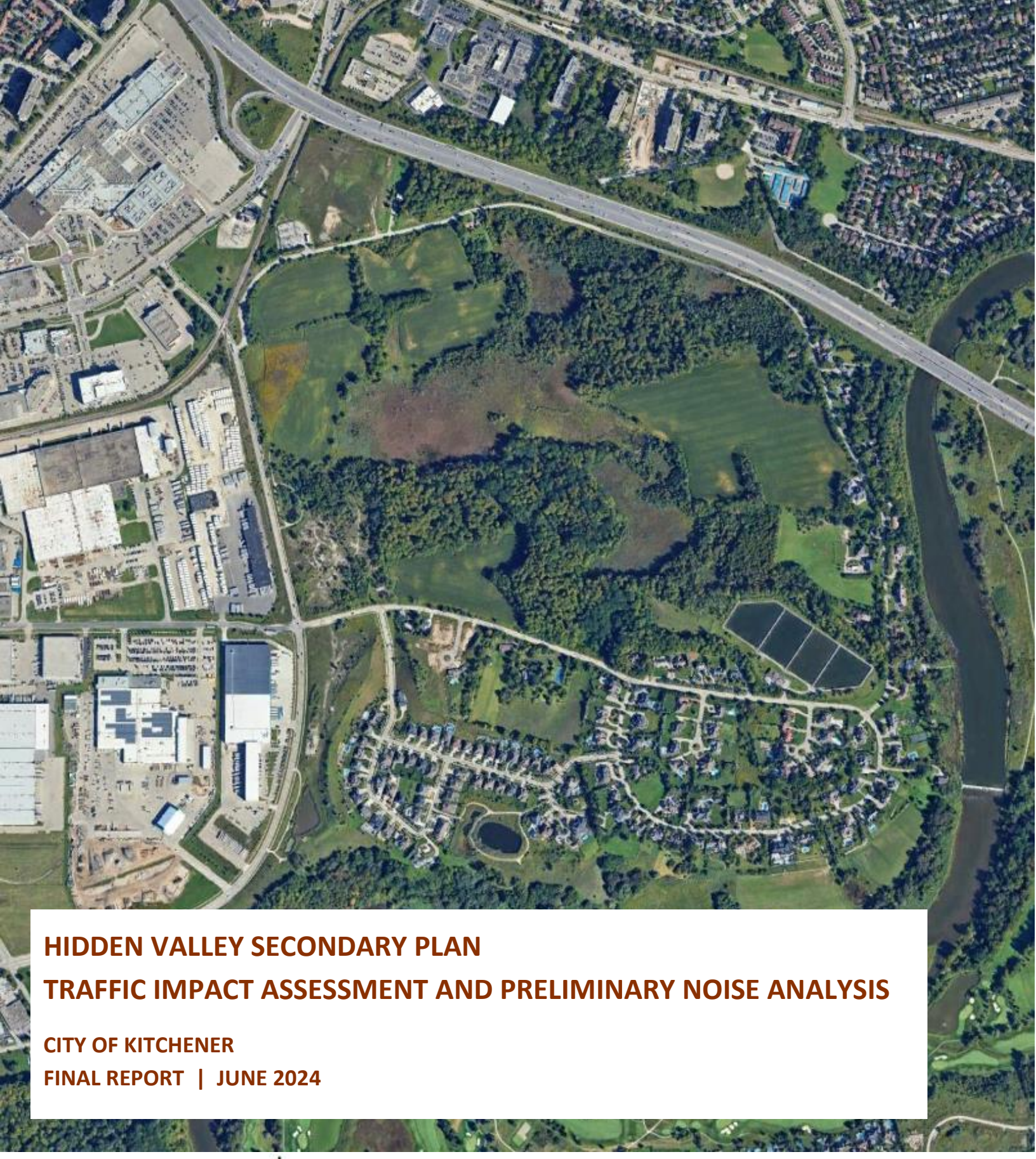

HIDDEN VALLEY SECONDARY PLAN
TRAFFIC IMPACT ASSESSMENT AND PRELIMINARY NOISE ANALYSIS

CITY OF KITCHENER

FINAL REPORT | JUNE 2024

KITCHENER

McINTOSH PERRY

egis GROUP

Final Report

Hidden Valley Secondary Plan
Transportation Impact Assessment and Preliminary Noise Analysis

Prepared by

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EXECUTIVE SUMMARY

Study Context

The City of Kitchener is undertaking a Transportation Impact Assessment and Preliminary Noise Study for the Hidden Valley area to provide a platform for the replacement of the existing Residential Hidden Valley Community Plan and the Industrial Hidden Valley Community Plan via amendment to the City of Kitchener's Official Plan (OP).

This report describes the existing and future context of the study area including transportation network, available facilities for multimodal travel, land use and built form. Impacts to the study area network have been assessed based on the planned extension of River Road from King Street in the north to Wabanaki Drive within Hidden Valley including upgrades of multiple study intersections under future conditions.

The Hidden Valley area is approximately 200 ha in size and is bounded by Highway 8, the Grand River, Wabanaki Drive, and Fairway Road, in the City of Kitchener. Highway 401 is located approximately 3.5 km to the east with Highway 8 providing connection to areas to the west beyond City limits. Hidden Valley is surrounded by reasonably dense residential communities located north of Highway 8 and west of Fairway Road South behind CF Fairview Park Mall. The Hidden Valley area, the study road network, and surrounding lands are illustrated in **Figure ES:1**.

The Hidden Valley area contains approximately 130 large 1 to 2-storey single detached homes located on the south and east portions of Hidden Valley Road while the majority of the development area is currently vacant. Significant portions of the undeveloped land are classified as Natural Heritage Conservation with significant wetlands and woodlands as well as regulated habitats for species at risk.

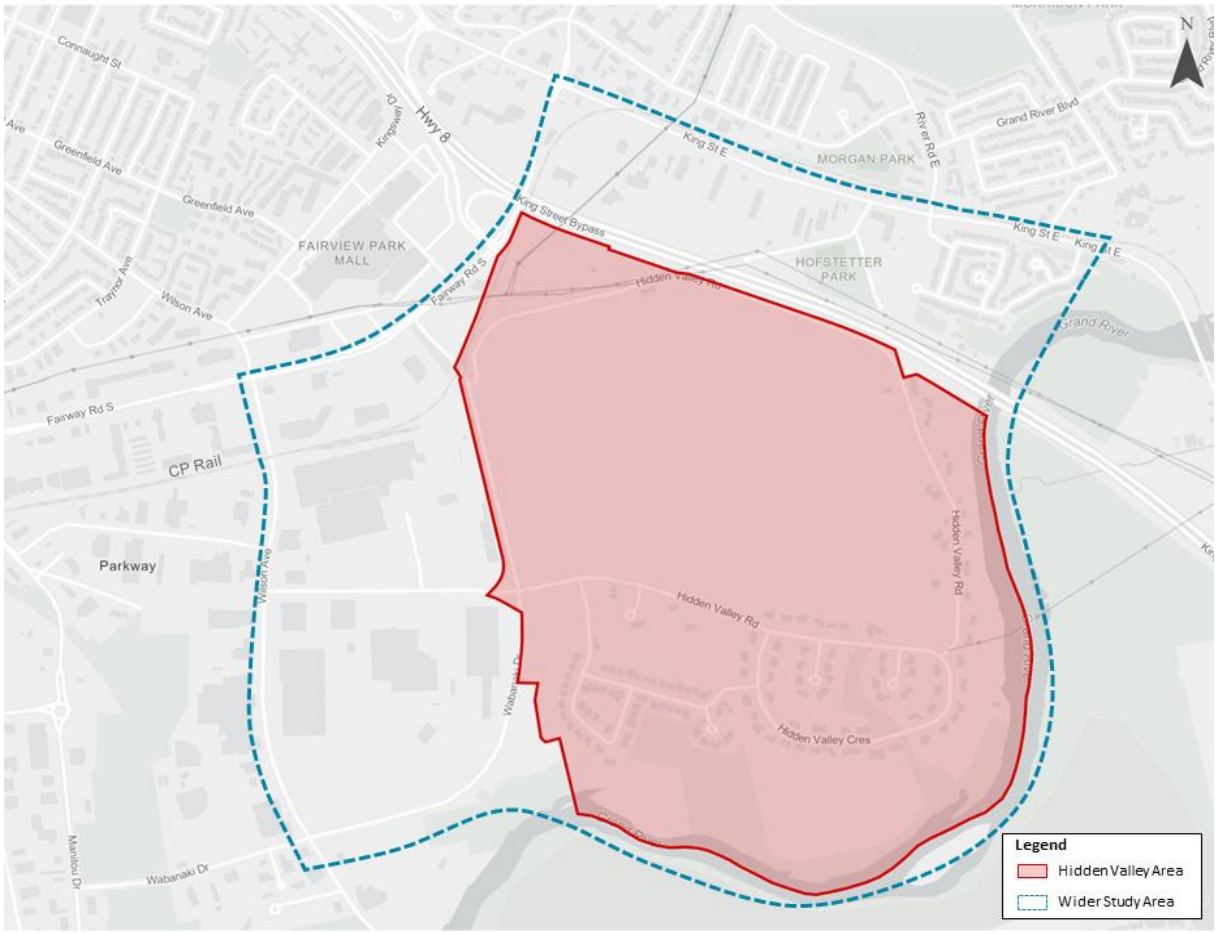

Figure ES:1: Hidden Valley Area and Surrounding Land

Intersections assessed as part of the study include:

Existing Conditions

- King Street and River Road (signalized);
- King Street and Stonegate Drive (unsignalized);
- Highway 8 Fairway Road southbound ramp terminal (signalized);
- Fairway Road and Wabanaki Drive (unsignalized);
- Fairway Road and Fairview Park Mall / Cineplex entrance (signalized);
- Fairway Road and Wilson Avenue (signalized);
- Wabanaki Drive and Hidden Valley Road (unsignalized);
- Wabanaki Drive and Hidden Valley Road / Goodrich Drive, (unsignalized) and
- Wabanaki Drive and Wilson Avenue (unsignalized).

Future Conditions

- Wabanaki Drive and River Road extension (formerly Hidden Valley Road, upgraded to roundabout);
- Wabanaki Drive and Hidden Valley Road / Goodrich Drive (upgraded to roundabout);
- Highway 8 and River Road extension northbound ramp terminal (signalized);
- River Road extension and Hidden Valley Road (unsignalized), and
- Highway 8 and River Road extension southbound ramp terminal (unsignalized).

Existing and future traffic operations for identified study intersections will be assessed for morning (AM) peak hour evening (PM) peak hour of the of the adjacent roadway. Traffic operations for study area intersections will be analyzed for the following years (study horizons):

- 2023 existing conditions;
- 2028 horizon year;
- 2033 horizon year, and
- 2043 horizon year.

Existing Conditions

Within the Hidden Valley area pedestrian facilities are present on less than half of the existing road network. At the intersection of Hidden Valley Road and Wabanaki Drive / Goodrich Drive a sidewalk is provide from Wabanaki Drive to River Valley Drive along the south side of along the southside Hidden Valley Road. Pedestrian connectivity is maintained with sidewalks along both sides of River Valley Drive and River Birch Street. The rest of the road network within the Hidden Valley area is void of pedestrian facilities.

Existing cycling facilities are severely limited within the Hidden Valley area, while a limited cycling network and connectivity to the Hidden Valley area is available on the surrounding boundary roads. Multiple gaps are present in the boundary road cycling network which include an orphaned section of on-street bicycle lanes on Wabanaki Drive, located between Wilson Avenue and Goodrich Drive / Hidden Valley Road.

Traffic data was obtained from the City of Kitchener and the Region of Waterloo. Data collection was also undertaken as part of this project replace data that was not collected within the past 3 years. Identified by Region of Waterloo staff, a growth rate of 1.0% and 0% was used for the Fairway Road and King Street corridors, respectively. Volume balancing was performed on the existing traffic volumes between adjacent intersections to account for variation in the available traffic data. Traffic volumes were typically balanced towards the higher volume within the network.

Study area intersection operations were assessed using the Synchro 11 and SimTraffic software. Intersection operations performance metrics are reported in terms of Level of Service (LOS), average vehicle delay (Delay), volume-to-capacity ratio (V/C), and 95th percentile queue length (Queue). Analysis was conducted applying MTO and Region of Waterloo guidelines.

During the 2023 existing AM peak hour, all intersections are expected to operate well with LOS B or better. Individual movements are also expected to operate satisfactory and exhibit reserve capacity with the highest reported V/C being 0.72.

During the 2023 existing PM peak hour, intersections are still expected to operate well with the majority operating at LOS B or better, while the Fairway Road and Fairview Park Mall / Cineplex access is expected to operate at LOS C and the Fairway Road and Wilson Avenue intersection is expected to operate at LOS D. Individual movements experience higher average delay and queueing as a result of higher traffic volumes within the network with three (3) movements identified as nearing or surpassing the expected capacity with V/C rations between 0.97 and 1.02. Queuing deficiencies were noted in the eastbound and northbound approaches at the Fairway Road Highway 8 southbound ramp terminal, the eastbound and southbound approaches at the Fairway Road and Fairview Park / Cineplex access, and westbound approach at the Fairway Road and Wilson Avenue intersection.

Overall, intersections within the study area are expected to operate well under the 2023 existing conditions while specific movements operate with capacity constraints or with high average delay, during the PM peak hour.

Future Conditions

A Class Environmental Assessment (EA) Study was initiated by the Region of Waterloo in 2006 for the extension of River Road, providing a connection from King Street to Manitou Drive. The recommended design would incorporate a continuous centre median and multi-use trails on both sides between King Street and Manitou Drive along a 3.6 km road consisting of 4 lanes. The design would accommodate signalization of River Road at King Street and future River Road at Stonegate Drive/ Highway 8 westbound ramps. Turning movement restriction of the existing intersection of Stonegate Drive at King Street would occur except for right-turn entry only from King Street. The preferred alignment of the River Road extension to be constructed is illustrated in **Figure ES:2**.

A proposed extension of the ION Light Rail Transit (LRT) system by the Region of Waterloo (Stage 2), will provide an addition of 17 km from Fairway station in Kitchener to Downtown Cambridge. This extension proposes to provide a further seven (7) new stations creating a continuous LRT service across the Region's three urban centres. The first segment of the Stage 2 ION extension will pass through the Hidden Valley area, entering Hidden Valley via an elevated structure. Within Hidden Valley a segment of the LRT is proposed to be accommodated with the centre of the four-lane cross-section proposed for the planned River Road extension. The preferred route and station locations for the Stage 2 ION LRT is illustrated in **Figure ES:3**.

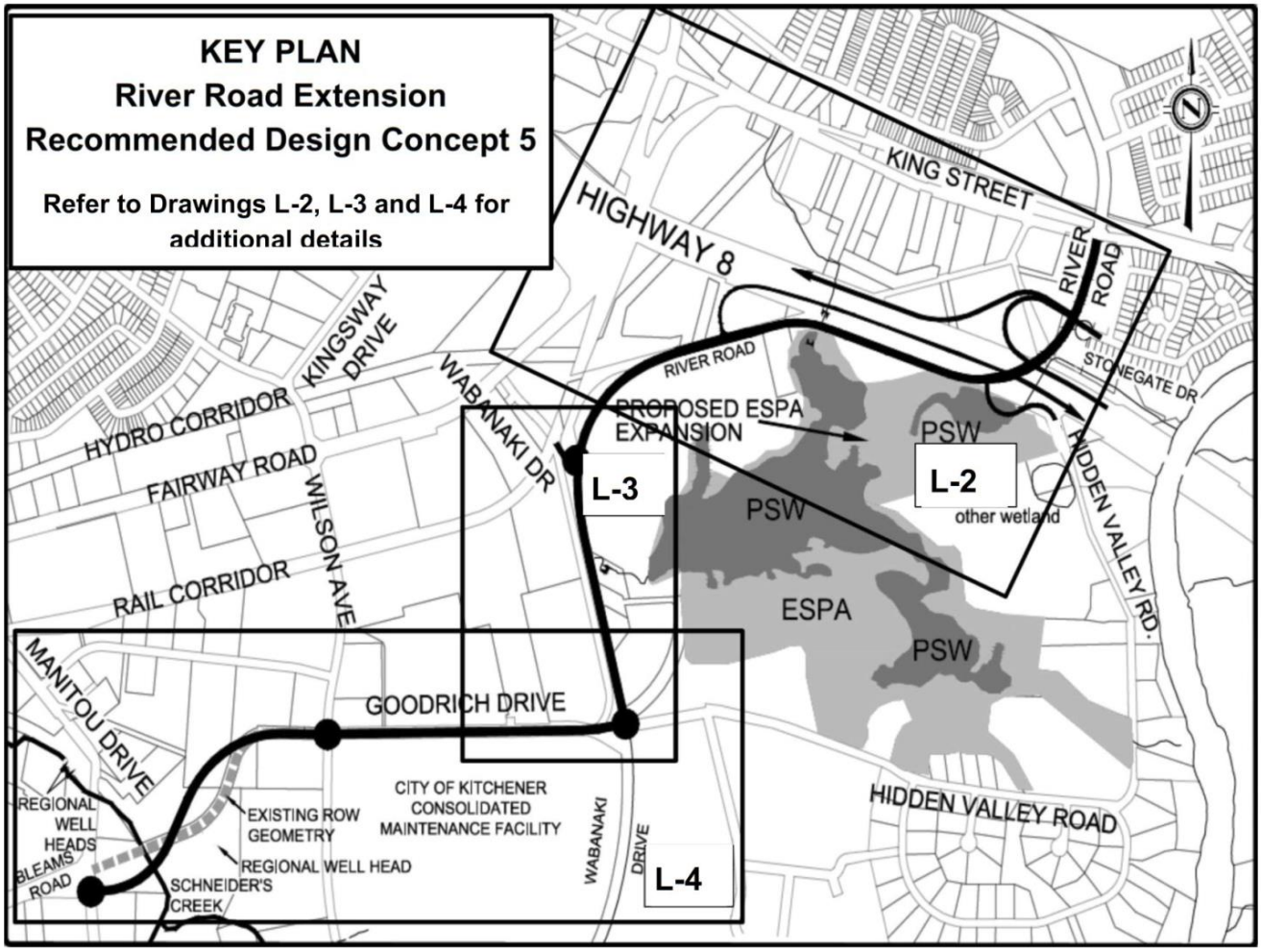

Figure ES:2: *River Road Extension Preferred Alignment*

Land uses for the Hidden Valley area for future developmental horizons have been identified by the City of Kitchener. The Hidden Valley development area is comprised of multiple land parcels designated to include, high-rise, mid-rise, and low-rise residential units, commercial uses, a business park, as well as a mixed-use section, having a total land area of 51.17 ha. Land uses for the Hidden Valley development are illustrated in **Figure ES:4**.

Based on consultation with City of Kitchener Staff regarding development densities, the study assumes a full build out of planning densities by the 2043 study horizon. Planning assumptions for development phasing is projected as follows:

- 25% of development will be constructed by the 2028 horizon year;
- 50% of development will be constructed by the 2033 horizon year, and
- 100% of development will be constructed by the 2043 horizon year.

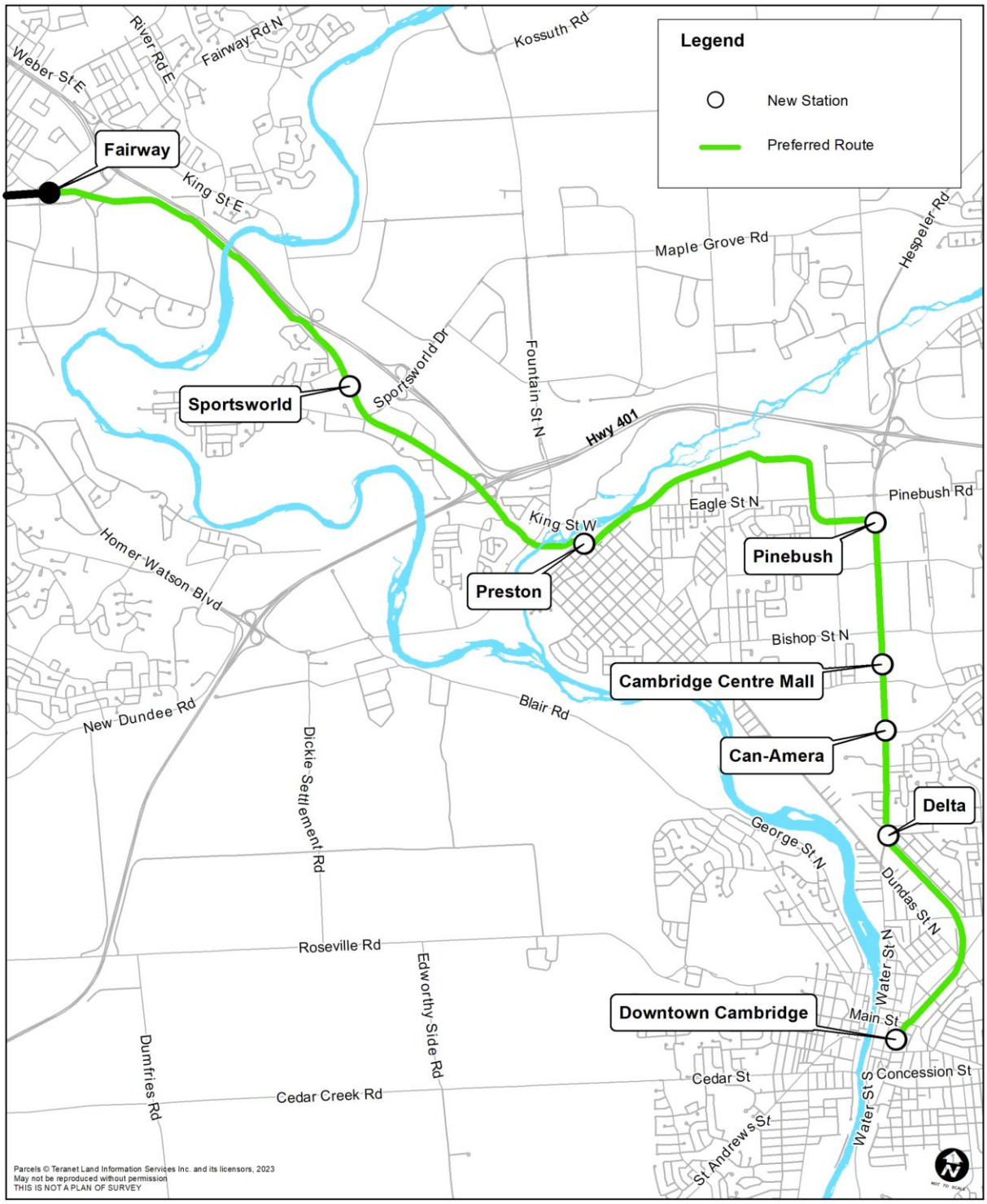

Figure ES:3: Stage 2 ION Preferred Route and Station Locations

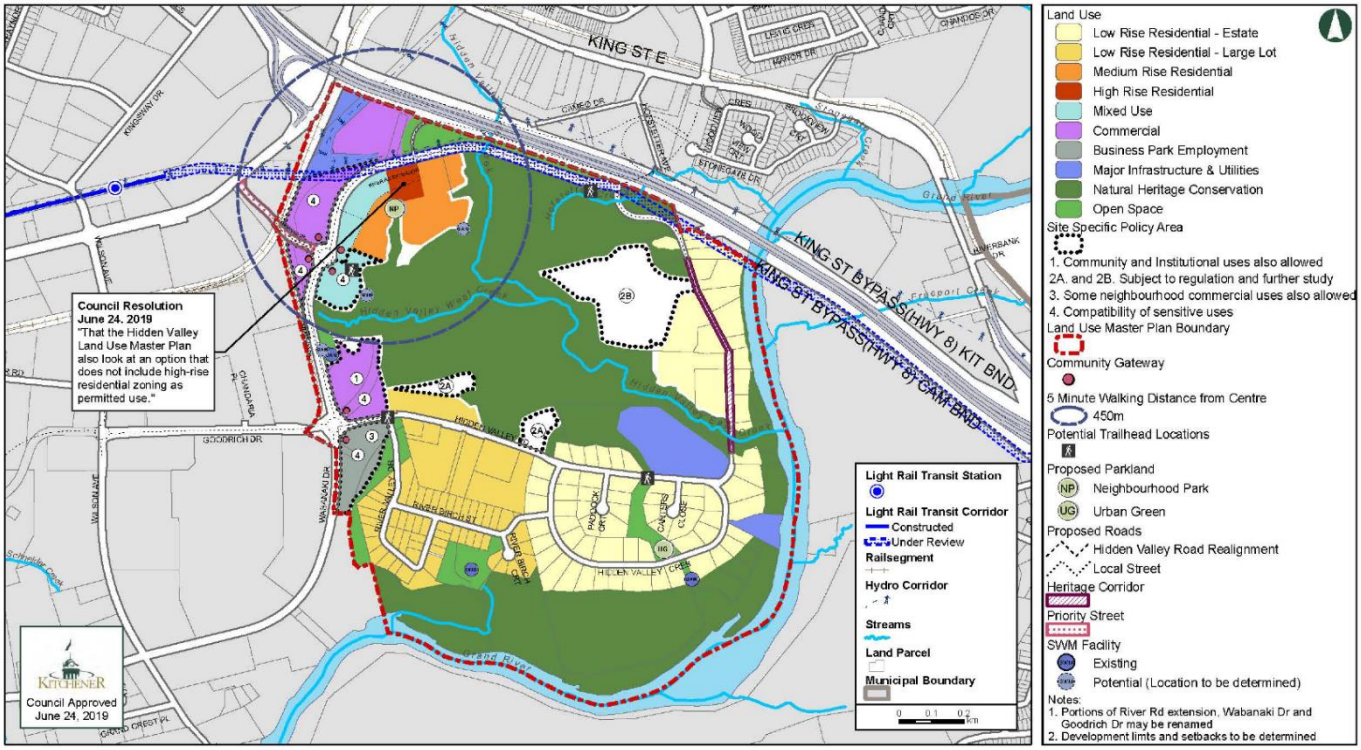

Figure ES:4: Hidden Valley Planned Development

Due to the changes to the future road network, with the construction of the River Road extension and new Highway 8 ramps redistribution of traffic through the network was required. As such future background traffic volumes were obtained by redistributing 2023 existing traffic volumes throughout the network, growth rates applied to the redistributed traffic volumes and background area development traffic added.

Future total traffic volumes were obtained through the summation of the future background traffic volumes and the site generated traffic. The Institute of Transportation Engineers (ITE) *Trip Generation Manual, 11th Edition* was used to estimate the site generated traffic for each component of the development. Based on the trip generation calculations, upon full build-out of the Hidden Valley area the development is expected to generate:

- 108 internal trips during the AM peak hour (54 inbound and 54 outbound), 772 internal trips during the PM peak hour (386 inbound and 386 outbound);
- 255 active transportation (walking, cycling, and transit) trips during the AM peak hour (93 inbound and 162 outbound), and 318 active transportation trips during the PM peak hour (180 inbound and 138 outbound);
- 0 pass-by trips during the AM peak hour, and 170 pass-by trips during the PM peak hour (96 inbound and 74 outbound, and
- 746 new external vehicle trips during the AM peak hour (272 inbound and 474 outbound), and 767 new external vehicle trips during the PM peak hour (435 inbound and 332 outbound).

Capacity analysis, completed using Synchro 11, was performed for future background conditions (without new Hidden Valley development generated traffic) and future total conditions(includes Hidden Valley development generated traffic) for the 2028, 2033, and 2043 study horizons.

Analysis for intermediate horizons (2028 and 2033) indicate that the addition of the River Road extension will have a positive impact on network operation with all intersections operating with acceptable levels of service. At full build out of the Hidden Valley area which occurs in 2043, analysis of future background and total conditions indicate that the study network will continue operating with acceptable levels of service.

Under the 2043 background traffic conditions, all intersections are expected to operate well during the AM peak hour, with LOS B or better. Individual movements are also expected to operate satisfactory and exhibit reserve capacity with the highest reported V/C being 0.74. During the PM peak hour, intersections are still expected to operate well however experience higher average delay and queueing as a result of higher traffic volumes within the network. Through signal timing optimization and phase adjustments all movements are expected to operate at LOS E or better with a maximum reported V/C of 0.82. Overall, intersections within the study area are expected to operate well under the 2043 background conditions AM and PM peak hours.

Under the 2043 total traffic conditions, the network is expected to continue operating well, with similar measures of effectiveness as the 2043 background conditions. All intersections are expected to operate well during the AM peak hour, with LOS B or better. Individual movements are also expected to operate satisfactory and exhibit reserve capacity with the highest reported V/C being 0.74. During the PM peak hour, intersections are still expected to operate well however experience higher average delay and queueing as a result of higher traffic volumes within the network. Through signal timing optimization and phase adjustments all movements are expected to operate at LOS E or better with a maximum reported V/C of 0.84. Upon application of signal timing optimization and phase adjustments, intersections within the study area are expected to operate well under the 2043 total traffic conditions AM and PM peak hours.

To maintain adequate operations of signalized intersections under the future background and total traffic scenarios, optimization of signal timing was required for the Fairway Road and King Street, King Street and River Road, and Fairway Road and Wilson Drive intersections. Optimization of signal times was used when movements were found to operate at LOS F or experience a V/C ratio of 0.85 or greater. When optimization of the signal times was found to be insufficient, further changes to the signal timing, such as phasing, was implemented.

Upon review of all analysis scenarios, storage length deficiencies were noted at the following intersection auxiliary lanes:

- King Street and River Road eastbound left-turn, westbound left-turn, and southbound left-turn;
- Fairway Road and Highway 8 southbound ramp terminal eastbound left-turn and eastbound right-turn;
- Fairway Road and Fairview Park Mall / Cineplex access eastbound left-turn and southbound left-turn, and
- Fairway Road and Wilson Avenue westbound right-turn and southbound left-turn.

Overall, increases to the storage length within the study area is extremely difficult due to the built-up nature of the area. With future development of the King Street and River Road intersection confirmed, an increase to the westbound left-turn storage length is considered appropriate, while the scale of the works required to correct all other noted storage length deficiencies are considered too great and are not recommended.

As part of the future road network upgrades, the intersections of Wabanaki Drive and River Road (formerly Hidden Valley Road), and Wabanaki Drive and Goodrich Drive / Hidden Valley Road were to be upgraded to roundabouts. Roundabout capacity analysis was performed using Arcady Junctions 9 analysis tool which applies the UK empirical model for roundabouts.

The future River Road extension and Wabanaki Drive, and Wabanaki Drive and Goodrich Drive / Hidden Valley Road roundabouts are expected to operate well under the background and total traffic conditions. The roundabouts are expected to operate at LOS A through 2043, with a maximum average delay per vehicle of 2.4 seconds. Individual movements are also expected to operate satisfactory and exhibit significant reserve capacity with the highest reported V/C being 0.30. Queueing is expected to be less than 20 m or approximately two (2) vehicles and is not anticipated to influence any adjacent intersections or accesses.

From the City of Kitchener Vision Zero Strategy the Wabanaki Drive and Wilson Drive intersection was identified for signalization in 2023/2024. Traffic capacity analysis was completed for the signalized intersection of Wabanaki Drive and Wilson Drive using the 2043 total traffic volumes. After signalization the intersection is expected to operate well with an overall intersection LOS A during the AM and PM peak hours. Individual movements are expected to operate at LOS B or better and exhibit significant reserve capacity with the highest reported V/C being 0.67.

A pedestrian crossover (PXO) warrant was performed for a potential PXO at the Fairway Road at Wabanaki Drive intersection. The methodology for a PXO warrant is outlined in the Ministry of Transportation Ontario (MTO) Ontario Traffic Manual (OTM) Book 15, Pedestrian Crossing Treatments. As the proposed location of the Fairway Road PXO at Wabanaki Drive is less than 200 m from the Fairway Road and Fairview Park Mall / Cineplex signalized access the site is not considered a candidate for pedestrian crossing control. Additionally, pedestrian crossovers are not permitted for roadways with a cross-section of more than 4 lanes under any circumstances. As a result, installation of a pedestrian crossover on Fairway Road at Wabanaki Drive is not justified.

A 2023 heritage impact assessment (HIA) for Hidden Valley has identified the potential of Hidden Valley Road being designated as a heritage corridor. City staff will action this recommendation designating the north-south portion Hidden Valley Road as a “Heritage Corridor” in the Official Plan and recognizing the lower east-west portion of the Hidden Valley Road as a Cultural Heritage Landscape (CHL) in the Official Plan. These designations will impact recommendations and future facilities (active and transit) for Hidden Valley. The proposed Heritage Corridor (shown in green) and CHL (shown in orange) are illustrated in **Figure ES:5**.

Figure ES:5: Hidden Valley Heritage Corridor

Recommendations

The following recommendations were made for the pedestrian network within the Hidden Valley area in order to connect it with the overall pedestrian facilities currently present:

- Provide a sidewalk on Hidden Valley Crescent to connect it with the existing sidewalk on River Birch Street;
- Construct a Multi-Use Path (MUP) on part of Hidden Valley Road and part of Wabanaki Drive to connect into the existing pedestrian facilities outside the Hidden Valley area, and
- Fill the gap in the pedestrian network on Wabanaki Drive and provide a sidewalk connecting to Manitou Drive and provide a MUP on the future Goodrich Drive extension.

The recommended future pedestrian network is illustrated in **Figure ES:6**.

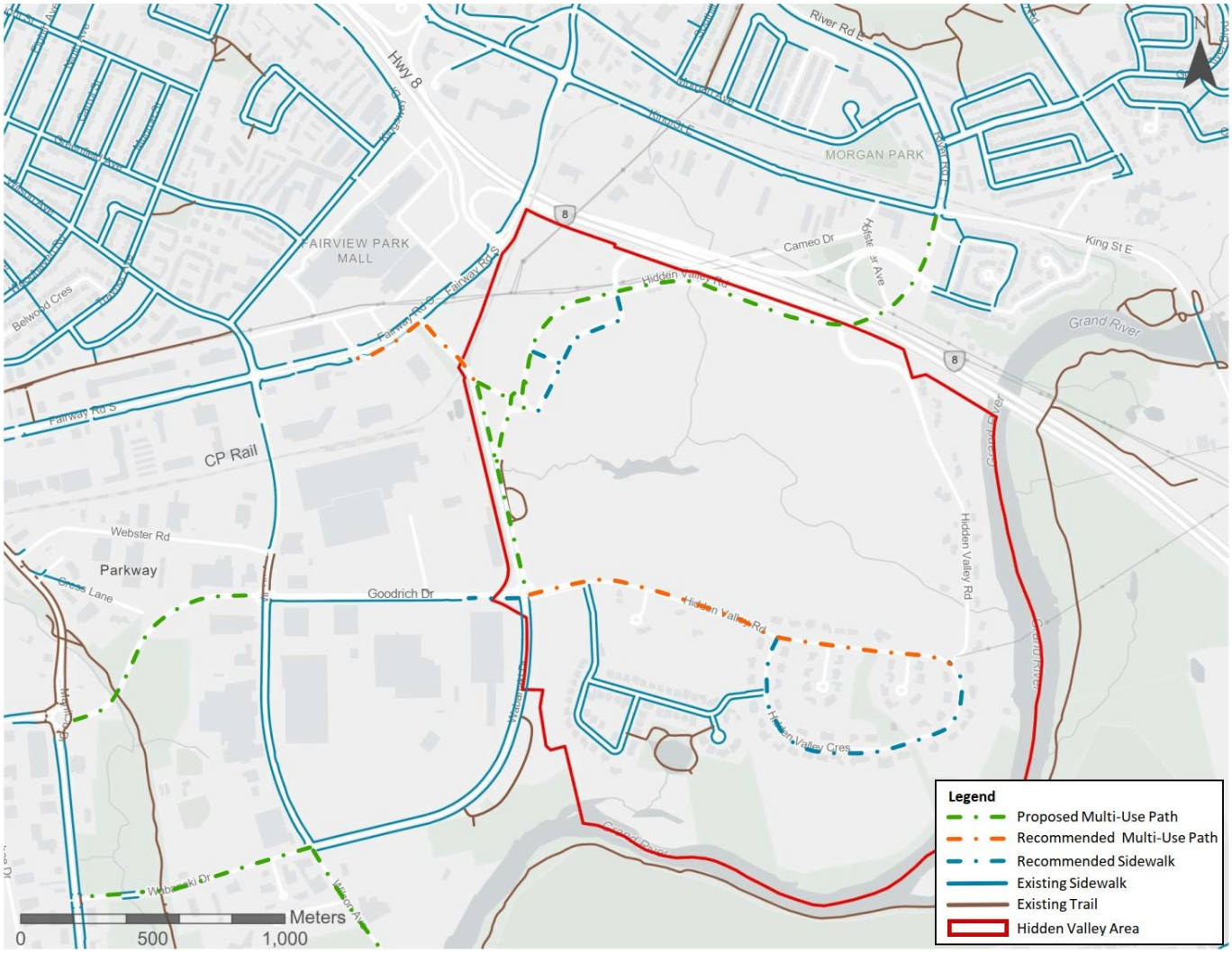

Figure ES:6: Recommended Future Pedestrian Network

The following recommendations were made for the cycling network to encourage the use of sustainable modes of transportation within the area:

- Construction of MUPs on Hidden Valley Road, Goodrich Drive, Wilson Avenue, and Wabanaki Drive to provide a seamless connect into the existing cycling facilities present within the area, and
- Provide signed bike routes on Hidden Valley Crescent, and River Birch Street to connect the local streets with the proposed MUP network.

The recommended future cycling network is illustrated in **Figure ES:7**.

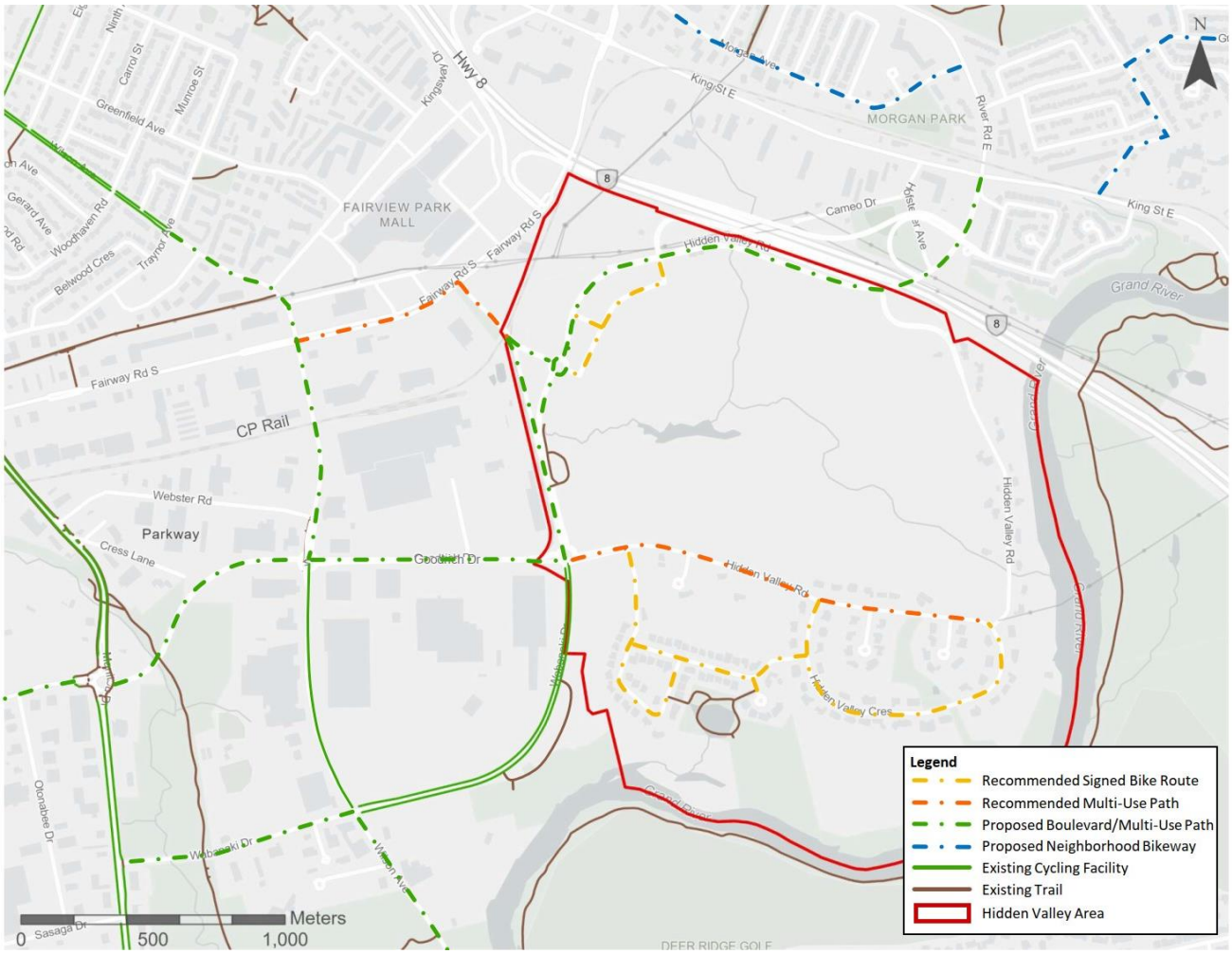

Figure ES:7: Recommended Future Cycling Network

As Grand River Transit (GRT) does not operate any transit service within the Hidden Valley area, a review of the transit routes in the vicinity of the study boundary was undertaken to potentially propose a re-routing of a bus route that is feasible and can pass through the Hidden Valley area. Two (2) bus routes, Route 10 and Route 27, are proposed to be re-routed to pass through the Hidden Valley area and provide transit service within the study boundary. Route 10 travels between Fairway Station and Conestoga College making several stops along the way and providing a connection to the ION Light Rail at Fairway Station. Route 27 travels between Fairway Station and the bus stop on Quinte/Morrison also making several stops along the way and providing a connection to the ION Light Rail at Fairway Station. Re-routing the above-mentioned bus routes can ensure transit connections are provided to the Hidden Valley area and provide the community with alternative modes of transportation.

Potential rerouting of GRT Route 10 inbound and outbound from Fairview Park Mall are illustrated in **Figure ES:8** and **Figure ES:9**, respectively.

Potential rerouting of GRT Route 27 inbound and outbound from Fairview Park Mall are illustrated in **Figure ES:10** and **Figure ES:11**, respectively.

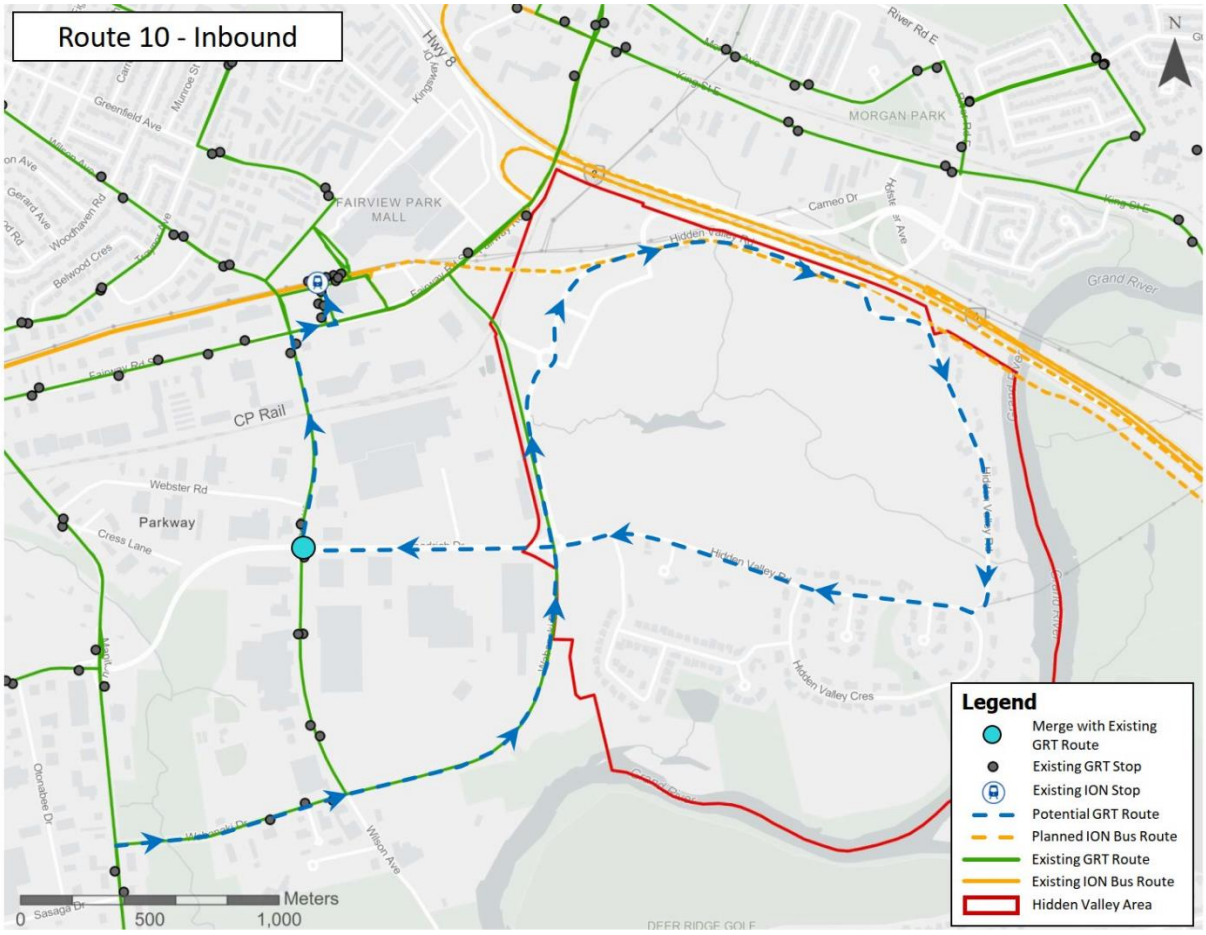

Figure ES:8: Potential Route for GRT Bus Route 10 - Inbound

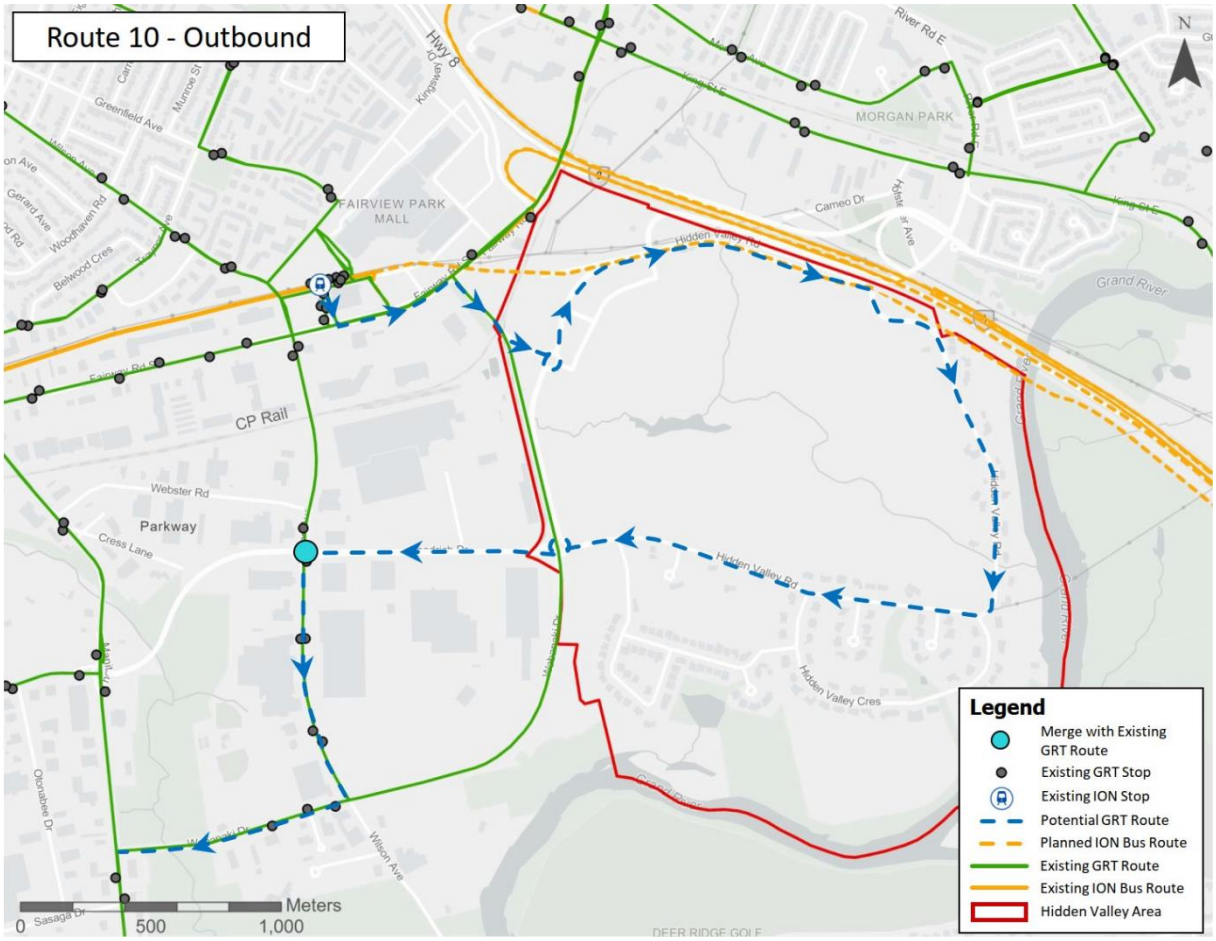

Figure ES:9: Potential Route for GRT Bus Route 10 – Outbound

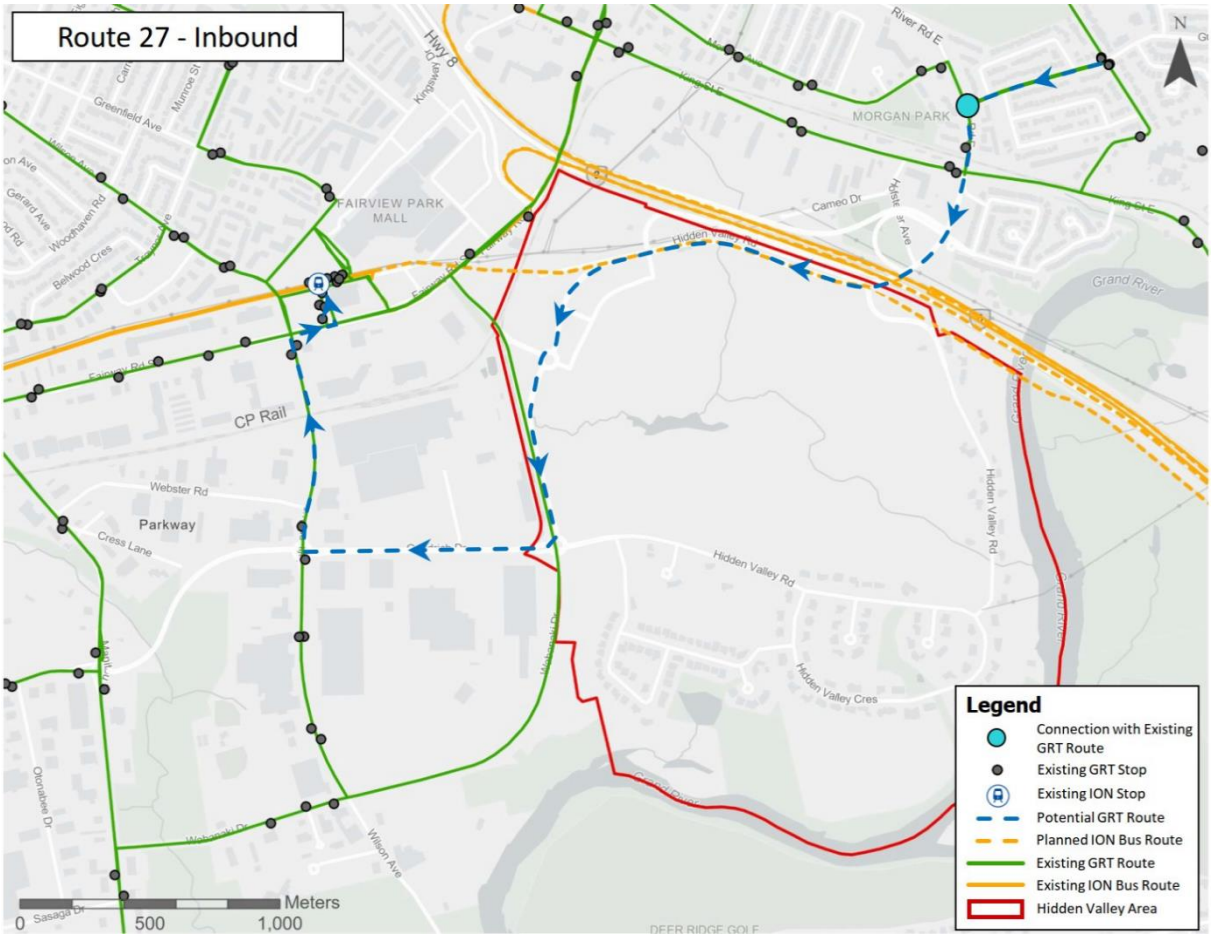

Figure ES:10: Potential Route for GRT Bus Route 27 - Inbound

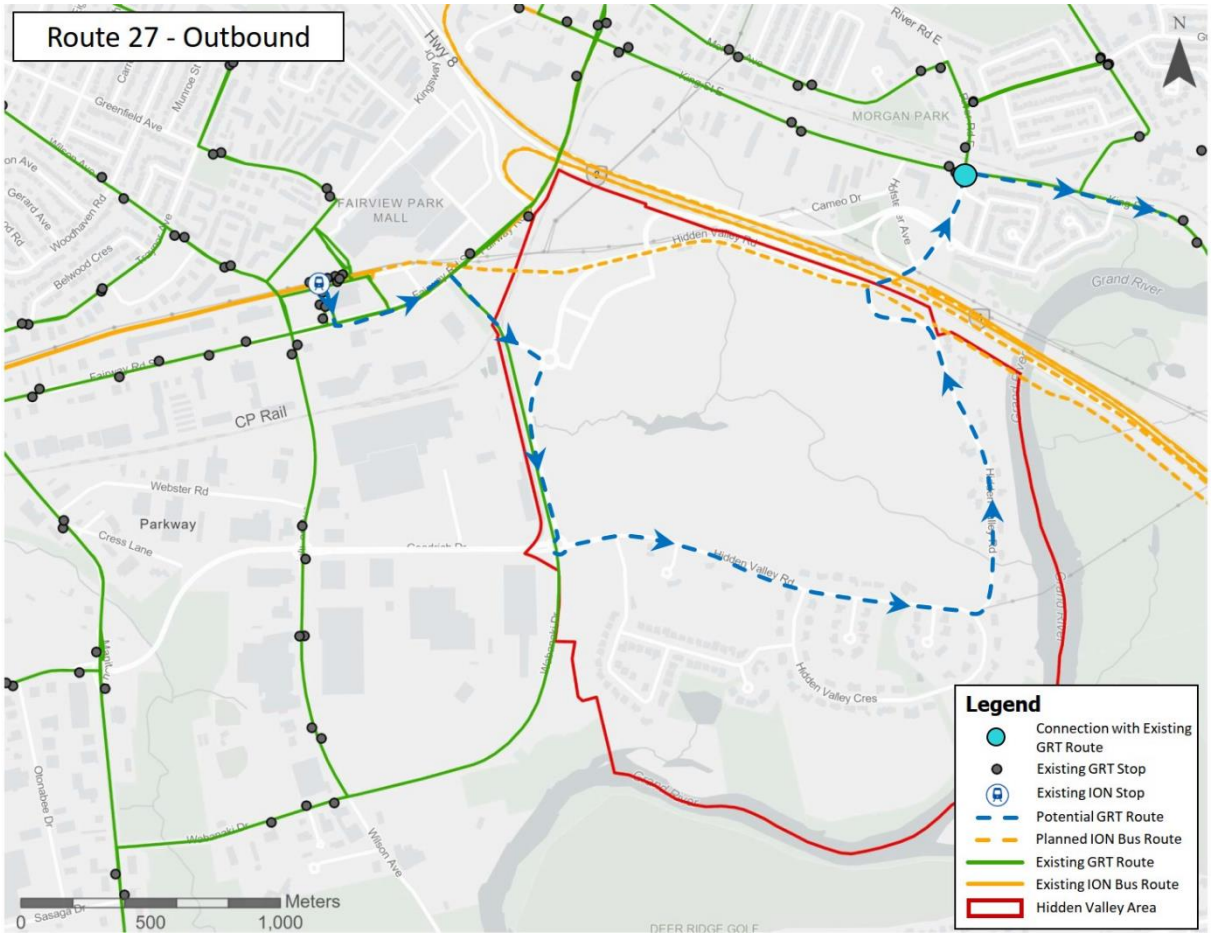

Figure ES:11: Potential Route for GRT Bus Route 27 - Outbound

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1.0 INTRODUCTION

The City of Kitchener has undertaken a Transportation Impact Assessment and Preliminary Noise Study for the Hidden Valley area to provide a platform for the replacement of the existing Residential Hidden Valley Community Plan and the Industrial Hidden Valley Community Plan via amendment to the City of Kitchener's Official Plan (OP).

The transportation and noise study for the Hidden Valley area will provide an assessment and understanding of the transportation paradigm that exists within the study area and the impacts of planned improvements as it relates to the future growth of residential and commercial development for the area.

This report describes the existing and future context of the study area, its transportation network, available facilities for multimodal travel, land use and built form. This report has been prepared following consultation and input from the City of Kitchener, Region of Waterloo, and Ministry of Transportation Ontario (MTO) on preliminary submissions. A comments response matrix for aforementioned reviewing agencies is provided in **Appendix A**.

Analysis undertaken for the study consisted of:

- Existing conditions traffic analysis based on baseline (2023) volumes using the existing road network configuration;
- Future conditions traffic analysis incorporating planned and proposed network improvements;
- A review of planned and proposed network improvements and future traffic operations that align with changes to the study area network for short and long-term study horizons; and
- Assessment of traffic impacts for proposed land uses within the Hidden Valley area;
- A preliminary noise study base on this study's traffic analysis, and
- Recommendations for mitigation measures for future study horizons as required.

1.1 Study Background and Purpose

The Hidden Valley area is approximately 200 ha in size and is bounded by Highway 8, the Grand River, Wabanaki Drive, and Fairway Road, in the City of Kitchener. The Residential Community Plan and Industrial Community Plan policies provided the framework for development of the Hidden Valley study area from the early 1990s through to the early 2000s with land uses based on an old alignment of the proposed River Road extension. This extension was realigned and construction is now underway. Existing land use plans and zoning for the Hidden Valley area are considered out-of-date and will be formally repealed and replaced with new land uses.

The new alignment for the River Road extension is now approved, following over a decade of study and environmental assessment. The proposed new alignment will add a key east-west corridor from Bleams Road in the west, past Hidden Valley and across Highway 8 to King Street. Considered a major development for the Region, the project will include two bridges, four roundabouts, and ramps on and off the highway.

In the vicinity of the Hidden Valley area, the extension provides a realignment of Wabanaki Drive providing greater separation from CP rail lines, avoids sensitive wetlands and woodland, crosses Highway 8 to connect to the existing portion of River Road at King Street to the north. The proposed new River Road alignment creates new access points for the surrounding communities including a connection to Hidden Valley Road, Stonegate Drive, and ramp accesses to Highway 8.

In light of the planned development and growth of the study area, a number of objectives and transportation improvements specific to the study area network should be aligned with the principles of providing a multi-modal transportation network and a high-quality pedestrian realm. The purpose of the Transportation Impact Assessment is to:

- Determine the long-term transportation needs for the new community to achieve or surpass the Region's 2031 and 2041 modal share objectives and obstacles to achieving targets;
- Assess the impacts of enhanced transit facilities on travel modes (particularly ION Phase 2) while identifying issues, opportunities, and constraints for the study area;
- Determine facility needs for movement of the community across the study network; and
- Identify necessary inputs for land use planning and recommendations for mitigation measures to be implemented in order to achieve the preferred land use concept.

The noise component of this project complementing the traffic review and assessment has been provided in **Appendix B** and incorporates all comments received from applicable review agencies.

1.2 Background Documents Review

Background documents governing policy, planning and infrastructural improvements of the study area were reviewed to identify key aspects of the study area to be considered and incorporated into network analysis for both existing and future conditions. Background documents made available by the City, Region, and public forums for reviewed for contextual support are listed below. No applicable area planning documents were obtained from the Ministry of Transportation Ontario (MTO) for consideration.

- Region of Waterloo Official Plan, Office Consolidation, January 2020;
- Stage 2 ION Light Rail Transit;
    - Appendix A: Functional Design Plates;
    - Appendix B8 – Noise and Vibration Assessment Report;
    - Appendix B9 – Traffic Impact Assessment Report;
- River Road Extension Class Environmental Assessment Study and Design Concepts;
- Region of Waterloo 2018 Transportation Master Plan, June 2019;
- City of Kitchener Official Plan, November 19, 2014;
- City of Kitchener Hidden Valley Land Use Master Plan, June 24, 2019;
- City of Kitchener Hidden Valley Residential Community Plan, September 7, 1990;
- City of Kitchener Hidden Valley Industrial Community Plan, October 18, 1988;

- City of Kitchener Transportation Demand Management Plan, Fall 2010;
- City of Kitchener Cycling and Trails Master Plan, Summary Report, June 2020;
- City of Kitchener Cycling Master Plan, August 18, 2010;
- Region of Waterloo Transportation Impact Study Guidelines, July 22, 2014;
- Region of Waterloo Transportation Impact Studies Requirements for Capacity Analysis, Roundabouts and Signal Warrants, and
- Regional Municipality of Waterloo River Road Extension Environmental Assessment, Vissim Technical Report, October 2013.

Some key points identified during the background document review for the Hidden Valley Community area are provided below:

- Stage 2 ION Light Rail Transit;
    - Planned extension of the ION Light Rail Transit (LRT) from the current southern stop at Fairway Park Mall including functional design templates for the LRT on the River Road extension.

- City of Kitchener Official Plan, November 19, 2014;
    - The City of Kitchener forecasts population and employment growth of approximately 2.0% and 1.3% per year between 2006 and 2031.
    - Identified the City's priorities for active transportation, pedestrian movement, cycling, multi-use pathways and trails, public transit, traffic calming, transportation demand management, and parking.

- City of Kitchener Transportation Demand Management Plan, Fall 2010;
    - Outlines a four (4) phase TDM strategy to increase the use of Active Transportation (AT) mode shares that includes recommendations such as carpool matching, subsidizing Grand River Transit (GRT) passes for city employees, implementing a pilot telework program and carbon tracking tool, and community outreach.

- Region of Waterloo Official Plan, June 18, 2015;
    - The Region of Waterloo forecasts population and employment growth of approximately 1.09% and 1.1% per year between 2006 and 2031.
    - Region of Waterloo is projected to grow to 729,000 people by 2031 and forecasts an employment growth to 366,000 by 2031 as per the Regional Official Plan.
    - Identifies PM Peak hour mode share targets for 2031 and 2041 with transit targets used as the basis for developing the Region's transit strategy.

- Region of Waterloo, Planning, Design and Legislative Services Community Planning PDL-CPL-23-003, Year End 2022 Population and Household Estimates for Waterloo Region, March 7, 2022;
    - In 2022 the Region of Waterloo's population has been estimated at 647,540 people, a growth rate of 2.3%. The estimated number of households has been reported to grow to 232,540 a growth of 2.25% as compared to 2021.

2.0 STUDY AREA

Hidden Valley is flanked by the Grand River along the east and southern boundaries of the community, Highway 8 to the north, and Wabanaki Drive and Fairway Road South to the west. Highway 401 is located approximately 3.5 km to the east with Highway 8 providing connection to areas to the west beyond City limits. Hidden Valley is surrounded by reasonably dense residential communities located north of Highway 8 and west of Fairway Road South behind CF Fairview Park Mall.

The Hidden Valley area comprises of agricultural fields, with dwellings abutting the river along the east and south potions of the study area. The Hidden Valley area has a ring-road type network, which currently provide the only access to the community. Private driveways provide access to residential units from the ring-road and local roads provide access to two main residential subdivisions.

Figure 2:1 provides an illustration of the Hidden Valley area, the study road network, and surrounding lands.

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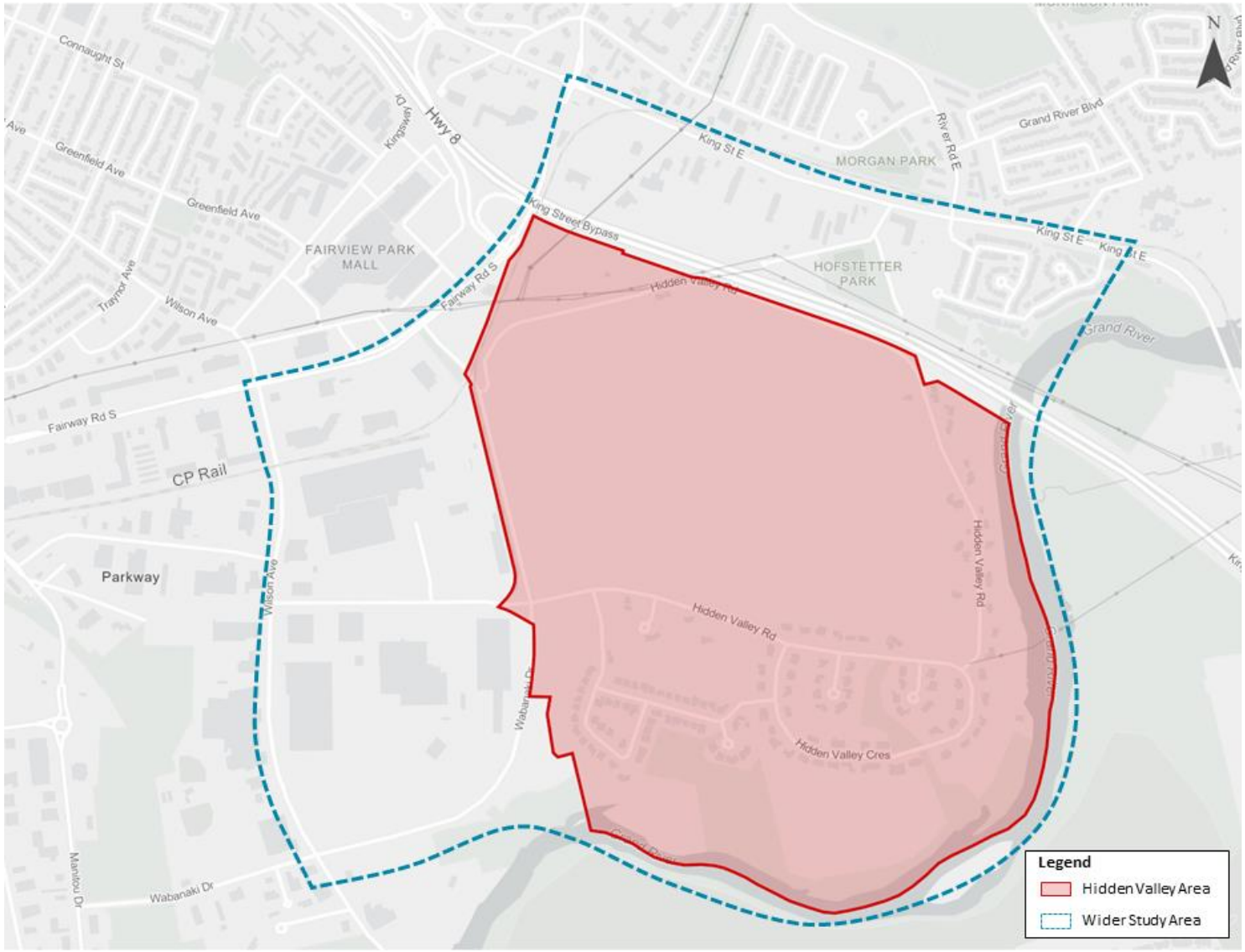

Figure 2:1: Hidden Valley Area and Surrounding Land

2.1 Land Use and Built Form

The proposed development lands are located within the Hidden Valley community of the City of Kitchener, bounded by Wabanaki Drive on the west, the Canadian Pacific Railway (CPR) tracks on the northwest, Highway 8 on the north, and the Grand River on the east and south.

The Hidden Valley area shown in **Figure 2:1** is comprised of multiple zones including:

- Agricultural Zone (A-1);
- Business Park Zone (B-1);
- Restricted Business Park Zone (B-2);
- Business Park Service Centre Zone (B-3);
- General Industrial Zone (M-2);
- Open Space Zone (P-2);
- Residential One Zone (R-1), and
- Residential Two Zone (R-2).

The Hidden Valley area contains approximately 130 large 1 to 2-storey single detached homes located on the south and east portions of Hidden Valley Road while the majority of the development area is currently vacant. Significant portions of the undeveloped land are classified as Natural Heritage Conservation with significant wetlands and woodlands as well as regulated habitats for species at risk.

The City of Kitchener's 2019 Land Use Master Plan envisions the area developing with a variety of uses including high-rise, mid-rise, and low-rise residential units, commercial uses, a business park, as well as a mixed-use section, expected to be comprised of mid to high-rise residential units with ground floor commercial uses.

The Hidden Valley development area is comprised of multiple land parcels and has a total land area of 51.17 ha. The land use and development area of each component of the proposed development is outlined in **Table 2:1.** The planned development is illustrated in **Figure 2:2**.

Table 2:1: Hidden Valley Development Area

Land Use	Area (ha)
High Rise Residential	1.06
Medium Rise Residential	5.32
Low Rise Residential (RES-5)	7.42
Low Rise Residential (Large Lot)	20.61
Mixed Use	3.80
Business Park	2.74
Commercial	10.22
Development Total	**51.17**

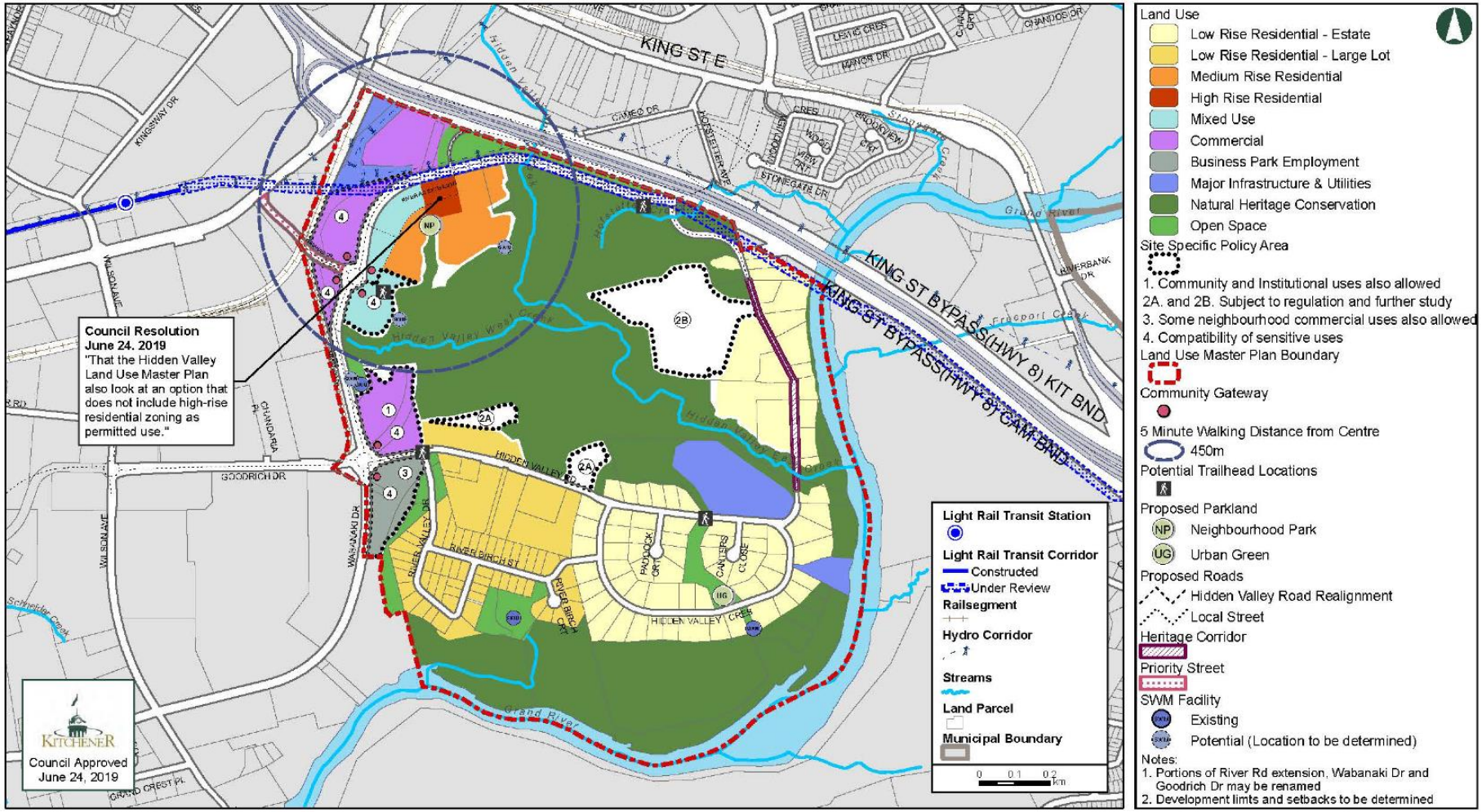

Figure 2:2: Hidden Valley Planned Development

2.2 Existing Roadway Network

The existing study area network consists of the following roadways:

Hidden Valley Road is classified as a local roadway under the jurisdiction of the City of Kitchener. Hidden Valley Road consists of a two-lane cross-section with one (1) lane per direction and has a posted speed limit of 40 km/h. Hidden Valley Road runs from Wabanaki Drive / Goodrich Drive in the south, to Wabanaki Drive in the north. Future upgrades to the roadway have been identified, with the roadway to be terminated at the future River Road extension, via a right-in right-out intersection, while the intersection of Wabanaki Drive and Hidden Valley Road / Goodrich Drive is to be upgraded to a roundabout.

Wabanaki Drive is classified as a major community collector road under the jurisdiction of the City of Kitchener. Wabanaki Drive consists of a two-lane cross-section with one (1) lane per direction and has a posted speed limit of 50 km/h. Wabanaki Drive runs from Manitou Drive in the south-east, to Fairway Road in the north-west. Future upgrades to the roadway have been identified with the intersections of Wabanaki Drive and Hidden Valley Road, and Wabanaki Drive and Hidden Valley Road / Goodrich Drive to be upgraded to roundabouts.

Fairway Road is classified as a regional arterial roadway under the jurisdiction of the Region of Waterloo. Fairway Road consists of a four-lane cross-section with two (2) lanes per direction and has a posted speed limit of 60 km/h. Fairway Road runs from Manitou Drive to the south-west, where it becomes Courtland Avenue, to Fountain Street (Regional Road 17) to the north-east, where it becomes Kossuth Road.

King Street is classified as a regional arterial road under the jurisdiction of the Region of Waterloo. The cross-section of King Street varies throughout the study area, consisting of a two-lane cross-section with one lane per direction east of River Road, a three-lane cross-section with one (1) lane per direction and a two-way left-turn lane between River Road and Fairway Road, and a four-lane cross-section with two (2) lanes per direction west of Fairway Road. Located north of the Hidden Valley area, King Street has a posted speed limit of 60 km/h east of the Highway 8 King Street ramp terminal, and a posted speed limit of 50 km/h west of the ramp terminal. King Street runs from Highway 401 to the south-east, where it becomes Shantz Hill Road, to the Highway 8 northbound ramp terminal to the north-west, where it becomes Weber Street.

River Road is classified as a regional arterial road under the jurisdiction of the Region of Waterloo. River Road, north of King Street, consists of a four-lane cross-section with two (2) lanes per direction and has a posted speed limit of 60 km/h. South of King Street, River Road has a two-lane cross-section with one (1) lane per direction and has a posted speed limit of 40 km/h. River Road runs from Woodview Crescent in the south-east, to Victoria Street in the north-west. Future upgrades to the roadway have been identified, with the roadway to be extended south from the current south-east limits at King Street and over Highway 8. The extension will connect to Wabanaki Drive at a future roundabout within the Hidden Valley area. Wabanaki Drive will maintain its termination at Manitou Drive west of the future roundabout and Hidden Valley area. Future connections planned for the River Road extension include, Stonegate Drive, Hidden Valley Road, a new Highway 8 southbound on-ramp, and a new Highway 8 northbound on and off-ramp.

Stonegate Drive is classified as a local roadway under the jurisdiction of the City of Kitchener. Stonegate Drive consists of a two-lane cross-section with one (1) lane per direction and has an unposted speed limit of 40 km/h. A painted centerline is present at the intersection of King Street and Stonegate Drive, while the remainder of Stonegate Drive has no painted centerline. Stonegate Drive runs from King Street to the east, ending with a cul-de-sac to the west. Future upgrades to the roadway have been identified, with the west end to be connected via the River Road extension, while the King Street intersection will be modified to permit right-in movements only, eliminating the occurrence of pass-through traffic under the ultimate conditions.

Wilson Avenue is classified as a major community collector north of Wabanaki Drive, and a local roadway south of Wabanaki Drive, under the jurisdiction of the City of Kitchener. Wilson Avenue consists of a four-lane cross-section with two (2) lanes per direction between Wabanaki Drive and Kingsway Drive, and a two-lane cross section with one (1) lane per direction south of Wabanaki Drive. Wilson Avenue has a posted speed limit of 50 km/h and runs from a cul-de-sac south of Wabanaki Drive, to the Kingsdale Community Centre, north of Fourth Avenue. Future upgrades to the roadway have been identified with the Wilson Avenue and Goodrich Drive intersection to be upgraded to a roundabout with an extension of Goodrich Drive providing a connection to the existing Manitou Drive and Bleams Road roundabout.

2.3 Study Area Intersections

The following existing intersections will be assessed as part of this study:

- King Street and River Road (signalized);
- King Street and Stonegate Drive (unsignalized);
- Highway 8 Fairway Road southbound ramp terminal (signalized);
- Fairway Road and Wabanaki Drive (unsignalized);
- Fairway Road and Fairview Park Mall / Cineplex entrance (signalized);
- Fairway Road and Wilson Avenue (signalized);
- Wabanaki Drive and Hidden Valley Road (unsignalized);
- Wabanaki Drive and Hidden Valley Road / Goodrich Drive, (unsignalized) and
- Wabanaki Drive and Wilson Avenue (unsignalized).

Figure 2:3 illustrates the study area with each of the intersections identified following the numbering used in the list above. The lane configurations for the existing intersections can be found in **Appendix C**, with a brief description of each intersection.

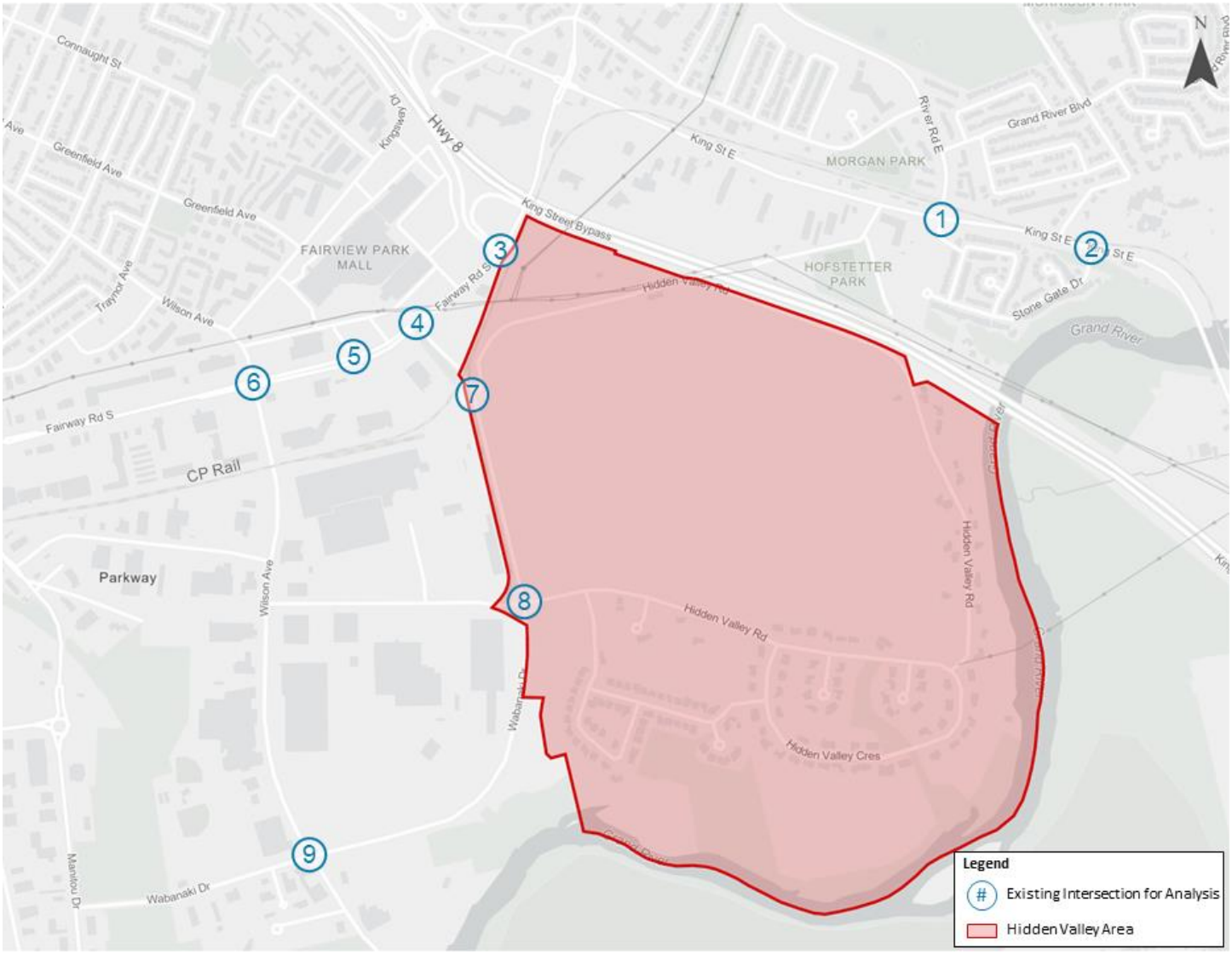

Figure 2:3: Existing Conditions Study Area Intersections

2.4 Existing Pedestrian Facilities

Pedestrian facilities are features that are specifically designed for the use of pedestrians and include sidewalks, trails, and Multi-Use Paths (MUP).

Within the Hidden Valley area pedestrian facilities are present on less than half of the existing road network. At the intersection of Hidden Valley Road and Wabanaki Drive / Goodrich Drive a worn pathway indicates a desire line from Wabanaki Drive to River Valley Drive along the south side of Hidden Valley Road. Dedicated pedestrian facilities are provided via sidewalks along both sides of River Valley Drive and River Birch Street.

The rest of the road network within the Hidden Valley area is void of pedestrian facilities. This results in gaps in the pedestrian network along Hidden Valley Crescent and on Hidden Valley Road, east of River Valley Drive. Pedestrian connectivity is available to the boundary road network via Wabanaki Drive. North and south connectivity is available via sidewalks on Wabanaki Drive although some gaps are present.

The location of existing pedestrian facilities and network gaps within Hidden Valley and the surrounding road network are illustrated in **Figure 2:4** while details regarding the facilities are summarized in **Appendix D**.

2.5 Existing Cycling Facilities

Cycling facilities are features that are specifically designed for the use of cyclists and include trails, bicycle tracks, and MUPs.

Existing cycling facilities are severely limited within the Hidden Valley area, while a limited cycling network and connectivity to the Hidden Valley area is available on the surrounding boundary roads. Multiple gaps are present in the boundary road cycling network which include an orphaned section of on-street bicycle lanes on Wabanaki Drive, located between Wilson Avenue and Goodrich Drive / Hidden Valley Road.

The location of existing cycling facilities and network gaps in Hidden Valley and the surrounding road network are illustrated in **Figure 2:5**.

2.6 Existing Transit Facilities

Grand River Transit (GRT) currently operates transit routes within the vicinity of the Hidden Valley area and on the study boundary road network. GRT provides transit service in Kitchener, Waterloo, Cambridge, Elmira, St. Jacobs, and New Hamburg, operating conventional buses, an express bus network, community and flexible transit routes, door-to-door transit service for riders with disabilities using specialized vehicles and rapid transit (ION light rail and bus).

ION light rail travels between Conestoga station in Waterloo and Fairway station in Kitchener (total of 19 stations). At Fairway station, ION light rail connects to ION bus (Route 302) and travels to the Ainslie Street Terminal in Cambridge. Stage 2 ION will see ION bus converted to light rail, creating a light rail route that runs from Cambridge to Waterloo.

Transit service is present along Fairway Road, however no service is provided within the Hidden Valley area. The closest transit stop to the Hidden Valley area is located on Fairway Road within 300 meters of the Wabanaki Drive intersection. Transit stops and routes within the vicinity of the Hidden Valley area are shown in **Figure 2:6** and detailed route information is provided in **Appendix E**.

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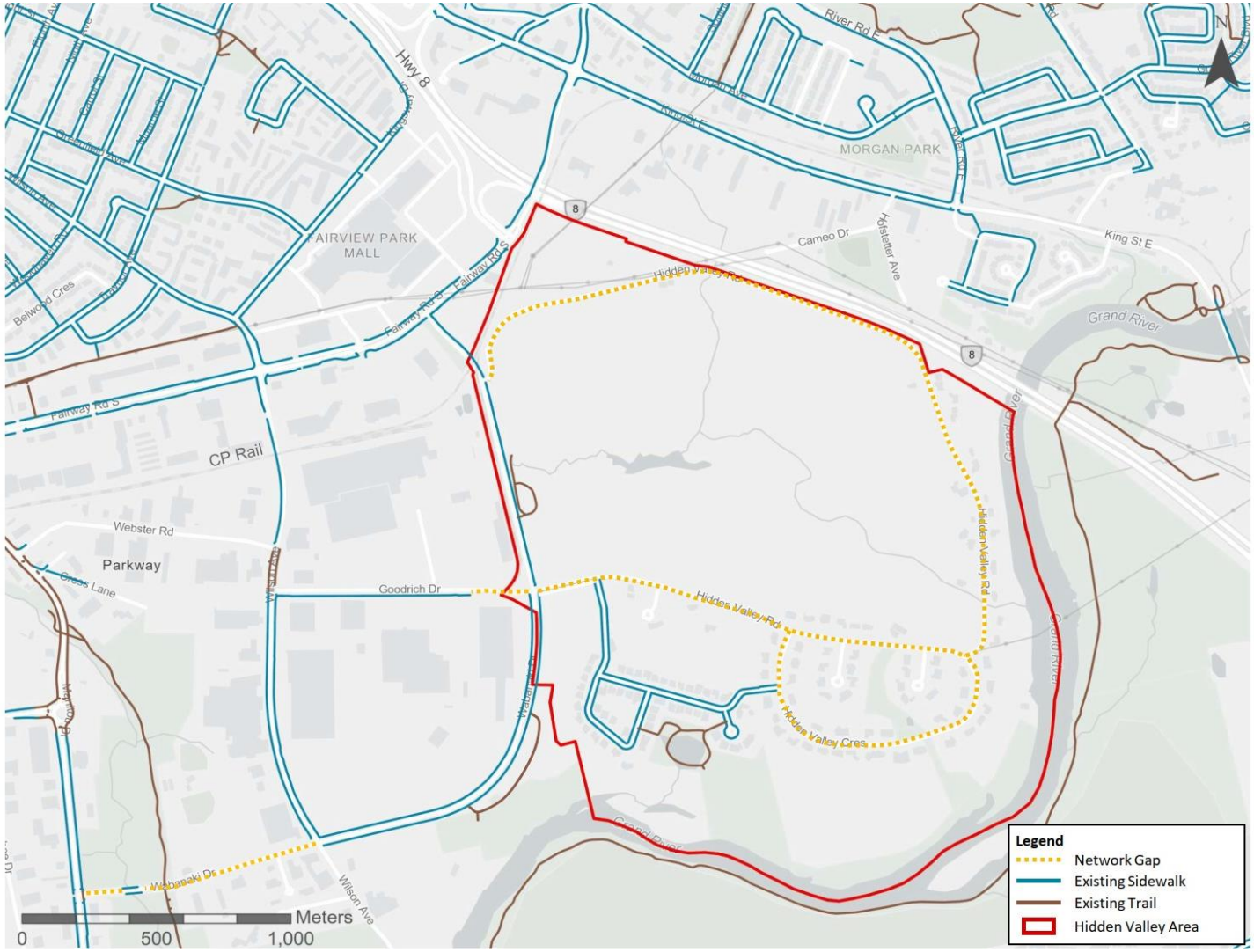

Figure 2:4: Existing Pedestrian Facilities Network

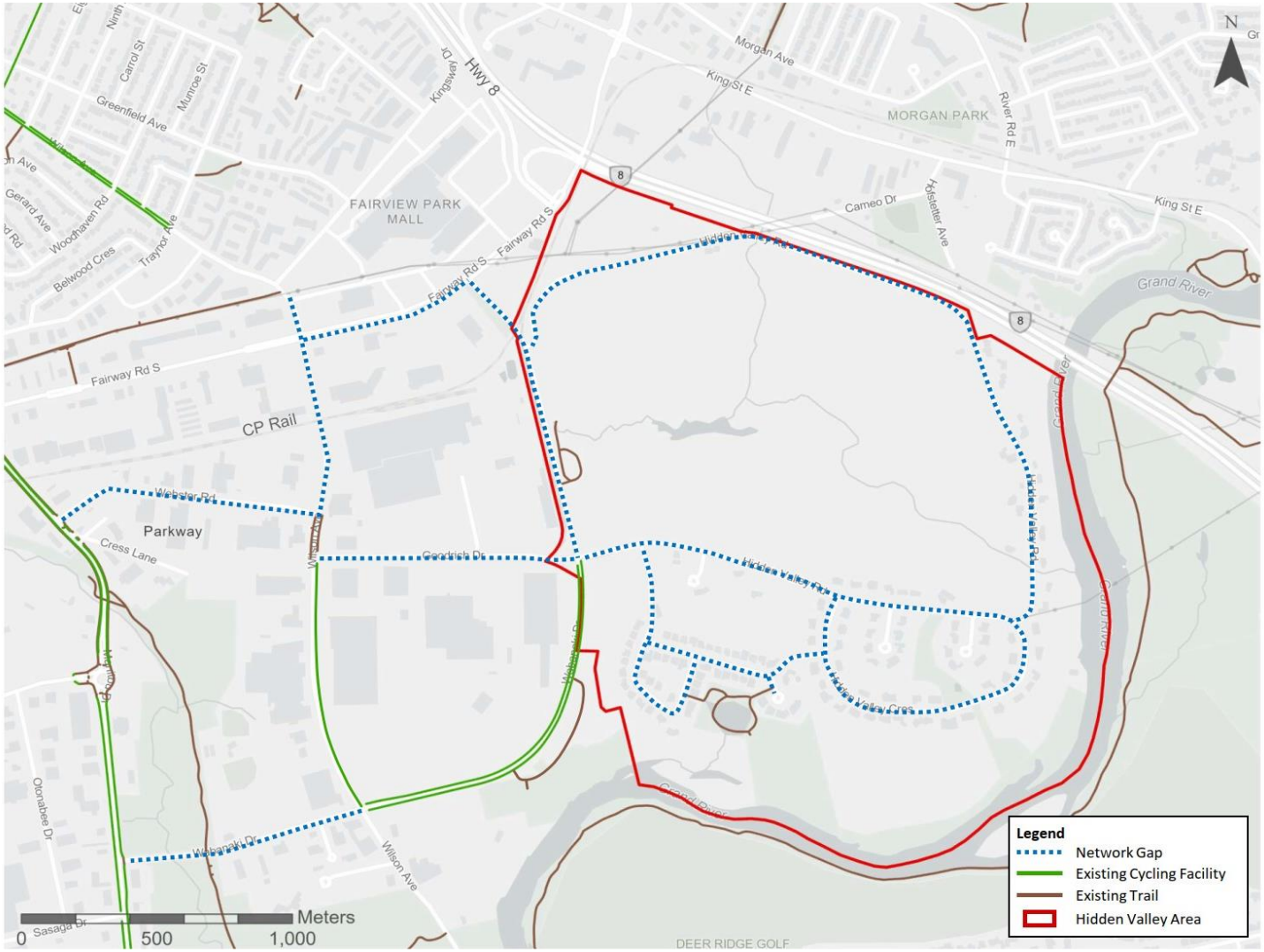

Figure 2:5: Existing Cycling Facilities Network

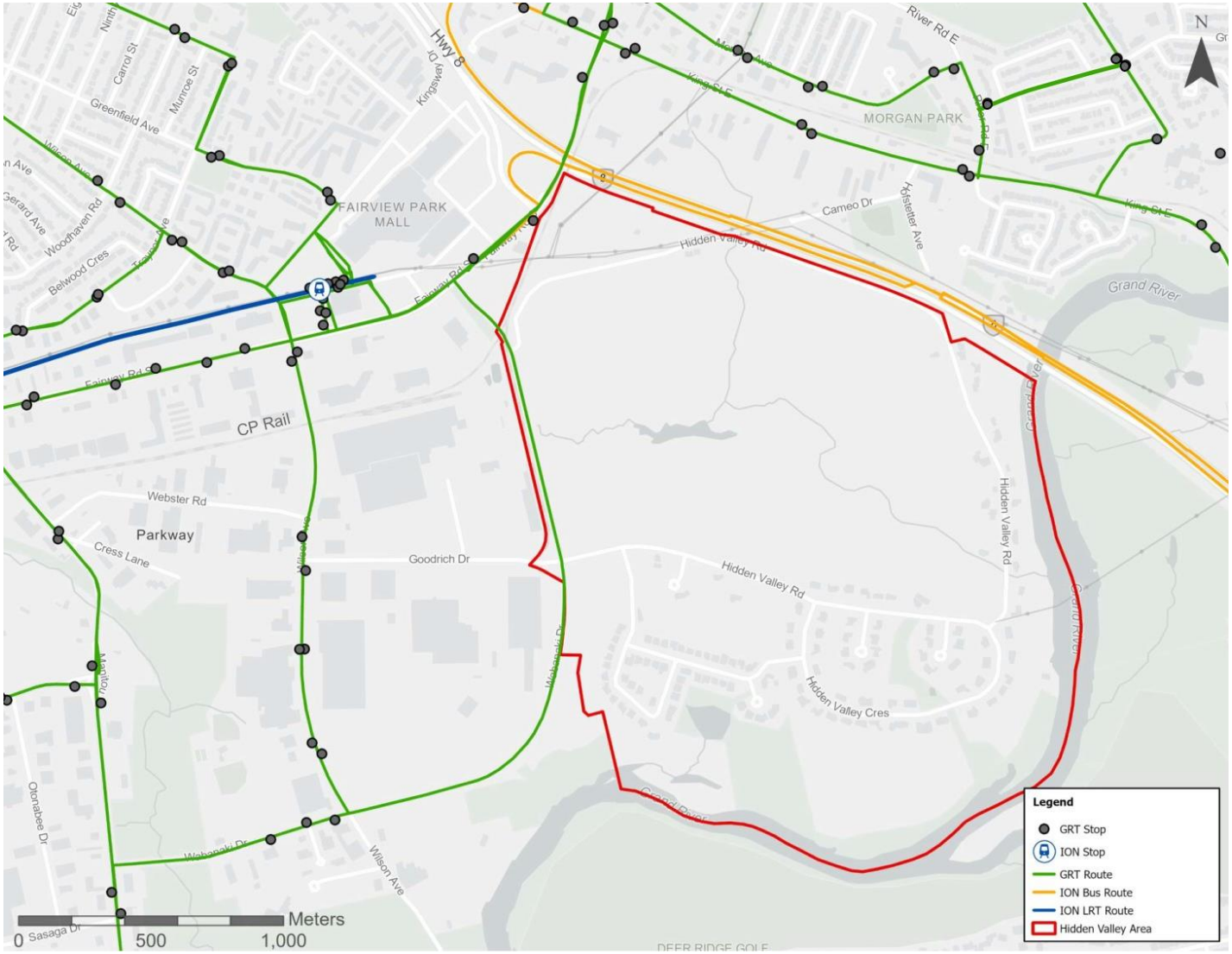

Figure 2:6: Existing Transit Facilities

3.0 ANALYSIS PERIOD

3.1 Peak Periods

Existing and future traffic operations within the study area will be analyzed for the following peak periods:

- The morning (AM) peak hour of the adjacent roadway, and
- The evening (PM) peak hour of the adjacent roadway.

3.2 Study Horizons

Traffic operations within the study area will be analyzed for the following years:

- 2023 existing conditions;
- 2028 horizon year;
- 2033 horizon year, and
- 2043 horizon year.

4.0 EXISTING CONDITIONS ASSESSMENT

4.1 Traffic Data

Traffic data was obtained from the City of Kitchener in the form of Turning Movement Counts (TMCs) data (containing vehicle, pedestrian, and cyclist data) and Automated Traffic Recorder (ATR) counts. Data obtained from the Region of Waterloo was obtained in the form of TMCs, intersection Signal Times (ST) and a Synchro network file. Dates, locations, and the jurisdiction from which the most recent data was obtained is summarized in **Table 4:1**. Traffic data provided by the City of Kitchener is provided in **Appendix F**, while data provided by the Region of Waterloo is provided in **Appendix G**.

In addition to the traffic data provided by the City and the Region, additional TMC data collection was commissioned for the study, on behalf of the City. Additional data was collected by Horizon Data Services Ltd. Traffic data used for study analysis is detailed in **Table 4:2** below. Traffic data collected as part of this project is provided in **Appendix H**.

Table 4:1: Traffic Data Provided

Type of Data	Collection Location	Date Collected
City of Kitchener		
ATR	Goodrich Drive, from Wilson Avenue to Chandaria Place	30-Sep-21
ATR	Wabanaki Drive, from Wilson Avenue to Goodrich Drive	30-Sep-21
ATR	Wabanaki Drive, from Manitou Drive to Kevco Place	20-Oct-21
ATR	Wilson Avenue, from Wabanaki Drive to Grand Crest Place	29-Sep-22
ATR	Hidden Valley Road, from Wabanaki Drive to Hidden Valley Crescent	10-Nov-22
Region of Waterloo		
TMC	Fairway Road & Wilson Avenue	17-May-22
TMC	Fairway Road & Highway 8 Southbound Ramps	17-May-22
TMC	King Street & Fairway Road	17-May-22
ST	Fairway Road & Highway 8 Southbound Ramps	23-Jan-23
ST	King Street & Highway 8 Northbound Ramps	23-Jan-23
ST	King Street & River Road	27-Jan-23
ST	Fairway Road & Wilson Avenue	27-Jan-23
ST	King Street & Fairway Road	27-Jan-23
ST	Fairway Road & Fairview Park Mall / Cineplex Entrance	07-Jun-23
ST	Manitou Drive & Wabanaki Drive	02-Feb-23
Synchro	King Street & Highway 8 Northbound Ramps	26-Jan-23
Synchro	King Street & Fairway Road	26-Jan-23
Synchro	King Street & River Road	26-Jan-23
Synchro	Fairway Road & Highway 8 Southbound Ramps	26-Jan-23
Synchro	Fairway Road & Wilson Avenue	26-Jan-23
Synchro	Manitou Drive & Wabanaki Drive	26-Jan-23

Notes: TMC – Turning Movement Count; ATR – Automated Traffic Recorder; ST – Signal Time.

Table 4:2: Traffic Data Collected

Type of Data	Collection Location	Date Collected
Horizon Data Services Ltd.		
TMC	Fairway Road & Wabanaki Drive	16-Feb-23
TMC	Goodrich Drive & Wabanaki Drive	16-Feb-23
TMC	Wabanaki Drive & Hidden Valley Road	16-Feb-23
TMC	King Street & River Road	16-Feb-23
TMC	Manitou Drive & Wabanaki Drive	16-Feb-23
TMC	Wilson Avenue & Wabanaki Drive	16-Feb-23
TMC	King Street & Highway 8 Northbound Ramps	21-Feb-23
TMC	King Street & Stonegate Drive	14-Dec-23
TMC	King Street & Highway 8 Northbound Ramps	14-Dec-23
TMC	Fairway Road & Fairview Park Mall / Cineplex Entrance	14-Dec-23

Notes: TMC – Turning Movement Count.

4.1.1 Growth Rate

Network growth for the study was based on consultation with City of Kitchener staff in addition to growth rate recommendations provided by Region of Waterloo staff. It was determined growth rates were to be applied to regional roads within the study area as follows:

- 0.0% yearly growth for traffic on King Street, and
- 1.0% yearly growth for traffic on Fairway Road.

Network growth was applied to bring older count data in line with 2023 existing conditions volumes. Upon review of the expected 2023 traffic volumes within the study area it was noted that volume balancing was required to mitigate volume discrepancies between adjacent intersections within the network. Volume balancing performed is discussed further in the following section.

The growth rates above were used to develop future 2028, 2033, and 2043 background traffic volumes, by applying them to the balanced 2023 volumes on a per annum basis up to the future horizon year being assessed.

Email correspondence confirming the use of the growth rates stated above is provided in **Appendix I**.

4.1.2 Volume Balancing

Due to differences in when traffic data was collected, adjustments to traffic volumes between adjacent intersections was required for this study i.e., volume balancing, to establish baseline / existing traffic volumes. The most recent data set for each intersection was used for volume balancing purposes to develop existing condition traffic volumes. Traffic volumes were typically balanced towards the higher number within the network. Volume balancing is illustrated volume figures provided in **Appendix J** and are accompanied by a brief description of the adjustments made.

Traffic volumes traffic volume figures for existing conditions are provided in

with additional detail provided in **Appendix J**.

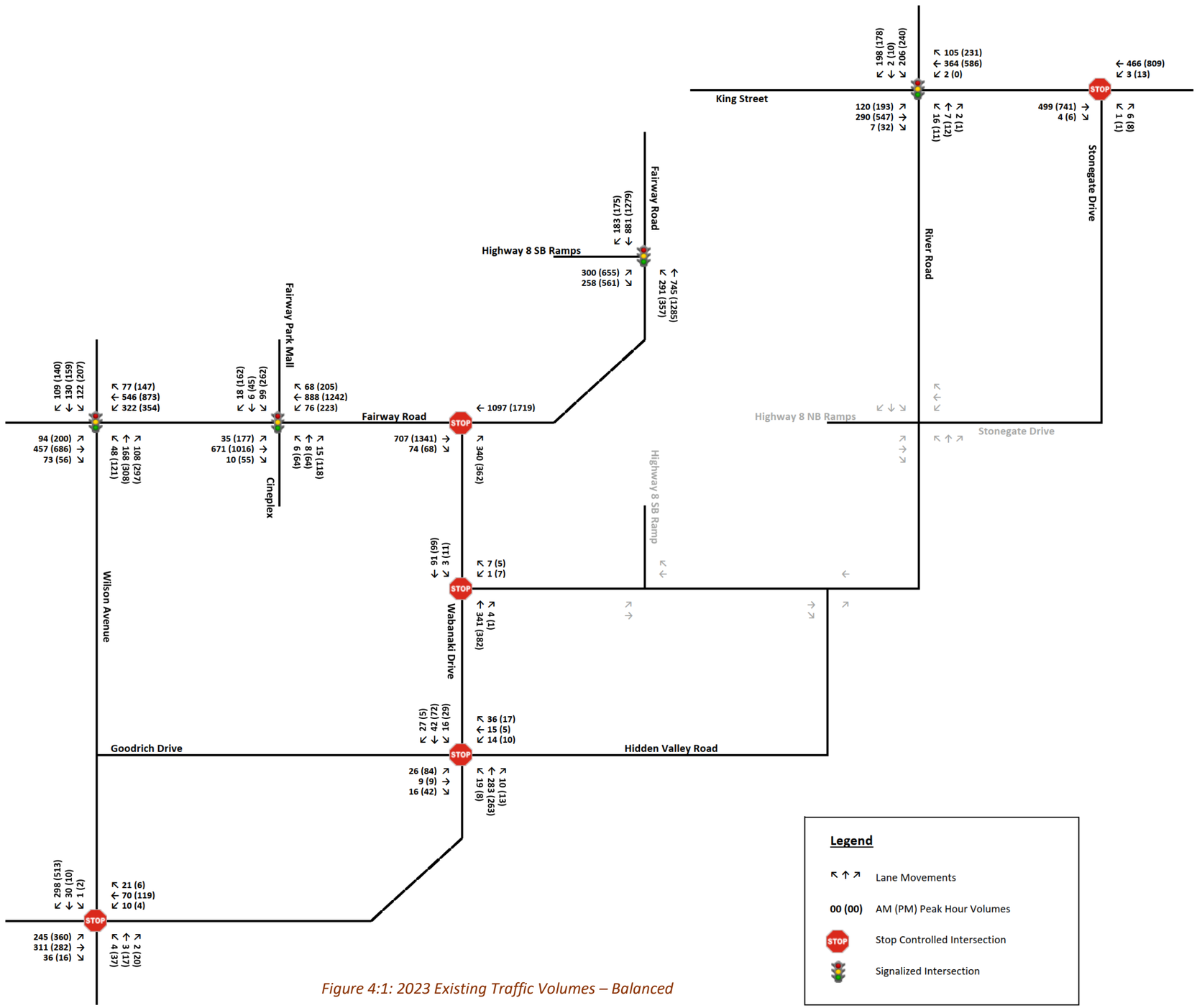

Figure 4:1: 2023 Existing Traffic Volumes – Balanced

4.2 Existing Conditions Network Analysis

4.2.1 Capacity Analysis

4.2.1.1 Methodology

Study area intersection operations were assessed using the Synchro 11 and SimTraffic software. Intersection operations performance metrics are reported in terms of Level of Service (LOS), average vehicle delay (Delay), volume-to-capacity ratio (V/C), and 95th percentile queue length (Queue). Analysis was conducted applying MTO and Region of Waterloo guidelines.

Level of Service is based on the average control delay per vehicle for a given movement and is represented by a letter between 'A' and 'F', with 'F' being the longest delay. Results for LOS, V/C, and delay were taken from Synchro 11 while values for queueing were taken from SimTraffic.

Table 4:3 summarizes the LOS criteria for signalized and unsignalized intersections based on the Highway Capacity Manual (HCM) 6th Edition methodology.

Table 4:3: LOS Criteria for Signalized and Unsignalized Intersections

Level of Service (LOS)	Average Control Delay per Vehicle (seconds / vehicle)	
	Signalized Intersection	Unsignalized Intersection
A	≤ 10	≤ 10
B	>10 and ≤ 20	> 10 and ≤ 15
C	> 20 and ≤ 35	> 15 and ≤ 25
D	> 35 and ≤ 55	> 25 and ≤ 35
E	> 55 and ≤ 80	> 35 and ≤ 50
F	> 80	> 50

4.2.1.2 Existing 2023 Capacity Analysis

Capacity analysis was completed for the 2023 existing conditions within the study area. Results from the traffic analysis are summarized in **Table 4:4**, while Synchro and SimTraffic output reports are provided in **Appendix K**. For analysis purposes in Synchro and SimTraffic, Fairway Road is considered to have an east-west orientation at Wilson Avenue, CF Fairview Park Mall / Cineplex access, and Wabanaki Drive, and a north-south orientation at the Highway 8 southbound ramp terminal and King Street. The following results have been bolded and coloured red within the results tables to assist in identifying movements that are operating poorly:

- LOS F;
- V/C ratio of 0.85 or greater, and
- 95th percentile queue lengths that exceed the available storage length.

As shown in **Table 4:4**, all intersections are expected to operate well during the AM peak hour, with LOS B or better. Individual movements are also expected to operate satisfactory and exhibit reserve capacity with the highest reported V/C being 0.72.

During the PM peak hour, intersections are still expected to operate well however experience higher average delay and queueing as a result of higher traffic volumes within the network. The Fairway Road Highway 8 ramp terminal intersection northbound left movement, the Fairway Road and Wabanaki Drive northbound right movement, and the Fairway Road and Wilson Avenue southbound left movement were all shown to be nearing or over capacity with reported V/C ratios of 0.93, 0.97, and 1.03, respectively.

The Fairway Road and Wilson Avenue southbound left movement is shown to operate with a V/C ratio of 1.03 indicated the movement is at capacity and a LOS F. Additionally, the Fairway Road and Wabanaki Drive northbound right movement and Wilson Avenue and Wabanaki Drive intersection northbound left-through-right movement are expected to operate with LOS F, indicating average delays of greater than 50 s are experienced. These cases of poor operations are the result of high traffic volumes on the intersecting roadway causing vehicles to wait for an appropriate gap to perform their movement.

Queuing deficiencies were noted in the eastbound and northbound approaches at the Fairway Road Highway 8 southbound ramp terminal, the eastbound and southbound approaches at the Fairway Road and Fairview Park / Cineplex access, and the westbound and southbound approaches at the Fairway Road and Wilson Avenue intersection.

4.2.1.3 Existing Condition Operational Summary

Overall, intersections within the study area are expected to operate well under the 2023 existing conditions while specific movements operate with capacity constraints or with high average delay, during the PM peak hour. Operational improvement is anticipated with network improvements to be explored under future conditions study area analysis.

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Table 4:4: Existing 2023 Capacity Analysis

Intersection	Approach - Movement	Storage Length (m)	AM Peak				PM Peak			
			LOS	V/C	Delay (s)	Queue (m)	LOS	V/C	Delay (s)	Queue (m)
King St & River Rd	**Intersection**	**-**	**B**	**-**	**15.4**	**-**	**B**	**-**	**17.7**	**-**
	EB - L	45	A	0.23	8.1	27	B	0.51	12.2	34
	EB - TR	-	A	0.30	8.9	41	B	0.57	12.8	72
	WB - L	50	B	0.00	11.0	2	-	-	-	-
	WB - T	-	B	0.38	15.3	63	B	0.59	19.2	100
	WB - R	50	A	0.13	2.8	18	A	0.26	2.8	29
	NB - LTR	-	C	0.07	25.8	17	C	0.07	26.5	16
	SB - LT	-	D	0.66	43.0	57	D	0.77	50.6	79
	SB - R	-	A	0.36	6.2	29	A	0.34	6.2	37
King St & Stonegate Dr	**Intersection**	**-**	**A**	**-**	**0.1**	**-**	**A**	**-**	**0.1**	**-**
	EB - TR	-	-	-	-	0	-	-	-	0
	WB - L	100	A	0.00	8.9	4	A	0.02	9.2	8
	WB - T	-	-	-	-	0	-	-	-	0
	NB - LR	-	B	0.01	12.3	6	C	0.03	16.3	9
Fairway Rd Highway 8 Ramps	**Intersection**	**-**	**B**	**-**	**14.0**	**-**	**C**	**-**	**25.5**	**-**
	EB - L	75**	C	0.47	33.7	52	D	0.71	38.6	**224**
	EB - R	50**	B	0.26	15.8	42	B	0.46	17.0	**168**
	NB - L	85	B	0.65	13.8	71	E	**0.93**	59.8	**164**
	NB - T	-	A	0.33	6.0	54	B	0.59	13.4	232
	SB - T	-	B	0.39	16.3	77	C	0.64	28.4	110
	SB - R	75	A	0.18	1.1	25	A	0.17	1.4	48
Fairway Rd & Wabanaki Dr	**Intersection**	**-**	**A**	**-**	**2.9**	**-**	**A**	**-**	**7.5**	**-**
	EB - TR*	-	-	-	-	2	-	-	-	16
	WB - T*	-	-	-	-	54	-	-	-	44
	NB - R	-	C	0.58	19.1	48	**F**	**0.97**	72.6	198
Fairway Rd & Fairview Park Mall / Cineplex	**Intersection**	**-**	**B**	**-**	**10.6**	**-**	**C**	**-**	**23.8**	**-**
	EB - L	40	A	0.08	5.3	14	C	0.65	33.1	**51**
	EB - TR	-	A	0.30	8.3	32	B	0.60	18.0	82
	WB - L	130	A	0.14	6.1	21	C	0.68	23.0	78
	WB - T	-	B	0.39	10.6	70	C	0.70	26.1	147
	WB - R	-	A	0.07	0.1	19	A	0.24	4.1	70
	NB - L	-	D	0.04	41.5	7	E	0.44	57.9	29
	NB - TR	-	C	0.13	25.8	14	D	0.68	44.7	60
	SB - L	40	C	0.24	32.4	31	C	0.46	34.3	**50**
	SB - TR	-	B	0.08	15.2	15	A	0.35	9.5	48
Fairway Rd & Wilson Ave	**Intersection**	**-**	**B**	**-**	**18.5**	**-**	**D**	**-**	**36.2**	**-**
	EB - L	120	A	0.18	6.9	26	B	0.56	19.7	59
	EB - TR	-	B	0.32	14.9	59	C	0.61	34.7	97
	WB - L	160	C	0.56	20.5	80	D	0.80	51.7	142
	WB - T	-	A	0.26	7.3	43	C	0.56	25.6	98
	WB - R	30	A	0.09	1.3	21	B	0.24	12.6	**62**
	NB - L	95	D	0.29	36.1	28	C	0.39	32.2	47
	NB - T	-	D	0.51	40.2	53	D	0.75	54.1	97
	NB - R	-	A	0.20	4.0	24	B	0.48	18.8	68
	SB - L	45	E	0.72	60.0	38	**F**	**1.03**	106.1	57
	SB - T	-	D	0.40	37.2	40	D	0.40	41.1	372
	SB - R	45	B	0.48	13.4	9	B	0.51	12.7	**90**

*Notes: * = Movement operates under free-flow conditions;*

*** = Storage applies to one of two lanes used for this movement while the second lane has no associated storage length.*

Intersection	Approach - Movement	Storage Length (m)	AM Peak				PM Peak			
			LOS	V/C	Delay (s)	Queue (m)	LOS	V/C	Delay (s)	Queue (m)
Wabanaki Dr & Hidden Valley Dr	**Intersection**	**-**	**A**	**-**	**0.3**	**-**	**A**	**-**	**0.4**	**-**
	WB - LR	-	B	0.01	10.7	10	B	0.02	11.5	10
	NB - TR*	-	-	-	-	0	-	-	-	99
	SB - LT	-	A	0.00	8.0	1	A	0.01	8.1	7
Wabanaki Dr & Goodrich Dr / Hidden Valley Dr	**Intersection**	**-**	**A**	**-**	**9.9**	**-**	**A**	**-**	**9.9**	**-**
	EB - LTR	-	A	0.08	9.0	22	A	0.19	9.1	20
	WB - LTR	-	A	0.08	8.1	15	A	0.04	8.2	16
	NB - LTR	-	B	0.41	11.0	30	B	0.38	10.9	27
	SB - LTR	-	A	0.11	7.9	17	A	0.14	8.6	20
Wilson Ave & Wabanaki Dr	**Intersection**	**-**	**A**	**-**	**5.9**	**-**	**B**	**-**	**13.7**	**-**
	EB - L	-	A	0.17	7.9	15	A	0.25	8.3	23
	EB - TR*	-	-	-	-	1	-	-	-	3
	WB - LT	-	A	0.01	8.0	3	A	0.00	7.8	4
	WB - R*	45	-	-	-	2	-	-	-	0
	NB - LTR	-	C	0.05	24.9	9	F	0.77	116.1	21
	SB - LT	-	D	0.15	25.2	14	D	0.09	33.1	9
	SB - R	-	B	0.30	10.3	0	B	0.56	13.7	3

*Notes: * = movement operates under free-flow conditions;*

*** = Storage applies to one of two lanes used for this movement while the second lane has no associated storage length.*

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5.0 OPPORTUNITIES AND CONSTRAINTS

5.1 Opportunities

Future development of the Hidden Valley area should provide a connected, flexible network that is dynamic enough to adequately serve the mobility and accessibility needs of all road users (motorists, transit, cyclists, and pedestrians). Key planning opportunities and considerations for the area should include:

- Ability to live / work / play within the Hidden Valley community or its environs. Self-contained communities give individuals the ability to build and enjoy their lifestyle without leaving the community. This reduces overall auto trips and thus development impacts on the internal and external boundary network.
- Development intensification assist the City and the Region in meeting residential and employment targets.
- Developing and incorporating multi-modal options that will reduce passenger vehicle and single occupant vehicle (SOV) travel modes which work to guide communities to more sustainable way of travel.
- Build upon the previously contemplated and planned road network elements identified in Hidden Valley planning to provided enhanced network connectivity where possible between existing and future development blocks.
- New transit route options that can connect Hidden Valley to lands north of Highway 8 and west of Wabanaki Drive.
- Enhanced pedestrian and cycle facilities to improve connectivity to/from existing and future residential and commercial areas and can accommodate users of all ages and abilities.
- Provide additional network capacity to accommodate future vehicular volumes to improve network operation.
- Replacing existing stop control intersections with roundabouts has been identified as the preferred intersection control based on life-cycle costs. Roundabouts are identified as safer than signalization as it results in fewer crashes, reduces pedestrian collision, reduces injury and creates less air pollution.

5.2 Constraints

A review of the Hidden Valley area has also identified area constraints that impact the planning of the area transportation network. Key considerations include:

- Within the limits of the Hidden Valley area only two existing access points are provided to the wider boundary network. Future development will provide access to Highway 8 within the limits of the area and the overall River Road extension will allow access to King Street. The overall community however remains constrained on opportunities to connect to the wider network.

- Turning movement restrictions i.e., right-turn only movements limits vehicle circulation, ingress and egress.
- The Grand River bounds the east and south portions of the Hidden Valley area.
- Environmentally sensitive land, habitats and features that impact where development can occur.
- A 2023 heritage impact assessment (HIA) has identified Hidden Valley Road could be designated as a heritage corridor. City staff will designate the north-south portion Hidden Valley Road as a "Heritage Corridor" in the Official Plan and recognizing the lower east-west portion of the Hidden Valley Road as a Cultural Heritage Landscape (CHL) in the Official Plan. Thus, any development on or adjacent to the corridor might trigger the need for certain technical studies, such as Corridor Enhancement Plans to ensure that the heritage attributes of Hidden Valley Road remain conserved. This may impact upgrades to accommodate development, transit, trails, sidewalks or other active transportation facilities. The proposed Heritage Corridor (shown in green) and CHL (shown in orange) are illustrated in **Figure 5:1**.

Figure 5:1: Hidden Valley Heritage Corridor

6.0 FUTURE HIDDEN VALLEY AREA DEVELOPMENT

6.1 River Road Extension

A Class Environmental Assessment (EA) Study was initiated by the Region of Waterloo in 2006 for the extension of River Road, providing a connection from King Street to Manitou Drive, in the City of Kitchener. The recommended design concept for the extension was approved by Regional Council on March 4, 2014. The recommended design would incorporate a continuous centre median and multi-use trails on both sides between King Street and Manitou Drive along a 3.6 km road consisting of 4 lanes. The design would accommodate signalization of River Road at King Street and future River Road at Stonegate Drive/ Highway 8 westbound ramps. Turning movement restriction of the existing intersection of Stonegate Drive at King Street would occur except for right-turn entry only from King Street. The design would also provide bridges across Schneider Creek and across Highway 8 with ramps to access on and off Highway 8 northbound, toward Waterloo and to access onto Highway 8 southbound toward Cambridge.

New intersection configurations would be provided which would include unsignalized intersections of River Road at Hidden Valley Road and at the Highway 8 eastbound ramp. New roundabouts and roadway realignment (where necessary) are to be provided at the intersections of River Road at Wabanaki Drive, Wabanaki Drive at Goodrich Drive/Hidden Valley Road, and at Wilson Avenue at Goodrich Drive, the latter being outside of the Hidden Valley lands. The preferred alignment of the River Road extension to be constructed is illustrated in **Figure 6:1**.

Construction of the River Road extension was originally expected to be completed in 2023. However, based on project updates published by the Region of Waterloo in 2024, construction is expected to commence in 2024 and is expected to be completed in 2025. For the purposes of this report the River Road extension was anticipated to be completed prior to the 2028 analysis year.

Design concepts for the sections of the River Road Extension within the study area are further detailed in shown in **Figure 6:2** and **Figure 6:3**.

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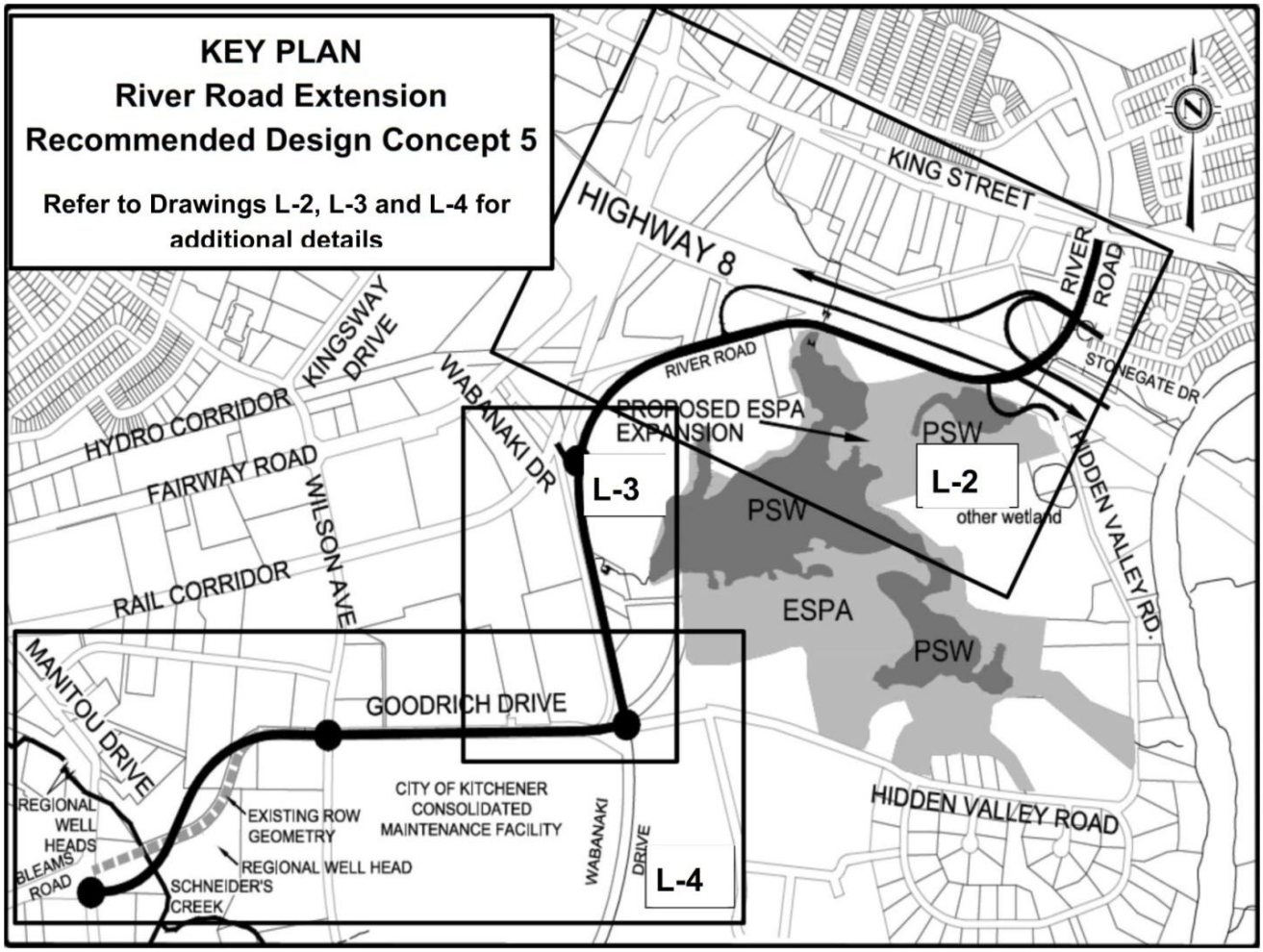

Figure 6:1: River Road Extension Preferred Alignment

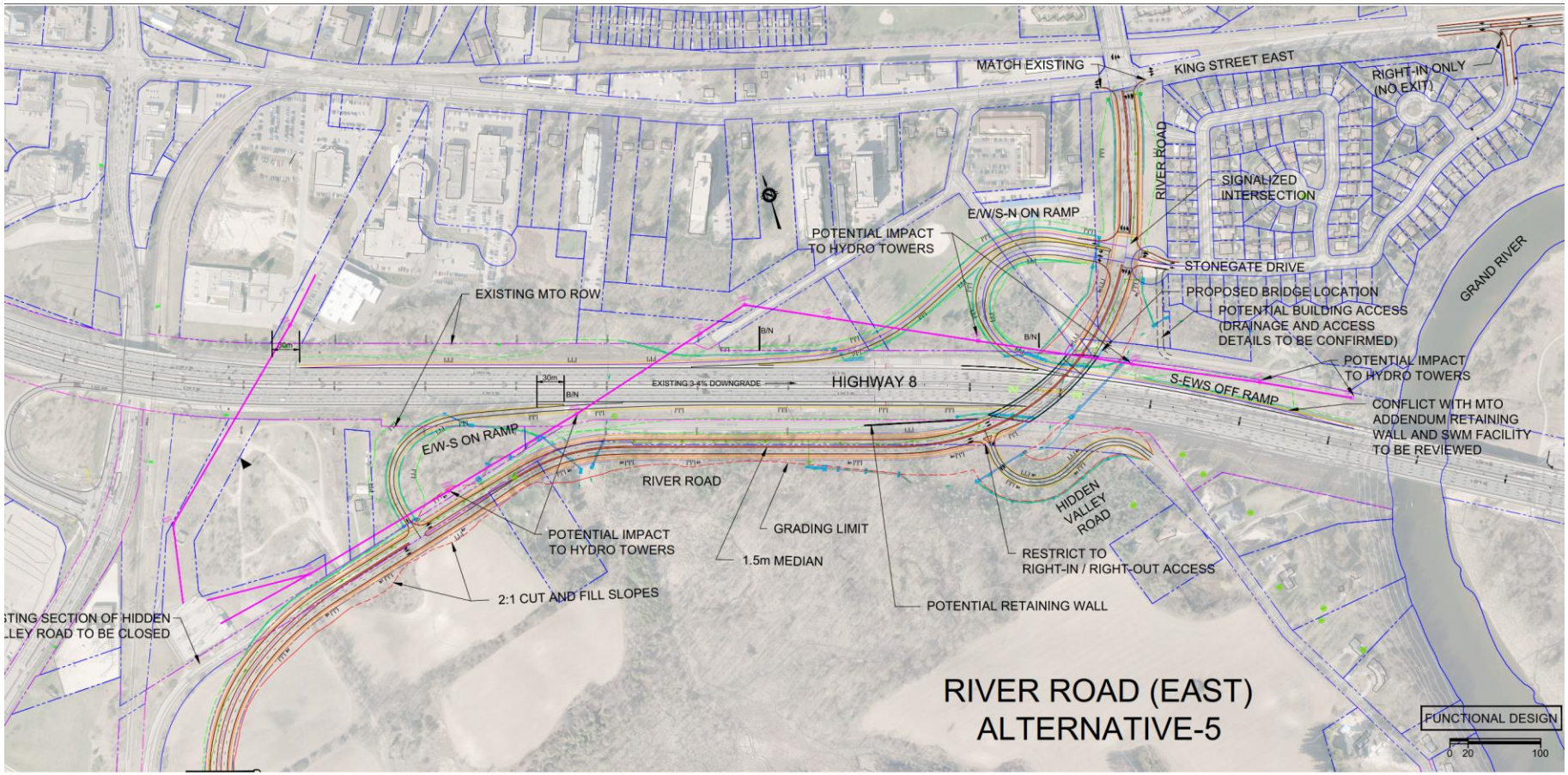

Figure 6:2: River Road Extension Design Concept King Street to Wabanaki Drive (L-2)

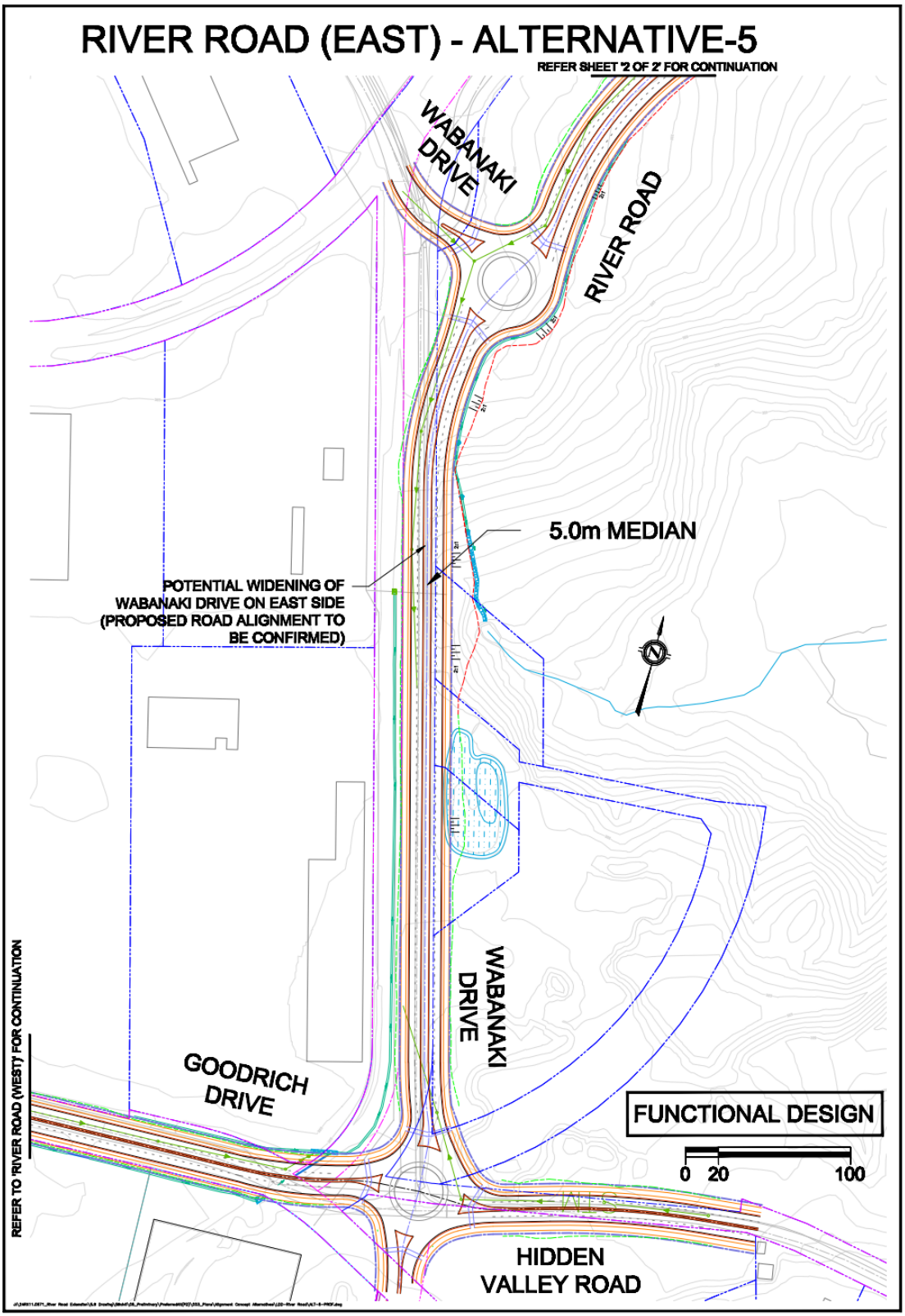

Figure 6:3: River Road Extension Design Concept Wabanaki Drive to Goodrich Drive (L-3)

6.2 ION Stage 2

ION is the Region of Waterloo's light rail transit system with Stage 1 construction completed in June 2019 providing service between Conestoga station in Waterloo and Fairway station in Kitchener. This section of LRT consists of a total of 19 stations along the route. In June 2011 the Region of Waterloo Council approved a staged approach to light rail transit from Waterloo to Cambridge in Stage 2. Stage 1 ION also includes ION bus rapid transit between Kitchener and Cambridge, a service that was launched in September 2015.

Stage 2 ION proposed an extension of the ION LRT system by the Region of Waterloo, an addition of 17 km from Fairway station in Kitchener to Downtown Cambridge with a further seven new stations creating a continuous LRT service across the Region's three urban centres. In December 2023 Regional Council endorsed a new location for the south terminal, creating a new preferred route and station locations. The ION Stage 2 preferred routes, station locations, and functional design plates are illustrated in **Appendix L.**

The first segment of the Stage 2 ION extension will pass through the Hidden Valley area, entering Hidden Valley via an elevated structure. Within Hidden Valley a segment of the LRT is proposed to be accommodated with the centre of the four-lane cross-section proposed for the planned River Road extension. The LRT will continue to run parallel to Highway 8 exiting Hidden Valley via an elevated structure. The proposed LRT alignment within Hidden Valley is illustrated in **Figure 6:4** and central alignment within the River Road extension is provided in **Figure 6:5**.

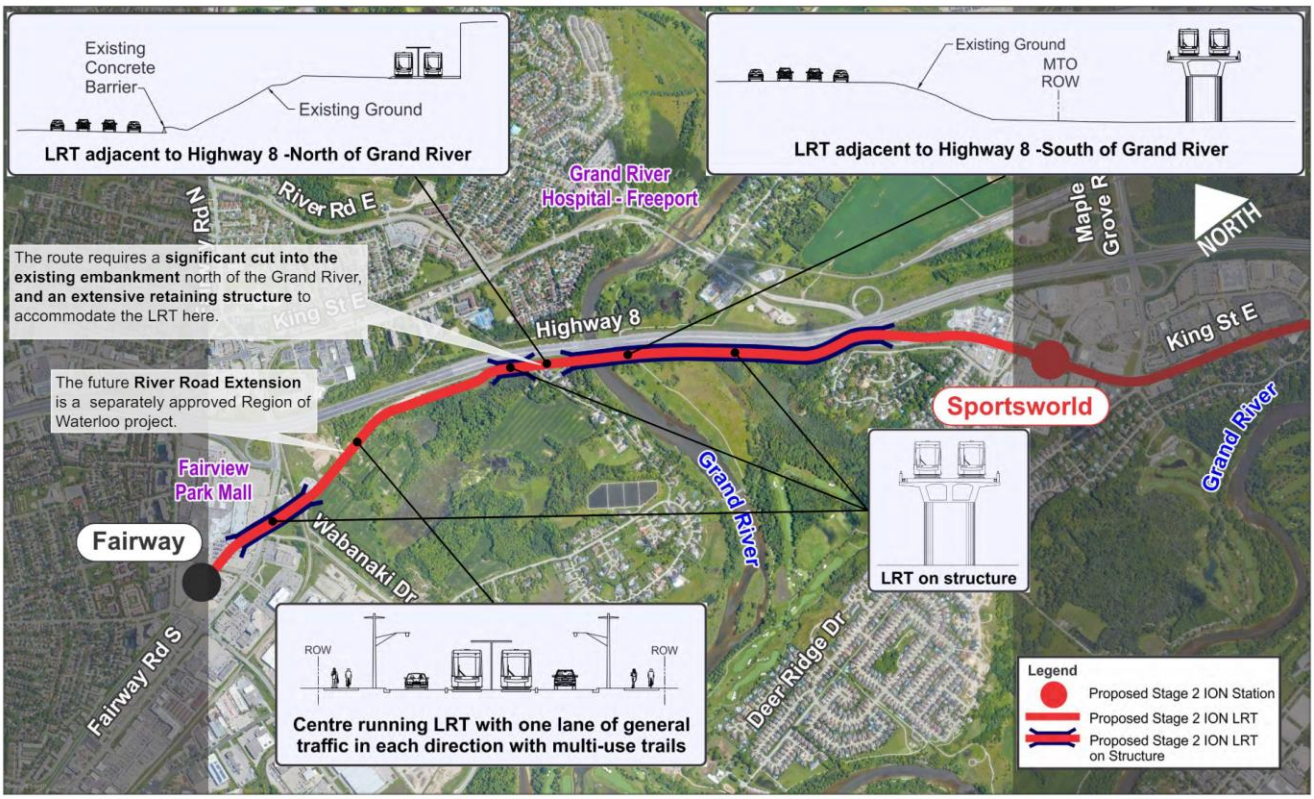

Figure 6:4: Stage 2 ION Segment within Hidden Valley

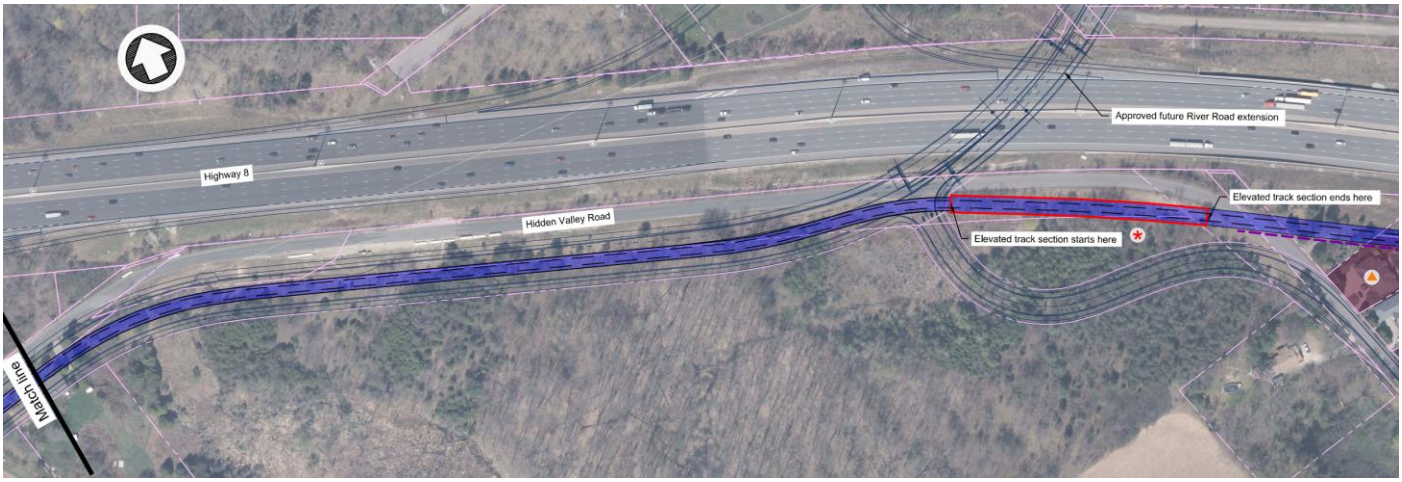

Figure 6:5: Stage 2 ION LRT Segment within Center of River Road Extension

6.1 Hidden Valley Development Densities

Land uses for the Hidden Valley area for future developmental horizons have been identified by the City of Kitchener and are detailed in **Table 2:1** and **Figure 2:2**. Development densities for the Hidden Valley area has been projected for future study horizons based on long term planning targets identified for 2043.

Based on consultation with City of Kitchener Staff regarding development densities, the study assumes a full build out of planning densities by the 2043 study horizon, as such construction phasing and associated development densities assess were projected as follows:

- 25% of development will be constructed by the 2028 horizon year;
- 50% of development will be constructed by the 2033 horizon year, and
- 100% of development will be constructed by the 2043 horizon year.

A summary of corresponding residential and commercial densities to be applied for future conditions analysis is provided in **Table 6:1.**

Table 6:1: Future Hidden Valley Development Densities

Land Use	Study Horizon	Units	GFA (m^2)	GFA (ft^2)
Total Development	2028 Horizon	524	4,776	51,406
	2033 Horizon	1,048	9,552	102,812
	2043 Horizon	2,095	19,103	205,623

7.0 FUTURE CONDITIONS VOLUMES

7.1 Future Background Traffic Volumes

Due to the changes to the future road network, with the construction of the River Road extension and new Highway 8 ramps, the 2023 existing traffic volumes were reviewed and redistributed throughout the network. Changes made to the existing traffic volumes and volume figure for the redistribution of traffic under the future analysis scenarios are provided in **Appendix J**.

Upon redistributing the existing traffic throughout the network, future background traffic volumes were obtained by applying the growth rate, outlined in **Section 4.1.1**, to the redistributed traffic volumes, with the addition of the background development traffic. The 2028, 2033, and 2043 background traffic volumes are illustrated in **Figure 7:1**, **Figure 7:2**, and **Figure 7:3**, respectively.

7.1.1 Background Development Traffic Volumes

Through consultation with the City of Kitchener and Region of Waterloo a single background development was identified. The development, located at 3241-3247 King Street and 108 Cameo Drive, is expected to contain two 21-storey and one 23-storey residential buildings containing a total of 982 residential units. A traffic Impact Study for the development was prepared by Paradigm Transportation Solutions Limited and was dated September 2021. Site generated traffic volume figures for the background development are provided in **Appendix M**.

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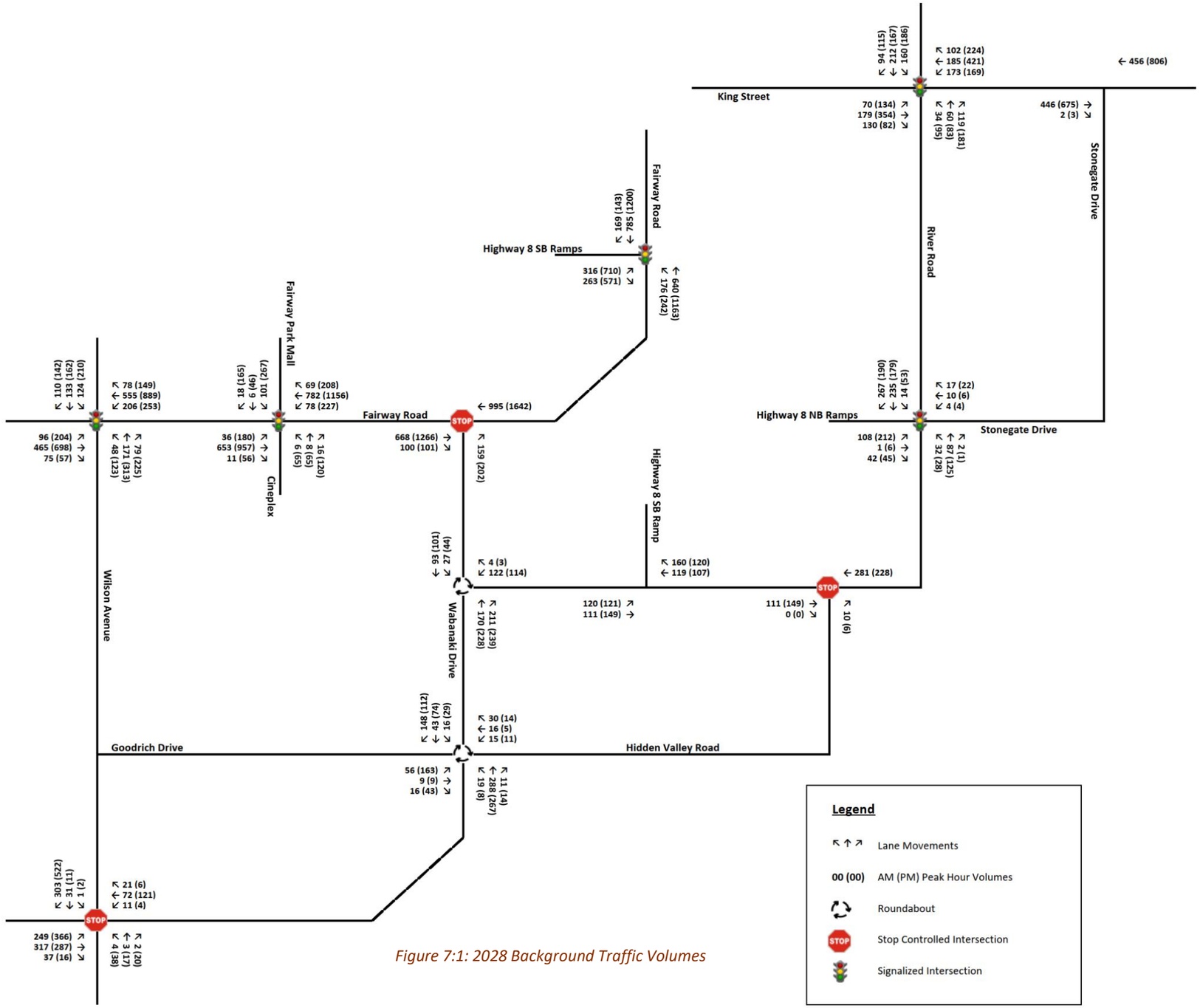

Figure 7:1: 2028 Background Traffic Volumes

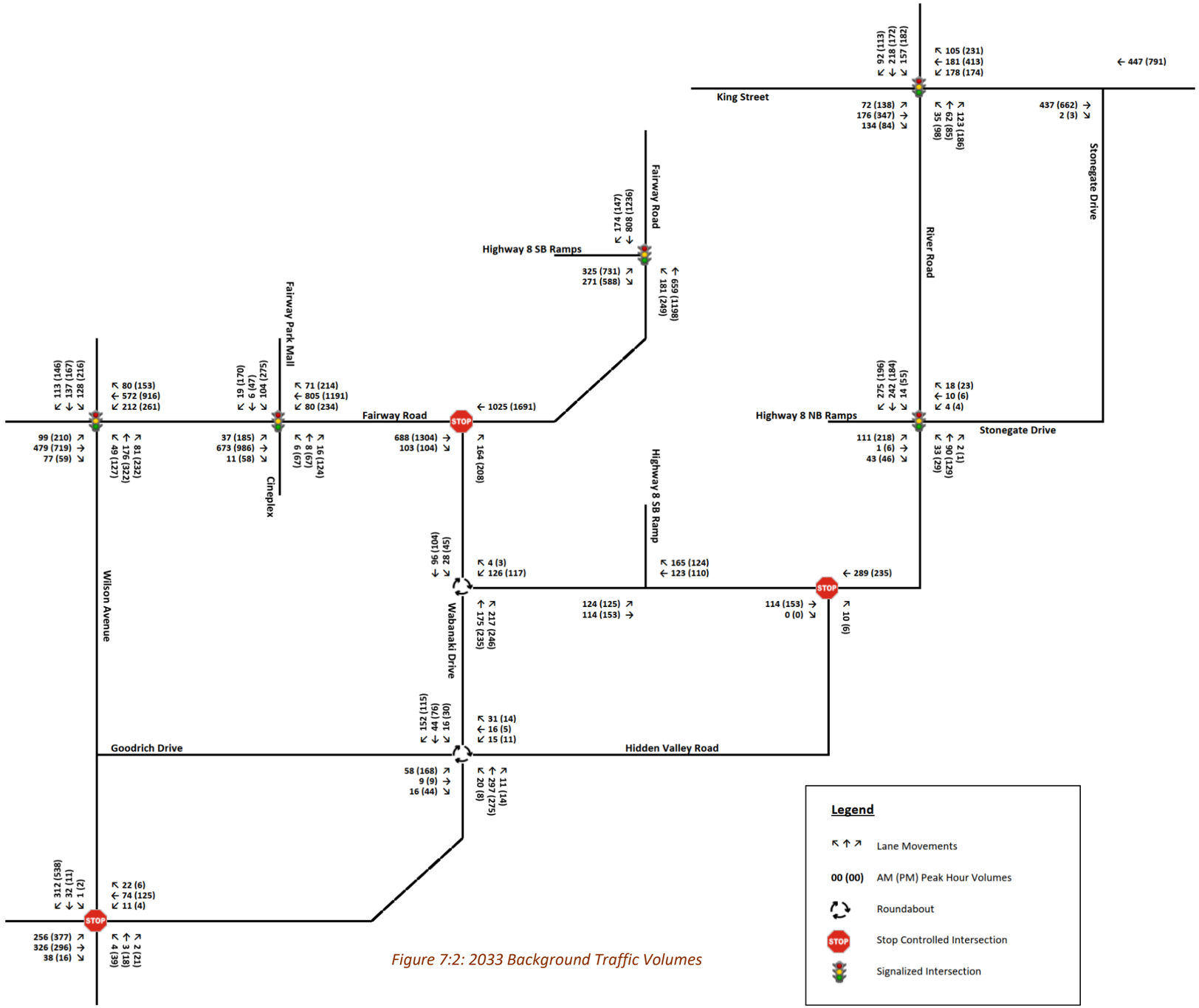

Figure 7:2: 2033 Background Traffic Volumes

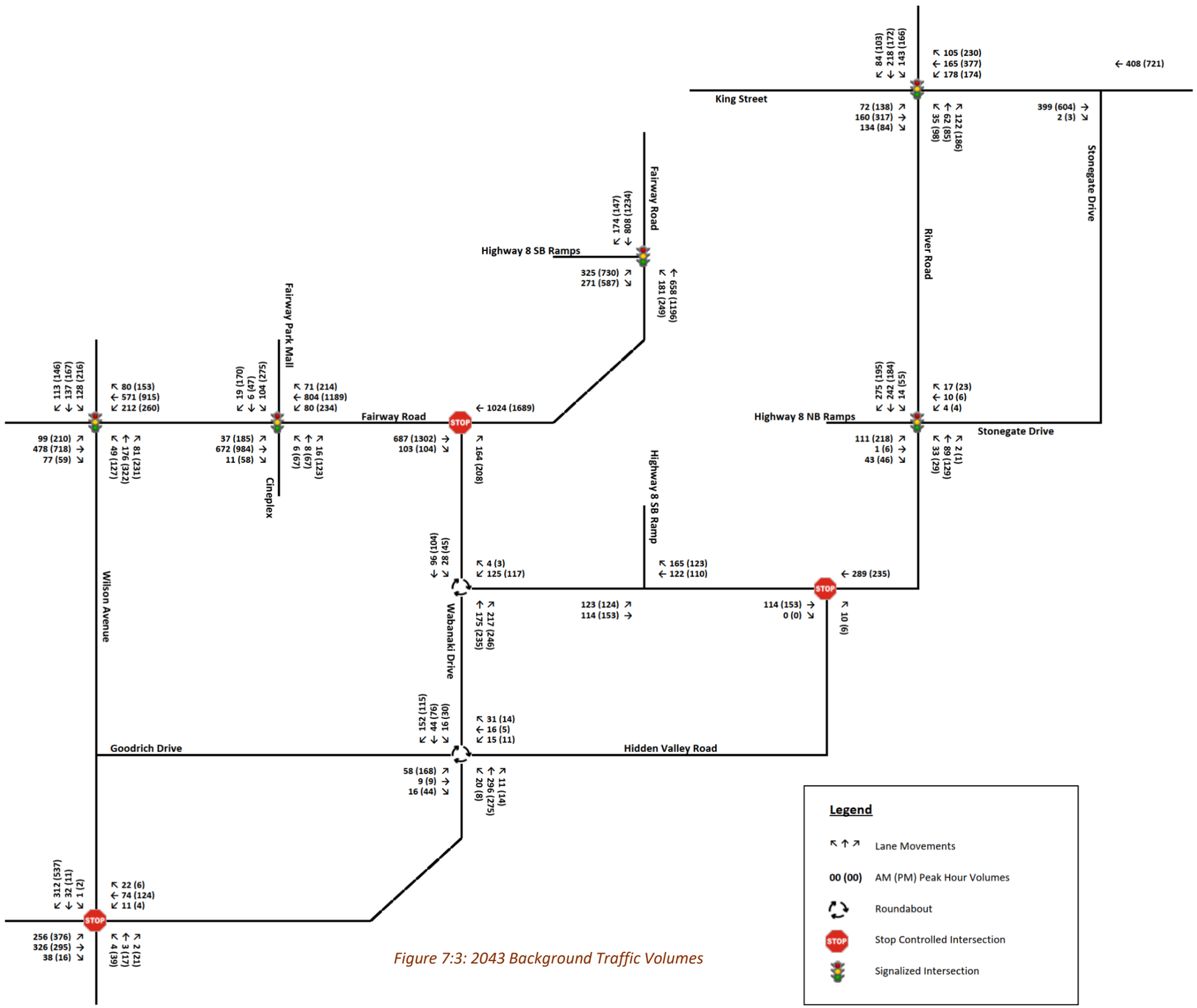

Figure 7:3: 2043 Background Traffic Volumes

7.2 Future Total Traffic Volumes

Future total traffic volumes were obtained through the summation of the future background traffic volumes and the site generated traffic. Site generated traffic, including person-trips, internal trips, pass-by trips, active transportation (AT) trips, and new vehicle trips are calculated in the following sections.

7.2.1 Trip Generation

The Institute of Transportation Engineers (ITE) *Trip Generation Manual, 11th Edition* was used to estimate the site generated traffic for each component of the development. Trip generation calculations were performed using the following steps:

- Baseline vehicle trips were calculated for each development component using ITE published rates for the applicable potential land uses identified within the Hidden Valley area as provided by the City of Kitchener.
- Calculating the vehicle-to-person trip adjustment factor.
- Establish baseline person trips by multiplying site generated vehicle trips by the vehicle-to-person trip adjustment factor.
- Estimating internal person trips between land uses within the development.
- Establishing mode share targets for each horizon year.
- Calculating external person trips by subtracting the estimated internal trips from forecasted baseline person trips.
- Calculating active transportation trips (transit, walking, cycling, school bus, other) and external vehicle trips by multiplying the external person trips by the applicable mode share targets.
- Calculation of total vehicle trips using external vehicle-person trips and vehicle occupancy obtained from mode share targets.
- Calculating the number of pass-by trips for the commercial component of the development using ITE published rates.
- Calculation of new external vehicle trips by subtracting the number of pass-by trips from the total vehicle trips.

Table 7:1 summarizes the AM and PM peak hour site generated person trips for each component of the development, as well as the 2028, 2033, and 2043 horizon year total site generated person trips. The average trip generation rates and directional distribution of trips, taken from the ITE Trip Generation Manual were used to estimate the number of vehicle trips to and from the development. The estimate vehicle trips were subsequently multiplied by the vehicle-to-person trip adjustment factor to estimate the expected number of person trips generated by the development.

The following Land Use Codes (LUC) were selected for use in the calculation of the site generated trips. Where required, reasoning for the selection of each LUC used is provided.

- High Rise Residential component: LUC 222 – Multifamily Housing (High-Rise) Not Close to Rail Transit.
  - Not close to rail transit was selected as the subcategory for all applicable residential uses as the closest residential lands were found to be over 1 km walking distance from the ION LRT station at Fairview Park Mall.

- Medium Rise Residential component: LUC 221 – Multifamily Housing (Mid-Rise) Not Close to Rail Transit.
- Mixed Use: LUC 230 – Low-Rise Residential with Ground-Floor Commercial with a Gross Floor Area (GFA) between 1,000 and 25,000 square feet.
  - While LUC 231 – Mid-Rise Residential with Ground-Floor Commercial may be considered more suitable for this component, the published rip generation rates for LUC 231 are lower than LUC 230 resulting in a more conservative estimate for the expected trips for this component of the development. Additionally, LUC 231 lacks directional distribution information and as a result, LUC 230 was selected for use.
  - The development of Hidden Valley is in the planning phase and the exact GFA details for the mixed-use development are currently unknown. The City of Kitchener has provided residential density only (no GFAs) and confirmed that only a residential ground floor mix-use need be considered at this time. Use of residential with ground floor commercial less than 25,000 square feet of GFA has also been deemed appropriate by the City for trip generation calculations.

- Low Rise Residential (RES-5): LUC 220 – Multifamily Housing (Low-Rise) Not Close to Rail Transit.
- Low Rise Residential (Large Lot): LUC 210 – Single-Family Detached Housing.
- Business Park: LUC 770 – Business Park.
- Commercial components 1, 2, and 4: LUC 821 – Shopping Plaza with a Gross Leasable Area (GLA) between 40,000 and 150,000 square feet.
  - Commercial components 1, 2, and 4 each have a GFA between 44,000 and 51,000 square feet.
  - The development of Hidden Valley is in the planning phase and the exact GLA for the commercial developments is unknown. City of Kitchener staff have confirmed that the use of GFA is sufficient and appropriate at this stage. It is noted use of GFA will also create a more conservative estimate for the expected trips.

- Commercial component 3: LUC 822 – Strip Retail Plaza with a GLA of less than 40,000 square feet.
  - Commercial component 3 has a GFA of approximately 12,800 square feet.

Table 7:1: Site Generated Person Trips

Portion	Land Use	Area (ha)	Density (units/ha)	Units	GFA (m^2)	GFA (ft^2)	ITE LUC		AM Peak Hour			PM Peak Hour		
									Inbound	Outbound	Total	Inbound	Outbound	Total
Total	High Rise Residential	1.06	301	319	-	-	222	Average Rate	0.27			0.32		
								Directional Distribution	26%	74%	-	62%	38%	-
								Vehicle Trips	22	64	86	63	39	102
								Vehicle-Person Trips Adjustment Factor	1.17	1.11	-	1.18	1.26	-
								Person Trips	**26**	**71**	**97**	**74**	**49**	**123**
Total	Medium Rise Residential	5.32	128	683	-	-	221	Average Rate	0.37			0.39		
								Directional Distribution	23%	77%	-	61%	39%	-
								Vehicle Trips	58	195	253	162	104	266
								Vehicle-Person Trips Adjustment Factor	1.17	1.11	-	1.18	1.26	-
								Person Trips	**68**	**216**	**284**	**191**	**131**	**322**
Total	Mixed Use	3.80	128	488	-	-	230	Average Rate	0.44			0.36		
								Directional Distribution	23%	77%	-	71%	29%	-
								Vehicle Trips	49	166	215	125	51	176
								Vehicle-Person Trips Adjustment Factor	1.13	1.09	-	1.14	1.17	-
								Person Trips	**55**	**181**	**236**	**143**	**60**	**203**
Total	Low Rise Residential (RES-5)	7.42	49	361	-	-	220	Average Rate	0.40			0.51		
								Directional Distribution	24%	76%	-	63%	37%	-
								Vehicle Trips	35	109	144	116	68	184
								Vehicle-Person Trips Adjustment Factor	1.17	1.11	-	1.18	1.26	-
								Person Trips	**41**	**121**	**162**	**137**	**86**	**223**
Total	Low Rise Residential (Large Lot)	20.61	5	99	-	-	210	Average Rate	0.70			0.94		
								Directional Distribution	25%	75%	-	63%	37%	-
								Vehicle Trips	17	52	69	59	34	93
								Vehicle-Person Trips Adjustment Factor	1.17	1.11	-	1.18	1.26	-
								Person Trips	**20**	**58**	**78**	**70**	**43**	**113**
Total	Business Park	2.74	-	1	4,795	51,613	770	Average Rate	1.35			1.22		
								Directional Distribution	85%	15%	-	26%	74%	-
								Vehicle Trips	59	11	70	16	47	63
								Vehicle-Person Trips Adjustment Factor	1.07	1.06	-	1.11	1.08	-
								Person Trips	**63**	**12**	**75**	**18**	**51**	**69**

Portion	Land Use	Area (ha)	Density (units/ha)	Units	GFA (m^2)	GFA (ft^2)	ITE LUC		AM Peak Hour			PM Peak Hour		
									Inbound	Outbound	Total	Inbound	Outbound	Total
Total	Commercial - Total	10.22	14	144	14,308	154,010	-	Vehicle Trips	170	104	274	401	416	817
								Person Trips	**198**	**121**	**319**	**565**	**587**	**1152**
1	Commercial Component 1	3.03		43	4,242	45,660	821	Average Rate	1.73			5.19		
								Directional Distribution	62%	38%	-	49%	51%	-
								Vehicle Trips	49	30	79	116	121	237
								Vehicle-Person Trips Adjustment Factor	1.17	1.16	-	1.41	1.41	-
								Person Trips	**57**	**35**	**92**	**164**	**171**	**335**
2	Commercial Component 2	2.96		42	4,144	44,606		Vehicle Trips	48	29	77	113	119	232
								Person Trips	**56**	**34**	**90**	**159**	**168**	**327**
3	Commercial Component 3	0.85		12	1,190	12,809	822	Average Rate	2.36			6.59		
								Directional Distribution	60%	40%	-	50%	50%	-
								Vehicle Trips	18	12	30	42	42	84
								Vehicle-Person Trips Adjustment Factor	1.17	1.16	-	1.41	1.41	-
								Person Trips	**21**	**14**	**35**	**59**	**59**	**118**
4	Commercial Component 4	3.38		47	4,732	50,935	821	Vehicle Trips	55	33	88	130	134	264
								Person Trips	**64**	**38**	**102**	**183**	**189**	**372**
25%	**Total Development**	**51.17**	**-**	**524**	**4,776**	**51,406**	**-**	**(25%) Person Trips**	**118**	**195**	**313**	**300**	**252**	**552**
50%				**1,048**	**9,552**	**102,812**		**(50%) Person Trips**	**236**	**390**	**626**	**599**	**504**	**1,103**
100%				**2,095**	**19,103**	**205,623**		**Person Trips**	**471**	**780**	**1,251**	**1,198**	**1,007**	**2,205**

Following the calculation of the expected number of person trips generated by the development, internal trip capture were then calculated between each component of the development. Calculation of internal trips for the development followed the methodology outlined in the ITE Trip Generation Manual while the following assumptions were used when calculated the internal trip capture.

- No internal trip capture rate was provided for mixed-use areas. As a result, the internal trip capture rate was estimated to be the average of commercial-to-residential, and residential-to-commercial internal trip capture rates as the mixed-use component contains both residential and commercial land uses.
- No internal trip capture rate was provided between two (2) commercial developments. As the commercial developments are expected to contain a variety of stores internal trip capture between commercial areas is anticipated and an internal trip capture rate of 10% was applied for commercial-to-commercial land uses.
- Internal trips were calculated for the 2043 horizon year (100%) and were subsequently adjusted based on development density, i.e., 25% and 50% to forecast the expected number of internal trips for the 2028 and 2033 horizon years, respectively.

The maximum number of available outbound and inbound internal trips that may be captured by the development for the AM and PM peak hours were calculated. From here the maximum number of available inbound and outbound internal trips were then compared for each development component, with the lower value selected as the expected internal trip capture between the two (2) development components. Internal trip generation calculation tables are provided in **Appendix N**. The expected number of internal trips captured between each development component during is identified in **Table 7:3**.

The total number of site generated new external vehicle trips is presented in **Table 7:3** and used the following calculations:

- The number of new external trips developed by the site was calculated by subtracting the internal trips calculated from the person trips calculated in **Table 7:1**.
- The number of active transportation (non-vehicle) trips was calculated by multiplying the number of new external trips by the active transportation mode share as presented in **Table 7:2**.
- The number of vehicle-person trips was calculated by subtracting the active transportation (non-vehicle) trips from the new external trips.
- The number of vehicle trips was calculated by dividing the vehicle-person trips by the vehicle occupancy factor derived from the mode share projections.
- For the commercial component of the development, the number of pass-by trips was calculated using the ITE published rates for pass-by trips.
- For the commercial component of the development, the number of new vehicle trips was determined by subtracting the pass-by trips from the vehicle trips, while the number of new vehicle trips is equal to the number of vehicle trips for other components as they are not expected to attract pass-by trips.

Table 7:2: Mode Share Targets

Travel Mode	PM Peak Period Mode Shares				
	2016 (actual)	2023^	2028^	2031 (target)	2041 (target)
Auto Driver	69.8%	66.9%	64.8%	63.6%	58.0%
Auto Passenger	12.3%	12.3%	12.3%	12.3%	12.0%
Transit	4.9%	7.1%	8.7%	9.7%	14.8%
Walk	7.2%	7.8%	8.2%	8.4%	9.0%
Cycle	1.4%	1.8%	2.1%	2.3%	3.0%
School Bus	3.8%	3.5%	3.2%	3.1%	2.7%
Other	0.6%	0.6%	0.6%	0.6%	0.5%
Total	100.0%	100.0%	100.0%	100.0%	100.0%

Note: ^ - Calculated via linear interpolation.

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Table 7:3: Site Generated Trips

Land Use	ITE LUC		AM Peak Hour			PM Peak Hour		
			Inbound	Outbound	Total	Inbound	Outbound	Total
High Rise Residential	222	Person Trips	26	71	97	74	49	123
		Internal Person Trips	1	1	2	25	11	36
		External Person Trips	25	70	95	49	38	87
		AT Trips	6	16	21	11	8	19
		External Vehicle Person Trips	19	54	74	38	30	68
		New Vehicle Trips	**16**	**45**	**62**	**32**	**25**	**57**
Medium Rise Residential	221	Person Trips	68	216	284	191	131	322
		Internal Person Trips	2	4	6	65	31	96
		External Person Trips	66	212	278	126	100	226
		AT Trips	15	47	62	28	22	50
		External Vehicle Person Trips	51	165	216	98	78	176
		New Vehicle Trips	**43**	**139**	**182**	**82**	**66**	**148**
Mixed Use	230	Person Trips	55	181	236	143	60	203
		Internal Person Trips	12	19	31	73	46	119
		External Person Trips	43	162	205	70	14	84
		AT Trips	10	36	46	16	3	19
		External Vehicle Person Trips	33	126	159	54	11	65
		New Vehicle Trips	**28**	**106**	**134**	**45**	**9**	**55**
Low Rise Residential (RES-5)	220	Person Trips	41	121	162	137	86	223
		Internal Person Trips	2	3	5	46	20	66
		External Person Trips	39	118	157	91	66	157
		AT Trips	9	26	35	20	15	35
		External Vehicle Person Trips	30	92	122	71	51	122
		New Vehicle Trips	**25**	**77**	**103**	**60**	**43**	**103**
Low Rise Residential (Large Lot)	210	Person Trips	20	58	78	70	43	113
		Internal Person Trips	0	1	1	23	10	33
		External Person Trips	20	57	77	47	33	80
		AT Trips	4	13	17	10	7	18
		External Vehicle Person Trips	16	44	60	37	26	62
		New Vehicle Trips	**13**	**37**	**50**	**31**	**22**	**53**
Business Park	770	Person Trips	63	12	75	18	51	69
		Internal Person Trips	7	5	12	18	17	35
		External Person Trips	56	7	63	0	34	34
		AT Trips	12	2	14	0	8	8
		External Vehicle Person Trips	44	5	49	0	26	26
		New Vehicle Trips	**37**	**4**	**41**	**0**	**22**	**22**

Land Use	ITE LUC		AM Peak Hour			PM Peak Hour		
			Inbound	Outbound	Total	Inbound	Outbound	Total
Commercial - Total	821	Person Trips	198	121	319	565	587	1152
		Internal Person Trips	30	21	51	136	251	387
		External Person Trips	168	100	268	429	336	765
		AT Trips	37	22	60	95	75	170
		External Vehicle Person Trips	131	78	208	334	261	595
		Vehicle Trips	110	66	175	281	219	500
		Pass-By Trip Factor	0%			34%		
		Pass-By Trips	0	0	0	96	74	170
		New Vehicle Trips	**110**	**66**	**175**	**185**	**145**	**330**
Total Development	**2028 Horizon Person Trips** (25% Person Trips)	Person Trips	118	195	313	300	252	552
		Internal Person Trips	14	14	28	97	97	194
		External Person Trips	104	182	286	203	155	358
		AT Trips	23	41	64	45	35	80
		External Person Trips in Vehicle	81	141	222	158	121	279
		Vehicle Trips	68	119	187	133	102	235
		Pass-By Trips	0	0	0	24	19	43
		New Vehicle Trips	**68**	**119**	**187**	**109**	**83**	**192**
	2033 Horizon Person Trips (50% Person Trips)	Person Trips	236	390	626	599	504	1,103
		Internal Person Trips	27	27	54	193	193	386
		External Person Trips	209	363	572	406	311	717
		AT Trips	47	81	128	90	69	159
		External Person Trips in Vehicle	162	282	444	316	242	558
		Vehicle Trips	136	237	373	266	203	469
		Pass-By Trips	0	0	0	48	37	85
		New Vehicle Trips	**136**	**237**	**373**	**218**	**166**	**384**
	2043 Horizon Person Trips (100% Person Trips)	Person Trips	471	780	1,251	1,198	1,007	2,205
		Internal Person Trips	54	54	108	386	386	772
		External Person Trips	417	726	1,143	812	621	1,433
		AT Trips	93	162	255	180	138	318
		External Person Trips in Vehicle	324	564	888	632	483	1,115
		Vehicle Trips	272	474	746	531	406	937
		Pass-By Trips	0	0	0	96	74	170
		New Vehicle Trips	**272**	**474**	**746**	**435**	**332**	**767**

7.2.2 Trip Distribution and Assignment

Trips were distributed throughout the network based on the expected trip generators and were subsequently assigned to roadways based on existing traffic patterns and turning movement count data. The combined trip distribution and assignment is outlined in **Table 7:4**.

Table 7:4: Trip Distribution and Assignment

Origin / Destination		Percentage Distribution			
		AM Peak Hour		PM Peak Hour	
		Inbound	Outbound	Inbound	Outbound
To / From the North:		**33%**	**36%**	**30%**	**33%**
Via	Fairway Rd.	19%	15%	14%	17%
	River Rd.	5%	4%	3%	4%
	Highway 8	9%	17%	13%	12%
To / From the South:		**12%**	**9%**	**12%**	**13%**
Via	Manitou Dr.	12%	9%	12%	13%
To / From the East:		**22%**	**29%**	**34%**	**22%**
Via	Highway 8	9%	18%	19%	10%
	King St.	13%	11%	15%	12%
To / From the West:		**33%**	**26%**	**24%**	**32%**
Via	King St.	11%	8%	8%	9%
	Fairway Rd.	13%	10%	9%	15%
	Goodrich Dr. / Bleams Road	6%	3%	2%	2%
	Fairview Mall	3%	5%	5%	6%
Total		**100%**	**100%**	**100%**	**100%**

AM and PM peak hour site generated distribution and assignment figures, and site generated traffic figures are provided in **Appendix J**.

7.2.3 Future Total Traffic Volume Figures

The 2028, 2033, and 2043 total traffic volumes are illustrated in , **Figure 7:5**, and **Figure 7:6**, respectively.

