	1.453
AVG	2400-2760	1-5: WBTR IN@61.2-16: WB OUT@12.8	0.04	4.43	66	1.23	0.01	0.01	23.861	4.643	5.53	0.341	
AVG	2400-2760	1-5: WBTR IN@61.2-18: NB OUT@18.0	0	0.47	2	0.92	0	0	0.657	0.128	0.152	0.009	
AVG	2400-2760	1-11: NB IN@43.4-6: EB OUT@4.5	2.23	17.76	17	9.59	4.6	0.69	15.087	2.935</			

	2400-2760	1-11: NB IN@43.4-18: NB OUT@18.0	2.23	17.76	0	10.85	5.13	0.67	0.796	0.155	0.185	0.011	
AVG	2400-2760	1-15: EB IN@94.7-6: EB OUT@4.5	2.68	36.81	76	3.86	0.37	0.16	38.805	7.55	8.993	0.555	
AVG	2400-2760	1-15: EB IN@94.7-12: SB OUT@8.2	2.68	36.81	0	3.72	0	0	0.503	0.098	0.117	0.007	
AVG	2400-2760	1-15: EB IN@94.7-16: WB OUT@12.8	2.68	36.81	0								
AVG	2400-2760	1-15: EB IN@94.7-18: NB OUT@18.0	2.68	36.81	0	0.71	0	0	0.437	0.085	0.101	0.006	
AVG	2400-2760	1-17: SB IN@108.9-6: EB OUT@4.5	0.81	10.32	8	11.95	7.16	0.79	9.3	1.809	2.155	0.133	
AVG	2400-2760	1-17: SB IN@108.9-12: SB OUT@8.2	0.81	10.32	1	6.16	3.42	0.4	0.761	0.148	0.176	0.011	
AVG	2400-2760	1-17: SB IN@108.9-16: WB OUT@12.8	0.44	10.92	1	11.49	6.25	0.58	0.999	0.194	0.232	0.014	
AVG	2400-2760	1-17: SB IN@108.9-18: NB OUT@18.0	0.81	10.32	0								
AVG	2400-2760	1-21: WBL IN@74.4-6: EB OUT@4.5	0.01	1.24	0								
AVG	2400-2760	1-21: WBL IN@74.4-12: SB OUT@8.2	0.01	1.24	15	0.98	0.03	0.02	6.079	1.183	1.409	0.087	
AVG	2400-2760	1-21: WBL IN@74.4-16: WB OUT@12.8	0.01	1.24	0								
AVG	2400-2760	1-21: WBL IN@74.4-18: NB OUT@18.0	0.01	1.24	0								
AVG	2400-2760		1	0.84	36.89	186	3.63	0.95	0.17	95.611	18.602	22.159	1.368
AVG	2760-3120	1-5: WBTR IN@61.2-16: WB OUT@12.8	0.03	4.55	69	1.33	0	0	25.02	4.868	5.799	0.358	
AVG	2760-3120	1-5: WBTR IN@61.2-18: NB OUT@18.0	0	0	3	1.39	0	0	1.195	0.233	0.277	0.017	
AVG	2760-3120	1-11: NB IN@43.4-6: EB OUT@4.5	2.98	21.17	19	10.59	5.26	0.68	16.727	3.255	3.877	0.239	
AVG	2760-3120	1-11: NB IN@43.4-16: WB OUT@12.8	2.98	21.17	1	12.25	7.26	0.5	0.984	0.192	0.228	0.014	
AVG	2760-3120	1-11: NB IN@43.4-18: NB OUT@18.0	2.98	21.17	0	10.22	4.04	0.75	0.865	0.168	0.2	0.012	
AVG	2760-3120	1-15: EB IN@94.7-6: EB OUT@4.5	2.41	39.77	74	3.4	0.32	0.12	35.836	6.972	8.305	0.513	
AVG	2760-3120	1-15: EB IN@94.7-12: SB OUT@8.2	2.41	39.77	0	1.71	0	0	0.317	0.062	0.074	0.005	
AVG	2760-3120	1-15: EB IN@94.7-16: WB OUT@12.8	2.41	39.77	0								
AVG	2760-3120	1-15: EB IN@94.7-18: NB OUT@18.0	2.41	39.77	1	1.5	0	0	0.538	0.105	0.125	0.008	
AVG	2760-3120	1-17: SB IN@108.9-6: EB OUT@4.5	1.04	12.55	9	7.79	3.61	0.52	8.134	1.583	1.885	0.116	
AVG	2760-3120	1-17: SB IN@108.9-12: SB OUT@8.2	1.04	12.55	1	16.92	11.54	1.06	1.445	0.281	0.335	0.021	
AVG	2760-3120	1-17: SB IN@108.9-16: WB OUT@12.8	0.58	13.19	1	3.26	0.56	0.2	0.481	0.094	0.111	0.007	
AVG	2760-3120	1-17: SB IN@108.9-18: NB OUT@18.0	1.04	12.55	0								
AVG	2760-3120	1-21: WBL IN@74.4-6: EB OUT@4.5	0.08	5.09	0								
AVG	2760-3120	1-21: WBL IN@74.4-12: SB OUT@8.2	0.08	5.09	12	1.46	0.09	0.07	4.941	0.961	1.145	0.071	
AVG	2760-3120	1-21: WBL IN@74.4-16: WB OUT@12.8	0.08	5.09	0								
AVG	2760-3120	1-21: WBL IN@74.4-18: NB OUT@18.0	0.08	5.09	0								
AVG	2760-3120		1	0.95	42.57	188	3.51	0.92	0.15	93.158	18.125	21.59	1.333
AVG	3120-3480	1-5: WBTR IN@61.2-16: WB OUT@12.8	0.14	7.46	63	1.29	0	0	22.537	4.385	5.223	0.322	
AVG	3120-3480	1-5: WBTR IN@61.2-18: NB OUT@18.0	0	0.57	2	0.96	0	0	0.829	0.161	0.192	0.012	
AVG	3120-3480	1-11: NB IN@43.4-6: EB OUT@4.5	4.63	24.36	20	15.25	7.82	0.99	23.641	4.6	5.479	0.338	
AVG	3120-3480	1-11: NB IN@43.4-16: WB OUT@12.8	4.63	24.36	0	49.49	21.72	3.5	4.068	0.791	0.943	0.058	
AVG	3120-3480	1-11: NB IN@43.4-18: NB OUT@18.0	4.63	24.36	0	3.07	0	0	0.405	0.079	0.094	0.006	
AVG	3120-3480	1-15: EB IN@94.7-6: EB OUT@4.5	4.45	49.27	76	5.4	0.5	0.23	44.598	8.677	10.336	0.638	
AVG	3120-3480	1-15: EB IN@94.7-12: SB OUT@8.2	4.45	49.27	0	0.59	0	0	0.3	0.058	0.069	0.004	
AVG	3120-3480	1-15: EB IN@94.7-16: WB OUT@12.8	4.45	49.27	0								
AVG	3120-3480	1-15: EB IN@94.7-18: NB OUT@18.0	4.45	49.27	1	1	0	0	0.444	0.086	0.103	0.006	
AVG	3120-3480	1-17: SB IN@108.9-6: EB OUT@4.5	0.98	9.7	9	7.82	4.24	0.55	8.405	1.635	1.948	0.12	
AVG	3120-3480	1-17: SB IN@108.9-12: SB OUT@8.2	0.98	9.7	1	7.9	4.27	0.5	0.843	0.164	0.195	0.012	
AVG	3120-3480	1-17: SB IN@108.9-16: WB OUT@12.8	0.52	9.7	1	4.53	1.56	0.33	0.772	0.15	0.179	0.011	
AVG	3120-3480	1-17: SB IN@108.9-18: NB OUT@18.0	0.98	9.7	0								
AVG	3120-3480	1-21: WBL IN@74.4-6: EB OUT@4.5	0.02	2.34	0								
AVG	3120-3480	1-21: WBL IN@74.4-12: SB OUT@8.2	0.02	2.34	14	1.22	0.04	0.04	5.827	1.134	1.35	0.083	
AVG	3120-3480	1-21: WBL IN@74.4-16: WB OUT@12.8	0.02	2.34	0								
AVG	3120-3480	1-21: WBL IN@74.4-18: NB OUT@18.0	0.02	2.34	0								
AVG	3120-3480		1	1.47	49.79	188	4.99	1.37	0.24	108.58	21.126	25.164	1.553
AVG	3480-3840	1-5: WBTR IN@61.2-16: WB OUT@12.8	0.05	5.54	66	1.35	0	0.01	23.896	4.649	5.538	0.342	
AVG	3480-3840	1-5: WBTR IN@61.2-18: NB OUT@18.0	0	0	3	0.89	0	0	1.052	0.205	0.244	0.015	
AVG	3480-3840	1-11: NB IN@43.4-6: EB OUT@4.5	2.85	22.34	19	10.88	5.06	0.73	17.796	3.462	4.124	0.255	
AVG	3480-3840	1-11: NB IN@43.4-16: WB OUT@12.8	2.85	22.34	1	14.72	8.06	1.2	1.576	0.307	0.365	0.023	
AVG	3480-3840	1-11: NB IN@43.4-18: NB OUT@18.0	2.85	22.34	0	11.49	3.37	1	0.988	0.192	0.229	0.014	
AVG	3480-3840	1-15: EB IN@94.7-6: EB OUT@4.5	2.6	34.17	74	3.89	0.21	0.15	37.617	7.319	8.718	0.538	
AVG	3480-3840	1-15: EB IN@94.7-12: SB OUT@8.2	2.6	34.17	0	3.32	0	0	0.337	0.066	0.078	0.005	
AVG	3480-3840	1-15: EB IN@94.7-16: WB OUT@12.8	2.6	34.17	0								
AVG	3480-3840	1-15: EB IN@94.7-18: NB OUT@18.0	2.6	34.17	1	3.97	0	0	0.746	0.145	0.173	0.011	
AVG	3480-3840	1-17: SB IN@108.9-6: EB OUT@4.5	0.9	9.68	7	9.65	5.75	0.66	7.256	1.412	1.682	0.104	
AVG	3480-3840	1-17: SB IN@108.9-12: SB OUT@8.2	0.9	9.68	1	13.12	6.5	1.2	1.588	0.309	0.368	0.023	
AVG	3480-3840	1-17: SB IN@108.9-16: WB OUT@12.8	0.47	9.68	1	4.89	2.27	0.44	1.217	0.237	0.282	0.017	
AVG	3480-3840	1-17: SB IN@108.9-18: NB OUT@18.0	0.9	9.68	0								
AVG	3480-3840	1-21: WBL IN@74.4-6: EB OUT@4.5	0.08	5.02	0								
AVG	3480-3840	1-21: WBL IN@74.4-12: SB OUT@8.2	0.08	5.02	14	1.4	0.12	0.06	5.822	1.133	1.349	0.083	
AVG	3480-3840	1-21: WBL IN@74.4-16: WB OUT@12.8	0.08	5.02	0								
AVG	3480-3840	1-21: WBL IN@74.4-18: NB OUT@18.0	0.08	5.02	0								
AVG	3480-3840		1	0.93	37.94	186	3.77	0.89	0.18	96.389	18.754	22.339	1.379
AVG	3840-4200	1-5: WBTR IN@61.2-16: WB OUT@12.8	0.05	4.82	67	1.33	0	0	23.953	4.66	5.551	0.343	
AVG	3840-4200	1-5: WBTR IN@61.2-18: NB OUT@18.0	0	0.53	2	1.45	0	0	0.792	0.154	0.184	0.011	
AVG	3840-4200	1-11: NB IN@43.4-6: EB OUT@4.5	2.03	21.37	20	9.03	3.63	0.64	16.146	3.142	3.742	0.231	
AVG	3840-4200	1-11: NB IN@43.4-16: WB OUT@12.8	2.03	21.37	0	3.76	0	0	0.426	0.083	0.099	0.006	
AVG	3840-4200	1-11: NB IN@43.4-18: NB OUT@18.0	2.03	21.37	0	6.97	0.29	0.5	0.718	0.14	0.166	0.01	
AVG	3840-4200	1-15: EB IN@94.7-6: EB OUT@4.5	2.65	48.08	75	3.92	0.27	0.13	37.009	7.201	8.577	0.529	
AVG	3840-4200	1-15: EB IN@94.7-12: SB OUT@8.2	2.65	48.08	0	5.32	1.44	0.5	0.738	0.144	0.171	0.011	
AVG	3840-4200	1-15: EB IN@94.7-16: WB OUT@12.8	2.65	48.08	0								
AVG	3840-4200	1-15: EB IN@94.7-18: NB OUT@18.0	2.65	48.08	1	0.66	0	0	0.439	0.085	0.102	0.006	
AVG	3840-4200	1-17: SB IN@108.9-6: EB OUT@4.5	0.75	9.54	8	8.23	4.46	0.44	6.729	1.309	1.56	0.096	
AVG	3840-4200	1-17: SB IN@108.9-12: SB OUT@8.2	0.75	9.54	1	5.23	1.74	0.2	0.854	0.166	0.198	0.012	
AVG	3840-4200	1-17: SB IN@108.9-16: WB OUT@12.8	0.39	9.54	1	2.83	1.05	0.17	0.782	0.152	0.181	0.011	
AVG	3840-4200	1-17: SB IN@108.9-18: NB OUT@18.0	0.75	9.54	0								
AVG	3840-4200	1-21: WBL IN@74.4-6: EB OUT@4.5	0.05	5.61	0								
AVG	3840-4200	1-21: WBL IN@74.4-12: SB OUT@8.2	0.05	5.61	14	1.47	0.07	0.05	5.973	1.162	1.384	0.085	
AVG	3840-4200	1-21: WBL IN@74.4-16: WB OUT@12.8	0.05	5.61	0								