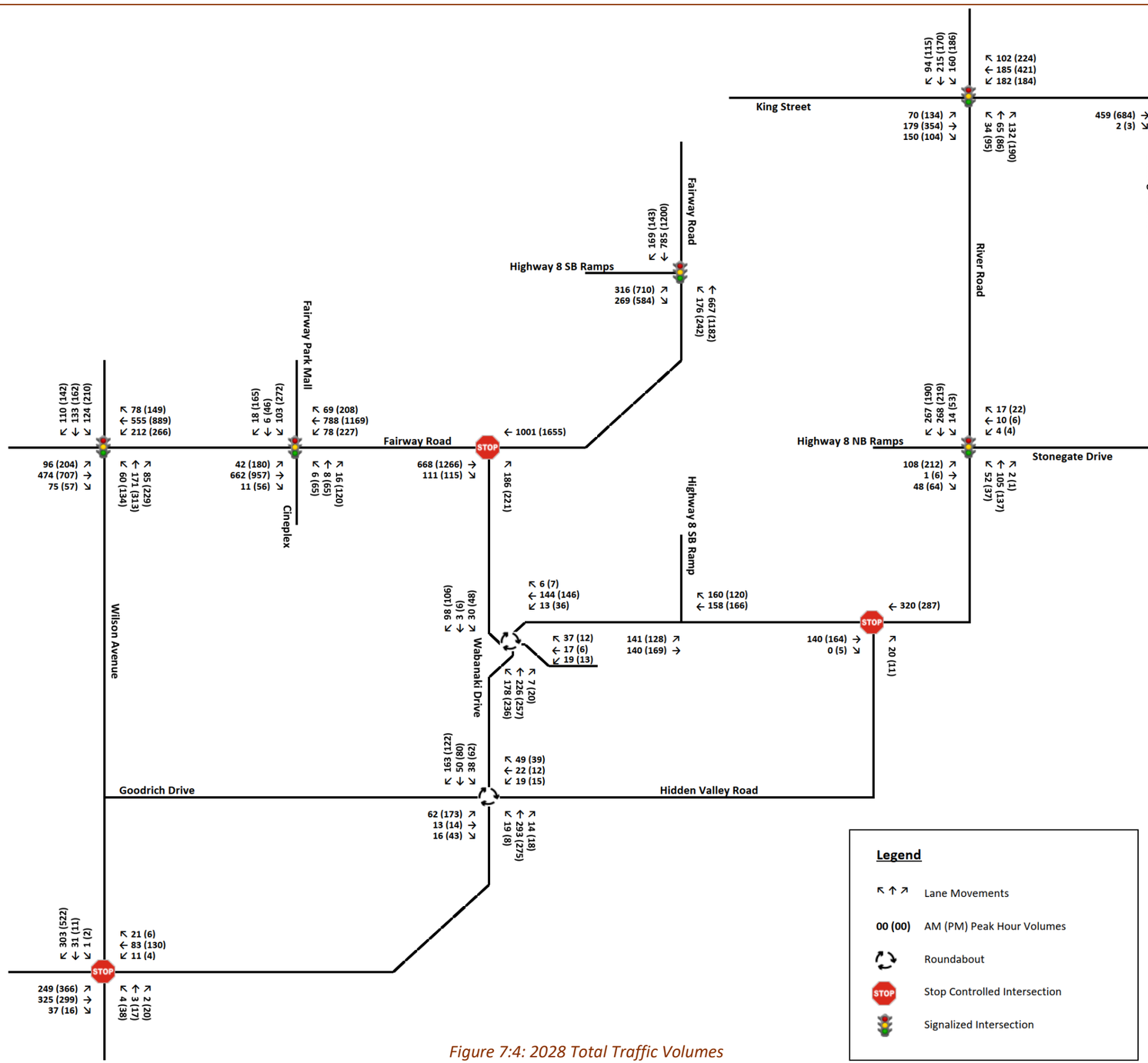

Figure 7:4: 2028 Total Traffic Volumes

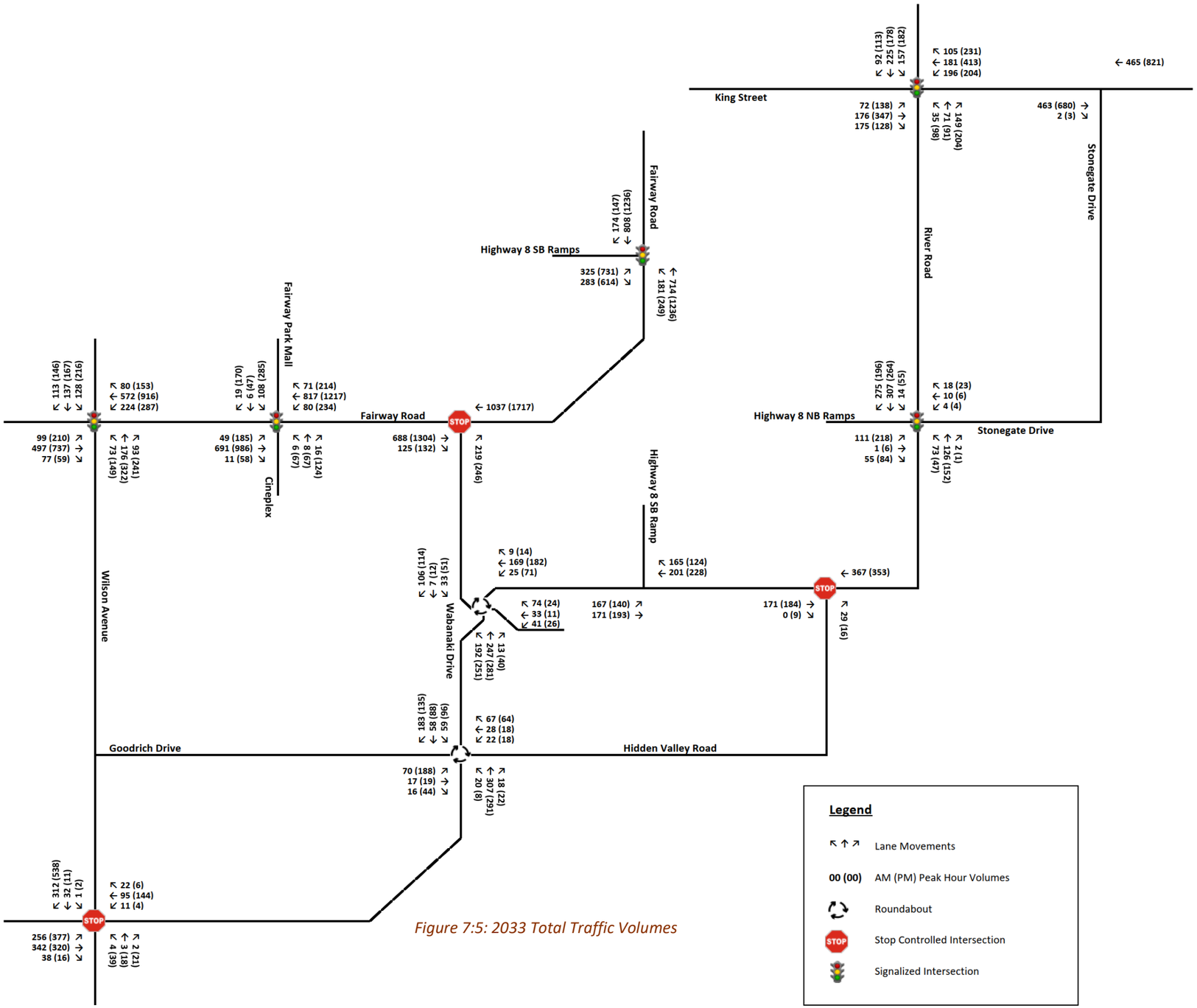

Figure 7:5: 2033 Total Traffic Volumes

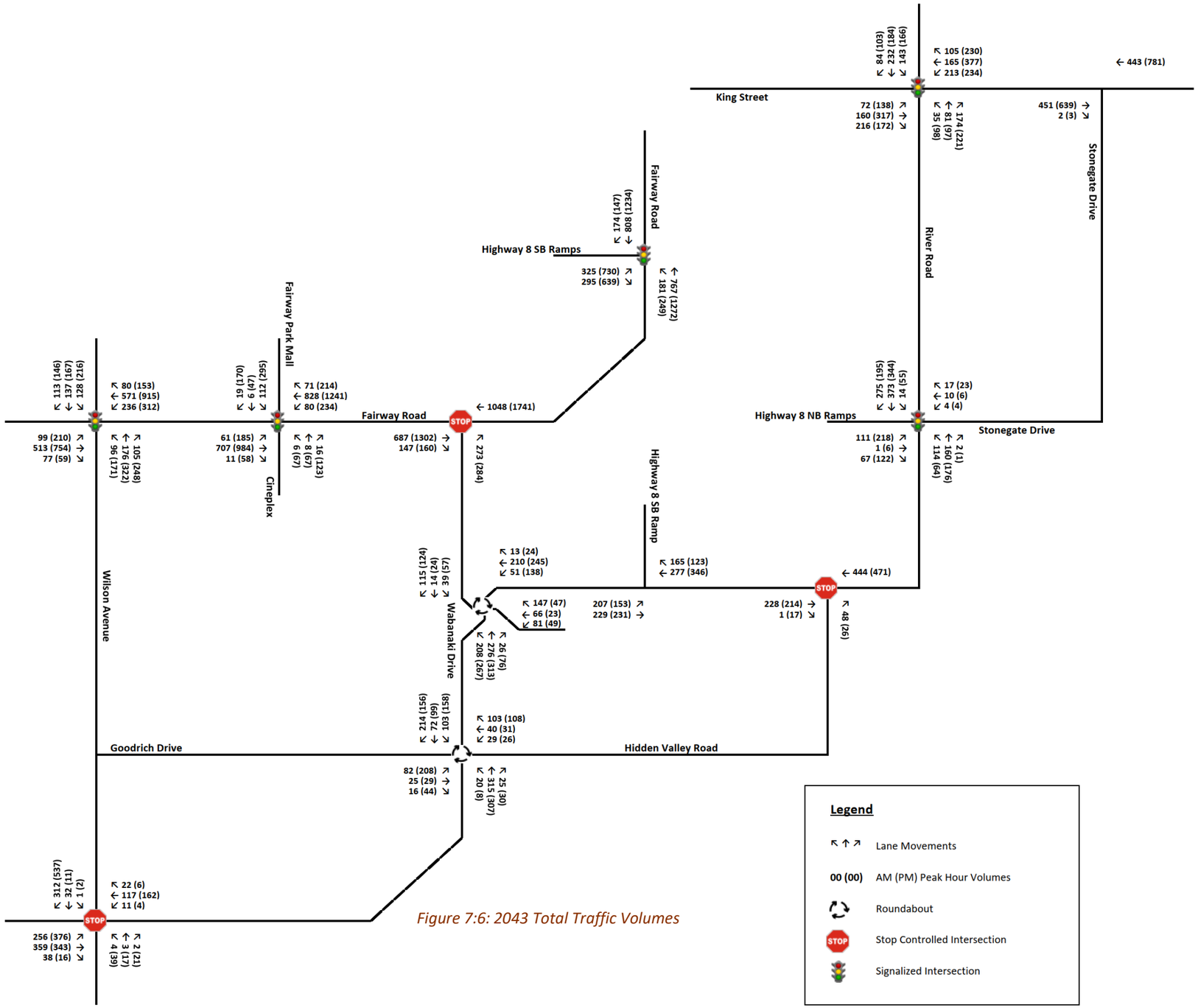

Figure 7:6: 2043 Total Traffic Volumes

8.0 FUTURE CONDITIONS ASSESSMENT

8.1 Synchro Intersection Capacity Analysis

8.1.1 2028 Background Conditions

Capacity analysis was completed for the 2028 background conditions within the study area. Results from the traffic analysis are summarized in **Table 8:1**, while Synchro and SimTraffic output reports are provided in **Appendix K**.

Intersection signal timing and phasing adjustments were implemented for intersections with movements were found to operate at LOS F or experience a V/C ratio of 0.85 or greater. Signal timing and phasing adjustments are discussed further in **Section 9.1.1** of this report.

As shown in **Table 8:1**, all intersections are expected to operate well during the AM peak hour, with LOS B or better. Individual movements are also expected to operate satisfactory and exhibit reserve capacity with the highest reported V/C being 0.73.

During the PM peak hour, intersections are still expected to operate well however experience higher average delay and queueing as a result of higher traffic volumes within the network. Through signal timing optimization and phase adjustments all movements are expected to operate at LOS E or better with a maximum reported V/C of 0.81, with the exception of the unsignalized Wilson Avenue and Wabanaki Drive intersection where the northbound movement operates at LOS F with a V/C of 0.83.

Queuing deficiencies were noted in the southbound approach at the King Street and River Road intersection, the eastbound approach at the Fairway Road Highway 8 southbound ramp terminal, the eastbound and southbound approaches at the Fairway Road and Fairview Park / Cineplex access, and the westbound and southbound approaches at the Fairway Road and Wilson Avenue intersection.

Overall, intersections within the study area are expected to operate well under the 2028 background conditions AM and PM peak hours.

Table 8:1: Traffic Capacity Analysis – 2028 Background Conditions

Intersection	Approach - Movement	Storage Length (m)	AM Peak				PM Peak			
			LOS	V/C	Delay (s)	Queue (m)	LOS	V/C	Delay (s)	Queue (m)
King St & River Rd	**Intersection**	-	**B**	-	**16.9**	-	**B**	-	**18.6**	-
	EB - L	45	B	0.13	15.0	22	C	0.38	20.3	45
	EB - T	-	B	0.22	14.6	37	B	0.43	17.5	63
	EB - R	45	A	0.36	5.7	28	A	0.21	4.6	18
	WB - L	50	B	0.30	16.2	43	B	0.40	18.9	48
	WB - T	-	B	0.20	14.3	44	B	0.44	17.5	75
	WB - R	50	A	0.13	3.1	18	A	0.26	2.6	23
	NB - L	75	C	0.16	21.1	14	C	0.43	27.8	30
	NB - TR	-	B	0.23	11.6	25	B	0.32	11.1	38
	SB - L	45	D	0.65	38.0	37	D	0.81	54.1	**46**
	SB - TR	-	C	0.30	21.8	44	B	0.30	18.0	39
Fairway Rd Highway 8 Ramps	**Intersection**	-	**B**	-	**13.3**	-	**C**	-	**22.5**	-
	EB - L	75**	C	0.47	31.8	52	D	0.74	38.1	**109**
	EB - R	50**	B	0.30	17.8	43	B	0.48	17.6	**71**
	NB - L	85	A	0.40	8.1	46	C	0.68	27.0	58
	NB - T	-	A	0.29	6.0	46	B	0.54	13.1	87
	SB - T	-	B	0.33	14.1	63	C	0.59	26.3	97
	SB - R	75	A	0.16	0.9	21	A	0.14	1.0	25
Fairway Rd & Wabanaki Dr	**Intersection**	-	**A**	-	**1.1**	-	**A**	-	**1.5**	-
	EB - TR*	-	-	-	-	1	-	-	-	1
	WB - T*	-	-	-	-	0	-	-	-	7
	NB - R	-	B	0.27	13.2	26	C	0.52	24.0	41

Intersection	Approach - Movement	Storage Length (m)	AM Peak				PM Peak			
			LOS	V/C	Delay (s)	Queue (m)	LOS	V/C	Delay (s)	Queue (m)
Fairway Rd & Fairview Park Mall / Cineplex	**Intersection**	**-**	**B**	**-**	**11.0**	**-**	**C**	**-**	**23.7**	**-**
	EB - L	40	A	0.07	5.2	15	C	0.61	25.4	**51**
	EB - TR	-	A	0.29	8.1	32	B	0.56	15.7	65
	WB - L	130	A	0.14	6.1	17	C	0.66	20.7	54
	WB - T	-	B	0.34	10.1	52	C	0.65	24.7	115
	WB - R	-	A	0.07	0.1	15	A	0.24	3.2	41
	NB - L	-	D	0.04	41.5	10	E	0.45	58.1	28
	NB - TR	-	C	0.13	25.3	16	D	0.69	45.4	63
	SB - L	40	D	0.33	43.8	36	D	0.60	54.2	**68**
	SB - TR	-	B	0.08	15.2	14	A	0.36	9.9	53
Fairway Rd & Wilson Ave	**Intersection**	**-**	**B**	**-**	**17.2**	**-**	**D**	**-**	**38.7**	**-**
	EB - L	120	A	0.18	6.5	26	C	0.63	24.7	54
	EB - TR	-	B	0.31	13.1	56	C	0.59	32.8	97
	WB - L	160	B	0.39	10.7	43	D	0.70	42.6	92
	WB - T	-	A	0.27	7.4	41	D	0.63	52.9	138
	WB - R	30	A	0.10	1.3	17	C	0.26	26.0	**74**
	NB - L	95	D	0.28	35.8	29	C	0.36	28.9	54
	NB - T	-	D	0.51	40.0	52	D	0.76	54.6	102
	NB - R	-	A	0.19	4.7	21	B	0.40	14.4	36
	SB - L	45	E	0.73	60.5	44	D	0.79	48.8	**55**
	SB - T	-	D	0.40	37.0	49	D	0.33	35.3	66
	SB - R	45	B	0.45	11.9	18	A	0.45	9.6	35

Intersection	Approach - Movement	Storage Length (m)	AM Peak				PM Peak			
			LOS	V/C	Delay (s)	Queue (m)	LOS	V/C	Delay (s)	Queue (m)
Wilson Ave & Wabanaki Dr	**Intersection**	**-**	**A**	**-**	**6.0**	**-**	**B**	**-**	**14.9**	**-**
	EB - L	-	A	0.17	8.0	14	A	0.25	8.3	21
	EB - TR*	-	-	-	-	4	-	-	-	0
	WB - LT	-	A	0.01	8.0	6	A	0.00	7.8	4
	WB - R*	45	-	-	-	0	-	-	-	0
	NB - LTR	-	D	0.05	25.7	10	F	0.83	135.6	19
	SB - LT	-	D	0.16	25.9	15	D	0.10	34.2	11
	SB - R	-	B	0.31	10.3	2	B	0.57	14.0	1
River Rd Ex & Highway 8 NB Ramps / Stonegate Dr	**Intersection**	**-**	**A**	**-**	**5.9**	**-**	**A**	**-**	**7.4**	
	EB - L	140*	B	0.12	11.6	12	B	0.20	10.3	17
	EB - T		B	0.12	11.6	20	B	0.20	10.3	28
	EB - R	140	A	0.09	1.3	15	A	0.08	1.4	13
	WB - L	15	B	0.01	12.2	6	B	0.01	12.2	5
	WB - TR	-	A	0.06	8.9	14	A	0.06	8.1	13
	NB - L	90	A	0.07	8.9	14	B	0.06	10.1	12
	NB - TR	-	A	0.05	7.6	9	A	0.08	8.9	14
	SB - L	45	A	0.02	8.5	7	A	0.09	10.0	17
	SB - TR	-	A	0.26	4.3	29	A	0.22	5.2	26
River Rd Ex & Hidden Valley Dr	**Intersection**	**-**	**A**	**-**	**0.2**	**-**	**A**	**-**	**0.1**	
	EB - TR*	-	-	-	-	0	-	-	-	0
	WB - T*	-	-	-	-	0	-	-	-	0
	NB - R	-	A	0.01	8.6	8	A	0.01	8.7	7
River Rd Ex & Highway 8 SB Ramp	**Intersection**	**-**	**A**	**-**	**1.9**	**-**	**A**	**-**	**1.9**	
	EB - L	90	A	0.09	8.1	15	A	0.09	8.0	13
	EB - T*	-	-	-	-	0	-	-	-	0
	WB - TR*	-	-	-	-	3	-	-	-	0

Notes: ** = Movement operates under free-flow conditions;*

*** = Storage applies to one of two lanes used for this movement while the second lane has no associated storage length.*

8.1.2 2033 Background Conditions

Capacity analysis was completed for the 2033 background conditions within the study area. Results from the traffic analysis are summarized in **Table 8:2**, while Synchro and SimTraffic output reports are provided in **Appendix K**.

As shown in **Table 8:2**, all intersections are expected to operate well during the AM peak hour, with LOS B or better. Individual movements are also expected to operate satisfactory and exhibit reserve capacity with the highest reported V/C being 0.74.

During the PM peak hour, intersections are still expected to operate well however experience higher average delay and queueing as a result of higher traffic volumes within the network. Through signal timing optimization and phase adjustments all movements are expected to operate at LOS E or better with a maximum reported V/C of 0.82, with the exception of the unsignalized Wilson Avenue and Wabanaki Drive intersection where the northbound movement operates at LOS F with a V/C of 0.95.

Queuing deficiencies were noted in the westbound approach at the King Street and River Road intersection, the eastbound approach at the Fairway Road Highway 8 southbound ramp terminal, the eastbound and southbound approaches at the Fairway Road and Fairview Park / Cineplex access, and the westbound and southbound approaches at the Fairway Road and Wilson Avenue intersection.

Overall, intersections within the study area are expected to operate well under the 2033 background conditions AM and PM peak hours.

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Table 8:2: Traffic Capacity Analysis – 2033 Background Conditions

Intersection	Approach - Movement	Storage Length (m)	AM Peak				PM Peak			
			LOS	V/C	Delay (s)	Queue (m)	LOS	V/C	Delay (s)	Queue (m)
King St & River Rd	**Intersection**	-	**B**	-	**16.9**	-	**B**	-	**18.4**	-
	EB - L	45	B	0.14	15.0	24	C	0.39	20.3	45
	EB - T	-	B	0.22	14.5	37	B	0.42	17.4	64
	EB - R	45	A	0.37	5.8	28	A	0.21	4.5	19
	WB - L	50	B	0.31	16.3	46	B	0.41	19.0	**54**
	WB - T	-	B	0.20	14.2	39	B	0.43	17.4	77
	WB - R	50	A	0.14	3.1	17	A	0.27	2.6	29
	NB - L	75	C	0.17	21.1	13	C	0.45	28.4	27
	NB - TR	-	B	0.24	11.6	26	B	0.33	11.1	37
	SB - L	45	D	0.64	37.7	40	D	0.80	52.9	41
	SB - TR	-	C	0.30	22.4	45	B	0.30	18.4	46
Fairway Rd Highway 8 Ramps	**Intersection**	-	**B**	-	**13.5**	-	**C**	-	**23.2**	-
	EB - L	75**	C	0.48	32.0	52	D	0.76	39.0	**131**
	EB - R	50**	B	0.31	17.8	46	B	0.49	17.7	**95**
	NB - L	85	A	0.42	8.4	41	C	0.70	30.3	64
	NB - T	-	A	0.30	6.2	52	B	0.56	13.4	90
	SB - T	-	B	0.34	14.4	63	C	0.61	27.2	101
	SB - R	75	A	0.17	0.9	22	A	0.14	1.0	28
Fairway Rd & Wabanaki Dr	**Intersection**	-	**A**	-	**1.1**	-	**A**	-	**1.6**	-
	EB - TR*	-	-	-	-	3	-	-	-	4
	WB - T*	-	-	-	-	1	-	-	-	3
	NB - R	-	B	0.28	13.5	28	D	0.56	25.9	51

Intersection	Approach - Movement	Storage Length (m)	AM Peak				PM Peak			
			LOS	V/C	Delay (s)	Queue (m)	LOS	V/C	Delay (s)	Queue (m)
Fairway Rd & Fairview Park Mall / Cineplex	**Intersection**	**-**	**B**	**-**	**11.1**	**-**	**C**	**-**	**25.0**	**-**
	EB - L	40	A	0.08	5.1	13	C	0.65	34.0	**50**
	EB - TR	-	A	0.30	8.1	32	B	0.59	16.3	74
	WB - L	130	A	0.14	6.2	18	C	0.70	24.1	65
	WB - T	-	B	0.35	10.3	59	C	0.68	25.7	129
	WB - R	-	A	0.07	0.2	15	A	0.25	3.6	34
	NB - L	-	D	0.04	41.5	7	E	0.46	58.6	28
	NB - TR	-	C	0.13	25.3	15	D	0.70	46.8	63
	SB - L	40	D	0.34	43.9	37	D	0.61	54.4	**66**
	SB - TR	-	B	0.09	15.0	16	B	0.36	10.2	56
Fairway Rd & Wilson Ave	**Intersection**	**-**	**B**	**-**	**17.5**	**-**	**C**	**-**	**32.6**	**-**
	EB - L	120	A	0.19	6.8	27	C	0.66	28.1	60
	EB - TR	-	B	0.32	13.7	54	C	0.63	34.1	100
	WB - L	160	B	0.40	11.8	48	D	0.74	46.7	93
	WB - T	-	A	0.28	7.6	42	C	0.66	28.1	114
	WB - R	30	A	0.10	1.4	19	A	0.27	8.9	**69**
	NB - L	95	D	0.28	35.3	26	C	0.37	28.9	55
	NB - T	-	D	0.51	39.5	52	D	0.76	54.9	102
	NB - R	-	A	0.19	4.5	22	B	0.41	14.6	43
	SB - L	45	E	0.74	61.4	**46**	D	0.82	51.8	**58**
	SB - T	-	D	0.41	36.6	41	D	0.34	35.1	81
	SB - R	45	B	0.45	11.6	24	A	0.45	9.5	40

Intersection	Approach - Movement	Storage Length (m)	AM Peak				PM Peak			
			LOS	V/C	Delay (s)	Queue (m)	LOS	V/C	Delay (s)	Queue (m)
Wilson Ave & Wabanaki Dr	**Intersection**	**-**	**A**	**-**	**6.0**	**-**	**C**	**-**	**17.3**	**-**
	EB - L	-	A	0.18	8.0	14	A	0.26	8.4	20
	EB - TR*	-	-	-	-	2	-	-	-	0
	WB - LT	-	A	0.01	8.0	6	A	0.00	7.9	3
	WB - R*	45	-	-	-	0	-	-	-	0
	NB - LTR	-	D	0.05	27.1	9	**F**	**0.95**	175.5	18
	SB - LT	-	D	0.17	27.2	18	E	0.10	36.3	10
	SB - R	-	B	0.32	10.4	1	B	0.59	14.4	0
River Rd Ex & Highway 8 NB Ramps / Stonegate Dr	**Intersection**	**-**	**A**	**-**	**6.0**	**-**	**A**	**-**	**7.4**	
	EB - L	140*	B	0.12	11.7	10	B	0.20	10.3	19
	EB - T	-	B	0.13	11.8	19	B	0.20	10.3	28
	EB - R	140	A	0.09	1.4	14	A	0.08	1.4	14
	WB - L	15	B	0.01	12.5	4	B	0.01	12.5	6
	WB - TR	-	A	0.07	8.9	13	A	0.07	8.1	13
	NB - L	90	A	0.07	9.0	12	B	0.06	10.2	12
	NB - TR	-	A	0.05	7.6	9	A	0.08	9.0	14
	SB - L	45	A	0.02	8.6	8	B	0.09	10.0	17
	SB - TR	-	A	0.27	4.3	29	A	0.23	5.2	28
River Rd Ex & Hidden Valley Dr	**Intersection**	**-**	**A**	**-**	**0.2**	**-**	**A**	**-**	**0.1**	
	EB - TR*	-	-	-	-	0	-	-	-	0
	WB - T*	-	-	-	-	0	-	-	-	0
	NB - R	-	A	0.01	8.6	9	A	0.01	8.7	7
River Rd Ex & Highway 8 SB Ramp	**Intersection**	**-**	**A**	**-**	**1.9**	**-**	**A**	**-**	**1.9**	
	EB - L	90	A	0.10	8.1	17	A	0.09	8.0	13
	EB - T*	-	-	-	-	0	-	-	-	0
	WB - TR*	-	-	-	-	3	-	-	-	0

Notes: ** = Movement operates under free-flow conditions;*

*** = Storage applies to one of two lanes used for this movement while the second lane has no associated storage length.*

8.1.3 2043 Background Conditions

Capacity analysis was completed for the 2043 background conditions within the study area. Results from the traffic analysis are summarized in **Table 8:3**, while Synchro and SimTraffic output reports are provided in **Appendix K**.

As shown in **Table 8:3**, all intersections are expected to operate well during the AM peak hour, with LOS B or better. Individual movements are also expected to operate satisfactory and exhibit reserve capacity with the highest reported V/C being 0.74.

During the PM peak hour, intersections are still expected to operate well however experience higher average delay and queueing as a result of higher traffic volumes within the network. Through signal timing optimization and phase adjustments all movements are expected to operate at LOS E or better with a maximum reported V/C of 0.82, with the exception of the unsignalized Wilson Avenue and Wabanaki Drive intersection where the northbound movement operates at LOS F with a V/C of 0.93.

Queuing deficiencies were noted in the eastbound approach at the Fairway Road Highway 8 southbound ramp terminal, the eastbound and southbound approaches at the Fairway Road and Fairview Park / Cineplex access, and the westbound and southbound approaches at the Fairway Road and Wilson Avenue intersection.

Overall, intersections within the study area are expected to operate well under the 2043 background conditions AM and PM peak hours.

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Table 8:3: Traffic Capacity Analysis – 2043 Background Conditions

Intersection	Approach - Movement	Storage Length (m)	AM Peak				PM Peak			
			LOS	V/C	Delay (s)	Queue (m)	LOS	V/C	Delay (s)	Queue (m)
King St & River Rd	**Intersection**	-	**B**	-	**16.5**	-	**B**	-	**17.4**	-
	EB - L	45	B	0.13	14.9	26	B	0.36	19.4	45
	EB - T	-	B	0.20	14.3	35	B	0.38	16.8	61
	EB - R	45	A	0.37	5.8	29	A	0.21	4.5	20
	WB - L	50	B	0.30	16.1	41	B	0.39	18.4	49
	WB - T	-	B	0.18	14.0	33	B	0.39	16.8	65
	WB - R	50	A	0.14	3.1	18	A	0.27	2.6	23
	NB - L	75	C	0.17	21.1	15	C	0.44	28.2	32
	NB - TR	-	B	0.23	11.7	29	B	0.33	11.1	43
	SB - L	45	C	0.59	34.2	32	D	0.73	45.2	39
	SB - TR	-	C	0.30	23.0	45	B	0.29	19.0	41
Fairway Rd Highway 8 Ramps	**Intersection**	-	**B**	-	**13.7**	-	**C**	-	**23.1**	-
	EB - L	75**	C	0.48	32.0	54	D	0.76	39.0	**132**
	EB - R	50**	B	0.36	19.6	43	B	0.49	17.6	**77**
	NB - L	85	A	0.42	8.4	45	C	0.70	30.0	61
	NB - T	-	A	0.30	6.2	48	B	0.56	13.4	89
	SB - T	-	B	0.34	14.4	66	C	0.61	27.1	100
	SB - R	75	A	0.17	0.9	21	A	0.14	1.0	34
Fairway Rd & Wabanaki Dr	**Intersection**	-	**A**	-	**1.1**	-	**A**	-	**1.6**	-
	EB - TR*	-	-	-	-	3	-	-	-	1
	WB - T*	-	-	-	-	1	-	-	-	4
	NB - R	-	B	0.28	13.5	26	D	0.55	25.8	45

Intersection	Approach - Movement	Storage Length (m)	AM Peak				PM Peak			
			LOS	V/C	Delay (s)	Queue (m)	LOS	V/C	Delay (s)	Queue (m)
Fairway Rd & Fairview Park Mall / Cineplex	**Intersection**	**-**	**B**	**-**	**11.1**	**-**	**C**	**-**	**24.9**	**-**
	EB - L	40	A	0.08	5.1	15	C	0.65	33.7	**55**
	EB - TR	-	A	0.30	8.1	30	B	0.59	16.3	73
	WB - L	130	A	0.14	6.2	19	C	0.70	23.8	59
	WB - T	-	B	0.35	10.3	55	C	0.68	25.6	131
	WB - R	-	A	0.07	0.2	16	A	0.25	3.6	42
	NB - L	-	D	0.04	41.5	7	E	0.47	58.7	31
	NB - TR	-	C	0.13	25.3	14	D	0.70	46.7	60
	SB - L	40	D	0.34	43.9	35	D	0.61	54.4	**70**
	SB - TR	-	B	0.09	15.0	13	B	0.36	10.2	52
Fairway Rd & Wilson Ave	**Intersection**	**-**	**B**	**-**	**17.5**	**-**	**C**	**-**	**32.5**	**-**
	EB - L	120	A	0.19	6.8	29	C	0.66	28.0	64
	EB - TR	-	B	0.32	13.7	55	C	0.63	34.1	95
	WB - L	160	B	0.40	11.8	49	D	0.74	46.2	92
	WB - T	-	A	0.28	7.6	46	C	0.66	28.0	121
	WB - R	30	A	0.10	1.4	21	A	0.27	8.9	**68**
	NB - L	95	D	0.28	35.3	30	C	0.37	28.9	45
	NB - T	-	D	0.51	39.5	52	D	0.76	54.9	94
	NB - R	-	A	0.19	4.5	20	B	0.41	14.5	43
	SB - L	45	E	0.74	61.4	44	D	0.82	51.8	**57**
	SB - T	-	D	0.41	36.6	40	D	0.34	35.1	83
	SB - R	45	B	0.45	11.6	17	A	0.45	9.5	39

Intersection	Approach - Movement	Storage Length (m)	AM Peak				PM Peak			
			LOS	V/C	Delay (s)	Queue (m)	LOS	V/C	Delay (s)	Queue (m)
Wilson Ave & Wabanaki Dr	**Intersection**	**-**	**A**	**-**	**6.0**	**-**	**C**	**-**	**16.8**	**-**
	EB - L	-	A	0.18	8.0	15	A	0.26	8.4	21
	EB - TR*	-	-	-	-	4	-	-	-	2
	WB - LT	-	A	0.01	8.0	5	A	0.00	7.9	2
	WB - R*	45	-	-	-	1	-	-	-	0
	NB - LTR	-	D	0.05	27.1	8	**F**	**0.93**	167.7	20
	SB - LT	-	D	0.17	27.2	17	E	0.10	36.0	10
	SB - R	-	B	0.32	10.4	0	B	0.59	14.4	2
River Rd Ex & Highway 8 NB Ramps / Stonegate Dr	**Intersection**	**-**	**A**	**-**	**6.0**	**-**	**A**	**-**	**7.4**	
	EB - L	140*	B	0.12	11.7	11	B	0.20	10.3	18
	EB - T	-	B	0.13	11.7	20	B	0.20	10.3	27
	EB - R	140	A	0.09	1.4	14	A	0.08	1.4	13
	WB - L	15	B	0.01	12.5	5	B	0.01	12.5	4
	WB - TR	-	A	0.07	9.1	13	A	0.07	8.1	13
	NB - L	90	A	0.07	9.0	13	B	0.06	10.2	13
	NB - TR	-	A	0.05	7.6	10	A	0.08	9.0	13
	SB - L	45	A	0.02	8.5	6	B	0.09	10.0	16
	SB - TR	-	A	0.27	4.3	31	A	0.23	5.2	24
River Rd Ex & Hidden Valley Dr	**Intersection**	**-**	**A**	**-**	**0.2**	**-**	**A**	**-**	**0.1**	
	EB - TR*	-	-	-	-	0	-	-	-	0
	WB - T*	-	-	-	-	0	-	-	-	0
	NB - R	-	A	0.01	8.6	7	A	0.01	8.7	7
River Rd Ex & Highway 8 SB Ramp	**Intersection**	**-**	**A**	**-**	**1.9**	**-**	**A**	**-**	**1.9**	
	EB - L	90	A	0.10	8.1	16	A	0.09	8.0	14
	EB - T*	-	-	-	-	0	-	-	-	0
	WB - TR*	-	-	-	-	2	-	-	-	0

Notes: ** = Movement operates under free-flow conditions;*

*** = Storage applies to one of two lanes used for this movement while the second lane has no associated storage length.*

8.1.4 2028 Total Traffic Conditions

Capacity analysis was completed for the 2028 total traffic conditions within the study area. Results from the traffic analysis are summarized in **Table 8:4**, while Synchro and SimTraffic output reports are provided in **Appendix K**.

As shown in **Table 8:4**, all intersections are expected to operate well during the AM peak hour, with LOS B or better. Individual movements are also expected to operate satisfactory and exhibit reserve capacity with the highest reported V/C being 0.73.

During the PM peak hour, intersections are still expected to operate well however experience higher average delay and queueing as a result of higher traffic volumes within the network. Through signal timing optimization and phase adjustments all movements are expected to operate at LOS E or better with a maximum reported V/C of 0.7*, with the exception of the unsignalized Wilson Avenue and Wabanaki Drive intersection where the northbound movement operates at LOS F with a V/C of 0.86.

Queuing deficiencies were noted in the westbound, and southbound approaches at the King Street and River Road intersection, the eastbound approach at the Fairway Road Highway 8 southbound ramp terminal, the eastbound and southbound approaches at the Fairway Road and Fairview Park / Cineplex access, and the westbound and southbound approaches at the Fairway Road and Wilson Avenue intersection.

Overall, intersections within the study area are expected to operate well under the 2028 total traffic conditions AM and PM peak hours.

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Table 8:4: Traffic Capacity Analysis – 2028 Total Traffic Conditions

Intersection	Approach - Movement	Storage Length (m)	AM Peak				PM Peak			
			LOS	V/C	Delay (s)	Queue (m)	LOS	V/C	Delay (s)	Queue (m)
King St & River Rd	**Intersection**	-	**B**	-	**16.5**	-	**B**	-	**18.3**	-
	EB - L	45	B	0.14	15.5	24	C	0.40	21.3	40
	EB - T	-	B	0.23	15.0	36	B	0.44	18.2	65
	EB - R	45	A	0.41	6.4	30	A	0.26	4.8	22
	WB - L	50	B	0.33	17.1	43	C	0.45	20.7	**56**
	WB - T	-	B	0.21	14.7	36	B	0.45	18.1	72
	WB - R	50	A	0.14	3.2	17	A	0.26	2.7	21
	NB - L	75	B	0.16	19.7	14	C	0.42	25.8	29
	NB - TR	-	B	0.24	10.9	34	B	0.33	10.5	46
	SB - L	45	D	0.64	35.8	33	D	0.79	50.0	**48**
	SB - TR	-	C	0.29	20.9	41	B	0.29	17.3	46
Fairway Rd Highway 8 Ramps	**Intersection**	-	**B**	-	**13.2**	-	**C**	-	**22.5**	-
	EB - L	75**	C	0.47	31.8	54	D	0.74	38.1	**120**
	EB - R	50**	B	0.31	17.9	47	B	0.49	17.8	**103**
	NB - L	85	A	0.40	8.1	42	C	0.68	27.0	60
	NB - T	-	A	0.30	6.1	47	B	0.55	13.2	90
	SB - T	-	B	0.33	14.1	71	C	0.59	26.3	95
	SB - R	75	A	0.16	0.9	23	A	0.14	1.0	24
Fairway Rd & Wabanaki Dr	**Intersection**	-	**A**	-	**1.3**	-	**A**	-	**1.8**	-
	EB - TR*	-	-	-	-	2	-	-	-	2
	WB - T*	-	-	-	-	0	-	-	-	57
	NB - R	-	B	0.32	13.9	27	D	0.58	26.5	51

Intersection	Approach - Movement	Storage Length (m)	AM Peak				PM Peak			
			LOS	V/C	Delay (s)	Queue (m)	LOS	V/C	Delay (s)	Queue (m)
Fairway Rd & Fairview Park Mall / Cineplex	**Intersection**	**-**	**B**	**-**	**11.1**	**-**	**C**	**-**	**23.8**	**-**
	EB - L	40	A	0.09	5.2	16	C	0.62	27.1	**53**
	EB - TR	-	A	0.30	8.1	30	B	0.57	15.4	65
	WB - L	130	A	0.14	6.1	18	C	0.66	20.8	55
	WB - T	-	B	0.34	10.3	54	C	0.66	25.0	117
	WB - R	-	A	0.07	0.1	19	A	0.24	3.4	44
	NB - L	-	D	0.04	41.5	9	E	0.45	58.1	28
	NB - TR	-	C	0.13	25.3	15	D	0.69	45.4	63
	SB - L	40	D	0.34	43.9	**44**	D	0.61	54.3	**71**
	SB - TR	-	B	0.08	15.1	16	A	0.35	9.9	54
Fairway Rd & Wilson Ave	**Intersection**	**-**	**B**	**-**	**17.4**	**-**	**D**	**-**	**39.1**	**-**
	EB - L	120	A	0.18	6.5	26	C	0.62	24.6	60
	EB - TR	-	B	0.31	13.3	56	C	0.61	33.6	102
	WB - L	160	B	0.40	11.5	50	D	0.73	44.5	91
	WB - T	-	A	0.27	7.4	47	D	0.63	53.1	143
	WB - R	30	A	0.10	1.3	22	C	0.26	26.0	**75**
	NB - L	95	D	0.35	38.0	36	C	0.39	29.8	50
	NB - T	-	D	0.51	40.0	53	D	0.76	54.6	95
	NB - R	-	A	0.20	4.6	24	B	0.40	14.4	48
	SB - L	45	E	0.73	60.5	40	D	0.79	48.8	**54**
	SB - T	-	D	0.40	37.0	41	D	0.33	35.3	60
	SB - R	45	B	0.45	11.9	21	A	0.45	9.6	36

Intersection	Approach - Movement	Storage Length (m)	AM Peak				PM Peak			
			LOS	V/C	Delay (s)	Queue (m)	LOS	V/C	Delay (s)	Queue (m)
Wilson Ave & Wabanaki Dr	**Intersection**	**-**	**A**	**-**	**5.9**	**-**	**C**	**-**	**15.3**	**-**
	EB - L	-	A	0.17	8.0	16	A	0.26	8.4	21
	EB - TR*	-	-	-	-	4	-	-	-	3
	WB - LT	-	A	0.01	8.0	7	A	0.00	7.9	3
	WB - R*	45	-	-	-	2	-	-	-	0
	NB - LTR	-	D	0.05	26.4	10	**F**	**0.86**	145.8	19
	SB - LT	-	D	0.16	26.5	15	E	0.10	35.2	11
	SB - R	-	B	0.32	10.4	0	B	0.58	14.2	0
River Rd Ex & Highway 8 NB Ramps / Stonegate Dr	**Intersection**	**-**	**A**	**-**	**8.0**	**-**	**A**	**-**	**10.0**	**-**
	EB - L	140*	B	0.13	17.9	11	B	0.26	18.9	19
	EB - T	-	B	0.13	18.0	21	B	0.27	18.9	34
	EB - R	140	A	0.1	1.9	14	A	0.14	3.2	15
	WB - L	15	B	0.01	17.8	6	B	0.01	18.2	4
	WB - TR	-	B	0.06	12.1	13	B	0.07	11.2	14
	NB - L	90	B	0.11	11.4	16	B	0.08	11.4	14
	NB - TR	-	A	0.05	9.5	12	A	0.08	9.8	13
	SB - L	45	B	0.02	10.6	9	B	0.09	11.1	15
	SB - TR	-	A	0.27	5.5	32	A	0.24	5.9	32
River Rd Ex & Hidden Valley Dr	**Intersection**	**-**	**A**	**-**	**0.4**	**-**	**A**	**-**	**0.2**	**-**
	EB - TR*	-	-	-	-	0	-	-	-	0
	WB - T*	-	-	-	-	0	-	-	-	0
	NB - R	-	A	0.02	8.8	11	A	0.01	8.8	8
River Rd Ex & Highway 8 SB Ramp	**Intersection**	**-**	**A**	**-**	**2.0**	**-**	**A**	**-**	**1.8**	**-**
	EB - L	90	A	0.11	8.3	16	A	0.10	8.2	15
	EB - T*	-	-	-	-	0	-	-	-	0
	WB - TR*	-	-	-	-	3	-	-	-	0

Notes: ** = Movement operates under free-flow conditions;*

*** = Storage applies to one of two lanes used for this movement while the second lane has no associated storage length.*

8.1.5 2033 Total Traffic Conditions

Capacity analysis was completed for the 2033 total traffic conditions within the study area. Results from the traffic analysis are summarized in **Table 8:5**, while Synchro and SimTraffic output reports are provided in **Appendix K**.

As shown in **Table 8:5**, all intersections are expected to operate well during the AM peak hour, with LOS B or better. Individual movements are also expected to operate satisfactory and exhibit reserve capacity with the highest reported V/C being 0.74.

During the PM peak hour, intersections are still expected to operate well however experience higher average delay and queueing as a result of higher traffic volumes within the network. Through signal timing optimization and phase adjustments all movements are expected to operate at LOS E or better with a maximum reported V/C of 0.82, with the exception of the unsignalized Wilson Avenue and Wabanaki Drive intersection where the northbound movement operates at LOS F with a V/C of 1.05.

Queuing deficiencies were noted in the eastbound, westbound, and southbound approaches at the King Street and River Road intersection, the eastbound approach at the Fairway Road Highway 8 southbound ramp terminal, the eastbound and southbound approaches at the Fairway Road and Fairview Park / Cineplex access, and the westbound and southbound approaches at the Fairway Road and Wilson Avenue intersection.

Overall, intersections within the study area are expected to operate well under the 2033 total traffic conditions AM and PM peak hours.

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Table 8:5: Traffic Capacity Analysis – 2033 Total Traffic Conditions

Intersection	Approach - Movement	Storage Length (m)	AM Peak				PM Peak			
			LOS	V/C	Delay (s)	Queue (m)	LOS	V/C	Delay (s)	Queue (m)
King St & River Rd	**Intersection**	-	**B**	-	**16.5**	-	**B**	-	**18.2**	-
	EB - L	45	B	0.14	15.5	23	C	0.41	21.4	**47**
	EB - T	-	B	0.22	15.0	37	B	0.43	18.0	62
	EB - R	45	A	0.47	6.9	35	A	0.31	4.9	23
	WB - L	50	B	0.35	17.5	44	C	0.50	21.9	**56**
	WB - T	-	B	0.20	14.7	38	B	0.44	18.0	72
	WB - R	50	A	0.14	3.2	18	A	0.27	2.7	23
	NB - L	75	B	0.16	19.8	16	C	0.43	26.3	33
	NB - TR	-	B	0.27	10.7	34	B	0.35	10.5	43
	SB - L	45	D	0.65	36.4	39	D	0.79	50.4	**46**
	SB - TR	-	C	0.30	21.7	44	B	0.30	17.7	44
Fairway Rd Highway 8 Ramps	**Intersection**	-	**B**	-	**13.4**	-	**C**	-	**23.2**	-
	EB - L	75**	C	0.48	32.0	56	D	0.76	39.2	**143**
	EB - R	50**	B	0.32	17.9	45	B	0.51	18.0	**124**
	NB - L	85	A	0.42	8.4	47	C	0.70	30.1	71
	NB - T	-	A	0.32	6.3	56	B	0.58	13.7	94
	SB - T	-	B	0.34	14.4	63	C	0.61	27.2	97
	SB - R	75	A	0.17	0.9	25	A	0.14	1.0	29
Fairway Rd & Wabanaki Dr	**Intersection**	-	**A**	-	**1.6**	-	**A**	-	**2.4**	-
	EB - TR*	-	-	-	-	0	-	-	-	4
	WB - T*	-	-	-	-	1	-	-	-	47
	NB - R	-	C	0.38	15.1	34	D	0.67	32.6	49

Intersection	Approach - Movement	Storage Length (m)	AM Peak				PM Peak			
			LOS	V/C	Delay (s)	Queue (m)	LOS	V/C	Delay (s)	Queue (m)
Fairway Rd & Fairview Park Mall / Cineplex	**Intersection**	**-**	**B**	**-**	**11.7**	**-**	**C**	**-**	**25.5**	**-**
	EB - L	40	A	0.11	5.3	18	D	0.66	36.8	**54**
	EB - TR	-	A	0.33	8.4	32	B	0.59	16.3	79
	WB - L	130	A	0.15	6.3	17	C	0.70	24.2	82
	WB - T	-	B	0.39	11.4	56	C	0.70	26.4	140
	WB - R	-	A	0.08	0.2	16	A	0.25	3.9	42
	NB - L	-	D	0.04	41.5	7	E	0.46	58.6	31
	NB - TR	-	C	0.13	25.3	17	D	0.70	46.8	66
	SB - L	40	D	0.34	43.7	38	D	0.63	54.8	**82**
	SB - TR	-	B	0.09	14.9	16	B	0.36	10.1	58
Fairway Rd & Wilson Ave	**Intersection**	**-**	**B**	**-**	**18.0**	**-**	**C**	**-**	**34.1**	**-**
	EB - L	120	A	0.19	6.8	27	C	0.66	27.6	67
	EB - TR	-	B	0.33	14.1	57	D	0.67	36.5	123
	WB - L	160	B	0.43	13.6	51	D	0.80	54.9	118
	WB - T	-	A	0.28	7.6	45	C	0.66	28.9	108
	WB - R	30	A	0.10	1.4	20	A	0.27	9.4	**69**
	NB - L	95	D	0.42	40.2	38	C	0.43	30.9	59
	NB - T	-	D	0.51	39.5	61	D	0.76	54.9	94
	NB - R	-	A	0.21	4.3	24	B	0.41	14.5	44
	SB - L	45	E	0.74	61.4	**48**	D	0.82	51.8	**58**
	SB - T	-	D	0.41	36.6	42	D	0.34	35.1	70
	SB - R	45	B	0.45	11.6	20	A	0.45	9.5	40

Intersection	Approach - Movement	Storage Length (m)	AM Peak				PM Peak			
			LOS	V/C	Delay (s)	Queue (m)	LOS	V/C	Delay (s)	Queue (m)
Wilson Ave & Wabanaki Dr	**Intersection**	**-**	**A**	**-**	**5.9**	**-**	**C**	**-**	**19.3**	**-**
	EB - L	-	A	0.18	8.0	16	A	0.27	8.5	20
	EB - TR*	-	-	-	-	3	-	-	-	4
	WB - LT	-	A	0.01	8.1	7	A	0.00	7.9	2
	WB - R*	45	-	-	-	0	-	-	-	0
	NB - LTR	-	D	0.06	28.7	10	**F**	**1.05**	218.2	20
	SB - LT	-	D	0.18	28.6	16	E	0.11	38.9	11
	SB - R	-	B	0.33	10.6	1	C	0.60	15.0	1
River Rd Ex & Highway 8 NB Ramps / Stonegate Dr	**Intersection**	**-**	**A**	**-**	**8.3**	**-**	**B**	**-**	**10.1**	**-**
	EB - L	140*	B	0.13	18.0	11	B	0.26	18.8	22
	EB - T	-	B	0.13	18.0	23	B	0.26	18.9	33
	EB - R	140	A	0.12	2.5	15	A	0.18	5.3	16
	WB - L	15	B	0.01	17.8	6	B	0.01	18.5	6
	WB - TR	-	B	0.06	12.1	14	B	0.07	11.0	13
	NB - L	90	B	0.17	12.2	20	B	0.11	11.7	16
	NB - TR	-	A	0.06	9.6	15	A	0.09	9.9	17
	SB - L	45	B	0.02	10.6	8	B	0.09	11.2	18
	SB - TR	-	A	0.3	5.9	37	A	0.27	6.4	32
River Rd Ex & Hidden Valley Dr	**Intersection**	**-**	**A**	**-**	**0.5**	**-**	**A**	**-**	**0.3**	**-**
	EB - TR*	-	-	-	-	0	-	-	-	0
	WB - T*	-	-	-	-	0	-	-	-	0
	NB - R	-	A	0.03	8.9	13	A	0.02	8.9	11
River Rd Ex & Highway 8 SB Ramp	**Intersection**	**-**	**A**	**-**	**2.0**	**-**	**A**	**-**	**1.7**	**-**
	EB - L	90	A	0.14	8.5	19	A	0.12	8.4	16
	EB - T*	-	-	-	-	0	-	-	-	0
	WB - TR*	-	-	-	-	4	-	-	-	0

Notes: ** = Movement operates under free-flow conditions;*

*** = Storage applies to one of two lanes used for this movement while the second lane has no associated storage length.*

8.1.6 2043 Total Traffic Conditions

Capacity analysis was completed for the 2043 total traffic conditions within the study area. Results from the traffic analysis are summarized in **Table 8:6**, while Synchro and SimTraffic output reports are provided in **Appendix K**.

As shown in **Table 8:6**, all intersections are expected to operate well during the AM peak hour, with LOS B or better. Individual movements are also expected to operate satisfactory and exhibit reserve capacity with the highest reported V/C being 0.74.

During the PM peak hour, intersections are still expected to operate well however experience higher average delay and queueing as a result of higher traffic volumes within the network. Through signal timing optimization and phase adjustments all movements are expected to operate at LOS E or better with a maximum reported V/C of 0.84, with the exception of the unsignalized Wilson Avenue and Wabanaki Drive intersection where the northbound movement operates at LOS F with a V/C of 1.15.

Queuing deficiencies were noted in westbound approach at the King Street and River Road intersection, the eastbound approach at the Fairway Road Highway 8 southbound ramp terminal, the eastbound and southbound approaches at the Fairway Road and Fairview Park / Cineplex access, and the westbound and southbound approaches at the Fairway Road and Wilson Avenue intersection.

Overall, intersections within the study area are expected to operate well under the 2043 total traffic conditions AM and PM peak hours.

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Table 8:6: Traffic Capacity Analysis – 2043 Total Traffic Conditions

Intersection	Approach - Movement	Storage Length (m)	AM Peak				PM Peak			
			LOS	V/C	Delay (s)	Queue (m)	LOS	V/C	Delay (s)	Queue (m)
King St & River Rd	**Intersection**	-	**B**	-	**16.2**	-	**B**	-	**17.3**	-
	EB - L	45	B	0.14	15.4	22	C	0.38	20.3	42
	EB - T	-	B	0.20	14.7	33	B	0.39	17.4	61
	EB - R	45	A	0.54	7.9	36	A	0.40	5.4	26
	WB - L	50	B	0.37	17.7	53	C	0.54	22.9	75
	WB - T	-	B	0.18	14.4	38	B	0.40	17.3	85
	WB - R	50	A	0.14	3.2	17	A	0.27	2.7	22
	NB - L	75	B	0.16	19.8	14	C	0.43	26.3	30
	NB - TR	-	B	0.30	10.6	38	B	0.37	10.4	44
	SB - L	45	C	0.62	34.7	34	D	0.74	45.3	37
	SB - TR	-	C	0.30	22.5	42	B	0.30	18.5	37
Fairway Rd Highway 8 Ramps	**Intersection**	-	**B**	-	**13.6**	-	**C**	-	**23.2**	-
	EB - L	75**	C	0.48	32.1	52	D	0.76	39.1	202
	EB - R	50**	B	0.39	20.0	47	B	0.53	18.4	192
	NB - L	85	A	0.41	8.4	42	C	0.70	29.8	61
	NB - T	-	A	0.35	6.5	54	B	0.59	14.0	104
	SB - T	-	B	0.34	14.6	64	C	0.61	27.2	97
	SB - R	75	A	0.17	0.9	24	A	0.14	1.0	37
Fairway Rd & Wabanaki Dr	**Intersection**	-	**A**	-	**2.2**	-	**A**	-	**3.6**	-
	EB - TR*	-	-	-	-	1	-	-	-	6
	WB - T*	-	-	-	-	50	-	-	-	3
	NB - R	-	C	0.48	17.1	36	E	0.79	43.7	65

Intersection	Approach - Movement	Storage Length (m)	AM Peak				PM Peak			
			LOS	V/C	Delay (s)	Queue (m)	LOS	V/C	Delay (s)	Queue (m)
Fairway Rd & Fairview Park Mall / Cineplex	**Intersection**	**-**	**B**	**-**	**11.8**	**-**	**C**	**-**	**25.9**	**-**
	EB - L	40	A	0.14	5.4	20	D	0.68	39.6	**54**
	EB - TR	-	A	0.34	8.4	32	B	0.59	16.2	80
	WB - L	130	A	0.16	6.4	22	C	0.70	24.1	70
	WB - T	-	B	0.39	11.7	60	C	0.71	27.1	138
	WB - R	-	A	0.08	0.2	18	A	0.25	4.1	40
	NB - L	-	D	0.04	41.5	8	E	0.47	58.7	33
	NB - TR	-	C	0.13	25.3	14	D	0.70	46.7	64
	SB - L	40	D	0.35	43.8	**42**	E	0.64	55.1	**74**
	SB - TR	-	B	0.09	14.9	14	B	0.36	10.1	54
Fairway Rd & Wilson Ave	**Intersection**	**-**	**B**	**-**	**18.6**	**-**	**D**	**-**	**35.8**	**-**
	EB - L	120	A	0.19	6.9	27	C	0.66	27.0	64
	EB - TR	-	B	0.35	14.4	64	D	0.74	40.1	117
	WB - L	160	B	0.46	15.6	51	E	0.84	62.1	148
	WB - T	-	A	0.28	7.6	42	C	0.66	29.6	130
	WB - R	30	A	0.10	1.4	19	A	0.27	9.9	**67**
	NB - L	95	D	0.55	46.5	46	C	0.50	33.2	78
	NB - T	-	D	0.51	39.5	55	D	0.76	54.9	136
	NB - R	-	A	0.23	4.2	25	B	0.40	14.1	58
	SB - L	45	E	0.74	61.4	43	D	0.82	51.8	**58**
	SB - T	-	D	0.41	36.6	40	D	0.34	35.1	71
	SB - R	45	B	0.45	11.6	18	A	0.45	9.5	43

Intersection	Approach - Movement	Storage Length (m)	AM Peak				PM Peak			
			LOS	V/C	Delay (s)	Queue (m)	LOS	V/C	Delay (s)	Queue (m)
Wilson Ave & Wabanaki Dr	**Intersection**	**-**	**A**	**-**	**5.9**	**-**	**C**	**-**	**21.1**	**-**
	EB - L	-	A	0.18	8.1	19	A	0.27	8.5	22
	EB - TR*	-	-	-	-	5	-	-	-	2
	WB - LT	-	A	0.01	8.1	8	A	0.00	8.0	2
	WB - R*	45	-	-	-	0	-	-	-	0
	NB - LTR	-	D	0.06	30.7	9	**F**	**1.15**	262.4	19
	SB - LT	-	D	0.19	30.5	16	E	0.12	41.3	11
	SB - R	-	B	0.34	10.9	1	C	0.62	15.5	1
River Rd Ex & Highway 8 NB Ramps / Stonegate Dr	**Intersection**	**-**	**A**	**-**	**9.0**	**-**	**B**	**-**	**10.9**	**-**
	EB - L	140*	B	0.13	19.5	11	B	0.25	18.7	19
	EB - T		B	0.13	19.6	23	B	0.26	18.7	34
	EB - R	140	A	0.14	3.9	16	A	0.24	6.1	18
	WB - L	15	B	0.01	20.0	4	B	0.01	18.5	4
	WB - TR	-	B	0.06	13.6	13	B	0.07	11.0	12
	NB - L	90	B	0.29	13.5	24	B	0.18	12.7	18
	NB - TR	-	A	0.08	9.1	15	B	0.11	10.0	17
	SB - L	45	A	0.02	10.0	9	B	0.10	11.3	18
	SB - TR	-	A	0.32	6.6	35	A	0.33	8.7	36
River Rd Ex & Hidden Valley Dr	**Intersection**	**-**	**A**	**-**	**0.6**	**-**	**A**	**-**	**0.3**	**-**
	EB - TR*	-	-	-	-	0	-	-	-	0
	WB - T*	-	-	-	-	0	-	-	-	0
	NB - R	-	A	0.05	9.1	13	A	0.03	9.1	13
River Rd Ex & Highway 8 SB Ramp	**Intersection**	**-**	**A**	**-**	**2.1**	**-**	**A**	**-**	**1.6**	**-**
	EB - L	90	A	0.17	8.9	21	A	0.14	8.8	18
	EB - T*	-	-	-	-	0	-	-	-	0
	WB - TR*	-	-	-	-	6	-	-	-	0

Notes: ** = Movement operates under free-flow conditions;*

*** = Storage applies to one of two lanes used for this movement while the second lane has no associated storage length.*

8.2 Arcady Roundabout Capacity Analysis

8.2.1 Methodology

Roundabout capacity analysis was performed using Arcady Junctions 9 analysis tool which applies the UK empirical model for roundabouts. The UK empirical model for roundabouts was developed by the Transport and Road Research Laboratory (TRRL) by collecting various geometric parameters and entry/circulating flow measurements using statistical analysis to determine the significance and effect of each.

The River Road extension design concept templates were input into AutoCAD to conduct measurements of the following items to be input into the Arcady model:

- V – Approach roadway half-width (m);
- E – Entry width (m);
- l' – Effective flare length (m);
- R – Entry radius (m);
- D – Inscribed circle diameter (m), and
- PHI – Conflict (entry) angle (degrees).

As the expected 95th percentile queue length is provided in vehicles, the 95th percentile queue length in metres was assumed to be 10 times greater, i.e., the average vehicle length was assumed to be 10 m.

8.2.2 River Road Extension and Wabanaki Drive Roundabout

8.2.2.1 Background Conditions

Under background conditions the future River Road extension and Wabanaki Drive roundabout is anticipated to have three (3) legs; the River Road extension northeast leg, the Wabanaki Drive northwest leg, and the Wabanaki Drive southwest leg. The design concept for the future River Road extension and Wabanaki Drive roundabout is depicted in **Figure 8:1**.

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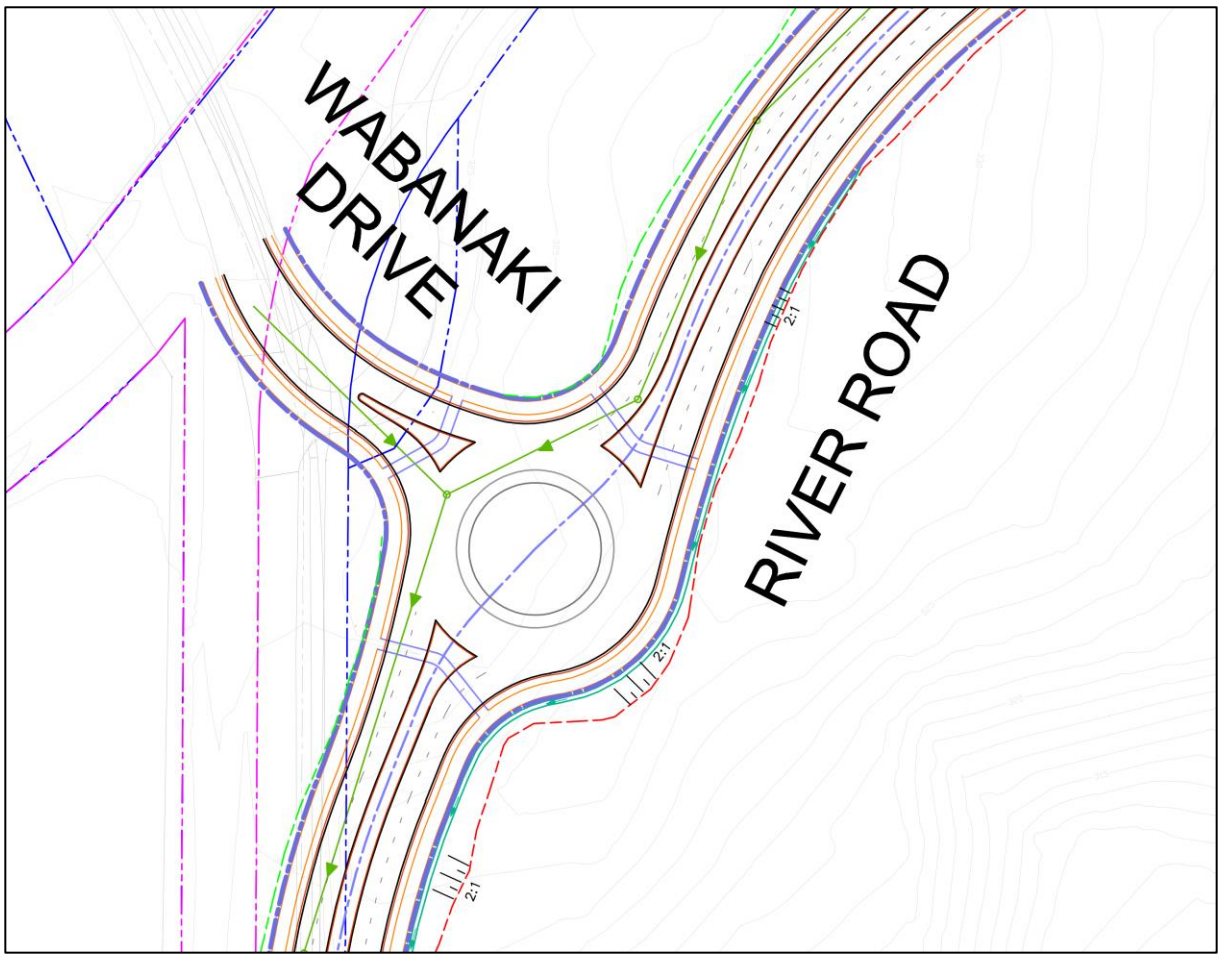

Figure 8:1: Future River Road Extension and Wabanaki Drive Roundabout Design Concept

Measurements were taken from the future River Road extension and Wabanaki Drive roundabout design concept are summarized in **Table 8:7**.

Table 8:7: River Road Extension and Wabanaki Drive Roundabout Design – Background Conditions

Approach	Road	V (m)	E (m)	l' (m)	R (m)	D (m)	PHI (deg)
Northeast	River Rd Ext	7.00	8.82	6.6	27	56	52
Northwest	Wabanaki Dr (N)	5.76	9.07	9.1	25	56	47
Southwest	Wabanaki Dr (S)	7.00	9.28	14.7	30	56	33

Capacity analysis was completed for the 2028, 2033, and 2043 background conditions. Results from the Arcady analysis is summarized in **Table 8:8** while Arcady output reports are provided in **Appendix O**.

Overall, the future River Road extension and Wabanaki Drive roundabout is expected to operate well under the background conditions. The roundabout is expected to operate at LOS A through 2043, with an average delay per vehicle of under 2 seconds. Individual movements are also expected to operate satisfactory and exhibit significant reserve capacity with the highest reported V/C being 0.21. Queueing is expected to be less than 10 m or one (1) vehicle and is not anticipated to influence any adjacent intersections or accesses.

Table 8:8: River Road Extension and Wabanaki Drive Roundabout Capacity Analysis – Background Conditions

Scenario	Approach - Movement	AM Peak				PM Peak			
		LOS	V/C	Delay (s)	Queue (m)	LOS	V/C	Delay (s)	Queue (m)
2028 Background	**Roundabout**	**A**	**-**	**1.8**	**-**	**A**	**-**	**1.9**	**-**
	EB - LR	A	0.07	2.0	5	A	0.08	2.0	5
	NB - LT	A	0.17	1.8	5	A	0.20	1.8	5
	SB - TR	A	0.07	1.8	5	A	0.06	1.8	5
2033 Background	**Roundabout**	**A**	**-**	**1.9**	**-**	**A**	**-**	**1.9**	**-**
	EB - LR	A	0.07	2.0	5	A	0.09	2.0	5
	NB - LT	A	0.18	1.8	5	A	0.21	1.8	6
	SB - TR	A	0.07	1.8	5	A	0.06	1.8	5
2043 Background	**Roundabout**	**A**	**-**	**1.9**	**-**	**A**	**-**	**1.9**	**-**
	EB - LR	A	0.07	2.0	5	A	0.09	2.0	5
	NB - LT	A	0.18	1.8	5	A	0.21	1.8	6
	SB - TR	A	0.07	1.8	5	A	0.06	1.8	5

8.2.2.2 Total Traffic Conditions

Under total traffic conditions the future River Road extension and Wabanaki Drive roundabout is anticipated to have four (4) legs; the River Road extension northeast leg, the development access east leg, the Wabanaki Drive northwest leg, and the Wabanaki Drive southwest leg.

As the development access west leg is not included as part of the design concept for the roundabout measurements for this leg were taken as the following:

- With an assumed 2-lane cross section (1 entering and 1 departing lane) the approach roadway half-width was assumed to be equal to that of the Wabanaki Drive northwest leg which also contains a 2-lane cross section.
- Inscribed circle diameter remains unchanged as it is consistent across all legs of the roundabout.
- The entry width, effective flare length, entry radius, and conflict (entry) angle were taken as the average of the three (3) other legs.

Measurements for the future River Road extension and Wabanaki Drive roundabout under total traffic conditions are summarized in **Table 8:9**.

Table 8:9: River Road Extension and Wabanaki Drive Roundabout Design – Total Traffic Conditions

Approach	Road	V (m)	E (m)	l' (m)	R (m)	D (m)	PHI (deg)
East	Access	5.76	9.06	10.1	27	56	44
Northeast	River Rd Ext	7.00	8.82	6.6	27	56	52
Northwest	Wabanaki Dr (N)	5.76	9.07	9.1	25	56	47
Southwest	Wabanaki Dr (S)	7.00	9.28	14.7	30	56	33

Capacity analysis was completed for the 2028, 2033, and 2043 total traffic conditions. Results from the Arcady analysis is summarized in **Table 8:10** while Arcady output reports are provided in **Appendix O**.

Overall, the future River Road extension and Wabanaki Drive roundabout is expected to operate well under the total traffic conditions. The roundabout is expected to operate at LOS A through 2043, with a maximum average delay per vehicle of 2.4 seconds. Individual movements are also expected to operate satisfactory and exhibit significant reserve capacity with the highest reported V/C being 0.30. Queueing is expected to be less than 20 m or approximately two (2) vehicles and is not anticipated to influence any adjacent intersections or accesses.

Table 8:10: River Road Extension and Wabanaki Drive Roundabout Capacity Analysis – Total Traffic Conditions

Scenario	Approach - Movement	AM Peak				PM Peak			
		LOS	V/C	Delay (s)	Queue (m)	LOS	V/C	Delay (s)	Queue (m)
2028 Total Traffic	**Roundabout**	**A**	**-**	**1.9**	**-**	**A**	**-**	**2.0**	**-**
	EB - LTR	A	0.08	2.1	5	A	0.09	2.1	5
	WB - LTR	A	0.04	2.1	5	A	0.02	2.1	5
	NB - LTR	A	0.19	1.8	5	A	0.23	1.9	11
	SB - LTR	A	0.09	1.9	5	A	0.10	1.9	5
2033 Total Traffic	**Roundabout**	**A**	**-**	**2.0**	**-**	**A**	**-**	**2.1**	**-**
	EB - LTR	A	0.09	2.1	5	A	0.11	2.2	5
	WB - LTR	A	0.09	2.3	5	A	0.04	2.2	5
	NB - LTR	A	0.21	1.9	5	A	0.26	2.0	14
	SB - LTR	A	0.11	2.0	5	A	0.14	2.1	5
2043 Total Traffic	**Roundabout**	**A**	**-**	**2.2**	**-**	**A**	**-**	**2.3**	**-**
	EB - LTR	A	0.10	2.3	5	A	0.13	2.4	5
	WB - LTR	A	0.17	2.6	5	A	0.08	2.4	5
	NB - LTR	A	0.24	2.0	12	A	0.30	2.2	16
	SB - LTR	A	0.15	2.2	5	A	0.23	2.3	12

8.2.3 Wabanaki Drive and Goodrich Drive / Hidden Valley Road Roundabout

The future Wabanaki Drive and Goodrich Drive / Hidden Valley Road roundabout is anticipated to have four (4) legs; the Hidden Valley Road east leg, the Goodrich Drive west leg, the Wabanaki Drive north leg, and the Wabanaki Drive south leg. The design concept for the future Wabanaki Drive and Goodrich Drive / Hidden Valley Road roundabout is depicted in **Figure 8:2**.

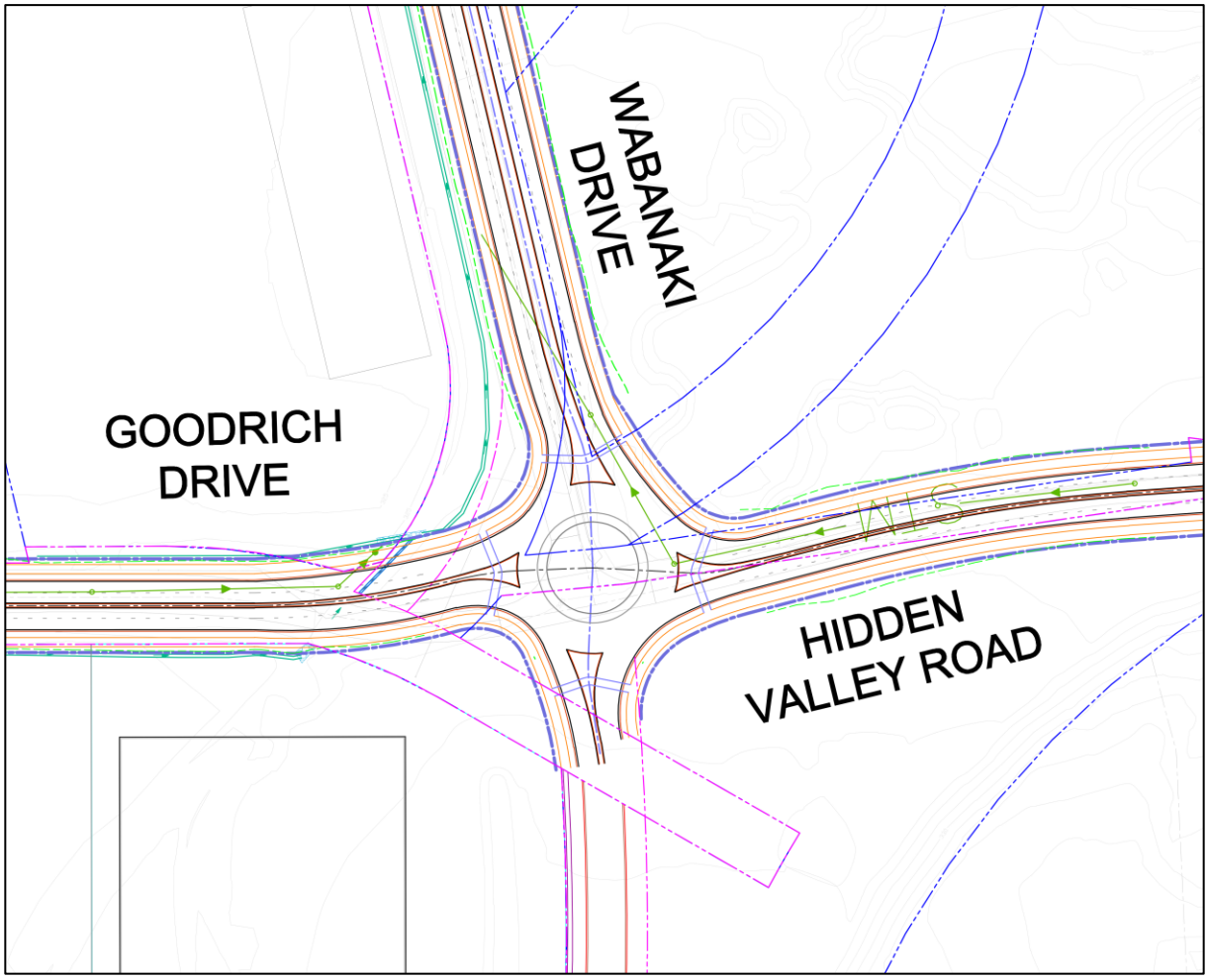

Figure 8:2: Future Wabanaki Drive and Goodrich Drive / Hidden Valley Road Roundabout Design Concept

Measurements were taken from the future Wabanaki Drive and Goodrich Drive / Hidden Valley Road roundabout design concept are summarized in **Table 8:11**.

Table 8:11: Wabanaki Drive and Goodrich Drive / Hidden Valley Road Roundabout Design Measurements

Approach	Road	V (m)	E (m)	l' (m)	R (m)	D (m)	PHI (deg)
East	Hidden Valley Rd	7	8.86	14.2	27	54.6	6
North	Wabanaki Dr (N)	7	8.07	10.3	28	54.6	50
West	Goodrich Dr	7	8.39	23.4	22	54.6	35
South	Wabanaki Dr (S)	7	8.37	12.2	35	54.6	34

Capacity analysis was completed for the 2028, 2033, and 2043 background and total traffic conditions. Results from the Arcady analysis is summarized in **Table 8:12** while Arcady output reports are provided in **Appendix O**.

Overall, the future Wabanaki Drive and Goodrich Drive / Hidden Valley Road roundabout is expected to operate well under the background and total traffic conditions. The roundabout is expected to operate at LOS A through 2043, with a maximum average delay per vehicle of 2.3 seconds. Individual movements are also expected to operate satisfactory and exhibit significant reserve capacity with the highest reported V/C being 0.21. Queueing is expected to be less than two (2) vehicles (or 20 m) and is not anticipated to influence any adjacent intersections or accesses.

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Table 8:12: Wabanaki Drive and Goodrich Drive / Hidden Valley Road Roundabout Capacity Analysis

Scenario	Approach - Movement	AM Peak				PM Peak			
		LOS	V/C	Delay (s)	Queue (m)	LOS	V/C	Delay (s)	Queue (m)
2028 Background	**Roundabout**	**A**	**-**	**1.9**	**-**	**A**	**-**	**1.9**	**-**
	EB - LTR	A	0.05	2.1	5	A	0.11	1.8	5
	WB - LTR	A	0.03	1.6	5	A	0.02	1.7	5
	NB - LTR	A	0.16	1.9	5	A	0.14	1.9	5
	SB - LTR	A	0.11	1.9	5	A	0.11	1.9	5
2033 Background	**Roundabout**	**A**	**-**	**1.9**	**-**	**A**	**-**	**1.9**	**-**
	EB - LTR	A	0.05	2.1	5	A	0.11	1.9	5
	WB - LTR	A	0.03	1.7	5	A	0.02	1.8	5
	NB - LTR	A	0.16	1.9	5	A	0.15	1.9	5
	SB - LTR	A	0.11	2.0	5	A	0.11	1.9	5
2043 Background	**Roundabout**	**A**	**-**	**1.9**	**-**	**A**	**-**	**1.9**	**-**
	EB - LTR	A	0.05	2.1	5	A	0.11	1.9	5
	WB - LTR	A	0.03	1.7	5	A	0.02	1.8	5
	NB - LTR	A	0.16	1.9	5	A	0.15	1.9	5
	SB - LTR	A	0.11	2.0	5	A	0.11	1.9	5
2028 Total Traffic	**Roundabout**	**A**	**-**	**2.0**	**-**	**A**	**-**	**1.9**	**-**
	EB - LTR	A	0.06	2.2	5	A	0.12	1.9	5
	WB - LTR	A	0.04	1.7	5	A	0.04	1.8	5
	NB - LTR	A	0.16	2.0	5	A	0.15	2.0	5
	SB - LTR	A	0.13	2.0	5	A	0.14	2.0	5
2033 Total Traffic	**Roundabout**	**A**	**-**	**2.0**	**-**	**A**	**-**	**2.0**	**-**
	EB - LTR	A	0.07	2.2	5	A	0.13	2.0	5
	WB - LTR	A	0.06	1.7	5	A	0.05	1.9	5
	NB - LTR	A	0.17	2.0	5	A	0.17	2.0	5
	SB - LTR	A	0.16	2.1	5	A	0.16	2.0	5
2043 Total Traffic	**Roundabout**	**A**	**-**	**2.1**	**-**	**A**	**-**	**2.1**	**-**
	EB - LTR	A	0.08	2.3	5	A	0.15	2.1	5
	WB - LTR	A	0.09	1.8	5	A	0.09	2.0	5
	NB - LTR	A	0.19	2.1	5	A	0.19	2.2	5
	SB - LTR	A	0.21	2.2	7	A	0.21	2.2	10

8.1 Future Study Network Analysis Summary

Overall, the study area network is expected to operate well through 2043, with many intersections and movements experiencing improved operations compared with the 2023 existing conditions. These improvements are produced through two (2) means.

The first is the redirection of vehicles from the existing Highway 8 ramps on Fairview Road and King Street to the new ramps on River Road. As drivers are given more opportunities to access Highway 8 northbound and southbound the number of vehicles accessing each existing ramp is reduced, improving operations at the ramp terminals and adjacent intersections. Secondly, the growth rate used within the study is outpaced by mode share targets, resulting in an overall decrease in traffic volumes between the 2023 and 2043 background conditions. While the addition of site generated traffic results in an increase in volumes for specific movements within the network, overall traffic volumes are still expected to lessen under future scenarios. Due to these factors, the future network is expected to operate well with only minor changes to the existing signal timings/phases.

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9.0 UPGRADES AND MITIGATION MEASURES

9.1 Road Network

9.1.1 Signal Timing Adjustments

To maintain adequate operations of signalized intersections under the future background and total traffic scenarios, optimization of signal timing was required for the Fairway Road and King Street, King Street and River Road, and Fairway Road and Wilson Drive intersections.

Optimization of signal times was used when movements were found to operate at LOS F or experience a V/C ratio of 0.85 or greater. When optimization of the signal times was found to be insufficient, further changes to the signal timing, such as phasing, was implemented.

Optimization of signal times at the Fairway Road and King Street and Fairway Road and Wilson Avenue intersections was found to resolve the capacity issues at both intersections. At the King Street and River Road intersection optimization of the signal times was found to resolve the capacity issues during the AM peak hour, however, the V/C ratio during the PM peak hour was still found to above 0.85 due to the high volume in the southbound left-turn movement. To improve capacity for the southbound left-turn movement a protected/permitted left-turn was implemented for the northbound and southbound directions, followed by further signal timing optimization, which further reduced the V/C ratio to an acceptable level. Changes to the existing signal times are summarized in **Table 9:1**.

Signal timing adjustments presented as part of this study are not recommended and are only intended to identify the need for future changes as the study area is developed further. Operations within the study area should be continually monitored and updated as the development proceeds to ensure that intersection signal times account for the changes to travel patterns within the study area.

9.1.2 Auxiliary Lane Storage Capacity

Upon review of all analysis scenarios, storage length deficiencies were noted at the following intersection auxiliary lanes:

- King Street and River Road eastbound left-turn, westbound left-turn, and southbound left-turn;
- Fairway Road and Highway 8 southbound ramp terminal eastbound left-turn and eastbound right-turn;
- Fairway Road and Fairview Park Mall / Cineplex access eastbound left-turn and southbound left-turn, and
- Fairway Road and Wilson Avenue westbound right-turn and southbound left-turn.

Expected queueing at the King Street and River Road eastbound left-turn and southbound left-turn are within 3 m of the available storage and increases to the available storage are not recommended. The storage length deficiency for the King Street and River Road westbound left-turn is expected to be 6 m under the 2028 and 2033 total traffic conditions, however, is expected to increase to 25 m under the 2043 total traffic conditions. A large paved shoulder is provided on the north side of King Street prior to the commencement of the westbound left-turn lane. During reconstruction of the King Street and River Road intersection to accommodate the River Road extension, further traffic capacity analysis should be completed to confirm the appropriate storage length is provided for the westbound left-turn lane.

While the expected queueing for the eastbound left-turn and right-turn movements at the Fairway Road and Highway 8 southbound ramp terminal is expected to exceed the available storage for the auxiliary lanes, each movement also contains an additional turning lane that facilitates queueing of nearly 350 m before queueing is expected to spill onto the Highway 8 mainline. As queueing onto the highway mainline is not anticipated increases to the available storage are not required through 2043.

Due to the internal road network within the Fairview Park Mall, with the presence of an upstream intersection and back-to-back left-turn lanes, an increase to the storage length for the southbound left-turn at the Fairway Road and Fairview Park Mall / Cineplex access is considered unreasonable and is not recommended. Additionally, due the presence of back-to-back left-turn lanes and the proximity of the active transportation infrastructure on the south side of Fairway Road increases to the storage length for the eastbound left-turn at the Fairway Road and Fairview Park Mall / Cineplex access is also not recommended.

Due to the presence of back-to-back left-turn lanes, as well as the upstream intersection and ION LRT rail crossing, an increase to the storage length for the southbound left-turn at the Fairway Road and Wilson Avenue intersection is not recommended. Storage for the westbound right-turn lane may be increased by up to 10 m, however further increases would result in interference with access to the bus terminal. As a storage length increase of 10 m is not expected to resolve the storage deficiency and is therefore not recommended for implementation.

Overall, increases to the storage length within the study area is extremely difficult due to the built-up nature of the area. With future development of the King Street and River Road intersection confirmed, an increase to the westbound left-turn storage length is considered appropriate, while the scale of the works required to correct all other noted storage length deficiencies are considered too great and are not recommended.

Table 9:1: Future Conditions Signal Timing Optimization

Scenario	Intersection	Peak Hour	Issue	Issue Location	Mitigation	Issue Solved	
2028 Background Conditions	Fairway & King	PM	V/C = 0.88	NB-TR	Split Optimization	Yes	V/C = 0.81
	King & River	AM	V/C = 0.98	SB-L	Split Optimization	Yes	V/C = 0.70
			V/C = 0.70	SB-L	Prot./Perm. Left-Turn for NB & SB	N/A	V/C = 0.65
		PM	V/C = 1.34	SB-L	Split Optimization	No	V/C = 0.90
			V/C = 0.90	SB-L	Prot./Perm. Left-Turn for NB & SB	Yes	V/C = 0.81
	Fairway & Wilson	PM	V/C = 1.04	SB-L	Split Optimization	Yes	V/C = 0.80
2033 Background Conditions	Changes from 2028 Background Conditions carried forward. No additional changes required.						
2043 Background Conditions							
2028 Total Traffic Conditions							
2033 Total Traffic Conditions							
2043 Total Traffic Conditions							

Notes: Prot. = Protected; Perm. = Permitted.

9.2 Wabanaki Drive and Wilson Drive Intersection Signalization Analysis

From the City of Kitchener Vision Zero Strategy, 2022 Update, dated March 23, 2023, the Wabanaki Drive and Wilson Drive intersection was identified for signalization in 2023/2024. Through consultation with City staff signalization was recommended as the intersection was identified in the Vision Zero Strategy as a high-risk location with a history of collisions and lack pedestrian and cycling crossing facilities. Implementation of traffic signals and AT crossing facilities at the intersection are expected to result in a reduction in conflicts by providing designated time and clear guidance on when each user can move through the intersection, thus reducing the expected number of collisions.

While changes to the lane configuration at the intersection are possible through signalization, no detailed designs of the upgraded intersection were made available. Thus, for the purposes of this report the intersection lane configuration was assumed to remain unchanged upon signalization.

Traffic capacity analysis was completed for the signalized intersection of Wabanaki Drive and Wilson Drive using the 2043 total traffic volumes. Results from the traffic analysis are summarized in **Table 9:2**, while Synchro and SimTraffic output reports are provided in **Appendix K**. Synchro 11 signal optimization was used to approximate the operations at the signalized intersection as the exact signal timing was unknown.

After signalization the intersection is expected to operate well with an overall intersection LOS A during the AM and PM peak hours. Individual movements are expected to operate at LOS B or better and exhibit significant reserve capacity with the highest reported V/C being 0.67.

[This section intentionally left blank.]

Table 9:2: Traffic Capacity Analysis – Intersection Signalization at Wabanaki Drive and Wilson Drive – 2043 Total Traffic Conditions

Intersection	Approach - Movement	Storage Length (m)	AM Peak				PM Peak			
			LOS	V/C	Delay (s)	Queue (m)	LOS	V/C	Delay (s)	Queue (m)
Wilson Ave & Wabanaki Dr	**Intersection**	**-**	**A**	**-**	**7.7**	**-**	**A**	**-**	**9.4**	**-**
	EB - L	-	A	0.43	9.5	37	B	0.64	14.6	51
	EB - TR*	-	A	0.48	8.9	37	A	0.43	8.9	34
	WB - LT	-	A	0.17	6.3	18	A	0.21	7.1	20
	WB - R*	45	A	0.03	0.8	3	A	0.01	0.0	4
	NB - LTR	-	B	0.03	10.8	9	B	0.20	11.6	17
	SB - LT	-	B	0.08	12.2	17	B	0.03	12.8	10
	SB - R	-	A	0.50	5.2	4	A	0.67	6.6	0

9.3 Active Transportation Network

9.3.1 Fairway Road Pedestrian Crossover (PXO)

A new crossing location of Fairway Road was requested to be investigated for potential future implementation for pedestrians going to and from Hidden Valley. As such a pedestrian crossover (PXO) warrant, was performed for a potential PXO at the Fairway Road at Wabanaki Drive intersection. The methodology for a PXO warrant is outlined in the Ministry of Transportation Ontario (MTO) Ontario Traffic Manual (OTM) Book 15, Pedestrian Crossing Treatments. The following steps were performed to determine the eligibility of a PXO at the Fairway Road and Wabanaki Drive intersection:

- Identify whether the site is a candidate for pedestrian crossing control using the preliminary assessment decision support tool.
- If the site is identified as a candidate for pedestrian crossing control, attributes of the crossing roadway (4/8-hour vehicular volume, posted speed, number of lanes on Fairway Road) are identified to select the appropriate crossing treatment using the pedestrian crossover selection matrix.

Figure 2: Decision Support Tool – Preliminary Assessment from OTM Book 15 is used to identify whether the site is a candidate for pedestrian crossing control. Steps from this process are illustrated in **Figure 9:1** and are discussed below.

- Step 1: With no existing pedestrian crossing at the site, minimal pedestrian crossings of Fairway Road were reported within the TMC data recorded as part of the study.
- Step 2: While the 4/8-hour vehicle volumes on Fairway Road are met the requirements the 4/8-hour pedestrian volumes are not.
- Step 3: Due to the lack of recorded pedestrian movements across Fairway Road at Wabanaki Drive one could argue for or against the fact that the site lies along pedestrian desire lines. For the purposes of this review the site was identified as lying along pedestrian desire lines for future residents of the Hidden Valley development wishing to walk to the Fairview Park Mall.
- Step 4: The proposed location of the Fairway Road PXO at Wabanaki Drive is less than 200 m from the Fairway Road and Fairview Park Mall / Cineplex signalized access.
- As a result, the site is not considered a candidate for pedestrian crossing control.

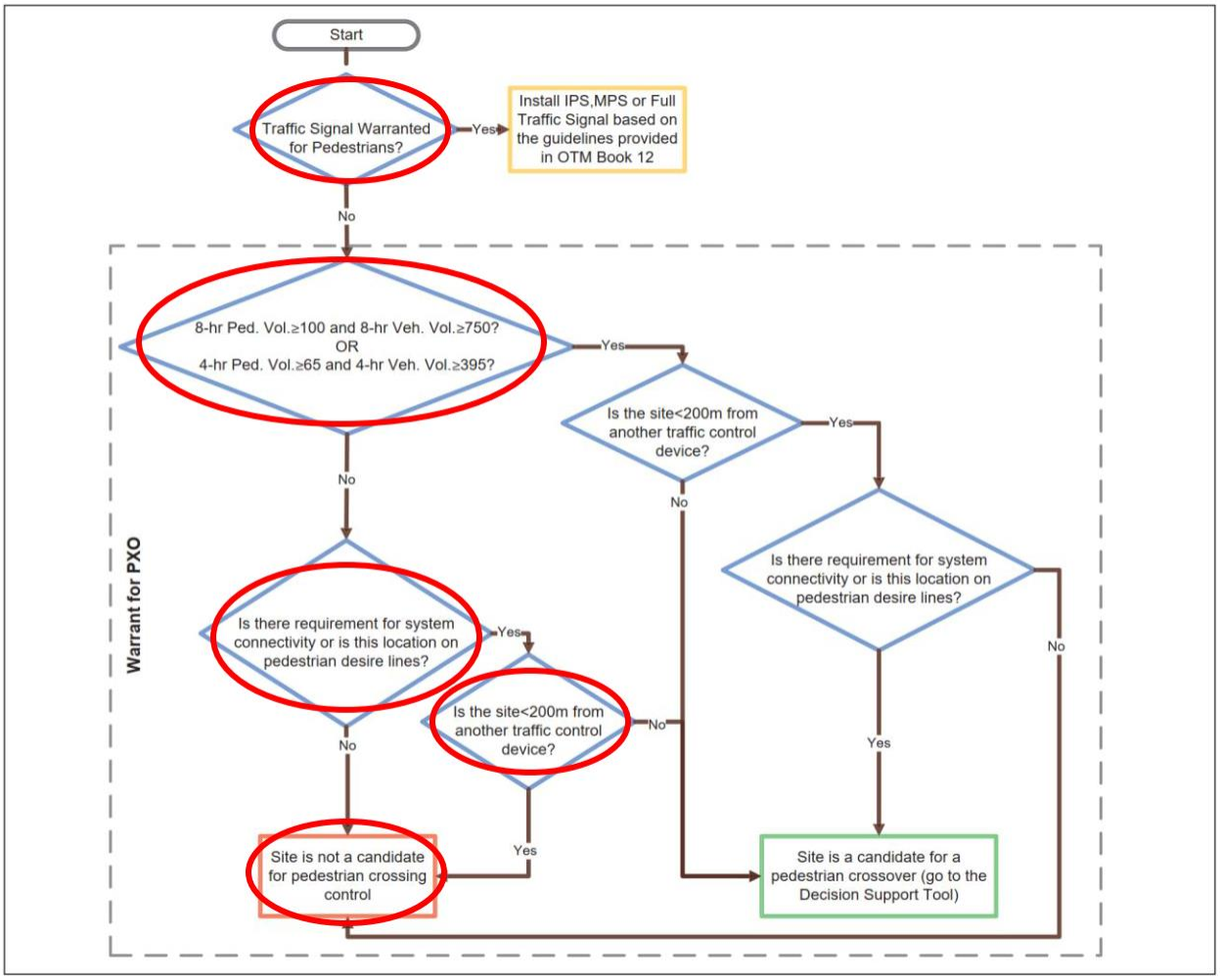

Figure 9:1: MTO OTM Book 15, Figure 2, Decision Support Tool – Preliminary Assessment

While the location was identified as not being a candidate for pedestrian crossing control, the crossing treatment selection was completed to determine the recommended treatment should the preliminary assessment be overruled. Table 7: Pedestrian Crossover Selection Matrix from OTM Book 15 is used to select the appropriate PXO treatment based on the crossing roadway details.

Attributes of Fairway Road at Wabanaki Drive are identified below:

- 2023 8-hour Volume: 14,420 vehicles;
- Posted Speed: 60 km/h, and
- Number of Lanes: 5.

Due to the high volumes on Fairway Road, the final row within the table was selected (i.e., 8-hour volume between 7,500 and 17,500 vehicles, and a posted speed limit of 60 km/h) as shown in **Figure 9**:**2**. Based on the 8-hour volume and posted speed, installation of a PXO is only justified for roadways with a cross-section

of one or two-lanes. Additionally, pedestrian crossovers are not permitted for roadways with a cross-section of more than 4 lanes under any circumstances. As a result, installation of a pedestrian crossover on Fairway Road at Wabanaki Drive is not justified.

Two-way Vehicular Volume			Posted Speed Limit (km/h	Total Number of Lanes for the Roadway Cross Section[1]			
Time Period	Lower Bound	Upper Bound		1 or 2 Lanes	3 lanes	4 lanes w/raised refuge	4 lanes w/o raised refuge
8 Hour	750	2,250	≤50	Level 2 Type D	Level 2 Type C[3]	Level 2 Type D[2]	Level 2 Type B
4 Hour	395	1,185					
8 Hour	750	2,250	60	Level 2 Type C	Level 2 Type B	Level 2 Type C[2]	Level 2 Type B
4 Hour	395	1,185					
8 Hour	2,250	4,500	≤50	Level 2 Type D	Level 2 Type B	Level 2 Type D[2]	Level 2 Type B
4 Hour	1,185	2,370					
8 Hour	2,250	4,500	60	Level 2 Type C	Level 2 Type B	Level 2 Type C[2]	Level 2 Type B
4 Hour	1,185	2,370					
8 Hour	4,500	6,000	≤50	Level 2 Type C	Level 2 Type B	Level 2 Type C[2]	Level 2 Type B
4 Hour	2,370	3,155					
8 Hour	4,500	6,000	60	Level 2 Type B	Level 2 Type B	Level 2 Type C[2]	Level 2 Type B
4 Hour	2,370	3,155					
8 Hour	6,000	7,500	≤50	Level 2 Type B	Level 2 Type B	Level 2 Type C[2]	Level 1 Type A
4 Hour	3,155	3,950					
8 Hour	6,000	7,500	60	Level 2 Type B	Level 2 Type B		
4 Hour	3,155	3,950					
8 Hour	7,500	17,500	≤50	Level 2 Type B	Level 2 Type B		
4 Hour	3,950	9,215					
8 Hour	7,500	17,500	60	Level 2 Type B			
4 Hour	3,950	9,215					

Figure 9:2: MTO OTM Book 15, Table 7, Pedestrian Crossover Selection Matrix

Based on the PXO warrant review, installation of a pedestrian crossover on Fairway Road at Wabanaki Drive or its environs is ***not justified.***

9.3.2 Pedestrian Network

A significant focus for this study was to provide improved and safe active transportation connections. Recommendations were made for the pedestrian network within the Hidden Valley area in order to connect it with the overall pedestrian facilities currently present. **Figure 9:3** shows the existing pedestrian facilities,

proposed pedestrian facilities as detailed within the City of Kitchener's Cycling and Trails Master Plan (CTMP), and future network recommendations to ensure a well-connected pedestrian network within the Hidden Valley area.

It is recommended to provide a sidewalk on Hidden Valley Crescent to connect it with the existing sidewalk which currently seems isolated. Furthermore, a MUP is proposed on part of Hidden Valley Road and part of Wabanaki Drive to connect into the existing pedestrian facilities outside the Hidden Valley area. It should be noted that no pedestrian or other active transportation facilities were recommended on the section of Hidden Valley Road to be designated a heritage corridor.

It is also proposed to fill the gap in the pedestrian network on Wabanaki Drive and provide a sidewalk connecting to Manitou Drive and provide a MUP on the future Goodrich Drive extension. This will ensure a comprehensive and continuous pedestrian network and will encourage pedestrian activity within the area.

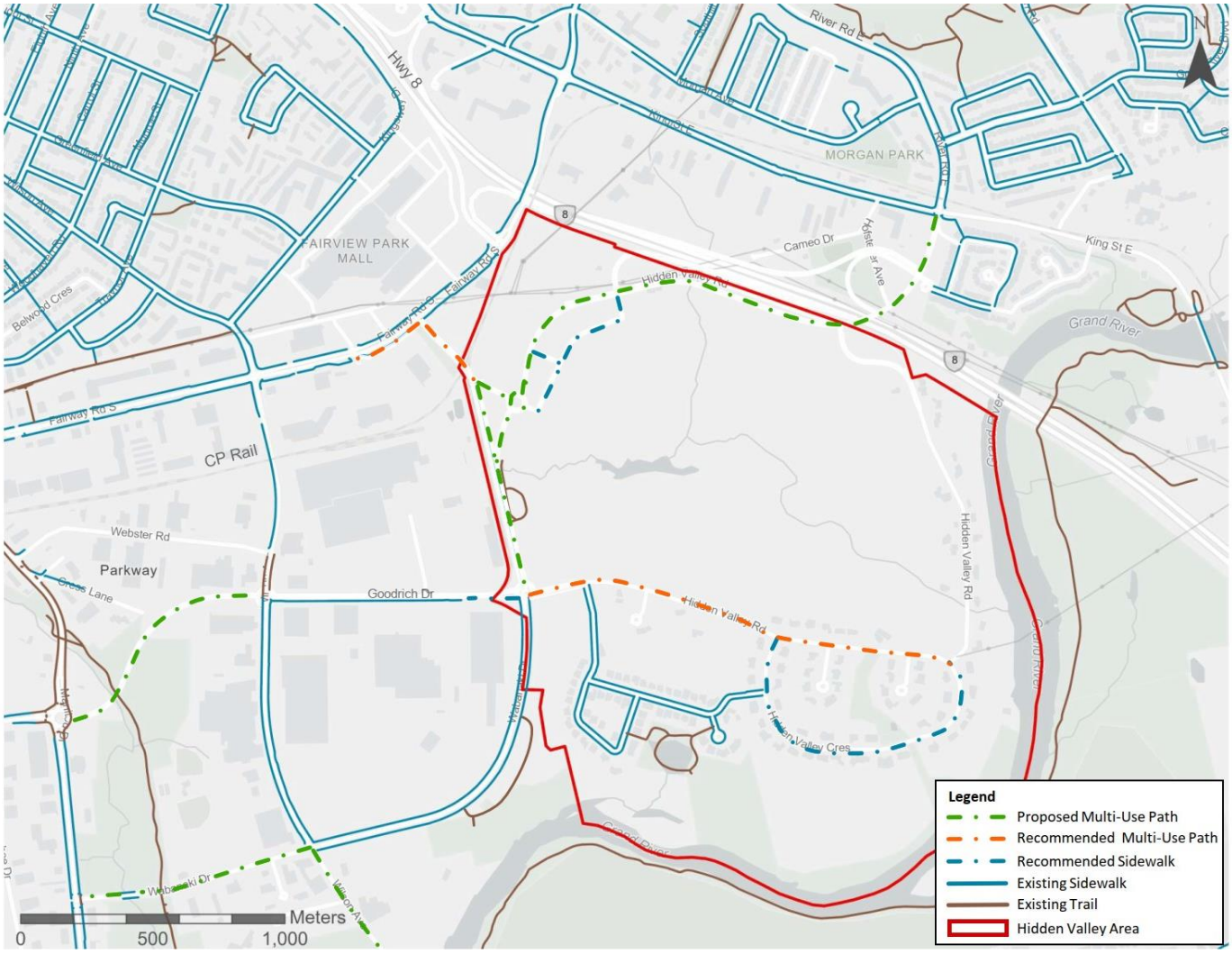

Figure 9:3 Recommended Future Pedestrian Network

9.3.3 Cycling Network

As previously identified, cycling facilities within the Hidden Valley area are severely limited and the ones present seem isolated from the overall cycling network. Therefore, to fill in the gaps in the cycling network, recommendations were made to encourage the use of sustainable modes of transportation within the area. **Figure 9:4**, provides future network recommendations building on the existing network, as well as the proposed upgrades as detailed within the CTMP. Recommendations aligned with the CTMP, while proposing new facility connections in Hidden Valley supporting the vision of safe, walkable and bikeable neighborhoods.

It proposes MUPs on Hidden Valley Road, Goodrich Drive, Wilson Avenue, and Wabanaki Drive as they would seamlessly connect into the existing cycling facilities present within the area. Furthermore, signed bike routes are proposed on Hidden Valley Crescent, and River Birch Street to connect the local streets with the proposed MUP network. As per the City's CTMP neighborhood bikeways are proposed on Morgan Avenue and Morrison Road which have also been shown in **Figure 9:4**, to provide an understanding of the overall future cycling network within the area. A grade separated crossing is also proposed on the future River Road extension that will connect the active transportation facilities in the Hidden Valley area to the neighborhoods in the north.

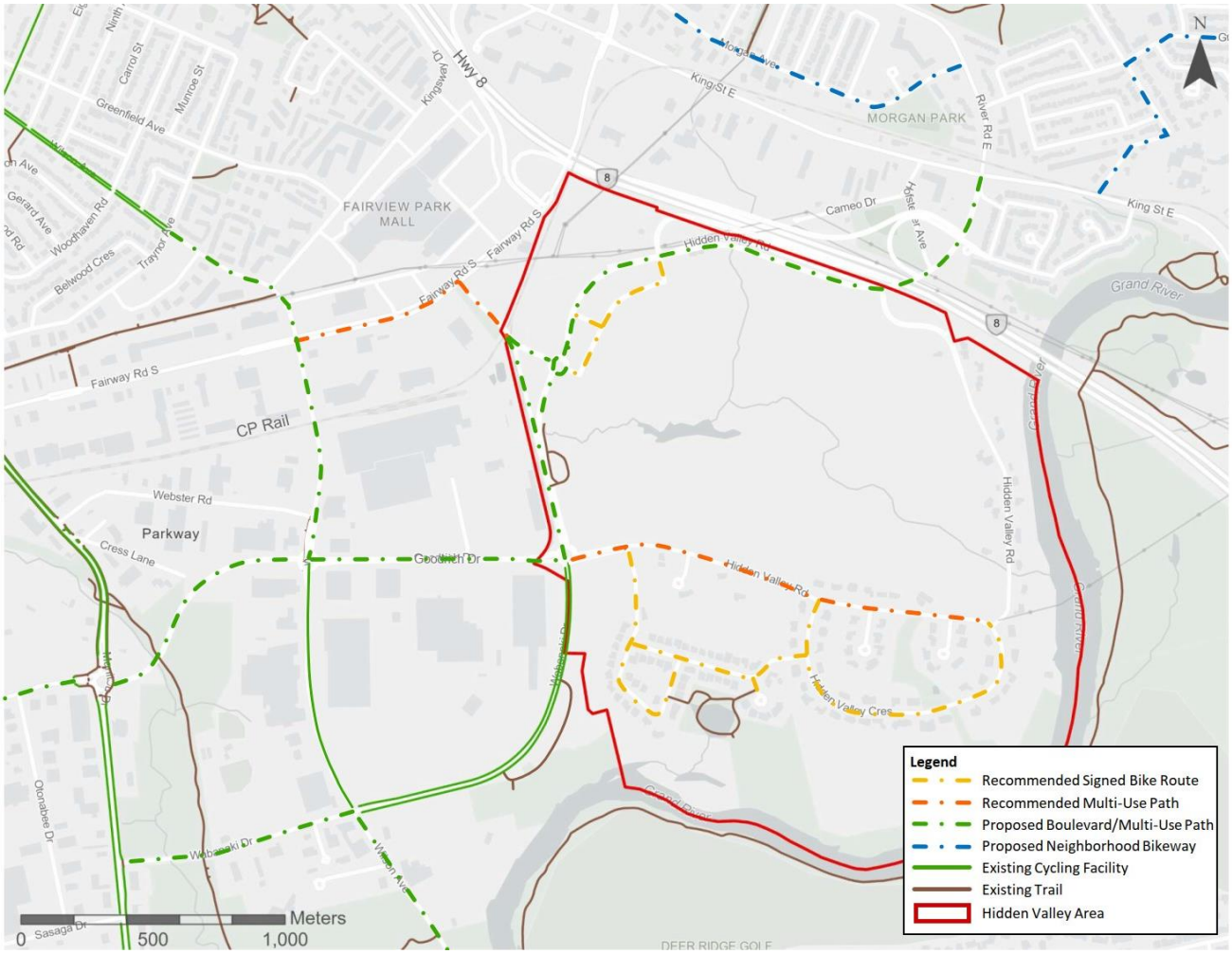

Figure 9:4 Recommended Future Cycling Network

9.3.4 Transit Network

As GRT does not operate any transit service within the Hidden Valley area, a review of the transit routes in the vicinity of the study boundary was undertaken to potentially propose a re-routing of a bus route that is feasible and can pass through the Hidden Valley area.

Two bus routes which are Route 10 and Route 27 are proposed to be re-routed to pass through the Hidden Valley area and provide transit service within the study boundary. Route 10 travels between Fairway Station and Conestoga College making several stops along the way and providing a connection to the ION Light Rail at Fairway Station. Route 10 operates 7 days a week with service on weekdays beginning at 5:30 AM and ending at 12:20 PM. During the week Route 10 operates with 15-minute headways between 6:45 AM to 6:00 PM and 30-minute headways outside of these times. On Saturdays it operates between 6:30 AM to 12:20 AM with 30-minute headways, and on Sundays it operates between 8:00 AM to 12:00 AM with 30-minute headways.

Furthermore, Route 27 travels between Fairway Station and the bus stop on Quinte/Morrison also making several stops along the way and providing a connection to the ION Light Rail at Fairway Station. It operates with 30-minute headways between 6:00 AM and 9:25 PM on weekdays, 7:00 AM to 9:25 PM on Saturdays and 9:30 AM to 9:25 PM on Sundays. **Figure 9:5, Figure 9:6, Figure 9:7,** and **Figure 9:8** show the recommended inbound and outbound routes for Route 10 and Route 27 respectively.

Re-routing the above-mentioned bus routes can ensure transit connections are provided to the Hidden Valley area and provide the community with alternative modes of transportation. It is noted however, that the heritage status of Hidden Valley Road discussed in **Section 5.2** may limit potential transit options that maybe feasible for Hidden Valley.

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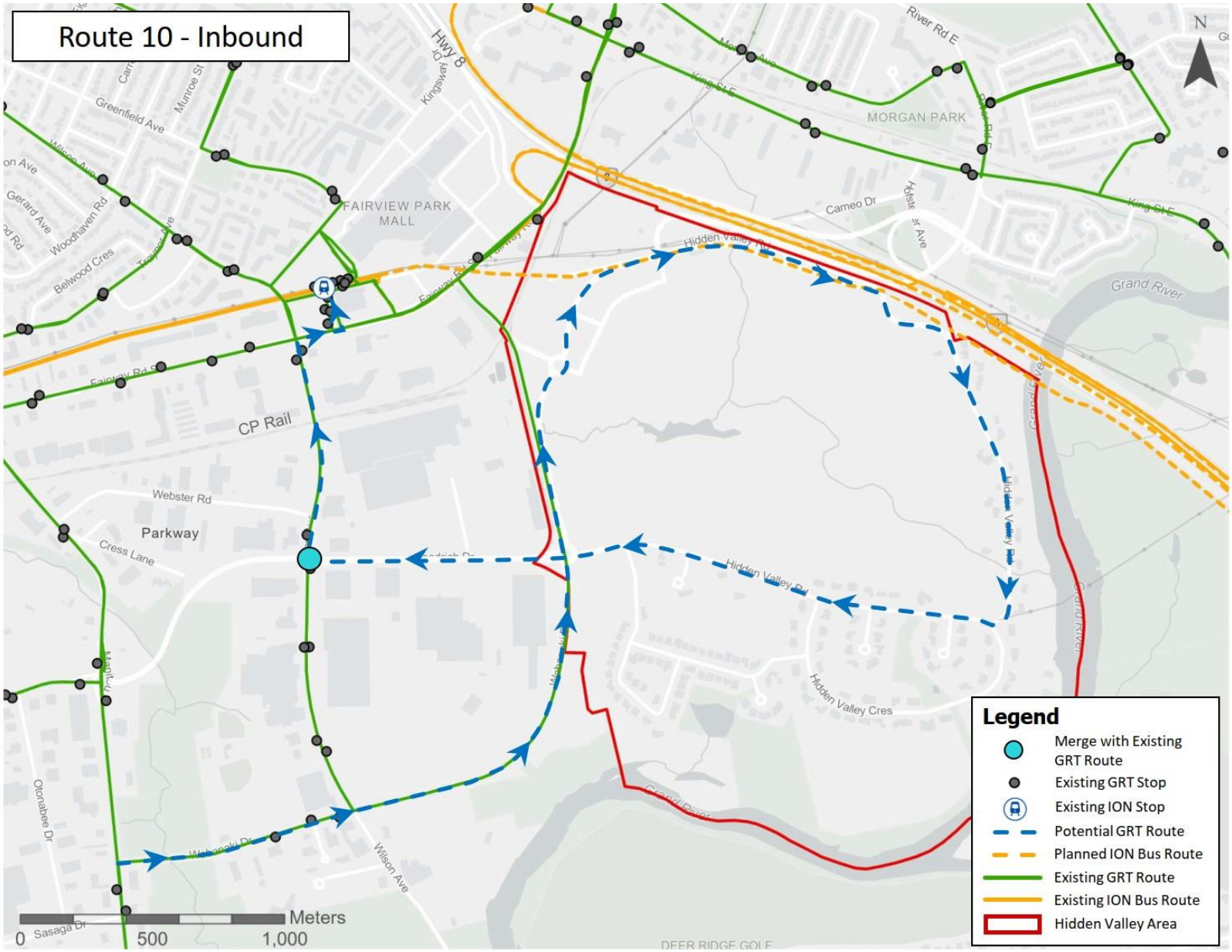

Figure 9:5 Potential Route for GRT Bus Route 10 - Inbound

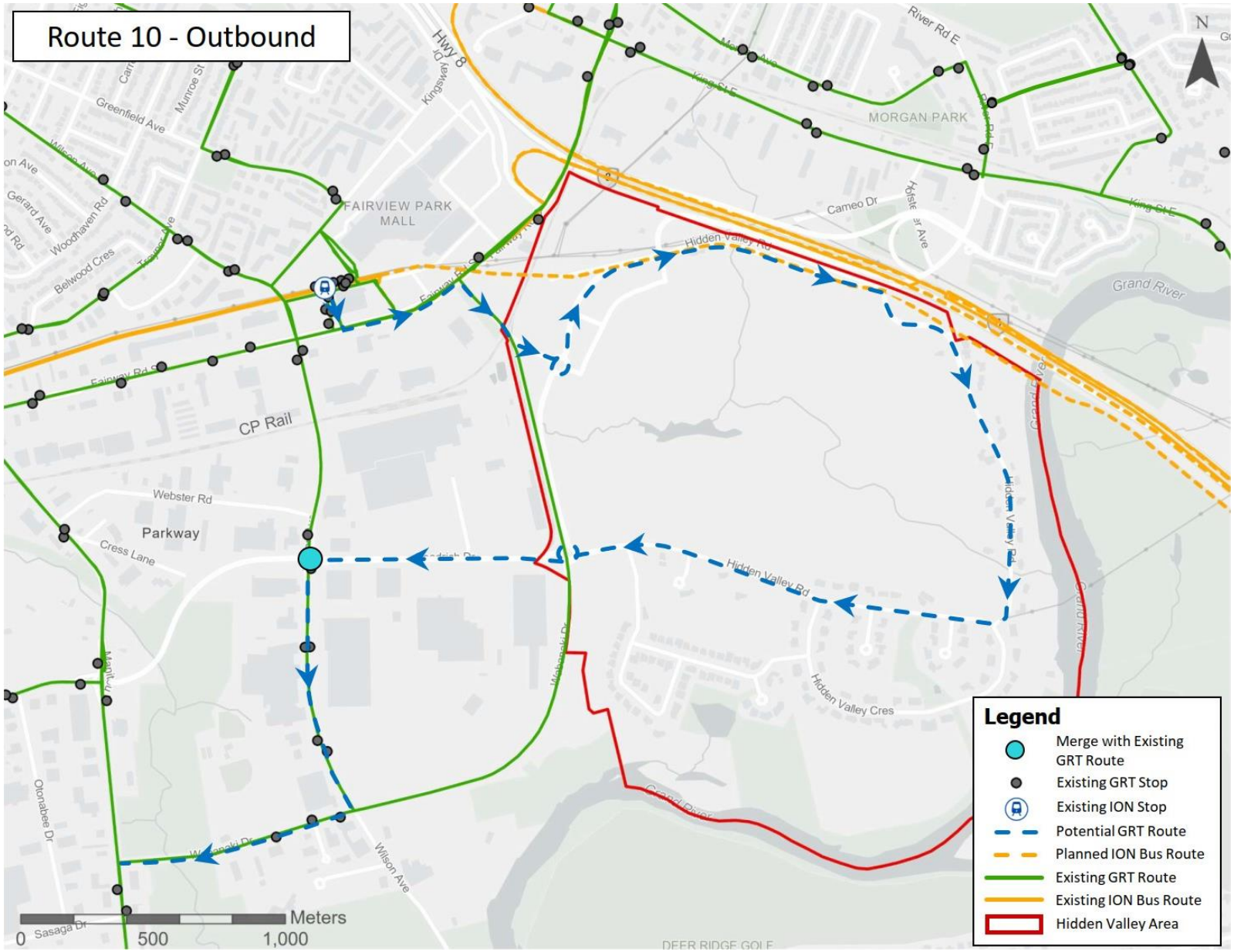

Figure 9:6 Potential Route for GRT Bus Route 10 - Outbound

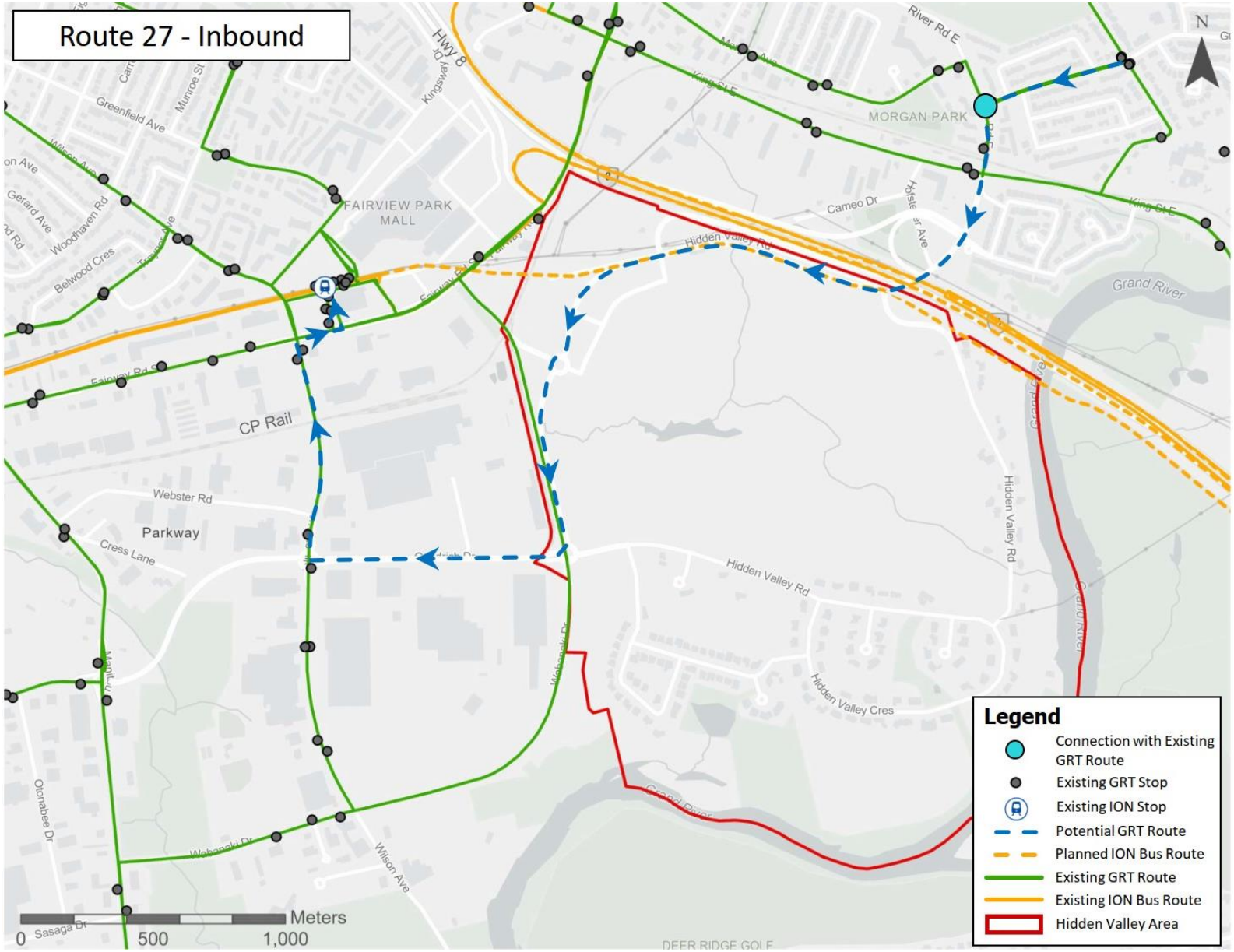

Figure 9:7 Potential Route for GRT Bus Route 27 - Inbound

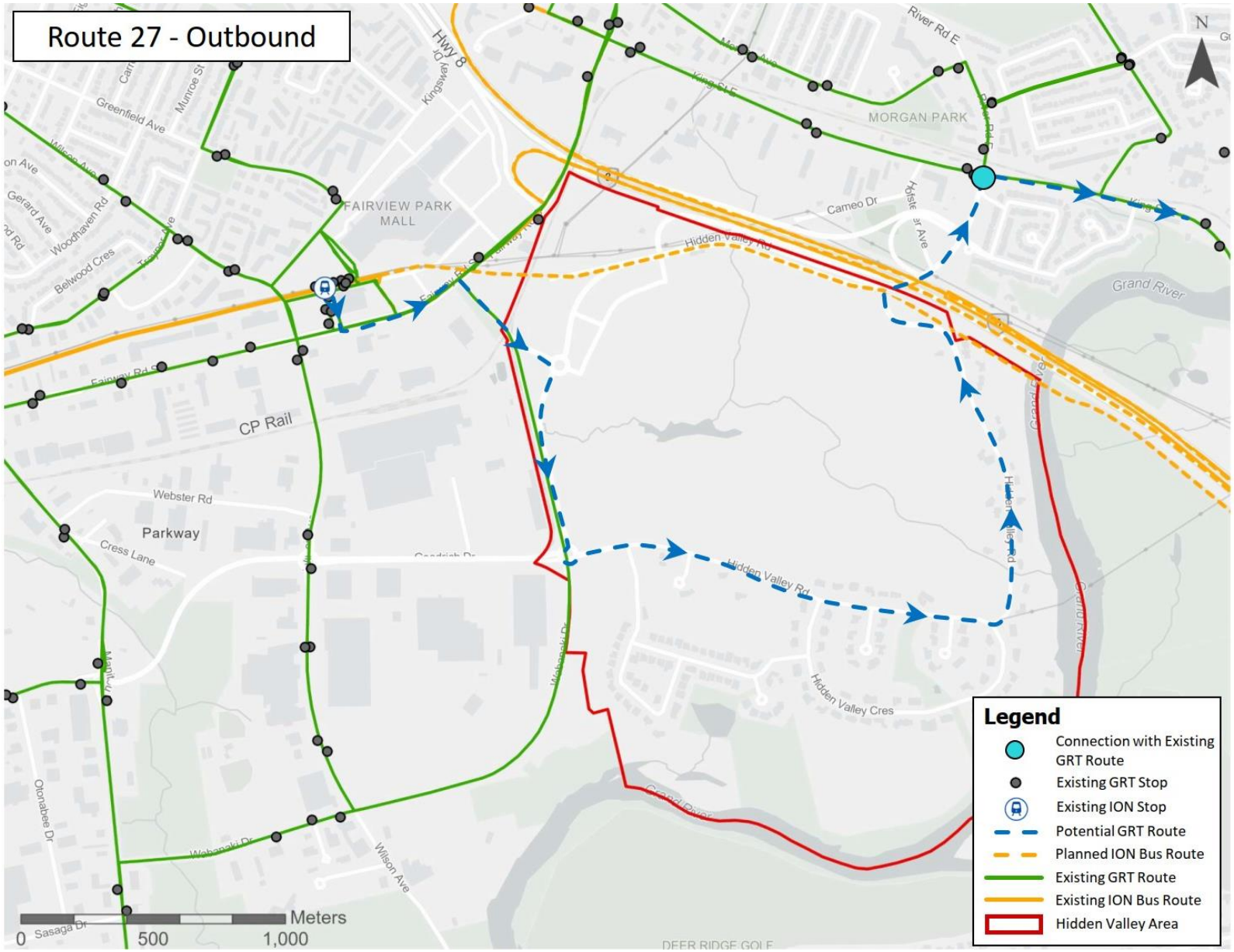

Figure 9:8 Potential Route for GRT Bus Route 27 - Outbound

10.0 RECOMMENDATIONS AND CONCLUSIONS

Findings from the Hidden Valley Traffic Study Existing Conditions Report are summarized in the subsequent sections:

10.1 Transportation Summary

- The proposed development lands are located within the Hidden Valley community of the City of Kitchener, bounded by Wabanaki Drive on the west, the Canadian Pacific Railway (CPR) tracks on the northwest, Highway 8 on the north, and the Grand River on the east and south.
- The City of Kitchener envisions the area developing with a variety of uses including, high-rise, mid-rise, and low-rise residential units, commercial uses, a business park, as well as a mixed-use section.
- No cycling facilities are provided within the development area.
- No bicycle connectivity to/from the designated cycling facilities on Wabanaki Drive or Wilson Avenue.
- Access to numerous GRT bus routes, and the ION Rail Line, are available at the Fairview Park Mall west of the proposed development area. GRT bus routes operate with typical headways between 15 and 30 minutes, while the ION rail line operates with typical headways of 15 minutes.
- Pedestrian facilities are located along the western limit of the development area, Wabanaki Drive, with weak pedestrian connectivity to Hidden Valley Road and Hidden Valley Crescent, with significant gaps to existing sidewalk infrastructure within the Hidden Valley area.
- Detailed by the Region of Waterloo, a 0% and 1.0% growth rate will be used to calculate future traffic volumes along the King Street and Fairway Road corridors, respectively.
- Existing 2023 capacity analysis for study area intersections indicates that intersections operate well. A few specific movements operate near capacity (one location over capacity), or with high average delay, during the PM peak hour.
- Significant upgrades to the surrounding roadway network are planned and includes construction of the River Road extension, a new highway overpass, new Highway 8 on and off-ramps, two (2) roundabouts, and more.
- Due to the changes to the future road network the 2023 existing traffic volumes were redistributed throughout the network. Future background traffic volumes were then obtained by applying the growth rate to the redistributed 2023 traffic volumes, with the addition of the background development traffic.
- Future total traffic volumes were obtained through the summation of the future background traffic volumes and the site generated traffic.
- Based on the trip generation calculations, upon full build-out of the Hidden Valley area the development is expected to generate 1,251 person trips during the AM peak hour (471 inbound and 780 outbound), and 2,205 person trips during the PM peak hour (1,198 inbound and 1,007 outbound).

- Mode share targets were obtained from the Region of Waterloo Official Plan, June 18, 2015. Mode shares for the 2023 and 2028 were calculated through linear interpolation while the 2033 and 2043 mode shares were assumed to equal the 2031 and 2041 mode share targets, respectively.
- Based on the trip generation calculations, upon full build-out of the Hidden Valley area the development is expected to generate:
    - 108 internal trips during the AM peak hour (54 inbound and 54 outbound), 772 internal trips during the PM peak hour (386 inbound and 386 outbound);
    - 255 active transportation (walking, cycling, and transit) trips during the AM peak hour (93 inbound and 162 outbound), and 318 active transportation trips during the PM peak hour (180 inbound and 138 outbound);
    - 0 pass-by trips during the AM peak hour, and 170 pass-by trips during the PM peak hour (96 inbound and 74 outbound, and
    - 746 new external vehicle trips during the AM peak hour (272 inbound and 474 outbound), and 767 new external vehicle trips during the PM peak hour (435 inbound and 332 outbound).
- Trips were distributed throughout the network based on the expected trip generators and were subsequently assigned to roadways based on existing traffic patterns and turning movement count data.
- For future capacity analysis scenarios optimization of signal times was used when movements were found to operate at LOS F or experience a V/C ratio of 0.85 or greater.
- Based on the Synchro capacity analysis for signalized and unsignalized intersections within the study area intersections are expected to operate well with little to no mitigation proposed.
    - During the AM peak hour, intersections are expected operate at LOS B or better. Individual movements operate at LOS E or better and exhibit reserve capacity with the highest reported V/C being 0.74.
    - During the PM peak hour, intersections are expected operate at LOS D or better. Individual movements operate at LOS E or better and exhibit some reserve capacity with the highest reported V/C being 0.84.
- Based on the Arcady capacity analysis for the new Wabanaki Drive and River Road extension roundabout, and Wabanaki Drive and Goodrich Drive/Hidden Valley Drive roundabout, both roundabouts are expected to operate well through 2043. All movements are expected to operate at LOS A with delays of less than 3.0 seconds, and queueing of less than 2 vehicles (20 m).
- Upon signalization, the intersection of Wabanaki Drive and Wilson Drive is expected to operate well through 2043 with all movements operating at LOS B or better and exhibit significant reserve capacity with the highest reported V/C being 0.67.
- Under the future capacity analysis scenarios storage length deficiencies were identified for the following intersection auxiliary lanes:

- King Street and River Road eastbound left-turn, westbound left-turn, and southbound left-turn;
- Fairway Road and Highway 8 southbound ramp terminal eastbound left-turn and eastbound right-turn;
- Fairway Road and Fairview Park Mall / Cineplex access eastbound left-turn and southbound left-turn, and
- Fairway Road and Wilson Avenue westbound right-turn and southbound left-turn.

- The proposed PXO crossing of Fairway Road at Wabanaki Drive is not considered a candidate for pedestrian crossing control due to the proximity to the pedestrian crossing present at the Fairway Road and Fairview Park Mall / Cineplex access. Additionally, no PXO type was deemed acceptable for a roadway with a 5-lane cross-section. As a result, installation of a pedestrian crossover on Fairway Road at Wabanaki Drive is ***not*** justified.

10.2 Recommendations

As this report was intended to confirm the planned development of the Hidden Valley area is feasible, recommendations presented as part of this report should be confirmed through future Traffic Impact Studies based on submitted development proposals and planned construction timelines.

Intersection Signal Timing Adjustments

To maintain adequate operations of signalized intersections under the future background and total traffic scenarios changes to existing signal timings were identified and are presented below. Signal timing adjustments were identified for the 2028 background conditions and were carried through all future background and total traffic scenarios. Signal timing adjustments presented as part of this study are only intended to identify the need for future changes as the study area is developed further.

- Signal timing optimization of the Fairway Road and King Street intersection;
- Signal timing optimization of the Fairway Road and Wilson Avenue intersection, and
- Implementation of a northbound and southbound protected/permitted left-turn phase and signal timing optimization of the new King Street and River Road intersection.

Auxiliary Lane Storage Length

Upon review of all analysis scenarios, storage length deficiencies were noted at the following intersection auxiliary lanes:

- King Street and River Road eastbound left-turn, westbound left-turn, and southbound left-turn;
- Fairway Road and Highway 8 southbound ramp terminal eastbound left-turn and eastbound right-turn;
- Fairway Road and Fairview Park Mall / Cineplex access eastbound left-turn and southbound left-turn, and
- Fairway Road and Wilson Avenue westbound right-turn and southbound left-turn.

Overall, increases to the storage length within the study area would be difficult to implement due to the built-up nature of the area. However, with future development of the King Street and River Road intersection confirmed, along with the availability of a large paved shoulder, an increase to the westbound left-turn storage length, from the existing 50 m to 75 m, is considered appropriate. The potential financial and infrastructural impact required for improvements at other location with noted storage length deficiencies are considered too great and are not recommended.

Active Transportation Facility Upgrades

Egis has recommended upgrades to the existing pedestrian and cycling networks within the Hidden Valley study area, as well as potential expansion to existing transit routes to provide access to and from Hidden Valley. Recommended upgrades to AT facilities and services are presented below.

Pedestrian Facility Upgrades

- Construction of a MUP on Hidden Valley Road, between Wabanaki Drive and the Hidden Valley Crescent east junction, providing connection to the existing pedestrian facilities outside the Hidden Valley area;
- Provide a sidewalk on Hidden Valley Crescent, between the Hidden Valley road west and east junctions, providing connection to the existing sidewalks on River Birch Street and the proposed MUP on Hidden Valley Road;
- Construction of a sidewalk on Wabanaki Drive, between Wilson Avenue and Manitou Drive, to fill in the existing network gap;
- Construction of a MUP on Wilson Avenue, south of Wabanaki Drive, to provide connection to the trail system at the southern terminus of Wilson Avenue, and
- Provide a MUP on the future Goodrich Drive extension, between Wilson Avenue and Manitou Drive, to provide greater connectivity to and from Manitou Drive.

Cycling Facility Upgrades

- Construction of a MUP on Hidden Valley Road, between Wabanaki Drive and the Hidden Valley Crescent east junction, providing connection to the existing cycling facilities outside the Hidden Valley area;
- Provide a MUP on Wabanaki Drive, between Hidden Valley Road and Fairway Road, to provide greater connectivity to Fairway Road and the Fairview Park Mall;
- Construction of a MUP on Wilson Avenue, between Goodrich Drive and Traynor Avenue, to provide connection to the existing cycling facilities north of Fairway Road;
- Construction of a MUP on Fairway Road, between Wabanaki Drive and Wilson Avenue, to provide connection between the proposed MUPs on both roadways;
- Provide a MUP on Goodrich Drive, between Wabanaki Drive and Manitou Drive, to provide greater connectivity to and from Manitou Drive, and
- Provide signed cycle routes on the entirety of Hidden Valley Crescent and River Birch Street to connect the local streets with the proposed MUP network.

Transit Service Upgrades

- Rerouting of Route 10 to Fairway Station (inbound) onto River Road extension and Hidden Valley Drive;
- Rerouting of Route 10 to Conestoga College (outbound) onto River Road extension and Hidden Valley Drive;
- Rerouting of Route 27 to Fairway Station (inbound) onto River Road extension, Wabanaki Drive, and Wilson Avenue, and
- Rerouting of Route 27 to Quinte/Morrison (outbound) onto Wabanaki Drive, Hidden Valley Road, and River Road extension.

10.3 Conclusions

Capacity analysis confirms that planned land uses and potential development densities conceived by the City and included in this study can be supported on the future road network for the assessed 2028, 2033, and 2043 horizons with the incorporation of study recommendations

APPENDIX A – COMMENT RESPONSE MATRIX

Comment #	Comment	Response
Existing Conditions Report - August 28, 2023		
Reviewer: Carrie Musselman and Richard Kelly-Ruetz, City of Kitchener **Received: November 29, 2023**		
1	Page: 5 Region not City?	Acknowledged.
2	Page: 5 These Community Plans will be formally repealed and replaced via amendment to the City's Official Plan (OP).	Acknowledged. Identified that the existing Residential Hidden Valley Community Plan and the Industrial Hidden Valley Community Plan will be replaced via amendment to the City's Official Plan
3	Page: 5 awkward wording... the remainder of the paragraph should be broken apart and/or put into bullet points	Acknowledged, final paragraph of Section 1.0 has been updated to list tasks following the approval of this Existing Conditions Report in bullet point form.
4	Page: 5 change to "area"	Acknowledged.
5	Page: 5 Add "proposed"	Acknowledged.
6	Page: 5 change to "realigned and construction is now underway". End of sentence. Start new sentence with - "Existing land use plans…	Acknowledged.
7	Page: 5 Do not use "secondary plan" in this document. We may not for sure do a secondary plan here - we may do a more simple update to our Official Plan instead As such, delete all reference to "Secondary Plan" in this document For this sentence, replace with "new land uses"	Acknowledged.
8	Page: 6 Region of Waterloo not City of Waterloo	Acknowledged.
9	Page: 6 Does the MTO have any documents that we should reference / include?	While MTO guidelines for TIS submissions were followed, no MTO planning documents were reviewed as part of this project.
10	Page: 6 "assess the"	Acknowledged.
11	Page: 6 "concept" - remove plural since only 1 concept	Acknowledged.
12	Page: 7 is something missing?	This bullet was included in error and has been removed from the updated report.
13	Page: 7 We should also note the population forecast from the Region of Waterloo Official Plan and their 2022 Population and Households Estimates for Waterloo Region https://www.regionofwaterloo.ca/en/resources/Regional-Official-Plan/Chapter_2_Consolidated_New_ROP_2015-access.pdf https://www.regionofwaterloo.ca/en/regional-government/resources/Appendix-of-PDL-CPL-23-003-Year_End_2022_Population_Bulletin.pdf	Acknowledged.
14	Page: 7 Should a key point not be the Region's 2031 and 2041 modal share objectives identified in the 2018 RTMP	Acknowledged, Waterloo Region's modal share objectives were identified as part of the 2018 RTMP review.
15	Page: 7 Is this of any value? i.e., listing 2010 data for persons working in downtown kitchener	Acknowledged and removed from report.
16	Page: 7 correct	Acknowledged.
17	Page: 7 "ION"	Acknowledged.
18	Page: 7 ION	Acknowledged.
19	Page: 7 "City's"	Acknowledged.
20	Page: 7 Clarify what "AT" is for public audience	Acknowledged.
21	Page: 7 "Fairview" not Fairway	Acknowledged.
22	Page: 7 change to "study area has"	Acknkowledged, updated to "Hidden Valley area", to maintain consistency that study area includes all roadways/intersections identified for analysis.
23	Page: 7 Delete, not needed.	Acknowledged.
24	Page: 7 change to study area and surrounding area. Keep terminology consistent in document.	Acknowledged.
25	Page: 8 "Study Area and Surrounding Lands"	Acknowledged.
26	Page: 8 Study area label? Instead of "site"	Acknowledged, map has been updated to have legend outlining the Hidden Valley area and study area.
27	Page: 8 "zones"	Acknowledged.
28	Page: 8 What is the "development area"? Is it the same as "study area"? If not, show on a map.	Acknowledged, "development area" has been changed to "Hidden Valley area" in updated report.

Comment #	Comment	Response
Existing Conditions Report - August 28, 2023		
Reviewer: Carrie Musselman and Richard Kelly-Ruetz, City of Kitchener **Received: November 29, 2023**		
29	Page: 9 what is the point of this? Delete sentence.	Acknowledged.
30	Page: 9 sections of what? this section isn't very clear	Acknowledged, "sections" has been changed to "land parcels" in the updated report.
31	Page: 9 existing lands to be developed? ... I think this is 'existing land' as it's noted they contain 134 single detached homes Agreed. Change this to "study area".	Acknowledged, "existing land" has been changed to "Hidden Valley area" in the updated report.
32	Page: 9 correct	Acknowledged.
33	Page: 9 Change to "approximately 130"	Acknowledged.
34	Page: 9 Change to "The City of Kitchener's 2019 Land Use Master Plan envisions the area developing"....	Acknowledged.
35	Page: 9 Remove comma	Acknowledged.
36	Page: 9 Remove any reference to density / number of units in text and in Table 2-1. We will keep this document (and subsequent documents) high-level.	Acknowledged.
37	Page: 9 Remove these 4 columns. Density, Units, GFA m2, GFA f2.	Acknowledged.
38	Page: 11 King Street is not within the study area shown on Figure 2-1.	Acknowledged, Figure 2-1 has been updated to include King Street within the study area.
39	Page: 11 Doesn't the River Road extension terminate at Manitou Drive? Please confirm.	As per the 'DC_07087_DesignConceptEast1' PDF document, River Road is expected to terminate at the Wabanaki Drive and River Road roundabout, while Wabanaki Drive continues south, terminating at Manitou Drive.
40	Page: 12 can these be put into an appendix?	MP has moved the study area intersection descriptions and figures to an appendix as requested.
41	Page: 12 Figure 2-3 does not correctly show the location of this intersection. Update.	The Existing Conditions Study Area Intersections figure has been updated to correctly depict the location of all 9 study area intersections.
42	Page: 12 The Capacity Analysis in Section 3.2.1.2 has 12 intersections. Why only 8 here?	Analysis of 9 intersections within the study area was confirmed with the City, Region, and MTO. Additional intersections were included within the Synchro and SimTraffic analysis for calibration purposes only. Results for these intersections will be removed from the Existing 2023 Capacity Analysis results table.
43	Page: 13 #5 (Cineplex) is at incorrect location. Update.	The Existing Conditions Study Area Intersections figure has been updated to correctly depict the location of all 9 study area intersections.
44	Page: 13 Why are these 4 shown on legend but not on map?	The legend for the Existing Conditions Study Area Intersections figure has been updated to remove items not shown with in the map.
45	Page: 14 "are"	Acknowledged.
46	Page: 15 Doesn't the aerial photo above show a dedicated left lane?	MP has reviewed the lane and pedestrian configurations for each of the study area intersections and updated the descriptions as required.
47	Page: 16 Doesn't look like they are on both sides. Confirm.	MP has reviewed the lane and pedestrian configurations for each of the study area intersections and updated the descriptions as required.
48	Page: 18 Please confirm. I believe only 3/4 have signalized ped crossings. See 2023 streetview: https://www.google.ca/maps/@43.4217996,-80.4394971,3a,64.8y,109.11h,88.04t/data=!3m6!1e1!3m4!1sM2J2_XljWzY8R9-BCMY89w!2e0!7i16384!8i8192?hl=en&entry=ttu	MP has reviewed the lane and pedestrian configurations for each of the study area intersections and updated the descriptions as required.
49	Page: 21 does this need to be formatted?	Acknowledged.
50	Page: 22 can this be summarized (a chart would be nice) and details put into an appendix?	Discussion of AT facilities on study area roadways has been reformatted as a table and moved into an appendix.
51	Page: 25 Again, can we have a summary with details put into an appendix?	Discussion of transit facilities on study area roadways has been reformatted as a table and moved into an appendix.
52	Page: 26 College	Acknowledged.
53	Page: 26 Conestoga Mall not College	Acknowledged.
54	Page: 27 Is this the (ST) acronym on Table 3-1? If so, clarify.	Acknowledged.
55	Page: 28 Acronyms defined for the table please	Acknowledged, acronyms used within the table have been identified at the bottom of the table.
56	Page: 29 source?	Growth rates were provided by Oriana Aguas from the Region of Waterloo. Report has been updated to append email indicating use of these growth rates.
57	Page: 30 what is this?	HCM referrs to the Highway Capacity Manual and the acronym for this has been identified within the updated report.
58	Page: 30 What does V/C mean? Something about capacity? Introduce acronym.	V/C stands for volume-to-capacity ratio and the acronym was previously identified under Section 3.2.1.1.

Comment #	Comment	Response
Existing Conditions Report - August 28, 2023		
Reviewer: Carrie Musselman and Richard Kelly-Ruetz, City of Kitchener **Received: November 29, 2023**		
59	Page: 31 Why are there more intersections listed here than the list in Section 2.3 / figure 2-3?	Analysis of 9 intersections within the study area was confirmed with the City, Region, and MTO. Additional intersections were included within the Synchro and SimTraffic analysis for calibration purposes only. Results for these intersections will be removed from the Existing 2023 Capacity Analysis results table.
60	Page: 33 what does having an 'above allowable limits' mean? restrictions on land use? noise mitigation required?	MP will consult with the Noise Sub and prepare a response and update the report as required.
61	Page: 33 This whole section on noise seems out of place and needs more context. I'm not sure I follow what is being said. Please revise significantly to better fit into rest of report.	Acknowledged. Noise section has been removed from the report and will be submitted as an appendix to the traffic study.
62	Page: 34 this needs to be located above 4.1 Summary or removed	Acknowledged.
63	Page: 34 Change to "envisions the area developing"	Acknowledged.
64	Page: 34 Delete entirely. Keep all TIS work high level on specific unit counts, as discussed.	Acknowledged.
65	Page: 34 More context is needed on this point, per note above. Seems out of place compared to other "summary" points.	Acknowledged.
66	Page: 34 Reference the River Road Extension... that is the main one.	Acknowledged, mention of the River Road extension has been included in the updated report.
67	Page: 34 ?	This bullet was included in error and has been removed from the updated report.
68	Page: 34 More complete sentence needed.	Acknowledged.

Comment #	Comment	Response
Existing Conditions Report - August 28, 2023		
Reviewer: Darren Kropf, City of Kitchener **Received: October 2, 2023**		
1	Page 7: Section 2.2 Existing road network Wabanaki Drive should be noted as “Major Community Collector”, the report noted city arterial roadway	Acknowledged, roadway classification for Wabanaki Drive has been updated.
2	Page 19: Section 2.4 Existing pedestrian and cycling facilities Wilson Avenue: should read concrete sidewalk, the report notes concrete	Acknowledged, sidewalk has been added to the updated report.
3	Page 19: Section 2.4 Existing pedestrian and cycling facilities Wilson Avenue: should read bi-directional multi-use pathway on the east side, the report notes cycle track	Acknowledged, reference to a cycle track has been removed and replaced with multi-use path in the updated report.
4	Page 19: Section 2.4 Existing pedestrian and cycling facilities Additional roadways to included: River Birch Court, Paddock Court, Canters Close	Acknowledged. Discussion of AT facilities on River Birch Court, Paddock Court, and Canters Close has been added to the updated report.
5	Page 25: Section 3.1.1 Growth rate Who from the Region of Waterloo provided these percentages?	Growth rates were provided by Oriana Aguas from the Region of Waterloo. Report has been updated to append email indicating use of these growth rates.
6	Page 25: Table 3-4 Existing capacity analysis Pages 27 to 29 noted 12 intersections analyzed, however, the intersection list on page 8 of section 2.3 Study Area Intersections notes eight intersections, this list should be updated to reflect Table 3-4	Analysis of 9 intersections within the study area was confirmed with the City, Region, and MTO. Additional intersections were included within the Synchro and SimTraffic analysis for calibration purposes only. Results for these intersections will be removed from the Existing 2023 Capacity Analysis results table.
7	Page 25: Table 3-4 Existing capacity analysis Page 28 Fairway Road at Wabanaki Drive: approach movement for Wabanaki Drive is noted as NB-R, while the intersection data noted in Appendix D for Wabanaki Drive as “from East”. Ensure all vehicle travel directions are consistent throughout the report	Based on the study area network and excel model developed Wabanaki Drive at Fairway Road has been designated as as the northbound approach. While this is

Comment #	Comment	Response
Existing Conditions Report - August 28, 2023		
Reviewer: Jeremiah Johnston, MTO **Received: November 29, 2023**		
1	Please provide an executive summary at the front of the document	Acknowledged, an executive summary will be included in the updated report.
2	Section 1.2 of the TIS report lists the reviewed policy and planning documents that are expected to impact the study area. In the section summarizing key findings of the background document review, there is an extra bullet that should be removed. Additionally, the base year for population and employment growth forecasts should be revised to state the correct year, which should be 2006 instead of 206	Acknowledged, errors have been eliminated from the updated report.
3	Section 2.1 of the TIS report has a reference error above Table 2.1 – please update the 'Figure 2.2 reference error'	Acknowledged.
4	Section 2.2 of the TIS report discusses the road classification and characteristics of each road within the study area. From Google Streetview (dated June 2023), posted speed limit signs on Hidden Valley Road, Stonegate Drive, and River Road south of King Street indicate 40 km/hr speed limit. However, the speed limits noted for these segments in Section 2.2 of the TIS report are at 50 km/hr, which do not match with the existing posted speeds. Please clarify which are the correct speed limits and update the speed limits in the report for Hidden Valley Rd, Stonegate Dr and River Rd south of King St. to match existing field posted speeds.	Acknowledged, MP has confirmed that the posted speed of these roadways is 40 km/h and is reflected in the updated report.
5	Section 2.3 provides detailed discussion on the intersections reviewed as part of the study. There were eight (8) intersections that were identified and illustrated in the study area map. However, Section 3 of the TIS report, which presents the existing operational analysis for each intersection, includes four (4) additional existing intersections that were not discussed in Section 2.3, which are King St Hwy 8 ramps, Fairway Rd and King St, Fairway Rd and Wilson Ave and Manitou Dr and Wabanaki Dr. Please update to clarify the scope of the study area and include a descriptions of the additional intersections that were analyzed.	Understood. Additional intersections included in the results tables were used for calibration purposes only and results for these intersections will be removed from the report.
6	Figure 2-3 shows the existing intersections only. Therefore, its title should be updated from "Future Study Area Intersections" to "Existing Study Area Intersections". The additional intersections analyzed should also be included in the map. Furthermore, the legend on Figure 2-3 includes items that are not shown on the map, which should be removed to avoid confusion.	Acknowledged. Existing Conditions Study Area Intersections figure has been updated to remove irrelevant legend items.
7	For the King Street and Stonegate Drive intersection, the east leg has a through lane and an auxiliary left-turn lane. The lane configuration diagram on Figure 2-5 and the description for east leg should be updated to reflect the correct geometry.	Acknowledged, lane configuration description for King Street and Stonegate Drive has been updated to match existing conditions.
8	For the Wabanaki Drive and Wilson Avenue intersection, the descriptions of lane configurations for east and west legs are flipped and should be updated.	Acknowledged, lane configuration descriptions have been updated to match existing conditions.
9	The Wabanaki Drive and Goodrich Drive / Hidden Valley Road intersection is a four-way stop-control intersection. The description for this intersection should be updated.	Acknowledged, intersection control type has been updated to match existing conditions.
10	In Table 3-1, the TMC provided by Region of Waterloo at "Fairway Road & Stonegate Drive" should be corrected to "King Street & Stonegate Drive". Also, this count was not provided in Appendix C of the TIS report.	Acknowledged. Intersection name has been updated and TMC data for the intersection will be included in the appendix of the updated report.
11	Since the traffic volumes used for this study were from various sources, and some intersections may have more than one set of counts available, a table should be included that specifies the source and date of counts used for each intersection used for the Volume Balancing Process.	Acknowledged, MP was identified that the most recent data was used for intersection with multiple data sets.
12	According to MTO's TIS Guidelines, only data collected within 18 months of the submission date for the study shall be used. However, the traffic data used for Fairway Road & Fairview Park Mall / Cineplex Entrance and King Street & Stonegate Drive were collected in 2019 and 2012, respectively. There should be correspondence provided confirming MTO's acceptance of these data being used for the study. Provide the correspondence confirming the acceptance of using dated traffic data and the assumptions on background growth rates.	Acknowledged. MP has subsequently drafted and provided a TOR to the MTO for this project. A request to use data at these two (2) intersections was included in the submitted TOR.
13	Section 3.3.1 of the TIS report states the background growth rates used for the study. However, correspondence should be provided confirming these assumptions.	Acknowledged, MP will append corrsepondance with the Region confirming the growth rate used.
14	Appendix E of the report provides volume diagrams that illustrate the volumes used for modelling 2023 existing conditions. The title of the first traffic volume figure in Appendix E should be corrected, as it is not showing the traffic volume adjustments. Also, the truck percentages from raw TMC data, Synchro outputs, and volume figures in Appendix E were reviewed and compared. Minor discrepancy in truck percentage values was found in Appendix E figures. The truck percentage volume diagrams should be updated to show the observed truck percentages and be consistent with values from the raw TMC and Synchro inputs.	Acknowledged, MP will review and compare the truck turning percentages within the data, synchro, and volume figure.
15	MTO provides the most recent data avaible for Hwy 8 and Fairway Rd, attached.	Acknowledged.

Comment #	Comment	Response
Existing Conditions Report - August 28, 2023		
Reviewer: Jeremiah Johnston, MTO **Received: November 29, 2023**		
16	Section 3.2 summarizes the capacity analysis results for existing intersections. According to the Region of Waterloo's guidelines, as part of the capacity analysis, the 95th percentile queue length for individual movements exceeding available storage should be identified. In Table 3-4 of the TIS report, storage lengths for auxiliary lanes were not provided, therefore, queue capacity issues were not able to be identified. Additionally, Table 3-4 has a few movements with asterisks ("*", "**"), however, there is no footnote provided to elaborate on these. Include the storage lengths in table 3-4 to compare with 95th percentile queue lengths and flag any movement with queue capacity issues. Add missing footnotes for the movements with asterisks in table 3-4.	Acknowledged. MP will update that tables to include the available storage length and identify all movements that exceed the available storage. MP will also provide notes to identify the significance of movements marked with "*" and "**".
17	The Synchro outputs in Appendix F were checked against the raw data provided and information within the report. The following discrepancies were identified:	-
18	Node 1 Highway 8 NB Ramp and Weber Street / King Street: Northbound ramp speed is modelled as 50 km/hour; however, the ramp advisory speed signage shows 40 km/hour from Google Streetview. This should be applied in the model as well as discussed in Section 2.3 of the TIS report to indicate the ramp advisory speeds in the description for this intersection.	Acknowledged. MP has confirmed that an advisory speed limit of 40 km/h is present at the Highway 8 King Street off-ramp, and an advisory speed limit of 50 km/h is present at the on-ramp. The synchro files have been updated to reflect this change, however as this intersection was used for calibration purposed only it is not discussed within the report.
19	Synchro output indicates that the intersection was modelled as single ring. With the current setup, when Phase 1 is active, the signal for westbound through movement (on King Street) is red even though it is coded as permissive. This does not reflect the actual field condition. We cannot verify the signal timing inputs from the Region's raw model, it is recommended to verify the signal timing programming for this intersection matches the Region provided model (e.g., Single ring vs. conventional double ring structure). If it is supposed to be coded as single ring, the westbound through movement should be coded as "protected" in both Phase 1 and Phase 2.	Acknowledged. As per the Region's Synchro traffic model, the intersetion is coded as a single ring. Phasing for the intersection has been updated to accommodate westbound through movements during both Phase 1 and 2.
20	Node 2 Fairway Rd and King St Eastbound and westbound speeds are modelled as 50 km/hour, however, posted speed signs show 60 km/ hour from Google Streetview. Clarify and update speeds in Synchro model to ensure they are consistent with existing field speed limits.	Acknowledged, MP has confirmed that the posted speed of King Street, east of the Highway 8 ramp terminal, is 60 km/h and is reflected in the synchro anlaysis.
21	Node 3 King St and River Rd Eastbound, westbound, and southbound speeds are modelled as 50 km/hour, however, posted speed signs show 60 km/hour from Google Streetview. Northbound speed is modelled as 50 km/hour, however, posted speed sign shows 40 km/hr. Clarify and update speeds in Synchro model to ensure they are consistent with existing field speed limits	Acknowledged, MP has confirmed that the posted speed of King Street, east of the Highway 8 ramp terminal, and River Road, north of King Street, is 60 km/h and is reflected in the synchro anlaysis.
22	Node 5 Highway 8 Fairway Road Southbound Ramp Terminal: Eastbound ramp speed is modelled as 50 km/ hour; however, the ramp advisory speed signage shows 60 km/ hour from Google Streetview. This should be applied in the model as well as discussed in Section 2.3 of the TIS report to indicate the ramp advisory speeds in the description for this intersection. According to Region of Waterloo's guideline, total lost time must equal 4 seconds for each movement, however, the eastbound right-turn movement total lost time 2.5 seconds.	Acknowledged, MP has reviewed and updated signal timings within synchro to ensure total lost time of 4 seconds is provided for each movement. An advisory speed limit of 60 km/h is noted for the Highway 8 Fairway Road off-ramp, while an advisory speed limit of 40 km/h is noted for the on-ramp. Synchro files and the report have been updated to reflect this.
23	Node 12: Manitou Drive and Wabanaki Drive: Lost time adjustments need to be updated such that total lost time equals 4 seconds for each movement. Signal timing plan is not available, We are unable to verify timing inputs.	Acknowledged, MP has reviewed and updated signal timings within synchro to ensure total lost time of 4 seconds is provided for each movement.
24	Please provide the Synchro files on future circulations.	Acknowledged. MP will provide synchro anlaysis files with future submissions.
25	On June 2nd MTO had requested McIntosh Perry to submit a terms of reference for MTO to review. MTO has not received a ToR to review to date. Was a ToR prepared for the City?	Acknowledged. MP has subsequently drafted and provided a TOR to the MTO for this project.
26	The final report must follow MTO's Traffic Impact Studies Guideline March 2023, attached.	Acknowledged.

Comment #	Comment	Response
Future Conditions Traffic Analysis Summary - April 4, 2024		
Reviewer: CIMA+, MTO Peer Reviewer **Received: April 22, 2024**		
1	Confirm the type of residential use within the mixed-use development and its associated GFA, update the LUC and trip generation rates if needed	The development of Hidden Valley is in the planning phase and the exact GFA details for the mixed-use development are currently unknown. **The City of Kitchener have provided residential density only (no GFAs) and confirmed that only a residential ground floor mix-use need be considered at this time**. Use of residential with ground floor **commercial less than 25,000 ft2 of GFA** has also been deemed appropriate by the City for trip generation. Please see confidential density planning map for the Hidden Valley development within *Attachment B* of the Future Conditions Traffic Analysis Summary Secondary Submission. Based on potential development planning the City has confrimed LUC 231 (mid-rise with ground-floor commercial) is considered to be more suitable than LUC 230 (low-rise with ground-floor commercial). It is noted however, that the published trip generation rates for LUC 231 are lower than LUC 230 resulting in a more conservative estimate for the expected trips for this component of the development.
2	Confirm if any of the residential uses are considered as “Close to Rail Transit”	Residential uses were found to be over 1 km walking distance from the rail transit station and were not considered as "Close to Rail Transit", per the definition provided by ITE which requires to residential uses to be within 0.5 miles (800 m) to be considered "Close to Trail Transit".
3	Describe methodology for estimating vehicle-to-person trip adjustment factor	Estimates for the vehicle-to-person adjustment factor was calculated using the ITE published rates for vehicle occupancy, percent passenger car trips, and percent truck trips. Please see *Attachment C* within the Future Conditions Traffic Analysis Summary Secondary Submission for a detailed discussion on the calculations performed.
4	Confirm total vehicle trip numbers for “Commercial Total”	Total vehicle trips for the Commercial component will be reviewed and updated accordingly.
5	Use gross leasable area to calculate trip generation rates for commercial land uses	The development of Hidden Valley is in the planning phase and the exact GLA for the commercial developments is unknown. **City of Kitchener staff have confirmed** that the use of GFA is sufficient and appropriate at this stage. It is noted use of GFA will also create a more conservative estimate for the expected trips.
6	Use the appropriate LUC for Commercial Component 3 based on its gross leasable area	Vehicle trips for the commercial components were calculated assuming they acted as a single development. Upon further review this was altered and the LUC used for commercial component 3 was changed to align with the planned GFA.
7	Describe methodology for estimating internal capture rates	Internal capture trips were estimated using methodologies from ITE Trip generation Handbook 3rd Edition Section 6, which is consistent with procedure presented in NCHRP Report 684. Where available, ITE published internal trip capture rates were used. Internal trip capture rates were estimated for the mixed used development (average of residential and commercial internal trip capture rates). An assumed 10% internal trip capture rate was also applied for trips between multiple commercial blocks. Methodology for estimating internal trip capture is described in further detail within *Attachment C* of the Future Conditions Traffic Analysis Summary Secondary Submission.
8	Confirm the proposed pass-by trip factor and provide justification for the commercial land use	Pass-by trip factors for LUC 821 - Shopping Plaza (40-150k) are not provided by ITE. As a result, the pass-by trip factor of 0.34 for LUC 820 - Shopping Centre (>150k) was used in place. A page from the ITE Trip Generation Handbook 3rd Edition identifying the pass-by trip factor for LUC 820 is provided in *Attachment F* of the Future Conditions Traffic Analysis Summary Secondary Submission.
9	Provide assumptions for trip redistribution under future network	A list of all assumptions and volume figures illustrating the change in volume for the future trip distribution can be found in *Attachment D* of the Future Conditions Traffic Analysis Summary Secondary Submission.
10	Provide background development information	Background development information has been provided in *Attachment E* of the Future Conditions Traffic Analysis Summary Secondary Submission and will also be included within he final Traffic Impact Study.
11	Describe the assumptions for origin/destination and percent distribution of site generated traffic and present in a tabular format	Trip assignment/distribution has been presented in tabular format within *Attachment C* of the Future Conditions Traffic Analysis Summary Secondary Submission.
12	Update detector settings for signalized intersections in Synchro models	Egis will review and update the detector settings for new intersections/legs as required.
13	Confirm the proposed signal timings for King Street and River Road intersection and provide justification for addition/removal of advanced left-turn phases	Left-turn phases were included due to capacity constraints (V/C ratio of 0.91 for left-turn movements). Providing protected/permitted left-turn movements reduces the V/C ratio to under 0.85.
14	Regenerate SimTraffic results with 5 SimTraffic runs	SimTraffic results **were completed** using 5 simulations runs. This approach will be carried forward for all updates.
15	Confirm if any unsignalized intersections are impacted by the new developments and conduct signal warrant analysis as needed	Under future conditions, all unsignalized intersections operate as roundabouts (Wabanaki Drive and River Road extension, and Wabanaki Drive and Goodrich Drive / Hidden Valley Road) or right-in right-out intersections (Fairway Road and Wabanaki Drive, and King Street and Stonegate Drive). As a result, intersections signalization warrants were omitted.

APPENDIX B – HIDDEN VALLEY SECONDARY PLAN PRELIMINARY NOISE ANALYSIS

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PRELIMINARY NOISE ANALYSIS – **Project: 22377.00**

Hidden Valley Secondary Plan

City of Kitchener

Prepared for:

City of Kitchener c/o Egis Canada Ltd. (formerly McIntosh Perry Consulting Engineers Ltd.)
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May 17, 2024

Revision History

Version	Description	Author	Reviewed	Date
- -	Initial Report	KC	DF	May 17, 2024

Important Notice and Disclaimer

This report was prepared by Aercoustics Engineering Limited (Aercoustics) solely for the client identified above and is to be used exclusively for the purposes set out in the report. The material in this report reflects the judgment of Aercoustics based on information available to them at the time of preparation. Unless manifestly incorrect, Aercoustics assumes information provided by others is accurate. Changed conditions or information occurring or becoming known after the date of this report could affect the results and conclusions presented. Unless otherwise required by law or regulation, this report shall not be shared with any Third Party without the express written consent of Aercoustics. Aercoustics accepts no responsibility for damages, if any, suffered by any Third Party which makes use of the results and conclusions presented in this report.

Executive Summary

Aercoustics Engineering Limited was retained by City of Kitchener c/o Egis Cannada Ltd. (formerly McIntosh Perry Consulting Engineers Ltd.) to support the review and replacement of the existing Residential Hidden Valley Community Plan and the Industrial Hidden Valley Community Plan in the context of the acoustic environment. These community plans will be formally repealed and replaced with a new Secondary Plan via amendment to the City's Official Plan (OP). The proposed Secondary Plan would introduce new land uses which include noise sensitive land uses.

Strategic assessment locations were evaluated within the Study Area. The selected locations were those expected to have the highest potential noise impact from future transportation and stationary noise sources. Assessment at these locations is expected to provide an indication of the worst-case future potential noise impacts and insight into potential land use incompatibilities based on the preferred land use.

This study considered existing and future transportation noise, including road traffic noise which may impact the Study Area assessed at operational years of 2023, 2028, 2033, and 2043. Future rail impacts from the CPKC Rail Line and ION 2 LRT extension were considered at a future 2043 condition.

It was found that future road impacts from Highway 8 and Wabanaki Drive may necessitate typical transportation noise control measures for receptors with exposure to those roadways. The required transportation noise controls for sensitive receptors within approximately 30 m of the ION 2 LRT extension and within approximately 100 m of the CPKC rail line may also be marginally increased. The future transportation noise impact condition is not expected to dictate minimum setbacks or require unfeasible noise controls, provided that detailed noise studies be carried out later in the planning process for key locations discussed in this study.

A consideration of land use compatibility with existing industry was also carried out in accordance with the MECP's D-6 Land Use Compatibility guidelines. It was determined that no additional minimum setback distances are expected to be required.

Stationary noise impact predictions were carried out based on available information regarding the existing operations. Compliance with the MECP Class 1 sound level limits is expected to be met for most locations in the Study Area with noted exceptions. Detailed noise studies are recommended for these locations; depending on the background sound level due to transportation noise, or the actual site-specific operating scenarios, additional noise controls may not be required.

Based on this review, it was concluded that land use compatibility is expected to be feasible based on the proposed land uses within the Study Area. It was recommended that detailed noise studies be carried out later in the development process for several locations in the Study Area for final determination of appropriate mitigation and warning clauses.

Table of Contents

1 Introduction

Aercoustics Engineering Limited was retained by City of Kitchener c/o Egis Cannada Ltd. (formerly McIntosh Perry Consulting Engineers Ltd.) to support the review and replacement of the existing Residential Hidden Valley Community Plan and the Industrial Hidden Valley Community Plan in the context of the acoustic environment. These community plans will be formally repealed and replaced with a new Secondary Plan via amendment to the City's Official Plan (OP), as indicated in Appendix B (the "Study Area").

The purpose of this study is twofold:

Firstly, noise impacts from transportation sources were evaluated at key proposed noise sensitive locations within the Study Area based on current traffic levels and at future traffic levels in the years 2028, 2033, and 2043. Noise from existing and proposed rail transportation sources were also considered for the future 2043 condition.

Secondly, an evaluation of land use compatibility between proposed land uses and existing industry sources to the west and north was carried out based on the MECP publication: D-6 Guideline for Land Use Compatibility with Industrial Facilities [1]. This preliminary land use compatibility evaluation included an assessment of stationary noise impacts in accordance with the Ministry for the Environment Conservation and Parks (MECP) publication entitled "Environmental Noise Guideline – Stationary and Transportation Sources – Approval and Planning", dated August 2013 (NPC-300) [2].

This study also follows the Regional Municipality of Waterloo's *Noise Policy Implementation Guideline* [3].

The acoustic terminology used in this report are provided below, in order of appearance.

Table 1: Glossary

Parameter	Definition
dBA	The A-weighted decibel (dBA) is a single-number metric commonly used to define overall sound levels considering human perception of sound. Maximum allowable dBA limits due to continuous (non-impulsive) noise sources, such as transportation vehicles or rooftop mechanical equipment, are described further in the report.
L_{eq}	The L_{eq} is a method of averaging overall sound levels (dBA) based on acoustic energy contained within a specified interval. MECP sound level limits are expressed in terms of an L_{eq} In this study, L_{eq} is used to define hourly sound levels due to stationary sources, such as rooftop mechanical equipment, consistent with the guidelines referenced in this report.

Parameter	Definition
L_{eq}-16hr	The L_{eq}-16hr is a method of averaging sound levels (dBA) across a 16-hour duration. This parameter is typically used to quantify noise due to transportation vehicles between the daytime hours of 07:00 – 23:00.
L_{eq}-8hr	The L_{eq}-8hr is a method of averaging sound levels (dBA) across an 8-hour duration. This parameter is typically used to quantify noise due to transportation vehicles between the nighttime hours of 23:00 – 07:00.
dBAI	The dBAI is a single-number metric that defines overall sound levels due to impulsive activities, such as trailer coupling or de-coupling.
L_{LM}	The L_{LM} is a method of averaging peak overall sound levels due to impulsive activities (dBAI) over an hour for comparison with the MECP sound level limits.

2 Noise Sensitive Points of Reception

The noise impacts predicted in this report are based on the definitions provided in the MECP's NPC-300 guideline, summarized below. In general, environmental noise is assessed during the planning process to evaluate compliance with the limits in NPC-300 at locations which are considered "noise sensitive". The specific locations considered in an environmental noise study differ when evaluating transportation noise, such as that from traffic, or stationary noise, such as that from nearby industry.

Table 2: MECP NPC-300 Definitions

Parameter	Definition per MECP NPC-300
Noise Sensitive Land Use[1]	A property of a person that accommodates a dwelling and includes a legal non- conforming residential use; or A property of a person that accommodates a building used for a noise sensitive commercial purpose; or A property of a person that accommodates a building used for a noise sensitive institutional purpose.
	[1] – From a land use planning perspective, a noise sensitive land use may be comprised of both noise sensitive spaces (e.g., sleeping quarters of dwellings) and non-noise sensitive spaces (e.g., commercial podium).
Noise Sensitive Commercial Purpose Building	A building used for a commercial purpose that includes one or more habitable rooms used as sleeping facilities such as a hotel and a motel.

Parameter	Definition per MECP NPC-300
Noise Sensitive Institutional Purpose Building	A building used for an institutional purpose, including an educational facility, a day nursery, a hospital, a health care facility, a shelter for emergency housing, a community centre, a place of worship and a detention centre. A place of worship located in commercially or industrially zoned lands is not considered a noise sensitive institutional purpose building. A daycare associated with a place of worship would still be considered noise sensitive.
Noise Sensitive Space	The living and sleeping quarters of dwellings and sleeping quarters of noise sensitive commercial or institutional land uses. Examples include, but are not limited to bedrooms, sleeping quarters such as patient rooms, living/dining rooms, eat-in kitchens, dens, lounges, classrooms, therapy or treatment rooms, assembly spaces for worship, sleeping quarters of detention centres.
Outdoor Living Area (OLA)	Part of a noise sensitive land use that is: • intended and designed for the quiet enjoyment of the outdoor environment; and • readily accessible from the building. The OLA includes: • backyards, front yards, gardens, terraces or patios; • balconies and elevated terraces (e.g., rooftops), with a minimum depth of 4 metres, that are not enclosed, provided they are the only outdoor living area (OLA) for the occupant; or • common outdoor living areas (OLAs) associated with high-rise multi-unit buildings. The outdoor living area (OLA) associated with a noise sensitive land use is considered a noise sensitive space.
Plane of Window Point of Reception	The plane of window is a point in space corresponding with the location of the centre of a window of a noise sensitive space.
Outdoor Point of Reception	Location outdoors within 30 metres of a façade of a dwelling, at a height of 1.5 metres above ground, typically in backyards, front yards, terraces or patios. If the dwelling is a high-rise multi-unit building, the location is confined to a common outdoor amenity area.
Non-Noise Sensitive Space	The following are examples of locations that are not considered to be points of reception: • Outdoor locations associated with a noise sensitive institutional purpose or a noise sensitive commercial purpose; • A place of worship or a school located in a commercially or industrially zoned location.

2.1 Proposed Land Uses

Based on review of the City of Kitchener Zoning By-law 2019-051, the proposed Hidden Valley Land Use Master Plan would the following possible noise sensitive uses within the Study Area as summarized in Table 3. Relevant sections of the zoning by-law have been included in Appendix A.

Table 3: Potential Sensitive Uses within Proposed Zoning

Proposed Zoning	Permitted Sensitive Use
Residential	Dwelling Unit
Mixed use	Day Care Facility Hotel School / Education Facility Health Clinic Dwelling Unit Place of Worship Hospice Lodging House Residential Care Facility
Commercial	Hotel Day Care Facility
Business Park Employment	Day Care Facility

2.2 Assessed Points of Reception

This study seeks to evaluate land use compatibility and viability of land designations for proposed uses. Since building layouts are not known at the time of this study, receptor heights were chosen as a representative worst-case impact location for potential sensitive uses within each area. The same heights were used for both stationary and transportation impact assessments. Similarly, shielding from other future buildings which may exist has not been accounted for in the modelling for a worst-case assessment of potential noise impacts.

Accordingly, the predicted noise impacts are expected to provide an indication of potential worst-case noise impacts for the proposed sensitive uses, to facilitate discussion of land use compatibility and evaluation of potential future noise control requirements.

Stationary and transportation noise impacts were evaluated at representative points of reception within the Study Area as outlined in Table 4.

Table 4: Representative Noise Sensitive Points of Reception – Stationary and Transportation Noise

Calculation Location	Receptor Height (m)	Description
R01	4.5	Proposed Low-Rise Residential
R02	4.5	Proposed Low-Rise Residential
R03	7.5	Proposed Business Park Employment
R04	7.5	Proposed Commercial / Mixed-Use
R05	7.5	Proposed Mixed-Use
R06	7.5	Proposed Commercial / Mixed-Use
R07	7.5	Proposed Commercial / Mixed-Use
R08	7.5	Proposed Mixed-Use
R09	25	Proposed Mid-Rise Residential
R10	7.5	Proposed Commercial / Mixed-Use
R11	50	Proposed High-Rise Residential
R12	25	Proposed Mid-Rise Residential
R13	4.5	Proposed Low-Rise Residential

These receptor locations are illustrated in Figure 1, below, which is also reproduced in higher resolution and appended to this report.

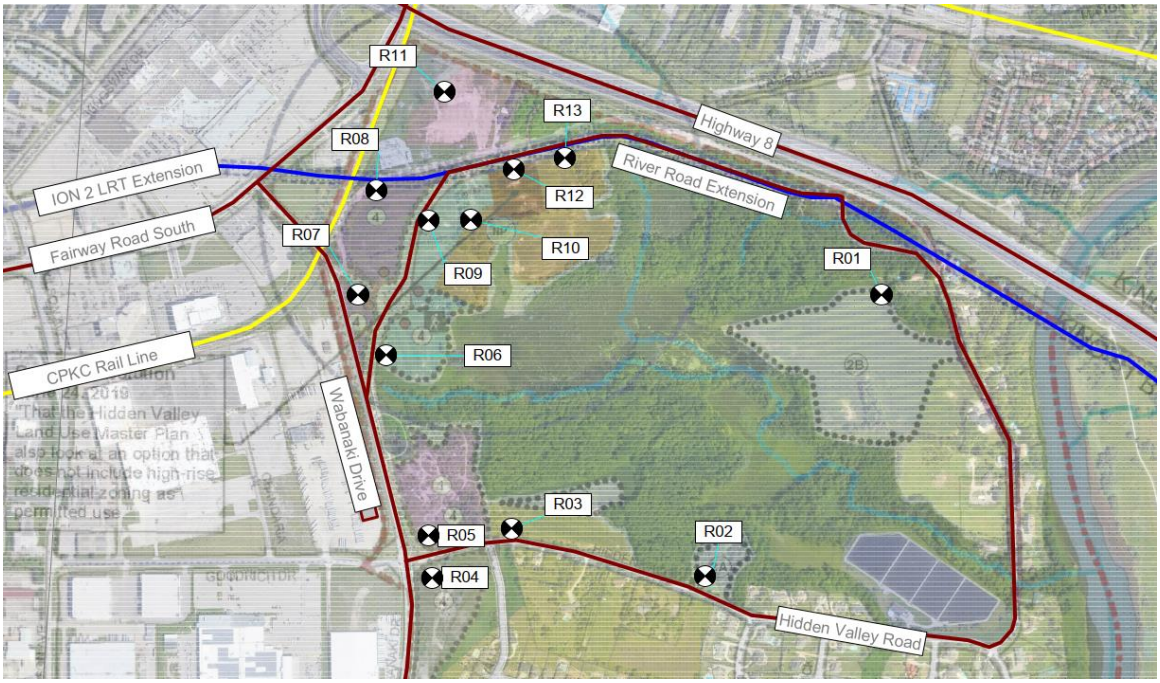


Figure 1: Noise Assessment Receptor Locations and Sources of Transportation Noise

3 Transportation Noise Impact Assessment

The Hidden Valley Study Area is enclosed by the Grand River to the east and south, Wabanaki Drive to the west and King Street (Highway 8) to the north. The current land uses include residential dwellings within the southern portion of the Study Area, industrial uses to the east, commercial and residential dwellings to the north and vacant land to the west.

The dominant sources of road transportation noise in the Study Area include Highway 8, Wabanaki Drive, and Hidden Valley Road. Transportation noise was also assessed from the adjacent CPKC freight line (west/northwest of the Study Area), as well as the ION 2 Light Rail Transit (LRT) extension. Transportation sources considered in this assessment are illustrated in Figure 1. Sources of road and rail noise further from the Study Area are not expected to be significant. The Study Area is not expected to be impacted significantly by aircraft noise or industrial vibration.

3.1 Transportation Noise Guidelines and Criteria

This section outlines transportation noise guidelines as described in the MECP NPC-300 publication [2]. The study also follows the guidance of the Regional Municipality of Waterloo's Noise Policy Implementation Guideline [3], which aligns with NPC-300.

NPC-300 provides sound level limits for transportation noise for indoor and outdoor noise sensitive uses.

Future impacts from road and rail traffic noise are typically considered during the land use planning process by evaluating road traffic volumes extrapolated a minimum of 10 years post-construction for a sensitive land use.

If predicted noise impacts exceed the MECP limits as described in Section 3.1, the following noise controls are considered:

- Acoustic barriers for Outdoor Living Areas (OLA's);
- Improved building façade elements;
- Ventilation requirements including the mandatory installation of, or provision for future installation of air conditioning (AC); and
- Warning clauses for purchase/lease agreements.

Since the potential construction dates of sensitive uses within the Study Area are unknown, the noise impacts predicted for the year 2043 were used to inform potential noise control requirements for the potential uses in Section 3.5. Final specific noise control requirements are recommended to be determined through a detailed Noise Impact Study at key locations throughout the Study Area as discussed in Section 5.

3.1.1 Transportation Noise – Outdoor Living Area (OLA)

MECP guidelines recommend that equivalent noise levels (L_{eq}-16hr) in outdoor living areas should not exceed 55 dBA. Predicted noise levels between 55 dBA and 60 dBA may be acceptable provided that the future occupants of the building are made aware of the potential noise problems through appropriate warning clauses. Noise levels above 60 dBA are generally not acceptable and will warrant noise control measures.

All unenclosed balconies that are less than 4 m in depth and outside the exterior of the building façade are exempt from meeting the MECP outdoor noise criteria with regards to transportation noise sources. Should the depth of the future balconies and terraces be greater than 4 m, they will be subject to the MECP noise level limit of 55 dBA.

3.1.2 Transportation Noise – Indoor Living Spaces

Indoor noise levels due to road traffic were also examined with respect to the MECP guidelines. Bedrooms are required to meet an indoor noise level (L_{eq}-8hr) of 40 dBA from road traffic during nighttime hours. The indoor daytime noise level (L_{eq}-16hr) due to road traffic should not exceed 45 dBA for living or dining rooms. Lounges, lobbies, retail or general office spaces should meet the indoor noise level of 50 dBA from road traffic. In order to achieve these levels, the MECP guidelines provide a basis for the types of windows, exterior walls, and doors that will be required based on projected outdoor noise levels.

The MECP also requires that a central air conditioning system be installed for dwellings when the daytime or nighttime outdoor transportation noise levels at the façade of the dwelling are above 65 dBA or 60 dBA, respectively. The provision for the future installation of central air conditioning must be made if:

- the nighttime sound level is greater than 50 dBA and less than or equal to 60 dBA on the outside face of a bedroom window;
- the daytime sound level is greater than 55 dBA and less than or equal to 65 dBA on the outside face of a bedroom window; or
- the daytime sound level is greater than 55 dBA and less than or equal to 65 dBA on the outside face of a living/dining room window.

This provision involves a ducted heating system sized to accommodate the addition of central air conditioning by the occupant.

The required limits as per NPC-300 are summarized in Table 5.

Table 5: Indoor and Outdoor Sound Level Limits for Road and Rail Traffic

Type of Space	Time Period	Maximum L_{eq} (dBA) Road Traffic	Maximum L_{eq} (dBA) Rail Traffic
Living/dining, den areas of residences, hospitals, nursing homes, schools, day-care centres (Indoor)	07:00 – 23:00	45	40
Living/dining, den areas of residences, hospitals, nursing homes (Indoor)	23:00 – 07:00	45	40
Sleeping quarters (Indoor)	07:00 – 23:00	45	40
	23:00 – 07:00	40	35
Outdoor Living Areas (OLA)	07:00 – 23:00	55	50

The evaluation of indoor sound levels is typically carried out during a detailed Noise Impact Study if the predicted transportation noise impacts exceed key thresholds at the plane-of-window for the sensitive use.

Section 3.5 of this report includes a list of areas where the future evaluation of indoor noise levels is likely to be required.

3.2 Road Transportation Noise Calculations

Road traffic noise level calculations were performed using the U.S. Department of Transportation's Traffic Noise Model Version (TNM) Version 2.5; within Datakustik's CadnaA Noise Prediction Software.

As noted, noise impacts at future sensitive locations reflect direct exposure to the dominant transportation noise sources and do not account for shielding due to potential future developments.

3.2.1 Road Traffic Data Summary

Traffic noise calculations were based on the road traffic data outlined in Table 6. The existing and future road traffic volume-counts, truck percentages, and day/night split for all roadways in Table 6 were provided by Egis Canada Ltd.

The assessed road segments in Table 6 are those which are expected to produce the highest noise impact at sensitive locations within the Study Area; other roadways not included in this assessment are expected to have insignificant noise impacts at receptors within the Study Area.

Table 6: Assessed Road Traffic Volumes

Road	AADT[1]	Lanes	Day/Night Split[2] (%)	Medium/Heavy Truck Split (% total)		Posted Speed (km/h)
				Day	Night	
Highway 8	132000	8	90 / 10	6 / 5	6 / 5	90
	138600					
	145200					
	158400					
Wabanaki Drive (Goodrich to Wilson)	3800	2	90 / 10	12 / 12	7 / 6	50
	3800					
	4050					
	4350					
Wabanaki Drive (Fairway to Goodrich)[3]	3700	2	90 / 10	12 / 12	7 / 6	50
Fairway Rd. S.	23600	6	90 / 10	7 / 5	7 / 5	60
	21300					
	22200					
	22650					
River Rd. Extension (Wabanaki to Hwy 8 SB Ramp)	-	2	90/10	8 / 6	8 / 6	60
	4000					
	4900					
	6300					
River Rd. Extension (btw. Hwy 8 Ramps)	-	2	90/10	8 / 6	8 / 6	60
	3950					
	4700					
	5800					
Hidden Valley Road	800	2	90/10	10 / 7	7 / 5	50
	1350					
	1900					
	2850					

1 - AADT presented for each study year: 2023, 2028, 2033, and 2043 respectively.

2 –24-hr traffic data patterns for several roadways in the study area indicate a 90/10 daytime/nighttime split; this assumption was extended for other roadways in the Study Area.

3 – Counts reflect existing condition; roadway is relocated for future condition scenarios.

3.2.2 Road Noise Impact Predictions

Existing and future sound levels are presented to demonstrate the expected increase in sound levels due to road traffic over time. The calculated daytime and nighttime noise levels due to road traffic at each noise sensitive receptor are summarized Table 7 and illustrated in Figures 2 through 5, appended to the end of this report.

Table 7: Road Noise Impact Predictions

Calculation Location	Time Period[1]	Predicted Road Traffic Noise Impact L_{AEQ} (dBA)			
		Baseline (2023)	2028	2033	2043
R01	Day	60	60	60	61
	Night	53	54	54	54
R02	Day	50	52	55	57
	Night	43	45	48	50
R03	Day	55	56	59	60
	Night	48	49	52	53
R04	Day	58	58	60	60
	Night	50	50	52	52
R05	Day	58	59	62	61
	Night	50	51	54	53
R06	Day	57	61	63	63
	Night	49	53	55	55
R07	Day	60	61	63	61
	Night	52	53	55	53
R08	Day	60	59	60	60
	Night	53	53	53	53
R09	Day	57	63	64	64
	Night	51	56	57	58
R10	Day	61	62	62	63
	Night	54	55	56	56
R11	Day	67	67	67	67
	Night	60	60	60	61
R12	Day	67	68	68	69
	Night	61	61	62	62

Calculation Location	Time Period[1]	Predicted Road Traffic Noise Impact L_{AEQ} (dBA)			
		Baseline (2023)	2028	2033	2043
R13	Day	69	69	69	70
	Night	62	63	63	63

[1] – Daytime impacts are $L_{eq-16hr}$ and Nighttime impacts are L_{eq-8hr}

3.3 Rail Transportation Noise Calculations

Two sources of rail noise have the potential to impact future sensitive uses within the Study Area:

- The existing CPKC Rail Line, and
- The proposed ION 2 light rail transit (LRT) extension.

3.3.1 Rail Noise Prediction Methodology

Noise from the CPKC freight rail line was assessed in accordance with the MECP guidelines and the guidance document *Sound from Trains Environmental Analysis Method (STEAM)* [4]. Calculations for CPKC and ION 2 LRT were carried out using the MECP's Road and Rail Traffic Noise Prediction Model STAMSON (Version 5.04).

The train counts were extrapolated to a future evaluation point of 2043 for consistency with the ultimate condition evaluated in the road traffic study. An escalation rate of 2.5% per year was assumed in accordance with MECP guidance. Continuous welded rail was assumed.

Noise impact predictions were carried out at a receptor height of 4.5 m. For simplicity and conservatism, shielding from proposed developments was not considered and as such, the rail impacts at higher elevations are expected to remain within the predicted noise impact described in this report.

3.3.2 CPKC Freight Line Noise Impact Predictions

Detailed rail volumes were not available from the rail operator, however, existing train counts were retrieved from the Government of Canada's publicly available Grade Crossings Inventory, which indicate a total of two trains per day at a speed of 10 km/h. It is unknown whether these train movements occur during the daytime (07:00 – 23:00) or nighttime (23:00 – 07:00). A conservative assessment was carried out by evaluating a future 2043 assessment condition equivalent to four train passes during a 16-hour daytime period, which is equivalent to two train passes during an 8-hour nighttime period. In total, this evaluation considers six train passes in a 24-hour period.

The Grade Crossing Inventory does not include details regarding the number of cars or locomotives; train details including the number of locomotives and rail cars per train were

assumed based on road data for CP freight operations in Belleville, Ontario. These volumes are expected to be conservative based on review of CP freight operations elsewhere in Ontario.

There is an at-grade crossing located on Wabanaki Drive. It is understood that the use of rail whistling is prohibited within the limits of the City Kitchener; as such, whistle noise was not considered in the assessment.

The assessed rail volumes for the CPKC rail line are indicated in Table 8.

Table 8: Assessed Worst-Case Rail Traffic Volumes – 2043 Condition

Time Period	Type of Train	Trains/Period	Cars/Train	Max Speed (km/h)	Locomotives/ Train
07:00 – 23:00	CPKC Freight	4	195	20	4
23:00 – 07:00	CPKC Freight	2	195	20	4

The predicted noise impact due to CPKC train movements are summarized in Table 9.

Table 9: CPKC Rail Noise Impact Table – Future 2043 Condition

Setback from Rail Centre Line (m)	Receptors within Setback[1]	Predicted Noise Impact at Setback $LAeq_{16\text{-}hr/8hr}$ (dBA)[2]	
		Daytime	Nighttime
50	R08	58	58
75	R07	56	56
100	R11	54	54
150	R11	51	51
>= 200	R01 - R06, R09 - R13	< 50 dBA	< 50 dBA

1 – Receptors are listed if any portion of the area represented by the receptor in Figure 1 is within the listed setback; other locations within the same zoning area further set back would experience lower noise levels from this source.

2 – The listed noise impacts reflect un-shielded exposure to the full rail line; receptors at greater setbacks may benefit from shielding resulting in lower noise impacts.

Per Table 9, predicted noise impacts from the CPKC rail line may marginally increase noise control requirements for receptors within 100 m which have full exposure to the rail line. Further discussion is provided in Section 3.4.1.

3.3.3 ION 2 LRT Noise Impact Predictions

Evaluation of noise from the proposed ION 2 LRT extension was evaluated for potential sensitive locations within critical setbacks. Sound levels for the LRT cars were based on assumptions made in the Noise and Vibration Impact Assessment for the ION 2 LRT, dated March 19, 2021 [5] in order to maintain a consistent approach. Based on this report, each rail car was modelled as two medium trucks and a train speed of 50 km/h was assumed [5].

Rail volumes were assumed based on the existing ION schedule as summarized below:

Table 10: ION 2 LRT Rail Volumes – Future 2043 Condition

Period	One-way Trips
Daytime (07:00 – 23:00)	282
Nighttime (23:00 – 07:00)	33

Predicted noise impacts from future ION 2 LRT movements are summarized in Table 11.

Table 11: Rail Noise Impacts from ION 2 LRT – Future 2043 Condition

Setback from Rail Centre Line (m)	Receptors within Setback[1]	Predicted Noise Impact at Setback $LAeq_{16\text{-}hr/8hr}$ (dBA)[2]	
		Daytime	Nighttime
15	R12, R13	56	50
30	R08	53	47
50	R11	51	45
>=75	R01 - R07, R09, R10	<50	<45

1 – Receptors are listed if any portion of the area represented by the receptor in Figure 1 is within the listed setback; other locations within the same zoning area further set back would experience lower noise levels from this source.

2 – The listed noise impacts reflect un-shielded exposure to the full rail line; receptors at greater setbacks may benefit from shielding resulting in lower noise impacts.

The predicted rail noise impacts from the ION 2 LRT are expected to influence noise control requirements for receptors R08, R12, and R13, with receptors further set back from the rail line experiencing minimal noise impact. Noise considerations are included in Section 3.4.2.

The assessment in this study does not include consideration for rail squeal, which may occur in curved or sloped sections of track. As noted in the Noise and Vibration Impact assessment for the Stage 2 ION LRT [4], it is recommended that rail squeal be evaluated during detailed track design. Specifically, the potential influence of rail squeal on sensitive receptors within the Hidden Valley Study Area should also be considered during detailed track design.

3.4 Rail Transportation Noise Considerations

Per MECP guidelines, rail noise impacts are added cumulatively to road noise impacts during the determination for noise control requirements such as noise barriers, ventilation requirements, or warning clauses.

3.4.1 CPKC Freight Line Noise Considerations

The Canadian Rail Association (RAC) guidelines [6] note a minimum noise influence area to be considered for railway corridors when undertaking noise studies of 300 m for principal main lines, and 250 m for secondary main lines. The RAC online Rail Atlas lists this segment of CPKC track as “main line” but does not note whether it is primary or secondary.

Canadian Pacific Railway has typically required assessment of vibration levels if buildings are to be located within 75 m of a rail line and has also requested that warning clauses be included in purchase/lease agreements for sensitive uses within 300 m of their respective rights-of-way. It is recommended that CPKC be consulted regarding developments within these setbacks during the approvals process.

Per RAC guidelines, vibration measurements should consider the particular features of a planned development. It is recommended that vibration measurements be conduced on a case-by-case basis as warranted by CPKC rail guidelines, or included as a requirement for applications with building foundations within 75 m of the rail line, and should be conducted at locations representative of the worst-case potential rail vibration impacts for specific building foundation locations. An exceedance of applicable vibration limits does not necessarily indicate restricted land uses or setbacks. Vibration can be mitigated with proper building design if desired.

The assumed rail volumes may differ significantly from those assumed. While it is expected that the MECP sound level limits can be met based on the assumed rail volumes, which are expected to be conservative, it is nonetheless recommended that future detailed noise studies consider the actual CPKC rail volumes if the data becomes available.

Noise impacts from the CPKC rail line are expected to influence noise control requirements for sensitive receptor locations in the western extent of the area designated by Receptor R08. The impacts at receptors further north, south, and east are expected to be dominated by road transportation noise.

3.4.2 ION 2 LRT Noise Considerations

Rail traffic from the ION 2 LRT may marginally influence the requirement for noise controls for sensitive receptors within 30 m of the rail line[1] including Receptor R08. Discussion of potential noise controls is included in Section 3.5. Further assessment of noise from the LRT on these proposed sensitive uses is recommended during detailed design for the LRT, or during detailed noise studies for the more affected sensitive uses within the Study Area. An assessment of the potential for rail squeal should be included for curved sections of track during detailed design of the ION 2 LRT extension.

3.5 Transportation Noise – Noise Control Considerations

Table 12 has been prepared to provide context as to which controls may be required as a result of road and rail traffic noise for locations within the areas specified for the receptor; specific noise controls should be evaluated during detailed noise studies carried out during the approvals process as discussed in Section 5.

Per NPC-300, the requirement for noise controls to address transportation noise are determined by evaluating the cumulative impact from all road and rail sources.

Table 12 has been prepared by adding the predicted future-condition (2043) impacts from Table 7, Table 9, and Table 11, which assume full exposure to each source of transportation noise for conservatism. Note that sensitive land uses in the areas designated by these receptors which are likely to be subject to shielding by intervening structures may not require the listed noise controls.

Table 12: Potential Noise Control Requirements due to Transportation Noise – Future Condition 2043

	OLA Shielding	Installed Central AC	Provision for Future AC	Façade Elements
R01	Likely	-	Likely	-
R02	Potentially[1]	-	Likely[1]	-
R03	Potentially[1]	-	Likely[1]	-
R04	Potentially[2]	-	Likely	-
R05	Likely[2]	-	Likely	-
R06	Likely[2]	-	Likely	-
R07	Likely[2]	-	Likely	-
R08	Likely[2]	-	Likely	Evaluate[3]
R09	Likely	-	Likely	-

[1] Noise control requirements for sensitive receptors associated with R12, R13 would likely be driven by Highway 8 traffic; ION 2 LRT may contribute marginally for lower floors which do not have exposure to Highway 8.

	OLA Shielding	Installed Central AC	Provision for Future AC	Façade Elements
R10	Likely	-	Likely	-
R11	Highly Likely[2]	Likely	Likely	Evaluate[3]
R12	Highly Likely	Likely	Likely	Evaluate[3]
R13	Highly Likely	Likely	Likely	Evaluate[3]

1 – As noted above, calculations to not include shielding; listed noise control is unlikely to be required for receptors shielded from Highway 8 or set back from local roadways.

2 – OLA would only be considered sensitive if a residential use was considered at this location.

3 – Improved window glazing may be required for listed receptors having direct exposure to Highway 8, or those within 50 m of the CPKC rail line.

4 Land Use Compatibility – Nearby Industry

The MECP's document "*D-6 Guidelines for Compatibility with Industrial Facilities*" (D-6 Guideline) [1] is a planning guide for land use planning authorities to decide what types of land uses are appropriate near industrial areas.

The intention of this study is to inform land use planning decision making and to prevent or minimize incompatibilities arising due to the encroachment of sensitive land uses and industrial land uses on one another.

The potential pollutants under consideration in the D-6 Guidelines include odour, dust, noise and vibration due to the operation of the industrial facilities. Under the guideline, industrial facilities are classified as Class I, Class II, or Class III based on several operational considerations. These classifications are then used to inform:

Potential Influence Area, wherein compatibility should be reviewed in more detail, and;

Recommended Minimum Separation Distances, wherein additional buffers or mitigation are likely to be required to achieve compatibility.

The listed areas of influence and minimum separation distance are generally between the property line of an industrial use and that of a sensitive use.

These categories are broadly summarized, below:

Table 13: D-6 Guidelines for Industry Classification

Classification	Class of Industry	Potential Influence Area	Recommended Minimum Separation Distance
Class I	Small-scale, self-contained with low probability of fugitive emissions, infrequent outputs of noise, vibration, dust, and/or odor, daytime operation only.	70 m	20 m
Class II	Medium scale processing and manufacturing, outdoor storage of materials, periodic outputs of minor annoyance, shift operations with frequent movement of products and/or heavy trucks during daytime hours, occasional output of fugitive emissions such as noise, vibration, dust and/or odour	300 m	70 m
Class III	Large-scale processing and manufacturing, outdoor storage of products and raw materials, continuous movement of products and employees during shift operations, frequent output of major annoyance and high probability of fugitive emissions such as noise, vibration, dust, and/or odour.	1000 m	300 m

Aercoustics has assessed the operations of nearby industry. Assessments were based on a site visit in March 2023 as well as review of aerial imagery and conversation with facility operators where possible. Based on review of Ontario's *Access Environmen*t web database, none of the listed facilities include a relevant Environmental Compliance Approval (ECA) or Certificate of Approval (CofA) which includes detail on noise producing operations.

Table 14 includes a summary of the assumed industry classification and Area of Influence / Minimum Separation Distance as well as the observed sources of stationary noise.

Table 14: Nearby Industry Operations and D-6 Guideline Classification

Source of Stationary Noise	Location	Noise Sources	Assigned D-6 Classification	AOI / MSD[1]
Kitchener-Wilmot Hydro TS#7	75 Fairway Road South	Transformer noise – cooling fan and core hum	Class II	300 m / 70 m
Kitchener Operations Facility	131 Goodrich Drive	Outdoor vehicle movements including loaders and forklifts Occasional crushing of material Building HVAC Sources	Class II†	300 m / 70 m

Source of Stationary Noise	Location	Noise Sources	Assigned D-6 Classification	AOI / MSD[1]
GFL Logistics	190 Goodrich Drive	Truck Movements Truck coupling/loading Impulses	Class II	300 m / 70 m
Fastenal Canada	900 Wabanaki Drive	Truck Movements Truck coupling/loading Impulses	Class II	300 m / 70 m
Z Modular Factory Kitchener	50 Goodrich Drive	Building HVAC Truck Movements Truck coupling/loading Impulses	Class II	300 m / 70 m
Retail Commercial	Various (North / West of Study Area)	Rooftop HVAC Delivery Truck Movements	Class I	70 m / 20 m

1 – Area of Influence / Minimum Separation Distance

† - With the existing buffer between this facility and future/existing sensitive locations, typical operations are expected to align with a Class II designation.

Per the appended Figure 1, sensitive uses within the area designated by Receptors R03 through R12 are located within the 300 m area of potential influence from existing industry. Some locations in the areas designated by Receptors R04, R05, R07, and R08 may fall within the 70 m recommended minimum separation distance.

According to the D-6 guidelines, a more detailed assessment would be warranted for sensitive locations in these areas, and may include a detailed Noise Impact Study. It may be feasible to establish a sensitive location within the recommended minimum separation distance if compliance with regulatory noise (and other) guidelines can be demonstrated through a detailed study. A preliminary assessment of stationary noise from nearby industry was carried out as described in Section 4.1.

4.1 Preliminary Stationary Noise Assessment

A high-level stationary noise assessment was carried out in accordance with the MECP's NPC-300 noise guideline in order to evaluate possible stationary noise impacts on proposed sensitive uses within the Study Area from existing stationary noise sources. This assessment is not intended to serve as a comprehensive assessment of compliance, and further detailed studies are recommended as described in Section 5.

4.1.1 Steady Stationary Noise Limits

The noise level limits pertaining to stationary noise sources have been established based on the MECP publication NPC-300. For sound from a stationary source, the sound level limit at a point of reception, expressed in terms of the one-hour equivalent sound level

(L_{eq}-1hr), is the higher of the applicable exclusion limit value given in Table 15, or the background sound level for that point of reception.

Table 15: Noise Exclusion Limits – Steady Stationary Noise Sources – Class 1

Time of Day	Sound Level Exclusion Limit*		
	Class 1	Class 2	Class 4
	Outdoor Points of Reception		
Day (07:00 to 19:00)	50 dBA	50 dBA	55 dBA
Evening (19:00 to 23:00)	50 dBA	50 dBA	55 dBA
	Plane of Window of Noise Sensitive Spaces		
Day (07:00 to 19:00)	50 dBA	50 dBA	60 dBA
Evening (19:00 to 23:00)	50 dBA	45 dBA	60 dBA
Night (23:00 to 07:00)	45 dBA	45 dBA	55 dBA

D*or the minimum existing hourly background sound level L_{eq}, whichever is higher

The MECP exclusion limits are broken into four classes. Class 1 areas are defined by sound related to human activity (such as road traffic or industry) during the daytime, evening, and nighttime. Class 3 areas are subject to more stringent limits and are represented by natural sounds during the daytime, evening, and nighttime. Class 2 areas are a combination of each Class 1 and 3, represented by sounds from human activity during the daytime and by natural sounds during the evening and nighttime. The Class 4 designation warrants elevated sound level limits and is discussed further in Section 4.1.2.

It is expected that all locations in the Study Area are representative of Class 1 or Class 2 designations as described above. No delineation was assumed between daytime (07:00 – 19:00) and evening (19:00 – 23:00) operations, and so the Class 1 sound level limits are referenced throughout this study for simplicity.

The sound level limits listed in Table 15 for an Outdoor Point of Reception define the point of reception as any area in the development that is amenable for use by residents. The sound level limit is also valid for a point of reception location at the centre of the plane of a residential window. The outdoor sound level limits for stationary sources apply only to daytime and evening hours while sound level limits apply at all times for the Plane of Window of a noise sensitive space. In general, outdoor points of reception will be protected during the nighttime as a consequence of meeting the sound level limits at the adjacent Plane of Window of noise sensitive spaces.

4.1.2 Class 4 Designation

A Class 4 area is defined as one which would otherwise be defined as a Class 1 or Class 2 and which:

- is an area intended for development with new noise sensitive land use(s) that are not yet built;
- is in proximity to existing, lawfully established stationary source(s); and
- has formal confirmation from the land use planning authority with the Class 4 area classification which is determined during the land use planning process.

A Class 4 designation may therefore be sought and granted at the discretion of the land use authority under its developed procedures in exercise of its responsibility under the Planning Act.

Even when the above conditions are met, the Class 4 designation may not be warranted if the Class 1 MECP sound level limits can be feasibly met with the implementation of appropriate noise controls.

4.1.3 Stationary Noise Assessment Methodology

The stationary noise source prediction model was generated using Datakustik's CadnaA Noise Prediction Software. This model is based on established noise prediction methods outlined in the ISO 9613-2 standard "Acoustic – Attenuation of sound during propagation outdoors – Part 2: General method and calculation" [7].

Noise levels were predicted using conditions of downwind propagation, generally with hard ground in paved areas. Stationary noise impacts were evaluated at representative heights as described in Table Table 4. Shielding from potential future buildings was not considered, representing a conservative assessment of the worst-case stationary noise impacts. Stationary noise sample calculations are included in Appendix D.

The modelled operations and sources were based on review of aerial imagery, Aercoustics' experience assessing similar facilities, and conversations with facility operators where possible. Source sound levels were based on Aercoustics' measurement library. Stationary noise source locations are illustrated in Figure 6. A summary of the assessed cumulative operating scenario is presented below:

Table 16: Stationary Noise Source Description

Source of Stationary Noise	Noise Sources
Kitchener-Wilmot Hydro TS#7	Transformer noise – cooling fan and core hum at 100% duty cycle; 5 dB tonal penalty applied to transformer core noise.
Kitchener Operations Facility	Outdoor vehicle movements including loaders and forklifts (daytime only) Crushing of material (daytime only) Building HVAC Sources

Source of Stationary Noise	Noise Sources
GFL Logistics	Truck Movements Building HVAC Sources Truck coupling/loading Impulses
Fastenal Canada	Truck Movements Truck coupling/loading Impulses Building HVAC Sources
Z Modular Factory Kitchener	Outdoor vehicle movements including loaders and forklifts (daytime only)
Retail Commercial	Building HVAC Sources
ION 2 LRT Traction Power Substation	TPSS modelled with 5 dB tonal penalty

[1] – Building HVAC sources were assumed to operate at a 100% duty cycle during the daytime and 50% duty cycle at night.

The overall sound levels used in this preliminary assessment of stationary noise are included in Table 17, below.

Table 17: Stationary Noise Source Sound Power Level Summary

Source Type	Sound Level (dBA)	Notes
Substation Transformer	97	5 dB tonal penalty included per MECP guidelines.
TPSS	92	5 dB tonal penalty included per MECP guidelines.
Crusher	119	-
Loader	101	-
Truck Movement	103	-
Forklift Movement	83	-
Crusher	119	-
10-Ton Rooftop Unit	91	-
20-Ton Rooftop Unit	94	-
Trailer Coupling Impulse	118	-

4.1.4 Stationary Noise Impact Results

Stationary noise impacts associated with a cumulative operating scenario as described in 4.1.3 are included in Table 18, below. These impacts and associated noise contours are included in the appended Figures 7a and 7b. Predicted exceedances of the MECP Class 1 exclusion limits have been presented in bolded text.

Table 18: Stationary Noise Impact Summary

Receptor ID	Description	Predicted Cumulative Noise Impact (dBA)		MECP Class 1 Sound Level Limit (dBA)	
		Daytime	Nighttime	Daytime	Nighttime
R01	Low-Rise Residential	40	36	50	45
R02	Low-Rise Residential	41	29	50	45
R03	Low-Rise Residential	49	40	50	45
R04	Business Park Employment	**52**	44	50	45
R05	Commercial / Mixed-Use	**51**	44	50	45
R06	Mixed-Use	49	42	50	45
R07	Mixed-Use	50	**46**	50	45
R08	Mixed-Use	**51**	**50**	50	45
R09	Mixed-Use	50	**46**	50	45
R10	Mid-Rise Residential	49	43	50	45
R11	Mixed-Use	46	43	50	45
R12	High-Rise Residential	47	42	50	45
R13	Mid-Rise Residential	46	39	50	45

Per Figures 7a, 7b and Table 18, the worst-case cumulative noise impact from stationary noise sources is predicted to comply with the baseline MECP Class 1 exclusion limits for most noise sensitive locations with the following noted exceptions:

4.1.5 Stationary Noise Considerations – Receptors R07, R08, R09

Some locations within these commercial and mixed-use areas have been predicted to experience minor exceedances of the nighttime exclusion sound level limits, predominantly from the nearby Hydro One transformer substation.

If sensitive land uses are proposed within these areas, applicable detailed noise studies should capture the specific noise output of any existing or planned station configurations as confirmed through consultation with Hydro One.

Elevated nighttime sound level limits may be warranted due to road traffic on Highway 8 and should be evaluated during relevant detailed noise studies. If such studies indicate that noise impacts from the Hydro One station still exceed the applicable sound level limit, shielding could be achieved by intervening non-sensitive uses, or by local noise barriers.

4.1.6 Stationary Noise Considerations – Receptors R04 and R05

These Office Park and Commercial areas have been predicted to experience noise impacts above the daytime sound level limits due to operation of the crusher within the

nearby Kitchener Operations Facility. The use of a local barrier, or quieter crusher, is expected to resolve this minor exceedance.

If sensitive land uses are proposed within these areas, applicable detailed noise studies should capture the specific noise output of the current or any likely future crushing equipment as confirmed through consultation with the City of Kitchener Operations Facility.

It should be noted that there are existing sensitive uses more closely situated to this occasional crushing operation, which suggests that assumed levels are conservative and actual noise from the crusher may not require mitigation.

4.1.7 Impulsive Stationary Noise

Impulsive noise may be generated during trailer coupling and de-coupling activities at the GFL Logistics and Fastenal industrial sites to the west of the Study Area.

The MECP prescribes sound level limits for impulsive noise based on the number of impulses per hour according to Table 19, below.

Table 19: Impulsive Stationary Noise Limits – Class 1 Area

Impulses Per Hour	Time of Day	Exclusion Limit* Plane of Window	Exclusion Limit* Outdoors
1	Daytime/Evening (07:00 to 23:00)	80 dBAI L_{LM}	80 dBAI L_{LM}
	Nighttime (23:00 to 07:00)	75 dBAI L_{LM}	- -
2	Daytime/Evening (07:00 to 23:00)	75 dBAI L_{LM}	75 dBAI L_{LM}
	Nighttime (23:00 to 07:00)	70 dBAI L_{LM}	- -
3	Daytime/Evening (07:00 to 23:00)	70 dBAI L_{LM}	70 dBAI L_{LM}
	Nighttime (23:00 to 07:00)	65 dBAI L_{LM}	- -
4	Daytime/Evening (07:00 to 23:00)	65 dBAI L_{LM}	65 dBAI L_{LM}
	Nighttime (23:00 to 07:00)	60 dBAI L_{LM}	- -
5-6	Daytime/Evening (07:00 to 23:00)	60 dBAI L_{LM}	60 dBAI L_{LM}
	Nighttime (23:00 to 07:00)	55 dBAI L_{LM}	- -
7-8	Daytime/Evening (07:00 to 23:00)	55 dBAI L_{LM}	55 dBAI L_{LM}
	Nighttime (23:00 to 07:00)	50 dBAI L_{LM}	- -
9+	Daytime/Evening (07:00 to 23:00)	50 dBAI L_{LM}	50 dBAI L_{LM}
	Nighttime (23:00 to 07:00)	45 dBAI L_{LM}	- -

Specific details regarding the typical number of trailer coupling events was not available. Therefore, coupling operations were assumed based on Aercoustics' experience assessing other similar facilities; it was assumed that a worst-case operating hour may

include as many as six impulses across these facilities, affording sound level limits of 60 dBAI and 55 dBAI during the daytime and nighttime, respectively.

Impulsive noise predictions are summarized in Table 20.

Table 20: Impulsive Stationary Noise Summary

Receptor ID	Description	Predicted Cumulative Noise Impact (dBAI)		MECP Class 1 Sound Level Limit (dBAI)	
		Daytime	Nighttime	Daytime	Nighttime
R01	Low-Rise Residential	33	33	60	55
R02	Low-Rise Residential	33	33	60	55
R03	Low-Rise Residential	49	49	60	55
R04	Commercial / Mixed-Use	55	55	60	55
R05	Commercial / Mixed-Use	54	54	60	55
R06	Mixed-Use	47	47	60	55
R07	Mixed-Use	46	46	60	55
R08	Mixed-Use	41	41	60	55
R09	Mixed-Use	46	46	60	55
R10	Mid-Rise Residential	40	40	60	55
R11	Mixed-Use	38	38	60	55
R12	High-Rise Residential	38	38	60	55
R13	Mid-Rise Residential	37	37	60	55

Per Table 20, impulsive noise impacts are predicted to comply with the applicable MECP Class 1 sound level limits at all receptors.

5 Feasibility of Proposed Land Uses in Study Area

Based on the findings of Sections 3 and 4, it is expected that land use compatibility can be feasibly achieved with the appropriate use of site-specific detailed noise studies, typical noise control measures, and setbacks. Discussion is provided herein on the different land uses proposed within the Study Area.

Where a detailed Noise Impact Study is recommended, this refers to a study carried out by a qualified acoustical consultant which follows the guidance of the MECP's NPC-300 [2] as well as the Regional Municipality of Waterloo's Noise Policy Implementation Guideline [3].

Per NPC-300, a detailed noise impact study for any sensitive land use should consider the impact of the environment on the development, and of the development on its

surroundings. Some municipalities also include the requirement for the evaluation of the development's impacts on itself. This approach is recommended as a best practice.

Noise Impact Studies for non-sensitive uses including commercial should consider the stationary noise impact of the development on its surroundings, including an assessment of lands which are currently vacant, but which have zoning designations which allow for sensitive land uses.

Sections 5.1 through 5.5 provide discussion specific to the land uses proposed within the Study area. Section 5.6 provides a summary of the locations and conditions under which detailed noise studies are recommended.

5.1 Proposed Mid-Rise and High-Rise Residential

Proposed mid-rise and high-rise residential uses are represented by Receptors R10, R12, and R13.

Compatibility with future transportation noise impacts is expected to be achievable with the evaluation of façade components and potential incorporation of improved window glazing for facades exposed to Highway 8. The orientation of Outdoor Living Areas facing Highway 8 should be avoided where possible, and noise barriers may still be required.

The requirement for central air conditioning and appropriate warning clauses in purchase/lease agreements is likely for facades exposed to Highway 8 and the CPKC rail line.

Noise from rooftop HVAC associated with the nearby medium-rise residential and commercial spaces should be evaluated in detail during the design of those uses or during design of the proposed residential; it can be difficult to effectively mitigate noise from exposed rooftop HVAC equipment if sensitive receptors are directly overlooking the rooftop.

Impacts from existing stationary noise sources are expected to be below the MECP sound level limits.

5.2 Proposed Low-Rise Residential

Proposed low-rise residential areas are represented by Receptors R01, R02, and R03.

Impacts from existing or proposed future stationary noise sources are expected to fall below the applicable MECP sound level limits. Impacts from transportation noise may necessitate noise controls including the provision for the future installation of air conditioning, the installation of noise barriers shielding Outdoor Living Areas, and the inclusion of appropriate MECP warning clauses in purchase/lease agreements.

These noise controls are likely only to be required for the dwellings most exposed to nearby roadways and may be evaluated during a Noise Impact Study carried out as part of the Draft Plan of Subdivision process if desired.

5.3 Business Park Employment

Proposed business park employment areas are represented by Receptor R04.

It is recommended that a detailed Noise Impact Study be completed as a condition of approval for any sensitive use in this area which features operable windows or Outdoor Living Areas with exposure to the existing industry to the west and to Wabanaki Drive.

Many non-sensitive land uses permitted by the EMP-4 and EMP-5 business park employment zoning designations have the potential to require mitigation in order to comply with the MECP sound level limits at nearby sensitive locations. These uses include but are not limited to the following:

- Automotive Detailing and Repair Operation,
- Heavy Repair Operation
- Biotechnological Establishment
- Manufacturing
- Craftsperson Shop
- Drive-thru Facility
- Car Wash
- Major Equipment Supply and Service
- Towing Compound
- Truck Transport Terminal
- Warehouse
- Tradesperson or Contractor’s Establishment

The requirement for a detailed Noise Impact Study is recommended for these listed uses, if permitted.

5.4 Mixed Use

Proposed mixed-use areas are represented by Receptors R06 and R09.

Noise controls, including shielding for Outdoor Living Areas and the provision for the future installation of air conditioning, would likely be required for residential uses in these areas.

It is recommended that a detailed Noise Impact Study be carried out for proposed sensitive uses in this area with un-shielded exposure to the ION 2 LRT, the CPKC Rail Line, or Wabanaki Drive. Typical mechanical noise sources associated with future developments can be mitigated effectively at-source during the building design.

5.5 Commercial

Proposed commercial areas are represented by Receptors R05, R07, R08, and R11.

Many non-sensitive land uses permitted by the COM-2, COM-3, and COM-4 commercial zoning designations have the potential to require mitigation; if these commercial zonings are to be permitted, the requirement for a detailed Noise Impact Study should be considered based on the nature of the proposed use.

For the area represented by Receptor R05, it is recommended that a detailed Noise Impact Study be carried out for sensitive uses in this area which feature operable windows with exposure to the existing industry to the west and to Wabanaki Drive.

Detailed noise studies are recommended for any proposed sensitive uses within the areas designated by R07, R08, and R11.

If a residential use is considered in these areas, noise controls including shielding for Outdoor Living Areas, the provision for the future installation of air conditioning, or the installation of air conditioning would likely be required. Façade elements should be evaluated for potential residential uses in the area designated by R11 with exposure to Highway 8.

5.6 Summary – Recommended Locations for Detailed Study

Table 21 summarizes the conditions under which a detailed Noise Impact Study is recommended for various proposed land uses. The municipality may request a noise impact study for locations and under conditions not specified in this table at its discretion. It is up to the municipality when to require a detailed noise study of a developer, however the provincial guidance suggests detailed studies should be conducted as early as possible in the planning process.

Table 21: Recommendations for Detailed Noise Study

Zoning	Receptor	Noise Study Required	Condition for Noise Study
Low-Rise Residential	R01	Optional	May be conducted at the discretion of the region or municipality.
	R02		
	R03		
Business Park	R04	Yes*	*for sensitive uses with operable windows / OLA exposed to industry or Wabanaki Drive * for non-sensitive uses in Section 5.3

Zoning	Receptor	Noise Study Required	Condition for Noise Study
Mixed-Use	R06	Yes*	*for sensitive uses with exposure to ION 2 LRT, CPKC Rail, or Wabanaki Dr.
	R09		
Commercial	R05	Yes*	*for sensitive uses with operable windows exposed to Wabanaki Dr. or industry to west.
	R07	Yes*	*for any sensitive uses in these areas. NIS also recommended for any non-sensitive uses permitted under COM-2, COM-3, or COM-4 zoning.
	R08		
	R11		
Mid / High-Rise Residential	R10	Yes	NIS recommended for any residential in zone.
	R12		
	R13		

6 Conclusion

Aercoustics Engineering Limited was retained by City of Kitchener c/o Egis Canada Ltd. to support the review and replacement of the existing Residential Hidden Valley Community Plan and the Industrial Hidden Valley Community Plan in the context of the acoustic environment.

Existing and future transportation noise impacts were assessed including road and rail traffic at proposed future sensitive land uses within the Study Area.

A cursory stationary noise impact assessment was similarly conducted for future uses in order to evaluate land use compatibility with existing industry.

It is expected that land use compatibility can be achieved based on the preferred land uses identified in the Land Use Master Plan. It is recommended that detailed Noise Impact Studies be conducted as a condition of Site Plan Approval, Draft Plan of Subdivision, as well as zone change and consent applications for key locations within the Study Area as described in Section 5 of this report.

7 References

[1] Ministry of the Environment, Conservation, and Parks , “D-6 Compatability between Industrial Facilities,” MECP, Toronto, 1995.

[2] Ministry of the Environment, Conservation, and Parks, “Environmental Noise Guideline, Stationary and Transportation Sources - Approval and Planning (NPC-300),” MECP, Toronto, 2013.

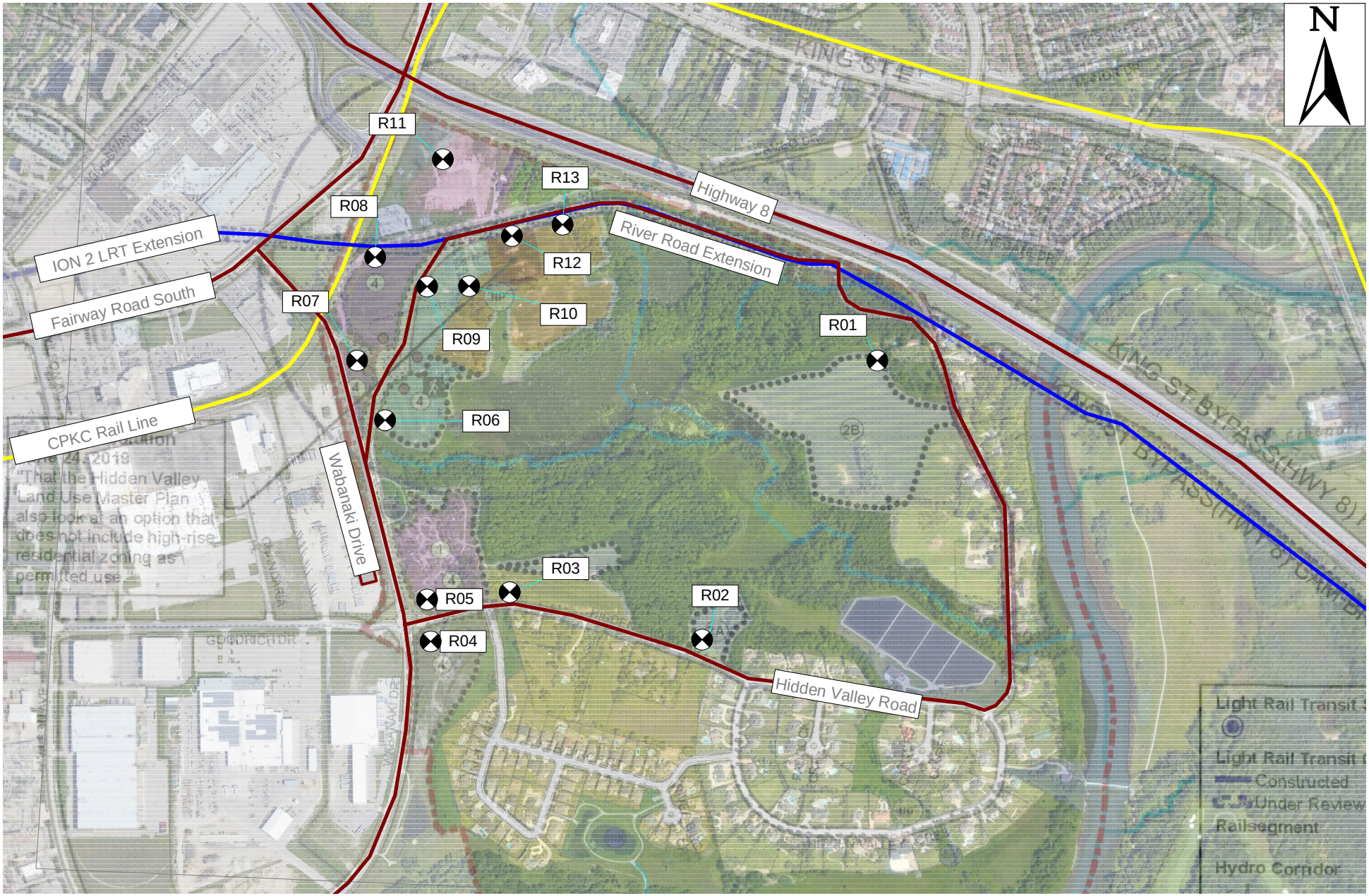
[3] Region of Waterloo, “Noise Policy Implementation Guideline,” Waterloo, 2019.

[4] V. Schroter, “Sound from Trains Environmental Analysis Method (STEAM),” Ministry of the Environment, Toronto, 1999.

[5] B. Colaco and S. Kulendran, “Noise and Vibration Impact Assessment - Stage 2 ION LRT,” J.E. Coulder Associates Ltd., Toronto, 2021.

[6] Railway Association of Canada, “Guidelines for New Development in Proximity to Railway Operations,” Railway Association of Canada, Ottawa, 2013.

[7] International Standards Organization, “ISO 9613-2: Acoustics - Attenuaiton of Sound During Propogation Outdoor - Part 2: General Method of Calculation,” International Standards Organization, Geneva, 2012.



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Project ID: 22377
Scale: As Indicated
Drawn by: DSF
Reviewed by: KC

Date: 2024.04.02

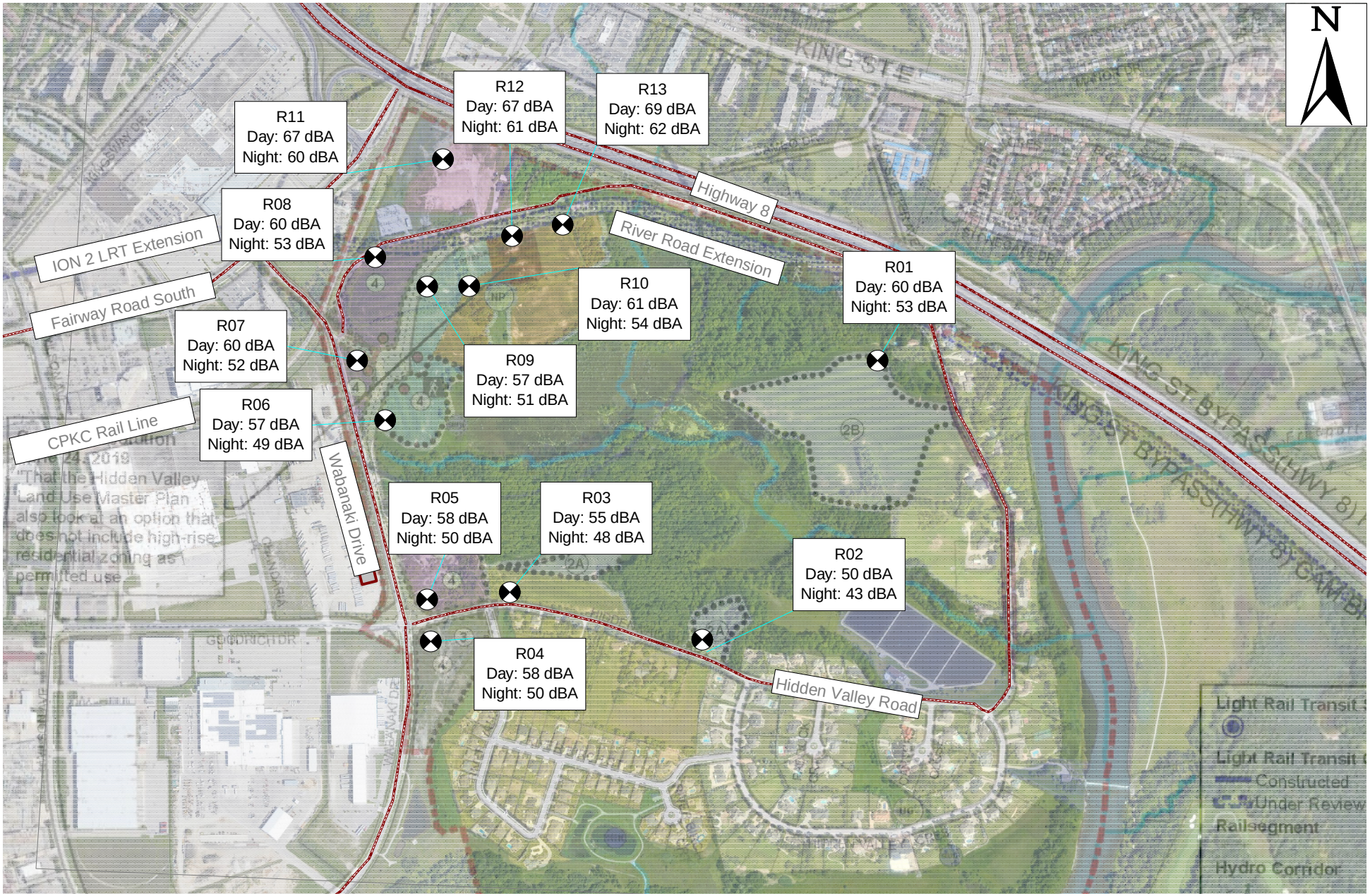
Project Name

Kitchener Hidden Valley Preliminary Noise Analysis

Figure Title

Noise Assessment Receptor Locations and Sources of Transportation Noise

Figure 1



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Reviewed by: KC

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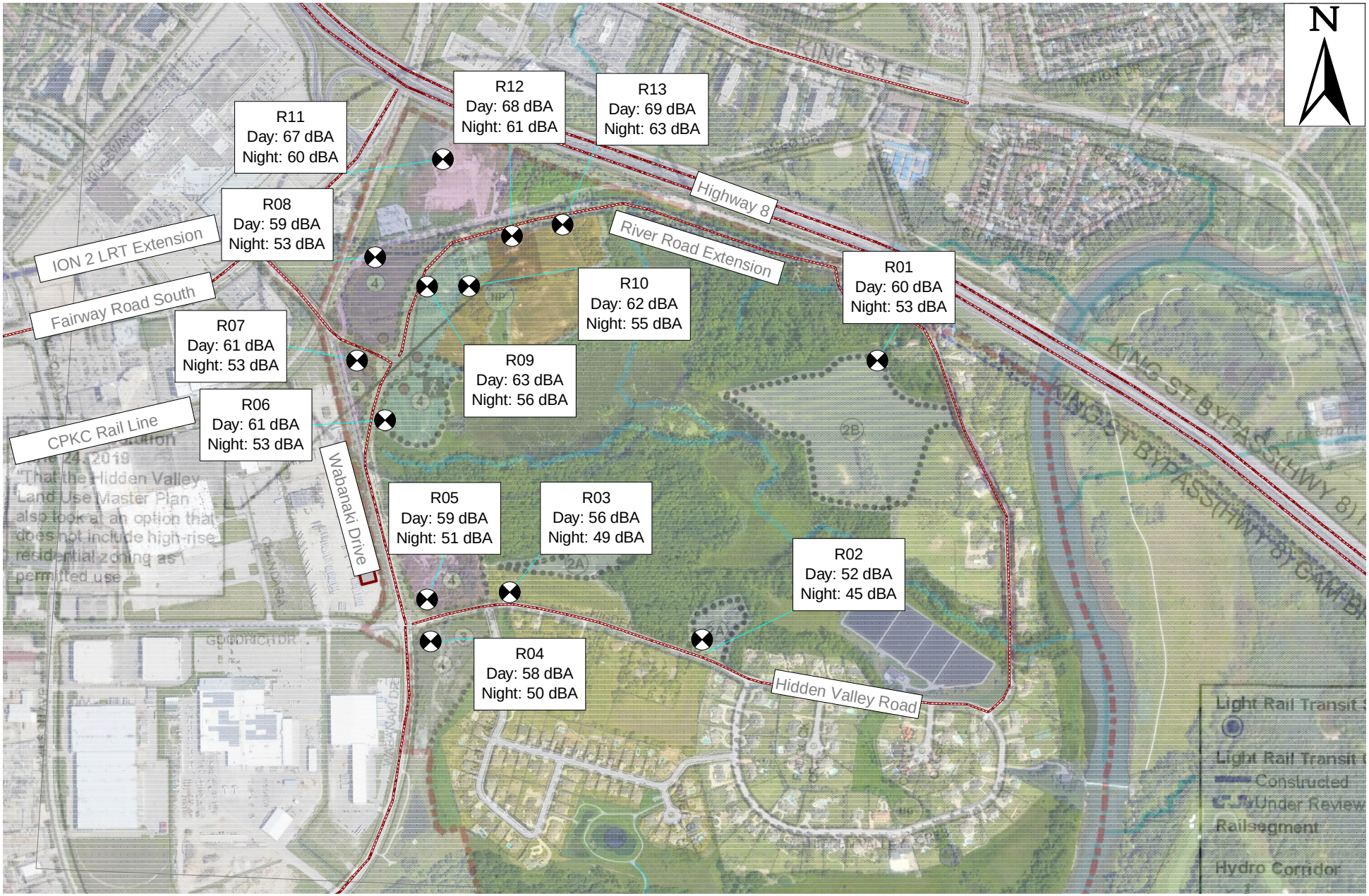
Kitchener Hidden Valley Preliminary Noise Analysis

Figure Title

Road Transportation Noise Assessment - 2023 Noise Impacts (Baseline)

Figure 2



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Reviewed by: KC

Date: 2024.04.02

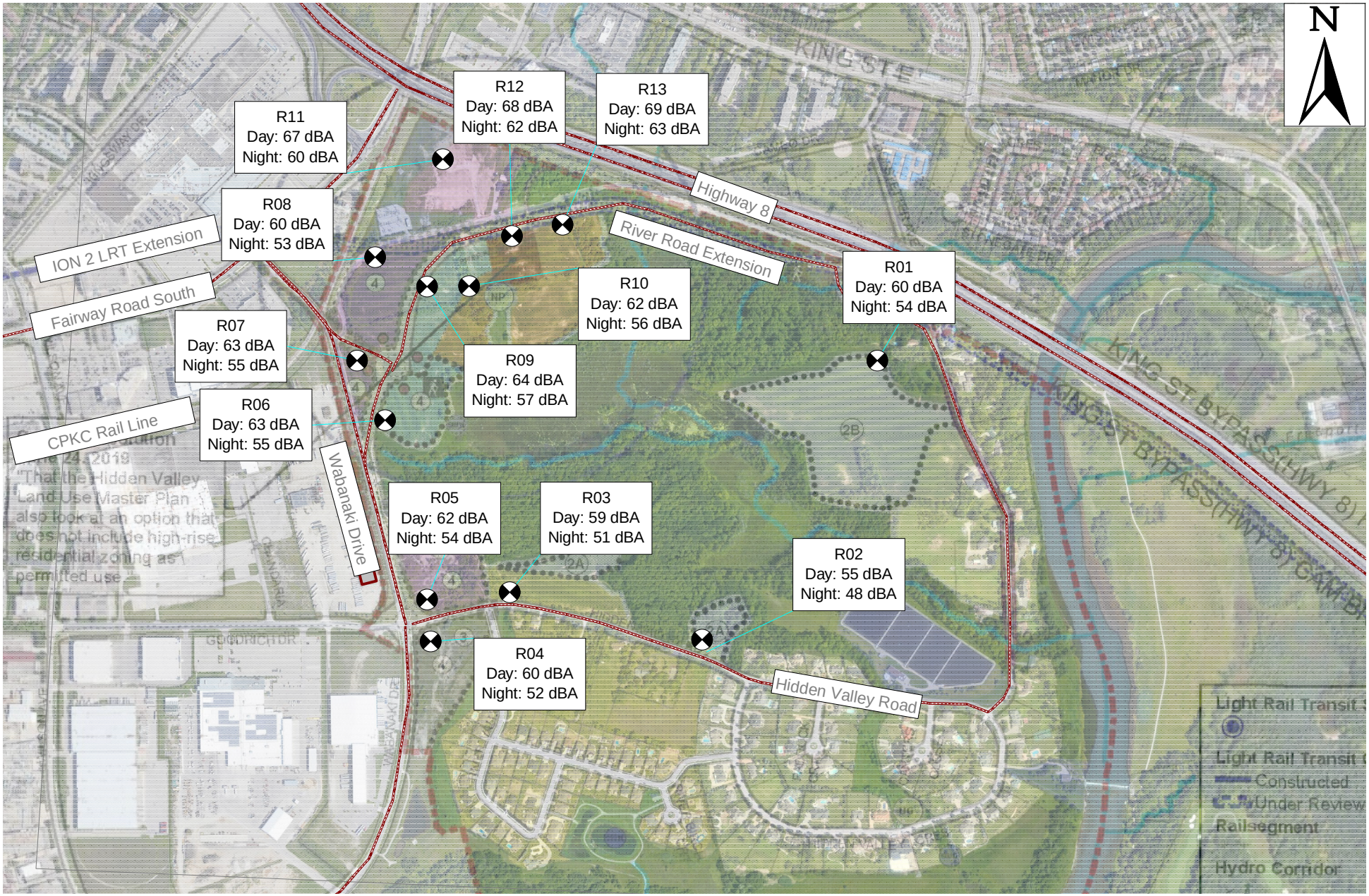
Project Name

Kitchener Hidden Valley Preliminary Noise Analysis

Figure Title

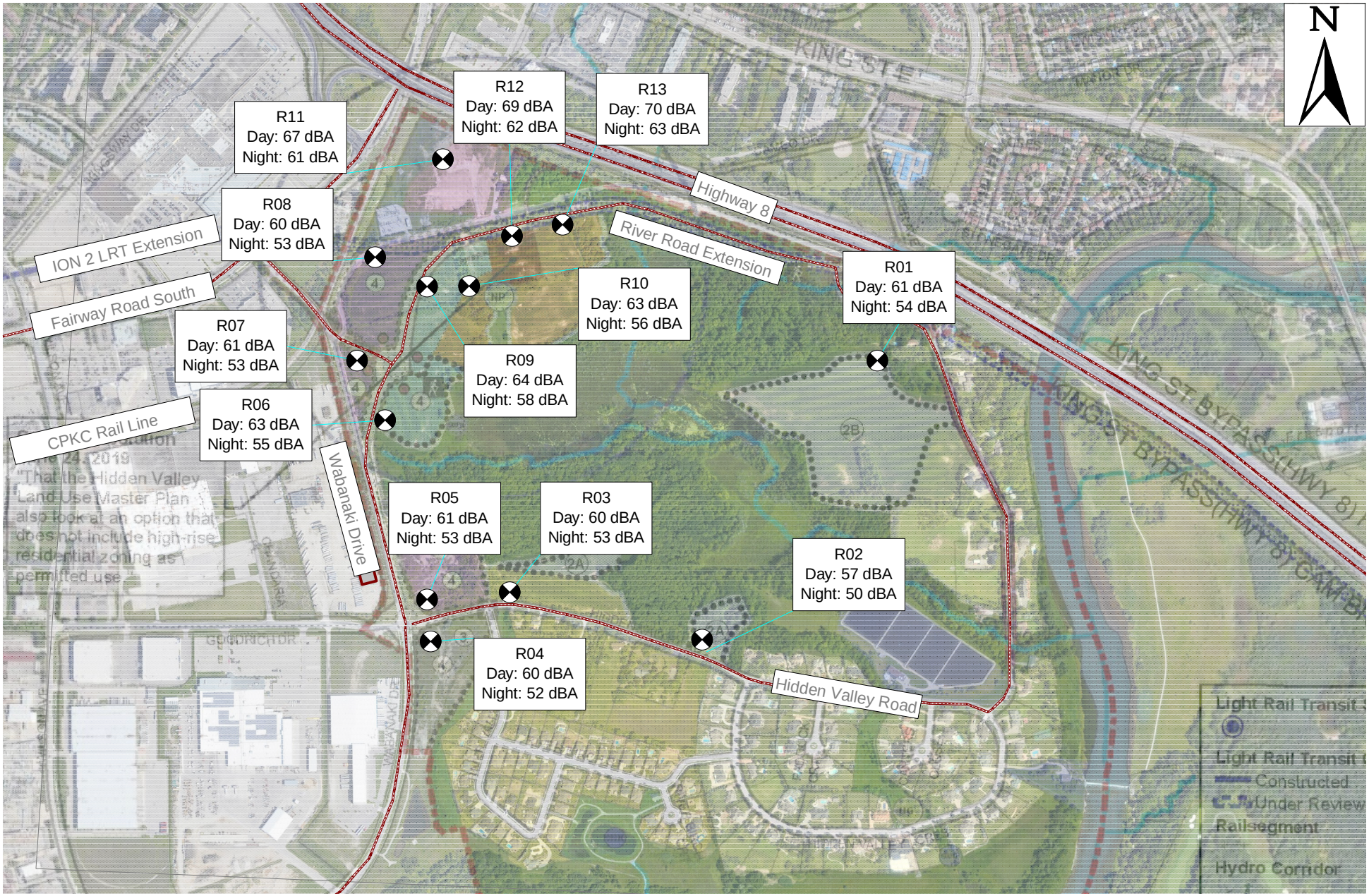
Road Transportation Noise Assessment - 2028 Noise Impacts

Figure 3

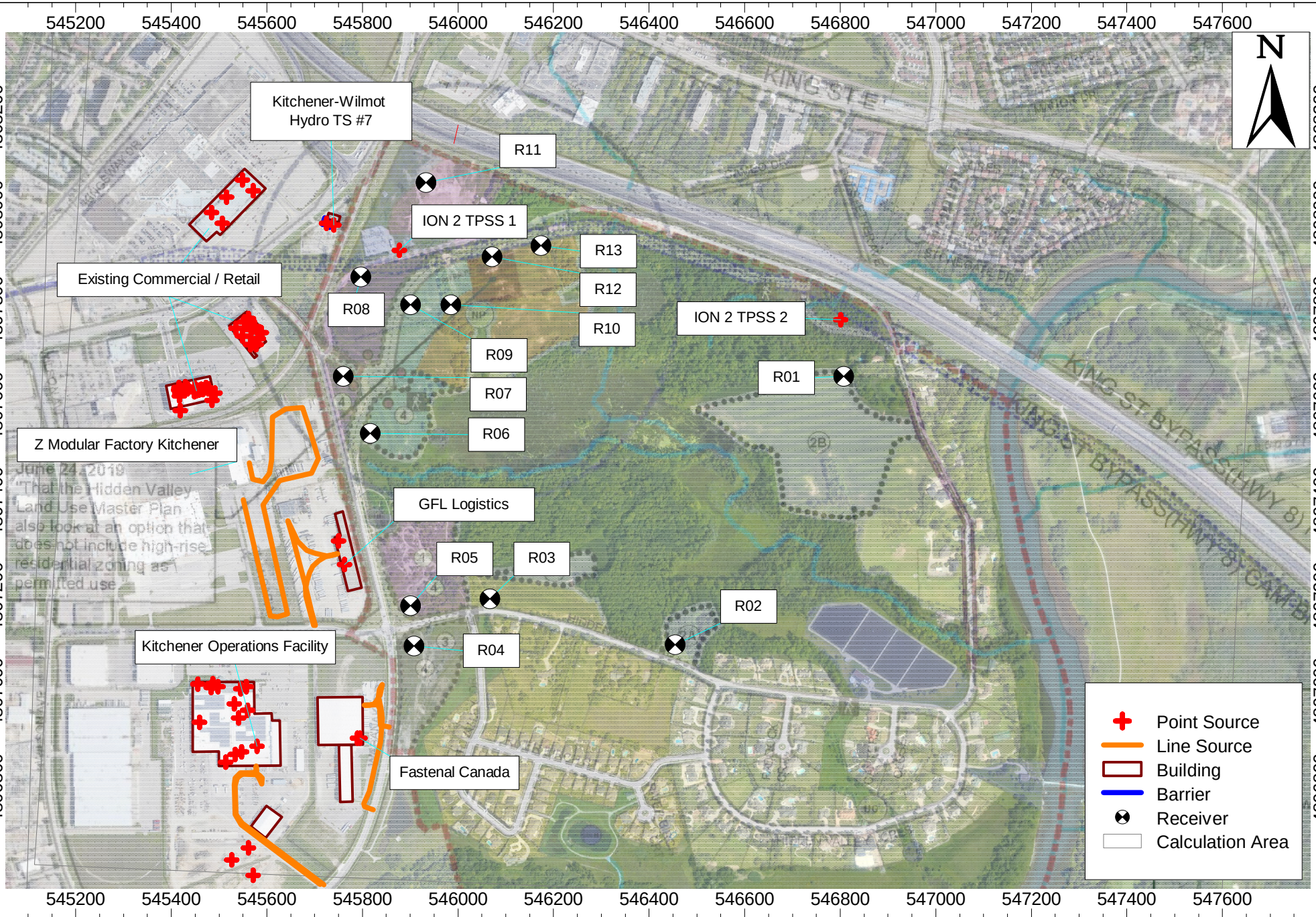


aercoustics	Project ID: 22377 Scale: As Indicated Drawn by: DSF Reviewed by: KC Date: 2024.04.02	**Project Name** Kitchener Hidden Valley Preliminary Noise Analysis **Figure Title** Road Transportation Noise Assessment - 2033 Noise Impacts

Figure 4



aercoustics	Project ID: 22377 Scale: As Indicated Drawn by: DSF Reviewed by: KC Date: 2024.04.02	**Project Name** Kitchener Hidden Valley Preliminary Noise Analysis	
		Figure Title Road Transportation Noise Assessment - 2043 Noise Impacts	**Figure 5**



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Date: 2024.04.02

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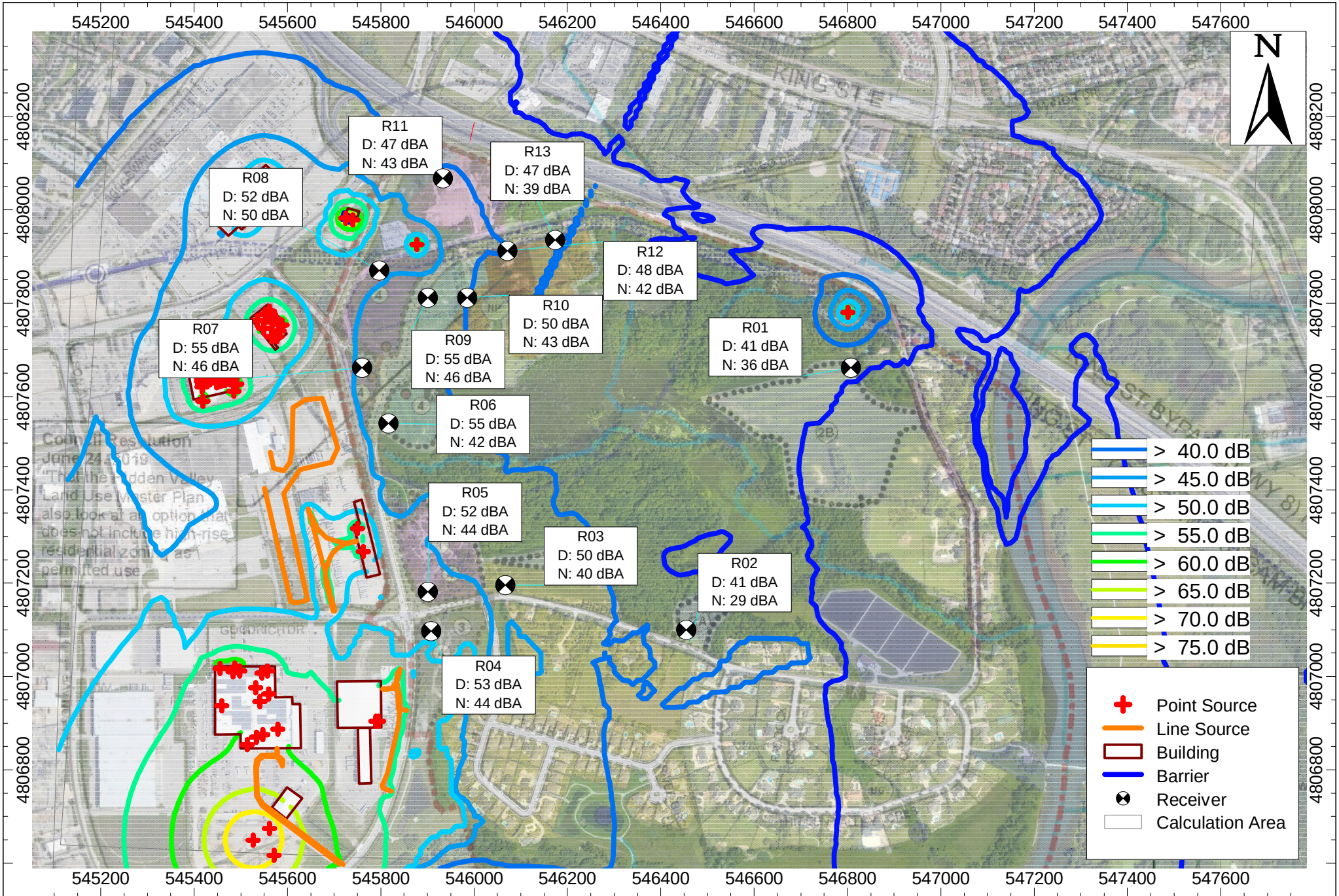
Kitchener Hidden Valley Preliminary Noise Analysis

Figure Title

Assessed Sources of Stationary Noise

Figure 6



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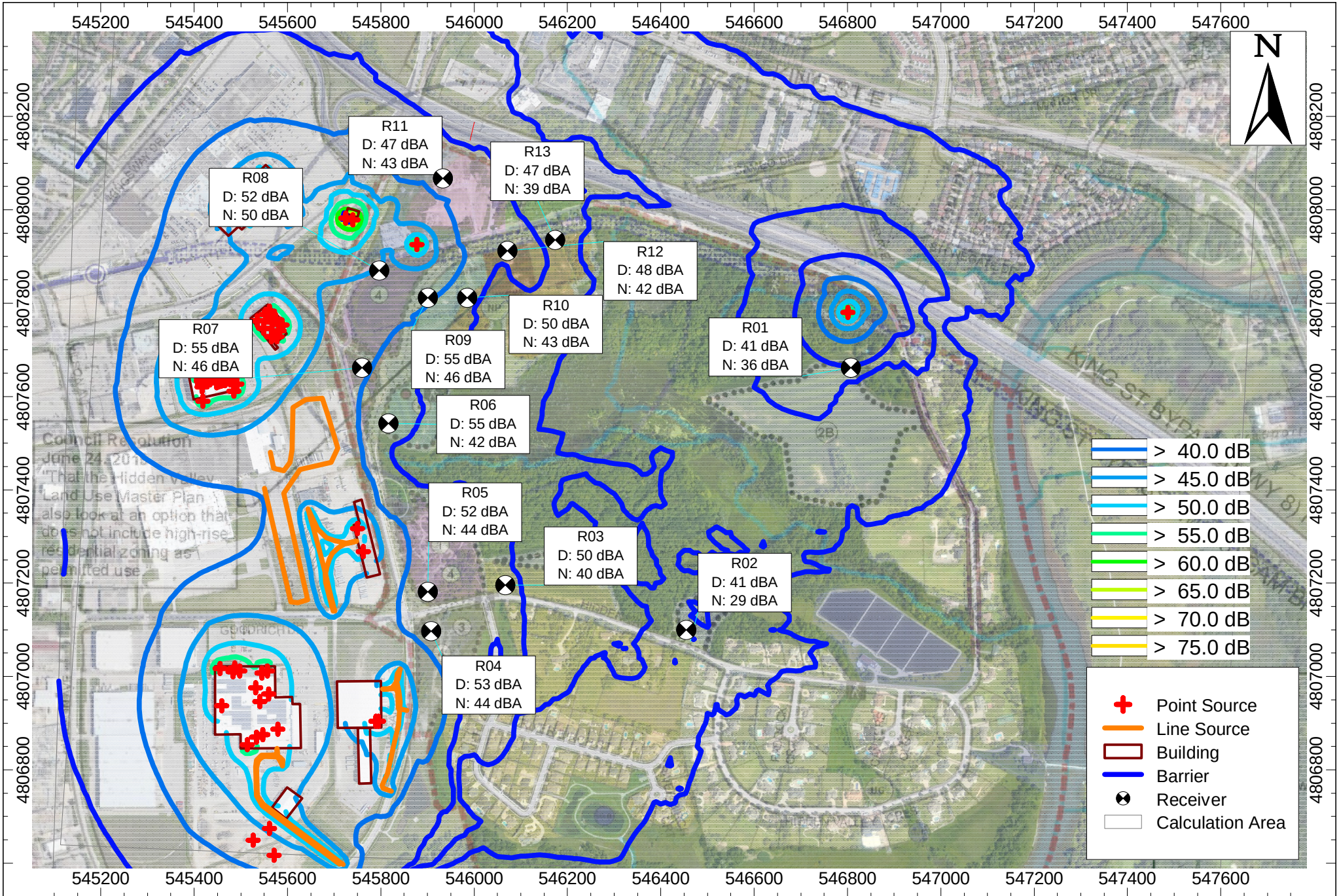
Project Name

Kitchener Hidden Valley Preliminary Noise Analysis

Figure Title

Predicted Stationary Noise Impact - Daytime Noise Contours at 7.5 m Height

Figure 7a



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Date: 2024.04.02

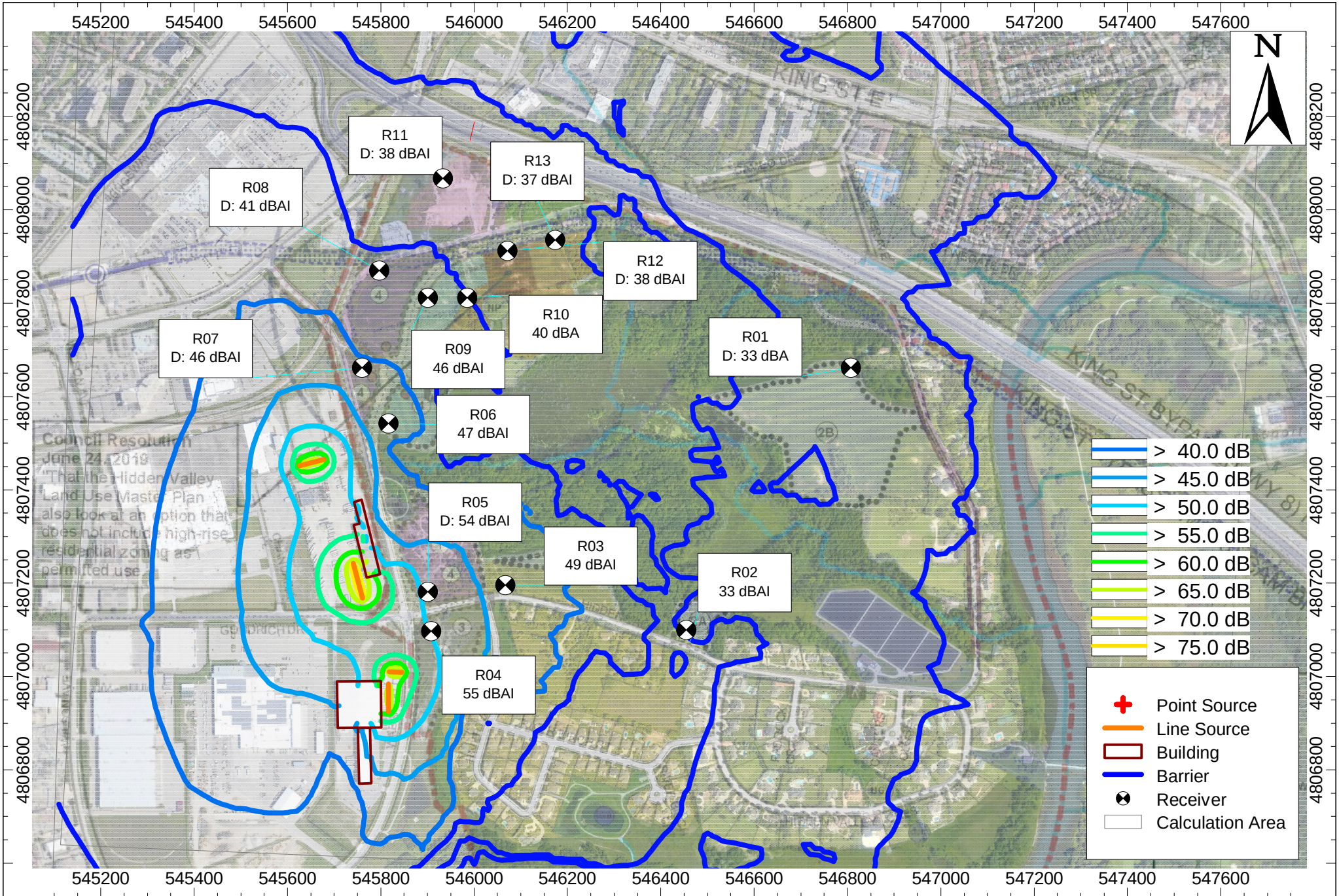
Project Name

Kitchener Hidden Valley Preliminary Noise Analysis

Figure Title

Predicted Stationary Noise Impact - Nighttime Noise Contours at 7.5 m Height

Figure 7b



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Date: 2024.04.02

Project Name

Kitchener Hidden Valley Preliminary Noise Analysis

Figure Title

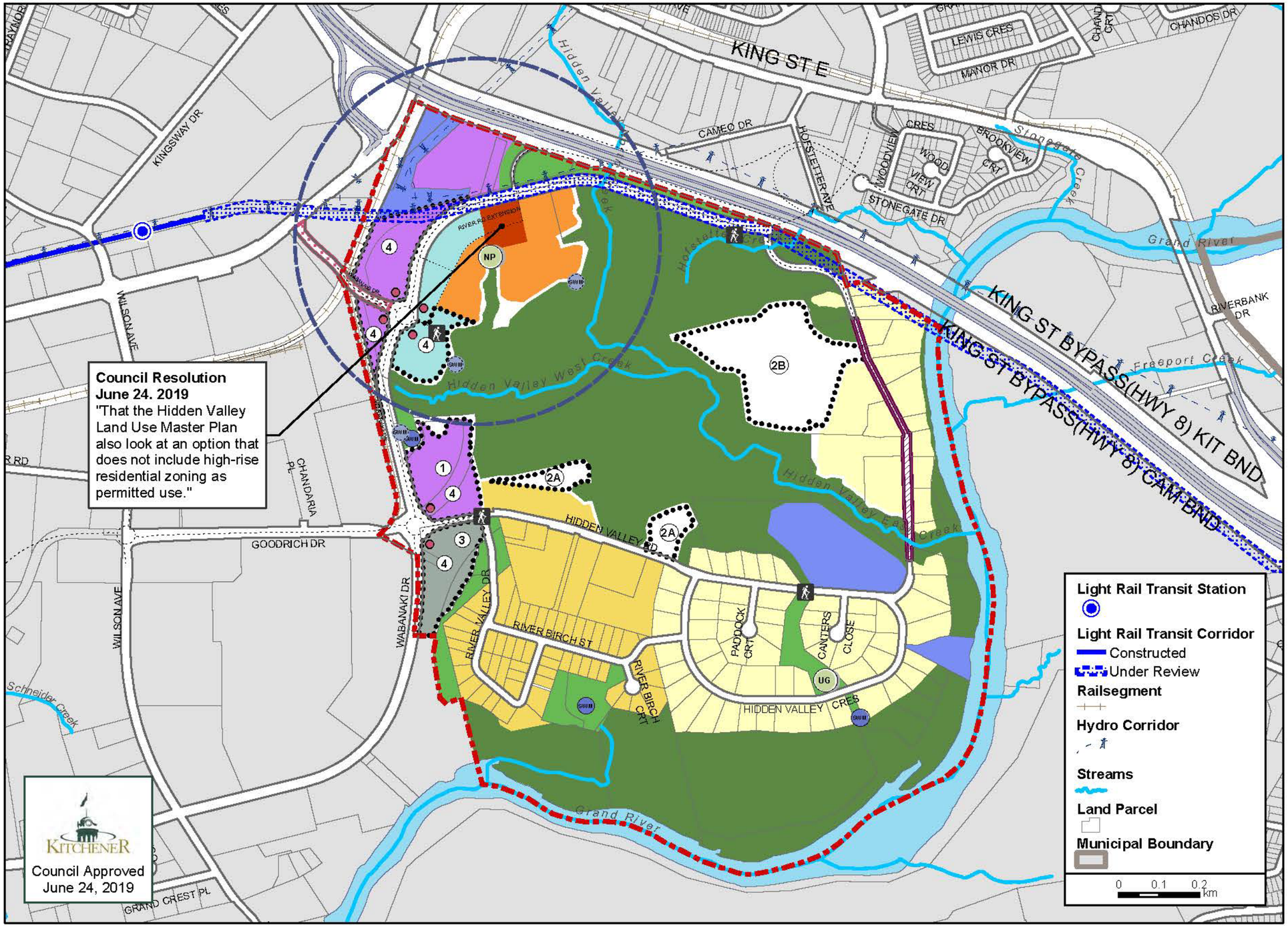
Predicted Impulsive Stationary Noise Impact - Noise Contours at 7.5 m Height

Figure 8

Appendix A

Hidden Valley Land Use Master Plan and Relevant Zoning By-law Excerpts

Hidden Valley
Land Use Master Plan



Council Resolution
June 24. 2019
"That the Hidden Valley Land Use Master Plan also look at an option that does not include high-rise residential zoning as permitted use."

KITCHENER
Council Approved
June 24, 2019

Light Rail Transit Station

Light Rail Transit Corridor
- Constructed
- Under Review

Railsegment

Hydro Corridor

Streams

Land Parcel

Municipal Boundary

0 0.1 0.2 km

Land Use
- Low Rise Residential - Estate
- Low Rise Residential - Large Lot
- Medium Rise Residential
- High Rise Residential
- Mixed Use
- Commercial
- Business Park Employment
- Major Infrastructure & Utilities
- Natural Heritage Conservation
- Open Space

Site Specific Policy Area

1. Community and Institutional uses also allowed
2A. and 2B. Subject to regulation and further study
3. Some neighbourhood commercial uses also allowed
4. Compatibility of sensitive uses

Land Use Master Plan Boundary

Community Gateway

5 Minute Walking Distance from Centre
- 450m

Potential Trailhead Locations

Proposed Parkland
- NP Neighbourhood Park
- UG Urban Green

Proposed Roads
- Hidden Valley Road Realignment
- Local Street

Heritage Corridor

Priority Street

SWM Facility
- Existing
- Potential (Location to be determined)

Notes:
1. Portions of River Rd extension, Wabanaki Dr and Goodrich Dr may be renamed
2. Development limts and setbacks to be determined

SECTION 7 – Residential Zones (RES)

The Residential Zones apply to lands designated Low Rise Residential, Medium Rise Residential and High Rise Residential in the Official Plan.

7.1 APPLICABLE ZONES

RES-1: Low Rise Residential One Zone – the purpose of this *zone* is to accommodate limited dwelling types in areas with an estate character and/or limited municipal services in low rise areas.

RES-2: Low Rise Residential Two Zone – the purpose of this *zone* is to accommodate a limited range of low density dwelling types on larger lots than the RES-3 Zone in low rise areas.

RES-3: Low Rise Residential Three Zone – the purpose of this *zone* is to accommodate a limited range of low density dwelling types on smaller *lots* than the RES-2 Zone in low rise areas.

RES-4: Low Rise Residential Four Zone – the purpose of this *zone* is to accommodate a range of low density dwelling types that allow up to four dwelling units on a range of *lot* sizes in low rise areas.

RES-5: Low Rise Residential Five Zone – the purpose of this *zone* is to accommodate the widest range of low density dwelling types on the widest range of *lot* sizes in low rise areas.

RES-6: Medium Rise Residential Six Zone – the purpose of this *zone* is to accommodate medium density dwelling types and some complementary non-residential uses in medium rise residential areas.

RES-7: High Rise Residential Seven Zone – the purpose of this *zone* is to accommodate high density dwelling types and a range of complementary non-residential uses in high rise residential areas.

7.2 PERMITTED USES

No person shall, within any Residential Zone *use* or permit the *use* of any *lot* or erect, alter or *use* any *building* or *structure* for any purpose other than those permitted *uses* within Table 7-1 below.

Table 7-1: Permitted Uses within the Residential Zones

Use	RES-1	RES-2	RES-3	RES-4	RES-5	RES-6	RES-7
Residential Uses							
Single Detached Dwelling	✓	✓	✓	✓	✓		
Additional Dwelling Units (Attached)(1)	✓	✓	✓	✓	✓		
Additional Dwelling Units (Detached)(2)	✓	✓	✓	✓	✓		
Semi-Detached Dwelling			✓	✓	✓		
Townhouse Dwelling – Street				✓(3)	✓(4)		
Townhouse Dwelling – Cluster (7)					✓(4)	✓	
Multiple Dwelling (7)				✓(3)	✓	✓	✓
Lodging House				✓	✓	✓	✓
Continuing Care Community					✓	✓	✓
Hospice		✓	✓	✓	✓	✓	✓
Residential Care Facility, Small		✓	✓	✓	✓	✓	✓
Residential Care Facility, Large					✓	✓	✓
Non-Residential Uses							
Artisan's Establishment (5)						✓	✓
Community Facility (5)						✓	✓
Convenience Retail (5)						✓	✓
Day Care Facility (5)						✓	✓
Financial Establishment (5)							✓
Health Office (5)							✓
Home Occupation (6)	✓	✓	✓	✓	✓	✓	✓
Office (5)						✓	✓
Personal Services (5)							✓
Studio (5)						✓	✓

Additional Regulations for Permitted Uses Table 7-1

(1) Shall be permitted in accordance with 4.12.1 and 4.12.2.

(2) Shall be permitted in accordance with 4.12.3.

(3) The maximum number of *dwelling units* in a *dwelling* shall be 4.

(4) The maximum number of *dwelling units* in a *dwelling* shall be 8.

(5) Permitted non-residential uses must be located within a *multiple dwelling* (despite the definition of *multiple dwelling* in Section 3) and are limited in size in accordance with the regulations in Table 7-6.

(6) Shall be permitted in accordance with 4.7.

SECTION 8 – Mixed Use (MIX) Zones

The Mixed Use *zones* apply to lands designated Mixed Use in the Official Plan.

8.1 APPLICABLE ZONES

MIX-1: Mixed Use One – the purpose of this *zone* is to accommodate a variety of *uses* within *mixed use buildings* and *mixed use developments* at a low density and scale in Neighbourhood Nodes and certain other areas that are adjacent to *low-rise residential zones.*

MIX-2: Mixed Use Two – the purpose of this *zone* is to accommodate a variety of *uses* within *mixed use buildings* and *mixed use developments* at a medium density on certain lands within Urban Corridors.

MIX-3: Mixed Use Three – the purpose of this *zone* is to accommodate a variety of *uses* within *mixed use buildings* and *mixed use developments* at a medium density within Community Nodes and City Nodes.

8.2 PERMITTED USES

No *person* shall, within any MIX *zone*, *use* or permit the *use* of any *lot*; or erect, alter or *use* any *building* or *structure* for any purpose other than those permitted *uses* within Table 8-1 below.

Table 8-1: Permitted Uses within the Mixed Use Zones

Use	MIX-1	MIX-2	MIX-3
Adult Education School	✓	✓	✓
Artisan's Establishment	✓	✓	✓
Brewpub	✓	✓	✓
Cluster Townhouse Dwelling	✓(1)	✓	
Commercial Entertainment	✓	✓	✓
Commercial School	✓	✓	✓
Community Facility	✓	✓	✓
Computer, Electronic, Data Processing, or Server Establishment	✓	✓	✓
Craftsperson Shop	✓	✓	✓
Cultural Facility	✓	✓	✓
Day Care Facility	✓	✓	✓
Dwelling Unit (2)	✓	✓	✓
Financial Establishment	✓	✓	✓
Fitness Centre	✓	✓	✓
Health Clinic	✓	✓	✓
Hospice	✓	✓	✓
Hotel	✓	✓	✓

Large Residential Care Facility		✓(2)	✓(2)
Light Repair Operation	✓	✓	✓
Lodging House	✓	✓	✓
Multiple Dwelling	✓(1)	✓	✓(1)
Office	✓(3)	✓(3)	✓(4)
Payday Loan Establishment		✓	✓
Personal Services	✓	✓	✓
Pet Services Establishment	✓	✓	✓
Place of Worship	✓	✓	✓
Post-Secondary School		✓	✓
Print Shop	✓	✓	✓
Research and Development Establishment	✓	✓	✓
Restaurant	✓	✓	✓
Retail	✓(5)	✓(6)	✓(7)
Secondary School	✓(8)	✓	✓
Small Residential Care Facility	✓	✓	✓
Social Service Establishment	✓	✓	✓
Veterinary Services	✓	✓	✓

Additional Regulations for Permitted Uses Table 8-1

(1) A *cluster townhouse dwelling* and a *multiple dwelling* are only permitted on a *l*ot containing a non-residential use. A *cluster townhouse dwelling* and a *multiple dwelling* shall not have a *street line façade,* except for access.

(2) Shall be located within a *mixed use building*, and except for access, the *ground floor* shall contain at least one non-residential permitted *use* listed in Table 8-1 that abuts the entire length of the *street line façade*.

(3) A total maximum *gross floor area* of 5,000 square metres is permitted.

(4) A total maximum *gross floor area* of 10,000 square metres is permitted.

(5) A maximum *gross floor area* of 3,500 square metres is permitted for each individual *freestanding retail outlet* to a total maximum *gross floor area* of 5,000 square metres.

(6) A maximum *gross floor area* of 2,500 square metres is permitted for each individual *freestanding retail outlet* to a total maximum *gross floor area* of 5,000 square metres. A *food store* is only permitted within a *mixed use development* to a maximum *gross floor area* of 5,000 square metres.

(7) A maximum *gross floor area* of 5,000 square metres is permitted for each *freestanding retail outlet*. A *food store* is permitted within a *freestanding retail outlet* or within a *mixed use development* to a maximum *gross floor area* of 10,000 square metres.

(8) A total maximum *gross floor area* of 6,000 square metres is permitted.

SECTION 9 – Commercial (COM) Zones

The Commercial *zones* apply to lands designated Commercial and Commercial Campus in the Official Plan as well as certain lands designated Residential.

9.1 APPLICABLE ZONES

COM-1: Local Commercial – the purpose of this *zone* is to accommodate complementary commercial *uses* within residential neighbourhoods in Community Areas.

COM-2: General Commercial – the purpose of this *zone* is to accommodate *retail* and commercial *uses* within the City's Urban Corridors; and Community and City Nodes.

COM-3: Arterial Commercial – the purpose of this *zone* is to accommodate the retailing of bulky, space intensive goods; and service commercial *uses* predominately serving the travelling public within Arterial Corridors.

COM-4: Commercial Campus – the purpose of this *zone* is to accommodate a range of retail and commercial *uses* functioning as a unit within comprehensively planned campuses within City Nodes.

9.2 PERMITTED USES

No *person* shall, within any COM *zone*, use or permit the *use* of any *lot*; or erect, alter or *use* any *building* or *structure* for any purpose other than those permitted *uses* within Table 9-1 below.

Table 9-1: Permitted Uses within the Commercial Zones

Use	COM-1	COM-2	COM-3	COM-4
Amusement Park		✓(1)	✓(1)	✓(1)
Artisan's Establishment	✓(2)	✓	✓	✓
Automotive Detailing and Repair Operation		✓	✓	✓
Brewpub	✓(2)	✓	✓	✓
Car Wash		✓	✓	✓
Catering Service Establishment	✓(2)	✓	✓	✓
Commercial Entertainment		✓	✓	✓
Commercial Parking Facility			✓	✓
Commercial School		✓	✓	✓
Computer, Electronic, Data Processing, or Server Establishment	✓(2)	✓	✓	✓

Use	COM-1	COM-2	COM-3	COM-4
Conference, Convention, or Exhibition Facility		✓	✓	✓
Convenience Retail	✓(2)	✓	✓	✓
Craftsperson Shop	✓(2)	✓	✓	✓
Day Care Facility	✓(2)	✓	✓	✓
Drive-Through Facility		✓	✓	✓
Dwelling Unit	✓(3)	✓(3)(4)		
Financial Establishment	✓(2)	✓	✓	✓
Fitness Centre	✓(2)	✓	✓	✓
Funeral Home		✓	✓	✓
Gas Station	✓(2)	✓	✓	✓
Health Clinic	✓(2)	✓	✓	✓
Heavy Repair Operation			✓(5)	
Hotel		✓	✓	✓
Large Merchandise Retail		✓	✓	✓
Light Repair Operation		✓	✓(5)	✓
Manufacturing			✓(6)	
Office	✓(2)	✓(7)	✓(7)	✓(7)
Pawn Establishment		✓		✓
Payday Loan Establishment		✓		✓
Personal Services	✓(2)	✓	✓	✓
Pet Services Establishment		✓	✓	✓
Place of Worship		✓(8)	✓(8)	✓
Print Shop		✓	✓	✓
Propane Retail Outlet	✓(2)	✓	✓	✓
Research and Development Establishment	✓(2)	✓	✓	✓
Restaurant	✓(2)(9)	✓	✓	✓
Retail		✓		✓(10)
Retail of Motor Vehicles and Major Recreational Equipment		✓	✓	✓
Towing Compound			✓	
Tradesperson or Contractor's Establishment			✓	
Transportation Depot			✓(11)	
Veterinary Services		✓	✓	✓
Warehouse			✓(5)(11)	✓(11)(12)

SECTION 10 – Employment (EMP) Zones

The Employment *zones* apply to lands designated General Industrial Employment, Heavy Industrial Employment, and Business Park Employment in the Official Plan

10.1 APPLICABLE ZONES

EMP-1: Neighbourhood Industrial Employment – the purpose of this *zone* is to accommodate a limited range of industrial *uses* on lands located within neighbourhoods and/or Major Transit Station Areas.

EMP-2: General Industrial Employment – the purpose of this *zone* is to accommodate a broad range of industrial *uses* that are not *noxious uses*.

EMP-3: Heavy Industrial Employment – the purpose of this *zone* is to accommodate industrial *uses*, including *noxious uses,* on lands that are separated from sensitive land *uses*. This *zone* also accommodates *uses* that require larger tracts of land for large *buildings*, materials, and/or products.

EMP-4: Service Business Park Employment – the purpose of this *zone* is to accommodate industrial *uses* and limited complimentary *uses* that support adjacent employment lands. EMP-4 *zoned* lands are located within 450 metres of existing or planned transit corridors.

EMP-5: General Business Park Employment – the purpose of this *zone* is to accommodate a limited range of industrial employment *uses* on lands that are generally located adjacent to EMP-2 and EMP-3 lands to provide a transition from *noxious uses*.

10.2 PERMITTED USES

No *person* shall, within any EMP *zone*, *use* or permit the *use* of any *lot*; or erect, alter or *use* any *building* or *structure* for any purpose other than those permitted *uses* within Table 10-1 below.

Table 10-1: Permitted Uses within the Employment Zones

Use	EMP-1	EMP-2	EMP-3	EMP-4	EMP-5
Adult Sex Film Theatre (1)			✓		
Automotive Detailing and Repair Operation (2)		✓		✓	✓
Biotechnological Establishment	✓	✓	✓	✓	✓
Building Material and Decorating Supply Establishment	✓	✓		✓	✓
Bulk Fuel and Oil Storage Establishment		✓	✓		
Car Wash (3)				✓	

Use	EMP-1	EMP-2	EMP-3	EMP-4	EMP-5
Catering Service Establishment				✓	✓
Commercial Driver and Training Establishment				✓	✓
Commercial Vehicle Wash Facility		✓			✓
Computer, Electronic, Data Processing, or Server Establishment				✓	✓
Craftsperson Shop	✓	✓		✓	✓
Crematorium (4)			✓		
Day Care Facility	✓(5)	✓(5)		✓(3)	✓(3)
Drive-Through Facility	✓	✓		✓	✓
Existing Residential Uses	✓				
Financial Establishment (3)				✓	✓
Fitness Centre	✓(5)	✓(5)		✓(3)	✓(3)
Garden Centre, Nursery, and/or Landscaping Supply	✓	✓		✓	✓
Gas Station				✓	
Health Clinic (3)				✓	✓
Heavy Repair Operation (2)	✓(6)(9)	✓(6)	✓(6)	✓	✓
Indoor Recycling Operation	✓(10)	✓(10)	✓		
Industrial Administrative Office				✓	✓
Major Equipment Supply and Service		✓	✓	✓	✓
Manufacturing (2)	✓ (6)(7)(9)	✓(6)(7)	✓	✓(7)	✓(7)
Office				✓(8)	
Outdoor Recycling Operation			✓		
Personal Services (3)				✓	✓
Pet Boarding (3)				✓	
Pet Services Establishment (3)				✓	
Print Shop (3)				✓	✓
Printing or Publishing Establishment	✓	✓		✓	✓
Propane Facility			✓		
Propane Retail Outlet				✓	
Research and Development Establishment				✓	✓
Restaurant	✓(5)	✓(5)		✓(3)	✓(3)
Restoration, Janitorial, or Security Services		✓(6)		✓	✓
Salvage or Scrap Yard			✓		

Use	EMP-1	EMP-2	EMP-3	EMP-4	EMP-5
Towing Compound	✓(9)	✓		✓	✓
Tradesperson or Contractor's Establishment	✓(6)	✓(6)	✓(6)	✓	✓
Truck Transport Terminal		✓(6)(7)	✓ (6)	✓(7)	✓(7)
Veterinary Services (3)				✓	✓
Warehouse	✓(6)(7)	✓(6)(7)	✓	✓(7)	✓(7)

Additional Regulations for Permitted Uses Table 10-1

(1) No *building* shall be *used* for an *Adult Sex Film Theatre* on a *lot* that is situated within 300 metres of a *day care facility*; *elementary, secondary or post-secondary schools* (including *offices* of the Waterloo Region District School Board); *place of worship*; *offices* of the Family and Children Services of Waterloo Region; a *lot zoned* to permit a *residential use*; or another *lot* on which an *Adult Sex Film Theatre* is located. Such distance is to be measured from the closest points of the *lot lines* associated with each *lot*.

(2) Despite Section 4.2, *retail uses* are permitted as *accessory uses* and shall be located on the same *premises* as the *principal use* to a maximum of 25 percent of the *gross floor area* of the *building.*

(3) Shall be located within a *multi-unit building* containing at least one permitted *use* listed in Table 10-1 not subject to this provision. Individual units shall not exceed 1,500 square metres of *gross floor area*.

(4) Shall not be located within 250 metres of a *residential use, a day care facility, elementary school, secondary school* or a *post-secondary school* or a *lot zoned* to permit a *residential use, a day care facility, elementary school, secondary school* or a *post-secondary school.*

(5) Shall be permitted as an *accessory* use to at least one permitted *use* listed in Table 10-1 not subject to this regulation and shall be located within a *multi-unit building* containing. Individual units shall not exceed 1,500 square metres of *gross floor area*.

(6) Despite Section 4.2, *industrial administrative office uses* are permitted as an *accessory use* and shall be located on the same *premises* as the *principal use* to a maximum of 25 percent of the *gross floor area* of the *building*.

(7) Shall not include a *noxious use*.

(8) A total maximum *gross floor area* of 10,000 square metres of *office* is permitted on a *lot*.

Appendix B
Transportation Noise Input Data

Figure 1-3:
2023 Existing Traffic Volumes Balanced
AM and PM Peak Hour

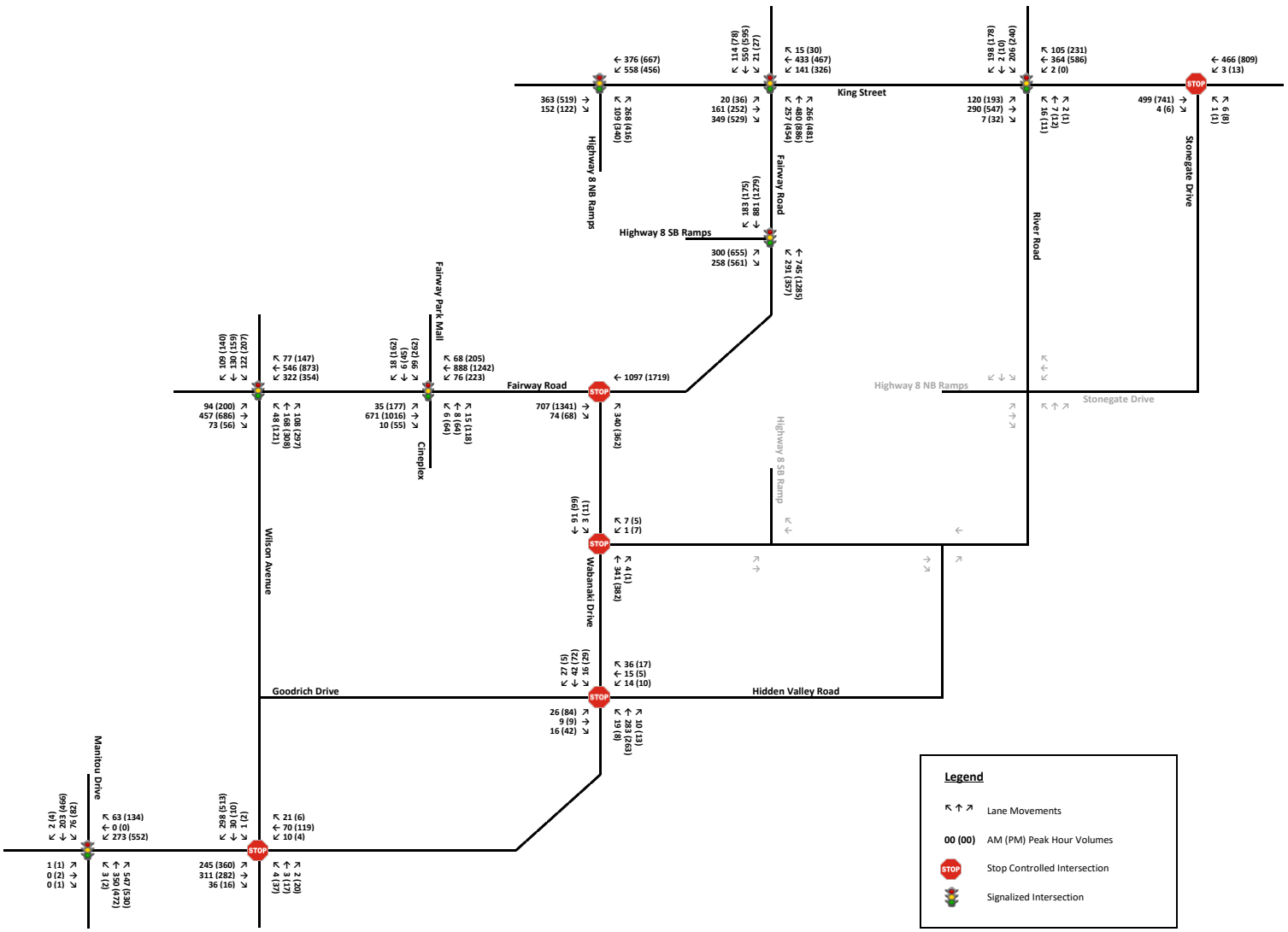


Figure 1-4:
2023 Existing Commercial Vehicle Percentage
AM and PM Peak Hour

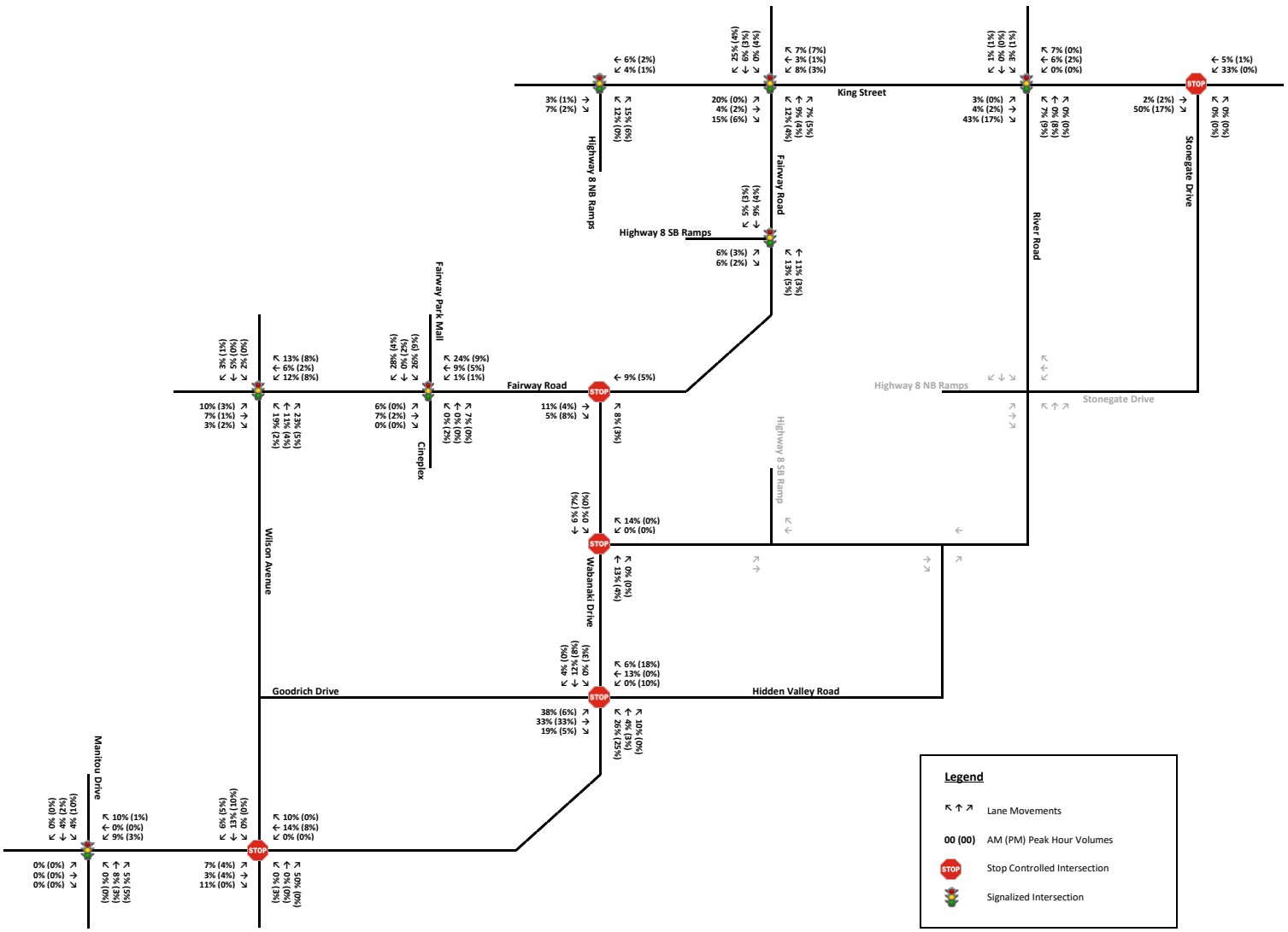


Figure 5-1:
2028 Total Traffic Volumes
AM and PM Peak Hour

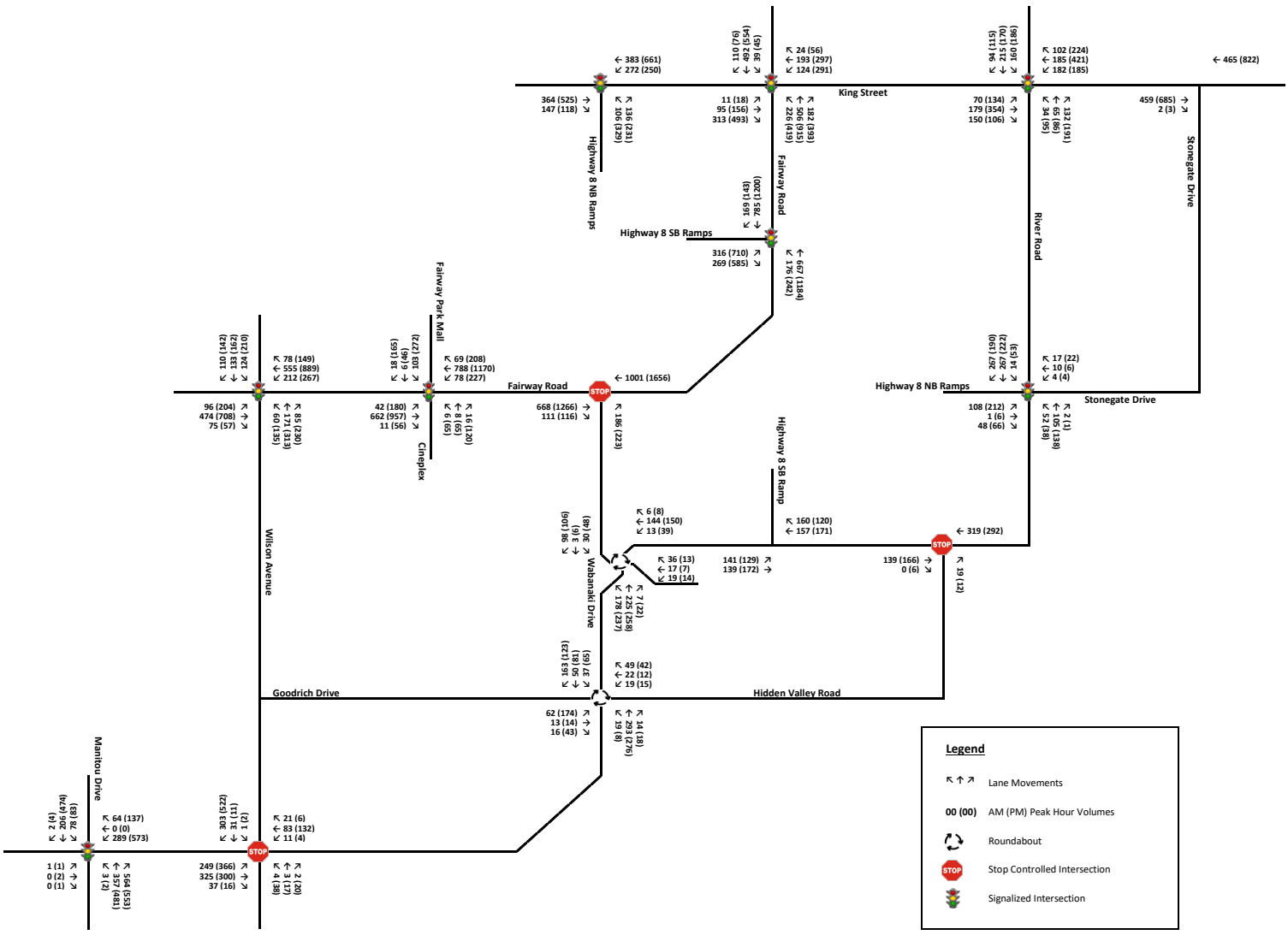


Figure 5-2:
2033 Total Traffic Volumes
AM and PM Peak Hour

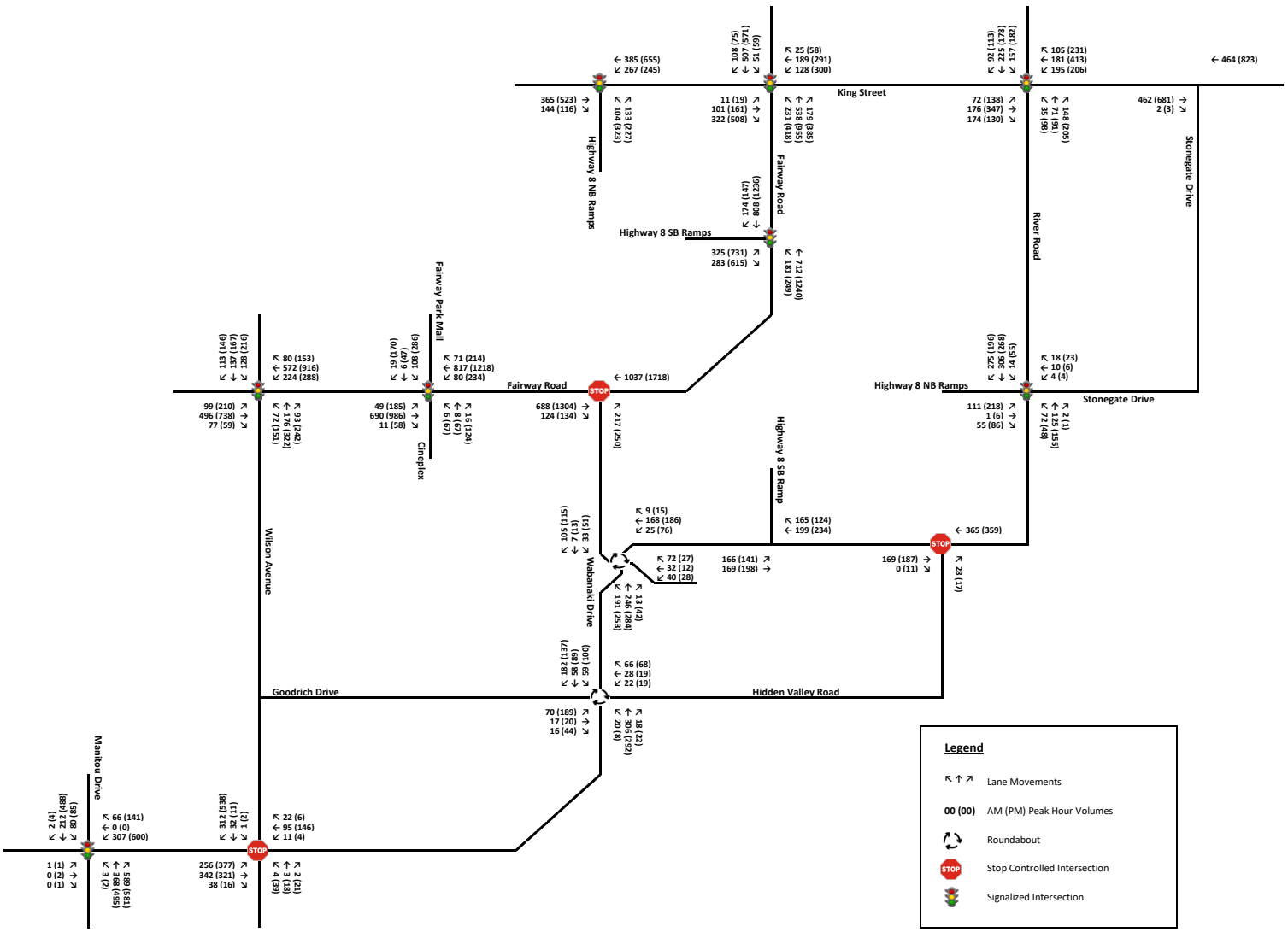
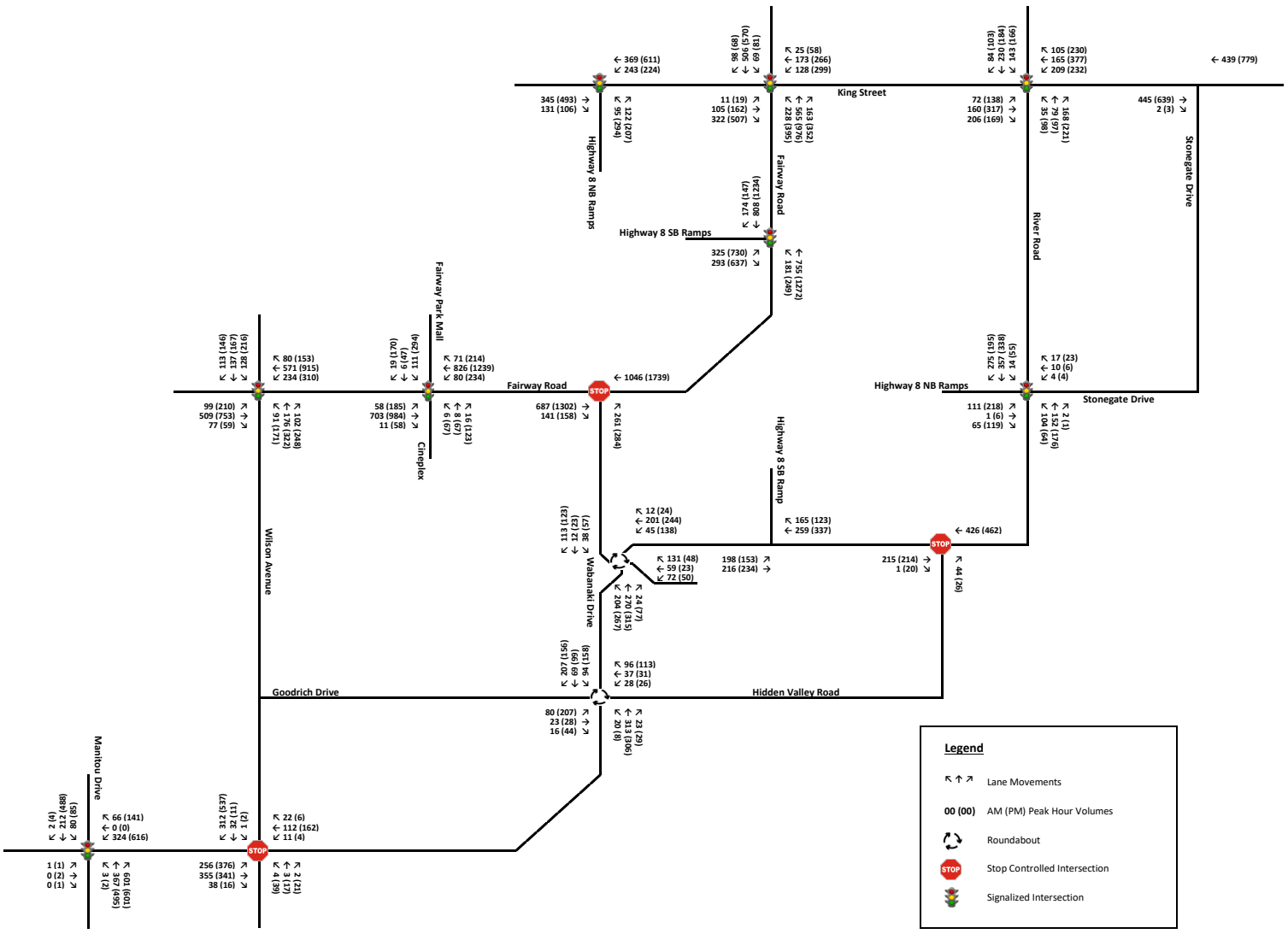


Figure 5-3:
2043 Total Traffic Volumes
AM and PM Peak Hour



Highway	Location Description From	Location Description To	Dist. (KM)	2019 AADT
7A	ISLAND RD.	CARNEGIE ST (S)	1.9	22700
7A	CARNEGIE ST (S)	DURHAM RD. 2 SIMCOE ST.	0.5	16700
7A	DURHAM RD. 2 SIMCOE ST.	6TH LINE (W)	1.2	15100
7A	6TH LINE (W)	HWYS 7 & 12 MANCHESTER HWY END	2.8	14000
7A	HWYS 7 & 12 MANCHESTER HWY END	END OF HWY 7A		
8	NIAGARA/HAMILTON REG BDY START OF NA	HWY 5 AND HWY 8 EAST OF ROUNDABOUT END OF NA	43.0	
8	HWY 5 AND HWY 8 EAST OF ROUNDABOUT END OF NA	CENTRE OF ROUNDABOUT (PETERS CORS)	0.3	22550
8	CENTRE OF ROUNDABOUT (PETERS CORS)	HAM/WENT RDS 552 (N) WOODHILL RD 519 (S)	6.3	11100
8	HAM/WENT RDS 552 (N) WOODHILL RD 519 (S)	SAFARI RD (4)	7.0	9800
8	SAFARI RD (4)	HAMILTON WATERLOO REG BDY	1.8	12400
8	HAMILTON WATERLOO REG BDY	CAMBRIDGE S LTS N DUMFRIES C 8 RD	1.2	12800
8	CAMBRIDGE S LTS N DUMFRIES C 8 RD	REG RD 43 BRANCHTON RD START OF NA	1.9	13100
8	REG RD 43 BRANCHTON RD START OF NA	HWYS 8/401 IC	10.9	
8	HWYS 8/401 IC	SPORTSWORLD DR IC	2.1	79400
8	SPORTSWORLD DR IC	WATERLOO RD 8 KING ST IC	1.2	88500
8	WATERLOO RD 8 KING ST IC	FAIRWAY RD IC OP(WBL)	2.5	117600
8	FAIRWAY RD IC OP(WBL)	E JCT HWY 7 IC	2.2	115400
8	E JCT HWY 7 IC	STRATFORD E LTS START OF NA	41.4	
8	STRATFORD E LTS START OF NA	STRATFORD END OF NA	5.5	
8	STRATFORD END OF NA	PERTH RD 135 WARTBURG RD (N)	5.7	6800
8	PERTH RD 135 WARTBURG RD (N)	MITCHELL E LTS START OF NA	11.2	6600
8	MITCHELL E LTS START OF NA	FORMER MITCHELL W LTS END OF NA	2.8	
8	FORMER MITCHELL W LTS END OF NA	SEAFORTH E LT START OF NA	16.2	3850
8	SEAFORTH E LT START OF NA	FORMER SEAFORTH W LTS END OF NA	1.4	
8	FORMER SEAFORTH W LTS END OF NA	CLINTON E LTS RANSFORD ST START OF NA	11.5	4550
8	CLINTON E LTS RANSFORD ST START OF NA	FORMER CLINTON W LTS END OF NA	2.1	
8	FORMER CLINTON W LTS END OF NA	GODERICH S LTS START OF NA	16.6	6450
8	GODERICH S LTS START OF NA	HWY 21 END OF NA HWY END	2.1	
8	HWY 21 END OF NA HWY END	END OF HWY 8		
9	HWY 11 NEWMARKET START OF NA	0.560 KM E OF HWY 400 END OF NA	8.9	
9	0.560 KM E OF HWY 400 END OF NA	HWY 400 IC	0.6	38000
9	HWY 400 IC	HWY 27	7.0	21700

Rank	TC Number	Railway	Province	Access	Jurisdiction	Mile	Subdivision	Location	Latitude	Longitude	Total Trains Daily	Train Max Speed (mph)	Lanes	Tracks
11280	32059	CP	ON	Public	F	9.42	Waterloo	Goodwich Dr	43.4156	-80.4345	2	10	2	1
11282	29167	HCRC	ON	Public	P	116.52	Webbwood - H	Eley Rd	46.2224	-83.238	4	40	2	1
11302	50114	CN	ON	Private	F	27.06	Caramat	Private Rd	49.36993	-85.25121	20.86	65	2	1
11303	5719	GERCL	ON	Public	F	31.48	Exeter	Rogerville Rd	43.4155	-81.5028	1	35	2	1
11305	300983	CN	ON	Private	F	129.5	Redditt	End of Ena Road	49.97483	-94.5179	18.86	50	2	2
11309	2820	TRC	ON	Public	P	0.38	Canal	Philips Rd	42.951	-79.2967	1	30	2	1
11337	725019	CP	ON	Public	F	30.75	Ignace	Bogg Lake Road	49.60115	-92.24356	0	60	2	3
11341	8314	CN	ON	Public	F	310.4	Kingston - CN	Francom St	43.8466	-79.0319	2	15	2	1
11350	7590	ON	ON	Public	P	110.75	Kapuskasing	Twsp. Road	49.61749	-83.27616	1	45	2	1
11360	46139	CN	ON	Private	F	273.86	Bala - CN	Private (Capreol)	46.6835	-80.91699	21.86	45	2	1
11361	25051	CP	ON	Public	F	95.3	Mactier	Lovering Line (Concessior	44.7621	-79.6143	0	50	2	1
11364	46665	CP	ON	Private	F	4.9	Windsor	Farm Crossing	0	0	20	60	1	1
11365	46667	CP	ON	Private	F	55.1	Windsor	Farm Crossing	42.50873	-82.08331	20	60	1	1
11367	16554	CN	ON	Public	F	20.28	Vankleek	Industrial Blvd/Cameron	45.5945	-74.5996	2	10	2	1
11368	26133	CP	ON	Public	F	79.7	Cartier - CP	Clarabelle Rd.	46.4991	-81.053	2	10	2	1
11369	26182	CP	ON	Public	F	132.02	Nipigon	Bethune-Hardisty Streets	48.38676	-89.23942	2	10	2	1
11371	31602	CN	ON	Public	F	60.8	Chatham - CN	Allison (West Sr13)	42.3318	-82.02	4	10	2	1
11372	7541	ON	ON	Public	P	4.42	Kapuskasing	L6-7 C2	49.07864	-81.11627	4	50	2	1
11373	7542	ON	ON	Public	P	4.76	Kapuskasing	L8 Con 2-3	49.08014	-81.12393	4	50	2	1
11374	7550	ON	ON	Public	P	32.2	Kapuskasing	Lot-8 Conc 6-7 (Neat Sm	49.25438	-81.66042	4	50	2	1
11375	25037	CP	ON	Public	F	81.7	Mactier	Warmminister Sideroad (	44.6071	-79.6358	0	55	2	1
11378	1170	B-CR	ON	Public	P	0.11	Meaford	Mckay Road	44.3132	-79.6679	0.25	5	2	1
11379	300857	YDH	ON	Public	P	35.4	Uxbridge	Regional Road 21	44.03383	-79.19843	0.6	10	2	1
11380	7544	ON	ON	Public	P	8.39	Kapuskasing	Concession 4 Lot 18-19	49.09434	-81.20039	4	50	2	2
11382	22841	CP	ON	Public	F	117.51	Havelock - CP	Maria St	44.3007	-78.3105	1	10	2	1
11397	18999	CP	ON	Public	F	93.02	Belleville	Sidney Street	44.1519	-77.3945	0	60	1	1
11400	49058	CN	ON	Private	F	247.2	Bala - CN	Macynen Rd	46.38128	-80.81706	21.86	40	2	1
11401	51009	CN	ON	Private	F	146.21	Bala - CN	0	45.32045	-79.99058	21.86	40	2	1
11407	300850	YDH	ON	Public	P	31.32	Uxbridge	Obeirn Rd	44.0811	-79.1611	1	15	2	1
11409	18941	CP	ON	Public	F	34.16	Belleville	Cross Road (Lot 2 Conces	44.7333	-76.606	0	50	1	1
11415	22813	CP	ON	Public	F	95.95	Havelock - CP	11 Line	44.4188	-77.922	1	10	2	1
11426	46948	CN	ON	Private	F	38.25	Dundas	Farm Crossing	0	0	52	80	1	3
11427	300725	CP	ON	Private	F	20.13	Parry Sound	Access from James Bay Fi	45.32046	-79.99073	14	40	2	1
11429	47132	CN	ON	Private	F	58.8	Chatham - CN		42.42685	-82.14018	18	80	1	2
11430	47133	CN	ON	Private	F	58.6	Chatham - CN		42.42909	-82.13718	18	80	1	2
11431	47134	CN	ON	Private	F	58.5	Chatham - CN		42.43043	-82.13548	18	80	1	2
11432	47135	CN	ON	Private	F	58.2	Chatham - CN		42.43254	-82.13266	18	80	1	2
11433	47137	CN	ON	Private	F	54.1	Chatham - CN		42.47505	-82.07585	18	80	1	2
11434	47138	CN	ON	Private	F	53.7	Chatham - CN	Farm	42.47907	-82.07068	18	80	1	2
11435	47140	CN	ON	Private	F	52.8	Chatham - CN		42.48857	-82.0577	18	80	1	2
11436	47141	CN	ON	Private	F	50.3	Chatham - CN	Does not exist	0	0	18	80	1	2
11437	47142	CN	ON	Private	F	49.43	Chatham - CN	Farm	42.52282	-82.01186	18	80	1	2
11438	47143	CN	ON	Private	F	49.01	Chatham - CN	Farm	42.52688	-82.00645	18	80	1	2
11439	47144	CN	ON	Private	F	48.7	Chatham - CN		42.53003	-82.00211	18	80	1	2
11440	47145	CN	ON	Private	F	48.25	Chatham - CN	Farm	42.53513	-81.99539	18	80	1	2
11448	50641	CP	ON	Private	F	19.5	Keewatin	Sherwood Campers	49.76845	-94.86902	18	45	2	2
11449	300463	CP	ON	Private	F	35.87	Galt	Glen Eden Ski/Snowboar	43.5027	-79.9473	18	45	2	2
11456	34512	CN	ON	Public	F	6.13	Hagersville	10Th Concession	42.9269	-80.083	4	30	2	1
11458	25050	CP	ON	Public	F	94.61	Mactier	Laughlin Falls Road (4Th (	44.7526	-79.6134	0	50	2	1
11474	31610	CN	ON	Public	F	60.8	Chatham - CN	English Line	42.3886	-82.1398	4	10	2	1
11481	22898	CP	ON	Public	F	161.33	Havelock - CP	Lakeridge Rd (Reg 23)	44.0001	-79.0434	1	10	2	1
11508	22474	GJR	ON	Public	P	26.6	Goderich - GJR	Watson Rd S	43.5338	-80.163	2	5	2	1

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January 30, 2018

Via email: IwonaS@aercoustics.com

Iwona Stasiewicz
Aercoustics Engineering Limited
1004 Middlegate Road
Suite 1100
Mississauga, ON L4Y 1M4

Dear Sir/Madam:

Re: Rail Traffic Volumes, CP Mileage 94.63, Belleville Subdivision, Wallbridge Loyalist Road

This is in reference to your request for rail traffic data in the vicinity of Wallbridge Loyalist Road in the City of Belleville. The study area is located at mile 94.63 of our Belleville Subdivision, which is classified as a Principal Main line.

The information requested is as follows:

1. Number of freight trains between 0700 & 2300: 5
   Number of freight trains between 2300 & 0700: 4

2. Average number of cars per train: 85
   Maximum cars per train freight: 195

3. Number of locomotives per train: 2 (4 Maximum)

4. Maximum permissible train speed is 60 miles per hour (freight)

5. Whistle signal is sounded only at the Wallbridge Loyalist Road grade crossing located within the study area. Please note, the whistle may be sounded at any time if deemed necessary by the train crew for safety reasons.

6. There is 1 main line track with continuously welded rail at this location.

The information provided is based on recent rail traffic. Variations of the above may exist on a day-to-day basis. Specific measurements may also vary significantly depending on customer needs.

Yours truly,

Josie Tomei SR/WA
Specialist Real Estate Sales & Acquisitions – Ontario

Appendix C
Rail Noise Sample Calculations

CPKC Rail Assessment

```
STAMSON 5.0        NORMAL REPORT        Date: 13-03-2024 16:32:37
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: rail.te              Time Period: Day/Night 16/8 hours
Description: Impact from Rail at 50m


Rail data, segment # 1: CPKC (day/night)
-----------------------------------------
Train            ! Trains      ! Speed !# loc !# Cars! Eng  !Cont
Type             !             !(km/h) !/Train!/Train! type !weld
-----------------+-------------+-------+------+------+------+----
  1.             !   4.0/2.0   !  20.0 !  4.0 !195.0 !Diesel! Yes

Data for Segment # 1: CPKC (day/night)
---------------------------------------
Angle1   Angle2           : -90.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  :  50.00 / 50.00  m
Receiver height           :   4.50 / 4.50   m
Topography                :      1       (Flat/gentle slope; no barrier)
No Whistle
Reference angle           :   0.00

Results segment # 1: CPKC (day)
-------------------------------

LOCOMOTIVE (0.00 + 58.02 + 0.00) = 58.02 dBA
Angle1 Angle2  Alpha RefLeq  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------
   -90     90   0.50  67.00  -7.82  -1.17   0.00   0.00   0.00  58.02
-------------------------------------------------------------------------

WHEEL (0.00 + 44.58 + 0.00) = 44.58 dBA
Angle1 Angle2  Alpha RefLeq  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------
   -90     90   0.60  54.30  -8.37  -1.35   0.00   0.00   0.00  44.58
-------------------------------------------------------------------------

Segment Leq : 58.21 dBA

Total Leq All Segments: 58.21 dBA

Results segment # 1: CPKC (night)
---------------------------------

LOCOMOTIVE (0.00 + 58.02 + 0.00) = 58.02 dBA
Angle1 Angle2  Alpha RefLeq  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------
   -90     90   0.50  67.00  -7.82  -1.17   0.00   0.00   0.00  58.02
-------------------------------------------------------------------------

WHEEL (0.00 + 44.58 + 0.00) = 44.58 dBA
Angle1 Angle2  Alpha RefLeq  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------
   -90     90   0.60  54.30  -8.37  -1.35   0.00   0.00   0.00  44.58
-------------------------------------------------------------------------
```

```
Segment Leq : 58.21 dBA

Total Leq All Segments: 58.21 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 58.21
                           (NIGHT): 58.21
```

```
STAMSON 5.0        NORMAL REPORT        Date: 13-03-2024 16:32:56
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: rail.te              Time Period: Day/Night 16/8 hours
Description: Impact from Rail at 75m


Rail data, segment # 1: CPKC (day/night)
-----------------------------------------
Train            ! Trains      ! Speed !# loc !# Cars! Eng  !Cont
Type             !             !(km/h) !/Train!/Train! type !weld
-----------------+-------------+-------+------+------+------+----
  1.             !   4.0/2.0   !  20.0 !  4.0 !195.0 !Diesel! Yes

Data for Segment # 1: CPKC (day/night)
---------------------------------------
Angle1   Angle2           : -90.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  :  75.00 / 75.00  m
Receiver height           :   4.50 / 4.50   m
Topography                :      1       (Flat/gentle slope; no barrier)
No Whistle
Reference angle           :   0.00

Results segment # 1: CPKC (day)
--------------------------------

LOCOMOTIVE (0.00 + 55.39 + 0.00) = 55.39 dBA
Angle1 Angle2  Alpha RefLeq  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------
   -90     90   0.50  67.00 -10.45  -1.17   0.00   0.00   0.00  55.39
-------------------------------------------------------------------------

WHEEL (0.00 + 41.76 + 0.00) = 41.76 dBA
Angle1 Angle2  Alpha RefLeq  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------
   -90     90   0.60  54.30 -11.18  -1.35   0.00   0.00   0.00  41.76
-------------------------------------------------------------------------

Segment Leq : 55.57 dBA

Total Leq All Segments: 55.57 dBA

Results segment # 1: CPKC (night)
----------------------------------

LOCOMOTIVE (0.00 + 55.39 + 0.00) = 55.39 dBA
Angle1 Angle2  Alpha RefLeq  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------
   -90     90   0.50  67.00 -10.45  -1.17   0.00   0.00   0.00  55.39
-------------------------------------------------------------------------

WHEEL (0.00 + 41.76 + 0.00) = 41.76 dBA
Angle1 Angle2  Alpha RefLeq  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------
   -90     90   0.60  54.30 -11.18  -1.35   0.00   0.00   0.00  41.76
-------------------------------------------------------------------------

Segment Leq : 55.57 dBA
```

```
Total Leq All Segments: 55.57 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 55.57
                           (NIGHT): 55.57
```

```
STAMSON 5.0        NORMAL REPORT        Date: 13-03-2024 16:33:26
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: rail.te              Time Period: Day/Night 16/8 hours
Description: Impact from CPKC Rail at 100m


Rail data, segment # 1: CPKC (day/night)
-----------------------------------------
Train            ! Trains      ! Speed !# loc !# Cars! Eng  !Cont
Type             !             !(km/h) !/Train!/Train! type !weld
-----------------+-------------+-------+------+------+------+----
  1.             !   4.0/2.0   !  20.0 !  4.0 !195.0 !Diesel! Yes

Data for Segment # 1: CPKC (day/night)
---------------------------------------
Angle1   Angle2           : -90.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  : 100.00 / 100.00 m
Receiver height           :   4.50 / 4.50   m
Topography                :      1       (Flat/gentle slope; no barrier)
No Whistle
Reference angle           :   0.00

Results segment # 1: CPKC (day)
--------------------------------

LOCOMOTIVE (0.00 + 53.52 + 0.00) = 53.52 dBA
Angle1 Angle2  Alpha RefLeq  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------
   -90     90   0.50  67.00 -12.32  -1.17   0.00   0.00   0.00  53.52
-------------------------------------------------------------------------

WHEEL (0.00 + 39.76 + 0.00) = 39.76 dBA
Angle1 Angle2  Alpha RefLeq  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------
   -90     90   0.60  54.30 -13.18  -1.35   0.00   0.00   0.00  39.76
-------------------------------------------------------------------------

Segment Leq : 53.70 dBA

Total Leq All Segments: 53.70 dBA

Results segment # 1: CPKC (night)
----------------------------------

LOCOMOTIVE (0.00 + 53.52 + 0.00) = 53.52 dBA
Angle1 Angle2  Alpha RefLeq  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------
   -90     90   0.50  67.00 -12.32  -1.17   0.00   0.00   0.00  53.52
-------------------------------------------------------------------------

WHEEL (0.00 + 39.76 + 0.00) = 39.76 dBA
Angle1 Angle2  Alpha RefLeq  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------
   -90     90   0.60  54.30 -13.18  -1.35   0.00   0.00   0.00  39.76
-------------------------------------------------------------------------

Segment Leq : 53.70 dBA
```

```
Total Leq All Segments: 53.70 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 53.70
                           (NIGHT): 53.70
```

```
STAMSON 5.0        NORMAL REPORT        Date: 13-03-2024 16:33:52
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: rail.te              Time Period: Day/Night 16/8 hours
Description: Impact from CPKC Rail at 150m


Rail data, segment # 1: CPKC (day/night)
-----------------------------------------
Train            ! Trains      ! Speed !# loc !# Cars! Eng  !Cont
Type             !             !(km/h) !/Train!/Train! type !weld
-----------------+-------------+-------+------+------+------+----
  1.             !   4.0/2.0   !  20.0 !  4.0 !195.0 !Diesel! Yes

Data for Segment # 1: CPKC (day/night)
---------------------------------------
Angle1   Angle2           : -90.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  : 150.00 / 150.00 m
Receiver height           :   4.50 / 4.50   m
Topography                :      1       (Flat/gentle slope; no barrier)
No Whistle
Reference angle           :   0.00

Results segment # 1: CPKC (day)
-------------------------------

LOCOMOTIVE (0.00 + 50.89 + 0.00) = 50.89 dBA
Angle1 Angle2  Alpha RefLeq  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------
   -90     90   0.50  67.00 -14.95  -1.17   0.00   0.00   0.00  50.89
-------------------------------------------------------------------------

WHEEL (0.00 + 36.94 + 0.00) = 36.94 dBA
Angle1 Angle2  Alpha RefLeq  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------
   -90     90   0.60  54.30 -16.00  -1.35   0.00   0.00   0.00  36.94
-------------------------------------------------------------------------

Segment Leq : 51.06 dBA

Total Leq All Segments: 51.06 dBA

Results segment # 1: CPKC (night)
---------------------------------

LOCOMOTIVE (0.00 + 50.89 + 0.00) = 50.89 dBA
Angle1 Angle2  Alpha RefLeq  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------
   -90     90   0.50  67.00 -14.95  -1.17   0.00   0.00   0.00  50.89
-------------------------------------------------------------------------

WHEEL (0.00 + 36.94 + 0.00) = 36.94 dBA
Angle1 Angle2  Alpha RefLeq  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------
   -90     90   0.60  54.30 -16.00  -1.35   0.00   0.00   0.00  36.94
-------------------------------------------------------------------------

Segment Leq : 51.06 dBA
```

```
Total Leq All Segments: 51.06 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 51.06
                           (NIGHT): 51.06
```

```
STAMSON 5.0        NORMAL REPORT        Date: 13-03-2024 16:34:11
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: rail.te              Time Period: Day/Night 16/8 hours
Description: Impact from CPKC Rail at 200m


Rail data, segment # 1: CPKC (day/night)
-----------------------------------------
Train            ! Trains      ! Speed !# loc !# Cars! Eng  !Cont
Type             !             !(km/h) !/Train!/Train! type !weld
-----------------+-------------+-------+------+------+------+----
  1.             !   4.0/2.0   !  20.0 !  4.0 !195.0 !Diesel! Yes

Data for Segment # 1: CPKC (day/night)
---------------------------------------
Angle1   Angle2           : -90.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      1       (Absorptive ground surface)
Receiver source distance  : 200.00 / 200.00 m
Receiver height           :   4.50 / 4.50   m
Topography                :      1       (Flat/gentle slope; no barrier)
No Whistle
Reference angle           :   0.00

Results segment # 1: CPKC (day)
--------------------------------

LOCOMOTIVE (0.00 + 49.02 + 0.00) = 49.02 dBA
Angle1 Angle2  Alpha RefLeq  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------
   -90     90   0.50  67.00 -16.82  -1.17   0.00   0.00   0.00  49.02
-------------------------------------------------------------------------

WHEEL (0.00 + 34.94 + 0.00) = 34.94 dBA
Angle1 Angle2  Alpha RefLeq  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------
   -90     90   0.60  54.30 -18.00  -1.35   0.00   0.00   0.00  34.94
-------------------------------------------------------------------------

Segment Leq : 49.19 dBA

Total Leq All Segments: 49.19 dBA

Results segment # 1: CPKC (night)
----------------------------------

LOCOMOTIVE (0.00 + 49.02 + 0.00) = 49.02 dBA
Angle1 Angle2  Alpha RefLeq  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------
   -90     90   0.50  67.00 -16.82  -1.17   0.00   0.00   0.00  49.02
-------------------------------------------------------------------------

WHEEL (0.00 + 34.94 + 0.00) = 34.94 dBA
Angle1 Angle2  Alpha RefLeq  D.Adj  F.Adj  W.Adj  H.Adj  B.Adj SubLeq
-------------------------------------------------------------------------
   -90     90   0.60  54.30 -18.00  -1.35   0.00   0.00   0.00  34.94
-------------------------------------------------------------------------

Segment Leq : 49.19 dBA
```

```
Total Leq All Segments: 49.19 dBA

TOTAL Leq FROM ALL SOURCES (DAY): 49.19
                           (NIGHT): 49.19
```

ION 2 LRT Assessment

Per Report, LRT movements were modelled as the acoustic equivalent of two medium trucks, consistent with the existing Noise Impact Study carried out for the LRT.

STAMSON requires a minimum equivalent number of vehicles per hour (40 VPH). As such, traffic counts were inflated, and appropriate adjustments were made to the final results. For example, an inflation of 100% (doubling) of vehicle counts would equate to an increase of + 3dB at receptors. To account for a doubling, 3 dB would then be subtracted from the calculated sound level.

```
ION 2 LRT Assessment
STAMSON 5.0        SUMMARY REPORT        Date: 22-02-2024 16:38:39
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: ion2_day.te          Time Period: Day/Night 16/8 hours
Description: ION Impact 15m


Road data, segment # 1:  (day/night)
-----------------------------------
Car traffic volume  :     0/0     veh/TimePeriod
Medium truck volume :  1127/327   veh/TimePeriod
Heavy truck volume  :     0/0     veh/TimePeriod
Posted speed limit  :    50 km/h
Road gradient       :     0 %
Road pavement       :     1 (Typical asphalt or concrete)

Data for Segment # 1:  (day/night)
-----------------------------------
Angle1   Angle2           : -90.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  :  15.00 / 15.00  m
Receiver height           :   4.50 / 4.50   m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00

Result summary (day)
--------------------

                    !  source  !   Road   !  Total
                    !  height  !   Leq    !   Leq
                    !   (m)    !  (dBA)   !  (dBA)
--------------------+----------+----------+----------
 1.                 !     0.50 !    62.24 !    62.24
--------------------+----------+----------+----------
                      Total                  62.24 dBA

Result summary (night)
----------------------

                    !  source  !   Road   !  Total
                    !  height  !   Leq    !   Leq
                    !   (m)    !  (dBA)   !  (dBA)
--------------------+----------+----------+----------
 1.                 !     0.50 !    59.88 !    59.88
--------------------+----------+----------+----------
                      Total                  59.88 dBA

Daytime Vehicle Inflation Adjustment (x 4) = -6 dB
Nighttime Vehicle Adjustment (x 10) = -10 dB

TOTAL Leq FROM ALL SOURCES (DAY): 56.24
                           (NIGHT): 49.88
```

```
STAMSON 5.0        SUMMARY REPORT        Date: 22-02-2024 16:39:06
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: ion2_day.te          Time Period: Day/Night 16/8 hours
Description: ION Impact 30m


Road data, segment # 1:  (day/night)
-----------------------------------
Car traffic volume  :     0/0     veh/TimePeriod
Medium truck volume :  1127/327   veh/TimePeriod
Heavy truck volume  :     0/0     veh/TimePeriod
Posted speed limit  :    50 km/h
Road gradient       :     0 %
Road pavement       :     1 (Typical asphalt or concrete)

Data for Segment # 1:  (day/night)
-----------------------------------
Angle1   Angle2           : -90.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  :  30.00 / 30.00  m
Receiver height           :   4.50 / 4.50   m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00

Result summary (day)
--------------------

                    !  source  !   Road   !  Total
                    !  height  !   Leq    !   Leq
                    !   (m)    !  (dBA)   !  (dBA)
--------------------+----------+----------+----------
 1.                 !     0.50 !    59.23 !    59.23
--------------------+----------+----------+----------
                      Total                  59.23 dBA

Result summary (night)
----------------------

                    !  source  !   Road   !  Total
                    !  height  !   Leq    !   Leq
                    !   (m)    !  (dBA)   !  (dBA)
--------------------+----------+----------+----------
 1.                 !     0.50 !    56.87 !    56.87
--------------------+----------+----------+----------
                      Total                  56.87 dBA

Daytime Vehicle Inflation Adjustment (x 4) = -6 dB
Nighttime Vehicle Adjustment (x 10) = -10 dB

TOTAL Leq FROM ALL SOURCES (DAY): 53.23
                           (NIGHT): 46.87
```

```
STAMSON 5.0         SUMMARY REPORT         Date: 22-02-2024 16:39:23
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: ion2_day.te           Time Period: Day/Night 16/8 hours
Description: ION Impact 50m


Road data, segment # 1:  (day/night)
-----------------------------------
Car traffic volume  :     0/0     veh/TimePeriod
Medium truck volume :  1127/327   veh/TimePeriod
Heavy truck volume  :     0/0     veh/TimePeriod
Posted speed limit  :    50 km/h
Road gradient       :     0 %
Road pavement       :     1 (Typical asphalt or concrete)

Data for Segment # 1:  (day/night)
-----------------------------------
Angle1   Angle2           : -90.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  :  50.00 / 50.00  m
Receiver height           :   4.50 / 4.50   m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00

Result summary (day)
--------------------

                    !  source  !   Road   !  Total
                    !  height  !   Leq    !   Leq
                    !   (m)    !  (dBA)   !  (dBA)
--------------------+----------+----------+----------
 1.                 !     0.50 !    57.02 !    57.02
--------------------+----------+----------+----------
                      Total                  57.02 dBA

Result summary (night)
----------------------

                    !  source  !   Road   !  Total
                    !  height  !   Leq    !   Leq
                    !   (m)    !  (dBA)   !  (dBA)
--------------------+----------+----------+----------
 1.                 !     0.50 !    54.65 !    54.65
--------------------+----------+----------+----------
                      Total                  54.65 dBA

Daytime Vehicle Inflation Adjustment (x 4) = -6 dB
Nighttime Vehicle Adjustment (x 10) = -10 dB

TOTAL Leq FROM ALL SOURCES (DAY): 51.02
                           (NIGHT): 44.65
```

```
STAMSON 5.0        SUMMARY REPORT        Date: 22-02-2024 16:39:44
MINISTRY OF ENVIRONMENT AND ENERGY / NOISE ASSESSMENT

Filename: ion2_day.te          Time Period: Day/Night 16/8 hours
Description: ION Impact 75m


Road data, segment # 1:  (day/night)
-----------------------------------
Car traffic volume  :     0/0     veh/TimePeriod
Medium truck volume :  1127/327   veh/TimePeriod
Heavy truck volume  :     0/0     veh/TimePeriod
Posted speed limit  :    50 km/h
Road gradient       :     0 %
Road pavement       :     1 (Typical asphalt or concrete)

Data for Segment # 1:  (day/night)
-----------------------------------
Angle1   Angle2           : -90.00 deg   90.00 deg
Wood depth                :      0       (No woods.)
No of house rows          :      0 / 0
Surface                   :      2       (Reflective ground surface)
Receiver source distance  :  75.00 / 75.00  m
Receiver height           :   4.50 / 4.50   m
Topography                :      1       (Flat/gentle slope; no barrier)
Reference angle           :   0.00

Result summary (day)
--------------------

                    !  source  !   Road   !  Total
                    !  height  !   Leq    !   Leq
                    !   (m)    !  (dBA)   !  (dBA)
--------------------+----------+----------+----------
 1.                 !     0.50 !    55.25 !    55.25
--------------------+----------+----------+----------
                      Total                  55.25 dBA

Result summary (night)
----------------------

                    !  source  !   Road   !  Total
                    !  height  !   Leq    !   Leq
                    !   (m)    !  (dBA)   !  (dBA)
--------------------+----------+----------+----------
 1.                 !     0.50 !    52.89 !    52.89
--------------------+----------+----------+----------
                      Total                  52.89 dBA

Daytime Vehicle Inflation Adjustment (x 4) = -6 dB
Nighttime Vehicle Adjustment (x 10) = -10 dB

TOTAL Leq FROM ALL SOURCES (DAY): 49.25
                           (NIGHT): 42.89
```

Appendix D
Stationary Noise Sample Calculations

Receiver: R01

Project: Kitchener Hidden Valley - Stationary Noise
Project Number: 22377

Time Period	Total (dBA)*
Day	41

Receiver Name	Receiver ID	X	Y	Z
Future Low Rise Residential	R01	546807 m	4807662 m	319 m

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
S03	Crusher	545526.7	4806649.4	328.8	0	119	0.0	A	75.3	0.0	-0.5	4.2	3.1	0.0	0.0	0.0	0.0	0.0	37
T05	Forklift	545587.7	4807243.6	326.4	0	80	22.4	A	73.2	0.0	0.2	4.4	4.8	0.0	0.0	0.0	0.0	0.0	20
T05	Forklift	545559.6	4807365.6	326.4	0	80	18.9	A	73.2	0.0	0.1	0.0	4.8	0.0	0.0	0.0	0.0	0.0	21
T05	Forklift	545598.1	4807364.7	326.4	0	80	17.5	A	72.9	0.0	-0.8	0.0	4.7	0.0	0.0	0.0	0.0	0.0	21
T05	Forklift	545623.6	4807251.1	326.4	0	80	22.5	A	73.0	0.0	-0.8	4.6	4.7	0.0	0.0	0.0	0.0	0.0	22
T05	Forklift	545610.8	4807531.2	327.1	0	80	19.5	A	72.6	0.0	-1.9	0.0	4.5	0.0	0.0	0.0	0.0	0.0	25
T05	Forklift	545697.5	4807523.7	327.4	0	80	18.6	A	72.0	0.0	-1.0	0.0	4.3	0.0	0.0	0.0	0.0	0.0	24
T05	Forklift	545660.0	4807451.2	326.9	0	80	18.3	A	72.3	0.0	-1.7	0.0	4.4	0.0	0.0	0.0	0.0	0.0	24
T05	Forklift	545609.4	4807417.7	326.7	0	80	17.9	A	72.7	0.0	-1.5	0.0	4.6	0.0	0.0	0.0	0.0	0.0	23
T05	Forklift	545680.9	4807577.1	327.3	0	80	16.0	A	72.1	0.0	-1.0	0.0	4.3	0.0	0.0	0.0	0.0	0.0	21
T05	Forklift	545657.0	4807594.9	327.0	0	80	15.5	A	72.2	0.0	-1.4	0.0	4.4	0.0	0.0	0.0	0.0	0.0	21
T05	Forklift	545700.5	4807474.1	327.2	0	80	15.3	A	72.0	0.0	-1.1	0.0	4.3	0.0	0.0	0.0	0.0	0.0	20
T05	Forklift	545625.6	4807584.9	326.8	0	80	15.2	A	72.5	0.0	-1.7	0.0	4.5	0.0	0.0	0.0	0.0	0.0	20
T05	Forklift	545567.0	4807463.3	327.1	0	80	15.4	A	73.0	0.0	-0.4	0.0	4.7	0.0	0.0	0.0	0.0	0.0	19
T05	Forklift	545607.8	4807472.6	327.4	0	80	14.4	A	72.7	0.0	-1.5	0.0	4.6	0.0	0.0	0.0	0.0	0.0	19
T05	Forklift	545599.0	4807450.0	327.0	0	80	13.5	A	72.8	0.0	-1.1	0.0	4.6	0.0	0.0	0.0	0.0	0.0	18
T05	Forklift	545581.5	4807443.6	326.8	0	80	13.5	A	72.9	0.0	-0.6	0.0	4.7	0.0	0.0	0.0	0.0	0.0	17
S05	Large RTU	545557.3	4807011.9	331.9	0	94	0.0	A	74.0	0.0	-1.2	0.0	4.6	0.0	0.0	0.0	0.0	0.0	17
S05	Large RTU	545545.0	4807007.6	331.9	0	94	0.0	A	74.1	0.0	-1.3	0.0	4.6	0.0	0.0	0.0	0.0	0.0	17
S05	Large RTU	545560.1	4806962.7	331.9	0	94	0.0	A	74.1	0.0	-1.2	0.0	4.7	0.0	0.0	0.0	0.0	0.0	17
S05	Large RTU	545540.4	4806946.3	331.9	0	94	0.0	A	74.3	0.0	-1.3	0.0	4.7	0.0	0.0	0.0	0.0	0.0	17
S05	Large RTU	545497.6	4807011.4	331.9	0	94	0.0	A	74.3	0.0	-1.7	0.0	4.7	0.0	0.0	0.0	0.0	0.0	17
S05	Large RTU	545487.3	4807018.2	331.9	0	94	0.0	A	74.3	0.0	-1.7	0.0	4.8	0.0	0.0	0.0	0.0	0.0	17
S05	Large RTU	545483.1	4807009.9	331.9	0	94	0.0	A	74.4	0.0	-1.7	0.0	4.8	0.0	0.0	0.0	0.0	0.0	17
S05	Large RTU	545455.5	4807017.1	331.9	0	94	0.0	A	74.5	0.0	-1.8	0.0	4.8	0.0	0.0	0.0	0.0	0.0	17
S05	Large RTU	545458.8	4806937.6	331.9	0	94	0.0	A	74.7	0.0	-1.7	0.0	4.9	0.0	0.0	0.0	0.0	0.0	16
S04	Loader	545561.3	4806674.5	327.4	0	101	0.0	A	75.0	0.0	-3.0	4.7	4.3	0.0	0.0	0.0	0.0	0.0	20
S01	Rooftop Unit	545749.8	4807316.8	330.5	0	91	0.0	A	71.9	0.0	-0.3	0.0	3.1	0.0	0.0	0.0	0.0	0.0	16
S02	Rooftop Unit	545762.4	4807267.9	330.5	0	91	0.0	A	72.0	0.0	-1.3	0.0	3.2	0.0	0.0	0.0	0.0	0.0	17
S05	Rooftop Unit	545588.6	4807753.3	332.2	0	91	0.0	A	72.7	0.0	-0.2	0.0	3.4	0.0	0.0	0.0	0.0	0.0	15
S05	Rooftop Unit	545581.7	4807741.0	332.2	0	91	0.0	A	72.8	0.0	-0.2	0.0	3.4	0.0	0.0	0.0	0.0	0.0	15
S05	Rooftop Unit	545577.4	4807728.1	332.2	0	91	0.0	A	72.8	0.0	-0.3	0.0	3.4	0.0	0.0	0.0	0.0	0.0	15
S05	Rooftop Unit	545574.4	4807766.0	332.2	0	91	0.0	A	72.8	0.0	-0.3	0.0	3.4	0.0	0.0	0.0	0.0	0.0	15
S05	Rooftop Unit	545566.0	4807728.3	332.2	0	91	0.0	A	72.9	0.0	-0.3	0.0	3.4	0.0	0.0	0.0	0.0	0.0	15
S05	Rooftop Unit	545566.7	4807759.9	332.2	0	91	0.0	A	72.9	0.0	-0.4	0.0	3.4	0.0	0.0	0.0	0.0	0.0	15
TPSS_1	TPSS1 adjusted to 87 dBA + 5 dB tonal penalty	545877.3	4807925.8	332.8	0	92	0.0	A	70.7	0.0	-0.9	0.0	3.2	0.0	0.0	0.0	0.0	0.0	20
TPSS_2	TPSS2 adjusted to 87 dBA + 5 dB tonal penalty	546801.0	4807780.2	312.5	0	92	0.0	A	52.5	0.0	0.4	4.4	0.5	0.0	0.0	0.0	0.0	0.0	35
Transformer	Transformer 1	545740.0	4807978.1	331.4	0	97	0.0	A	71.9	0.0	-0.3	0.0	3.5	0.0	0.0	0.0	0.0	0.0	22
Transformer	Transformer 1	545724.9	4807982.0	331.5	0	97	0.0	A	72.1	0.0	-0.5	4.5	3.6	0.0	0.0	0.0	0.0	0.0	18

*The total value shown accounts for all modelled sources and may include small contributions from sources not described in the table above

Receiver: R02

Project: Kitchener Hidden Valley - Stationary Noise
Project Number: 22377

Time Period	Total (dBA)*
Day	41

Receiver Name	Receiver ID	X	Y	Z
Future Low Rise Residential	R02	546454 m	4807100 m	316 m

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
S03	Crusher	545526.7	4806649.4	328.8	0	119	0.0	A	71.3	0.0	-0.9	6.1	2.3	0.0	0.0	0.0	0.0	0.0	40
T05	Forklift	545609.6	4807313.5	326.4	0	80	22.1	A	69.8	0.0	-1.6	12.6	3.5	0.0	0.0	0.0	0.0	0.0	18
T05	Forklift	545635.1	4807199.9	326.4	0	80	18.6	A	69.3	0.0	-1.8	8.2	3.4	0.0	0.0	0.0	0.0	0.0	20
T05	Forklift	545597.6	4807200.4	326.4	0	80	19.2	A	69.7	0.0	-0.8	7.7	3.5	0.0	0.0	0.0	0.0	0.0	20
T05	Forklift	545569.5	4807322.4	326.4	0	80	22.2	A	70.2	0.0	-0.6	11.6	3.6	0.0	0.0	0.0	0.0	0.0	18
T05	Forklift	545610.8	4807531.2	327.1	0	80	19.5	A	70.5	0.0	-1.9	5.0	3.8	0.0	0.0	0.0	0.0	0.0	23
T05	Forklift	545697.5	4807523.7	327.4	0	80	18.6	A	69.8	0.0	-1.1	4.9	3.5	0.0	0.0	0.0	0.0	0.0	22
T05	Forklift	545660.0	4807451.2	326.9	0	80	18.3	A	69.8	0.0	-2.0	5.5	3.5	0.0	0.0	0.0	0.0	0.0	22
T05	Forklift	545606.4	4807413.3	326.6	0	80	17.1	A	70.1	0.0	-2.2	10.8	3.6	0.0	0.0	0.0	0.0	0.0	15
T05	Forklift	545680.9	4807577.1	327.3	0	80	16.0	A	70.2	0.0	-1.3	4.7	3.6	0.0	0.0	0.0	0.0	0.0	19
T05	Forklift	545700.5	4807474.1	327.2	0	80	15.3	A	69.5	0.0	-1.5	5.2	3.4	0.0	0.0	0.0	0.0	0.0	19
T05	Forklift	545657.0	4807594.9	327.0	0	80	15.5	A	70.4	0.0	-1.6	4.8	3.7	0.0	0.0	0.0	0.0	0.0	19
T05	Forklift	545566.1	4807467.8	327.2	0	80	14.0	A	70.7	0.0	-0.5	5.2	3.8	0.0	0.0	0.0	0.0	0.0	15
T05	Forklift	545625.6	4807584.9	326.8	0	80	15.2	A	70.6	0.0	-1.7	4.8	3.8	0.0	0.0	0.0	0.0	0.0	18
T05	Forklift	545607.8	4807472.6	327.4	0	80	14.4	A	70.3	0.0	-1.8	5.2	3.7	0.0	0.0	0.0	0.0	0.0	17
S05	Large RTU	545579.6	4806887.0	331.9	0	94	0.0	A	70.1	0.0	-2.1	6.0	3.3	0.0	0.0	0.0	0.0	0.0	17
S05	Large RTU	545557.3	4807011.9	331.9	0	94	0.0	A	70.1	0.0	-1.7	5.7	3.3	0.0	0.0	0.0	0.0	0.0	17
S05	Large RTU	545560.1	4806962.7	331.9	0	94	0.0	A	70.1	0.0	-2.2	5.9	3.4	0.0	0.0	0.0	0.0	0.0	17
S05	Large RTU	545545.0	4807007.6	331.9	0	94	0.0	A	70.2	0.0	-1.7	5.6	3.4	0.0	0.0	0.0	0.0	0.0	17
S05	Large RTU	545540.4	4806946.3	331.9	0	94	0.0	A	70.3	0.0	-2.4	5.9	3.4	0.0	0.0	0.0	0.0	0.0	17
S05	Large RTU	545546.7	4806875.1	331.9	0	94	0.0	A	70.4	0.0	-2.2	5.8	3.4	0.0	0.0	0.0	0.0	0.0	17
S05	Large RTU	545533.2	4806870.2	331.9	0	94	0.0	A	70.5	0.0	-2.2	5.8	3.5	0.0	0.0	0.0	0.0	0.0	17
S05	Large RTU	545497.6	4807011.4	331.9	0	94	0.0	A	70.7	0.0	-2.1	5.2	3.5	0.0	0.0	0.0	0.0	0.0	17
S05	Large RTU	545487.3	4807018.2	331.9	0	94	0.0	A	70.7	0.0	-2.2	5.2	3.5	0.0	0.0	0.0	0.0	0.0	17
S05	Large RTU	545513.6	4806853.5	331.9	0	94	0.0	A	70.8	0.0	-2.3	5.6	3.5	0.0	0.0	0.0	0.0	0.0	17
S05	Large RTU	545483.1	4807009.9	331.9	0	94	0.0	A	70.8	0.0	-2.2	5.2	3.5	0.0	0.0	0.0	0.0	0.0	17
S05	Large RTU	545455.5	4807017.1	331.9	0	94	0.0	A	71.0	0.0	-2.3	5.2	3.6	0.0	0.0	0.0	0.0	0.0	17
S05	Large RTU	545458.8	4806937.6	331.9	0	94	0.0	A	71.1	0.0	-2.6	5.6	3.6	0.0	0.0	0.0	0.0	0.0	17
S04	Loader	545561.3	4806674.5	327.4	0	101	0.0	A	70.9	0.0	-2.8	6.9	3.2	0.0	0.0	0.0	0.0	0.0	23
S05	Rooftop Unit	545794.7	4806904.0	332.3	0	91	0.0	A	67.8	0.0	-1.2	6.4	2.2	0.0	0.0	0.0	0.0	0.0	16
S05	Rooftop Unit	545789.5	4806904.1	332.3	0	91	0.0	A	67.8	0.0	-1.3	6.4	2.2	0.0	0.0	0.0	0.0	0.0	16
TPSS_2	TPSS2 adjusted to 87 dBA + 5 dB tonal penalty	546801.0	4807780.2	312.5	0	92	0.0	A	68.7	0.0	0.6	4.2	2.6	0.0	0.0	0.0	0.0	0.0	16
Transformer	Transformer 1	545740.0	4807978.1	331.4	0	97	0.0	A	72.1	0.0	-0.1	4.4	3.6	0.0	0.0	0.0	0.0	0.0	18

*The total value shown accounts for all modelled sources and may include small contributions from sources not described in the table above

Receiver: R03

Project: Kitchener Hidden Valley - Stationary Noise
Project Number: 22377

Time Period	Total (dBA)*
Day	50

Receiver Name	Receiver ID	X	Y	Z
Future Low Rise Residential	R03	546067 m	4807196 m	327.6 m

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
S05	Condenser	545531.4	4806976.3	331.9	0	91	0.0	A	66.2	0.0	-2.4	0.0	1.4	0.0	0.0	0.0	0.0	0.0	25
S03	Crusher	545526.7	4806649.4	328.8	0	119	0.0	A	68.7	0.0	-4.0	4.8	1.9	0.0	0.0	0.0	0.0	0.0	47
T05	Forklift	545611.3	4807305.6	326.4	0	80	22.5	A	64.4	0.0	-3.1	4.8	2.1	0.0	0.0	0.0	0.0	0.0	35
T05	Forklift	545636.9	4807192.1	326.4	0	80	17.5	A	63.7	0.0	-3.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	35
T05	Forklift	545599.9	4807190.4	326.4	0	80	18.0	A	64.4	0.0	-2.2	0.0	2.1	0.0	0.0	0.0	0.0	0.0	34
T05	Forklift	545571.8	4807312.4	326.4	0	80	22.7	A	65.1	0.0	-2.2	4.7	2.3	0.0	0.0	0.0	0.0	0.0	33
T05	Forklift	545697.5	4807523.7	327.4	0	80	18.6	A	64.9	0.0	-3.0	0.0	2.2	0.0	0.0	0.0	0.0	0.0	35
T05	Forklift	545668.7	4807453.2	326.9	0	80	17.0	A	64.5	0.0	-3.7	0.0	2.1	0.0	0.0	0.0	0.0	0.0	35
T05	Forklift	545635.5	4807445.4	327.0	0	80	12.5	A	65.0	0.0	-3.9	3.3	2.2	0.0	0.0	0.0	0.0	0.0	26
T05	Forklift	545610.8	4807531.2	327.1	0	80	19.5	A	66.1	0.0	-3.7	0.0	2.5	0.0	0.0	0.0	0.0	0.0	35
T05	Forklift	545609.4	4807417.7	326.7	0	80	17.9	A	65.1	0.0	-3.9	4.8	2.3	0.0	0.0	0.0	0.0	0.0	30
T05	Forklift	545700.5	4807474.1	327.2	0	80	15.3	A	64.3	0.0	-3.3	0.0	2.1	0.0	0.0	0.0	0.0	0.0	33
T05	Forklift	545680.9	4807577.1	327.3	0	80	16.0	A	65.7	0.0	-2.9	0.0	2.4	0.0	0.0	0.0	0.0	0.0	31
T05	Forklift	545632.9	4807161.6	326.4	0	80	13.3	A	63.8	0.0	-2.7	0.0	2.0	0.0	0.0	0.0	0.0	0.0	31
T05	Forklift	545567.0	4807463.3	327.1	0	80	15.4	A	66.1	0.0	-2.2	4.4	2.5	0.0	0.0	0.0	0.0	0.0	25
T05	Forklift	545657.0	4807594.9	327.0	0	80	15.5	A	66.1	0.0	-3.1	0.0	2.5	0.0	0.0	0.0	0.0	0.0	30
T05	Forklift	545606.5	4807464.2	327.3	0	80	10.2	A	65.5	0.0	-3.5	2.8	2.3	0.0	0.0	0.0	0.0	0.0	23
T05	Forklift	545608.6	4807477.8	327.4	0	80	12.3	A	65.6	0.0	-3.6	0.0	2.4	0.0	0.0	0.0	0.0	0.0	28
T05	Forklift	545625.6	4807584.9	326.8	0	80	15.2	A	66.4	0.0	-3.4	0.0	2.5	0.0	0.0	0.0	0.0	0.0	30
T05	Forklift	545599.0	4807450.0	327.0	0	80	13.5	A	65.5	0.0	-3.1	4.4	2.3	0.0	0.0	0.0	0.0	0.0	25
T05	Forklift	545614.9	4807158.9	326.4	0	80	12.0	A	64.1	0.0	-2.3	0.0	2.0	0.0	0.0	0.0	0.0	0.0	29
T05	Forklift	545581.5	4807443.6	326.8	0	80	13.5	A	65.7	0.0	-2.9	4.6	2.4	0.0	0.0	0.0	0.0	0.0	24
T03	Highway Truck	545668.1	4807270.3	326.4	0	68	19.9	A	63.2	0.0	-3.9	5.1	1.9	0.0	0.0	0.0	0.0	0.0	22
T03	Highway Truck	545687.9	4807193.1	326.4	0	68	16.8	A	62.6	0.0	-3.8	0.0	1.8	0.0	0.0	0.0	0.0	0.0	25
T03	Highway Truck	545686.8	4807182.6	326.4	0	68	15.9	A	62.6	0.0	-3.8	0.0	1.8	0.0	0.0	0.0	0.0	0.0	24
T03	Highway Truck	545654.5	4807337.6	326.4	0	68	16.8	A	63.8	0.0	-3.9	4.9	2.0	0.0	0.0	0.0	0.0	0.0	18
T03	Highway Truck	545649.7	4807338.2	326.4	0	68	16.3	A	63.9	0.0	-3.9	4.9	2.0	0.0	0.0	0.0	0.0	0.0	18
T03	Highway Truck	545697.5	4807155.1	326.4	0	68	14.8	A	62.4	0.0	-3.7	0.0	1.7	0.0	0.0	0.0	0.0	0.0	23
T03	Highway Truck	545694.6	4807151.9	326.4	0	68	13.9	A	62.5	0.0	-3.7	0.0	1.7	0.0	0.0	0.0	0.0	0.0	22
T03	Highway Truck	545674.1	4807306.8	326.4	0	68	14.2	A	63.2	0.0	-3.9	5.3	1.9	0.0	0.0	0.0	0.0	0.0	16
T03	Highway Truck	545682.6	4807225.9	326.4	0	68	12.3	A	62.7	0.0	-3.8	4.6	1.8	0.0	0.0	0.0	0.0	0.0	15
T03	Highway Truck	545681.6	4807208.9	326.4	0	68	11.8	A	62.7	0.0	-3.8	0.0	1.8	0.0	0.0	0.0	0.0	0.0	19
T01	Highway Truck	545839.5	4806920.5	328.4	0	68	17.0	A	62.1	0.0	-3.0	0.0	1.7	0.0	0.0	0.0	0.0	0.0	25
T01	Highway Truck	545831.7	4806868.8	328.4	0	68	17.4	A	63.1	0.0	-3.1	4.8	1.8	0.0	0.0	0.0	0.0	0.0	19
T01	Highway Truck	545837.0	4806948.6	328.3	0	68	15.5	A	61.6	0.0	-2.9	0.0	1.6	0.0	0.0	0.0	0.0	0.0	24
T01	Highway Truck	545820.0	4806817.5	328.3	0	68	17.0	A	64.1	0.0	-3.4	4.8	2.0	0.0	0.0	0.0	0.0	0.0	18
T01	Highway Truck	545817.5	4806973.8	328.1	0	68	14.4	A	61.5	0.0	-3.3	0.0	1.6	0.0	0.0	0.0	0.0	0.0	23
T01	Highway Truck	545840.2	4806956.3	328.3	0	68	13.4	A	61.4	0.0	-2.9	0.0	1.6	0.0	0.0	0.0	0.0	0.0	22
T01	Highway Truck	545837.0	4806975.5	328.2	0	68	12.3	A	61.1	0.0	-3.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	21
T01	Highway Truck	545834.2	4806998.2	328.2	0	68	11.8	A	60.7	0.0	-3.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	21
T01	Highway Truck	545833.1	4806988.2	328.2	0	68	11.9	A	60.9	0.0	-3.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	21
T01	Highway Truck	545846.9	4806929.0	328.5	0	68	12.8	A	61.8	0.0	-3.1	0.0	1.6	0.0	0.0	0.0	0.0	0.0	21
T01	Highway Truck	545838.4	4807001.2	328.2	0	68	11.1	A	60.5	0.0	-2.9	0.0	1.4	0.0	0.0	0.0	0.0	0.0	20
T01	Highway Truck	545838.0	4807010.9	328.0	0	68	10.8	A	60.4	0.0	-2.9	0.0	1.4	0.0	0.0	0.0	0.0	0.0	20
T01	Highway Truck	545809.6	4806973.4	328.1	0	68	10.8	A	61.6	0.0	-3.3	0.0	1.6	0.0	0.0	0.0	0.0	0.0	19
T01	Highway Truck	545840.5	4807011.8	328.0	0	68	9.4	A	60.3	0.0	-2.9	0.0	1.4	0.0	0.0	0.0	0.0	0.0	19

Receiver: R03

Project: Kitchener Hidden Valley - Stationary Noise
Project Number: 22377

Time Period	Total (dBA)*
Day	50

Receiver Name	Receiver ID	X	Y	Z
Future Low Rise Residential	R03	546067 m	4807196 m	327.6 m

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
T01	Highway Truck	545833.9	4806970.3	328.2	0	68	9.7	A	61.2	0.0	-3.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	18
T01	Highway Truck	545826.3	4806978.3	328.2	0	68	9.4	A	61.2	0.0	-3.2	0.0	1.5	0.0	0.0	0.0	0.0	0.0	18
T01	Highway Truck	545819.5	4806974.3	328.1	0	68	9.0	A	61.4	0.0	-3.3	0.0	1.6	0.0	0.0	0.0	0.0	0.0	18
T01	Highway Truck	545834.2	4806987.2	328.2	0	68	8.5	A	60.9	0.0	-3.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	17
S05	Large RTU	545557.3	4807011.9	331.9	0	94	0.0	A	65.7	0.0	-2.5	0.0	2.3	0.0	0.0	0.0	0.0	0.0	29
S05	Large RTU	545545.0	4807007.6	331.9	0	94	0.0	A	65.9	0.0	-2.6	0.0	2.3	0.0	0.0	0.0	0.0	0.0	29
S05	Large RTU	545560.1	4806962.7	331.9	0	94	0.0	A	65.9	0.0	-2.5	0.0	2.3	0.0	0.0	0.0	0.0	0.0	28
S05	Large RTU	545579.6	4806887.0	331.9	0	94	0.0	A	66.2	0.0	-2.9	4.8	2.4	0.0	0.0	0.0	0.0	0.0	24
S05	Large RTU	545540.4	4806946.3	331.9	0	94	0.0	A	66.3	0.0	-2.6	0.0	2.4	0.0	0.0	0.0	0.0	0.0	28
S05	Large RTU	545497.6	4807011.4	331.9	0	94	0.0	A	66.5	0.0	-2.9	0.0	2.5	0.0	0.0	0.0	0.0	0.0	28
S05	Large RTU	545487.3	4807018.2	331.9	0	94	0.0	A	66.7	0.0	-3.1	0.0	2.5	0.0	0.0	0.0	0.0	0.0	28
S05	Large RTU	545546.7	4806875.1	331.9	0	94	0.0	A	66.7	0.0	-3.0	4.8	2.5	0.0	0.0	0.0	0.0	0.0	23
S05	Large RTU	545483.1	4807009.9	331.9	0	94	0.0	A	66.7	0.0	-3.1	0.0	2.5	0.0	0.0	0.0	0.0	0.0	28
S05	Large RTU	545533.2	4806870.2	331.9	0	94	0.0	A	66.9	0.0	-3.0	4.8	2.6	0.0	0.0	0.0	0.0	0.0	23
S05	Large RTU	545455.5	4807017.1	331.9	0	94	0.0	A	67.1	0.0	-3.4	0.0	2.6	0.0	0.0	0.0	0.0	0.0	28
S05	Large RTU	545513.6	4806853.5	331.9	0	94	0.0	A	67.3	0.0	-3.2	4.8	2.6	0.0	0.0	0.0	0.0	0.0	23
S05	Large RTU	545458.8	4806937.6	331.9	0	94	0.0	A	67.4	0.0	-3.1	0.0	2.7	0.0	0.0	0.0	0.0	0.0	27
S04	Loader	545561.3	4806674.5	327.4	0	101	0.0	A	68.2	0.0	-4.5	4.8	2.6	0.0	0.0	0.0	0.0	0.0	30
S02	Rooftop Unit	545762.4	4807267.9	330.5	0	91	0.0	A	60.9	0.0	-2.3	0.0	1.2	0.0	0.0	0.0	0.0	0.0	31
S01	Rooftop Unit	545749.8	4807316.8	330.5	0	91	0.0	A	61.6	0.0	-2.3	0.0	1.2	0.0	0.0	0.0	0.0	0.0	30
S05	Rooftop Unit	545794.7	4806904.0	332.3	0	91	0.0	A	63.0	0.0	-2.8	0.0	1.4	0.0	0.0	0.0	0.0	0.0	29
S05	Rooftop Unit	545789.5	4806904.1	332.3	0	91	0.0	A	63.1	0.0	-2.8	0.0	1.4	0.0	0.0	0.0	0.0	0.0	29
S05	Rooftop Unit	545484.8	4807611.6	325.7	0	91	0.0	A	68.1	0.0	-1.5	0.0	2.2	0.0	0.0	0.0	0.0	0.0	22
S05	Rooftop Unit	545491.4	4807626.9	325.9	0	91	0.0	A	68.1	0.0	-3.7	0.0	2.2	0.0	0.0	0.0	0.0	0.0	24
S05	Rooftop Unit	545577.4	4807728.1	332.2	0	91	0.0	A	68.2	0.0	-1.7	0.0	2.3	0.0	0.0	0.0	0.0	0.0	22
S05	Rooftop Unit	545581.7	4807741.0	332.2	0	91	0.0	A	68.3	0.0	-1.6	0.0	2.3	0.0	0.0	0.0	0.0	0.0	22
S05	Rooftop Unit	545566.0	4807728.3	332.2	0	91	0.0	A	68.3	0.0	-1.8	0.0	2.3	0.0	0.0	0.0	0.0	0.0	22
S05	Rooftop Unit	545588.6	4807753.3	332.2	0	91	0.0	A	68.3	0.0	-1.5	0.0	2.3	0.0	0.0	0.0	0.0	0.0	22
S05	Rooftop Unit	545476.8	4807636.0	332.2	0	91	0.0	A	68.3	0.0	-2.7	0.0	2.3	0.0	0.0	0.0	0.0	0.0	23
S05	Rooftop Unit	545472.6	4807638.4	332.2	0	91	0.0	A	68.4	0.0	-2.7	0.0	2.3	0.0	0.0	0.0	0.0	0.0	23
S05	Rooftop Unit	545466.5	4807633.4	332.2	0	91	0.0	A	68.4	0.0	-2.7	0.0	2.3	0.0	0.0	0.0	0.0	0.0	23
S05	Rooftop Unit	545462.4	4807635.0	332.2	0	91	0.0	A	68.5	0.0	-2.7	0.0	2.3	0.0	0.0	0.0	0.0	0.0	23
S05	Rooftop Unit	545458.4	4807633.3	332.2	0	91	0.0	A	68.5	0.0	-2.6	0.0	2.3	0.0	0.0	0.0	0.0	0.0	23
S05	Rooftop Unit	545453.3	4807630.8	332.2	0	91	0.0	A	68.5	0.0	-2.6	0.0	2.3	0.0	0.0	0.0	0.0	0.0	23
S05	Rooftop Unit	545574.4	4807766.0	332.2	0	91	0.0	A	68.5	0.0	-1.6	0.0	2.3	0.0	0.0	0.0	0.0	0.0	22
S05	Rooftop Unit	545566.7	4807759.9	332.2	0	91	0.0	A	68.5	0.0	-1.7	0.0	2.3	0.0	0.0	0.0	0.0	0.0	22
S05	Rooftop Unit	545549.1	4807745.9	332.2	0	91	0.0	A	68.6	0.0	-1.9	0.0	2.3	0.0	0.0	0.0	0.0	0.0	22
S05	Rooftop Unit	545448.4	4807629.7	332.2	0	91	0.0	A	68.6	0.0	-2.6	0.0	2.3	0.0	0.0	0.0	0.0	0.0	23
S05	Rooftop Unit	545419.1	4807589.9	325.4	0	91	0.0	A	68.6	0.0	-1.3	0.0	2.3	0.0	0.0	0.0	0.0	0.0	21
S05	Rooftop Unit	545448.9	4807637.2	332.2	0	91	0.0	A	68.6	0.0	-2.6	0.0	2.3	0.0	0.0	0.0	0.0	0.0	23
S05	Rooftop Unit	545433.7	4807635.9	332.2	0	91	0.0	A	68.7	0.0	-2.6	0.0	2.4	0.0	0.0	0.0	0.0	0.0	22
S05	Rooftop Unit	545428.7	4807633.1	332.2	0	91	0.0	A	68.8	0.0	-2.6	0.0	2.4	0.0	0.0	0.0	0.0	0.0	22
S05	Rooftop Unit	545561.2	4807782.7	332.2	0	91	0.0	A	68.8	0.0	-1.6	0.0	2.4	0.0	0.0	0.0	0.0	0.0	21
S05	Rooftop Unit	545553.0	4807776.0	332.2	0	91	0.0	A	68.8	0.0	-1.7	0.0	2.4	0.0	0.0	0.0	0.0	0.0	22
S05	Rooftop Unit	545417.0	4807620.1	332.2	0	91	0.0	A	68.8	0.0	-2.5	0.0	2.4	0.0	0.0	0.0	0.0	0.0	22
S05	Rooftop Unit	545535.7	4807762.1	332.2	0	91	0.0	A	68.8	0.0	-1.9	0.0	2.4	0.0	0.0	0.0	0.0	0.0	22