WESTBOUND WIDENING ROUNDABOUT (AM PEAK HOUR) - NODE RESULTS

SIMRUN	TIMEINT	MOVEMEN	QLEN	QLENMAX	VEHS(ALL)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	EMISSIONSCO	EMISSIONSNOX	EMISSIONSVOC	FUELCONSUMPTION
AVG	600-960	1-3: WB IN(	0.03	3.95	15	1.32	0.03	0.02	6.1	1.187	1.414	0.087
AVG	600-960	1-3: WB IN(	0.02	5.09	2	0.99	0	0	0.816	0.159	0.189	0.012
AVG	600-960	1-3: WB IN(	0.03	3.95	0							
AVG	600-960	1-3: WB IN(	0.03	3.95	65	0.89	0.01	0.01	23.183	4.511	5.373	0.332
AVG	600-960	1-8: NB IN(	3.93	25.8	0							
AVG	600-960	1-8: NB IN(	3.93	25.8	0	29.03	21.3	2	1.726	0.336	0.4	0.025
AVG	600-960	1-8: NB IN(	3.93	25.8	19	13.22	7	0.8	19.652	3.824	4.555	0.281
AVG	600-960	1-8: NB IN(	3.93	25.8	1	14.21	8.61	0.6	1.039	0.202	0.241	0.015
AVG	600-960	1-13: EB IN(	2.59	40.9	0	0.83	0	0	0.299	0.058	0.069	0.004
AVG	600-960	1-13: EB IN(	2.59	40.9	1	3.15	0.14	0.17	0.788	0.153	0.183	0.011
AVG	600-960	1-13: EB IN(	2.59	40.9	71	3.88	0.37	0.21	39.104	7.608	9.063	0.559
AVG	600-960	1-13: EB IN(	2.59	40.9	0							
AVG	600-960	1-17: SB IN(	0.57	10.25	1	6.65	2.86	0.63	1.198	0.233	0.278	0.017
AVG	600-960	1-17: SB IN(	0.57	10.25	0							
AVG	600-960	1-17: SB IN(	0.57	10.25	6	6.97	3.07	0.48	5.399	1.05	1.251	0.077
AVG	600-960	1-17: SB IN(	0.34	10.25	1	3.1	0.78	0.44	0.898	0.175	0.208	0.013
AVG	600-960	1	1.04	42.97	183	3.8	1.11	0.2	97.222	18.916	22.532	1.391
AVG	960-1320	1-3: WB IN(	0	2.87	15	1.22	0.04	0.04	6.386	1.242	1.48	0.091
AVG	960-1320	1-3: WB IN(	0	2.87	2	0.9	0.01	0.06	0.922	0.179	0.214	0.013
AVG	960-1320	1-3: WB IN(	0	2.87	0							
AVG	960-1320	1-3: WB IN(	0	2.87	62	0.85	0	0	21.889	4.259	5.073	0.313
AVG	960-1320	1-8: NB IN(	2.74	17.93	0							
AVG	960-1320	1-8: NB IN(	2.74	17.93	0	5.03	1.1	0.67	0.752	0.146	0.174	0.011
AVG	960-1320	1-8: NB IN(	2.74	17.93	17	10.74	5.69	0.67	15.248	2.967	3.534	0.218
AVG	960-1320	1-8: NB IN(	2.74	17.93	1	22.96	11.79	1.67	2.198	0.428	0.509	0.031
AVG	960-1320	1-13: EB IN(	3.88	46.24	0	6.96	0.14	0.5	0.715	0.139	0.166	0.01
AVG	960-1320	1-13: EB IN(	3.88	46.24	1	9.88	1.69	1	1.011	0.197	0.234	0.014
AVG	960-1320	1-13: EB IN(	3.88	46.24	74	4.54	0.47	0.2	40.986	7.974	9.499	0.586
AVG	960-1320	1-13: EB IN(	3.88	46.24	0							
AVG	960-1320	1-17: SB IN(	0.58	10.57	0	8.85	1.62	0.17	1.281	0.249	0.297	0.018
AVG	960-1320	1-17: SB IN(	0.58	10.57	0							
AVG	960-1320	1-17: SB IN(	0.58	10.57	9	5.66	2.25	0.41	6.482	1.261	1.502	0.093
AVG	960-1320	1-17: SB IN(	0.31	10.57	1	4.81	0.19	0.6	0.742	0.144	0.172	0.011
AVG	960-1320	1	1.03	46.86	182	3.73	0.9	0.18	94.786	18.442	21.968	1.356
AVG	1320-1680	1-3: WB IN(	0.02	2.87	15	1.04	0.02	0.01	6.026	1.172	1.396	0.086
AVG	1320-1680	1-3: WB IN(	0.01	4.33	3	1.19	0	0	1.068	0.208	0.247	0.015
AVG	1320-1680	1-3: WB IN(	0.02	2.87	0							
AVG	1320-1680	1-3: WB IN(	0.02	2.87	66	0.76	0.01	0.01	23.369	4.547	5.416	0.334
AVG	1320-1680	1-8: NB IN(	3.62	25.61	0							
AVG	1320-1680	1-8: NB IN(	3.62	25.61	0	6.39	1.41	1	0.875	0.17	0.203	0.013
AVG	1320-1680	1-8: NB IN(	3.62	25.61	20	11.36	5.59	0.75	18.399	3.58	4.264	0.263
AVG	1320-1680	1-8: NB IN(	3.62	25.61	0	10.96	1.24	0.75	1.444	0.281	0.335	0.021
AVG	1320-1680	1-13: EB IN(	2.34	29.19	0	0.65	0	0	0.303	0.059	0.07	0.004
AVG	1320-1680	1-13: EB IN(	2.34	29.19	0							
AVG	1320-1680	1-13: EB IN(	2.34	29.19	69	3.94	0.44	0.26	40.246	7.83	9.327	0.576
AVG	1320-1680	1-13: EB IN(	2.34	29.19	0							
AVG	1320-1680	1-17: SB IN(	0.64	9.52	1	6.46	1.81	0.54	1.409	0.274	0.327	0.02
AVG	1320-1680	1-17: SB IN(	0.64	9.52	0							
AVG	1320-1680	1-17: SB IN(	0.64	9.52	10	6.75	3.14	0.5	8.047	1.566	1.865	0.115
AVG	1320-1680	1-17: SB IN(	0.34	9.52	0	6.95	2.54	1	1.141	0.222	0.264	0.016
AVG	1320-1680	1	0.96	33.77	185	3.42	0.9	0.21	98.28	19.122	22.777	1.406
AVG	1680-2040	1-3: WB IN(	0.06	5.51	14	1.61	0.28	0.04	5.689	1.107	1.319	0.081
AVG	1680-2040	1-3: WB IN(	0.04	5.51	2	0.79	0.04	0.05	1.027	0.2	0.238	0.015
AVG	1680-2040	1-3: WB IN(	0.06	5.51	0							
AVG	1680-2040	1-3: WB IN(	0.06	5.51	66	1.02	0.05	0.01	23.647	4.601	5.48	0.338
AVG	1680-2040	1-8: NB IN(	3.97	20.43	0							
AVG	1680-2040	1-8: NB IN(	3.97	20.43	0	19.8	14.51	2	1.616	0.315	0.375	0.023
AVG	1680-2040	1-8: NB IN(	3.97	20.43	16	13.28	6.37	0.93	19.868	3.866	4.605	0.284
AVG	1680-2040	1-8: NB IN(	3.97	20.43	1	16.47	8.81	1.3	2.13	0.414	0.494	0.03
AVG	1680-2040	1-13: EB IN(	3.55	43.61	0	0.52	0	0	0.298	0.058	0.069	0.004
AVG	1680-2040	1-13: EB IN(	3.55	43.61	1	6.06	0.89	0.3	0.918	0.179	0.213	0.013
AVG	1680-2040	1-13: EB IN(	3.55	43.61	78	4.13	0.34	0.2	43.199	8.405	10.012	0.618
AVG	1680-2040	1-13: EB IN(	3.55	43.61	0							
AVG	1680-2040	1-17: SB IN(	0.6	9.58	1	0.37	0	0	0.409	0.08	0.095	0.006
AVG	1680-2040	1-17: SB IN(	0.6	9.58	0							
AVG	1680-2040	1-17: SB IN(	0.6	9.58	10	6.01	2.36	0.43	8.028	1.562	1.86	0.115
AVG	1680-2040	1-17: SB IN(	0.31	9.58	1	0.59	0	0	0.452	0.088	0.105	0.006
AVG	1680-2040	1	1.18	44.21	189	3.96	1.01	0.21	103.334	20.105	23.949	1.478
AVG	2040-2400	1-3: WB IN(	0.03	5.6	15	1.21	0.06	0.01	5.967	1.161	1.383	0.085
AVG	2040-2400	1-3: WB IN(	0.02	5.6	3	1.31	0.08	0.1	0.991	0.193	0.23	0.014
AVG	2040-2400	1-3: WB IN(	0.03	5.6	0							
AVG	2040-2400	1-3: WB IN(	0.03	5.6	63	0.9	0.02	0.01	22.527	4.383	5.221	0.322
AVG	2040-2400	1-8: NB IN(	4.28	24.13	0							
AVG	2040-2400	1-8: NB IN(	4.28	24.13	0	20.46	12.56	1.5	1.931	0.376	0.448	0.028
AVG	2040-2400	1-8: NB IN(	4.28	24.13	21	13.48	7.2	0.93	22.843	4.444	5.294	0.327
AVG	2040-2400	1-8: NB IN(	4.28	24.13	1	18.76	12.61	0.83	1.236	0.24	0.286	0.018
AVG	2040-2400	1-13: EB IN(	6.26	57.15	0	7.39	1.61	1	1.047	0.204	0.243	0.015
AVG	2040-2400	1-13: EB IN(	6.26	57.15	1	1.47	0.19	0.13	0.681	0.133	0.158	0.01
AVG	2040-2400	1-13: EB IN(	6.26	57.15	76	5.87	0.69	0.38	53.173	10.345	12.323	0.761
AVG	2040-2400	1-13: EB IN(	6.26	57.15	0							