Receiver: R03

Project: Kitchener Hidden Valley - Stationary Noise
Project Number: 22377

Time Period	Total (dBA)*
Day	50

Receiver Name	Receiver ID	X	Y	Z
Future Low Rise Residential	R03	546067 m	4807196 m	327.6 m

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
S05	Rooftop Unit	545429.3	4807640.1	332.2	0	91	0.0	A	68.8	0.0	-2.6	0.0	2.4	0.0	0.0	0.0	0.0	0.0	22
S05	Rooftop Unit	545421.9	4807632.5	332.2	0	91	0.0	A	68.8	0.0	-2.6	0.0	2.4	0.0	0.0	0.0	0.0	0.0	22
S05	Rooftop Unit	545417.8	4807626.5	332.2	0	91	0.0	A	68.8	0.0	-2.6	0.0	2.4	0.0	0.0	0.0	0.0	0.0	22
S05	Rooftop Unit	545415.3	4807632.6	332.2	0	91	0.0	A	68.9	0.0	-2.6	0.0	2.4	0.0	0.0	0.0	0.0	0.0	22
S05	Rooftop Unit	545415.6	4807638.7	332.2	0	91	0.0	A	68.9	0.0	-2.7	0.0	2.4	0.0	0.0	0.0	0.0	0.0	22
S05	Rooftop Unit	545506.9	4807982.4	331.2	0	91	0.0	A	70.7	0.0	-1.7	0.0	2.8	0.0	0.0	0.0	0.0	0.0	19
S05	Rooftop Unit	545571.7	4808050.4	331.2	0	91	0.0	A	70.9	0.0	-1.7	0.0	2.9	0.0	0.0	0.0	0.0	0.0	19
S05	Rooftop Unit	545484.7	4808004.7	331.2	0	91	0.0	A	71.0	0.0	-1.8	0.0	2.9	0.0	0.0	0.0	0.0	0.0	19
S05	Rooftop Unit	545515.4	4808036.9	331.2	0	91	0.0	A	71.1	0.0	-1.9	0.0	2.9	0.0	0.0	0.0	0.0	0.0	19
S05	Rooftop Unit	545549.3	4808072.5	331.2	0	91	0.0	A	71.2	0.0	-1.9	0.0	2.9	0.0	0.0	0.0	0.0	0.0	19
TPSS_1	TPSS1 adjusted to 87 dBA + 5 dB tonal penalty	545877.3	4807925.8	332.8	0	92	0.0	A	68.6	0.0	-0.3	0.0	2.6	0.0	0.0	0.0	0.0	0.0	22
TPSS_2	TPSS2 adjusted to 87 dBA + 5 dB tonal penalty	546801.0	4807780.2	312.5	0	92	0.0	A	70.4	0.0	0.6	0.0	3.1	0.0	0.0	0.0	0.0	0.0	18
Transformer	Transformer 1	545740.0	4807978.1	331.4	0	97	0.0	A	69.6	0.0	-0.5	0.0	2.8	0.0	0.0	0.0	0.0	0.0	26
Transformer	Transformer 1	545724.9	4807982.0	331.5	0	97	0.0	A	69.7	0.0	-0.8	0.0	2.9	0.0	0.0	0.0	0.0	0.0	26

*The total value shown accounts for all modelled sources and may include small contributions from sources not described in the table above

Receiver: R04

Project: Kitchener Hidden Valley - Stationary Noise
Project Number: 22377

Time Period	Total (dBA)*
Day	53

Receiver Name	Receiver ID	X	Y	Z
Proposed Commercial / Mixed-Use	R04	545908 m	4807097 m	332.3 m

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
S05	Condenser	545531.4	4806976.3	331.9	0	91	0.0	A	62.9	0.0	-1.3	0.0	1.0	0.0	0.0	0.0	0.0	0.0	28
S03	Crusher	545526.7	4806649.4	328.8	0	119	0.0	A	66.4	0.0	-4.1	4.8	1.6	0.0	0.0	0.0	0.0	0.0	50
T05	Forklift	545596.6	4807371.4	326.4	0	80	16.3	A	63.4	0.0	-2.1	4.7	1.9	0.0	0.0	0.0	0.0	0.0	29
T05	Forklift	545611.6	4807304.3	326.4	0	80	19.8	A	62.2	0.0	-1.9	0.0	1.7	0.0	0.0	0.0	0.0	0.0	38
T05	Forklift	545632.5	4807211.4	326.4	0	80	19.8	A	60.5	0.0	-1.6	0.0	1.4	0.0	0.0	0.0	0.0	0.0	40
T05	Forklift	545593.8	4807217.1	326.4	0	80	20.7	A	61.5	0.0	-0.9	0.0	1.6	0.0	0.0	0.0	0.0	0.0	39
T05	Forklift	545567.3	4807332.3	326.4	0	80	20.7	A	63.4	0.0	-1.3	0.0	1.9	0.0	0.0	0.0	0.0	0.0	37
T05	Forklift	545553.5	4807392.2	326.4	0	80	6.8	A	64.3	0.0	-1.5	4.7	2.1	0.0	0.0	0.0	0.0	0.0	18
T05	Forklift	545551.9	4807399.0	326.4	0	80	9.7	A	64.4	0.0	-1.6	4.7	2.1	0.0	0.0	0.0	0.0	0.0	21
T05	Forklift	545664.7	4807452.3	326.9	0	80	17.7	A	63.7	0.0	-3.6	4.8	2.0	0.0	0.0	0.0	0.0	0.0	31
T05	Forklift	545631.5	4807444.4	327.0	0	80	9.9	A	64.0	0.0	-3.7	4.8	2.0	0.0	0.0	0.0	0.0	0.0	23
T05	Forklift	545610.5	4807516.8	327.2	0	80	17.9	A	65.2	0.0	-4.0	4.8	2.3	0.0	0.0	0.0	0.0	0.0	30
T05	Forklift	545611.4	4807561.8	326.9	0	80	14.6	A	65.8	0.0	-4.0	4.8	2.4	0.0	0.0	0.0	0.0	0.0	26
T05	Forklift	545697.5	4807523.7	327.4	0	80	18.6	A	64.6	0.0	-3.6	0.0	2.1	0.0	0.0	0.0	0.0	0.0	36
T05	Forklift	545612.0	4807421.5	326.7	0	80	17.2	A	63.9	0.0	-3.6	4.8	2.0	0.0	0.0	0.0	0.0	0.0	31
T05	Forklift	545594.5	4807395.9	326.4	0	80	9.7	A	63.7	0.0	-2.3	4.7	2.0	0.0	0.0	0.0	0.0	0.0	22
T05	Forklift	545632.9	4807161.6	326.4	0	80	13.3	A	60.0	0.0	-0.5	0.0	1.4	0.0	0.0	0.0	0.0	0.0	33
T05	Forklift	545706.1	4807485.7	327.3	0	80	8.9	A	63.8	0.0	-3.4	0.0	2.0	0.0	0.0	0.0	0.0	0.0	27
T05	Forklift	545698.8	4807470.6	327.1	0	80	14.1	A	63.6	0.0	-3.5	4.1	2.0	0.0	0.0	0.0	0.0	0.0	28
T05	Forklift	545614.9	4807158.9	326.4	0	80	12.0	A	60.5	0.0	-0.5	0.0	1.4	0.0	0.0	0.0	0.0	0.0	31
T05	Forklift	545680.9	4807577.1	327.3	0	80	16.0	A	65.5	0.0	-3.8	0.0	2.3	0.0	0.0	0.0	0.0	0.0	32
T05	Forklift	545565.4	4807470.7	327.3	0	80	12.9	A	65.1	0.0	-2.0	0.0	2.2	0.0	0.0	0.0	0.0	0.0	28
T05	Forklift	545569.1	4807453.8	327.0	0	80	11.8	A	64.8	0.0	-1.9	4.7	2.2	0.0	0.0	0.0	0.0	0.0	23
T05	Forklift	545607.8	4807472.6	327.4	0	80	14.4	A	64.6	0.0	-3.1	4.8	2.2	0.0	0.0	0.0	0.0	0.0	26
T05	Forklift	545642.4	4807593.9	326.8	0	80	7.6	A	66.0	0.0	-4.0	2.0	2.5	0.0	0.0	0.0	0.0	0.0	22
T05	Forklift	545659.9	4807595.1	327.0	0	80	14.7	A	65.9	0.0	-3.9	0.0	2.4	0.0	0.0	0.0	0.0	0.0	31
T05	Forklift	545625.6	4807584.9	326.8	0	80	15.2	A	66.0	0.0	-4.0	4.8	2.5	0.0	0.0	0.0	0.0	0.0	26
T05	Forklift	545599.0	4807450.0	327.0	0	80	13.5	A	64.4	0.0	-2.8	4.8	2.1	0.0	0.0	0.0	0.0	0.0	26
T05	Forklift	545581.5	4807443.6	326.8	0	80	13.5	A	64.6	0.0	-2.4	4.7	2.1	0.0	0.0	0.0	0.0	0.0	25
T01	Highway Truck	545839.5	4806920.5	328.4	0	68	17.0	A	56.5	0.0	-2.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	30
T01	Highway Truck	545837.0	4806948.6	328.3	0	68	15.5	A	55.3	0.0	-2.2	0.0	0.8	0.0	0.0	0.0	0.0	0.0	30
T01	Highway Truck	545817.5	4806973.8	328.1	0	68	14.4	A	54.7	0.0	-2.3	0.0	0.8	0.0	0.0	0.0	0.0	0.0	29
T01	Highway Truck	545831.7	4806868.8	328.4	0	68	17.4	A	58.6	0.0	-2.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	28
T01	Highway Truck	545834.2	4806998.2	328.2	0	68	11.8	A	52.8	0.0	-2.1	0.0	0.6	0.0	0.0	0.0	0.0	0.0	29
T01	Highway Truck	545838.0	4807010.9	328.0	0	68	10.8	A	51.9	0.0	-2.1	0.0	0.6	0.0	0.0	0.0	0.0	0.0	29
T01	Highway Truck	545838.4	4807001.2	328.2	0	68	11.1	A	52.5	0.0	-2.0	0.0	0.6	0.0	0.0	0.0	0.0	0.0	28
T01	Highway Truck	545840.2	4806956.3	328.3	0	68	13.4	A	54.9	0.0	-2.2	0.0	0.8	0.0	0.0	0.0	0.0	0.0	28
T01	Highway Truck	545833.1	4806988.2	328.2	0	68	11.9	A	53.4	0.0	-2.2	0.0	0.7	0.0	0.0	0.0	0.0	0.0	28
T01	Highway Truck	545837.0	4806975.5	328.2	0	68	12.3	A	54.0	0.0	-2.3	0.0	0.7	0.0	0.0	0.0	0.0	0.0	28
T01	Highway Truck	545840.5	4807011.8	328.0	0	68	9.4	A	51.7	0.0	-2.1	0.0	0.6	0.0	0.0	0.0	0.0	0.0	27
T01	Highway Truck	545820.0	4806817.5	328.3	0	68	17.0	A	60.3	0.0	-1.6	0.0	1.4	0.0	0.0	0.0	0.0	0.0	25
T01	Highway Truck	545846.9	4806929.0	328.5	0	68	12.8	A	56.0	0.0	-2.6	0.0	0.9	0.0	0.0	0.0	0.0	0.0	27
T01	Highway Truck	545809.6	4806973.4	328.1	0	68	10.8	A	55.0	0.0	-2.5	0.0	0.8	0.0	0.0	0.0	0.0	0.0	26
T01	Highway Truck	545826.3	4806978.3	328.2	0	68	9.4	A	54.2	0.0	-2.2	0.0	0.7	0.0	0.0	0.0	0.0	0.0	25
T01	Highway Truck	545833.9	4806970.3	328.2	0	68	9.7	A	54.3	0.0	-2.3	0.0	0.8	0.0	0.0	0.0	0.0	0.0	25

Receiver: R04

Project: Kitchener Hidden Valley - Stationary Noise
Project Number: 22377

Time Period	Total (dBA)*
Day	53

Receiver Name	Receiver ID	X	Y	Z
Proposed Commercial / Mixed-Use	R04	545908 m	4807097 m	332.3 m

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
T01	Highway Truck	545834.2	4806987.2	328.2	0	68	8.5	A	53.4	0.0	-2.2	0.0	0.7	0.0	0.0	0.0	0.0	0.0	25
T01	Highway Truck	545819.5	4806974.3	328.1	0	68	9.0	A	54.6	0.0	-2.3	0.0	0.8	0.0	0.0	0.0	0.0	0.0	24
T01	Highway Truck	545810.7	4806784.8	328.0	0	68	12.5	A	61.3	0.0	-2.2	0.0	1.5	0.0	0.0	0.0	0.0	0.0	20
T01	Highway Truck	545813.7	4806757.2	327.6	0	68	12.7	A	61.9	0.0	-2.9	0.0	1.7	0.0	0.0	0.0	0.0	0.0	20
T01	Highway Truck	545805.0	4806771.6	327.8	0	68	10.3	A	61.7	0.0	-2.8	0.0	1.6	0.0	0.0	0.0	0.0	0.0	18
T01	Highway Truck	545803.9	4806763.6	327.7	0	68	8.2	A	61.9	0.0	-2.7	0.0	1.6	0.0	0.0	0.0	0.0	0.0	16
T03	Highway Truck	545670.1	4807262.9	326.4	0	68	19.2	A	60.3	0.0	-2.7	0.0	1.4	0.0	0.0	0.0	0.0	0.0	28
T03	Highway Truck	545657.4	4807310.1	326.4	0	68	11.9	A	61.4	0.0	-3.0	2.7	1.6	0.0	0.0	0.0	0.0	0.0	18
T03	Highway Truck	545687.1	4807196.5	326.4	0	68	17.4	A	58.7	0.0	-2.7	0.0	1.2	0.0	0.0	0.0	0.0	0.0	28
T03	Highway Truck	545686.8	4807182.6	326.4	0	68	15.9	A	58.5	0.0	-2.6	0.0	1.2	0.0	0.0	0.0	0.0	0.0	27
T03	Highway Truck	545697.5	4807155.1	326.4	0	68	14.8	A	57.8	0.0	-0.9	0.0	1.1	0.0	0.0	0.0	0.0	0.0	25
T03	Highway Truck	545694.6	4807151.9	326.4	0	68	13.9	A	57.9	0.0	-0.6	0.0	1.1	0.0	0.0	0.0	0.0	0.0	24
T03	Highway Truck	545654.5	4807337.6	326.4	0	68	16.8	A	61.9	0.0	-3.2	4.8	1.6	0.0	0.0	0.0	0.0	0.0	20
T03	Highway Truck	545649.7	4807338.2	326.4	0	68	16.3	A	62.0	0.0	-3.2	4.8	1.7	0.0	0.0	0.0	0.0	0.0	19
T03	Highway Truck	545736.8	4807287.9	326.4	0	68	13.6	A	59.2	0.0	-2.7	7.7	1.3	0.0	0.0	0.0	0.0	0.0	17
T03	Highway Truck	545713.4	4807288.1	326.4	0	68	13.9	A	59.7	0.0	-2.8	4.7	1.3	0.0	0.0	0.0	0.0	0.0	19
T03	Highway Truck	545674.1	4807306.8	326.4	0	68	14.2	A	61.0	0.0	-2.9	4.1	1.5	0.0	0.0	0.0	0.0	0.0	19
T03	Highway Truck	545687.1	4807243.1	326.4	0	68	12.7	A	59.5	0.0	-2.6	0.0	1.3	0.0	0.0	0.0	0.0	0.0	23
T03	Highway Truck	545681.6	4807209.4	326.4	0	68	12.1	A	59.1	0.0	-2.7	0.0	1.2	0.0	0.0	0.0	0.0	0.0	23
T03	Highway Truck	545682.6	4807225.9	326.4	0	68	12.3	A	59.3	0.0	-2.7	0.0	1.3	0.0	0.0	0.0	0.0	0.0	23
T03	Highway Truck	545692.2	4807293.9	326.4	0	68	12.9	A	60.3	0.0	-2.7	4.3	1.4	0.0	0.0	0.0	0.0	0.0	18
T03	Highway Truck	545704.5	4807272.4	326.4	0	68	10.4	A	59.6	0.0	-2.7	3.4	1.3	0.0	0.0	0.0	0.0	0.0	17
T03	Highway Truck	545698.1	4807266.6	326.4	0	68	8.0	A	59.6	0.0	-2.7	0.0	1.3	0.0	0.0	0.0	0.0	0.0	18
T03	Highway Truck	545715.4	4807279.8	326.4	0	68	12.0	A	59.5	0.0	-2.7	4.7	1.3	0.0	0.0	0.0	0.0	0.0	17
T03	Highway Truck	545692.9	4807258.2	326.4	0	68	11.4	A	59.6	0.0	-2.7	0.0	1.3	0.0	0.0	0.0	0.0	0.0	21
T03	Highway Truck	545728.4	4807284.9	326.4	0	68	11.0	A	59.3	0.0	-2.7	5.8	1.3	0.0	0.0	0.0	0.0	0.0	16
T02	Highway Truck	545691.0	4806618.3	328.2	0	68	17.4	A	65.4	0.0	-2.1	4.5	2.3	0.0	0.0	0.0	0.0	0.0	16
T02	Highway Truck	545633.1	4806661.9	327.9	0	68	19.5	A	65.2	0.0	-2.0	4.7	2.3	0.0	0.0	0.0	0.0	0.0	18
T02	Highway Truck	545576.7	4806704.4	327.6	0	68	16.5	A	65.2	0.0	-4.0	5.2	2.3	0.0	0.0	0.0	0.0	0.0	16
T02	Highway Truck	545574.3	4806702.0	327.6	0	68	16.6	A	65.3	0.0	-4.0	4.8	2.3	0.0	0.0	0.0	0.0	0.0	16
T02	Highway Truck	545631.2	4806658.9	327.9	0	68	19.6	A	65.3	0.0	-2.1	4.7	2.3	0.0	0.0	0.0	0.0	0.0	18
T02	Highway Truck	545689.4	4806614.7	328.3	0	68	17.5	A	65.5	0.0	-2.2	4.5	2.3	0.0	0.0	0.0	0.0	0.0	16
T02	Highway Truck	545532.4	4806783.9	327.4	0	68	16.6	A	64.8	0.0	-3.6	4.8	2.2	0.0	0.0	0.0	0.0	0.0	17
T02	Highway Truck	545534.0	4806787.8	327.4	0	68	15.2	A	64.7	0.0	-3.6	4.8	2.2	0.0	0.0	0.0	0.0	0.0	15
S05	Large RTU	545557.3	4807011.9	331.9	0	94	0.0	A	62.2	0.0	-1.3	0.0	1.7	0.0	0.0	0.0	0.0	0.0	32
S05	Large RTU	545560.1	4806962.7	331.9	0	94	0.0	A	62.4	0.0	-1.3	0.0	1.7	0.0	0.0	0.0	0.0	0.0	31
S05	Large RTU	545545.0	4807007.6	331.9	0	94	0.0	A	62.5	0.0	-1.3	0.0	1.7	0.0	0.0	0.0	0.0	0.0	31
S05	Large RTU	545579.6	4806887.0	331.9	0	94	0.0	A	62.8	0.0	-1.9	0.0	1.8	0.0	0.0	0.0	0.0	0.0	32
S05	Large RTU	545540.4	4806946.3	331.9	0	94	0.0	A	63.0	0.0	-1.5	0.0	1.8	0.0	0.0	0.0	0.0	0.0	31
S05	Large RTU	545497.6	4807011.4	331.9	0	94	0.0	A	63.5	0.0	-1.7	0.0	1.9	0.0	0.0	0.0	0.0	0.0	31
S05	Large RTU	545546.7	4806875.1	331.9	0	94	0.0	A	63.6	0.0	-1.9	0.0	1.9	0.0	0.0	0.0	0.0	0.0	31
S05	Large RTU	545487.3	4807018.2	331.9	0	94	0.0	A	63.6	0.0	-1.7	0.0	1.9	0.0	0.0	0.0	0.0	0.0	30
S05	Large RTU	545483.1	4807009.9	331.9	0	94	0.0	A	63.8	0.0	-1.8	0.0	1.9	0.0	0.0	0.0	0.0	0.0	30
S05	Large RTU	545533.2	4806870.2	331.9	0	94	0.0	A	63.8	0.0	-2.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	30
S05	Large RTU	545455.5	4807017.1	331.9	0	94	0.0	A	64.3	0.0	-2.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	30

Receiver: R04

Project: Kitchener Hidden Valley - Stationary Noise
Project Number: 22377

Time Period	Total (dBA)*
Day	53

Receiver Name	Receiver ID	X	Y	Z
Proposed Commercial / Mixed-Use	R04	545908 m	4807097 m	332.3 m

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
S05	Large RTU	545513.6	4806853.5	331.9	0	94	0.0	A	64.3	0.0	-2.2	0.0	2.0	0.0	0.0	0.0	0.0	0.0	30
S05	Large RTU	545458.8	4806937.6	331.9	0	94	0.0	A	64.6	0.0	-2.1	0.0	2.1	0.0	0.0	0.0	0.0	0.0	30
S04	Loader	545561.3	4806674.5	327.4	0	101	0.0	A	65.8	0.0	-4.1	4.8	2.1	0.0	0.0	0.0	0.0	0.0	32
S05	Rooftop Unit	545794.7	4806904.0	332.3	0	91	0.0	A	58.0	0.0	-2.6	0.0	0.9	0.0	0.0	0.0	0.0	0.0	35
S02	Rooftop Unit	545762.4	4807267.9	330.5	0	91	0.0	A	58.0	0.0	-2.4	0.0	0.9	0.0	0.0	0.0	0.0	0.0	34
S05	Rooftop Unit	545789.5	4806904.1	332.3	0	91	0.0	A	58.1	0.0	-2.5	0.0	0.9	0.0	0.0	0.0	0.0	0.0	35
S01	Rooftop Unit	545749.8	4807316.8	330.5	0	91	0.0	A	59.7	0.0	-2.3	0.0	1.0	0.0	0.0	0.0	0.0	0.0	33
S05	Rooftop Unit	545484.8	4807611.6	325.7	0	91	0.0	A	67.5	0.0	-1.0	4.6	2.1	0.0	0.0	0.0	0.0	0.0	18
S05	Rooftop Unit	545491.4	4807626.9	325.9	0	91	0.0	A	67.6	0.0	-3.3	4.8	2.1	0.0	0.0	0.0	0.0	0.0	20
S05	Rooftop Unit	545476.8	4807636.0	332.2	0	91	0.0	A	67.8	0.0	-2.5	0.0	2.2	0.0	0.0	0.0	0.0	0.0	24
S05	Rooftop Unit	545419.1	4807589.9	325.4	0	91	0.0	A	67.8	0.0	-0.6	0.0	2.2	0.0	0.0	0.0	0.0	0.0	22
S05	Rooftop Unit	545466.5	4807633.4	332.2	0	91	0.0	A	67.8	0.0	-2.5	0.0	2.2	0.0	0.0	0.0	0.0	0.0	23
S05	Rooftop Unit	545472.6	4807638.4	332.2	0	91	0.0	A	67.8	0.0	-2.5	0.0	2.2	0.0	0.0	0.0	0.0	0.0	24
S05	Rooftop Unit	545462.4	4807635.0	332.2	0	91	0.0	A	67.9	0.0	-2.5	0.0	2.2	0.0	0.0	0.0	0.0	0.0	23
S05	Rooftop Unit	545458.4	4807633.3	332.2	0	91	0.0	A	67.9	0.0	-2.4	0.0	2.2	0.0	0.0	0.0	0.0	0.0	23
S05	Rooftop Unit	545453.3	4807630.8	332.2	0	91	0.0	A	67.9	0.0	-2.4	0.0	2.2	0.0	0.0	0.0	0.0	0.0	23
S05	Rooftop Unit	545448.4	4807629.7	332.2	0	91	0.0	A	68.0	0.0	-2.5	0.0	2.2	0.0	0.0	0.0	0.0	0.0	23
S05	Rooftop Unit	545448.9	4807637.2	332.2	0	91	0.0	A	68.0	0.0	-2.5	0.0	2.2	0.0	0.0	0.0	0.0	0.0	23
S05	Rooftop Unit	545577.4	4807728.1	332.2	0	91	0.0	A	68.1	0.0	-3.0	0.0	2.2	0.0	0.0	0.0	0.0	0.0	24
S05	Rooftop Unit	545417.0	4807620.1	332.2	0	91	0.0	A	68.1	0.0	-2.4	0.0	2.2	0.0	0.0	0.0	0.0	0.0	23
S05	Rooftop Unit	545433.7	4807635.9	332.2	0	91	0.0	A	68.1	0.0	-2.5	0.0	2.2	0.0	0.0	0.0	0.0	0.0	23
S05	Rooftop Unit	545566.0	4807728.3	332.2	0	91	0.0	A	68.1	0.0	-3.0	0.0	2.2	0.0	0.0	0.0	0.0	0.0	24
S05	Rooftop Unit	545428.7	4807633.1	332.2	0	91	0.0	A	68.1	0.0	-2.5	0.0	2.2	0.0	0.0	0.0	0.0	0.0	23
S05	Rooftop Unit	545417.8	4807626.5	332.2	0	91	0.0	A	68.2	0.0	-2.5	0.0	2.3	0.0	0.0	0.0	0.0	0.0	23
S05	Rooftop Unit	545581.7	4807741.0	332.2	0	91	0.0	A	68.2	0.0	-3.0	0.0	2.3	0.0	0.0	0.0	0.0	0.0	24
S05	Rooftop Unit	545421.9	4807632.5	332.2	0	91	0.0	A	68.2	0.0	-2.6	0.0	2.3	0.0	0.0	0.0	0.0	0.0	23
S05	Rooftop Unit	545429.3	4807640.1	332.2	0	91	0.0	A	68.2	0.0	-2.6	0.0	2.3	0.0	0.0	0.0	0.0	0.0	23
S05	Rooftop Unit	545415.3	4807632.6	332.2	0	91	0.0	A	68.2	0.0	-2.6	0.0	2.3	0.0	0.0	0.0	0.0	0.0	23
S05	Rooftop Unit	545588.6	4807753.3	332.2	0	91	0.0	A	68.3	0.0	-3.0	0.0	2.3	0.0	0.0	0.0	0.0	0.0	23
S05	Rooftop Unit	545415.6	4807638.7	332.2	0	91	0.0	A	68.3	0.0	-2.6	0.0	2.3	0.0	0.0	0.0	0.0	0.0	23
S05	Rooftop Unit	545549.1	4807745.9	332.2	0	91	0.0	A	68.4	0.0	-3.1	0.0	2.3	0.0	0.0	0.0	0.0	0.0	23
S05	Rooftop Unit	545566.7	4807759.9	332.2	0	91	0.0	A	68.5	0.0	-3.1	0.0	2.3	0.0	0.0	0.0	0.0	0.0	23
S05	Rooftop Unit	545574.4	4807766.0	332.2	0	91	0.0	A	68.5	0.0	-3.1	0.0	2.3	0.0	0.0	0.0	0.0	0.0	23
S05	Rooftop Unit	545535.7	4807762.1	332.2	0	91	0.0	A	68.6	0.0	-3.2	0.0	2.3	0.0	0.0	0.0	0.0	0.0	23
S05	Rooftop Unit	545553.0	4807776.0	332.2	0	91	0.0	A	68.7	0.0	-3.1	0.0	2.4	0.0	0.0	0.0	0.0	0.0	23
S05	Rooftop Unit	545561.2	4807782.7	332.2	0	91	0.0	A	68.7	0.0	-3.1	0.0	2.4	0.0	0.0	0.0	0.0	0.0	23
S05	Rooftop Unit	545506.9	4807982.4	331.2	0	91	0.0	A	70.8	0.0	-3.5	0.0	2.8	0.0	0.0	0.0	0.0	0.0	21
S05	Rooftop Unit	545484.7	4808004.7	331.2	0	91	0.0	A	71.0	0.0	-3.9	0.0	2.9	0.0	0.0	0.0	0.0	0.0	21
S05	Rooftop Unit	545571.7	4808050.4	331.2	0	91	0.0	A	71.1	0.0	-3.2	0.0	2.9	0.0	0.0	0.0	0.0	0.0	20
S05	Rooftop Unit	545515.4	4808036.9	331.2	0	91	0.0	A	71.2	0.0	-3.2	0.0	2.9	0.0	0.0	0.0	0.0	0.0	20
S05	Rooftop Unit	545549.3	4808072.5	331.2	0	91	0.0	A	71.3	0.0	-3.3	0.0	3.0	0.0	0.0	0.0	0.0	0.0	20
TPSS_1	TPSS1 adjusted to 87 dBA + 5 dB tonal penalty	545877.3	4807925.8	332.8	0	92	0.0	A	69.4	0.0	-2.6	0.0	2.8	0.0	0.0	0.0	0.0	0.0	23
TPSS_2	TPSS2 adjusted to 87 dBA + 5 dB tonal penalty	546801.0	4807780.2	312.5	0	92	0.0	A	72.0	0.0	-0.5	0.0	3.6	0.0	0.0	0.0	0.0	0.0	17

Receiver: R04

Project: Kitchener Hidden Valley - Stationary Noise
Project Number: 22377

Time Period	Total (dBA)*
Day	53

Receiver Name	Receiver ID	X	Y	Z
Proposed Commercial / Mixed-Use	R04	545908 m	4807097 m	332.3 m

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
Transformer	Transformer 1	545740.0	4807978.1	331.4	0	97	0.0	A	70.1	0.0	-2.4	0.0	3.0	0.0	0.0	0.0	0.0	0.0	27
Transformer	Transformer 1	545724.9	4807982.0	331.5	0	97	0.0	A	70.1	0.0	-2.7	0.0	3.0	0.0	0.0	0.0	0.0	0.0	27

*The total value shown accounts for all modelled sources and may include small contributions from sources not described in the table above

Receiver: R05

Project: Kitchener Hidden Valley - Stationary Noise
Project Number: 22377

Time Period	Total (dBA)*
Day	52

Receiver Name	Receiver ID	X	Y	Z
Proposed Commercial / Mixed-Use	R05	545901 m	4807181 m	329.5 m

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
S05	Condenser	545531.4	4806976.3	331.9	0	91	0.0	A	63.5	0.0	-1.9	0.0	1.1	0.0	0.0	0.0	0.0	0.0	28
S03	Crusher	545526.7	4806649.4	328.8	0	119	0.0	A	67.3	0.0	-3.2	4.8	1.7	0.0	0.0	0.0	0.0	0.0	48
T05	Forklift	545608.4	4807318.6	326.4	0	80	21.8	A	61.2	0.0	-2.0	4.8	1.5	0.0	0.0	0.0	0.0	0.0	37
T05	Forklift	545634.0	4807205.0	326.4	0	80	19.2	A	59.6	0.0	-1.9	0.0	1.3	0.0	0.0	0.0	0.0	0.0	41
T05	Forklift	545596.1	4807207.0	326.4	0	80	19.9	A	60.7	0.0	-1.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	39
T05	Forklift	545568.0	4807328.9	326.4	0	80	21.8	A	62.2	0.0	-1.4	4.7	1.7	0.0	0.0	0.0	0.0	0.0	35
T05	Forklift	545660.0	4807451.2	326.9	0	80	18.3	A	62.2	0.0	-3.3	4.8	1.7	0.0	0.0	0.0	0.0	0.0	33
T05	Forklift	545689.9	4807549.0	327.4	0	80	12.8	A	63.5	0.0	-3.4	0.0	1.9	0.0	0.0	0.0	0.0	0.0	31
T05	Forklift	545700.2	4807514.6	327.4	0	80	17.2	A	62.8	0.0	-3.3	0.0	1.8	0.0	0.0	0.0	0.0	0.0	36
T05	Forklift	545610.8	4807531.2	327.1	0	80	19.5	A	64.1	0.0	-3.8	4.8	2.0	0.0	0.0	0.0	0.0	0.0	33
T05	Forklift	545609.4	4807417.7	326.7	0	80	17.9	A	62.5	0.0	-3.2	4.8	1.7	0.0	0.0	0.0	0.0	0.0	33
T05	Forklift	545632.9	4807161.6	326.4	0	80	13.3	A	59.6	0.0	-1.6	0.0	1.3	0.0	0.0	0.0	0.0	0.0	34
T05	Forklift	545702.2	4807477.6	327.2	0	80	14.1	A	62.0	0.0	-3.2	0.0	1.7	0.0	0.0	0.0	0.0	0.0	34
T05	Forklift	545694.9	4807462.5	327.0	0	80	8.9	A	61.8	0.0	-3.1	2.7	1.6	0.0	0.0	0.0	0.0	0.0	26
T05	Forklift	545680.9	4807577.1	327.3	0	80	16.0	A	64.1	0.0	-3.6	0.0	2.0	0.0	0.0	0.0	0.0	0.0	34
T05	Forklift	545614.9	4807158.9	326.4	0	80	12.0	A	60.2	0.0	-1.1	0.0	1.4	0.0	0.0	0.0	0.0	0.0	32
T05	Forklift	545567.0	4807463.3	327.1	0	80	15.4	A	63.8	0.0	-2.0	4.7	2.0	0.0	0.0	0.0	0.0	0.0	27
T05	Forklift	545607.8	4807472.6	327.4	0	80	14.4	A	63.3	0.0	-3.0	4.8	1.9	0.0	0.0	0.0	0.0	0.0	28
T05	Forklift	545657.0	4807594.9	327.0	0	80	15.5	A	64.6	0.0	-3.7	0.0	2.1	0.0	0.0	0.0	0.0	0.0	33
T05	Forklift	545599.0	4807450.0	327.0	0	80	13.5	A	63.1	0.0	-2.5	4.8	1.9	0.0	0.0	0.0	0.0	0.0	27
T05	Forklift	545581.5	4807443.6	326.8	0	80	13.5	A	63.3	0.0	-2.4	4.8	1.9	0.0	0.0	0.0	0.0	0.0	26
T05	Forklift	545613.8	4807577.5	326.8	0	80	6.8	A	64.8	0.0	-3.9	2.0	2.2	0.0	0.0	0.0	0.0	0.0	22
T05	Forklift	545627.6	4807586.2	326.8	0	80	14.5	A	64.8	0.0	-3.8	0.0	2.2	0.0	0.0	0.0	0.0	0.0	32
T03	Highway Truck	545679.5	4807228.0	326.4	0	68	10.0	A	58.1	0.0	-2.9	0.0	1.1	0.0	0.0	0.0	0.0	0.0	22
T03	Highway Truck	545666.8	4807275.2	326.4	0	68	19.4	A	59.0	0.0	-2.9	5.4	1.2	0.0	0.0	0.0	0.0	0.0	25
T03	Highway Truck	545687.1	4807196.5	326.4	0	68	17.4	A	57.6	0.0	-2.8	0.0	1.1	0.0	0.0	0.0	0.0	0.0	30
T03	Highway Truck	545686.8	4807182.6	326.4	0	68	15.9	A	57.6	0.0	-2.8	0.0	1.1	0.0	0.0	0.0	0.0	0.0	28
T03	Highway Truck	545697.5	4807155.1	326.4	0	68	14.8	A	57.2	0.0	-2.8	0.0	1.0	0.0	0.0	0.0	0.0	0.0	28
T03	Highway Truck	545654.5	4807337.6	326.4	0	68	16.8	A	60.3	0.0	-2.8	5.0	1.4	0.0	0.0	0.0	0.0	0.0	21
T03	Highway Truck	545713.4	4807288.1	326.4	0	68	13.9	A	57.7	0.0	-2.8	8.8	1.1	0.0	0.0	0.0	0.0	0.0	17
T03	Highway Truck	545694.6	4807151.9	326.4	0	68	13.9	A	57.4	0.0	-2.8	0.0	1.0	0.0	0.0	0.0	0.0	0.0	27
T03	Highway Truck	545649.7	4807338.2	326.4	0	68	16.3	A	60.4	0.0	-2.8	4.9	1.4	0.0	0.0	0.0	0.0	0.0	21
T03	Highway Truck	545674.1	4807306.8	326.4	0	68	14.2	A	59.3	0.0	-2.8	5.5	1.3	0.0	0.0	0.0	0.0	0.0	19
T03	Highway Truck	545687.1	4807243.1	326.4	0	68	12.7	A	57.9	0.0	-2.9	5.4	1.1	0.0	0.0	0.0	0.0	0.0	19
T03	Highway Truck	545702.1	4807270.2	326.4	0	68	12.4	A	57.8	0.0	-2.8	7.4	1.1	0.0	0.0	0.0	0.0	0.0	17
T03	Highway Truck	545692.2	4807293.9	326.4	0	68	12.9	A	58.5	0.0	-2.8	6.5	1.2	0.0	0.0	0.0	0.0	0.0	18
T03	Highway Truck	545715.4	4807279.8	326.4	0	68	12.0	A	57.4	0.0	-2.8	9.1	1.0	0.0	0.0	0.0	0.0	0.0	16
T03	Highway Truck	545682.3	4807224.6	326.4	0	68	11.6	A	58.0	0.0	-2.9	0.0	1.1	0.0	0.0	0.0	0.0	0.0	24
T03	Highway Truck	545681.6	4807209.4	326.4	0	68	12.1	A	57.9	0.0	-2.9	0.0	1.1	0.0	0.0	0.0	0.0	0.0	24
T03	Highway Truck	545692.9	4807258.2	326.4	0	68	11.4	A	57.9	0.0	-2.9	6.4	1.1	0.0	0.0	0.0	0.0	0.0	17
T01	Highway Truck	545839.5	4806920.5	328.4	0	68	17.0	A	59.6	0.0	-1.7	0.0	1.3	0.0	0.0	0.0	0.0	0.0	26
T01	Highway Truck	545837.0	4806948.6	328.3	0	68	15.5	A	58.7	0.0	-1.6	0.0	1.2	0.0	0.0	0.0	0.0	0.0	26
T01	Highway Truck	545831.7	4806868.8	328.4	0	68	17.4	A	61.1	0.0	-2.3	0.0	1.5	0.0	0.0	0.0	0.0	0.0	25
T01	Highway Truck	545816.8	4806973.7	328.1	0	68	14.2	A	58.0	0.0	-2.1	0.0	1.1	0.0	0.0	0.0	0.0	0.0	25
T01	Highway Truck	545840.2	4806956.3	328.3	0	68	13.4	A	58.4	0.0	-1.7	0.0	1.1	0.0	0.0	0.0	0.0	0.0	24

Receiver: R05

Project: Kitchener Hidden Valley - Stationary Noise
Project Number: 22377

Time Period	Total (dBA)*
Day	52

Receiver Name	Receiver ID	X	Y	Z
Proposed Commercial / Mixed-Use	R05	545901 m	4807181 m	329.5 m

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
T01	Highway Truck	545834.2	4806998.2	328.2	0	68	11.8	A	56.8	0.0	-1.9	0.0	1.0	0.0	0.0	0.0	0.0	0.0	24
T01	Highway Truck	545820.0	4806817.5	328.3	0	68	17.0	A	62.4	0.0	-3.2	0.0	1.7	0.0	0.0	0.0	0.0	0.0	24
T01	Highway Truck	545833.1	4806988.2	328.2	0	68	11.9	A	57.2	0.0	-1.9	0.0	1.0	0.0	0.0	0.0	0.0	0.0	24
T01	Highway Truck	545837.0	4806975.5	328.2	0	68	12.3	A	57.7	0.0	-1.7	0.0	1.1	0.0	0.0	0.0	0.0	0.0	24
T01	Highway Truck	545838.0	4807010.9	328.0	0	68	10.8	A	56.2	0.0	-1.8	0.0	0.9	0.0	0.0	0.0	0.0	0.0	24
T01	Highway Truck	545838.4	4807001.2	328.2	0	68	11.1	A	56.6	0.0	-1.9	0.0	1.0	0.0	0.0	0.0	0.0	0.0	24
T01	Highway Truck	545846.9	4806929.0	328.5	0	68	12.8	A	59.2	0.0	-2.4	0.0	1.3	0.0	0.0	0.0	0.0	0.0	23
T01	Highway Truck	545840.5	4807011.8	328.0	0	68	9.4	A	56.1	0.0	-1.9	0.0	0.9	0.0	0.0	0.0	0.0	0.0	23
T01	Highway Truck	545809.6	4806973.4	328.1	0	68	10.8	A	58.1	0.0	-2.1	0.0	1.1	0.0	0.0	0.0	0.0	0.0	22
T01	Highway Truck	545833.9	4806970.3	328.2	0	68	9.7	A	57.9	0.0	-1.7	0.0	1.1	0.0	0.0	0.0	0.0	0.0	21
T01	Highway Truck	545826.3	4806978.3	328.2	0	68	9.4	A	57.7	0.0	-2.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0	21
T01	Highway Truck	545834.2	4806987.2	328.2	0	68	8.5	A	57.2	0.0	-2.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	20
T01	Highway Truck	545819.5	4806974.3	328.1	0	68	9.0	A	57.9	0.0	-2.1	0.0	1.1	0.0	0.0	0.0	0.0	0.0	20
T01	Highway Truck	545810.7	4806784.8	328.0	0	68	12.5	A	63.2	0.0	-3.4	0.0	1.9	0.0	0.0	0.0	0.0	0.0	19
T01	Highway Truck	545813.7	4806757.2	327.6	0	68	12.7	A	63.7	0.0	-1.2	0.0	2.0	0.0	0.0	0.0	0.0	0.0	16
T01	Highway Truck	545805.0	4806771.6	327.8	0	68	10.3	A	63.5	0.0	-3.5	0.0	1.9	0.0	0.0	0.0	0.0	0.0	17
T02	Highway Truck	545669.0	4806634.9	328.1	0	68	19.5	A	66.5	0.0	-2.1	4.7	2.6	0.0	0.0	0.0	0.0	0.0	16
T02	Highway Truck	545667.5	4806631.4	328.1	0	68	19.6	A	66.5	0.0	-2.2	4.7	2.6	0.0	0.0	0.0	0.0	0.0	16
T02	Highway Truck	545532.6	4806775.7	327.4	0	68	17.9	A	65.8	0.0	-3.2	4.8	2.4	0.0	0.0	0.0	0.0	0.0	16
S05	Large RTU	545557.3	4807011.9	331.9	0	94	0.0	A	62.7	0.0	-1.7	0.0	1.8	0.0	0.0	0.0	0.0	0.0	32
S05	Large RTU	545545.0	4807007.6	331.9	0	94	0.0	A	63.0	0.0	-1.8	0.0	1.8	0.0	0.0	0.0	0.0	0.0	31
S05	Large RTU	545560.1	4806962.7	331.9	0	94	0.0	A	63.1	0.0	-1.8	0.0	1.8	0.0	0.0	0.0	0.0	0.0	31
S05	Large RTU	545540.4	4806946.3	331.9	0	94	0.0	A	63.7	0.0	-2.0	0.0	1.9	0.0	0.0	0.0	0.0	0.0	31
S05	Large RTU	545579.6	4806887.0	331.9	0	94	0.0	A	63.8	0.0	-1.6	0.0	2.0	0.0	0.0	0.0	0.0	0.0	30
S05	Large RTU	545497.6	4807011.4	331.9	0	94	0.0	A	63.8	0.0	-2.2	0.0	2.0	0.0	0.0	0.0	0.0	0.0	31
S05	Large RTU	545487.3	4807018.2	331.9	0	94	0.0	A	64.0	0.0	-2.3	0.0	2.0	0.0	0.0	0.0	0.0	0.0	31
S05	Large RTU	545483.1	4807009.9	331.9	0	94	0.0	A	64.1	0.0	-2.3	0.0	2.0	0.0	0.0	0.0	0.0	0.0	30
S05	Large RTU	545546.7	4806875.1	331.9	0	94	0.0	A	64.4	0.0	-2.0	0.0	2.1	0.0	0.0	0.0	0.0	0.0	30
S05	Large RTU	545455.5	4807017.1	331.9	0	94	0.0	A	64.5	0.0	-2.5	0.0	2.1	0.0	0.0	0.0	0.0	0.0	30
S05	Large RTU	545533.2	4806870.2	331.9	0	94	0.0	A	64.7	0.0	-2.1	0.0	2.1	0.0	0.0	0.0	0.0	0.0	30
S05	Large RTU	545458.8	4806937.6	331.9	0	94	0.0	A	65.1	0.0	-2.6	0.0	2.2	0.0	0.0	0.0	0.0	0.0	30
S05	Large RTU	545513.6	4806853.5	331.9	0	94	0.0	A	65.1	0.0	-2.3	0.0	2.2	0.0	0.0	0.0	0.0	0.0	29
S04	Loader	545561.3	4806674.5	327.4	0	101	0.0	A	66.7	0.0	-3.7	4.8	2.3	0.0	0.0	0.0	0.0	0.0	31
S02	Rooftop Unit	545762.4	4807267.9	330.5	0	91	0.0	A	55.3	0.0	-2.6	0.0	0.7	0.0	0.0	0.0	0.0	0.0	38
S01	Rooftop Unit	545749.8	4807316.8	330.5	0	91	0.0	A	57.1	0.0	-2.5	0.0	0.8	0.0	0.0	0.0	0.0	0.0	36
S05	Rooftop Unit	545794.7	4806904.0	332.3	0	91	0.0	A	60.5	0.0	-2.4	0.0	1.1	0.0	0.0	0.0	0.0	0.0	32
S05	Rooftop Unit	545789.5	4806904.1	332.3	0	91	0.0	A	60.5	0.0	-2.3	0.0	1.1	0.0	0.0	0.0	0.0	0.0	32
S05	Rooftop Unit	545484.8	4807611.6	325.7	0	91	0.0	A	66.5	0.0	-1.2	4.7	1.9	0.0	0.0	0.0	0.0	0.0	19
S05	Rooftop Unit	545491.4	4807626.9	325.9	0	91	0.0	A	66.6	0.0	-3.1	4.8	2.0	0.0	0.0	0.0	0.0	0.0	21
S05	Rooftop Unit	545476.8	4807636.0	332.2	0	91	0.0	A	66.9	0.0	-2.5	0.0	2.0	0.0	0.0	0.0	0.0	0.0	25
S05	Rooftop Unit	545472.6	4807638.4	332.2	0	91	0.0	A	66.9	0.0	-2.5	0.0	2.0	0.0	0.0	0.0	0.0	0.0	25
S05	Rooftop Unit	545466.5	4807633.4	332.2	0	91	0.0	A	66.9	0.0	-2.5	0.0	2.0	0.0	0.0	0.0	0.0	0.0	25
S05	Rooftop Unit	545462.4	4807635.0	332.2	0	91	0.0	A	67.0	0.0	-2.5	0.0	2.0	0.0	0.0	0.0	0.0	0.0	24
S05	Rooftop Unit	545419.1	4807589.9	325.4	0	91	0.0	A	67.0	0.0	-0.5	4.3	2.0	0.0	0.0	0.0	0.0	0.0	18
S05	Rooftop Unit	545458.4	4807633.3	332.2	0	91	0.0	A	67.0	0.0	-2.5	0.0	2.0	0.0	0.0	0.0	0.0	0.0	24

Receiver: R05

Project: Kitchener Hidden Valley - Stationary Noise
Project Number: 22377

Time Period	Total (dBA)*
Day	52

Receiver Name	Receiver ID	X	Y	Z
Proposed Commercial / Mixed-Use	R05	545901 m	4807181 m	329.5 m

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
S05	Rooftop Unit	545453.3	4807630.8	332.2	0	91	0.0	A	67.0	0.0	-2.4	0.0	2.0	0.0	0.0	0.0	0.0	0.0	24
S05	Rooftop Unit	545577.4	4807728.1	332.2	0	91	0.0	A	67.1	0.0	-2.8	0.0	2.0	0.0	0.0	0.0	0.0	0.0	25
S05	Rooftop Unit	545448.4	4807629.7	332.2	0	91	0.0	A	67.1	0.0	-2.4	0.0	2.0	0.0	0.0	0.0	0.0	0.0	24
S05	Rooftop Unit	545566.0	4807728.3	332.2	0	91	0.0	A	67.1	0.0	-2.8	0.0	2.1	0.0	0.0	0.0	0.0	0.0	25
S05	Rooftop Unit	545448.9	4807637.2	332.2	0	91	0.0	A	67.1	0.0	-2.5	0.0	2.1	0.0	0.0	0.0	0.0	0.0	24
S05	Rooftop Unit	545581.7	4807741.0	332.2	0	91	0.0	A	67.2	0.0	-2.8	0.0	2.1	0.0	0.0	0.0	0.0	0.0	25
S05	Rooftop Unit	545588.6	4807753.3	332.2	0	91	0.0	A	67.3	0.0	-2.8	0.0	2.1	0.0	0.0	0.0	0.0	0.0	24
S05	Rooftop Unit	545433.7	4807635.9	332.2	0	91	0.0	A	67.3	0.0	-2.4	0.0	2.1	0.0	0.0	0.0	0.0	0.0	24
S05	Rooftop Unit	545417.0	4807620.1	332.2	0	91	0.0	A	67.3	0.0	-2.3	0.0	2.1	0.0	0.0	0.0	0.0	0.0	24
S05	Rooftop Unit	545428.7	4807633.1	332.2	0	91	0.0	A	67.3	0.0	-2.4	0.0	2.1	0.0	0.0	0.0	0.0	0.0	24
S05	Rooftop Unit	545417.8	4807626.5	332.2	0	91	0.0	A	67.3	0.0	-2.4	0.0	2.1	0.0	0.0	0.0	0.0	0.0	24
S05	Rooftop Unit	545429.3	4807640.1	332.2	0	91	0.0	A	67.4	0.0	-2.5	0.0	2.1	0.0	0.0	0.0	0.0	0.0	24
S05	Rooftop Unit	545421.9	4807632.5	332.2	0	91	0.0	A	67.4	0.0	-2.4	0.0	2.1	0.0	0.0	0.0	0.0	0.0	24
S05	Rooftop Unit	545415.3	4807632.6	332.2	0	91	0.0	A	67.4	0.0	-2.4	0.0	2.1	0.0	0.0	0.0	0.0	0.0	24
S05	Rooftop Unit	545549.1	4807745.9	332.2	0	91	0.0	A	67.5	0.0	-2.9	0.0	2.1	0.0	0.0	0.0	0.0	0.0	24
S05	Rooftop Unit	545415.6	4807638.7	332.2	0	91	0.0	A	67.5	0.0	-2.5	0.0	2.1	0.0	0.0	0.0	0.0	0.0	24
S05	Rooftop Unit	545566.7	4807759.9	332.2	0	91	0.0	A	67.5	0.0	-2.9	0.0	2.1	0.0	0.0	0.0	0.0	0.0	24
S05	Rooftop Unit	545574.4	4807766.0	332.2	0	91	0.0	A	67.5	0.0	-2.9	0.0	2.1	0.0	0.0	0.0	0.0	0.0	24
S05	Rooftop Unit	545535.7	4807762.1	332.2	0	91	0.0	A	67.7	0.0	-3.0	0.0	2.2	0.0	0.0	0.0	0.0	0.0	24
S05	Rooftop Unit	545553.0	4807776.0	332.2	0	91	0.0	A	67.8	0.0	-3.0	0.0	2.2	0.0	0.0	0.0	0.0	0.0	24
S05	Rooftop Unit	545561.2	4807782.7	332.2	0	91	0.0	A	67.8	0.0	-3.0	0.0	2.2	0.0	0.0	0.0	0.0	0.0	24
S05	Rooftop Unit	545506.9	4807982.4	331.2	0	91	0.0	A	70.0	0.0	-3.2	0.0	2.7	0.0	0.0	0.0	0.0	0.0	21
S05	Rooftop Unit	545484.7	4808004.7	331.2	0	91	0.0	A	70.3	0.0	-3.5	0.0	2.7	0.0	0.0	0.0	0.0	0.0	22
S05	Rooftop Unit	545571.7	4808050.4	331.2	0	91	0.0	A	70.4	0.0	-2.6	0.0	2.7	0.0	0.0	0.0	0.0	0.0	20
S05	Rooftop Unit	545515.4	4808036.9	331.2	0	91	0.0	A	70.4	0.0	-2.9	0.0	2.8	0.0	0.0	0.0	0.0	0.0	21
S05	Rooftop Unit	545549.3	4808072.5	331.2	0	91	0.0	A	70.6	0.0	-2.8	0.0	2.8	0.0	0.0	0.0	0.0	0.0	20
TPSS_1	TPSS1 adjusted to 87 dBA + 5 dB tonal penalty	545877.3	4807925.8	332.8	0	92	0.0	A	68.4	0.0	-2.2	0.0	2.6	0.0	0.0	0.0	0.0	0.0	24
TPSS_2	TPSS2 adjusted to 87 dBA + 5 dB tonal penalty	546801.0	4807780.2	312.5	0	92	0.0	A	71.7	0.0	-0.5	0.0	3.5	0.0	0.0	0.0	0.0	0.0	18
Transformer	Transformer 1	545740.0	4807978.1	331.4	0	97	0.0	A	69.2	0.0	-2.0	0.0	2.7	0.0	0.0	0.0	0.0	0.0	27
Transformer	Transformer 1	545724.9	4807982.0	331.5	0	97	0.0	A	69.3	0.0	-2.3	0.0	2.8	0.0	0.0	0.0	0.0	0.0	28

*The total value shown accounts for all modelled sources and may include small contributions from sources not described in the table above

Receiver: R06

Project: Kitchener Hidden Valley - Stationary Noise
Project Number: 22377

Time Period	Total (dBA)*
Day	55

Receiver Name	Receiver ID	X	Y	Z
Proposed Mixed-Use	R06	545816 m	4807542 m	324.6 m

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
S05	Condenser	545531.4	4806976.3	331.9	0	91	0.0	A	67.0	0.0	-2.8	0.0	1.5	0.0	0.0	0.0	0.0	0.0	25
S03	Crusher	545526.7	4806649.4	328.8	0	119	0.0	A	70.4	0.0	-4.2	4.8	2.2	0.0	0.0	0.0	0.0	0.0	46
T05	Forklift	545692.4	4807540.9	327.4	0	80	15.6	A	52.9	0.0	-1.8	0.0	0.6	0.0	0.0	0.0	0.0	0.0	44
T05	Forklift	545702.6	4807506.4	327.4	0	80	15.6	A	52.5	0.0	-1.8	0.0	0.6	0.0	0.0	0.0	0.0	0.0	45
T05	Forklift	545604.7	4807335.3	326.4	0	80	20.7	A	60.4	0.0	-1.8	0.0	1.4	0.0	0.0	0.0	0.0	0.0	41
T05	Forklift	545630.2	4807221.7	326.4	0	80	20.7	A	62.4	0.0	-2.0	0.0	1.7	0.0	0.0	0.0	0.0	0.0	39
T05	Forklift	545660.0	4807451.2	326.9	0	80	18.3	A	56.1	0.0	-2.7	0.0	0.9	0.0	0.0	0.0	0.0	0.0	45
T05	Forklift	545593.0	4807220.5	326.4	0	80	21.0	A	62.9	0.0	-1.3	0.0	1.8	0.0	0.0	0.0	0.0	0.0	38
T05	Forklift	545564.9	4807342.5	326.4	0	80	21.0	A	61.1	0.0	-1.1	0.0	1.5	0.0	0.0	0.0	0.0	0.0	40
T05	Forklift	545680.9	4807577.1	327.3	0	80	16.0	A	53.9	0.0	-2.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	44
T05	Forklift	545700.5	4807474.1	327.2	0	80	15.3	A	53.5	0.0	-2.1	0.0	0.7	0.0	0.0	0.0	0.0	0.0	44
T05	Forklift	545610.8	4807531.2	327.1	0	80	19.5	A	57.3	0.0	-2.7	0.0	1.0	0.0	0.0	0.0	0.0	0.0	44
T05	Forklift	545657.0	4807594.9	327.0	0	80	15.5	A	55.5	0.0	-2.6	0.0	0.9	0.0	0.0	0.0	0.0	0.0	42
T05	Forklift	545609.4	4807417.7	326.7	0	80	17.9	A	58.6	0.0	-2.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	41
T05	Forklift	545625.6	4807584.9	326.8	0	80	15.2	A	56.8	0.0	-2.7	0.0	1.0	0.0	0.0	0.0	0.0	0.0	41
T05	Forklift	545607.8	4807472.6	327.4	0	80	14.4	A	57.8	0.0	-2.4	0.0	1.1	0.0	0.0	0.0	0.0	0.0	38
T05	Forklift	545567.0	4807463.3	327.1	0	80	15.4	A	59.3	0.0	-1.3	0.0	1.3	0.0	0.0	0.0	0.0	0.0	37
T05	Forklift	545599.0	4807450.0	327.0	0	80	13.5	A	58.5	0.0	-2.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	36
T05	Forklift	545581.5	4807443.6	326.8	0	80	13.5	A	59.1	0.0	-1.5	0.0	1.2	0.0	0.0	0.0	0.0	0.0	35
T05	Forklift	545632.9	4807161.6	326.4	0	80	13.3	A	63.5	0.0	-1.6	0.0	1.9	0.0	0.0	0.0	0.0	0.0	30
T05	Forklift	545614.9	4807158.9	326.4	0	80	12.0	A	63.7	0.0	-1.5	0.0	2.0	0.0	0.0	0.0	0.0	0.0	28
T03	Highway Truck	545667.4	4807273.0	326.4	0	68	19.6	A	60.8	0.0	-2.7	0.0	1.5	0.0	0.0	0.0	0.0	0.0	28
T03	Highway Truck	545654.5	4807337.6	326.4	0	68	16.8	A	59.3	0.0	-2.8	0.0	1.3	0.0	0.0	0.0	0.0	0.0	27
T03	Highway Truck	545649.7	4807338.2	326.4	0	68	16.3	A	59.4	0.0	-2.8	0.0	1.3	0.0	0.0	0.0	0.0	0.0	27
T03	Highway Truck	545687.1	4807196.5	326.4	0	68	17.4	A	62.3	0.0	-3.1	5.0	1.7	0.0	0.0	0.0	0.0	0.0	20
T03	Highway Truck	545674.1	4807306.8	326.4	0	68	14.2	A	59.8	0.0	-2.7	0.0	1.3	0.0	0.0	0.0	0.0	0.0	24
T03	Highway Truck	545703.7	4807290.1	326.4	0	68	6.8	A	59.8	0.0	-2.6	0.0	1.3	0.0	0.0	0.0	0.0	0.0	16
T03	Highway Truck	545715.7	4807287.6	326.4	0	68	13.0	A	59.7	0.0	-2.5	6.9	1.3	0.0	0.0	0.0	0.0	0.0	16
T03	Highway Truck	545686.8	4807182.6	326.4	0	68	15.9	A	62.6	0.0	-3.1	5.0	1.8	0.0	0.0	0.0	0.0	0.0	18
T03	Highway Truck	545692.2	4807293.9	326.4	0	68	12.9	A	59.9	0.0	-2.6	0.0	1.3	0.0	0.0	0.0	0.0	0.0	23
T03	Highway Truck	545702.1	4807270.2	326.4	0	68	12.4	A	60.4	0.0	-2.5	4.1	1.4	0.0	0.0	0.0	0.0	0.0	17
T03	Highway Truck	545697.5	4807155.1	326.4	0	68	14.8	A	63.1	0.0	-3.2	5.3	1.9	0.0	0.0	0.0	0.0	0.0	16
T03	Highway Truck	545687.1	4807243.1	326.4	0	68	12.7	A	61.3	0.0	-2.8	2.3	1.5	0.0	0.0	0.0	0.0	0.0	19
T03	Highway Truck	545694.6	4807151.9	326.4	0	68	13.9	A	63.2	0.0	-3.3	5.2	1.9	0.0	0.0	0.0	0.0	0.0	15
T03	Highway Truck	545682.6	4807225.9	326.4	0	68	12.3	A	61.7	0.0	-3.0	3.0	1.6	0.0	0.0	0.0	0.0	0.0	17
T03	Highway Truck	545692.9	4807258.2	326.4	0	68	11.4	A	60.8	0.0	-2.7	2.2	1.5	0.0	0.0	0.0	0.0	0.0	18
T03	Highway Truck	545681.6	4807209.4	326.4	0	68	12.1	A	62.1	0.0	-3.1	4.1	1.7	0.0	0.0	0.0	0.0	0.0	16
T01	Highway Truck	545839.5	4806920.5	328.4	0	68	17.0	A	66.9	0.0	-2.7	0.0	2.7	0.0	0.0	0.0	0.0	0.0	18
T01	Highway Truck	545831.7	4806868.8	328.4	0	68	17.4	A	67.6	0.0	-2.9	0.0	2.8	0.0	0.0	0.0	0.0	0.0	18
T01	Highway Truck	545837.0	4806948.6	328.3	0	68	15.5	A	66.5	0.0	-2.6	0.0	2.6	0.0	0.0	0.0	0.0	0.0	17
T01	Highway Truck	545820.0	4806817.5	328.3	0	68	17.0	A	68.2	0.0	-3.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	17
T01	Highway Truck	545817.5	4806973.8	328.1	0	68	14.4	A	66.1	0.0	-1.8	0.0	2.5	0.0	0.0	0.0	0.0	0.0	16
T01	Highway Truck	545840.2	4806956.3	328.3	0	68	13.4	A	66.4	0.0	-2.4	0.0	2.5	0.0	0.0	0.0	0.0	0.0	15
S05	Large RTU	545557.3	4807011.9	331.9	0	94	0.0	A	66.4	0.0	-2.6	0.0	2.4	0.0	0.0	0.0	0.0	0.0	28
S05	Large RTU	545545.0	4807007.6	331.9	0	94	0.0	A	66.6	0.0	-2.7	0.0	2.5	0.0	0.0	0.0	0.0	0.0	28
S05	Large RTU	545487.3	4807018.2	331.9	0	94	0.0	A	66.8	0.0	-2.5	0.0	2.5	0.0	0.0	0.0	0.0	0.0	27

Receiver: R06

Project: Kitchener Hidden Valley - Stationary Noise
Project Number: 22377

Time Period	Total (dBA)*
Day	55

Receiver Name	Receiver ID	X	Y	Z
Proposed Mixed-Use	R06	545816 m	4807542 m	324.6 m

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
S05	Large RTU	545497.6	4807011.4	331.9	0	94	0.0	A	66.8	0.0	-2.6	0.0	2.5	0.0	0.0	0.0	0.0	0.0	27
S05	Large RTU	545483.1	4807009.9	331.9	0	94	0.0	A	67.0	0.0	-2.6	0.0	2.6	0.0	0.0	0.0	0.0	0.0	27
S05	Large RTU	545560.1	4806962.7	331.9	0	94	0.0	A	67.0	0.0	-3.0	0.0	2.6	0.0	0.0	0.0	0.0	0.0	28
S05	Large RTU	545455.5	4807017.1	331.9	0	94	0.0	A	67.1	0.0	-2.5	0.0	2.6	0.0	0.0	0.0	0.0	0.0	27
S05	Large RTU	545540.4	4806946.3	331.9	0	94	0.0	A	67.3	0.0	-3.2	0.0	2.7	0.0	0.0	0.0	0.0	0.0	27
S05	Large RTU	545579.6	4806887.0	331.9	0	94	0.0	A	67.9	0.0	-3.5	4.1	2.8	0.0	0.0	0.0	0.0	0.0	23
S05	Large RTU	545458.8	4806937.6	331.9	0	94	0.0	A	67.9	0.0	-3.1	0.0	2.8	0.0	0.0	0.0	0.0	0.0	27
S05	Large RTU	545546.7	4806875.1	331.9	0	94	0.0	A	68.1	0.0	-3.5	3.1	2.8	0.0	0.0	0.0	0.0	0.0	24
S05	Large RTU	545533.2	4806870.2	331.9	0	94	0.0	A	68.3	0.0	-3.5	2.2	2.9	0.0	0.0	0.0	0.0	0.0	24
S05	Large RTU	545513.6	4806853.5	331.9	0	94	0.0	A	68.5	0.0	-3.5	4.8	2.9	0.0	0.0	0.0	0.0	0.0	22
S04	Loader	545561.3	4806674.5	327.4	0	101	0.0	A	70.1	0.0	-4.4	4.8	3.0	0.0	0.0	0.0	0.0	0.0	27
S01	Rooftop Unit	545749.8	4807316.8	330.5	0	91	0.0	A	58.4	0.0	-1.9	4.8	0.9	0.0	0.0	0.0	0.0	0.0	29
S02	Rooftop Unit	545762.4	4807267.9	330.5	0	91	0.0	A	59.9	0.0	-1.9	4.8	1.1	0.0	0.0	0.0	0.0	0.0	27
S05	Rooftop Unit	545577.4	4807728.1	332.2	0	91	0.0	A	60.6	0.0	-0.6	0.0	1.1	0.0	0.0	0.0	0.0	0.0	30
S05	Rooftop Unit	545581.7	4807741.0	332.2	0	91	0.0	A	60.8	0.0	-0.6	0.0	1.1	0.0	0.0	0.0	0.0	0.0	30
S05	Rooftop Unit	545588.6	4807753.3	332.2	0	91	0.0	A	60.8	0.0	-0.7	0.0	1.2	0.0	0.0	0.0	0.0	0.0	30
S05	Rooftop Unit	545566.0	4807728.3	332.2	0	91	0.0	A	60.9	0.0	-0.7	0.0	1.2	0.0	0.0	0.0	0.0	0.0	30
S05	Rooftop Unit	545574.4	4807766.0	332.2	0	91	0.0	A	61.4	0.0	-0.8	0.0	1.2	0.0	0.0	0.0	0.0	0.0	29
S05	Rooftop Unit	545566.7	4807759.9	332.2	0	91	0.0	A	61.4	0.0	-0.8	0.0	1.2	0.0	0.0	0.0	0.0	0.0	29
S05	Rooftop Unit	545491.4	4807626.9	325.9	0	91	0.0	A	61.5	0.0	-2.7	4.8	1.2	0.0	0.0	0.0	0.0	0.0	26
S05	Rooftop Unit	545549.1	4807745.9	332.2	0	91	0.0	A	61.5	0.0	-0.9	0.0	1.2	0.0	0.0	0.0	0.0	0.0	29
S05	Rooftop Unit	545484.8	4807611.6	325.7	0	91	0.0	A	61.6	0.0	-2.6	4.8	1.2	0.0	0.0	0.0	0.0	0.0	26
S05	Rooftop Unit	545561.2	4807782.7	332.2	0	91	0.0	A	61.9	0.0	-0.9	0.0	1.3	0.0	0.0	0.0	0.0	0.0	29
S05	Rooftop Unit	545476.8	4807636.0	332.2	0	91	0.0	A	61.9	0.0	-1.9	0.0	1.3	0.0	0.0	0.0	0.0	0.0	30
S05	Rooftop Unit	545553.0	4807776.0	332.2	0	91	0.0	A	61.9	0.0	-0.9	0.0	1.3	0.0	0.0	0.0	0.0	0.0	29
S05	Rooftop Unit	545535.7	4807762.1	332.2	0	91	0.0	A	62.0	0.0	-0.9	4.7	1.3	0.0	0.0	0.0	0.0	0.0	24
S05	Rooftop Unit	545472.6	4807638.4	332.2	0	91	0.0	A	62.0	0.0	-1.9	0.0	1.3	0.0	0.0	0.0	0.0	0.0	30
S05	Rooftop Unit	545466.5	4807633.4	332.2	0	91	0.0	A	62.2	0.0	-1.9	0.0	1.3	0.0	0.0	0.0	0.0	0.0	29
S05	Rooftop Unit	545462.4	4807635.0	332.2	0	91	0.0	A	62.3	0.0	-1.9	0.0	1.3	0.0	0.0	0.0	0.0	0.0	29
S05	Rooftop Unit	545458.4	4807633.3	332.2	0	91	0.0	A	62.3	0.0	-2.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	29
S05	Rooftop Unit	545453.3	4807630.8	332.2	0	91	0.0	A	62.4	0.0	-2.0	0.0	1.3	0.0	0.0	0.0	0.0	0.0	29
S05	Rooftop Unit	545448.4	4807629.7	332.2	0	91	0.0	A	62.6	0.0	-2.1	0.0	1.4	0.0	0.0	0.0	0.0	0.0	29
S05	Rooftop Unit	545448.9	4807637.2	332.2	0	91	0.0	A	62.6	0.0	-1.9	0.0	1.4	0.0	0.0	0.0	0.0	0.0	29
S05	Rooftop Unit	545433.7	4807635.9	332.2	0	91	0.0	A	62.9	0.0	-2.0	0.0	1.4	0.0	0.0	0.0	0.0	0.0	29
S05	Rooftop Unit	545428.7	4807633.1	332.2	0	91	0.0	A	63.0	0.0	-2.1	4.8	1.4	0.0	0.0	0.0	0.0	0.0	24
S05	Rooftop Unit	545429.3	4807640.1	332.2	0	91	0.0	A	63.0	0.0	-2.0	0.0	1.4	0.0	0.0	0.0	0.0	0.0	29
S05	Rooftop Unit	545419.1	4807589.9	325.4	0	91	0.0	A	63.0	0.0	-2.8	4.8	1.4	0.0	0.0	0.0	0.0	0.0	25
S05	Rooftop Unit	545421.9	4807632.5	332.2	0	91	0.0	A	63.1	0.0	-2.1	4.8	1.4	0.0	0.0	0.0	0.0	0.0	24
S05	Rooftop Unit	545417.0	4807620.1	332.2	0	91	0.0	A	63.2	0.0	-2.2	0.0	1.4	0.0	0.0	0.0	0.0	0.0	29
S05	Rooftop Unit	545417.8	4807626.5	332.2	0	91	0.0	A	63.2	0.0	-2.1	4.8	1.4	0.0	0.0	0.0	0.0	0.0	24
S05	Rooftop Unit	545415.3	4807632.6	332.2	0	91	0.0	A	63.3	0.0	-2.1	4.8	1.4	0.0	0.0	0.0	0.0	0.0	24
S05	Rooftop Unit	545415.6	4807638.7	332.2	0	91	0.0	A	63.3	0.0	-2.0	4.8	1.4	0.0	0.0	0.0	0.0	0.0	23
S05	Rooftop Unit	545506.9	4807982.4	331.2	0	91	0.0	A	65.6	0.0	-1.2	4.7	1.8	0.0	0.0	0.0	0.0	0.0	20
S05	Rooftop Unit	545571.7	4808050.4	331.2	0	91	0.0	A	66.0	0.0	-1.5	4.8	1.9	0.0	0.0	0.0	0.0	0.0	20
S05	Rooftop Unit	545484.7	4808004.7	331.2	0	91	0.0	A	66.1	0.0	-1.4	4.8	1.9	0.0	0.0	0.0	0.0	0.0	20
S05	Rooftop Unit	545515.4	4808036.9	331.2	0	91	0.0	A	66.3	0.0	-1.5	4.8	1.9	0.0	0.0	0.0	0.0	0.0	20

Receiver: R06

Project: Kitchener Hidden Valley - Stationary Noise
Project Number: 22377

Time Period	Total (dBA)*
Day	55

Receiver Name	Receiver ID	X	Y	Z
Proposed Mixed-Use	R06	545816 m	4807542 m	324.6 m

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
S05	Rooftop Unit	545549.3	4808072.5	331.2	0	91	0.0	A	66.5	0.0	-1.7	4.8	1.9	0.0	0.0	0.0	0.0	0.0	20
S05	Rooftop Unit	545794.7	4806904.0	332.3	0	91	0.0	A	67.1	0.0	-2.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	24
S05	Rooftop Unit	545789.5	4806904.1	332.3	0	91	0.0	A	67.1	0.0	-2.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	24
TPSS_1	TPSS1 adjusted to 87 dBA + 5 dB tonal penalty	545877.3	4807925.8	332.8	0	92	0.0	A	62.8	0.0	-1.7	0.0	1.5	0.0	0.0	0.0	0.0	0.0	30
TPSS_2	TPSS2 adjusted to 87 dBA + 5 dB tonal penalty	546801.0	4807780.2	312.5	0	92	0.0	A	71.1	0.0	-0.4	0.0	3.3	0.0	0.0	0.0	0.0	0.0	18
Transformer	Transformer 1	545740.0	4807978.1	331.4	0	97	0.0	A	63.9	0.0	-1.1	4.7	1.6	0.0	0.0	0.0	0.0	0.0	28
Transformer	Transformer 1	545724.9	4807982.0	331.5	0	97	0.0	A	64.1	0.0	-1.3	4.8	1.7	0.0	0.0	0.0	0.0	0.0	28

*The total value shown accounts for all modelled sources and may include small contributions from sources not described in the table above

Receiver: R07

Project: Kitchener Hidden Valley - Stationary Noise
Project Number: 22377

Time Period	Total (dBA)*
Day	55

Receiver Name	Receiver ID	X	Y	Z
Proposed Mixed-Use	R07	545760 m	4807662 m	332.2 m

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
S05	Condenser	545531.4	4806976.3	331.9	0	91	0.0	A	68.2	0.0	-2.5	0.0	1.6	0.0	0.0	0.0	0.0	0.0	23
S03	Crusher	545526.7	4806649.4	328.8	0	119	0.0	A	71.3	0.0	-3.7	4.8	2.3	0.0	0.0	0.0	0.0	0.0	44
T05	Forklift	545697.5	4807523.7	327.4	0	80	18.6	A	54.6	0.0	-2.2	0.0	0.8	0.0	0.0	0.0	0.0	0.0	46
T05	Forklift	545680.9	4807577.1	327.3	0	80	16.0	A	52.3	0.0	-1.8	0.0	0.6	0.0	0.0	0.0	0.0	0.0	45
T05	Forklift	545610.8	4807531.2	327.1	0	80	19.5	A	57.0	0.0	-2.5	0.0	1.0	0.0	0.0	0.0	0.0	0.0	45
T05	Forklift	545657.0	4807594.9	327.0	0	80	15.5	A	52.8	0.0	-0.5	0.0	0.6	0.0	0.0	0.0	0.0	0.0	43
T05	Forklift	545604.7	4807335.3	326.4	0	80	20.7	A	62.2	0.0	-1.7	0.0	1.7	0.0	0.0	0.0	0.0	0.0	39
T05	Forklift	545630.2	4807221.7	326.4	0	80	20.7	A	64.2	0.0	-1.6	0.0	2.1	0.0	0.0	0.0	0.0	0.0	36
T05	Forklift	545593.0	4807220.5	326.4	0	80	21.0	A	64.5	0.0	-1.2	0.0	2.1	0.0	0.0	0.0	0.0	0.0	36
T05	Forklift	545564.9	4807342.5	326.4	0	80	21.0	A	62.5	0.0	-0.8	0.0	1.7	0.0	0.0	0.0	0.0	0.0	38
T05	Forklift	545625.6	4807584.9	326.8	0	80	15.2	A	54.8	0.0	-0.9	0.0	0.8	0.0	0.0	0.0	0.0	0.0	41
T05	Forklift	545660.0	4807451.2	326.9	0	80	18.3	A	58.4	0.0	-2.5	0.0	1.2	0.0	0.0	0.0	0.0	0.0	42
T05	Forklift	545700.5	4807474.1	327.2	0	80	15.3	A	56.9	0.0	-2.3	0.0	1.0	0.0	0.0	0.0	0.0	0.0	40
T05	Forklift	545609.4	4807417.7	326.7	0	80	17.9	A	60.2	0.0	-1.6	0.0	1.4	0.0	0.0	0.0	0.0	0.0	38
T05	Forklift	545607.8	4807472.6	327.4	0	80	14.4	A	58.7	0.0	-2.2	0.0	1.2	0.0	0.0	0.0	0.0	0.0	37
T05	Forklift	545567.0	4807463.3	327.1	0	80	15.4	A	59.9	0.0	-0.9	0.0	1.3	0.0	0.0	0.0	0.0	0.0	36
T05	Forklift	545599.0	4807450.0	327.0	0	80	13.5	A	59.5	0.0	-1.7	0.0	1.3	0.0	0.0	0.0	0.0	0.0	35
T05	Forklift	545581.5	4807443.6	326.8	0	80	13.5	A	60.0	0.0	-1.2	0.0	1.4	0.0	0.0	0.0	0.0	0.0	34
T05	Forklift	545632.9	4807161.6	326.4	0	80	13.3	A	65.3	0.0	-1.4	0.0	2.3	0.0	0.0	0.0	0.0	0.0	28
T05	Forklift	545614.9	4807158.9	326.4	0	80	12.0	A	65.4	0.0	-1.3	0.0	2.3	0.0	0.0	0.0	0.0	0.0	26
T03	Highway Truck	545668.1	4807270.3	326.4	0	68	19.9	A	63.1	0.0	-3.0	0.0	1.8	0.0	0.0	0.0	0.0	0.0	26
T03	Highway Truck	545654.5	4807337.6	326.4	0	68	16.8	A	61.7	0.0	-2.8	0.0	1.6	0.0	0.0	0.0	0.0	0.0	25
T03	Highway Truck	545649.7	4807338.2	326.4	0	68	16.3	A	61.7	0.0	-2.8	0.0	1.6	0.0	0.0	0.0	0.0	0.0	24
T03	Highway Truck	545687.1	4807196.5	326.4	0	68	17.4	A	64.5	0.0	-3.2	0.0	2.1	0.0	0.0	0.0	0.0	0.0	22
T03	Highway Truck	545674.1	4807306.8	326.4	0	68	14.2	A	62.3	0.0	-2.8	0.0	1.7	0.0	0.0	0.0	0.0	0.0	21
T03	Highway Truck	545686.8	4807182.6	326.4	0	68	15.9	A	64.7	0.0	-3.3	0.0	2.2	0.0	0.0	0.0	0.0	0.0	21
T03	Highway Truck	545713.4	4807288.1	326.4	0	68	13.9	A	62.5	0.0	-2.7	0.0	1.7	0.0	0.0	0.0	0.0	0.0	21
T03	Highway Truck	545731.5	4807286.8	326.4	0	68	10.9	A	62.5	0.0	-2.5	0.0	1.7	0.0	0.0	0.0	0.0	0.0	17
T03	Highway Truck	545692.2	4807293.9	326.4	0	68	12.9	A	62.5	0.0	-2.8	0.0	1.7	0.0	0.0	0.0	0.0	0.0	20
T03	Highway Truck	545697.5	4807155.1	326.4	0	68	14.8	A	65.2	0.0	-3.3	0.0	2.3	0.0	0.0	0.0	0.0	0.0	19
T03	Highway Truck	545702.1	4807270.2	326.4	0	68	12.4	A	63.0	0.0	-2.8	0.0	1.8	0.0	0.0	0.0	0.0	0.0	19
T03	Highway Truck	545715.4	4807279.8	326.4	0	68	12.0	A	62.7	0.0	-2.7	0.0	1.8	0.0	0.0	0.0	0.0	0.0	18
T03	Highway Truck	545687.1	4807243.1	326.4	0	68	12.7	A	63.6	0.0	-3.1	0.0	1.9	0.0	0.0	0.0	0.0	0.0	18
T03	Highway Truck	545694.6	4807151.9	326.4	0	68	13.9	A	65.2	0.0	-3.3	0.0	2.3	0.0	0.0	0.0	0.0	0.0	18
T03	Highway Truck	545682.6	4807225.9	326.4	0	68	12.3	A	63.9	0.0	-3.1	0.0	2.0	0.0	0.0	0.0	0.0	0.0	18
T03	Highway Truck	545728.4	4807284.9	326.4	0	68	11.0	A	62.6	0.0	-2.6	0.0	1.8	0.0	0.0	0.0	0.0	0.0	17
T03	Highway Truck	545692.9	4807258.2	326.4	0	68	11.4	A	63.2	0.0	-3.0	0.0	1.9	0.0	0.0	0.0	0.0	0.0	17
T03	Highway Truck	545681.6	4807209.4	326.4	0	68	12.1	A	64.2	0.0	-3.2	0.0	2.1	0.0	0.0	0.0	0.0	0.0	17
T01	Highway Truck	545839.5	4806920.5	328.4	0	68	17.0	A	68.5	0.0	-2.7	0.0	3.1	0.0	0.0	0.0	0.0	0.0	16
T01	Highway Truck	545820.0	4806817.5	328.3	0	68	17.0	A	69.6	0.0	-2.8	0.0	3.4	0.0	0.0	0.0	0.0	0.0	15
T01	Highway Truck	545837.0	4806948.6	328.3	0	68	15.5	A	68.1	0.0	-2.6	0.0	3.0	0.0	0.0	0.0	0.0	0.0	15
S05	Large RTU	545557.3	4807011.9	331.9	0	94	0.0	A	67.7	0.0	-2.4	0.0	2.7	0.0	0.0	0.0	0.0	0.0	26
S05	Large RTU	545545.0	4807007.6	331.9	0	94	0.0	A	67.8	0.0	-2.4	0.0	2.7	0.0	0.0	0.0	0.0	0.0	26
S05	Large RTU	545487.3	4807018.2	331.9	0	94	0.0	A	67.9	0.0	-2.2	0.0	2.8	0.0	0.0	0.0	0.0	0.0	26
S05	Large RTU	545497.6	4807011.4	331.9	0	94	0.0	A	67.9	0.0	-2.3	0.0	2.8	0.0	0.0	0.0	0.0	0.0	26
S05	Large RTU	545483.1	4807009.9	331.9	0	94	0.0	A	68.0	0.0	-2.3	0.0	2.8	0.0	0.0	0.0	0.0	0.0	26

Receiver: R07

Project: Kitchener Hidden Valley - Stationary Noise
Project Number: 22377

Time Period	Total (dBA)*
Day	55

Receiver Name	Receiver ID	X	Y	Z
Proposed Mixed-Use	R07	545760 m	4807662 m	332.2 m

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
S05	Large RTU	545455.5	4807017.1	331.9	0	94	0.0	A	68.1	0.0	-2.2	0.0	2.8	0.0	0.0	0.0	0.0	0.0	26
S05	Large RTU	545560.1	4806962.7	331.9	0	94	0.0	A	68.2	0.0	-2.8	0.0	2.9	0.0	0.0	0.0	0.0	0.0	26
S05	Large RTU	545540.4	4806946.3	331.9	0	94	0.0	A	68.5	0.0	-2.9	0.0	2.9	0.0	0.0	0.0	0.0	0.0	26
S05	Large RTU	545458.8	4806937.6	331.9	0	94	0.0	A	68.9	0.0	-2.8	0.0	3.0	0.0	0.0	0.0	0.0	0.0	25
S05	Large RTU	545579.6	4806887.0	331.9	0	94	0.0	A	69.0	0.0	-3.2	0.0	3.1	0.0	0.0	0.0	0.0	0.0	25
S05	Large RTU	545546.7	4806875.1	331.9	0	94	0.0	A	69.2	0.0	-3.2	0.0	3.1	0.0	0.0	0.0	0.0	0.0	25
S05	Large RTU	545533.2	4806870.2	331.9	0	94	0.0	A	69.3	0.0	-3.2	0.0	3.1	0.0	0.0	0.0	0.0	0.0	25
S05	Large RTU	545513.6	4806853.5	331.9	0	94	0.0	A	69.5	0.0	-3.2	0.0	3.2	0.0	0.0	0.0	0.0	0.0	25
S04	Loader	545561.3	4806674.5	327.4	0	101	0.0	A	71.1	0.0	-4.2	4.8	3.2	0.0	0.0	0.0	0.0	0.0	26
S05	Rooftop Unit	545588.6	4807753.3	332.2	0	91	0.0	A	56.8	0.0	-0.7	0.0	0.8	0.0	0.0	0.0	0.0	0.0	34
S05	Rooftop Unit	545577.4	4807728.1	332.2	0	91	0.0	A	56.8	0.0	-0.7	0.0	0.8	0.0	0.0	0.0	0.0	0.0	34
S05	Rooftop Unit	545581.7	4807741.0	332.2	0	91	0.0	A	56.8	0.0	-0.7	0.0	0.8	0.0	0.0	0.0	0.0	0.0	34
S05	Rooftop Unit	545566.0	4807728.3	332.2	0	91	0.0	A	57.2	0.0	-0.8	0.0	0.8	0.0	0.0	0.0	0.0	0.0	34
S05	Rooftop Unit	545574.4	4807766.0	332.2	0	91	0.0	A	57.6	0.0	-0.9	0.0	0.8	0.0	0.0	0.0	0.0	0.0	33
S05	Rooftop Unit	545566.7	4807759.9	332.2	0	91	0.0	A	57.7	0.0	-1.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	33
S05	Rooftop Unit	545549.1	4807745.9	332.2	0	91	0.0	A	58.1	0.0	-1.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	33
S05	Rooftop Unit	545561.2	4807782.7	332.2	0	91	0.0	A	58.3	0.0	-1.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	33
S05	Rooftop Unit	545553.0	4807776.0	332.2	0	91	0.0	A	58.5	0.0	-1.1	0.0	0.9	0.0	0.0	0.0	0.0	0.0	33
S05	Rooftop Unit	545535.7	4807762.1	332.2	0	91	0.0	A	58.8	0.0	-1.2	0.0	1.0	0.0	0.0	0.0	0.0	0.0	32
S05	Rooftop Unit	545491.4	4807626.9	325.9	0	91	0.0	A	59.7	0.0	-1.9	0.0	1.0	0.0	0.0	0.0	0.0	0.0	32
S05	Rooftop Unit	545484.8	4807611.6	325.7	0	91	0.0	A	59.9	0.0	-1.8	0.0	1.1	0.0	0.0	0.0	0.0	0.0	32
S05	Rooftop Unit	545476.8	4807636.0	332.2	0	91	0.0	A	60.1	0.0	-1.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0	31
S05	Rooftop Unit	545472.6	4807638.4	332.2	0	91	0.0	A	60.2	0.0	-1.0	0.0	1.1	0.0	0.0	0.0	0.0	0.0	31
S05	Rooftop Unit	545466.5	4807633.4	332.2	0	91	0.0	A	60.4	0.0	-1.1	0.0	1.1	0.0	0.0	0.0	0.0	0.0	31
S05	Rooftop Unit	545462.4	4807635.0	332.2	0	91	0.0	A	60.5	0.0	-1.1	0.0	1.1	0.0	0.0	0.0	0.0	0.0	30
S05	Rooftop Unit	545458.4	4807633.3	332.2	0	91	0.0	A	60.6	0.0	-1.1	0.0	1.1	0.0	0.0	0.0	0.0	0.0	30
S05	Rooftop Unit	545453.3	4807630.8	332.2	0	91	0.0	A	60.8	0.0	-1.2	0.0	1.1	0.0	0.0	0.0	0.0	0.0	30
S05	Rooftop Unit	545448.9	4807637.2	332.2	0	91	0.0	A	60.9	0.0	-1.2	0.0	1.2	0.0	0.0	0.0	0.0	0.0	30
S05	Rooftop Unit	545448.4	4807629.7	332.2	0	91	0.0	A	60.9	0.0	-1.2	0.0	1.2	0.0	0.0	0.0	0.0	0.0	30
S05	Rooftop Unit	545433.7	4807635.9	332.2	0	91	0.0	A	61.3	0.0	-1.3	0.0	1.2	0.0	0.0	0.0	0.0	0.0	30
S05	Rooftop Unit	545429.3	4807640.1	332.2	0	91	0.0	A	61.4	0.0	-1.3	0.0	1.2	0.0	0.0	0.0	0.0	0.0	30
S05	Rooftop Unit	545428.7	4807633.1	332.2	0	91	0.0	A	61.4	0.0	-1.3	0.0	1.2	0.0	0.0	0.0	0.0	0.0	30
S05	Rooftop Unit	545421.9	4807632.5	332.2	0	91	0.0	A	61.6	0.0	-1.4	0.0	1.2	0.0	0.0	0.0	0.0	0.0	30
S05	Rooftop Unit	545417.8	4807626.5	332.2	0	91	0.0	A	61.7	0.0	-1.4	0.0	1.3	0.0	0.0	0.0	0.0	0.0	29
S01	Rooftop Unit	545749.8	4807316.8	330.5	0	91	0.0	A	61.8	0.0	-1.3	0.0	1.3	0.0	0.0	0.0	0.0	0.0	29
S05	Rooftop Unit	545415.6	4807638.7	332.2	0	91	0.0	A	61.8	0.0	-1.4	0.0	1.3	0.0	0.0	0.0	0.0	0.0	29
S05	Rooftop Unit	545417.0	4807620.1	332.2	0	91	0.0	A	61.8	0.0	-1.4	0.0	1.3	0.0	0.0	0.0	0.0	0.0	29
S05	Rooftop Unit	545415.3	4807632.6	332.2	0	91	0.0	A	61.8	0.0	-1.4	0.0	1.3	0.0	0.0	0.0	0.0	0.0	29
S05	Rooftop Unit	545419.1	4807589.9	325.4	0	91	0.0	A	61.9	0.0	-2.2	0.0	1.3	0.0	0.0	0.0	0.0	0.0	30
S02	Rooftop Unit	545762.4	4807267.9	330.5	0	91	0.0	A	62.9	0.0	-1.2	0.0	1.4	0.0	0.0	0.0	0.0	0.0	28
S05	Rooftop Unit	545506.9	4807982.4	331.2	0	91	0.0	A	63.2	0.0	-0.8	0.0	1.4	0.0	0.0	0.0	0.0	0.0	27
S05	Rooftop Unit	545571.7	4808050.4	331.2	0	91	0.0	A	63.7	0.0	-1.1	0.0	1.5	0.0	0.0	0.0	0.0	0.0	27
S05	Rooftop Unit	545484.7	4808004.7	331.2	0	91	0.0	A	63.9	0.0	-1.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	27
S05	Rooftop Unit	545515.4	4808036.9	331.2	0	91	0.0	A	64.0	0.0	-1.1	0.0	1.5	0.0	0.0	0.0	0.0	0.0	27
S05	Rooftop Unit	545549.3	4808072.5	331.2	0	91	0.0	A	64.3	0.0	-1.3	0.0	1.6	0.0	0.0	0.0	0.0	0.0	26
S05	Rooftop Unit	545789.5	4806904.1	332.3	0	91	0.0	A	68.6	0.0	-1.7	0.0	2.3	0.0	0.0	0.0	0.0	0.0	22

Receiver: R07

Project: Kitchener Hidden Valley - Stationary Noise
Project Number: 22377

Time Period	Total (dBA)*
Day	55

Receiver Name	Receiver ID	X	Y	Z
Proposed Mixed-Use	R07	545760 m	4807662 m	332.2 m

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
S05	Rooftop Unit	545794.7	4806904.0	332.3	0	91	0.0	A	68.6	0.0	-1.7	0.0	2.3	0.0	0.0	0.0	0.0	0.0	22
TPSS_1	TPSS1 adjusted to 87 dBA + 5 dB tonal penalty	545877.3	4807925.8	332.8	0	92	0.0	A	60.2	0.0	-0.1	0.0	1.1	0.0	0.0	0.0	0.0	0.0	31
TPSS_2	TPSS2 adjusted to 87 dBA + 5 dB tonal penalty	546801.0	4807780.2	312.5	0	92	0.0	A	71.4	0.0	0.0	0.0	3.4	0.0	0.0	0.0	0.0	0.0	18
Transformer	Transformer 1	545740.0	4807978.1	331.4	0	97	0.0	A	61.0	0.0	-0.5	0.0	1.2	0.0	0.0	0.0	0.0	0.0	36
Transformer	Transformer 1	545724.9	4807982.0	331.5	0	97	0.0	A	61.2	0.0	-0.9	0.0	1.2	0.0	0.0	0.0	0.0	0.0	36

*The total value shown accounts for all modelled sources and may include small contributions from sources not described in the table above

Receiver: R08

Project: Kitchener Hidden Valley - Stationary Noise
Project Number: 22377

Time Period	Total (dBA)*
Day	52

Receiver Name	Receiver ID	X	Y	Z
Proposed Mixed-Use	R08	545796 m	4807870 m	334.5 m

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
S05	Condenser	545531.4	4806976.3	331.9	0	91	0.0	A	70.4	0.0	-1.8	0.0	2.0	0.0	0.0	0.0	0.0	0.0	20
S03	Crusher	545526.7	4806649.4	328.8	0	119	0.0	A	72.9	0.0	-2.7	4.8	2.6	0.0	0.0	0.0	0.0	0.0	41
T05	Forklift	545578.9	4807281.5	326.4	0	80	24.0	A	67.0	0.0	-0.6	0.0	2.7	0.0	0.0	0.0	0.0	0.0	35
T05	Forklift	545617.5	4807278.5	326.4	0	80	23.7	A	66.8	0.0	-1.1	0.0	2.7	0.0	0.0	0.0	0.0	0.0	36
T05	Forklift	545610.8	4807531.2	327.1	0	80	19.5	A	62.7	0.0	-1.6	0.0	1.8	0.0	0.0	0.0	0.0	0.0	37
T05	Forklift	545697.5	4807523.7	327.4	0	80	18.6	A	62.1	0.0	-1.6	0.0	1.7	0.0	0.0	0.0	0.0	0.0	37
T05	Forklift	545680.9	4807577.1	327.3	0	80	16.0	A	61.0	0.0	-0.6	0.0	1.5	0.0	0.0	0.0	0.0	0.0	35
T05	Forklift	545657.0	4807594.9	327.0	0	80	15.5	A	60.8	0.0	0.1	0.0	1.5	0.0	0.0	0.0	0.0	0.0	34
T05	Forklift	545660.0	4807451.2	326.9	0	80	18.3	A	63.9	0.0	-2.2	0.0	2.0	0.0	0.0	0.0	0.0	0.0	35
T05	Forklift	545625.6	4807584.9	326.8	0	80	15.2	A	61.4	0.0	0.1	0.0	1.6	0.0	0.0	0.0	0.0	0.0	33
T05	Forklift	545609.4	4807417.7	326.7	0	80	17.9	A	64.8	0.0	-1.3	0.0	2.2	0.0	0.0	0.0	0.0	0.0	33
T05	Forklift	545700.5	4807474.1	327.2	0	80	15.3	A	63.2	0.0	-1.8	0.0	1.9	0.0	0.0	0.0	0.0	0.0	32
T05	Forklift	545567.0	4807463.3	327.1	0	80	15.4	A	64.4	0.0	-0.1	0.0	2.1	0.0	0.0	0.0	0.0	0.0	29
T05	Forklift	545607.8	4807472.6	327.4	0	80	14.4	A	63.9	0.0	-1.5	0.0	2.0	0.0	0.0	0.0	0.0	0.0	31
T05	Forklift	545599.0	4807450.0	327.0	0	80	13.5	A	64.3	0.0	-1.1	0.0	2.1	0.0	0.0	0.0	0.0	0.0	29
T05	Forklift	545581.5	4807443.6	326.8	0	80	13.5	A	64.6	0.0	-0.4	0.0	2.1	0.0	0.0	0.0	0.0	0.0	28
T05	Forklift	545632.9	4807161.6	326.4	0	80	13.3	A	68.2	0.0	-0.8	0.0	3.0	0.0	0.0	0.0	0.0	0.0	23
T05	Forklift	545614.9	4807158.9	326.4	0	80	12.0	A	68.3	0.0	-0.7	0.0	3.1	0.0	0.0	0.0	0.0	0.0	22
T03	Highway Truck	545668.1	4807270.3	326.4	0	68	19.9	A	66.8	0.0	-2.6	0.0	2.6	0.0	0.0	0.0	0.0	0.0	21
T03	Highway Truck	545654.5	4807337.6	326.4	0	68	16.8	A	65.8	0.0	-2.6	0.0	2.4	0.0	0.0	0.0	0.0	0.0	19
T03	Highway Truck	545649.7	4807338.2	326.4	0	68	16.3	A	65.8	0.0	-2.6	0.0	2.4	0.0	0.0	0.0	0.0	0.0	19
T03	Highway Truck	545687.1	4807196.5	326.4	0	68	17.4	A	67.7	0.0	-2.7	0.0	2.9	0.0	0.0	0.0	0.0	0.0	18
T03	Highway Truck	545686.8	4807182.6	326.4	0	68	15.9	A	67.9	0.0	-2.7	0.0	2.9	0.0	0.0	0.0	0.0	0.0	16
T03	Highway Truck	545674.1	4807306.8	326.4	0	68	14.2	A	66.2	0.0	-2.5	0.0	2.5	0.0	0.0	0.0	0.0	0.0	16
T03	Highway Truck	545713.4	4807288.1	326.4	0	68	13.9	A	66.4	0.0	-2.3	0.0	2.5	0.0	0.0	0.0	0.0	0.0	16
S05	Large RTU	545557.3	4807011.9	331.9	0	94	0.0	A	70.0	0.0	-1.9	0.0	3.3	0.0	0.0	0.0	0.0	0.0	23
S05	Large RTU	545545.0	4807007.6	331.9	0	94	0.0	A	70.1	0.0	-1.9	0.0	3.3	0.0	0.0	0.0	0.0	0.0	23
S05	Large RTU	545487.3	4807018.2	331.9	0	94	0.0	A	70.1	0.0	-1.6	0.0	3.4	0.0	0.0	0.0	0.0	0.0	22
S05	Large RTU	545497.6	4807011.4	331.9	0	94	0.0	A	70.2	0.0	-1.7	0.0	3.4	0.0	0.0	0.0	0.0	0.0	22
S05	Large RTU	545483.1	4807009.9	331.9	0	94	0.0	A	70.2	0.0	-1.6	0.0	3.4	0.0	0.0	0.0	0.0	0.0	22
S05	Large RTU	545455.5	4807017.1	331.9	0	94	0.0	A	70.3	0.0	-1.4	0.0	3.4	0.0	0.0	0.0	0.0	0.0	22
S05	Large RTU	545560.1	4806962.7	331.9	0	94	0.0	A	70.4	0.0	-2.3	0.0	3.4	0.0	0.0	0.0	0.0	0.0	23
S05	Large RTU	545540.4	4806946.3	331.9	0	94	0.0	A	70.6	0.0	-2.3	0.0	3.5	0.0	0.0	0.0	0.0	0.0	22
S05	Large RTU	545458.8	4806937.6	331.9	0	94	0.0	A	70.9	0.0	-2.2	0.0	3.6	0.0	0.0	0.0	0.0	0.0	22
S05	Large RTU	545579.6	4806887.0	331.9	0	94	0.0	A	71.1	0.0	-2.6	0.0	3.6	0.0	0.0	0.0	0.0	0.0	22
S05	Large RTU	545546.7	4806875.1	331.9	0	94	0.0	A	71.2	0.0	-2.6	0.0	3.7	0.0	0.0	0.0	0.0	0.0	22
S05	Large RTU	545533.2	4806870.2	331.9	0	94	0.0	A	71.3	0.0	-2.6	0.0	3.7	0.0	0.0	0.0	0.0	0.0	22
S05	Large RTU	545513.6	4806853.5	331.9	0	94	0.0	A	71.5	0.0	-2.6	0.0	3.8	0.0	0.0	0.0	0.0	0.0	22
S04	Loader	545561.3	4806674.5	327.4	0	101	0.0	A	72.7	0.0	-3.7	4.8	3.7	0.0	0.0	0.0	0.0	0.0	23
S05	Rooftop Unit	545588.6	4807753.3	332.2	0	91	0.0	A	58.5	0.0	-0.4	0.0	0.9	0.0	0.0	0.0	0.0	0.0	32
S05	Rooftop Unit	545574.4	4807766.0	332.2	0	91	0.0	A	58.8	0.0	-0.4	0.0	1.0	0.0	0.0	0.0	0.0	0.0	32
S05	Rooftop Unit	545581.7	4807741.0	332.2	0	91	0.0	A	59.0	0.0	-0.5	0.0	1.0	0.0	0.0	0.0	0.0	0.0	32
S05	Rooftop Unit	545561.2	4807782.7	332.2	0	91	0.0	A	59.0	0.0	-0.4	0.0	1.0	0.0	0.0	0.0	0.0	0.0	31
S05	Rooftop Unit	545566.7	4807759.9	332.2	0	91	0.0	A	59.1	0.0	-0.5	0.0	1.0	0.0	0.0	0.0	0.0	0.0	31
S05	Rooftop Unit	545553.0	4807776.0	332.2	0	91	0.0	A	59.3	0.0	-0.5	0.0	1.0	0.0	0.0	0.0	0.0	0.0	31
S05	Rooftop Unit	545577.4	4807728.1	332.2	0	91	0.0	A	59.3	0.0	-0.6	0.0	1.0	0.0	0.0	0.0	0.0	0.0	31

Receiver: R08

Project: Kitchener Hidden Valley - Stationary Noise
Project Number: 22377

Time Period	Total (dBA)*
Day	52

Receiver Name	Receiver ID	X	Y	Z
Proposed Mixed-Use	R08	545796 m	4807870 m	334.5 m

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
S05	Rooftop Unit	545566.0	4807728.3	332.2	0	91	0.0	A	59.6	0.0	-0.6	0.0	1.0	0.0	0.0	0.0	0.0	0.0	31
S05	Rooftop Unit	545549.1	4807745.9	332.2	0	91	0.0	A	59.8	0.0	-0.6	0.0	1.0	0.0	0.0	0.0	0.0	0.0	31
S05	Rooftop Unit	545535.7	4807762.1	332.2	0	91	0.0	A	60.0	0.0	-0.6	0.0	1.1	0.0	0.0	0.0	0.0	0.0	31
S05	Rooftop Unit	545571.7	4808050.4	331.2	0	91	0.0	A	60.2	0.0	-2.7	0.0	1.1	0.0	0.0	0.0	0.0	0.0	32
S05	Rooftop Unit	545506.9	4807982.4	331.2	0	91	0.0	A	60.8	0.0	-2.0	0.0	1.2	0.0	0.0	0.0	0.0	0.0	31
S05	Rooftop Unit	545549.3	4808072.5	331.2	0	91	0.0	A	61.1	0.0	-2.7	0.0	1.2	0.0	0.0	0.0	0.0	0.0	31
S05	Rooftop Unit	545515.4	4808036.9	331.2	0	91	0.0	A	61.3	0.0	-2.4	0.0	1.2	0.0	0.0	0.0	0.0	0.0	31
S05	Rooftop Unit	545484.7	4808004.7	331.2	0	91	0.0	A	61.6	0.0	-2.1	0.0	1.2	0.0	0.0	0.0	0.0	0.0	30
S05	Rooftop Unit	545491.4	4807626.9	325.9	0	91	0.0	A	62.8	0.0	-2.5	0.0	1.4	0.0	0.0	0.0	0.0	0.0	29
S05	Rooftop Unit	545476.8	4807636.0	332.2	0	91	0.0	A	63.0	0.0	-1.4	0.0	1.4	0.0	0.0	0.0	0.0	0.0	28
S05	Rooftop Unit	545472.6	4807638.4	332.2	0	91	0.0	A	63.0	0.0	-1.4	0.0	1.4	0.0	0.0	0.0	0.0	0.0	28
S05	Rooftop Unit	545484.8	4807611.6	325.7	0	91	0.0	A	63.1	0.0	-2.5	10.0	1.4	0.0	0.0	0.0	0.0	0.0	19
S05	Rooftop Unit	545466.5	4807633.4	332.2	0	91	0.0	A	63.2	0.0	-1.5	0.0	1.4	0.0	0.0	0.0	0.0	0.0	28
S05	Rooftop Unit	545462.4	4807635.0	332.2	0	91	0.0	A	63.2	0.0	-1.6	0.0	1.4	0.0	0.0	0.0	0.0	0.0	28
S05	Rooftop Unit	545458.4	4807633.3	332.2	0	91	0.0	A	63.3	0.0	-1.6	0.0	1.4	0.0	0.0	0.0	0.0	0.0	28
S05	Rooftop Unit	545448.9	4807637.2	332.2	0	91	0.0	A	63.4	0.0	-1.6	0.0	1.5	0.0	0.0	0.0	0.0	0.0	28
S05	Rooftop Unit	545453.3	4807630.8	332.2	0	91	0.0	A	63.4	0.0	-1.6	0.0	1.5	0.0	0.0	0.0	0.0	0.0	28
S05	Rooftop Unit	545448.4	4807629.7	332.2	0	91	0.0	A	63.5	0.0	-1.6	0.0	1.5	0.0	0.0	0.0	0.0	0.0	28
S05	Rooftop Unit	545433.7	4807635.9	332.2	0	91	0.0	A	63.7	0.0	-1.6	0.0	1.5	0.0	0.0	0.0	0.0	0.0	27
S05	Rooftop Unit	545429.3	4807640.1	332.2	0	91	0.0	A	63.7	0.0	-1.6	0.0	1.5	0.0	0.0	0.0	0.0	0.0	27
S05	Rooftop Unit	545428.7	4807633.1	332.2	0	91	0.0	A	63.8	0.0	-1.6	0.0	1.5	0.0	0.0	0.0	0.0	0.0	27
S05	Rooftop Unit	545421.9	4807632.5	332.2	0	91	0.0	A	63.9	0.0	-1.6	0.0	1.5	0.0	0.0	0.0	0.0	0.0	27
S05	Rooftop Unit	545415.6	4807638.7	332.2	0	91	0.0	A	64.0	0.0	-1.6	0.0	1.5	0.0	0.0	0.0	0.0	0.0	27
S05	Rooftop Unit	545415.3	4807632.6	332.2	0	91	0.0	A	64.0	0.0	-1.7	0.0	1.5	0.0	0.0	0.0	0.0	0.0	27
S05	Rooftop Unit	545417.8	4807626.5	332.2	0	91	0.0	A	64.1	0.0	-1.7	0.0	1.6	0.0	0.0	0.0	0.0	0.0	27
S05	Rooftop Unit	545417.0	4807620.1	332.2	0	91	0.0	A	64.1	0.0	-1.7	0.0	1.6	0.0	0.0	0.0	0.0	0.0	27
S05	Rooftop Unit	545419.1	4807589.9	325.4	0	91	0.0	A	64.4	0.0	-2.9	10.2	1.6	0.0	0.0	0.0	0.0	0.0	18
S01	Rooftop Unit	545749.8	4807316.8	330.5	0	91	0.0	A	65.9	0.0	-1.0	0.0	1.8	0.0	0.0	0.0	0.0	0.0	24
S02	Rooftop Unit	545762.4	4807267.9	330.5	0	91	0.0	A	66.6	0.0	-1.4	0.0	2.0	0.0	0.0	0.0	0.0	0.0	24
S05	Rooftop Unit	545789.5	4806904.1	332.3	0	91	0.0	A	70.7	0.0	-1.9	0.0	2.8	0.0	0.0	0.0	0.0	0.0	19
S05	Rooftop Unit	545794.7	4806904.0	332.3	0	91	0.0	A	70.7	0.0	-1.9	0.0	2.8	0.0	0.0	0.0	0.0	0.0	19
TPSS_1	TPSS1 adjusted to 87 dBA + 5 dB tonal penalty	545877.3	4807925.8	332.8	0	92	0.0	A	50.9	0.0	-1.3	0.0	0.4	0.0	0.0	0.0	0.0	0.0	42
TPSS_2	TPSS2 adjusted to 87 dBA + 5 dB tonal penalty	546801.0	4807780.2	312.5	0	92	0.0	A	71.1	0.0	-0.2	0.0	3.3	0.0	0.0	0.0	0.0	0.0	18
Transformer	Transformer 1	545740.0	4807978.1	331.4	0	97	0.0	A	52.7	0.0	-1.1	0.0	0.5	0.0	0.0	0.0	0.0	0.0	45
Transformer	Transformer 1	545724.9	4807982.0	331.5	0	97	0.0	A	53.5	0.0	-1.4	0.0	0.6	0.0	0.0	0.0	0.0	0.0	45

*The total value shown accounts for all modelled sources and may include small contributions from sources not described in the table above

Receiver: R09

Project: Kitchener Hidden Valley - Stationary Noise
Project Number: 22377

Time Period	Total (dBA)*
Day	50

Receiver Name	Receiver ID	X	Y	Z
Proposed Mixed-Use	R09	545901 m	4807811 m	332.3 m

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
S05	Condenser	545531.4	4806976.3	331.9	0	91	0.0	A	70.2	0.0	-3.4	0.0	2.0	0.0	0.0	0.0	0.0	0.0	22
S03	Crusher	545526.7	4806649.4	328.8	0	119	0.0	A	72.7	0.0	-4.0	4.8	2.6	0.0	0.0	0.0	0.0	0.0	43
T05	Forklift	545578.9	4807281.5	326.4	0	80	24.0	A	66.8	0.0	-1.6	0.0	2.7	0.0	0.0	0.0	0.0	0.0	37
T05	Forklift	545617.5	4807278.5	326.4	0	80	23.7	A	66.6	0.0	-2.5	0.0	2.6	0.0	0.0	0.0	0.0	0.0	37
T05	Forklift	545697.5	4807523.7	327.4	0	80	18.6	A	61.9	0.0	-1.6	0.0	1.6	0.0	0.0	0.0	0.0	0.0	37
T05	Forklift	545610.8	4807531.2	327.1	0	80	19.5	A	63.1	0.0	-2.2	0.0	1.9	0.0	0.0	0.0	0.0	0.0	37
T05	Forklift	545680.9	4807577.1	327.3	0	80	16.0	A	61.1	0.0	-1.5	0.0	1.5	0.0	0.0	0.0	0.0	0.0	35
T05	Forklift	545660.0	4807451.2	326.9	0	80	18.3	A	63.7	0.0	-2.5	0.0	2.0	0.0	0.0	0.0	0.0	0.0	36
T05	Forklift	545657.0	4807594.9	327.0	0	80	15.5	A	61.3	0.0	-0.4	0.0	1.5	0.0	0.0	0.0	0.0	0.0	34
T05	Forklift	545609.4	4807417.7	326.7	0	80	17.9	A	64.8	0.0	-2.0	0.0	2.2	0.0	0.0	0.0	0.0	0.0	33
T05	Forklift	545625.6	4807584.9	326.8	0	80	15.2	A	62.0	0.0	-0.5	0.0	1.7	0.0	0.0	0.0	0.0	0.0	32
T05	Forklift	545700.5	4807474.1	327.2	0	80	15.3	A	62.9	0.0	-2.7	0.0	1.8	0.0	0.0	0.0	0.0	0.0	34
T05	Forklift	545567.0	4807463.3	327.1	0	80	15.4	A	64.7	0.0	-1.1	0.0	2.2	0.0	0.0	0.0	0.0	0.0	30
T05	Forklift	545607.8	4807472.6	327.4	0	80	14.4	A	64.0	0.0	-2.3	0.0	2.0	0.0	0.0	0.0	0.0	0.0	31
T05	Forklift	545599.0	4807450.0	327.0	0	80	13.5	A	64.5	0.0	-1.9	0.0	2.1	0.0	0.0	0.0	0.0	0.0	29
T05	Forklift	545581.5	4807443.6	326.8	0	80	13.5	A	64.7	0.0	-1.4	0.0	2.2	0.0	0.0	0.0	0.0	0.0	28
T05	Forklift	545632.9	4807161.6	326.4	0	80	13.3	A	67.9	0.0	-2.1	0.0	2.9	0.0	0.0	0.0	0.0	0.0	25
T05	Forklift	545614.9	4807158.9	326.4	0	80	12.0	A	68.1	0.0	-2.1	0.0	3.0	0.0	0.0	0.0	0.0	0.0	23
T03	Highway Truck	545668.1	4807270.3	326.4	0	68	19.9	A	66.4	0.0	-3.9	0.0	2.5	0.0	0.0	0.0	0.0	0.0	23
T03	Highway Truck	545654.5	4807337.6	326.4	0	68	16.8	A	65.5	0.0	-3.6	0.0	2.3	0.0	0.0	0.0	0.0	0.0	21
T03	Highway Truck	545649.7	4807338.2	326.4	0	68	16.3	A	65.6	0.0	-3.6	0.0	2.4	0.0	0.0	0.0	0.0	0.0	20
T03	Highway Truck	545674.1	4807306.8	326.4	0	68	14.2	A	65.9	0.0	-3.8	0.0	2.4	0.0	0.0	0.0	0.0	0.0	18
T03	Highway Truck	545692.2	4807293.9	326.4	0	68	12.9	A	65.9	0.0	-3.8	0.0	2.4	0.0	0.0	0.0	0.0	0.0	17
T03	Highway Truck	545687.1	4807243.1	326.4	0	68	12.7	A	66.7	0.0	-3.8	0.0	2.6	0.0	0.0	0.0	0.0	0.0	15
S05	Large RTU	545557.3	4807011.9	331.9	0	94	0.0	A	69.8	0.0	-3.2	0.0	3.3	0.0	0.0	0.0	0.0	0.0	24
S05	Large RTU	545545.0	4807007.6	331.9	0	94	0.0	A	69.9	0.0	-3.3	0.0	3.3	0.0	0.0	0.0	0.0	0.0	24
S05	Large RTU	545487.3	4807018.2	331.9	0	94	0.0	A	70.0	0.0	-2.9	0.0	3.3	0.0	0.0	0.0	0.0	0.0	24
S05	Large RTU	545497.6	4807011.4	331.9	0	94	0.0	A	70.0	0.0	-3.0	0.0	3.3	0.0	0.0	0.0	0.0	0.0	24
S05	Large RTU	545483.1	4807009.9	331.9	0	94	0.0	A	70.1	0.0	-3.0	0.0	3.4	0.0	0.0	0.0	0.0	0.0	24
S05	Large RTU	545455.5	4807017.1	331.9	0	94	0.0	A	70.2	0.0	-2.9	0.0	3.4	0.0	0.0	0.0	0.0	0.0	24
S05	Large RTU	545560.1	4806962.7	331.9	0	94	0.0	A	70.2	0.0	-3.7	0.0	3.4	0.0	0.0	0.0	0.0	0.0	24
S05	Large RTU	545540.4	4806946.3	331.9	0	94	0.0	A	70.4	0.0	-3.7	0.0	3.4	0.0	0.0	0.0	0.0	0.0	24
S05	Large RTU	545579.6	4806887.0	331.9	0	94	0.0	A	70.8	0.0	-3.8	0.0	3.6	0.0	0.0	0.0	0.0	0.0	24
S05	Large RTU	545458.8	4806937.6	331.9	0	94	0.0	A	70.8	0.0	-3.5	0.0	3.6	0.0	0.0	0.0	0.0	0.0	23
S05	Large RTU	545546.7	4806875.1	331.9	0	94	0.0	A	71.0	0.0	-3.9	0.0	3.6	0.0	0.0	0.0	0.0	0.0	23
S05	Large RTU	545533.2	4806870.2	331.9	0	94	0.0	A	71.1	0.0	-3.9	0.0	3.6	0.0	0.0	0.0	0.0	0.0	23
S05	Large RTU	545513.6	4806853.5	331.9	0	94	0.0	A	71.3	0.0	-4.0	0.0	3.7	0.0	0.0	0.0	0.0	0.0	23
S04	Loader	545561.3	4806674.5	327.4	0	101	0.0	A	72.5	0.0	-4.3	4.8	3.6	0.0	0.0	0.0	0.0	0.0	24
S05	Rooftop Unit	545588.6	4807753.3	332.2	0	91	0.0	A	61.0	0.0	-0.5	0.0	1.2	0.0	0.0	0.0	0.0	0.0	29
S05	Rooftop Unit	545581.7	4807741.0	332.2	0	91	0.0	A	61.3	0.0	-0.6	0.0	1.2	0.0	0.0	0.0	0.0	0.0	29
S05	Rooftop Unit	545574.4	4807766.0	332.2	0	91	0.0	A	61.4	0.0	-0.5	0.0	1.2	0.0	0.0	0.0	0.0	0.0	29
S05	Rooftop Unit	545577.4	4807728.1	332.2	0	91	0.0	A	61.5	0.0	-0.6	0.0	1.2	0.0	0.0	0.0	0.0	0.0	29
S05	Rooftop Unit	545566.7	4807759.9	332.2	0	91	0.0	A	61.6	0.0	-0.6	0.0	1.2	0.0	0.0	0.0	0.0	0.0	29
S05	Rooftop Unit	545561.2	4807782.7	332.2	0	91	0.0	A	61.7	0.0	-0.5	0.0	1.2	0.0	0.0	0.0	0.0	0.0	29
S05	Rooftop Unit	545566.0	4807728.3	332.2	0	91	0.0	A	61.8	0.0	-0.7	0.0	1.3	0.0	0.0	0.0	0.0	0.0	29
S05	Rooftop Unit	545553.0	4807776.0	332.2	0	91	0.0	A	61.9	0.0	-0.6	0.0	1.3	0.0	0.0	0.0	0.0	0.0	28

Receiver: R09

Project: Kitchener Hidden Valley - Stationary Noise
Project Number: 22377

Time Period	Total (dBA)*
Day	50

Receiver Name	Receiver ID	X	Y	Z
Proposed Mixed-Use	R09	545901 m	4807811 m	332.3 m

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
S05	Rooftop Unit	545549.1	4807745.9	332.2	0	91	0.0	A	62.1	0.0	-0.8	0.0	1.3	0.0	0.0	0.0	0.0	0.0	28
S05	Rooftop Unit	545535.7	4807762.1	332.2	0	91	0.0	A	62.3	0.0	-0.8	0.0	1.3	0.0	0.0	0.0	0.0	0.0	28
S05	Rooftop Unit	545571.7	4808050.4	331.2	0	91	0.0	A	63.2	0.0	-2.1	0.0	1.4	0.0	0.0	0.0	0.0	0.0	28
S05	Rooftop Unit	545506.9	4807982.4	331.2	0	91	0.0	A	63.7	0.0	-1.6	0.0	1.5	0.0	0.0	0.0	0.0	0.0	27
S05	Rooftop Unit	545549.3	4808072.5	331.2	0	91	0.0	A	63.8	0.0	-2.1	0.0	1.5	0.0	0.0	0.0	0.0	0.0	28
S05	Rooftop Unit	545515.4	4808036.9	331.2	0	91	0.0	A	64.0	0.0	-2.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	27
S05	Rooftop Unit	545491.4	4807626.9	325.9	0	91	0.0	A	64.0	0.0	-2.1	0.0	1.5	0.0	0.0	0.0	0.0	0.0	28
S05	Rooftop Unit	545476.8	4807636.0	332.2	0	91	0.0	A	64.2	0.0	-0.9	0.0	1.6	0.0	0.0	0.0	0.0	0.0	26
S05	Rooftop Unit	545484.7	4808004.7	331.2	0	91	0.0	A	64.2	0.0	-1.7	0.0	1.6	0.0	0.0	0.0	0.0	0.0	27
S05	Rooftop Unit	545484.8	4807611.6	325.7	0	91	0.0	A	64.3	0.0	-2.2	5.1	1.6	0.0	0.0	0.0	0.0	0.0	22
S05	Rooftop Unit	545472.6	4807638.4	332.2	0	91	0.0	A	64.3	0.0	-0.9	0.0	1.6	0.0	0.0	0.0	0.0	0.0	26
S05	Rooftop Unit	545466.5	4807633.4	332.2	0	91	0.0	A	64.4	0.0	-1.0	0.0	1.6	0.0	0.0	0.0	0.0	0.0	26
S05	Rooftop Unit	545462.4	4807635.0	332.2	0	91	0.0	A	64.5	0.0	-1.0	0.0	1.6	0.0	0.0	0.0	0.0	0.0	26
S05	Rooftop Unit	545458.4	4807633.3	332.2	0	91	0.0	A	64.6	0.0	-1.0	0.0	1.6	0.0	0.0	0.0	0.0	0.0	26
S05	Rooftop Unit	545453.3	4807630.8	332.2	0	91	0.0	A	64.7	0.0	-1.1	0.0	1.6	0.0	0.0	0.0	0.0	0.0	26
S05	Rooftop Unit	545448.9	4807637.2	332.2	0	91	0.0	A	64.7	0.0	-1.3	0.0	1.6	0.0	0.0	0.0	0.0	0.0	26
S05	Rooftop Unit	545448.4	4807629.7	332.2	0	91	0.0	A	64.8	0.0	-1.1	0.0	1.7	0.0	0.0	0.0	0.0	0.0	26
S05	Rooftop Unit	545433.7	4807635.9	332.2	0	91	0.0	A	65.0	0.0	-1.4	0.0	1.7	0.0	0.0	0.0	0.0	0.0	26
S05	Rooftop Unit	545429.3	4807640.1	332.2	0	91	0.0	A	65.0	0.0	-1.5	0.0	1.7	0.0	0.0	0.0	0.0	0.0	26
S05	Rooftop Unit	545428.7	4807633.1	332.2	0	91	0.0	A	65.1	0.0	-1.5	0.0	1.7	0.0	0.0	0.0	0.0	0.0	26
S05	Rooftop Unit	545421.9	4807632.5	332.2	0	91	0.0	A	65.2	0.0	-1.5	0.0	1.7	0.0	0.0	0.0	0.0	0.0	26
S05	Rooftop Unit	545415.6	4807638.7	332.2	0	91	0.0	A	65.2	0.0	-1.7	0.0	1.7	0.0	0.0	0.0	0.0	0.0	26
S01	Rooftop Unit	545749.8	4807316.8	330.5	0	91	0.0	A	65.3	0.0	-2.2	0.0	1.7	0.0	0.0	0.0	0.0	0.0	26
S05	Rooftop Unit	545417.8	4807626.5	332.2	0	91	0.0	A	65.3	0.0	-1.5	0.0	1.7	0.0	0.0	0.0	0.0	0.0	26
S05	Rooftop Unit	545415.3	4807632.6	332.2	0	91	0.0	A	65.3	0.0	-1.6	0.0	1.7	0.0	0.0	0.0	0.0	0.0	26
S05	Rooftop Unit	545417.0	4807620.1	332.2	0	91	0.0	A	65.3	0.0	-1.4	0.0	1.7	0.0	0.0	0.0	0.0	0.0	25
S05	Rooftop Unit	545419.1	4807589.9	325.4	0	91	0.0	A	65.5	0.0	-2.6	5.7	1.8	0.0	0.0	0.0	0.0	0.0	21
S02	Rooftop Unit	545762.4	4807267.9	330.5	0	91	0.0	A	66.0	0.0	-1.8	0.0	1.8	0.0	0.0	0.0	0.0	0.0	25
S05	Rooftop Unit	545794.7	4806904.0	332.3	0	91	0.0	A	70.2	0.0	-1.8	0.0	2.7	0.0	0.0	0.0	0.0	0.0	20
S05	Rooftop Unit	545789.5	4806904.1	332.3	0	91	0.0	A	70.2	0.0	-1.7	0.0	2.7	0.0	0.0	0.0	0.0	0.0	20
TPSS_1	TPSS1 adjusted to 87 dBA + 5 dB tonal penalty	545877.3	4807925.8	332.8	0	92	0.0	A	52.4	0.0	-1.6	0.0	0.5	0.0	0.0	0.0	0.0	0.0	41
TPSS_2	TPSS2 adjusted to 87 dBA + 5 dB tonal penalty	546801.0	4807780.2	312.5	0	92	0.0	A	70.1	0.0	0.4	0.0	3.0	0.0	0.0	0.0	0.0	0.0	19
Transformer	Transformer 1	545740.0	4807978.1	331.4	0	97	0.0	A	58.3	0.0	-1.0	0.0	0.9	0.0	0.0	0.0	0.0	0.0	39
Transformer	Transformer 1	545724.9	4807982.0	331.5	0	97	0.0	A	58.8	0.0	-1.1	3.8	1.0	0.0	0.0	0.0	0.0	0.0	35

*The total value shown accounts for all modelled sources and may include small contributions from sources not described in the table above

Receiver: R10

Project: Kitchener Hidden Valley - Stationary Noise
Project Number: 22377

Time Period	Total (dBA)*
Day	50

Receiver Name	Receiver ID	X	Y	Z
Proposed Mid-Rise Residential	R10	545985 m	4807812 m	343.4 m

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
S05	Condenser	545531.4	4806976.3	331.9	0	91	0.0	A	70.6	0.0	-1.9	0.0	2.0	0.0	0.0	0.0	0.0	0.0	20
S03	Crusher	545526.7	4806649.4	328.8	0	119	0.0	A	72.9	0.0	-3.0	0.0	2.6	0.0	0.0	0.0	0.0	0.0	46
T05	Forklift	545578.9	4807281.5	326.4	0	80	24.0	A	67.5	0.0	-0.2	0.0	2.8	0.0	0.0	0.0	0.0	0.0	34
T05	Forklift	545615.2	4807288.7	326.4	0	80	23.3	A	67.1	0.0	-1.1	0.0	2.7	0.0	0.0	0.0	0.0	0.0	35
T05	Forklift	545640.7	4807175.1	326.4	0	80	13.2	A	68.2	0.0	-0.8	0.0	3.0	0.0	0.0	0.0	0.0	0.0	23
T05	Forklift	545697.5	4807523.7	327.4	0	80	18.6	A	63.2	0.0	-1.5	0.0	1.9	0.0	0.0	0.0	0.0	0.0	35
T05	Forklift	545610.8	4807531.2	327.1	0	80	19.5	A	64.4	0.0	-2.2	0.0	2.1	0.0	0.0	0.0	0.0	0.0	36
T05	Forklift	545660.0	4807451.2	326.9	0	80	18.3	A	64.7	0.0	-2.2	0.0	2.2	0.0	0.0	0.0	0.0	0.0	34
T05	Forklift	545680.9	4807577.1	327.3	0	80	16.0	A	62.7	0.0	-1.4	0.0	1.8	0.0	0.0	0.0	0.0	0.0	33
T05	Forklift	545657.0	4807594.9	327.0	0	80	15.5	A	62.9	0.0	-0.4	0.0	1.8	0.0	0.0	0.0	0.0	0.0	32
T05	Forklift	545609.4	4807417.7	326.7	0	80	17.9	A	65.7	0.0	-1.4	0.0	2.4	0.0	0.0	0.0	0.0	0.0	32
T05	Forklift	545625.6	4807584.9	326.8	0	80	15.2	A	63.6	0.0	-0.6	0.0	1.9	0.0	0.0	0.0	0.0	0.0	31
T05	Forklift	545700.5	4807474.1	327.2	0	80	15.3	A	63.9	0.0	-1.9	0.0	2.0	0.0	0.0	0.0	0.0	0.0	32
T05	Forklift	545567.0	4807463.3	327.1	0	80	15.4	A	65.7	0.0	-0.6	0.0	2.4	0.0	0.0	0.0	0.0	0.0	28
T05	Forklift	545607.8	4807472.6	327.4	0	80	14.4	A	65.1	0.0	-1.9	0.0	2.3	0.0	0.0	0.0	0.0	0.0	29
T05	Forklift	545599.0	4807450.0	327.0	0	80	13.5	A	65.5	0.0	-1.4	0.0	2.3	0.0	0.0	0.0	0.0	0.0	28
T05	Forklift	545581.5	4807443.6	326.8	0	80	13.5	A	65.8	0.0	-0.8	0.0	2.4	0.0	0.0	0.0	0.0	0.0	27
T05	Forklift	545633.3	4807161.7	326.4	0	80	13.1	A	68.4	0.0	-0.3	0.0	3.1	0.0	0.0	0.0	0.0	0.0	22
T05	Forklift	545614.9	4807158.9	326.4	0	80	12.0	A	68.5	0.0	-0.1	0.0	3.1	0.0	0.0	0.0	0.0	0.0	21
T03	Highway Truck	545664.6	4807283.4	326.4	0	68	18.5	A	66.8	0.0	-2.3	0.0	2.7	0.0	0.0	0.0	0.0	0.0	20
T03	Highway Truck	545654.5	4807337.6	326.4	0	68	16.8	A	66.2	0.0	-2.3	0.0	2.5	0.0	0.0	0.0	0.0	0.0	19
T03	Highway Truck	545649.7	4807338.2	326.4	0	68	16.3	A	66.3	0.0	-2.3	0.0	2.5	0.0	0.0	0.0	0.0	0.0	18
T03	Highway Truck	545674.1	4807306.8	326.4	0	68	14.2	A	66.5	0.0	-2.3	0.0	2.6	0.0	0.0	0.0	0.0	0.0	16
S05	Large RTU	545557.3	4807011.9	331.9	0	94	0.0	A	70.2	0.0	-1.6	0.0	3.4	0.0	0.0	0.0	0.0	0.0	22
S05	Large RTU	545545.0	4807007.6	331.9	0	94	0.0	A	70.2	0.0	-1.7	0.0	3.4	0.0	0.0	0.0	0.0	0.0	22
S05	Large RTU	545487.3	4807018.2	331.9	0	94	0.0	A	70.4	0.0	-1.6	0.0	3.4	0.0	0.0	0.0	0.0	0.0	22
S05	Large RTU	545497.6	4807011.4	331.9	0	94	0.0	A	70.4	0.0	-1.6	0.0	3.4	0.0	0.0	0.0	0.0	0.0	22
S05	Large RTU	545483.1	4807009.9	331.9	0	94	0.0	A	70.5	0.0	-1.7	0.0	3.5	0.0	0.0	0.0	0.0	0.0	22
S05	Large RTU	545560.1	4806962.7	331.9	0	94	0.0	A	70.6	0.0	-2.1	0.0	3.5	0.0	0.0	0.0	0.0	0.0	22
S05	Large RTU	545455.5	4807017.1	331.9	0	94	0.0	A	70.6	0.0	-1.6	0.0	3.5	0.0	0.0	0.0	0.0	0.0	22
S05	Large RTU	545540.4	4806946.3	331.9	0	94	0.0	A	70.8	0.0	-2.2	0.0	3.5	0.0	0.0	0.0	0.0	0.0	22
S05	Large RTU	545579.6	4806887.0	331.9	0	94	0.0	A	71.1	0.0	-2.4	0.0	3.6	0.0	0.0	0.0	0.0	0.0	22
S05	Large RTU	545458.8	4806937.6	331.9	0	94	0.0	A	71.2	0.0	-2.2	0.0	3.7	0.0	0.0	0.0	0.0	0.0	22
S05	Large RTU	545546.7	4806875.1	331.9	0	94	0.0	A	71.3	0.0	-2.5	0.0	3.7	0.0	0.0	0.0	0.0	0.0	22
S05	Large RTU	545533.2	4806870.2	331.9	0	94	0.0	A	71.4	0.0	-2.5	0.0	3.7	0.0	0.0	0.0	0.0	0.0	22
S05	Large RTU	545513.6	4806853.5	331.9	0	94	0.0	A	71.6	0.0	-2.5	0.0	3.8	0.0	0.0	0.0	0.0	0.0	21
S04	Loader	545561.3	4806674.5	327.4	0	101	0.0	A	72.7	0.0	-3.1	4.8	3.6	0.0	0.0	0.0	0.0	0.0	23
S05	Rooftop Unit	545588.6	4807753.3	332.2	0	91	0.0	A	63.1	0.0	-0.6	0.0	1.4	0.0	0.0	0.0	0.0	0.0	27
S05	Rooftop Unit	545581.7	4807741.0	332.2	0	91	0.0	A	63.3	0.0	-0.7	0.0	1.4	0.0	0.0	0.0	0.0	0.0	27
S05	Rooftop Unit	545574.4	4807766.0	332.2	0	91	0.0	A	63.3	0.0	-0.6	0.0	1.5	0.0	0.0	0.0	0.0	0.0	27
S05	Rooftop Unit	545577.4	4807728.1	332.2	0	91	0.0	A	63.4	0.0	-0.7	0.0	1.5	0.0	0.0	0.0	0.0	0.0	27
S05	Rooftop Unit	545566.7	4807759.9	332.2	0	91	0.0	A	63.5	0.0	-0.7	0.0	1.5	0.0	0.0	0.0	0.0	0.0	27
S05	Rooftop Unit	545561.2	4807782.7	332.2	0	91	0.0	A	63.6	0.0	-0.6	0.0	1.5	0.0	0.0	0.0	0.0	0.0	27
S05	Rooftop Unit	545566.0	4807728.3	332.2	0	91	0.0	A	63.6	0.0	-0.8	0.0	1.5	0.0	0.0	0.0	0.0	0.0	27
S05	Rooftop Unit	545553.0	4807776.0	332.2	0	91	0.0	A	63.7	0.0	-0.8	0.0	1.5	0.0	0.0	0.0	0.0	0.0	26
S05	Rooftop Unit	545549.1	4807745.9	332.2	0	91	0.0	A	63.9	0.0	-1.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0	27

Receiver: R10

Project: Kitchener Hidden Valley - Stationary Noise
Project Number: 22377

Time Period	Total (dBA)*
Day	50

Receiver Name	Receiver ID	X	Y	Z
Proposed Mid-Rise Residential	R10	545985 m	4807812 m	343.4 m

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
S05	Rooftop Unit	545535.7	4807762.1	332.2	0	91	0.0	A	64.1	0.0	-1.0	0.0	1.6	0.0	0.0	0.0	0.0	0.0	26
S05	Rooftop Unit	545571.7	4808050.4	331.2	0	91	0.0	A	64.6	0.0	-2.3	0.0	1.6	0.0	0.0	0.0	0.0	0.0	27
S05	Rooftop Unit	545506.9	4807982.4	331.2	0	91	0.0	A	65.1	0.0	-1.9	0.0	1.7	0.0	0.0	0.0	0.0	0.0	26
S05	Rooftop Unit	545549.3	4808072.5	331.2	0	91	0.0	A	65.1	0.0	-2.4	0.0	1.7	0.0	0.0	0.0	0.0	0.0	27
S05	Rooftop Unit	545515.4	4808036.9	331.2	0	91	0.0	A	65.3	0.0	-2.4	0.0	1.7	0.0	0.0	0.0	0.0	0.0	26
S05	Rooftop Unit	545491.4	4807626.9	325.9	0	91	0.0	A	65.4	0.0	-1.9	0.0	1.8	0.0	0.0	0.0	0.0	0.0	26
S05	Rooftop Unit	545484.7	4808004.7	331.2	0	91	0.0	A	65.6	0.0	-2.2	0.0	1.8	0.0	0.0	0.0	0.0	0.0	26
S05	Rooftop Unit	545476.8	4807636.0	332.2	0	91	0.0	A	65.6	0.0	-1.0	0.0	1.8	0.0	0.0	0.0	0.0	0.0	25
S05	Rooftop Unit	545484.8	4807611.6	325.7	0	91	0.0	A	65.6	0.0	-1.9	0.0	1.8	0.0	0.0	0.0	0.0	0.0	25
S05	Rooftop Unit	545472.6	4807638.4	332.2	0	91	0.0	A	65.7	0.0	-1.1	0.0	1.8	0.0	0.0	0.0	0.0	0.0	25
S01	Rooftop Unit	545749.8	4807316.8	330.5	0	91	0.0	A	65.8	0.0	-1.3	0.0	1.8	0.0	0.0	0.0	0.0	0.0	25
S05	Rooftop Unit	545466.5	4807633.4	332.2	0	91	0.0	A	65.8	0.0	-1.1	0.0	1.8	0.0	0.0	0.0	0.0	0.0	25
S05	Rooftop Unit	545462.4	4807635.0	332.2	0	91	0.0	A	65.8	0.0	-1.2	0.0	1.8	0.0	0.0	0.0	0.0	0.0	24
S05	Rooftop Unit	545458.4	4807633.3	332.2	0	91	0.0	A	65.9	0.0	-1.2	0.0	1.8	0.0	0.0	0.0	0.0	0.0	24
S05	Rooftop Unit	545453.3	4807630.8	332.2	0	91	0.0	A	66.0	0.0	-1.2	0.0	1.9	0.0	0.0	0.0	0.0	0.0	24
S05	Rooftop Unit	545448.9	4807637.2	332.2	0	91	0.0	A	66.0	0.0	-1.3	0.0	1.9	0.0	0.0	0.0	0.0	0.0	24
S05	Rooftop Unit	545448.4	4807629.7	332.2	0	91	0.0	A	66.1	0.0	-1.3	0.0	1.9	0.0	0.0	0.0	0.0	0.0	24
S05	Rooftop Unit	545433.7	4807635.9	332.2	0	91	0.0	A	66.3	0.0	-1.4	0.0	1.9	0.0	0.0	0.0	0.0	0.0	24
S05	Rooftop Unit	545429.3	4807640.1	332.2	0	91	0.0	A	66.3	0.0	-1.6	0.0	1.9	0.0	0.0	0.0	0.0	0.0	24
S05	Rooftop Unit	545428.7	4807633.1	332.2	0	91	0.0	A	66.3	0.0	-1.4	0.0	1.9	0.0	0.0	0.0	0.0	0.0	24
S02	Rooftop Unit	545762.4	4807267.9	330.5	0	91	0.0	A	66.4	0.0	-1.3	0.0	1.9	0.0	0.0	0.0	0.0	0.0	24
S05	Rooftop Unit	545421.9	4807632.5	332.2	0	91	0.0	A	66.4	0.0	-1.5	0.0	1.9	0.0	0.0	0.0	0.0	0.0	24
S05	Rooftop Unit	545415.6	4807638.7	332.2	0	91	0.0	A	66.5	0.0	-1.8	0.0	1.9	0.0	0.0	0.0	0.0	0.0	24
S05	Rooftop Unit	545417.8	4807626.5	332.2	0	91	0.0	A	66.5	0.0	-1.5	0.0	1.9	0.0	0.0	0.0	0.0	0.0	24
S05	Rooftop Unit	545415.3	4807632.6	332.2	0	91	0.0	A	66.5	0.0	-1.6	0.0	1.9	0.0	0.0	0.0	0.0	0.0	24
S05	Rooftop Unit	545417.0	4807620.1	332.2	0	91	0.0	A	66.6	0.0	-1.6	0.0	1.9	0.0	0.0	0.0	0.0	0.0	24
S05	Rooftop Unit	545419.1	4807589.9	325.4	0	91	0.0	A	66.7	0.0	-2.0	3.2	2.0	0.0	0.0	0.0	0.0	0.0	21
S05	Rooftop Unit	545794.7	4806904.0	332.3	0	91	0.0	A	70.3	0.0	-1.6	0.0	2.7	0.0	0.0	0.0	0.0	0.0	19
S05	Rooftop Unit	545789.5	4806904.1	332.3	0	91	0.0	A	70.4	0.0	-1.6	0.0	2.7	0.0	0.0	0.0	0.0	0.0	19
TPSS_1	TPSS1 adjusted to 87 dBA + 5 dB tonal penalty	545877.3	4807925.8	332.8	0	92	0.0	A	54.9	0.0	-1.3	0.0	0.7	0.0	0.0	0.0	0.0	0.0	38
TPSS_2	TPSS2 adjusted to 87 dBA + 5 dB tonal penalty	546801.0	4807780.2	312.5	0	92	0.0	A	69.2	0.0	0.4	0.0	2.8	0.0	0.0	0.0	0.0	0.0	20
Transformer	Transformer 1	545740.0	4807978.1	331.4	0	97	0.0	A	60.4	0.0	-0.5	0.0	1.2	0.0	0.0	0.0	0.0	0.0	36
Transformer	Transformer 1	545724.9	4807982.0	331.5	0	97	0.0	A	60.9	0.0	-0.7	4.7	1.2	0.0	0.0	0.0	0.0	0.0	31

*The total value shown accounts for all modelled sources and may include small contributions from sources not described in the table above

Receiver: R11

Project: Kitchener Hidden Valley - Stationary Noise
Project Number: 22377

Time Period	Total (dBA)*
Day	47

Receiver Name	Receiver ID	X	Y	Z
Proposed Mixed-Use	R11	545933 m	4808067 m	337.4 m

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
S05	Condenser	545531.4	4806976.3	331.9	0	91	0.0	A	72.3	0.0	-1.8	0.0	2.4	0.0	0.0	0.0	0.0	0.0	18
S03	Crusher	545526.7	4806649.4	328.8	0	119	0.0	A	74.4	0.0	-3.0	4.8	2.9	0.0	0.0	0.0	0.0	0.0	40
T05	Forklift	545578.9	4807281.5	326.4	0	80	24.0	A	69.7	0.0	-0.5	0.0	3.5	0.0	0.0	0.0	0.0	0.0	32
T05	Forklift	545617.5	4807278.5	326.4	0	80	23.7	A	69.6	0.0	-1.0	0.0	3.4	0.0	0.0	0.0	0.0	0.0	32
T05	Forklift	545610.8	4807531.2	327.1	0	80	19.5	A	66.9	0.0	-1.8	0.0	2.7	0.0	0.0	0.0	0.0	0.0	32
T05	Forklift	545697.5	4807523.7	327.4	0	80	18.6	A	66.4	0.0	-1.7	0.0	2.6	0.0	0.0	0.0	0.0	0.0	32
T05	Forklift	545660.0	4807451.2	326.9	0	80	18.3	A	67.6	0.0	-2.1	0.0	2.8	0.0	0.0	0.0	0.0	0.0	31
T05	Forklift	545680.9	4807577.1	327.3	0	80	16.0	A	65.8	0.0	-0.9	0.0	2.4	0.0	0.0	0.0	0.0	0.0	29
T05	Forklift	545609.4	4807417.7	326.7	0	80	17.9	A	68.2	0.0	-1.3	0.0	3.0	0.0	0.0	0.0	0.0	0.0	28
T05	Forklift	545657.0	4807594.9	327.0	0	80	15.5	A	65.8	0.0	0.0	0.0	2.4	0.0	0.0	0.0	0.0	0.0	28
T05	Forklift	545625.6	4807584.9	326.8	0	80	15.2	A	66.1	0.0	-0.1	0.0	2.5	0.0	0.0	0.0	0.0	0.0	27
T05	Forklift	545700.5	4807474.1	327.2	0	80	15.3	A	67.1	0.0	-1.8	0.0	2.7	0.0	0.0	0.0	0.0	0.0	28
T05	Forklift	545567.0	4807463.3	327.1	0	80	15.4	A	68.0	0.0	-0.1	0.0	3.0	0.0	0.0	0.0	0.0	0.0	25
T05	Forklift	545607.8	4807472.6	327.4	0	80	14.4	A	67.6	0.0	-1.6	0.0	2.9	0.0	0.0	0.0	0.0	0.0	26
T05	Forklift	545599.0	4807450.0	327.0	0	80	13.5	A	67.9	0.0	-1.1	0.0	2.9	0.0	0.0	0.0	0.0	0.0	24
T05	Forklift	545581.5	4807443.6	326.8	0	80	13.5	A	68.1	0.0	-0.5	0.0	3.0	0.0	0.0	0.0	0.0	0.0	23
T05	Forklift	545632.9	4807161.6	326.4	0	80	13.3	A	70.6	0.0	-0.5	0.0	3.8	0.0	0.0	0.0	0.0	0.0	20
T05	Forklift	545614.9	4807158.9	326.4	0	80	12.0	A	70.7	0.0	-0.5	0.0	3.8	0.0	0.0	0.0	0.0	0.0	18
T03	Highway Truck	545668.1	4807270.3	326.4	0	68	19.9	A	69.5	0.0	-2.3	0.0	3.4	0.0	0.0	0.0	0.0	0.0	18
T03	Highway Truck	545654.5	4807337.6	326.4	0	68	16.8	A	68.8	0.0	-2.3	0.0	3.2	0.0	0.0	0.0	0.0	0.0	15
S05	Large RTU	545557.3	4807011.9	331.9	0	94	0.0	A	72.0	0.0	-1.8	0.0	3.9	0.0	0.0	0.0	0.0	0.0	20
S05	Large RTU	545545.0	4807007.6	331.9	0	94	0.0	A	72.0	0.0	-1.8	0.0	3.9	0.0	0.0	0.0	0.0	0.0	20
S05	Large RTU	545487.3	4807018.2	331.9	0	94	0.0	A	72.1	0.0	-1.7	0.0	4.0	0.0	0.0	0.0	0.0	0.0	20
S05	Large RTU	545497.6	4807011.4	331.9	0	94	0.0	A	72.2	0.0	-1.7	0.0	4.0	0.0	0.0	0.0	0.0	0.0	20
S05	Large RTU	545483.1	4807009.9	331.9	0	94	0.0	A	72.2	0.0	-1.7	0.0	4.0	0.0	0.0	0.0	0.0	0.0	20
S05	Large RTU	545455.5	4807017.1	331.9	0	94	0.0	A	72.2	0.0	-1.7	0.0	4.0	0.0	0.0	0.0	0.0	0.0	20
S05	Large RTU	545560.1	4806962.7	331.9	0	94	0.0	A	72.3	0.0	-2.2	0.0	4.0	0.0	0.0	0.0	0.0	0.0	20
S05	Large RTU	545540.4	4806946.3	331.9	0	94	0.0	A	72.5	0.0	-2.3	0.0	4.1	0.0	0.0	0.0	0.0	0.0	20
S05	Large RTU	545458.8	4806937.6	331.9	0	94	0.0	A	72.8	0.0	-2.3	0.0	4.2	0.0	0.0	0.0	0.0	0.0	20
S05	Large RTU	545579.6	4806887.0	331.9	0	94	0.0	A	72.8	0.0	-2.9	0.0	4.2	0.0	0.0	0.0	0.0	0.0	20
S05	Large RTU	545546.7	4806875.1	331.9	0	94	0.0	A	73.0	0.0	-2.5	0.0	4.2	0.0	0.0	0.0	0.0	0.0	20
S05	Large RTU	545533.2	4806870.2	331.9	0	94	0.0	A	73.0	0.0	-2.5	0.0	4.3	0.0	0.0	0.0	0.0	0.0	19
S05	Large RTU	545513.6	4806853.5	331.9	0	94	0.0	A	73.2	0.0	-2.6	0.0	4.3	0.0	0.0	0.0	0.0	0.0	19
S04	Loader	545561.3	4806674.5	327.4	0	101	0.0	A	74.2	0.0	-4.1	4.8	4.1	0.0	0.0	0.0	0.0	0.0	22
S05	Rooftop Unit	545571.7	4808050.4	331.2	0	91	0.0	A	62.2	0.0	-1.9	0.0	1.3	0.0	0.0	0.0	0.0	0.0	29
S05	Rooftop Unit	545549.3	4808072.5	331.2	0	91	0.0	A	62.7	0.0	-1.9	0.0	1.4	0.0	0.0	0.0	0.0	0.0	29
S05	Rooftop Unit	545515.4	4808036.9	331.2	0	91	0.0	A	63.4	0.0	-1.9	0.0	1.5	0.0	0.0	0.0	0.0	0.0	28
S05	Rooftop Unit	545506.9	4807982.4	331.2	0	91	0.0	A	63.8	0.0	-1.8	0.0	1.5	0.0	0.0	0.0	0.0	0.0	28
S05	Rooftop Unit	545484.7	4808004.7	331.2	0	91	0.0	A	64.1	0.0	-1.9	0.0	1.6	0.0	0.0	0.0	0.0	0.0	27
S05	Rooftop Unit	545588.6	4807753.3	332.2	0	91	0.0	A	64.4	0.0	-0.5	0.0	1.6	0.0	0.0	0.0	0.0	0.0	26
S05	Rooftop Unit	545561.2	4807782.7	332.2	0	91	0.0	A	64.4	0.0	-0.5	0.0	1.6	0.0	0.0	0.0	0.0	0.0	26
S05	Rooftop Unit	545574.4	4807766.0	332.2	0	91	0.0	A	64.4	0.0	-0.5	0.0	1.6	0.0	0.0	0.0	0.0	0.0	26
S05	Rooftop Unit	545566.7	4807759.9	332.2	0	91	0.0	A	64.6	0.0	-0.6	0.0	1.6	0.0	0.0	0.0	0.0	0.0	25
S05	Rooftop Unit	545553.0	4807776.0	332.2	0	91	0.0	A	64.6	0.0	-0.6	0.0	1.6	0.0	0.0	0.0	0.0	0.0	25
S05	Rooftop Unit	545581.7	4807741.0	332.2	0	91	0.0	A	64.6	0.0	-0.5	0.0	1.6	0.0	0.0	0.0	0.0	0.0	25
S05	Rooftop Unit	545577.4	4807728.1	332.2	0	91	0.0	A	64.8	0.0	-0.6	0.0	1.7	0.0	0.0	0.0	0.0	0.0	25

Receiver: R11

Project: Kitchener Hidden Valley - Stationary Noise
Project Number: 22377

Time Period	Total (dBA)*
Day	47

Receiver Name	Receiver ID	X	Y	Z
Proposed Mixed-Use	R11	545933 m	4808067 m	337.4 m

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
S05	Rooftop Unit	545566.0	4807728.3	332.2	0	91	0.0	A	65.0	0.0	-0.7	0.0	1.7	0.0	0.0	0.0	0.0	0.0	25
S05	Rooftop Unit	545549.1	4807745.9	332.2	0	91	0.0	A	65.0	0.0	-0.7	0.0	1.7	0.0	0.0	0.0	0.0	0.0	25
S05	Rooftop Unit	545535.7	4807762.1	332.2	0	91	0.0	A	65.0	0.0	-0.7	0.0	1.7	0.0	0.0	0.0	0.0	0.0	25
S05	Rooftop Unit	545491.4	4807626.9	325.9	0	91	0.0	A	66.9	0.0	-2.4	3.6	2.0	0.0	0.0	0.0	0.0	0.0	21
S05	Rooftop Unit	545476.8	4807636.0	332.2	0	91	0.0	A	67.0	0.0	-1.5	0.0	2.0	0.0	0.0	0.0	0.0	0.0	24
S05	Rooftop Unit	545472.6	4807638.4	332.2	0	91	0.0	A	67.0	0.0	-1.5	0.0	2.0	0.0	0.0	0.0	0.0	0.0	24
S05	Rooftop Unit	545466.5	4807633.4	332.2	0	91	0.0	A	67.1	0.0	-1.6	0.0	2.0	0.0	0.0	0.0	0.0	0.0	23
S05	Rooftop Unit	545462.4	4807635.0	332.2	0	91	0.0	A	67.1	0.0	-1.6	0.0	2.0	0.0	0.0	0.0	0.0	0.0	23
S05	Rooftop Unit	545458.4	4807633.3	332.2	0	91	0.0	A	67.2	0.0	-1.6	0.0	2.1	0.0	0.0	0.0	0.0	0.0	23
S05	Rooftop Unit	545448.9	4807637.2	332.2	0	91	0.0	A	67.2	0.0	-1.7	0.0	2.1	0.0	0.0	0.0	0.0	0.0	23
S05	Rooftop Unit	545453.3	4807630.8	332.2	0	91	0.0	A	67.2	0.0	-1.7	0.0	2.1	0.0	0.0	0.0	0.0	0.0	23
S05	Rooftop Unit	545448.4	4807629.7	332.2	0	91	0.0	A	67.3	0.0	-1.7	0.0	2.1	0.0	0.0	0.0	0.0	0.0	23
S05	Rooftop Unit	545433.7	4807635.9	332.2	0	91	0.0	A	67.4	0.0	-1.7	0.0	2.1	0.0	0.0	0.0	0.0	0.0	23
S05	Rooftop Unit	545429.3	4807640.1	332.2	0	91	0.0	A	67.4	0.0	-1.8	0.0	2.1	0.0	0.0	0.0	0.0	0.0	23
S05	Rooftop Unit	545428.7	4807633.1	332.2	0	91	0.0	A	67.5	0.0	-1.8	0.0	2.1	0.0	0.0	0.0	0.0	0.0	23
S05	Rooftop Unit	545421.9	4807632.5	332.2	0	91	0.0	A	67.5	0.0	-1.8	0.0	2.1	0.0	0.0	0.0	0.0	0.0	23
S05	Rooftop Unit	545415.6	4807638.7	332.2	0	91	0.0	A	67.5	0.0	-1.8	0.0	2.1	0.0	0.0	0.0	0.0	0.0	23
S05	Rooftop Unit	545415.3	4807632.6	332.2	0	91	0.0	A	67.6	0.0	-1.8	0.0	2.1	0.0	0.0	0.0	0.0	0.0	23
S05	Rooftop Unit	545417.8	4807626.5	332.2	0	91	0.0	A	67.6	0.0	-1.8	0.0	2.1	0.0	0.0	0.0	0.0	0.0	23
S05	Rooftop Unit	545417.0	4807620.1	332.2	0	91	0.0	A	67.7	0.0	-1.8	0.0	2.2	0.0	0.0	0.0	0.0	0.0	23
S01	Rooftop Unit	545749.8	4807316.8	330.5	0	91	0.0	A	68.8	0.0	-2.5	0.0	2.4	0.0	0.0	0.0	0.0	0.0	22
S02	Rooftop Unit	545762.4	4807267.9	330.5	0	91	0.0	A	69.2	0.0	-2.5	0.0	2.5	0.0	0.0	0.0	0.0	0.0	22
S05	Rooftop Unit	545794.7	4806904.0	332.3	0	91	0.0	A	72.4	0.0	-2.1	0.0	3.3	0.0	0.0	0.0	0.0	0.0	17
S05	Rooftop Unit	545789.5	4806904.1	332.3	0	91	0.0	A	72.4	0.0	-2.1	0.0	3.3	0.0	0.0	0.0	0.0	0.0	17
TPSS_1	TPSS1 adjusted to 87 dBA + 5 dB tonal penalty	545877.3	4807925.8	332.8	0	92	0.0	A	54.6	0.0	0.3	0.0	0.6	0.0	0.0	0.0	0.0	0.0	37
TPSS_2	TPSS2 adjusted to 87 dBA + 5 dB tonal penalty	546801.0	4807780.2	312.5	0	92	0.0	A	70.2	0.0	0.2	0.0	3.0	0.0	0.0	0.0	0.0	0.0	19
Transformer	Transformer 1	545740.0	4807978.1	331.4	0	97	0.0	A	57.5	0.0	-0.1	0.0	0.9	0.0	0.0	0.0	0.0	0.0	39
Transformer	Transformer 1	545724.9	4807982.0	331.5	0	97	0.0	A	58.0	0.0	-0.5	4.7	0.9	0.0	0.0	0.0	0.0	0.0	34

*The total value shown accounts for all modelled sources and may include small contributions from sources not described in the table above

Receiver: R12

Project: Kitchener Hidden Valley - Stationary Noise
Project Number: 22377

Time Period	Total (dBA)*
Day	48

Receiver Name	Receiver ID	X	Y	Z
Proposed High-Rise	R12	546072 m	4807913 m	374.3 m

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
S05	Condenser	545531.4	4806976.3	331.9	0	91	0.0	A	71.7	0.0	-2.1	0.0	2.2	0.0	0.0	0.0	0.0	0.0	19
S03	Crusher	545526.7	4806649.4	328.8	0	119	0.0	A	73.8	0.0	-2.4	0.0	2.8	0.0	0.0	0.0	0.0	0.0	45
T05	Forklift	545578.9	4807281.5	326.4	0	80	24.0	A	69.1	0.0	-0.1	0.0	3.3	0.0	0.0	0.0	0.0	0.0	32
T05	Forklift	545613.7	4807295.1	326.4	0	80	23.0	A	68.7	0.0	-1.1	0.0	3.2	0.0	0.0	0.0	0.0	0.0	33
T05	Forklift	545639.3	4807181.5	326.4	0	80	15.3	A	69.6	0.0	-0.9	0.0	3.4	0.0	0.0	0.0	0.0	0.0	24
T05	Forklift	545610.8	4807531.2	327.1	0	80	19.5	A	66.6	0.0	-2.1	0.0	2.6	0.0	0.0	0.0	0.0	0.0	33
T05	Forklift	545697.5	4807523.7	327.4	0	80	18.6	A	65.7	0.0	-1.5	0.0	2.4	0.0	0.0	0.0	0.0	0.0	33
T05	Forklift	545660.0	4807451.2	326.9	0	80	18.3	A	66.8	0.0	-2.2	0.0	2.7	0.0	0.0	0.0	0.0	0.0	32
T05	Forklift	545680.9	4807577.1	327.3	0	80	16.0	A	65.3	0.0	-1.4	0.0	2.3	0.0	0.0	0.0	0.0	0.0	30
T05	Forklift	545609.4	4807417.7	326.7	0	80	17.9	A	67.6	0.0	-1.4	0.0	2.9	0.0	0.0	0.0	0.0	0.0	29
T05	Forklift	545657.0	4807594.9	327.0	0	80	15.5	A	65.4	0.0	-0.4	0.0	2.3	0.0	0.0	0.0	0.0	0.0	29
T05	Forklift	545625.6	4807584.9	326.8	0	80	15.2	A	65.9	0.0	-0.6	0.0	2.4	0.0	0.0	0.0	0.0	0.0	28
T05	Forklift	545700.5	4807474.1	327.2	0	80	15.3	A	66.2	0.0	-1.9	0.0	2.5	0.0	0.0	0.0	0.0	0.0	29
T05	Forklift	545567.0	4807463.3	327.1	0	80	15.4	A	67.6	0.0	-0.4	0.0	2.9	0.0	0.0	0.0	0.0	0.0	26
T05	Forklift	545607.8	4807472.6	327.4	0	80	14.4	A	67.1	0.0	-1.9	0.0	2.7	0.0	0.0	0.0	0.0	0.0	27
T05	Forklift	545599.0	4807450.0	327.0	0	80	13.5	A	67.4	0.0	-1.4	0.0	2.8	0.0	0.0	0.0	0.0	0.0	25
T05	Forklift	545581.5	4807443.6	326.8	0	80	13.5	A	67.6	0.0	-0.8	0.0	2.9	0.0	0.0	0.0	0.0	0.0	24
T05	Forklift	545632.9	4807161.6	326.4	0	80	13.3	A	69.8	0.0	-0.4	0.0	3.5	0.0	0.0	0.0	0.0	0.0	21
T05	Forklift	545617.2	4807158.8	326.4	0	80	10.4	A	69.9	0.0	-0.1	0.0	3.5	0.0	0.0	0.0	0.0	0.0	18
T03	Highway Truck	545663.5	4807287.4	326.4	0	68	18.0	A	68.5	0.0	-2.3	0.0	3.1	0.0	0.0	0.0	0.0	0.0	17
T03	Highway Truck	545654.5	4807337.6	326.4	0	68	16.8	A	68.0	0.0	-2.3	0.0	3.0	0.0	0.0	0.0	0.0	0.0	16
T03	Highway Truck	545649.7	4807338.2	326.4	0	68	16.3	A	68.1	0.0	-2.3	0.0	3.0	0.0	0.0	0.0	0.0	0.0	16
T03	Highway Truck	545687.1	4807196.5	326.4	0	68	17.4	A	69.2	0.0	-2.3	0.0	3.3	0.0	0.0	0.0	0.0	0.0	15
S05	Large RTU	545557.3	4807011.9	331.9	0	94	0.0	A	71.3	0.0	-1.8	0.0	3.7	0.0	0.0	0.0	0.0	0.0	21
S05	Large RTU	545545.0	4807007.6	331.9	0	94	0.0	A	71.4	0.0	-1.8	0.0	3.7	0.0	0.0	0.0	0.0	0.0	21
S05	Large RTU	545487.3	4807018.2	331.9	0	94	0.0	A	71.6	0.0	-1.7	0.0	3.8	0.0	0.0	0.0	0.0	0.0	21
S05	Large RTU	545497.6	4807011.4	331.9	0	94	0.0	A	71.6	0.0	-1.8	0.0	3.8	0.0	0.0	0.0	0.0	0.0	21
S05	Large RTU	545483.1	4807009.9	331.9	0	94	0.0	A	71.7	0.0	-1.8	0.0	3.8	0.0	0.0	0.0	0.0	0.0	21
S05	Large RTU	545560.1	4806962.7	331.9	0	94	0.0	A	71.7	0.0	-2.3	0.0	3.8	0.0	0.0	0.0	0.0	0.0	21
S05	Large RTU	545455.5	4807017.1	331.9	0	94	0.0	A	71.7	0.0	-1.7	0.0	3.8	0.0	0.0	0.0	0.0	0.0	20
S05	Large RTU	545540.4	4806946.3	331.9	0	94	0.0	A	71.9	0.0	-2.3	0.0	3.9	0.0	0.0	0.0	0.0	0.0	21
S05	Large RTU	545579.6	4806887.0	331.9	0	94	0.0	A	72.1	0.0	-2.4	0.0	4.0	0.0	0.0	0.0	0.0	0.0	21
S05	Large RTU	545458.8	4806937.6	331.9	0	94	0.0	A	72.2	0.0	-2.3	0.0	4.0	0.0	0.0	0.0	0.0	0.0	20
S05	Large RTU	545546.7	4806875.1	331.9	0	94	0.0	A	72.3	0.0	-2.5	0.0	4.0	0.0	0.0	0.0	0.0	0.0	20
S05	Large RTU	545533.2	4806870.2	331.9	0	94	0.0	A	72.4	0.0	-2.5	0.0	4.1	0.0	0.0	0.0	0.0	0.0	20
S05	Large RTU	545513.6	4806853.5	331.9	0	94	0.0	A	72.6	0.0	-2.5	0.0	4.1	0.0	0.0	0.0	0.0	0.0	20
S04	Loader	545561.3	4806674.5	327.4	0	101	0.0	A	73.5	0.0	-2.5	0.0	3.9	0.0	0.0	0.0	0.0	0.0	26
S05	Rooftop Unit	545588.6	4807753.3	332.2	0	91	0.0	A	65.2	0.0	-0.7	0.0	1.7	0.0	0.0	0.0	0.0	0.0	25
S05	Rooftop Unit	545574.4	4807766.0	332.2	0	91	0.0	A	65.3	0.0	-0.8	0.0	1.7	0.0	0.0	0.0	0.0	0.0	25
S05	Rooftop Unit	545571.7	4808050.4	331.2	0	91	0.0	A	65.3	0.0	-2.2	0.0	1.7	0.0	0.0	0.0	0.0	0.0	26
S05	Rooftop Unit	545581.7	4807741.0	332.2	0	91	0.0	A	65.3	0.0	-0.8	0.0	1.7	0.0	0.0	0.0	0.0	0.0	25
S05	Rooftop Unit	545561.2	4807782.7	332.2	0	91	0.0	A	65.5	0.0	-0.8	0.0	1.8	0.0	0.0	0.0	0.0	0.0	25
S05	Rooftop Unit	545566.7	4807759.9	332.2	0	91	0.0	A	65.5	0.0	-0.9	0.0	1.8	0.0	0.0	0.0	0.0	0.0	25
S05	Rooftop Unit	545577.4	4807728.1	332.2	0	91	0.0	A	65.5	0.0	-0.9	0.0	1.8	0.0	0.0	0.0	0.0	0.0	25
S05	Rooftop Unit	545553.0	4807776.0	332.2	0	91	0.0	A	65.6	0.0	-0.9	0.0	1.8	0.0	0.0	0.0	0.0	0.0	24
S05	Rooftop Unit	545566.0	4807728.3	332.2	0	91	0.0	A	65.6	0.0	-1.0	0.0	1.8	0.0	0.0	0.0	0.0	0.0	25

Receiver: R12

Project: Kitchener Hidden Valley - Stationary Noise
Project Number: 22377

Time Period	Total (dBA)*
Day	48

Receiver Name	Receiver ID	X	Y	Z
Proposed High-Rise	R12	546072 m	4807913 m	374.3 m

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
S05	Rooftop Unit	545549.3	4808072.5	331.2	0	91	0.0	A	65.8	0.0	-2.3	0.0	1.8	0.0	0.0	0.0	0.0	0.0	26
S05	Rooftop Unit	545549.1	4807745.9	332.2	0	91	0.0	A	65.8	0.0	-1.1	0.0	1.8	0.0	0.0	0.0	0.0	0.0	24
S05	Rooftop Unit	545535.7	4807762.1	332.2	0	91	0.0	A	65.9	0.0	-1.1	0.0	1.8	0.0	0.0	0.0	0.0	0.0	24
S05	Rooftop Unit	545506.9	4807982.4	331.2	0	91	0.0	A	66.1	0.0	-2.4	0.0	1.9	0.0	0.0	0.0	0.0	0.0	25
S05	Rooftop Unit	545515.4	4808036.9	331.2	0	91	0.0	A	66.1	0.0	-2.3	0.0	1.9	0.0	0.0	0.0	0.0	0.0	25
S05	Rooftop Unit	545484.7	4808004.7	331.2	0	91	0.0	A	66.5	0.0	-2.4	0.0	1.9	0.0	0.0	0.0	0.0	0.0	25
S05	Rooftop Unit	545491.4	4807626.9	325.9	0	91	0.0	A	67.2	0.0	-2.0	0.0	2.1	0.0	0.0	0.0	0.0	0.0	24
S05	Rooftop Unit	545476.8	4807636.0	332.2	0	91	0.0	A	67.4	0.0	-1.1	0.0	2.1	0.0	0.0	0.0	0.0	0.0	23
S05	Rooftop Unit	545472.6	4807638.4	332.2	0	91	0.0	A	67.4	0.0	-1.4	0.0	2.1	0.0	0.0	0.0	0.0	0.0	23
S05	Rooftop Unit	545484.8	4807611.6	325.7	0	91	0.0	A	67.4	0.0	-2.0	5.5	2.1	0.0	0.0	0.0	0.0	0.0	18
S05	Rooftop Unit	545466.5	4807633.4	332.2	0	91	0.0	A	67.5	0.0	-1.3	0.0	2.1	0.0	0.0	0.0	0.0	0.0	23
S05	Rooftop Unit	545462.4	4807635.0	332.2	0	91	0.0	A	67.5	0.0	-1.5	0.0	2.1	0.0	0.0	0.0	0.0	0.0	23
S05	Rooftop Unit	545458.4	4807633.3	332.2	0	91	0.0	A	67.6	0.0	-1.6	0.0	2.1	0.0	0.0	0.0	0.0	0.0	23
S01	Rooftop Unit	545749.8	4807316.8	330.5	0	91	0.0	A	67.6	0.0	-1.4	0.0	2.1	0.0	0.0	0.0	0.0	0.0	23
S05	Rooftop Unit	545453.3	4807630.8	332.2	0	91	0.0	A	67.7	0.0	-1.6	0.0	2.2	0.0	0.0	0.0	0.0	0.0	23
S05	Rooftop Unit	545448.9	4807637.2	332.2	0	91	0.0	A	67.7	0.0	-1.8	0.0	2.2	0.0	0.0	0.0	0.0	0.0	23
S05	Rooftop Unit	545448.4	4807629.7	332.2	0	91	0.0	A	67.7	0.0	-1.7	0.0	2.2	0.0	0.0	0.0	0.0	0.0	23
S05	Rooftop Unit	545433.7	4807635.9	332.2	0	91	0.0	A	67.9	0.0	-2.1	0.0	2.2	0.0	0.0	0.0	0.0	0.0	23
S05	Rooftop Unit	545429.3	4807640.1	332.2	0	91	0.0	A	67.9	0.0	-2.2	0.0	2.2	0.0	0.0	0.0	0.0	0.0	23
S05	Rooftop Unit	545428.7	4807633.1	332.2	0	91	0.0	A	67.9	0.0	-2.1	0.0	2.2	0.0	0.0	0.0	0.0	0.0	23
S05	Rooftop Unit	545421.9	4807632.5	332.2	0	91	0.0	A	68.0	0.0	-2.2	0.0	2.2	0.0	0.0	0.0	0.0	0.0	23
S05	Rooftop Unit	545415.6	4807638.7	332.2	0	91	0.0	A	68.1	0.0	-2.2	0.0	2.2	0.0	0.0	0.0	0.0	0.0	23
S05	Rooftop Unit	545415.3	4807632.6	332.2	0	91	0.0	A	68.1	0.0	-2.2	0.0	2.2	0.0	0.0	0.0	0.0	0.0	23
S05	Rooftop Unit	545417.8	4807626.5	332.2	0	91	0.0	A	68.1	0.0	-2.2	0.0	2.2	0.0	0.0	0.0	0.0	0.0	23
S02	Rooftop Unit	545762.4	4807267.9	330.5	0	91	0.0	A	68.1	0.0	-1.3	0.0	2.2	0.0	0.0	0.0	0.0	0.0	22
S05	Rooftop Unit	545417.0	4807620.1	332.2	0	91	0.0	A	68.1	0.0	-2.1	0.0	2.2	0.0	0.0	0.0	0.0	0.0	23
S05	Rooftop Unit	545419.1	4807589.9	325.4	0	91	0.0	A	68.3	0.0	-2.1	4.4	2.3	0.0	0.0	0.0	0.0	0.0	18
S05	Rooftop Unit	545794.7	4806904.0	332.3	0	91	0.0	A	71.4	0.0	-1.7	0.0	3.0	0.0	0.0	0.0	0.0	0.0	18
S05	Rooftop Unit	545789.5	4806904.1	332.3	0	91	0.0	A	71.4	0.0	-1.6	0.0	3.0	0.0	0.0	0.0	0.0	0.0	18
TPSS_1	TPSS1 adjusted to 87 dBA + 5 dB tonal penalty	545877.3	4807925.8	332.8	0	92	0.0	A	57.0	0.0	-1.6	0.0	0.8	0.0	0.0	0.0	0.0	0.0	36
TPSS_2	TPSS2 adjusted to 87 dBA + 5 dB tonal penalty	546801.0	4807780.2	312.5	0	92	0.0	A	68.4	0.0	0.0	0.0	2.6	0.0	0.0	0.0	0.0	0.0	21
Transformer	Transformer 1	545740.0	4807978.1	331.4	0	97	0.0	A	61.6	0.0	-0.4	0.0	1.3	0.0	0.0	0.0	0.0	0.0	35
Transformer	Transformer 1	545724.9	4807982.0	331.5	0	97	0.0	A	62.0	0.0	-0.6	0.0	1.4	0.0	0.0	0.0	0.0	0.0	35

*The total value shown accounts for all modelled sources and may include small contributions from sources not described in the table above

Receiver: R13

Project: Kitchener Hidden Valley - Stationary Noise
Project Number: 22377

Time Period	Total (dBA)*
Day	47

Receiver Name	Receiver ID	X	Y	Z
Proposed Mid-Rise	R13	546173 m	4807936 m	351.5 m

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
S05	Condenser	545531.4	4806976.3	331.9	0	91	0.0	A	72.2	0.0	-2.3	0.0	2.4	0.0	0.0	0.0	0.0	0.0	18
S03	Crusher	545526.7	4806649.4	328.8	0	119	0.0	A	74.2	0.0	-2.7	0.0	2.8	0.0	0.0	0.0	0.0	0.0	45
T05	Forklift	545603.7	4807173.9	326.4	0	80	14.7	A	70.6	0.0	-0.5	0.0	3.8	0.0	0.0	0.0	0.0	0.0	21
T05	Forklift	545575.6	4807295.8	326.4	0	80	23.4	A	69.8	0.0	-0.4	0.0	3.5	0.0	0.0	0.0	0.0	0.0	31
T05	Forklift	545610.6	4807308.9	326.4	0	80	22.3	A	69.5	0.0	-1.3	0.0	3.4	0.0	0.0	0.0	0.0	0.0	31
T05	Forklift	545636.1	4807195.4	326.4	0	80	18.0	A	70.2	0.0	-1.2	0.0	3.7	0.0	0.0	0.0	0.0	0.0	26
T05	Forklift	545610.8	4807531.2	327.1	0	80	19.5	A	67.8	0.0	-2.3	0.0	2.9	0.0	0.0	0.0	0.0	0.0	32
T05	Forklift	545697.5	4807523.7	327.4	0	80	18.6	A	67.0	0.0	-1.6	0.0	2.7	0.0	0.0	0.0	0.0	0.0	31
T05	Forklift	545660.0	4807451.2	326.9	0	80	18.3	A	68.0	0.0	-2.3	0.0	3.0	0.0	0.0	0.0	0.0	0.0	30
T05	Forklift	545609.4	4807417.7	326.7	0	80	17.9	A	68.7	0.0	-1.6	0.0	3.2	0.0	0.0	0.0	0.0	0.0	28
T05	Forklift	545680.9	4807577.1	327.3	0	80	16.0	A	66.7	0.0	-1.6	0.0	2.6	0.0	0.0	0.0	0.0	0.0	29
T05	Forklift	545657.0	4807594.9	327.0	0	80	15.5	A	66.8	0.0	-0.7	0.0	2.7	0.0	0.0	0.0	0.0	0.0	27
T05	Forklift	545625.6	4807584.9	326.8	0	80	15.2	A	67.3	0.0	-0.9	0.0	2.8	0.0	0.0	0.0	0.0	0.0	26
T05	Forklift	545700.5	4807474.1	327.2	0	80	15.3	A	67.4	0.0	-1.9	0.0	2.8	0.0	0.0	0.0	0.0	0.0	27
T05	Forklift	545567.0	4807463.3	327.1	0	80	15.4	A	68.7	0.0	-0.7	0.0	3.2	0.0	0.0	0.0	0.0	0.0	25
T05	Forklift	545607.8	4807472.6	327.4	0	80	14.4	A	68.3	0.0	-2.0	0.0	3.0	0.0	0.0	0.0	0.0	0.0	26
T05	Forklift	545599.0	4807450.0	327.0	0	80	13.5	A	68.5	0.0	-1.5	0.0	3.1	0.0	0.0	0.0	0.0	0.0	24
T05	Forklift	545581.5	4807443.6	326.8	0	80	13.5	A	68.7	0.0	-0.9	0.0	3.2	0.0	0.0	0.0	0.0	0.0	23
T05	Forklift	545632.9	4807161.6	326.4	0	80	13.3	A	70.5	0.0	-0.8	0.0	3.7	0.0	0.0	0.0	0.0	0.0	20
T05	Forklift	545614.9	4807158.9	326.4	0	80	12.0	A	70.6	0.0	-0.5	0.0	3.8	0.0	0.0	0.0	0.0	0.0	19
T03	Highway Truck	545654.5	4807337.6	326.4	0	68	16.8	A	69.0	0.0	-2.3	0.0	3.3	0.0	0.0	0.0	0.0	0.0	15
S05	Large RTU	545557.3	4807011.9	331.9	0	94	0.0	A	71.9	0.0	-2.1	0.0	3.9	0.0	0.0	0.0	0.0	0.0	21
S05	Large RTU	545545.0	4807007.6	331.9	0	94	0.0	A	72.0	0.0	-2.1	0.0	3.9	0.0	0.0	0.0	0.0	0.0	20
S05	Large RTU	545497.6	4807011.4	331.9	0	94	0.0	A	72.2	0.0	-2.1	0.0	4.0	0.0	0.0	0.0	0.0	0.0	20
S05	Large RTU	545487.3	4807018.2	331.9	0	94	0.0	A	72.2	0.0	-2.0	0.0	4.0	0.0	0.0	0.0	0.0	0.0	20
S05	Large RTU	545560.1	4806962.7	331.9	0	94	0.0	A	72.2	0.0	-2.5	0.0	4.0	0.0	0.0	0.0	0.0	0.0	20
S05	Large RTU	545483.1	4807009.9	331.9	0	94	0.0	A	72.2	0.0	-2.1	0.0	4.0	0.0	0.0	0.0	0.0	0.0	20
S05	Large RTU	545455.5	4807017.1	331.9	0	94	0.0	A	72.3	0.0	-2.0	0.0	4.0	0.0	0.0	0.0	0.0	0.0	20
S05	Large RTU	545540.4	4806946.3	331.9	0	94	0.0	A	72.4	0.0	-2.5	0.0	4.1	0.0	0.0	0.0	0.0	0.0	20
S05	Large RTU	545579.6	4806887.0	331.9	0	94	0.0	A	72.6	0.0	-2.3	0.0	4.1	0.0	0.0	0.0	0.0	0.0	20
S05	Large RTU	545458.8	4806937.6	331.9	0	94	0.0	A	72.8	0.0	-2.6	0.0	4.2	0.0	0.0	0.0	0.0	0.0	20
S05	Large RTU	545546.7	4806875.1	331.9	0	94	0.0	A	72.8	0.0	-2.5	0.0	4.2	0.0	0.0	0.0	0.0	0.0	20
S05	Large RTU	545533.2	4806870.2	331.9	0	94	0.0	A	72.9	0.0	-2.6	0.0	4.2	0.0	0.0	0.0	0.0	0.0	20
S05	Large RTU	545513.6	4806853.5	331.9	0	94	0.0	A	73.1	0.0	-2.7	0.0	4.3	0.0	0.0	0.0	0.0	0.0	20
S04	Loader	545561.3	4806674.5	327.4	0	101	0.0	A	73.9	0.0	-3.1	0.0	4.0	0.0	0.0	0.0	0.0	0.0	26
S05	Rooftop Unit	545588.6	4807753.3	332.2	0	91	0.0	A	66.7	0.0	-0.9	0.0	2.0	0.0	0.0	0.0	0.0	0.0	23
S05	Rooftop Unit	545571.7	4808050.4	331.2	0	91	0.0	A	66.7	0.0	-2.1	0.0	2.0	0.0	0.0	0.0	0.0	0.0	24
S05	Rooftop Unit	545574.4	4807766.0	332.2	0	91	0.0	A	66.9	0.0	-0.9	0.0	2.0	0.0	0.0	0.0	0.0	0.0	23
S05	Rooftop Unit	545581.7	4807741.0	332.2	0	91	0.0	A	66.9	0.0	-1.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	23
S05	Rooftop Unit	545561.2	4807782.7	332.2	0	91	0.0	A	67.0	0.0	-0.9	0.0	2.0	0.0	0.0	0.0	0.0	0.0	23
S05	Rooftop Unit	545577.4	4807728.1	332.2	0	91	0.0	A	67.0	0.0	-1.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	23
S05	Rooftop Unit	545566.7	4807759.9	332.2	0	91	0.0	A	67.0	0.0	-1.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	23
S05	Rooftop Unit	545549.3	4808072.5	331.2	0	91	0.0	A	67.1	0.0	-2.2	0.0	2.0	0.0	0.0	0.0	0.0	0.0	24
S05	Rooftop Unit	545553.0	4807776.0	332.2	0	91	0.0	A	67.1	0.0	-1.0	0.0	2.1	0.0	0.0	0.0	0.0	0.0	23
S05	Rooftop Unit	545566.0	4807728.3	332.2	0	91	0.0	A	67.1	0.0	-1.1	0.0	2.1	0.0	0.0	0.0	0.0	0.0	23
S05	Rooftop Unit	545549.1	4807745.9	332.2	0	91	0.0	A	67.3	0.0	-1.2	0.0	2.1	0.0	0.0	0.0	0.0	0.0	23

Receiver: R13

Project: Kitchener Hidden Valley - Stationary Noise
Project Number: 22377

Time Period	Total (dBA)*
Day	47

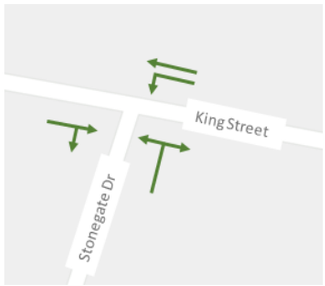
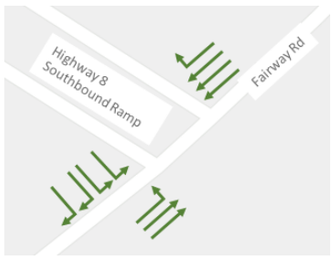
Receiver Name	Receiver ID	X	Y	Z
Proposed Mid-Rise	R13	546173 m	4807936 m	351.5 m

Source ID	Source Name	X	Y	Z	Refl.	Lw	L/A	Freq	Adiv	K0	Agr	Abar	Aatm	Afol	Ahous	Cmet	Dc	RL	Lr
S05	Rooftop Unit	545535.7	4807762.1	332.2	0	91	0.0	A	67.4	0.0	-1.2	0.0	2.1	0.0	0.0	0.0	0.0	0.0	23
S05	Rooftop Unit	545515.4	4808036.9	331.2	0	91	0.0	A	67.5	0.0	-2.2	0.0	2.1	0.0	0.0	0.0	0.0	0.0	24
S05	Rooftop Unit	545506.9	4807982.4	331.2	0	91	0.0	A	67.5	0.0	-2.3	0.0	2.1	0.0	0.0	0.0	0.0	0.0	24
S05	Rooftop Unit	545484.7	4808004.7	331.2	0	91	0.0	A	67.8	0.0	-2.3	0.0	2.2	0.0	0.0	0.0	0.0	0.0	23
S05	Rooftop Unit	545491.4	4807626.9	325.9	0	91	0.0	A	68.5	0.0	-2.1	0.0	2.3	0.0	0.0	0.0	0.0	0.0	22
S01	Rooftop Unit	545749.8	4807316.8	330.5	0	91	0.0	A	68.5	0.0	-1.3	0.0	2.3	0.0	0.0	0.0	0.0	0.0	22
S05	Rooftop Unit	545476.8	4807636.0	332.2	0	91	0.0	A	68.6	0.0	-1.2	0.0	2.3	0.0	0.0	0.0	0.0	0.0	21
S05	Rooftop Unit	545472.6	4807638.4	332.2	0	91	0.0	A	68.6	0.0	-1.3	0.0	2.3	0.0	0.0	0.0	0.0	0.0	21
S05	Rooftop Unit	545484.8	4807611.6	325.7	0	91	0.0	A	68.6	0.0	-2.1	4.8	2.3	0.0	0.0	0.0	0.0	0.0	17
S05	Rooftop Unit	545466.5	4807633.4	332.2	0	91	0.0	A	68.7	0.0	-1.3	0.0	2.4	0.0	0.0	0.0	0.0	0.0	21
S05	Rooftop Unit	545462.4	4807635.0	332.2	0	91	0.0	A	68.8	0.0	-1.4	0.0	2.4	0.0	0.0	0.0	0.0	0.0	21
S05	Rooftop Unit	545458.4	4807633.3	332.2	0	91	0.0	A	68.8	0.0	-1.4	0.0	2.4	0.0	0.0	0.0	0.0	0.0	21
S05	Rooftop Unit	545453.3	4807630.8	332.2	0	91	0.0	A	68.9	0.0	-1.4	0.0	2.4	0.0	0.0	0.0	0.0	0.0	21
S05	Rooftop Unit	545448.9	4807637.2	332.2	0	91	0.0	A	68.9	0.0	-1.8	0.0	2.4	0.0	0.0	0.0	0.0	0.0	21
S02	Rooftop Unit	545762.4	4807267.9	330.5	0	91	0.0	A	68.9	0.0	-1.2	0.0	2.4	0.0	0.0	0.0	0.0	0.0	21
S05	Rooftop Unit	545448.4	4807629.7	332.2	0	91	0.0	A	68.9	0.0	-1.5	0.0	2.4	0.0	0.0	0.0	0.0	0.0	21
S05	Rooftop Unit	545433.7	4807635.9	332.2	0	91	0.0	A	69.0	0.0	-2.0	0.0	2.4	0.0	0.0	0.0	0.0	0.0	21
S05	Rooftop Unit	545429.3	4807640.1	332.2	0	91	0.0	A	69.1	0.0	-2.1	0.0	2.4	0.0	0.0	0.0	0.0	0.0	22
S05	Rooftop Unit	545428.7	4807633.1	332.2	0	91	0.0	A	69.1	0.0	-2.0	0.0	2.4	0.0	0.0	0.0	0.0	0.0	21
S05	Rooftop Unit	545421.9	4807632.5	332.2	0	91	0.0	A	69.2	0.0	-2.1	0.0	2.5	0.0	0.0	0.0	0.0	0.0	21
S05	Rooftop Unit	545415.6	4807638.7	332.2	0	91	0.0	A	69.2	0.0	-2.2	0.0	2.5	0.0	0.0	0.0	0.0	0.0	22
S05	Rooftop Unit	545417.8	4807626.5	332.2	0	91	0.0	A	69.2	0.0	-2.0	0.0	2.5	0.0	0.0	0.0	0.0	0.0	21
S05	Rooftop Unit	545415.3	4807632.6	332.2	0	91	0.0	A	69.2	0.0	-2.2	0.0	2.5	0.0	0.0	0.0	0.0	0.0	21
S05	Rooftop Unit	545417.0	4807620.1	332.2	0	91	0.0	A	69.3	0.0	-1.9	0.0	2.5	0.0	0.0	0.0	0.0	0.0	21
S05	Rooftop Unit	545419.1	4807589.9	325.4	0	91	0.0	A	69.4	0.0	-2.3	4.3	2.5	0.0	0.0	0.0	0.0	0.0	17
S05	Rooftop Unit	545794.7	4806904.0	332.3	0	91	0.0	A	71.8	0.0	-2.1	0.0	3.1	0.0	0.0	0.0	0.0	0.0	18
S05	Rooftop Unit	545789.5	4806904.1	332.3	0	91	0.0	A	71.8	0.0	-2.0	0.0	3.1	0.0	0.0	0.0	0.0	0.0	18
TPSS_1	TPSS1 adjusted to 87 dBA + 5 dB tonal penalty	545877.3	4807925.8	332.8	0	92	0.0	A	60.4	0.0	-1.2	0.0	1.2	0.0	0.0	0.0	0.0	0.0	32
TPSS_2	TPSS2 adjusted to 87 dBA + 5 dB tonal penalty	546801.0	4807780.2	312.5	0	92	0.0	A	67.2	0.0	0.2	0.0	2.3	0.0	0.0	0.0	0.0	0.0	23
Transformer	Transformer 1	545740.0	4807978.1	331.4	0	97	0.0	A	63.8	0.0	-0.4	0.0	1.6	0.0	0.0	0.0	0.0	0.0	32
Transformer	Transformer 1	545724.9	4807982.0	331.5	0	97	0.0	A	64.1	0.0	-0.6	4.7	1.7	0.0	0.0	0.0	0.0	0.0	28

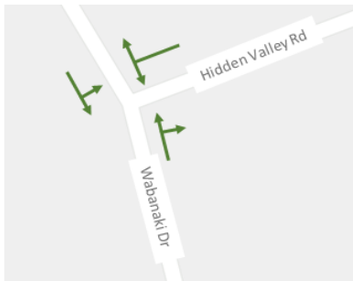
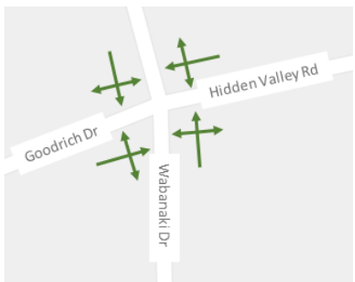
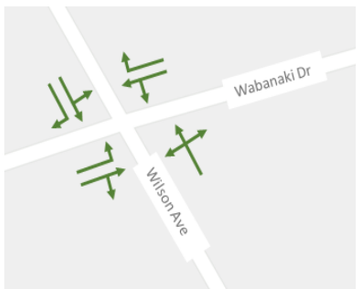
*The total value shown accounts for all modelled sources and may include small contributions from sources not described in the table above

End of Report

APPENDIX C – STUDY AREA INTERSECTIONS

Intersection	Diagram	Description
King Street and River Road		The King Street and River Road intersection is a four-leg signalized intersection. The King Street east leg contains a through lane, and two (2) auxiliary lanes, a left-turn lane and right-turn lane, while the King Street west leg contains a through-right lane, and an auxiliary left-turn lane. The River Road north approach contains a left-through lane, and an auxiliary right-turn lane, while the River Road south approach contains a shared left-through-right lane. Painted crosswalks with signalization are located across each intersection leg. The King Street east leg and River Road north leg contain sidewalks on both sides of the roadway. The King Street west leg contains a sidewalk on the south side of the roadway, and no sidewalks are provided on either side of the River Road south leg. A signalized railway crossing is located just north of the intersection, crossing River Road.
King Street and Stonegate Drive		The King Street and Stonegate Drive intersection is a three-leg intersection with stop-control on the minor approach, Stonegate Drive. The King Street east leg contains a through lane and an auxiliary left-turn lane, while the King Street west leg a shared through-right lane. The Stonegate Drive south approach contains a shared left-right lane. No crosswalks or sidewalks are present within the vicinity of the intersection.
Highway 8 Fairway Road South-bound Ramp Terminal		The Highway 8 Fairway Road Southbound Ramp Terminal intersection is a three-leg signalized intersection. The Fairway Road north approach contains three (3) through lanes and an auxiliary right-turn lane while the Fairway Road south approach contains two (2) through lanes and an auxiliary left-turn lane. The Highway 8 southbound ramp west approach contains two (2) right-turn lanes and two (2) left-turn lanes. An advisory speed limit of 60 km/h is present at the Highway 8 southbound off-ramp, while an advisory speed limit of 40 km/h is present at the Highway 8 southbound on-ramp. Painted crosswalks with signalization are located across the west and south intersection legs. The Fairway Road south leg contain sidewalks on both sides of the roadway while a sidewalk is provided on the west side of the north leg.