AVG	2040-2400	1-17: SB IN	1.06	11.92	1	4.24	1.07	0.25	1.024	0.199	0.237	0.015
AVG	2040-2400	1-17: SB IN	1.06	11.92	0							
AVG	2040-2400	1-17: SB IN	1.06	11.92	9	7.18	3.29	0.62	7.728	1.504	1.791	0.111
AVG	2040-2400	1-17: SB IN	0.7	12.48	1	1.86	0.13	0.08	0.53	0.103	0.123	0.008
AVG	2040-2400	1	1.72	57.8	189	4.76	1.31	0.3	115.825	22.535	26.844	1.657
AVG	2400-2760	1-3: WB IN	0	1.64	14	1.16	0.05	0.02	5.473	1.065	1.268	0.078
AVG	2400-2760	1-3: WB IN	0	2.26	4	0.77	0	0	1.204	0.234	0.279	0.017
AVG	2400-2760	1-3: WB IN	0	1.64	0							
AVG	2400-2760	1-3: WB IN	0	1.64	66	0.83	0	0	23.171	4.508	5.37	0.331
AVG	2400-2760	1-8: NB IN	2.21	19.14	0							
AVG	2400-2760	1-8: NB IN	2.21	19.14	0							
AVG	2400-2760	1-8: NB IN	2.21	19.14	16	9.81	4.87	0.66	14.294	2.781	3.313	0.204
AVG	2400-2760	1-8: NB IN	2.21	19.14	1	8.29	4.79	0.67	1.468	0.286	0.34	0.021
AVG	2400-2760	1-13: EB IN	3.18	40.71	0	1.79	0	0	0.314	0.061	0.073	0.004
AVG	2400-2760	1-13: EB IN	3.18	40.71	1	2.99	0	0	0.596	0.116	0.138	0.009
AVG	2400-2760	1-13: EB IN	3.18	40.71	76	4.41	0.4	0.22	42.678	8.304	9.891	0.611
AVG	2400-2760	1-13: EB IN	3.18	40.71	0							
AVG	2400-2760	1-17: SB IN	0.46	8.72	1	2.3	0.33	0.3	0.704	0.137	0.163	0.01
AVG	2400-2760	1-17: SB IN	0.46	8.72	0							
AVG	2400-2760	1-17: SB IN	0.46	8.72	8	7.07	3.22	0.58	7.54	1.467	1.748	0.108
AVG	2400-2760	1-17: SB IN	0.25	8.72	0	3.82	1.47	0.17	1.091	0.212	0.253	0.016
AVG	2400-2760	1	0.84	42.14	186	3.46	0.77	0.18	95.516	18.584	22.137	1.366
AVG	2760-3120	1-3: WB IN	0.01	1.16	14	1.62	0.03	0.03	6.045	1.176	1.401	0.086
AVG	2760-3120	1-3: WB IN	0.01	2.24	2	0.85	0.04	0.04	0.595	0.116	0.138	0.009
AVG	2760-3120	1-3: WB IN	0.01	1.16	0							
AVG	2760-3120	1-3: WB IN	0.01	1.16	68	0.8	0.01	0.01	24.112	4.691	5.588	0.345
AVG	2760-3120	1-8: NB IN	2.77	20.57	0							
AVG	2760-3120	1-8: NB IN	2.77	20.57	0	33.09	22.89	2	1.843	0.359	0.427	0.026
AVG	2760-3120	1-8: NB IN	2.77	20.57	20	9.76	4.4	0.74	17.849	3.473	4.137	0.255
AVG	2760-3120	1-8: NB IN	2.77	20.57	0	16.75	9.34	2	1.833	0.357	0.425	0.026
AVG	2760-3120	1-13: EB IN	2.6	33.56	0	1.07	0	0	0.304	0.059	0.071	0.004
AVG	2760-3120	1-13: EB IN	2.6	33.56	0	5.95	0.01	0.25	0.621	0.121	0.144	0.009
AVG	2760-3120	1-13: EB IN	2.6	33.56	75	4.5	0.36	0.23	42.364	8.242	9.818	0.606
AVG	2760-3120	1-13: EB IN	2.6	33.56	0							
AVG	2760-3120	1-17: SB IN	0.56	9.67	1	8.84	4.42	0.53	1.251	0.243	0.29	0.018
AVG	2760-3120	1-17: SB IN	0.56	9.67	0							
AVG	2760-3120	1-17: SB IN	0.56	9.67	9	5.48	1.99	0.42	6.518	1.268	1.511	0.093
AVG	2760-3120	1-17: SB IN	0.32	10.25	1	6.57	2.84	0.13	0.773	0.15	0.179	0.011
AVG	2760-3120	1	0.86	35.72	190	3.57	0.75	0.19	99.059	19.273	22.958	1.417
AVG	3120-3480	1-3: WB IN	0.01	1.87	16	1.32	0.02	0.04	6.62	1.288	1.534	0.095
AVG	3120-3480	1-3: WB IN	0	1.87	2	0.51	0	0	0.926	0.18	0.215	0.013
AVG	3120-3480	1-3: WB IN	0.01	1.87	0							
AVG	3120-3480	1-3: WB IN	0.01	1.87	61	0.77	0	0.01	21.462	4.176	4.974	0.307
AVG	3120-3480	1-8: NB IN	4.67	26.41	0							
AVG	3120-3480	1-8: NB IN	4.67	26.41	0	22.75	12.35	2	1.505	0.293	0.349	0.022
AVG	3120-3480	1-8: NB IN	4.67	26.41	20	16.27	8.98	1.01	23.529	4.578	5.453	0.337
AVG	3120-3480	1-8: NB IN	4.67	26.41	0	30.22	14.49	3	2.668	0.519	0.618	0.038
AVG	3120-3480	1-13: EB IN	5.17	50.46	0	6.77	0	0	0.388	0.075	0.09	0.006
AVG	3120-3480	1-13: EB IN	5.17	50.46	1	3.96	0.6	0.43	0.737	0.143	0.171	0.011
AVG	3120-3480	1-13: EB IN	5.17	50.46	76	5.82	0.52	0.3	48.531	9.442	11.248	0.694
AVG	3120-3480	1-13: EB IN	5.17	50.46	0							
AVG	3120-3480	1-17: SB IN	0.58	8.46	1	3.21	0.82	0.22	1.347	0.262	0.312	0.019
AVG	3120-3480	1-17: SB IN	0.58	8.46	0							
AVG	3120-3480	1-17: SB IN	0.58	8.46	9	6.05	2.47	0.51	7.738	1.506	1.793	0.111
AVG	3120-3480	1-17: SB IN	0.32	9.05	1	2.67	0.96	0.07	0.531	0.103	0.123	0.008
AVG	3120-3480	1	1.5	51.51	187	4.96	1.36	0.27	111.214	21.638	25.775	1.591
AVG	3480-3840	1-3: WB IN	0.04	3.99	14	1.26	0.12	0.03	5.796	1.128	1.343	0.083
AVG	3480-3840	1-3: WB IN	0.03	4.6	2	0.66	0	0	0.649	0.126	0.15	0.009
AVG	3480-3840	1-3: WB IN	0.04	3.99	0							
AVG	3480-3840	1-3: WB IN	0.04	3.99	66	0.83	0.04	0.01	23.912	4.652	5.542	0.342
AVG	3480-3840	1-8: NB IN	2.75	20.54	0							
AVG	3480-3840	1-8: NB IN	2.75	20.54	0	14.4	7.56	0.33	0.7	0.136	0.162	0.01
AVG	3480-3840	1-8: NB IN	2.75	20.54	19	10.15	4.71	0.68	16.954	3.299	3.929	0.243
AVG	3480-3840	1-8: NB IN	2.75	20.54	0	16.88	8.69	1.17	1.645	0.32	0.381	0.024
AVG	3480-3840	1-13: EB IN	3.45	43.67	0	10.49	3.08	0.33	0.673	0.131	0.156	0.01
AVG	3480-3840	1-13: EB IN	3.45	43.67	0	3.43	0	0	0.483	0.094	0.112	0.007
AVG	3480-3840	1-13: EB IN	3.45	43.67	75	4.33	0.36	0.17	40.074	7.797	9.288	0.573
AVG	3480-3840	1-13: EB IN	3.45	43.67	0							
AVG	3480-3840	1-17: SB IN	0.45	7.98	0	1.56	0	0	0.476	0.093	0.11	0.007
AVG	3480-3840	1-17: SB IN	0.45	7.98	0							
AVG	3480-3840	1-17: SB IN	0.45	7.98	8	5.69	2.32	0.42	6.021	1.172	1.395	0.086
AVG	3480-3840	1-17: SB IN	0.24	7.98	1	3.96	1.41	0.5	1.055	0.205	0.245	0.015
AVG	3480-3840	1	0.96	43.83	187	3.51	0.77	0.17	95.003	18.484	22.018	1.359
AVG	3840-4200	1-3: WB IN	0.01	2.27	14	1.37	0.06	0.04	5.783	1.125	1.34	0.083
AVG	3840-4200	1-3: WB IN	0.01	2.85	2	1.6	0	0	0.751	0.146	0.174	0.011
AVG	3840-4200	1-3: WB IN	0.01	2.27	0							
AVG	3840-4200	1-3: WB IN	0.01	2.27	67	0.85	0.01	0.01	23.609	4.593	5.472	0.338
AVG	3840-4200	1-8: NB IN	2.78	23.47	0							
AVG	3840-4200	1-8: NB IN	2.78	23.47	0							
AVG	3840-4200	1-8: NB IN	2.78	23.47	19	10.07	4.55	0.77	18.589	3.617	4.308	0.266
AVG	3840-4200	1-8: NB IN	2.78	23.47	1	11.9	5.48	0.83	1.152	0.224	0.267	0.016
AVG	3840-4200	1-13: EB IN	2.91	40.16	0							

AVG	3840-4200	1-13: EB IN	2.91	40.16	1	1.93	0	0	0.553	0.108	0.128	0.008
AVG	3840-4200	1-13: EB IN	2.91	40.16	75	4.07	0.4	0.22	41.705	8.114	9.666	0.597
AVG	3840-4200	1-13: EB IN	2.91	40.16	0							
AVG	3840-4200	1-17: SB IN	0.55	9.26	1	8.49	3.44	0.64	0.976	0.19	0.226	0.014
AVG	3840-4200	1-17: SB IN	0.55	9.26	0							
AVG	3840-4200	1-17: SB IN	0.55	9.26	8	5.77	2.3	0.49	6.66	1.296	1.544	0.095
AVG	3840-4200	1-17: SB IN	0.28	9.26	1	2.14	0.32	0.13	0.444	0.086	0.103	0.006
AVG	3840-4200	1	0.9	41.35	188	3.47	0.78	0.2	98.997	19.261	22.944	1.416

WESTBOUND WIDENING ROUNDABOUT (PM PEAK HOUR) - NODE RESULTS

SIMRUN	TIMEINT	MOVEMENT	QLEN	QLENMAX	VEHS(ALL)	VEHDELAY(ALL)	STOPDELAY(ALL)	STOPS(ALL)	EMISSIONSCO	EMISSIONSNOX	EMISSIONSVOC	FUELCONSUMPTION	
AVG	600-960	1-3: WB IN@340.1-10: SB OUT@8.1	0.09	10.88	23	1.87	0.11	0.07	10.215	1.987	2.367	0.146	
AVG	600-960	1-3: WB IN@340.1-18: NB OUT@18.0	0.08	12.04	10	1.25	0.09	0.03	3.516	0.684	0.815	0.05	
AVG	600-960	1-3: WB IN@340.1-27: EB OUT@30.6	0.09	10.88	0								
AVG	600-960	1-3: WB IN@340.1-32: WB OUT@9.0	0.09	10.88	88	1.34	0.03	0.03	33.052	6.431	7.66	0.473	
AVG	600-960	1-8: NB IN@400.7-10: SB OUT@8.1	5.36	26.49	0								
AVG	600-960	1-8: NB IN@400.7-18: NB OUT@18.0	5.36	26.49	1	14.37	7.65	1.08	1.44	0.28	0.334	0.021	
AVG	600-960	1-8: NB IN@400.7-27: EB OUT@30.6	5.36	26.49	23	14.93	8.53	0.87	25.619	4.985	5.937	0.367	
AVG	600-960	1-8: NB IN@400.7-32: WB OUT@9.0	5.36	26.49	1	24.35	16.8	0.88	1.588	0.309	0.368	0.023	
AVG	600-960	1-13: EB IN@378.6-10: SB OUT@8.1	7.19	60.01	1	10.68	3.02	1.5	1.989	0.387	0.461	0.028	
AVG	600-960	1-13: EB IN@378.6-18: NB OUT@18.0	7.19	60.01	1	5.09	1.33	0.33	0.869	0.169	0.201	0.012	
AVG	600-960	1-13: EB IN@378.6-27: EB OUT@30.6	7.19	60.01	77	6.71	0.96	0.39	54.352	10.575	12.597	0.778	
AVG	600-960	1-13: EB IN@378.6-32: WB OUT@9.0	7.19	60.01	0								
AVG	600-960	1-17: SB IN@108.9-10: SB OUT@8.1	0.54	7.49	1	12.03	8.37	0.5	0.938	0.183	0.217	0.013	
AVG	600-960	1-17: SB IN@108.9-18: NB OUT@18.0	0.54	7.49	0								
AVG	600-960	1-17: SB IN@108.9-27: EB OUT@30.6	0.54	7.49	4	11.18	7.11	0.65	4.221	0.821	0.978	0.06	
AVG	600-960	1-17: SB IN@108.9-32: WB OUT@9.0	0.27	7.49	0	2.78	0.73	0.33	0.541	0.105	0.125	0.008	
AVG	600-960		1	1.9	61.32	228	4.97	1.46	0.27	134.125	26.096	31.085	1.919
AVG	960-1320	1-3: WB IN@340.1-10: SB OUT@8.1	0.09	12.12	21	1.67	0.06	0.02	8.83	1.718	2.046	0.126	
AVG	960-1320	1-3: WB IN@340.1-18: NB OUT@18.0	0.07	15.45	9	1.63	0.07	0.04	3.181	0.619	0.737	0.046	
AVG	960-1320	1-3: WB IN@340.1-27: EB OUT@30.6	0.09	12.12	0								
AVG	960-1320	1-3: WB IN@340.1-32: WB OUT@9.0	0.09	12.12	93	1.31	0.01	0.02	34.437	6.7	7.981	0.493	
AVG	960-1320	1-8: NB IN@400.7-10: SB OUT@8.1	3.19	23.29	0								
AVG	960-1320	1-8: NB IN@400.7-18: NB OUT@18.0	3.19	23.29	1	5.02	2.72	0.33	0.646	0.126	0.15	0.009	
AVG	960-1320	1-8: NB IN@400.7-27: EB OUT@30.6	3.19	23.29	22	10.47	5.07	0.71	20.039	3.899	4.644	0.287	
AVG	960-1320	1-8: NB IN@400.7-32: WB OUT@9.0	3.19	23.29	0	14.38	7.4	1.25	1.774	0.345	0.411	0.025	
AVG	960-1320	1-13: EB IN@378.6-10: SB OUT@8.1	6.53	52.8	1	3.31	0.08	0.14	0.836	0.163	0.194	0.012	
AVG	960-1320	1-13: EB IN@378.6-18: NB OUT@18.0	6.53	52.8	1	12.37	1.97	0.38	0.985	0.192	0.228	0.014	
AVG	960-1320	1-13: EB IN@378.6-27: EB OUT@30.6	6.53	52.8	78	6.54	0.65	0.4	56.176	10.93	13.019	0.804	
AVG	960-1320	1-13: EB IN@378.6-32: WB OUT@9.0	6.53	52.8	0								
AVG	960-1320	1-17: SB IN@108.9-10: SB OUT@8.1	0.48	6.87	1	9.83	6.3	0.33	0.769	0.15	0.178	0.011	
AVG	960-1320	1-17: SB IN@108.9-18: NB OUT@18.0	0.48	6.87	0								
AVG	960-1320	1-17: SB IN@108.9-27: EB OUT@30.6	0.48	6.87	4	8.11	4.44	0.39	2.884	0.561	0.668	0.041	
AVG	960-1320	1-17: SB IN@108.9-32: WB OUT@9.0	0.24	6.91	0	1.91	0	0	0.323	0.063	0.075	0.005	
AVG	960-1320		1	1.49	53.34	232	4.22	0.82	0.23	127.635	24.833	29.581	1.826
AVG	1320-1680	1-3: WB IN@340.1-10: SB OUT@8.1	0.02	5.92	22	1.47	0.05	0.03	9.087	1.768	2.106	0.13	
AVG	1320-1680	1-3: WB IN@340.1-18: NB OUT@18.0	0.03	11.81	10	1.54	0.1	0.04	3.562	0.693	0.825	0.051	
AVG	1320-1680	1-3: WB IN@340.1-27: EB OUT@30.6	0.02	5.92	0								
AVG	1320-1680	1-3: WB IN@340.1-32: WB OUT@9.0	0.02	5.92	91	1.17	0.01	0.01	32.94	6.409	7.634	0.471	
AVG	1320-1680	1-8: NB IN@400.7-10: SB OUT@8.1	4.17	24.8	0								
AVG	1320-1680	1-8: NB IN@400.7-18: NB OUT@18.0	4.17	24.8	1	10.54	5.15	0.58	1.031	0.201	0.239	0.015	
AVG	1320-1680	1-8: NB IN@400.7-27: EB OUT@30.6	4.17	24.8	19	12.66	5.85	0.94	21.144	4.114	4.9	0.302	
AVG	1320-1680	1-8: NB IN@400.7-32: WB OUT@9.0	4.17	24.8	0	17.56	10.12	0.5	0.943	0.183	0.218	0.013	
AVG	1320-1680	1-13: EB IN@378.6-10: SB OUT@8.1	4.59	46.87	2	4.76	0.7	0.31	1.284	0.25	0.298	0.018	
AVG	1320-1680	1-13: EB IN@378.6-18: NB OUT@18.0	4.59	46.87	0	10.56	0.3	0.5	0.788	0.153	0.183	0.011	
AVG	1320-1680	1-13: EB IN@378.6-27: EB OUT@30.6	4.59	46.87	79	5.14	0.61	0.32	50.468	9.819	11.696	0.722	
AVG	1320-1680	1-13: EB IN@378.6-32: WB OUT@9.0	4.59	46.87	0								
AVG	1320-1680	1-17: SB IN@108.9-10: SB OUT@8.1	0.41	6.78	0	15.76	11.16	1	1.213	0.236	0.281	0.017	
AVG	1320-1680	1-17: SB IN@108.9-18: NB OUT@18.0	0.41	6.78	0								
AVG	1320-1680	1-17: SB IN@108.9-27: EB OUT@30.6	0.41	6.78	3	8.8	5.05	0.62	3.732	0.726	0.865	0.053	
AVG	1320-1680	1-17: SB IN@108.9-32: WB OUT@9.0	0.24	7.3	1	4.67	1.94	0.31	0.748	0.146	0.173	0.011	
AVG	1320-1680		1	1.34	47.67	229	3.87	0.89	0.22	123.331	23.996	28.583	1.764
AVG	1680-2040	1-3: WB IN@340.1-10: SB OUT@8.1	0.02	4.52	20	1.53	0.03	0.02	8.144	1.585	1.887	0.117	
AVG	1680-2040	1-3: WB IN@340.1-18: NB OUT@18.0	0.02	6.57	8	1.46	0	0.01	2.847	0.554	0.66	0.041	
AVG	1680-2040	1-3: WB IN@340.1-27: EB OUT@30.6	0.02	4.52	0								
AVG	1680-2040	1-3: WB IN@340.1-32: WB OUT@9.0	0.02	4.52	93	1.09	0.01	0.01	33.438	6.506	7.75	0.478	
AVG	1680-2040	1-8: NB IN@400.7-10: SB OUT@8.1	4.15	26.85	0								
AVG	1680-2040	1-8: NB IN@400.7-18: NB OUT@18.0	4.15	26.85	1	9.6	4.95	0.38	1.058	0.206	0.245	0.015	
AVG	1680-2040	1-8: NB IN@400.7-27: EB OUT@30.6	4.15	26.85	23	12.54	5.89	0.84	23.527	4.578	5.453	0.337	
AVG	1680-2040	1-8: NB IN@400.7-32: WB OUT@9.0	4.15	26.85	0	15.78	7.36	1.33	1.553	0.302	0.36	0.022	
AVG	1680-2040	1-13: EB IN@378.6-10: SB OUT@8.1	9	69.48	1	5.98	0.13	0.33	0.817	0.159	0.189	0.012	
AVG	1680-2040	1-13: EB IN@378.6-18: NB OUT@18.0	9	69.48	1	8.39	0.32	0.5	0.874	0.17	0.203	0.013	
AVG	1680-2040	1-13: EB IN@378.6-27: EB OUT@30.6	9	69.48	81	7.72	0.97	0.45	62.672	12.194	14.525	0.897	
AVG	1680-2040	1-13: EB IN@378.6-32: WB OUT@9.0	9	69.48	0								
AVG	1680-2040	1-17: SB IN@108.9-10: SB OUT@8.1	0.69	9.39	0	14.09	5.16	1	1.147	0.223	0.266	0.016	
AVG	1680-2040	1-17: SB IN@108.9-18: NB OUT@18.0	0.69	9.39	0								
AVG	1680-2040	1-17: SB IN@108.9-27: EB OUT@30.6	0.69	9.39	5	12.07	8.05	0.61	4.838	0.941	1.121	0.069	
AVG	1680-2040	1-17: SB IN@108.9-32: WB OUT@9.0	0.43	9.9	0	18.61	12.09	1.33	1.427	0.278	0.331	0.02	
AVG	1680-2040		1	2.01	69.48	234	4.94	1.13	0.27	137.647	26.781	31.901	1.969
AVG	2040-2400	1-3: WB IN@340.1-10: SB OUT@8.1	0.08	7.96	24	1.6	0.13	0.03	9.908	1.928	2.296	0.142	
AVG	2040-2400	1-3: WB IN@340.1-18: NB OUT@18.0	0.06	9.11	8	1.73	0.04	0.03	2.757	0.536	0.639	0.039	
AVG	2040-2400	1-3: WB IN@340.1-27: EB OUT@30.6	0.08	7.96	0								
AVG	2040-2400	1-3: WB IN@340.1-32: WB OUT@9.0	0.08	7.96	90	1.24	0.02	0.01	32.832	6.388	7.609	0.47	
AVG	2040-2400	1-8: NB IN@400.7-10: SB OUT@8.1	4.55	23.39	0								
AVG	2040-2400	1-8: NB IN@400.7-18: NB OUT@18.0	4.55	23.39	1	11.91	7.23	0.53	1.265	0.246	0.293	0.018	
AVG	2040-2400	1-8: NB IN@400.7-27: EB OUT@30.6	4.55	23.39	20	14.33	6.69	1.07	24.556	4.778	5.691	0.351	
AVG	2040-2400	1-8: NB IN@400.7-32: WB OUT@9.0	4.55	23.39	0	7.74	2.37	0.67	0.871	0.169	0.202	0.012	
AVG	2040-2400	1-13: EB IN@378.6-10: SB OUT@8.1	10.86	67	1	8.13	0.96	0.47	1.557	0.303	0.361	0.022	
AVG	2040-2400	1-13: EB IN@378.6-18: NB OUT@18.0	10.86	67	1	3.23	0.85	0.27	0.867	0.169	0.201	0.012	
AVG	2040-2400	1-13: EB IN@378.6-27: EB OUT@30.6	10.86	67	81	8.11	0.89	0.48	65.385	12.722	15.154	0.935	
AVG	2040-2400	1-13: EB IN@378.6-32: WB OUT@9.0	10.86	67	0								
AVG	2040-2400	1-17: SB IN@108.9-10: SB OUT@8.1	0.96	10.26	0	9.48	2.64	1	1.141	0.222	0.264	0.016	
AVG	2040-2400	1-17: SB IN@108.9-18: NB OUT@18.0	0.96	10.26	0								
AVG	2040-2400	1-17: SB IN@108.9-27: EB OUT@30.6	0.96	10.26	5	13.04	8.56	0.85	5.862	1.14	1.358	0.084	
AVG	2040-2400	1-17: SB IN@108.9-32: WB OUT@9.0	0.49	10.26	0	2.93	1.28	0.25	0.508	0.099	0.118	0.007	
AVG	2040-2400		1	2.37	67.03	232	5.33	1.17	0.3	143.553	27.93	33.27	2.054
AVG	2400-2760	1-3: WB IN@340.1-10: SB OUT@8.1	0.03	5.01	20	1.6	0.04	0.03	8.401	1.635	1.947	0.12	
AVG	2400-2760	1-3: WB IN@340.1-18: NB OUT@18.0	0.03	5.7	9	1.6	0.09	0.05	3.361	0.654	0.779	0.048	
AVG	2400-2760	1-3: WB IN@340.1-27: EB OUT@30.6	0.03	5.01	0								
AVG	2400-2760	1-3: WB IN@340.1-32: WB OUT@9.0	0.03	5.01	90	1.18	0.01	0.01	32.794	6.381	7.6	0.469	
AVG	2400-2760	1-8: NB IN@400.7-10: SB OUT@8.1	7	34.19	0								
AVG	2400-2760	1-8: NB IN@400.7-18: NB OUT@18.0	7	34.19	0	4.79	1.45	0.25	0.891	0.173	0.207	0.013	
AVG	2400-2760	1-8: NB IN@40											