Intersection	Diagram	Description
Fairway Road and Wabanaki Drive		The Fairway Road and Wabanaki Drive intersection is a three-leg intersection with stop-control on the minor approach, Wabanaki Drive. The Fairway Road east leg contains three (3) through lanes, while the Fairway Road west leg contains one (1) through lane and a shared through-right lane. The Wabanaki Drive south leg contains a single right-turn lane. No crosswalks are present at the intersection. The Fairway Road east and west legs contain sidewalks on both sides of the roadway while a sidewalk is provided on the east side of the Wabanaki Drive south leg.
Fairway Road and Fairview Park Mall / Cineplex Entrance		The Fairway Road and Fairview Park Mall / Cineplex intersection is a four-leg signalized intersection. The Fairway Road east approach contains two (2) through lanes, an auxiliary right-turn lane, and an auxiliary left-turn lane, while the Fairway Road west approach contains one (1) through lane, one (1) through-right lane, and an auxiliary left-turn lane. Painted crosswalks with signalization are located on the west, north, and south, intersection legs while no crossing is provided at the east leg. All four (4) intersection legs contain sidewalks on both sides of the roadway.
Fairway Road and Wilson Avenue		The Fairway Road and Wilson Avenue intersection is a four-leg signalized intersection. The Fairway Road east approach contains two (2) through lanes, an auxiliary right-turn lane, and an auxiliary left-turn lane, while the Fairway Road west approach contains one (1) through lane, one (1) through-right lane, and an auxiliary left-turn lane. The Wilson Avenue north approach contains one (1) through lane, one (1) right-turn lane, and an auxiliary left-turn lane, while the Wilson Avenue south approach contains one (1) through lane, one (1) right-turn lane, and an auxiliary left-turn lane. Painted crosswalks with signalization are located across each intersection leg. All four (4) intersection legs contain sidewalks on both sides of the roadway.

Intersection	Diagram	Description
Wabanaki Drive and Hidden Valley Road		The Wabanaki Drive and Hidden Valley Road intersection is a three-leg intersection with stop-control on the minor approach, Hidden Valley Road. The Wabanaki Drive north leg contains a shared left-through lane while the Wabanaki Drive south leg contains a shared through-right lane. The Hidden Valley Road east leg contains a shared left-right lane. No crosswalks are present at the intersection. The Wabanaki Drive north and south legs contain a sidewalk on the east side of the roadway while no sidewalks are provided on Hidden Valley Road. A signalized railway crossing is located just north of the intersection, crossing Wabanaki Drive.
Wabanaki Drive and Goodrich Drive/Hidden Valley Road		The Wabanaki Drive and Goodrich Drive / Hidden Valley Road intersection is a four-leg stop-controlled intersection. All four (4) legs of the intersection contain a single shared left-through-right lane. No crosswalks are present at the intersection. The Wabanaki Drive south leg contains sidewalks on both sides of the roadway while the Wabanaki Drive north leg contains a sidewalk on the east side of the roadway. No sidewalk is provided on the Goodrich Drive west leg, while a sidewalk is provided on the south side of the Hidden Valley Road east approach.
Wabanaki Drive and Wilson Avenue		The Wabanaki Drive and Wilson Avenue intersection is a four-leg intersection with stop-control on the minor approaches, Wilson Avenue. The Wabanaki Drive east approach contains a shared left-through lane and an auxiliary right-turn lane, while the Wabanaki Drive west approach contains a shared through-right lane and an right-turn lane. The Wilson Avenue north approach contains a shared left-through lane and a channelized right-turn lane while the Wilson Avenue south approach contains a shared left-through-right lane. No crosswalks are present at the intersection. The Wabanaki Drive east leg contains a sidewalk on both sides of the roadway, while the Wilson Avenue north leg contains a sidewalk on the west side of the roadway and a separated bi-directional cycling facility on the east side of the roadway. No sidewalks are provided on the west or south legs of the intersection.

APPENDIX D – ACTIVE TRANSPORTATION FACILITIES SUMMARY

	Pedestrian	Cycling	Multi-Use Pathway
Hidden Valley Road	No facilities present	No facilities present	Gravel trail on south side of roadway between Wabanaki Drive and River Valley Drive
Wabanaki Drive	Concrete sidewalk on both sides of the roadway between Wilson Avenue and Hidden Valley Road (south junction)/Goodrich Drive Concrete sidewalk on east side of roadway between Hidden Valley Road (south junction)/Goodrich Drive and Fairway Road	Painted bicycle lanes on both sides of the roadway between Wilson Avenue and Hidden Valley Road (south junction)/Goodrich Drive	No facilities present
Fairway Road	Concrete sidewalk on both sides of roadway north of King Street Concrete sidewalk on west side of roadway between King Street and Highway 8 Fairway Road southbound ramp terminal Concrete/paved sidewalk on both sides of roadway between Highway 8 Fairway Road southbound ramp terminal and Manitou Drive	No facilities present	No facilities present

	Pedestrian	Cycling	Multi-Use Pathway
King Street	Concrete sidewalk on north side of Highway 8 King Street northbound ramp terminal Concrete sidewalk on both sides of roadway between Highway 8 King Street northbound ramp terminal and River Road	No facilities present	No facilities present
River Road	Concrete sidewalk on both sides of roadway north of King Street	No facilities present	No facilities present
Stonegate Drive	Concrete sidewalk on both sides of roadway between Woodview Crescent (east junction) and cul-de-sac (end of roadway)	No facilities present	No facilities present
Wilson Avenue	Concrete sidewalk on west side of roadway between Fairway Road and Wabanaki Drive	Bi-directional cycle track on the east side of roadway between Goodrich Drive and Wabanaki Drive	No facilities present
River Valley Drive	Concrete sidewalk on both sides of roadway	No facilities present	Paved Multi-Use Path (MUP) connection to River Birch Court
River Birch Street	Concrete sidewalk on both sides of roadway	No facilities present	No facilities present
Hidden Valley Crescent	No facilities present	No facilities present	No facilities present

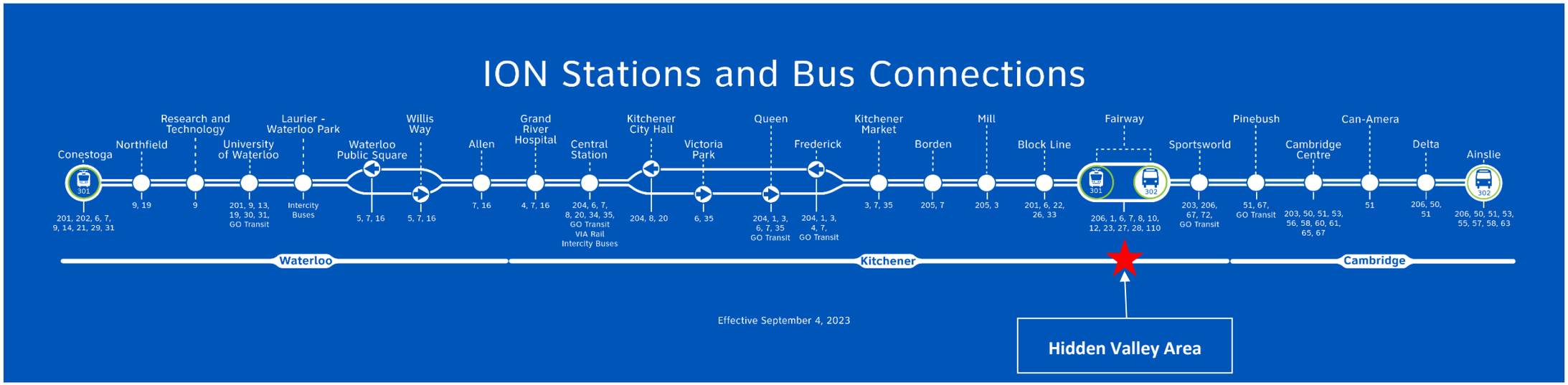
	Pedestrian	Cycling	Multi-Use Pathway
River Birch Court	Concrete sidewalk on both sides of roadway	No facilities present	Paved Multi-Use Path (MUP) connection to River Valley Drive
Paddock Court	No facilities present	No facilities present	No facilities present
Canters Close	No facilities present	No facilities present	No facilities present

APPENDIX E – PUBLIC TRANSIT FACILITIES

Transit Type	Route	Stops	Operating Hours
GRT Bus	Route 1	Major stops include Fairway Station at the south end, Frederick Station, Queen Station, and Boardwalk Station at the north end.	Operates 7 days a week with service on weekdays beginning at 5:45 AM and ending at 12:50 AM. On weekdays it operates with headways of 30 min, dropping to 15 min during the AM (6:30 AM to 8:30 AM) and PM (2:30 PM to 6:00 PM) peak times.
GRT Bus	Route 6	Major stops include Fairway Station at the south end, Queen Station, Central Station, and Conestoga Station at the north end.	Operates 7 days a week with service on weekdays beginning at 5:30 AM and ending at 12:30 AM. During the week it operates with typical headways of 30 min.
GRT Bus	Route 7	Major stops include Fairway Station at the south end, Frederick Station, Central Station, Grand River Hospital Station, Waterloo Public Square Station, and Conestoga Station at the north end.	operates 7 days a week with service on weekdays beginning at 5:30 AM and ending at 12:40 AM. During the week it operates with typical headways of 15 min.
GRT Bus	Route 8	Major stops include Fairway Station at the south end, Frederick Station, Kitchener Town Hall Station, Central Station, and University Avenue / King Street at the north end where it continues as Route 12.	Operates 7 days a week with service on weekdays beginning at 5:30 AM and ending at 12:30 PM. During the week it operates with headways between 10 min and 30 min, with typical headways of 15 min.
GRT Bus	Route 10	Major stops include Fairway Station at the north end, Doon Village, Pioneer Park Plaza, Old Carriage Drive / Homer Watson Boulevard, and Conestoga College Doon Campus at the south end.	Operates 7 days a week with service on weekdays beginning at 5:30 AM and ending at 12:20 AM. During the week it operates with 15 min headways between 6:45 AM and 6:00 PM, with 30 min headways outside of these times.
GRT Bus	Route 12	Major stops include Fairway Station at the south end, Fischer-Hallman Road, Westmount Road, the University of Waterloo, and University Avenue / King Street at the north end where it continues as Route 8.	Operates 7 days a week with service on weekdays beginning at 5:30 AM and ending at 1:00 AM. During the week it operates with headways of 15 min between 7:30 AM and 6:30 PM, with 20-30 min headways outside of these times.

Transit Type	Route	Stops	Operating Hours
GRT Bus	Route 23	Major stops include Fairway Station at the north end, Fairway Road / River Road, Fairway Road / Zeller Drive, and Stanley Park Mall at the east end.	Operates 6 days a week, with no service on Sunday. On weekdays, service begins at 5:30 AM and ends at 10:30 PM with headways of 30 min throughout the day.
GRT Bus	Route 27	Major stops include Fairway Station at the north end, Morgan Avenue / River Road, Grand River Hospital Freeport Campus, and Quinte Crescent / Morrison Road at the south end.	Operates 7 days a week with service on weekdays beginning at 9:30 AM and ending at 9:25 PM. During the week it operates with headways of 30 min throughout the day.
GRT Bus	Route 28	Major stops include Fairway Station at the south end, Franklin Street / Weber Street, and Stanley Park Mall at the north end.	Operates 7 days a week with service on weekdays beginning at 6:05 AM and ending at 11:50 PM. During the week it operates with headways of 30 min throughout the day.
GRT Bus	Route 110	Known as the college express route and contains two (2) stops, Fairway Station at the north end and Conestoga College Doon Campus at the south end.	Operates during the week with service beginning at 6:45 AM and ending at 9:15 PM with 15 min headways between 7:15 AM and 6:00 PM, with 30 min headways outside of these times.
GRT iXpress Bus	Route 206	Major stops include Fairway Station at the north end, Sports World Station, Cambridge Memorial Hospital, Delta Station, Ainslie Terminal, and Southwood Drive / Cedar Street at the south end.	Operates 7 days a week with service on weekdays beginning at 5:30 AM and ending at 12:40 AM. During the week it operates with headways of 20 min between 6:10 AM and 6:20 PM, with 30 min headways outside of these times
GRT ION LRT	Route 301	Major stops include Fairway Station at the south end, Kitchener Market, Kitchener City Hall, Central Station, Grand River Hospital, Waterloo Public Square, University of Waterloo, and Conestoga Mall at the north end.	Operates 7 days a week with service on weekdays beginning at 4:45 and ending at 12:20 AM. During the week it operates with typical headways of 15 min.

Transit Type	Route	Stops	Operating Hours
GRT ION LRT	Route 302	Major stops include Fairway Station at the north end, Sports World Station, Cambridge Centre Station, and Ainslie Terminal at the south end.	Operates 7 days a week with service on weekdays beginning at 5:25 AM and ending at 12:30 AM with typical headways of 15 min.



APPENDIX F – CITY OF KITCHENER TRAFFIC DATA

REGIONAL MUNICIPALITY OF WATERLOO
TURNING MOVEMENT COUNT

Region of Waterloo

Morning Peak Diagram

Count Period
From: 7:30 AM
To: 10:30 AM

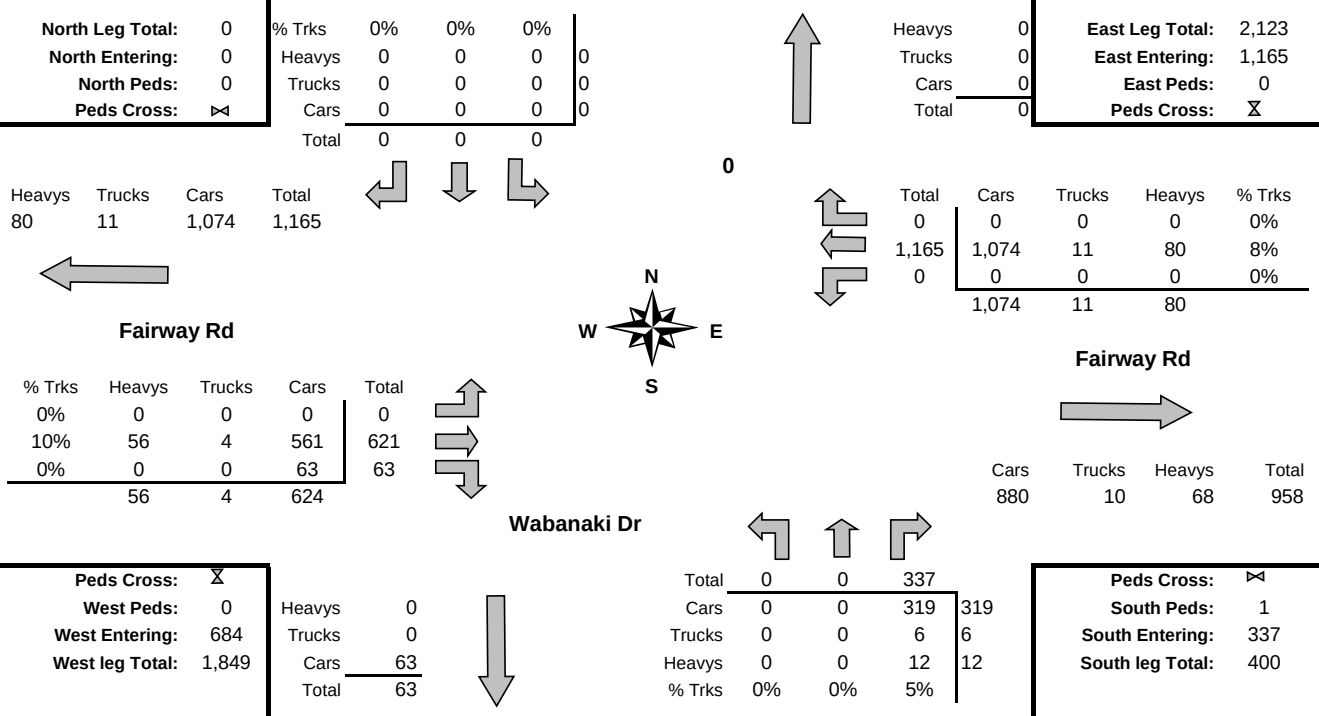
Peak Hour
From: 7:45 AM
To: 8:45 AM

Municipality: Kitchener
Intersection: Fairway Rd & Wabanaki Dr
Control: Non Signalized
Major Road: Fairway Rd

Weather conditions: Sunny

Person(s) who counted: AT28-YA

GeoID: 29041
Count Date: Tuesday, 18-Apr-17



Comments

To determine total vehicles entering the intersection during morning peak hour, add all leg totals entering.

Example 1: Total Entering = West leg total entering + South leg total entering + East leg total entering + North leg total entering
Therefore, total vehicles entering intersection = **2,186**

Example 2: Total vehicles entering from the west = eastbound left turn + eastbound through + eastbound right turn
Therefore, vehicles entering from the west = **684**

REGIONAL MUNICIPALITY OF WATERLOO
TURNING MOVEMENT COUNT

Region of Waterloo

Mid-day Peak Diagram

Count Period
From: 12:00 PM
To: 2:00 PM

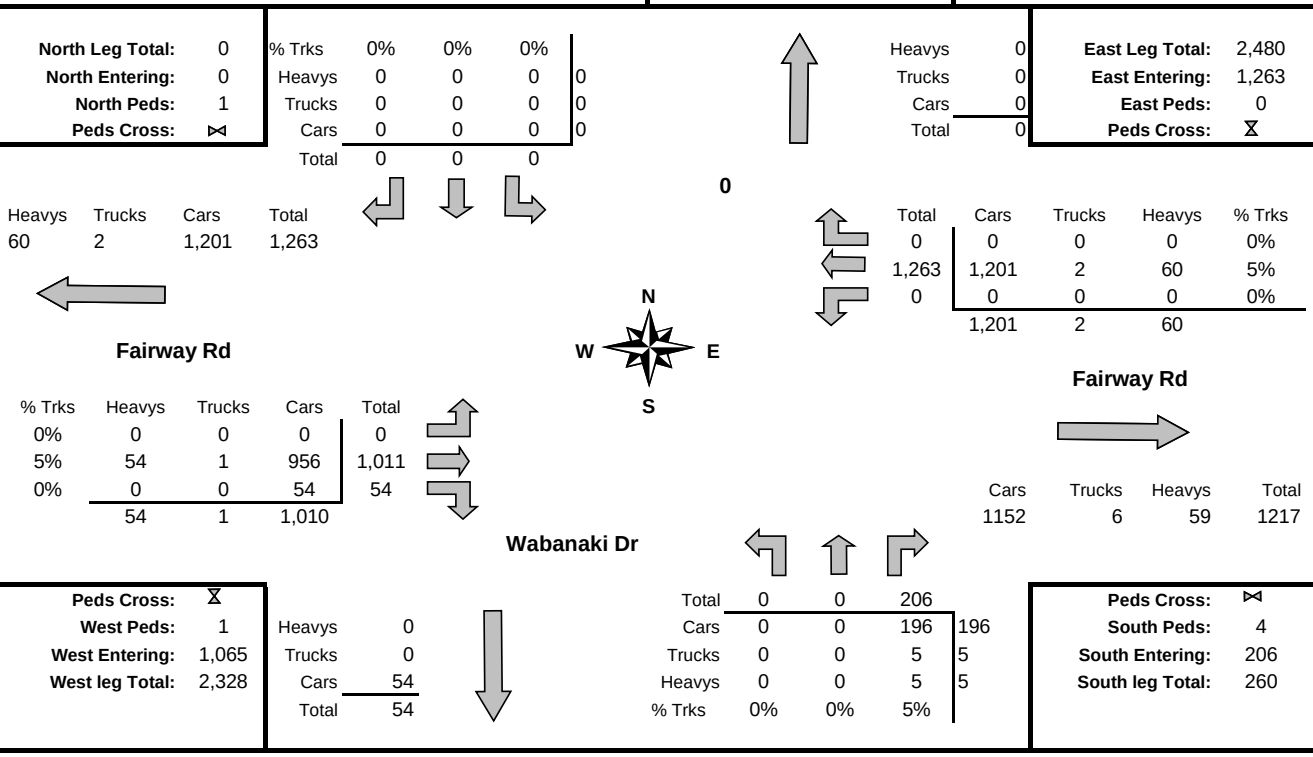
Peak Hour
From: 12:15 PM
To: 1:15 PM

Municipality: Kitchener
Intersection: Fairway Rd & Wabanaki Dr
Control: Non Signalized
Major Road: Fairway Rd

Weather conditions: Sunny

Person(s) who counted: AT28-YA

GeoID: 29041
Count Date: Tuesday, 18-Apr-17



Comments

To determine total vehicles entering the intersection during mid-day peak hour, add all leg totals entering.

Example 1: Total Entering = West leg total entering + South leg total entering + East leg total entering + North leg total entering
Therefore, total vehicles entering intersection = **2,534**

Example 2: Total vehicles entering from the west = eastbound left turn + eastbound through + eastbound right turn
Therefore, vehicles entering from the west = **1,065**

REGIONAL MUNICIPALITY OF WATERLOO
TURNING MOVEMENT COUNT

Region of Waterloo

Afternoon Peak Diagram

Count Period
From: 3:00 PM
To: 6:00 PM

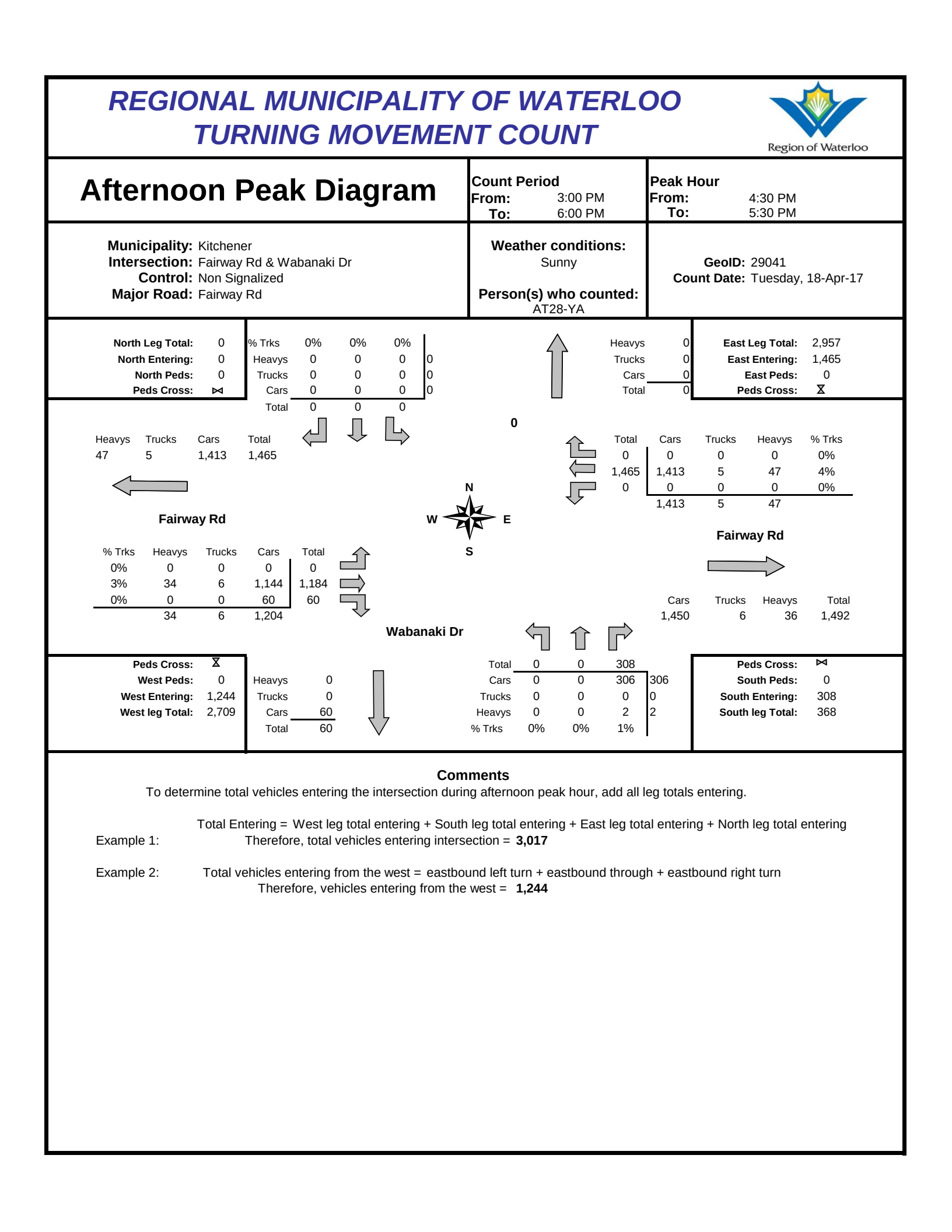
Peak Hour
From: 4:30 PM
To: 5:30 PM

Municipality: Kitchener
Intersection: Fairway Rd & Wabanaki Dr
Control: Non Signalized
Major Road: Fairway Rd

Weather conditions: Sunny

Person(s) who counted: AT28-YA

GeoID: 29041
Count Date: Tuesday, 18-Apr-17



Comments

To determine total vehicles entering the intersection during afternoon peak hour, add all leg totals entering.

Total Entering = West leg total entering + South leg total entering + East leg total entering + North leg total entering

Example 1: Therefore, total vehicles entering intersection = **3,017**

Example 2: Total vehicles entering from the west = eastbound left turn + eastbound through + eastbound right turn

Therefore, vehicles entering from the west = **1,244**

REGIONAL MUNICIPALITY OF WATERLOO
TURNING MOVEMENT COUNT

Region of Waterloo

Total Count Diagram

Municipality: Kitchener
Intersection: Fairway Rd & Wabanaki Dr
Control: Non Signalized
Major Road: Fairway Rd

Weather conditions: Sunny

Person(s) who counted: AT28-YA

GeoID: 29041
Count Date: Tuesday, 18-Apr-17

North Leg Total:	0
North Entering:	0
North Peds:	5
Peds Cross:	⋈
Bicycles Entering:	0
Buggies Entering:	0

% Trks	0%	0%	0%	
Heavys	0	0	0	0
Trucks	0	0	0	0
Cars	0	0	0	0
Total	0	0	0	

Heavys	0
Trucks	0
Cars	0
Total	0

East Leg Total:	19,443
East Entering:	9,938
East Peds:	2
Peds Cross:	⧖
Bicycles Entering:	11
Buggies Entering:	0

0

Heavys	Trucks	Cars	Total
515	41	9,382	9,938

Total	Cars	Trucks	Heavys	% Trks
0	0	0	0	0%
9,938	9,382	41	515	6%
0	0	0	0	0%
	9,382	41	515	

Fairway Rd

N
W E
S

Fairway Rd

% Trks	Heavys	Trucks	Cars	Total
0%	0	0	0	0
6%	407	22	6,911	7,340
1%	2	2	419	423
	409	24	7,330	

Cars	Trucks	Heavys	Total
8,987	40	478	9,505

Wabanaki Dr

Total	0	0	2,165	
Cars	0	0	2,076	2,076
Trucks	0	0	18	18
Heavys	0	0	71	71
% Trks	0%	0%	4%	

Peds Cross:	⧖
West Peds:	3
West Entering:	7,763
West leg Total:	17,701
Bicycles Entering:	6
Buggies Entering:	0

Heavys	2
Trucks	2
Cars	419
Total	423

Peds Cross:	⋈
South Peds:	12
South Entering:	2,165
South leg Total:	2,588
Bicycles Entering:	4
Buggies Entering:	0

Comments

To determine total vehicles entering the intersection, add all leg totals entering.

Example 1: Total Entering = West leg total entering + South leg total entering + East leg total entering + North leg total entering
Therefore, total vehicles entering intersection = **19,866**

Example 2: Total vehicles entering from the west = eastbound left turn + eastbound through + eastbound right turn
Therefore, vehicles entering from the west = **7,763**

Notes: None

REGIONAL MUNICIPALITY OF WATERLOO
TURNING MOVEMENT COUNT

Region of Waterloo

Estimated Daily Traffic

Total Factor = Monthly Factor 1 x Daily Factor 1 x 24 Hour Factor 1.74 = 1.740000

Municipality: Kitchener
Intersection: Fairway Rd & Wabanaki Dr
Control: Non Signalized
Major Road: Fairway Rd

Weather conditions: Sunny

Person(s) who counted: AT28-YA

GeoID: 29041
Count Date: Tuesday, 18-Apr-17

North Leg Total: 0
North Entering: 0
North Peds: N/A
Peds Cross: ⋈

% Trks	0%	0%	0%	
Heavys	0	0	0	0
Trucks	0	0	0	0
Cars	0	0	0	0
Total	0	0	0	

Heavys	0
Trucks	0
Cars	0
Total	0

East Leg Total: 33,831
East Entering: 17,292
East Peds: N/A
Peds Cross: ⧖

Heavys	Trucks	Cars	Total
896	71	16,325	17,292

0

Total	Cars	Trucks	Heavys	% Trks
0	0	0	0	0%
17,292	16,325	71	896	6%
0	0	0	0	0%
	16,325	71	896	

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Fairway Rd

% Trks	Heavys	Trucks	Cars	Total
0%	0	0	0	0
6%	708	38	12,025	12,772
1%	3	3	729	736
	712	42	12,754	

Fairway Rd

Cars	Trucks	Heavys	Total
15,637	70	832	16,539

Wabanaki Dr

Peds Cross: ⧖
West Peds: N/A
West Entering: 13,508
West leg Total: 30,800

Heavys	3
Trucks	3
Cars	729
Total	736

Total	0	0	3,767	
Cars	0	0	3,612	3,612
Trucks	0	0	31	31
Heavys	0	0	124	124
% Trks	0%	0%	4%	

Peds Cross: ⋈
South Peds: N/A
South Entering: 3,767
South leg Total: 4,503

Comments

To determine the EDT (Estimated Daily Traffic), add all four leg totals and divide by two.
This will give you the approximate number of vehicles entering and exiting the intersection in a 24-hour period

Example: $\frac{\text{(West leg total + South leg total + East leg total + North leg total)}}{2}$ ***EDT =*** ***34,567***

REGIONAL MUNICIPALITY OF WATERLOO
TURNING MOVEMENT COUNT

Region of Waterloo

Peak Hour Factor By Movement

Municipality: Kitchener
Intersection: Fairway Rd & Wabanaki Dr
Control: Non Signalized
Major Road: Fairway Rd

Weather conditions: Sunny

Person(s) who counted: AT28-YA

GeoID: 29041
Count Date: Tuesday, 18-Apr-17

North Approach PHF

AM Peak:	0.00
Mid-day Peak:	0.00
PM Peak:	0.00

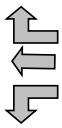
	Movement		
PM	0.00	0.00	0.00
MID	0.00	0.00	0.00
AM	0.00	0.00	0.00

East Approach PHF

AM Peak:	0.88
Mid-day Peak:	0.92
PM Peak:	0.95

0

AM AM Peak Hour
MID Mid-day Peak Hour
PM PM Peak Hour



AM	MID	PM	
0.00	0.00	0.00	
0.88	0.92	0.95	Movement
0.00	0.00	0.00	

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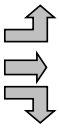
Fairway Rd

Movement	PM	MID	AM
	0.00	0.00	0.00
	0.94	0.95	0.92
	0.75	0.79	0.58



Fairway Rd

Wabanaki Dr

0.00	0.00	0.81	AM
0.00	0.00	0.92	MID
0.00	0.00	0.85	PM

Movement

West Approach PHF

AM Peak:	0.97
Mid-day Peak:	0.95
PM Peak:	0.95

South Approach PHF

AM Peak:	0.81
Mid-day Peak:	0.92
PM Peak:	0.85

Comments

Intersection: Fairway Rd & Wabanaki Dr
GeoID: 29041
Municipality: Kitchener
Major Road: Fairway Rd

Intersection Control: Non Signalized
Date: Tuesday, 18-Apr-17
Name: AT28-YA
Weather: Sunny

	EASTBOUND			WESTBOUND			NORTHBOUND			SOUTHBOUND				
Approach Control		*Free Flow*			*Free Flow*			*Stop Control*			*N/A*			
Movement	LT	THRU	RT	LT	THRU	RT	LT	THRU	RT	LT	THRU	RT		
Approach Lanes	0	2	<	0	2	1	0	0	1	0	0	0	TOTAL	TOTAL HOUR
7:30 to 7:45	0	161	19	0	238	0	0	0	85	0	0	0	503	
7:45 to 8:00	0	141	27	0	330	0	0	0	104	0	0	0	602	
8:00 to 8:15	0	164	11	0	260	0	0	0	85	0	0	0	520	
8:15 to 8:30	0	148	16	0	319	0	0	0	74	0	0	0	557	2,182
8:30 to 8:45	0	168	9	0	256	0	0	0	74	0	0	0	507	2,186
8:45 to 9:00	0	164	12	0	277	0	0	0	70	0	0	0	523	2,107
9:00 to 9:15	0	160	10	0	286	0	0	0	47	0	0	0	503	2,090
9:15 to 9:30	0	158	6	0	219	0	0	0	58	0	0	0	441	1,974
9:30 to 9:45	0	163	7	0	232	0	0	0	48	0	0	0	450	1,917
9:45 to 10:00	0	147	11	0	250	0	0	0	50	0	0	0	458	1,852
10:00 to 10:15	0	174	12	0	228	0	0	0	64	0	0	0	478	1,827
10:15 to 10:30	0	168	9	0	273	0	0	0	46	0	0	0	496	1,882
AM Peak Hour														
7:45 to 8:45	**0**	**621**	**63**	**0**	**1,165**	**0**	**0**	**0**	**337**	**0**	**0**	**0**	**2,186**	
# of trucks in peak	0	4	0	0	11	0	0	0	6	0	0	0	21	
# of heavies in peak	0	56	0	0	80	0	0	0	12	0	0	0	148	
% heavies (Total)	0%	10%	0%	0%	8%	0%	0%	0%	5%	0%	0%	0%	8%	
12:00 to 12:15	0	215	14	0	296	0	0	0	65	0	0	0	590	
12:15 to 12:30	0	265	14	0	342	0	0	0	46	0	0	0	667	
12:30 to 12:45	0	240	13	0	329	0	0	0	56	0	0	0	638	
12:45 to 13:00	0	255	10	0	305	0	0	0	53	0	0	0	623	2,518
13:00 to 13:15	0	251	17	0	287	0	0	0	51	0	0	0	606	2,534
13:15 to 13:30	0	265	16	0	320	0	0	0	40	0	0	0	641	2,508
13:30 to 13:45	0	253	12	0	270	0	0	0	44	0	0	0	579	2,449
13:45 to 14:00	0	257	9	0	287	0	0	0	61	0	0	0	614	2,440
Midday Peak Hour														
12:15 to 13:15	**0**	**1,011**	**54**	**0**	**1,263**	**0**	**0**	**0**	**206**	**0**	**0**	**0**	**2,534**	
# of trucks in peak	0	1	0	0	2	0	0	0	5	0	0	0	8	
# of heavies in peak	0	54	0	0	60	0	0	0	5	0	0	0	119	
% heavies (Total)	0%	5%	0%	0%	5%	0%	0%	0%	5%	0%	0%	0%	5%	
15:00 to 15:15	0	318	9	0	325	0	0	0	113	0	0	0	765	
15:15 to 15:30	0	256	14	0	355	0	0	0	72	0	0	0	697	
15:30 to 15:45	0	313	17	0	398	0	0	0	83	0	0	0	811	
15:45 to 16:00	0	261	13	0	375	0	0	0	82	0	0	0	731	3,004
16:00 to 16:15	0	293	11	0	329	0	0	0	100	0	0	0	733	2,972
16:15 to 16:30	0	280	19	0	369	0	0	0	72	0	0	0	740	3,015
16:30 to 16:45	0	278	20	0	341	0	0	0	91	0	0	0	730	2,934
16:45 to 17:00	0	291	15	0	378	0	0	0	80	0	0	0	764	2,967
17:00 to 17:15	0	316	11	0	362	0	0	0	83	0	0	0	772	3,006
17:15 to 17:30	0	299	14	0	384	0	0	0	54	0	0	0	751	3,017
17:30 to 17:45	0	249	15	0	360	0	0	0	71	0	0	0	695	2,982
17:45 to 18:00	0	269	11	0	358	0	0	0	43	0	0	0	681	2,899
PM Peak Hour														
16:30 to 17:30	**0**	**1,184**	**60**	**0**	**1,465**	**0**	**0**	**0**	**308**	**0**	**0**	**0**	**3,017**	
# of trucks in peak	0	6	0	0	5	0	0	0	0	0	0	0	11	
# of heavies in peak	0	34	0	0	47	0	0	0	2	0	0	0	83	
% heavies (Total)	0%	3%	0%	0%	4%	0%	0%	0%	1%	0%	0%	0%	3%	

Intersection: Fairway Rd & Wabanaki Dr
GeoID: 29041
Municipality: Kitchener
Major Road: Fairway Rd

Intersection Control: Non Signalized
Date: Tuesday, 18-Apr-17
Name: AT28-YA
Weather: Sunny

PEDESTRIAN CROSSING

Time			Crossing Approach					
			East App.	West App.	North App.	South App.	TOTAL	TOTAL HOUR
7:30	to	7:45	1	0	0	1	2	
7:45	to	8:00	0	0	0	1	1	
8:00	to	8:15	0	0	0	0	0	
8:15	to	8:30	0	0	0	0	0	3
8:30	to	8:45	0	0	0	0	0	1
8:45	to	9:00	0	0	0	0	0	0
9:00	to	9:15	0	0	0	0	0	0
9:15	to	9:30	0	0	0	0	0	0
9:30	to	9:45	0	0	0	0	0	0
9:45	to	10:00	0	0	0	0	0	0
10:00	to	10:15	0	0	0	0	0	0
10:15	to	10:30	0	0	0	0	0	0
AM Peak Hour								
7:45	**to**	**8:45**	**0**	**0**	**0**	**1**	**1**	
12:00	to	12:15	0	0	0	0	0	
12:15	to	12:30	0	0	0	3	3	
12:30	to	12:45	0	0	0	0	0	
12:45	to	13:00	0	1	1	1	3	6
13:00	to	13:15	0	0	0	0	0	6
13:15	to	13:30	0	0	0	0	0	3
13:30	to	13:45	0	0	0	0	0	3
13:45	to	14:00	0	0	2	0	2	2
Midday Peak Hour								
12:15	**to**	**13:15**	0	1	1	4	**6**	
15:00	to	15:15	0	0	0	0	0	
15:15	to	15:30	0	1	0	1	2	
15:30	to	15:45	0	0	0	1	1	
15:45	to	16:00	0	1	1	1	3	6
16:00	to	16:15	0	0	0	0	0	6
16:15	to	16:30	1	0	0	0	1	5
16:30	to	16:45	0	0	0	0	0	4
16:45	to	17:00	0	0	0	0	0	1
17:00	to	17:15	0	0	0	0	0	1
17:15	to	17:30	0	0	0	0	0	0
17:30	to	17:45	0	0	0	1	1	1
17:45	to	18:00	0	0	1	2	3	4
PM Peak Hour								
16:30	**to**	**17:30**	0	0	0	0	**0**	

REGIONAL MUNICIPALITY OF WATERLOO
TURNING MOVEMENT COUNT

Region of Waterloo

Morning Peak Diagram

Count Period
From: 7:30 AM
To: 10:30 AM

Peak Hour
From: 7:30 AM
To: 8:30 AM

Municipality: Kitchener
Intersection: Manitou Dr & Wabanaki Dr/Driveway
Control: Signalized
Major Road: Manitou Dr

Weather conditions: Cloudy

Person(s) who counted: AT21-EZ

GeoID: 21803
Count Date: Tuesday, 05-Nov-19

North Leg Total: 963
North Entering: 382
North Peds: 1
Peds Cross: ⋈

% Trks	0%	11%	7%	
Heavys	0	27	4	31
Trucks	0	4	3	7
Cars	0	257	87	344
Total	0	288	94	

Heavys	Trucks	Cars	Total
0	0	2	2

East Leg Total: 1,007
East Entering: 397
East Peds: 1
Peds Cross: ⧖

Heavys	39
Trucks	4
Cars	538
Total	581

Manitou Dr

Total	Cars	Trucks	Heavys	% Trks
70	51	1	18	27%
0	0	0	0	0%
327	301	6	20	8%
	352	7	38	

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Driveway

% Trks	Heavys	Trucks	Cars	Total
0%	0	0	0	0
0%	0	0	0	0
0%	0	0	0	0
	0	0	0	

Wabanaki Dr

Cars	Trucks	Heavys	Total
577	6	27	610

Manitou Dr

Peds Cross: ⧖
West Peds: 3
West Entering: 0
West leg Total: 2

Heavys	47
Trucks	10
Cars	558
Total	615

Total	2	511	516	
Cars	2	487	490	979
Trucks	0	3	3	6
Heavys	0	21	23	44
% Trks	0%	5%	5%	

Peds Cross: ⋈
South Peds: 6
South Entering: 1,029
South leg Total: 1,644

Comments

To determine total vehicles entering the intersection during morning peak hour, add all leg totals entering.

Example 1: Total Entering = West leg total entering + South leg total entering + East leg total entering + North leg total entering
Therefore, total vehicles entering intersection = **1,808**

Example 2: Total vehicles entering from the west = eastbound left turn + eastbound through + eastbound right turn
Therefore, vehicles entering from the west = **0**

REGIONAL MUNICIPALITY OF WATERLOO
TURNING MOVEMENT COUNT

Region of Waterloo

Mid-day Peak Diagram

Count Period
From: 12:00 PM
To: 2:00 PM

Peak Hour
From: 12:00 PM
To: 1:00 PM

Municipality: Kitchener
Intersection: Manitou Dr & Wabanaki Dr/Driveway
Control: Signalized
Major Road: Manitou Dr

Weather conditions: Cloudy

Person(s) who counted: AT21-EZ

GeoID: 21803
Count Date: Tuesday, 05-Nov-19

North Leg Total: 1,019
North Entering: 492
North Peds: 2
Peds Cross: ⋈

% Trks	0%	3%	8%	
Heavys	0	8	6	14
Trucks	0	5	2	7
Cars	6	375	90	471
Total	6	388	98	

Heavys	Trucks	Cars	Total
0	0	11	11

Heavys	Trucks	Cars	Total
23	6	498	527

East Leg Total: 979
East Entering: 501
East Peds: 1
Peds Cross: ⧖

Manitou Dr

Total	Cars	Trucks	Heavys	% Trks
126	117	1	8	7%
2	2	0	0	0%
373	351	6	16	6%
	470	7	24	

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Driveway

% Trks	Heavys	Trucks	Cars	Total
0%	0	0	5	5
0%	0	0	1	1
33%	0	1	2	3
	0	1	8	

Wabanaki Dr

Cars	Trucks	Heavys	Total
436	5	37	478

Manitou Dr

Total	3	396	379
Cars	3	376	345	724
Trucks	0	5	3	8
Heavys	0	15	31	46
% Trks	0%	5%	9%	

Peds Cross: ⧖
West Peds: 5
West Entering: 9
West leg Total: 20

Heavys	24
Trucks	12
Cars	728
Total	764

Peds Cross: ⋈
South Peds: 2
South Entering: 778
South leg Total: 1,542

Comments

To determine total vehicles entering the intersection during mid-day peak hour, add all leg totals entering.

Example 1: Total Entering = West leg total entering + South leg total entering + East leg total entering + North leg total entering
Therefore, total vehicles entering intersection = **1,780**

Example 2: Total vehicles entering from the west = eastbound left turn + eastbound through + eastbound right turn
Therefore, vehicles entering from the west = **9**

REGIONAL MUNICIPALITY OF WATERLOO
TURNING MOVEMENT COUNT

Region of Waterloo

Afternoon Peak Diagram

Count Period
From: 3:00 PM
To: 6:00 PM

Peak Hour
From: 4:30 PM
To: 5:30 PM

Municipality: Kitchener
Intersection: Manitou Dr & Wabanaki Dr/Driveway
Control: Signalized
Major Road: Manitou Dr

Weather conditions: Cloudy

Person(s) who counted: AT21-EZ

GeoID: 21803
Count Date: Tuesday, 05-Nov-19

North Leg

North Leg Total:	1,233
North Entering:	579
North Peds:	0
Peds Cross:	⋈

% Trks	0%	2%	9%	
Heavys	0	8	8	16
Trucks	0	0	0	0
Cars	4	482	77	563
Total	4	490	85	

East Leg

Heavys	21
Trucks	3
Cars	630
Total	654

East Leg Total:	1,373
East Entering:	757
East Peds:	2
Peds Cross:	⧖

Driveway

Heavys	Trucks	Cars	Total
0	0	8	8

% Trks	Heavys	Trucks	Cars	Total
0%	0	0	6	6
0%	0	0	0	0
0%	0	0	3	3
	0	0	9	

Manitou Dr

Total	Cars	Trucks	Heavys	% Trks
160	154	1	5	4%
1	1	0	0	0%
596	575	1	20	4%
	730	2	25	

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Wabanaki Dr

Cars	Trucks	Heavys	Total
576	5	35	616

Manitou Dr

Total	3	488	531
Cars	3	470	499	972
Trucks	0	2	5	7
Heavys	0	16	27	43
% Trks	0%	4%	6%	

South Leg

Peds Cross:	⋈
South Peds:	8
South Entering:	1,022
South leg Total:	2,111

West Leg

Peds Cross:	⧖
West Peds:	4
West Entering:	9
West leg Total:	17

Heavys	28
Trucks	1
Cars	1,060
Total	1,089

Comments

To determine total vehicles entering the intersection during afternoon peak hour, add all leg totals entering.

Total Entering = West leg total entering + South leg total entering + East leg total entering + North leg total entering

Example 1: Therefore, total vehicles entering intersection = **2,367**

Example 2: Total vehicles entering from the west = eastbound left turn + eastbound through + eastbound right turn

Therefore, vehicles entering from the west = **9**

REGIONAL MUNICIPALITY OF WATERLOO
TURNING MOVEMENT COUNT

Region of Waterloo

Total Count Diagram

Municipality: Kitchener
Intersection: Manitou Dr & Wabanaki Dr/Driveway
Control: Signalized
Major Road: Manitou Dr

Weather conditions: Cloudy

Person(s) who counted: AT21-EZ

GeoID: 21803
Count Date: Tuesday, 05-Nov-19

North Leg Total:	8,092
North Entering:	3,637
North Peds:	7
Peds Cross:	⋈
Bicycles Entering:	0
Buggies Entering:	0

% Trks	4%	5%	12%	
Heavys	0	116	68	184
Trucks	1	25	14	40
Cars	27	2,785	601	3,413
Total	28	2,926	683	

Heavys	192
Trucks	51
Cars	4,212
Total	4,455

East Leg Total:	8,236
East Entering:	4,107
East Peds:	11
Peds Cross:	⧖
Bicycles Entering:	0
Buggies Entering:	0

Heavys	Trucks	Cars	Total
0	1	49	50

Manitou Dr

Total	Cars	Trucks	Heavys	% Trks
937	866	14	57	8%
7	7	0	0	0%
3,163	2,961	34	168	6%
	3,834	48	225	

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Driveway

% Trks	Heavys	Trucks	Cars	Total
5%	0	1	20	21
0%	0	0	4	4
5%	0	1	19	20
	0	2	43	

Wabanaki Dr

Cars	Trucks	Heavys	Total
3,792	66	271	4,129

Manitou Dr

Total	15	3,497	3,442
Cars	15	3,326	3,187	6,528
Trucks	0	36	52	88
Heavys	0	135	203	338
% Trks	0%	5%	7%	

Peds Cross:	⧖
West Peds:	22
West Entering:	45
West leg Total:	95
Bicycles Entering:	0
Buggies Entering:	0

Heavys	284
Trucks	60
Cars	5,765
Total	6,109

Peds Cross:	⋈
South Peds:	32
South Entering:	6,954
South leg Total:	13,063
Bicycles Entering:	0
Buggies Entering:	0

Comments

To determine total vehicles entering the intersection, add all leg totals entering.

Example 1: Total Entering = West leg total entering + South leg total entering + East leg total entering + North leg total entering
Therefore, total vehicles entering intersection = **14,743**

Example 2: Total vehicles entering from the west = eastbound left turn + eastbound through + eastbound right turn
Therefore, vehicles entering from the west = **45**

Notes: None

REGIONAL MUNICIPALITY OF WATERLOO
TURNING MOVEMENT COUNT

Region of Waterloo

Estimated Daily Traffic

Total Factor = Monthly Factor 1 x Daily Factor 1 x 24 Hour Factor 1.74 = 1.740000

Municipality: Kitchener
Intersection: Manitou Dr & Wabanaki Dr/Driveway
Control: Signalized
Major Road: Manitou Dr

Weather conditions: Cloudy

Person(s) who counted: AT21-EZ

GeoID: 21803
Count Date: Tuesday, 05-Nov-19

North Leg

North Leg Total:	14,080
North Entering:	6,328
North Peds:	N/A
Peds Cross:	⋈

% Trks	4%	5%	12%	
Heavys	0	202	118	320
Trucks	2	44	24	70
Cars	47	4,846	1,046	5,939
Total	49	5,091	1,188	

East Leg

East Leg Total:	14,331
East Entering:	7,146
East Peds:	N/A
Peds Cross:	⧖

Heavys	334
Trucks	89
Cars	7,329
Total	7752

Driveway

Heavys	Trucks	Cars	Total
0	2	85	87

% Trks	Heavys	Trucks	Cars	Total
5%	0	2	35	37
0%	0	0	7	7
5%	0	2	33	35
	0	3	75	

Manitou Dr

Total	Cars	Trucks	Heavys	% Trks
1,630	1,507	24	99	8%
12	12	0	0	0%
5,504	5,152	59	292	6%
	6,671	84	392	

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Wabanaki Dr

Cars	Trucks	Heavys	Total
6,598	115	472	7,184

Manitou Dr

Total	26	6,085	5,989
Cars	26	5,787	5,545
Trucks	0	63	90
Heavys	0	235	353
% Trks	0%	5%	7%

West Leg

Peds Cross:	⧖
West Peds:	N/A
West Entering:	78
West leg Total:	165

Heavys	494
Trucks	104
Cars	10,031
Total	10,630

South Leg

Peds Cross:	⋈
South Peds:	N/A
South Entering:	12,100
South leg Total:	22,730

Comments

To determine the EDT (Estimated Daily Traffic), add all four leg totals and divide by two.
This will give you the approximate number of vehicles entering and exiting the intersection in a 24-hour period

Example: (West leg total + South leg total + East leg total + North leg total) / 2 ***EDT =*** ***25,653***

REGIONAL MUNICIPALITY OF WATERLOO
TURNING MOVEMENT COUNT

Region of Waterloo

Peak Hour Factor By Movement

Municipality: Kitchener
Intersection: Manitou Dr & Wabanaki Dr/Driveway
Control: Signalized
Major Road: Manitou Dr

Weather conditions: Cloudy

Person(s) who counted: AT21-EZ

GeoID: 21803
Count Date: Tuesday, 05-Nov-19

North Approach PHF

AM Peak:	0.93
Mid-day Peak:	0.89
PM Peak:	0.89

East Approach PHF

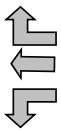
AM Peak:	0.89
Mid-day Peak:	0.88
PM Peak:	0.93

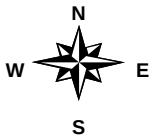
	Movement		
PM	0.33	0.86	0.89
MID	0.50	0.87	0.91
AM	0.00	0.88	0.76

Manitou Dr

AM AM Peak Hour
MID Mid-day Peak Hour
PM PM Peak Hour

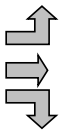
AM	MID	PM	
0.83	0.88	0.71	
0.00	0.25	0.25	Movement
0.91	0.86	0.91	





Driveway

Movement	PM	MID	AM
	0.50	0.63	0.00
	0.00	0.25	0.00
	0.75	0.38	0.00



Wabanaki Dr

Manitou Dr

0.25	0.95	0.90	AM	
0.38	0.94	0.93	MID	
0.38	0.90	0.93	PM	
	Movement			

West Approach PHF

AM Peak:	#DIV/0!
Mid-day Peak:	0.56
PM Peak:	0.56

South Approach PHF

AM Peak:	0.93
Mid-day Peak:	0.95
PM Peak:	0.95

Comments

Intersection: Manitou Dr & Wabanaki Dr/Driveway
GeoID: 21803
Municipality: Kitchener
Major Road: Manitou Dr

Intersection Control: Signalized
Date: Tuesday, 05-Nov-19
Name: AT21-EZ
Weather: Cloudy

			EASTBOUND			WESTBOUND			NORTHBOUND			SOUTHBOUND				
Approach Control			*Signalized*			*Signalized*			*Signalized*			*Signalized*				
Movement			LT	THRU	RT	LT	THRU	RT	LT	THRU	RT	LT	THRU	RT		
Approach Lanes			0	1	0	1	1	<	>	2	1	>	2	<	TOTAL	TOTAL HOUR
7:30	to	7:45	0	0	0	90	0	21	0	135	127	21	67	0	461	
7:45	to	8:00	0	0	0	81	0	18	0	108	134	23	67	0	431	
8:00	to	8:15	0	0	0	75	0	14	0	133	143	31	72	0	468	
8:15	to	8:30	0	0	0	81	0	17	2	135	112	19	82	0	448	1,808
8:30	to	8:45	0	0	0	85	0	15	0	116	130	17	69	0	432	1,779
8:45	to	9:00	1	0	0	53	1	21	1	119	110	22	61	1	390	1,738
9:00	to	9:15	0	0	1	63	0	18	0	125	101	24	75	1	408	1,678
9:15	to	9:30	0	0	0	64	0	17	0	103	91	18	62	1	356	1,586
9:30	to	9:45	1	0	0	54	0	15	2	112	79	17	62	1	343	1,497
9:45	to	10:00	1	0	2	65	0	30	0	89	95	24	73	0	379	1,486
10:00	to	10:15	1	0	2	52	0	20	0	99	74	18	57	3	326	1,404
10:15	to	10:30	1	0	0	49	0	12	0	84	67	15	65	2	295	1,343
AM Peak Hour																
7:30	**to**	**8:30**	**0**	**0**	**0**	**327**	**0**	**70**	**2**	**511**	**516**	**94**	**288**	**0**	**1,808**	
# of trucks in peak			0	0	0	6	0	1	0	3	3	3	4	0	20	
# of heavies in peak			0	0	0	20	0	18	0	21	23	4	27	0	113	
% heavies (Total)			0%	0%	0%	8%	0%	27%	0%	5%	5%	7%	11%	0%	7%	
12:00	to	12:15	0	0	1	88	0	36	1	101	102	26	96	2	453	
12:15	to	12:30	2	0	0	83	0	26	2	96	92	27	87	0	415	
12:30	to	12:45	1	1	2	108	0	34	0	94	87	21	94	1	443	
12:45	to	13:00	2	0	0	94	2	30	0	105	98	24	111	3	469	1,780
13:00	to	13:15	1	0	1	79	0	35	0	106	85	21	84	1	413	1,740
13:15	to	13:30	1	0	1	81	0	24	0	94	83	23	92	1	400	1,725
13:30	to	13:45	0	0	0	81	0	23	0	91	108	25	91	0	419	1,701
13:45	to	14:00	0	0	0	77	0	25	0	75	99	21	86	1	384	1,616
Midday Peak Hour																
12:00	**to**	**13:00**	**5**	**1**	**3**	**373**	**2**	**126**	**3**	**396**	**379**	**98**	**388**	**6**	**1,780**	
# of trucks in peak			0	0	1	6	0	1	0	5	3	2	5	0	23	
# of heavies in peak			0	0	0	16	0	8	0	15	31	6	8	0	84	
% heavies (Total)			0%	0%	33%	6%	0%	7%	0%	5%	9%	8%	3%	0%	6%	
15:00	to	15:15	0	0	0	162	1	85	0	110	99	20	104	0	581	
15:15	to	15:30	0	0	1	124	0	42	0	122	122	16	123	1	551	
15:30	to	15:45	0	0	0	143	0	38	1	103	125	21	104	1	536	
15:45	to	16:00	0	0	3	119	0	33	1	97	113	19	101	2	488	2,156
16:00	to	16:15	1	1	2	144	1	54	0	107	121	25	85	1	542	2,117
16:15	to	16:30	0	0	0	147	0	40	1	125	116	29	132	1	591	2,157
16:30	to	16:45	1	0	1	157	0	46	1	116	123	22	103	0	570	2,191
16:45	to	17:00	3	0	1	129	0	36	0	125	133	24	128	3	582	2,285
17:00	to	17:15	2	0	0	146	0	56	2	135	133	20	117	0	611	2,354
17:15	to	17:30	0	0	1	164	1	22	0	112	142	19	142	1	604	2,367
17:30	to	17:45	1	2	0	120	1	16	1	103	99	13	115	0	471	2,268
17:45	to	18:00	1	0	1	105	0	18	0	122	99	18	119	0	483	2,169
PM Peak Hour																
16:30	**to**	**17:30**	**6**	**0**	**3**	**596**	**1**	**160**	**3**	**488**	**531**	**85**	**490**	**4**	**2,367**	
# of trucks in peak			0	0	0	1	0	1	0	2	5	0	0	0	9	
# of heavies in peak			0	0	0	20	0	5	0	16	27	8	8	0	84	
% heavies (Total)			0%	0%	0%	4%	0%	4%	0%	4%	6%	9%	2%	0%	4%	

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GeoID: 21803
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Major Road: Manitou Dr

Intersection Control: Signalized
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Name: AT21-EZ
Weather: Cloudy

PEDESTRIAN CROSSING

Time			Crossing Approach					
			East App.	West App.	North App.	South App.	TOTAL	TOTAL HOUR
7:30	to	7:45	0	2	0	1	3	
7:45	to	8:00	1	0	0	0	1	
8:00	to	8:15	0	1	1	1	3	
8:15	to	8:30	0	0	0	4	4	11
8:30	to	8:45	0	1	0	1	2	10
8:45	to	9:00	1	0	0	0	1	10
9:00	to	9:15	0	0	0	0	0	7
9:15	to	9:30	0	0	0	0	0	3
9:30	to	9:45	0	0	0	2	2	3
9:45	to	10:00	0	1	0	1	2	4
10:00	to	10:15	1	0	0	0	1	5
10:15	to	10:30	0	0	0	1	1	6
AM Peak Hour							**20**	
7:30	**to**	**8:30**	**1**	**3**	**1**	**6**	**11**	
12:00	to	12:15	0	0	0	0	0	
12:15	to	12:30	1	0	0	2	3	
12:30	to	12:45	0	3	2	0	5	
12:45	to	13:00	0	2	0	0	2	10
13:00	to	13:15	0	0	0	0	0	10
13:15	to	13:30	0	2	0	1	3	10
13:30	to	13:45	0	1	1	1	3	8
13:45	to	14:00	1	1	0	3	5	11
Midday Peak Hour							**21**	
12:00	**to**	**13:00**	1	5	2	2	**10**	
15:00	to	15:15	0	0	0	0	0	
15:15	to	15:30	2	3	2	4	11	
15:30	to	15:45	0	0	0	0	0	
15:45	to	16:00	1	0	0	0	1	12
16:00	to	16:15	1	0	0	0	1	13
16:15	to	16:30	0	0	1	0	1	3
16:30	to	16:45	0	2	0	5	7	10
16:45	to	17:00	2	0	0	1	3	12
17:00	to	17:15	0	2	0	2	4	15
17:15	to	17:30	0	0	0	0	0	14
17:30	to	17:45	0	1	0	2	3	10
17:45	to	18:00	0	0	0	0	0	7
PM Peak Hour							**31**	
16:30	**to**	**17:30**	2	4	0	8	**14**	

Ontario Traffic, Inc.
17705 Leslie St., Unit 6
Newmarket, Ontario L3Y 3E3
Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 10697
Station ID: U80
GOODRICH DR from WILSON AVE to CHANDARIA PL
Date Start: 30-Sep-21
Date End: 06-Oct-21
Date Start: 30-Sep-21

EB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
09/30/21	0	0	1	0	0	0	0	0	2	0	0	0	2	5
01:00	0	0	0	0	0	1	0	0	0	0	0	0	1	2
02:00	0	1	1	0	0	0	0	0	2	1	0	0	0	5
03:00	1	1	2	0	2	0	0	0	1	0	1	0	0	8
04:00	0	10	3	0	1	3	0	0	0	0	0	0	0	17
05:00	0	28	17	0	0	1	0	2	1	0	0	0	0	49
06:00	**5**	**103**	**53**	0	0	2	**1**	2	1	1	1	0	2	**171**
07:00	1	51	27	0	3	2	0	1	0	2	0	0	**4**	91
08:00	1	41	18	0	4	4	0	**4**	1	1	**2**	0	3	79
09:00	2	24	18	0	3	4	0	1	**6**	**4**	0	0	4	66
10:00	0	33	28	0	**6**	2	0	0	5	3	0	0	2	79
11:00	0	47	40	0	4	**7**	0	1	0	0	2	0	3	104
12 PM	2	57	29	0	6	1	0	**5**	**9**	3	1	0	1	114
13:00	1	48	30	0	2	**8**	0	1	2	**4**	2	0	1	99
14:00	3	38	**41**	0	**7**	7	0	4	7	4	**6**	0	1	**118**
15:00	3	**72**	23	**1**	2	2	0	2	5	1	3	0	1	115
16:00	2	57	10	0	0	3	0	1	6	1	0	0	2	82
17:00	**6**	44	8	0	2	5	0	0	2	1	1	0	**4**	73
18:00	1	18	2	0	0	2	0	0	1	1	0	0	1	26
19:00	0	14	3	0	0	0	0	0	4	0	0	0	0	21
20:00	0	12	1	0	0	0	**1**	1	2	0	0	0	3	20
21:00	1	3	2	0	0	0	0	0	3	2	0	0	0	11
22:00	1	7	1	0	0	0	0	0	0	0	0	0	0	9
23:00	0	4	0	0	0	2	0	0	1	0	0	0	0	7
Day Total	30	713	358	1	42	56	2	25	61	29	19	0	35	1371
Percent	2.2%	52.0%	26.1%	0.1%	3.1%	4.1%	0.1%	1.8%	4.4%	2.1%	1.4%	0.0%	2.6%	
AM Peak	06:00	06:00	06:00		10:00	11:00	06:00	08:00	09:00	09:00	08:00		07:00	06:00
Vol.	5	103	53		6	7	1	4	6	4	2		4	171
PM Peak	17:00	15:00	14:00	15:00	14:00	13:00	20:00	12:00	12:00	13:00	14:00		17:00	14:00
Vol.	6	72	41	1	7	8	1	5	9	4	6		4	118

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Station ID: U80
GOODRICH DR from WILSON AVE to CHANDARIA PL
Date Start: 30-Sep-21
Date End: 06-Oct-21
Date Start: 30-Sep-21

EB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
10/01/21	0	0	0	0	0	0	0	0	1	0	0	0	1	2
01:00	0	0	0	0	0	1	0	0	2	2	0	0	2	7
02:00	0	0	0	0	0	3	0	0	2	0	0	0	1	6
03:00	0	3	1	0	1	1	0	0	0	0	0	0	1	7
04:00	0	10	2	0	0	2	0	0	2	0	0	0	0	16
05:00	0	25	12	0	0	1	0	0	0	0	0	0	0	38
06:00	2	**99**	**48**	0	2	1	0	**1**	1	2	**3**	**1**	0	**160**
07:00	**4**	50	21	0	1	1	0	0	3	0	0	0	2	82
08:00	3	37	23	0	4	**4**	0	1	**4**	2	3	1	**3**	85
09:00	0	26	27	0	1	4	**1**	1	1	1	0	0	3	65
10:00	1	27	25	0	5	3	1	0	2	**4**	1	0	0	69
11:00	1	55	31	0	**6**	3	0	0	3	2	1	0	1	103
12 PM	2	60	39	0	2	**6**	**1**	2	2	1	**4**	0	**4**	**123**
13:00	2	58	**45**	0	3	4	1	**3**	2	**2**	1	0	2	123
14:00	**4**	58	38	0	**4**	3	0	0	**4**	1	2	0	0	114
15:00	1	**68**	35	0	3	1	0	0	2	0	1	0	0	111
16:00	1	54	9	0	3	1	0	0	4	0	0	0	2	74
17:00	2	25	3	**1**	1	2	0	0	2	0	0	0	1	37
18:00	1	28	4	0	0	1	0	0	3	0	1	0	0	38
19:00	2	21	0	0	0	1	0	0	1	0	0	0	1	26
20:00	2	15	0	0	0	0	0	0	3	0	0	0	0	20
21:00	1	11	1	0	0	0	0	0	1	0	0	0	0	14
22:00	0	7	1	0	0	0	0	0	1	0	0	0	1	10
23:00	0	5	1	0	0	0	0	0	2	0	0	0	0	8
Day Total	29	742	366	1	36	43	4	8	48	17	17	2	25	1338
Percent	2.2%	55.5%	27.4%	0.1%	2.7%	3.2%	0.3%	0.6%	3.6%	1.3%	1.3%	0.1%	1.9%	
AM Peak	07:00	06:00	06:00		11:00	08:00	09:00	06:00	08:00	10:00	06:00	06:00	08:00	06:00
Vol.	4	99	48		6	4	1	1	4	4	3	1	3	160
PM Peak	14:00	15:00	13:00	17:00	14:00	12:00	12:00	13:00	14:00	13:00	12:00		12:00	12:00
Vol.	4	68	45	1	4	6	1	3	4	2	4		4	123

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Site Code: 10697
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GOODRICH DR from WILSON AVE to CHANDARIA PL
Date Start: 30-Sep-21
Date End: 06-Oct-21
Date Start: 30-Sep-21

EB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
10/02/21	0	1	0	0	0	0	0	0	**3**	0	0	0	0	4
01:00	0	2	0	0	0	0	0	0	1	0	0	0	0	3
02:00	0	1	0	0	0	0	0	0	1	0	0	0	1	3
03:00	0	1	1	0	**1**	0	0	0	0	0	0	0	0	3
04:00	0	4	1	0	1	0	0	0	1	0	0	0	0	7
05:00	0	2	1	0	0	0	0	0	0	0	0	0	0	3
06:00	**1**	10	0	0	0	0	0	0	0	0	0	0	0	11
07:00	0	4	1	0	1	0	0	0	0	0	0	0	**2**	8
08:00	0	4	**4**	0	1	**2**	0	0	2	0	0	0	0	13
09:00	0	6	4	0	1	0	0	0	3	0	0	0	0	14
10:00	0	13	2	0	1	0	0	0	2	0	0	0	0	18
11:00	0	**21**	3	0	0	0	0	**1**	1	0	**1**	0	0	**27**
12 PM	**1**	13	5	0	**2**	**1**	0	0	0	**1**	0	0	0	23
13:00	1	20	3	0	1	1	0	0	0	0	0	0	**1**	27
14:00	0	**26**	**6**	0	0	0	0	0	3	1	0	0	0	**36**
15:00	0	26	3	0	0	0	0	0	0	1	**1**	0	0	31
16:00	1	17	1	0	0	0	0	0	**4**	0	1	0	0	24
17:00	0	14	4	0	0	0	0	0	0	1	0	0	1	20
18:00	1	15	1	0	0	0	0	0	3	0	0	0	0	20
19:00	1	10	0	0	0	0	0	0	0	0	0	0	0	11
20:00	0	6	0	0	0	0	0	0	0	0	0	0	0	6
21:00	0	8	0	0	0	0	0	0	2	1	0	0	0	11
22:00	0	4	0	0	0	1	0	0	0	0	0	0	0	5
23:00	0	2	0	0	0	0	0	0	1	0	0	0	0	3
Day Total	6	230	40	0	9	5	0	1	27	5	3	0	5	331
Percent	1.8%	69.5%	12.1%	0.0%	2.7%	1.5%	0.0%	0.3%	8.2%	1.5%	0.9%	0.0%	1.5%	
AM Peak	06:00	11:00	08:00		03:00	08:00		11:00	00:00		11:00		07:00	11:00
Vol.	1	21	4		1	2		1	3		1		2	27
PM Peak	12:00	14:00	14:00		12:00	12:00			16:00	12:00	15:00		13:00	14:00
Vol.	1	26	6		2	1			4	1	1		1	36

Ontario Traffic, Inc.
17705 Leslie St., Unit 6
Newmarket, Ontario L3Y 3E3
Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 10697
Station ID: U80
GOODRICH DR from WILSON AVE to CHANDARIA PL
Date Start: 30-Sep-21
Date End: 06-Oct-21
Date Start: 30-Sep-21

EB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
10/03/21	0	2	0	0	0	0	0	**1**	0	0	0	0	0	3
01:00	0	2	0	0	0	**1**	0	0	0	0	0	0	0	3
02:00	0	2	0	0	0	1	0	0	1	0	0	0	0	4
03:00	0	1	0	0	0	0	0	0	1	0	0	0	0	2
04:00	0	7	1	0	0	0	0	0	0	0	0	0	0	8
05:00	0	2	2	0	0	0	0	0	1	0	0	0	0	5
06:00	0	10	1	0	0	0	0	0	0	0	0	0	1	12
07:00	0	1	**5**	0	0	0	0	0	1	0	0	0	0	7
08:00	0	3	1	0	0	0	0	0	1	0	0	0	0	5
09:00	**1**	5	0	0	**1**	1	0	0	0	0	0	0	0	8
10:00	0	7	2	0	0	0	**1**	0	0	0	0	0	**2**	12
11:00	0	**12**	3	0	0	1	0	0	**2**	0	0	0	0	**18**
12 PM	**2**	16	**4**	0	0	0	**1**	0	0	**2**	0	0	**1**	**26**
13:00	2	19	3	0	0	0	0	0	0	0	0	0	0	24
14:00	1	13	4	0	0	1	0	**1**	**1**	0	0	0	0	21
15:00	1	**22**	0	0	0	0	0	0	0	0	0	0	0	23
16:00	1	13	0	0	0	0	0	0	0	1	0	0	0	15
17:00	2	8	3	0	0	**2**	0	0	0	0	**1**	0	1	17
18:00	0	8	2	0	0	0	0	0	0	0	0	0	1	11
19:00	0	10	0	0	0	0	0	0	0	0	0	0	0	10
20:00	0	9	2	0	0	0	0	0	0	0	0	0	1	12
21:00	1	5	1	0	0	0	0	0	1	0	0	0	0	8
22:00	0	5	0	0	0	0	0	0	0	0	0	0	1	6
23:00	1	3	1	0	0	0	0	0	0	0	0	0	1	6
Day Total	12	185	35	0	1	7	2	2	9	3	1	0	9	266
Percent	4.5%	69.5%	13.2%	0.0%	0.4%	2.6%	0.8%	0.8%	3.4%	1.1%	0.4%	0.0%	3.4%	
AM Peak	09:00	11:00	07:00		09:00	01:00	10:00	00:00	11:00				10:00	11:00
Vol.	1	12	5		1	1	1	1	2				2	18
PM Peak	12:00	15:00	12:00			17:00	12:00	14:00	14:00	12:00	17:00		12:00	12:00
Vol.	2	22	4			2	1	1	1	2	1		1	26

Ontario Traffic, Inc.
17705 Leslie St., Unit 6
Newmarket, Ontario L3Y 3E3
Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 10697
Station ID: U80
GOODRICH DR from WILSON AVE to CHANDARIA PL
Date Start: 30-Sep-21
Date End: 06-Oct-21
Date Start: 30-Sep-21

EB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
10/04/21	0	1	1	0	0	0	0	0	0	0	0	**1**	0	3
01:00	0	0	1	0	0	0	0	0	1	0	0	0	2	4
02:00	0	1	0	0	0	1	0	0	2	0	0	0	0	4
03:00	0	0	2	0	0	2	0	0	3	1	0	0	2	10
04:00	2	8	1	0	1	0	0	0	1	0	0	0	2	15
05:00	2	29	14	0	0	1	0	0	0	**2**	0	0	**3**	51
06:00	**5**	**107**	**55**	0	1	1	0	**2**	0	1	**3**	0	2	**177**
07:00	2	64	42	0	2	2	**1**	2	3	1	0	0	3	122
08:00	0	50	30	0	1	**4**	0	1	2	0	0	0	2	90
09:00	0	25	18	0	**4**	2	0	0	**5**	0	0	0	1	55
10:00	1	24	33	**1**	4	3	0	1	5	1	1	0	2	76
11:00	1	28	28	0	4	3	0	2	3	0	1	1	1	72
12 PM	1	41	29	0	**4**	4	0	2	3	**3**	0	0	2	89
13:00	1	32	42	0	2	**5**	0	**4**	**4**	2	0	0	**3**	95
14:00	1	43	**46**	0	4	3	0	2	4	1	**1**	0	2	**107**
15:00	**3**	**59**	32	**1**	1	4	0	2	2	0	1	0	1	106
16:00	0	40	7	0	2	0	0	0	3	1	1	0	3	57
17:00	0	33	3	0	0	1	**1**	0	0	1	1	0	0	40
18:00	0	13	1	0	0	2	0	0	2	1	0	0	2	21
19:00	1	22	1	0	0	2	0	1	3	1	0	0	0	31
20:00	0	9	2	0	0	0	0	0	1	1	0	0	1	14
21:00	1	5	0	0	0	2	0	0	1	0	0	0	0	9
22:00	0	3	4	0	0	1	0	0	1	1	0	0	0	10
23:00	0	4	1	0	0	1	0	0	2	0	0	0	1	9
Day Total	21	641	393	2	30	44	2	19	51	18	9	2	35	1267
Percent	1.7%	50.6%	31.0%	0.2%	2.4%	3.5%	0.2%	1.5%	4.0%	1.4%	0.7%	0.2%	2.8%	
AM Peak	06:00	06:00	06:00	10:00	09:00	08:00	07:00	06:00	09:00	05:00	06:00	00:00	05:00	06:00
Vol.	5	107	55	1	4	4	1	2	5	2	3	1	3	177
PM Peak	15:00	15:00	14:00	15:00	12:00	13:00	17:00	13:00	13:00	12:00	14:00		13:00	14:00
Vol.	3	59	46	1	4	5	1	4	4	3	1		3	107

Ontario Traffic, Inc.
17705 Leslie St., Unit 6
Newmarket, Ontario L3Y 3E3
Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 10697
Station ID: U80
GOODRICH DR from WILSON AVE to CHANDARIA PL
Date Start: 30-Sep-21
Date End: 06-Oct-21
Date Start: 30-Sep-21

EB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
10/05/21	0	0	0	0	0	0	0	0	1	0	0	0	1	2
01:00	0	1	0	0	0	0	0	1	2	1	0	0	0	5
02:00	0	1	0	0	0	0	0	0	2	0	0	0	0	3
03:00	1	3	4	0	1	0	0	0	0	0	0	0	0	9
04:00	0	4	0	0	1	1	0	0	1	0	0	0	0	7
05:00	0	23	16	0	0	0	0	0	**3**	0	0	0	0	42
06:00	**3**	**114**	**64**	**1**	0	3	0	0	2	1	0	0	0	**188**
07:00	1	58	27	0	0	4	0	0	2	0	0	0	1	93
08:00	1	54	27	0	**4**	2	0	2	3	1	0	0	3	97
09:00	0	32	31	0	3	7	**1**	1	2	**5**	0	0	2	84
10:00	0	21	23	0	2	4	0	2	2	1	0	0	**4**	59
11:00	0	33	36	0	1	**10**	1	**4**	1	1	**2**	0	1	90
12 PM	0	33	28	0	1	**10**	0	1	**4**	0	0	0	**4**	81
13:00	1	44	**43**	0	0	7	**1**	**3**	1	**1**	0	0	3	**104**
14:00	2	36	41	0	**10**	4	0	0	4	1	**2**	0	0	100
15:00	1	**62**	24	0	1	3	0	1	1	0	2	0	1	96
16:00	**4**	39	13	0	0	2	0	0	3	0	0	0	3	64
17:00	3	28	7	0	0	2	0	2	3	0	2	0	2	49
18:00	2	17	6	0	1	1	0	0	2	1	1	**1**	0	32
19:00	1	14	3	0	1	2	0	0	1	0	0	0	0	22
20:00	0	7	2	0	0	1	0	0	3	1	0	0	1	15
21:00	1	5	1	0	1	0	0	0	2	0	0	0	1	11
22:00	0	3	0	0	0	0	0	0	0	1	0	0	0	4
23:00	0	2	0	0	0	1	0	0	0	0	0	0	1	4
Day Total	21	634	396	1	27	64	3	17	45	15	9	1	28	1261
Percent	1.7%	50.3%	31.4%	0.1%	2.1%	5.1%	0.2%	1.3%	3.6%	1.2%	0.7%	0.1%	2.2%	
AM Peak	06:00	06:00	06:00	06:00	08:00	11:00	09:00	11:00	05:00	09:00	11:00		10:00	06:00
Vol.	3	114	64	1	4	10	1	4	3	5	2		4	188
PM Peak	16:00	15:00	13:00		14:00	12:00	13:00	13:00	12:00	13:00	14:00	18:00	12:00	13:00
Vol.	4	62	43		10	10	1	3	4	1	2	1	4	104

Ontario Traffic, Inc.
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Newmarket, Ontario L3Y 3E3
Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 10697
Station ID: U80
GOODRICH DR from WILSON AVE to CHANDARIA PL
Date Start: 30-Sep-21
Date End: 06-Oct-21
Date Start: 30-Sep-21

EB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
10/06/21	0	0	0	0	0	0	0	0	0	1	0	0	0	1
01:00	0	0	0	0	0	0	0	0	2	0	0	**1**	0	3
02:00	0	2	0	0	0	0	0	0	0	2	0	0	2	6
03:00	0	0	3	0	0	1	0	0	0	0	0	0	0	4
04:00	1	7	0	0	1	0	0	0	0	0	0	0	1	10
05:00	1	24	14	0	0	1	0	0	2	0	0	0	1	43
06:00	**5**	**114**	**59**	0	0	1	0	1	2	0	**2**	0	1	**185**
07:00	0	63	29	0	2	3	0	0	2	2	1	0	2	104
08:00	0	47	33	**1**	**6**	**7**	**1**	**2**	4	**4**	1	0	2	108
09:00	0	31	26	0	1	4	0	1	**5**	1	0	0	2	71
10:00	1	29	26	0	3	4	0	0	2	1	1	0	1	68
11:00	1	39	30	0	2	5	0	2	4	4	0	0	**3**	90
12 PM	1	43	27	0	2	2	0	0	3	**1**	0	0	**4**	83
13:00	2	47	**48**	0	3	**5**	0	**4**	**5**	1	0	0	3	**118**
14:00	1	30	37	**1**	**4**	5	0	1	2	1	1	0	1	84
15:00	**3**	**67**	22	0	3	4	0	0	3	0	**2**	0	0	104
16:00	2	49	14	0	0	4	0	2	5	0	0	0	1	77
17:00	1	27	7	0	1	1	0	0	1	0	0	0	3	41
18:00	1	13	4	0	0	1	0	0	3	1	0	0	2	25
19:00	1	15	0	0	0	2	0	0	1	0	0	0	2	21
20:00	2	9	2	0	0	0	0	0	2	0	0	0	0	15
21:00	0	2	0	0	0	1	0	0	1	1	1	0	0	6
22:00	0	6	2	0	1	0	0	0	4	0	0	0	0	13
23:00	0	6	0	0	0	1	0	0	0	1	0	0	1	9
Day Total	23	670	383	2	29	52	1	13	53	21	9	1	32	1289
Percent	1.8%	52.0%	29.7%	0.2%	2.2%	4.0%	0.1%	1.0%	4.1%	1.6%	0.7%	0.1%	2.5%	
AM Peak	06:00	06:00	06:00	08:00	08:00	08:00	08:00	08:00	09:00	08:00	06:00	01:00	11:00	06:00
Vol.	5	114	59	1	6	7	1	2	5	4	2	1	3	185
PM Peak	15:00	15:00	13:00	14:00	14:00	13:00		13:00	13:00	12:00	15:00		12:00	13:00
Vol.	3	67	48	1	4	5		4	5	1	2		4	118
Grand Total	142	3815	1971	7	174	271	14	85	294	108	67	6	169	7123
Percent	2.0%	53.6%	27.7%	0.1%	2.4%	3.8%	0.2%	1.2%	4.1%	1.5%	0.9%	0.1%	2.4%	

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Site Code: 10697
Station ID: U80
GOODRICH DR from WILSON AVE to CHANDARIA PL
Date Start: 30-Sep-21
Date End: 06-Oct-21
Date Start: 30-Sep-21

WB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
09/30/21	0	1	0	0	0	0	0	0	1	0	0	0	0	2
01:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
02:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
03:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1
04:00	0	0	0	0	0	**1**	0	0	0	0	0	0	0	1
05:00	0	3	1	0	0	0	0	0	0	0	0	0	0	4
06:00	0	15	2	0	0	0	0	0	1	**1**	0	0	0	19
07:00	0	13	4	0	0	1	0	0	0	0	0	0	**1**	19
08:00	0	26	10	0	**2**	0	0	0	1	0	0	0	0	39
09:00	0	14	13	0	1	1	**1**	0	0	0	0	0	0	30
10:00	**1**	20	6	0	0	0	0	0	**5**	0	0	0	0	32
11:00	0	**44**	**16**	0	2	1	0	**1**	1	1	0	0	1	**67**
12 PM	0	38	**15**	0	1	0	0	**1**	0	1	0	0	0	56
13:00	0	15	5	0	**2**	**2**	0	0	**3**	**2**	0	0	**1**	30
14:00	0	**41**	12	0	1	0	**1**	1	2	1	0	0	0	**59**
15:00	**2**	39	13	0	1	0	0	0	1	0	0	0	0	56
16:00	1	36	7	0	0	0	0	0	0	0	**1**	0	0	45
17:00	0	27	4	0	1	1	0	0	0	0	0	0	0	33
18:00	0	14	2	0	0	0	0	0	2	0	0	0	0	18
19:00	0	16	1	0	0	0	0	0	0	0	0	0	0	17
20:00	0	8	0	0	0	0	0	0	1	0	0	0	0	9
21:00	0	6	1	0	0	1	0	0	0	0	0	0	0	8
22:00	1	4	0	0	0	0	0	0	0	0	0	0	0	5
23:00	0	5	1	0	0	0	0	0	1	0	0	0	0	7
Day Total	5	389	113	0	12	8	2	3	19	6	1	0	3	561
Percent	0.9%	69.3%	20.1%	0.0%	2.1%	1.4%	0.4%	0.5%	3.4%	1.1%	0.2%	0.0%	0.5%	
AM Peak	10:00	11:00	11:00		08:00	04:00	09:00	11:00	10:00	06:00			07:00	11:00
Vol.	1	44	16		2	1	1	1	5	1			1	67
PM Peak	15:00	14:00	12:00		13:00	13:00	14:00	12:00	13:00	13:00	16:00		13:00	14:00
Vol.	2	41	15		2	2	1	1	3	2	1		1	59

Ontario Traffic, Inc.
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Site Code: 10697
Station ID: U80
GOODRICH DR from WILSON AVE to CHANDARIA PL
Date Start: 30-Sep-21
Date End: 06-Oct-21
Date Start: 30-Sep-21

WB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
10/01/21	0	2	0	0	0	0	0	0	0	0	0	0	0	2
01:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
02:00	0	0	0	0	0	0	0	0	1	0	0	0	0	1
03:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
06:00	0	14	2	0	0	0	0	0	0	0	0	0	0	16
07:00	0	8	7	0	0	**2**	0	0	2	**1**	**1**	0	0	21
08:00	0	21	8	0	**2**	0	0	**1**	2	0	1	0	0	35
09:00	**1**	15	**13**	0	1	1	0	0	0	1	1	0	0	33
10:00	0	16	7	0	1	1	0	1	**3**	1	1	0	0	31
11:00	1	**34**	10	0	0	0	0	1	0	0	0	0	0	**46**
12 PM	0	52	15	0	0	0	0	0	0	0	**1**	0	0	68
13:00	0	23	15	0	**1**	0	0	0	0	0	0	0	**2**	41
14:00	0	48	**16**	0	0	0	0	**1**	**2**	0	1	0	0	68
15:00	0	**56**	12	0	1	0	0	0	2	0	1	0	0	**72**
16:00	0	29	5	0	0	0	0	1	1	0	0	0	0	36
17:00	0	24	1	0	0	0	0	0	0	0	0	0	0	25
18:00	0	18	4	0	0	**1**	0	0	0	0	1	0	0	24
19:00	0	10	4	0	0	0	0	0	1	0	0	0	0	15
20:00	0	12	0	0	0	0	0	0	1	0	0	0	0	13
21:00	0	11	0	0	0	0	0	0	0	0	0	0	0	11
22:00	0	4	0	0	0	1	0	0	0	0	0	0	0	5
23:00	0	7	0	0	0	0	0	0	2	0	0	0	0	9
Day Total	2	407	120	0	7	6	0	5	17	3	8	0	2	577
Percent	0.3%	70.5%	20.8%	0.0%	1.2%	1.0%	0.0%	0.9%	2.9%	0.5%	1.4%	0.0%	0.3%	
AM Peak	09:00	11:00	09:00		08:00	07:00		08:00	10:00	07:00	07:00			11:00
Vol.	1	34	13		2	2		1	3	1	1			46
PM Peak		15:00	14:00		13:00	18:00		14:00	14:00		12:00		13:00	15:00
Vol.		56	16		1	1		1	2		1		2	72

Ontario Traffic, Inc.
17705 Leslie St., Unit 6
Newmarket, Ontario L3Y 3E3
Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 10697
Station ID: U80
GOODRICH DR from WILSON AVE to CHANDARIA PL
Date Start: 30-Sep-21
Date End: 06-Oct-21
Date Start: 30-Sep-21

WB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
10/02/21	0	2	0	0	0	0	0	0	0	0	0	0	0	2
01:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
06:00	0	2	0	0	**1**	0	0	0	0	0	0	0	0	3
07:00	0	11	0	0	0	0	0	0	**1**	0	0	0	0	12
08:00	0	6	1	0	0	0	0	0	0	0	0	0	0	7
09:00	0	15	0	0	0	0	0	0	0	0	0	0	0	15
10:00	0	7	1	0	0	0	0	0	1	0	0	0	0	9
11:00	0	**19**	**2**	0	0	0	0	0	1	0	0	0	0	**22**
12 PM	0	**18**	**6**	0	0	0	0	0	0	**1**	0	0	0	**25**
13:00	0	15	3	0	0	0	0	0	0	0	0	0	0	18
14:00	0	17	3	0	0	0	0	0	0	0	0	0	0	20
15:00	0	15	3	0	0	0	0	0	**1**	1	0	0	0	20
16:00	0	11	0	0	0	0	0	0	0	0	0	0	0	11
17:00	**1**	11	5	0	0	**1**	0	0	0	0	0	0	0	18
18:00	0	13	1	0	0	0	0	0	1	0	0	0	0	15
19:00	0	7	1	0	0	0	0	0	0	0	0	0	0	8
20:00	0	3	1	0	0	0	0	0	0	0	0	0	0	4
21:00	0	7	2	0	0	0	0	0	0	0	0	0	0	9
22:00	0	7	0	0	0	0	0	0	0	0	0	0	0	7
23:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Day Total	1	192	29	0	1	1	0	0	5	2	0	0	0	231
Percent	0.4%	83.1%	12.6%	0.0%	0.4%	0.4%	0.0%	0.0%	2.2%	0.9%	0.0%	0.0%	0.0%	
AM Peak		11:00	11:00		06:00				07:00					11:00
Vol.		19	2		1				1					22
PM Peak	17:00	12:00	12:00			17:00			15:00	12:00				12:00
Vol.	1	18	6			1			1	1				25

Ontario Traffic, Inc.
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Site Code: 10697
Station ID: U80
GOODRICH DR from WILSON AVE to CHANDARIA PL
Date Start: 30-Sep-21
Date End: 06-Oct-21
Date Start: 30-Sep-21

WB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
10/03/21	0	2	0	0	0	0	0	0	0	0	0	0	0	2
01:00	0	2	1	0	0	0	0	0	0	0	0	0	0	3
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
06:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
07:00	0	1	1	0	0	0	0	0	0	0	0	0	0	2
08:00	0	4	0	0	0	0	0	0	0	0	0	0	0	4
09:00	0	10	0	0	0	0	0	0	0	0	0	0	0	10
10:00	0	7	1	0	0	**1**	0	0	0	0	0	0	0	9
11:00	0	**14**	**2**	0	0	0	0	0	**1**	0	0	0	0	**17**
12 PM	0	10	1	0	0	0	0	0	0	0	0	0	0	11
13:00	0	12	**3**	0	0	0	0	0	**1**	0	0	0	0	**16**
14:00	0	9	0	0	0	0	0	0	0	0	0	0	0	9
15:00	0	13	0	0	0	0	0	0	0	0	**1**	0	0	14
16:00	0	**14**	2	0	0	0	0	0	0	0	0	0	0	16
17:00	0	4	2	0	0	0	0	0	0	0	0	0	0	6
18:00	0	14	0	0	0	**1**	0	0	0	0	0	0	0	15
19:00	0	11	0	0	0	0	0	0	0	0	0	0	0	11
20:00	0	10	0	0	0	0	0	0	0	0	0	0	0	10
21:00	0	6	0	0	0	0	0	0	0	0	0	0	0	6
22:00	0	4	0	0	0	0	0	0	0	0	0	0	0	4
23:00	0	5	0	0	0	0	0	0	1	0	0	0	0	6
Day Total	0	157	13	0	0	2	0	0	3	0	1	0	0	176
Percent	0.0%	89.2%	7.4%	0.0%	0.0%	1.1%	0.0%	0.0%	1.7%	0.0%	0.6%	0.0%	0.0%	
AM Peak		11:00	11:00			10:00			11:00					11:00
Vol.		14	2			1			1					17
PM Peak		16:00	13:00			18:00			13:00		15:00			13:00
Vol.		14	3			1			1		1			16

Ontario Traffic, Inc.
17705 Leslie St., Unit 6
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Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 10697
Station ID: U80
GOODRICH DR from WILSON AVE to CHANDARIA PL
Date Start: 30-Sep-21
Date End: 06-Oct-21
Date Start: 30-Sep-21

WB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
10/04/21	0	4	0	0	0	0	0	0	0	0	0	0	0	4
01:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1
04:00	0	1	0	0	0	0	0	0	1	0	0	0	0	2
05:00	0	6	1	0	0	1	0	0	0	0	0	0	**1**	9
06:00	0	12	4	0	0	0	0	0	0	0	0	0	0	16
07:00	0	14	8	0	0	**2**	**1**	0	**2**	0	0	0	0	27
08:00	0	**23**	9	0	**2**	0	0	2	0	0	0	**1**	1	**38**
09:00	**1**	17	**15**	0	1	2	0	0	0	0	0	0	0	36
10:00	0	17	7	0	2	0	0	**3**	2	**1**	0	0	0	32
11:00	0	20	13	0	2	0	0	0	0	0	0	0	0	35
12 PM	0	30	17	0	0	**1**	0	0	0	1	0	0	0	49
13:00	0	23	8	0	1	0	0	0	0	0	1	0	0	33
14:00	0	41	**33**	0	0	0	0	**1**	**2**	**2**	**2**	0	0	**81**
15:00	0	**56**	20	0	**2**	0	0	0	0	1	0	0	0	79
16:00	0	25	9	0	0	0	0	0	1	0	0	0	**1**	36
17:00	0	24	5	0	0	0	0	0	1	0	0	0	0	30
18:00	**1**	18	1	0	0	0	0	0	0	0	0	0	0	20
19:00	0	11	1	0	0	0	0	0	0	0	0	0	0	12
20:00	0	13	0	0	0	0	0	0	0	0	0	0	1	14
21:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
22:00	0	4	0	0	0	0	0	0	0	0	0	0	0	4
23:00	0	4	3	0	0	0	0	0	1	0	0	0	0	8
Day Total	2	368	154	0	11	6	1	6	10	5	3	1	4	571
Percent	0.4%	64.4%	27.0%	0.0%	1.9%	1.1%	0.2%	1.1%	1.8%	0.9%	0.5%	0.2%	0.7%	
AM Peak	09:00	08:00	09:00		08:00	07:00	07:00	10:00	07:00	10:00		08:00	05:00	08:00
Vol.	1	23	15		2	2	1	3	2	1		1	1	38
PM Peak	18:00	15:00	14:00		15:00	12:00		14:00	14:00	14:00	14:00		16:00	14:00
Vol.	1	56	33		2	1		1	2	2	2		1	81

Ontario Traffic, Inc.
17705 Leslie St., Unit 6
Newmarket, Ontario L3Y 3E3
Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 10697
Station ID: U80
GOODRICH DR from WILSON AVE to CHANDARIA PL
Date Start: 30-Sep-21
Date End: 06-Oct-21
Date Start: 30-Sep-21

WB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
10/05/21	0	1	0	0	0	0	0	0	0	0	0	0	0	1
01:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
02:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	1	0	0	0	1	0	0	0	0	2
05:00	0	7	1	0	0	0	0	0	0	0	0	0	0	8
06:00	**1**	15	1	0	0	0	0	1	0	0	0	0	0	18
07:00	0	14	13	0	0	0	0	0	0	0	0	0	0	27
08:00	0	**21**	6	0	1	2	0	0	**3**	0	0	**1**	0	34
09:00	1	21	8	0	0	1	0	0	0	0	0	0	0	31
10:00	0	16	**14**	0	**4**	**3**	0	1	0	0	**1**	0	0	**39**
11:00	0	21	11	0	0	2	0	**2**	2	**1**	0	0	0	39
12 PM	0	37	16	0	1	0	0	**1**	1	0	0	0	0	56
13:00	0	23	13	0	**3**	0	0	1	0	**1**	0	0	**1**	42
14:00	**1**	42	**22**	0	0	**1**	0	0	1	0	0	0	0	67
15:00	0	**50**	14	0	2	0	0	1	0	0	0	0	1	**68**
16:00	0	37	5	0	0	0	0	0	0	1	**2**	0	0	45
17:00	0	26	4	0	0	0	0	0	0	0	0	0	0	30
18:00	0	17	1	0	0	0	0	0	1	0	0	0	1	20
19:00	0	11	4	0	0	0	0	0	0	0	0	0	0	15
20:00	0	7	0	0	0	0	0	0	0	0	0	0	0	7
21:00	0	12	2	0	0	0	0	0	0	0	0	0	0	14
22:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
23:00	0	4	0	0	0	0	0	0	**2**	0	0	0	0	6
Day Total	3	387	136	0	12	9	0	7	11	3	3	1	3	575
Percent	0.5%	67.3%	23.7%	0.0%	2.1%	1.6%	0.0%	1.2%	1.9%	0.5%	0.5%	0.2%	0.5%	
AM Peak	06:00	08:00	10:00		10:00	10:00		11:00	08:00	11:00	10:00	08:00		10:00
Vol.	1	21	14		4	3		2	3	1	1	1		39
PM Peak	14:00	15:00	14:00		13:00	14:00		12:00	23:00	13:00	16:00		13:00	15:00
Vol.	1	50	22		3	1		1	2	1	2		1	68

Ontario Traffic, Inc.
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Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 10697
Station ID: U80
GOODRICH DR from WILSON AVE to CHANDARIA PL
Date Start: 30-Sep-21
Date End: 06-Oct-21
Date Start: 30-Sep-21

WB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
10/06/21	0	3	0	0	0	0	0	0	0	0	0	0	0	3
01:00	0	1	1	0	0	0	0	0	0	0	0	0	0	2
02:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	1	0	0	1	0	0	0	0	0	0	0	0	2
05:00	0	3	1	0	0	0	0	0	0	0	0	0	0	4
06:00	0	17	0	0	0	0	0	0	1	0	**2**	0	0	20
07:00	0	13	6	0	0	0	**1**	0	1	0	1	0	**1**	23
08:00	0	15	**12**	0	**4**	0	1	**1**	0	**1**	1	0	1	**36**
09:00	0	15	5	0	0	**2**	0	0	2	1	0	0	1	26
10:00	0	17	9	0	0	2	1	0	**3**	1	0	0	0	33
11:00	0	**26**	7	0	0	0	0	1	1	0	0	0	0	35
12 PM	0	39	19	0	1	**1**	0	0	1	0	1	0	0	62
13:00	0	22	7	0	**2**	1	0	0	**3**	**1**	1	0	1	38
14:00	0	**53**	**25**	**1**	1	0	0	**3**	3	0	1	0	**2**	**89**
15:00	0	37	13	0	1	0	0	0	2	0	**2**	0	0	55
16:00	0	26	9	0	0	1	0	2	1	0	0	0	0	39
17:00	0	31	3	0	0	0	0	0	0	0	1	0	0	35
18:00	0	18	1	0	0	0	0	0	0	0	0	0	0	19
19:00	0	9	1	0	0	1	0	0	0	0	0	0	0	11
20:00	**1**	5	0	0	0	0	0	0	0	0	0	0	0	6
21:00	0	6	0	0	0	0	0	0	0	0	0	0	0	6
22:00	0	3	3	0	0	0	0	0	0	0	0	0	0	6
23:00	0	8	1	0	1	0	0	1	0	0	0	0	0	11
Day Total	1	370	123	1	11	8	3	8	18	4	10	0	6	563
Percent	0.2%	65.7%	21.8%	0.2%	2.0%	1.4%	0.5%	1.4%	3.2%	0.7%	1.8%	0.0%	1.1%	
AM Peak		11:00	08:00		08:00	09:00	07:00	08:00	10:00	08:00	06:00		07:00	08:00
Vol.		26	12		4	2	1	1	3	1	2		1	36
PM Peak	20:00	14:00	14:00	14:00	13:00	12:00		14:00	13:00	13:00	15:00		14:00	14:00
Vol.	1	53	25	1	2	1		3	3	1	2		2	89
Grand Total	14	2270	688	1	54	40	6	29	83	23	26	2	18	3254
Percent	0.4%	69.8%	21.1%	0.0%	1.7%	1.2%	0.2%	0.9%	2.6%	0.7%	0.8%	0.1%	0.6%	

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Site Code: 10697
Station ID: U80
GOODRICH DR from WILSON AVE to CHANDARIA PL
Date Start: 30-Sep-21
Date End: 06-Oct-21
Date Start: 30-Sep-21

EB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Avera
09/30 /21	0	0	0	0	0	0	0	0	1	0	1	2	1	0	0	0	0	0	0	0	0	0	0	5	0
01:00	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	2	0
02:00	0	0	0	0	0	0	0	0	2	1	2	0	0	0	0	0	0	0	0	0	0	0	0	5	0
03:00	0	0	0	0	0	0	0	1	1	2	2	0	0	0	1	1	0	0	0	0	0	0	0	8	0
04:00	0	0	0	0	0	0	1	1	0	3	6	3	2	1	0	0	0	0	0	0	0	0	0	17	1
05:00	0	0	0	0	0	0	4	11	13	7	7	4	3	0	0	0	0	0	0	0	0	0	0	49	2
06:00	0	0	0	0	0	1	13	45	42	30	19	11	5	5	0	0	0	0	0	0	0	0	0	171	7
07:00	0	0	0	0	0	1	4	24	27	16	12	3	2	0	1	1	0	0	0	0	0	0	0	91	4
08:00	0	0	0	0	1	0	6	11	13	18	15	8	4	1	2	0	0	0	0	0	0	0	0	79	3
09:00	0	0	0	0	0	0	5	9	15	14	9	5	2	2	3	2	0	0	0	0	0	0	0	66	3
10:00	0	0	0	0	0	1	5	10	13	18	11	12	4	3	1	1	0	0	0	0	0	0	0	79	3
11:00	0	0	0	0	0	1	6	13	18	27	14	14	9	1	1	0	0	0	0	0	0	0	0	104	5
12 PM	0	0	0	0	0	0	0	13	15	24	32	20	4	3	2	0	1	0	0	0	0	0	0	114	5
13:00	0	0	0	0	1	1	6	15	10	20	24	8	4	5	4	0	0	1	0	0	0	0	0	99	4
14:00	0	0	0	0	0	3	1	9	31	26	22	11	8	4	1	1	1	0	0	0	0	0	0	118	5
15:00	0	0	0	0	0	4	8	8	21	23	23	13	8	3	2	0	2	0	0	0	0	0	0	115	5
16:00	0	0	0	0	1	2	6	6	7	9	12	15	10	8	2	3	0	1	0	0	0	0	0	82	4
17:00	0	0	0	0	0	0	3	6	2	6	10	20	15	7	0	1	1	2	0	0	0	0	0	73	3
18:00	0	0	0	0	0	0	1	3	3	3	6	3	3	2	1	0	0	1	0	0	0	0	0	26	1
19:00	0	0	0	0	0	0	2	1	4	3	5	1	4	1	0	0	0	0	0	0	0	0	0	21	1
20:00	0	0	0	0	0	1	0	2	2	5	1	4	3	0	0	0	1	0	1	0	0	0	0	20	1
21:00	0	0	0	0	0	0	0	1	1	2	3	3	1	0	0	0	0	0	0	0	0	0	0	11	0
22:00	0	0	0	0	0	0	1	0	0	2	2	3	1	0	0	0	0	0	0	0	0	0	0	9	0
23:00	0	0	0	0	0	0	0	0	1	0	3	1	1	1	0	0	0	0	0	0	0	0	0	7	0
Percent	0.0%	0.0%	0.0%	0.0%	0.2%	1.2%	5.3%	13.8 %	17.7 %	18.9 %	17.6 %	12.0 %	6.9%	3.4%	1.5%	0.8%	0.4%	0.4%	0.1%	0.0%	0.0%	0.0%	0.0%		
AM Peak					08:00	01:00	06:00	06:00	06:00	06:00	06:00	11:00	11:00	06:00	09:00	09:00								06:00	
Vol.					1	1	13	45	42	30	19	14	9	5	3	2								171	
PM Peak					13:00	15:00	15:00	13:00	14:00	14:00	12:00	12:00	17:00	16:00	13:00	16:00	15:00	17:00	20:00					14:00	
Vol.					1	4	8	15	31	26	32	20	15	8	4	3	2	2	1					118	

Ontario Traffic, Inc.
17705 Leslie St., Unit 6
Newmarket, Ontario L3Y 3E3
Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 10697
Station ID: U80
GOODRICH DR from WILSON AVE to CHANDARIA PL
Date Start: 30-Sep-21
Date End: 06-Oct-21
Date Start: 30-Sep-21

EB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Avera
10/01 /21	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2	0
01:00	0	0	0	0	0	0	0	1	2	1	2	1	0	0	0	0	0	0	0	0	0	0	0	7	0
02:00	0	0	0	0	0	0	0	1	4	0	1	0	0	0	0	0	0	0	0	0	0	0	0	6	0
03:00	0	0	0	0	0	0	0	0	3	2	0	1	1	0	0	0	0	0	0	0	0	0	0	7	0
04:00	0	0	0	0	0	0	0	1	1	4	5	3	2	0	0	0	0	0	0	0	0	0	0	16	1
05:00	0	0	0	0	0	0	2	6	12	6	5	5	1	1	0	0	0	0	0	0	0	0	0	38	2
06:00	0	0	0	0	0	0	8	32	51	25	21	13	5	3	2	0	0	0	0	0	0	0	0	160	7
07:00	0	0	0	0	1	0	14	19	16	10	13	5	2	1	0	1	0	0	0	0	0	0	0	82	4
08:00	0	0	0	0	2	2	2	7	13	28	19	8	3	0	1	0	0	0	0	0	0	0	0	85	4
09:00	0	1	0	1	0	0	0	7	12	8	15	14	5	0	1	0	1	0	0	0	0	0	0	65	3
10:00	0	0	0	1	1	0	3	3	15	13	17	5	8	2	1	0	0	0	0	0	0	0	0	69	3
11:00	0	1	0	0	2	2	4	9	21	15	17	11	16	3	2	0	0	0	0	0	0	0	0	103	4
12 PM	0	0	0	1	0	1	4	11	22	25	21	16	13	3	4	2	0	0	0	0	0	0	0	123	5
13:00	0	0	0	0	0	0	2	9	14	24	23	25	17	3	4	1	0	1	0	0	0	0	0	123	5
14:00	0	0	1	1	0	2	2	8	17	18	32	16	9	4	1	1	1	1	0	0	0	0	0	114	5
15:00	0	0	0	0	0	0	1	10	7	16	16	32	13	7	6	1	2	0	0	0	0	0	0	111	5
16:00	0	0	0	0	0	2	5	8	7	7	12	13	10	9	0	0	1	0	0	0	0	0	0	74	3
17:00	0	0	0	0	1	2	2	1	2	5	3	9	9	1	1	0	1	0	0	0	0	0	0	37	2
18:00	0	0	0	0	0	1	0	2	1	4	10	7	7	4	1	0	1	0	0	0	0	0	0	38	2
19:00	0	0	0	0	0	0	1	2	0	3	7	3	2	6	2	0	0	0	0	0	0	0	0	26	1
20:00	0	0	0	1	0	0	0	2	1	6	1	3	4	1	0	1	0	0	0	0	0	0	0	20	1
21:00	0	0	0	0	0	1	0	1	2	4	2	3	1	0	0	0	0	0	0	0	0	0	0	14	1
22:00	0	0	0	0	0	0	0	1	1	2	1	3	2	0	0	0	0	0	0	0	0	0	0	10	0
23:00	0	0	0	0	0	1	1	0	1	0	1	0	3	1	0	0	0	0	0	0	0	0	0	8	0
Percent	0.0%	0.1%	0.1%	0.4%	0.5%	1.0%	3.8%	10.5 %	16.9 %	16.9 %	18.3 %	14.6 %	9.9%	3.7%	1.9%	0.5%	0.5%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%		
AM Peak		09:00		09:00	08:00	08:00	07:00	06:00	06:00	08:00	06:00	09:00	11:00	06:00	06:00	07:00	09:00							06:00	
Vol.		1		1	2	2	14	32	51	28	21	14	16	3	2	1	1							160	
PM Peak			14:00	12:00	17:00	14:00	16:00	12:00	12:00	12:00	14:00	15:00	13:00	16:00	15:00	12:00	15:00	13:00						12:00	
Vol.			1	1	1	2	5	11	22	25	32	32	17	9	6	2	2	1						123	

Ontario Traffic, Inc.
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GOODRICH DR from WILSON AVE to CHANDARIA PL
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EB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Avera
10/02 /21	0	0	0	0	0	0	0	0	0	1	2	0	0	1	0	0	0	0	0	0	0	0	0	4	0
01:00	0	0	0	0	0	0	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3	0
02:00	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	3	0
03:00	0	0	0	0	0	0	0	0	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	3	0
04:00	0	0	0	0	0	0	0	0	0	1	2	4	0	0	0	0	0	0	0	0	0	0	0	7	0
05:00	0	0	0	0	0	0	0	0	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	3	0
06:00	0	0	0	0	0	0	1	1	4	0	1	2	1	0	0	0	0	0	1	0	0	0	0	11	0
07:00	0	0	0	0	0	0	0	1	2	1	1	2	0	0	1	0	0	0	0	0	0	0	0	8	0
08:00	0	0	0	0	0	0	1	0	0	2	6	1	2	1	0	0	0	0	0	0	0	0	0	13	1
09:00	0	0	0	0	0	0	0	2	2	2	2	2	2	1	1	0	0	0	0	0	0	0	0	14	1
10:00	0	0	0	0	0	0	0	0	4	1	4	4	2	1	1	1	0	0	0	0	0	0	0	18	1
11:00	0	0	0	0	0	0	0	0	4	4	7	9	2	1	0	0	0	0	0	0	0	0	0	27	1
12 PM	0	0	0	0	0	1	1	2	1	2	0	9	4	2	1	0	0	0	0	0	0	0	0	23	1
13:00	0	0	0	0	0	0	0	1	1	3	3	10	5	2	1	0	1	0	0	0	0	0	0	27	1
14:00	0	0	0	0	0	0	0	1	4	4	5	8	9	5	0	0	0	0	0	0	0	0	0	36	2
15:00	0	0	0	0	0	0	0	1	0	5	5	9	6	4	1	0	0	0	0	0	0	0	0	31	1
16:00	0	0	0	0	0	0	0	1	2	4	5	2	2	5	2	0	1	0	0	0	0	0	0	24	1
17:00	0	0	0	0	0	0	0	2	3	1	3	3	3	4	1	0	0	0	0	0	0	0	0	20	1
18:00	0	0	0	0	0	0	0	1	4	4	3	5	0	2	1	0	0	0	0	0	0	0	0	20	1
19:00	0	0	0	0	0	0	0	0	1	2	2	4	0	2	0	0	0	0	0	0	0	0	0	11	0
20:00	0	0	0	0	0	0	0	0	2	0	3	1	0	0	0	0	0	0	0	0	0	0	0	6	0
21:00	0	0	1	0	1	0	1	1	1	0	2	1	1	1	1	0	0	0	0	0	0	0	0	11	0
22:00	0	0	0	0	0	1	0	0	1	0	0	1	0	2	0	0	0	0	0	0	0	0	0	5	0
23:00	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0
Percent	0.0%	0.0%	0.3%	0.0%	0.3%	0.6%	1.5%	4.5%	11.8 %	12.1 %	17.5 %	23.9 %	12.4 %	10.6 %	3.3%	0.3%	0.6%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%		
AM Peak							01:00	09:00	06:00	11:00	11:00	11:00	08:00	00:00	07:00	10:00			06:00					11:00	
Vol.							1	2	4	4	7	9	2	1	1	1			1					27	
PM Peak			21:00		21:00	12:00	12:00	12:00	14:00	15:00	14:00	13:00	14:00	14:00	16:00		13:00							14:00	
Vol.			1		1	1	1	2	4	5	5	10	9	5	2		1							36	

Ontario Traffic, Inc.
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GOODRICH DR from WILSON AVE to CHANDARIA PL
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EB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Avera
10/03 /21	0	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0	0	0	0	0	0	0	0	3	0
01:00	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	3	0
02:00	0	0	0	0	0	1	0	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	4	0
03:00	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2	0
04:00	0	0	0	0	0	0	0	1	0	2	3	1	0	0	0	1	0	0	0	0	0	0	0	8	0
05:00	0	0	0	0	0	0	0	0	0	1	2	1	1	0	0	0	0	0	0	0	0	0	0	5	0
06:00	0	0	0	0	0	0	0	1	5	3	2	1	0	0	0	0	0	0	0	0	0	0	0	12	1
07:00	0	0	0	0	0	0	0	3	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	7	0
08:00	0	0	0	0	0	0	0	0	1	2	1	0	1	0	0	0	0	0	0	0	0	0	0	5	0
09:00	0	0	0	0	0	0	0	0	2	2	1	0	3	0	0	0	0	0	0	0	0	0	0	8	0
10:00	0	0	0	0	0	0	0	0	5	1	2	3	1	0	0	0	0	0	0	0	0	0	0	12	1
11:00	0	0	0	0	1	0	0	0	1	4	5	5	1	1	0	0	0	0	0	0	0	0	0	18	1
12 PM	0	0	0	0	0	1	0	2	3	5	5	4	3	1	0	2	0	0	0	0	0	0	0	26	1
13:00	0	0	0	0	0	0	0	1	2	3	6	5	5	1	1	0	0	0	0	0	0	0	0	24	1
14:00	0	0	0	0	0	0	0	2	2	3	2	4	4	3	1	0	0	0	0	0	0	0	0	21	1
15:00	0	0	0	0	0	0	0	0	3	3	6	6	3	1	1	0	0	0	0	0	0	0	0	23	1
16:00	0	0	0	0	0	0	1	0	2	3	3	1	3	2	0	0	0	0	0	0	0	0	0	15	1
17:00	0	0	0	0	0	0	0	1	1	3	4	1	2	1	1	2	0	1	0	0	0	0	0	17	1
18:00	0	0	0	0	0	1	1	2	3	0	2	0	1	0	1	0	0	0	0	0	0	0	0	11	0
19:00	0	0	0	0	1	0	0	0	3	0	3	1	1	0	0	1	0	0	0	0	0	0	0	10	0
20:00	0	0	0	0	0	0	1	0	2	1	5	2	0	1	0	0	0	0	0	0	0	0	0	12	1
21:00	0	0	0	0	0	1	0	0	1	2	2	1	1	0	0	0	0	0	0	0	0	0	0	8	0
22:00	0	0	0	0	0	0	0	0	0	2	2	1	1	0	0	0	0	0	0	0	0	0	0	6	0
23:00	0	0	0	0	0	1	1	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	6	0
Percent	0.0%	0.0%	0.0%	0.0%	0.8%	1.9%	1.5%	5.3%	13.9 %	16.9 %	23.3 %	14.7 %	12.8 %	4.1%	2.3%	2.3%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%		
AM Peak					11:00	02:00		07:00	06:00	11:00	11:00	11:00	09:00	11:00	00:00	04:00								11:00	
Vol.					1	1		3	5	4	5	5	3	1	1	1								18	
PM Peak					19:00	12:00	16:00	12:00	12:00	12:00	13:00	15:00	13:00	14:00	13:00	12:00		17:00						12:00	
Vol.					1	1	1	2	3	5	6	6	5	3	1	2		1						26	

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GOODRICH DR from WILSON AVE to CHANDARIA PL
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10/04 /21	0	0	0	0	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0
01:00	0	0	0	0	0	0	0	0	0	1	2	0	1	0	0	0	0	0	0	0	0	0	0	4	0
02:00	0	0	0	0	1	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	4	0
03:00	0	0	0	0	0	0	0	1	2	2	2	1	2	0	0	0	0	0	0	0	0	0	0	10	0
04:00	0	0	0	0	0	0	0	0	0	4	6	2	2	1	0	0	0	0	0	0	0	0	0	15	1
05:00	0	0	0	0	0	1	6	16	7	7	5	6	3	0	0	0	0	0	0	0	0	0	0	51	2
06:00	0	0	0	0	0	6	21	50	33	29	22	11	4	0	1	0	0	0	0	0	0	0	0	177	8
07:00	0	0	0	0	2	2	20	31	31	21	9	3	2	0	1	0	0	0	0	0	0	0	0	122	5
08:00	0	0	0	0	0	1	9	13	26	17	18	3	2	0	0	1	0	0	0	0	0	0	0	90	4
09:00	0	0	0	0	1	0	3	8	12	11	13	6	0	0	1	0	0	0	0	0	0	0	0	55	2
10:00	0	0	0	0	0	1	7	7	18	24	14	2	3	0	0	0	0	0	0	0	0	0	0	76	3
11:00	0	0	0	0	0	1	5	5	11	23	13	5	7	1	1	0	0	0	0	0	0	0	0	72	3
12 PM	0	0	0	0	1	0	4	14	18	26	14	9	2	1	0	0	0	0	0	0	0	0	0	89	4
13:00	0	0	0	0	1	2	4	9	28	24	21	2	3	0	1	0	0	0	0	0	0	0	0	95	4
14:00	0	0	0	1	1	3	4	4	27	29	22	9	5	1	1	0	0	0	0	0	0	0	0	107	5
15:00	0	0	0	1	0	1	10	14	17	19	26	9	2	3	2	1	1	0	0	0	0	0	0	106	5
16:00	0	0	0	0	0	1	10	2	3	14	11	8	5	2	1	0	0	0	0	0	0	0	0	57	2
17:00	0	0	0	0	0	1	3	5	4	3	6	5	6	5	2	0	0	0	0	0	0	0	0	40	2
18:00	0	0	0	0	0	0	0	4	3	5	3	3	2	0	1	0	0	0	0	0	0	0	0	21	1
19:00	0	0	0	0	0	0	1	3	2	4	10	2	2	1	4	1	0	1	0	0	0	0	0	31	1
20:00	0	0	0	0	0	0	1	3	2	2	2	2	1	1	0	0	0	0	0	0	0	0	0	14	1
21:00	0	0	0	0	0	0	0	0	3	0	2	3	1	0	0	0	0	0	0	0	0	0	0	9	0
22:00	0	0	0	0	0	0	1	0	2	1	1	4	1	0	0	0	0	0	0	0	0	0	0	10	0
23:00	0	0	0	0	1	0	1	0	1	1	2	1	1	0	0	0	1	0	0	0	0	0	0	9	0
Percent	0.0%	0.0%	0.0%	0.2%	0.6%	1.7%	8.7%	15.1 %	19.7 %	21.2 %	17.8 %	7.6%	4.5%	1.3%	1.3%	0.2%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%		
AM Peak Vol.					07:00 2	06:00 6	06:00 21	06:00 50	06:00 33	06:00 29	06:00 22	06:00 11	11:00 7	04:00 1	06:00 1	08:00 1								06:00 177	
PM Peak Vol.				14:00 1	12:00 1	14:00 3	15:00 10	12:00 14	13:00 28	14:00 29	15:00 26	12:00 9	17:00 6	17:00 5	19:00 4	15:00 1	15:00 1	19:00 1						14:00 107	

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Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Avera
10/05 /21	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2	0
01:00	0	0	0	0	0	0	1	1	0	2	0	0	0	1	0	0	0	0	0	0	0	0	0	5	0
02:00	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0
03:00	0	0	0	0	0	0	0	0	2	2	2	1	0	0	0	1	0	0	1	0	0	0	0	9	0
04:00	0	0	0	0	0	0	0	1	0	3	2	1	0	0	0	0	0	0	0	0	0	0	0	7	0
05:00	0	0	0	0	0	0	7	7	10	11	4	2	1	0	0	0	0	0	0	0	0	0	0	42	2
06:00	0	0	0	0	0	4	11	41	58	28	29	10	4	3	0	0	0	0	0	0	0	0	0	188	8
07:00	0	0	1	0	0	1	6	22	23	21	14	2	3	0	0	0	0	0	0	0	0	0	0	93	4
08:00	0	0	0	0	0	1	6	18	15	26	18	8	2	2	0	1	0	0	0	0	0	0	0	97	4
09:00	0	0	0	0	0	2	3	12	14	19	20	9	3	2	0	0	0	0	0	0	0	0	0	84	4
10:00	0	0	0	0	0	3	3	6	12	16	4	8	2	3	1	1	0	0	0	0	0	0	0	59	3
11:00	0	0	0	0	0	0	4	7	20	23	16	11	5	4	0	0	0	0	0	0	0	0	0	90	4
12 PM	0	0	0	0	0	0	4	11	15	24	13	8	5	0	1	0	0	0	0	0	0	0	0	81	4
13:00	0	0	0	2	3	0	6	10	20	31	21	6	1	1	1	1	0	1	0	0	0	0	0	104	5
14:00	0	0	0	0	0	0	2	9	26	23	25	9	4	2	0	0	0	0	0	0	0	0	0	100	4
15:00	0	0	0	0	0	0	7	18	8	21	15	14	10	2	0	0	1	0	0	0	0	0	0	96	4
16:00	0	0	0	1	1	1	5	4	7	7	11	17	7	3	0	0	0	0	0	0	0	0	0	64	3
17:00	0	0	0	0	0	1	7	4	3	4	12	7	7	1	3	0	0	0	0	0	0	0	0	49	2
18:00	0	0	0	0	0	2	1	3	4	4	5	5	2	3	1	1	0	1	0	0	0	0	0	32	1
19:00	0	0	0	0	0	0	2	2	3	2	2	5	6	0	0	0	0	0	0	0	0	0	0	22	1
20:00	0	0	0	0	0	1	0	1	5	2	1	1	1	1	0	2	0	0	0	0	0	0	0	15	1
21:00	0	0	0	0	0	0	1	1	1	0	3	4	0	0	1	0	0	0	0	0	0	0	0	11	0
22:00	0	0	0	0	0	0	0	0	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	4	0
23:00	0	0	0	0	0	0	0	2	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	4	0
Percent	0.0%	0.0%	0.1%	0.2%	0.3%	1.3%	6.1%	14.4 %	19.6 %	21.5 %	17.6 %	10.2 %	5.0%	2.2%	0.6%	0.6%	0.1%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%		
AM Peak Vol.			07:00 1			06:00 4	06:00 11	06:00 41	06:00 58	06:00 28	06:00 29	11:00 11	11:00 5	11:00 4	10:00 1	03:00 1			03:00 1					06:00 188	
PM Peak Vol.				13:00 2	13:00 3	18:00 2	15:00 7	15:00 18	14:00 26	13:00 31	14:00 25	16:00 17	15:00 10	16:00 3	17:00 3	20:00 2	15:00 1	13:00 1					13:00 104	

Ontario Traffic, Inc.
17705 Leslie St., Unit 6
Newmarket, Ontario L3Y 3E3
Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 10697
Station ID: U80
GOODRICH DR from WILSON AVE to CHANDARIA PL
Date Start: 30-Sep-21
Date End: 06-Oct-21
Date Start: 30-Sep-21

EB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Avera
10/06 /21	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
01:00	0	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0
02:00	0	0	0	0	0	0	1	1	3	0	0	1	0	0	0	0	0	0	0	0	0	0	0	6	0
03:00	0	0	0	0	0	0	0	1	1	0	0	0	1	0	1	0	0	0	0	0	0	0	0	4	0
04:00	0	0	0	0	0	0	0	0	1	3	4	2	0	0	0	0	0	0	0	0	0	0	0	10	0
05:00	0	0	0	0	0	0	3	6	14	7	5	5	3	0	0	0	0	0	0	0	0	0	0	43	2
06:00	0	1	0	0	0	3	13	48	42	42	25	5	3	3	0	0	0	0	0	0	0	0	0	185	8
07:00	0	0	1	0	1	0	16	31	19	20	9	4	1	2	0	0	0	0	0	0	0	0	0	104	5
08:00	0	1	0	0	0	4	8	20	22	28	13	8	1	2	0	1	0	0	0	0	0	0	0	108	5
09:00	0	0	1	1	1	0	7	10	19	12	13	4	3	0	0	0	0	0	0	0	0	0	0	71	3
10:00	0	0	0	0	2	4	3	10	16	18	9	4	1	1	0	0	0	0	0	0	0	0	0	68	3
11:00	0	0	0	0	0	3	5	14	22	22	11	8	2	2	1	0	0	0	0	0	0	0	0	90	4
12 PM	0	0	0	0	2	0	8	10	9	20	15	11	6	1	1	0	0	0	0	0	0	0	0	83	4
13:00	0	0	1	0	2	2	4	13	37	31	19	4	2	2	1	0	0	0	0	0	0	0	0	118	5
14:00	0	0	0	0	0	3	5	10	18	29	8	4	3	3	0	0	0	1	0	0	0	0	0	84	4
15:00	0	0	0	1	0	1	11	11	18	20	24	11	6	0	0	1	0	0	0	0	0	0	0	104	5
16:00	0	0	0	0	2	1	6	9	10	11	16	10	6	1	4	1	0	0	0	0	0	0	0	77	3
17:00	0	0	0	0	1	3	2	4	2	9	3	7	6	1	0	1	1	1	0	0	0	0	0	41	2
18:00	0	0	0	0	0	0	1	1	4	2	5	8	1	2	1	0	0	0	0	0	0	0	0	25	1
19:00	0	0	0	0	0	0	0	0	3	4	1	3	6	3	0	1	0	0	0	0	0	0	0	21	1
20:00	0	0	0	0	0	0	1	2	3	2	2	2	0	0	2	0	0	1	0	0	0	0	0	15	1
21:00	0	0	0	0	0	0	1	0	0	1	1	1	2	0	0	0	0	0	0	0	0	0	0	6	0
22:00	0	0	0	0	0	1	0	2	0	4	1	3	1	1	0	0	0	0	0	0	0	0	0	13	1
23:00	0	0	0	0	0	0	1	0	1	1	1	2	1	1	0	1	0	0	0	0	0	0	0	9	0
Percent	0.0%	0.2%	0.2%	0.2%	0.9%	1.9%	7.4%	15.7 %	20.6 %	22.3 %	14.4 %	8.3%	4.3%	1.9%	0.9%	0.5%	0.1%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%		
AM Peak		06:00	07:00	09:00	10:00	08:00	07:00	06:00	06:00	06:00	06:00	08:00	05:00	06:00	03:00	08:00								06:00	
Vol.		1	1	1	2	4	16	48	42	42	25	8	3	3	1	1								185	
PM Peak			13:00	15:00	12:00	14:00	15:00	13:00	13:00	13:00	15:00	12:00	12:00	14:00	16:00	15:00	17:00	14:00						13:00	
Vol.			1	1	2	3	11	13	37	31	24	11	6	3	4	1	1	1						118	
Total	0	4	6	12	37	100	415	934	1307	1396	1238	810	477	211	99	41	19	14	3	0	0	0	0	7123	

Statistics

Mean Speed(Average) : 49 KPH
50th Percentile : 48 KPH
85th Percentile : 59 KPH

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GOODRICH DR from WILSON AVE to CHANDARIA PL
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WB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Avera
09/30 /21	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
01:00	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2	0
02:00	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2	0
03:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0
04:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
05:00	0	0	0	0	0	0	0	0	2	0	0	1	0	1	0	0	0	0	0	0	0	0	0	4	0
06:00	0	0	0	0	0	0	1	1	3	2	3	2	5	2	0	0	0	0	0	0	0	0	0	19	1
07:00	0	0	0	0	0	1	0	4	2	6	2	3	1	0	0	0	0	0	0	0	0	0	0	19	1
08:00	0	0	0	0	0	0	1	5	5	5	5	4	6	4	3	0	0	1	0	0	0	0	0	39	2
09:00	0	0	0	0	0	1	0	1	5	6	8	3	4	1	1	0	0	0	0	0	0	0	0	30	1
10:00	0	0	0	0	0	1	2	6	4	2	7	2	2	4	2	0	0	0	0	0	0	0	0	32	1
11:00	0	0	0	0	1	1	4	13	10	5	9	19	2	2	1	0	0	0	0	0	0	0	0	67	3
12 PM	0	0	0	0	0	1	5	10	6	12	7	9	4	2	0	0	0	0	0	0	0	0	0	56	2
13:00	0	0	0	0	0	2	0	1	5	3	5	6	2	3	1	2	0	0	0	0	0	0	0	30	1
14:00	0	0	0	0	0	3	2	4	14	5	6	13	7	3	1	1	0	0	0	0	0	0	0	59	3
15:00	0	0	0	0	0	2	7	9	9	5	8	6	6	1	2	1	0	0	0	0	0	0	0	56	2
16:00	0	0	0	0	0	0	2	6	3	4	9	11	3	4	2	1	0	0	0	0	0	0	0	45	2
17:00	0	0	0	0	0	0	0	2	1	4	5	7	5	5	3	0	1	0	0	0	0	0	0	33	1
18:00	0	0	0	0	0	1	1	0	1	0	1	6	2	2	2	2	0	0	0	0	0	0	0	18	1
19:00	0	0	0	0	0	0	0	0	4	1	3	2	3	3	1	0	0	0	0	0	0	0	0	17	1
20:00	0	0	0	0	0	1	1	1	0	0	1	2	2	1	0	0	0	0	0	0	0	0	0	9	0
21:00	0	0	0	0	0	0	0	1	2	0	1	1	1	2	0	0	0	0	0	0	0	0	0	8	0
22:00	1	0	0	0	0	0	0	0	1	1	1	0	0	0	1	0	0	0	0	0	0	0	0	5	0
23:00	0	0	0	0	0	0	0	0	0	1	3	0	0	0	0	1	1	1	0	0	0	0	0	7	0
Percent	0.2%	0.0%	0.0%	0.0%	0.2%	2.5%	4.6%	11.4 %	14.1 %	11.4 %	15.3 %	17.6 %	9.8%	7.1%	3.6%	1.4%	0.4%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%		
AM Peak					11:00	07:00	11:00	11:00	11:00	07:00	11:00	11:00	08:00	08:00	08:00			08:00						11:00	
Vol.					1	1	4	13	10	6	9	19	6	4	3			1						67	
PM Peak	22:00					14:00	15:00	12:00	14:00	12:00	16:00	14:00	14:00	17:00	17:00	13:00	17:00	23:00						14:00	
Vol.	1					3	7	10	14	12	9	13	7	5	3	2	1	1						59	

Ontario Traffic, Inc.
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Site Code: 10697
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GOODRICH DR from WILSON AVE to CHANDARIA PL
Date Start: 30-Sep-21
Date End: 06-Oct-21
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WB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Avera
10/01 /21	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	2	0
01:00	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
02:00	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
03:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	1	0	1	0	1	0	0	0	0	0	0	0	0	0	3	0
06:00	0	0	0	0	0	0	0	2	4	1	3	4	1	1	0	0	0	0	0	0	0	0	0	16	1
07:00	0	0	0	1	0	0	0	3	1	3	7	3	2	0	0	0	0	1	0	0	0	0	0	21	1
08:00	0	0	0	1	2	1	1	1	4	5	5	7	6	2	0	0	0	0	0	0	0	0	0	35	2
09:00	0	1	1	0	0	1	1	3	4	3	2	5	4	2	3	3	0	0	0	0	0	0	0	33	1
10:00	0	0	1	0	0	0	0	3	3	3	7	5	1	3	3	1	0	1	0	0	0	0	0	31	1
11:00	0	0	0	0	1	0	1	5	4	6	11	6	7	3	1	1	0	0	0	0	0	0	0	46	2
12 PM	0	0	0	0	0	0	3	8	10	13	10	14	5	1	3	1	0	0	0	0	0	0	0	68	3
13:00	0	0	0	0	1	2	2	4	4	4	9	5	7	0	2	0	1	0	0	0	0	0	0	41	2
14:00	0	0	0	0	0	0	2	3	11	10	10	10	15	3	3	0	1	0	0	0	0	0	0	68	3
15:00	0	0	0	0	0	0	5	9	9	7	12	12	10	4	2	1	0	0	1	0	0	0	0	72	3
16:00	0	0	0	0	0	0	1	2	6	1	6	10	1	3	2	4	0	0	0	0	0	0	0	36	2
17:00	0	0	0	0	0	0	0	0	2	3	3	9	2	3	2	0	0	0	1	0	0	0	0	25	1
18:00	0	0	0	0	0	0	0	1	2	2	2	4	8	2	1	0	1	0	1	0	0	0	0	24	1
19:00	0	0	0	0	0	0	1	0	1	2	2	1	3	4	0	0	1	0	0	0	0	0	0	15	1
20:00	0	0	0	0	0	0	1	1	1	3	1	2	0	1	2	0	1	0	0	0	0	0	0	13	1
21:00	0	0	0	0	0	0	1	2	0	0	2	2	1	1	2	0	0	0	0	0	0	0	0	11	0
22:00	0	0	0	0	0	0	0	0	1	0	0	1	0	3	0	0	0	0	0	0	0	0	0	5	0
23:00	0	0	0	0	0	1	0	0	1	0	3	4	0	0	0	0	0	0	0	0	0	0	0	9	0
Percent	0.0%	0.2%	0.3%	0.3%	0.7%	0.9%	3.5%	8.1%	11.8 %	11.8 %	16.6 %	18.5 %	12.7 %	6.4%	4.5%	1.9%	0.9%	0.3%	0.5%	0.0%	0.0%	0.0%	0.0%		
AM Peak		09:00	09:00	07:00	08:00	08:00	02:00	11:00	06:00	11:00	11:00	08:00	11:00	10:00	09:00	09:00		07:00						11:00	
Vol.		1	1	1	2	1	1	5	4	6	11	7	7	3	3	3		1						46	
PM Peak					13:00	13:00	15:00	15:00	14:00	12:00	15:00	12:00	14:00	15:00	12:00	16:00	13:00		15:00					15:00	
Vol.					1	2	5	9	11	13	12	14	15	4	3	4	1		1					72	

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GOODRICH DR from WILSON AVE to CHANDARIA PL
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WB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Avera
10/02 /21	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0
01:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	2	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2	0
06:00	0	0	0	0	0	0	0	0	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0	3	0
07:00	0	0	0	0	0	0	0	1	2	1	2	2	1	2	0	1	0	0	0	0	0	0	0	12	1
08:00	0	0	0	0	0	0	0	0	0	0	1	2	2	1	1	0	0	0	0	0	0	0	0	7	0
09:00	0	0	0	0	0	0	0	0	0	0	4	2	5	2	2	0	0	0	0	0	0	0	0	15	1
10:00	0	0	0	0	0	0	0	2	0	1	3	0	2	0	1	0	0	0	0	0	0	0	0	9	0
11:00	0	0	0	0	1	1	0	1	0	0	3	3	5	3	3	1	0	0	1	0	0	0	0	22	1
12 PM	0	0	0	0	1	1	1	1	2	1	4	4	5	5	0	0	0	0	0	0	0	0	0	25	1
13:00	0	0	0	0	0	0	0	0	0	2	1	3	4	7	0	0	1	0	0	0	0	0	0	18	1
14:00	0	0	0	0	0	0	0	1	2	2	2	4	2	4	1	1	1	0	0	0	0	0	0	20	1
15:00	0	0	0	0	0	0	1	2	1	2	3	3	2	3	2	1	0	0	0	0	0	0	0	20	1
16:00	0	0	0	0	0	0	0	0	1	3	1	3	1	0	1	1	0	0	0	0	0	0	0	11	0
17:00	0	0	1	0	0	0	1	1	2	0	0	4	2	2	3	2	0	0	0	0	0	0	0	18	1
18:00	0	0	0	0	0	0	0	1	0	3	4	0	5	1	0	1	0	0	0	0	0	0	0	15	1
19:00	0	0	0	0	0	0	1	0	1	1	2	0	2	0	1	0	0	0	0	0	0	0	0	8	0
20:00	0	0	0	0	0	0	0	0	1	0	0	2	1	0	0	0	0	0	0	0	0	0	0	4	0
21:00	0	0	0	0	0	0	0	1	2	1	2	0	2	1	0	0	0	0	0	0	0	0	0	9	0
22:00	0	0	0	0	0	0	0	0	0	1	1	3	2	0	0	0	0	0	0	0	0	0	0	7	0
23:00	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Percent	0.0%	0.0%	0.4%	0.0%	0.9%	0.9%	1.7%	4.8%	6.1%	8.2%	16.5 %	16.0 %	19.0 %	14.3 %	6.5%	3.5%	0.9%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%		
AM Peak					11:00	11:00		10:00	07:00	05:00	09:00	11:00	09:00	11:00	11:00	07:00			11:00					11:00	
Vol.					1	1		2	2	1	4	3	5	3	3	1			1					22	
PM Peak			17:00		12:00	12:00	12:00	15:00	12:00	16:00	12:00	12:00	12:00	13:00	17:00	17:00	13:00							12:00	
Vol.			1		1	1	1	2	2	3	4	4	5	7	3	2	1							25	

Ontario Traffic, Inc.
17705 Leslie St., Unit 6
Newmarket, Ontario L3Y 3E3
Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 10697
Station ID: U80
GOODRICH DR from WILSON AVE to CHANDARIA PL
Date Start: 30-Sep-21
Date End: 06-Oct-21
Date Start: 30-Sep-21

WB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Avera
10/03 /21	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	2	0
01:00	0	0	0	0	0	0	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	3	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	3	0
06:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
07:00	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2	0
08:00	0	0	0	0	0	0	1	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	4	0
09:00	0	0	0	0	0	0	0	0	1	0	2	2	4	1	0	0	0	0	0	0	0	0	0	10	0
10:00	0	0	0	0	0	0	0	0	1	0	2	3	0	0	1	1	1	0	0	0	0	0	0	9	0
11:00	0	0	0	0	0	0	0	1	1	1	1	3	3	5	2	0	0	0	0	0	0	0	0	17	1
12 PM	0	0	0	0	0	0	0	0	1	0	1	3	1	2	2	0	0	1	0	0	0	0	0	11	0
13:00	0	0	0	0	0	0	0	1	0	1	5	1	2	3	2	1	0	0	0	0	0	0	0	16	1
14:00	0	0	0	0	0	0	0	0	0	1	1	0	3	0	3	1	0	0	0	0	0	0	0	9	0
15:00	0	0	0	0	0	1	0	2	0	1	3	3	1	2	1	0	0	0	0	0	0	0	0	14	1
16:00	0	0	0	0	0	0	1	1	1	0	0	8	1	3	1	0	0	0	0	0	0	0	0	16	1
17:00	0	0	0	0	0	0	0	1	0	1	0	0	2	0	0	2	0	0	0	0	0	0	0	6	0
18:00	0	0	0	0	0	0	0	0	4	2	4	1	2	0	2	0	0	0	0	0	0	0	0	15	1
19:00	0	0	0	0	0	0	1	0	0	1	3	1	3	0	1	1	0	0	0	0	0	0	0	11	0
20:00	0	0	0	0	0	0	0	0	0	0	3	5	1	0	1	0	0	0	0	0	0	0	0	10	0
21:00	0	0	0	0	0	0	1	1	1	1	0	0	0	1	1	0	0	0	0	0	0	0	0	6	0
22:00	0	0	0	0	0	0	0	0	0	0	2	0	1	1	0	0	0	0	0	0	0	0	0	4	0
23:00	0	0	0	0	0	0	0	0	0	0	3	0	1	2	0	0	0	0	0	0	0	0	0	6	0
Percent	0.0%	0.0%	0.0%	0.0%	0.0%	1.1%	2.3%	4.5%	7.4%	5.7%	18.2 %	19.9 %	14.8 %	11.4 %	10.2 %	3.4%	0.6%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%		
AM Peak						03:00	08:00	08:00	01:00	05:00	09:00	10:00	09:00	11:00	11:00	10:00	10:00							11:00	
Vol.						1	1	1	1	1	2	3	4	5	2	1	1							17	
PM Peak						15:00	16:00	15:00	18:00	18:00	13:00	16:00	14:00	13:00	14:00	17:00		12:00						13:00	
Vol.						1	1	2	4	2	5	8	3	3	3	2		1						16	

Ontario Traffic, Inc.
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Site Code: 10697
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GOODRICH DR from WILSON AVE to CHANDARIA PL
Date Start: 30-Sep-21
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WB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Avera
10/04 /21	0	0	0	0	0	0	0	1	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	4	0
01:00	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0
04:00	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	0
05:00	0	0	0	0	0	1	1	1	1	0	1	1	2	0	1	0	0	0	0	0	0	0	0	9	0
06:00	0	0	0	0	1	0	1	0	4	4	2	1	3	0	0	0	0	0	0	0	0	0	0	16	1
07:00	0	0	0	0	0	1	6	1	3	3	6	1	4	0	2	0	0	0	0	0	0	0	0	27	1
08:00	0	0	0	0	1	2	1	3	7	6	5	3	5	3	2	0	0	0	0	0	0	0	0	38	2
09:00	0	0	0	0	0	1	1	4	6	8	6	6	0	3	0	0	1	0	0	0	0	0	0	36	2
10:00	0	0	0	0	0	0	5	2	4	8	6	3	2	1	1	0	0	0	0	0	0	0	0	32	1
11:00	0	0	0	0	0	3	1	0	6	5	9	4	7	0	0	0	0	0	0	0	0	0	0	35	2
12 PM	0	0	0	0	1	1	0	6	6	11	13	8	1	1	1	0	0	0	0	0	0	0	0	49	2
13:00	0	0	0	0	1	0	2	8	4	2	6	3	3	2	0	1	0	0	1	0	0	0	0	33	1
14:00	0	0	0	0	0	1	7	13	18	6	11	10	8	3	1	1	2	0	0	0	0	0	0	81	4
15:00	0	0	0	0	0	1	3	7	12	14	15	12	9	5	0	1	0	0	0	0	0	0	0	79	3
16:00	0	0	0	0	1	0	4	8	1	6	6	5	5	0	0	0	0	0	0	0	0	0	0	36	2
17:00	0	0	0	0	0	1	0	2	5	1	4	7	5	3	1	0	1	0	0	0	0	0	0	30	1
18:00	0	0	0	0	0	0	0	0	0	4	4	7	1	2	0	2	0	0	0	0	0	0	0	20	1
19:00	0	0	0	0	0	0	1	2	0	1	1	1	3	1	1	1	0	0	0	0	0	0	0	12	1
20:00	0	0	0	0	0	0	0	0	2	0	2	6	1	1	1	0	1	0	0	0	0	0	0	14	1
21:00	0	0	0	0	0	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	3	0
22:00	0	0	0	0	0	0	0	0	1	0	0	2	1	0	0	0	0	0	0	0	0	0	0	4	0
23:00	0	0	0	0	0	0	0	0	0	2	4	2	0	0	0	0	0	0	0	0	0	0	0	8	0
Percent	0.0%	0.0%	0.0%	0.0%	0.9%	2.1%	5.8%	10.7 %	14.0 %	14.7 %	18.0 %	14.5 %	10.9 %	4.4%	1.9%	1.1%	0.9%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%		
AM Peak					06:00	11:00	07:00	09:00	08:00	09:00	11:00	09:00	11:00	08:00	07:00		09:00							08:00	
Vol.					1	3	6	4	7	8	9	6	7	3	2		1							38	
PM Peak					12:00	12:00	14:00	14:00	14:00	15:00	15:00	15:00	15:00	15:00	12:00	18:00	14:00		13:00					14:00	
Vol.					1	1	7	13	18	14	15	12	9	5	1	2	2		1					81	

Ontario Traffic, Inc.
17705 Leslie St., Unit 6
Newmarket, Ontario L3Y 3E3
Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 10697
Station ID: U80
GOODRICH DR from WILSON AVE to CHANDARIA PL
Date Start: 30-Sep-21
Date End: 06-Oct-21
Date Start: 30-Sep-21

WB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Avera
10/05 /21	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0
01:00	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0
02:00	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
05:00	0	0	0	0	0	0	1	1	1	0	0	0	3	0	1	0	1	0	0	0	0	0	0	8	0
06:00	0	0	0	0	0	0	3	2	1	1	5	3	0	2	0	1	0	0	0	0	0	0	0	18	1
07:00	0	0	0	0	0	1	1	3	2	2	4	7	3	0	2	1	1	0	0	0	0	0	0	27	1
08:00	0	0	0	0	0	0	2	3	3	6	5	7	2	1	4	1	0	0	0	0	0	0	0	34	1
09:00	0	0	0	0	0	1	3	3	3	6	7	1	3	2	1	1	0	0	0	0	0	0	0	31	1
10:00	0	0	0	0	0	0	0	4	4	7	7	8	4	2	0	1	0	2	0	0	0	0	0	39	2
11:00	0	0	0	0	0	1	2	0	6	3	7	10	6	1	3	0	0	0	0	0	0	0	0	39	2
12 PM	0	0	0	0	0	0	3	3	9	12	13	5	3	5	1	1	0	0	1	0	0	0	0	56	2
13:00	0	0	0	0	3	1	1	3	7	4	6	10	3	3	1	0	0	0	0	0	0	0	0	42	2
14:00	0	0	0	0	0	0	2	10	8	9	13	14	7	2	2	0	0	0	0	0	0	0	0	67	3
15:00	0	0	0	0	0	1	5	9	12	10	8	10	7	2	4	0	0	0	0	0	0	0	0	68	3
16:00	0	0	0	0	0	0	1	4	9	4	9	3	7	2	5	1	0	0	0	0	0	0	0	45	2
17:00	0	0	0	0	1	0	0	4	2	5	3	5	5	1	1	2	1	0	0	0	0	0	0	30	1
18:00	0	0	0	0	0	0	1	2	4	1	2	2	3	2	1	1	1	0	0	0	0	0	0	20	1
19:00	0	0	0	0	0	0	0	4	2	0	3	2	2	1	0	1	0	0	0	0	0	0	0	15	1
20:00	0	0	0	0	0	0	1	1	1	0	2	0	0	1	1	0	0	0	0	0	0	0	0	7	0
21:00	0	0	0	0	0	1	0	1	3	2	4	1	0	2	0	0	0	0	0	0	0	0	0	14	1
22:00	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	3	0
23:00	0	0	0	0	0	0	2	2	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	6	0
Percent	0.0%	0.0%	0.0%	0.0%	0.7%	1.0%	4.9%	10.4 %	13.4 %	13.0 %	18.1 %	15.5 %	10.1 %	5.0%	4.7%	1.9%	0.7%	0.3%	0.2%	0.0%	0.0%	0.0%	0.0%		
AM Peak						07:00	06:00	10:00	11:00	10:00	09:00	11:00	11:00	06:00	08:00	06:00	05:00	10:00						10:00	
Vol.						1	3	4	6	7	7	10	6	2	4	1	1	2						39	
PM Peak					13:00	13:00	15:00	14:00	15:00	12:00	12:00	14:00	14:00	12:00	16:00	17:00	17:00		12:00					15:00	
Vol.					3	1	5	10	12	12	13	14	7	5	5	2	1		1					68	

Ontario Traffic, Inc.
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GOODRICH DR from WILSON AVE to CHANDARIA PL
Date Start: 30-Sep-21
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WB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Avera
10/06 /21	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	0	0	0	0	0	0	0	3	0
01:00	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	2	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2	0
05:00	0	0	0	0	0	0	0	0	0	1	0	1	2	0	0	0	0	0	0	0	0	0	0	4	0
06:00	0	0	0	0	0	0	1	3	3	3	5	2	2	0	0	0	0	1	0	0	0	0	0	20	1
07:00	0	0	1	0	0	0	1	3	3	5	7	1	2	0	0	0	0	0	0	0	0	0	0	23	1
08:00	0	0	0	1	0	2	1	5	5	6	10	0	3	3	0	0	0	0	0	0	0	0	0	36	2
09:00	0	0	0	1	1	1	1	3	7	8	2	2	0	0	0	0	0	0	0	0	0	0	0	26	1
10:00	0	1	0	0	0	3	0	4	9	6	5	3	1	1	0	0	0	0	0	0	0	0	0	33	1
11:00	0	0	0	0	0	2	2	3	9	7	3	7	0	2	0	0	0	0	0	0	0	0	0	35	2
12 PM	0	0	0	0	0	1	6	11	15	11	10	6	1	1	0	0	0	0	0	0	0	0	0	62	3
13:00	0	0	0	0	0	1	5	8	4	10	6	2	2	0	0	0	0	0	0	0	0	0	0	38	2
14:00	0	0	0	3	1	2	13	15	13	11	10	11	6	3	1	0	0	0	0	0	0	0	0	89	4
15:00	0	0	0	2	1	2	7	6	11	10	7	5	3	1	0	0	0	0	0	0	0	0	0	55	2
16:00	0	0	0	1	0	4	2	9	2	6	4	3	6	1	0	1	0	0	0	0	0	0	0	39	2
17:00	0	0	0	0	0	0	0	6	4	9	6	2	3	2	2	1	0	0	0	0	0	0	0	35	2
18:00	0	0	0	0	0	0	0	0	1	2	1	5	5	3	2	0	0	0	0	0	0	0	0	19	1
19:00	0	0	0	0	0	1	0	0	3	1	1	1	2	2	0	0	0	0	0	0	0	0	0	11	0
20:00	0	0	0	0	0	0	2	0	2	0	0	0	0	1	1	0	0	0	0	0	0	0	0	6	0
21:00	0	0	0	0	0	0	0	1	0	2	0	1	1	0	1	0	0	0	0	0	0	0	0	6	0
22:00	0	0	0	0	0	0	0	0	1	1	0	1	2	1	0	0	0	0	0	0	0	0	0	6	0
23:00	0	0	0	0	2	0	0	0	2	3	1	1	1	1	0	0	0	0	0	0	0	0	0	11	0
Percent	0.0%	0.2%	0.2%	1.4%	0.9%	3.4%	7.3%	13.7 %	16.7 %	18.5 %	14.4 %	9.6%	7.6%	3.9%	1.6%	0.5%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%		
AM Peak		10:00	07:00	08:00	09:00	10:00	11:00	08:00	10:00	09:00	08:00	11:00	08:00	08:00	00:00	02:00		06:00						08:00	
Vol.		1	1	1	1	3	2	5	9	8	10	7	3	3	2	1		1						36	
PM Peak				14:00	23:00	16:00	14:00	14:00	12:00	12:00	12:00	14:00	14:00	14:00	17:00	16:00								14:00	
Vol.				3	2	4	13	15	15	11	10	11	6	3	2	1								89	
Total	1	2	4	10	21	60	156	328	425	424	540	504	361	206	126	53	19	8	6	0	0	0	0	3254	

Statistics

Mean Speed(Average) : 52 KPH
50th Percentile : 52 KPH
85th Percentile : 65 KPH

Ontario Traffic, Inc.
17705 Leslie St., Unit 6
Newmarket, Ontario L3Y 3E3
Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 10697
Station ID: U80
GOODRICH DR from WILSON AVE to CHANDARIA PL
Date Start: 30-Sep-21
Date End: 06-Oct-21
Date Start: 30-Sep-21

EB, WB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Avera
09/30 /21	0	0	0	0	0	0	0	0	2	1	1	2	1	0	0	0	0	0	0	0	0	0	0	7	0
01:00	0	0	0	0	0	1	0	0	0	1	1	0	0	0	0	1	0	0	0	0	0	0	0	4	0
02:00	0	0	0	0	0	0	0	0	2	1	3	1	0	0	0	0	0	0	0	0	0	0	0	7	0
03:00	0	0	0	0	0	0	0	1	1	2	2	1	0	0	1	1	0	0	0	0	0	0	0	9	0
04:00	0	0	0	0	0	0	1	1	1	3	6	3	2	1	0	0	0	0	0	0	0	0	0	18	1
05:00	0	0	0	0	0	0	4	11	15	7	7	5	3	1	0	0	0	0	0	0	0	0	0	53	2
06:00	0	0	0	0	0	1	14	46	45	32	22	13	10	7	0	0	0	0	0	0	0	0	0	190	8
07:00	0	0	0	0	0	2	4	28	29	22	14	6	3	0	1	1	0	0	0	0	0	0	0	110	5
08:00	0	0	0	0	1	0	7	16	18	23	20	12	10	5	5	0	0	1	0	0	0	0	0	118	5
09:00	0	0	0	0	0	1	5	10	20	20	17	8	6	3	4	2	0	0	0	0	0	0	0	96	4
10:00	0	0	0	0	0	2	7	16	17	20	18	14	6	7	3	1	0	0	0	0	0	0	0	111	5
11:00	0	0	0	0	1	2	10	26	28	32	23	33	11	3	2	0	0	0	0	0	0	0	0	171	7
12 PM	0	0	0	0	0	1	5	23	21	36	39	29	8	5	2	0	1	0	0	0	0	0	0	170	7
13:00	0	0	0	0	1	3	6	16	15	23	29	14	6	8	5	2	0	1	0	0	0	0	0	129	6
14:00	0	0	0	0	0	6	3	13	45	31	28	24	15	7	2	2	1	0	0	0	0	0	0	177	8
15:00	0	0	0	0	0	6	15	17	30	28	31	19	14	4	4	1	2	0	0	0	0	0	0	171	7
16:00	0	0	0	0	1	2	8	12	10	13	21	26	13	12	4	4	0	1	0	0	0	0	0	127	6
17:00	0	0	0	0	0	0	3	8	3	10	15	27	20	12	3	1	2	2	0	0	0	0	0	106	5
18:00	0	0	0	0	0	1	2	3	4	3	7	9	5	4	3	2	0	1	0	0	0	0	0	44	2
19:00	0	0	0	0	0	0	2	1	8	4	8	3	7	4	1	0	0	0	0	0	0	0	0	38	2
20:00	0	0	0	0	0	2	1	3	2	5	2	6	5	1	0	0	1	0	1	0	0	0	0	29	1
21:00	0	0	0	0	0	0	0	2	3	2	4	4	2	2	0	0	0	0	0	0	0	0	0	19	1
22:00	1	0	0	0	0	0	1	0	1	3	3	3	1	0	1	0	0	0	0	0	0	0	0	14	1
23:00	0	0	0	0	0	0	0	0	1	1	6	1	1	1	0	1	1	1	0	0	0	0	0	14	1
Percent	0.1%	0.0%	0.0%	0.0%	0.2%	1.6%	5.1%	13.1 %	16.6 %	16.7 %	16.9 %	13.6 %	7.7%	4.5%	2.1%	1.0%	0.4%	0.4%	0.1%	0.0%	0.0%	0.0%	0.0%		
AM Peak					08:00	07:00	06:00	06:00	06:00	06:00	11:00	11:00	11:00	06:00	08:00	09:00		08:00						06:00	
Vol.					1	2	14	46	45	32	23	33	11	7	5	2		1						190	
PM Peak	22:00				13:00	14:00	15:00	12:00	14:00	12:00	12:00	12:00	17:00	16:00	13:00	16:00	15:00	17:00	20:00					14:00	
Vol.	1				1	6	15	23	45	36	39	29	20	12	5	4	2	2	1					177	

Ontario Traffic, Inc.
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GOODRICH DR from WILSON AVE to CHANDARIA PL
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EB, WB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Avera
10/01 /21	0	0	0	0	0	0	0	0	1	0	2	1	0	0	0	0	0	0	0	0	0	0	0	4	0
01:00	0	0	0	0	0	0	0	1	2	2	2	1	0	0	0	0	0	0	0	0	0	0	0	8	0
02:00	0	0	0	0	0	0	1	1	4	0	1	0	0	0	0	0	0	0	0	0	0	0	0	7	0
03:00	0	0	0	0	0	0	0	0	3	2	0	2	1	0	0	0	0	0	0	0	0	0	0	8	0
04:00	0	0	0	0	0	0	0	1	1	4	5	3	2	0	0	0	0	0	0	0	0	0	0	16	1
05:00	0	0	0	0	0	0	2	6	12	7	5	6	1	2	0	0	0	0	0	0	0	0	0	41	2
06:00	0	0	0	0	0	0	8	34	55	26	24	17	6	4	2	0	0	0	0	0	0	0	0	176	8
07:00	0	0	0	1	1	0	14	22	17	13	20	8	4	1	0	1	0	1	0	0	0	0	0	103	4
08:00	0	0	0	1	4	3	3	8	17	33	24	15	9	2	1	0	0	0	0	0	0	0	0	120	5
09:00	0	2	1	1	0	1	1	10	16	11	17	19	9	2	4	3	1	0	0	0	0	0	0	98	4
10:00	0	0	1	1	1	0	3	6	18	16	24	10	9	5	4	1	0	1	0	0	0	0	0	100	4
11:00	0	1	0	0	3	2	5	14	25	21	28	17	23	6	3	1	0	0	0	0	0	0	0	149	6
12 PM	0	0	0	1	0	1	7	19	32	38	31	30	18	4	7	3	0	0	0	0	0	0	0	191	8
13:00	0	0	0	0	1	2	4	13	18	28	32	30	24	3	6	1	1	1	0	0	0	0	0	164	7
14:00	0	0	1	1	0	2	4	11	28	28	42	26	24	7	4	1	2	1	0	0	0	0	0	182	8
15:00	0	0	0	0	0	0	6	19	16	23	28	44	23	11	8	2	2	0	1	0	0	0	0	183	8
16:00	0	0	0	0	0	2	6	10	13	8	18	23	11	12	2	4	1	0	0	0	0	0	0	110	5
17:00	0	0	0	0	1	2	2	1	4	8	6	18	11	4	3	0	1	0	1	0	0	0	0	62	3
18:00	0	0	0	0	0	1	0	3	3	6	12	11	15	6	2	0	2	0	1	0	0	0	0	62	3
19:00	0	0	0	0	0	0	2	2	1	5	9	4	5	10	2	0	1	0	0	0	0	0	0	41	2
20:00	0	0	0	1	0	0	1	3	2	9	2	5	4	2	2	1	1	0	0	0	0	0	0	33	1
21:00	0	0	0	0	0	1	1	3	2	4	4	5	2	1	2	0	0	0	0	0	0	0	0	25	1
22:00	0	0	0	0	0	0	0	1	2	2	1	4	2	3	0	0	0	0	0	0	0	0	0	15	1
23:00	0	0	0	0	0	2	1	0	2	0	4	4	3	1	0	0	0	0	0	0	0	0	0	17	1
Percent	0.0%	0.2%	0.2%	0.4%	0.6%	1.0%	3.7%	9.8%	15.4 %	15.4 %	17.8 %	15.8 %	10.8 %	4.5%	2.7%	0.9%	0.6%	0.2%	0.2%	0.0%	0.0%	0.0%	0.0%		
AM Peak		09:00	09:00	07:00	08:00	08:00	07:00	06:00	06:00	08:00	11:00	09:00	11:00	11:00	09:00	09:00	09:00	07:00						06:00	
Vol.		2	1	1	4	3	14	34	55	33	28	19	23	6	4	3	1	1						176	
PM Peak			14:00	12:00	13:00	13:00	12:00	12:00	12:00	12:00	14:00	15:00	13:00	16:00	15:00	16:00	14:00	13:00	15:00					12:00	
Vol.			1	1	1	2	7	19	32	38	42	44	24	12	8	4	2	1	1					191	

Ontario Traffic, Inc.
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Station ID: U80
GOODRICH DR from WILSON AVE to CHANDARIA PL
Date Start: 30-Sep-21
Date End: 06-Oct-21
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EB, WB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Avera
10/02 /21	0	0	0	0	0	0	0	0	0	1	4	0	0	1	0	0	0	0	0	0	0	0	0	6	0
01:00	0	0	0	0	0	0	1	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	4	0
02:00	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	3	0
03:00	0	0	0	0	0	0	0	0	1	0	2	0	2	0	0	0	0	0	0	0	0	0	0	5	0
04:00	0	0	0	0	0	0	0	0	0	1	2	4	0	0	0	0	0	0	0	0	0	0	0	7	0
05:00	0	0	0	0	0	0	0	0	0	2	0	2	0	1	0	0	0	0	0	0	0	0	0	5	0
06:00	0	0	0	0	0	0	1	1	4	0	2	3	1	1	0	0	0	0	1	0	0	0	0	14	1
07:00	0	0	0	0	0	0	0	2	4	2	3	4	1	2	1	1	0	0	0	0	0	0	0	20	1
08:00	0	0	0	0	0	0	1	0	0	2	7	3	4	2	1	0	0	0	0	0	0	0	0	20	1
09:00	0	0	0	0	0	0	0	2	2	2	6	4	7	3	3	0	0	0	0	0	0	0	0	29	1
10:00	0	0	0	0	0	0	0	2	4	2	7	4	4	1	2	1	0	0	0	0	0	0	0	27	1
11:00	0	0	0	0	1	1	0	1	4	4	10	12	7	4	3	1	0	0	1	0	0	0	0	49	2
12 PM	0	0	0	0	1	2	2	3	3	3	4	13	9	7	1	0	0	0	0	0	0	0	0	48	2
13:00	0	0	0	0	0	0	0	1	1	5	4	13	9	9	1	0	2	0	0	0	0	0	0	45	2
14:00	0	0	0	0	0	0	0	2	6	6	7	12	11	9	1	1	1	0	0	0	0	0	0	56	2
15:00	0	0	0	0	0	0	1	3	1	7	8	12	8	7	3	1	0	0	0	0	0	0	0	51	2
16:00	0	0	0	0	0	0	0	1	3	7	6	5	3	5	3	1	1	0	0	0	0	0	0	35	2
17:00	0	0	1	0	0	0	1	3	5	1	3	7	5	6	4	2	0	0	0	0	0	0	0	38	2
18:00	0	0	0	0	0	0	0	2	4	7	7	5	5	3	1	1	0	0	0	0	0	0	0	35	2
19:00	0	0	0	0	0	0	1	0	2	3	4	4	2	2	1	0	0	0	0	0	0	0	0	19	1
20:00	0	0	0	0	0	0	0	0	3	0	3	3	1	0	0	0	0	0	0	0	0	0	0	10	0
21:00	0	0	1	0	1	0	1	2	3	1	4	1	3	2	1	0	0	0	0	0	0	0	0	20	1
22:00	0	0	0	0	0	1	0	0	1	1	1	4	2	2	0	0	0	0	0	0	0	0	0	12	1
23:00	0	0	0	0	0	0	0	0	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	4	0
Percent	0.0%	0.0%	0.4%	0.0%	0.5%	0.7%	1.6%	4.6%	9.4%	10.5 %	17.1 %	20.6 %	15.1 %	12.1 %	4.6%	1.6%	0.7%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%		
AM Peak					11:00	11:00	01:00	07:00	06:00	11:00	11:00	11:00	09:00	11:00	09:00	07:00			06:00					11:00	
Vol.					1	1	1	2	4	4	10	12	7	4	3	1			1					49	
PM Peak			17:00		12:00	12:00	12:00	12:00	14:00	15:00	15:00	12:00	14:00	13:00	17:00	17:00	13:00							14:00	
Vol.			1		1	2	2	3	6	7	8	13	11	9	4	2	2							56	

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GOODRICH DR from WILSON AVE to CHANDARIA PL
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EB, WB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Avera
10/03 /21	0	0	0	0	0	0	0	0	0	0	1	1	1	0	2	0	0	0	0	0	0	0	0	5	0
01:00	0	0	0	0	0	0	0	0	1	1	1	2	1	0	0	0	0	0	0	0	0	0	0	6	0
02:00	0	0	0	0	0	1	0	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	4	0
03:00	0	0	0	0	0	1	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	3	0
04:00	0	0	0	0	0	0	0	1	0	2	3	1	0	0	0	1	0	0	0	0	0	0	0	8	0
05:00	0	0	0	0	0	0	0	0	0	2	2	3	1	0	0	0	0	0	0	0	0	0	0	8	0
06:00	0	0	0	0	0	0	0	1	6	3	2	1	0	0	0	0	0	0	0	0	0	0	0	13	1
07:00	0	0	0	0	0	0	0	3	1	3	2	0	0	0	0	0	0	0	0	0	0	0	0	9	0
08:00	0	0	0	0	0	0	1	1	1	2	2	1	1	0	0	0	0	0	0	0	0	0	0	9	0
09:00	0	0	0	0	0	0	0	0	3	2	3	2	7	1	0	0	0	0	0	0	0	0	0	18	1
10:00	0	0	0	0	0	0	0	0	6	1	4	6	1	0	1	1	1	0	0	0	0	0	0	21	1
11:00	0	0	0	0	1	0	0	1	2	5	6	8	4	6	2	0	0	0	0	0	0	0	0	35	2
12 PM	0	0	0	0	0	1	0	2	4	5	6	7	4	3	2	2	0	1	0	0	0	0	0	37	2
13:00	0	0	0	0	0	0	0	2	2	4	11	6	7	4	3	1	0	0	0	0	0	0	0	40	2
14:00	0	0	0	0	0	0	0	2	2	4	3	4	7	3	4	1	0	0	0	0	0	0	0	30	1
15:00	0	0	0	0	0	1	0	2	3	4	9	9	4	3	2	0	0	0	0	0	0	0	0	37	2
16:00	0	0	0	0	0	0	2	1	3	3	3	9	4	5	1	0	0	0	0	0	0	0	0	31	1
17:00	0	0	0	0	0	0	0	2	1	4	4	1	4	1	1	4	0	1	0	0	0	0	0	23	1
18:00	0	0	0	0	0	1	1	2	7	2	6	1	3	0	3	0	0	0	0	0	0	0	0	26	1
19:00	0	0	0	0	1	0	1	0	3	1	6	2	4	0	1	2	0	0	0	0	0	0	0	21	1
20:00	0	0	0	0	0	0	1	0	2	1	8	7	1	1	1	0	0	0	0	0	0	0	0	22	1
21:00	0	0	0	0	0	1	1	1	2	3	2	1	1	1	1	0	0	0	0	0	0	0	0	14	1
22:00	0	0	0	0	0	0	0	0	0	2	4	1	2	1	0	0	0	0	0	0	0	0	0	10	0
23:00	0	0	0	0	0	1	1	0	0	1	4	1	2	2	0	0	0	0	0	0	0	0	0	12	1
Percent	0.0%	0.0%	0.0%	0.0%	0.5%	1.6%	1.8%	5.0%	11.3 %	12.4 %	21.3 %	16.7 %	13.6 %	7.0%	5.4%	2.7%	0.2%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%		
AM Peak					11:00	02:00	08:00	07:00	06:00	11:00	11:00	11:00	09:00	11:00	00:00	04:00	10:00							11:00	
Vol.					1	1	1	3	6	5	6	8	7	6	2	1	1							35	
PM Peak					19:00	12:00	16:00	12:00	18:00	12:00	13:00	15:00	13:00	16:00	14:00	17:00		12:00						13:00	
Vol.					1	1	2	2	7	5	11	9	7	5	4	4		1						40	

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EB, WB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Avera
10/04 /21	0	0	0	0	0	2	0	2	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	7	0
01:00	0	0	0	0	0	0	0	1	0	1	2	0	2	0	0	0	0	0	0	0	0	0	0	6	0
02:00	0	0	0	0	1	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	4	0
03:00	0	0	0	0	0	0	0	1	2	2	3	1	2	0	0	0	0	0	0	0	0	0	0	11	0
04:00	0	0	0	0	0	0	0	1	0	4	6	3	2	1	0	0	0	0	0	0	0	0	0	17	1
05:00	0	0	0	0	0	2	7	17	8	7	6	7	5	0	1	0	0	0	0	0	0	0	0	60	3
06:00	0	0	0	0	1	6	22	50	37	33	24	12	7	0	1	0	0	0	0	0	0	0	0	193	8
07:00	0	0	0	0	2	3	26	32	34	24	15	4	6	0	3	0	0	0	0	0	0	0	0	149	6
08:00	0	0	0	0	1	3	10	16	33	23	23	6	7	3	2	1	0	0	0	0	0	0	0	128	6
09:00	0	0	0	0	1	1	4	12	18	19	19	12	0	3	1	0	1	0	0	0	0	0	0	91	4
10:00	0	0	0	0	0	1	12	9	22	32	20	5	5	1	1	0	0	0	0	0	0	0	0	108	5
11:00	0	0	0	0	0	4	6	5	17	28	22	9	14	1	1	0	0	0	0	0	0	0	0	107	5
12 PM	0	0	0	0	2	1	4	20	24	37	27	17	3	2	1	0	0	0	0	0	0	0	0	138	6
13:00	0	0	0	0	2	2	6	17	32	26	27	5	6	2	1	1	0	0	1	0	0	0	0	128	6
14:00	0	0	0	1	1	4	11	17	45	35	33	19	13	4	2	1	2	0	0	0	0	0	0	188	8
15:00	0	0	0	1	0	2	13	21	29	33	41	21	11	8	2	2	1	0	0	0	0	0	0	185	8
16:00	0	0	0	0	1	1	14	10	4	20	17	13	10	2	1	0	0	0	0	0	0	0	0	93	4
17:00	0	0	0	0	0	2	3	7	9	4	10	12	11	8	3	0	1	0	0	0	0	0	0	70	3
18:00	0	0	0	0	0	0	0	4	3	9	7	10	3	2	1	2	0	0	0	0	0	0	0	41	2
19:00	0	0	0	0	0	0	2	5	2	5	11	3	5	2	5	2	0	1	0	0	0	0	0	43	2
20:00	0	0	0	0	0	0	1	3	4	2	4	8	2	2	1	0	1	0	0	0	0	0	0	28	1
21:00	0	0	0	0	0	0	0	1	3	1	2	3	2	0	0	0	0	0	0	0	0	0	0	12	1
22:00	0	0	0	0	0	0	1	0	3	1	1	6	2	0	0	0	0	0	0	0	0	0	0	14	1
23:00	0	0	0	0	1	0	1	0	1	3	6	3	1	0	0	0	1	0	0	0	0	0	0	17	1
Percent	0.0%	0.0%	0.0%	0.1%	0.7%	1.8%	7.8%	13.7 %	18.0 %	19.2 %	17.8 %	9.7%	6.5%	2.2%	1.5%	0.5%	0.4%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%		
AM Peak Vol.					07:00 2	06:00 6	07:00 26	06:00 50	06:00 37	06:00 33	06:00 24	06:00 12	11:00 14	08:00 3	07:00 3	08:00 1	09:00 1							06:00 193	
PM Peak Vol.				14:00 1	12:00 2	14:00 4	16:00 14	15:00 21	14:00 45	12:00 37	15:00 41	15:00 21	14:00 13	15:00 8	19:00 5	15:00 2	14:00 2	19:00 1	13:00 1					14:00 188	

Ontario Traffic, Inc.
17705 Leslie St., Unit 6
Newmarket, Ontario L3Y 3E3
Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 10697
Station ID: U80
GOODRICH DR from WILSON AVE to CHANDARIA PL
Date Start: 30-Sep-21
Date End: 06-Oct-21
Date Start: 30-Sep-21

EB, WB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Avera
10/05 /21	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	3	0
01:00	0	0	0	0	0	0	1	1	0	2	1	0	0	1	0	0	0	0	0	0	0	0	0	6	0
02:00	0	0	0	0	0	0	1	1	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	5	0
03:00	0	0	0	0	0	0	0	0	2	2	2	1	0	0	0	1	0	0	1	0	0	0	0	9	0
04:00	0	0	0	0	0	0	0	2	0	4	2	1	0	0	0	0	0	0	0	0	0	0	0	9	0
05:00	0	0	0	0	0	0	8	8	11	11	4	2	4	0	1	0	1	0	0	0	0	0	0	50	2
06:00	0	0	0	0	0	4	14	43	59	29	34	13	4	5	0	1	0	0	0	0	0	0	0	206	9
07:00	0	0	1	0	0	2	7	25	25	23	18	9	6	0	2	1	1	0	0	0	0	0	0	120	5
08:00	0	0	0	0	0	1	8	21	18	32	23	15	4	3	4	2	0	0	0	0	0	0	0	131	6
09:00	0	0	0	0	0	3	6	15	17	25	27	10	6	4	1	1	0	0	0	0	0	0	0	115	5
10:00	0	0	0	0	0	3	3	10	16	23	11	16	6	5	1	2	0	2	0	0	0	0	0	98	4
11:00	0	0	0	0	0	1	6	7	26	26	23	21	11	5	3	0	0	0	0	0	0	0	0	129	6
12 PM	0	0	0	0	0	0	7	14	24	36	26	13	8	5	2	1	0	0	1	0	0	0	0	137	6
13:00	0	0	0	2	6	1	7	13	27	35	27	16	4	4	2	1	0	1	0	0	0	0	0	146	6
14:00	0	0	0	0	0	0	4	19	34	32	38	23	11	4	2	0	0	0	0	0	0	0	0	167	7
15:00	0	0	0	0	0	1	12	27	20	31	23	24	17	4	4	0	1	0	0	0	0	0	0	164	7
16:00	0	0	0	1	1	1	6	8	16	11	20	20	14	5	5	1	0	0	0	0	0	0	0	109	5
17:00	0	0	0	0	1	1	7	8	5	9	15	12	12	2	4	2	1	0	0	0	0	0	0	79	3
18:00	0	0	0	0	0	2	2	5	8	5	7	7	5	5	2	2	1	1	0	0	0	0	0	52	2
19:00	0	0	0	0	0	0	2	6	5	2	5	7	8	1	0	1	0	0	0	0	0	0	0	37	2
20:00	0	0	0	0	0	1	1	2	6	2	3	1	1	2	1	2	0	0	0	0	0	0	0	22	1
21:00	0	0	0	0	0	1	1	2	4	2	7	5	0	2	1	0	0	0	0	0	0	0	0	25	1
22:00	0	0	0	0	0	0	0	0	0	3	4	0	0	0	0	0	0	0	0	0	0	0	0	7	0
23:00	0	0	0	0	0	0	2	4	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	10	0
Percent	0.0%	0.0%	0.1%	0.2%	0.4%	1.2%	5.7%	13.1 %	17.6 %	18.8 %	17.8 %	11.9 %	6.6%	3.1%	1.9%	1.0%	0.3%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%		
AM Peak			07:00			06:00	06:00	06:00	06:00	08:00	06:00	11:00	11:00	06:00	08:00	08:00	05:00	10:00	03:00					06:00	
Vol.			1			4	14	43	59	32	34	21	11	5	4	2	1	2	1					206	
PM Peak				13:00	13:00	18:00	15:00	15:00	14:00	12:00	14:00	15:00	15:00	12:00	16:00	17:00	15:00	13:00	12:00					14:00	
Vol.				2	6	2	12	27	34	36	38	24	17	5	5	2	1	1	1					167	

Ontario Traffic, Inc.
17705 Leslie St., Unit 6
Newmarket, Ontario L3Y 3E3
Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 10697
Station ID: U80
GOODRICH DR from WILSON AVE to CHANDARIA PL
Date Start: 30-Sep-21
Date End: 06-Oct-21
Date Start: 30-Sep-21

EB, WB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Avera
10/06 /21	0	0	0	0	0	0	0	0	0	1	1	0	0	0	2	0	0	0	0	0	0	0	0	4	0
01:00	0	0	0	0	1	0	0	0	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	5	0
02:00	0	0	0	0	0	0	1	1	3	0	0	1	1	0	0	1	0	0	0	0	0	0	0	8	0
03:00	0	0	0	0	0	0	0	1	1	0	0	0	1	0	1	0	0	0	0	0	0	0	0	4	0
04:00	0	0	0	0	0	0	0	0	1	4	5	2	0	0	0	0	0	0	0	0	0	0	0	12	1
05:00	0	0	0	0	0	0	3	6	14	8	5	6	5	0	0	0	0	0	0	0	0	0	0	47	2
06:00	0	1	0	0	0	3	14	51	45	45	30	7	5	3	0	0	0	1	0	0	0	0	0	205	9
07:00	0	0	2	0	1	0	17	34	22	25	16	5	3	2	0	0	0	0	0	0	0	0	0	127	6
08:00	0	1	0	1	0	6	9	25	27	34	23	8	4	5	0	1	0	0	0	0	0	0	0	144	6
09:00	0	0	1	2	2	1	8	13	26	20	15	6	3	0	0	0	0	0	0	0	0	0	0	97	4
10:00	0	1	0	0	2	7	3	14	25	24	14	7	2	2	0	0	0	0	0	0	0	0	0	101	4
11:00	0	0	0	0	0	5	7	17	31	29	14	15	2	4	1	0	0	0	0	0	0	0	0	125	5
12 PM	0	0	0	0	2	1	14	21	24	31	25	17	7	2	1	0	0	0	0	0	0	0	0	145	6
13:00	0	0	1	0	2	3	9	21	41	41	25	6	4	2	1	0	0	0	0	0	0	0	0	156	7
14:00	0	0	0	3	1	5	18	25	31	40	18	15	9	6	1	0	0	1	0	0	0	0	0	173	8
15:00	0	0	0	3	1	3	18	17	29	30	31	16	9	1	0	1	0	0	0	0	0	0	0	159	7
16:00	0	0	0	1	2	5	8	18	12	17	20	13	12	2	4	2	0	0	0	0	0	0	0	116	5
17:00	0	0	0	0	1	3	2	10	6	18	9	9	9	3	2	2	1	1	0	0	0	0	0	76	3
18:00	0	0	0	0	0	0	1	1	5	4	6	13	6	5	3	0	0	0	0	0	0	0	0	44	2
19:00	0	0	0	0	0	1	0	0	6	5	2	4	8	5	0	1	0	0	0	0	0	0	0	32	1
20:00	0	0	0	0	0	0	3	2	5	2	2	2	0	1	3	0	0	1	0	0	0	0	0	21	1
21:00	0	0	0	0	0	0	1	1	0	3	1	2	3	0	1	0	0	0	0	0	0	0	0	12	1
22:00	0	0	0	0	0	1	0	2	1	5	1	4	3	2	0	0	0	0	0	0	0	0	0	19	1
23:00	0	0	0	0	2	0	1	0	3	4	2	3	2	2	0	1	0	0	0	0	0	0	0	20	1
Percent	0.0%	0.2%	0.2%	0.5%	0.9%	2.4%	7.4%	15.1 %	19.4 %	21.1 %	14.4 %	8.7%	5.3%	2.5%	1.1%	0.5%	0.1%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%		
AM Peak		06:00	07:00	09:00	09:00	10:00	07:00	06:00	06:00	06:00	06:00	11:00	05:00	08:00	00:00	02:00		06:00						06:00	
Vol.		1	2	2	2	7	17	51	45	45	30	15	5	5	2	1		1						205	
PM Peak			13:00	14:00	12:00	14:00	14:00	14:00	13:00	13:00	15:00	12:00	16:00	14:00	16:00	16:00	17:00	14:00						14:00	
Vol.			1	3	2	5	18	25	41	41	31	17	12	6	4	2	1	1						173	
Total	1	6	10	22	58	160	571	1262	1732	1820	1778	1314	838	417	225	94	38	22	9	0	0	0	0	10377	

Statistics

Mean Speed(Average) : 50 KPH
50th Percentile : 49 KPH
85th Percentile : 61 KPH

Ontario Traffic, Inc.
17705 Leslie St., Unit 6
Newmarket, Ontario L3Y 3E3
Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 13142
Station ID: U154
WABANAKI DR from WILSON AVE to GOODRICH DR
Date Start: 30-Sep-21
Date End: 06-Oct-21
Date Start: 30-Sep-21

NB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
09/30/21	0	13	0	0	0	0	0	0	3	0	0	0	0	16
01:00	0	8	0	0	0	0	0	0	4	0	0	0	0	12
02:00	0	8	0	0	0	0	0	0	2	0	0	0	0	10
03:00	0	14	0	0	0	0	0	0	1	0	0	0	0	15
04:00	0	28	8	0	0	0	0	0	5	0	0	0	0	41
05:00	0	60	23	0	0	0	0	0	4	0	2	0	0	89
06:00	0	135	36	0	0	0	0	0	**19**	0	4	0	0	194
07:00	**2**	**176**	**63**	0	0	0	0	0	14	0	2	0	0	**257**
08:00	2	168	58	0	1	0	1	0	11	0	5	0	0	246
09:00	2	140	48	0	0	**2**	0	**2**	3	0	1	0	**1**	199
10:00	0	145	44	0	0	0	0	0	0	0	**7**	0	0	196
11:00	0	145	38	0	**5**	0	**2**	0	2	0	5	0	0	197
12 PM	0	146	**79**	0	0	0	0	**1**	2	0	10	0	1	239
13:00	0	131	68	0	0	0	0	0	4	0	0	**1**	0	204
14:00	**2**	196	45	0	0	2	0	1	1	0	6	0	**2**	255
15:00	0	237	32	**1**	0	0	0	0	1	0	13	0	0	284
16:00	0	**303**	32	0	0	0	0	0	3	**2**	**19**	1	0	**360**
17:00	1	225	20	0	**2**	0	0	0	2	0	8	0	0	258
18:00	0	185	19	0	0	0	**2**	1	2	0	6	0	0	215
19:00	0	124	11	0	2	1	0	0	0	0	4	0	0	142
20:00	0	96	3	0	0	**4**	0	0	2	1	0	0	0	106
21:00	0	65	1	0	0	0	0	0	6	0	0	0	0	72
22:00	0	47	2	0	0	0	0	0	4	0	0	0	0	53
23:00	0	19	0	0	0	0	0	0	**12**	0	0	0	0	31
Day Total	9	2814	630	1	10	9	5	5	107	3	92	2	4	3691
Percent	0.2%	76.2%	17.1%	0.0%	0.3%	0.2%	0.1%	0.1%	2.9%	0.1%	2.5%	0.1%	0.1%	
AM Peak	07:00	07:00	07:00		11:00	09:00	11:00	09:00	06:00		10:00		09:00	07:00
Vol.	2	176	63		5	2	2	2	19		7		1	257
PM Peak	14:00	16:00	12:00	15:00	17:00	20:00	18:00	12:00	23:00	16:00	16:00	13:00	14:00	16:00
Vol.	2	303	79	1	2	4	2	1	12	2	19	1	2	360

Ontario Traffic, Inc.
17705 Leslie St., Unit 6
Newmarket, Ontario L3Y 3E3
Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 13142
Station ID: U154
WABANAKI DR from WILSON AVE to GOODRICH DR
Date Start: 30-Sep-21
Date End: 06-Oct-21
Date Start: 30-Sep-21

NB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
10/01/21	0	12	0	0	0	0	0	0	6	0	0	0	0	18
01:00	0	6	0	0	0	0	0	0	1	0	0	0	0	7
02:00	0	6	0	0	0	0	0	0	5	0	0	0	0	11
03:00	0	6	0	0	0	0	0	0	3	0	0	0	0	9
04:00	0	29	1	0	0	0	0	0	5	0	0	0	0	35
05:00	0	57	29	0	0	0	0	0	**11**	0	0	0	0	97
06:00	0	120	55	0	0	0	0	0	8	0	0	0	0	183
07:00	1	**175**	**72**	0	0	0	0	0	0	0	7	**1**	1	**257**
08:00	0	160	49	0	0	**2**	1	0	5	0	**11**	0	0	228
09:00	**2**	132	48	0	0	2	**3**	0	2	0	5	0	**2**	196
10:00	0	123	47	0	0	2	0	**4**	2	0	10	0	0	188
11:00	0	155	57	0	**1**	0	0	0	0	**2**	7	0	0	222
12 PM	0	142	56	0	**2**	0	**2**	0	4	0	8	**1**	0	215
13:00	**1**	159	72	0	0	0	0	0	4	0	5	0	0	241
14:00	0	191	**82**	0	1	0	0	0	0	**2**	3	0	0	279
15:00	1	223	33	0	0	1	0	**2**	0	0	10	0	0	270
16:00	0	**252**	30	0	0	0	2	0	**6**	0	11	0	**5**	**306**
17:00	0	208	23	0	0	0	0	2	0	0	**14**	0	2	249
18:00	0	198	20	0	1	0	0	0	0	0	5	0	0	224
19:00	0	132	9	**1**	0	**3**	0	0	0	1	0	0	0	146
20:00	1	107	9	0	1	0	0	0	0	0	0	0	2	120
21:00	0	79	1	0	0	0	0	0	6	0	0	0	0	86
22:00	0	70	0	0	0	0	0	0	3	0	0	0	0	73
23:00	0	42	0	0	0	0	0	0	2	0	0	0	0	44
Day Total	6	2784	693	1	6	10	8	8	73	5	96	2	12	3704
Percent	0.2%	75.2%	18.7%	0.0%	0.2%	0.3%	0.2%	0.2%	2.0%	0.1%	2.6%	0.1%	0.3%	
AM Peak	09:00	07:00	07:00		11:00	08:00	09:00	10:00	05:00	11:00	08:00	07:00	09:00	07:00
Vol.	2	175	72		1	2	3	4	11	2	11	1	2	257
PM Peak	13:00	16:00	14:00	19:00	12:00	19:00	12:00	15:00	16:00	14:00	17:00	12:00	16:00	16:00
Vol.	1	252	82	1	2	3	2	2	6	2	14	1	5	306

Ontario Traffic, Inc.
17705 Leslie St., Unit 6
Newmarket, Ontario L3Y 3E3
Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 13142
Station ID: U154
WABANAKI DR from WILSON AVE to GOODRICH DR
Date Start: 30-Sep-21
Date End: 06-Oct-21
Date Start: 30-Sep-21

NB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
10/02/21	0	30	0	0	0	0	0	0	4	0	0	0	0	34
01:00	0	13	0	0	0	0	0	0	3	0	0	0	0	16
02:00	0	8	1	0	0	0	0	0	2	0	0	0	0	11
03:00	0	5	0	0	0	0	0	0	6	0	0	0	0	11
04:00	0	7	1	0	0	0	0	0	1	0	0	0	0	9
05:00	0	17	8	0	0	0	0	0	3	0	0	0	0	28
06:00	0	34	12	0	0	0	0	0	0	0	0	0	0	46
07:00	0	46	17	0	0	2	0	0	0	0	4	0	1	70
08:00	**4**	83	14	0	0	1	0	0	6	**3**	5	0	0	116
09:00	0	110	31	0	**2**	**3**	0	0	7	3	5	0	0	161
10:00	1	116	**54**	0	2	2	0	0	**9**	0	**13**	0	**2**	**199**
11:00	2	**142**	42	0	1	0	0	0	1	0	6	**1**	0	195
12 PM	**3**	129	37	0	0	2	2	0	2	0	**7**	0	**1**	183
13:00	0	131	**53**	0	**2**	0	0	0	2	0	0	0	0	**188**
14:00	0	129	37	0	1	0	1	2	1	0	6	0	0	177
15:00	1	141	21	0	0	0	1	**4**	4	0	3	0	1	176
16:00	0	**152**	23	0	0	1	0	2	4	0	6	0	0	188
17:00	0	141	10	0	1	**4**	2	0	0	0	5	0	0	163
18:00	0	111	11	0	0	2	1	4	1	**1**	6	0	0	137
19:00	0	106	4	0	0	0	0	0	0	0	1	0	0	111
20:00	0	74	2	0	0	0	**4**	2	2	0	0	0	0	84
21:00	0	65	4	0	0	0	0	0	2	0	0	0	0	71
22:00	0	56	2	0	0	0	0	0	3	0	0	0	0	61
23:00	0	39	0	0	0	0	0	0	**5**	0	0	0	0	44
Day Total	11	1885	384	0	9	17	11	14	68	7	67	1	5	2479
Percent	0.4%	76.0%	15.5%	0.0%	0.4%	0.7%	0.4%	0.6%	2.7%	0.3%	2.7%	0.0%	0.2%	
AM Peak	08:00	11:00	10:00		09:00	09:00			10:00	08:00	10:00	11:00	10:00	10:00
Vol.	4	142	54		2	3			9	3	13	1	2	199
PM Peak	12:00	16:00	13:00		13:00	17:00	20:00	15:00	23:00	18:00	12:00		12:00	13:00
Vol.	3	152	53		2	4	4	4	5	1	7		1	188

Ontario Traffic, Inc.
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Site Code: 13142
Station ID: U154
WABANAKI DR from WILSON AVE to GOODRICH DR
Date Start: 30-Sep-21
Date End: 06-Oct-21
Date Start: 30-Sep-21

NB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
10/03/21	0	20	0	0	0	0	0	0	**4**	0	0	0	0	24
01:00	0	20	0	0	0	0	0	0	1	0	0	0	0	21
02:00	0	11	0	0	0	0	0	0	2	0	0	0	0	13
03:00	0	5	0	0	0	0	0	0	2	0	0	0	0	7
04:00	0	12	0	0	0	0	0	0	0	0	0	0	0	12
05:00	0	6	0	0	0	0	0	0	0	0	0	0	0	6
06:00	0	17	5	0	0	0	0	0	0	0	0	0	0	22
07:00	0	32	13	0	0	**2**	0	0	1	0	1	**1**	0	50
08:00	2	51	11	0	0	2	0	0	0	0	0	0	0	66
09:00	0	62	28	0	**6**	1	**2**	0	2	**1**	**5**	0	0	107
10:00	0	85	25	0	4	2	2	0	0	1	0	0	0	119
11:00	**3**	**93**	**31**	0	0	1	0	**1**	1	0	2	0	**1**	**133**
12 PM	0	98	39	0	**4**	0	0	1	2	0	3	0	0	147
13:00	**2**	95	**45**	0	0	0	0	0	1	0	6	0	0	149
14:00	0	**122**	39	0	0	0	0	**2**	1	**2**	3	0	0	**169**
15:00	0	122	20	0	0	0	0	0	0	1	**7**	0	0	150
16:00	2	121	11	0	2	1	0	1	1	0	6	0	0	145
17:00	2	112	6	0	0	**4**	0	0	1	0	5	0	0	130
18:00	0	101	4	0	0	0	**2**	0	0	0	3	0	0	110
19:00	1	76	12	0	0	2	0	0	2	0	0	0	0	93
20:00	0	71	3	0	0	0	0	0	2	0	0	0	0	76
21:00	0	60	0	0	0	0	0	0	**4**	0	0	0	0	64
22:00	0	36	0	0	0	0	0	0	3	0	0	0	0	39
23:00	0	17	0	0	0	0	0	0	4	0	0	0	0	21
Day Total	12	1445	292	0	16	15	6	5	34	5	41	1	1	1873
Percent	0.6%	77.1%	15.6%	0.0%	0.9%	0.8%	0.3%	0.3%	1.8%	0.3%	2.2%	0.1%	0.1%	
AM Peak	11:00	11:00	11:00		09:00	07:00	09:00	11:00	00:00	09:00	09:00	07:00	11:00	11:00
Vol.	3	93	31		6	2	2	1	4	1	5	1	1	133
PM Peak	13:00	14:00	13:00		12:00	17:00	18:00	14:00	21:00	14:00	15:00			14:00
Vol.	2	122	45		4	4	2	2	4	2	7			169

Ontario Traffic, Inc.
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Site Code: 13142
Station ID: U154
WABANAKI DR from WILSON AVE to GOODRICH DR
Date Start: 30-Sep-21
Date End: 06-Oct-21
Date Start: 30-Sep-21

NB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
10/04/21	0	8	0	0	0	0	0	0	3	0	0	0	0	11
01:00	0	7	0	0	0	0	0	0	1	0	0	0	0	8
02:00	0	4	0	0	0	0	0	0	3	0	0	0	0	7
03:00	0	9	2	0	0	0	0	0	0	0	0	0	0	11
04:00	0	28	0	0	0	0	0	0	5	0	0	0	0	33
05:00	0	75	8	0	0	0	0	0	6	0	1	0	0	90
06:00	0	109	51	0	0	0	0	0	11	0	5	0	0	176
07:00	**2**	**191**	**63**	0	0	0	0	0	5	0	**17**	0	0	**278**
08:00	0	158	53	0	0	0	0	0	1	1	10	0	**2**	225
09:00	0	110	45	0	0	0	0	0	**13**	0	9	0	0	177
10:00	1	123	42	0	**1**	0	0	0	0	0	7	0	2	176
11:00	0	125	43	0	0	**1**	**2**	**2**	0	**2**	6	0	0	181
12 PM	0	147	**48**	0	**3**	**3**	0	0	0	0	7	0	0	208
13:00	0	148	46	0	0	0	0	0	2	0	4	0	0	200
14:00	2	164	44	0	0	0	0	2	0	0	**15**	0	0	227
15:00	0	201	30	0	0	0	**1**	0	1	**2**	14	0	1	250
16:00	0	**214**	34	0	1	0	0	2	**5**	0	13	**1**	**2**	**272**
17:00	0	177	25	0	1	0	0	**3**	2	0	13	0	0	221
18:00	0	151	19	0	0	2	0	1	0	2	2	0	0	177
19:00	2	94	5	0	0	2	0	0	1	0	0	0	0	104
20:00	**3**	70	3	0	0	0	0	1	2	0	0	0	0	79
21:00	0	66	5	0	0	0	0	0	3	0	0	0	0	74
22:00	0	42	1	0	0	0	0	0	3	0	0	0	0	46
23:00	0	32	0	0	0	0	0	0	2	0	0	0	0	34
Day Total	10	2453	567	0	6	8	3	11	69	7	123	1	7	3265
Percent	0.3%	75.1%	17.4%	0.0%	0.2%	0.2%	0.1%	0.3%	2.1%	0.2%	3.8%	0.0%	0.2%	
AM Peak	07:00	07:00	07:00		10:00	11:00	11:00	11:00	09:00	11:00	07:00		08:00	07:00
Vol.	2	191	63		1	1	2	2	13	2	17		2	278
PM Peak	20:00	16:00	12:00		12:00	12:00	15:00	17:00	16:00	15:00	14:00	16:00	16:00	16:00
Vol.	3	214	48		3	3	1	3	5	2	15	1	2	272

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Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 13142
Station ID: U154
WABANAKI DR from WILSON AVE to GOODRICH DR
Date Start: 30-Sep-21
Date End: 06-Oct-21
Date Start: 30-Sep-21

NB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
10/05/21	0	5	0	0	0	0	0	0	1	0	0	0	0	6
01:00	0	6	0	0	0	0	0	0	2	0	0	0	0	8
02:00	0	4	0	0	0	0	0	0	4	0	0	0	0	8
03:00	0	7	0	0	0	0	0	0	6	0	0	0	0	13
04:00	0	32	1	0	0	0	0	0	3	0	0	0	0	36
05:00	0	80	20	0	0	0	0	0	**7**	0	0	0	0	107
06:00	0	155	47	0	0	0	0	0	5	0	12	0	0	219
07:00	**3**	**173**	**72**	0	0	**2**	0	**1**	6	0	**14**	0	0	**271**
08:00	0	157	53	0	0	0	0	0	6	0	11	0	0	227
09:00	0	128	56	0	0	2	**1**	1	5	0	4	0	0	197
10:00	0	119	48	0	0	2	0	0	2	0	6	0	0	177
11:00	0	125	47	0	0	0	1	0	3	0	7	0	0	183
12 PM	1	143	53	0	**2**	0	0	0	0	1	4	0	0	204
13:00	0	140	**55**	0	0	0	**2**	0	2	**2**	4	0	**2**	207
14:00	0	167	37	0	2	0	0	0	5	2	5	0	2	220
15:00	0	203	37	0	2	0	0	**1**	4	2	5	0	0	254
16:00	0	**249**	29	0	0	**2**	0	0	2	2	**17**	0	0	**301**
17:00	0	203	30	0	2	0	0	0	2	0	16	0	0	253
18:00	**2**	138	9	0	1	1	0	0	2	0	10	**1**	0	164
19:00	0	122	9	0	0	0	0	0	0	0	7	0	2	140
20:00	0	88	10	0	2	0	0	0	0	0	0	0	0	100
21:00	0	66	5	0	0	0	0	0	2	0	0	0	0	73
22:00	0	43	2	0	0	0	0	0	**13**	0	0	0	0	58
23:00	0	23	0	0	0	0	0	0	0	0	0	0	0	23
Day Total	6	2576	620	0	11	9	4	3	82	9	122	1	6	3449
Percent	0.2%	74.7%	18.0%	0.0%	0.3%	0.3%	0.1%	0.1%	2.4%	0.3%	3.5%	0.0%	0.2%	
AM Peak	07:00	07:00	07:00			07:00	09:00	07:00	05:00		07:00			07:00
Vol.	3	173	72			2	1	1	7		14			271
PM Peak	18:00	16:00	13:00		12:00	16:00	13:00	15:00	22:00	13:00	16:00	18:00	13:00	16:00
Vol.	2	249	55		2	2	2	1	13	2	17	1	2	301

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Site Code: 13142
Station ID: U154
WABANAKI DR from WILSON AVE to GOODRICH DR
Date Start: 30-Sep-21
Date End: 06-Oct-21
Date Start: 30-Sep-21

NB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
10/06/21	0	13	0	0	0	0	0	0	7	0	0	0	0	20
01:00	0	11	0	0	0	0	0	0	1	0	0	0	0	12
02:00	0	3	0	0	0	0	0	0	2	0	0	0	0	5
03:00	0	13	0	0	0	0	0	0	2	0	0	0	0	15
04:00	0	18	4	0	0	0	0	0	7	0	0	0	0	29
05:00	0	80	8	0	0	0	0	0	6	0	0	0	0	94
06:00	0	128	65	0	0	0	0	0	8	0	4	0	0	205
07:00	0	**183**	69	0	**1**	0	0	0	**13**	0	6	0	0	**272**
08:00	0	177	**74**	**1**	0	0	0	**1**	3	0	4	0	0	260
09:00	0	151	43	0	0	0	0	0	11	0	6	0	0	211
10:00	0	121	39	0	0	**5**	0	0	2	0	**9**	0	0	176
11:00	0	131	42	0	0	0	0	0	2	0	6	0	**2**	183
12 PM	**3**	147	42	0	0	0	0	0	0	0	5	0	0	197
13:00	0	149	49	0	0	0	0	0	1	0	5	0	0	204
14:00	0	159	**56**	0	**2**	2	0	0	5	0	4	**1**	0	229
15:00	2	223	31	0	0	2	0	0	5	0	4	0	0	267
16:00	2	**253**	33	0	0	0	0	**1**	**6**	0	9	0	0	**304**
17:00	0	225	34	0	1	0	0	0	2	**1**	**11**	0	0	274
18:00	0	121	17	0	1	**4**	0	1	0	0	6	0	**2**	152
19:00	2	106	14	0	0	2	**2**	0	0	0	1	0	0	127
20:00	0	77	21	0	0	0	2	0	5	0	0	0	0	105
21:00	0	75	4	0	0	0	0	0	2	0	0	0	0	81
22:00	0	61	0	0	0	0	0	0	4	0	0	0	0	65
23:00	0	32	0	0	0	0	0	0	3	0	0	0	0	35
Day Total	9	2657	645	1	5	15	4	3	97	1	80	1	4	3522
Percent	0.3%	75.4%	18.3%	0.0%	0.1%	0.4%	0.1%	0.1%	2.8%	0.0%	2.3%	0.0%	0.1%	
AM Peak		07:00	08:00	08:00	07:00	10:00		08:00	07:00		10:00		11:00	07:00
Vol.		183	74	1	1	5		1	13		9		2	272
PM Peak	12:00	16:00	14:00		14:00	18:00	19:00	16:00	16:00	17:00	17:00	14:00	18:00	16:00
Vol.	3	253	56		2	4	2	1	6	1	11	1	2	304
Grand Total	63	16614	3831	3	63	83	41	49	530	37	621	9	39	21983
Percent	0.3%	75.6%	17.4%	0.0%	0.3%	0.4%	0.2%	0.2%	2.4%	0.2%	2.8%	0.0%	0.2%	

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WABANAKI DR from WILSON AVE to GOODRICH DR
Date Start: 30-Sep-21
Date End: 06-Oct-21
Date Start: 30-Sep-21

SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
09/30/21	0	2	0	0	0	0	0	**1**	2	0	0	0	0	5
01:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
02:00	1	2	0	0	0	0	0	0	1	0	0	0	0	4
03:00	0	2	0	0	0	0	0	0	2	0	0	0	0	4
04:00	0	2	0	0	1	0	0	0	**3**	0	0	0	0	6
05:00	0	5	1	0	1	0	0	1	1	0	1	0	0	10
06:00	0	24	5	0	1	2	0	0	0	**2**	1	0	**1**	36
07:00	**2**	31	8	0	1	0	0	0	1	1	1	0	1	46
08:00	1	35	7	0	1	1	0	1	1	1	0	0	0	48
09:00	0	31	17	**1**	0	0	0	0	3	1	1	0	0	54
10:00	0	45	19	0	**3**	1	0	1	0	1	**3**	0	0	73
11:00	0	**58**	**26**	0	2	**5**	0	1	1	1	3	0	0	**97**
12 PM	1	40	21	0	**1**	0	0	0	1	0	1	0	0	65
13:00	1	50	30	0	0	**4**	0	**4**	1	0	1	0	0	91
14:00	**2**	**107**	**49**	0	0	2	0	2	2	**1**	5	0	0	**170**
15:00	0	103	13	0	1	1	0	1	1	1	**10**	0	**1**	132
16:00	0	68	4	0	0	0	0	1	2	0	6	0	0	81
17:00	0	67	6	0	0	0	**1**	0	0	0	2	0	1	77
18:00	2	57	3	0	0	0	0	0	0	0	2	0	0	64
19:00	0	39	2	**1**	0	1	0	0	0	0	1	0	0	44
20:00	0	25	1	0	0	0	0	0	0	0	1	0	0	27
21:00	0	24	1	0	0	0	0	0	0	0	0	0	0	25
22:00	0	15	0	0	0	0	0	0	**3**	0	1	0	0	19
23:00	0	13	0	0	0	0	0	0	3	0	0	0	0	16
Day Total	10	847	213	2	12	17	1	13	28	9	40	0	4	1196
Percent	0.8%	70.8%	17.8%	0.2%	1.0%	1.4%	0.1%	1.1%	2.3%	0.8%	3.3%	0.0%	0.3%	
AM Peak	07:00	11:00	11:00	09:00	10:00	11:00		00:00	04:00	06:00	10:00		06:00	11:00
Vol.	2	58	26	1	3	5		1	3	2	3		1	97
PM Peak	14:00	14:00	14:00	19:00	12:00	13:00	17:00	13:00	22:00	14:00	15:00		15:00	14:00
Vol.	2	107	49	1	1	4	1	4	3	1	10		1	170

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WABANAKI DR from WILSON AVE to GOODRICH DR
Date Start: 30-Sep-21
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Date Start: 30-Sep-21

SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
10/01/21	1	4	0	0	0	0	0	0	2	0	0	0	0	7
01:00	0	1	0	0	0	0	0	0	**3**	0	0	0	0	4
02:00	0	2	0	0	0	0	0	0	2	0	0	0	0	4
03:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
04:00	0	1	1	0	1	0	0	0	0	0	0	0	0	3
05:00	0	5	1	0	1	1	0	0	3	0	0	0	0	11
06:00	0	24	4	0	0	0	0	**1**	1	0	1	0	0	31
07:00	1	24	12	0	1	1	**1**	0	0	0	1	0	**1**	42
08:00	1	43	17	0	2	2	1	0	1	1	0	0	0	68
09:00	0	41	18	0	2	2	0	0	2	0	1	0	1	67
10:00	**2**	50	19	0	**4**	**3**	0	1	1	**2**	**3**	0	0	85
11:00	0	**56**	**26**	0	0	1	1	1	3	2	3	0	1	**94**
12 PM	1	73	20	0	0	**5**	**1**	**2**	**2**	**1**	3	0	**2**	110
13:00	0	59	**37**	0	**1**	1	1	2	0	0	3	0	1	105
14:00	**2**	**116**	35	0	1	0	0	0	1	1	2	**1**	1	**160**
15:00	1	115	19	0	0	0	0	1	2	1	3	0	1	143
16:00	2	77	3	0	1	0	0	1	0	0	1	0	0	85
17:00	0	41	3	0	1	1	1	2	1	0	**4**	0	0	54
18:00	0	46	5	0	0	0	0	1	0	0	1	0	0	53
19:00	0	34	0	0	0	0	0	0	1	0	0	0	0	35
20:00	0	38	0	0	0	0	0	0	0	0	0	0	0	38
21:00	0	24	2	0	0	0	0	0	2	0	1	0	0	29
22:00	0	21	1	0	0	0	0	0	1	0	0	0	0	23
23:00	0	17	0	0	0	0	1	0	1	0	0	0	0	19
Day Total	11	913	223	0	15	17	7	12	29	8	27	1	8	1271
Percent	0.9%	71.8%	17.5%	0.0%	1.2%	1.3%	0.6%	0.9%	2.3%	0.6%	2.1%	0.1%	0.6%	
AM Peak	10:00	11:00	11:00		10:00	10:00	07:00	06:00	01:00	10:00	10:00		07:00	11:00
Vol.	2	56	26		4	3	1	1	3	2	3		1	94
PM Peak	14:00	14:00	13:00		13:00	12:00	12:00	12:00	12:00	12:00	17:00	14:00	12:00	14:00
Vol.	2	116	37		1	5	1	2	2	1	4	1	2	160

Ontario Traffic, Inc.
17705 Leslie St., Unit 6
Newmarket, Ontario L3Y 3E3
Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 13142
Station ID: U154
WABANAKI DR from WILSON AVE to GOODRICH DR
Date Start: 30-Sep-21
Date End: 06-Oct-21
Date Start: 30-Sep-21

SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
10/02/21	0	13	1	0	0	0	0	0	**1**	0	0	0	0	15
01:00	0	4	0	0	0	0	0	0	1	0	0	0	0	5
02:00	0	1	0	0	0	0	0	0	1	0	0	0	0	2
03:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
04:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
05:00	0	1	0	0	0	0	0	0	1	0	0	0	0	2
06:00	0	3	**3**	0	0	0	0	0	0	0	0	0	0	6
07:00	0	7	0	0	0	0	0	0	0	0	0	0	0	7
08:00	0	15	3	0	0	0	0	0	0	0	0	0	0	18
09:00	0	26	3	0	0	0	0	0	0	0	0	0	0	29
10:00	**2**	26	1	0	0	0	0	0	0	0	0	0	0	29
11:00	1	**46**	2	0	**2**	0	0	0	0	0	**2**	0	0	**53**
12 PM	0	42	1	0	0	0	0	0	0	0	1	0	0	44
13:00	1	39	**4**	0	0	0	0	0	0	0	1	0	0	45
14:00	**2**	48	3	0	0	0	0	0	0	0	0	0	0	53
15:00	0	**55**	1	0	0	**1**	0	0	0	0	**3**	0	0	**60**
16:00	0	53	3	**1**	0	0	0	0	0	0	2	0	0	59
17:00	0	43	3	0	0	0	0	0	0	0	2	0	0	48
18:00	0	37	1	0	0	0	0	0	**1**	0	1	0	0	40
19:00	2	20	1	0	0	0	0	0	0	0	1	0	0	24
20:00	2	19	1	0	0	0	0	0	0	0	2	0	0	24
21:00	0	15	0	0	0	0	0	0	0	0	0	0	0	15
22:00	0	13	0	0	0	0	0	0	0	0	0	0	0	13
23:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
Day Total	10	532	31	1	2	1	0	0	5	0	15	0	0	597
Percent	1.7%	89.1%	5.2%	0.2%	0.3%	0.2%	0.0%	0.0%	0.8%	0.0%	2.5%	0.0%	0.0%	
AM Peak	10:00	11:00	06:00		11:00				00:00		11:00			11:00
Vol.	2	46	3		2				1		2			53
PM Peak	14:00	15:00	13:00	16:00		15:00			18:00		15:00			15:00
Vol.	2	55	4	1		1			1		3			60

Ontario Traffic, Inc.
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Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 13142
Station ID: U154
WABANAKI DR from WILSON AVE to GOODRICH DR
Date Start: 30-Sep-21
Date End: 06-Oct-21
Date Start: 30-Sep-21

SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
10/03/21	**1**	9	0	0	0	0	0	0	0	0	0	0	0	10
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	1	0	0	**1**	0	0	0	1	0	0	0	0	3
05:00	0	0	0	0	1	0	0	0	0	0	0	0	0	1
06:00	0	6	1	0	1	0	0	0	0	0	0	0	0	8
07:00	0	13	**4**	0	0	0	0	0	**2**	0	0	0	0	19
08:00	0	11	2	0	0	0	0	0	0	0	0	0	0	13
09:00	0	16	1	0	1	0	0	0	0	0	0	0	0	18
10:00	0	14	2	0	0	0	0	0	1	0	0	0	0	17
11:00	0	**39**	2	0	0	0	0	0	0	0	**1**	0	0	**42**
12 PM	0	32	**6**	0	**1**	0	0	0	0	0	1	0	0	40
13:00	0	38	5	0	0	0	0	0	0	0	0	0	0	43
14:00	0	**56**	3	0	0	0	0	**1**	0	0	1	0	**1**	**62**
15:00	0	42	6	0	0	0	0	1	0	0	0	0	0	49
16:00	0	54	1	0	0	0	0	0	0	0	**3**	0	0	58
17:00	**1**	50	3	0	0	**1**	0	0	1	0	0	0	1	57
18:00	0	19	1	0	0	0	0	0	1	0	1	0	0	22
19:00	0	16	1	0	0	0	0	0	0	0	1	0	0	18
20:00	1	25	0	0	0	0	0	0	2	0	0	0	0	28
21:00	0	16	1	0	0	0	0	0	0	0	0	0	0	17
22:00	0	10	0	0	0	0	0	0	1	0	0	0	0	11
23:00	0	6	0	0	0	0	0	0	**5**	0	0	0	0	11
Day Total	3	475	39	0	5	1	0	2	14	0	8	0	2	549
Percent	0.5%	86.5%	7.1%	0.0%	0.9%	0.2%	0.0%	0.4%	2.6%	0.0%	1.5%	0.0%	0.4%	
AM Peak	00:00	11:00	07:00		04:00				07:00		11:00			11:00
Vol.	1	39	4		1				2		1			42
PM Peak	17:00	14:00	12:00		12:00	17:00		14:00	23:00		16:00		14:00	14:00
Vol.	1	56	6		1	1		1	5		3		1	62

Ontario Traffic, Inc.
17705 Leslie St., Unit 6
Newmarket, Ontario L3Y 3E3
Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 13142
Station ID: U154
WABANAKI DR from WILSON AVE to GOODRICH DR
Date Start: 30-Sep-21
Date End: 06-Oct-21
Date Start: 30-Sep-21

SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
10/04/21	0	1	0	0	0	0	0	0	0	0	0	0	0	1
01:00	**1**	2	0	0	0	0	0	0	1	0	0	0	0	4
02:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
03:00	0	3	0	0	0	0	0	0	2	0	0	0	0	5
04:00	0	1	0	0	0	0	0	0	1	0	0	0	0	2
05:00	0	6	3	0	0	0	0	0	1	0	0	0	**1**	11
06:00	1	22	12	0	1	**4**	**1**	0	0	0	0	**1**	1	43
07:00	1	30	13	0	**2**	1	0	**1**	3	0	**5**	0	1	57
08:00	0	43	**18**	0	1	1	0	0	0	0	2	0	0	65
09:00	0	39	13	0	2	1	0	0	**4**	0	4	0	0	63
10:00	0	36	17	0	0	3	0	0	1	0	3	0	0	60
11:00	0	**54**	17	0	1	2	1	0	1	0	3	0	0	**79**
12 PM	0	46	26	0	1	2	0	**2**	1	0	2	**1**	0	81
13:00	0	67	**45**	0	1	**4**	**2**	0	0	0	4	0	**1**	124
14:00	**1**	**125**	33	0	**3**	2	0	1	**3**	0	2	0	0	**170**
15:00	0	93	15	0	1	0	2	2	1	0	**6**	1	0	121
16:00	0	73	6	0	0	0	0	2	1	0	5	0	0	87
17:00	1	64	8	0	0	1	0	1	1	0	2	0	0	78
18:00	0	41	2	0	0	0	0	0	0	0	2	0	0	45
19:00	0	31	7	0	0	1	0	0	0	0	0	0	0	39
20:00	0	19	2	0	0	0	0	0	1	0	0	0	0	22
21:00	0	15	2	0	0	0	0	0	1	0	0	0	0	18
22:00	0	12	0	0	0	0	0	0	2	0	0	0	0	14
23:00	0	16	0	0	0	0	0	0	3	0	0	0	0	19
Day Total	5	840	239	0	13	22	6	9	28	0	40	3	4	1209
Percent	0.4%	69.5%	19.8%	0.0%	1.1%	1.8%	0.5%	0.7%	2.3%	0.0%	3.3%	0.2%	0.3%	
AM Peak	01:00	11:00	08:00		07:00	06:00	06:00	07:00	09:00		07:00	06:00	05:00	11:00
Vol.	1	54	18		2	4	1	1	4		5	1	1	79
PM Peak	14:00	14:00	13:00		14:00	13:00	13:00	12:00	14:00		15:00	12:00	13:00	14:00
Vol.	1	125	45		3	4	2	2	3		6	1	1	170

Ontario Traffic, Inc.
17705 Leslie St., Unit 6
Newmarket, Ontario L3Y 3E3
Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 13142
Station ID: U154
WABANAKI DR from WILSON AVE to GOODRICH DR
Date Start: 30-Sep-21
Date End: 06-Oct-21
Date Start: 30-Sep-21

SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
10/05/21	0	2	0	0	0	0	0	0	2	0	0	0	0	4
01:00	0	4	0	0	0	0	0	0	0	0	0	0	0	4
02:00	0	1	0	0	0	0	0	0	1	0	0	0	0	2
03:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
04:00	0	2	0	0	0	0	0	0	1	0	0	0	0	3
05:00	0	8	2	0	1	1	0	0	**3**	0	0	0	0	15
06:00	1	31	5	0	0	1	0	1	1	0	0	0	1	41
07:00	**2**	32	16	0	1	0	0	0	0	0	0	0	1	52
08:00	1	46	16	0	0	2	**1**	**3**	2	0	1	0	0	72
09:00	0	38	15	0	0	0	1	0	2	0	0	0	1	57
10:00	0	45	12	0	**3**	1	0	1	0	0	**4**	0	0	66
11:00	0	**50**	**23**	0	1	**4**	0	0	3	0	3	0	**2**	**86**
12 PM	**1**	58	24	0	0	**2**	0	0	**2**	0	3	0	2	92
13:00	1	53	40	0	1	2	**2**	1	1	0	0	**2**	1	104
14:00	0	**114**	**43**	0	**2**	1	1	1	2	0	3	0	**4**	**171**
15:00	1	91	11	0	1	0	2	**2**	1	0	**7**	0	0	116
16:00	0	86	13	0	1	0	0	1	2	0	2	1	1	107
17:00	0	72	5	0	0	1	1	1	0	0	2	0	1	83
18:00	1	41	6	0	0	0	0	0	0	0	3	0	0	51
19:00	0	51	0	0	0	0	0	1	0	0	1	0	0	53
20:00	0	16	2	0	0	0	0	0	0	0	0	0	0	18
21:00	0	19	2	0	0	0	0	0	1	0	0	0	0	22
22:00	0	21	0	0	0	0	0	0	0	0	0	0	0	21
23:00	0	8	0	0	0	0	0	0	1	0	0	0	0	9
Day Total	8	891	235	0	11	15	8	12	25	0	29	3	14	1251
Percent	0.6%	71.2%	18.8%	0.0%	0.9%	1.2%	0.6%	1.0%	2.0%	0.0%	2.3%	0.2%	1.1%	
AM Peak	07:00	11:00	11:00		10:00	11:00	08:00	08:00	05:00		10:00		11:00	11:00
Vol.	2	50	23		3	4	1	3	3		4		2	86
PM Peak	12:00	14:00	14:00		14:00	12:00	13:00	15:00	12:00		15:00	13:00	14:00	14:00
Vol.	1	114	43		2	2	2	2	2		7	2	4	171

Ontario Traffic, Inc.
17705 Leslie St., Unit 6
Newmarket, Ontario L3Y 3E3
Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 13142
Station ID: U154
WABANAKI DR from WILSON AVE to GOODRICH DR
Date Start: 30-Sep-21
Date End: 06-Oct-21
Date Start: 30-Sep-21

SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
10/06/21	1	11	0	0	0	0	0	0	1	0	0	0	0	13
01:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	1	0	0	0	0	0	0	0	1	0	0	0	2
04:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
05:00	0	4	1	0	0	1	0	**2**	2	1	0	0	1	12
06:00	**2**	27	9	0	1	0	0	0	1	0	0	0	0	40
07:00	0	38	13	0	2	4	**1**	1	1	1	**3**	0	**2**	66
08:00	1	40	12	0	1	2	1	2	2	0	3	0	0	64
09:00	0	34	13	0	**3**	1	1	0	**3**	**2**	2	0	0	59
10:00	0	47	10	0	3	4	0	0	0	0	1	0	0	65
11:00	0	**59**	**25**	0	0	**6**	0	1	2	0	2	0	1	**96**
12 PM	**2**	56	17	0	0	1	0	**1**	2	0	3	0	0	82
13:00	2	65	**39**	0	0	**6**	1	0	3	0	**6**	0	**2**	124
14:00	0	109	29	0	**2**	1	**2**	0	0	0	3	0	1	147
15:00	1	**120**	23	0	1	1	1	1	2	**1**	3	0	0	**154**
16:00	1	78	13	0	1	3	0	1	2	0	3	**1**	0	103
17:00	1	48	6	0	0	0	0	0	2	0	1	0	0	58
18:00	0	51	4	0	0	2	0	0	1	0	0	0	0	58
19:00	0	44	0	0	0	0	0	0	1	0	2	0	0	47
20:00	0	19	2	0	0	0	0	0	0	0	0	0	0	21
21:00	0	19	1	0	0	1	1	0	2	1	1	0	0	26
22:00	0	19	0	0	0	0	0	0	1	0	1	0	0	21
23:00	0	11	1	0	0	0	0	0	**4**	0	0	0	0	16
Day Total	11	905	218	0	14	33	8	9	32	7	34	1	7	1279
Percent	0.9%	70.8%	17.0%	0.0%	1.1%	2.6%	0.6%	0.7%	2.5%	0.5%	2.7%	0.1%	0.5%	
AM Peak	06:00	11:00	11:00		09:00	11:00	07:00	05:00	09:00	09:00	07:00		07:00	11:00
Vol.	2	59	25		3	6	1	2	3	2	3		2	96
PM Peak	12:00	15:00	13:00		14:00	13:00	14:00	12:00	23:00	15:00	13:00	16:00	13:00	15:00
Vol.	2	120	39		2	6	2	1	4	1	6	1	2	154
Grand Total	58	5403	1198	3	72	106	30	57	161	24	193	8	39	7352
Percent	0.8%	73.5%	16.3%	0.0%	1.0%	1.4%	0.4%	0.8%	2.2%	0.3%	2.6%	0.1%	0.5%	

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Site Code: 13142
Station ID: U154
WABANAKI DR from WILSON AVE to GOODRICH DR
Date Start: 30-Sep-21
Date End: 06-Oct-21
Date Start: 30-Sep-21

NB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Avera
09/30 /21	0	0	0	0	0	0	0	3	0	4	5	4	0	0	0	0	0	0	0	0	0	0	0	16	1
01:00	0	0	8	0	0	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	12	1
02:00	0	0	4	0	0	0	0	1	0	1	1	3	0	0	0	0	0	0	0	0	0	0	0	10	0
03:00	0	0	2	0	0	0	2	0	4	1	2	1	3	0	0	0	0	0	0	0	0	0	0	15	1
04:00	0	0	2	0	0	0	1	5	2	5	5	3	18	0	0	0	0	0	0	0	0	0	0	41	2
05:00	0	0	0	4	5	0	3	13	12	9	24	9	7	3	0	0	0	0	0	0	0	0	0	89	4
06:00	0	0	0	0	0	2	7	3	38	30	92	17	5	0	0	0	0	0	0	0	0	0	0	194	8
07:00	0	0	0	0	5	5	1	5	44	93	56	28	12	8	0	0	0	0	0	0	0	0	0	257	11
08:00	0	0	1	0	0	0	0	9	35	96	54	26	25	0	0	0	0	0	0	0	0	0	0	246	11
09:00	0	0	0	0	0	0	1	8	30	67	53	19	9	12	0	0	0	0	0	0	0	0	0	199	9
10:00	0	0	0	0	0	0	2	5	27	61	52	28	6	15	0	0	0	0	0	0	0	0	0	196	9
11:00	0	0	0	0	0	5	4	11	25	38	54	50	8	2	0	0	0	0	0	0	0	0	0	197	9
12 PM	0	0	0	0	0	0	4	19	42	54	62	43	10	3	2	0	0	0	0	0	0	0	0	239	10
13:00	0	0	0	1	0	1	3	4	40	48	41	52	12	2	0	0	0	0	0	0	0	0	0	204	9
14:00	0	0	0	1	0	1	3	7	35	71	73	45	16	1	1	1	0	0	0	0	0	0	0	255	11
15:00	0	0	1	1	0	0	0	1	17	61	102	76	20	3	1	1	0	0	0	0	0	0	0	284	12
16:00	0	0	0	0	1	2	0	18	35	52	142	86	19	5	0	0	0	0	0	0	0	0	0	360	16
17:00	0	1	0	0	0	0	14	8	9	70	81	46	21	7	0	0	1	0	0	0	0	0	0	258	11
18:00	0	0	0	0	0	1	4	2	9	46	80	55	14	4	0	0	0	0	0	0	0	0	0	215	9
19:00	0	0	0	1	0	0	1	0	11	36	42	40	8	2	0	0	1	0	0	0	0	0	0	142	6
20:00	0	0	1	0	0	2	2	3	4	23	45	16	9	1	0	0	0	0	0	0	0	0	0	106	5
21:00	0	0	0	0	0	1	0	3	9	17	25	14	0	0	1	0	2	0	0	0	0	0	0	72	3
22:00	0	0	1	0	1	1	0	10	7	8	9	11	4	0	0	1	0	0	0	0	0	0	0	53	2
23:00	0	0	0	0	0	0	2	1	2	7	16	3	0	0	0	0	0	0	0	0	0	0	0	31	1
Percent	0.0%	0.0%	0.5%	0.2%	0.3%	0.6%	1.5%	3.8%	11.8 %	24.4 %	30.3 %	18.3 %	6.1%	1.8%	0.1%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
AM Peak			01:00	05:00	05:00	07:00	06:00	05:00	07:00	08:00	06:00	11:00	08:00	10:00										07:00	
Vol.			8	4	5	5	7	13	44	96	92	50	25	15										257	
PM Peak		17:00	15:00	13:00	16:00	16:00	17:00	12:00	12:00	14:00	16:00	16:00	17:00	17:00	12:00	14:00	21:00							16:00	
Vol.		1	1	1	1	2	14	19	42	71	142	86	21	7	2	1	2							360	

Ontario Traffic, Inc.
17705 Leslie St., Unit 6
Newmarket, Ontario L3Y 3E3
Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 13142
Station ID: U154
WABANAKI DR from WILSON AVE to GOODRICH DR
Date Start: 30-Sep-21
Date End: 06-Oct-21
Date Start: 30-Sep-21

NB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Avera
10/01 /21	0	0	1	1	1	0	0	0	0	6	1	5	1	0	1	1	0	0	0	0	0	0	0	18	1
01:00	0	0	0	1	1	0	0	1	1	1	1	0	0	1	0	0	0	0	0	0	0	0	0	7	0
02:00	0	0	0	1	1	1	0	0	0	2	0	4	1	1	0	0	0	0	0	0	0	0	0	11	0
03:00	0	0	0	0	0	0	0	1	4	1	0	0	1	2	0	0	0	0	0	0	0	0	0	9	0
04:00	0	0	0	0	0	0	0	2	0	7	22	4	0	0	0	0	0	0	0	0	0	0	0	35	2
05:00	0	0	0	23	3	0	0	15	7	11	25	5	4	4	0	0	0	0	0	0	0	0	0	97	4
06:00	0	0	0	0	0	5	1	4	25	49	51	38	3	5	1	1	0	0	0	0	0	0	0	183	8
07:00	0	0	1	0	0	6	4	1	25	90	87	24	13	5	0	1	0	0	0	0	0	0	0	257	11
08:00	0	0	0	0	0	0	9	6	25	73	69	31	14	0	1	0	0	0	0	0	0	0	0	228	10
09:00	0	0	0	0	0	2	0	6	32	59	56	19	16	6	0	0	0	0	0	0	0	0	0	196	9
10:00	0	0	0	0	0	0	0	1	32	53	57	28	11	1	5	0	0	0	0	0	0	0	0	188	8
11:00	0	0	0	0	1	2	5	13	31	53	51	37	21	2	6	0	0	0	0	0	0	0	0	222	10
12 PM	0	0	0	0	0	0	2	12	32	61	55	32	18	1	1	1	0	0	0	0	0	0	0	215	9
13:00	0	0	0	2	1	1	3	8	35	76	61	36	14	4	0	0	0	0	0	0	0	0	0	241	10
14:00	0	0	2	0	2	2	1	12	28	77	93	45	16	1	0	0	0	0	0	0	0	0	0	279	12
15:00	0	0	0	0	0	0	2	8	26	54	98	63	11	7	1	0	0	0	0	0	0	0	0	270	12
16:00	0	1	2	0	0	1	0	8	26	67	101	78	15	6	0	0	1	0	0	0	0	0	0	306	13
17:00	0	0	0	0	0	0	6	1	18	50	74	70	17	11	1	1	0	0	0	0	0	0	0	249	11
18:00	0	0	0	0	0	0	0	2	18	68	67	43	18	6	2	0	0	0	0	0	0	0	0	224	10
19:00	0	0	0	3	0	6	0	7	12	31	57	20	8	2	0	0	0	0	0	0	0	0	0	146	6
20:00	0	0	0	0	3	2	1	8	15	24	41	16	8	2	0	0	0	0	0	0	0	0	0	120	5
21:00	0	0	1	1	0	0	2	7	7	23	25	18	1	0	0	0	1	0	0	0	0	0	0	86	4
22:00	0	0	0	1	1	0	0	10	5	29	11	13	2	1	0	0	0	0	0	0	0	0	0	73	3
23:00	0	0	0	0	1	1	1	1	4	9	18	2	1	2	2	1	1	0	0	0	0	0	0	44	2
Percent	0.0%	0.0%	0.2%	0.9%	0.4%	0.8%	1.0%	3.6%	11.0 %	26.3 %	30.3 %	17.0 %	5.8%	1.9%	0.6%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
AM Peak			00:00	05:00	05:00	07:00	08:00	05:00	09:00	07:00	07:00	06:00	11:00	09:00	11:00	00:00								07:00	
Vol.			1	23	3	6	9	15	32	90	87	38	21	6	6	1								257	
PM Peak		16:00	14:00	19:00	20:00	19:00	17:00	12:00	13:00	14:00	16:00	16:00	12:00	17:00	18:00	12:00	16:00							16:00	
Vol.		1	2	3	3	6	6	12	35	77	101	78	18	11	2	1	1							306	

Ontario Traffic, Inc.
17705 Leslie St., Unit 6
Newmarket, Ontario L3Y 3E3
Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 13142
Station ID: U154
WABANAKI DR from WILSON AVE to GOODRICH DR
Date Start: 30-Sep-21
Date End: 06-Oct-21
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NB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Avera
10/02 /21	0	0	0	1	0	0	0	0	2	7	7	13	2	1	0	1	0	0	0	0	0	0	0	34	1
01:00	0	0	2	0	0	0	0	0	1	7	2	0	2	0	1	0	1	0	0	0	0	0	0	16	1
02:00	0	0	0	0	1	0	0	0	0	5	4	1	0	0	0	0	0	0	0	0	0	0	0	11	0
03:00	0	0	0	0	0	2	1	0	1	0	3	1	1	0	1	0	1	0	0	0	0	0	0	11	0
04:00	0	0	0	1	0	1	0	0	0	1	2	0	1	3	0	0	0	0	0	0	0	0	0	9	0
05:00	0	0	1	3	0	1	1	4	3	1	10	0	2	1	1	0	0	0	0	0	0	0	0	28	1
06:00	0	0	1	0	0	2	0	0	6	6	8	19	2	0	0	2	0	0	0	0	0	0	0	46	2
07:00	0	0	0	0	0	1	2	0	5	18	24	8	11	0	0	0	1	0	0	0	0	0	0	70	3
08:00	0	0	0	0	0	0	0	2	13	29	45	17	7	3	0	0	0	0	0	0	0	0	0	116	5
09:00	0	0	0	0	1	1	2	3	19	35	57	30	12	0	1	0	0	0	0	0	0	0	0	161	7
10:00	0	0	0	4	0	0	0	3	33	58	50	41	10	0	0	0	0	0	0	0	0	0	0	199	9
11:00	0	0	0	0	0	1	2	5	21	33	73	34	18	1	7	0	0	0	0	0	0	0	0	195	8
12 PM	0	0	0	1	2	0	3	4	22	35	61	35	16	3	0	1	0	0	0	0	0	0	0	183	8
13:00	0	0	0	0	3	3	1	2	27	60	53	29	9	1	0	0	0	0	0	0	0	0	0	188	8
14:00	0	0	0	2	0	2	0	5	20	50	51	32	12	3	0	0	0	0	0	0	0	0	0	177	8
15:00	0	0	2	0	0	0	0	1	11	35	67	47	12	0	1	0	0	0	0	0	0	0	0	176	8
16:00	0	0	2	0	0	1	0	12	19	27	77	40	7	1	2	0	0	0	0	0	0	0	0	188	8
17:00	0	0	1	1	0	0	0	11	3	39	54	39	15	0	0	0	0	0	0	0	0	0	0	163	7
18:00	0	0	0	0	0	0	1	6	12	27	47	33	8	2	1	0	0	0	0	0	0	0	0	137	6
19:00	0	0	0	0	0	0	9	1	6	25	30	23	17	0	0	0	0	0	0	0	0	0	0	111	5
20:00	0	0	0	1	0	0	0	3	12	19	30	15	2	2	0	0	0	0	0	0	0	0	0	84	4
21:00	0	1	1	1	1	3	2	4	6	15	11	20	2	2	0	0	2	0	0	0	0	0	0	71	3
22:00	0	0	1	2	0	2	0	2	11	19	9	12	3	0	0	0	0	0	0	0	0	0	0	61	3
23:00	0	0	0	0	0	1	0	0	3	22	11	3	2	0	1	1	0	0	0	0	0	0	0	44	2
Percent	0.0%	0.0%	0.4%	0.7%	0.3%	0.8%	1.0%	2.7%	10.3 %	23.1 %	31.7 %	19.8 %	7.0%	0.9%	0.6%	0.2%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
AM Peak			01:00	10:00	02:00	03:00	07:00	11:00	10:00	10:00	11:00	10:00	11:00	04:00	11:00	06:00	01:00							10:00	
Vol.			2	4	1	2	2	5	33	58	73	41	18	3	7	2	1							199	
PM Peak		21:00	15:00	14:00	13:00	13:00	19:00	16:00	13:00	13:00	16:00	15:00	19:00	12:00	16:00	12:00	21:00							13:00	
Vol.		1	2	2	3	3	9	12	27	60	77	47	17	3	2	1	2							188	

Ontario Traffic, Inc.
17705 Leslie St., Unit 6
Newmarket, Ontario L3Y 3E3
Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 13142
Station ID: U154
WABANAKI DR from WILSON AVE to GOODRICH DR
Date Start: 30-Sep-21
Date End: 06-Oct-21
Date Start: 30-Sep-21

NB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Avera
10/03 /21	0	0	0	0	0	1	0	0	3	9	5	3	1	2	0	0	0	0	0	0	0	0	0	24	1
01:00	0	1	1	1	1	2	0	1	2	8	0	3	0	0	0	0	1	0	0	0	0	0	0	21	1
02:00	0	0	0	0	0	0	1	0	3	2	3	2	0	2	0	0	0	0	0	0	0	0	0	13	1
03:00	0	0	0	1	0	0	0	1	1	2	1	0	0	0	0	1	0	0	0	0	0	0	0	7	0
04:00	0	0	0	1	0	0	3	0	0	0	6	0	1	0	0	0	1	0	0	0	0	0	0	12	1
05:00	0	0	0	0	0	0	0	0	2	0	3	1	0	0	0	0	0	0	0	0	0	0	0	6	0
06:00	0	0	0	0	0	0	0	3	2	5	8	4	0	0	0	0	0	0	0	0	0	0	0	22	1
07:00	0	0	0	1	0	0	0	2	9	15	14	5	3	1	0	0	0	0	0	0	0	0	0	50	2
08:00	0	0	0	0	0	0	1	2	9	19	19	8	8	0	0	0	0	0	0	0	0	0	0	66	3
09:00	0	0	0	0	0	0	1	5	26	32	27	9	7	0	0	0	0	0	0	0	0	0	0	107	5
10:00	0	0	0	0	0	0	1	6	20	35	32	19	6	0	0	0	0	0	0	0	0	0	0	119	5
11:00	0	0	0	0	1	0	2	5	27	36	30	26	6	0	0	0	0	0	0	0	0	0	0	133	6
12 PM	0	0	0	0	2	1	1	9	22	39	40	19	7	4	3	0	0	0	0	0	0	0	0	147	6
13:00	0	0	0	0	1	1	1	5	23	49	35	20	9	3	2	0	0	0	0	0	0	0	0	149	6
14:00	0	0	0	0	0	0	2	3	33	54	43	26	5	2	1	0	0	0	0	0	0	0	0	169	7
15:00	0	0	0	0	0	0	1	4	15	33	47	41	7	2	0	0	0	0	0	0	0	0	0	150	7
16:00	0	0	0	1	0	1	1	2	11	34	56	25	10	2	1	1	0	0	0	0	0	0	0	145	6
17:00	0	0	0	0	0	0	0	7	10	28	45	26	13	1	0	0	0	0	0	0	0	0	0	130	6
18:00	0	0	0	0	1	0	0	0	6	19	44	27	9	4	0	0	0	0	0	0	0	0	0	110	5
19:00	0	0	0	0	0	0	1	4	8	15	31	23	10	1	0	0	0	0	0	0	0	0	0	93	4
20:00	0	0	0	0	0	0	0	8	6	21	20	10	10	0	0	0	1	0	0	0	0	0	0	76	3
21:00	0	1	0	0	0	2	2	7	8	9	16	11	5	0	2	0	1	0	0	0	0	0	0	64	3
22:00	0	0	0	0	0	0	1	3	3	11	9	3	6	2	1	0	0	0	0	0	0	0	0	39	2
23:00	0	0	0	0	0	0	0	3	2	3	7	4	1	1	0	0	0	0	0	0	0	0	0	21	1
Percent	0.0%	0.1%	0.1%	0.3%	0.3%	0.4%	1.0%	4.3%	13.4 %	25.5 %	28.9 %	16.8 %	6.6%	1.4%	0.5%	0.1%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
AM Peak		01:00	01:00	01:00	01:00	01:00	04:00	10:00	11:00	11:00	10:00	11:00	08:00	00:00		03:00	01:00							11:00	
Vol.		1	1	1	1	2	3	6	27	36	32	26	8	2		1	1							133	
PM Peak		21:00		16:00	12:00	21:00	14:00	12:00	14:00	14:00	16:00	15:00	17:00	12:00	12:00	16:00	20:00							14:00	
Vol.		1		1	2	2	2	9	33	54	56	41	13	4	3	1	1							169	

Ontario Traffic, Inc.
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Site Code: 13142
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WABANAKI DR from WILSON AVE to GOODRICH DR
Date Start: 30-Sep-21
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NB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Avera
10/04 /21	0	0	0	1	0	0	0	1	0	4	3	0	1	0	1	0	0	0	0	0	0	0	0	11	0
01:00	0	0	2	0	0	0	0	0	0	5	1	0	0	0	0	0	0	0	0	0	0	0	0	8	0
02:00	0	0	1	0	0	0	0	0	4	0	0	1	0	0	0	1	0	0	0	0	0	0	0	7	0
03:00	0	0	0	1	0	0	0	0	3	2	1	0	3	0	0	1	0	0	0	0	0	0	0	11	0
04:00	0	0	0	1	1	0	0	0	6	6	11	2	4	1	0	1	0	0	0	0	0	0	0	33	1
05:00	0	1	1	2	6	4	5	5	12	10	19	9	6	6	1	2	1	0	0	0	0	0	0	90	4
06:00	0	0	0	0	0	11	0	9	47	37	46	22	1	2	1	0	0	0	0	0	0	0	0	176	8
07:00	0	0	0	0	0	0	4	4	42	91	81	36	13	7	0	0	0	0	0	0	0	0	0	278	12
08:00	0	0	0	0	0	3	0	9	40	75	55	21	14	6	0	2	0	0	0	0	0	0	0	225	10
09:00	0	0	0	0	0	1	0	4	26	56	53	28	7	2	0	0	0	0	0	0	0	0	0	177	8
10:00	0	0	0	0	0	2	0	7	45	51	38	28	4	1	0	0	0	0	0	0	0	0	0	176	8
11:00	0	0	0	0	0	4	3	15	43	44	35	31	6	0	0	0	0	0	0	0	0	0	0	181	8
12 PM	0	0	0	1	3	2	6	4	41	60	56	22	10	0	3	0	0	0	0	0	0	0	0	208	9
13:00	0	0	0	0	6	2	3	3	48	63	37	26	7	2	1	2	0	0	0	0	0	0	0	200	9
14:00	0	0	0	0	1	1	3	7	29	58	67	50	10	1	0	0	0	0	0	0	0	0	0	227	10
15:00	0	0	0	0	0	0	1	7	22	51	83	67	17	1	1	0	0	0	0	0	0	0	0	250	11
16:00	0	0	0	0	0	0	2	19	20	56	81	68	24	1	1	0	0	0	0	0	0	0	0	272	12
17:00	0	0	0	0	1	0	0	5	20	33	78	56	18	5	5	0	0	0	0	0	0	0	0	221	10
18:00	0	0	0	0	0	0	0	3	15	39	57	42	16	3	2	0	0	0	0	0	0	0	0	177	8
19:00	0	0	0	0	0	0	2	0	11	22	30	28	9	2	0	0	0	0	0	0	0	0	0	104	5
20:00	0	0	0	0	1	0	3	6	1	17	26	17	7	0	0	0	1	0	0	0	0	0	0	79	3
21:00	0	1	0	0	1	1	2	3	7	12	27	14	0	4	1	0	1	0	0	0	0	0	0	74	3
22:00	0	0	0	0	0	0	1	6	7	4	18	5	4	0	1	0	0	0	0	0	0	0	0	46	2
23:00	0	0	0	0	0	0	1	4	3	7	11	5	2	0	1	0	0	0	0	0	0	0	0	34	1
Percent	0.0%	0.1%	0.1%	0.2%	0.6%	0.9%	1.1%	3.7%	15.1 %	24.6 %	28.0 %	17.7 %	5.6%	1.3%	0.6%	0.3%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
AM Peak		05:00	01:00	05:00	05:00	06:00	05:00	11:00	06:00	07:00	07:00	07:00	08:00	07:00	00:00	05:00	05:00							07:00	
Vol.		1	2	2	6	11	5	15	47	91	81	36	14	7	1	2	1							278	
PM Peak		21:00		12:00	13:00	12:00	12:00	16:00	13:00	13:00	15:00	16:00	16:00	17:00	17:00	13:00	20:00							16:00	
Vol.		1		1	6	2	6	19	48	63	83	68	24	5	5	2	1							272	

Ontario Traffic, Inc.
17705 Leslie St., Unit 6
Newmarket, Ontario L3Y 3E3
Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 13142
Station ID: U154
WABANAKI DR from WILSON AVE to GOODRICH DR
Date Start: 30-Sep-21
Date End: 06-Oct-21
Date Start: 30-Sep-21

NB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Avera
10/05 /21	0	0	0	1	0	0	0	0	0	2	0	2	0	0	0	1	0	0	0	0	0	0	0	6	0
01:00	0	0	1	0	0	1	0	0	0	1	3	0	1	0	0	0	1	0	0	0	0	0	0	8	0
02:00	0	0	0	1	0	0	0	1	2	1	2	0	0	1	0	0	0	0	0	0	0	0	0	8	0
03:00	0	0	0	0	0	1	1	1	3	2	3	2	0	0	0	0	0	0	0	0	0	0	0	13	1
04:00	0	0	0	1	0	1	4	1	2	11	7	1	3	1	3	1	0	0	0	0	0	0	0	36	2
05:00	0	0	0	11	2	1	2	1	7	31	20	11	17	2	0	2	0	0	0	0	0	0	0	107	5
06:00	0	2	0	2	1	0	4	5	24	49	53	19	52	3	2	1	2	0	0	0	0	0	0	219	10
07:00	0	0	0	1	0	1	1	3	26	55	65	54	64	1	0	0	0	0	0	0	0	0	0	271	12
08:00	0	0	0	0	0	2	7	1	20	58	90	34	14	0	1	0	0	0	0	0	0	0	0	227	10
09:00	0	0	0	0	0	0	0	15	27	46	70	18	17	4	0	0	0	0	0	0	0	0	0	197	9
10:00	0	0	0	4	0	0	0	9	30	43	48	32	7	2	2	0	0	0	0	0	0	0	0	177	8
11:00	0	0	1	0	1	1	2	6	25	50	46	38	13	0	0	0	0	0	0	0	0	0	0	183	8
12 PM	0	0	0	0	1	2	0	7	23	50	63	39	17	0	1	1	0	0	0	0	0	0	0	204	9
13:00	0	0	0	0	2	2	1	2	30	62	50	42	12	4	0	0	0	0	0	0	0	0	0	207	9
14:00	0	0	1	0	2	0	0	5	21	57	73	46	13	2	0	0	0	0	0	0	0	0	0	220	10
15:00	0	0	0	0	0	0	0	3	22	49	95	59	22	4	0	0	0	0	0	0	0	0	0	254	11
16:00	0	0	2	1	0	0	0	10	27	58	113	61	22	5	1	1	0	0	0	0	0	0	0	301	13
17:00	0	0	0	0	3	0	2	6	5	66	91	60	18	2	0	0	0	0	0	0	0	0	0	253	11
18:00	0	0	0	0	0	0	3	8	14	30	49	40	18	1	1	0	0	0	0	0	0	0	0	164	7
19:00	0	0	0	8	0	0	0	2	13	22	29	60	5	1	0	0	0	0	0	0	0	0	0	140	6
20:00	0	0	0	0	0	0	0	0	12	33	36	17	2	0	0	0	0	0	0	0	0	0	0	100	4
21:00	0	0	0	1	0	0	1	7	1	17	27	11	5	0	3	0	0	0	0	0	0	0	0	73	3
22:00	0	0	0	0	1	1	1	6	5	20	13	5	2	3	0	1	0	0	0	0	0	0	0	58	3
23:00	0	0	0	1	0	0	0	0	3	6	5	1	3	3	1	0	0	0	0	0	0	0	0	23	1
Percent	0.0%	0.1%	0.1%	0.9%	0.4%	0.4%	0.8%	2.9%	9.9%	23.7 %	30.5 %	18.9 %	9.5%	1.1%	0.4%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
AM Peak		06:00	01:00	05:00	05:00	08:00	08:00	09:00	10:00	08:00	08:00	07:00	07:00	09:00	04:00	05:00	06:00							07:00	
Vol.		2	1	11	2	2	7	15	30	58	90	54	64	4	3	2	2							271	
PM Peak			16:00	19:00	17:00	12:00	18:00	16:00	13:00	17:00	16:00	16:00	15:00	16:00	21:00	12:00								16:00	
Vol.			2	8	3	2	3	10	30	66	113	61	22	5	3	1								301	

Ontario Traffic, Inc.
17705 Leslie St., Unit 6
Newmarket, Ontario L3Y 3E3
Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 13142
Station ID: U154
WABANAKI DR from WILSON AVE to GOODRICH DR
Date Start: 30-Sep-21
Date End: 06-Oct-21
Date Start: 30-Sep-21

NB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Avera
10/06 /21	0	0	0	0	3	0	0	0	3	1	7	2	1	1	1	1	0	0	0	0	0	0	0	20	1
01:00	0	0	1	0	0	0	0	0	2	3	4	1	1	0	0	0	0	0	0	0	0	0	0	12	1
02:00	0	0	0	0	0	0	0	0	0	0	0	3	1	0	1	0	0	0	0	0	0	0	0	5	0
03:00	0	0	0	0	0	2	0	2	4	3	0	0	2	1	1	0	0	0	0	0	0	0	0	15	1
04:00	0	0	1	1	2	2	2	0	3	1	6	4	5	0	1	1	0	0	0	0	0	0	0	29	1
05:00	0	1	1	1	3	7	0	4	17	12	33	7	4	0	1	1	2	0	0	0	0	0	0	94	4
06:00	0	0	0	0	0	5	4	7	43	51	64	23	7	0	1	0	0	0	0	0	0	0	0	205	9
07:00	0	0	0	0	0	1	8	7	53	74	78	29	17	3	2	0	0	0	0	0	0	0	0	272	12
08:00	0	0	0	0	0	0	2	7	41	64	66	45	34	1	0	0	0	0	0	0	0	0	0	260	11
09:00	0	0	0	0	0	3	4	10	51	59	51	23	10	0	0	0	0	0	0	0	0	0	0	211	9
10:00	0	0	0	0	0	3	1	0	24	54	54	34	5	0	0	0	1	0	0	0	0	0	0	176	8
11:00	0	0	0	0	3	0	5	10	37	53	37	29	8	1	0	0	0	0	0	0	0	0	0	183	8
12 PM	0	0	0	0	2	4	5	6	37	45	60	26	10	2	0	0	0	0	0	0	0	0	0	197	9
13:00	0	0	0	0	5	3	2	7	39	58	52	31	6	1	0	0	0	0	0	0	0	0	0	204	9
14:00	0	0	0	0	0	0	1	4	42	61	72	39	6	4	0	0	0	0	0	0	0	0	0	229	10
15:00	0	0	0	0	0	0	1	10	29	61	87	53	18	7	0	1	0	0	0	0	0	0	0	267	12
16:00	0	0	0	0	0	0	2	12	36	60	109	63	16	3	3	0	0	0	0	0	0	0	0	304	13
17:00	0	0	0	0	0	0	1	16	17	57	80	59	30	7	7	0	0	0	0	0	0	0	0	274	12
18:00	0	0	0	0	0	0	0	9	8	24	43	42	19	4	3	0	0	0	0	0	0	0	0	152	7
19:00	0	0	0	0	0	0	3	5	11	29	38	27	12	2	0	0	0	0	0	0	0	0	0	127	6
20:00	0	0	0	0	0	1	3	2	6	25	35	26	4	2	0	0	1	0	0	0	0	0	0	105	5
21:00	0	0	1	0	0	1	1	6	7	20	28	11	2	1	2	1	0	0	0	0	0	0	0	81	4
22:00	0	0	0	0	0	0	1	2	14	9	24	7	4	0	2	2	0	0	0	0	0	0	0	65	3
23:00	0	0	0	0	0	0	0	2	2	9	15	5	2	0	0	0	0	0	0	0	0	0	0	35	2
Percent	0.0%	0.0%	0.1%	0.1%	0.5%	0.9%	1.3%	3.6%	14.9 %	23.7 %	29.6 %	16.7 %	6.4%	1.1%	0.7%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
AM Peak		05:00	01:00	04:00	00:00	05:00	07:00	09:00	07:00	07:00	07:00	08:00	08:00	07:00	07:00	00:00	05:00							07:00	
Vol.		1	1	1	3	7	8	10	53	74	78	45	34	3	2	1	2							272	
PM Peak			21:00		13:00	12:00	12:00	17:00	14:00	14:00	16:00	16:00	17:00	15:00	17:00	22:00	20:00							16:00	
Vol.			1		5	4	5	16	42	61	109	63	30	7	7	2	1							304	
Total	0	10	52	103	92	155	245	769	2712	5380	6574	3932	1471	311	111	40	26	0	0	0	0	0	0	21983	

Statistics

Mean Speed(Average) : 51 KPH
50th Percentile : 52 KPH
85th Percentile : 59 KPH

Ontario Traffic, Inc.
17705 Leslie St., Unit 6
Newmarket, Ontario L3Y 3E3
Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 13142
Station ID: U154
WABANAKI DR from WILSON AVE to GOODRICH DR
Date Start: 30-Sep-21
Date End: 06-Oct-21
Date Start: 30-Sep-21

SB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Avera
09/30 /21	0	0	0	0	0	0	0	0	1	1	1	2	0	0	0	0	0	0	0	0	0	0	0	5	0
01:00	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	2	0
02:00	0	0	0	0	0	2	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	4	0
03:00	0	0	0	0	0	0	0	1	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	4	0
04:00	0	0	0	0	0	0	2	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	6	0
05:00	0	0	0	0	0	0	0	0	0	2	6	1	1	0	0	0	0	0	0	0	0	0	0	10	0
06:00	0	0	0	0	0	0	4	2	3	10	13	3	0	1	0	0	0	0	0	0	0	0	0	36	2
07:00	0	0	0	1	0	0	0	1	8	13	12	6	5	0	0	0	0	0	0	0	0	0	0	46	2
08:00	0	0	0	0	0	1	1	1	6	13	17	3	6	0	0	0	0	0	0	0	0	0	0	48	2
09:00	0	0	0	0	0	1	0	2	17	15	14	4	1	0	0	0	0	0	0	0	0	0	0	54	2
10:00	0	0	0	0	0	0	0	6	17	21	15	8	5	1	0	0	0	0	0	0	0	0	0	73	3
11:00	0	0	0	0	0	1	1	7	23	30	15	17	3	0	0	0	0	0	0	0	0	0	0	97	4
12 PM	0	0	0	0	1	0	0	3	3	20	20	12	2	3	1	0	0	0	0	0	0	0	0	65	3
13:00	0	0	0	0	1	1	1	2	18	26	18	15	6	1	2	0	0	0	0	0	0	0	0	91	4
14:00	0	0	0	0	1	1	1	9	23	51	44	32	5	3	0	0	0	0	0	0	0	0	0	170	7
15:00	0	0	0	0	0	0	0	4	12	29	40	36	9	2	0	0	0	0	0	0	0	0	0	132	6
16:00	0	0	0	0	0	0	0	2	5	21	33	11	8	1	0	0	0	0	0	0	0	0	0	81	4
17:00	0	0	0	0	1	0	0	3	4	15	27	16	9	1	1	0	0	0	0	0	0	0	0	77	3
18:00	0	0	0	0	0	0	1	2	3	9	21	20	5	2	1	0	0	0	0	0	0	0	0	64	3
19:00	0	0	0	0	0	0	0	2	6	6	13	13	4	0	0	0	0	0	0	0	0	0	0	44	2
20:00	0	0	0	0	0	0	0	1	1	8	7	7	3	0	0	0	0	0	0	0	0	0	0	27	1
21:00	0	0	0	0	0	0	1	3	1	3	7	5	2	1	2	0	0	0	0	0	0	0	0	25	1
22:00	0	0	0	0	0	0	1	5	3	5	2	1	2	0	0	0	0	0	0	0	0	0	0	19	1
23:00	0	0	0	0	0	0	0	1	2	4	3	3	1	2	0	0	0	0	0	0	0	0	0	16	1
Percent	0.0%	0.0%	0.0%	0.1%	0.3%	0.6%	1.1%	4.8%	13.4 %	25.4 %	27.8 %	18.0 %	6.4%	1.6%	0.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
AM Peak				07:00		02:00	06:00	11:00	11:00	11:00	08:00	11:00	08:00	01:00										11:00	
Vol.				1		2	4	7	23	30	17	17	6	1										97	
PM Peak					12:00	13:00	13:00	14:00	14:00	14:00	14:00	15:00	15:00	12:00	13:00									14:00	
Vol.					1	1	1	9	23	51	44	36	9	3	2									170	

Ontario Traffic, Inc.
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WABANAKI DR from WILSON AVE to GOODRICH DR
Date Start: 30-Sep-21
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SB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Avera
10/01 /21	0	0	0	0	0	0	0	0	1	5	1	0	0	0	0	0	0	0	0	0	0	0	0	7	0
01:00	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	4	0
02:00	0	0	0	0	0	0	0	1	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	4	0
03:00	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
04:00	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	3	0
05:00	0	0	0	0	0	0	0	0	3	0	4	4	0	0	0	0	0	0	0	0	0	0	0	11	0
06:00	0	0	0	1	0	0	0	1	5	8	8	7	0	1	0	0	0	0	0	0	0	0	0	31	1
07:00	0	0	0	0	1	0	0	1	6	15	14	3	1	1	0	0	0	0	0	0	0	0	0	42	2
08:00	0	0	0	0	1	0	0	1	7	21	21	15	1	0	1	0	0	0	0	0	0	0	0	68	3
09:00	0	0	0	0	0	0	0	1	15	17	21	11	2	0	0	0	0	0	0	0	0	0	0	67	3
10:00	1	0	0	0	0	0	1	2	16	21	22	18	4	0	0	0	0	0	0	0	0	0	0	85	4
11:00	0	0	0	0	0	0	1	4	17	32	24	11	4	1	0	0	0	0	0	0	0	0	0	94	4
12 PM	0	0	0	1	0	2	1	4	11	29	35	20	4	2	0	1	0	0	0	0	0	0	0	110	5
13:00	0	0	0	0	0	0	1	4	16	28	35	16	4	1	0	0	0	0	0	0	0	0	0	105	5
14:00	0	0	0	0	0	5	1	5	13	50	52	22	8	3	1	0	0	0	0	0	0	0	0	160	7
15:00	0	0	0	0	1	0	1	4	20	28	47	35	4	3	0	0	0	0	0	0	0	0	0	143	6
16:00	1	0	0	1	0	0	0	2	10	11	30	18	9	2	1	0	0	0	0	0	0	0	0	85	4
17:00	0	0	0	0	0	0	1	1	3	13	21	10	5	0	0	0	0	0	0	0	0	0	0	54	2
18:00	0	0	0	0	0	0	0	1	5	13	20	8	5	1	0	0	0	0	0	0	0	0	0	53	2
19:00	0	0	0	0	0	1	0	0	7	12	9	5	1	0	0	0	0	0	0	0	0	0	0	35	2
20:00	0	0	0	0	0	0	2	0	3	9	13	8	3	0	0	0	0	0	0	0	0	0	0	38	2
21:00	0	0	0	0	0	0	1	2	6	11	3	4	2	0	0	0	0	0	0	0	0	0	0	29	1
22:00	0	0	0	0	0	0	2	0	5	2	9	4	1	0	0	0	0	0	0	0	0	0	0	23	1
23:00	0	0	0	0	0	0	0	1	0	4	8	2	3	0	1	0	0	0	0	0	0	0	0	19	1
Percent	0.2%	0.0%	0.0%	0.2%	0.2%	0.6%	0.9%	2.9%	13.4 %	26.2 %	31.5 %	17.4 %	4.8%	1.2%	0.3%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
AM Peak	10:00			06:00	07:00		10:00	11:00	11:00	11:00	11:00	10:00	10:00	06:00	08:00									11:00	
Vol.	1			1	1		1	4	17	32	24	18	4	1	1									94	
PM Peak	16:00			12:00	15:00	14:00	20:00	14:00	15:00	14:00	14:00	15:00	16:00	14:00	14:00	12:00								14:00	
Vol.	1			1	1	5	2	5	20	50	52	35	9	3	1	1								160	

Ontario Traffic, Inc.
17705 Leslie St., Unit 6
Newmarket, Ontario L3Y 3E3
Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 13142
Station ID: U154
WABANAKI DR from WILSON AVE to GOODRICH DR
Date Start: 30-Sep-21
Date End: 06-Oct-21
Date Start: 30-Sep-21

SB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Avera
10/02 /21	0	0	0	0	0	0	0	0	1	2	3	5	4	0	0	0	0	0	0	0	0	0	0	15	1
01:00	0	0	0	0	0	0	0	1	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	5	0
02:00	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2	0
03:00	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	2	0
04:00	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0
05:00	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
06:00	0	0	0	0	0	0	0	1	0	1	3	1	0	0	0	0	0	0	0	0	0	0	0	6	0
07:00	0	0	0	0	0	0	0	0	0	2	2	1	2	0	0	0	0	0	0	0	0	0	0	7	0
08:00	0	0	0	0	0	0	1	0	1	3	9	3	0	1	0	0	0	0	0	0	0	0	0	18	1
09:00	0	0	0	0	0	0	0	1	1	5	12	5	5	0	0	0	0	0	0	0	0	0	0	29	1
10:00	0	0	0	1	0	0	0	0	1	6	13	6	1	0	1	0	0	0	0	0	0	0	0	29	1
11:00	0	0	0	0	1	0	0	0	2	12	12	16	9	0	1	0	0	0	0	0	0	0	0	53	2
12 PM	0	0	0	0	0	0	0	1	1	8	14	12	7	1	0	0	0	0	0	0	0	0	0	44	2
13:00	0	0	0	0	1	0	0	0	2	12	17	10	2	1	0	0	0	0	0	0	0	0	0	45	2
14:00	0	0	1	1	0	0	0	1	3	13	16	12	5	1	0	0	0	0	0	0	0	0	0	53	2
15:00	0	0	0	0	0	0	0	3	1	8	31	10	7	0	0	0	0	0	0	0	0	0	0	60	3
16:00	0	0	1	1	0	0	0	0	5	16	19	10	5	1	1	0	0	0	0	0	0	0	0	59	3
17:00	0	0	0	0	0	0	0	1	1	10	20	16	0	0	0	0	0	0	0	0	0	0	0	48	2
18:00	0	0	0	0	0	0	0	1	2	13	11	9	3	1	0	0	0	0	0	0	0	0	0	40	2
19:00	0	0	0	2	0	0	1	2	3	2	6	6	2	0	0	0	0	0	0	0	0	0	0	24	1
20:00	0	0	0	0	0	0	0	0	5	7	6	4	1	1	0	0	0	0	0	0	0	0	0	24	1
21:00	0	0	0	0	0	0	0	0	0	5	3	6	1	0	0	0	0	0	0	0	0	0	0	15	1
22:00	0	0	0	0	0	0	0	0	1	5	5	2	0	0	0	0	0	0	0	0	0	0	0	13	1
23:00	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0
Percent	0.0%	0.0%	0.3%	1.0%	0.3%	0.0%	0.3%	2.0%	5.0%	23.3 %	34.3 %	22.6 %	9.0%	1.2%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
AM Peak				05:00	11:00		08:00	01:00	11:00	11:00	10:00	11:00	11:00	08:00	10:00									11:00	
Vol.				1	1		1	1	2	12	13	16	9	1	1									53	
PM Peak			14:00	19:00	13:00		19:00	15:00	16:00	16:00	15:00	17:00	12:00	12:00	16:00									15:00	
Vol.			1	2	1		1	3	5	16	31	16	7	1	1									60	

Ontario Traffic, Inc.
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WABANAKI DR from WILSON AVE to GOODRICH DR
Date Start: 30-Sep-21
Date End: 06-Oct-21
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SB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Avera
10/03 /21	0	0	0	0	0	0	0	1	0	2	2	1	2	1	1	0	0	0	0	0	0	0	0	10	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	2	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	3	0
05:00	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0
06:00	0	0	0	0	0	0	1	0	3	1	2	1	0	0	0	0	0	0	0	0	0	0	0	8	0
07:00	0	0	0	0	1	0	0	2	5	7	1	2	0	1	0	0	0	0	0	0	0	0	0	19	1
08:00	0	0	0	0	0	0	1	0	1	4	5	0	2	0	0	0	0	0	0	0	0	0	0	13	1
09:00	0	0	0	0	0	0	0	0	1	5	7	4	1	0	0	0	0	0	0	0	0	0	0	18	1
10:00	0	0	0	0	0	0	0	0	0	4	6	6	0	1	0	0	0	0	0	0	0	0	0	17	1
11:00	0	0	0	0	0	0	0	1	2	4	13	17	4	0	1	0	0	0	0	0	0	0	0	42	2
12 PM	0	0	0	0	0	0	0	0	2	12	12	10	3	0	0	1	0	0	0	0	0	0	0	40	2
13:00	0	0	0	0	0	0	0	0	2	5	19	12	3	1	1	0	0	0	0	0	0	0	0	43	2
14:00	0	0	0	0	0	0	1	1	9	16	18	9	5	1	1	1	0	0	0	0	0	0	0	62	3
15:00	0	0	0	0	0	0	0	1	4	7	16	14	7	0	0	0	0	0	0	0	0	0	0	49	2
16:00	0	0	0	0	0	0	0	0	6	13	20	16	3	0	0	0	0	0	0	0	0	0	0	58	3
17:00	0	0	0	0	0	0	3	0	2	11	24	11	3	3	0	0	0	0	0	0	0	0	0	57	2
18:00	0	0	0	0	0	0	0	0	1	4	9	5	2	1	0	0	0	0	0	0	0	0	0	22	1
19:00	0	0	0	0	0	0	0	0	1	5	4	8	0	0	0	0	0	0	0	0	0	0	0	18	1
20:00	0	0	0	1	0	0	0	0	0	8	15	3	1	0	0	0	0	0	0	0	0	0	0	28	1
21:00	0	0	0	0	0	0	0	1	3	4	5	2	2	0	0	0	0	0	0	0	0	0	0	17	1
22:00	0	0	0	0	0	0	0	0	0	1	6	2	1	1	0	0	0	0	0	0	0	0	0	11	0
23:00	0	0	0	0	0	0	0	0	1	3	6	1	0	0	0	0	0	0	0	0	0	0	0	11	0
Percent	0.0%	0.0%	0.0%	0.2%	0.2%	0.0%	1.1%	1.3%	7.8%	21.1 %	34.8 %	23.0 %	7.7%	1.8%	0.7%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
AM Peak					07:00		06:00	07:00	07:00	07:00	11:00	11:00	11:00	00:00	00:00									11:00	
Vol.					1		1	2	5	7	13	17	4	1	1									42	
PM Peak				20:00			17:00	14:00	14:00	14:00	17:00	16:00	15:00	17:00	13:00	12:00								14:00	
Vol.				1			3	1	9	16	24	16	7	3	1	1								62	

Ontario Traffic, Inc.
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Site Code: 13142
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WABANAKI DR from WILSON AVE to GOODRICH DR
Date Start: 30-Sep-21
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SB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Avera
10/04 /21	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
01:00	0	0	1	0	0	0	0	0	0	0	2	0	0	1	0	0	0	0	0	0	0	0	0	4	0
02:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0
03:00	0	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	5	0
04:00	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	2	0
05:00	0	0	0	0	1	0	0	1	2	2	3	1	0	1	0	0	0	0	0	0	0	0	0	11	0
06:00	0	0	0	0	0	1	0	1	10	12	9	6	3	1	0	0	0	0	0	0	0	0	0	43	2
07:00	0	0	0	0	0	1	0	0	9	18	17	5	5	2	0	0	0	0	0	0	0	0	0	57	2
08:00	0	0	0	0	0	1	0	3	8	24	13	10	5	1	0	0	0	0	0	0	0	0	0	65	3
09:00	0	0	0	0	0	0	0	2	13	25	15	3	4	1	0	0	0	0	0	0	0	0	0	63	3
10:00	0	0	0	0	0	0	1	3	14	25	11	4	1	1	0	0	0	0	0	0	0	0	0	60	3
11:00	0	0	0	0	0	2	4	13	15	17	15	8	4	1	0	0	0	0	0	0	0	0	0	79	3
12 PM	0	0	0	0	1	0	1	2	20	24	22	8	2	1	0	0	0	0	0	0	0	0	0	81	4
13:00	0	0	0	0	2	1	2	7	30	39	26	13	2	2	0	0	0	0	0	0	0	0	0	124	5
14:00	0	0	0	1	0	1	2	6	23	48	48	32	8	1	0	0	0	0	0	0	0	0	0	170	7
15:00	0	0	0	0	0	0	1	4	13	30	40	29	3	0	1	0	0	0	0	0	0	0	0	121	5
16:00	0	0	0	0	0	0	0	6	7	12	28	29	3	2	0	0	0	0	0	0	0	0	0	87	4
17:00	0	0	0	0	1	0	3	5	2	26	20	16	3	2	0	0	0	0	0	0	0	0	0	78	3
18:00	0	0	0	0	0	0	1	1	2	10	12	12	6	1	0	0	0	0	0	0	0	0	0	45	2
19:00	0	0	0	0	0	1	0	1	7	9	10	6	3	2	0	0	0	0	0	0	0	0	0	39	2
20:00	0	0	0	0	1	0	1	4	1	1	6	6	1	1	0	0	0	0	0	0	0	0	0	22	1
21:00	0	0	0	0	0	0	0	0	1	3	10	4	0	0	0	0	0	0	0	0	0	0	0	18	1
22:00	0	0	0	0	0	0	0	4	1	4	2	2	1	0	0	0	0	0	0	0	0	0	0	14	1
23:00	0	0	0	0	0	0	1	1	4	3	6	2	2	0	0	0	0	0	0	0	0	0	0	19	1
Percent	0.0%	0.0%	0.1%	0.1%	0.5%	0.7%	1.5%	5.4%	15.1 %	27.6 %	26.2 %	16.3 %	4.7%	1.7%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
AM Peak			01:00		05:00	11:00	11:00	11:00	11:00	09:00	07:00	08:00	07:00	07:00										11:00	
Vol.			1		1	2	4	13	15	25	17	10	5	2										79	
PM Peak				14:00	13:00	13:00	17:00	13:00	13:00	14:00	14:00	14:00	14:00	13:00	15:00									14:00	
Vol.				1	2	1	3	7	30	48	48	32	8	2	1									170	

Ontario Traffic, Inc.
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Site Code: 13142
Station ID: U154
WABANAKI DR from WILSON AVE to GOODRICH DR
Date Start: 30-Sep-21
Date End: 06-Oct-21
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SB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Avera
10/05 /21	0	0	0	0	0	0	0	0	0	0	3	0	1	0	0	0	0	0	0	0	0	0	0	4	0
01:00	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0
02:00	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
03:00	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
04:00	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	3	0
05:00	0	0	0	0	0	1	0	1	3	4	4	1	1	0	0	0	0	0	0	0	0	0	0	15	1
06:00	0	0	0	0	0	1	0	4	6	8	12	8	1	0	1	0	0	0	0	0	0	0	0	41	2
07:00	0	0	0	0	0	1	1	2	7	18	13	8	2	0	0	0	0	0	0	0	0	0	0	52	2
08:00	0	0	0	0	1	0	1	1	15	22	17	10	4	1	0	0	0	0	0	0	0	0	0	72	3
09:00	0	0	0	0	0	0	0	3	10	12	18	10	3	1	0	0	0	0	0	0	0	0	0	57	2
10:00	0	0	0	0	0	1	2	1	10	18	16	16	2	0	0	0	0	0	0	0	0	0	0	66	3
11:00	0	0	0	0	0	0	0	7	23	23	17	15	1	0	0	0	0	0	0	0	0	0	0	86	4
12 PM	0	0	0	0	2	0	3	2	24	28	19	7	4	2	1	0	0	0	0	0	0	0	0	92	4
13:00	0	0	0	0	1	3	0	3	24	41	19	8	4	1	0	0	0	0	0	0	0	0	0	104	5
14:00	0	1	0	0	0	1	1	4	28	50	48	29	9	0	0	0	0	0	0	0	0	0	0	171	7
15:00	0	0	0	0	0	0	0	5	13	20	30	38	8	1	1	0	0	0	0	0	0	0	0	116	5
16:00	0	0	0	0	0	0	0	5	11	23	33	23	9	2	1	0	0	0	0	0	0	0	0	107	5
17:00	0	0	0	0	0	0	1	6	2	16	28	15	10	4	0	1	0	0	0	0	0	0	0	83	4
18:00	0	0	0	0	0	0	0	1	4	5	18	17	5	0	1	0	0	0	0	0	0	0	0	51	2
19:00	0	0	0	0	0	0	1	1	4	17	13	14	2	1	0	0	0	0	0	0	0	0	0	53	2
20:00	0	0	0	0	0	0	1	1	2	7	4	1	1	1	0	0	0	0	0	0	0	0	0	18	1
21:00	0	0	0	0	0	0	1	2	2	4	6	7	0	0	0	0	0	0	0	0	0	0	0	22	1
22:00	0	0	0	0	0	0	0	0	8	1	8	2	2	0	0	0	0	0	0	0	0	0	0	21	1
23:00	0	0	0	0	0	0	0	1	0	4	2	1	1	0	0	0	0	0	0	0	0	0	0	9	0
Percent	0.0%	0.1%	0.0%	0.0%	0.3%	0.6%	1.0%	4.2%	15.7 %	26.1 %	26.3 %	18.5 %	5.6%	1.1%	0.4%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
AM Peak					08:00	05:00	10:00	11:00	11:00	11:00	09:00	10:00	08:00	08:00	06:00									11:00	
Vol.					1	1	2	7	23	23	18	16	4	1	1									86	
PM Peak		14:00			12:00	13:00	12:00	17:00	14:00	14:00	14:00	15:00	17:00	17:00	12:00	17:00								14:00	
Vol.		1			2	3	3	6	28	50	48	38	10	4	1	1								171	

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10/06 /21	0	0	0	0	1	0	0	2	5	1	3	1	0	0	0	0	0	0	0	0	0	0	0	13	1
01:00	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	2	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2	0
04:00	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	3	0
05:00	0	0	0	0	0	1	0	0	2	4	3	1	0	1	0	0	0	0	0	0	0	0	0	12	1
06:00	0	0	0	0	0	1	1	1	6	10	11	8	1	1	0	0	0	0	0	0	0	0	0	40	2
07:00	0	0	0	0	0	0	3	1	12	16	23	5	4	1	1	0	0	0	0	0	0	0	0	66	3
08:00	0	0	0	0	0	0	0	4	11	18	16	12	3	0	0	0	0	0	0	0	0	0	0	64	3
09:00	0	0	0	0	0	1	4	1	12	15	16	9	1	0	0	0	0	0	0	0	0	0	0	59	3
10:00	0	0	0	0	0	0	0	1	13	19	19	10	3	0	0	0	0	0	0	0	0	0	0	65	3
11:00	0	0	0	0	2	0	4	2	18	34	19	11	5	1	0	0	0	0	0	0	0	0	0	96	4
12 PM	0	0	0	1	1	2	1	2	14	15	27	14	5	0	0	0	0	0	0	0	0	0	0	82	4
13:00	0	0	0	0	3	3	3	7	25	41	29	11	2	0	0	0	0	0	0	0	0	0	0	124	5
14:00	0	0	0	0	0	1	0	6	16	30	55	31	3	5	0	0	0	0	0	0	0	0	0	147	6
15:00	0	0	0	0	1	0	1	3	16	35	47	40	11	0	0	0	0	0	0	0	0	0	0	154	7
16:00	0	0	0	0	0	0	1	5	11	20	41	18	4	2	0	1	0	0	0	0	0	0	0	103	4
17:00	0	0	0	0	0	0	0	2	2	14	14	15	8	1	2	0	0	0	0	0	0	0	0	58	3
18:00	0	0	0	0	0	0	0	6	4	11	14	13	6	3	1	0	0	0	0	0	0	0	0	58	3
19:00	0	0	0	0	0	1	0	0	0	14	17	9	6	0	0	0	0	0	0	0	0	0	0	47	2
20:00	0	0	0	0	0	1	2	1	5	4	3	2	3	0	0	0	0	0	0	0	0	0	0	21	1
21:00	0	0	0	0	0	0	1	2	5	2	7	6	3	0	0	0	0	0	0	0	0	0	0	26	1
22:00	0	0	0	0	0	0	1	2	3	2	7	1	2	1	1	1	0	0	0	0	0	0	0	21	1
23:00	0	0	0	0	0	0	0	1	1	4	5	3	1	1	0	0	0	0	0	0	0	0	0	16	1
Percent	0.0%	0.0%	0.0%	0.1%	0.6%	0.9%	1.7%	3.8%	14.2 %	24.2 %	29.6 %	17.3 %	5.6%	1.4%	0.4%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
AM Peak					11:00	05:00	09:00	08:00	11:00	11:00	07:00	08:00	11:00	01:00	07:00									11:00	
Vol.					2	1	4	4	18	34	23	12	5	1	1									96	
PM Peak				12:00	13:00	13:00	13:00	13:00	13:00	13:00	14:00	15:00	15:00	14:00	17:00	16:00								15:00	
Vol.				1	3	3	3	7	25	41	55	40	11	5	2	1								154	
Total	2	1	3	13	28	42	85	279	965	1862	2154	1346	433	104	29	6	0	0	0	0	0	0	0	7352	

Statistics

Mean Speed(Average) : 51 KPH
50th Percentile : 51 KPH
85th Percentile : 59 KPH

Ontario Traffic, Inc.
17705 Leslie St., Unit 6
Newmarket, Ontario L3Y 3E3
Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 13142
Station ID: U154
WABANAKI DR from WILSON AVE to GOODRICH DR
Date Start: 30-Sep-21
Date End: 06-Oct-21
Date Start: 30-Sep-21

NB, SB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Avera
09/30 /21	0	0	0	0	0	0	0	3	1	5	6	6	0	0	0	0	0	0	0	0	0	0	0	21	1
01:00	0	0	8	0	0	0	0	0	1	2	2	0	0	1	0	0	0	0	0	0	0	0	0	14	1
02:00	0	0	4	0	0	2	0	1	1	1	2	3	0	0	0	0	0	0	0	0	0	0	0	14	1
03:00	0	0	2	0	0	0	2	1	6	1	3	1	3	0	0	0	0	0	0	0	0	0	0	19	1
04:00	0	0	2	0	0	0	3	5	2	7	7	3	18	0	0	0	0	0	0	0	0	0	0	47	2
05:00	0	0	0	4	5	0	3	13	12	11	30	10	8	3	0	0	0	0	0	0	0	0	0	99	4
06:00	0	0	0	0	0	2	11	5	41	40	105	20	5	1	0	0	0	0	0	0	0	0	0	230	10
07:00	0	0	0	1	5	5	1	6	52	106	68	34	17	8	0	0	0	0	0	0	0	0	0	303	13
08:00	0	0	1	0	0	1	1	10	41	109	71	29	31	0	0	0	0	0	0	0	0	0	0	294	13
09:00	0	0	0	0	0	1	1	10	47	82	67	23	10	12	0	0	0	0	0	0	0	0	0	253	11
10:00	0	0	0	0	0	0	2	11	44	82	67	36	11	16	0	0	0	0	0	0	0	0	0	269	12
11:00	0	0	0	0	0	6	5	18	48	68	69	67	11	2	0	0	0	0	0	0	0	0	0	294	13
12 PM	0	0	0	0	1	0	4	22	45	74	82	55	12	6	3	0	0	0	0	0	0	0	0	304	13
13:00	0	0	0	1	1	2	4	6	58	74	59	67	18	3	2	0	0	0	0	0	0	0	0	295	13
14:00	0	0	0	1	1	2	4	16	58	122	117	77	21	4	1	1	0	0	0	0	0	0	0	425	18
15:00	0	0	1	1	0	0	0	5	29	90	142	112	29	5	1	1	0	0	0	0	0	0	0	416	18
16:00	0	0	0	0	1	2	0	20	40	73	175	97	27	6	0	0	0	0	0	0	0	0	0	441	19
17:00	0	1	0	0	1	0	14	11	13	85	108	62	30	8	1	0	1	0	0	0	0	0	0	335	15
18:00	0	0	0	0	0	1	5	4	12	55	101	75	19	6	1	0	0	0	0	0	0	0	0	279	12
19:00	0	0	0	1	0	0	1	2	17	42	55	53	12	2	0	0	1	0	0	0	0	0	0	186	8
20:00	0	0	1	0	0	2	2	4	5	31	52	23	12	1	0	0	0	0	0	0	0	0	0	133	6
21:00	0	0	0	0	0	1	1	6	10	20	32	19	2	1	3	0	2	0	0	0	0	0	0	97	4
22:00	0	0	1	0	1	1	1	15	10	13	11	12	6	0	0	1	0	0	0	0	0	0	0	72	3
23:00	0	0	0	0	0	0	2	2	4	11	19	6	1	2	0	0	0	0	0	0	0	0	0	47	2
Percent	0.0%	0.0%	0.4%	0.2%	0.3%	0.6%	1.4%	4.0%	12.2 %	24.6 %	29.7 %	18.2 %	6.2%	1.8%	0.2%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
AM Peak			01:00	05:00	05:00	11:00	06:00	11:00	07:00	08:00	06:00	11:00	08:00	10:00										07:00	
Vol.			8	4	5	6	11	18	52	109	105	67	31	16										303	
PM Peak		17:00	15:00	13:00	12:00	13:00	17:00	12:00	13:00	14:00	16:00	15:00	17:00	17:00	12:00	14:00	21:00							16:00	
Vol.		1	1	1	1	2	14	22	58	122	175	112	30	8	3	1	2							441	

Ontario Traffic, Inc.
17705 Leslie St., Unit 6
Newmarket, Ontario L3Y 3E3
Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 13142
Station ID: U154
WABANAKI DR from WILSON AVE to GOODRICH DR
Date Start: 30-Sep-21
Date End: 06-Oct-21
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NB, SB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Avera
10/01 /21	0	0	1	1	1	0	0	0	1	11	2	5	1	0	1	1	0	0	0	0	0	0	0	25	1
01:00	0	0	0	1	1	0	0	2	2	2	2	0	0	1	0	0	0	0	0	0	0	0	0	11	0
02:00	0	0	0	1	1	1	0	1	0	3	2	4	1	1	0	0	0	0	0	0	0	0	0	15	1
03:00	0	0	0	0	0	0	0	2	4	1	0	0	1	2	0	0	0	0	0	0	0	0	0	10	0
04:00	0	0	0	0	0	0	0	2	0	9	23	4	0	0	0	0	0	0	0	0	0	0	0	38	2
05:00	0	0	0	23	3	0	0	15	10	11	29	9	4	4	0	0	0	0	0	0	0	0	0	108	5
06:00	0	0	0	1	0	5	1	5	30	57	59	45	3	6	1	1	0	0	0	0	0	0	0	214	9
07:00	0	0	1	0	1	6	4	2	31	105	101	27	14	6	0	1	0	0	0	0	0	0	0	299	13
08:00	0	0	0	0	1	0	9	7	32	94	90	46	15	0	2	0	0	0	0	0	0	0	0	296	13
09:00	0	0	0	0	0	2	0	7	47	76	77	30	18	6	0	0	0	0	0	0	0	0	0	263	11
10:00	1	0	0	0	0	0	1	3	48	74	79	46	15	1	5	0	0	0	0	0	0	0	0	273	12
11:00	0	0	0	0	1	2	6	17	48	85	75	48	25	3	6	0	0	0	0	0	0	0	0	316	14
12 PM	0	0	0	1	0	2	3	16	43	90	90	52	22	3	1	2	0	0	0	0	0	0	0	325	14
13:00	0	0	0	2	1	1	4	12	51	104	96	52	18	5	0	0	0	0	0	0	0	0	0	346	15
14:00	0	0	2	0	2	7	2	17	41	127	145	67	24	4	1	0	0	0	0	0	0	0	0	439	19
15:00	0	0	0	0	1	0	3	12	46	82	145	98	15	10	1	0	0	0	0	0	0	0	0	413	18
16:00	1	1	2	1	0	1	0	10	36	78	131	96	24	8	1	0	1	0	0	0	0	0	0	391	17
17:00	0	0	0	0	0	0	7	2	21	63	95	80	22	11	1	1	0	0	0	0	0	0	0	303	13
18:00	0	0	0	0	0	0	0	3	23	81	87	51	23	7	2	0	0	0	0	0	0	0	0	277	12
19:00	0	0	0	3	0	7	0	7	19	43	66	25	9	2	0	0	0	0	0	0	0	0	0	181	8
20:00	0	0	0	0	3	2	3	8	18	33	54	24	11	2	0	0	0	0	0	0	0	0	0	158	7
21:00	0	0	1	1	0	0	3	9	13	34	28	22	3	0	0	0	1	0	0	0	0	0	0	115	5
22:00	0	0	0	1	1	0	2	10	10	31	20	17	3	1	0	0	0	0	0	0	0	0	0	96	4
23:00	0	0	0	0	1	1	1	2	4	13	26	4	4	2	3	1	1	0	0	0	0	0	0	63	3
Percent	0.0%	0.0%	0.1%	0.7%	0.4%	0.7%	1.0%	3.4%	11.6 %	26.3 %	30.6 %	17.1 %	5.5%	1.7%	0.5%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
AM Peak	10:00		00:00	05:00	05:00	07:00	08:00	11:00	10:00	07:00	07:00	11:00	11:00	06:00	11:00	00:00								11:00	
Vol.	1		1	23	3	6	9	17	48	105	101	48	25	6	6	1								316	
PM Peak	16:00	16:00	14:00	19:00	20:00	14:00	17:00	14:00	13:00	14:00	14:00	15:00	14:00	17:00	23:00	12:00	16:00							14:00	
Vol.	1	1	2	3	3	7	7	17	51	127	145	98	24	11	3	2	1							439	

Ontario Traffic, Inc.
17705 Leslie St., Unit 6
Newmarket, Ontario L3Y 3E3
Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 13142
Station ID: U154
WABANAKI DR from WILSON AVE to GOODRICH DR
Date Start: 30-Sep-21
Date End: 06-Oct-21
Date Start: 30-Sep-21

NB, SB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Avera
10/02 /21	0	0	0	1	0	0	0	0	3	9	10	18	6	1	0	1	0	0	0	0	0	0	0	49	2
01:00	0	0	2	0	0	0	0	1	1	10	3	0	2	0	1	0	1	0	0	0	0	0	0	21	1
02:00	0	0	0	0	1	0	0	0	0	6	5	1	0	0	0	0	0	0	0	0	0	0	0	13	1
03:00	0	0	0	0	0	2	1	0	1	1	3	2	1	0	1	0	1	0	0	0	0	0	0	13	1
04:00	0	0	0	1	0	1	0	0	0	1	3	0	1	3	0	0	0	0	0	0	0	0	0	10	0
05:00	0	0	1	4	0	1	1	4	3	2	10	0	2	1	1	0	0	0	0	0	0	0	0	30	1
06:00	0	0	1	0	0	2	0	1	6	7	11	20	2	0	0	2	0	0	0	0	0	0	0	52	2
07:00	0	0	0	0	0	1	2	0	5	20	26	9	13	0	0	0	1	0	0	0	0	0	0	77	3
08:00	0	0	0	0	0	0	1	2	14	32	54	20	7	4	0	0	0	0	0	0	0	0	0	134	6
09:00	0	0	0	0	1	1	2	4	20	40	69	35	17	0	1	0	0	0	0	0	0	0	0	190	8
10:00	0	0	0	5	0	0	0	3	34	64	63	47	11	0	1	0	0	0	0	0	0	0	0	228	10
11:00	0	0	0	0	1	1	2	5	23	45	85	50	27	1	8	0	0	0	0	0	0	0	0	248	11
12 PM	0	0	0	1	2	0	3	5	23	43	75	47	23	4	0	1	0	0	0	0	0	0	0	227	10
13:00	0	0	0	0	4	3	1	2	29	72	70	39	11	2	0	0	0	0	0	0	0	0	0	233	10
14:00	0	0	1	3	0	2	0	6	23	63	67	44	17	4	0	0	0	0	0	0	0	0	0	230	10
15:00	0	0	2	0	0	0	0	4	12	43	98	57	19	0	1	0	0	0	0	0	0	0	0	236	10
16:00	0	0	3	1	0	1	0	12	24	43	96	50	12	2	3	0	0	0	0	0	0	0	0	247	11
17:00	0	0	1	1	0	0	0	12	4	49	74	55	15	0	0	0	0	0	0	0	0	0	0	211	9
18:00	0	0	0	0	0	0	1	7	14	40	58	42	11	3	1	0	0	0	0	0	0	0	0	177	8
19:00	0	0	0	2	0	0	10	3	9	27	36	29	19	0	0	0	0	0	0	0	0	0	0	135	6
20:00	0	0	0	1	0	0	0	3	17	26	36	19	3	3	0	0	0	0	0	0	0	0	0	108	5
21:00	0	1	1	1	1	3	2	4	6	20	14	26	3	2	0	0	2	0	0	0	0	0	0	86	4
22:00	0	0	1	2	0	2	0	2	12	24	14	14	3	0	0	0	0	0	0	0	0	0	0	74	3
23:00	0	0	0	0	0	1	0	0	3	25	11	3	2	0	1	1	0	0	0	0	0	0	0	47	2
Percent	0.0%	0.0%	0.4%	0.7%	0.3%	0.7%	0.8%	2.6%	9.3%	23.1 %	32.2 %	20.4 %	7.4%	1.0%	0.6%	0.2%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
AM Peak			01:00	10:00	02:00	03:00	07:00	11:00	10:00	10:00	11:00	11:00	11:00	08:00	11:00	06:00	01:00							11:00	
Vol.			2	5	1	2	2	5	34	64	85	50	27	4	8	2	1							248	
PM Peak		21:00	16:00	14:00	13:00	13:00	19:00	16:00	13:00	13:00	15:00	15:00	12:00	12:00	16:00	12:00	21:00							16:00	
Vol.		1	3	3	4	3	10	12	29	72	98	57	23	4	3	1	2							247	

Ontario Traffic, Inc.
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Site Code: 13142
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WABANAKI DR from WILSON AVE to GOODRICH DR
Date Start: 30-Sep-21
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NB, SB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Avera
10/03 /21	0	0	0	0	0	1	0	1	3	11	7	4	3	3	1	0	0	0	0	0	0	0	0	34	1
01:00	0	1	1	1	1	2	0	1	2	8	0	3	0	0	0	0	1	0	0	0	0	0	0	21	1
02:00	0	0	0	0	0	0	1	0	3	2	3	3	1	2	0	0	0	0	0	0	0	0	0	15	1
03:00	0	0	0	1	0	0	0	1	1	2	1	0	0	0	0	1	0	0	0	0	0	0	0	7	0
04:00	0	0	0	1	0	0	3	0	0	0	6	1	3	0	0	0	1	0	0	0	0	0	0	15	1
05:00	0	0	0	0	0	0	0	0	2	0	4	1	0	0	0	0	0	0	0	0	0	0	0	7	0
06:00	0	0	0	0	0	0	1	3	5	6	10	5	0	0	0	0	0	0	0	0	0	0	0	30	1
07:00	0	0	0	1	1	0	0	4	14	22	15	7	3	2	0	0	0	0	0	0	0	0	0	69	3
08:00	0	0	0	0	0	0	2	2	10	23	24	8	10	0	0	0	0	0	0	0	0	0	0	79	3
09:00	0	0	0	0	0	0	1	5	27	37	34	13	8	0	0	0	0	0	0	0	0	0	0	125	5
10:00	0	0	0	0	0	0	1	6	20	39	38	25	6	1	0	0	0	0	0	0	0	0	0	136	6
11:00	0	0	0	0	1	0	2	6	29	40	43	43	10	0	1	0	0	0	0	0	0	0	0	175	8
12 PM	0	0	0	0	2	1	1	9	24	51	52	29	10	4	3	1	0	0	0	0	0	0	0	187	8
13:00	0	0	0	0	1	1	1	5	25	54	54	32	12	4	3	0	0	0	0	0	0	0	0	192	8
14:00	0	0	0	0	0	0	3	4	42	70	61	35	10	3	2	1	0	0	0	0	0	0	0	231	10
15:00	0	0	0	0	0	0	1	5	19	40	63	55	14	2	0	0	0	0	0	0	0	0	0	199	9
16:00	0	0	0	1	0	1	1	2	17	47	76	41	13	2	1	1	0	0	0	0	0	0	0	203	9
17:00	0	0	0	0	0	0	3	7	12	39	69	37	16	4	0	0	0	0	0	0	0	0	0	187	8
18:00	0	0	0	0	1	0	0	0	7	23	53	32	11	5	0	0	0	0	0	0	0	0	0	132	6
19:00	0	0	0	0	0	0	1	4	9	20	35	31	10	1	0	0	0	0	0	0	0	0	0	111	5
20:00	0	0	0	1	0	0	0	8	6	29	35	13	11	0	0	0	1	0	0	0	0	0	0	104	5
21:00	0	1	0	0	0	2	2	8	11	13	21	13	7	0	2	0	1	0	0	0	0	0	0	81	4
22:00	0	0	0	0	0	0	1	3	3	12	15	5	7	3	1	0	0	0	0	0	0	0	0	50	2
23:00	0	0	0	0	0	0	0	3	3	6	13	5	1	1	0	0	0	0	0	0	0	0	0	32	1
Percent	0.0%	0.1%	0.0%	0.2%	0.3%	0.3%	1.0%	3.6%	12.1 %	24.5 %	30.2 %	18.2 %	6.9%	1.5%	0.6%	0.2%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
AM Peak		01:00	01:00	01:00	01:00	01:00	04:00	10:00	11:00	11:00	11:00	11:00	08:00	00:00	00:00	03:00	01:00							11:00	
Vol.		1	1	1	1	2	3	6	29	40	43	43	10	3	1	1	1							175	
PM Peak		21:00		16:00	12:00	21:00	14:00	12:00	14:00	14:00	16:00	15:00	17:00	18:00	12:00	12:00	20:00							14:00	
Vol.		1		1	2	2	3	9	42	70	76	55	16	5	3	1	1							231	

Ontario Traffic, Inc.
17705 Leslie St., Unit 6
Newmarket, Ontario L3Y 3E3
Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 13142
Station ID: U154
WABANAKI DR from WILSON AVE to GOODRICH DR
Date Start: 30-Sep-21
Date End: 06-Oct-21
Date Start: 30-Sep-21

NB, SB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Avera
10/04 /21	0	0	0	1	0	0	0	1	0	5	3	0	1	0	1	0	0	0	0	0	0	0	0	12	1
01:00	0	0	3	0	0	0	0	0	0	5	3	0	0	1	0	0	0	0	0	0	0	0	0	12	1
02:00	0	0	1	0	0	0	0	0	4	0	0	2	0	0	0	1	0	0	0	0	0	0	0	8	0
03:00	0	0	0	1	0	0	1	1	4	3	2	0	3	0	0	1	0	0	0	0	0	0	0	16	1
04:00	0	0	0	1	1	0	0	0	6	6	12	2	5	1	0	1	0	0	0	0	0	0	0	35	2
05:00	0	1	1	2	7	4	5	6	14	12	22	10	6	7	1	2	1	0	0	0	0	0	0	101	4
06:00	0	0	0	0	0	12	0	10	57	49	55	28	4	3	1	0	0	0	0	0	0	0	0	219	10
07:00	0	0	0	0	0	1	4	4	51	109	98	41	18	9	0	0	0	0	0	0	0	0	0	335	15
08:00	0	0	0	0	0	4	0	12	48	99	68	31	19	7	0	2	0	0	0	0	0	0	0	290	13
09:00	0	0	0	0	0	1	0	6	39	81	68	31	11	3	0	0	0	0	0	0	0	0	0	240	10
10:00	0	0	0	0	0	2	1	10	59	76	49	32	5	2	0	0	0	0	0	0	0	0	0	236	10
11:00	0	0	0	0	0	6	7	28	58	61	50	39	10	1	0	0	0	0	0	0	0	0	0	260	11
12 PM	0	0	0	1	4	2	7	6	61	84	78	30	12	1	3	0	0	0	0	0	0	0	0	289	13
13:00	0	0	0	0	8	3	5	10	78	102	63	39	9	4	1	2	0	0	0	0	0	0	0	324	14
14:00	0	0	0	1	1	2	5	13	52	106	115	82	18	2	0	0	0	0	0	0	0	0	0	397	17
15:00	0	0	0	0	0	0	2	11	35	81	123	96	20	1	2	0	0	0	0	0	0	0	0	371	16
16:00	0	0	0	0	0	0	2	25	27	68	109	97	27	3	1	0	0	0	0	0	0	0	0	359	16
17:00	0	0	0	0	2	0	3	10	22	59	98	72	21	7	5	0	0	0	0	0	0	0	0	299	13
18:00	0	0	0	0	0	0	1	4	17	49	69	54	22	4	2	0	0	0	0	0	0	0	0	222	10
19:00	0	0	0	0	0	1	2	1	18	31	40	34	12	4	0	0	0	0	0	0	0	0	0	143	6
20:00	0	0	0	0	2	0	4	10	2	18	32	23	8	1	0	0	1	0	0	0	0	0	0	101	4
21:00	0	1	0	0	1	1	2	3	8	15	37	18	0	4	1	0	1	0	0	0	0	0	0	92	4
22:00	0	0	0	0	0	0	1	10	8	8	20	7	5	0	1	0	0	0	0	0	0	0	0	60	3
23:00	0	0	0	0	0	0	2	5	7	10	17	7	4	0	1	0	0	0	0	0	0	0	0	53	2
Percent	0.0%	0.0%	0.1%	0.2%	0.6%	0.9%	1.2%	4.2%	15.1 %	25.4 %	27.5 %	17.3 %	5.4%	1.5%	0.4%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
AM Peak		05:00	01:00	05:00	05:00	06:00	11:00	11:00	10:00	07:00	07:00	07:00	08:00	07:00	00:00	05:00	05:00							07:00	
Vol.		1	3	2	7	12	7	28	59	109	98	41	19	9	1	2	1							335	
PM Peak		21:00		12:00	13:00	13:00	12:00	16:00	13:00	14:00	15:00	16:00	16:00	17:00	17:00	13:00	20:00							14:00	
Vol.		1		1	8	3	7	25	78	106	123	97	27	7	5	2	1							397	

Ontario Traffic, Inc.
17705 Leslie St., Unit 6
Newmarket, Ontario L3Y 3E3
Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 13142
Station ID: U154
WABANAKI DR from WILSON AVE to GOODRICH DR
Date Start: 30-Sep-21
Date End: 06-Oct-21
Date Start: 30-Sep-21

NB, SB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Avera
10/05 /21	0	0	0	1	0	0	0	0	0	2	3	2	1	0	0	1	0	0	0	0	0	0	0	10	0
01:00	0	0	1	0	0	1	0	0	0	5	3	0	1	0	0	0	1	0	0	0	0	0	0	12	1
02:00	0	0	0	1	0	0	0	2	2	2	2	0	0	1	0	0	0	0	0	0	0	0	0	10	0
03:00	0	0	0	0	0	1	1	2	4	2	3	2	0	0	0	0	0	0	0	0	0	0	0	15	1
04:00	0	0	0	1	0	1	4	1	2	12	8	2	3	1	3	1	0	0	0	0	0	0	0	39	2
05:00	0	0	0	11	2	2	2	2	10	35	24	12	18	2	0	2	0	0	0	0	0	0	0	122	5
06:00	0	2	0	2	1	1	4	9	30	57	65	27	53	3	3	1	2	0	0	0	0	0	0	260	11
07:00	0	0	0	1	0	2	2	5	33	73	78	62	66	1	0	0	0	0	0	0	0	0	0	323	14
08:00	0	0	0	0	1	2	8	2	35	80	107	44	18	1	1	0	0	0	0	0	0	0	0	299	13
09:00	0	0	0	0	0	0	0	18	37	58	88	28	20	5	0	0	0	0	0	0	0	0	0	254	11
10:00	0	0	0	4	0	1	2	10	40	61	64	48	9	2	2	0	0	0	0	0	0	0	0	243	11
11:00	0	0	1	0	1	1	2	13	48	73	63	53	14	0	0	0	0	0	0	0	0	0	0	269	12
12 PM	0	0	0	0	3	2	3	9	47	78	82	46	21	2	2	1	0	0	0	0	0	0	0	296	13
13:00	0	0	0	0	3	5	1	5	54	103	69	50	16	5	0	0	0	0	0	0	0	0	0	311	14
14:00	0	1	1	0	2	1	1	9	49	107	121	75	22	2	0	0	0	0	0	0	0	0	0	391	17
15:00	0	0	0	0	0	0	0	8	35	69	125	97	30	5	1	0	0	0	0	0	0	0	0	370	16
16:00	0	0	2	1	0	0	0	15	38	81	146	84	31	7	2	1	0	0	0	0	0	0	0	408	18
17:00	0	0	0	0	3	0	3	12	7	82	119	75	28	6	0	1	0	0	0	0	0	0	0	336	15
18:00	0	0	0	0	0	0	3	9	18	35	67	57	23	1	2	0	0	0	0	0	0	0	0	215	9
19:00	0	0	0	8	0	0	1	3	17	39	42	74	7	2	0	0	0	0	0	0	0	0	0	193	8
20:00	0	0	0	0	0	0	1	1	14	40	40	18	3	1	0	0	0	0	0	0	0	0	0	118	5
21:00	0	0	0	1	0	0	2	9	3	21	33	18	5	0	3	0	0	0	0	0	0	0	0	95	4
22:00	0	0	0	0	1	1	1	6	13	21	21	7	4	3	0	1	0	0	0	0	0	0	0	79	3
23:00	0	0	0	1	0	0	0	1	3	10	7	2	4	3	1	0	0	0	0	0	0	0	0	32	1
Percent	0.0%	0.1%	0.1%	0.7%	0.4%	0.4%	0.9%	3.2%	11.5 %	24.4 %	29.4 %	18.8 %	8.4%	1.1%	0.4%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
AM Peak		06:00	01:00	05:00	05:00	05:00	08:00	09:00	11:00	08:00	08:00	07:00	07:00	09:00	04:00	05:00	06:00							07:00	
Vol.		2	1	11	2	2	8	18	48	80	107	62	66	5	3	2	2							323	
PM Peak		14:00	16:00	19:00	12:00	13:00	12:00	16:00	13:00	14:00	16:00	15:00	16:00	16:00	21:00	12:00								16:00	
Vol.		1	2	8	3	5	3	15	54	107	146	97	31	7	3	1								408	

Ontario Traffic, Inc.
17705 Leslie St., Unit 6
Newmarket, Ontario L3Y 3E3
Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 13142
Station ID: U154
WABANAKI DR from WILSON AVE to GOODRICH DR
Date Start: 30-Sep-21
Date End: 06-Oct-21
Date Start: 30-Sep-21

NB, SB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Avera
10/06 /21	0	0	0	0	4	0	0	2	8	2	10	3	1	1	1	1	0	0	0	0	0	0	0	33	1
01:00	0	0	1	0	0	0	0	0	2	3	5	1	1	1	0	0	0	0	0	0	0	0	0	14	1
02:00	0	0	0	0	0	0	0	0	0	0	0	3	1	0	1	0	0	0	0	0	0	0	0	5	0
03:00	0	0	0	0	0	2	0	2	5	3	1	0	2	1	1	0	0	0	0	0	0	0	0	17	1
04:00	0	0	1	1	2	2	2	0	3	1	7	5	6	0	1	1	0	0	0	0	0	0	0	32	1
05:00	0	1	1	1	3	8	0	4	19	16	36	8	4	1	1	1	2	0	0	0	0	0	0	106	5
06:00	0	0	0	0	0	6	5	8	49	61	75	31	8	1	1	0	0	0	0	0	0	0	0	245	11
07:00	0	0	0	0	0	1	11	8	65	90	101	34	21	4	3	0	0	0	0	0	0	0	0	338	15
08:00	0	0	0	0	0	0	2	11	52	82	82	57	37	1	0	0	0	0	0	0	0	0	0	324	14
09:00	0	0	0	0	0	4	8	11	63	74	67	32	11	0	0	0	0	0	0	0	0	0	0	270	12
10:00	0	0	0	0	0	3	1	1	37	73	73	44	8	0	0	0	1	0	0	0	0	0	0	241	10
11:00	0	0	0	0	5	0	9	12	55	87	56	40	13	2	0	0	0	0	0	0	0	0	0	279	12
12 PM	0	0	0	1	3	6	6	8	51	60	87	40	15	2	0	0	0	0	0	0	0	0	0	279	12
13:00	0	0	0	0	8	6	5	14	64	99	81	42	8	1	0	0	0	0	0	0	0	0	0	328	14
14:00	0	0	0	0	0	1	1	10	58	91	127	70	9	9	0	0	0	0	0	0	0	0	0	376	16
15:00	0	0	0	0	1	0	2	13	45	96	134	93	29	7	0	1	0	0	0	0	0	0	0	421	18
16:00	0	0	0	0	0	0	3	17	47	80	150	81	20	5	3	1	0	0	0	0	0	0	0	407	18
17:00	0	0	0	0	0	0	1	18	19	71	94	74	38	8	9	0	0	0	0	0	0	0	0	332	14
18:00	0	0	0	0	0	0	0	15	12	35	57	55	25	7	4	0	0	0	0	0	0	0	0	210	9
19:00	0	0	0	0	0	1	3	5	11	43	55	36	18	2	0	0	0	0	0	0	0	0	0	174	8
20:00	0	0	0	0	0	2	5	3	11	29	38	28	7	2	0	0	1	0	0	0	0	0	0	126	5
21:00	0	0	1	0	0	1	2	8	12	22	35	17	5	1	2	1	0	0	0	0	0	0	0	107	5
22:00	0	0	0	0	0	0	2	4	17	11	31	8	6	1	3	3	0	0	0	0	0	0	0	86	4
23:00	0	0	0	0	0	0	0	3	3	13	20	8	3	1	0	0	0	0	0	0	0	0	0	51	2
Percent	0.0%	0.0%	0.1%	0.1%	0.5%	0.9%	1.4%	3.7%	14.7 %	23.8 %	29.6 %	16.9 %	6.2%	1.2%	0.6%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
AM Peak		05:00	01:00	04:00	11:00	05:00	07:00	11:00	07:00	07:00	07:00	08:00	08:00	07:00	07:00	00:00	05:00							07:00	
Vol.		1	1	1	5	8	11	12	65	90	101	57	37	4	3	1	2							338	
PM Peak			21:00	12:00	13:00	12:00	12:00	17:00	13:00	13:00	16:00	15:00	17:00	14:00	17:00	22:00	20:00							15:00	
Vol.			1	1	8	6	6	18	64	99	150	93	38	9	9	3	1							421	
Total	2	11	55	116	120	197	330	1048	3677	7242	8728	5278	1904	415	140	46	26	0	0	0	0	0	0	29335	

Statistics

Mean Speed(Average) : 51 KPH
50th Percentile : 52 KPH
85th Percentile : 59 KPH

Ontario Traffic, Inc.
17705 Leslie St., Unit 6
Newmarket, Ontario L3Y 3E3
Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 21897
Station ID:
WABANAKI DR from MANITOU DR to KEVCO PL

Date Start: 20-Oct-21
Date End: 26-Oct-21
Date Start: 20-Oct-21

EB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
10/20/21	0	9	0	0	0	0	0	0	2	0	0	0	0	11
01:00	0	10	0	0	0	0	0	0	0	0	0	0	0	10
02:00	0	2	1	0	0	0	0	0	1	0	0	0	0	4
03:00	0	8	0	0	0	0	0	0	0	0	0	0	0	8
04:00	0	31	4	0	0	0	0	0	5	0	0	0	0	40
05:00	0	82	3	0	0	0	0	0	**7**	0	0	0	0	92
06:00	0	171	25	0	0	0	0	0	5	0	0	0	0	201
07:00	0	**294**	**59**	0	0	0	0	0	3	0	3	0	0	**359**
08:00	**2**	218	45	1	0	0	0	0	3	0	**8**	0	0	277
09:00	1	158	46	0	**1**	0	**2**	0	2	0	6	0	0	216
10:00	0	135	41	**2**	1	0	0	0	1	**1**	7	**1**	**1**	190
11:00	0	139	34	0	0	0	0	0	0	0	3	0	0	176
12 PM	0	142	41	0	0	1	**2**	0	3	0	7	0	0	196
13:00	0	110	**56**	0	**2**	0	0	0	1	0	8	0	0	177
14:00	0	158	51	0	2	**3**	2	0	5	0	7	**1**	0	229
15:00	0	241	32	0	1	0	0	0	4	0	**9**	0	0	287
16:00	1	**276**	31	**2**	0	0	0	0	5	0	7	0	0	**322**
17:00	**2**	225	35	0	1	1	0	0	4	**1**	4	0	0	273
18:00	0	178	10	0	0	0	0	0	0	0	8	0	**1**	197
19:00	0	104	7	0	0	0	0	0	0	0	2	0	0	113
20:00	1	74	5	0	0	2	0	0	2	1	0	0	0	85
21:00	0	55	0	0	1	0	0	0	**8**	0	2	0	0	66
22:00	0	51	0	0	0	0	0	0	2	0	3	0	0	56
23:00	0	34	0	0	0	0	0	0	2	0	0	0	0	36
Day Total	7	2905	526	5	9	7	6	0	65	3	84	2	2	3621
Percent	0.2%	80.2%	14.5%	0.1%	0.2%	0.2%	0.2%	0.0%	1.8%	0.1%	2.3%	0.1%	0.1%	
AM Peak	08:00	07:00	07:00	10:00	09:00		09:00		05:00	10:00	08:00	10:00	10:00	07:00
Vol.	2	294	59	2	1		2		7	1	8	1	1	359
PM Peak	17:00	16:00	13:00	16:00	13:00	14:00	12:00		21:00	17:00	15:00	14:00	18:00	16:00
Vol.	2	276	56	2	2	3	2		8	1	9	1	1	322

Ontario Traffic, Inc.
17705 Leslie St., Unit 6
Newmarket, Ontario L3Y 3E3
Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 21897
Station ID:
WABANAKI DR from MANITOU DR to KEVCO PL

Date Start: 20-Oct-21
Date End: 26-Oct-21
Date Start: 20-Oct-21

EB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
10/21/21	0	11	0	0	0	0	0	0	0	0	0	0	0	11
01:00	0	11	0	0	0	0	0	0	1	0	0	0	0	12
02:00	0	6	0	0	0	0	0	0	0	0	0	0	0	6
03:00	0	18	0	0	0	0	0	0	2	0	0	0	0	20
04:00	0	44	3	0	0	0	0	0	3	0	0	0	0	50
05:00	0	77	4	0	0	0	0	0	3	0	0	0	0	84
06:00	0	182	50	0	0	0	0	0	2	0	0	0	0	234
07:00	0	**239**	**57**	0	0	0	1	0	3	**1**	3	**1**	0	**305**
08:00	**2**	229	55	0	**1**	2	0	0	2	0	**8**	1	0	300
09:00	1	146	42	0	1	**3**	0	0	**5**	0	2	0	0	200
10:00	0	126	44	0	0	2	0	**2**	0	0	3	0	0	177
11:00	0	150	41	0	0	0	**5**	0	1	0	4	0	0	201
12 PM	1	155	48	0	1	1	1	1	1	**2**	4	0	**2**	217
13:00	0	152	47	0	0	0	0	0	1	0	6	0	0	206
14:00	**3**	178	56	0	0	1	0	0	0	0	10	0	1	249
15:00	0	234	**89**	0	0	0	0	0	2	0	**13**	0	0	338
16:00	0	**303**	30	0	0	0	**2**	2	5	0	4	0	2	**348**
17:00	0	252	28	0	0	**2**	0	0	0	2	4	0	0	288
18:00	0	221	8	0	0	0	0	0	2	0	2	0	0	233
19:00	0	97	11	0	**2**	2	0	**3**	5	0	1	0	0	121
20:00	0	90	7	0	0	1	0	0	0	0	5	0	0	103
21:00	0	62	4	0	1	0	0	0	5	0	0	0	0	72
22:00	0	44	2	0	0	0	0	0	**7**	0	1	0	0	54
23:00	0	22	0	0	0	0	0	0	5	0	0	0	0	27
Day Total	7	3049	626	0	6	14	9	8	55	5	70	2	5	3856
Percent	0.2%	79.1%	16.2%	0.0%	0.2%	0.4%	0.2%	0.2%	1.4%	0.1%	1.8%	0.1%	0.1%	
AM Peak	08:00	07:00	07:00		08:00	09:00	11:00	10:00	09:00	07:00	08:00	07:00		07:00
Vol.	2	239	57		1	3	5	2	5	1	8	1		305
PM Peak	14:00	16:00	15:00		19:00	17:00	16:00	19:00	22:00	12:00	15:00		12:00	16:00
Vol.	3	303	89		2	2	2	3	7	2	13		2	348

Ontario Traffic, Inc.
17705 Leslie St., Unit 6
Newmarket, Ontario L3Y 3E3
Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 21897
Station ID:
WABANAKI DR from MANITOU DR to KEVCO PL

Date Start: 20-Oct-21
Date End: 26-Oct-21
Date Start: 20-Oct-21

EB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
10/22/21	0	12	0	0	0	0	0	0	1	0	0	0	0	13
01:00	0	9	0	0	0	0	0	0	0	0	0	0	0	9
02:00	0	9	0	0	0	0	0	0	1	0	0	0	0	10
03:00	0	6	0	0	0	0	0	0	0	0	0	0	0	6
04:00	0	15	0	0	0	0	0	0	4	0	0	0	0	19
05:00	0	69	4	0	0	0	0	0	5	0	0	0	0	78
06:00	0	162	50	0	0	0	0	0	3	0	1	0	0	216
07:00	0	214	**82**	0	0	0	**2**	0	3	0	3	0	0	**304**
08:00	0	**242**	42	0	0	0	0	**2**	2	**2**	7	0	0	297
09:00	**1**	141	37	0	0	0	0	0	**8**	0	0	0	0	187
10:00	0	150	37	0	0	**6**	1	2	2	1	7	0	0	206
11:00	0	137	56	0	0	1	0	0	5	0	**8**	0	0	207
12 PM	**2**	148	43	0	0	2	**2**	0	9	2	2	0	0	210
13:00	0	164	**74**	0	0	**5**	0	1	6	**4**	**9**	0	0	263
14:00	0	173	55	0	0	0	0	0	3	0	5	0	**2**	238
15:00	0	260	32	0	0	0	0	0	3	0	9	0	0	304
16:00	0	**268**	52	0	0	0	0	**2**	9	0	3	0	0	**334**
17:00	0	233	16	0	0	0	0	0	2	0	5	0	0	256
18:00	2	198	5	0	0	2	2	2	2	0	2	0	0	215
19:00	2	98	10	0	0	0	2	0	2	0	1	0	0	115
20:00	1	95	16	0	0	0	0	0	0	0	1	0	0	113
21:00	0	84	6	0	0	0	0	0	11	0	0	0	0	101
22:00	0	52	2	0	0	0	0	0	**15**	0	2	0	0	71
23:00	0	28	2	0	0	0	0	0	6	0	1	0	0	37
Day Total	8	2967	621	0	0	16	9	9	102	9	66	0	2	3809
Percent	0.2%	77.9%	16.3%	0.0%	0.0%	0.4%	0.2%	0.2%	2.7%	0.2%	1.7%	0.0%	0.1%	
AM Peak	09:00	08:00	07:00			10:00	07:00	08:00	09:00	08:00	11:00			07:00
Vol.	1	242	82			6	2	2	8	2	8			304
PM Peak	12:00	16:00	13:00			13:00	12:00	16:00	22:00	13:00	13:00		14:00	16:00
Vol.	2	268	74			5	2	2	15	4	9		2	334

Ontario Traffic, Inc.
17705 Leslie St., Unit 6
Newmarket, Ontario L3Y 3E3
Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 21897
Station ID:
WABANAKI DR from MANITOU DR to KEVCO PL

Date Start: 20-Oct-21
Date End: 26-Oct-21
Date Start: 20-Oct-21

EB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
10/23/21	0	26	0	0	0	0	0	0	**3**	0	0	0	0	29
01:00	0	16	0	0	0	0	0	0	0	0	0	0	0	16
02:00	0	6	0	0	0	0	0	0	0	0	0	0	0	6
03:00	0	9	0	0	0	0	0	0	2	0	0	0	0	11
04:00	0	12	0	0	0	0	0	0	2	0	0	0	0	14
05:00	0	25	1	0	0	0	0	0	2	0	0	0	0	28
06:00	0	32	10	0	0	0	0	0	3	0	0	0	0	45
07:00	0	51	11	0	0	**2**	0	**2**	0	0	1	0	0	67
08:00	0	83	25	0	0	0	1	2	1	0	2	0	**2**	116
09:00	**3**	101	33	0	0	1	0	2	3	0	4	0	0	147
10:00	0	156	41	0	0	0	**2**	0	2	0	**5**	0	1	207
11:00	0	**175**	**45**	0	0	0	0	2	0	0	2	**1**	0	**225**
12 PM	0	137	**57**	0	0	**4**	0	0	1	0	4	0	0	**203**
13:00	3	130	35	0	0	0	0	0	0	0	**14**	0	0	182
14:00	0	151	32	0	0	1	0	**3**	2	0	5	0	1	195
15:00	0	142	35	0	0	1	**4**	0	0	**1**	3	0	0	186
16:00	**4**	**154**	17	0	0	1	1	0	2	0	3	0	0	182
17:00	0	143	14	0	0	1	0	0	4	1	9	0	**4**	176
18:00	2	109	6	0	0	0	0	0	1	0	3	0	0	121
19:00	0	104	3	0	0	0	0	0	0	0	0	0	0	107
20:00	2	108	0	0	0	0	0	2	2	0	5	0	1	120
21:00	0	92	1	0	0	0	0	0	0	0	0	0	0	93
22:00	0	54	1	0	0	0	0	0	5	0	0	0	0	60
23:00	0	51	0	0	0	0	0	0	**6**	0	0	0	0	57
Day Total	14	2067	367	0	0	11	8	13	41	2	60	1	9	2593
Percent	0.5%	79.7%	14.2%	0.0%	0.0%	0.4%	0.3%	0.5%	1.6%	0.1%	2.3%	0.0%	0.3%	
AM Peak	09:00	11:00	11:00			07:00	10:00	07:00	00:00		10:00	11:00	08:00	11:00
Vol.	3	175	45			2	2	2	3		5	1	2	225
PM Peak	16:00	16:00	12:00			12:00	15:00	14:00	23:00	15:00	13:00		17:00	12:00
Vol.	4	154	57			4	4	3	6	1	14		4	203

Ontario Traffic, Inc.
17705 Leslie St., Unit 6
Newmarket, Ontario L3Y 3E3
Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 21897
Station ID:
WABANAKI DR from MANITOU DR to KEVCO PL

Date Start: 20-Oct-21
Date End: 26-Oct-21
Date Start: 20-Oct-21

EB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
10/24/21	0	23	0	0	0	0	0	0	1	0	0	0	0	24
01:00	0	16	0	0	0	0	0	0	1	0	0	0	0	17
02:00	0	9	0	0	0	0	0	0	1	0	0	0	0	10
03:00	0	7	0	0	0	0	0	0	0	0	0	0	0	7
04:00	0	5	0	0	0	0	0	0	1	0	0	0	0	6
05:00	0	12	0	0	0	0	0	0	0	0	0	0	0	12
06:00	0	26	3	0	0	0	0	0	0	0	0	0	0	29
07:00	1	31	10	0	0	0	1	0	1	**2**	0	0	0	46
08:00	2	59	16	0	0	**1**	0	0	**4**	0	1	0	**1**	84
09:00	1	73	19	0	0	0	0	**2**	3	0	**4**	0	1	103
10:00	0	93	**28**	0	0	0	**2**	0	2	0	3	0	1	129
11:00	**5**	**105**	28	0	0	0	0	1	1	0	3	**1**	0	**144**
12 PM	**2**	89	**40**	0	0	3	0	0	3	0	4	0	0	141
13:00	0	106	40	0	0	**4**	0	0	3	0	4	0	0	**157**
14:00	0	110	34	0	1	1	0	0	3	0	**7**	0	0	156
15:00	0	122	20	0	0	1	0	0	1	0	3	0	**2**	149
16:00	1	**123**	17	0	0	1	0	1	3	0	4	0	0	150
17:00	0	109	13	0	0	0	**2**	0	1	1	2	0	0	128
18:00	0	102	6	0	0	1	0	0	1	0	2	0	2	114
19:00	2	92	1	0	1	2	0	0	0	2	2	0	0	102
20:00	0	60	4	0	0	0	0	**2**	0	**3**	2	0	0	71
21:00	0	51	0	0	**2**	0	0	0	1	0	0	0	0	54
22:00	0	37	0	0	0	0	0	0	1	0	0	0	0	38
23:00	0	34	1	0	0	0	0	0	**6**	0	0	0	0	41
Day Total	14	1494	280	0	4	14	5	6	38	8	41	1	7	1912
Percent	0.7%	78.1%	14.6%	0.0%	0.2%	0.7%	0.3%	0.3%	2.0%	0.4%	2.1%	0.1%	0.4%	
AM Peak	11:00	11:00	10:00			08:00	10:00	09:00	08:00	07:00	09:00	11:00	08:00	11:00
Vol.	5	105	28			1	2	2	4	2	4	1	1	144
PM Peak	12:00	16:00	12:00		21:00	13:00	17:00	20:00	23:00	20:00	14:00		15:00	13:00
Vol.	2	123	40		2	4	2	2	6	3	7		2	157

Ontario Traffic, Inc.
17705 Leslie St., Unit 6
Newmarket, Ontario L3Y 3E3
Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 21897
Station ID:
WABANAKI DR from MANITOU DR to KEVCO PL

Date Start: 20-Oct-21
Date End: 26-Oct-21
Date Start: 20-Oct-21

EB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
10/25/21	0	9	0	0	0	0	0	0	1	0	0	0	0	10
01:00	0	9	0	0	0	0	0	0	1	0	0	0	0	10
02:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
03:00	0	12	0	0	0	0	0	0	0	0	0	0	0	12
04:00	0	32	0	0	0	0	0	0	7	0	0	0	0	39
05:00	0	78	3	0	0	0	0	0	4	0	0	0	0	85
06:00	0	161	23	0	0	0	0	0	1	0	1	0	0	186
07:00	0	**224**	**67**	0	0	0	0	**3**	3	0	4	0	0	**301**
08:00	1	191	50	0	0	0	0	2	**8**	0	4	0	0	256
09:00	**2**	147	37	0	0	**2**	0	0	8	**1**	**5**	0	0	202
10:00	0	127	35	0	0	0	0	0	1	0	5	0	0	168
11:00	0	129	34	0	**2**	0	0	2	1	1	1	0	**1**	171
12 PM	1	137	47	0	0	3	**2**	1	3	0	6	0	0	200
13:00	2	127	**63**	0	0	0	0	0	0	0	**10**	0	**3**	205
14:00	0	165	48	0	0	0	0	**2**	3	0	2	0	0	220
15:00	0	229	40	0	0	0	0	0	**8**	**1**	7	0	0	285
16:00	**4**	**261**	41	0	**2**	1	0	1	3	0	7	0	0	**320**
17:00	0	220	19	0	0	**6**	0	2	1	0	6	0	1	255
18:00	0	167	8	0	0	0	0	0	4	0	7	0	0	186
19:00	0	91	6	0	0	0	0	2	1	0	1	0	0	101
20:00	0	84	1	0	0	0	0	2	1	0	0	0	0	88
21:00	0	67	4	0	1	0	0	0	1	0	0	0	0	73
22:00	0	35	5	0	0	0	0	0	0	0	3	0	0	43
23:00	0	25	0	0	1	0	0	0	6	0	1	0	0	33
Day Total	10	2729	531	0	6	12	2	17	66	3	70	0	5	3451
Percent	0.3%	79.1%	15.4%	0.0%	0.2%	0.3%	0.1%	0.5%	1.9%	0.1%	2.0%	0.0%	0.1%	
AM Peak	09:00	07:00	07:00		11:00	09:00		07:00	08:00	09:00	09:00		11:00	07:00
Vol.	2	224	67		2	2		3	8	1	5		1	301
PM Peak	16:00	16:00	13:00		16:00	17:00	12:00	14:00	15:00	15:00	13:00		13:00	16:00
Vol.	4	261	63		2	6	2	2	8	1	10		3	320

Ontario Traffic, Inc.
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Newmarket, Ontario L3Y 3E3
Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 21897
Station ID:
WABANAKI DR from MANITOU DR to KEVCO PL

Date Start: 20-Oct-21
Date End: 26-Oct-21
Date Start: 20-Oct-21

EB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
10/26/21	0	5	1	0	0	0	0	0	0	0	0	0	0	6
01:00	0	7	0	0	0	0	0	0	0	0	0	0	0	7
02:00	0	6	0	0	0	0	0	0	1	0	0	0	0	7
03:00	0	13	0	0	0	0	0	0	4	0	0	0	0	17
04:00	0	24	4	0	0	0	0	0	9	0	0	0	0	37
05:00	0	63	17	0	0	0	0	0	**13**	0	0	0	0	93
06:00	0	181	40	0	0	0	0	0	2	0	0	0	0	223
07:00	1	**225**	54	**2**	0	0	0	0	4	0	7	0	0	**293**
08:00	**2**	161	**61**	1	0	**3**	0	0	7	0	**13**	0	0	248
09:00	0	157	37	0	0	0	0	0	7	0	5	0	0	206
10:00	0	125	26	0	0	3	0	0	4	0	5	0	**2**	165
11:00	2	134	54	0	0	3	0	0	0	**1**	7	0	0	201
12 PM	0	124	49	**1**	0	1	0	0	4	0	3	0	0	182
13:00	2	120	**53**	0	**2**	1	**4**	**2**	0	0	5	0	0	189
14:00	**4**	176	38	0	1	1	0	0	0	0	6	**1**	0	227
15:00	2	220	46	0	0	**2**	0	0	4	0	**11**	0	0	285
16:00	2	**255**	51	0	0	0	0	0	**15**	0	7	0	0	**330**
17:00	0	235	32	0	0	0	1	0	6	0	10	0	0	284
18:00	0	160	17	0	0	0	0	0	3	0	4	0	0	184
19:00	2	101	7	0	0	0	0	1	0	0	0	0	**1**	112
20:00	0	88	1	1	0	0	2	1	3	0	1	0	0	97
21:00	0	57	3	0	0	0	0	0	2	0	3	0	0	65
22:00	0	37	1	0	0	0	0	0	7	0	0	0	0	45
23:00	0	25	0	0	0	0	0	0	4	0	0	0	0	29
Day Total	17	2699	592	5	3	14	7	4	99	1	87	1	3	3532
Percent	0.5%	76.4%	16.8%	0.1%	0.1%	0.4%	0.2%	0.1%	2.8%	0.0%	2.5%	0.0%	0.1%	
AM Peak	08:00	07:00	08:00	07:00		08:00			05:00	11:00	08:00		10:00	07:00
Vol.	2	225	61	2		3			13	1	13		2	293
PM Peak	14:00	16:00	13:00	12:00	13:00	15:00	13:00	13:00	16:00		15:00	14:00	19:00	16:00
Vol.	4	255	53	1	2	2	4	2	15		11	1	1	330
Grand Total	77	17910	3543	10	28	88	46	57	466	31	478	7	33	22774
Percent	0.3%	78.6%	15.6%	0.0%	0.1%	0.4%	0.2%	0.3%	2.0%	0.1%	2.1%	0.0%	0.1%	

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Station ID:
WABANAKI DR from MANITOU DR to KEVCO PL

Date Start: 20-Oct-21
Date End: 26-Oct-21
Date Start: 20-Oct-21

WB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
10/20/21	0	5	0	0	0	0	0	0	0	0	0	0	0	5
01:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
02:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	4	0	0	0	0	0	0	0	0	0	0	0	4
05:00	0	13	2	0	0	0	0	0	0	0	0	0	0	15
06:00	0	25	8	0	0	0	0	0	1	0	0	0	0	34
07:00	0	45	14	0	**2**	0	**1**	0	2	0	1	0	0	65
08:00	0	56	13	0	0	0	0	**1**	**3**	**2**	2	0	0	77
09:00	**1**	41	11	**1**	0	**5**	0	0	1	0	2	0	**4**	66
10:00	0	45	13	0	0	2	0	0	1	0	2	0	1	64
11:00	0	**61**	**22**	0	0	1	0	0	0	0	**3**	**1**	0	**88**
12 PM	0	71	18	0	0	0	0	2	1	**2**	2	0	0	96
13:00	1	67	**33**	0	0	1	0	1	1	0	**5**	0	0	109
14:00	2	104	31	0	1	0	**1**	0	2	0	4	0	0	145
15:00	2	**144**	24	0	0	**2**	0	1	1	0	4	0	0	**178**
16:00	0	92	13	0	**2**	0	0	0	**5**	0	3	0	0	115
17:00	1	60	9	0	0	1	0	0	2	0	1	0	0	74
18:00	**4**	64	1	0	0	0	0	1	2	0	0	0	0	72
19:00	1	41	1	0	0	0	0	0	1	0	0	**1**	**2**	47
20:00	2	13	1	0	0	1	0	**3**	0	0	0	0	0	20
21:00	0	18	1	0	0	0	0	0	1	0	0	0	0	20
22:00	0	12	1	0	0	0	0	0	2	0	0	0	0	15
23:00	0	15	0	0	0	0	0	0	2	0	0	0	0	17
Day Total	14	1001	216	1	5	13	2	9	28	4	29	2	7	1331
Percent	1.1%	75.2%	16.2%	0.1%	0.4%	1.0%	0.2%	0.7%	2.1%	0.3%	2.2%	0.2%	0.5%	
AM Peak	09:00	11:00	11:00	09:00	07:00	09:00	07:00	08:00	08:00	08:00	11:00	11:00	09:00	11:00
Vol.	1	61	22	1	2	5	1	1	3	2	3	1	4	88
PM Peak	18:00	15:00	13:00		16:00	15:00	14:00	20:00	16:00	12:00	13:00	19:00	19:00	15:00
Vol.	4	144	33		2	2	1	3	5	2	5	1	2	178

Ontario Traffic, Inc.
17705 Leslie St., Unit 6
Newmarket, Ontario L3Y 3E3
Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 21897
Station ID:
WABANAKI DR from MANITOU DR to KEVCO PL

Date Start: 20-Oct-21
Date End: 26-Oct-21
Date Start: 20-Oct-21

WB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
10/21/21	0	2	0	0	0	0	0	0	0	0	0	0	0	2
01:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
02:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
03:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
04:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
05:00	0	8	1	0	0	0	0	0	0	0	0	0	0	9
06:00	0	24	5	0	0	0	0	0	**6**	0	0	0	0	35
07:00	0	42	9	0	0	0	0	0	0	0	**2**	0	0	53
08:00	0	**57**	10	0	**2**	**1**	0	0	1	0	2	0	0	**73**
09:00	**4**	44	9	0	1	0	**2**	0	2	0	1	0	0	63
10:00	2	48	11	0	0	0	0	0	0	0	1	**2**	0	64
11:00	2	47	**17**	0	0	0	1	**1**	2	0	1	0	0	71
12 PM	2	54	12	0	**2**	0	**2**	0	2	**1**	0	0	0	75
13:00	1	82	28	0	0	0	0	0	1	0	2	0	2	116
14:00	0	99	**29**	0	0	0	1	**4**	1	1	3	0	0	138
15:00	1	**120**	20	0	0	**2**	0	0	2	1	**6**	0	0	**152**
16:00	0	98	12	0	0	1	0	0	1	0	4	0	0	116
17:00	2	71	8	0	0	0	0	0	2	0	0	0	0	83
18:00	1	59	4	0	2	0	2	0	0	0	1	0	**3**	72
19:00	**3**	31	1	0	0	1	0	2	1	0	0	0	0	39
20:00	1	25	1	0	0	0	1	1	0	0	0	0	0	29
21:00	0	23	1	0	0	0	0	0	0	0	0	0	0	24
22:00	0	14	0	0	0	0	0	0	**3**	0	1	0	0	18
23:00	0	9	0	0	0	0	0	0	3	0	0	0	0	12
Day Total	19	966	178	0	7	5	9	8	27	3	24	2	5	1253
Percent	1.5%	77.1%	14.2%	0.0%	0.6%	0.4%	0.7%	0.6%	2.2%	0.2%	1.9%	0.2%	0.4%	
AM Peak	09:00	08:00	11:00		08:00	08:00	09:00	11:00	06:00		07:00	10:00		08:00
Vol.	4	57	17		2	1	2	1	6		2	2		73
PM Peak	19:00	15:00	14:00		12:00	15:00	12:00	14:00	22:00	12:00	15:00		18:00	15:00
Vol.	3	120	29		2	2	2	4	3	1	6		3	152

Ontario Traffic, Inc.
17705 Leslie St., Unit 6
Newmarket, Ontario L3Y 3E3
Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 21897
Station ID:
WABANAKI DR from MANITOU DR to KEVCO PL

Date Start: 20-Oct-21
Date End: 26-Oct-21
Date Start: 20-Oct-21

WB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
10/22/21	0	5	0	0	0	0	0	0	0	0	0	0	0	5
01:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
04:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
05:00	0	7	0	0	0	0	0	0	0	0	0	0	0	7
06:00	0	36	5	0	0	0	0	0	1	0	0	0	0	42
07:00	0	30	17	0	0	0	0	**2**	1	0	4	0	0	54
08:00	**1**	51	14	0	0	0	**2**	0	**3**	0	**5**	0	0	76
09:00	0	58	16	0	0	**2**	0	0	1	0	1	0	0	78
10:00	0	49	17	0	0	0	0	0	2	0	4	0	**1**	73
11:00	0	**75**	**25**	0	0	0	0	0	0	**2**	1	0	0	**103**
12 PM	0	64	25	0	0	0	0	**2**	2	0	4	0	0	97
13:00	1	91	**33**	0	0	0	0	0	1	0	4	0	0	130
14:00	0	**133**	21	**1**	0	0	0	0	0	0	2	0	0	157
15:00	**2**	122	26	0	0	1	0	0	1	0	**6**	0	**2**	**160**
16:00	0	101	14	0	**2**	1	**2**	0	0	**2**	1	0	0	123
17:00	0	53	4	0	0	1	0	0	**3**	0	2	0	1	64
18:00	2	49	7	0	0	**2**	0	0	0	1	1	0	0	62
19:00	0	31	2	0	0	2	0	0	1	0	0	0	0	36
20:00	0	28	0	0	0	0	0	0	1	0	0	0	0	29
21:00	0	27	2	0	0	0	0	0	0	0	1	0	0	30
22:00	0	22	0	0	0	0	0	0	2	0	1	0	0	25
23:00	0	8	0	0	0	0	0	0	3	0	0	0	0	11
Day Total	6	1047	228	1	2	9	4	4	22	5	37	0	4	1369
Percent	0.4%	76.5%	16.7%	0.1%	0.1%	0.7%	0.3%	0.3%	1.6%	0.4%	2.7%	0.0%	0.3%	
AM Peak	08:00	11:00	11:00			09:00	08:00	07:00	08:00	11:00	08:00		10:00	11:00
Vol.	1	75	25			2	2	2	3	2	5		1	103
PM Peak	15:00	14:00	13:00	14:00	16:00	18:00	16:00	12:00	17:00	16:00	15:00		15:00	15:00
Vol.	2	133	33	1	2	2	2	2	3	2	6		2	160

Ontario Traffic, Inc.
17705 Leslie St., Unit 6
Newmarket, Ontario L3Y 3E3
Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 21897
Station ID:
WABANAKI DR from MANITOU DR to KEVCO PL

Date Start: 20-Oct-21
Date End: 26-Oct-21
Date Start: 20-Oct-21

WB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
10/23/21	0	10	0	0	0	0	0	0	**2**	0	0	0	0	12
01:00	0	8	0	0	0	0	0	0	0	0	0	0	0	8
02:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
03:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
06:00	0	4	1	0	0	0	0	0	0	0	0	0	0	5
07:00	0	5	3	0	0	**1**	0	0	0	0	0	0	0	9
08:00	0	13	4	0	0	1	0	0	0	0	0	0	1	19
09:00	0	24	6	0	0	0	0	0	0	0	**2**	**2**	0	34
10:00	**1**	20	6	0	0	0	0	0	0	**2**	2	0	2	33
11:00	0	**31**	**10**	0	0	0	**1**	0	1	0	0	0	**3**	**46**
12 PM	1	35	10	0	1	1	0	**1**	0	0	0	0	1	50
13:00	1	31	**12**	0	0	0	0	0	0	0	1	**1**	0	46
14:00	**4**	41	12	0	0	0	**2**	0	0	**1**	0	0	0	**60**
15:00	1	**50**	6	0	**2**	0	0	0	0	0	1	0	0	60
16:00	2	36	2	0	0	**2**	1	0	1	0	2	0	**2**	48
17:00	2	38	4	0	1	2	1	0	1	0	**3**	0	1	53
18:00	3	31	5	0	1	0	0	0	0	0	1	0	0	41
19:00	0	32	1	0	0	0	0	0	0	0	0	0	0	33
20:00	0	28	2	0	0	0	0	0	0	0	0	1	0	31
21:00	0	18	1	0	0	0	0	0	0	0	0	0	0	19
22:00	0	3	1	0	0	0	0	0	1	0	0	0	0	5
23:00	0	6	0	0	0	0	0	0	**2**	0	0	0	0	8
Day Total	15	469	86	0	5	7	5	1	8	3	12	4	10	625
Percent	2.4%	75.0%	13.8%	0.0%	0.8%	1.1%	0.8%	0.2%	1.3%	0.5%	1.9%	0.6%	1.6%	
AM Peak	10:00	11:00	11:00			07:00	11:00		00:00	10:00	09:00	09:00	11:00	11:00
Vol.	1	31	10			1	1		2	2	2	2	3	46
PM Peak	14:00	15:00	13:00		15:00	16:00	14:00	12:00	23:00	14:00	17:00	13:00	16:00	14:00
Vol.	4	50	12		2	2	2	1	2	1	3	1	2	60

Ontario Traffic, Inc.
17705 Leslie St., Unit 6
Newmarket, Ontario L3Y 3E3
Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 21897
Station ID:
WABANAKI DR from MANITOU DR to KEVCO PL