	2400-2760	1-13: EB IN@378.6-18: NB OUT@18.0	8.49	66.15	1	10.29	1.89	1.07	1.537	0.299	0.356	0.022	
AVG	2400-2760	1-13: EB IN@378.6-27: EB OUT@30.6	8.49	66.15	84	7.39	0.74	0.45	63.023	12.262	14.606	0.902	
AVG	2400-2760	1-13: EB IN@378.6-32: WB OUT@9.0	8.49	66.15	0								
AVG	2400-2760	1-17: SB IN@108.9-10: SB OUT@8.1	0.91	9.5	1	12	4.41	1	1.796	0.349	0.416	0.026	
AVG	2400-2760	1-17: SB IN@108.9-18: NB OUT@18.0	0.91	9.5	0								
AVG	2400-2760	1-17: SB IN@108.9-27: EB OUT@30.6	0.91	9.5	6	12.4	7.86	0.67	5.993	1.166	1.389	0.086	
AVG	2400-2760	1-17: SB IN@108.9-32: WB OUT@9.0	0.45	9.5	0	0.37	0	0	0.295	0.057	0.068	0.004	
AVG	2400-2760		1	2.36	67.31	235	5.54	1.48	0.31	147.683	28.734	34.227	2.113
AVG	2760-3120	1-3: WB IN@340.1-10: SB OUT@8.1	0.11	13.6	22	1.75	0.1	0.03	9.239	1.798	2.141	0.132	
AVG	2760-3120	1-3: WB IN@340.1-18: NB OUT@18.0	0.09	13.76	8	2.11	0.1	0.07	3.103	0.604	0.719	0.044	
AVG	2760-3120	1-3: WB IN@340.1-27: EB OUT@30.6	0.11	13.6	0								
AVG	2760-3120	1-3: WB IN@340.1-32: WB OUT@9.0	0.11	13.6	96	1.26	0.01	0.02	35.057	6.821	8.125	0.502	
AVG	2760-3120	1-8: NB IN@400.7-10: SB OUT@8.1	7.92	33.55	0								
AVG	2760-3120	1-8: NB IN@400.7-18: NB OUT@18.0	7.92	33.55	1	14.06	9.74	0.5	1.067	0.208	0.247	0.015	
AVG	2760-3120	1-8: NB IN@400.7-27: EB OUT@30.6	7.92	33.55	22	20.28	11.48	1.24	31.598	6.148	7.323	0.452	
AVG	2760-3120	1-8: NB IN@400.7-32: WB OUT@9.0	7.92	33.55	0	13.88	3.78	1.5	1.486	0.289	0.344	0.021	
AVG	2760-3120	1-13: EB IN@378.6-10: SB OUT@8.1	12.25	69.35	2	8.04	1.06	0.4	1.33	0.259	0.308	0.019	
AVG	2760-3120	1-13: EB IN@378.6-18: NB OUT@18.0	12.25	69.35	1	19.86	2.37	1.2	1.326	0.258	0.307	0.019	
AVG	2760-3120	1-13: EB IN@378.6-27: EB OUT@30.6	12.25	69.35	81	9.37	1.15	0.56	71.288	13.87	16.522	1.02	
AVG	2760-3120	1-13: EB IN@378.6-32: WB OUT@9.0	12.25	69.35	0								
AVG	2760-3120	1-17: SB IN@108.9-10: SB OUT@8.1	0.76	9.11	0	7.43	3.84	0.67	0.869	0.169	0.201	0.012	
AVG	2760-3120	1-17: SB IN@108.9-18: NB OUT@18.0	0.76	9.11	0								
AVG	2760-3120	1-17: SB IN@108.9-27: EB OUT@30.6	0.76	9.11	5	10.85	6.57	0.76	5.716	1.112	1.325	0.082	
AVG	2760-3120	1-17: SB IN@108.9-32: WB OUT@9.0	0.38	9.11	1	1.01	0.09	0.1	0.506	0.098	0.117	0.007	
AVG	2760-3120		1	3.03	69.68	238	6.28	1.68	0.35	158.361	30.811	36.702	2.266
AVG	3120-3480	1-3: WB IN@340.1-10: SB OUT@8.1	0.11	9.69	22	1.98	0.13	0.07	9.64	1.876	2.234	0.138	
AVG	3120-3480	1-3: WB IN@340.1-18: NB OUT@18.0	0.11	16.66	10	1.93	0.27	0.07	3.943	0.767	0.914	0.056	
AVG	3120-3480	1-3: WB IN@340.1-27: EB OUT@30.6	0.11	9.69	0								
AVG	3120-3480	1-3: WB IN@340.1-32: WB OUT@9.0	0.11	9.69	91	1.24	0.02	0.01	33.125	6.445	7.677	0.474	
AVG	3120-3480	1-8: NB IN@400.7-10: SB OUT@8.1	4.74	23.16	0								
AVG	3120-3480	1-8: NB IN@400.7-18: NB OUT@18.0	4.74	23.16	0	13.86	5.86	1.5	1.226	0.239	0.284	0.018	
AVG	3120-3480	1-8: NB IN@400.7-27: EB OUT@30.6	4.74	23.16	23	13.83	7.23	0.84	24.227	4.714	5.615	0.347	
AVG	3120-3480	1-8: NB IN@400.7-32: WB OUT@9.0	4.74	23.16	0	5.46	0	0	0.45	0.088	0.104	0.006	
AVG	3120-3480	1-13: EB IN@378.6-10: SB OUT@8.1	6.5	55.93	1	5.12	1.32	0.11	0.502	0.098	0.116	0.007	
AVG	3120-3480	1-13: EB IN@378.6-18: NB OUT@18.0	6.5	55.93	1	8.32	0.73	0.6	0.916	0.178	0.212	0.013	
AVG	3120-3480	1-13: EB IN@378.6-27: EB OUT@30.6	6.5	55.93	80	5.92	0.63	0.29	49.968	9.722	11.581	0.715	
AVG	3120-3480	1-13: EB IN@378.6-32: WB OUT@9.0	6.5	55.93	0								
AVG	3120-3480	1-17: SB IN@108.9-10: SB OUT@8.1	0.73	9.48	1	16.35	10.67	1	1.526	0.297	0.354	0.022	
AVG	3120-3480	1-17: SB IN@108.9-18: NB OUT@18.0	0.73	9.48	0								
AVG	3120-3480	1-17: SB IN@108.9-27: EB OUT@30.6	0.73	9.48	6	10.92	6.71	0.64	5.582	1.086	1.294	0.08	
AVG	3120-3480	1-17: SB IN@108.9-32: WB OUT@9.0	0.37	9.48	0	3.46	0.58	0.25	0.491	0.096	0.114	0.007	
AVG	3120-3480		1	1.76	57.42	234	4.49	1.16	0.22	128.696	25.04	29.827	1.841
AVG	3480-3840	1-3: WB IN@340.1-10: SB OUT@8.1	0.07	9.2	21	1.65	0.08	0.05	8.819	1.716	2.044	0.126	
AVG	3480-3840	1-3: WB IN@340.1-18: NB OUT@18.0	0.06	9.77	11	1.47	0.06	0.03	3.71	0.722	0.86	0.053	
AVG	3480-3840	1-3: WB IN@340.1-27: EB OUT@30.6	0.07	9.2	0								
AVG	3480-3840	1-3: WB IN@340.1-32: WB OUT@9.0	0.07	9.2	87	1.2	0.03	0.02	32.127	6.251	7.446	0.46	
AVG	3480-3840	1-8: NB IN@400.7-10: SB OUT@8.1	3.69	23.5	0								
AVG	3480-3840	1-8: NB IN@400.7-18: NB OUT@18.0	3.69	23.5	1	9	4.9	0.36	1.091	0.212	0.253	0.016	
AVG	3480-3840	1-8: NB IN@400.7-27: EB OUT@30.6	3.69	23.5	20	11.76	5.61	0.8	19.57	3.808	4.536	0.28	
AVG	3480-3840	1-8: NB IN@400.7-32: WB OUT@9.0	3.69	23.5	0	4.86	0	0	0.442	0.086	0.102	0.006	
AVG	3480-3840	1-13: EB IN@378.6-10: SB OUT@8.1	8.4	65.97	1	10.9	1.6	0.67	1.139	0.222	0.264	0.016	
AVG	3480-3840	1-13: EB IN@378.6-18: NB OUT@18.0	8.4	65.97	1	6.93	0.68	0.36	0.803	0.156	0.186	0.011	
AVG	3480-3840	1-13: EB IN@378.6-27: EB OUT@30.6	8.4	65.97	82	7.52	0.81	0.49	65.192	12.684	15.109	0.933	
AVG	3480-3840	1-13: EB IN@378.6-32: WB OUT@9.0	8.4	65.97	0								
AVG	3480-3840	1-17: SB IN@108.9-10: SB OUT@8.1	0.58	7.69	0	4.72	0.3	0.25	0.913	0.178	0.212	0.013	
AVG	3480-3840	1-17: SB IN@108.9-18: NB OUT@18.0	0.58	7.69	0								
AVG	3480-3840	1-17: SB IN@108.9-27: EB OUT@30.6	0.58	7.69	5	9.56	4.84	0.76	5.546	1.079	1.285	0.079	
AVG	3480-3840	1-17: SB IN@108.9-32: WB OUT@9.0	0.3	8.23	1	2.75	0.72	0.25	0.583	0.113	0.135	0.008	
AVG	3480-3840		1	1.84	67.86	230	4.75	0.96	0.28	136.656	26.588	31.671	1.955
AVG	3840-4200	1-3: WB IN@340.1-10: SB OUT@8.1	0.05	8.88	19	1.32	0.02	0.02	7.774	1.513	1.802	0.111	
AVG	3840-4200	1-3: WB IN@340.1-18: NB OUT@18.0	0.03	9.04	9	1.19	0	0	3.061	0.595	0.709	0.044	
AVG	3840-4200	1-3: WB IN@340.1-27: EB OUT@30.6	0.05	8.88	0								
AVG	3840-4200	1-3: WB IN@340.1-32: WB OUT@9.0	0.05	8.88	87	1.13	0.02	0.02	32.073	6.24	7.433	0.459	
AVG	3840-4200	1-8: NB IN@400.7-10: SB OUT@8.1	6.28	30.13	0								
AVG	3840-4200	1-8: NB IN@400.7-18: NB OUT@18.0	6.28	30.13	2	22.17	12.17	1.63	2.714	0.528	0.629	0.039	
AVG	3840-4200	1-8: NB IN@400.7-27: EB OUT@30.6	6.28	30.13	23	16.17	8.36	1.05	27.936	5.435	6.474	0.4	
AVG	3840-4200	1-8: NB IN@400.7-32: WB OUT@9.0	6.28	30.13	0	50.67	29.18	3.33	3.032	0.59	0.703	0.043	
AVG	3840-4200	1-13: EB IN@378.6-10: SB OUT@8.1	4.99	49.26	1	4.45	0.67	0.26	0.787	0.153	0.182	0.011	
AVG	3840-4200	1-13: EB IN@378.6-18: NB OUT@18.0	4.99	49.26	0	5.37	0.3	0.25	0.62	0.121	0.144	0.009	
AVG	3840-4200	1-13: EB IN@378.6-27: EB OUT@30.6	4.99	49.26	81	5.31	0.54	0.28	49.768	9.683	11.534	0.712	
AVG	3840-4200	1-13: EB IN@378.6-32: WB OUT@9.0	4.99	49.26	0								
AVG	3840-4200	1-17: SB IN@108.9-10: SB OUT@8.1	0.4	6.98	1	8.15	3.19	0.6	0.859	0.167	0.199	0.012	
AVG	3840-4200	1-17: SB IN@108.9-18: NB OUT@18.0	0.4	6.98	0								
AVG	3840-4200	1-17: SB IN@108.9-27: EB OUT@30.6	0.4	6.98	5	8.15	4.36	0.52	4.503	0.876	1.044	0.064	
AVG	3840-4200	1-17: SB IN@108.9-32: WB OUT@9.0	0.2	6.98	1	1.27	0	0	0.369	0.072	0.085	0.005	
AVG	3840-4200		1	1.68	49.32	229	4.57	1.28	0.25	130.032	25.299	30.136	1.86

STANDARD ROUNDABOUT (AM PEAK HOUR) - QUEUE RESULTS

SIMRUN	TIMEINT	QUEUECOUNTER	QLEN	QLENMAX	QSTOPS
AVG	600-960	1	2.23	34.8	11
AVG	600-960	2	3.01	26.49	8
AVG	600-960	3	0.76	23.81	5
AVG	600-960	4	0.43	10.41	5
AVG	960-1320	1	4.68	45.21	21
AVG	960-1320	2	1.62	17.2	6
AVG	960-1320	3	0.58	20.39	6
AVG	960-1320	4	0.48	10.65	6
AVG	1320-1680	1	2.49	37.36	15
AVG	1320-1680	2	1.98	22.43	6
AVG	1320-1680	3	1.6	33.65	7
AVG	1320-1680	4	0.63	12.12	7
AVG	1680-2040	1	4.81	46.6	24
AVG	1680-2040	2	1.96	18.17	6
AVG	1680-2040	3	2.69	41.02	11
AVG	1680-2040	4	0.37	9.34	7
AVG	2040-2400	1	4.16	51.18	20
AVG	2040-2400	2	3.88	24.64	10
AVG	2040-2400	3	1.28	26.86	6
AVG	2040-2400	4	1.19	14.18	7
AVG	2400-2760	1	3.27	38.61	16
AVG	2400-2760	2	1.77	18.49	5
AVG	2400-2760	3	1.14	29.08	5
AVG	2400-2760	4	0.68	11.49	5
AVG	2760-3120	1	4.78	47.92	19
AVG	2760-3120	2	2.27	23.65	7
AVG	2760-3120	3	1.15	31.78	7
AVG	2760-3120	4	0.32	9.94	6
AVG	3120-3480	1	7.47	61.64	27
AVG	3120-3480	2	4.72	26.54	10
AVG	3120-3480	3	0.31	14.15	4
AVG	3120-3480	4	0.26	11.18	5
AVG	3480-3840	1	3.96	45.04	17
AVG	3480-3840	2	3.05	20.96	8
AVG	3480-3840	3	1.35	34.18	9
AVG	3480-3840	4	0.41	8.67	5
AVG	3840-4200	1	2.91	40.2	15
AVG	3840-4200	2	1.51	22.68	7
AVG	3840-4200	3	1.16	26.6	6
AVG	3840-4200	4	0.17	7.89	5
MAX	600-960	1	6.63	79.18	25
MAX	600-960	2	9.56	47.94	16
MAX	600-960	3	3.29	66.7	14
MAX	600-960	4	1.55	22.36	10
MAX	960-1320	1	17.56	97.1	53

MAX	960-1320	2	5.44	25.53	17
MAX	960-1320	3	2.25	52.83	12
MAX	960-1320	4	1.86	17.09	11
MAX	1320-1680	1	5.94	73.08	28
MAX	1320-1680	2	6.7	46.83	14
MAX	1320-1680	3	7.65	105.34	19
MAX	1320-1680	4	2.53	16.86	10
MAX	1680-2040	1	9.91	78.21	50
MAX	1680-2040	2	5.83	41.66	15
MAX	1680-2040	3	10.39	114.23	31
MAX	1680-2040	4	1.69	20.95	14
MAX	2040-2400	1	6.23	75.81	34
MAX	2040-2400	2	10.6	46.35	18
MAX	2040-2400	3	8.61	117.66	25
MAX	2040-2400	4	3.51	30.55	11
MAX	2400-2760	1	9.39	66.1	30
MAX	2400-2760	2	5.34	43.48	17
MAX	2400-2760	3	6.45	100.96	22
MAX	2400-2760	4	2.13	21.95	6
MAX	2760-3120	1	16.6	93.98	52
MAX	2760-3120	2	5.97	40.54	17
MAX	2760-3120	3	2.68	53.39	13
MAX	2760-3120	4	0.92	22.22	9
MAX	3120-3480	1	19.53	133.51	52
MAX	3120-3480	2	23.24	52.37	22
MAX	3120-3480	3	0.94	26.87	9
MAX	3120-3480	4	1.09	20.93	10
MAX	3480-3840	1	12.16	86.88	47
MAX	3480-3840	2	8.26	46.68	21
MAX	3480-3840	3	3.97	72.51	13
MAX	3480-3840	4	2.03	15.67	10
MAX	3840-4200	1	7.8	62.76	29
MAX	3840-4200	2	3.54	47.76	13
MAX	3840-4200	3	5.43	82.48	20
MAX	3840-4200	4	0.51	11.25	8

STANDARD ROUNDABOUT (PM PEAK HOUR) - QUEUE RESULTS

SIMRUN	TIMEINT	QUEUECOUNTER	QLEN	QLENMAX	QSTOPS
AVG	1320-1680	1	5.59	47.55	27
AVG	1680-2040	1	13.85	67.83	47
AVG	2040-2400	1	9.62	71.25	34
AVG	2400-2760	1	12.16	84.91	43
AVG	2760-3120	1	16.89	80.53	48
AVG	3120-3480	1	10.46	66.05	41
AVG	3480-3840	1	16.76	97.1	50
AVG	3840-4200	1	8.73	61.77	31
AVG	600-960	1	9.4	59.68	38
AVG	960-1320	1	6.06	58.33	24
AVG	1320-1680	2	3.47	24.96	9
AVG	1680-2040	2	5.75	29.69	13
AVG	2040-2400	2	3.82	26.75	9
AVG	2400-2760	2	6.88	32.71	14
AVG	2760-3120	2	6.45	33.64	15
AVG	3120-3480	2	3.41	25.17	12
AVG	3480-3840	2	3.18	24.34	9
AVG	3840-4200	2	4.27	28.87	11
AVG	600-960	2	4.77	27.08	10
AVG	960-1320	2	2.51	19.78	8
AVG	1320-1680	3	21.55	109.51	37
AVG	1680-2040	3	14.55	127.61	37
AVG	2040-2400	3	4.74	92.08	21
AVG	2400-2760	3	11.52	102.9	33
AVG	2760-3120	3	32.03	150.12	60
AVG	3120-3480	3	32.76	137.67	64
AVG	3480-3840	3	8.46	93.13	26
AVG	3840-4200	3	5.24	67.32	24
AVG	600-960	3	7.25	80.26	25
AVG	960-1320	3	49.14	154.9	76
AVG	1320-1680	4	1.18	8.26	4
AVG	1680-2040	4	0.99	10.51	5
AVG	2040-2400	4	1.55	14.64	6
AVG	2400-2760	4	1.08	11.56	5
AVG	2760-3120	4	2.21	12.55	5
AVG	3120-3480	4	4.51	15.36	6
AVG	3480-3840	4	2.09	11.56	5
AVG	3840-4200	4	0.71	9.3	5
AVG	600-960	4	1.07	10.49	4
AVG	960-1320	4	0.61	8.18	3
MAX	1320-1680	1	13.8	76.67	57
MAX	1680-2040	1	70.85	173.42	180
MAX	2040-2400	1	27.66	135.46	88
MAX	2400-2760	1	28.07	133.75	93
MAX	2760-3120	1	97.3	192.69	215