Date Start: 20-Oct-21
Date End: 26-Oct-21
Date Start: 20-Oct-21

WB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
10/24/21	0	8	0	0	0	0	0	0	0	0	0	0	0	8
01:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
05:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
06:00	0	12	1	0	0	0	0	0	**1**	0	0	0	0	14
07:00	1	10	1	0	0	**2**	0	0	0	0	0	0	0	14
08:00	0	14	3	0	0	1	**2**	**2**	0	0	**1**	0	0	23
09:00	**3**	9	2	0	0	0	0	0	0	0	0	0	0	14
10:00	0	15	3	0	0	2	0	2	0	0	0	0	0	22
11:00	0	**31**	**10**	0	0	0	0	0	1	0	1	0	0	**43**
12 PM	**1**	26	9	0	0	0	1	**2**	0	**2**	0	0	0	41
13:00	0	36	**11**	0	1	0	0	1	0	0	**2**	0	1	52
14:00	0	46	9	0	2	0	0	1	**2**	0	0	0	0	60
15:00	1	**49**	6	0	1	0	0	0	1	0	1	0	0	59
16:00	0	48	7	0	0	**2**	0	0	1	0	2	0	1	**61**
17:00	1	35	2	0	**4**	0	**2**	0	0	0	1	0	1	46
18:00	0	37	5	0	0	2	0	1	0	0	2	0	**2**	49
19:00	1	14	2	0	0	0	0	0	1	0	0	0	0	18
20:00	0	16	0	0	1	1	0	0	0	0	0	0	0	18
21:00	0	14	0	0	0	0	0	0	1	0	1	0	0	16
22:00	0	7	1	0	0	0	0	0	1	0	0	0	0	9
23:00	0	6	0	0	0	0	0	0	0	0	0	0	0	6
Day Total	8	436	72	0	9	10	5	9	9	2	11	0	5	576
Percent	1.4%	75.7%	12.5%	0.0%	1.6%	1.7%	0.9%	1.6%	1.6%	0.3%	1.9%	0.0%	0.9%	
AM Peak	09:00	11:00	11:00			07:00	08:00	08:00	06:00		08:00			11:00
Vol.	3	31	10			2	2	2	1		1			43
PM Peak	12:00	15:00	13:00		17:00	16:00	17:00	12:00	14:00	12:00	13:00		18:00	16:00
Vol.	1	49	11		4	2	2	2	2	2	2		2	61

Ontario Traffic, Inc.
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Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 21897
Station ID:
WABANAKI DR from MANITOU DR to KEVCO PL

Date Start: 20-Oct-21
Date End: 26-Oct-21
Date Start: 20-Oct-21

WB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
10/25/21	0	5	0	0	0	0	0	0	0	0	0	0	0	5
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
03:00	0	3	0	0	0	0	0	0	1	0	0	0	0	4
04:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
05:00	0	6	2	0	0	0	0	0	1	0	0	0	0	9
06:00	0	29	5	0	0	0	0	0	**3**	0	0	0	0	37
07:00	**2**	36	14	0	0	**2**	0	0	0	0	3	0	0	57
08:00	1	40	15	0	0	0	0	0	2	**2**	3	**1**	0	64
09:00	1	43	15	0	0	0	**1**	0	2	0	2	0	0	64
10:00	0	45	13	0	0	2	0	0	1	2	**4**	0	0	67
11:00	2	**55**	**17**	0	0	0	0	**1**	1	0	1	0	0	**77**
12 PM	2	51	20	0	1	0	0	**2**	3	0	**3**	0	0	82
13:00	1	76	26	0	1	0	0	2	0	0	3	0	0	109
14:00	1	**131**	**28**	0	1	0	0	0	0	0	3	0	0	**164**
15:00	0	116	22	0	**2**	0	**1**	0	2	**2**	3	0	0	148
16:00	2	84	16	0	2	0	0	1	**5**	0	2	0	0	112
17:00	0	80	9	0	0	**2**	1	0	1	0	1	0	0	94
18:00	2	46	1	**1**	0	0	0	0	1	1	1	0	0	53
19:00	0	38	2	0	0	0	0	0	0	0	0	0	0	40
20:00	**3**	13	2	0	0	1	0	2	0	0	0	**1**	**1**	23
21:00	0	22	0	0	0	0	0	0	0	0	0	0	0	22
22:00	0	9	0	0	0	0	0	0	1	0	0	0	0	10
23:00	0	12	1	0	0	0	0	0	0	0	1	0	0	14
Day Total	17	942	208	1	7	7	3	8	24	7	30	2	1	1257
Percent	1.4%	74.9%	16.5%	0.1%	0.6%	0.6%	0.2%	0.6%	1.9%	0.6%	2.4%	0.2%	0.1%	
AM Peak	07:00	11:00	11:00			07:00	09:00	11:00	06:00	08:00	10:00	08:00		11:00
Vol.	2	55	17			2	1	1	3	2	4	1		77
PM Peak	20:00	14:00	14:00	18:00	15:00	17:00	15:00	12:00	16:00	15:00	12:00	20:00	20:00	14:00
Vol.	3	131	28	1	2	2	1	2	5	2	3	1	1	164

Ontario Traffic, Inc.
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Site Code: 21897
Station ID:
WABANAKI DR from MANITOU DR to KEVCO PL

Date Start: 20-Oct-21
Date End: 26-Oct-21
Date Start: 20-Oct-21

WB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
10/26/21	0	3	0	0	0	0	0	0	0	0	0	0	0	3
01:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
02:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
03:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
04:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
05:00	0	7	4	0	0	0	0	0	2	0	0	0	0	13
06:00	0	28	10	0	0	0	0	0	1	0	0	0	0	39
07:00	0	47	10	0	0	**2**	0	0	0	**1**	2	0	0	62
08:00	1	**57**	17	0	0	2	0	0	**4**	0	**3**	0	0	84
09:00	1	49	12	0	0	2	**1**	0	1	1	0	0	0	67
10:00	0	45	13	0	0	0	0	0	1	0	2	0	**1**	62
11:00	**2**	54	**24**	0	0	1	0	**2**	1	0	3	0	0	**87**
12 PM	**2**	62	20	0	0	1	**2**	**2**	**3**	**2**	3	0	0	97
13:00	0	77	30	0	**3**	**2**	0	2	1	0	3	0	0	118
14:00	0	113	**33**	0	0	1	0	0	1	0	4	0	0	152
15:00	0	**144**	10	0	0	0	0	0	2	0	**7**	0	0	**163**
16:00	1	104	16	**1**	0	0	2	2	1	2	0	0	0	129
17:00	0	86	3	0	0	2	0	0	2	0	0	0	0	93
18:00	0	64	1	0	0	0	0	0	0	2	2	0	0	69
19:00	0	33	4	0	2	0	0	1	1	0	1	0	0	42
20:00	0	18	2	0	0	2	0	0	1	0	0	0	0	23
21:00	0	15	0	0	0	0	0	0	2	0	1	0	0	18
22:00	0	20	0	0	0	0	0	0	2	0	2	0	0	24
23:00	0	12	0	0	0	0	0	0	1	0	0	0	0	13
Day Total	7	1046	209	1	5	15	5	9	27	8	33	0	1	1366
Percent	0.5%	76.6%	15.3%	0.1%	0.4%	1.1%	0.4%	0.7%	2.0%	0.6%	2.4%	0.0%	0.1%	
AM Peak	11:00	08:00	11:00			07:00	09:00	11:00	08:00	07:00	08:00		10:00	11:00
Vol.	2	57	24			2	1	2	4	1	3		1	87
PM Peak	12:00	15:00	14:00	16:00	13:00	13:00	12:00	12:00	12:00	12:00	15:00			15:00
Vol.	2	144	33	1	3	2	2	2	3	2	7			163
Grand Total	86	5907	1197	4	40	66	33	48	145	32	176	10	33	7777
Percent	1.1%	76.0%	15.4%	0.1%	0.5%	0.8%	0.4%	0.6%	1.9%	0.4%	2.3%	0.1%	0.4%	

Ontario Traffic, Inc.
17705 Leslie St., Unit 6
Newmarket, Ontario L3Y 3E3
Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 21897
Station ID:
WABANAKI DR from MANITOU DR to KEVCO PL

Date Start: 20-Oct-21
Date End: 26-Oct-21
Date Start: 20-Oct-21

EB, WB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
10/20/21	0	14	0	0	0	0	0	0	2	0	0	0	0	16
01:00	0	13	0	0	0	0	0	0	0	0	0	0	0	13
02:00	0	4	1	0	0	0	0	0	1	0	0	0	0	6
03:00	0	8	0	0	0	0	0	0	0	0	0	0	0	8
04:00	0	35	4	0	0	0	0	0	5	0	0	0	0	44
05:00	0	95	5	0	0	0	0	0	**7**	0	0	0	0	107
06:00	0	196	33	0	0	0	0	0	6	0	0	0	0	235
07:00	0	**339**	**73**	0	**2**	0	1	0	5	0	4	0	0	**424**
08:00	**2**	274	58	1	0	0	0	**1**	6	**2**	**10**	0	0	354
09:00	2	199	57	1	1	**5**	**2**	0	3	0	8	0	**4**	282
10:00	0	180	54	**2**	1	2	0	0	2	1	9	**1**	2	254
11:00	0	200	56	0	0	1	0	0	0	0	6	1	0	264
12 PM	0	213	59	0	0	1	2	2	4	**2**	9	0	0	292
13:00	1	177	**89**	0	2	1	0	1	2	0	**13**	0	0	286
14:00	2	262	82	0	**3**	**3**	**3**	0	7	0	11	**1**	0	374
15:00	2	**385**	56	0	1	2	0	1	5	0	13	0	0	**465**
16:00	1	368	44	**2**	2	0	0	0	**10**	0	10	0	0	437
17:00	3	285	44	0	1	2	0	0	6	1	5	0	0	347
18:00	**4**	242	11	0	0	0	0	1	2	0	8	0	1	269
19:00	1	145	8	0	0	0	0	0	1	0	2	1	**2**	160
20:00	3	87	6	0	0	3	0	**3**	2	1	0	0	0	105
21:00	0	73	1	0	1	0	0	0	9	0	2	0	0	86
22:00	0	63	1	0	0	0	0	0	4	0	3	0	0	71
23:00	0	49	0	0	0	0	0	0	4	0	0	0	0	53
Day Total	21	3906	742	6	14	20	8	9	93	7	113	4	9	4952
Percent	0.4%	78.9%	15.0%	0.1%	0.3%	0.4%	0.2%	0.2%	1.9%	0.1%	2.3%	0.1%	0.2%	
AM Peak	08:00	07:00	07:00	10:00	07:00	09:00	09:00	08:00	05:00	08:00	08:00	10:00	09:00	07:00
Vol.	2	339	73	2	2	5	2	1	7	2	10	1	4	424
PM Peak	18:00	15:00	13:00	16:00	14:00	14:00	14:00	20:00	16:00	12:00	13:00	14:00	19:00	15:00
Vol.	4	385	89	2	3	3	3	3	10	2	13	1	2	465

Ontario Traffic, Inc.
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Site Code: 21897
Station ID:
WABANAKI DR from MANITOU DR to KEVCO PL

Date Start: 20-Oct-21
Date End: 26-Oct-21
Date Start: 20-Oct-21

EB, WB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
10/21/21	0	13	0	0	0	0	0	0	0	0	0	0	0	13
01:00	0	12	0	0	0	0	0	0	1	0	0	0	0	13
02:00	0	9	0	0	0	0	0	0	0	0	0	0	0	9
03:00	0	20	0	0	0	0	0	0	2	0	0	0	0	22
04:00	0	47	3	0	0	0	0	0	3	0	0	0	0	53
05:00	0	85	5	0	0	0	0	0	3	0	0	0	0	93
06:00	0	206	55	0	0	0	0	0	**8**	0	0	0	0	269
07:00	0	281	**66**	0	0	0	1	0	3	**1**	5	1	0	358
08:00	2	**286**	65	0	**3**	**3**	0	0	3	0	**10**	1	0	**373**
09:00	**5**	190	51	0	2	3	2	0	7	0	3	0	0	263
10:00	2	174	55	0	0	2	0	**2**	0	0	4	**2**	0	241
11:00	2	197	58	0	0	0	**6**	1	3	0	5	0	0	272
12 PM	**3**	209	60	0	**3**	1	**3**	1	3	**3**	4	0	2	292
13:00	1	234	75	0	0	0	0	0	2	0	8	0	2	322
14:00	3	277	85	0	0	1	1	4	1	1	13	0	1	387
15:00	1	354	**109**	0	0	2	0	0	4	1	**19**	0	0	**490**
16:00	0	**401**	42	0	0	1	2	2	6	0	8	0	2	464
17:00	2	323	36	0	0	2	0	0	2	2	4	0	0	371
18:00	1	280	12	0	2	0	2	0	2	0	3	0	**3**	305
19:00	3	128	12	0	2	**3**	0	**5**	6	0	1	0	0	160
20:00	1	115	8	0	0	1	1	1	0	0	5	0	0	132
21:00	0	85	5	0	1	0	0	0	5	0	0	0	0	96
22:00	0	58	2	0	0	0	0	0	**10**	0	2	0	0	72
23:00	0	31	0	0	0	0	0	0	8	0	0	0	0	39
Day Total	26	4015	804	0	13	19	18	16	82	8	94	4	10	5109
Percent	0.5%	78.6%	15.7%	0.0%	0.3%	0.4%	0.4%	0.3%	1.6%	0.2%	1.8%	0.1%	0.2%	
AM Peak	09:00	08:00	07:00		08:00	08:00	11:00	10:00	06:00	07:00	08:00	10:00		08:00
Vol.	5	286	66		3	3	6	2	8	1	10	2		373
PM Peak	12:00	16:00	15:00		12:00	19:00	12:00	19:00	22:00	12:00	15:00		18:00	15:00
Vol.	3	401	109		3	3	3	5	10	3	19		3	490

Ontario Traffic, Inc.
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Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 21897
Station ID:
WABANAKI DR from MANITOU DR to KEVCO PL

Date Start: 20-Oct-21
Date End: 26-Oct-21
Date Start: 20-Oct-21

EB, WB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
10/22/21	0	17	0	0	0	0	0	0	1	0	0	0	0	18
01:00	0	12	0	0	0	0	0	0	0	0	0	0	0	12
02:00	0	9	0	0	0	0	0	0	1	0	0	0	0	10
03:00	0	7	0	0	0	0	0	0	0	0	0	0	0	7
04:00	0	18	0	0	0	0	0	0	4	0	0	0	0	22
05:00	0	76	4	0	0	0	0	0	5	0	0	0	0	85
06:00	0	198	55	0	0	0	0	0	4	0	1	0	0	258
07:00	0	244	**99**	0	0	0	**2**	**2**	4	0	7	0	0	358
08:00	**1**	**293**	56	0	0	0	2	2	5	**2**	**12**	0	0	**373**
09:00	1	199	53	0	0	2	0	0	**9**	0	1	0	0	265
10:00	0	199	54	0	0	**6**	1	2	4	1	11	0	**1**	279
11:00	0	212	81	0	0	1	0	0	5	2	9	0	0	310
12 PM	2	212	68	0	0	2	**2**	**2**	11	2	6	0	0	307
13:00	1	255	**107**	0	0	**5**	0	1	7	**4**	13	0	0	393
14:00	0	306	76	**1**	0	0	0	0	3	0	7	0	**2**	395
15:00	2	**382**	58	0	0	1	0	0	4	0	**15**	0	2	**464**
16:00	0	369	66	0	**2**	1	2	2	9	2	4	0	0	457
17:00	0	286	20	0	0	1	0	0	5	0	7	0	1	320
18:00	**4**	247	12	0	0	4	2	2	2	1	3	0	0	277
19:00	2	129	12	0	0	2	2	0	3	0	1	0	0	151
20:00	1	123	16	0	0	0	0	0	1	0	1	0	0	142
21:00	0	111	8	0	0	0	0	0	11	0	1	0	0	131
22:00	0	74	2	0	0	0	0	0	**17**	0	3	0	0	96
23:00	0	36	2	0	0	0	0	0	9	0	1	0	0	48
Day Total	14	4014	849	1	2	25	13	13	124	14	103	0	6	5178
Percent	0.3%	77.5%	16.4%	0.0%	0.0%	0.5%	0.3%	0.3%	2.4%	0.3%	2.0%	0.0%	0.1%	
AM Peak	08:00	08:00	07:00			10:00	07:00	07:00	09:00	08:00	08:00		10:00	08:00
Vol.	1	293	99			6	2	2	9	2	12		1	373
PM Peak	18:00	15:00	13:00	14:00	16:00	13:00	12:00	12:00	22:00	13:00	15:00		14:00	15:00
Vol.	4	382	107	1	2	5	2	2	17	4	15		2	464

Ontario Traffic, Inc.
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Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 21897
Station ID:
WABANAKI DR from MANITOU DR to KEVCO PL

Date Start: 20-Oct-21
Date End: 26-Oct-21
Date Start: 20-Oct-21

EB, WB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
10/23/21	0	36	0	0	0	0	0	0	**5**	0	0	0	0	41
01:00	0	24	0	0	0	0	0	0	0	0	0	0	0	24
02:00	0	7	0	0	0	0	0	0	0	0	0	0	0	7
03:00	0	10	0	0	0	0	0	0	2	0	0	0	0	12
04:00	0	12	0	0	0	0	0	0	2	0	0	0	0	14
05:00	0	28	1	0	0	0	0	0	2	0	0	0	0	31
06:00	0	36	11	0	0	0	0	0	3	0	0	0	0	50
07:00	0	56	14	0	0	**3**	0	**2**	0	0	1	0	0	76
08:00	0	96	29	0	0	1	1	2	1	0	2	0	**3**	135
09:00	**3**	125	39	0	0	1	0	2	3	0	6	**2**	0	181
10:00	1	176	47	0	0	0	**2**	0	2	**2**	**7**	0	3	240
11:00	0	**206**	**55**	0	0	0	1	2	1	0	2	1	3	**271**
12 PM	1	172	**67**	0	1	**5**	0	1	1	0	4	0	1	253
13:00	4	161	47	0	0	0	0	0	0	0	**15**	**1**	0	228
14:00	4	**192**	44	0	0	1	2	**3**	2	**1**	5	0	1	**255**
15:00	1	192	41	0	**2**	1	**4**	0	0	1	4	0	0	246
16:00	**6**	190	19	0	0	3	2	0	3	0	5	0	2	230
17:00	2	181	18	0	1	3	1	0	5	1	12	0	**5**	229
18:00	5	140	11	0	1	0	0	0	1	0	4	0	0	162
19:00	0	136	4	0	0	0	0	0	0	0	0	0	0	140
20:00	2	136	2	0	0	0	0	2	2	0	5	1	1	151
21:00	0	110	2	0	0	0	0	0	0	0	0	0	0	112
22:00	0	57	2	0	0	0	0	0	6	0	0	0	0	65
23:00	0	57	0	0	0	0	0	0	**8**	0	0	0	0	65
Day Total	29	2536	453	0	5	18	13	14	49	5	72	5	19	3218
Percent	0.9%	78.8%	14.1%	0.0%	0.2%	0.6%	0.4%	0.4%	1.5%	0.2%	2.2%	0.2%	0.6%	
AM Peak	09:00	11:00	11:00			07:00	10:00	07:00	00:00	10:00	10:00	09:00	08:00	11:00
Vol.	3	206	55			3	2	2	5	2	7	2	3	271
PM Peak	16:00	14:00	12:00		15:00	12:00	15:00	14:00	23:00	14:00	13:00	13:00	17:00	14:00
Vol.	6	192	67		2	5	4	3	8	1	15	1	5	255

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Site Code: 21897
Station ID:
WABANAKI DR from MANITOU DR to KEVCO PL

Date Start: 20-Oct-21
Date End: 26-Oct-21
Date Start: 20-Oct-21

EB, WB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
10/24/21	0	31	0	0	0	0	0	0	1	0	0	0	0	32
01:00	0	17	0	0	0	0	0	0	1	0	0	0	0	18
02:00	0	9	0	0	0	0	0	0	1	0	0	0	0	10
03:00	0	7	0	0	0	0	0	0	0	0	0	0	0	7
04:00	0	6	0	0	0	0	0	0	1	0	0	0	0	7
05:00	0	13	0	0	0	0	0	0	0	0	0	0	0	13
06:00	0	38	4	0	0	0	0	0	1	0	0	0	0	43
07:00	2	41	11	0	0	**2**	1	0	1	**2**	0	0	0	60
08:00	2	73	19	0	0	2	**2**	**2**	**4**	0	2	0	**1**	107
09:00	4	82	21	0	0	0	0	2	3	0	**4**	0	1	117
10:00	0	108	31	0	0	2	2	2	2	0	3	0	1	151
11:00	**5**	**136**	**38**	0	0	0	0	1	2	0	4	**1**	0	**187**
12 PM	**3**	115	49	0	0	3	1	**2**	3	2	4	0	0	182
13:00	0	142	**51**	0	1	**4**	0	1	3	0	6	0	1	209
14:00	0	156	43	0	3	1	0	1	5	0	**7**	0	0	**216**
15:00	1	**171**	26	0	1	1	0	0	2	0	4	0	2	208
16:00	1	171	24	0	0	3	0	1	4	0	6	0	1	211
17:00	1	144	15	0	**4**	0	**4**	0	1	1	3	0	1	174
18:00	0	139	11	0	0	3	0	1	1	0	4	0	**4**	163
19:00	3	106	3	0	1	2	0	0	1	2	2	0	0	120
20:00	0	76	4	0	1	1	0	2	0	**3**	2	0	0	89
21:00	0	65	0	0	2	0	0	0	2	0	1	0	0	70
22:00	0	44	1	0	0	0	0	0	2	0	0	0	0	47
23:00	0	40	1	0	0	0	0	0	**6**	0	0	0	0	47
Day Total	22	1930	352	0	13	24	10	15	47	10	52	1	12	2488
Percent	0.9%	77.6%	14.1%	0.0%	0.5%	1.0%	0.4%	0.6%	1.9%	0.4%	2.1%	0.0%	0.5%	
AM Peak	11:00	11:00	11:00			07:00	08:00	08:00	08:00	07:00	09:00	11:00	08:00	11:00
Vol.	5	136	38			2	2	2	4	2	4	1	1	187
PM Peak	12:00	15:00	13:00		17:00	13:00	17:00	12:00	23:00	20:00	14:00		18:00	14:00
Vol.	3	171	51		4	4	4	2	6	3	7		4	216

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Station ID:
WABANAKI DR from MANITOU DR to KEVCO PL

Date Start: 20-Oct-21
Date End: 26-Oct-21
Date Start: 20-Oct-21

EB, WB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
10/25/21	0	14	0	0	0	0	0	0	1	0	0	0	0	15
01:00	0	9	0	0	0	0	0	0	1	0	0	0	0	10
02:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
03:00	0	15	0	0	0	0	0	0	1	0	0	0	0	16
04:00	0	33	0	0	0	0	0	0	7	0	0	0	0	40
05:00	0	84	5	0	0	0	0	0	5	0	0	0	0	94
06:00	0	190	28	0	0	0	0	0	4	0	1	0	0	223
07:00	2	**260**	**81**	0	0	**2**	0	**3**	3	0	7	0	0	**358**
08:00	2	231	65	0	0	0	0	2	**10**	**2**	7	**1**	0	320
09:00	**3**	190	52	0	0	2	**1**	0	10	1	7	0	0	266
10:00	0	172	48	0	0	2	0	0	2	2	**9**	0	0	235
11:00	2	184	51	0	**2**	0	0	3	2	1	2	0	**1**	248
12 PM	3	188	67	0	1	3	**2**	3	6	0	9	0	0	282
13:00	3	203	**89**	0	1	0	0	2	0	0	**13**	0	**3**	314
14:00	1	296	76	0	1	0	0	2	3	0	5	0	0	384
15:00	0	**345**	62	0	2	0	1	0	**10**	**3**	10	0	0	**433**
16:00	**6**	345	57	0	**4**	1	0	2	8	0	9	0	0	432
17:00	0	300	28	0	0	**8**	1	2	2	0	7	0	1	349
18:00	2	213	9	**1**	0	0	0	0	5	1	8	0	0	239
19:00	0	129	8	0	0	0	0	2	1	0	1	0	0	141
20:00	3	97	3	0	0	1	0	**4**	1	0	0	**1**	1	111
21:00	0	89	4	0	1	0	0	0	1	0	0	0	0	95
22:00	0	44	5	0	0	0	0	0	1	0	3	0	0	53
23:00	0	37	1	0	1	0	0	0	6	0	2	0	0	47
Day Total	27	3671	739	1	13	19	5	25	90	10	100	2	6	4708
Percent	0.6%	78.0%	15.7%	0.0%	0.3%	0.4%	0.1%	0.5%	1.9%	0.2%	2.1%	0.0%	0.1%	
AM Peak	09:00	07:00	07:00		11:00	07:00	09:00	07:00	08:00	08:00	10:00	08:00	11:00	07:00
Vol.	3	260	81		2	2	1	3	10	2	9	1	1	358
PM Peak	16:00	15:00	13:00	18:00	16:00	17:00	12:00	20:00	15:00	15:00	13:00	20:00	13:00	15:00
Vol.	6	345	89	1	4	8	2	4	10	3	13	1	3	433

Ontario Traffic, Inc.
17705 Leslie St., Unit 6
Newmarket, Ontario L3Y 3E3
Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 21897
Station ID:
WABANAKI DR from MANITOU DR to KEVCO PL

Date Start: 20-Oct-21
Date End: 26-Oct-21
Date Start: 20-Oct-21

EB, WB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
10/26/21	0	8	1	0	0	0	0	0	0	0	0	0	0	9
01:00	0	10	0	0	0	0	0	0	0	0	0	0	0	10
02:00	0	8	0	0	0	0	0	0	1	0	0	0	0	9
03:00	0	15	0	0	0	0	0	0	4	0	0	0	0	19
04:00	0	25	4	0	0	0	0	0	9	0	0	0	0	38
05:00	0	70	21	0	0	0	0	0	**15**	0	0	0	0	106
06:00	0	209	50	0	0	0	0	0	3	0	0	0	0	262
07:00	1	**272**	64	**2**	0	2	0	0	4	**1**	9	0	0	**355**
08:00	3	218	**78**	1	0	**5**	0	0	11	0	**16**	0	0	332
09:00	1	206	49	0	0	2	**1**	0	8	1	5	0	0	273
10:00	0	170	39	0	0	3	0	0	5	0	7	0	**3**	227
11:00	**4**	188	78	0	0	4	0	**2**	1	1	10	0	0	288
12 PM	2	186	69	**1**	0	2	2	2	7	**2**	6	0	0	279
13:00	2	197	**83**	0	**5**	**3**	**4**	**4**	1	0	8	0	0	307
14:00	**4**	289	71	0	1	2	0	0	1	0	10	**1**	0	379
15:00	2	**364**	56	0	0	2	0	0	6	0	**18**	0	0	448
16:00	3	359	67	1	0	0	2	2	**16**	2	7	0	0	**459**
17:00	0	321	35	0	0	2	1	0	8	0	10	0	0	377
18:00	0	224	18	0	0	0	0	0	3	2	6	0	0	253
19:00	2	134	11	0	2	0	0	2	1	0	1	0	**1**	154
20:00	0	106	3	1	0	2	2	1	4	0	1	0	0	120
21:00	0	72	3	0	0	0	0	0	4	0	4	0	0	83
22:00	0	57	1	0	0	0	0	0	9	0	2	0	0	69
23:00	0	37	0	0	0	0	0	0	5	0	0	0	0	42
Day Total	24	3745	801	6	8	29	12	13	126	9	120	1	4	4898
Percent	0.5%	76.5%	16.4%	0.1%	0.2%	0.6%	0.2%	0.3%	2.6%	0.2%	2.4%	0.0%	0.1%	
AM Peak	11:00	07:00	08:00	07:00		08:00	09:00	11:00	05:00	07:00	08:00		10:00	07:00
Vol.	4	272	78	2		5	1	2	15	1	16		3	355
PM Peak	14:00	15:00	13:00	12:00	13:00	13:00	13:00	13:00	16:00	12:00	15:00	14:00	19:00	16:00
Vol.	4	364	83	1	5	3	4	4	16	2	18	1	1	459
Grand Total	163	23817	4740	14	68	154	79	105	611	63	654	17	66	30551
Percent	0.5%	78.0%	15.5%	0.0%	0.2%	0.5%	0.3%	0.3%	2.0%	0.2%	2.1%	0.1%	0.2%	

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WABANAKI DR from MANITOU DR to KEVCO PL

Date Start: 20-Oct-21
Date End: 26-Oct-21
Date Start: 20-Oct-21

EB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Avera
10/20 /21	0	0	0	0	0	0	0	0	0	4	4	2	1	0	0	0	0	0	0	0	0	0	0	11	0
01:00	0	0	0	0	0	0	0	0	0	3	2	2	2	1	0	0	0	0	0	0	0	0	0	10	0
02:00	0	0	0	0	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	0	0	0	0	4	0
03:00	0	0	0	0	0	0	0	0	2	1	1	4	0	0	0	0	0	0	0	0	0	0	0	8	0
04:00	0	0	0	1	0	0	0	11	2	6	11	5	4	0	0	0	0	0	0	0	0	0	0	40	2
05:00	0	0	0	1	5	3	0	0	10	17	26	16	5	9	0	0	0	0	0	0	0	0	0	92	4
06:00	0	0	0	1	1	1	2	1	45	50	60	28	4	8	0	0	0	0	0	0	0	0	0	201	9
07:00	0	0	0	0	2	0	2	5	71	125	78	39	31	6	0	0	0	0	0	0	0	0	0	359	16
08:00	0	0	0	0	0	0	2	4	34	111	61	35	30	0	0	0	0	0	0	0	0	0	0	277	12
09:00	0	0	0	0	0	2	3	10	23	72	67	25	10	4	0	0	0	0	0	0	0	0	0	216	9
10:00	0	0	0	0	0	0	2	6	25	61	57	30	5	4	0	0	0	0	0	0	0	0	0	190	8
11:00	0	0	0	0	0	2	3	13	31	41	41	40	4	0	1	0	0	0	0	0	0	0	0	176	8
12 PM	0	0	0	0	0	1	0	4	33	62	50	30	11	1	0	4	0	0	0	0	0	0	0	196	9
13:00	0	0	0	0	0	0	1	7	31	53	39	33	9	2	0	2	0	0	0	0	0	0	0	177	8
14:00	0	0	0	0	1	1	1	4	28	61	78	42	11	1	0	1	0	0	0	0	0	0	0	229	10
15:00	0	0	0	0	0	0	3	13	50	48	93	72	6	1	0	1	0	0	0	0	0	0	0	287	12
16:00	0	0	0	0	0	0	0	12	26	68	112	81	17	6	0	0	0	0	0	0	0	0	0	322	14
17:00	0	0	0	0	3	1	2	12	9	75	92	55	15	8	0	0	1	0	0	0	0	0	0	273	12
18:00	0	0	0	0	0	0	2	1	16	40	63	53	18	4	0	0	0	0	0	0	0	0	0	197	9
19:00	0	0	0	2	0	0	1	1	8	26	28	38	8	0	0	0	1	0	0	0	0	0	0	113	5
20:00	0	0	0	1	1	0	1	1	4	20	32	19	4	2	0	0	0	0	0	0	0	0	0	85	4
21:00	0	0	0	0	0	0	0	7	1	13	27	11	5	0	0	0	2	0	0	0	0	0	0	66	3
22:00	0	0	0	0	0	1	0	2	6	14	17	8	4	2	0	0	2	0	0	0	0	0	0	56	2
23:00	0	0	0	0	1	0	1	1	3	9	14	5	2	0	0	0	0	0	0	0	0	0	0	36	2
Percent	0.0%	0.0%	0.0%	0.2%	0.4%	0.3%	0.7%	3.2%	12.6 %	27.1 %	29.1 %	18.6 %	5.7%	1.6%	0.0%	0.2%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
AM Peak				04:00	05:00	05:00	09:00	11:00	07:00	07:00	07:00	11:00	07:00	05:00	11:00									07:00	
Vol.				1	5	3	3	13	71	125	78	40	31	9	1									359	
PM Peak				19:00	17:00	12:00	15:00	15:00	15:00	17:00	16:00	16:00	18:00	17:00		12:00	21:00							16:00	
Vol.				2	3	1	3	13	50	75	112	81	18	8		4	2							322	

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WABANAKI DR from MANITOU DR to KEVCO PL

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EB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Avera
10/21 /21	0	0	0	0	0	0	0	0	0	4	3	2	1	1	0	0	0	0	0	0	0	0	0	11	0
01:00	0	0	0	0	1	0	0	2	0	4	3	0	0	0	0	2	0	0	0	0	0	0	0	12	1
02:00	0	0	2	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	6	0
03:00	0	0	0	0	0	0	0	1	5	3	9	1	0	0	0	0	1	0	0	0	0	0	0	20	1
04:00	0	0	0	0	0	0	3	0	1	4	37	4	0	0	0	1	0	0	0	0	0	0	0	50	2
05:00	0	0	2	1	2	1	4	2	16	14	22	6	7	5	0	0	2	0	0	0	0	0	0	84	4
06:00	0	0	0	0	2	1	2	13	27	63	81	27	10	5	0	3	0	0	0	0	0	0	0	234	10
07:00	0	0	2	2	2	2	5	7	46	86	78	41	16	10	0	3	5	0	0	0	0	0	0	305	13
08:00	0	0	0	0	0	6	1	10	27	102	95	32	24	3	0	0	0	0	0	0	0	0	0	300	13
09:00	0	0	0	0	1	0	1	7	25	64	65	21	15	1	0	0	0	0	0	0	0	0	0	200	9
10:00	0	0	0	3	0	0	2	6	21	56	59	23	4	3	0	0	0	0	0	0	0	0	0	177	8
11:00	0	0	0	1	1	2	2	14	31	48	45	38	16	0	3	0	0	0	0	0	0	0	0	201	9
12 PM	0	0	0	0	2	3	4	8	31	44	63	40	19	0	1	1	1	0	0	0	0	0	0	217	9
13:00	0	0	0	0	1	0	3	7	37	60	52	33	8	3	1	0	1	0	0	0	0	0	0	206	9
14:00	0	0	0	0	0	1	2	14	26	63	78	47	14	4	0	0	0	0	0	0	0	0	0	249	11
15:00	0	0	0	2	0	0	2	16	29	67	126	70	19	5	2	0	0	0	0	0	0	0	0	338	15
16:00	0	0	1	2	0	1	0	9	18	94	106	86	23	6	2	0	0	0	0	0	0	0	0	348	15
17:00	0	0	2	0	0	1	2	15	24	57	96	70	15	5	1	0	0	0	0	0	0	0	0	288	13
18:00	0	0	0	1	0	1	0	5	22	76	71	36	16	4	1	0	0	0	0	0	0	0	0	233	10
19:00	0	0	0	2	0	2	3	0	12	21	24	37	16	2	1	0	1	0	0	0	0	0	0	121	5
20:00	0	0	0	0	0	1	4	3	5	25	33	24	4	3	1	0	0	0	0	0	0	0	0	103	4
21:00	0	0	1	0	0	2	1	1	4	14	26	20	1	0	0	1	1	0	0	0	0	0	0	72	3
22:00	0	0	0	1	0	0	1	1	7	16	10	11	2	0	4	0	1	0	0	0	0	0	0	54	2
23:00	0	0	0	0	0	0	1	0	4	9	12	0	1	0	0	0	0	0	0	0	0	0	0	27	1
Percent	0.0%	0.0%	0.3%	0.4%	0.3%	0.6%	1.1%	3.7%	10.8 %	25.8 %	31.0 %	17.4 %	6.0%	1.6%	0.4%	0.3%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
AM Peak			02:00	10:00	05:00	08:00	07:00	11:00	07:00	08:00	08:00	07:00	08:00	07:00	11:00	06:00	07:00							07:00	
Vol.			2	3	2	6	5	14	46	102	95	41	24	10	3	3	5							305	
PM Peak			17:00	15:00	12:00	12:00	12:00	15:00	13:00	16:00	15:00	16:00	16:00	16:00	22:00	12:00	12:00							16:00	
Vol.			2	2	2	3	4	16	37	94	126	86	23	6	4	1	1							348	

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WABANAKI DR from MANITOU DR to KEVCO PL

Date Start: 20-Oct-21
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EB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Avera
10/22 /21	0	0	0	0	0	1	0	1	0	4	1	2	0	3	0	0	1	0	0	0	0	0	0	13	1
01:00	0	0	0	1	1	0	0	0	0	5	1	1	0	0	0	0	0	0	0	0	0	0	0	9	0
02:00	0	0	1	0	0	0	0	1	0	4	1	2	0	0	0	0	1	0	0	0	0	0	0	10	0
03:00	0	0	0	1	0	0	1	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	6	0
04:00	0	0	0	1	0	1	2	1	5	4	2	2	0	0	1	0	0	0	0	0	0	0	0	19	1
05:00	0	0	1	2	1	1	3	1	14	31	6	11	1	3	1	2	0	0	0	0	0	0	0	78	3
06:00	0	0	1	1	1	3	2	4	21	57	82	28	4	4	6	0	2	0	0	0	0	0	0	216	9
07:00	0	0	2	2	3	7	9	5	41	78	95	29	17	8	3	2	3	0	0	0	0	0	0	304	13
08:00	0	0	0	0	2	0	19	2	30	95	83	51	6	7	0	0	0	2	0	0	0	0	0	297	13
09:00	0	0	0	0	0	0	0	5	22	51	58	29	21	0	0	1	0	0	0	0	0	0	0	187	8
10:00	0	0	0	0	0	1	1	7	25	52	63	39	14	0	4	0	0	0	0	0	0	0	0	206	9
11:00	0	0	0	0	1	1	2	6	34	44	58	45	16	0	0	0	0	0	0	0	0	0	0	207	9
12 PM	0	0	0	1	4	1	2	5	23	56	42	45	27	2	2	0	0	0	0	0	0	0	0	210	9
13:00	0	0	0	0	1	3	3	6	35	78	68	49	18	2	0	0	0	0	0	0	0	0	0	263	11
14:00	0	1	0	2	0	2	1	4	28	69	55	52	23	0	0	0	1	0	0	0	0	0	0	238	10
15:00	0	0	1	0	0	0	1	6	25	59	114	70	22	4	2	0	0	0	0	0	0	0	0	304	13
16:00	0	0	0	2	0	1	1	12	17	99	90	72	30	5	4	1	0	0	0	0	0	0	0	334	15
17:00	0	0	0	0	0	0	0	10	9	49	108	61	17	2	0	0	0	0	0	0	0	0	0	256	11
18:00	0	0	0	0	0	0	0	5	17	45	68	64	10	4	2	0	0	0	0	0	0	0	0	215	9
19:00	0	0	0	0	0	0	4	5	7	23	43	22	10	1	0	0	0	0	0	0	0	0	0	115	5
20:00	0	0	1	0	0	0	2	1	9	31	31	29	8	0	0	1	0	0	0	0	0	0	0	113	5
21:00	0	1	2	1	3	0	1	4	15	16	26	19	4	2	1	3	1	2	0	0	0	0	0	101	4
22:00	0	0	1	0	1	0	1	1	9	23	13	15	5	1	1	0	0	0	0	0	0	0	0	71	3
23:00	0	0	0	0	0	1	0	2	2	16	7	5	2	0	0	0	1	1	0	0	0	0	0	37	2
Percent	0.0%	0.1%	0.3%	0.4%	0.5%	0.6%	1.4%	2.5%	10.2 %	26.0 %	29.3 %	19.5 %	6.7%	1.3%	0.7%	0.3%	0.3%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%		
AM Peak			07:00	05:00	07:00	07:00	08:00	10:00	07:00	08:00	07:00	08:00	09:00	07:00	06:00	05:00	07:00	08:00						07:00	
Vol.			2	2	3	7	19	7	41	95	95	51	21	8	6	2	3	2						304	
PM Peak		14:00	21:00	14:00	12:00	13:00	19:00	16:00	13:00	16:00	15:00	16:00	16:00	16:00	16:00	21:00	14:00	21:00						16:00	
Vol.		1	2	2	4	3	4	12	35	99	114	72	30	5	4	3	1	2						334	

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10/23 /21	0	0	1	1	0	1	1	4	1	4	2	10	1	0	2	0	1	0	0	0	0	0	0	29	1
01:00	0	0	1	1	0	0	0	1	2	7	0	0	2	2	0	0	0	0	0	0	0	0	0	16	1
02:00	0	1	1	0	0	0	0	0	0	2	0	1	0	0	0	1	0	0	0	0	0	0	0	6	0
03:00	0	2	0	1	0	0	0	0	2	3	0	1	0	0	0	1	0	1	0	0	0	0	0	11	0
04:00	0	0	0	1	2	1	3	0	1	1	4	1	0	0	0	0	0	0	0	0	0	0	0	14	1
05:00	0	1	0	0	3	0	0	2	4	1	8	1	5	1	1	0	1	0	0	0	0	0	0	28	1
06:00	0	0	0	0	0	1	0	3	7	10	13	10	1	0	0	0	0	0	0	0	0	0	0	45	2
07:00	0	0	0	0	0	3	0	0	10	22	15	13	3	1	0	0	0	0	0	0	0	0	0	67	3
08:00	0	1	0	0	0	4	0	2	19	32	39	16	1	2	0	0	0	0	0	0	0	0	0	116	5
09:00	1	0	1	0	0	0	1	2	35	42	38	21	5	1	0	0	0	0	0	0	0	0	0	147	6
10:00	0	0	0	0	0	1	1	12	45	59	45	34	9	1	0	0	0	0	0	0	0	0	0	207	9
11:00	0	1	0	0	0	1	1	14	40	71	44	43	9	0	0	0	0	1	0	0	0	0	0	225	10
12 PM	0	0	1	0	2	0	1	3	35	65	38	41	9	5	2	1	0	0	0	0	0	0	0	203	9
13:00	0	0	0	1	1	2	3	6	46	58	34	25	2	2	0	1	1	0	0	0	0	0	0	182	8
14:00	0	0	0	0	1	1	1	3	33	55	56	36	4	3	1	1	0	0	0	0	0	0	0	195	8
15:00	0	0	0	0	0	0	0	6	16	35	56	55	14	2	2	0	0	0	0	0	0	0	0	186	8
16:00	0	0	0	0	0	0	1	6	10	43	74	33	12	2	1	0	0	0	0	0	0	0	0	182	8
17:00	0	0	0	0	1	0	1	8	8	41	67	35	11	2	2	0	0	0	0	0	0	0	0	176	8
18:00	0	0	0	0	0	0	1	0	8	14	50	37	8	3	0	0	0	0	0	0	0	0	0	121	5
19:00	0	0	0	0	1	1	1	2	9	27	32	28	6	0	0	0	0	0	0	0	0	0	0	107	5
20:00	0	0	0	0	0	0	1	7	10	24	34	31	7	2	0	0	4	0	0	0	0	0	0	120	5
21:00	0	0	0	0	0	0	2	8	12	8	19	30	11	3	0	0	0	0	0	0	0	0	0	93	4
22:00	0	1	0	0	0	0	2	7	8	6	17	12	3	1	3	0	0	0	0	0	0	0	0	60	3
23:00	0	0	0	0	0	0	0	11	4	11	21	9	0	0	0	0	1	0	0	0	0	0	0	57	2
Percent	0.0%	0.3%	0.2%	0.2%	0.4%	0.6%	0.8%	4.1%	14.1 %	24.7 %	27.2 %	20.2 %	4.7%	1.3%	0.5%	0.2%	0.3%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%		
AM Peak	09:00	03:00	00:00	00:00	05:00	08:00	04:00	11:00	10:00	11:00	10:00	11:00	10:00	01:00	00:00	02:00	00:00	03:00						11:00	
Vol.	1	2	1	1	3	4	3	14	45	71	45	43	9	2	2	1	1	1						225	
PM Peak		22:00	12:00	13:00	12:00	13:00	13:00	23:00	13:00	12:00	16:00	15:00	15:00	12:00	22:00	12:00	20:00							12:00	
Vol.		1	1	1	2	2	3	11	46	65	74	55	14	5	3	1	4							203	

Ontario Traffic, Inc.
17705 Leslie St., Unit 6
Newmarket, Ontario L3Y 3E3
Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 21897
Station ID:
WABANAKI DR from MANITOU DR to KEVCO PL

Date Start: 20-Oct-21
Date End: 26-Oct-21
Date Start: 20-Oct-21

EB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Avera
10/24 /21	0	0	0	0	1	1	1	0	0	7	8	2	1	1	1	0	1	0	0	0	0	0	0	24	1
01:00	0	0	4	0	0	0	0	1	0	8	2	0	1	0	0	1	0	0	0	0	0	0	0	17	1
02:00	0	0	0	1	0	0	0	1	2	3	0	0	0	0	1	2	0	0	0	0	0	0	0	10	0
03:00	0	0	1	0	1	1	0	1	0	1	1	0	0	0	0	0	1	0	0	0	0	0	0	7	0
04:00	0	0	0	1	0	0	0	0	2	0	2	0	0	0	0	0	1	0	0	0	0	0	0	6	0
05:00	0	1	0	0	0	0	0	2	4	0	4	0	1	0	0	0	0	0	0	0	0	0	0	12	1
06:00	0	1	0	0	1	2	0	1	8	5	6	5	0	0	0	0	0	0	0	0	0	0	0	29	1
07:00	0	0	0	0	0	0	0	1	6	17	14	5	3	0	0	0	0	0	0	0	0	0	0	46	2
08:00	0	0	0	0	1	1	1	1	11	29	23	12	3	1	0	0	0	1	0	0	0	0	0	84	4
09:00	0	0	0	0	0	0	1	3	22	29	28	14	5	1	0	0	0	0	0	0	0	0	0	103	4
10:00	0	0	0	0	0	1	2	7	28	38	24	22	4	3	0	0	0	0	0	0	0	0	0	129	6
11:00	0	0	1	0	1	0	2	7	46	31	27	22	6	0	0	1	0	0	0	0	0	0	0	144	6
12 PM	0	0	0	0	2	1	5	4	28	41	34	16	7	2	1	0	0	0	0	0	0	0	0	141	6
13:00	0	0	0	1	1	2	1	3	36	54	35	16	2	1	3	1	1	0	0	0	0	0	0	157	7
14:00	0	0	1	0	0	1	0	3	28	44	44	29	4	2	0	0	0	0	0	0	0	0	0	156	7
15:00	0	0	0	0	0	0	1	5	17	34	46	40	6	0	0	0	0	0	0	0	0	0	0	149	6
16:00	0	0	0	0	0	0	0	7	15	31	50	33	9	2	2	0	1	0	0	0	0	0	0	150	7
17:00	0	0	0	0	1	0	0	9	7	34	37	29	10	1	0	0	0	0	0	0	0	0	0	128	6
18:00	0	0	0	0	0	0	0	1	11	17	33	34	12	3	2	0	1	0	0	0	0	0	0	114	5
19:00	0	1	0	0	0	1	3	2	10	21	29	28	6	0	0	0	1	0	0	0	0	0	0	102	4
20:00	0	0	0	0	0	1	2	0	4	16	23	16	6	3	0	0	0	0	0	0	0	0	0	71	3
21:00	0	1	0	1	1	0	0	4	9	5	17	11	2	2	0	0	0	1	0	0	0	0	0	54	2
22:00	0	0	0	0	0	0	0	6	12	7	7	5	0	0	0	1	0	0	0	0	0	0	0	38	2
23:00	0	0	0	0	0	0	2	3	6	6	15	6	3	0	0	0	0	0	0	0	0	0	0	41	2
Percent	0.0%	0.2%	0.4%	0.2%	0.5%	0.6%	1.1%	3.8%	16.3 %	25.0 %	26.6 %	18.0 %	4.8%	1.2%	0.5%	0.3%	0.4%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%		
AM Peak		05:00	01:00	02:00	00:00	06:00	10:00	10:00	11:00	10:00	09:00	10:00	11:00	10:00	00:00	02:00	00:00	08:00						11:00	
Vol.		1	4	1	1	2	2	7	46	38	28	22	6	3	1	2	1	1						144	
PM Peak		19:00	14:00	13:00	12:00	13:00	12:00	17:00	13:00	13:00	16:00	15:00	18:00	18:00	13:00	13:00	13:00	21:00						13:00	
Vol.		1	1	1	2	2	5	9	36	54	50	40	12	3	3	1	1	1						157	

Ontario Traffic, Inc.
17705 Leslie St., Unit 6
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Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 21897
Station ID:
WABANAKI DR from MANITOU DR to KEVCO PL

Date Start: 20-Oct-21
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EB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Avera
10/25 /21	0	0	0	0	0	0	0	0	0	3	0	5	1	0	0	1	0	0	0	0	0	0	0	10	0
01:00	0	0	0	0	1	0	0	1	1	3	1	0	0	2	0	0	0	1	0	0	0	0	0	10	0
02:00	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
03:00	0	0	0	0	0	0	1	2	1	4	3	1	0	0	0	0	0	0	0	0	0	0	0	12	1
04:00	0	0	2	1	1	0	2	0	2	5	12	3	10	0	0	1	0	0	0	0	0	0	0	39	2
05:00	0	1	0	1	1	1	0	1	9	8	31	4	22	2	1	2	0	1	0	0	0	0	0	85	4
06:00	0	0	0	0	1	1	8	11	19	42	61	13	25	3	1	1	0	0	0	0	0	0	0	186	8
07:00	0	1	0	1	2	6	4	9	38	81	86	26	39	3	4	0	0	1	0	0	0	0	0	301	13
08:00	0	0	0	0	0	0	1	2	33	54	115	31	17	1	0	1	1	0	0	0	0	0	0	256	11
09:00	0	0	0	0	1	1	0	10	40	50	64	21	15	0	0	0	0	0	0	0	0	0	0	202	9
10:00	0	0	0	0	0	0	1	7	31	37	46	30	12	1	3	0	0	0	0	0	0	0	0	168	7
11:00	0	0	0	2	0	1	1	6	26	46	43	35	8	1	1	0	1	0	0	0	0	0	0	171	7
12 PM	0	1	0	1	1	0	0	6	15	48	70	36	16	4	2	0	0	0	0	0	0	0	0	200	9
13:00	0	0	0	0	2	1	0	2	29	65	36	53	11	6	0	0	0	0	0	0	0	0	0	205	9
14:00	0	0	2	0	1	1	2	4	24	57	71	46	8	2	1	1	0	0	0	0	0	0	0	220	10
15:00	0	0	0	0	0	0	0	8	19	60	112	54	28	4	0	0	0	0	0	0	0	0	0	285	12
16:00	0	0	0	0	0	2	0	10	23	66	126	60	26	7	0	0	0	0	0	0	0	0	0	320	14
17:00	0	0	0	0	0	1	1	13	13	64	78	59	23	1	2	0	0	0	0	0	0	0	0	255	11
18:00	0	0	0	0	0	0	0	1	11	30	55	71	14	3	1	0	0	0	0	0	0	0	0	186	8
19:00	0	0	1	0	0	0	1	2	10	20	30	23	12	1	0	0	1	0	0	0	0	0	0	101	4
20:00	0	1	0	0	0	0	0	1	9	23	23	24	5	1	0	0	1	0	0	0	0	0	0	88	4
21:00	0	0	0	0	0	0	0	8	4	13	25	16	7	0	0	0	0	0	0	0	0	0	0	73	3
22:00	0	0	1	0	0	1	1	8	6	14	5	2	1	1	1	2	0	0	0	0	0	0	0	43	2
23:00	0	0	0	0	0	0	1	2	1	11	10	3	2	2	0	0	1	0	0	0	0	0	0	33	1
Percent	0.0%	0.1%	0.2%	0.2%	0.3%	0.5%	0.7%	3.3%	10.5 %	23.3 %	32.0 %	17.8 %	8.8%	1.3%	0.5%	0.3%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%		
AM Peak		02:00	04:00	11:00	07:00	07:00	06:00	06:00	09:00	07:00	08:00	11:00	07:00	06:00	07:00	05:00	08:00	01:00						07:00	
Vol.		1	2	2	2	6	8	11	40	81	115	35	39	3	4	2	1	1						301	
PM Peak		12:00	14:00	12:00	13:00	16:00	14:00	17:00	13:00	16:00	16:00	18:00	15:00	16:00	12:00	22:00	19:00							16:00	
Vol.		1	2	1	2	2	2	13	29	66	126	71	28	7	2	2	1							320	

Ontario Traffic, Inc.
17705 Leslie St., Unit 6
Newmarket, Ontario L3Y 3E3
Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 21897
Station ID:
WABANAKI DR from MANITOU DR to KEVCO PL

Date Start: 20-Oct-21
Date End: 26-Oct-21
Date Start: 20-Oct-21

EB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Avera
10/26 /21	0	0	1	0	0	0	0	0	1	0	2	1	0	1	0	0	0	0	0	0	0	0	0	6	0
01:00	0	0	0	0	0	0	0	0	1	3	0	0	1	1	1	0	0	0	0	0	0	0	0	7	0
02:00	0	1	0	0	0	0	0	0	0	0	1	1	1	0	0	1	0	2	0	0	0	0	0	7	0
03:00	0	0	1	1	1	0	0	0	4	4	0	0	4	1	0	0	1	0	0	0	0	0	0	17	1
04:00	0	0	0	1	0	1	1	0	2	5	10	2	10	1	1	0	0	3	0	0	0	0	0	37	2
05:00	0	0	0	2	1	2	0	3	25	13	31	0	14	0	0	1	1	0	0	0	0	0	0	93	4
06:00	0	0	0	0	0	13	0	10	42	52	49	44	13	0	0	0	0	0	0	0	0	0	0	223	10
07:00	0	1	0	0	0	2	6	5	37	85	88	50	10	6	2	1	0	0	0	0	0	0	0	293	13
08:00	0	0	0	0	2	0	2	10	37	84	56	39	15	1	0	0	0	2	0	0	0	0	0	248	11
09:00	0	0	0	0	2	2	5	7	28	61	60	35	3	0	0	0	0	3	0	0	0	0	0	206	9
10:00	0	1	0	0	1	0	3	4	33	42	44	30	5	0	0	0	0	2	0	0	0	0	0	165	7
11:00	0	0	0	1	2	2	8	7	30	56	62	26	7	0	0	0	0	0	0	0	0	0	0	201	9
12 PM	0	0	0	0	3	2	6	6	31	44	54	27	6	1	2	0	0	0	0	0	0	0	0	182	8
13:00	0	1	0	0	3	4	3	7	28	59	46	23	13	2	0	0	0	0	0	0	0	0	0	189	8
14:00	0	2	0	0	0	3	0	10	24	60	71	44	11	2	0	0	0	0	0	0	0	0	0	227	10
15:00	0	0	0	0	0	0	0	9	30	63	90	67	18	6	2	0	0	0	0	0	0	0	0	285	12
16:00	0	0	0	1	0	0	1	14	34	69	116	67	19	6	1	1	0	1	0	0	0	0	0	330	14
17:00	0	0	0	0	0	0	2	9	23	58	98	62	21	7	3	1	0	0	0	0	0	0	0	284	12
18:00	0	0	0	0	0	0	1	5	15	37	47	54	18	7	0	0	0	0	0	0	0	0	0	184	8
19:00	0	0	0	0	0	2	4	2	14	26	28	18	15	2	1	0	0	0	0	0	0	0	0	112	5
20:00	0	0	0	0	0	0	0	0	10	30	30	6	16	4	0	0	1	0	0	0	0	0	0	97	4
21:00	0	0	0	0	0	2	3	5	11	9	14	15	6	0	0	0	0	0	0	0	0	0	0	65	3
22:00	0	0	0	0	0	0	1	6	8	7	11	7	5	0	0	0	0	0	0	0	0	0	0	45	2
23:00	0	0	0	0	0	0	0	0	0	7	16	2	2	2	0	0	0	0	0	0	0	0	0	29	1
Percent	0.0%	0.2%	0.1%	0.2%	0.4%	1.0%	1.3%	3.4%	13.3 %	24.7 %	29.0 %	17.6 %	6.6%	1.4%	0.4%	0.1%	0.1%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%		
AM Peak		02:00	00:00	05:00	08:00	06:00	11:00	06:00	06:00	07:00	07:00	07:00	08:00	07:00	07:00	02:00	03:00	04:00						07:00	
Vol.		1	1	2	2	13	8	10	42	85	88	50	15	6	2	1	1	3						293	
PM Peak		14:00		16:00	12:00	13:00	12:00	16:00	16:00	16:00	16:00	15:00	17:00	17:00	17:00	16:00	20:00	16:00						16:00	
Vol.		2		1	3	4	6	14	34	69	116	67	21	7	3	1	1	1						330	
Total	1	24	40	56	91	139	236	762	2773	5763	6708	4191	1443	317	99	54	52	25	0	0	0	0	0	22774	

Statistics

Mean Speed(Average) : 51 KPH
50th Percentile : 52 KPH
85th Percentile : 59 KPH

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WABANAKI DR from MANITOU DR to KEVCO PL

Date Start: 20-Oct-21
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WB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Avera
10/20 /21	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	5	0
01:00	0	0	0	0	0	0	0	0	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	3	0
02:00	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	2	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	0	0	0	0	0	0	0	0	4	0
05:00	0	0	0	0	0	0	0	0	5	3	3	4	0	0	0	0	0	0	0	0	0	0	0	15	1
06:00	0	0	0	0	0	0	0	2	7	3	15	4	3	0	0	0	0	0	0	0	0	0	0	34	1
07:00	0	0	0	0	0	0	0	1	6	19	27	8	4	0	0	0	0	0	0	0	0	0	0	65	3
08:00	0	0	0	0	0	0	2	2	5	15	33	13	7	0	0	0	0	0	0	0	0	0	0	77	3
09:00	0	0	0	0	0	1	0	3	12	12	22	13	2	1	0	0	0	0	0	0	0	0	0	66	3
10:00	0	0	0	0	0	1	0	2	13	12	18	13	4	0	1	0	0	0	0	0	0	0	0	64	3
11:00	0	0	0	2	0	0	0	4	9	27	20	19	6	0	1	0	0	0	0	0	0	0	0	88	4
12 PM	0	0	0	0	0	1	1	5	11	23	28	14	11	1	1	0	0	0	0	0	0	0	0	96	4
13:00	0	0	0	0	3	2	0	0	16	36	26	18	7	1	0	0	0	0	0	0	0	0	0	109	5
14:00	0	0	1	0	0	2	0	3	20	42	36	31	10	0	0	0	0	0	0	0	0	0	0	145	6
15:00	0	0	0	1	0	0	0	7	14	35	58	45	15	2	1	0	0	0	0	0	0	0	0	178	8
16:00	0	0	0	1	0	1	1	2	8	37	30	23	8	3	1	0	0	0	0	0	0	0	0	115	5
17:00	0	0	0	0	0	1	0	0	4	16	28	18	2	4	1	0	0	0	0	0	0	0	0	74	3
18:00	0	0	0	0	0	0	0	2	5	11	26	19	5	3	1	0	0	0	0	0	0	0	0	72	3
19:00	0	0	1	0	0	0	2	1	3	10	12	11	6	0	0	1	0	0	0	0	0	0	0	47	2
20:00	0	0	0	0	0	0	1	1	2	7	5	3	1	0	0	0	0	0	0	0	0	0	0	20	1
21:00	0	0	2	1	0	1	0	0	1	6	2	6	0	0	1	0	0	0	0	0	0	0	0	20	1
22:00	0	0	0	0	0	0	0	0	3	3	3	2	0	2	1	1	0	0	0	0	0	0	0	15	1
23:00	0	0	0	1	0	0	0	0	0	9	5	0	2	0	0	0	0	0	0	0	0	0	0	17	1
Percent	0.0%	0.0%	0.3%	0.5%	0.2%	0.8%	0.5%	2.6%	10.8 %	24.7 %	30.1 %	20.4 %	7.0%	1.3%	0.7%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
AM Peak				11:00		09:00	08:00	11:00	10:00	11:00	08:00	11:00	08:00	09:00	10:00									11:00	
Vol.				2		1	2	4	13	27	33	19	7	1	1									88	
PM Peak			21:00	15:00	13:00	13:00	19:00	15:00	14:00	14:00	15:00	15:00	15:00	17:00	12:00	19:00								15:00	
Vol.			2	1	3	2	2	7	20	42	58	45	15	4	1	1								178	

Ontario Traffic, Inc.
17705 Leslie St., Unit 6
Newmarket, Ontario L3Y 3E3
Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 21897
Station ID:
WABANAKI DR from MANITOU DR to KEVCO PL

Date Start: 20-Oct-21
Date End: 26-Oct-21
Date Start: 20-Oct-21

WB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Avera
10/21 /21	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2	0
01:00	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
02:00	0	0	0	0	0	0	0	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3	0
03:00	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
04:00	0	0	0	0	0	0	0	0	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	3	0
05:00	0	0	0	0	1	0	0	0	2	2	3	0	1	0	0	0	0	0	0	0	0	0	0	9	0
06:00	0	0	0	0	0	0	1	0	8	10	9	5	1	1	0	0	0	0	0	0	0	0	0	35	2
07:00	0	0	0	0	0	1	2	1	10	16	15	6	1	0	0	1	0	0	0	0	0	0	0	53	2
08:00	0	0	0	0	0	0	1	2	10	20	21	12	7	0	0	0	0	0	0	0	0	0	0	73	3
09:00	0	0	0	0	0	1	1	2	14	15	18	10	2	0	0	0	0	0	0	0	0	0	0	63	3
10:00	0	0	0	0	1	0	0	1	14	17	17	11	2	0	1	0	0	0	0	0	0	0	0	64	3
11:00	0	0	0	0	0	1	2	4	15	16	19	10	2	1	1	0	0	0	0	0	0	0	0	71	3
12 PM	0	0	0	2	1	0	2	2	10	22	22	10	2	2	0	0	0	0	0	0	0	0	0	75	3
13:00	0	0	0	0	0	1	2	2	23	38	29	17	3	0	1	0	0	0	0	0	0	0	0	116	5
14:00	0	0	0	0	0	1	0	4	17	34	42	32	7	1	0	0	0	0	0	0	0	0	0	138	6
15:00	0	0	0	0	0	0	0	7	16	32	50	33	8	5	0	1	0	0	0	0	0	0	0	152	7
16:00	0	0	0	0	0	0	1	5	8	23	41	28	8	1	0	1	0	0	0	0	0	0	0	116	5
17:00	0	0	0	0	1	0	1	2	6	20	24	17	7	3	2	0	0	0	0	0	0	0	0	83	4
18:00	0	0	1	0	0	0	1	2	4	13	22	18	8	0	3	0	0	0	0	0	0	0	0	72	3
19:00	0	0	0	0	0	2	0	0	4	9	14	5	5	0	0	0	0	0	0	0	0	0	0	39	2
20:00	0	0	0	0	0	0	0	0	2	5	11	8	2	0	0	1	0	0	0	0	0	0	0	29	1
21:00	0	0	0	0	0	0	0	3	2	7	8	3	0	1	0	0	0	0	0	0	0	0	0	24	1
22:00	0	0	0	0	0	0	1	1	3	3	5	4	1	0	0	0	0	0	0	0	0	0	0	18	1
23:00	0	0	0	0	0	0	0	0	1	4	4	1	1	0	0	1	0	0	0	0	0	0	0	12	1
Percent	0.0%	0.0%	0.1%	0.2%	0.3%	0.6%	1.3%	3.3%	13.6 %	24.4 %	29.9 %	18.4 %	5.5%	1.2%	0.6%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
AM Peak				03:00	05:00	01:00	07:00	11:00	11:00	08:00	08:00	08:00	08:00	06:00	10:00	07:00								08:00	
Vol.				1	1	1	2	4	15	20	21	12	7	1	1	1								73	
PM Peak			18:00	12:00	12:00	19:00	12:00	15:00	13:00	13:00	15:00	15:00	15:00	15:00	18:00	15:00								15:00	
Vol.			1	2	1	2	2	7	23	38	50	33	8	5	3	1								152	

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WABANAKI DR from MANITOU DR to KEVCO PL

Date Start: 20-Oct-21
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WB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Avera
10/22 /21	0	0	0	0	2	0	1	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0
01:00	0	0	1	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	3	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
04:00	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	0	0	0	0	0	0	0	0	3	0
05:00	0	0	0	1	0	0	0	0	1	1	2	1	0	0	1	0	0	0	0	0	0	0	0	7	0
06:00	0	0	0	0	1	1	0	4	6	6	16	4	1	0	2	1	0	0	0	0	0	0	0	42	2
07:00	0	0	1	0	0	1	3	1	8	12	14	12	2	0	0	0	0	0	0	0	0	0	0	54	2
08:00	0	0	1	0	0	0	5	1	8	22	18	18	3	0	0	0	0	0	0	0	0	0	0	76	3
09:00	0	0	0	0	0	1	3	2	11	17	26	12	6	0	0	0	0	0	0	0	0	0	0	78	3
10:00	0	0	0	0	0	0	1	2	7	23	23	9	5	1	2	0	0	0	0	0	0	0	0	73	3
11:00	0	0	0	0	2	1	1	2	15	26	24	19	11	0	2	0	0	0	0	0	0	0	0	103	4
12 PM	0	0	0	0	0	1	0	3	11	24	23	24	7	2	2	0	0	0	0	0	0	0	0	97	4
13:00	0	0	0	0	1	2	1	1	17	38	32	28	8	1	0	1	0	0	0	0	0	0	0	130	6
14:00	0	0	0	3	0	2	0	5	12	41	48	27	18	0	1	0	0	0	0	0	0	0	0	157	7
15:00	0	0	0	2	0	0	0	6	13	29	57	35	10	7	1	0	0	0	0	0	0	0	0	160	7
16:00	0	0	1	0	0	1	0	2	10	34	49	20	6	0	0	0	0	0	0	0	0	0	0	123	5
17:00	0	0	0	1	0	0	0	1	2	15	23	17	3	0	0	2	0	0	0	0	0	0	0	64	3
18:00	0	0	0	1	0	0	0	3	1	12	19	18	4	4	0	0	0	0	0	0	0	0	0	62	3
19:00	0	0	0	1	0	0	2	0	1	8	8	8	5	1	1	1	0	0	0	0	0	0	0	36	2
20:00	0	0	0	0	0	0	0	0	3	10	8	6	2	0	0	0	0	0	0	0	0	0	0	29	1
21:00	0	0	0	0	0	0	0	2	5	5	9	6	2	0	1	0	0	0	0	0	0	0	0	30	1
22:00	0	0	3	0	0	2	0	1	5	4	3	2	2	2	1	0	0	0	0	0	0	0	0	25	1
23:00	0	0	0	1	0	0	0	1	0	5	1	1	2	0	0	0	0	0	0	0	0	0	0	11	0
Percent	0.0%	0.0%	0.5%	0.7%	0.4%	0.9%	1.2%	2.7%	9.9%	24.5 %	29.5 %	19.6 %	7.1%	1.4%	1.1%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
AM Peak			01:00	05:00	00:00	06:00	08:00	06:00	11:00	11:00	09:00	11:00	11:00	01:00	06:00	06:00								11:00	
Vol.			1	1	2	1	5	4	15	26	26	19	11	1	2	1								103	
PM Peak			22:00	14:00	13:00	13:00	19:00	15:00	13:00	14:00	15:00	15:00	14:00	15:00	12:00	17:00								15:00	
Vol.			3	3	1	2	2	6	17	41	57	35	18	7	2	2								160	

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WABANAKI DR from MANITOU DR to KEVCO PL

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WB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Avera
10/23 /21	0	0	0	0	1	1	0	2	1	6	1	0	0	0	0	0	0	0	0	0	0	0	0	12	1
01:00	0	0	0	1	1	0	0	0	3	2	1	0	0	0	0	0	0	0	0	0	0	0	0	8	0
02:00	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	1	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	3	0
06:00	0	0	1	0	0	0	0	0	0	1	0	2	0	1	0	0	0	0	0	0	0	0	0	5	0
07:00	0	0	0	0	0	0	0	1	3	3	1	0	1	0	0	0	0	0	0	0	0	0	0	9	0
08:00	0	0	0	0	0	0	1	0	1	6	7	2	1	0	1	0	0	0	0	0	0	0	0	19	1
09:00	0	0	0	0	0	0	0	0	4	9	14	4	2	1	0	0	0	0	0	0	0	0	0	34	1
10:00	0	0	0	0	1	0	0	0	5	7	10	8	2	0	0	0	0	0	0	0	0	0	0	33	1
11:00	0	0	0	0	0	0	0	4	6	7	8	16	2	1	2	0	0	0	0	0	0	0	0	46	2
12 PM	0	0	0	0	0	0	0	2	6	12	10	16	1	1	1	0	1	0	0	0	0	0	0	50	2
13:00	0	0	0	0	0	0	0	0	6	10	15	10	4	1	0	0	0	0	0	0	0	0	0	46	2
14:00	0	0	0	0	0	2	2	2	5	12	20	10	7	0	0	0	0	0	0	0	0	0	0	60	3
15:00	0	0	0	1	0	0	0	2	7	11	18	17	3	0	0	0	1	0	0	0	0	0	0	60	3
16:00	0	0	1	0	0	0	0	1	3	13	17	9	4	0	0	0	0	0	0	0	0	0	0	48	2
17:00	0	0	0	0	0	0	2	1	1	11	20	12	3	2	0	0	1	0	0	0	0	0	0	53	2
18:00	0	0	0	0	0	1	0	0	4	8	16	8	3	0	0	1	0	0	0	0	0	0	0	41	2
19:00	0	0	0	0	0	0	1	1	2	10	11	7	1	0	0	0	0	0	0	0	0	0	0	33	1
20:00	0	0	0	0	0	0	0	0	2	7	11	7	4	0	0	0	0	0	0	0	0	0	0	31	1
21:00	0	0	0	0	0	0	0	0	0	6	7	4	2	0	0	0	0	0	0	0	0	0	0	19	1
22:00	0	0	0	0	1	1	0	0	1	0	1	0	0	0	1	0	0	0	0	0	0	0	0	5	0
23:00	0	0	0	0	0	0	0	0	2	2	3	1	0	0	0	0	0	0	0	0	0	0	0	8	0
Percent	0.0%	0.0%	0.3%	0.3%	0.6%	0.8%	1.1%	2.6%	9.9%	23.0 %	30.6 %	21.3 %	6.6%	1.1%	1.0%	0.3%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
AM Peak			06:00	01:00	00:00	00:00	05:00	11:00	11:00	09:00	09:00	11:00	09:00	06:00	11:00	03:00								11:00	
Vol.			1	1	1	1	1	4	6	9	14	16	2	1	2	1								46	
PM Peak			16:00	15:00	22:00	14:00	14:00	12:00	15:00	16:00	14:00	15:00	14:00	17:00	12:00	18:00	12:00							14:00	
Vol.			1	1	1	2	2	2	7	13	20	17	7	2	1	1	1							60	

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10/24 /21	0	0	0	0	0	1	0	0	1	0	2	2	0	1	0	1	0	0	0	0	0	0	0	8	0
01:00	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0
05:00	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0
06:00	0	0	0	0	0	0	1	1	4	2	1	3	1	1	0	0	0	0	0	0	0	0	0	14	1
07:00	0	0	0	0	0	0	0	0	2	4	6	1	1	0	0	0	0	0	0	0	0	0	0	14	1
08:00	0	0	0	0	0	0	0	1	4	5	6	5	2	0	0	0	0	0	0	0	0	0	0	23	1
09:00	0	0	0	0	0	1	0	0	1	3	6	2	0	0	1	0	0	0	0	0	0	0	0	14	1
10:00	0	0	0	0	0	0	2	0	3	5	6	5	1	0	0	0	0	0	0	0	0	0	0	22	1
11:00	0	0	0	0	1	0	0	4	3	12	8	12	3	0	0	0	0	0	0	0	0	0	0	43	2
12 PM	0	0	1	0	1	0	1	3	4	13	11	7	0	0	0	0	0	0	0	0	0	0	0	41	2
13:00	0	0	0	0	1	1	0	1	7	15	16	9	2	0	0	0	0	0	0	0	0	0	0	52	2
14:00	0	0	0	0	1	0	0	2	7	15	19	11	4	1	0	0	0	0	0	0	0	0	0	60	3
15:00	0	0	0	0	0	0	1	1	4	14	19	15	5	0	0	0	0	0	0	0	0	0	0	59	3
16:00	0	0	0	0	1	0	0	1	7	10	23	13	6	0	0	0	0	0	0	0	0	0	0	61	3
17:00	0	0	0	0	0	1	1	1	2	9	13	11	4	2	2	0	0	0	0	0	0	0	0	46	2
18:00	0	0	0	0	0	0	1	1	2	10	17	13	5	0	0	0	0	0	0	0	0	0	0	49	2
19:00	0	0	0	0	0	0	0	0	0	5	6	5	1	1	0	0	0	0	0	0	0	0	0	18	1
20:00	0	0	0	0	0	0	1	2	2	4	6	2	1	0	0	0	0	0	0	0	0	0	0	18	1
21:00	0	0	1	0	2	0	0	1	1	2	6	2	1	0	0	0	0	0	0	0	0	0	0	16	1
22:00	0	0	0	1	0	0	1	0	0	1	2	3	1	0	0	0	0	0	0	0	0	0	0	9	0
23:00	0	0	0	0	0	0	0	0	0	3	1	2	0	0	0	0	0	0	0	0	0	0	0	6	0
Percent	0.0%	0.0%	0.3%	0.2%	1.4%	0.7%	1.6%	3.3%	9.4%	22.9 %	30.4 %	21.4 %	6.6%	1.2%	0.5%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
AM Peak					01:00	00:00	10:00	11:00	06:00	11:00	11:00	11:00	11:00	00:00	09:00	00:00								11:00	
Vol.					1	1	2	4	4	12	8	12	3	1	1	1								43	
PM Peak			12:00	22:00	21:00	13:00	12:00	12:00	13:00	13:00	16:00	15:00	16:00	17:00	17:00									16:00	
Vol.			1	1	2	1	1	3	7	15	23	15	6	2	2									61	

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Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 21897
Station ID:
WABANAKI DR from MANITOU DR to KEVCO PL

Date Start: 20-Oct-21
Date End: 26-Oct-21
Date Start: 20-Oct-21

WB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Avera
10/25 /21	0	0	0	0	0	1	0	0	1	0	1	2	0	0	0	0	0	0	0	0	0	0	0	5	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
03:00	0	0	0	1	0	0	0	0	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	4	0
04:00	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
05:00	0	0	0	1	0	0	1	0	0	2	3	0	0	0	1	0	1	0	0	0	0	0	0	9	0
06:00	0	0	0	0	0	1	3	2	5	6	14	4	1	1	0	0	0	0	0	0	0	0	0	37	2
07:00	0	0	0	0	0	0	1	3	8	15	21	6	2	0	1	0	0	0	0	0	0	0	0	57	2
08:00	0	0	0	0	0	0	0	2	9	18	17	10	5	1	1	1	0	0	0	0	0	0	0	64	3
09:00	0	0	0	0	0	0	1	3	11	20	17	9	3	0	0	0	0	0	0	0	0	0	0	64	3
10:00	0	0	0	0	0	1	1	2	14	19	19	7	4	0	0	0	0	0	0	0	0	0	0	67	3
11:00	0	0	0	0	0	1	1	2	13	24	20	12	3	0	1	0	0	0	0	0	0	0	0	77	3
12 PM	0	0	1	0	0	0	0	3	13	24	17	16	6	1	0	1	0	0	0	0	0	0	0	82	4
13:00	0	0	0	0	3	2	0	6	19	29	23	17	9	1	0	0	0	0	0	0	0	0	0	109	5
14:00	0	0	0	0	1	0	2	5	29	44	46	31	2	4	0	0	0	0	0	0	0	0	0	164	7
15:00	0	0	0	0	0	0	1	6	16	31	45	37	8	3	1	0	0	0	0	0	0	0	0	148	6
16:00	0	0	0	0	0	0	0	4	9	24	40	21	11	1	0	1	1	0	0	0	0	0	0	112	5
17:00	0	0	0	0	1	0	0	2	3	18	29	21	11	4	5	0	0	0	0	0	0	0	0	94	4
18:00	0	0	0	0	1	0	0	3	2	10	17	14	3	1	3	0	0	0	0	0	0	0	0	54	2
19:00	0	0	0	0	0	1	0	1	2	8	13	8	6	1	0	0	0	0	0	0	0	0	0	40	2
20:00	0	0	0	0	1	0	1	0	1	7	6	5	2	0	0	0	0	0	0	0	0	0	0	23	1
21:00	0	0	0	0	0	0	0	3	2	3	6	6	1	0	1	0	0	0	0	0	0	0	0	22	1
22:00	0	0	1	1	0	1	0	1	1	3	1	1	0	0	0	0	0	0	0	0	0	0	0	10	0
23:00	0	0	0	0	0	0	0	1	3	1	6	0	2	1	0	0	0	0	0	0	0	0	0	14	1
Percent	0.0%	0.0%	0.2%	0.2%	0.6%	0.8%	1.0%	3.9%	13.0 %	24.3 %	28.7 %	18.1 %	6.3%	1.5%	1.1%	0.2%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
AM Peak				03:00		00:00	06:00	07:00	10:00	11:00	07:00	11:00	08:00	06:00	05:00	08:00	05:00							11:00	
Vol.				1		1	3	3	14	24	21	12	5	1	1	1	1							77	
PM Peak			12:00	22:00	13:00	13:00	14:00	13:00	14:00	14:00	14:00	15:00	16:00	14:00	17:00	12:00	16:00							14:00	
Vol.			1	1	3	2	2	6	29	44	46	37	11	4	5	1	1							164	

Ontario Traffic, Inc.
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WABANAKI DR from MANITOU DR to KEVCO PL

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Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Avera
10/26 /21	0	0	0	0	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3	0
01:00	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	3	0
02:00	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
03:00	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	2	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0
05:00	0	0	0	0	1	0	0	0	3	3	3	1	2	0	0	0	0	0	0	0	0	0	0	13	1
06:00	0	0	0	0	1	0	0	0	7	9	9	9	2	0	2	0	0	0	0	0	0	0	0	39	2
07:00	0	0	0	0	0	0	1	0	10	18	18	9	5	1	0	0	0	0	0	0	0	0	0	62	3
08:00	0	0	0	0	0	0	1	1	9	22	25	16	9	0	1	0	0	0	0	0	0	0	0	84	4
09:00	0	0	0	0	1	0	5	3	9	17	20	11	0	1	0	0	0	0	0	0	0	0	0	67	3
10:00	0	0	0	1	0	1	0	2	17	16	12	10	2	0	0	1	0	0	0	0	0	0	0	62	3
11:00	0	0	0	0	0	0	3	4	18	27	18	12	2	3	0	0	0	0	0	0	0	0	0	87	4
12 PM	0	0	1	0	2	1	1	2	19	28	22	14	5	1	0	1	0	0	0	0	0	0	0	97	4
13:00	0	0	1	0	1	1	1	4	29	41	25	12	2	0	0	1	0	0	0	0	0	0	0	118	5
14:00	0	0	0	0	0	1	1	4	26	43	41	28	5	2	0	1	0	0	0	0	0	0	0	152	7
15:00	0	0	0	0	0	0	0	7	15	40	49	37	10	4	0	0	1	0	0	0	0	0	0	163	7
16:00	0	0	0	0	0	0	0	9	14	25	41	31	9	0	0	0	0	0	0	0	0	0	0	129	6
17:00	0	0	0	0	0	0	0	2	5	21	27	21	8	4	5	0	0	0	0	0	0	0	0	93	4
18:00	0	0	1	0	1	0	0	0	4	13	20	20	6	2	1	1	0	0	0	0	0	0	0	69	3
19:00	0	0	0	0	0	1	1	1	4	11	13	6	5	0	0	0	0	0	0	0	0	0	0	42	2
20:00	0	0	0	0	0	0	4	1	2	7	4	2	2	1	0	0	0	0	0	0	0	0	0	23	1
21:00	0	0	1	0	0	0	0	3	3	4	5	1	0	0	0	0	1	0	0	0	0	0	0	18	1
22:00	0	0	0	0	0	0	1	2	6	3	5	4	2	0	0	1	0	0	0	0	0	0	0	24	1
23:00	0	0	0	0	0	0	0	1	1	3	4	2	1	0	1	0	0	0	0	0	0	0	0	13	1
Percent	0.0%	0.0%	0.3%	0.1%	0.7%	0.4%	1.4%	3.4%	14.8 %	25.8 %	26.6 %	18.1 %	5.7%	1.4%	0.7%	0.4%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
AM Peak				01:00	02:00	00:00	09:00	11:00	11:00	11:00	08:00	08:00	08:00	11:00	06:00	10:00								11:00	
Vol.				1	2	1	5	4	18	27	25	16	9	3	2	1								87	
PM Peak			12:00		12:00	12:00	20:00	16:00	13:00	14:00	15:00	15:00	15:00	15:00	17:00	12:00	15:00							15:00	
Vol.			1		2	1	4	9	29	43	49	37	10	4	5	1	1							163	
Total	0	0	22	27	42	55	87	243	932	1905	2269	1502	495	103	65	24	7	0	0	0	0	0	0	7778	

Statistics

Mean Speed(Average) : 51 KPH
50th Percentile : 52 KPH
85th Percentile : 59 KPH

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10/20 /21	0	0	0	0	0	0	0	0	0	4	4	7	1	0	0	0	0	0	0	0	0	0	0	16	1
01:00	0	0	0	0	0	0	0	0	0	5	2	3	2	1	0	0	0	0	0	0	0	0	0	13	1
02:00	0	0	0	0	0	0	0	0	0	1	1	2	2	0	0	0	0	0	0	0	0	0	0	6	0
03:00	0	0	0	0	0	0	0	0	2	1	1	4	0	0	0	0	0	0	0	0	0	0	0	8	0
04:00	0	0	0	1	0	0	0	11	2	6	14	6	4	0	0	0	0	0	0	0	0	0	0	44	2
05:00	0	0	0	1	5	3	0	0	15	20	29	20	5	9	0	0	0	0	0	0	0	0	0	107	5
06:00	0	0	0	1	1	1	2	3	52	53	75	32	7	8	0	0	0	0	0	0	0	0	0	235	10
07:00	0	0	0	0	2	0	2	6	77	144	105	47	35	6	0	0	0	0	0	0	0	0	0	424	18
08:00	0	0	0	0	0	0	4	6	39	126	94	48	37	0	0	0	0	0	0	0	0	0	0	354	15
09:00	0	0	0	0	0	3	3	13	35	84	89	38	12	5	0	0	0	0	0	0	0	0	0	282	12
10:00	0	0	0	0	0	1	2	8	38	73	75	43	9	4	1	0	0	0	0	0	0	0	0	254	11
11:00	0	0	0	2	0	2	3	17	40	68	61	59	10	0	2	0	0	0	0	0	0	0	0	264	11
12 PM	0	0	0	0	0	2	1	9	44	85	78	44	22	2	1	4	0	0	0	0	0	0	0	292	13
13:00	0	0	0	0	3	2	1	7	47	89	65	51	16	3	0	2	0	0	0	0	0	0	0	286	12
14:00	0	0	1	0	1	3	1	7	48	103	114	73	21	1	0	1	0	0	0	0	0	0	0	374	16
15:00	0	0	0	1	0	0	3	20	64	83	151	117	21	3	1	1	0	0	0	0	0	0	0	465	20
16:00	0	0	0	1	0	1	1	14	34	105	142	104	25	9	1	0	0	0	0	0	0	0	0	437	19
17:00	0	0	0	0	3	2	2	12	13	91	120	73	17	12	1	0	1	0	0	0	0	0	0	347	15
18:00	0	0	0	0	0	0	2	3	21	51	89	72	23	7	1	0	0	0	0	0	0	0	0	269	12
19:00	0	0	1	2	0	0	3	2	11	36	40	49	14	0	0	1	1	0	0	0	0	0	0	160	7
20:00	0	0	0	1	1	0	2	2	6	27	37	22	5	2	0	0	0	0	0	0	0	0	0	105	5
21:00	0	0	2	1	0	1	0	7	2	19	29	17	5	0	1	0	2	0	0	0	0	0	0	86	4
22:00	0	0	0	0	0	1	0	2	9	17	20	10	4	4	1	1	2	0	0	0	0	0	0	71	3
23:00	0	0	0	1	1	0	1	1	3	18	19	5	4	0	0	0	0	0	0	0	0	0	0	53	2
Percent	0.0%	0.0%	0.1%	0.2%	0.3%	0.4%	0.7%	3.0%	12.2 %	26.4 %	29.4 %	19.1 %	6.1%	1.5%	0.2%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
AM Peak				11:00	05:00	05:00	08:00	11:00	07:00	07:00	07:00	11:00	08:00	05:00	11:00									07:00	
Vol.				2	5	3	4	17	77	144	105	59	37	9	2									424	
PM Peak			21:00	19:00	13:00	14:00	15:00	15:00	15:00	16:00	15:00	15:00	16:00	17:00	12:00	12:00	21:00							15:00	
Vol.			2	2	3	3	3	20	64	105	151	117	25	12	1	4	2							465	

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10/21 /21	0	0	0	0	0	0	1	0	0	4	3	2	2	1	0	0	0	0	0	0	0	0	0	13	1
01:00	0	0	0	0	1	1	0	2	0	4	3	0	0	0	0	2	0	0	0	0	0	0	0	13	1
02:00	0	0	2	0	0	0	0	2	0	1	2	2	0	0	0	0	0	0	0	0	0	0	0	9	0
03:00	0	0	0	1	0	0	0	2	5	3	9	1	0	0	0	0	1	0	0	0	0	0	0	22	1
04:00	0	0	0	0	0	0	3	0	3	4	37	5	0	0	0	1	0	0	0	0	0	0	0	53	2
05:00	0	0	2	1	3	1	4	2	18	16	25	6	8	5	0	0	2	0	0	0	0	0	0	93	4
06:00	0	0	0	0	2	1	3	13	35	73	90	32	11	6	0	3	0	0	0	0	0	0	0	269	12
07:00	0	0	2	2	2	3	7	8	56	102	93	47	17	10	0	4	5	0	0	0	0	0	0	358	16
08:00	0	0	0	0	0	6	2	12	37	122	116	44	31	3	0	0	0	0	0	0	0	0	0	373	16
09:00	0	0	0	0	1	1	2	9	39	79	83	31	17	1	0	0	0	0	0	0	0	0	0	263	11
10:00	0	0	0	3	1	0	2	7	35	73	76	34	6	3	1	0	0	0	0	0	0	0	0	241	10
11:00	0	0	0	1	1	3	4	18	46	64	64	48	18	1	4	0	0	0	0	0	0	0	0	272	12
12 PM	0	0	0	2	3	3	6	10	41	66	85	50	21	2	1	1	1	0	0	0	0	0	0	292	13
13:00	0	0	0	0	1	1	5	9	60	98	81	50	11	3	2	0	1	0	0	0	0	0	0	322	14
14:00	0	0	0	0	0	2	2	18	43	97	120	79	21	5	0	0	0	0	0	0	0	0	0	387	17
15:00	0	0	0	2	0	0	2	23	45	99	176	103	27	10	2	1	0	0	0	0	0	0	0	490	21
16:00	0	0	1	2	0	1	1	14	26	117	147	114	31	7	2	1	0	0	0	0	0	0	0	464	20
17:00	0	0	2	0	1	1	3	17	30	77	120	87	22	8	3	0	0	0	0	0	0	0	0	371	16
18:00	0	0	1	1	0	1	1	7	26	89	93	54	24	4	4	0	0	0	0	0	0	0	0	305	13
19:00	0	0	0	2	0	4	3	0	16	30	38	42	21	2	1	0	1	0	0	0	0	0	0	160	7
20:00	0	0	0	0	0	1	4	3	7	30	44	32	6	3	1	1	0	0	0	0	0	0	0	132	6
21:00	0	0	1	0	0	2	1	4	6	21	34	23	1	1	0	1	1	0	0	0	0	0	0	96	4
22:00	0	0	0	1	0	0	2	2	10	19	15	15	3	0	4	0	1	0	0	0	0	0	0	72	3
23:00	0	0	0	0	0	0	1	0	5	13	16	1	2	0	0	1	0	0	0	0	0	0	0	39	2
Percent	0.0%	0.0%	0.2%	0.4%	0.3%	0.6%	1.2%	3.6%	11.5 %	25.5 %	30.7 %	17.7 %	5.9%	1.5%	0.5%	0.3%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
AM Peak			02:00	10:00	05:00	08:00	07:00	11:00	07:00	08:00	08:00	11:00	08:00	07:00	11:00	07:00	07:00							08:00	
Vol.			2	3	3	6	7	18	56	122	116	48	31	10	4	4	5							373	
PM Peak			17:00	12:00	12:00	19:00	12:00	15:00	13:00	16:00	15:00	16:00	16:00	15:00	18:00	12:00	12:00							15:00	
Vol.			2	2	3	4	6	23	60	117	176	114	31	10	4	1	1							490	

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10/22 /21	0	0	0	0	2	1	1	1	0	6	1	2	0	3	0	0	1	0	0	0	0	0	0	18	1
01:00	0	0	1	1	1	0	0	0	0	6	1	1	0	1	0	0	0	0	0	0	0	0	0	12	1
02:00	0	0	1	0	0	0	0	1	0	4	1	2	0	0	0	0	1	0	0	0	0	0	0	10	0
03:00	0	0	0	1	0	0	1	0	0	3	2	0	0	0	0	0	0	0	0	0	0	0	0	7	0
04:00	0	0	0	1	0	1	2	1	5	4	3	3	0	0	2	0	0	0	0	0	0	0	0	22	1
05:00	0	0	1	3	1	1	3	1	15	32	8	12	1	3	2	2	0	0	0	0	0	0	0	85	4
06:00	0	0	1	1	2	4	2	8	27	63	98	32	5	4	8	1	2	0	0	0	0	0	0	258	11
07:00	0	0	3	2	3	8	12	6	49	90	109	41	19	8	3	2	3	0	0	0	0	0	0	358	16
08:00	0	0	1	0	2	0	24	3	38	117	101	69	9	7	0	0	0	2	0	0	0	0	0	373	16
09:00	0	0	0	0	0	1	3	7	33	68	84	41	27	0	0	1	0	0	0	0	0	0	0	265	12
10:00	0	0	0	0	0	1	2	9	32	75	86	48	19	1	6	0	0	0	0	0	0	0	0	279	12
11:00	0	0	0	0	3	2	3	8	49	70	82	64	27	0	2	0	0	0	0	0	0	0	0	310	13
12 PM	0	0	0	1	4	2	2	8	34	80	65	69	34	4	4	0	0	0	0	0	0	0	0	307	13
13:00	0	0	0	0	2	5	4	7	52	116	100	77	26	3	0	1	0	0	0	0	0	0	0	393	17
14:00	0	1	0	5	0	4	1	9	40	110	103	79	41	0	1	0	1	0	0	0	0	0	0	395	17
15:00	0	0	1	2	0	0	1	12	38	88	171	105	32	11	3	0	0	0	0	0	0	0	0	464	20
16:00	0	0	1	2	0	2	1	14	27	133	139	92	36	5	4	1	0	0	0	0	0	0	0	457	20
17:00	0	0	0	1	0	0	0	11	11	64	131	78	20	2	0	2	0	0	0	0	0	0	0	320	14
18:00	0	0	0	1	0	0	0	8	18	57	87	82	14	8	2	0	0	0	0	0	0	0	0	277	12
19:00	0	0	0	1	0	0	6	5	8	31	51	30	15	2	1	1	0	0	0	0	0	0	0	151	7
20:00	0	0	1	0	0	0	2	1	12	41	39	35	10	0	0	1	0	0	0	0	0	0	0	142	6
21:00	0	1	2	1	3	0	1	6	20	21	35	25	6	2	2	3	1	2	0	0	0	0	0	131	6
22:00	0	0	4	0	1	2	1	2	14	27	16	17	7	3	2	0	0	0	0	0	0	0	0	96	4
23:00	0	0	0	1	0	1	0	3	2	21	8	6	4	0	0	0	1	1	0	0	0	0	0	48	2
Percent	0.0%	0.0%	0.3%	0.5%	0.5%	0.7%	1.4%	2.5%	10.1 %	25.6 %	29.4 %	19.5 %	6.8%	1.3%	0.8%	0.3%	0.2%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%		
AM Peak			07:00	05:00	07:00	07:00	08:00	10:00	07:00	08:00	07:00	08:00	09:00	07:00	06:00	05:00	07:00	08:00						08:00	
Vol.			3	3	3	8	24	9	49	117	109	69	27	8	8	2	3	2						373	
PM Peak		14:00	22:00	14:00	12:00	13:00	19:00	16:00	13:00	16:00	15:00	15:00	14:00	15:00	12:00	21:00	14:00	21:00						15:00	
Vol.		1	4	5	4	5	6	14	52	133	171	105	41	11	4	3	1	2						464	

Ontario Traffic, Inc.
17705 Leslie St., Unit 6
Newmarket, Ontario L3Y 3E3
Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 21897
Station ID:
WABANAKI DR from MANITOU DR to KEVCO PL

Date Start: 20-Oct-21
Date End: 26-Oct-21
Date Start: 20-Oct-21

EB, WB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Avera
10/23 /21	0	0	1	1	1	2	1	6	2	10	3	10	1	0	2	0	1	0	0	0	0	0	0	41	2
01:00	0	0	1	2	1	0	0	1	5	9	1	0	2	2	0	0	0	0	0	0	0	0	0	24	1
02:00	0	1	1	0	0	0	0	0	0	3	0	1	0	0	0	1	0	0	0	0	0	0	0	7	0
03:00	0	2	0	1	0	0	0	0	2	3	0	1	0	0	0	2	0	1	0	0	0	0	0	12	1
04:00	0	0	0	1	2	1	3	0	1	1	4	1	0	0	0	0	0	0	0	0	0	0	0	14	1
05:00	0	1	0	0	3	0	1	2	4	1	8	1	6	1	2	0	1	0	0	0	0	0	0	31	1
06:00	0	0	1	0	0	1	0	3	7	11	13	12	1	1	0	0	0	0	0	0	0	0	0	50	2
07:00	0	0	0	0	0	3	0	1	13	25	16	13	4	1	0	0	0	0	0	0	0	0	0	76	3
08:00	0	1	0	0	0	4	1	2	20	38	46	18	2	2	1	0	0	0	0	0	0	0	0	135	6
09:00	1	0	1	0	0	0	1	2	39	51	52	25	7	2	0	0	0	0	0	0	0	0	0	181	8
10:00	0	0	0	0	1	1	1	12	50	66	55	42	11	1	0	0	0	0	0	0	0	0	0	240	10
11:00	0	1	0	0	0	1	1	18	46	78	52	59	11	1	2	0	0	1	0	0	0	0	0	271	12
12 PM	0	0	1	0	2	0	1	5	41	77	48	57	10	6	3	1	1	0	0	0	0	0	0	253	11
13:00	0	0	0	1	1	2	3	6	52	68	49	35	6	3	0	1	1	0	0	0	0	0	0	228	10
14:00	0	0	0	0	1	3	3	5	38	67	76	46	11	3	1	1	0	0	0	0	0	0	0	255	11
15:00	0	0	0	1	0	0	0	8	23	46	74	72	17	2	2	0	1	0	0	0	0	0	0	246	11
16:00	0	0	1	0	0	0	1	7	13	56	91	42	16	2	1	0	0	0	0	0	0	0	0	230	10
17:00	0	0	0	0	1	0	3	9	9	52	87	47	14	4	2	0	1	0	0	0	0	0	0	229	10
18:00	0	0	0	0	0	1	1	0	12	22	66	45	11	3	0	1	0	0	0	0	0	0	0	162	7
19:00	0	0	0	0	1	1	2	3	11	37	43	35	7	0	0	0	0	0	0	0	0	0	0	140	6
20:00	0	0	0	0	0	0	1	7	12	31	45	38	11	2	0	0	4	0	0	0	0	0	0	151	7
21:00	0	0	0	0	0	0	2	8	12	14	26	34	13	3	0	0	0	0	0	0	0	0	0	112	5
22:00	0	1	0	0	1	1	2	7	9	6	18	12	3	1	4	0	0	0	0	0	0	0	0	65	3
23:00	0	0	0	0	0	0	0	11	6	13	24	10	0	0	0	0	1	0	0	0	0	0	0	65	3
Percent	0.0%	0.2%	0.2%	0.2%	0.5%	0.7%	0.9%	3.8%	13.3 %	24.4 %	27.9 %	20.4 %	5.1%	1.2%	0.6%	0.2%	0.3%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%		
AM Peak	09:00	03:00	00:00	01:00	05:00	08:00	04:00	11:00	10:00	11:00	10:00	11:00	10:00	01:00	00:00	03:00	00:00	03:00						11:00	
Vol.	1	2	1	2	3	4	3	18	50	78	55	59	11	2	2	2	1	1						271	
PM Peak		22:00	12:00	13:00	12:00	14:00	13:00	23:00	13:00	12:00	16:00	15:00	15:00	12:00	22:00	12:00	20:00							14:00	
Vol.		1	1	1	2	3	3	11	52	77	91	72	17	6	4	1	4							255	

Ontario Traffic, Inc.
17705 Leslie St., Unit 6
Newmarket, Ontario L3Y 3E3
Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 21897
Station ID:
WABANAKI DR from MANITOU DR to KEVCO PL

Date Start: 20-Oct-21
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EB, WB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Avera
10/24 /21	0	0	0	0	1	2	1	0	1	7	10	4	1	2	1	1	1	0	0	0	0	0	0	32	1
01:00	0	0	4	0	1	0	0	1	0	8	2	0	1	0	0	1	0	0	0	0	0	0	0	18	1
02:00	0	0	0	1	0	0	0	1	2	3	0	0	0	0	1	2	0	0	0	0	0	0	0	10	0
03:00	0	0	1	0	1	1	0	1	0	1	1	0	0	0	0	0	1	0	0	0	0	0	0	7	0
04:00	0	0	0	1	0	0	0	0	2	0	2	0	0	1	0	0	1	0	0	0	0	0	0	7	0
05:00	0	1	0	0	0	0	0	2	4	0	5	0	1	0	0	0	0	0	0	0	0	0	0	13	1
06:00	0	1	0	0	1	2	1	2	12	7	7	8	1	1	0	0	0	0	0	0	0	0	0	43	2
07:00	0	0	0	0	0	0	0	1	8	21	20	6	4	0	0	0	0	0	0	0	0	0	0	60	3
08:00	0	0	0	0	1	1	1	2	15	34	29	17	5	1	0	0	0	1	0	0	0	0	0	107	5
09:00	0	0	0	0	0	1	1	3	23	32	34	16	5	1	1	0	0	0	0	0	0	0	0	117	5
10:00	0	0	0	0	0	1	4	7	31	43	30	27	5	3	0	0	0	0	0	0	0	0	0	151	7
11:00	0	0	1	0	2	0	2	11	49	43	35	34	9	0	0	1	0	0	0	0	0	0	0	187	8
12 PM	0	0	1	0	3	1	6	7	32	54	45	23	7	2	1	0	0	0	0	0	0	0	0	182	8
13:00	0	0	0	1	2	3	1	4	43	69	51	25	4	1	3	1	1	0	0	0	0	0	0	209	9
14:00	0	0	1	0	1	1	0	5	35	59	63	40	8	3	0	0	0	0	0	0	0	0	0	216	9
15:00	0	0	0	0	0	0	2	6	21	48	65	55	11	0	0	0	0	0	0	0	0	0	0	208	9
16:00	0	0	0	0	1	0	0	8	22	41	73	46	15	2	2	0	1	0	0	0	0	0	0	211	9
17:00	0	0	0	0	1	1	1	10	9	43	50	40	14	3	2	0	0	0	0	0	0	0	0	174	8
18:00	0	0	0	0	0	0	1	2	13	27	50	47	17	3	2	0	1	0	0	0	0	0	0	163	7
19:00	0	1	0	0	0	1	3	2	10	26	35	33	7	1	0	0	1	0	0	0	0	0	0	120	5
20:00	0	0	0	0	0	1	3	2	6	20	29	18	7	3	0	0	0	0	0	0	0	0	0	89	4
21:00	0	1	1	1	3	0	0	5	10	7	23	13	3	2	0	0	0	1	0	0	0	0	0	70	3
22:00	0	0	0	1	0	0	1	6	12	8	9	8	1	0	0	1	0	0	0	0	0	0	0	47	2
23:00	0	0	0	0	0	0	2	3	6	9	16	8	3	0	0	0	0	0	0	0	0	0	0	47	2
Percent	0.0%	0.2%	0.4%	0.2%	0.7%	0.6%	1.2%	3.7%	14.7 %	24.5 %	27.5 %	18.8 %	5.2%	1.2%	0.5%	0.3%	0.3%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%		
AM Peak		05:00	01:00	02:00	11:00	00:00	10:00	11:00	11:00	10:00	11:00	11:00	11:00	10:00	00:00	02:00	00:00	08:00						11:00	
Vol.		1	4	1	2	2	4	11	49	43	35	34	9	3	1	2	1	1						187	
PM Peak		19:00	12:00	13:00	12:00	13:00	12:00	17:00	13:00	13:00	16:00	15:00	18:00	14:00	13:00	13:00	13:00	21:00						14:00	
Vol.		1	1	1	3	3	6	10	43	69	73	55	17	3	3	1	1	1						216	

Ontario Traffic, Inc.
17705 Leslie St., Unit 6
Newmarket, Ontario L3Y 3E3
Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 21897
Station ID:
WABANAKI DR from MANITOU DR to KEVCO PL

Date Start: 20-Oct-21
Date End: 26-Oct-21
Date Start: 20-Oct-21

EB, WB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Avera
10/25 /21	0	0	0	0	0	1	0	0	1	3	1	7	1	0	0	1	0	0	0	0	0	0	0	15	1
01:00	0	0	0	0	1	0	0	1	1	3	1	0	0	2	0	0	0	1	0	0	0	0	0	10	0
02:00	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0
03:00	0	0	0	1	0	0	1	2	3	4	3	2	0	0	0	0	0	0	0	0	0	0	0	16	1
04:00	0	0	2	1	1	1	2	0	2	5	12	3	10	0	0	1	0	0	0	0	0	0	0	40	2
05:00	0	1	0	2	1	1	1	1	9	10	34	4	22	2	2	2	1	1	0	0	0	0	0	94	4
06:00	0	0	0	0	1	2	11	13	24	48	75	17	26	4	1	1	0	0	0	0	0	0	0	223	10
07:00	0	1	0	1	2	6	5	12	46	96	107	32	41	3	5	0	0	1	0	0	0	0	0	358	16
08:00	0	0	0	0	0	0	1	4	42	72	132	41	22	2	1	2	1	0	0	0	0	0	0	320	14
09:00	0	0	0	0	1	1	1	13	51	70	81	30	18	0	0	0	0	0	0	0	0	0	0	266	12
10:00	0	0	0	0	0	1	2	9	45	56	65	37	16	1	3	0	0	0	0	0	0	0	0	235	10
11:00	0	0	0	2	0	2	2	8	39	70	63	47	11	1	2	0	1	0	0	0	0	0	0	248	11
12 PM	0	1	1	1	1	0	0	9	28	72	87	52	22	5	2	1	0	0	0	0	0	0	0	282	12
13:00	0	0	0	0	5	3	0	8	48	94	59	70	20	7	0	0	0	0	0	0	0	0	0	314	14
14:00	0	0	2	0	2	1	4	9	53	101	117	77	10	6	1	1	0	0	0	0	0	0	0	384	17
15:00	0	0	0	0	0	0	1	14	35	91	157	91	36	7	1	0	0	0	0	0	0	0	0	433	19
16:00	0	0	0	0	0	2	0	14	32	90	166	81	37	8	0	1	1	0	0	0	0	0	0	432	19
17:00	0	0	0	0	1	1	1	15	16	82	107	80	34	5	7	0	0	0	0	0	0	0	0	349	15
18:00	0	0	0	0	1	0	0	4	13	40	72	85	17	4	4	0	0	0	0	0	0	0	0	240	10
19:00	0	0	1	0	0	1	1	3	12	28	43	31	18	2	0	0	1	0	0	0	0	0	0	141	6
20:00	0	1	0	0	1	0	1	1	10	30	29	29	7	1	0	0	1	0	0	0	0	0	0	111	5
21:00	0	0	0	0	0	0	0	11	6	16	31	22	8	0	1	0	0	0	0	0	0	0	0	95	4
22:00	0	0	2	1	0	2	1	9	7	17	6	3	1	1	1	2	0	0	0	0	0	0	0	53	2
23:00	0	0	0	0	0	0	1	3	4	12	16	3	4	3	0	0	1	0	0	0	0	0	0	47	2
Percent	0.0%	0.1%	0.2%	0.2%	0.4%	0.6%	0.8%	3.5%	11.2 %	23.6 %	31.1 %	17.9 %	8.1%	1.4%	0.7%	0.3%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%		
AM Peak		02:00	04:00	05:00	07:00	07:00	06:00	06:00	09:00	07:00	08:00	11:00	07:00	06:00	07:00	05:00	05:00	01:00						07:00	
Vol.		1	2	2	2	6	11	13	51	96	132	47	41	4	5	2	1	1						358	
PM Peak		12:00	14:00	12:00	13:00	13:00	14:00	17:00	14:00	14:00	16:00	15:00	16:00	16:00	17:00	22:00	16:00							15:00	
Vol.		1	2	1	5	3	4	15	53	101	166	91	37	8	7	2	1							433	

Ontario Traffic, Inc.
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WABANAKI DR from MANITOU DR to KEVCO PL

Date Start: 20-Oct-21
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EB, WB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Avera
10/26 /21	0	0	1	0	1	1	0	0	1	0	3	1	0	1	0	0	0	0	0	0	0	0	0	9	0
01:00	0	0	0	1	0	0	0	0	1	4	1	0	1	1	1	0	0	0	0	0	0	0	0	10	0
02:00	0	1	0	0	2	0	0	0	0	0	1	1	1	0	0	1	0	2	0	0	0	0	0	9	0
03:00	0	0	1	1	1	0	0	0	5	4	0	1	4	1	0	0	1	0	0	0	0	0	0	19	1
04:00	0	0	0	1	0	1	1	0	2	5	10	2	11	1	1	0	0	3	0	0	0	0	0	38	2
05:00	0	0	0	2	2	2	0	3	28	16	34	1	16	0	0	1	1	0	0	0	0	0	0	106	5
06:00	0	0	0	0	1	13	0	10	49	61	58	53	15	0	2	0	0	0	0	0	0	0	0	262	11
07:00	0	1	0	0	0	2	7	5	47	103	106	59	15	7	2	1	0	0	0	0	0	0	0	355	15
08:00	0	0	0	0	2	0	3	11	46	106	81	55	24	1	1	0	0	2	0	0	0	0	0	332	14
09:00	0	0	0	0	3	2	10	10	37	78	80	46	3	1	0	0	0	3	0	0	0	0	0	273	12
10:00	0	1	0	1	1	1	3	6	50	58	56	40	7	0	0	1	0	2	0	0	0	0	0	227	10
11:00	0	0	0	1	2	2	11	11	48	83	80	38	9	3	0	0	0	0	0	0	0	0	0	288	13
12 PM	0	0	1	0	5	3	7	8	50	72	76	41	11	2	2	1	0	0	0	0	0	0	0	279	12
13:00	0	1	1	0	4	5	4	11	57	100	71	35	15	2	0	1	0	0	0	0	0	0	0	307	13
14:00	0	2	0	0	0	4	1	14	50	103	112	72	16	4	0	1	0	0	0	0	0	0	0	379	16
15:00	0	0	0	0	0	0	0	16	45	103	139	104	28	10	2	0	1	0	0	0	0	0	0	448	19
16:00	0	0	0	1	0	0	1	23	48	94	157	98	28	6	1	1	0	1	0	0	0	0	0	459	20
17:00	0	0	0	0	0	0	2	11	28	79	125	83	29	11	8	1	0	0	0	0	0	0	0	377	16
18:00	0	0	1	0	1	0	1	5	19	50	67	74	24	9	1	1	0	0	0	0	0	0	0	253	11
19:00	0	0	0	0	0	3	5	3	18	37	41	24	20	2	1	0	0	0	0	0	0	0	0	154	7
20:00	0	0	0	0	0	0	4	1	12	37	34	8	18	5	0	0	1	0	0	0	0	0	0	120	5
21:00	0	0	1	0	0	2	3	8	14	13	19	16	6	0	0	0	1	0	0	0	0	0	0	83	4
22:00	0	0	0	0	0	0	2	8	14	10	16	11	7	0	0	1	0	0	0	0	0	0	0	69	3
23:00	0	0	0	0	0	0	0	1	1	10	20	4	3	2	1	0	0	0	0	0	0	0	0	42	2
Percent	0.0%	0.1%	0.1%	0.2%	0.5%	0.8%	1.3%	3.4%	13.7 %	25.0 %	28.3 %	17.7 %	6.3%	1.4%	0.5%	0.2%	0.1%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%		
AM Peak		02:00	00:00	05:00	09:00	06:00	11:00	08:00	10:00	08:00	07:00	07:00	08:00	07:00	06:00	02:00	03:00	04:00						07:00	
Vol.		1	1	2	3	13	11	11	50	106	106	59	24	7	2	1	1	3						355	
PM Peak		14:00	12:00	16:00	12:00	13:00	12:00	16:00	13:00	14:00	16:00	15:00	17:00	17:00	17:00	12:00	15:00	16:00						16:00	
Vol.		2	1	1	5	5	7	23	57	103	157	104	29	11	8	1	1	1						459	
Total	1	24	62	83	133	194	323	1005	3705	7668	8977	5693	1938	420	164	78	59	25	0	0	0	0	0	30552	

Statistics

Mean Speed(Average) : 51 KPH
50th Percentile : 52 KPH
85th Percentile : 59 KPH

Ontario Traffic, Inc.
17705 Leslie St., Unit 6
Newmarket, Ontario L3Y 3E3
Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 21911
Station ID: U186
WILSON AVE from WABANAKI DR to GRAND CREST PL
Date Start: 29-Sep-22
Date End: 05-Oct-22

NB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
09/29/22	0	2	0	0	0	0	0	0	0	0	0	0	0	2
01:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
04:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
05:00	0	4	0	0	0	0	0	0	0	0	0	0	0	4
06:00	0	10	3	0	0	0	0	0	0	0	0	0	0	13
07:00	0	6	4	0	0	0	0	0	0	0	0	0	0	10
08:00	0	9	2	0	0	0	0	**1**	0	0	**1**	0	0	13
09:00	**1**	15	10	0	**1**	**2**	0	0	0	0	0	0	0	29
10:00	0	15	4	0	0	0	0	1	0	0	0	0	0	20
11:00	0	**38**	**13**	0	1	1	0	0	**1**	0	1	0	0	**55**
12 PM	0	19	5	0	**2**	**2**	0	0	**1**	0	**1**	0	0	30
13:00	0	11	4	0	1	0	0	0	0	**1**	0	0	0	17
14:00	**2**	**47**	**15**	0	0	0	0	1	0	0	1	0	0	**66**
15:00	2	35	5	**1**	1	0	0	0	0	0	1	0	0	45
16:00	0	38	8	0	0	0	0	0	0	0	0	0	0	46
17:00	1	13	2	0	0	0	0	0	0	0	0	0	0	16
18:00	0	15	2	0	0	0	0	0	0	0	0	0	0	17
19:00	1	22	2	0	0	0	0	0	0	0	1	0	0	26
20:00	1	9	1	0	0	0	0	0	0	0	0	0	0	11
21:00	0	10	0	0	0	0	0	0	0	0	0	0	0	10
22:00	0	13	4	0	0	0	0	1	0	0	0	0	0	18
23:00	0	6	0	0	0	0	0	**2**	0	0	0	0	0	8
Total	8	340	85	1	6	5	0	6	2	1	6	0	0	460
Percent	1.7%	73.9%	18.5%	0.2%	1.3%	1.1%	0.0%	1.3%	0.4%	0.2%	1.3%	0.0%	0.0%	
AM Peak	09:00	11:00	11:00		09:00	09:00		08:00	11:00		08:00			11:00
Vol.	1	38	13		1	2		1	1		1			55
PM Peak	14:00	14:00	14:00	15:00	12:00	12:00		23:00	12:00	13:00	12:00			14:00
Vol.	2	47	15	1	2	2		2	1	1	1			66

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Site Code: 21911
Station ID: U186
WILSON AVE from WABANAKI DR to GRAND CREST PL
Date Start: 29-Sep-22
Date End: 05-Oct-22

NB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
09/30/22	0	3	1	0	0	0	0	0	0	0	0	0	0	4
01:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
02:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
03:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
04:00	0	0	0	0	0	**1**	0	0	0	0	0	0	0	1
05:00	0	1	0	0	**1**	0	0	0	0	0	0	0	0	2
06:00	0	6	3	0	0	0	0	0	0	0	0	0	0	9
07:00	**1**	6	3	0	0	0	0	0	0	0	0	0	0	10
08:00	0	5	4	0	1	0	0	0	0	0	0	0	0	10
09:00	0	9	1	0	0	0	0	0	0	0	0	0	0	10
10:00	0	11	5	0	0	0	0	0	0	0	0	0	0	16
11:00	1	**40**	**12**	**1**	1	0	0	0	**1**	0	0	0	0	**56**
12 PM	0	18	**8**	0	0	0	0	0	**1**	0	0	0	0	27
13:00	1	21	4	0	0	0	0	0	0	0	**1**	0	0	27
14:00	0	**32**	6	0	0	0	0	0	0	0	1	0	0	39
15:00	**2**	32	6	0	**2**	0	0	0	0	0	0	0	0	**42**
16:00	2	27	6	0	0	0	0	**1**	0	0	1	0	0	37
17:00	0	22	2	0	0	0	0	1	0	0	0	0	0	25
18:00	0	16	2	0	0	0	0	0	0	0	0	0	0	18
19:00	0	13	0	0	0	0	0	0	0	0	0	0	0	13
20:00	0	9	0	0	0	0	0	0	0	0	0	0	0	9
21:00	0	8	3	0	0	0	0	0	0	**1**	0	0	0	12
22:00	0	13	3	0	0	0	0	0	0	0	0	0	0	16
23:00	0	10	2	0	0	**1**	0	0	0	0	0	0	0	13
Total	7	306	71	1	5	2	0	2	2	1	3	0	0	400
Percent	1.8%	76.5%	17.8%	0.3%	1.3%	0.5%	0.0%	0.5%	0.5%	0.3%	0.8%	0.0%	0.0%	
AM Peak	07:00	11:00	11:00	11:00	05:00	04:00			11:00					11:00
Vol.	1	40	12	1	1	1			1					56
PM Peak	15:00	14:00	12:00		15:00	23:00		16:00	12:00	21:00	13:00			15:00
Vol.	2	32	8		2	1		1	1	1	1			42

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Site Code: 21911
Station ID: U186
WILSON AVE from WABANAKI DR to GRAND CREST PL
Date Start: 29-Sep-22
Date End: 05-Oct-22

NB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
10/01/22	0	1	0	0	0	0	0	0	0	0	0	0	0	1
01:00	0	4	2	0	0	0	0	0	0	0	0	0	0	6
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00	0	4	0	0	0	0	0	0	0	0	0	0	0	4
08:00	0	1	2	0	0	0	0	0	0	0	0	0	0	3
09:00	0	12	0	0	0	0	0	**1**	0	0	0	0	0	13
10:00	0	9	1	0	0	0	0	0	0	0	0	0	0	10
11:00	0	**14**	**4**	0	0	0	0	0	0	0	0	0	0	**18**
12 PM	0	11	1	0	0	0	0	0	0	0	0	0	0	12
13:00	1	30	0	0	0	0	0	0	0	0	0	0	0	31
14:00	**2**	14	1	0	0	0	0	0	0	0	**1**	0	0	18
15:00	0	**32**	**5**	0	0	0	0	0	0	0	0	0	0	**37**
16:00	2	29	1	0	0	**1**	0	0	0	0	0	0	0	33
17:00	0	28	2	0	0	0	0	**2**	0	0	0	0	0	32
18:00	0	14	0	0	0	0	0	0	0	0	0	0	0	14
19:00	0	14	0	0	0	0	0	0	0	0	1	0	0	15
20:00	0	7	2	0	0	0	0	0	0	0	0	0	0	9
21:00	0	11	1	0	0	0	0	0	0	0	0	0	0	12
22:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
23:00	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Total	5	241	23	0	0	1	0	3	0	0	2	0	0	275
Percent	1.8%	87.6%	8.4%	0.0%	0.0%	0.4%	0.0%	1.1%	0.0%	0.0%	0.7%	0.0%	0.0%	
AM Peak		11:00	11:00					09:00						11:00
Vol.		14	4					1						18
PM Peak	14:00	15:00	15:00			16:00		17:00			14:00			15:00
Vol.	2	32	5			1		2			1			37

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Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 21911
Station ID: U186
WILSON AVE from WABANAKI DR to GRAND CREST PL
Date Start: 29-Sep-22
Date End: 05-Oct-22

NB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
10/02/22	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
07:00	0	6	**2**	0	0	0	0	0	0	0	0	0	0	8
08:00	0	5	2	0	0	0	0	0	0	0	0	**1**	0	8
09:00	0	7	1	0	0	0	0	0	0	0	0	0	0	8
10:00	0	**13**	1	0	0	0	0	0	0	0	0	0	0	**14**
11:00	0	13	1	0	0	0	0	0	0	0	0	0	0	14
12 PM	**1**	18	1	0	0	0	0	0	0	0	0	0	0	20
13:00	1	17	**6**	0	**1**	0	0	0	0	0	0	0	0	25
14:00	0	21	2	0	0	0	0	0	0	0	**1**	0	0	24
15:00	0	**36**	2	0	0	0	0	0	0	0	1	0	0	**39**
16:00	1	29	1	0	0	0	0	0	**1**	0	0	0	0	32
17:00	0	29	4	0	0	0	0	**1**	0	0	0	0	0	34
18:00	0	17	1	0	0	0	0	0	0	0	1	0	0	19
19:00	0	7	0	0	0	0	0	0	0	0	0	0	0	7
20:00	0	6	0	0	0	0	0	0	0	0	0	0	0	6
21:00	0	4	1	0	0	0	0	0	0	0	0	0	0	5
22:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
23:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Total	3	232	25	0	1	0	0	1	1	0	3	1	0	267
Percent	1.1%	86.9%	9.4%	0.0%	0.4%	0.0%	0.0%	0.4%	0.4%	0.0%	1.1%	0.4%	0.0%	
AM Peak		10:00	07:00									08:00		10:00
Vol.		13	2									1		14
PM Peak	12:00	15:00	13:00		13:00			17:00	16:00		14:00			15:00
Vol.	1	36	6		1			1	1		1			39

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Site Code: 21911
Station ID: U186
WILSON AVE from WABANAKI DR to GRAND CREST PL
Date Start: 29-Sep-22
Date End: 05-Oct-22

NB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
10/03/22	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	4	0	0	0	0	0	0	0	0	0	0	0	4
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	1	0	0	**1**	0	0	0	0	0	0	0	0	2
06:00	0	3	2	0	0	0	0	0	0	0	0	0	0	5
07:00	**1**	8	5	0	0	0	0	0	1	0	**1**	0	0	16
08:00	1	13	8	0	1	0	0	0	0	0	0	0	0	23
09:00	1	6	8	0	0	0	0	0	**2**	0	1	0	0	18
10:00	0	16	**11**	0	0	0	0	0	0	0	0	0	0	27
11:00	0	**35**	5	0	1	**1**	0	0	1	0	1	0	0	**44**
12 PM	0	17	10	0	0	0	0	0	0	**1**	0	0	0	28
13:00	0	28	7	0	**2**	0	0	0	**2**	0	1	0	0	40
14:00	**2**	**38**	**11**	0	2	0	0	**1**	0	0	**2**	0	0	**56**
15:00	0	28	7	0	1	0	0	0	1	0	0	0	0	37
16:00	1	32	6	0	0	0	0	0	0	0	0	0	0	39
17:00	0	26	2	0	0	0	0	0	0	0	0	0	0	28
18:00	0	23	3	0	0	0	0	0	0	0	0	0	0	26
19:00	0	15	1	0	0	**1**	0	0	0	0	0	0	0	17
20:00	0	10	1	0	0	0	0	0	0	0	0	0	0	11
21:00	1	9	1	0	0	0	0	0	0	0	0	0	0	11
22:00	0	11	3	0	0	0	0	0	0	0	0	0	0	14
23:00	0	5	1	0	0	0	0	0	0	0	0	0	0	6
Total	7	329	92	0	8	2	0	1	7	1	6	0	0	453
Percent	1.5%	72.6%	20.3%	0.0%	1.8%	0.4%	0.0%	0.2%	1.5%	0.2%	1.3%	0.0%	0.0%	
AM Peak	07:00	11:00	10:00		05:00	11:00			09:00		07:00			11:00
Vol.	1	35	11		1	1			2		1			44
PM Peak	14:00	14:00	14:00		13:00	19:00		14:00	13:00	12:00	14:00			14:00
Vol.	2	38	11		2	1		1	2	1	2			56

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WILSON AVE from WABANAKI DR to GRAND CREST PL
Date Start: 29-Sep-22
Date End: 05-Oct-22

NB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
10/04/22	0	1	0	0	0	0	0	0	0	0	0	0	0	1
01:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
02:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
03:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
06:00	0	12	2	0	0	**1**	0	0	0	0	0	0	0	15
07:00	0	6	3	0	1	1	0	0	**1**	0	0	0	0	12
08:00	**1**	11	3	0	1	0	0	**1**	0	0	0	0	0	17
09:00	0	11	7	0	0	0	0	0	1	0	0	0	0	19
10:00	1	11	6	0	**2**	0	0	0	0	0	**1**	0	**1**	22
11:00	1	**32**	**9**	0	1	0	0	0	0	0	0	0	0	**43**
12 PM	1	19	10	**1**	1	0	**1**	**1**	**1**	0	0	0	0	35
13:00	0	22	7	0	0	**1**	0	0	0	0	0	0	0	30
14:00	1	**48**	**14**	0	**2**	0	0	0	1	0	**2**	0	0	**68**
15:00	**3**	37	9	0	0	0	0	0	0	0	1	0	0	50
16:00	1	39	11	0	0	0	0	0	0	0	0	0	0	51
17:00	1	16	3	0	0	1	0	0	0	0	1	0	0	22
18:00	0	30	2	0	0	0	0	0	0	0	0	0	0	32
19:00	0	17	2	0	0	0	0	0	0	0	0	0	0	19
20:00	1	15	1	0	0	0	0	0	0	0	0	0	0	17
21:00	0	5	0	0	0	0	0	0	0	0	0	0	0	5
22:00	1	8	3	0	0	0	0	0	0	0	0	0	0	12
23:00	0	6	1	0	0	0	0	0	0	0	0	0	0	7
Total	12	352	93	1	8	4	1	2	4	0	5	0	1	483
Percent	2.5%	72.9%	19.3%	0.2%	1.7%	0.8%	0.2%	0.4%	0.8%	0.0%	1.0%	0.0%	0.2%	
AM Peak	08:00	11:00	11:00		10:00	06:00		08:00	07:00		10:00		10:00	11:00
Vol.	1	32	9		2	1		1	1		1		1	43
PM Peak	15:00	14:00	14:00	12:00	14:00	13:00	12:00	12:00	12:00		14:00			14:00
Vol.	3	48	14	1	2	1	1	1	1		2			68

Ontario Traffic, Inc.
17705 Leslie St., Unit 6
Newmarket, Ontario L3Y 3E3
Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 21911
Station ID: U186
WILSON AVE from WABANAKI DR to GRAND CREST PL
Date Start: 29-Sep-22
Date End: 05-Oct-22

NB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
10/05/22	0	6	0	0	0	0	0	0	0	0	0	0	0	6
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
03:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	3	1	0	0	0	0	0	0	0	0	0	0	4
06:00	0	11	2	0	1	**1**	0	0	0	0	0	0	0	15
07:00	0	4	5	0	0	0	0	**1**	0	0	0	0	0	10
08:00	0	12	**9**	0	0	1	0	0	0	0	**1**	0	0	23
09:00	**1**	13	6	0	**2**	0	0	0	**2**	0	0	0	0	24
10:00	0	14	8	0	0	0	0	0	1	0	0	0	0	23
11:00	0	**44**	6	**1**	0	1	**1**	0	0	0	0	0	0	**53**
12 PM	2	34	7	0	**1**	**1**	0	0	0	0	0	0	**1**	46
13:00	0	33	4	0	0	0	0	0	0	0	0	0	0	37
14:00	2	**51**	**16**	0	0	1	0	0	0	0	0	0	0	**70**
15:00	**6**	45	4	0	1	0	0	0	0	0	**2**	0	0	58
16:00	2	37	9	0	0	0	0	0	0	0	1	0	0	49
17:00	1	15	3	0	0	0	0	0	0	0	0	0	0	19
18:00	1	33	4	0	0	0	0	0	0	0	1	0	0	39
19:00	0	16	3	0	0	0	0	0	0	0	0	0	0	19
20:00	2	20	4	0	0	0	0	0	0	0	0	0	0	26
21:00	0	4	0	0	0	0	0	0	0	0	0	0	0	4
22:00	0	9	3	0	0	0	0	0	0	0	0	0	0	12
23:00	0	3	1	0	0	0	0	0	0	0	0	0	0	4
Total	17	410	95	1	5	5	1	1	3	0	5	0	1	544
Percent	3.1%	75.4%	17.5%	0.2%	0.9%	0.9%	0.2%	0.2%	0.6%	0.0%	0.9%	0.0%	0.2%	
AM Peak	09:00	11:00	08:00	11:00	09:00	06:00	11:00	07:00	09:00		08:00			11:00
Vol.	1	44	9	1	2	1	1	1	2		1			53
PM Peak	15:00	14:00	14:00		12:00	12:00					15:00		12:00	14:00
Vol.	6	51	16		1	1					2		1	70
Grand Total	59	2210	484	4	33	19	2	16	19	3	30	1	2	2882
Percent	2.0%	76.7%	16.8%	0.1%	1.1%	0.7%	0.1%	0.6%	0.7%	0.1%	1.0%	0.0%	0.1%	

Ontario Traffic, Inc.
17705 Leslie St., Unit 6
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Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 21911
Station ID: U186
WILSON AVE from WABANAKI DR to GRAND CREST PL
Date Start: 29-Sep-22
Date End: 05-Oct-22

SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
09/29/22	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
02:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
03:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
04:00	0	4	3	0	0	0	0	0	0	0	0	0	0	7
05:00	1	32	8	0	0	0	0	0	0	0	0	0	0	41
06:00	**3**	**52**	**15**	0	0	**1**	0	0	0	0	0	0	0	**71**
07:00	0	39	10	0	0	0	0	**1**	**1**	0	0	0	0	51
08:00	0	30	5	0	**1**	0	0	1	1	0	0	0	0	38
09:00	0	17	11	0	1	1	0	0	0	0	0	0	0	30
10:00	0	15	4	**1**	0	0	0	0	1	0	0	0	0	21
11:00	1	27	9	0	1	1	0	1	0	0	**1**	0	0	41
12 PM	2	**29**	**11**	0	**2**	**1**	0	0	**3**	0	**1**	0	0	**49**
13:00	1	23	10	0	0	0	0	0	0	0	1	0	0	35
14:00	3	21	9	0	0	0	0	1	0	0	1	0	0	35
15:00	**5**	17	6	0	1	0	0	0	0	0	0	0	0	29
16:00	2	14	5	0	0	0	0	0	0	0	0	0	0	21
17:00	0	16	2	0	0	0	0	0	0	0	0	0	0	18
18:00	4	12	2	0	0	0	0	1	0	0	0	0	0	19
19:00	0	19	1	0	0	0	0	0	0	0	1	0	0	21
20:00	0	10	2	0	0	0	0	0	0	0	0	0	0	12
21:00	0	9	0	0	0	0	0	0	0	0	0	0	0	9
22:00	0	5	1	0	0	0	0	1	0	0	0	0	0	7
23:00	0	5	0	0	0	0	0	**2**	0	0	0	0	0	7
Total	22	400	114	1	6	4	0	8	6	0	5	0	0	566
Percent	3.9%	70.7%	20.1%	0.2%	1.1%	0.7%	0.0%	1.4%	1.1%	0.0%	0.9%	0.0%	0.0%	
AM Peak	06:00	06:00	06:00	10:00	08:00	06:00		07:00	07:00		11:00			06:00
Vol.	3	52	15	1	1	1		1	1		1			71
PM Peak	15:00	12:00	12:00		12:00	12:00		23:00	12:00		12:00			12:00
Vol.	5	29	11		2	1		2	3		1			49

Ontario Traffic, Inc.
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Site Code: 21911
Station ID: U186
WILSON AVE from WABANAKI DR to GRAND CREST PL
Date Start: 29-Sep-22
Date End: 05-Oct-22

SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
09/30/22	0	2	0	0	0	0	0	0	0	0	0	0	0	2
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
03:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
04:00	0	0	0	0	0	**1**	0	0	0	0	0	0	0	1
05:00	1	24	2	0	**1**	0	0	0	0	0	0	0	0	28
06:00	2	**48**	6	0	0	0	0	0	1	0	0	0	0	**57**
07:00	2	28	**11**	0	1	1	0	0	0	0	**1**	0	0	44
08:00	1	22	6	0	0	0	0	0	0	0	0	0	0	29
09:00	2	6	4	0	1	0	0	0	0	0	0	0	0	13
10:00	2	16	4	0	0	0	0	0	0	0	0	0	0	22
11:00	**6**	25	11	**1**	1	0	0	0	**2**	0	0	0	0	46
12 PM	2	**28**	**10**	0	0	0	0	0	**1**	0	0	0	0	**41**
13:00	0	24	6	0	0	0	0	0	0	0	**1**	0	0	31
14:00	2	14	5	0	0	0	0	0	0	0	0	0	0	21
15:00	1	17	5	0	**2**	0	0	0	0	0	0	0	0	25
16:00	**3**	14	5	0	0	0	0	0	0	0	0	0	0	22
17:00	2	12	2	0	0	0	0	0	0	0	0	0	0	16
18:00	1	15	4	0	0	0	0	0	0	0	0	0	0	20
19:00	0	9	0	0	0	0	0	0	0	0	0	0	0	9
20:00	1	13	1	0	0	0	0	0	0	0	0	0	0	15
21:00	0	14	1	0	0	0	0	0	0	0	0	0	0	15
22:00	0	10	1	0	0	**1**	0	0	0	0	0	0	0	12
23:00	0	5	3	0	0	0	0	0	0	0	0	0	0	8
Total	28	349	87	1	6	3	0	0	4	0	2	0	0	480
Percent	5.8%	72.7%	18.1%	0.2%	1.3%	0.6%	0.0%	0.0%	0.8%	0.0%	0.4%	0.0%	0.0%	
AM Peak	11:00	06:00	07:00	11:00	05:00	04:00			11:00		07:00			06:00
Vol.	6	48	11	1	1	1			2		1			57
PM Peak	16:00	12:00	12:00		15:00	22:00			12:00		13:00			12:00
Vol.	3	28	10		2	1			1		1			41

Ontario Traffic, Inc.
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Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 21911
Station ID: U186
WILSON AVE from WABANAKI DR to GRAND CREST PL
Date Start: 29-Sep-22
Date End: 05-Oct-22

SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
10/01/22	0	1	1	0	0	0	0	0	0	0	0	0	0	2
01:00	0	5	0	0	0	0	0	0	0	0	0	0	0	5
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
05:00	0	6	0	0	0	0	0	0	0	0	0	0	0	6
06:00	0	6	**2**	0	0	0	0	0	0	0	0	0	0	8
07:00	1	7	1	0	**1**	0	0	0	0	0	0	0	0	10
08:00	0	8	0	0	0	0	0	0	0	0	0	0	0	8
09:00	0	10	1	0	0	0	0	0	0	0	0	0	0	11
10:00	**2**	**12**	1	0	0	0	0	0	0	0	0	0	0	**15**
11:00	0	12	1	0	0	0	0	0	0	0	0	0	0	13
12 PM	1	27	0	0	0	0	0	0	0	0	**1**	0	0	29
13:00	1	28	0	0	0	0	0	0	0	0	1	0	0	30
14:00	**2**	15	3	0	0	0	0	0	0	0	0	0	0	20
15:00	1	**32**	**5**	0	0	0	0	0	0	0	0	0	0	**38**
16:00	2	24	1	0	0	0	0	0	0	0	0	0	0	27
17:00	1	28	3	0	0	0	0	0	0	0	0	0	0	32
18:00	0	10	0	0	0	0	0	0	0	0	0	0	0	10
19:00	1	13	0	0	0	0	0	0	0	0	0	0	0	14
20:00	0	9	2	0	0	0	0	0	0	0	0	0	0	11
21:00	0	6	3	0	0	0	0	0	0	0	0	0	0	9
22:00	0	2	1	0	0	0	0	0	0	0	0	0	0	3
23:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Total	12	264	25	0	1	0	0	0	0	0	2	0	0	304
Percent	3.9%	86.8%	8.2%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.7%	0.0%	0.0%	
AM Peak	10:00	10:00	06:00		07:00									10:00
Vol.	2	12	2		1									15
PM Peak	14:00	15:00	15:00								12:00			15:00
Vol.	2	32	5								1			38

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WILSON AVE from WABANAKI DR to GRAND CREST PL
Date Start: 29-Sep-22
Date End: 05-Oct-22

SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
10/02/22	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
06:00	0	3	1	0	0	0	0	0	0	0	0	0	0	4
07:00	**2**	5	**2**	0	**1**	0	0	0	0	0	0	0	0	10
08:00	1	4	0	0	0	**1**	0	0	0	0	0	0	0	6
09:00	0	11	2	0	0	0	0	0	0	0	0	0	0	13
10:00	1	12	0	0	0	0	0	0	0	0	0	0	0	13
11:00	0	**20**	1	0	0	0	0	0	0	0	0	0	0	**21**
12 PM	1	23	3	0	0	0	0	0	**1**	0	**1**	0	0	29
13:00	1	27	**4**	0	0	0	0	0	0	0	0	0	0	32
14:00	1	28	2	0	0	0	0	0	0	0	0	0	0	31
15:00	1	**32**	4	0	0	0	0	**1**	1	0	1	0	0	**40**
16:00	**4**	27	1	0	0	0	0	0	0	0	0	0	0	32
17:00	0	12	0	0	0	0	0	0	0	0	0	0	0	12
18:00	0	13	1	0	0	0	0	0	0	0	0	0	0	14
19:00	0	9	0	0	0	0	0	0	0	0	0	0	0	9
20:00	1	6	0	0	0	0	0	0	0	0	0	0	0	7
21:00	0	3	1	0	0	0	0	0	0	0	0	0	0	4
22:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
23:00	1	2	0	0	0	0	0	0	0	0	0	0	0	3
Total	14	239	22	0	1	1	0	1	2	0	2	0	0	282
Percent	5.0%	84.8%	7.8%	0.0%	0.4%	0.4%	0.0%	0.4%	0.7%	0.0%	0.7%	0.0%	0.0%	
AM Peak	07:00	11:00	07:00		07:00	08:00								11:00
Vol.	2	20	2		1	1								21
PM Peak	16:00	15:00	13:00					15:00	12:00		12:00			15:00
Vol.	4	32	4					1	1		1			40

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WILSON AVE from WABANAKI DR to GRAND CREST PL
Date Start: 29-Sep-22
Date End: 05-Oct-22

SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
10/03/22	0	1	0	0	0	0	0	0	0	0	0	0	0	1
01:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
04:00	1	2	3	0	0	0	0	0	0	0	0	0	0	6
05:00	0	23	9	0	1	0	0	0	0	0	0	0	0	33
06:00	2	**53**	**12**	0	0	0	**1**	**1**	0	0	0	0	0	**69**
07:00	**3**	39	12	0	2	**1**	0	0	**3**	0	0	0	0	60
08:00	0	33	12	0	**5**	0	0	0	1	0	0	0	0	51
09:00	1	14	10	0	0	0	0	0	1	0	0	0	0	26
10:00	2	23	9	0	0	0	0	1	0	0	0	0	0	35
11:00	2	32	5	**1**	1	1	0	0	1	0	**1**	0	0	44
12 PM	0	**36**	13	**1**	0	0	0	0	0	0	0	0	0	**50**
13:00	1	16	5	0	2	**1**	0	0	**1**	0	0	0	0	26
14:00	1	20	17	0	**3**	0	**1**	0	1	0	0	0	0	43
15:00	1	16	**18**	0	3	0	0	0	0	**1**	**1**	0	0	40
16:00	1	14	5	0	1	0	0	0	0	0	0	0	0	21
17:00	**2**	17	3	0	0	0	0	0	0	0	0	0	0	22
18:00	2	18	3	0	0	0	0	0	0	0	0	0	0	23
19:00	0	17	1	0	0	1	0	0	0	0	0	0	0	19
20:00	1	9	1	0	0	0	0	0	0	0	0	0	0	11
21:00	0	10	0	0	0	0	0	**1**	0	0	0	0	0	11
22:00	0	4	0	0	0	0	0	0	0	0	0	0	0	4
23:00	0	4	0	0	0	0	0	0	0	0	0	0	0	4
Total	20	405	138	2	18	4	2	3	8	1	2	0	0	603
Percent	3.3%	67.2%	22.9%	0.3%	3.0%	0.7%	0.3%	0.5%	1.3%	0.2%	0.3%	0.0%	0.0%	
AM Peak	07:00	06:00	06:00	11:00	08:00	07:00	06:00	06:00	07:00		11:00			06:00
Vol.	3	53	12	1	5	1	1	1	3		1			69
PM Peak	17:00	12:00	15:00	12:00	14:00	13:00	14:00	21:00	13:00	15:00	15:00			12:00
Vol.	2	36	18	1	3	1	1	1	1	1	1			50

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WILSON AVE from WABANAKI DR to GRAND CREST PL
Date Start: 29-Sep-22
Date End: 05-Oct-22

SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
10/04/22	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	4	0	0	0	0	0	0	0	0	0	0	0	4
03:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
04:00	0	5	2	0	0	0	0	0	0	0	0	0	0	7
05:00	1	41	11	0	0	1	0	0	0	0	0	0	0	54
06:00	**3**	**51**	14	0	**2**	0	0	0	0	0	**1**	0	0	**71**
07:00	3	34	**18**	0	2	**2**	0	0	**2**	0	0	0	0	61
08:00	0	29	10	0	1	0	0	**2**	0	0	1	0	0	43
09:00	0	21	7	0	2	1	0	0	1	0	0	0	0	32
10:00	2	17	9	0	2	1	0	0	1	**1**	0	0	0	33
11:00	3	29	11	**1**	1	0	0	1	0	0	0	0	0	46
12 PM	3	**35**	19	**1**	0	0	0	0	**1**	0	0	0	0	**59**
13:00	2	31	16	0	3	**1**	0	**1**	0	0	0	0	0	54
14:00	1	30	8	0	**7**	0	0	0	0	0	0	0	0	46
15:00	**4**	17	**22**	0	6	0	**1**	0	0	0	0	0	0	50
16:00	0	18	7	0	0	0	0	0	0	0	**1**	0	0	26
17:00	1	27	3	0	2	1	0	0	0	0	0	0	0	34
18:00	1	17	3	0	0	0	0	0	0	0	0	0	0	21
19:00	0	9	2	0	0	0	0	0	0	0	0	0	0	11
20:00	0	15	1	0	0	0	0	0	0	0	0	0	0	16
21:00	0	2	1	0	0	0	0	0	0	0	0	0	0	3
22:00	0	4	0	0	0	0	0	0	0	0	0	0	0	4
23:00	0	5	0	0	0	0	0	0	0	0	0	0	0	5
Total	24	443	164	2	28	7	1	4	5	1	3	0	0	682
Percent	3.5%	65.0%	24.0%	0.3%	4.1%	1.0%	0.1%	0.6%	0.7%	0.1%	0.4%	0.0%	0.0%	
AM Peak	06:00	06:00	07:00	11:00	06:00	07:00		08:00	07:00	10:00	06:00			06:00
Vol.	3	51	18	1	2	2		2	2	1	1			71
PM Peak	15:00	12:00	15:00	12:00	14:00	13:00	15:00	13:00	12:00		16:00			12:00
Vol.	4	35	22	1	7	1	1	1	1		1			59

Ontario Traffic, Inc.
17705 Leslie St., Unit 6
Newmarket, Ontario L3Y 3E3
Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 21911
Station ID: U186
WILSON AVE from WABANAKI DR to GRAND CREST PL
Date Start: 29-Sep-22
Date End: 05-Oct-22

SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
10/05/22	0	3	0	0	0	0	0	0	0	0	0	0	0	3
01:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
02:00	0	2	2	0	0	0	0	0	0	0	0	0	0	4
03:00	0	1	1	0	0	0	0	0	0	0	0	0	0	2
04:00	0	3	3	0	0	0	0	0	0	0	0	0	0	6
05:00	0	41	9	0	0	**1**	0	0	0	0	**1**	0	0	52
06:00	2	**56**	13	0	2	0	0	1	0	0	0	0	0	**74**
07:00	1	39	**22**	0	**3**	0	0	**3**	**2**	0	0	0	0	70
08:00	1	30	14	0	1	0	0	0	1	0	0	0	0	47
09:00	0	24	7	0	2	0	0	1	1	0	1	0	0	36
10:00	1	20	10	0	0	1	0	0	1	0	0	0	0	33
11:00	**4**	33	11	**1**	0	0	0	1	1	0	0	0	0	51
12 PM	2	**40**	5	0	0	**1**	0	1	0	0	0	0	0	49
13:00	0	32	9	0	**2**	1	0	0	0	0	0	0	0	44
14:00	6	38	13	0	1	0	0	1	0	0	0	0	0	**59**
15:00	0	28	**19**	0	0	0	0	**2**	0	0	0	0	0	49
16:00	3	9	4	0	2	0	0	0	0	0	0	0	0	18
17:00	**7**	23	2	0	0	0	0	0	0	0	0	0	0	32
18:00	0	25	4	0	0	0	0	2	0	0	0	0	0	31
19:00	0	12	3	0	0	0	0	0	0	0	0	0	0	15
20:00	0	14	5	0	0	0	0	0	0	0	0	0	0	19
21:00	1	5	0	0	0	0	0	0	0	0	0	0	0	6
22:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
23:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
Total	28	484	156	1	13	4	0	12	6	0	2	0	0	706
Percent	4.0%	68.6%	22.1%	0.1%	1.8%	0.6%	0.0%	1.7%	0.8%	0.0%	0.3%	0.0%	0.0%	
AM Peak	11:00	06:00	07:00	11:00	07:00	05:00		07:00	07:00		05:00			06:00
Vol.	4	56	22	1	3	1		3	2		1			74
PM Peak	17:00	12:00	15:00		13:00	12:00		15:00						14:00
Vol.	7	40	19		2	1		2						59
Grand Total	148	2584	706	7	73	23	3	28	31	2	18	0	0	3623
Percent	4.1%	71.3%	19.5%	0.2%	2.0%	0.6%	0.1%	0.8%	0.9%	0.1%	0.5%	0.0%	0.0%	

Ontario Traffic, Inc.
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Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 21911
Station ID: U186
WILSON AVE from WABANAKI DR to GRAND CREST PL
Date Start: 29-Sep-22
Date End: 05-Oct-22

NB, SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
09/29/22	0	2	0	0	0	0	0	0	0	0	0	0	0	2
01:00	0	4	0	0	0	0	0	0	0	0	0	0	0	4
02:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
03:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
04:00	0	4	4	0	0	0	0	0	0	0	0	0	0	8
05:00	1	36	8	0	0	0	0	0	0	0	0	0	0	45
06:00	**3**	62	18	0	0	1	0	0	0	0	0	0	0	84
07:00	0	45	14	0	0	0	0	1	**1**	0	0	0	0	61
08:00	0	39	7	0	1	0	0	**2**	1	0	1	0	0	51
09:00	1	32	21	0	**2**	**3**	0	0	0	0	0	0	0	59
10:00	0	30	8	**1**	0	0	0	1	1	0	0	0	0	41
11:00	1	**65**	**22**	0	2	2	0	1	1	0	**2**	0	0	**96**
12 PM	2	48	16	0	**4**	**3**	0	0	**4**	0	**2**	0	0	79
13:00	1	34	14	0	1	0	0	0	0	**1**	1	0	0	52
14:00	5	**68**	**24**	0	0	0	0	2	0	0	2	0	0	**101**
15:00	**7**	52	11	**1**	2	0	0	0	0	0	1	0	0	74
16:00	2	52	13	0	0	0	0	0	0	0	0	0	0	67
17:00	1	29	4	0	0	0	0	0	0	0	0	0	0	34
18:00	4	27	4	0	0	0	0	1	0	0	0	0	0	36
19:00	1	41	3	0	0	0	0	0	0	0	2	0	0	47
20:00	1	19	3	0	0	0	0	0	0	0	0	0	0	23
21:00	0	19	0	0	0	0	0	0	0	0	0	0	0	19
22:00	0	18	5	0	0	0	0	2	0	0	0	0	0	25
23:00	0	11	0	0	0	0	0	**4**	0	0	0	0	0	15
Total	30	740	199	2	12	9	0	14	8	1	11	0	0	1026
Percent	2.9%	72.1%	19.4%	0.2%	1.2%	0.9%	0.0%	1.4%	0.8%	0.1%	1.1%	0.0%	0.0%	
AM Peak	06:00	11:00	11:00	10:00	09:00	09:00		08:00	07:00		11:00			11:00
Vol.	3	65	22	1	2	3		2	1		2			96
PM Peak	15:00	14:00	14:00	15:00	12:00	12:00		23:00	12:00	13:00	12:00			14:00
Vol.	7	68	24	1	4	3		4	4	1	2			101

Ontario Traffic, Inc.
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Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 21911
Station ID: U186
WILSON AVE from WABANAKI DR to GRAND CREST PL
Date Start: 29-Sep-22
Date End: 05-Oct-22

NB, SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
09/30/22	0	5	1	0	0	0	0	0	0	0	0	0	0	6
01:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
02:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
03:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
04:00	0	0	0	0	0	**2**	0	0	0	0	0	0	0	2
05:00	1	25	2	0	**2**	0	0	0	0	0	0	0	0	30
06:00	2	54	9	0	0	0	0	0	1	0	0	0	0	66
07:00	3	34	14	0	1	1	0	0	0	0	**1**	0	0	54
08:00	1	27	10	0	1	0	0	0	0	0	0	0	0	39
09:00	2	15	5	0	1	0	0	0	0	0	0	0	0	23
10:00	2	27	9	0	0	0	0	0	0	0	0	0	0	38
11:00	**7**	**65**	**23**	**2**	2	0	0	0	**3**	0	0	0	0	**102**
12 PM	2	46	**18**	0	0	0	0	0	**2**	0	0	0	0	**68**
13:00	1	45	10	0	0	0	0	0	0	0	**2**	0	0	58
14:00	2	46	11	0	0	0	0	0	0	0	1	0	0	60
15:00	3	**49**	11	0	**4**	0	0	0	0	0	0	0	0	67
16:00	**5**	41	11	0	0	0	0	**1**	0	0	1	0	0	59
17:00	2	34	4	0	0	0	0	1	0	0	0	0	0	41
18:00	1	31	6	0	0	0	0	0	0	0	0	0	0	38
19:00	0	22	0	0	0	0	0	0	0	0	0	0	0	22
20:00	1	22	1	0	0	0	0	0	0	0	0	0	0	24
21:00	0	22	4	0	0	0	0	0	0	**1**	0	0	0	27
22:00	0	23	4	0	0	**1**	0	0	0	0	0	0	0	28
23:00	0	15	5	0	0	1	0	0	0	0	0	0	0	21
Total	35	655	158	2	11	5	0	2	6	1	5	0	0	880
Percent	4.0%	74.4%	18.0%	0.2%	1.3%	0.6%	0.0%	0.2%	0.7%	0.1%	0.6%	0.0%	0.0%	
AM Peak	11:00	11:00	11:00	11:00	05:00	04:00			11:00		07:00			11:00
Vol.	7	65	23	2	2	2			3		1			102
PM Peak	16:00	15:00	12:00		15:00	22:00		16:00	12:00	21:00	13:00			12:00
Vol.	5	49	18		4	1		1	2	1	2			68

Ontario Traffic, Inc.
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Newmarket, Ontario L3Y 3E3
Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 21911
Station ID: U186
WILSON AVE from WABANAKI DR to GRAND CREST PL
Date Start: 29-Sep-22
Date End: 05-Oct-22

NB, SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
10/01/22	0	2	1	0	0	0	0	0	0	0	0	0	0	3
01:00	0	9	2	0	0	0	0	0	0	0	0	0	0	11
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
04:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
05:00	0	8	0	0	0	0	0	0	0	0	0	0	0	8
06:00	0	6	2	0	0	0	0	0	0	0	0	0	0	8
07:00	1	11	1	0	**1**	0	0	0	0	0	0	0	0	14
08:00	0	9	2	0	0	0	0	0	0	0	0	0	0	11
09:00	0	22	1	0	0	0	0	**1**	0	0	0	0	0	24
10:00	**2**	21	2	0	0	0	0	0	0	0	0	0	0	25
11:00	0	**26**	**5**	0	0	0	0	0	0	0	0	0	0	**31**
12 PM	1	38	1	0	0	0	0	0	0	0	**1**	0	0	41
13:00	2	58	0	0	0	0	0	0	0	0	1	0	0	61
14:00	**4**	29	4	0	0	0	0	0	0	0	1	0	0	38
15:00	1	**64**	**10**	0	0	0	0	0	0	0	0	0	0	**75**
16:00	4	53	2	0	0	**1**	0	0	0	0	0	0	0	60
17:00	1	56	5	0	0	0	0	**2**	0	0	0	0	0	64
18:00	0	24	0	0	0	0	0	0	0	0	0	0	0	24
19:00	1	27	0	0	0	0	0	0	0	0	1	0	0	29
20:00	0	16	4	0	0	0	0	0	0	0	0	0	0	20
21:00	0	17	4	0	0	0	0	0	0	0	0	0	0	21
22:00	0	5	1	0	0	0	0	0	0	0	0	0	0	6
23:00	0	1	1	0	0	0	0	0	0	0	0	0	0	2
Total	17	505	48	0	1	1	0	3	0	0	4	0	0	579
Percent	2.9%	87.2%	8.3%	0.0%	0.2%	0.2%	0.0%	0.5%	0.0%	0.0%	0.7%	0.0%	0.0%	
AM Peak	10:00	11:00	11:00		07:00			09:00						11:00
Vol.	2	26	5		1			1						31
PM Peak	14:00	15:00	15:00			16:00		17:00			12:00			15:00
Vol.	4	64	10			1		2			1			75

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Site Code: 21911
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WILSON AVE from WABANAKI DR to GRAND CREST PL
Date Start: 29-Sep-22
Date End: 05-Oct-22

NB, SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
10/02/22	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
06:00	0	4	1	0	0	0	0	0	0	0	0	0	0	5
07:00	**2**	11	**4**	0	**1**	0	0	0	0	0	0	0	0	18
08:00	1	9	2	0	0	**1**	0	0	0	0	0	**1**	0	14
09:00	0	18	3	0	0	0	0	0	0	0	0	0	0	21
10:00	1	25	1	0	0	0	0	0	0	0	0	0	0	27
11:00	0	**33**	2	0	0	0	0	0	0	0	0	0	0	**35**
12 PM	2	41	4	0	0	0	0	0	**1**	0	1	0	0	49
13:00	2	44	**10**	0	**1**	0	0	0	0	0	0	0	0	57
14:00	1	49	4	0	0	0	0	0	0	0	1	0	0	55
15:00	1	**68**	6	0	0	0	0	**1**	1	0	**2**	0	0	**79**
16:00	**5**	56	2	0	0	0	0	0	1	0	0	0	0	64
17:00	0	41	4	0	0	0	0	1	0	0	0	0	0	46
18:00	0	30	2	0	0	0	0	0	0	0	1	0	0	33
19:00	0	16	0	0	0	0	0	0	0	0	0	0	0	16
20:00	1	12	0	0	0	0	0	0	0	0	0	0	0	13
21:00	0	7	2	0	0	0	0	0	0	0	0	0	0	9
22:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
23:00	1	3	0	0	0	0	0	0	0	0	0	0	0	4
Total	17	471	47	0	2	1	0	2	3	0	5	1	0	549
Percent	3.1%	85.8%	8.6%	0.0%	0.4%	0.2%	0.0%	0.4%	0.5%	0.0%	0.9%	0.2%	0.0%	
AM Peak	07:00	11:00	07:00		07:00	08:00						08:00		11:00
Vol.	2	33	4		1	1						1		35
PM Peak	16:00	15:00	13:00		13:00			15:00	12:00		15:00			15:00
Vol.	5	68	10		1			1	1		2			79

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WILSON AVE from WABANAKI DR to GRAND CREST PL
Date Start: 29-Sep-22
Date End: 05-Oct-22

NB, SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
10/03/22	0	1	0	0	0	0	0	0	0	0	0	0	0	1
01:00	0	6	0	0	0	0	0	0	0	0	0	0	0	6
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
04:00	1	2	3	0	0	0	0	0	0	0	0	0	0	6
05:00	0	24	9	0	2	0	0	0	0	0	0	0	0	35
06:00	2	56	14	0	0	0	**1**	**1**	0	0	0	0	0	74
07:00	**4**	47	17	0	2	1	0	0	**4**	0	1	0	0	76
08:00	1	46	**20**	0	**6**	0	0	0	1	0	0	0	0	74
09:00	2	20	18	0	0	0	0	0	3	0	1	0	0	44
10:00	2	39	20	0	0	0	0	1	0	0	0	0	0	62
11:00	2	**67**	10	**1**	2	**2**	0	0	2	0	**2**	0	0	**88**
12 PM	0	53	23	**1**	0	0	0	0	0	**1**	0	0	0	78
13:00	1	44	12	0	4	1	0	0	**3**	0	1	0	0	66
14:00	**3**	**58**	**28**	0	**5**	0	**1**	**1**	1	0	**2**	0	0	**99**
15:00	1	44	25	0	4	0	0	0	1	1	1	0	0	77
16:00	2	46	11	0	1	0	0	0	0	0	0	0	0	60
17:00	2	43	5	0	0	0	0	0	0	0	0	0	0	50
18:00	2	41	6	0	0	0	0	0	0	0	0	0	0	49
19:00	0	32	2	0	0	**2**	0	0	0	0	0	0	0	36
20:00	1	19	2	0	0	0	0	0	0	0	0	0	0	22
21:00	1	19	1	0	0	0	0	1	0	0	0	0	0	22
22:00	0	15	3	0	0	0	0	0	0	0	0	0	0	18
23:00	0	9	1	0	0	0	0	0	0	0	0	0	0	10
Total	27	734	230	2	26	6	2	4	15	2	8	0	0	1056
Percent	2.6%	69.5%	21.8%	0.2%	2.5%	0.6%	0.2%	0.4%	1.4%	0.2%	0.8%	0.0%	0.0%	
AM Peak	07:00	11:00	08:00	11:00	08:00	11:00	06:00	06:00	07:00		11:00			11:00
Vol.	4	67	20	1	6	2	1	1	4		2			88
PM Peak	14:00	14:00	14:00	12:00	14:00	19:00	14:00	14:00	13:00	12:00	14:00			14:00
Vol.	3	58	28	1	5	2	1	1	3	1	2			99

Ontario Traffic, Inc.
17705 Leslie St., Unit 6
Newmarket, Ontario L3Y 3E3
Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 21911
Station ID: U186
WILSON AVE from WABANAKI DR to GRAND CREST PL
Date Start: 29-Sep-22
Date End: 05-Oct-22

NB, SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
10/04/22	0	1	0	0	0	0	0	0	0	0	0	0	0	1
01:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
02:00	0	6	0	0	0	0	0	0	0	0	0	0	0	6
03:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
04:00	0	5	2	0	0	0	0	0	0	0	0	0	0	7
05:00	1	43	11	0	0	1	0	0	0	0	0	0	0	56
06:00	3	**63**	16	0	2	1	0	0	0	0	**1**	0	0	86
07:00	3	40	**21**	0	3	**3**	0	0	**3**	0	0	0	0	73
08:00	1	40	13	0	2	0	0	**3**	0	0	1	0	0	60
09:00	0	32	14	0	2	1	0	0	2	0	0	0	0	51
10:00	3	28	15	0	**4**	1	0	0	1	**1**	1	0	**1**	55
11:00	**4**	61	20	**1**	2	0	0	1	0	0	0	0	0	**89**
12 PM	4	54	29	**2**	1	0	**1**	**1**	**2**	0	0	0	0	94
13:00	2	53	23	0	3	**2**	0	1	0	0	0	0	0	84
14:00	2	**78**	22	0	**9**	0	0	0	1	0	**2**	0	0	**114**
15:00	**7**	54	**31**	0	6	0	1	0	0	0	1	0	0	100
16:00	1	57	18	0	0	0	0	0	0	0	1	0	0	77
17:00	2	43	6	0	2	2	0	0	0	0	1	0	0	56
18:00	1	47	5	0	0	0	0	0	0	0	0	0	0	53
19:00	0	26	4	0	0	0	0	0	0	0	0	0	0	30
20:00	1	30	2	0	0	0	0	0	0	0	0	0	0	33
21:00	0	7	1	0	0	0	0	0	0	0	0	0	0	8
22:00	1	12	3	0	0	0	0	0	0	0	0	0	0	16
23:00	0	11	1	0	0	0	0	0	0	0	0	0	0	12
Total	36	795	257	3	36	11	2	6	9	1	8	0	1	1165
Percent	3.1%	68.2%	22.1%	0.3%	3.1%	0.9%	0.2%	0.5%	0.8%	0.1%	0.7%	0.0%	0.1%	
AM Peak	11:00	06:00	07:00	11:00	10:00	07:00		08:00	07:00	10:00	06:00		10:00	11:00
Vol.	4	63	21	1	4	3		3	3	1	1		1	89
PM Peak	15:00	14:00	15:00	12:00	14:00	13:00	12:00	12:00	12:00		14:00			14:00
Vol.	7	78	31	2	9	2	1	1	2		2			114

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Site Code: 21911
Station ID: U186
WILSON AVE from WABANAKI DR to GRAND CREST PL
Date Start: 29-Sep-22
Date End: 05-Oct-22

NB, SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
10/05/22	0	9	0	0	0	0	0	0	0	0	0	0	0	9
01:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
02:00	0	3	2	0	0	0	0	0	0	0	0	0	0	5
03:00	0	3	1	0	0	0	0	0	0	0	0	0	0	4
04:00	0	3	3	0	0	0	0	0	0	0	0	0	0	6
05:00	0	44	10	0	0	**1**	0	0	0	0	**1**	0	0	56
06:00	2	67	15	0	3	1	0	1	0	0	0	0	0	89
07:00	1	43	**27**	0	3	0	0	**4**	2	0	0	0	0	80
08:00	1	42	23	0	1	1	0	0	1	0	1	0	0	70
09:00	1	37	13	0	**4**	0	0	1	**3**	0	1	0	0	60
10:00	1	34	18	0	0	1	0	0	2	0	0	0	0	56
11:00	**4**	**77**	17	**2**	0	1	**1**	1	1	0	0	0	0	**104**
12 PM	4	74	12	0	1	**2**	0	1	0	0	0	0	**1**	95
13:00	0	65	13	0	**2**	1	0	0	0	0	0	0	0	81
14:00	**8**	**89**	**29**	0	1	1	0	1	0	0	0	0	0	**129**
15:00	6	73	23	0	1	0	0	**2**	0	0	**2**	0	0	107
16:00	5	46	13	0	2	0	0	0	0	0	1	0	0	67
17:00	8	38	5	0	0	0	0	0	0	0	0	0	0	51
18:00	1	58	8	0	0	0	0	2	0	0	1	0	0	70
19:00	0	28	6	0	0	0	0	0	0	0	0	0	0	34
20:00	2	34	9	0	0	0	0	0	0	0	0	0	0	45
21:00	1	9	0	0	0	0	0	0	0	0	0	0	0	10
22:00	0	12	3	0	0	0	0	0	0	0	0	0	0	15
23:00	0	5	1	0	0	0	0	0	0	0	0	0	0	6
Total	45	894	251	2	18	9	1	13	9	0	7	0	1	1250
Percent	3.6%	71.5%	20.1%	0.2%	1.4%	0.7%	0.1%	1.0%	0.7%	0.0%	0.6%	0.0%	0.1%	
AM Peak	11:00	11:00	07:00	11:00	09:00	05:00	11:00	07:00	09:00		05:00			11:00
Vol.	4	77	27	2	4	1	1	4	3		1			104
PM Peak	14:00	14:00	14:00		13:00	12:00		15:00			15:00		12:00	14:00
Vol.	8	89	29		2	2		2			2		1	129
Grand Total	207	4794	1190	11	106	42	5	44	50	5	48	1	2	6505
Percent	3.2%	73.7%	18.3%	0.2%	1.6%	0.6%	0.1%	0.7%	0.8%	0.1%	0.7%	0.0%	0.0%	

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Site Code: 21911
Station ID: U186
WILSON AVE from WABANAKI DR to GRAND CREST PL
Date Start: 29-Sep-22
Date End: 05-Oct-22

NB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Aver
09/29 /22	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
01:00	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
04:00	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
05:00	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0
06:00	0	0	0	0	1	0	3	2	2	5	0	0	0	0	0	0	0	0	0	0	0	0	0	13	1
07:00	0	0	0	1	0	0	4	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0
08:00	1	0	0	0	0	0	3	4	1	4	0	0	0	0	0	0	0	0	0	0	0	0	0	13	1
09:00	0	2	0	0	0	3	7	7	9	1	0	0	0	0	0	0	0	0	0	0	0	0	0	29	1
10:00	0	0	0	0	1	1	1	6	9	2	0	0	0	0	0	0	0	0	0	0	0	0	0	20	1
11:00	0	0	0	0	1	4	8	16	15	9	2	0	0	0	0	0	0	0	0	0	0	0	0	55	2
12 PM	0	0	0	1	0	1	6	6	7	8	1	0	0	0	0	0	0	0	0	0	0	0	0	30	1
13:00	0	0	0	0	1	1	1	6	4	3	1	0	0	0	0	0	0	0	0	0	0	0	0	17	1
14:00	0	0	2	1	0	4	15	14	16	11	2	1	0	0	0	0	0	0	0	0	0	0	0	66	3
15:00	0	0	0	0	2	2	10	15	11	4	1	0	0	0	0	0	0	0	0	0	0	0	0	45	2
16:00	0	1	0	0	0	1	9	13	17	1	2	2	0	0	0	0	0	0	0	0	0	0	0	46	2
17:00	0	0	0	0	1	0	1	3	6	3	2	0	0	0	0	0	0	0	0	0	0	0	0	16	1
18:00	0	0	0	0	0	0	5	2	6	2	2	0	0	0	0	0	0	0	0	0	0	0	0	17	1
19:00	0	0	0	1	2	0	3	7	6	4	3	0	0	0	0	0	0	0	0	0	0	0	0	26	1
20:00	0	0	0	1	0	0	1	2	3	2	2	0	0	0	0	0	0	0	0	0	0	0	0	11	0
21:00	0	0	0	0	1	1	1	2	4	0	0	0	1	0	0	0	0	0	0	0	0	0	0	10	0
22:00	0	0	1	1	0	3	5	4	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	18	1
23:00	0	0	2	0	1	0	0	1	0	3	0	0	1	0	0	0	0	0	0	0	0	0	0	8	0
Percent	0.2%	0.7%	1.3%	1.5%	2.6%	4.8%	18.3 %	24.3 %	26.5 %	14.8 %	3.9%	0.7%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
AM Peak	08:00	09:00	05:00	05:00	05:00	11:00	11:00	11:00	11:00	11:00	11:00													11:00	
Vol.	1	2	1	1	1	4	8	16	15	9	2													55	
PM Peak		16:00	14:00	12:00	15:00	14:00	14:00	15:00	16:00	14:00	19:00	16:00	21:00											14:00	
Vol.		1	2	1	2	4	15	15	17	11	3	2	1											66	

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Site Code: 21911
Station ID: U186
WILSON AVE from WABANAKI DR to GRAND CREST PL
Date Start: 29-Sep-22
Date End: 05-Oct-22

NB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Aver
09/30 /22	0	0	0	0	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0
01:00	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
02:00	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
03:00	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
04:00	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
05:00	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
06:00	0	0	0	0	0	0	1	2	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0
07:00	0	0	0	0	0	3	1	2	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0
08:00	0	0	0	0	0	0	1	5	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0
09:00	0	0	0	0	0	1	0	1	3	2	3	0	0	0	0	0	0	0	0	0	0	0	0	10	0
10:00	0	0	0	1	0	1	3	3	6	2	0	0	0	0	0	0	0	0	0	0	0	0	0	16	1
11:00	0	0	1	1	1	1	8	15	15	10	3	0	0	0	1	0	0	0	0	0	0	0	0	56	2
12 PM	0	0	0	0	0	2	5	12	4	2	2	0	0	0	0	0	0	0	0	0	0	0	0	27	1
13:00	0	0	0	0	0	0	6	9	3	5	4	0	0	0	0	0	0	0	0	0	0	0	0	27	1
14:00	0	0	0	0	0	1	5	8	14	6	2	2	1	0	0	0	0	0	0	0	0	0	0	39	2
15:00	0	0	0	0	0	0	9	10	11	11	0	0	1	0	0	0	0	0	0	0	0	0	0	42	2
16:00	0	0	0	0	0	0	7	14	9	6	1	0	0	0	0	0	0	0	0	0	0	0	0	37	2
17:00	0	0	0	0	0	0	0	6	13	5	1	0	0	0	0	0	0	0	0	0	0	0	0	25	1
18:00	0	0	0	0	1	0	5	2	4	6	0	0	0	0	0	0	0	0	0	0	0	0	0	18	1
19:00	0	0	0	0	0	0	6	6	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	13	1
20:00	0	0	0	0	0	0	0	2	4	2	1	0	0	0	0	0	0	0	0	0	0	0	0	9	0
21:00	0	0	0	0	0	0	2	4	1	3	0	1	0	1	0	0	0	0	0	0	0	0	0	12	1
22:00	0	0	0	0	1	5	0	4	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	16	1
23:00	0	0	0	0	0	1	1	3	4	2	2	0	0	0	0	0	0	0	0	0	0	0	0	13	1
Percent	0.0%	0.0%	0.3%	0.5%	0.8%	4.3%	16.0 %	27.3 %	27.8 %	16.8 %	4.8%	0.8%	0.5%	0.3%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
AM Peak			11:00	10:00	11:00	07:00	11:00	11:00	11:00	11:00	09:00				11:00									11:00	
Vol.			1	1	1	3	8	15	15	10	3				1									56	
PM Peak					18:00	22:00	15:00	16:00	14:00	15:00	13:00	14:00	14:00	21:00										15:00	
Vol.					1	5	9	14	14	11	4	2	1	1										42	

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WILSON AVE from WABANAKI DR to GRAND CREST PL
Date Start: 29-Sep-22
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NB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Aver
10/01 /22	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0
01:00	0	0	0	1	0	1	0	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	6	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
06:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:00	0	0	0	0	0	1	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	4	0
08:00	0	0	0	0	0	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0
09:00	0	0	0	0	1	0	4	3	2	2	0	0	0	1	0	0	0	0	0	0	0	0	0	13	1
10:00	0	0	0	0	1	0	0	1	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0
11:00	0	0	0	1	0	3	4	3	5	2	0	0	0	0	0	0	0	0	0	0	0	0	0	18	1
12 PM	0	0	0	0	0	0	1	4	5	1	1	0	0	0	0	0	0	0	0	0	0	0	0	12	1
13:00	0	0	0	0	0	0	4	11	11	5	0	0	0	0	0	0	0	0	0	0	0	0	0	31	1
14:00	0	0	0	1	1	0	2	7	3	3	1	0	0	0	0	0	0	0	0	0	0	0	0	18	1
15:00	0	0	0	0	0	1	7	11	8	7	3	0	0	0	0	0	0	0	0	0	0	0	0	37	2
16:00	0	0	1	3	0	2	3	12	6	5	1	0	0	0	0	0	0	0	0	0	0	0	0	33	1
17:00	0	0	0	0	0	1	8	10	7	5	1	0	0	0	0	0	0	0	0	0	0	0	0	32	1
18:00	0	0	0	0	0	2	0	4	4	1	3	0	0	0	0	0	0	0	0	0	0	0	0	14	1
19:00	0	0	1	0	0	2	4	5	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	15	1
20:00	0	0	0	0	0	0	0	4	2	2	0	1	0	0	0	0	0	0	0	0	0	0	0	9	0
21:00	0	0	0	0	0	0	2	5	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	12	1
22:00	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0
23:00	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Percent	0.0%	0.0%	0.7%	2.2%	1.1%	4.7%	14.5 %	30.5 %	25.5 %	14.5 %	5.1%	0.7%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
AM Peak				01:00	09:00	11:00	09:00	09:00	11:00	10:00	01:00	03:00		09:00										11:00	
Vol.				1	1	3	4	3	5	4	2	1		1										18	
PM Peak			16:00	16:00	14:00	16:00	17:00	16:00	13:00	15:00	15:00	20:00												15:00	
Vol.			1	3	1	2	8	12	11	7	3	1												37	

Ontario Traffic, Inc.
17705 Leslie St., Unit 6
Newmarket, Ontario L3Y 3E3
Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 21911
Station ID: U186
WILSON AVE from WABANAKI DR to GRAND CREST PL
Date Start: 29-Sep-22
Date End: 05-Oct-22

NB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Aver
10/02 /22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
06:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0
07:00	0	0	0	0	0	0	0	3	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0
08:00	0	0	1	0	0	1	1	2	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	8	0
09:00	0	0	0	1	0	0	1	1	2	0	3	0	0	0	0	0	0	0	0	0	0	0	0	8	0
10:00	0	0	0	0	0	0	2	2	4	4	2	0	0	0	0	0	0	0	0	0	0	0	0	14	1
11:00	0	0	0	0	0	1	1	4	4	2	2	0	0	0	0	0	0	0	0	0	0	0	0	14	1
12 PM	0	0	0	0	1	1	2	4	7	3	1	1	0	0	0	0	0	0	0	0	0	0	0	20	1
13:00	0	0	0	0	1	0	2	8	7	5	2	0	0	0	0	0	0	0	0	0	0	0	0	25	1
14:00	0	0	0	0	1	0	3	5	7	5	2	0	1	0	0	0	0	0	0	0	0	0	0	24	1
15:00	0	0	0	0	1	0	3	13	13	6	3	0	0	0	0	0	0	0	0	0	0	0	0	39	2
16:00	0	0	0	1	0	1	2	8	9	9	2	0	0	0	0	0	0	0	0	0	0	0	0	32	1
17:00	0	0	0	0	0	3	3	9	12	4	2	1	0	0	0	0	0	0	0	0	0	0	0	34	1
18:00	0	0	0	0	0	0	4	4	9	2	0	0	0	0	0	0	0	0	0	0	0	0	0	19	1
19:00	0	0	0	0	0	0	0	5	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0
20:00	0	0	0	0	0	1	1	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0
21:00	0	0	0	0	0	0	0	1	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0
22:00	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
23:00	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Percent	0.0%	0.0%	0.4%	0.7%	1.5%	3.0%	9.7%	26.2 %	30.7 %	18.4 %	7.5%	1.5%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
AM Peak			08:00	09:00		08:00	10:00	11:00	07:00	10:00	09:00	06:00												10:00	
Vol.			1	1		1	2	4	4	4	3	1												14	
PM Peak				16:00	12:00	17:00	18:00	15:00	15:00	16:00	15:00	12:00	14:00											15:00	
Vol.				1	1	3	4	13	13	9	3	1	1											39	

Ontario Traffic, Inc.
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Site Code: 21911
Station ID: U186
WILSON AVE from WABANAKI DR to GRAND CREST PL
Date Start: 29-Sep-22
Date End: 05-Oct-22

NB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Aver
10/03 /22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
06:00	0	0	0	0	0	0	0	3	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0
07:00	0	1	0	0	3	0	4	2	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	16	1
08:00	0	0	0	1	0	1	2	11	5	3	0	0	0	0	0	0	0	0	0	0	0	0	0	23	1
09:00	0	0	1	1	0	0	5	6	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	18	1
10:00	0	0	0	0	0	0	1	7	11	6	2	0	0	0	0	0	0	0	0	0	0	0	0	27	1
11:00	0	0	0	0	0	2	7	11	15	6	3	0	0	0	0	0	0	0	0	0	0	0	0	44	2
12 PM	0	0	0	2	0	1	4	5	11	3	0	0	2	0	0	0	0	0	0	0	0	0	0	28	1
13:00	0	2	0	0	0	2	8	11	5	8	4	0	0	0	0	0	0	0	0	0	0	0	0	40	2
14:00	0	0	1	2	0	7	8	19	15	3	1	0	0	0	0	0	0	0	0	0	0	0	0	56	2
15:00	0	0	0	0	0	0	6	14	7	7	3	0	0	0	0	0	0	0	0	0	0	0	0	37	2
16:00	0	0	0	0	1	3	8	10	10	6	0	0	1	0	0	0	0	0	0	0	0	0	0	39	2
17:00	0	0	0	0	0	0	4	8	7	4	5	0	0	0	0	0	0	0	0	0	0	0	0	28	1
18:00	0	0	0	0	0	0	1	9	8	6	2	0	0	0	0	0	0	0	0	0	0	0	0	26	1
19:00	0	0	0	1	0	1	2	4	7	1	1	0	0	0	0	0	0	0	0	0	0	0	0	17	1
20:00	0	0	0	0	1	0	1	3	4	1	1	0	0	0	0	0	0	0	0	0	0	0	0	11	0
21:00	0	0	0	0	0	0	1	2	4	3	1	0	0	0	0	0	0	0	0	0	0	0	0	11	0
22:00	0	0	0	0	0	4	2	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	1
23:00	0	0	0	0	0	0	0	2	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0
Percent	0.0%	0.7%	0.4%	1.5%	1.1%	4.6%	14.3 %	29.8 %	27.4 %	14.3 %	5.1%	0.0%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
AM Peak		07:00	09:00	08:00	07:00	11:00	11:00	08:00	11:00	10:00	11:00													11:00	
Vol.		1	1	1	3	2	7	11	15	6	3													44	
PM Peak		13:00	14:00	12:00	16:00	14:00	13:00	14:00	14:00	13:00	17:00		12:00											14:00	
Vol.		2	1	2	1	7	8	19	15	8	5		2											56	