MAX	3120-3480	1	26.58	127.49	79
MAX	3480-3840	1	31.91	164.64	100
MAX	3840-4200	1	31.09	134.5	76
MAX	600-960	1	29.58	131.06	72
MAX	960-1320	1	16.75	97.36	44
MAX	1320-1680	2	14.57	53.18	26
MAX	1680-2040	2	17.78	48.07	27
MAX	2040-2400	2	10.69	44.73	19
MAX	2400-2760	2	18.23	51.81	27
MAX	2760-3120	2	22.31	71.42	36
MAX	3120-3480	2	5.84	38.62	21
MAX	3480-3840	2	7.34	41.34	16
MAX	3840-4200	2	9.61	51.08	27
MAX	600-960	2	12.23	59.31	17
MAX	960-1320	2	7.21	43.07	16
MAX	1320-1680	3	133.87	380.73	138
MAX	1680-2040	3	35.18	219.66	75
MAX	2040-2400	3	15.37	201.3	51
MAX	2400-2760	3	35.11	232.93	63
MAX	2760-3120	3	88.26	277.19	126
MAX	3120-3480	3	171.29	380.16	271
MAX	3480-3840	3	31.69	308.02	54
MAX	3840-4200	3	12.74	127.29	46
MAX	600-960	3	22.41	162.89	54
MAX	960-1320	3	183.26	380.56	245
MAX	1320-1680	4	5.72	26.81	11
MAX	1680-2040	4	4.06	21.62	9
MAX	2040-2400	4	5.97	31.6	11
MAX	2400-2760	4	3.64	21.24	12
MAX	2760-3120	4	10.22	35.73	10
MAX	3120-3480	4	38.87	57.85	10
MAX	3480-3840	4	12.2	37.52	10
MAX	3840-4200	4	4.31	20.35	11
MAX	600-960	4	6.81	29.82	14
MAX	960-1320	4	3.85	21.28	7

TURBO ROUNDABOUT (AM PEAK HOUR) - QUEUE RESULTS

SIMRUN	TIMEINT	QUEUECOUNTER	QLEN	QLENMAX	QSTOPS
AVG	600-960	1	0.97	23.26	6
AVG	600-960	2	2.54	24.8	8
AVG	600-960	3	0.05	3.44	1
AVG	600-960	4	0.06	3.07	0
AVG	600-960	5	0	0	0
AVG	960-1320	1	2.9	38.85	13
AVG	960-1320	2	1.45	16.27	6
AVG	960-1320	3	0.01	0.87	0
AVG	960-1320	4	0	1.46	0
AVG	960-1320	5	0	0	0
AVG	1320-1680	1	1.29	30.17	8
AVG	1320-1680	2	2.18	21.93	8
AVG	1320-1680	3	0.41	11.48	1
AVG	1320-1680	4	0	1.47	0
AVG	1320-1680	5	0	0	0
AVG	1680-2040	1	2.83	42.57	14
AVG	1680-2040	2	1.84	17.99	6
AVG	1680-2040	3	0.08	7.31	0
AVG	1680-2040	4	0	2.4	1
AVG	1680-2040	5	0	0.61	0
AVG	2040-2400	1	2.56	44.83	14
AVG	2040-2400	2	3.35	23.49	9
AVG	2040-2400	3	0.09	5.79	1
AVG	2040-2400	4	0.68	8.9	1
AVG	2040-2400	5	0	0	0
AVG	2400-2760	1	2.2	34.35	13
AVG	2400-2760	2	1.24	16.15	6
AVG	2400-2760	3	0.01	1.41	0
AVG	2400-2760	4	0.06	4.1	1
AVG	2400-2760	5	0	0	0
AVG	2760-3120	1	1.97	36.92	12
AVG	2760-3120	2	2.03	19.48	7
AVG	2760-3120	3	0	0	0
AVG	2760-3120	4	0.1	5.92	1
AVG	2760-3120	5	0.03	2.28	0
AVG	3120-3480	1	3.84	46.88	17
AVG	3120-3480	2	3.85	22.74	9
AVG	3120-3480	3	0.09	4.28	1
AVG	3120-3480	4	0.01	3.08	1
AVG	3120-3480	5	0	0	0
AVG	3480-3840	1	2.19	34.42	11
AVG	3480-3840	2	1.83	20.74	6
AVG	3480-3840	3	0.01	1.95	0
AVG	3480-3840	4	0	1.71	0
AVG	3480-3840	5	0.02	1.69	0

AVG	3840-4200	1	2.14	45.63	14
AVG	3840-4200	2	1.05	19.77	5
AVG	3840-4200	3	0.02	1.17	0
AVG	3840-4200	4	0	0.89	0
AVG	3840-4200	5	0	0	0
MAX	600-960	1	3.83	55.47	14
MAX	600-960	2	5.3	42.84	16
MAX	600-960	3	0.43	25.21	4
MAX	600-960	4	0.6	21.31	2
MAX	600-960	5	0	0	0
MAX	960-1320	1	13.41	93.6	36
MAX	960-1320	2	2.79	24.85	13
MAX	960-1320	3	0.08	8.74	1
MAX	960-1320	4	0.01	5.14	1
MAX	960-1320	5	0	0	0
MAX	1320-1680	1	3.02	48.39	12
MAX	1320-1680	2	8.09	52.4	18
MAX	1320-1680	3	3.85	79.03	11
MAX	1320-1680	4	0.02	5.19	2
MAX	1320-1680	5	0	0	0
MAX	1680-2040	1	7.38	97.93	31
MAX	1680-2040	2	6	46.53	12
MAX	1680-2040	3	0.66	45.17	1
MAX	1680-2040	4	0.03	5.47	2
MAX	1680-2040	5	0.04	6.1	1
MAX	2040-2400	1	5.1	76.95	28
MAX	2040-2400	2	7.49	44.09	15
MAX	2040-2400	3	0.44	24.95	4
MAX	2040-2400	4	2.88	30.65	4
MAX	2040-2400	5	0	0	0
MAX	2400-2760	1	5.37	61.85	24
MAX	2400-2760	2	3.69	27.31	17
MAX	2400-2760	3	0.12	14.06	1
MAX	2400-2760	4	0.56	21.94	1
MAX	2400-2760	5	0	0	0
MAX	2760-3120	1	4.53	76.68	24
MAX	2760-3120	2	7.92	32.74	20
MAX	2760-3120	3	0	0	0
MAX	2760-3120	4	0.76	27.08	2
MAX	2760-3120	5	0.18	11.95	1
MAX	3120-3480	1	14	90.29	48
MAX	3120-3480	2	15.04	42.02	17
MAX	3120-3480	3	0.86	33.6	6
MAX	3120-3480	4	0.01	10.58	2
MAX	3120-3480	5	0	0	0
MAX	3480-3840	1	8.88	78.53	31
MAX	3480-3840	2	4.4	37.57	11

MAX	3480-3840	3	0.1	10.74	1
MAX	3480-3840	4	0.01	4.49	1
MAX	3480-3840	5	0.09	10.86	1
MAX	3840-4200	1	3.5	75.48	19
MAX	3840-4200	2	2.35	41.45	10
MAX	3840-4200	3	0.16	11.72	2
MAX	3840-4200	4	0.01	4.45	2
MAX	3840-4200	5	0	0	0

TURBO ROUNDABOUT (PM PEAK HOUR) - QUEUE RESULTS

SIMRUN	TIMEINT	QUEUECOUNTER	QLEN	QLENMAX	QSTOPS
AVG	600-960	1	4.5	53.09	21
AVG	600-960	2	4.78	26.77	11
AVG	600-960	3	0.25	12.33	2
AVG	600-960	4	0	1.04	0
AVG	600-960	5	0.03	2.23	0
AVG	960-1320	1	2.93	46.2	15
AVG	960-1320	2	1.62	17.75	7
AVG	960-1320	3	2.09	32.73	7
AVG	960-1320	4	0	0.47	0
AVG	960-1320	5	0.05	3.63	0
AVG	1320-1680	1	2.83	35.92	16
AVG	1320-1680	2	2.13	21.29	8
AVG	1320-1680	3	0.08	8.86	1
AVG	1320-1680	4	0	1.53	0
AVG	1320-1680	5	0.05	2.36	0
AVG	1680-2040	1	5.73	52.8	24
AVG	1680-2040	2	4.31	29.16	12
AVG	1680-2040	3	0.54	17.46	3
AVG	1680-2040	4	0	0.97	0
AVG	1680-2040	5	0.02	1.35	0
AVG	2040-2400	1	5.45	53.46	20
AVG	2040-2400	2	3.42	22.34	9
AVG	2040-2400	3	0.22	9.73	2
AVG	2040-2400	4	0.01	2.03	0
AVG	2040-2400	5	0	0	0
AVG	2400-2760	1	4.37	49.31	21
AVG	2400-2760	2	4.3	28.8	9
AVG	2400-2760	3	0.48	13.08	3
AVG	2400-2760	4	0.12	4.01	1
AVG	2400-2760	5	0.22	7.23	1
AVG	2760-3120	1	4.09	44.45	18
AVG	2760-3120	2	4.95	28.28	13
AVG	2760-3120	3	0.67	22.7	3
AVG	2760-3120	4	0.22	3.01	0
AVG	2760-3120	5	0	0.92	0
AVG	3120-3480	1	6.45	50.45	30
AVG	3120-3480	2	2.76	22.4	9
AVG	3120-3480	3	1.35	22.76	3
AVG	3120-3480	4	0	1.94	1
AVG	3120-3480	5	0.05	3.52	1
AVG	3480-3840	1	6.34	67.4	27
AVG	3480-3840	2	1.97	22.35	7
AVG	3480-3840	3	0.1	5.06	1
AVG	3480-3840	4	0	0.47	0
AVG	3480-3840	5	0.01	0.57	0

AVG	3840-4200	1	2.58	38.01	13
AVG	3840-4200	2	3.76	24.04	11
AVG	3840-4200	3	0.25	13.06	2
AVG	3840-4200	4	0	1.81	1
AVG	3840-4200	5	0	0	0
MAX	600-960	1	6.84	78.03	34
MAX	600-960	2	11.72	52.91	18
MAX	600-960	3	1.08	40.15	8
MAX	600-960	4	0.01	5.45	1
MAX	600-960	5	0.14	11.15	2
MAX	960-1320	1	7.66	94.27	30
MAX	960-1320	2	3.16	31.28	12
MAX	960-1320	3	11.9	108.84	34
MAX	960-1320	4	0.02	4.68	2
MAX	960-1320	5	0.24	17.49	2
MAX	1320-1680	1	10.06	84.34	43
MAX	1320-1680	2	5.41	43.83	18
MAX	1320-1680	3	0.42	30.51	4
MAX	1320-1680	4	0.02	5.41	2
MAX	1320-1680	5	0.39	17.09	3
MAX	1680-2040	1	25.3	125.29	83
MAX	1680-2040	2	12.18	48.19	29
MAX	1680-2040	3	2.42	66.33	9
MAX	1680-2040	4	0.01	5.13	1
MAX	1680-2040	5	0.2	13.51	1
MAX	2040-2400	1	26.66	162.9	69
MAX	2040-2400	2	11.13	42.17	20
MAX	2040-2400	3	1.01	38.56	5
MAX	2040-2400	4	0.04	11.18	2
MAX	2040-2400	5	0	0	0
MAX	2400-2760	1	9.07	83.08	36
MAX	2400-2760	2	11.8	42.45	22
MAX	2400-2760	3	3.76	65.66	15
MAX	2400-2760	4	1.17	25.06	2
MAX	2400-2760	5	1.07	27.82	3
MAX	2760-3120	1	16.33	108.66	55
MAX	2760-3120	2	25.11	71.67	32
MAX	2760-3120	3	4.13	86.47	11
MAX	2760-3120	4	2.22	25.45	3
MAX	2760-3120	5	0.01	5.09	1
MAX	3120-3480	1	17.18	104.99	59
MAX	3120-3480	2	6.2	35.2	14
MAX	3120-3480	3	12.18	165.35	16
MAX	3120-3480	4	0.01	5.34	2
MAX	3120-3480	5	0.38	22.74	4
MAX	3480-3840	1	20.98	130.99	64
MAX	3480-3840	2	8.09	57.3	14

MAX	3480-3840	3	0.92	31.97	7
MAX	3480-3840	4	0.01	4.66	1
MAX	3480-3840	5	0.07	5.7	1
MAX	3840-4200	1	6.51	72.18	31
MAX	3840-4200	2	10.71	40.91	29
MAX	3840-4200	3	1.21	40.19	7
MAX	3840-4200	4	0.01	4.89	2
MAX	3840-4200	5	0	0	0

WESTBOUND WIDENING ROUNDABOUT (AM PEAK HOUR) - QUEUE RESULTS

SIMRUN	TIMEINT	QUEUECOUNTER	QLEN	QLENMAX	QSTOPS
AVG	600-960	6	3.21	24.75	15
AVG	600-960	7	0.02	1.44	0
AVG	600-960	8	0.07	2.63	0
AVG	600-960	9	2.13	38.26	10
AVG	960-1320	6	1.92	16.88	12
AVG	960-1320	7	0	0	0
AVG	960-1320	8	0.01	1.5	0
AVG	960-1320	9	3.23	43.6	17
AVG	1320-1680	6	2.82	24.56	16
AVG	1320-1680	7	0	0	0
AVG	1320-1680	8	0.02	0.81	0
AVG	1320-1680	9	1.76	26.55	11
AVG	1680-2040	6	3.27	19.39	14
AVG	1680-2040	7	0.03	1.5	0
AVG	1680-2040	8	0.02	1.86	0
AVG	1680-2040	9	2.93	40.97	18
AVG	2040-2400	6	3.38	23.09	15
AVG	2040-2400	7	0	0.56	0
AVG	2040-2400	8	0.29	4.87	1
AVG	2040-2400	9	5.46	54.51	26
AVG	2400-2760	6	1.42	18.1	11
AVG	2400-2760	7	0	0	0
AVG	2400-2760	8	0.03	0.85	0
AVG	2400-2760	9	2.65	38.07	15
AVG	2760-3120	6	1.92	19.52	13
AVG	2760-3120	7	0	0	0
AVG	2760-3120	8	0.05	0.77	0
AVG	2760-3120	9	2	30.92	13
AVG	3120-3480	6	3.74	25.37	15
AVG	3120-3480	7	0	0	0
AVG	3120-3480	8	0.04	0.87	0
AVG	3120-3480	9	4.45	47.82	21
AVG	3480-3840	6	1.74	19.5	13
AVG	3480-3840	7	0.03	1.41	0
AVG	3480-3840	8	0	0	0
AVG	3480-3840	9	2.94	41.12	14
AVG	3840-4200	6	1.85	22.42	14
AVG	3840-4200	7	0	0	0
AVG	3840-4200	8	0	0	0
AVG	3840-4200	9	2.31	37.52	14
MAX	600-960	6	6.71	37.42	25
MAX	600-960	7	0.24	14.36	1
MAX	600-960	8	0.59	18.94	2
MAX	600-960	9	4.81	75.03	16
MAX	960-1320	6	6.39	25.62	22

MAX	960-1320	7	0	0	0
MAX	960-1320	8	0.07	7.61	1
MAX	960-1320	9	8.59	80.62	34
MAX	1320-1680	6	7.53	53.48	23
MAX	1320-1680	7	0	0	0
MAX	1320-1680	8	0.24	8.07	1
MAX	1320-1680	9	3.39	43.71	17
MAX	1680-2040	6	15.14	51.62	31
MAX	1680-2040	7	0.26	14.99	1
MAX	1680-2040	8	0.24	18.58	1
MAX	1680-2040	9	6.75	76.36	34
MAX	2040-2400	6	7.24	49.95	23
MAX	2040-2400	7	0.01	5.63	1
MAX	2040-2400	8	1.68	25.05	3
MAX	2040-2400	9	12.38	126.64	48
MAX	2400-2760	6	3.32	38.24	21
MAX	2400-2760	7	0	0	0
MAX	2400-2760	8	0.27	8.54	1
MAX	2400-2760	9	5.41	75.44	29
MAX	2760-3120	6	4.7	32.17	18
MAX	2760-3120	7	0	0	0
MAX	2760-3120	8	0.5	7.73	1
MAX	2760-3120	9	4.16	55.15	24
MAX	3120-3480	6	14.94	52.7	20
MAX	3120-3480	7	0	0	0
MAX	3120-3480	8	0.37	8.69	1
MAX	3120-3480	9	12.33	81.59	46
MAX	3480-3840	6	3.49	38.02	19
MAX	3480-3840	7	0.28	14.05	1
MAX	3480-3840	8	0	0	0
MAX	3480-3840	9	7.16	73.16	29
MAX	3840-4200	6	8.04	42.59	27
MAX	3840-4200	7	0	0	0
MAX	3840-4200	8	0	0	0
MAX	3840-4200	9	6.71	84.97	36

WESTBOUND WIDENING ROUNDABOUT (PM PEAK HOUR) - QUEUE RESULTS

SIMRUN	TIMEINT	QUEUECOUNTER	QLEN	QLENMAX	QSTOPS
AVG	1320-1680	6	3.24	23.76	18
AVG	1680-2040	6	3.13	25.81	19
AVG	2040-2400	6	3.73	22.35	16
AVG	2400-2760	6	5.95	33.14	21
AVG	2760-3120	6	7.04	32.51	21
AVG	3120-3480	6	3.77	22.11	18
AVG	3480-3840	6	2.8	22.45	17
AVG	3840-4200	6	5.32	29.09	20
AVG	600-960	6	4.48	25.45	16
AVG	960-1320	6	2.29	22.24	15
AVG	1320-1680	7	0.04	7.55	0
AVG	1680-2040	7	0	2.41	0
AVG	2040-2400	7	0.05	4.2	1
AVG	2400-2760	7	0.01	0.82	0
AVG	2760-3120	7	0.14	9.12	1
AVG	3120-3480	7	0.14	10.23	1
AVG	3480-3840	7	0.05	3.07	0
AVG	3840-4200	7	0.03	4.42	1
AVG	600-960	7	0.1	7.57	1
AVG	960-1320	7	0.08	10.15	1
AVG	1320-1680	8	0.03	0.73	0
AVG	1680-2040	8	0.11	1.29	0
AVG	2040-2400	8	0	0	0
AVG	2400-2760	8	0	1.73	0
AVG	2760-3120	8	0	0	0
AVG	3120-3480	8	0	0	0
AVG	3480-3840	8	0.01	0.77	0
AVG	3840-4200	8	0	0	0
AVG	600-960	8	0	0	0
AVG	960-1320	8	0	0	0
AVG	1320-1680	9	3.83	44.29	20
AVG	1680-2040	9	8.17	66.84	32
AVG	2040-2400	9	9.89	64.36	38
AVG	2400-2760	9	7.55	63.51	34
AVG	2760-3120	9	11.33	66.8	38
AVG	3120-3480	9	5.62	53.29	28
AVG	3480-3840	9	7.44	63.33	30
AVG	3840-4200	9	4.3	46.62	21
AVG	600-960	9	6.34	57.37	27
AVG	960-1320	9	5.77	50.16	23
MAX	1320-1680	6	10.98	53.74	40
MAX	1680-2040	6	5.42	48.64	30
MAX	2040-2400	6	14.12	43.67	37
MAX	2400-2760	6	18.37	61.22	37
MAX	2760-3120	6	25.52	71.68	48

MAX	3120-3480	6	19.12	46.94	44
MAX	3480-3840	6	9.08	53.01	23
MAX	3840-4200	6	14.14	49.8	47
MAX	600-960	6	11.16	43.2	31
MAX	960-1320	6	5.74	34.26	21
MAX	1320-1680	7	0.22	32.24	1
MAX	1680-2040	7	0.02	24.11	0
MAX	2040-2400	7	0.23	14.91	2
MAX	2400-2760	7	0.07	8.19	2
MAX	2760-3120	7	0.65	28.13	2
MAX	3120-3480	7	1.08	45.8	3
MAX	3480-3840	7	0.28	16.05	3
MAX	3840-4200	7	0.14	11.38	2
MAX	600-960	7	0.44	38.89	3
MAX	960-1320	7	0.2	31.22	2
MAX	1320-1680	8	0.33	7.31	1
MAX	1680-2040	8	1.12	12.88	1
MAX	2040-2400	8	0	0	0
MAX	2400-2760	8	0.02	17.32	1
MAX	2760-3120	8	0	0	0
MAX	3120-3480	8	0	0	0
MAX	3480-3840	8	0.12	7.72	1
MAX	3840-4200	8	0	0	0
MAX	600-960	8	0	0	0
MAX	960-1320	8	0	0	0
MAX	1320-1680	9	9.93	70.27	33
MAX	1680-2040	9	20.16	112.01	60
MAX	2040-2400	9	30.15	137.14	113
MAX	2400-2760	9	17.56	110.27	72
MAX	2760-3120	9	47.35	127.71	127
MAX	3120-3480	9	9.76	82.01	49
MAX	3480-3840	9	18.44	99.81	76
MAX	3840-4200	9	9.39	98.75	36
MAX	600-960	9	20.16	104.98	65
MAX	960-1320	9	28.46	116.15	60