Ontario Traffic, Inc.
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Newmarket, Ontario L3Y 3E3
Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 21911
Station ID: U186
WILSON AVE from WABANAKI DR to GRAND CREST PL
Date Start: 29-Sep-22
Date End: 05-Oct-22

NB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Aver
10/04 /22	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
01:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
02:00	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2	0
03:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
06:00	0	0	0	0	1	1	2	4	5	2	0	0	0	0	0	0	0	0	0	0	0	0	0	15	1
07:00	0	0	0	0	1	1	4	3	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	12	1
08:00	0	0	0	0	0	0	3	7	4	2	0	0	1	0	0	0	0	0	0	0	0	0	0	17	1
09:00	0	0	0	0	1	1	3	5	4	5	0	0	0	0	0	0	0	0	0	0	0	0	0	19	1
10:00	0	0	2	0	0	2	3	5	7	2	1	0	0	0	0	0	0	0	0	0	0	0	0	22	1
11:00	0	0	0	0	0	2	4	7	18	9	2	1	0	0	0	0	0	0	0	0	0	0	0	43	2
12 PM	0	0	1	0	1	1	3	18	8	3	0	0	0	0	0	0	0	0	0	0	0	0	0	35	2
13:00	0	1	0	1	0	2	6	7	5	4	2	2	0	0	0	0	0	0	0	0	0	0	0	30	1
14:00	0	0	0	1	3	4	11	16	21	10	2	0	0	0	0	0	0	0	0	0	0	0	0	68	3
15:00	1	2	1	0	1	2	6	13	8	7	7	2	0	0	0	0	0	0	0	0	0	0	0	50	2
16:00	0	0	0	0	0	3	8	13	16	7	1	3	0	0	0	0	0	0	0	0	0	0	0	51	2
17:00	0	0	1	0	0	1	3	8	5	4	0	0	0	0	0	0	0	0	0	0	0	0	0	22	1
18:00	0	0	0	0	2	3	7	5	10	4	1	0	0	0	0	0	0	0	0	0	0	0	0	32	1
19:00	0	0	0	0	0	4	4	3	5	2	1	0	0	0	0	0	0	0	0	0	0	0	0	19	1
20:00	0	0	0	0	0	0	1	8	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	17	1
21:00	0	0	0	0	1	0	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0
22:00	0	0	0	0	3	2	2	3	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	12	1
23:00	0	0	0	0	1	0	1	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0
Percent	0.2%	0.6%	1.0%	0.4%	3.1%	6.0%	14.9 %	27.3 %	26.3 %	13.9 %	4.1%	1.7%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
AM Peak			10:00		06:00	10:00	07:00	08:00	11:00	11:00	07:00	11:00	08:00											11:00	
Vol.			2		1	2	4	7	18	9	2	1	1											43	
PM Peak	15:00	15:00	12:00	13:00	14:00	14:00	14:00	12:00	14:00	14:00	15:00	16:00	22:00											14:00	
Vol.	1	2	1	1	3	4	11	18	21	10	7	3	1											68	

Ontario Traffic, Inc.
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Site Code: 21911
Station ID: U186
WILSON AVE from WABANAKI DR to GRAND CREST PL
Date Start: 29-Sep-22
Date End: 05-Oct-22

NB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Aver
10/05 /22	0	0	0	0	0	0	1	3	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	6	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
03:00	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	1	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0
06:00	0	0	0	0	0	1	2	3	5	4	0	0	0	0	0	0	0	0	0	0	0	0	0	15	1
07:00	0	0	0	0	0	0	0	3	5	2	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0
08:00	0	1	1	0	0	3	6	7	2	2	0	0	1	0	0	0	0	0	0	0	0	0	0	23	1
09:00	0	1	0	0	1	3	4	4	6	4	0	1	0	0	0	0	0	0	0	0	0	0	0	24	1
10:00	0	0	0	0	2	0	3	10	5	2	1	0	0	0	0	0	0	0	0	0	0	0	0	23	1
11:00	0	0	0	1	0	6	5	14	16	9	2	0	0	0	0	0	0	0	0	0	0	0	0	53	2
12 PM	0	0	1	0	3	4	3	13	11	7	3	1	0	0	0	0	0	0	0	0	0	0	0	46	2
13:00	0	0	0	0	1	3	5	7	14	2	5	0	0	0	0	0	0	0	0	0	0	0	0	37	2
14:00	0	0	1	2	2	3	6	23	21	7	4	0	0	1	0	0	0	0	0	0	0	0	0	70	3
15:00	0	0	1	3	2	8	15	18	6	3	1	1	0	0	0	0	0	0	0	0	0	0	0	58	3
16:00	0	0	0	0	0	3	6	17	13	8	2	0	0	0	0	0	0	0	0	0	0	0	0	49	2
17:00	0	0	0	0	0	1	4	3	8	2	0	1	0	0	0	0	0	0	0	0	0	0	0	19	1
18:00	0	0	1	1	1	3	4	9	10	9	1	0	0	0	0	0	0	0	0	0	0	0	0	39	2
19:00	0	0	0	0	0	0	1	9	5	3	1	0	0	0	0	0	0	0	0	0	0	0	0	19	1
20:00	0	0	0	0	1	3	3	9	6	3	1	0	0	0	0	0	0	0	0	0	0	0	0	26	1
21:00	0	0	0	0	0	0	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0
22:00	0	0	0	1	0	2	3	2	1	2	0	1	0	0	0	0	0	0	0	0	0	0	0	12	1
23:00	0	0	0	0	0	0	0	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0
Percent	0.0%	0.4%	0.9%	1.5%	2.4%	8.1%	13.2 %	30.0 %	25.4 %	12.9 %	4.0%	0.9%	0.2%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
AM Peak		08:00	08:00	11:00	10:00	11:00	08:00	11:00	11:00	11:00	11:00	09:00	08:00											11:00	
Vol.		1	1	1	2	6	6	14	16	9	2	1	1											53	
PM Peak			12:00	15:00	12:00	15:00	15:00	14:00	14:00	18:00	13:00	12:00		14:00										14:00	
Vol.			1	3	3	8	15	23	21	9	5	1		1										70	
Total	2	11	22	34	55	154	423	805	774	426	136	25	11	3	1	0	0	0	0	0	0	0	0	2882	

Statistics

Mean Speed(Average) : 40 MPH
50th Percentile : 39 MPH
85th Percentile : 46 MPH

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WILSON AVE from WABANAKI DR to GRAND CREST PL
Date Start: 29-Sep-22
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SB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Aver
09/29 /22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
02:00	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
03:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
04:00	0	0	0	0	0	0	1	2	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	7	0
05:00	0	0	1	1	2	0	6	12	9	7	3	0	0	0	0	0	0	0	0	0	0	0	0	41	2
06:00	0	0	0	0	0	0	6	10	22	26	6	0	0	1	0	0	0	0	0	0	0	0	0	71	3
07:00	0	0	0	0	1	1	3	12	14	15	5	0	0	0	0	0	0	0	0	0	0	0	0	51	2
08:00	0	0	1	0	0	0	5	10	7	10	4	0	1	0	0	0	0	0	0	0	0	0	0	38	2
09:00	0	0	0	0	0	1	3	5	11	7	2	1	0	0	0	0	0	0	0	0	0	0	0	30	1
10:00	0	0	0	0	0	2	6	2	3	4	3	0	1	0	0	0	0	0	0	0	0	0	0	21	1
11:00	0	0	0	1	0	2	3	6	13	10	5	0	1	0	0	0	0	0	0	0	0	0	0	41	2
12 PM	0	0	0	0	1	1	5	8	17	13	4	0	0	0	0	0	0	0	0	0	0	0	0	49	2
13:00	0	0	0	0	0	3	5	6	10	8	3	0	0	0	0	0	0	0	0	0	0	0	0	35	2
14:00	0	0	2	1	0	1	6	11	8	5	1	0	0	0	0	0	0	0	0	0	0	0	0	35	2
15:00	0	0	0	3	2	3	2	7	8	2	1	1	0	0	0	0	0	0	0	0	0	0	0	29	1
16:00	0	0	0	0	2	0	4	4	4	3	2	1	1	0	0	0	0	0	0	0	0	0	0	21	1
17:00	0	0	0	0	0	0	1	3	6	3	4	1	0	0	0	0	0	0	0	0	0	0	0	18	1
18:00	0	0	1	0	0	1	1	4	4	4	3	0	1	0	0	0	0	0	0	0	0	0	0	19	1
19:00	0	0	0	0	0	0	1	6	6	3	2	2	1	0	0	0	0	0	0	0	0	0	0	21	1
20:00	0	0	0	0	0	0	2	2	1	4	2	1	0	0	0	0	0	0	0	0	0	0	0	12	1
21:00	0	0	0	0	0	2	1	3	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0
22:00	0	0	0	1	0	1	1	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0
23:00	0	0	0	1	1	2	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	7	0
Percent	0.0%	0.0%	0.9%	1.4%	1.6%	3.5%	11.0 %	20.8 %	26.5 %	22.6 %	9.0%	1.4%	1.1%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
AM Peak			05:00	05:00	05:00	10:00	05:00	05:00	06:00	06:00	06:00	09:00	08:00	06:00										06:00	
Vol.			1	1	2	2	6	12	22	26	6	1	1	1										71	
PM Peak			14:00	15:00	15:00	13:00	14:00	14:00	12:00	12:00	12:00	19:00	16:00											12:00	
Vol.			2	3	2	3	6	11	17	13	4	2	1											49	

Ontario Traffic, Inc.
17705 Leslie St., Unit 6
Newmarket, Ontario L3Y 3E3
Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 21911
Station ID: U186
WILSON AVE from WABANAKI DR to GRAND CREST PL
Date Start: 29-Sep-22
Date End: 05-Oct-22

SB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Aver
09/30 /22	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
03:00	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
04:00	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
05:00	0	0	0	0	1	0	3	6	13	4	1	0	0	0	0	0	0	0	0	0	0	0	0	28	1
06:00	0	0	0	1	0	2	4	11	22	14	2	1	0	0	0	0	0	0	0	0	0	0	0	57	2
07:00	0	0	1	1	1	3	3	6	16	9	3	0	1	0	0	0	0	0	0	0	0	0	0	44	2
08:00	0	0	0	0	1	0	1	3	10	9	4	0	1	0	0	0	0	0	0	0	0	0	0	29	1
09:00	0	0	0	2	0	0	3	3	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	13	1
10:00	0	0	0	3	2	0	1	4	6	3	2	1	0	0	0	0	0	0	0	0	0	0	0	22	1
11:00	0	1	1	3	0	4	1	10	8	12	5	0	0	1	0	0	0	0	0	0	0	0	0	46	2
12 PM	0	0	0	0	0	2	2	5	9	15	4	3	1	0	0	0	0	0	0	0	0	0	0	41	2
13:00	0	0	0	0	0	1	1	7	8	11	2	1	0	0	0	0	0	0	0	0	0	0	0	31	1
14:00	0	0	0	0	1	1	3	5	6	3	2	0	0	0	0	0	0	0	0	0	0	0	0	21	1
15:00	0	1	0	0	1	0	3	3	13	4	0	0	0	0	0	0	0	0	0	0	0	0	0	25	1
16:00	0	0	1	0	2	0	2	3	4	6	4	0	0	0	0	0	0	0	0	0	0	0	0	22	1
17:00	0	0	0	0	1	2	0	3	4	3	2	0	0	0	1	0	0	0	0	0	0	0	0	16	1
18:00	0	0	0	0	0	1	3	2	4	7	3	0	0	0	0	0	0	0	0	0	0	0	0	20	1
19:00	0	0	0	0	0	0	2	2	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0
20:00	0	0	0	0	0	0	2	4	4	4	0	1	0	0	0	0	0	0	0	0	0	0	0	15	1
21:00	0	0	0	0	0	0	1	6	4	3	1	0	0	0	0	0	0	0	0	0	0	0	0	15	1
22:00	0	0	0	0	0	0	3	2	5	0	2	0	0	0	0	0	0	0	0	0	0	0	0	12	1
23:00	0	0	0	0	0	0	0	3	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	8	0
Percent	0.0%	0.4%	0.6%	2.1%	2.1%	3.3%	8.3%	19.2 %	29.6 %	24.0 %	7.9%	1.5%	0.6%	0.2%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
AM Peak		11:00	07:00	10:00	10:00	11:00	06:00	06:00	06:00	06:00	11:00	06:00	07:00	11:00										06:00	
Vol.		1	1	3	2	4	4	11	22	14	5	1	1	1										57	
PM Peak		15:00	16:00		16:00	12:00	14:00	13:00	15:00	12:00	12:00	12:00	12:00		17:00									12:00	
Vol.		1	1		2	2	3	7	13	15	4	3	1		1									41	

Ontario Traffic, Inc.
17705 Leslie St., Unit 6
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Site Code: 21911
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WILSON AVE from WABANAKI DR to GRAND CREST PL
Date Start: 29-Sep-22
Date End: 05-Oct-22

SB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Aver
10/01 /22	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
01:00	0	0	0	0	0	0	0	0	1	3	1	0	0	0	0	0	0	0	0	0	0	0	0	5	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
05:00	0	0	0	0	0	0	2	1	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	6	0
06:00	0	0	0	0	0	0	1	3	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0
07:00	0	0	0	1	0	0	1	1	2	3	1	0	0	0	1	0	0	0	0	0	0	0	0	10	0
08:00	0	0	0	0	0	0	1	3	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0
09:00	0	0	0	0	0	0	1	2	4	2	1	0	1	0	0	0	0	0	0	0	0	0	0	11	0
10:00	0	0	0	0	2	1	2	1	5	4	0	0	0	0	0	0	0	0	0	0	0	0	0	15	1
11:00	0	0	0	0	1	1	1	4	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	13	1
12 PM	0	0	0	1	0	0	2	12	5	7	1	1	0	0	0	0	0	0	0	0	0	0	0	29	1
13:00	0	0	0	0	1	0	1	8	8	7	3	2	0	0	0	0	0	0	0	0	0	0	0	30	1
14:00	0	0	1	1	0	0	1	2	5	8	1	1	0	0	0	0	0	0	0	0	0	0	0	20	1
15:00	0	0	0	0	1	2	6	4	13	6	5	1	0	0	0	0	0	0	0	0	0	0	0	38	2
16:00	0	0	2	1	2	0	2	5	8	2	5	0	0	0	0	0	0	0	0	0	0	0	0	27	1
17:00	0	0	0	0	0	1	3	6	11	7	2	2	0	0	0	0	0	0	0	0	0	0	0	32	1
18:00	0	0	0	0	0	0	0	5	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	10	0
19:00	0	1	1	0	0	1	2	2	4	1	2	0	0	0	0	0	0	0	0	0	0	0	0	14	1
20:00	0	0	0	0	0	0	1	2	4	2	1	1	0	0	0	0	0	0	0	0	0	0	0	11	0
21:00	0	0	0	0	0	0	1	3	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0
22:00	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0
23:00	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Percent	0.0%	0.3%	1.3%	1.3%	2.3%	2.0%	9.2%	21.7 %	29.3 %	21.1 %	8.2%	2.6%	0.3%	0.0%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
AM Peak				07:00	10:00	10:00	05:00	11:00	10:00	10:00	01:00		09:00		07:00									10:00	
Vol.				1	2	1	2	4	5	4	1		1		1									15	
PM Peak		19:00	16:00	12:00	16:00	15:00	15:00	12:00	15:00	14:00	15:00	13:00												15:00	
Vol.		1	2	1	2	2	6	12	13	8	5	2												38	

Ontario Traffic, Inc.
17705 Leslie St., Unit 6
Newmarket, Ontario L3Y 3E3
Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 21911
Station ID: U186
WILSON AVE from WABANAKI DR to GRAND CREST PL
Date Start: 29-Sep-22
Date End: 05-Oct-22

SB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Aver
10/02 /22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
06:00	0	0	0	0	0	1	0	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	4	0
07:00	0	0	0	0	0	1	4	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	10	0
08:00	0	0	0	1	0	0	2	0	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	6	0
09:00	0	0	0	0	0	1	3	2	2	3	1	0	1	0	0	0	0	0	0	0	0	0	0	13	1
10:00	0	0	0	1	0	1	0	3	2	4	1	1	0	0	0	0	0	0	0	0	0	0	0	13	1
11:00	0	0	0	0	0	0	4	6	4	2	2	1	1	0	0	1	0	0	0	0	0	0	0	21	1
12 PM	0	0	0	0	0	0	4	7	7	4	3	2	1	1	0	0	0	0	0	0	0	0	0	29	1
13:00	0	0	0	1	0	0	2	7	12	7	2	0	1	0	0	0	0	0	0	0	0	0	0	32	1
14:00	0	0	0	1	1	0	2	8	7	7	4	0	1	0	0	0	0	0	0	0	0	0	0	31	1
15:00	0	0	1	1	0	2	1	7	8	16	3	1	0	0	0	0	0	0	0	0	0	0	0	40	2
16:00	0	0	0	1	0	2	2	4	4	10	6	2	0	1	0	0	0	0	0	0	0	0	0	32	1
17:00	0	0	0	0	0	0	0	3	6	2	1	0	0	0	0	0	0	0	0	0	0	0	0	12	1
18:00	0	0	0	0	0	0	0	2	8	3	1	0	0	0	0	0	0	0	0	0	0	0	0	14	1
19:00	0	0	0	0	1	0	1	2	2	3	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0
20:00	0	0	0	0	0	0	3	0	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0
21:00	0	0	0	0	0	1	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0
22:00	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0
23:00	0	0	0	0	1	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	3	0
Percent	0.0%	0.0%	0.4%	2.1%	1.1%	3.2%	10.3 %	19.1 %	25.2 %	23.4 %	9.6%	2.8%	1.8%	0.7%	0.0%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
AM Peak				08:00		06:00	07:00	11:00	11:00	10:00	11:00	06:00	09:00			11:00								11:00	
Vol.				1		1	4	6	4	4	2	1	1			1								21	
PM Peak			15:00	13:00	14:00	15:00	12:00	14:00	13:00	15:00	16:00	12:00	12:00	12:00										15:00	
Vol.			1	1	1	2	4	8	12	16	6	2	1	1										40	

Ontario Traffic, Inc.
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WILSON AVE from WABANAKI DR to GRAND CREST PL
Date Start: 29-Sep-22
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SB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Aver
10/03 /22	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
01:00	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
04:00	0	0	0	1	1	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0
05:00	0	0	0	0	2	4	7	9	3	6	2	0	0	0	0	0	0	0	0	0	0	0	0	33	1
06:00	0	0	0	0	0	3	4	17	24	15	6	0	0	0	0	0	0	0	0	0	0	0	0	69	3
07:00	0	0	0	4	2	1	7	16	12	9	8	1	0	0	0	0	0	0	0	0	0	0	0	60	3
08:00	0	0	0	0	1	5	7	12	10	10	5	1	0	0	0	0	0	0	0	0	0	0	0	51	2
09:00	0	0	0	1	0	2	1	8	9	2	3	0	0	0	0	0	0	0	0	0	0	0	0	26	1
10:00	0	0	0	2	0	1	5	8	8	5	5	1	0	0	0	0	0	0	0	0	0	0	0	35	2
11:00	0	0	1	0	1	0	2	7	22	6	5	0	0	0	0	0	0	0	0	0	0	0	0	44	2
12 PM	0	0	1	0	0	2	7	8	19	10	3	0	0	0	0	0	0	0	0	0	0	0	0	50	2
13:00	0	0	0	1	0	1	3	5	3	9	2	1	1	0	0	0	0	0	0	0	0	0	0	26	1
14:00	0	0	0	2	2	1	7	12	9	8	1	0	1	0	0	0	0	0	0	0	0	0	0	43	2
15:00	0	0	0	2	2	3	9	9	9	6	0	0	0	0	0	0	0	0	0	0	0	0	0	40	2
16:00	0	0	0	0	0	2	2	4	6	2	3	1	1	0	0	0	0	0	0	0	0	0	0	21	1
17:00	0	0	0	0	1	2	1	1	6	6	5	0	0	0	0	0	0	0	0	0	0	0	0	22	1
18:00	0	0	0	0	2	0	1	2	9	6	2	1	0	0	0	0	0	0	0	0	0	0	0	23	1
19:00	0	0	0	0	0	1	3	4	6	3	2	0	0	0	0	0	0	0	0	0	0	0	0	19	1
20:00	0	0	0	1	0	0	0	1	5	3	1	0	0	0	0	0	0	0	0	0	0	0	0	11	0
21:00	0	0	0	0	0	1	1	2	4	3	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0
22:00	0	0	0	0	0	2	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0
23:00	0	0	0	0	0	0	0	1	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	4	0
Percent	0.0%	0.0%	0.3%	2.3%	2.3%	5.1%	11.4 %	22.1 %	27.5 %	18.4 %	8.8%	1.0%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
AM Peak			11:00	07:00	05:00	08:00	05:00	06:00	06:00	06:00	07:00	07:00												06:00	
Vol.			1	4	2	5	7	17	24	15	8	1												69	
PM Peak			12:00	14:00	14:00	15:00	15:00	14:00	12:00	12:00	17:00	13:00	13:00											12:00	
Vol.			1	2	2	3	9	12	19	10	5	1	1											50	

Ontario Traffic, Inc.
17705 Leslie St., Unit 6
Newmarket, Ontario L3Y 3E3
Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 21911
Station ID: U186
WILSON AVE from WABANAKI DR to GRAND CREST PL
Date Start: 29-Sep-22
Date End: 05-Oct-22

SB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Aver
10/04 /22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	2	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	4	0
03:00	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
04:00	0	0	0	0	0	0	3	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0
05:00	0	0	0	0	0	7	10	16	15	5	1	0	0	0	0	0	0	0	0	0	0	0	0	54	2
06:00	0	0	0	0	1	3	3	20	17	21	5	1	0	0	0	0	0	0	0	0	0	0	0	71	3
07:00	0	0	0	1	0	5	7	14	16	10	7	1	0	0	0	0	0	0	0	0	0	0	0	61	3
08:00	0	0	0	0	0	0	3	12	11	15	1	0	1	0	0	0	0	0	0	0	0	0	0	43	2
09:00	0	0	0	0	0	1	4	8	12	5	2	0	0	0	0	0	0	0	0	0	0	0	0	32	1
10:00	0	0	1	1	2	1	7	8	5	7	0	1	0	0	0	0	0	0	0	0	0	0	0	33	1
11:00	0	0	0	2	1	1	4	5	17	9	5	2	0	0	0	0	0	0	0	0	0	0	0	46	2
12 PM	0	0	0	0	1	2	6	13	18	13	1	5	0	0	0	0	0	0	0	0	0	0	0	59	3
13:00	0	0	0	0	3	4	10	11	14	8	0	3	1	0	0	0	0	0	0	0	0	0	0	54	2
14:00	0	0	0	1	1	5	7	13	9	5	3	1	0	0	1	0	0	0	0	0	0	0	0	46	2
15:00	0	0	0	1	2	4	8	10	12	9	3	1	0	0	0	0	0	0	0	0	0	0	0	50	2
16:00	0	0	0	0	0	0	1	4	12	5	4	0	0	0	0	0	0	0	0	0	0	0	0	26	1
17:00	0	0	1	1	0	2	4	4	9	7	4	2	0	0	0	0	0	0	0	0	0	0	0	34	1
18:00	0	0	0	1	0	2	0	3	6	4	4	0	1	0	0	0	0	0	0	0	0	0	0	21	1
19:00	0	0	0	0	0	2	0	5	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0
20:00	0	0	0	0	0	0	2	3	6	4	0	1	0	0	0	0	0	0	0	0	0	0	0	16	1
21:00	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	3	0
22:00	0	0	0	0	1	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0
23:00	0	0	0	0	0	0	0	3	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0
Percent	0.0%	0.0%	0.3%	1.2%	1.8%	5.7%	11.6 %	23.5 %	27.3 %	19.4 %	6.2%	2.6%	0.4%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
AM Peak			10:00	11:00	10:00	05:00	05:00	06:00	06:00	06:00	07:00	11:00	08:00											06:00	
Vol.			1	2	2	7	10	20	17	21	7	2	1											71	
PM Peak			17:00	14:00	13:00	14:00	13:00	12:00	12:00	12:00	16:00	12:00	13:00		14:00									12:00	
Vol.			1	1	3	5	10	13	18	13	4	5	1		1									59	

Ontario Traffic, Inc.
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WILSON AVE from WABANAKI DR to GRAND CREST PL
Date Start: 29-Sep-22
Date End: 05-Oct-22

SB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Aver
10/05 /22	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0
01:00	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
02:00	0	0	0	0	0	0	2	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0
03:00	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
04:00	0	0	0	0	0	0	0	3	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	6	0
05:00	0	1	1	0	0	6	14	14	11	4	1	0	0	0	0	0	0	0	0	0	0	0	0	52	2
06:00	0	0	0	0	1	3	2	22	19	17	6	2	1	1	0	0	0	0	0	0	0	0	0	74	3
07:00	0	1	0	0	1	8	11	14	16	13	5	1	0	0	0	0	0	0	0	0	0	0	0	70	3
08:00	0	1	1	0	2	2	7	7	14	5	5	2	0	1	0	0	0	0	0	0	0	0	0	47	2
09:00	0	0	0	0	1	3	4	6	9	6	6	1	0	0	0	0	0	0	0	0	0	0	0	36	2
10:00	0	0	0	1	0	4	3	6	9	8	2	0	0	0	0	0	0	0	0	0	0	0	0	33	1
11:00	0	0	0	3	1	0	9	9	8	16	5	0	0	0	0	0	0	0	0	0	0	0	0	51	2
12 PM	0	0	0	0	1	2	7	10	15	12	1	1	0	0	0	0	0	0	0	0	0	0	0	49	2
13:00	0	0	0	0	0	1	7	8	17	7	4	0	0	0	0	0	0	0	0	0	0	0	0	44	2
14:00	0	0	0	1	1	2	17	9	15	9	3	2	0	0	0	0	0	0	0	0	0	0	0	59	3
15:00	0	0	0	0	2	3	10	11	10	5	6	0	2	0	0	0	0	0	0	0	0	0	0	49	2
16:00	0	0	0	1	1	1	0	3	6	4	1	1	0	0	0	0	0	0	0	0	0	0	0	18	1
17:00	0	0	1	1	3	0	5	8	6	5	2	0	0	1	0	0	0	0	0	0	0	0	0	32	1
18:00	0	0	0	0	0	1	4	7	10	6	3	0	0	0	0	0	0	0	0	0	0	0	0	31	1
19:00	0	0	0	1	0	1	2	1	7	3	0	0	0	0	0	0	0	0	0	0	0	0	0	15	1
20:00	0	0	0	0	0	0	2	7	7	3	0	0	0	0	0	0	0	0	0	0	0	0	0	19	1
21:00	0	0	0	0	0	0	1	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	6	0
22:00	0	0	0	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0
23:00	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
Percent	0.0%	0.4%	0.4%	1.1%	2.1%	5.4%	15.4 %	21.1 %	26.2 %	18.1 %	7.2%	1.6%	0.4%	0.4%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
AM Peak		05:00	05:00	11:00	08:00	07:00	05:00	06:00	06:00	06:00	06:00	06:00	06:00	06:00										06:00	
Vol.		1	1	3	2	8	14	22	19	17	6	2	1	1										74	
PM Peak			17:00	14:00	17:00	15:00	14:00	15:00	13:00	12:00	15:00	14:00	15:00	17:00										14:00	
Vol.			1	1	3	3	17	11	17	12	6	2	2	1										59	
Total	0	6	20	58	70	159	416	772	989	744	287	66	25	7	3	1	0	0	0	0	0	0	0	3623	

Statistics

Mean Speed(Average) : 41 MPH
50th Percentile : 41 MPH
85th Percentile : 48 MPH

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WILSON AVE from WABANAKI DR to GRAND CREST PL
Date Start: 29-Sep-22
Date End: 05-Oct-22

NB, SB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Aver
09/29 /22	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
01:00	0	0	0	0	0	0	0	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0
02:00	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
03:00	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
04:00	0	0	0	0	0	0	1	2	2	2	1	0	0	0	0	0	0	0	0	0	0	0	0	8	0
05:00	0	0	2	2	3	1	6	12	9	7	3	0	0	0	0	0	0	0	0	0	0	0	0	45	2
06:00	0	0	0	0	1	0	9	12	24	31	6	0	0	1	0	0	0	0	0	0	0	0	0	84	4
07:00	0	0	0	1	1	1	7	14	16	16	5	0	0	0	0	0	0	0	0	0	0	0	0	61	3
08:00	1	0	1	0	0	0	8	14	8	14	4	0	1	0	0	0	0	0	0	0	0	0	0	51	2
09:00	0	2	0	0	0	4	10	12	20	8	2	1	0	0	0	0	0	0	0	0	0	0	0	59	3
10:00	0	0	0	0	1	3	7	8	12	6	3	0	1	0	0	0	0	0	0	0	0	0	0	41	2
11:00	0	0	0	1	1	6	11	22	28	19	7	0	1	0	0	0	0	0	0	0	0	0	0	96	4
12 PM	0	0	0	1	1	2	11	14	24	21	5	0	0	0	0	0	0	0	0	0	0	0	0	79	3
13:00	0	0	0	0	1	4	6	12	14	11	4	0	0	0	0	0	0	0	0	0	0	0	0	52	2
14:00	0	0	4	2	0	5	21	25	24	16	3	1	0	0	0	0	0	0	0	0	0	0	0	101	4
15:00	0	0	0	3	4	5	12	22	19	6	2	1	0	0	0	0	0	0	0	0	0	0	0	74	3
16:00	0	1	0	0	2	1	13	17	21	4	4	3	1	0	0	0	0	0	0	0	0	0	0	67	3
17:00	0	0	0	0	1	0	2	6	12	6	6	1	0	0	0	0	0	0	0	0	0	0	0	34	1
18:00	0	0	1	0	0	1	6	6	10	6	5	0	1	0	0	0	0	0	0	0	0	0	0	36	2
19:00	0	0	0	1	2	0	4	13	12	7	5	2	1	0	0	0	0	0	0	0	0	0	0	47	2
20:00	0	0	0	1	0	0	3	4	4	6	4	1	0	0	0	0	0	0	0	0	0	0	0	23	1
21:00	0	0	0	0	1	3	2	5	6	1	0	0	1	0	0	0	0	0	0	0	0	0	0	19	1
22:00	0	0	1	2	0	4	6	6	4	2	0	0	0	0	0	0	0	0	0	0	0	0	0	25	1
23:00	0	0	2	1	2	2	0	1	1	4	0	1	1	0	0	0	0	0	0	0	0	0	0	15	1
Percent	0.1%	0.3%	1.1%	1.5%	2.0%	4.1%	14.2 %	22.4 %	26.5 %	19.1 %	6.7%	1.1%	0.8%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
AM Peak	08:00	09:00	05:00	05:00	05:00	11:00	11:00	11:00	11:00	06:00	11:00	09:00	08:00	06:00										11:00	
Vol.	1	2	2	2	3	6	11	22	28	31	7	1	1	1										96	
PM Peak		16:00	14:00	15:00	15:00	14:00	14:00	14:00	12:00	12:00	17:00	16:00	16:00											14:00	
Vol.		1	4	3	4	5	21	25	24	21	6	3	1											101	

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WILSON AVE from WABANAKI DR to GRAND CREST PL
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NB, SB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Aver
09/30 /22	0	0	0	0	0	1	1	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0
01:00	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
02:00	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0
03:00	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
04:00	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
05:00	0	0	0	0	1	0	4	6	13	5	1	0	0	0	0	0	0	0	0	0	0	0	0	30	1
06:00	0	0	0	1	0	2	5	13	28	14	2	1	0	0	0	0	0	0	0	0	0	0	0	66	3
07:00	0	0	1	1	1	6	4	8	19	10	3	0	1	0	0	0	0	0	0	0	0	0	0	54	2
08:00	0	0	0	0	1	0	2	8	12	11	4	0	1	0	0	0	0	0	0	0	0	0	0	39	2
09:00	0	0	0	2	0	1	3	4	7	3	3	0	0	0	0	0	0	0	0	0	0	0	0	23	1
10:00	0	0	0	4	2	1	4	7	12	5	2	1	0	0	0	0	0	0	0	0	0	0	0	38	2
11:00	0	1	2	4	1	5	9	25	23	22	8	0	0	1	1	0	0	0	0	0	0	0	0	102	4
12 PM	0	0	0	0	0	4	7	17	13	17	6	3	1	0	0	0	0	0	0	0	0	0	0	68	3
13:00	0	0	0	0	0	1	7	16	11	16	6	1	0	0	0	0	0	0	0	0	0	0	0	58	3
14:00	0	0	0	0	1	2	8	13	20	9	4	2	1	0	0	0	0	0	0	0	0	0	0	60	3
15:00	0	1	0	0	1	0	12	13	24	15	0	0	1	0	0	0	0	0	0	0	0	0	0	67	3
16:00	0	0	1	0	2	0	9	17	13	12	5	0	0	0	0	0	0	0	0	0	0	0	0	59	3
17:00	0	0	0	0	1	2	0	9	17	8	3	0	0	0	1	0	0	0	0	0	0	0	0	41	2
18:00	0	0	0	0	1	1	8	4	8	13	3	0	0	0	0	0	0	0	0	0	0	0	0	38	2
19:00	0	0	0	0	0	0	8	8	1	5	0	0	0	0	0	0	0	0	0	0	0	0	0	22	1
20:00	0	0	0	0	0	0	2	6	8	6	1	1	0	0	0	0	0	0	0	0	0	0	0	24	1
21:00	0	0	0	0	0	0	3	10	5	6	1	1	0	1	0	0	0	0	0	0	0	0	0	27	1
22:00	0	0	0	0	1	5	3	6	10	1	2	0	0	0	0	0	0	0	0	0	0	0	0	28	1
23:00	0	0	0	0	0	1	1	6	6	4	3	0	0	0	0	0	0	0	0	0	0	0	0	21	1
Percent	0.0%	0.2%	0.5%	1.4%	1.5%	3.8%	11.8 %	22.8 %	28.8 %	20.7 %	6.5%	1.1%	0.6%	0.2%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
AM Peak		11:00	11:00	10:00	10:00	07:00	11:00	11:00	06:00	11:00	11:00	06:00	07:00	11:00	11:00									11:00	
Vol.		1	2	4	2	6	9	25	28	22	8	1	1	1	1									102	
PM Peak		15:00	16:00		16:00	22:00	15:00	12:00	15:00	12:00	12:00	12:00	12:00	21:00	17:00									12:00	
Vol.		1	1		2	5	12	17	24	17	6	3	1	1	1									68	

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Date End: 05-Oct-22

NB, SB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Aver
10/01 /22	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	3	0
01:00	0	0	0	1	0	1	0	0	3	3	3	0	0	0	0	0	0	0	0	0	0	0	0	11	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0
04:00	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
05:00	0	0	0	0	0	0	2	3	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	8	0
06:00	0	0	0	0	0	0	1	3	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0
07:00	0	0	0	1	0	1	1	1	3	4	2	0	0	0	1	0	0	0	0	0	0	0	0	14	1
08:00	0	0	0	0	0	0	2	3	5	1	0	0	0	0	0	0	0	0	0	0	0	0	0	11	0
09:00	0	0	0	0	1	0	5	5	6	4	1	0	1	1	0	0	0	0	0	0	0	0	0	24	1
10:00	0	0	0	0	3	1	2	2	9	8	0	0	0	0	0	0	0	0	0	0	0	0	0	25	1
11:00	0	0	0	1	1	4	5	7	8	5	0	0	0	0	0	0	0	0	0	0	0	0	0	31	1
12 PM	0	0	0	1	0	0	3	16	10	8	2	1	0	0	0	0	0	0	0	0	0	0	0	41	2
13:00	0	0	0	0	1	0	5	19	19	12	3	2	0	0	0	0	0	0	0	0	0	0	0	61	3
14:00	0	0	1	2	1	0	3	9	8	11	2	1	0	0	0	0	0	0	0	0	0	0	0	38	2
15:00	0	0	0	0	1	3	13	15	21	13	8	1	0	0	0	0	0	0	0	0	0	0	0	75	3
16:00	0	0	3	4	2	2	5	17	14	7	6	0	0	0	0	0	0	0	0	0	0	0	0	60	3
17:00	0	0	0	0	0	2	11	16	18	12	3	2	0	0	0	0	0	0	0	0	0	0	0	64	3
18:00	0	0	0	0	0	2	0	9	6	3	4	0	0	0	0	0	0	0	0	0	0	0	0	24	1
19:00	0	1	2	0	0	3	6	7	7	1	2	0	0	0	0	0	0	0	0	0	0	0	0	29	1
20:00	0	0	0	0	0	0	1	6	6	4	1	2	0	0	0	0	0	0	0	0	0	0	0	20	1
21:00	0	0	0	0	0	0	3	8	6	4	0	0	0	0	0	0	0	0	0	0	0	0	0	21	1
22:00	0	0	0	0	0	0	0	1	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0
23:00	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
Percent	0.0%	0.2%	1.0%	1.7%	1.7%	3.3%	11.7 %	25.9 %	27.5 %	18.0 %	6.7%	1.7%	0.2%	0.2%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
AM Peak				01:00	10:00	11:00	09:00	11:00	10:00	10:00	01:00	03:00	09:00	09:00	07:00									11:00	
Vol.				1	3	4	5	7	9	8	3	1	1	1	1									31	
PM Peak		19:00	16:00	16:00	16:00	15:00	15:00	13:00	15:00	15:00	15:00	13:00												15:00	
Vol.		1	3	4	2	3	13	19	21	13	8	2												75	

Ontario Traffic, Inc.
17705 Leslie St., Unit 6
Newmarket, Ontario L3Y 3E3
Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 21911
Station ID: U186
WILSON AVE from WABANAKI DR to GRAND CREST PL
Date Start: 29-Sep-22
Date End: 05-Oct-22

NB, SB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Aver
10/02 /22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
06:00	0	0	0	0	0	1	0	1	0	1	0	2	0	0	0	0	0	0	0	0	0	0	0	5	0
07:00	0	0	0	0	0	1	4	5	6	2	0	0	0	0	0	0	0	0	0	0	0	0	0	18	1
08:00	0	0	1	1	0	1	3	2	2	2	1	1	0	0	0	0	0	0	0	0	0	0	0	14	1
09:00	0	0	0	1	0	1	4	3	4	3	4	0	1	0	0	0	0	0	0	0	0	0	0	21	1
10:00	0	0	0	1	0	1	2	5	6	8	3	1	0	0	0	0	0	0	0	0	0	0	0	27	1
11:00	0	0	0	0	0	1	5	10	8	4	4	1	1	0	0	1	0	0	0	0	0	0	0	35	2
12 PM	0	0	0	0	1	1	6	11	14	7	4	3	1	1	0	0	0	0	0	0	0	0	0	49	2
13:00	0	0	0	1	1	0	4	15	19	12	4	0	1	0	0	0	0	0	0	0	0	0	0	57	2
14:00	0	0	0	1	2	0	5	13	14	12	6	0	2	0	0	0	0	0	0	0	0	0	0	55	2
15:00	0	0	1	1	1	2	4	20	21	22	6	1	0	0	0	0	0	0	0	0	0	0	0	79	3
16:00	0	0	0	2	0	3	4	12	13	19	8	2	0	1	0	0	0	0	0	0	0	0	0	64	3
17:00	0	0	0	0	0	3	3	12	18	6	3	1	0	0	0	0	0	0	0	0	0	0	0	46	2
18:00	0	0	0	0	0	0	4	6	17	5	1	0	0	0	0	0	0	0	0	0	0	0	0	33	1
19:00	0	0	0	0	1	0	1	7	3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	16	1
20:00	0	0	0	0	0	1	4	1	4	3	0	0	0	0	0	0	0	0	0	0	0	0	0	13	1
21:00	0	0	0	0	0	1	0	1	3	4	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0
22:00	0	0	0	0	0	0	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	3	0
23:00	0	0	0	0	1	0	1	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	4	0
Percent	0.0%	0.0%	0.4%	1.5%	1.3%	3.1%	10.0 %	22.6 %	27.9 %	20.9 %	8.6%	2.2%	1.1%	0.4%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
AM Peak			08:00	08:00		06:00	11:00	11:00	11:00	10:00	09:00	06:00	09:00			11:00								11:00	
Vol.			1	1		1	5	10	8	8	4	2	1			1								35	
PM Peak			15:00	16:00	14:00	16:00	12:00	15:00	15:00	15:00	16:00	12:00	14:00	12:00										15:00	
Vol.			1	2	2	3	6	20	21	22	8	3	2	1										79	

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WILSON AVE from WABANAKI DR to GRAND CREST PL
Date Start: 29-Sep-22
Date End: 05-Oct-22

NB, SB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Aver
10/03 /22	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
01:00	0	0	0	0	0	0	1	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
03:00	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0
04:00	0	0	0	1	1	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0
05:00	0	0	0	0	2	4	7	11	3	6	2	0	0	0	0	0	0	0	0	0	0	0	0	35	2
06:00	0	0	0	0	0	3	4	20	25	16	6	0	0	0	0	0	0	0	0	0	0	0	0	74	3
07:00	0	1	0	4	5	1	11	18	15	12	8	1	0	0	0	0	0	0	0	0	0	0	0	76	3
08:00	0	0	0	1	1	6	9	23	15	13	5	1	0	0	0	0	0	0	0	0	0	0	0	74	3
09:00	0	0	1	2	0	2	6	14	11	5	3	0	0	0	0	0	0	0	0	0	0	0	0	44	2
10:00	0	0	0	2	0	1	6	15	19	11	7	1	0	0	0	0	0	0	0	0	0	0	0	62	3
11:00	0	0	1	0	1	2	9	18	37	12	8	0	0	0	0	0	0	0	0	0	0	0	0	88	4
12 PM	0	0	1	2	0	3	11	13	30	13	3	0	2	0	0	0	0	0	0	0	0	0	0	78	3
13:00	0	2	0	1	0	3	11	16	8	17	6	1	1	0	0	0	0	0	0	0	0	0	0	66	3
14:00	0	0	1	4	2	8	15	31	24	11	2	0	1	0	0	0	0	0	0	0	0	0	0	99	4
15:00	0	0	0	2	2	3	15	23	16	13	3	0	0	0	0	0	0	0	0	0	0	0	0	77	3
16:00	0	0	0	0	1	5	10	14	16	8	3	1	2	0	0	0	0	0	0	0	0	0	0	60	3
17:00	0	0	0	0	1	2	5	9	13	10	10	0	0	0	0	0	0	0	0	0	0	0	0	50	2
18:00	0	0	0	0	2	0	2	11	17	12	4	1	0	0	0	0	0	0	0	0	0	0	0	49	2
19:00	0	0	0	1	0	2	5	8	13	4	3	0	0	0	0	0	0	0	0	0	0	0	0	36	2
20:00	0	0	0	1	1	0	1	4	9	4	2	0	0	0	0	0	0	0	0	0	0	0	0	22	1
21:00	0	0	0	0	0	1	2	4	8	6	1	0	0	0	0	0	0	0	0	0	0	0	0	22	1
22:00	0	0	0	0	0	6	3	4	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	18	1
23:00	0	0	0	0	0	0	0	3	4	2	0	0	1	0	0	0	0	0	0	0	0	0	0	10	0
Percent	0.0%	0.3%	0.4%	2.0%	1.8%	4.9%	12.7 %	25.4 %	27.5 %	16.7 %	7.2%	0.6%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
AM Peak		07:00	09:00	07:00	07:00	08:00	07:00	08:00	11:00	06:00	07:00	07:00												11:00	
Vol.		1	1	4	5	6	11	23	37	16	8	1												88	
PM Peak		13:00	12:00	14:00	14:00	14:00	14:00	14:00	12:00	13:00	17:00	13:00	12:00											14:00	
Vol.		2	1	4	2	8	15	31	30	17	10	1	2											99	

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WILSON AVE from WABANAKI DR to GRAND CREST PL
Date Start: 29-Sep-22
Date End: 05-Oct-22

NB, SB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Aver
10/04 /22	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
01:00	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
02:00	0	0	0	0	0	0	0	3	1	0	2	0	0	0	0	0	0	0	0	0	0	0	0	6	0
03:00	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0
04:00	0	0	0	0	0	0	3	3	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0
05:00	0	0	0	0	0	7	10	18	15	5	1	0	0	0	0	0	0	0	0	0	0	0	0	56	2
06:00	0	0	0	0	2	4	5	24	22	23	5	1	0	0	0	0	0	0	0	0	0	0	0	86	4
07:00	0	0	0	1	1	6	11	17	17	10	9	1	0	0	0	0	0	0	0	0	0	0	0	73	3
08:00	0	0	0	0	0	0	6	19	15	17	1	0	2	0	0	0	0	0	0	0	0	0	0	60	3
09:00	0	0	0	0	1	2	7	13	16	10	2	0	0	0	0	0	0	0	0	0	0	0	0	51	2
10:00	0	0	3	1	2	3	10	13	12	9	1	1	0	0	0	0	0	0	0	0	0	0	0	55	2
11:00	0	0	0	2	1	3	8	12	35	18	7	3	0	0	0	0	0	0	0	0	0	0	0	89	4
12 PM	0	0	1	0	2	3	9	31	26	16	1	5	0	0	0	0	0	0	0	0	0	0	0	94	4
13:00	0	1	0	1	3	6	16	18	19	12	2	5	1	0	0	0	0	0	0	0	0	0	0	84	4
14:00	0	0	0	2	4	9	18	29	30	15	5	1	0	0	1	0	0	0	0	0	0	0	0	114	5
15:00	1	2	1	1	3	6	14	23	20	16	10	3	0	0	0	0	0	0	0	0	0	0	0	100	4
16:00	0	0	0	0	0	3	9	17	28	12	5	3	0	0	0	0	0	0	0	0	0	0	0	77	3
17:00	0	0	2	1	0	3	7	12	14	11	4	2	0	0	0	0	0	0	0	0	0	0	0	56	2
18:00	0	0	0	1	2	5	7	8	16	8	5	0	1	0	0	0	0	0	0	0	0	0	0	53	2
19:00	0	0	0	0	0	6	4	8	8	3	1	0	0	0	0	0	0	0	0	0	0	0	0	30	1
20:00	0	0	0	0	0	0	3	11	10	8	0	1	0	0	0	0	0	0	0	0	0	0	0	33	1
21:00	0	0	0	0	1	0	0	1	1	4	1	0	0	0	0	0	0	0	0	0	0	0	0	8	0
22:00	0	0	0	0	4	2	2	6	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	16	1
23:00	0	0	0	0	1	0	1	6	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	12	1
Percent	0.1%	0.3%	0.6%	0.9%	2.3%	5.8%	13.0 %	25.1 %	26.9 %	17.1 %	5.3%	2.2%	0.4%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
AM Peak			10:00	11:00	06:00	05:00	07:00	06:00	11:00	06:00	07:00	11:00	08:00											11:00	
Vol.			3	2	2	7	11	24	35	23	9	3	2											89	
PM Peak	15:00	15:00	17:00	14:00	14:00	14:00	14:00	12:00	14:00	12:00	15:00	12:00	13:00		14:00									14:00	
Vol.	1	2	2	2	4	9	18	31	30	16	10	5	1		1									114	

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WILSON AVE from WABANAKI DR to GRAND CREST PL
Date Start: 29-Sep-22
Date End: 05-Oct-22

NB, SB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Aver
10/05 /22	0	0	0	0	0	0	2	4	2	0	1	0	0	0	0	0	0	0	0	0	0	0	0	9	0
01:00	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
02:00	0	0	0	0	0	0	2	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0
03:00	0	0	0	0	0	1	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0
04:00	0	0	0	0	0	0	0	3	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	6	0
05:00	0	1	1	0	0	7	14	17	11	4	1	0	0	0	0	0	0	0	0	0	0	0	0	56	2
06:00	0	0	0	0	1	4	4	25	24	21	6	2	1	1	0	0	0	0	0	0	0	0	0	89	4
07:00	0	1	0	0	1	8	11	17	21	15	5	1	0	0	0	0	0	0	0	0	0	0	0	80	3
08:00	0	2	2	0	2	5	13	14	16	7	5	2	1	1	0	0	0	0	0	0	0	0	0	70	3
09:00	0	1	0	0	2	6	8	10	15	10	6	2	0	0	0	0	0	0	0	0	0	0	0	60	3
10:00	0	0	0	1	2	4	6	16	14	10	3	0	0	0	0	0	0	0	0	0	0	0	0	56	2
11:00	0	0	0	4	1	6	14	23	24	25	7	0	0	0	0	0	0	0	0	0	0	0	0	104	5
12 PM	0	0	1	0	4	6	10	23	26	19	4	2	0	0	0	0	0	0	0	0	0	0	0	95	4
13:00	0	0	0	0	1	4	12	15	31	9	9	0	0	0	0	0	0	0	0	0	0	0	0	81	4
14:00	0	0	1	3	3	5	23	32	36	16	7	2	0	1	0	0	0	0	0	0	0	0	0	129	6
15:00	0	0	1	3	4	11	25	29	16	8	7	1	2	0	0	0	0	0	0	0	0	0	0	107	5
16:00	0	0	0	1	1	4	6	20	19	12	3	1	0	0	0	0	0	0	0	0	0	0	0	67	3
17:00	0	0	1	1	3	1	9	11	14	7	2	1	0	1	0	0	0	0	0	0	0	0	0	51	2
18:00	0	0	1	1	1	4	8	16	20	15	4	0	0	0	0	0	0	0	0	0	0	0	0	70	3
19:00	0	0	0	1	0	1	3	10	12	6	1	0	0	0	0	0	0	0	0	0	0	0	0	34	1
20:00	0	0	0	0	1	3	5	16	13	6	1	0	0	0	0	0	0	0	0	0	0	0	0	45	2
21:00	0	0	0	0	0	0	2	4	2	1	1	0	0	0	0	0	0	0	0	0	0	0	0	10	0
22:00	0	0	0	1	1	2	4	2	1	3	0	1	0	0	0	0	0	0	0	0	0	0	0	15	1
23:00	0	0	0	0	0	0	0	1	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0
Percent	0.0%	0.4%	0.6%	1.3%	2.2%	6.6%	14.5 %	25.0 %	25.8 %	15.8 %	5.8%	1.3%	0.3%	0.3%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		
AM Peak		08:00	08:00	11:00	08:00	07:00	05:00	06:00	06:00	11:00	11:00	06:00	06:00	06:00										11:00	
Vol.		2	2	4	2	8	14	25	24	25	7	2	1	1										104	
PM Peak			12:00	14:00	12:00	15:00	15:00	14:00	14:00	12:00	13:00	12:00	15:00	14:00										14:00	
Vol.			1	3	4	11	25	32	36	19	9	2	2	1										129	
Total	2	17	42	92	125	313	839	1577	1763	1170	423	91	36	10	4	1	0	0	0	0	0	0	0	6505	

Statistics

Mean Speed(Average) : 41 MPH
50th Percentile : 40 MPH
85th Percentile : 48 MPH

Ontario Traffic, Inc.
17705 Leslie St., Unit 6
Newmarket, Ontario L3Y 3E3
Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 22131
Station ID: U79
HIDDEN VALLEY RD from WABANAKI DR to HIDDEN VALLEY CRES
Date Start: 10-Nov-22
Date End: 16-Nov-22

NB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
11/10/22	0	14	0	0	0	0	0	0	0	0	0	0	0	14
01:00	0	7	1	0	2	0	0	1	2	0	0	0	0	13
02:00	0	11	0	0	0	0	0	0	3	0	0	0	0	14
03:00	0	9	0	0	2	3	0	0	3	0	0	0	0	17
04:00	0	24	4	0	1	3	0	0	2	0	0	0	0	34
05:00	0	73	21	0	7	1	0	0	1	1	2	0	0	106
06:00	0	130	46	0	8	8	0	2	6	0	0	0	0	200
07:00	0	**246**	**67**	0	7	**11**	**1**	1	3	1	3	0	0	**340**
08:00	0	215	64	0	7	1	1	2	5	**2**	1	**1**	0	299
09:00	0	168	61	0	5	3	1	3	4	1	3	0	0	249
10:00	**1**	164	45	0	**9**	5	0	**4**	**8**	2	4	0	**1**	243
11:00	1	192	44	0	6	2	0	4	7	0	**6**	0	0	262
12 PM	**1**	177	49	0	4	**5**	**1**	2	2	0	6	0	1	248
13:00	0	150	50	0	4	1	0	**3**	2	**3**	3	0	0	216
14:00	1	269	69	0	**11**	1	0	3	4	0	3	0	0	361
15:00	0	271	**74**	0	7	3	0	0	5	1	**11**	0	**2**	**374**
16:00	1	**290**	47	0	1	0	1	1	1	0	10	0	0	352
17:00	0	261	29	0	2	1	0	0	1	1	10	0	1	306
18:00	1	200	20	0	0	0	0	0	4	0	2	0	0	227
19:00	1	129	14	0	0	0	0	0	2	0	1	0	0	147
20:00	0	94	9	0	0	2	0	0	**6**	1	1	0	0	113
21:00	0	87	10	0	0	1	0	0	3	0	0	0	0	101
22:00	0	79	7	0	0	0	0	0	4	0	0	0	0	90
23:00	0	35	1	0	0	0	0	0	0	0	0	0	0	36
Day Total	7	3295	732	0	83	51	5	26	78	13	66	1	5	4362
Percent	0.2%	75.5%	16.8%	0.0%	1.9%	1.2%	0.1%	0.6%	1.8%	0.3%	1.5%	0.0%	0.1%	
AM Peak	10:00	07:00	07:00		10:00	07:00	07:00	10:00	10:00	08:00	11:00	08:00	10:00	07:00
Vol.	1	246	67		9	11	1	4	8	2	6	1	1	340
PM Peak	12:00	16:00	15:00		14:00	12:00	12:00	13:00	20:00	13:00	15:00		15:00	15:00
Vol.	1	290	74		11	5	1	3	6	3	11		2	374

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HIDDEN VALLEY RD from WABANAKI DR to HIDDEN VALLEY CRES
Date Start: 10-Nov-22
Date End: 16-Nov-22

NB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
11/11/22	0	16	1	0	0	0	0	0	0	0	0	0	0	17
01:00	0	10	0	0	2	1	0	0	3	0	0	0	0	16
02:00	0	10	1	0	0	0	0	0	0	0	0	0	0	11
03:00	0	15	4	0	0	2	0	0	3	0	0	0	0	24
04:00	0	22	3	0	7	2	0	0	4	0	0	0	**1**	39
05:00	0	77	12	0	6	1	0	0	0	1	0	0	0	97
06:00	0	133	44	0	5	**4**	0	1	4	1	**2**	0	0	194
07:00	**1**	207	**53**	0	**10**	4	0	**2**	6	0	1	0	1	**285**
08:00	0	**212**	46	0	5	2	**1**	0	**7**	0	2	0	0	275
09:00	0	170	46	0	5	3	0	2	6	1	2	0	0	235
10:00	0	177	48	0	7	2	0	0	2	1	0	0	1	238
11:00	0	210	49	0	2	1	0	1	6	**2**	2	0	1	274
12 PM	0	210	**44**	0	5	2	0	0	1	0	1	0	0	263
13:00	0	210	33	0	7	**3**	**2**	0	3	0	4	0	0	262
14:00	0	223	38	0	**8**	3	0	1	1	0	**5**	0	1	280
15:00	**1**	255	40	0	6	0	0	**2**	**6**	**1**	1	0	1	**313**
16:00	0	**266**	38	0	2	1	0	0	0	1	5	0	0	313
17:00	1	229	28	0	1	0	1	0	3	0	5	0	0	268
18:00	0	201	16	0	1	0	0	0	4	0	2	0	**2**	226
19:00	0	96	15	0	0	0	0	0	2	0	0	0	0	113
20:00	0	83	2	0	0	1	0	0	2	0	1	0	1	90
21:00	0	91	14	0	1	0	0	0	4	0	1	0	0	111
22:00	0	69	4	0	0	0	0	0	1	0	0	0	0	74
23:00	0	44	7	0	0	0	0	0	0	0	0	0	0	51
Day Total	3	3236	586	0	80	32	4	9	68	8	34	0	9	4069
Percent	0.1%	79.5%	14.4%	0.0%	2.0%	0.8%	0.1%	0.2%	1.7%	0.2%	0.8%	0.0%	0.2%	
AM Peak	07:00	08:00	07:00		07:00	06:00	08:00	07:00	08:00	11:00	06:00		04:00	07:00
Vol.	1	212	53		10	4	1	2	7	2	2		1	285
PM Peak	15:00	16:00	12:00		14:00	13:00	13:00	15:00	15:00	15:00	14:00		18:00	15:00
Vol.	1	266	44		8	3	2	2	6	1	5		2	313

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Site Code: 22131
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HIDDEN VALLEY RD from WABANAKI DR to HIDDEN VALLEY CRES
Date Start: 10-Nov-22
Date End: 16-Nov-22

NB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
11/12/22	0	25	2	0	0	0	0	0	0	0	0	0	0	27
01:00	0	15	3	0	1	0	0	0	**2**	0	0	0	0	21
02:00	0	13	3	0	1	0	0	0	1	0	0	0	0	18
03:00	0	8	1	0	0	0	0	0	0	0	0	0	0	9
04:00	0	15	2	0	**5**	1	0	0	1	0	0	0	0	24
05:00	0	23	5	0	4	1	0	**1**	0	0	0	0	0	34
06:00	0	49	7	0	1	**2**	0	0	0	0	1	0	0	60
07:00	0	54	11	0	0	1	0	0	0	0	0	0	0	66
08:00	0	135	12	0	1	0	0	0	1	0	0	0	**1**	150
09:00	0	**185**	16	0	0	1	0	0	1	0	2	0	0	**205**
10:00	0	182	15	0	0	0	0	0	0	0	**4**	0	0	201
11:00	0	171	**31**	0	1	0	0	1	0	0	0	0	0	204
12 PM	0	**211**	20	0	0	**1**	0	0	**1**	0	2	0	0	**235**
13:00	0	194	**25**	0	0	0	0	0	0	0	2	0	0	221
14:00	0	189	18	0	**1**	1	0	**2**	1	0	**5**	0	**1**	218
15:00	0	179	19	0	0	1	0	0	0	0	1	0	0	200
16:00	0	202	19	0	1	0	0	0	1	0	2	0	0	225
17:00	0	161	15	0	0	0	0	0	0	0	0	0	0	176
18:00	0	144	12	0	0	1	0	0	0	0	1	0	0	158
19:00	0	80	8	0	1	0	0	0	0	0	1	0	0	90
20:00	0	75	7	0	0	0	0	0	0	0	0	0	0	82
21:00	0	76	3	0	0	1	0	0	0	0	1	0	0	81
22:00	0	56	5	0	0	0	0	0	0	0	0	0	0	61
23:00	0	48	5	0	0	0	0	0	0	0	0	0	0	53
Day Total	0	2490	264	0	17	11	0	4	9	0	22	0	2	2819
Percent	0.0%	88.3%	9.4%	0.0%	0.6%	0.4%	0.0%	0.1%	0.3%	0.0%	0.8%	0.0%	0.1%	
AM Peak		09:00	11:00		04:00	06:00		05:00	01:00		10:00		08:00	09:00
Vol.		185	31		5	2		1	2		4		1	205
PM Peak		12:00	13:00		14:00	12:00		14:00	12:00		14:00		14:00	12:00
Vol.		211	25		1	1		2	1		5		1	235

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Site Code: 22131
Station ID: U79
HIDDEN VALLEY RD from WABANAKI DR to HIDDEN VALLEY CRES
Date Start: 10-Nov-22
Date End: 16-Nov-22

NB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
11/13/22	0	42	3	0	**1**	**1**	0	0	1	0	**2**	0	0	50
01:00	0	23	1	0	0	0	0	0	0	0	0	0	0	24
02:00	0	12	3	0	0	1	0	0	0	0	0	0	0	16
03:00	0	13	0	0	0	0	0	0	0	0	0	0	0	13
04:00	0	11	0	**1**	1	1	0	0	0	0	0	0	0	14
05:00	0	16	2	0	0	1	0	0	0	0	0	0	0	19
06:00	0	24	3	0	0	0	0	0	0	0	0	0	0	27
07:00	0	27	3	0	0	1	0	0	0	0	0	0	0	31
08:00	0	78	4	0	1	1	0	0	1	0	0	0	0	85
09:00	0	116	9	0	0	1	0	0	1	0	0	0	0	127
10:00	0	146	18	0	0	1	0	0	1	0	0	0	0	166
11:00	0	**149**	**19**	0	0	0	0	0	**2**	0	2	0	0	**172**
12 PM	**1**	165	18	0	0	1	0	**1**	3	0	1	0	0	190
13:00	0	**175**	16	0	0	1	0	1	1	0	2	0	**1**	197
14:00	0	150	19	0	0	0	**1**	0	1	0	2	0	0	173
15:00	0	175	**22**	0	0	0	0	0	1	0	2	0	0	**200**
16:00	0	160	11	0	**1**	**2**	0	1	2	**1**	1	0	0	179
17:00	0	125	15	0	0	0	0	0	3	0	**3**	0	0	146
18:00	0	100	13	0	0	0	0	1	1	0	3	0	1	119
19:00	0	83	9	0	1	0	0	0	2	0	1	0	0	96
20:00	0	73	8	0	0	0	0	0	3	0	0	0	0	84
21:00	0	65	2	0	0	0	0	0	**5**	0	0	0	0	72
22:00	0	45	2	0	0	1	0	0	2	0	0	0	0	50
23:00	0	26	4	0	0	0	0	0	0	0	0	0	0	30
Day Total	1	1999	204	1	5	13	1	4	30	1	19	0	2	2280
Percent	0.0%	87.7%	8.9%	0.0%	0.2%	0.6%	0.0%	0.2%	1.3%	0.0%	0.8%	0.0%	0.1%	
AM Peak		11:00	11:00	04:00	00:00	00:00			11:00		00:00			11:00
Vol.		149	19	1	1	1			2		2			172
PM Peak	12:00	13:00	15:00		16:00	16:00	14:00	12:00	21:00	16:00	17:00		13:00	15:00
Vol.	1	175	22		1	2	1	1	5	1	3		1	200

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HIDDEN VALLEY RD from WABANAKI DR to HIDDEN VALLEY CRES
Date Start: 10-Nov-22
Date End: 16-Nov-22

NB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
11/14/22	0	15	0	0	0	0	0	0	1	0	0	0	0	16
01:00	0	8	1	0	1	0	0	0	5	0	0	0	0	15
02:00	0	10	0	0	0	0	0	0	1	0	0	0	0	11
03:00	0	9	0	0	0	4	0	0	3	0	0	0	0	16
04:00	0	25	2	0	6	0	0	0	2	1	0	0	**1**	37
05:00	0	68	19	0	2	0	0	0	4	0	0	0	0	93
06:00	0	141	43	0	4	3	**1**	1	4	1	3	0	1	202
07:00	0	**257**	**70**	0	**13**	**14**	1	0	5	**4**	**5**	0	1	**370**
08:00	0	226	55	0	9	6	0	0	6	1	1	0	0	304
09:00	0	173	61	0	3	6	0	**2**	7	0	3	0	1	256
10:00	0	164	53	0	3	6	0	0	4	3	1	0	0	234
11:00	0	143	38	0	4	3	0	1	**9**	2	5	0	0	205
12 PM	0	178	47	0	6	**6**	**1**	**2**	5	**1**	6	0	**1**	253
13:00	0	164	36	0	8	5	1	2	**8**	0	3	0	0	227
14:00	**1**	237	65	0	**10**	2	0	2	4	1	4	0	0	326
15:00	0	277	**66**	**1**	7	3	0	2	1	0	**7**	0	0	364
16:00	0	**309**	50	0	1	3	0	1	2	0	7	0	0	**373**
17:00	0	214	30	0	0	3	0	0	2	0	4	0	0	253
18:00	0	160	13	0	0	1	0	1	0	0	1	0	1	177
19:00	0	98	9	0	0	0	0	0	4	0	1	0	0	112
20:00	0	93	2	0	0	1	0	0	8	0	0	**1**	1	106
21:00	0	68	4	0	0	1	0	1	3	0	0	0	0	77
22:00	0	67	3	0	0	0	0	0	3	0	0	0	0	73
23:00	0	36	5	0	0	0	0	0	1	0	1	0	0	43
Day Total	1	3140	672	1	77	67	4	15	92	14	52	1	7	4143
Percent	0.0%	75.8%	16.2%	0.0%	1.9%	1.6%	0.1%	0.4%	2.2%	0.3%	1.3%	0.0%	0.2%	
AM Peak		07:00	07:00		07:00	07:00	06:00	09:00	11:00	07:00	07:00		04:00	07:00
Vol.		257	70		13	14	1	2	9	4	5		1	370
PM Peak	14:00	16:00	15:00	15:00	14:00	12:00	12:00	12:00	13:00	12:00	15:00	20:00	12:00	16:00
Vol.	1	309	66	1	10	6	1	2	8	1	7	1	1	373

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HIDDEN VALLEY RD from WABANAKI DR to HIDDEN VALLEY CRES
Date Start: 10-Nov-22
Date End: 16-Nov-22

NB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
11/15/22	0	14	0	0	0	1	0	0	2	0	0	0	0	17
01:00	0	11	1	0	1	1	0	0	1	0	0	0	0	15
02:00	0	13	1	0	0	0	0	0	5	0	0	0	0	19
03:00	0	6	1	0	5	2	0	0	1	0	0	0	0	15
04:00	0	21	3	0	4	1	0	0	1	0	0	0	1	31
05:00	0	64	15	0	5	1	0	0	1	**1**	2	0	0	89
06:00	0	127	46	0	8	3	1	2	7	0	5	0	0	199
07:00	0	**239**	**71**	0	**15**	**10**	1	**4**	4	0	**7**	**1**	**3**	**355**
08:00	0	213	46	0	13	3	**2**	0	6	0	3	0	3	289
09:00	0	157	67	0	6	5	0	2	8	1	0	0	2	248
10:00	**1**	160	52	0	9	6	0	0	**9**	1	2	0	0	240
11:00	0	141	40	0	6	1	1	2	5	0	3	0	2	201
12 PM	2	159	37	0	3	4	**1**	3	1	**4**	6	0	1	221
13:00	0	145	39	0	**5**	**5**	1	2	4	1	5	0	**2**	209
14:00	1	219	54	0	5	2	1	**5**	1	2	2	0	1	293
15:00	0	312	**60**	0	2	3	1	1	3	1	10	**1**	1	**395**
16:00	**3**	**315**	45	0	2	1	1	0	1	1	**15**	0	0	384
17:00	0	210	26	0	1	1	1	0	0	2	5	0	2	248
18:00	2	159	16	0	0	0	1	0	2	0	0	0	1	181
19:00	1	88	10	0	0	1	1	0	2	1	1	0	0	105
20:00	0	86	8	0	0	2	1	0	**5**	0	0	0	0	102
21:00	0	60	6	0	0	0	0	0	2	0	0	0	0	68
22:00	0	58	4	0	0	0	0	0	0	0	0	0	0	62
23:00	0	34	1	0	0	0	0	0	0	0	0	0	0	35
Day Total	10	3011	649	0	90	53	14	21	71	15	66	2	19	4021
Percent	0.2%	74.9%	16.1%	0.0%	2.2%	1.3%	0.3%	0.5%	1.8%	0.4%	1.6%	0.0%	0.5%	
AM Peak	10:00	07:00	07:00		07:00	07:00	08:00	07:00	10:00	05:00	07:00	07:00	07:00	07:00
Vol.	1	239	71		15	10	2	4	9	1	7	1	3	355
PM Peak	16:00	16:00	15:00		13:00	13:00	12:00	14:00	20:00	12:00	16:00	15:00	13:00	15:00
Vol.	3	315	60		5	5	1	5	5	4	15	1	2	395

Ontario Traffic, Inc.
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Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 22131
Station ID: U79
HIDDEN VALLEY RD from WABANAKI DR to HIDDEN VALLEY CRES
Date Start: 10-Nov-22
Date End: 16-Nov-22

NB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
11/16/22	0	11	0	0	0	0	0	0	0	0	0	0	0	11
01:00	0	9	0	0	1	0	0	0	1	0	0	0	0	11
02:00	0	9	0	0	0	0	0	0	1	0	0	0	0	10
03:00	0	12	1	0	0	1	0	0	0	0	0	0	0	14
04:00	0	22	4	0	2	3	0	0	1	0	0	0	0	32
05:00	0	59	11	0	3	2	0	0	3	0	0	0	0	78
06:00	0	140	41	0	7	11	0	0	**7**	0	1	0	0	207
07:00	0	**243**	**83**	0	**12**	**15**	0	5	5	**1**	**3**	0	0	**367**
08:00	**1**	243	62	0	7	2	**2**	5	7	0	3	0	0	332
09:00	0	169	53	0	6	11	0	**7**	4	0	2	0	**3**	255
10:00	1	162	43	0	3	7	2	3	6	0	3	**2**	2	234
11:00	1	134	32	0	2	2	0	3	3	0	1	0	0	178
12 PM	**2**	150	44	0	4	1	0	2	3	0	2	0	**3**	211
13:00	0	154	43	0	**7**	1	1	4	3	0	4	**1**	1	219
14:00	1	221	62	0	7	0	1	**5**	3	**2**	5	0	0	307
15:00	2	279	**64**	0	7	**2**	**2**	0	3	1	6	0	2	368
16:00	1	**319**	60	0	5	1	2	0	3	0	**12**	0	2	**405**
17:00	0	237	39	0	2	1	0	0	4	0	7	0	1	291
18:00	1	180	15	0	0	1	0	0	2	1	1	0	0	201
19:00	0	96	13	0	0	1	0	0	2	0	1	0	0	113
20:00	0	97	12	0	0	0	0	0	3	0	0	0	0	112
21:00	0	68	8	0	0	0	0	0	3	0	1	0	1	81
22:00	0	64	2	0	0	2	0	0	**5**	0	0	0	0	73
23:00	0	39	2	0	0	0	0	0	2	0	0	0	0	43
Day Total	10	3117	694	0	75	64	10	34	74	5	52	3	15	4153
Percent	0.2%	75.1%	16.7%	0.0%	1.8%	1.5%	0.2%	0.8%	1.8%	0.1%	1.3%	0.1%	0.4%	
AM Peak	08:00	07:00	07:00		07:00	07:00	08:00	09:00	06:00	07:00	07:00	10:00	09:00	07:00
Vol.	1	243	83		12	15	2	7	7	1	3	2	3	367
PM Peak	12:00	16:00	15:00		13:00	15:00	15:00	14:00	22:00	14:00	16:00	13:00	12:00	16:00
Vol.	2	319	64		7	2	2	5	5	2	12	1	3	405
Grand Total	32	20288	3801	2	427	291	38	113	422	56	311	7	59	25847
Percent	0.1%	78.5%	14.7%	0.0%	1.7%	1.1%	0.1%	0.4%	1.6%	0.2%	1.2%	0.0%	0.2%	

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HIDDEN VALLEY RD from WABANAKI DR to HIDDEN VALLEY CRES
Date Start: 10-Nov-22
Date End: 16-Nov-22

SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
11/10/22	0	3	0	0	0	0	0	0	0	0	0	0	0	3
01:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
02:00	0	7	1	0	0	0	0	0	0	0	0	0	0	8
03:00	0	5	0	0	0	0	0	0	0	0	0	0	0	5
04:00	**1**	1	2	0	0	0	0	0	0	0	0	0	0	4
05:00	0	13	2	0	0	0	0	0	0	0	1	0	0	16
06:00	1	**66**	12	**1**	0	**1**	**1**	0	0	0	5	0	0	**87**
07:00	0	54	10	1	3	1	0	**2**	0	0	**6**	0	0	77
08:00	0	38	**20**	1	4	0	0	0	0	0	0	**2**	0	65
09:00	0	38	12	1	4	0	1	0	0	0	5	1	0	62
10:00	0	31	11	0	3	1	0	1	**2**	0	4	0	0	53
11:00	0	46	6	0	**5**	1	0	0	0	0	1	0	0	59
12 PM	0	**77**	12	0	**7**	1	0	0	**2**	0	2	0	0	**101**
13:00	1	55	**15**	0	3	0	0	0	0	0	3	0	0	77
14:00	0	58	11	0	4	**2**	1	0	0	0	4	0	0	80
15:00	0	60	15	0	4	1	0	**1**	0	0	5	0	0	86
16:00	**2**	75	11	0	2	0	**2**	1	0	0	**6**	0	0	99
17:00	1	49	10	0	4	0	1	0	1	0	4	0	0	70
18:00	0	48	7	0	2	0	0	0	0	**1**	3	0	0	61
19:00	0	47	2	0	2	0	1	0	0	0	0	0	0	52
20:00	0	45	2	0	2	0	0	0	0	0	0	0	0	49
21:00	0	39	11	0	0	0	0	1	1	0	0	0	0	52
22:00	0	34	3	0	0	0	0	0	0	0	0	0	0	37
23:00	0	10	0	0	0	0	0	0	0	0	0	0	0	10
Day Total	6	900	175	4	49	8	7	6	6	1	49	3	0	1214
Percent	0.5%	74.1%	14.4%	0.3%	4.0%	0.7%	0.6%	0.5%	0.5%	0.1%	4.0%	0.2%	0.0%	
AM Peak	04:00	06:00	08:00	06:00	11:00	06:00	06:00	07:00	10:00		07:00	08:00		06:00
Vol.	1	66	20	1	5	1	1	2	2		6	2		87
PM Peak	16:00	12:00	13:00		12:00	14:00	16:00	15:00	12:00	18:00	16:00			12:00
Vol.	2	77	15		7	2	2	1	2	1	6			101

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HIDDEN VALLEY RD from WABANAKI DR to HIDDEN VALLEY CRES
Date Start: 10-Nov-22
Date End: 16-Nov-22

SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
11/11/22	0	6	0	0	0	0	0	0	0	0	0	0	0	6
01:00	0	11	0	0	0	0	0	0	0	0	0	0	0	11
02:00	0	3	1	0	0	0	0	0	0	0	0	0	0	4
03:00	0	5	0	0	0	0	0	0	0	0	0	0	0	5
04:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
05:00	0	10	3	0	1	0	0	0	0	0	0	0	0	14
06:00	0	37	11	0	1	0	0	**1**	**1**	0	1	0	0	52
07:00	0	**59**	7	0	**6**	0	0	0	0	0	1	0	**1**	**74**
08:00	0	36	9	0	3	0	0	0	0	0	1	0	0	49
09:00	0	36	7	0	5	**1**	0	0	1	0	1	0	0	51
10:00	0	33	11	0	4	0	0	0	0	0	1	0	0	49
11:00	0	47	**12**	**1**	2	0	0	0	0	0	**2**	**1**	1	66
12 PM	0	71	9	0	4	0	0	0	0	0	4	0	0	88
13:00	0	70	**11**	0	3	0	0	0	0	0	3	0	0	87
14:00	0	55	5	0	3	0	0	0	0	0	2	0	0	65
15:00	0	74	11	0	**6**	0	0	0	1	0	5	0	**1**	**98**
16:00	0	**79**	8	0	2	0	0	**1**	1	0	**7**	0	0	98
17:00	0	51	5	0	5	**1**	0	0	**2**	0	4	0	0	68
18:00	0	34	5	0	2	0	0	0	0	0	1	0	0	42
19:00	0	40	4	0	2	0	0	0	0	0	0	0	0	46
20:00	0	40	1	0	2	0	0	0	0	0	0	0	0	43
21:00	0	37	5	0	0	0	0	0	0	0	1	0	0	43
22:00	0	21	2	0	0	0	0	0	0	0	0	0	0	23
23:00	0	18	2	0	0	0	0	0	0	0	0	0	0	20
Day Total	0	876	129	1	51	2	0	2	6	0	34	1	3	1105
Percent	0.0%	79.3%	11.7%	0.1%	4.6%	0.2%	0.0%	0.2%	0.5%	0.0%	3.1%	0.1%	0.3%	
AM Peak		07:00	11:00	11:00	07:00	09:00		06:00	06:00		11:00	11:00	07:00	07:00
Vol.		59	12	1	6	1		1	1		2	1	1	74
PM Peak		16:00	13:00		15:00	17:00		16:00	17:00		16:00		15:00	15:00
Vol.		79	11		6	1		1	2		7		1	98

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Station ID: U79
HIDDEN VALLEY RD from WABANAKI DR to HIDDEN VALLEY CRES
Date Start: 10-Nov-22
Date End: 16-Nov-22

SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
11/12/22	0	14	0	0	0	0	0	0	0	0	0	0	0	14
01:00	0	6	0	0	0	0	0	0	0	0	0	0	0	6
02:00	0	7	0	0	0	0	0	0	0	0	0	0	0	7
03:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
04:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
05:00	0	4	1	0	0	**1**	0	0	0	0	0	0	0	6
06:00	0	10	1	0	0	0	0	0	0	0	0	0	0	11
07:00	0	5	0	0	0	1	0	**1**	0	0	0	0	0	7
08:00	0	14	1	0	0	0	0	0	0	0	0	0	0	15
09:00	0	23	1	0	0	0	0	0	0	0	0	0	0	24
10:00	0	33	**9**	0	0	0	0	1	0	0	1	0	0	44
11:00	0	**50**	9	0	0	0	0	0	**1**	0	**2**	0	0	**62**
12 PM	0	42	6	0	0	0	**1**	0	0	0	**4**	0	0	53
13:00	0	54	5	0	0	0	0	0	0	0	1	0	0	60
14:00	0	**75**	9	0	0	0	0	**1**	**1**	0	3	0	0	**89**
15:00	0	67	**13**	0	0	0	0	0	1	0	1	0	0	82
16:00	0	55	3	0	**1**	**1**	0	0	0	0	0	0	0	60
17:00	0	55	2	0	0	0	0	1	0	0	3	0	0	61
18:00	0	40	6	0	0	0	0	0	0	0	1	0	0	47
19:00	0	49	4	0	0	0	0	0	0	0	1	0	0	54
20:00	0	29	1	0	0	0	0	0	0	0	1	0	0	31
21:00	0	25	0	0	0	0	0	0	0	0	0	0	0	25
22:00	0	14	3	0	0	0	0	0	0	0	0	0	0	17
23:00	0	14	1	0	0	0	0	0	0	0	0	0	0	15
Day Total	0	690	75	0	1	3	1	4	3	0	18	0	0	795
Percent	0.0%	86.8%	9.4%	0.0%	0.1%	0.4%	0.1%	0.5%	0.4%	0.0%	2.3%	0.0%	0.0%	
AM Peak		11:00	10:00			05:00		07:00	11:00		11:00			11:00
Vol.		50	9			1		1	1		2			62
PM Peak		14:00	15:00		16:00	16:00	12:00	14:00	14:00		12:00			14:00
Vol.		75	13		1	1	1	1	1		4			89

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HIDDEN VALLEY RD from WABANAKI DR to HIDDEN VALLEY CRES
Date Start: 10-Nov-22
Date End: 16-Nov-22

SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
11/13/22	0	12	3	0	0	0	0	0	0	0	0	0	0	15
01:00	0	14	3	0	0	0	0	0	0	0	0	0	0	17
02:00	0	3	0	0	0	**1**	0	0	0	0	0	0	0	4
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
05:00	0	3	1	0	0	0	0	0	0	0	0	0	0	4
06:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
07:00	0	5	0	0	0	1	0	0	0	0	0	0	0	6
08:00	0	8	0	0	0	0	0	0	0	0	0	0	0	8
09:00	0	15	3	0	**1**	0	0	0	0	0	0	0	0	19
10:00	0	26	4	0	0	0	0	0	0	0	0	0	0	30
11:00	0	**28**	**5**	0	0	0	0	0	**1**	0	**2**	0	0	**36**
12 PM	0	47	5	0	0	0	0	0	0	0	2	0	0	54
13:00	0	53	5	0	0	0	0	0	0	0	1	0	0	59
14:00	0	39	4	0	0	0	0	**1**	0	0	**3**	0	0	47
15:00	0	**66**	5	0	0	0	0	0	0	0	2	0	0	**73**
16:00	0	57	**9**	0	0	0	0	0	0	0	1	0	0	67
17:00	0	52	4	0	0	0	0	0	0	0	0	0	0	56
18:00	0	25	5	0	0	0	0	0	0	0	0	0	0	30
19:00	0	33	1	0	0	0	0	0	0	0	0	0	**1**	35
20:00	0	25	3	0	0	0	0	0	0	0	0	0	0	28
21:00	0	22	0	0	0	0	0	0	0	0	1	0	0	23
22:00	0	18	3	0	0	0	0	0	0	0	0	0	0	21
23:00	0	13	0	0	0	0	0	0	0	0	0	0	0	13
Day Total	0	566	63	0	1	2	0	1	1	0	12	0	1	647
Percent	0.0%	87.5%	9.7%	0.0%	0.2%	0.3%	0.0%	0.2%	0.2%	0.0%	1.9%	0.0%	0.2%	
AM Peak		11:00	11:00		09:00	02:00			11:00		11:00			11:00
Vol.		28	5		1	1			1		2			36
PM Peak		15:00	16:00					14:00			14:00		19:00	15:00
Vol.		66	9					1			3		1	73

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HIDDEN VALLEY RD from WABANAKI DR to HIDDEN VALLEY CRES
Date Start: 10-Nov-22
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SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
11/14/22	0	2	0	0	0	0	0	0	0	0	0	0	0	2
01:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
02:00	0	8	1	0	0	0	0	0	0	0	0	0	0	9
03:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
04:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
05:00	0	14	3	0	0	0	0	**1**	0	0	1	0	0	19
06:00	0	**54**	9	0	1	0	0	1	0	**1**	**2**	0	0	68
07:00	0	53	12	0	4	**1**	**1**	0	0	0	1	0	**1**	**73**
08:00	0	37	**14**	0	**5**	0	0	0	0	0	2	0	1	59
09:00	0	38	5	0	3	1	0	1	0	0	2	**1**	0	51
10:00	**1**	33	6	0	4	1	0	0	0	0	2	0	0	47
11:00	0	43	11	0	2	0	0	1	0	0	0	0	0	57
12 PM	0	65	14	0	4	0	0	**1**	0	0	3	0	1	88
13:00	**1**	45	**17**	0	**6**	0	**1**	1	0	0	2	0	0	73
14:00	0	61	16	0	2	1	1	0	1	0	4	0	**2**	88
15:00	0	**66**	16	0	4	**2**	0	1	1	0	1	0	0	**91**
16:00	0	66	11	**1**	1	0	0	0	**2**	0	1	**1**	0	83
17:00	0	58	7	0	3	0	0	1	0	0	**5**	0	0	74
18:00	0	46	7	0	2	0	0	0	0	0	1	0	0	56
19:00	0	33	7	1	1	0	0	0	0	0	2	0	0	44
20:00	0	35	1	0	1	0	0	0	0	0	0	0	0	37
21:00	0	18	3	0	0	0	0	0	0	0	0	0	0	21
22:00	0	21	3	0	0	0	0	0	0	0	1	0	0	25
23:00	0	12	0	0	0	0	0	0	0	0	0	0	0	12
Day Total	2	813	163	2	43	6	3	8	4	1	30	2	5	1082
Percent	0.2%	75.1%	15.1%	0.2%	4.0%	0.6%	0.3%	0.7%	0.4%	0.1%	2.8%	0.2%	0.5%	
AM Peak	10:00	06:00	08:00		08:00	07:00	07:00	05:00		06:00	06:00	09:00	07:00	07:00
Vol.	1	54	14		5	1	1	1		1	2	1	1	73
PM Peak	13:00	15:00	13:00	16:00	13:00	15:00	13:00	12:00	16:00		17:00	16:00	14:00	15:00
Vol.	1	66	17	1	6	2	1	1	2		5	1	2	91

Ontario Traffic, Inc.
17705 Leslie St., Unit 6
Newmarket, Ontario L3Y 3E3
Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 22131
Station ID: U79
HIDDEN VALLEY RD from WABANAKI DR to HIDDEN VALLEY CRES
Date Start: 10-Nov-22
Date End: 16-Nov-22

SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
11/15/22	0	6	0	0	0	0	0	0	0	0	0	0	0	6
01:00	0	1	0	0	0	1	0	0	0	0	0	0	0	2
02:00	0	3	1	0	0	0	0	0	0	0	0	0	0	4
03:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
04:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
05:00	0	13	4	0	0	0	0	0	0	0	0	0	0	17
06:00	0	**53**	12	0	1	0	0	**2**	0	0	3	0	0	71
07:00	0	53	11	0	2	1	0	0	0	**1**	**5**	0	**2**	**75**
08:00	0	46	8	**2**	3	0	0	2	**1**	0	4	0	1	67
09:00	0	25	**15**	0	4	0	0	0	0	0	1	0	0	45
10:00	0	39	9	1	1	0	0	0	0	1	0	0	0	51
11:00	**2**	44	7	0	**6**	**2**	0	0	0	0	2	0	0	63
12 PM	1	59	11	0	5	1	0	0	0	0	1	0	0	78
13:00	0	48	8	1	4	1	0	**2**	1	0	4	0	0	69
14:00	1	46	10	**2**	3	**3**	**3**	2	0	0	2	**1**	0	73
15:00	**2**	61	**17**	1	1	2	0	2	0	0	**9**	0	0	**95**
16:00	0	**62**	13	0	2	1	2	1	2	**1**	5	0	0	89
17:00	2	49	8	2	**6**	1	1	1	**3**	0	2	1	0	76
18:00	0	44	6	1	2	2	1	2	0	0	2	0	0	60
19:00	0	34	2	0	1	0	1	1	0	0	1	1	0	41
20:00	1	26	2	1	1	0	1	0	0	0	0	0	0	32
21:00	0	20	0	0	0	0	0	0	0	0	0	0	0	20
22:00	0	18	1	0	0	0	0	0	0	0	0	0	0	19
23:00	0	13	0	0	0	0	0	0	0	0	0	0	0	13
Day Total	9	766	145	11	42	15	9	15	7	3	41	3	3	1069
Percent	0.8%	71.7%	13.6%	1.0%	3.9%	1.4%	0.8%	1.4%	0.7%	0.3%	3.8%	0.3%	0.3%	
AM Peak	11:00	06:00	09:00	08:00	11:00	11:00		06:00	08:00	07:00	07:00		07:00	07:00
Vol.	2	53	15	2	6	2		2	1	1	5		2	75
PM Peak	15:00	16:00	15:00	14:00	17:00	14:00	14:00	13:00	17:00	16:00	15:00	14:00		15:00
Vol.	2	62	17	2	6	3	3	2	3	1	9	1		95

Ontario Traffic, Inc.
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Site Code: 22131
Station ID: U79
HIDDEN VALLEY RD from WABANAKI DR to HIDDEN VALLEY CRES
Date Start: 10-Nov-22
Date End: 16-Nov-22

SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
11/16/22	0	2	0	0	0	0	0	0	0	0	0	0	0	2
01:00	0	2	0	0	0	0	0	0	0	0	0	0	0	2
02:00	0	3	0	0	0	0	0	0	0	0	0	0	0	3
03:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
04:00	0	1	0	0	0	0	0	0	0	0	0	0	0	1
05:00	0	14	3	0	0	0	0	0	0	0	2	0	0	19
06:00	0	52	8	0	0	0	0	0	0	0	**11**	0	0	71
07:00	0	**57**	**14**	**3**	1	0	0	**1**	**4**	0	4	**1**	0	**85**
08:00	0	39	9	2	2	1	1	0	4	**1**	2	1	0	62
09:00	**5**	21	12	0	3	0	1	1	4	0	3	0	0	50
10:00	0	23	9	1	3	**3**	**2**	1	0	0	1	1	0	44
11:00	0	39	9	1	**5**	2	1	1	2	0	3	0	0	63
12 PM	0	55	12	0	**6**	**1**	1	1	0	0	1	0	0	77
13:00	**2**	45	13	0	4	1	1	**2**	0	0	**5**	**1**	0	74
14:00	1	57	11	0	4	1	**2**	1	0	**1**	5	0	0	83
15:00	0	**72**	**15**	0	3	1	1	0	2	0	5	0	0	**99**
16:00	0	57	8	0	3	1	2	2	**3**	1	4	0	0	81
17:00	0	60	10	0	1	0	0	0	0	0	2	0	**1**	74
18:00	0	50	7	0	2	0	0	1	0	0	1	0	0	61
19:00	1	35	2	0	2	0	0	1	0	0	0	1	0	42
20:00	0	28	4	0	2	0	1	0	0	0	2	0	0	37
21:00	0	23	3	0	0	0	0	0	0	0	1	0	0	27
22:00	0	25	2	0	0	0	0	0	0	0	0	0	0	27
23:00	0	8	0	0	0	0	0	0	0	0	0	0	0	8
Day Total	9	769	151	7	41	11	13	12	19	3	52	5	1	1093
Percent	0.8%	70.4%	13.8%	0.6%	3.8%	1.0%	1.2%	1.1%	1.7%	0.3%	4.8%	0.5%	0.1%	
AM Peak	09:00	07:00	07:00	07:00	11:00	10:00	10:00	07:00	07:00	08:00	06:00	07:00		07:00
Vol.	5	57	14	3	5	3	2	1	4	1	11	1		85
PM Peak	13:00	15:00	15:00		12:00	12:00	14:00	13:00	16:00	14:00	13:00	13:00	17:00	15:00
Vol.	2	72	15		6	1	2	2	3	1	5	1	1	99
Grand Total	26	5380	901	25	228	47	33	48	46	8	236	14	13	7005
Percent	0.4%	76.8%	12.9%	0.4%	3.3%	0.7%	0.5%	0.7%	0.7%	0.1%	3.4%	0.2%	0.2%	

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Site Code: 22131
Station ID: U79
HIDDEN VALLEY RD from WABANAKI DR to HIDDEN VALLEY CRES
Date Start: 10-Nov-22
Date End: 16-Nov-22

NB, SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
11/10/22	0	17	0	0	0	0	0	0	0	0	0	0	0	17
01:00	0	8	1	0	2	0	0	1	2	0	0	0	0	14
02:00	0	18	1	0	0	0	0	0	3	0	0	0	0	22
03:00	0	14	0	0	2	3	0	0	3	0	0	0	0	22
04:00	**1**	25	6	0	1	3	0	0	2	0	0	0	0	38
05:00	0	86	23	0	7	1	0	0	1	1	3	0	0	122
06:00	1	196	58	**1**	8	9	1	2	6	0	5	0	0	287
07:00	0	**300**	77	1	10	**12**	1	3	3	1	**9**	0	0	**417**
08:00	0	253	**84**	1	11	1	1	2	5	**2**	1	**3**	0	364
09:00	0	206	73	1	9	3	**2**	3	4	1	8	1	0	311
10:00	1	195	56	0	**12**	6	0	**5**	**10**	2	8	0	**1**	296
11:00	1	238	50	0	11	3	0	4	7	0	7	0	0	321
12 PM	1	254	61	0	11	**6**	1	2	4	0	8	0	1	349
13:00	1	205	65	0	7	1	0	**3**	2	**3**	6	0	0	293
14:00	1	327	80	0	**15**	3	1	3	4	0	7	0	0	441
15:00	0	331	**89**	0	11	4	0	1	5	1	**16**	0	**2**	**460**
16:00	**3**	**365**	58	0	3	0	**3**	2	1	0	16	0	0	451
17:00	1	310	39	0	6	1	1	0	2	1	14	0	1	376
18:00	1	248	27	0	2	0	0	0	4	1	5	0	0	288
19:00	1	176	16	0	2	0	1	0	2	0	1	0	0	199
20:00	0	139	11	0	2	2	0	0	**6**	1	1	0	0	162
21:00	0	126	21	0	0	1	0	1	4	0	0	0	0	153
22:00	0	113	10	0	0	0	0	0	4	0	0	0	0	127
23:00	0	45	1	0	0	0	0	0	0	0	0	0	0	46
Day Total	13	4195	907	4	132	59	12	32	84	14	115	4	5	5576
Percent	0.2%	75.2%	16.3%	0.1%	2.4%	1.1%	0.2%	0.6%	1.5%	0.3%	2.1%	0.1%	0.1%	
AM Peak	04:00	07:00	08:00	06:00	10:00	07:00	09:00	10:00	10:00	08:00	07:00	08:00	10:00	07:00
Vol.	1	300	84	1	12	12	2	5	10	2	9	3	1	417
PM Peak	16:00	16:00	15:00		14:00	12:00	16:00	13:00	20:00	13:00	15:00		15:00	15:00
Vol.	3	365	89		15	6	3	3	6	3	16		2	460

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Site Code: 22131
Station ID: U79
HIDDEN VALLEY RD from WABANAKI DR to HIDDEN VALLEY CRES
Date Start: 10-Nov-22
Date End: 16-Nov-22

NB, SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
11/11/22	0	22	1	0	0	0	0	0	0	0	0	0	0	23
01:00	0	21	0	0	2	1	0	0	3	0	0	0	0	27
02:00	0	13	2	0	0	0	0	0	0	0	0	0	0	15
03:00	0	20	4	0	0	2	0	0	3	0	0	0	0	29
04:00	0	25	3	0	7	2	0	0	4	0	0	0	1	42
05:00	0	87	15	0	7	1	0	0	0	1	0	0	0	111
06:00	0	170	55	0	6	**4**	0	**2**	5	1	3	0	0	246
07:00	**1**	**266**	60	0	**16**	4	0	2	6	0	2	0	**2**	**359**
08:00	0	248	55	0	8	2	**1**	0	**7**	0	3	0	0	324
09:00	0	206	53	0	10	4	0	2	7	1	3	0	0	286
10:00	0	210	59	0	11	2	0	0	2	1	1	0	1	287
11:00	0	257	**61**	**1**	4	1	0	1	6	**2**	**4**	**1**	2	340
12 PM	0	281	**53**	0	9	2	0	0	1	0	5	0	0	351
13:00	0	280	44	0	10	**3**	**2**	0	3	0	7	0	0	349
14:00	0	278	43	0	11	3	0	1	1	0	7	0	1	345
15:00	**1**	329	51	0	**12**	0	0	**2**	**7**	**1**	6	0	**2**	**411**
16:00	0	**345**	46	0	4	1	0	1	1	1	**12**	0	0	411
17:00	1	280	33	0	6	1	1	0	5	0	9	0	0	336
18:00	0	235	21	0	3	0	0	0	4	0	3	0	2	268
19:00	0	136	19	0	2	0	0	0	2	0	0	0	0	159
20:00	0	123	3	0	2	1	0	0	2	0	1	0	1	133
21:00	0	128	19	0	1	0	0	0	4	0	2	0	0	154
22:00	0	90	6	0	0	0	0	0	1	0	0	0	0	97
23:00	0	62	9	0	0	0	0	0	0	0	0	0	0	71
Day Total	3	4112	715	1	131	34	4	11	74	8	68	1	12	5174
Percent	0.1%	79.5%	13.8%	0.0%	2.5%	0.7%	0.1%	0.2%	1.4%	0.2%	1.3%	0.0%	0.2%	
AM Peak	07:00	07:00	11:00	11:00	07:00	06:00	08:00	06:00	08:00	11:00	11:00	11:00	07:00	07:00
Vol.	1	266	61	1	16	4	1	2	7	2	4	1	2	359
PM Peak	15:00	16:00	12:00		15:00	13:00	13:00	15:00	15:00	15:00	16:00		15:00	15:00
Vol.	1	345	53		12	3	2	2	7	1	12		2	411

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Station ID: U79
HIDDEN VALLEY RD from WABANAKI DR to HIDDEN VALLEY CRES
Date Start: 10-Nov-22
Date End: 16-Nov-22

NB, SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
11/12/22	0	39	2	0	0	0	0	0	0	0	0	0	0	41
01:00	0	21	3	0	1	0	0	0	**2**	0	0	0	0	27
02:00	0	20	3	0	1	0	0	0	1	0	0	0	0	25
03:00	0	11	1	0	0	0	0	0	0	0	0	0	0	12
04:00	0	17	2	0	**5**	1	0	0	1	0	0	0	0	26
05:00	0	27	6	0	4	**2**	0	**1**	0	0	0	0	0	40
06:00	0	59	8	0	1	2	0	0	0	0	1	0	0	71
07:00	0	59	11	0	0	2	0	1	0	0	0	0	0	73
08:00	0	149	13	0	1	0	0	0	1	0	0	0	**1**	165
09:00	0	208	17	0	0	1	0	0	1	0	2	0	0	229
10:00	0	215	24	0	0	0	0	1	0	0	**5**	0	0	245
11:00	0	**221**	**40**	0	1	0	0	1	1	0	2	0	0	**266**
12 PM	0	253	26	0	0	**1**	**1**	0	1	0	6	0	0	288
13:00	0	248	30	0	0	0	0	0	0	0	3	0	0	281
14:00	0	**264**	27	0	1	1	0	**3**	**2**	0	**8**	0	**1**	**307**
15:00	0	246	**32**	0	0	1	0	0	1	0	2	0	0	282
16:00	0	257	22	0	**2**	1	0	0	1	0	2	0	0	285
17:00	0	216	17	0	0	0	0	1	0	0	3	0	0	237
18:00	0	184	18	0	0	1	0	0	0	0	2	0	0	205
19:00	0	129	12	0	1	0	0	0	0	0	2	0	0	144
20:00	0	104	8	0	0	0	0	0	0	0	1	0	0	113
21:00	0	101	3	0	0	1	0	0	0	0	1	0	0	106
22:00	0	70	8	0	0	0	0	0	0	0	0	0	0	78
23:00	0	62	6	0	0	0	0	0	0	0	0	0	0	68
Day Total	0	3180	339	0	18	14	1	8	12	0	40	0	2	3614
Percent	0.0%	88.0%	9.4%	0.0%	0.5%	0.4%	0.0%	0.2%	0.3%	0.0%	1.1%	0.0%	0.1%	
AM Peak		11:00	11:00		04:00	05:00		05:00	01:00		10:00		08:00	11:00
Vol.		221	40		5	2		1	2		5		1	266
PM Peak		14:00	15:00		16:00	12:00	12:00	14:00	14:00		14:00		14:00	14:00
Vol.		264	32		2	1	1	3	2		8		1	307

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HIDDEN VALLEY RD from WABANAKI DR to HIDDEN VALLEY CRES
Date Start: 10-Nov-22
Date End: 16-Nov-22

NB, SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
11/13/22	0	54	6	0	**1**	1	0	0	1	0	2	0	0	65
01:00	0	37	4	0	0	0	0	0	0	0	0	0	0	41
02:00	0	15	3	0	0	**2**	0	0	0	0	0	0	0	20
03:00	0	13	0	0	0	0	0	0	0	0	0	0	0	13
04:00	0	12	0	**1**	1	1	0	0	0	0	0	0	0	15
05:00	0	19	3	0	0	1	0	0	0	0	0	0	0	23
06:00	0	25	3	0	0	0	0	0	0	0	0	0	0	28
07:00	0	32	3	0	0	2	0	0	0	0	0	0	0	37
08:00	0	86	4	0	1	1	0	0	1	0	0	0	0	93
09:00	0	131	12	0	1	1	0	0	1	0	0	0	0	146
10:00	0	172	22	0	0	1	0	0	1	0	0	0	0	196
11:00	0	**177**	**24**	0	0	0	0	0	**3**	0	**4**	0	0	**208**
12 PM	**1**	212	23	0	0	1	0	**1**	3	0	3	0	0	244
13:00	0	228	21	0	0	1	0	1	1	0	3	0	**1**	256
14:00	0	189	23	0	0	0	**1**	1	1	0	**5**	0	0	220
15:00	0	**241**	**27**	0	0	0	0	0	1	0	4	0	0	**273**
16:00	0	217	20	0	**1**	**2**	0	1	2	**1**	2	0	0	246
17:00	0	177	19	0	0	0	0	0	3	0	3	0	0	202
18:00	0	125	18	0	0	0	0	1	1	0	3	0	1	149
19:00	0	116	10	0	1	0	0	0	2	0	1	0	1	131
20:00	0	98	11	0	0	0	0	0	3	0	0	0	0	112
21:00	0	87	2	0	0	0	0	0	**5**	0	1	0	0	95
22:00	0	63	5	0	0	1	0	0	2	0	0	0	0	71
23:00	0	39	4	0	0	0	0	0	0	0	0	0	0	43
Day Total	1	2565	267	1	6	15	1	5	31	1	31	0	3	2927
Percent	0.0%	87.6%	9.1%	0.0%	0.2%	0.5%	0.0%	0.2%	1.1%	0.0%	1.1%	0.0%	0.1%	
AM Peak		11:00	11:00	04:00	00:00	02:00			11:00		11:00			11:00
Vol.		177	24	1	1	2			3		4			208
PM Peak	12:00	15:00	15:00		16:00	16:00	14:00	12:00	21:00	16:00	14:00		13:00	15:00
Vol.	1	241	27		1	2	1	1	5	1	5		1	273

Ontario Traffic, Inc.
17705 Leslie St., Unit 6
Newmarket, Ontario L3Y 3E3
Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 22131
Station ID: U79
HIDDEN VALLEY RD from WABANAKI DR to HIDDEN VALLEY CRES
Date Start: 10-Nov-22
Date End: 16-Nov-22

NB, SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
11/14/22	0	17	0	0	0	0	0	0	1	0	0	0	0	18
01:00	0	10	1	0	1	0	0	0	5	0	0	0	0	17
02:00	0	18	1	0	0	0	0	0	1	0	0	0	0	20
03:00	0	10	0	0	0	4	0	0	3	0	0	0	0	17
04:00	0	27	2	0	6	0	0	0	2	1	0	0	1	39
05:00	0	82	22	0	2	0	0	1	4	0	1	0	0	112
06:00	0	195	52	0	5	3	1	2	4	2	5	0	1	270
07:00	0	**310**	**82**	0	**17**	**15**	**2**	0	5	**4**	**6**	0	**2**	**443**
08:00	0	263	69	0	14	6	0	0	6	1	3	0	1	363
09:00	0	211	66	0	6	7	0	**3**	7	0	5	**1**	1	307
10:00	**1**	197	59	0	7	7	0	0	4	3	3	0	0	281
11:00	0	186	49	0	6	3	0	2	**9**	2	5	0	0	262
12 PM	0	243	61	0	10	**6**	1	**3**	5	**1**	**9**	0	**2**	341
13:00	**1**	209	53	0	**14**	5	**2**	3	**8**	0	5	0	0	300
14:00	1	298	81	0	12	3	1	2	5	1	8	0	2	414
15:00	0	343	**82**	**1**	11	5	0	3	2	0	8	0	0	455
16:00	0	**375**	61	1	2	3	0	1	4	0	8	**1**	0	**456**
17:00	0	272	37	0	3	3	0	1	2	0	9	0	0	327
18:00	0	206	20	0	2	1	0	1	0	0	2	0	1	233
19:00	0	131	16	1	1	0	0	0	4	0	3	0	0	156
20:00	0	128	3	0	1	1	0	0	8	0	0	1	1	143
21:00	0	86	7	0	0	1	0	1	3	0	0	0	0	98
22:00	0	88	6	0	0	0	0	0	3	0	1	0	0	98
23:00	0	48	5	0	0	0	0	0	1	0	1	0	0	55
Day Total	3	3953	835	3	120	73	7	23	96	15	82	3	12	5225
Percent	0.1%	75.7%	16.0%	0.1%	2.3%	1.4%	0.1%	0.4%	1.8%	0.3%	1.6%	0.1%	0.2%	
AM Peak	10:00	07:00	07:00		07:00	07:00	07:00	09:00	11:00	07:00	07:00	09:00	07:00	07:00
Vol.	1	310	82		17	15	2	3	9	4	6	1	2	443
PM Peak	13:00	16:00	15:00	15:00	13:00	12:00	13:00	12:00	13:00	12:00	12:00	16:00	12:00	16:00
Vol.	1	375	82	1	14	6	2	3	8	1	9	1	2	456

Ontario Traffic, Inc.
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Site Code: 22131
Station ID: U79
HIDDEN VALLEY RD from WABANAKI DR to HIDDEN VALLEY CRES
Date Start: 10-Nov-22
Date End: 16-Nov-22

NB, SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
11/15/22	0	20	0	0	0	1	0	0	2	0	0	0	0	23
01:00	0	12	1	0	1	2	0	0	1	0	0	0	0	17
02:00	0	16	2	0	0	0	0	0	5	0	0	0	0	23
03:00	0	8	1	0	5	2	0	0	1	0	0	0	0	17
04:00	0	22	3	0	4	1	0	0	1	0	0	0	1	32
05:00	0	77	19	0	5	1	0	0	1	1	2	0	0	106
06:00	0	180	58	0	9	3	1	**4**	7	0	8	0	0	270
07:00	0	**292**	**82**	0	**17**	**11**	1	4	4	1	**12**	**1**	**5**	**430**
08:00	0	259	54	**2**	16	3	**2**	2	7	0	7	0	4	356
09:00	0	182	82	0	10	5	0	2	8	1	1	0	2	293
10:00	1	199	61	1	10	6	0	0	**9**	**2**	2	0	0	291
11:00	**2**	185	47	0	12	3	1	2	5	0	5	0	2	264
12 PM	**3**	218	48	0	8	5	1	3	1	**4**	7	0	1	299
13:00	0	193	47	1	**9**	**6**	1	4	**5**	1	9	0	**2**	278
14:00	2	265	64	**2**	8	5	**4**	**7**	1	2	4	**1**	1	366
15:00	2	373	**77**	1	3	5	1	3	3	1	19	1	1	**490**
16:00	3	**377**	58	0	4	2	3	1	3	2	**20**	0	0	473
17:00	2	259	34	2	7	2	2	1	3	2	7	1	2	324
18:00	2	203	22	1	2	2	2	2	2	0	2	0	1	241
19:00	1	122	12	0	1	1	2	1	2	1	2	1	0	146
20:00	1	112	10	1	1	2	2	0	5	0	0	0	0	134
21:00	0	80	6	0	0	0	0	0	2	0	0	0	0	88
22:00	0	76	5	0	0	0	0	0	0	0	0	0	0	81
23:00	0	47	1	0	0	0	0	0	0	0	0	0	0	48
Day Total	19	3777	794	11	132	68	23	36	78	18	107	5	22	5090
Percent	0.4%	74.2%	15.6%	0.2%	2.6%	1.3%	0.5%	0.7%	1.5%	0.4%	2.1%	0.1%	0.4%	
AM Peak	11:00	07:00	07:00	08:00	07:00	07:00	08:00	06:00	10:00	10:00	07:00	07:00	07:00	07:00
Vol.	2	292	82	2	17	11	2	4	9	2	12	1	5	430
PM Peak	12:00	16:00	15:00	14:00	13:00	13:00	14:00	14:00	13:00	12:00	16:00	14:00	13:00	15:00
Vol.	3	377	77	2	9	6	4	7	5	4	20	1	2	490

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Site Code: 22131
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HIDDEN VALLEY RD from WABANAKI DR to HIDDEN VALLEY CRES
Date Start: 10-Nov-22
Date End: 16-Nov-22

NB, SB

Start Time	Bikes	Cars & Trailers	2 Axle Long	Buses	2 Axle 6 Tire	3 Axle Single	4 Axle Single	<5 Axl Double	5 Axle Double	>6 Axl Double	<6 Axl Multi	6 Axle Multi	>6 Axl Multi	Total
11/16/22	0	13	0	0	0	0	0	0	0	0	0	0	0	13
01:00	0	11	0	0	1	0	0	0	1	0	0	0	0	13
02:00	0	12	0	0	0	0	0	0	1	0	0	0	0	13
03:00	0	13	1	0	0	1	0	0	0	0	0	0	0	15
04:00	0	23	4	0	2	3	0	0	1	0	0	0	0	33
05:00	0	73	14	0	3	2	0	0	3	0	2	0	0	97
06:00	0	192	49	0	7	11	0	0	7	0	**12**	0	0	278
07:00	0	**300**	**97**	**3**	**13**	**15**	0	6	9	**1**	7	1	0	**452**
08:00	1	282	71	2	9	3	3	5	**11**	1	5	1	0	394
09:00	**5**	190	65	0	9	11	1	**8**	8	0	5	0	**3**	305
10:00	1	185	52	1	6	10	**4**	4	6	0	4	**3**	2	278
11:00	1	173	41	1	7	4	1	4	5	0	4	0	0	241
12 PM	**2**	205	56	0	10	2	1	3	3	0	3	0	**3**	288
13:00	2	199	56	0	**11**	2	2	**6**	3	0	9	**2**	1	293
14:00	2	278	73	0	11	1	3	6	3	**3**	10	0	0	390
15:00	2	351	**79**	0	10	**3**	3	0	5	1	11	0	2	467
16:00	1	**376**	68	0	8	2	**4**	2	**6**	1	**16**	0	2	**486**
17:00	0	297	49	0	3	1	0	0	4	0	9	0	2	365
18:00	1	230	22	0	2	1	0	1	2	1	2	0	0	262
19:00	1	131	15	0	2	1	0	1	2	0	1	1	0	155
20:00	0	125	16	0	2	0	1	0	3	0	2	0	0	149
21:00	0	91	11	0	0	0	0	0	3	0	2	0	1	108
22:00	0	89	4	0	0	2	0	0	5	0	0	0	0	100
23:00	0	47	2	0	0	0	0	0	2	0	0	0	0	51
Day Total	19	3886	845	7	116	75	23	46	93	8	104	8	16	5246
Percent	0.4%	74.1%	16.1%	0.1%	2.2%	1.4%	0.4%	0.9%	1.8%	0.2%	2.0%	0.2%	0.3%	
AM Peak	09:00	07:00	07:00	07:00	07:00	07:00	10:00	09:00	08:00	07:00	06:00	10:00	09:00	07:00
Vol.	5	300	97	3	13	15	4	8	11	1	12	3	3	452
PM Peak	12:00	16:00	15:00		13:00	15:00	16:00	13:00	16:00	14:00	16:00	13:00	12:00	16:00
Vol.	2	376	79		11	3	4	6	6	3	16	2	3	486
Grand Total	58	25668	4702	27	655	338	71	161	468	64	547	21	72	32852
Percent	0.2%	78.1%	14.3%	0.1%	2.0%	1.0%	0.2%	0.5%	1.4%	0.2%	1.7%	0.1%	0.2%	

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Site Code: 22131
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HIDDEN VALLEY RD from WABANAKI DR to HIDDEN VALLEY CRES
Date Start: 10-Nov-22
Date End: 16-Nov-22

NB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Aver
11/10 /22	0	0	0	0	0	0	0	0	0	1	1	4	2	4	2	0	0	0	0	0	0	0	0	14	1
01:00	0	0	0	0	0	0	0	0	0	2	0	2	3	2	2	0	2	0	0	0	0	0	0	13	1
02:00	0	0	0	0	0	0	0	1	2	1	3	0	2	2	1	0	0	2	0	0	0	0	0	14	1
03:00	0	0	0	0	0	0	0	0	3	1	4	3	2	1	2	1	0	0	0	0	0	0	0	17	1
04:00	0	0	0	0	0	0	0	0	2	3	4	5	7	5	5	2	0	1	0	0	0	0	0	34	1
05:00	0	0	0	0	0	0	0	1	2	3	10	25	26	23	10	4	1	1	0	0	0	0	0	106	5
06:00	0	0	0	0	0	0	1	4	3	17	32	35	56	27	17	4	4	0	0	0	0	0	0	200	9
07:00	0	0	0	0	1	2	0	5	5	32	56	83	84	42	21	7	2	0	0	0	0	0	0	340	15
08:00	0	0	0	0	0	1	0	3	2	12	50	77	64	52	29	6	3	0	0	0	0	0	0	299	13
09:00	0	0	0	0	0	0	2	3	2	13	31	57	65	50	19	5	1	1	0	0	0	0	0	249	11
10:00	0	0	0	0	0	0	0	0	1	11	61	73	46	32	14	4	1	0	0	0	0	0	0	243	11
11:00	0	0	0	0	0	0	0	3	3	10	24	60	75	53	25	4	4	1	0	0	0	0	0	262	11
12 PM	0	0	0	0	0	0	0	0	0	9	30	52	76	44	30	5	1	1	0	0	0	0	0	248	11
13:00	0	0	0	0	1	0	0	1	4	14	25	52	61	34	15	3	3	2	0	1	0	0	0	216	9
14:00	0	0	0	0	0	0	1	0	3	15	42	65	112	79	32	8	3	0	1	0	0	0	0	361	16
15:00	0	0	0	0	0	0	0	0	1	11	47	93	107	71	28	10	6	0	0	0	0	0	0	374	16
16:00	0	0	0	0	0	1	1	1	18	43	63	95	80	31	11	5	1	1	1	0	0	0	0	352	15
17:00	0	0	0	0	0	0	0	3	5	22	52	86	68	54	12	4	0	0	0	0	0	0	0	306	13
18:00	0	0	0	0	0	0	0	1	4	15	42	72	51	30	5	4	2	0	1	0	0	0	0	227	10
19:00	0	0	0	0	0	0	0	0	1	3	23	47	36	24	10	2	0	1	0	0	0	0	0	147	6
20:00	0	0	0	0	0	0	0	0	1	11	26	29	29	6	5	3	2	1	0	0	0	0	0	113	5
21:00	0	0	0	0	0	0	0	0	1	6	14	19	25	16	10	8	0	2	0	0	0	0	0	101	4
22:00	0	0	0	0	0	0	0	0	4	5	14	25	18	12	7	2	2	1	0	0	0	0	0	90	4
23:00	0	0	0	0	0	0	0	0	0	2	5	10	11	4	2	2	0	0	0	0	0	0	0	36	2
Percent	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.6%	1.5%	6.0%	15.1 %	24.5 %	25.4 %	16.0 %	7.2%	2.1%	0.9%	0.3%	0.1%	0.0%	0.0%	0.0%	0.0%		
AM Peak					07:00	07:00	09:00	07:00	07:00	07:00	10:00	07:00	07:00	11:00	08:00	07:00	06:00	02:00						07:00	
Vol.					1	2	2	5	5	32	61	83	84	53	29	7	4	2						340	
PM Peak					13:00	16:00	14:00	17:00	16:00	16:00	16:00	16:00	14:00	14:00	14:00	15:00	15:00	13:00	14:00	13:00				15:00	
Vol.					1	1	1	3	18	43	63	95	112	79	32	10	6	2	1	1				374	

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HIDDEN VALLEY RD from WABANAKI DR to HIDDEN VALLEY CRES
Date Start: 10-Nov-22
Date End: 16-Nov-22

NB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Aver
11/11 /22	0	0	0	0	0	0	0	0	0	0	2	3	6	1	1	3	0	1	0	0	0	0	0	17	1
01:00	0	0	0	0	0	0	0	0	1	2	2	4	5	1	0	1	0	0	0	0	0	0	0	16	1
02:00	0	0	0	0	0	0	0	1	1	2	1	3	0	1	1	0	0	1	0	0	0	0	0	11	0
03:00	0	0	0	0	0	0	0	1	2	1	5	6	7	2	0	0	0	0	0	0	0	0	0	24	1
04:00	0	0	0	0	0	0	0	0	1	4	6	9	9	4	3	1	2	0	0	0	0	0	0	39	2
05:00	0	0	0	0	0	0	0	0	0	4	11	19	22	18	15	5	0	2	1	0	0	0	0	97	4
06:00	0	0	0	0	0	0	0	0	4	15	36	36	52	24	18	6	1	0	1	1	0	0	0	194	8
07:00	0	0	0	0	0	0	0	0	3	12	36	83	80	40	19	7	3	1	1	0	0	0	0	285	12
08:00	0	0	0	0	0	0	0	5	2	7	39	71	79	44	20	5	2	1	0	0	0	0	0	275	12
09:00	0	0	0	0	0	1	2	2	5	17	39	58	52	38	18	1	2	0	0	0	0	0	0	235	10
10:00	0	0	0	0	0	0	0	0	5	14	26	45	72	51	17	6	2	0	0	0	0	0	0	238	10
11:00	0	0	0	0	0	0	1	1	3	14	31	77	61	58	11	10	6	1	0	0	0	0	0	274	12
12 PM	0	0	0	0	0	0	0	2	7	15	44	67	62	44	15	3	1	3	0	0	0	0	0	263	11
13:00	0	0	0	0	0	0	1	5	3	18	48	62	78	29	13	1	2	0	2	0	0	0	0	262	11
14:00	0	0	0	0	0	0	0	3	0	14	44	67	70	50	21	9	2	0	0	0	0	0	0	280	12
15:00	0	0	0	0	0	0	0	0	0	12	41	87	97	48	21	5	1	0	1	0	0	0	0	313	14
16:00	0	0	0	0	0	0	2	6	11	38	61	91	67	25	9	2	1	0	0	0	0	0	0	313	14
17:00	0	0	0	0	0	0	0	0	1	15	52	75	77	35	8	4	1	0	0	0	0	0	0	268	12
18:00	0	0	0	0	0	0	0	1	8	20	44	54	61	26	10	2	0	0	0	0	0	0	0	226	10
19:00	0	0	0	0	0	0	0	0	2	6	22	32	31	11	5	3	0	0	0	0	1	0	0	113	5
20:00	0	0	0	0	0	0	0	1	1	12	25	20	16	12	2	0	1	0	0	0	0	0	0	90	4
21:00	0	0	0	0	0	0	0	0	2	8	22	34	25	13	4	3	0	0	0	0	0	0	0	111	5
22:00	0	0	0	0	0	0	0	0	3	4	16	23	14	7	2	2	1	1	1	0	0	0	0	74	3
23:00	0	0	0	0	0	0	0	1	2	0	8	17	12	4	4	3	0	0	0	0	0	0	0	51	2
Percent	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.7%	1.6%	6.2%	16.2 %	25.6 %	25.9 %	14.4 %	5.8%	2.0%	0.7%	0.3%	0.2%	0.0%	0.0%	0.0%	0.0%		
AM Peak						09:00	09:00	08:00	09:00	09:00	08:00	07:00	07:00	11:00	08:00	11:00	11:00	05:00	05:00	06:00				07:00	
Vol.						1	2	5	5	17	39	83	80	58	20	10	6	2	1	1				285	
PM Peak							16:00	16:00	16:00	16:00	16:00	16:00	15:00	14:00	14:00	14:00	13:00	12:00	13:00		19:00			15:00	
Vol.							2	6	11	38	61	91	97	50	21	9	2	3	2		1			313	

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Site Code: 22131
Station ID: U79
HIDDEN VALLEY RD from WABANAKI DR to HIDDEN VALLEY CRES
Date Start: 10-Nov-22
Date End: 16-Nov-22

NB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Aver
11/12 /22	0	0	0	0	0	0	0	0	1	2	5	8	7	1	0	3	0	0	0	0	0	0	0	27	1
01:00	0	0	0	0	0	0	0	0	0	4	3	6	3	2	2	0	0	1	0	0	0	0	0	21	1
02:00	0	0	0	0	0	0	0	0	1	1	1	4	1	7	0	1	1	1	0	0	0	0	0	18	1
03:00	0	0	0	0	0	0	0	0	1	0	1	1	3	1	1	1	0	0	0	0	0	0	0	9	0
04:00	0	0	0	0	0	0	0	0	0	1	7	5	4	3	3	1	0	0	0	0	0	0	0	24	1
05:00	0	0	0	0	0	0	0	0	1	1	4	4	11	2	5	3	1	0	2	0	0	0	0	34	1
06:00	0	0	0	0	0	0	0	0	0	2	9	13	18	11	4	3	0	0	0	0	0	0	0	60	3
07:00	0	0	0	0	0	0	0	0	0	2	6	14	18	20	2	2	1	0	1	0	0	0	0	66	3
08:00	0	0	0	0	0	0	0	1	0	3	6	28	44	40	13	11	3	1	0	0	0	0	0	150	7
09:00	0	0	0	0	0	0	0	0	1	8	24	38	65	29	24	9	5	1	0	0	1	0	0	205	9
10:00	0	0	0	0	0	0	1	0	1	3	26	55	60	33	18	3	1	0	0	0	0	0	0	201	9
11:00	0	0	0	0	0	0	0	0	1	8	18	54	58	37	20	2	6	0	0	0	0	0	0	204	9
12 PM	0	0	0	0	0	0	0	1	2	4	32	58	61	46	21	8	0	0	2	0	0	0	0	235	10
13:00	0	0	0	0	0	0	0	0	0	6	35	61	57	39	18	5	0	0	0	0	0	0	0	221	10
14:00	0	0	0	0	0	0	0	0	2	13	20	58	67	38	15	4	0	0	0	0	1	0	0	218	9
15:00	0	0	0	0	0	0	0	0	1	10	31	58	54	26	14	4	1	0	1	0	0	0	0	200	9
16:00	0	0	0	0	0	0	0	1	4	10	32	66	52	37	17	2	3	1	0	0	0	0	0	225	10
17:00	0	0	0	0	0	0	0	0	0	14	45	49	38	19	7	3	1	0	0	0	0	0	0	176	8
18:00	0	0	0	0	0	0	0	0	1	11	29	48	42	16	5	3	3	0	0	0	0	0	0	158	7
19:00	0	0	0	0	0	0	0	1	0	3	22	16	29	12	6	1	0	0	0	0	0	0	0	90	4
20:00	0	0	0	0	0	0	0	0	2	5	20	22	21	8	3	1	0	0	0	0	0	0	0	82	4
21:00	0	0	0	0	0	0	0	0	0	6	15	19	21	16	1	1	1	1	0	0	0	0	0	81	4
22:00	0	0	0	0	0	0	0	0	1	7	12	20	11	5	4	1	0	0	0	0	0	0	0	61	3
23:00	0	0	0	0	0	0	0	0	1	4	9	16	15	5	3	0	0	0	0	0	0	0	0	53	2
Percent	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.7%	4.5%	14.6%	25.6%	27.0%	16.1%	7.3%	2.6%	1.0%	0.2%	0.2%	0.0%	0.1%	0.0%	0.0%		
AM Peak							10:00	08:00	00:00	09:00	10:00	10:00	09:00	08:00	09:00	08:00	11:00	01:00	05:00		09:00			09:00	
Vol.							1	1	1	8	26	55	65	40	24	11	6	1	2		1			205	
PM Peak								12:00	16:00	17:00	17:00	16:00	14:00	12:00	12:00	12:00	16:00	16:00	12:00		14:00			12:00	
Vol.								1	4	14	45	66	67	46	21	8	3	1	2		1			235	

Ontario Traffic, Inc.
17705 Leslie St., Unit 6
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Site Code: 22131
Station ID: U79
HIDDEN VALLEY RD from WABANAKI DR to HIDDEN VALLEY CRES
Date Start: 10-Nov-22
Date End: 16-Nov-22

NB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Aver
11/13 /22	0	0	0	0	0	0	0	1	1	6	6	15	15	3	2	1	0	0	0	0	0	0	0	50	2
01:00	0	0	0	0	0	0	0	0	0	1	3	4	6	6	3	1	0	0	0	0	0	0	0	24	1
02:00	0	0	0	0	0	0	0	0	0	1	3	1	3	5	1	1	0	1	0	0	0	0	0	16	1
03:00	0	0	0	0	0	0	0	0	0	0	1	2	4	1	3	1	0	0	0	0	1	0	0	13	1
04:00	0	0	0	0	0	0	0	0	0	2	4	1	2	2	0	1	0	1	0	1	0	0	0	14	1
05:00	0	0	0	0	0	0	0	0	1	1	6	0	5	2	2	1	0	1	0	0	0	0	0	19	1
06:00	0	0	0	0	0	0	0	0	0	1	4	5	4	7	4	0	2	0	0	0	0	0	0	27	1
07:00	0	0	0	0	0	0	0	0	1	0	2	9	6	5	6	0	2	0	0	0	0	0	0	31	1
08:00	0	0	0	0	0	0	0	0	1	6	12	22	28	9	4	1	2	0	0	0	0	0	0	85	4
09:00	0	0	0	0	0	0	0	0	0	4	15	31	33	20	18	5	1	0	0	0	0	0	0	127	6
10:00	0	0	0	0	0	0	0	0	0	5	23	38	57	23	12	5	1	0	1	1	0	0	0	166	7
11:00	0	0	0	0	0	0	0	1	0	13	27	41	49	25	13	1	1	0	1	0	0	0	0	172	7
12 PM	0	0	0	0	0	1	0	1	1	11	23	36	56	36	18	5	2	0	0	0	0	0	0	190	8
13:00	0	0	0	0	0	0	0	0	0	8	23	58	50	36	16	4	1	0	0	1	0	0	0	197	9
14:00	0	0	0	0	0	0	0	0	1	7	25	36	52	25	18	6	3	0	0	0	0	0	0	173	8
15:00	0	0	0	0	0	0	0	0	6	4	29	51	55	22	26	5	0	2	0	0	0	0	0	200	9
16:00	0	0	0	0	0	0	0	1	2	8	25	58	60	14	6	4	1	0	0	0	0	0	0	179	8
17:00	0	0	0	0	0	0	0	3	4	6	21	46	32	21	12	1	0	0	0	0	0	0	0	146	6
18:00	0	0	0	0	0	0	1	1	1	5	22	35	27	19	4	2	2	0	0	0	0	0	0	119	5
19:00	0	0	0	0	0	0	0	0	0	4	13	24	26	15	6	5	3	0	0	0	0	0	0	96	4
20:00	0	0	0	0	0	0	0	1	1	4	12	22	21	9	9	4	1	0	0	0	0	0	0	84	4
21:00	0	0	0	0	0	0	0	0	2	2	11	14	21	14	6	2	0	0	0	0	0	0	0	72	3
22:00	0	0	0	0	0	0	0	0	1	5	9	15	10	6	2	1	1	0	0	0	0	0	0	50	2
23:00	0	0	0	0	0	0	0	0	0	2	5	5	9	3	5	1	0	0	0	0	0	0	0	30	1
Percent	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	1.0%	4.6%	14.2 %	25.0 %	27.7 %	14.4 %	8.6%	2.5%	1.0%	0.2%	0.1%	0.1%	0.0%	0.0%	0.0%		
AM Peak								00:00	00:00	11:00	11:00	11:00	10:00	11:00	09:00	09:00	06:00	02:00	10:00	04:00	03:00			11:00	
Vol.								1	1	13	27	41	57	25	18	5	2	1	1	1	1			172	
PM Peak						12:00	18:00	17:00	15:00	12:00	15:00	13:00	16:00	12:00	15:00	14:00	14:00	15:00		13:00				15:00	
Vol.						1	1	3	6	11	29	58	60	36	26	6	3	2		1				200	

Ontario Traffic, Inc.
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Site Code: 22131
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HIDDEN VALLEY RD from WABANAKI DR to HIDDEN VALLEY CRES
Date Start: 10-Nov-22
Date End: 16-Nov-22

NB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Aver
11/14 /22	0	0	0	0	0	0	0	0	0	1	2	2	4	4	1	1	0	1	0	0	0	0	0	16	1
01:00	0	0	0	0	0	0	0	0	2	1	1	2	5	2	1	1	0	0	0	0	0	0	0	15	1
02:00	0	0	0	0	0	0	0	0	1	0	1	2	1	1	2	1	1	1	0	0	0	0	0	11	0
03:00	0	0	0	0	0	0	0	0	4	1	2	3	3	3	0	0	0	0	0	0	0	0	0	16	1
04:00	0	0	0	0	0	0	0	0	3	2	6	6	12	3	3	1	1	0	0	0	0	0	0	37	2
05:00	0	0	0	0	0	0	0	0	5	4	9	16	17	14	18	6	3	0	1	0	0	0	0	93	4
06:00	0	0	0	0	0	0	3	0	0	15	35	42	52	31	13	6	2	1	1	1	0	0	0	202	9
07:00	0	0	0	0	1	2	3	3	9	42	71	99	74	42	16	6	1	0	0	0	1	0	0	370	16
08:00	0	0	0	0	0	1	1	1	4	14	49	81	82	42	23	4	2	0	0	0	0	0	0	304	13
09:00	0	0	0	0	0	0	0	1	3	11	38	78	60	40	20	4	0	1	0	0	0	0	0	256	11
10:00	0	0	0	0	0	0	0	2	5	12	41	54	50	39	23	5	1	2	0	0	0	0	0	234	10
11:00	0	0	0	0	0	0	0	0	0	17	22	48	54	32	18	11	1	2	0	0	0	0	0	205	9
12 PM	0	0	0	0	0	0	0	0	4	19	44	59	60	39	18	9	0	1	0	0	0	0	0	253	11
13:00	0	0	0	0	0	0	0	0	4	27	36	61	49	25	19	3	2	1	0	0	0	0	0	227	10
14:00	0	0	0	0	0	0	0	0	0	15	60	86	83	52	20	5	2	2	0	1	0	0	0	326	14
15:00	0	0	0	0	0	0	0	2	6	16	49	85	106	61	27	9	1	2	0	0	0	0	0	364	16
16:00	0	0	0	0	0	0	0	0	2	10	35	107	112	77	19	9	2	0	0	0	0	0	0	373	16
17:00	0	0	0	0	0	0	0	0	5	10	41	73	73	35	12	2	1	0	1	0	0	0	0	253	11
18:00	0	0	0	0	0	0	0	1	1	6	39	42	48	25	11	3	1	0	0	0	0	0	0	177	8
19:00	0	0	0	0	0	0	0	0	4	5	13	27	26	21	10	3	2	0	0	0	1	0	0	112	5
20:00	0	0	0	0	0	0	0	0	0	3	25	30	23	13	8	3	1	0	0	0	0	0	0	106	5
21:00	0	0	0	0	0	0	0	0	3	0	16	23	13	8	6	8	0	0	0	0	0	0	0	77	3
22:00	0	0	0	0	0	0	0	1	0	2	8	15	26	10	8	1	2	0	0	0	0	0	0	73	3
23:00	0	0	0	0	0	0	0	0	0	3	6	6	12	5	7	3	1	0	0	0	0	0	0	43	2
Percent	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.2%	0.3%	1.6%	5.7%	15.7 %	25.3 %	25.2 %	15.1 %	7.3%	2.5%	0.7%	0.3%	0.1%	0.0%	0.0%	0.0%	0.0%		
AM Peak					07:00	07:00	06:00	07:00	07:00	07:00	07:00	07:00	08:00	07:00	08:00	11:00	05:00	10:00	05:00	06:00	07:00			07:00	
Vol.					1	2	3	3	9	42	71	99	82	42	23	11	3	2	1	1	1			370	
PM Peak								15:00	15:00	13:00	14:00	16:00	16:00	16:00	15:00	12:00	13:00	14:00	17:00	14:00	19:00			16:00	
Vol.								2	6	27	60	107	112	77	27	9	2	2	1	1	1			373	

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HIDDEN VALLEY RD from WABANAKI DR to HIDDEN VALLEY CRES
Date Start: 10-Nov-22
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NB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Aver
11/15 /22	0	0	0	0	0	0	0	0	1	0	5	4	6	1	0	0	0	0	0	0	0	0	0	17	1
01:00	0	0	0	0	0	0	0	0	1	2	1	4	5	0	2	0	0	0	0	0	0	0	0	15	1
02:00	0	0	0	0	0	0	1	0	0	4	3	3	3	1	0	3	0	1	0	0	0	0	0	19	1
03:00	0	0	0	0	0	0	0	0	0	5	0	5	2	1	2	0	0	0	0	0	0	0	0	15	1
04:00	0	0	0	0	0	0	0	1	2	0	6	7	7	5	1	0	0	2	0	0	0	0	0	31	1
05:00	0	0	0	0	0	0	0	1	0	5	7	12	27	13	17	4	3	0	0	0	0	0	0	89	4
06:00	0	0	0	0	0	1	1	2	5	18	43	43	30	24	20	8	1	1	2	0	0	0	0	199	9
07:00	0	0	0	0	1	1	2	4	16	48	77	82	77	27	13	5	1	1	0	0	0	0	0	355	15
08:00	0	0	0	0	0	0	0	1	4	14	37	83	74	51	20	3	1	1	0	0	0	0	0	289	13
09:00	0	0	0	0	0	0	0	1	4	16	35	85	56	33	11	7	0	0	0	0	0	0	0	248	11
10:00	0	0	0	0	0	1	0	2	9	19	46	66	56	31	8	1	1	0	0	0	0	0	0	240	10
11:00	0	0	0	0	0	0	1	5	6	7	23	38	54	41	21	5	0	0	0	0	0	0	0	201	9
12 PM	0	0	0	0	1	0	0	1	3	6	29	45	75	37	16	3	4	1	0	0	0	0	0	221	10
13:00	0	0	0	0	1	0	3	1	5	5	24	47	59	39	17	5	2	0	1	0	0	0	0	209	9
14:00	0	0	0	0	0	0	1	0	2	25	38	54	69	51	34	3	7	6	1	2	0	0	0	293	13
15:00	0	0	0	0	1	0	1	0	1	16	34	94	111	83	32	13	8	0	0	0	1	0	0	395	17
16:00	0	0	0	0	0	1	2	9	19	72	93	70	67	31	15	2	1	1	1	0	0	0	0	384	17
17:00	0	0	0	0	0	0	0	4	6	25	46	66	58	31	8	2	1	0	1	0	0	0	0	248	11
18:00	0	0	0	0	0	0	0	1	2	14	26	48	46	33	3	6	1	0	1	0	0	0	0	181	8
19:00	0	0	0	0	0	0	0	0	2	4	15	48	15	12	5	2	1	1	0	0	0	0	0	105	5
20:00	0	0	0	0	0	0	0	0	1	9	22	31	25	5	4	3	2	0	0	0	0	0	0	102	4
21:00	0	0	0	0	0	0	0	0	2	5	11	12	19	7	4	7	0	1	0	0	0	0	0	68	3
22:00	0	0	0	0	0	0	1	0	1	2	10	17	17	6	3	4	0	1	0	0	0	0	0	62	3
23:00	0	0	0	0	0	0	0	0	1	2	4	9	12	5	1	1	0	0	0	0	0	0	0	35	2
Percent	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.3%	0.8%	2.3%	8.0%	15.8 %	24.2 %	24.1 %	14.1 %	6.4%	2.2%	0.8%	0.4%	0.2%	0.0%	0.0%	0.0%	0.0%		
AM Peak					07:00	06:00	07:00	11:00	07:00	07:00	07:00	09:00	07:00	08:00	11:00	06:00	05:00	04:00	06:00					07:00	
Vol.					1	1	2	5	16	48	77	85	77	51	21	8	3	2	2					355	
PM Peak					12:00	16:00	13:00	16:00	16:00	16:00	16:00	15:00	15:00	15:00	14:00	15:00	15:00	14:00	13:00	14:00	15:00			15:00	
Vol.					1	1	3	9	19	72	93	94	111	83	34	13	8	6	1	2	1			395	

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HIDDEN VALLEY RD from WABANAKI DR to HIDDEN VALLEY CRES
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Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Aver
11/16 /22	0	0	0	0	0	0	0	0	0	0	2	3	2	3	1	0	0	0	0	0	0	0	0	11	0
01:00	0	0	0	0	0	0	0	0	0	1	1	2	3	4	0	0	0	0	0	0	0	0	0	11	0
02:00	0	0	0	0	0	0	0	0	2	1	2	1	0	2	2	0	0	0	0	0	0	0	0	10	0
03:00	0	0	0	0	0	0	0	0	0	1	0	10	0	0	2	1	0	0	0	0	0	0	0	14	1
04:00	0	0	0	0	0	0	0	0	4	3	2	7	8	5	1	0	1	1	0	0	0	0	0	32	1
05:00	0	0	0	0	0	0	0	2	2	1	7	19	19	20	5	3	0	0	0	0	0	0	0	78	3
06:00	0	0	0	0	1	0	2	3	3	26	25	43	49	35	9	6	5	0	0	0	0	0	0	207	9
07:00	0	0	0	0	0	2	2	6	2	25	57	85	104	45	28	8	3	0	0	0	0	0	0	367	16
08:00	0	0	0	0	0	1	0	7	5	11	55	100	80	49	22	2	0	0	0	0	0	0	0	332	14
09:00	0	0	0	0	0	0	6	0	3	14	38	59	66	49	15	2	1	1	0	0	1	0	0	255	11
10:00	0	0	0	0	0	0	0	0	0	9	73	60	43	32	15	2	0	0	0	0	0	0	0	234	10
11:00	0	0	0	0	0	0	0	0	2	7	19	47	48	34	12	4	4	1	0	0	0	0	0	178	8
12 PM	0	0	0	0	2	0	0	2	4	5	27	43	61	40	19	5	3	0	0	0	0	0	0	211	9
13:00	0	0	0	0	2	0	1	2	5	5	28	52	59	41	18	4	2	0	0	0	0	0	0	219	10
14:00	0	0	0	0	0	0	0	0	7	15	26	56	100	61	25	9	4	2	0	1	1	0	0	307	13
15:00	0	0	0	0	0	0	0	0	1	8	56	85	108	72	23	11	3	0	0	1	0	0	0	368	16
16:00	0	0	0	0	0	0	2	1	17	30	53	108	110	51	23	3	5	2	0	0	0	0	0	405	18
17:00	0	0	0	0	0	0	0	1	7	18	53	90	76	31	12	3	0	0	0	0	0	0	0	291	13
18:00	0	0	0	0	0	0	1	0	4	10	40	53	48	27	10	6	2	0	0	0	0	0	0	201	9
19:00	0	0	0	0	0	0	0	1	1	6	16	33	32	17	1	2	3	1	0	0	0	0	0	113	5
20:00	0	0	0	0	0	0	0	1	0	9	19	40	23	9	7	2	0	0	1	1	0	0	0	112	5
21:00	0	0	0	0	0	0	0	0	1	10	9	23	15	12	7	3	1	0	0	0	0	0	0	81	4
22:00	0	0	0	0	0	0	0	0	2	6	13	22	12	12	4	1	0	0	1	0	0	0	0	73	3
23:00	0	0	0	0	0	0	0	0	1	3	6	11	9	7	4	0	1	1	0	0	0	0	0	43	2
Percent	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.3%	0.6%	1.8%	5.4%	15.1 %	25.3 %	25.9 %	15.8 %	6.4%	1.9%	0.9%	0.2%	0.0%	0.1%	0.0%	0.0%	0.0%		
AM Peak					06:00	07:00	09:00	08:00	08:00	06:00	10:00	08:00	07:00	08:00	07:00	07:00	06:00	04:00			09:00			07:00	
Vol.					1	2	6	7	5	26	73	100	104	49	28	8	5	1			1			367	
PM Peak					12:00		16:00	12:00	16:00	16:00	15:00	16:00	16:00	15:00	14:00	15:00	16:00	14:00	20:00	14:00	14:00			16:00	
Vol.					2		2	2	17	30	56	108	110	72	25	11	5	2	1	1	1			405	
Total	0	0	0	0	12	16	47	138	409	1533	3967	6474	6642	3915	1778	573	215	77	30	12	9	0	0	25847	

Statistics

Mean Speed(Average) : 61 MPH
50th Percentile : 60 MPH
85th Percentile : 68 MPH

Ontario Traffic, Inc.
17705 Leslie St., Unit 6
Newmarket, Ontario L3Y 3E3
Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 22131
Station ID: U79
HIDDEN VALLEY RD from WABANAKI DR to HIDDEN VALLEY CRES
Date Start: 10-Nov-22
Date End: 16-Nov-22

SB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Aver
11/10 /22	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	1	0	0	0	0	0	3	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0
02:00	0	0	0	0	0	0	0	0	0	0	0	0	1	5	1	1	0	0	0	0	0	0	0	8	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	3	2	0	0	0	0	0	0	0	0	0	5	0
04:00	0	0	0	0	0	0	0	0	0	0	0	2	0	1	0	1	0	0	0	0	0	0	0	4	0
05:00	0	0	0	0	0	0	0	0	0	1	1	3	4	5	1	1	0	0	0	0	0	0	0	16	1
06:00	0	0	0	0	0	0	0	0	0	4	8	12	23	16	11	8	3	2	0	0	0	0	0	87	4
07:00	0	0	0	0	0	0	0	0	1	0	4	12	14	24	12	3	3	1	2	1	0	0	0	77	3
08:00	0	0	0	0	0	0	0	0	0	0	2	4	15	20	13	5	4	1	0	0	1	0	0	65	3
09:00	0	0	0	0	0	0	0	0	2	1	7	8	13	13	8	8	1	1	0	0	0	0	0	62	3
10:00	0	0	0	0	0	0	0	0	0	0	8	10	11	8	9	2	4	1	0	0	0	0	0	53	2
11:00	0	0	0	0	0	0	0	0	2	2	6	16	14	8	5	5	0	0	1	0	0	0	0	59	3
12 PM	0	0	0	0	0	0	0	0	0	2	10	22	24	20	7	7	6	1	1	1	0	0	0	101	4
13:00	0	0	0	0	0	0	3	1	1	1	10	9	19	16	7	4	3	1	1	0	1	0	0	77	3
14:00	0	0	0	0	0	0	0	0	0	3	5	19	18	17	8	4	3	1	0	2	0	0	0	80	3
15:00	0	0	0	0	0	0	0	0	0	2	9	11	24	18	13	3	5	1	0	0	0	0	0	86	4
16:00	0	0	0	0	0	0	0	0	0	5	9	20	17	16	15	8	8	1	0	0	0	0	0	99	4
17:00	0	0	0	0	0	0	0	0	1	5	13	17	14	7	10	3	0	0	0	0	0	0	0	70	3
18:00	0	0	0	0	0	0	0	0	0	3	7	10	10	14	8	5	2	0	1	0	1	0	0	61	3
19:00	0	0	0	0	0	0	0	0	0	4	11	13	9	8	6	1	0	0	0	0	0	0	0	52	2
20:00	0	0	0	0	0	0	0	0	0	1	6	16	13	10	1	1	0	0	0	0	1	0	0	49	2
21:00	0	0	0	0	0	0	0	1	0	2	14	10	7	5	7	3	0	2	1	0	0	0	0	52	2
22:00	0	0	0	0	0	0	0	0	1	3	3	6	8	9	1	3	0	1	0	1	1	0	0	37	2
23:00	0	0	0	0	0	0	0	0	0	0	1	3	2	1	2	1	0	0	0	0	0	0	0	10	0
Percent	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.2%	0.7%	3.2%	11.0 %	18.4 %	21.7 %	20.1 %	11.9 %	6.3%	3.5%	1.2%	0.6%	0.4%	0.4%	0.0%	0.0%		
AM Peak									09:00	06:00	06:00	11:00	06:00	07:00	08:00	06:00	08:00	06:00	07:00	07:00	08:00			06:00	
Vol.									2	4	8	16	23	24	13	8	4	2	2	1	1			87	
PM Peak							13:00	13:00	13:00	16:00	21:00	12:00	12:00	12:00	16:00	16:00	16:00	21:00	12:00	14:00	13:00			12:00	
Vol.							3	1	1	5	14	22	24	20	15	8	8	2	1	2	1			101	

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HIDDEN VALLEY RD from WABANAKI DR to HIDDEN VALLEY CRES
Date Start: 10-Nov-22
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SB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Aver
11/11 /22	0	0	0	0	0	0	0	0	0	0	2	0	2	1	1	0	0	0	0	0	0	0	0	6	0
01:00	0	0	0	0	0	0	0	0	0	0	1	2	1	4	1	0	2	0	0	0	0	0	0	11	0
02:00	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	1	0	0	1	0	0	0	4	0
03:00	0	0	0	0	0	0	0	0	0	1	0	1	0	1	2	0	0	0	0	0	0	0	0	5	0
04:00	0	0	0	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	3	0
05:00	0	0	0	0	0	0	0	0	1	1	1	3	3	3	0	0	2	0	0	0	0	0	0	14	1
06:00	0	0	0	0	0	0	0	0	1	0	6	16	12	9	4	2	1	1	0	0	0	0	0	52	2
07:00	0	0	0	0	0	0	0	0	2	0	4	7	13	22	14	4	2	5	1	0	0	0	0	74	3
08:00	0	0	0	0	0	0	0	0	0	2	5	9	5	14	8	2	1	0	2	0	1	0	0	49	2
09:00	0	0	0	0	0	0	0	0	0	1	4	8	8	16	10	3	1	0	0	0	0	0	0	51	2
10:00	0	0	0	0	0	0	0	1	2	2	3	7	15	8	6	5	0	0	0	0	0	0	0	49	2
11:00	0	0	0	0	0	0	1	0	2	2	2	18	14	13	8	3	2	0	1	0	0	0	0	66	3
12 PM	0	0	0	0	0	0	0	0	0	3	5	17	20	15	17	6	3	1	0	1	0	0	0	88	4
13:00	0	0	0	0	0	0	0	0	1	8	14	11	18	17	10	6	1	0	1	0	0	0	0	87	4
14:00	0	0	0	0	0	0	0	0	1	1	10	7	21	15	5	2	2	1	0	0	0	0	0	65	3
15:00	0	0	0	0	0	0	0	0	0	3	7	24	19	18	12	10	1	2	2	0	0	0	0	98	4
16:00	0	0	0	0	0	0	0	0	1	5	13	20	21	16	13	5	2	1	0	1	0	0	0	98	4
17:00	0	0	0	0	0	0	0	2	3	3	8	18	11	10	8	4	0	1	0	0	0	0	0	68	3
18:00	0	0	0	0	0	0	0	1	1	3	8	8	11	6	3	1	0	0	0	0	0	0	0	42	2
19:00	0	0	0	0	0	0	0	0	1	0	13	10	11	8	2	0	0	0	0	0	0	1	0	46	2
20:00	0	0	0	0	0	0	0	0	2	3	8	8	12	3	5	0	1	1	0	0	0	0	0	43	2
21:00	0	0	0	0	0	0	0	0	0	3	6	9	10	1	10	0	2	0	0	1	1	0	0	43	2
22:00	0	0	0	0	0	0	0	0	0	2	2	5	4	4	2	1	2	1	0	0	0	0	0	23	1
23:00	0	0	0	0	0	0	0	0	0	4	3	3	4	3	3	0	0	0	0	0	0	0	0	20	1
Percent	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.4%	1.7%	4.3%	11.3 %	19.3 %	21.4 %	18.8 %	13.0 %	4.9%	2.4%	1.3%	0.6%	0.4%	0.2%	0.1%	0.0%		
AM Peak							11:00	10:00	07:00	08:00	06:00	11:00	10:00	07:00	07:00	10:00	01:00	07:00	08:00	02:00	08:00			07:00	
Vol.							1	1	2	2	6	18	15	22	14	5	2	5	2	1	1			74	
PM Peak								17:00	17:00	13:00	13:00	15:00	14:00	15:00	12:00	15:00	12:00	15:00	15:00	12:00	21:00	19:00		15:00	
Vol.								2	3	8	14	24	21	18	17	10	3	2	2	1	1	1		98	

Ontario Traffic, Inc.
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Site Code: 22131
Station ID: U79
HIDDEN VALLEY RD from WABANAKI DR to HIDDEN VALLEY CRES
Date Start: 10-Nov-22
Date End: 16-Nov-22

SB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Aver
11/12 /22	0	0	0	0	0	0	0	0	0	1	1	1	7	0	2	1	0	1	0	0	0	0	0	14	1
01:00	0	0	0	0	0	0	0	0	0	0	1	3	0	2	0	0	0	0	0	0	0	0	0	6	0
02:00	0	0	0	0	0	0	0	0	1	0	1	1	3	0	1	0	0	0	0	0	0	0	0	7	0
03:00	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	0	0	0	0	0	0	0	0	3	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	2	0
05:00	0	0	0	0	0	1	0	0	0	0	2	1	2	0	0	0	0	0	0	0	0	0	0	6	0
06:00	0	0	0	0	0	0	0	0	0	0	1	2	2	2	0	1	3	0	0	0	0	0	0	11	0
07:00	0	0	0	0	0	0	0	0	0	0	0	2	3	0	0	0	1	0	1	0	0	0	0	7	0
08:00	0	0	0	0	0	0	0	0	1	0	2	2	2	3	2	2	1	0	0	0	0	0	0	15	1
09:00	0	0	0	0	0	0	0	0	0	0	2	2	4	8	4	4	0	0	0	0	0	0	0	24	1
10:00	0	0	0	0	0	0	0	0	0	0	2	7	9	5	9	8	3	1	0	0	0	0	0	44	2
11:00	0	0	0	0	0	0	0	0	0	0	5	6	10	16	14	3	3	4	1	0	0	0	0	62	3
12 PM	0	0	0	0	0	0	0	0	0	3	5	8	10	14	4	6	3	0	0	0	0	0	0	53	2
13:00	0	0	0	0	0	0	0	0	2	5	2	9	12	11	7	6	3	2	1	0	0	0	0	60	3
14:00	0	0	0	0	0	0	0	0	0	2	9	20	26	19	8	3	2	0	0	0	0	0	0	89	4
15:00	0	0	0	0	0	0	0	0	0	0	5	16	20	24	10	5	0	0	0	1	0	1	0	82	4
16:00	0	0	0	0	0	0	0	0	0	0	5	15	18	11	6	2	3	0	0	0	0	0	0	60	3
17:00	0	0	0	0	0	0	0	0	0	3	13	16	11	8	3	5	1	0	0	1	0	0	0	61	3
18:00	0	0	0	0	0	0	0	0	1	4	13	5	9	6	4	3	0	1	1	0	0	0	0	47	2
19:00	0	0	0	0	0	0	0	1	0	2	13	10	9	11	6	1	0	1	0	0	0	0	0	54	2
20:00	0	0	0	0	0	0	0	0	0	1	1	5	8	8	4	2	0	2	0	0	0	0	0	31	1
21:00	0	0	0	0	0	0	0	0	0	2	6	12	0	1	3	0	0	1	0	0	0	0	0	25	1
22:00	0	0	0	0	0	0	0	1	0	0	4	7	4	1	0	0	0	0	0	0	0	0	0	17	1
23:00	0	0	0	0	0	0	0	0	1	1	1	0	3	5	2	2	0	0	0	0	0	0	0	15	1
Percent	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.3%	0.8%	3.0%	11.9 %	19.0 %	21.8 %	19.5 %	11.4 %	6.8%	2.9%	1.6%	0.5%	0.3%	0.0%	0.1%	0.0%		
AM Peak						05:00			02:00	00:00	11:00	10:00	11:00	11:00	11:00	10:00	06:00	11:00	07:00					11:00	
Vol.						1			1	1	5	7	10	16	14	8	3	4	1					62	
PM Peak								19:00	13:00	13:00	17:00	14:00	14:00	15:00	15:00	12:00	12:00	13:00	13:00	15:00		15:00		14:00	
Vol.								1	2	5	13	20	26	24	10	6	3	2	1	1		1		89	

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HIDDEN VALLEY RD from WABANAKI DR to HIDDEN VALLEY CRES
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11/13 /22	0	0	0	0	0	0	0	0	0	0	1	5	2	2	3	1	1	0	0	0	0	0	0	15	1
01:00	0	0	0	0	0	0	0	0	0	0	6	3	2	5	0	1	0	0	0	0	0	0	0	17	1
02:00	0	0	0	0	0	0	1	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	4	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0
05:00	0	0	0	0	0	0	0	0	0	1	0	3	0	0	0	0	0	0	0	0	0	0	0	4	0
06:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0
07:00	0	0	0	0	0	0	0	0	0	2	1	0	1	1	0	1	0	0	0	0	0	0	0	6	0
08:00	0	0	0	0	0	0	0	0	0	1	0	3	2	1	0	1	0	0	0	0	0	0	0	8	0
09:00	0	0	0	0	0	0	0	0	0	1	2	3	6	2	2	2	0	1	0	0	0	0	0	19	1
10:00	0	0	0	0	0	0	0	0	1	1	2	0	8	6	5	3	3	0	0	1	0	0	0	30	1
11:00	0	0	0	0	0	0	0	0	1	3	3	5	9	6	4	4	1	0	0	0	0	0	0	36	2
12 PM	0	0	0	0	0	0	0	0	1	3	2	10	9	14	6	5	2	1	0	0	1	0	0	54	2
13:00	0	0	0	0	0	0	0	0	0	1	8	11	12	11	3	10	3	0	0	0	0	0	0	59	3
14:00	0	0	0	0	0	0	0	0	0	1	3	6	9	11	6	5	2	2	0	0	0	2	0	47	2
15:00	0	0	0	0	0	0	0	0	0	5	5	14	14	16	9	1	5	2	0	0	2	0	0	73	3
16:00	0	0	0	0	0	0	0	0	1	2	8	5	16	13	11	6	3	1	1	0	0	0	0	67	3
17:00	0	0	0	0	0	0	0	0	0	2	14	11	11	8	6	3	0	1	0	0	0	0	0	56	2
18:00	0	0	0	0	0	0	1	0	0	6	4	6	6	4	2	1	0	0	0	0	0	0	0	30	1
19:00	0	0	0	0	0	0	0	0	1	7	3	6	6	4	4	3	1	0	0	0	0	0	0	35	2
20:00	0	0	0	0	0	0	0	0	0	1	2	11	3	6	3	1	1	0	0	0	0	0	0	28	1
21:00	0	0	0	0	0	0	0	0	0	1	3	6	4	5	2	1	1	0	0	0	0	0	0	23	1
22:00	0	0	0	0	0	0	0	1	2	1	0	9	5	2	1	0	0	0	0	0	0	0	0	21	1
23:00	0	0	0	0	0	0	0	0	0	0	2	3	3	1	2	1	1	0	0	0	0	0	0	13	1
Percent	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%	0.2%	1.1%	6.0%	10.8 %	18.7 %	20.2 %	18.2 %	10.7 %	7.7%	3.7%	1.2%	0.2%	0.2%	0.5%	0.3%	0.0%		
AM Peak							02:00		10:00	11:00	01:00	00:00	11:00	10:00	10:00	11:00	10:00	09:00		10:00				11:00	
Vol.							1		1	3	6	5	9	6	5	4	3	1		1				36	
PM Peak							18:00	22:00	22:00	19:00	17:00	15:00	16:00	15:00	16:00	13:00	15:00	14:00	16:00		15:00	14:00		15:00	
Vol.							1	1	2	7	14	14	16	16	11	10	5	2	1		2	2		73	

Ontario Traffic, Inc.
17705 Leslie St., Unit 6
Newmarket, Ontario L3Y 3E3
Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 22131
Station ID: U79
HIDDEN VALLEY RD from WABANAKI DR to HIDDEN VALLEY CRES
Date Start: 10-Nov-22
Date End: 16-Nov-22

SB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Aver
11/14 /22	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	2	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	2	0
02:00	0	0	0	0	0	1	0	1	1	1	0	1	2	1	1	0	0	0	0	0	0	0	0	9	0
03:00	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0
04:00	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2	0
05:00	0	0	0	0	0	0	0	0	0	1	2	2	6	2	1	3	0	1	0	1	0	0	0	19	1
06:00	0	0	0	0	0	0	0	0	1	0	8	5	18	11	13	3	6	0	3	0	0	0	0	68	3
07:00	0	0	0	0	0	0	0	1	0	0	4	12	21	18	6	4	4	1	1	1	0	0	0	73	3
08:00	0	0	0	0	0	0	0	0	0	2	5	10	11	10	7	7	3	3	1	0	0	0	0	59	3
09:00	0	0	0	0	0	0	0	0	0	2	6	7	16	5	8	3	2	1	0	1	0	0	0	51	2
10:00	0	0	0	0	1	0	0	0	1	6	5	7	10	8	8	1	0	0	0	0	0	0	0	47	2
11:00	0	0	0	0	0	0	0	0	0	5	5	14	9	12	6	3	1	2	0	0	0	0	0	57	2
12 PM	0	0	0	0	0	0	0	0	3	8	9	16	20	13	13	4	0	1	1	0	0	0	0	88	4
13:00	0	0	0	0	0	1	1	0	2	5	12	10	11	14	7	3	4	1	1	1	0	0	0	73	3
14:00	0	0	0	0	0	1	1	3	1	1	9	10	17	23	13	8	0	1	0	0	0	0	0	88	4
15:00	0	0	0	0	0	0	0	0	1	6	9	13	20	13	15	7	6	0	0	1	0	0	0	91	4
16:00	0	0	0	0	0	0	0	0	0	3	2	13	19	21	17	3	2	2	1	0	0	0	0	83	4
17:00	0	0	0	0	1	0	0	0	1	5	10	12	15	16	10	3	0	1	0	0	0	0	0	74	3
18:00	0	0	0	0	0	0	0	0	0	4	10	9	9	14	5	3	1	0	1	0	0	0	0	56	2
19:00	0	0	0	0	0	0	0	0	0	5	5	5	9	7	4	5	3	0	1	0	0	0	0	44	2
20:00	0	0	0	0	0	0	0	0	0	0	3	10	8	9	3	3	1	0	0	0	0	0	0	37	2
21:00	0	0	0	0	0	0	0	0	0	2	1	6	5	2	3	1	0	1	0	0	0	0	0	21	1
22:00	0	0	0	0	0	0	0	0	0	2	0	6	5	10	2	0	0	0	0	0	0	0	0	25	1
23:00	0	0	0	0	0	0	0	0	0	2	2	1	1	3	1	0	1	1	0	0	0	0	0	12	1
Percent	0.0%	0.0%	0.0%	0.0%	0.2%	0.3%	0.2%	0.5%	1.1%	5.5%	10.0 %	15.7 %	21.7 %	19.6 %	13.3 %	5.9%	3.1%	1.5%	0.9%	0.5%	0.0%	0.0%	0.0%		
AM Peak					10:00	02:00		02:00	02:00	10:00	06:00	11:00	07:00	07:00	06:00	08:00	06:00	08:00	06:00	05:00				07:00	
Vol.					1	1		1	1	6	8	14	21	18	13	7	6	3	3	1				73	
PM Peak					17:00	13:00	13:00	14:00	12:00	12:00	13:00	12:00	12:00	14:00	16:00	14:00	15:00	16:00	12:00	13:00				15:00	
Vol.					1	1	1	3	3	8	12	16	20	23	17	8	6	2	1	1				91	

Ontario Traffic, Inc.
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HIDDEN VALLEY RD from WABANAKI DR to HIDDEN VALLEY CRES
Date Start: 10-Nov-22
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SB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Aver
11/15 /22	0	0	0	0	0	0	0	0	0	0	0	1	1	1	2	0	1	0	0	0	0	0	0	6	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	2	0
02:00	0	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	1	0	0	0	0	0	0	4	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	2	0
04:00	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0
05:00	0	0	0	0	0	0	0	0	0	2	0	5	3	2	3	1	1	0	0	0	0	0	0	17	1
06:00	0	0	0	0	0	0	0	0	0	1	10	14	13	17	6	8	1	1	0	0	0	0	0	71	3
07:00	0	0	0	0	0	0	0	0	0	0	7	17	20	11	11	4	4	0	0	1	0	0	0	75	3
08:00	0	0	0	0	0	0	0	0	0	1	6	10	14	9	13	8	3	3	0	0	0	0	0	67	3
09:00	0	0	0	0	0	0	0	0	0	4	8	5	13	7	4	2	2	0	0	0	0	0	0	45	2
10:00	0	0	0	0	0	0	0	1	2	3	4	11	13	8	6	2	1	0	0	0	0	0	0	51	2
11:00	0	0	0	0	1	1	0	1	0	2	6	17	19	7	4	2	1	0	1	0	1	0	0	63	3
12 PM	0	0	0	0	0	0	0	0	0	4	9	16	15	15	8	5	4	0	2	0	0	0	0	78	3
13:00	0	0	0	0	0	0	5	1	1	2	7	2	16	19	9	3	2	0	0	0	2	0	0	69	3
14:00	0	0	0	0	0	0	0	0	0	2	6	8	16	18	5	5	7	3	1	2	0	0	0	73	3
15:00	0	0	0	0	0	0	0	0	0	2	11	15	25	18	13	3	6	1	1	0	0	0	0	95	4
16:00	0	0	0	0	0	0	0	0	0	1	5	12	21	18	18	5	9	0	0	0	0	0	0	89	4
17:00	0	0	0	0	0	0	0	0	0	3	17	15	14	11	12	2	1	0	0	0	1	0	0	76	3
18:00	0	0	0	0	0	0	1	0	0	4	8	15	10	10	8	3	1	0	0	0	0	0	0	60	3
19:00	0	0	0	0	0	0	1	0	1	2	7	8	8	10	3	1	0	0	0	0	0	0	0	41	2
20:00	0	0	0	0	0	0	3	0	0	0	5	1	11	6	3	1	0	1	0	0	1	0	0	32	1
21:00	0	0	0	0	0	0	0	0	0	1	7	2	3	2	2	0	1	1	1	0	0	0	0	20	1
22:00	0	0	0	0	0	0	0	0	0	2	2	0	3	7	0	3	0	0	0	1	1	0	0	19	1
23:00	0	0	0	0	0	0	0	0	0	0	1	5	3	1	2	1	0	0	0	0	0	0	0	13	1
Percent	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	1.0%	0.3%	0.4%	3.4%	12.0 %	16.7 %	22.6 %	18.5 %	12.5 %	5.5%	4.4%	0.9%	0.6%	0.4%	0.6%	0.0%	0.0%		
AM Peak					11:00	11:00	02:00	10:00	10:00	09:00	06:00	07:00	07:00	06:00	08:00	06:00	07:00	08:00	11:00	07:00	11:00			07:00	
Vol.					1	1	1	1	2	4	10	17	20	17	13	8	4	3	1	1	1			75	
PM Peak							13:00	13:00	13:00	12:00	17:00	12:00	15:00	13:00	16:00	12:00	16:00	14:00	12:00	14:00	13:00			15:00	
Vol.							5	1	1	4	17	16	25	19	18	5	9	3	2	2	2			95	

Ontario Traffic, Inc.
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HIDDEN VALLEY RD from WABANAKI DR to HIDDEN VALLEY CRES
Date Start: 10-Nov-22
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SB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Aver
11/16 /22	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	2	0
01:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	2	0
02:00	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	3	0
03:00	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0
04:00	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
05:00	0	0	0	0	0	0	0	0	0	2	3	1	4	7	2	0	0	0	0	0	0	0	0	19	1
06:00	0	0	0	0	0	0	0	0	0	5	3	11	13	23	12	1	0	0	0	2	0	1	0	71	3
07:00	0	0	0	0	0	0	0	0	1	3	5	18	17	17	12	4	5	2	1	0	0	0	0	85	4
08:00	0	0	0	0	0	0	0	0	0	0	1	4	17	15	13	7	3	1	0	0	1	0	0	62	3
09:00	0	0	0	0	0	0	0	0	1	2	8	8	9	8	4	7	1	1	1	0	0	0	0	50	2
10:00	0	0	0	0	0	0	0	0	0	1	8	9	7	7	7	2	3	0	0	0	0	0	0	44	2
11:00	0	0	0	0	0	0	0	0	0	2	6	17	17	10	4	4	0	1	2	0	0	0	0	63	3
12 PM	0	0	0	0	0	0	1	2	3	1	8	16	15	15	4	8	2	0	0	2	0	0	0	77	3
13:00	0	0	0	0	0	0	2	0	0	3	11	7	16	21	9	0	3	1	1	0	0	0	0	74	3
14:00	0	0	0	0	0	0	5	1	0	1	4	7	21	18	4	6	9	2	0	3	2	0	0	83	4
15:00	0	0	0	0	0	0	0	0	0	4	5	20	13	19	19	10	6	2	0	0	1	0	0	99	4
16:00	0	0	0	0	0	0	0	0	0	3	8	17	14	10	13	8	6	2	0	0	0	0	0	81	4
17:00	0	0	0	0	0	0	0	0	0	9	7	15	21	13	6	1	2	0	0	0	0	0	0	74	3
18:00	0	0	0	0	0	0	0	0	1	5	10	10	13	11	5	3	1	1	1	0	0	0	0	61	3
19:00	0	0	0	0	0	0	1	0	1	1	13	7	6	7	4	1	1	0	0	0	0	0	0	42	2
20:00	0	0	0	0	0	0	0	0	0	1	7	10	11	4	2	1	0	1	0	0	0	0	0	37	2
21:00	0	0	0	0	0	0	0	0	0	1	7	4	6	6	1	1	0	1	0	0	0	0	0	27	1
22:00	0	0	0	0	0	0	0	0	0	2	1	7	6	5	4	2	0	0	0	0	0	0	0	27	1
23:00	0	0	0	0	0	0	0	0	0	1	0	1	3	1	0	1	0	1	0	0	0	0	0	8	0
Percent	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.8%	0.4%	0.6%	4.3%	10.5 %	17.3 %	21.0 %	20.0 %	11.4 %	6.1%	4.1%	1.5%	0.5%	0.6%	0.5%	0.1%	0.0%		
AM Peak Vol.						02:00 1		04:00 1	07:00 1	06:00 5	09:00 8	07:00 18	07:00 17	06:00 23	08:00 13	08:00 7	07:00 5	07:00 2	11:00 2	06:00 2	00:00 1	06:00 1		07:00 85	
PM Peak Vol.							14:00 5	12:00 2	12:00 3	17:00 9	19:00 13	15:00 20	14:00 21	13:00 21	15:00 19	15:00 10	14:00 9	14:00 2	13:00 1	14:00 3	14:00 2			15:00 99	
Total	0	0	0	0	3	6	28	21	63	292	775	1246	1511	1354	852	425	242	92	41	28	21	5	0	7005	

Statistics

Mean Speed(Average) : 65 MPH
50th Percentile : 63 MPH
85th Percentile : 73 MPH

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NB, SB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Aver
11/10 /22	0	0	0	0	0	0	0	0	0	1	1	4	3	5	2	0	0	1	0	0	0	0	0	17	1
01:00	0	0	0	0	0	0	0	0	0	2	0	2	3	2	2	0	3	0	0	0	0	0	0	14	1
02:00	0	0	0	0	0	0	0	1	2	1	3	0	3	7	2	1	0	2	0	0	0	0	0	22	1
03:00	0	0	0	0	0	0	0	0	3	1	4	3	5	3	2	1	0	0	0	0	0	0	0	22	1
04:00	0	0	0	0	0	0	0	0	2	3	4	7	7	6	5	3	0	1	0	0	0	0	0	38	2
05:00	0	0	0	0	0	0	0	1	2	4	11	28	30	28	11	5	1	1	0	0	0	0	0	122	5
06:00	0	0	0	0	0	0	1	4	3	21	40	47	79	43	28	12	7	2	0	0	0	0	0	287	12
07:00	0	0	0	0	1	2	0	5	6	32	60	95	98	66	33	10	5	1	2	1	0	0	0	417	18
08:00	0	0	0	0	0	1	0	3	2	12	52	81	79	72	42	11	7	1	0	0	1	0	0	364	16
09:00	0	0	0	0	0	0	2	3	4	14	38	65	78	63	27	13	2	2	0	0	0	0	0	311	14
10:00	0	0	0	0	0	0	0	0	1	11	69	83	57	40	23	6	5	1	0	0	0	0	0	296	13
11:00	0	0	0	0	0	0	0	3	5	12	30	76	89	61	30	9	4	1	1	0	0	0	0	321	14
12 PM	0	0	0	0	0	0	0	0	0	11	40	74	100	64	37	12	7	2	1	1	0	0	0	349	15
13:00	0	0	0	0	1	0	3	2	5	15	35	61	80	50	22	7	6	3	1	1	1	0	0	293	13
14:00	0	0	0	0	0	0	1	0	3	18	47	84	130	96	40	12	6	1	1	2	0	0	0	441	19
15:00	0	0	0	0	0	0	0	0	1	13	56	104	131	89	41	13	11	1	0	0	0	0	0	460	20
16:00	0	0	0	0	0	1	1	1	18	48	72	115	97	47	26	13	9	2	1	0	0	0	0	451	20
17:00	0	0	0	0	0	0	0	3	6	27	65	103	82	61	22	7	0	0	0	0	0	0	0	376	16
18:00	0	0	0	0	0	0	0	1	4	18	49	82	61	44	13	9	4	0	2	0	1	0	0	288	13
19:00	0	0	0	0	0	0	0	0	1	7	34	60	45	32	16	3	0	1	0	0	0	0	0	199	9
20:00	0	0	0	0	0	0	0	0	1	12	32	45	42	16	6	4	2	1	0	0	1	0	0	162	7
21:00	0	0	0	0	0	0	0	1	1	8	28	29	32	21	17	11	0	4	1	0	0	0	0	153	7
22:00	0	0	0	0	0	0	0	0	5	8	17	31	26	21	8	5	2	2	0	1	1	0	0	127	6
23:00	0	0	0	0	0	0	0	0	0	2	6	13	13	5	4	3	0	0	0	0	0	0	0	46	2
Percent	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.5%	1.3%	5.4%	14.2 %	23.2 %	24.6 %	16.9 %	8.2%	3.0%	1.5%	0.5%	0.2%	0.1%	0.1%	0.0%	0.0%		
AM Peak					07:00	07:00	09:00	07:00	07:00	07:00	10:00	07:00	07:00	08:00	08:00	09:00	06:00	02:00	07:00	07:00	08:00			07:00	
Vol.					1	2	2	5	6	32	69	95	98	72	42	13	7	2	2	1	1			417	
PM Peak					13:00	16:00	13:00	17:00	16:00	16:00	16:00	16:00	15:00	14:00	15:00	15:00	15:00	21:00	18:00	14:00	13:00			15:00	
Vol.					1	1	3	3	18	48	72	115	131	96	41	13	11	4	2	2	1			460	

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NB, SB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Aver
11/11 /22	0	0	0	0	0	0	0	0	0	0	4	3	8	2	2	3	0	1	0	0	0	0	0	23	1
01:00	0	0	0	0	0	0	0	0	1	2	3	6	6	5	1	1	2	0	0	0	0	0	0	27	1
02:00	0	0	0	0	0	0	0	1	2	2	1	3	0	2	1	0	1	1	0	1	0	0	0	15	1
03:00	0	0	0	0	0	0	0	1	2	2	5	7	7	3	2	0	0	0	0	0	0	0	0	29	1
04:00	0	0	0	0	0	0	0	0	1	4	6	11	10	4	3	1	2	0	0	0	0	0	0	42	2
05:00	0	0	0	0	0	0	0	0	1	5	12	22	25	21	15	5	2	2	1	0	0	0	0	111	5
06:00	0	0	0	0	0	0	0	0	5	15	42	52	64	33	22	8	2	1	1	1	0	0	0	246	11
07:00	0	0	0	0	0	0	0	0	5	12	40	90	93	62	33	11	5	6	2	0	0	0	0	359	16
08:00	0	0	0	0	0	0	0	5	2	9	44	80	84	58	28	7	3	1	2	0	1	0	0	324	14
09:00	0	0	0	0	0	1	2	2	5	18	43	66	60	54	28	4	3	0	0	0	0	0	0	286	12
10:00	0	0	0	0	0	0	0	1	7	16	29	52	87	59	23	11	2	0	0	0	0	0	0	287	12
11:00	0	0	0	0	0	0	2	1	5	16	33	95	75	71	19	13	8	1	1	0	0	0	0	340	15
12 PM	0	0	0	0	0	0	0	2	7	18	49	84	82	59	32	9	4	4	0	1	0	0	0	351	15
13:00	0	0	0	0	0	0	1	5	4	26	62	73	96	46	23	7	3	0	3	0	0	0	0	349	15
14:00	0	0	0	0	0	0	0	3	1	15	54	74	91	65	26	11	4	1	0	0	0	0	0	345	15
15:00	0	0	0	0	0	0	0	0	0	15	48	111	116	66	33	15	2	2	3	0	0	0	0	411	18
16:00	0	0	0	0	0	0	2	6	12	43	74	111	88	41	22	7	3	1	0	1	0	0	0	411	18
17:00	0	0	0	0	0	0	0	2	4	18	60	93	88	45	16	8	1	1	0	0	0	0	0	336	15
18:00	0	0	0	0	0	0	0	2	9	23	52	62	72	32	13	3	0	0	0	0	0	0	0	268	12
19:00	0	0	0	0	0	0	0	0	3	6	35	42	42	19	7	3	0	0	0	0	1	1	0	159	7
20:00	0	0	0	0	0	0	0	1	3	15	33	28	28	15	7	0	2	1	0	0	0	0	0	133	6
21:00	0	0	0	0	0	0	0	0	2	11	28	43	35	14	14	3	2	0	0	1	1	0	0	154	7
22:00	0	0	0	0	0	0	0	0	3	6	18	28	18	11	4	3	3	2	1	0	0	0	0	97	4
23:00	0	0	0	0	0	0	0	1	2	4	11	20	16	7	7	3	0	0	0	0	0	0	0	71	3
Percent	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.6%	1.7%	5.8%	15.2 %	24.3 %	25.0 %	15.3 %	7.4%	2.6%	1.0%	0.5%	0.3%	0.1%	0.1%	0.0%	0.0%		
AM Peak						09:00	09:00	08:00	10:00	09:00	08:00	11:00	07:00	11:00	07:00	11:00	11:00	07:00	07:00	02:00	08:00			07:00	
Vol.						1	2	5	7	18	44	95	93	71	33	13	8	6	2	1	1			359	
PM Peak							16:00	16:00	16:00	16:00	16:00	15:00	15:00	15:00	15:00	15:00	12:00	12:00	13:00	12:00	19:00	19:00		15:00	
Vol.							2	6	12	43	74	111	116	66	33	15	4	4	3	1	1	1		411	

Ontario Traffic, Inc.
17705 Leslie St., Unit 6
Newmarket, Ontario L3Y 3E3
Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 22131
Station ID: U79
HIDDEN VALLEY RD from WABANAKI DR to HIDDEN VALLEY CRES
Date Start: 10-Nov-22
Date End: 16-Nov-22

NB, SB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Aver
11/12 /22	0	0	0	0	0	0	0	0	1	3	6	9	14	1	2	4	0	1	0	0	0	0	0	41	2
01:00	0	0	0	0	0	0	0	0	0	4	4	9	3	4	2	0	0	1	0	0	0	0	0	27	1
02:00	0	0	0	0	0	0	0	0	2	1	2	5	4	7	1	1	1	1	0	0	0	0	0	25	1
03:00	0	0	0	0	0	0	0	0	1	0	2	2	3	1	2	1	0	0	0	0	0	0	0	12	1
04:00	0	0	0	0	0	0	0	0	0	1	7	5	5	3	4	1	0	0	0	0	0	0	0	26	1
05:00	0	0	0	0	0	1	0	0	1	1	6	5	13	2	5	3	1	0	2	0	0	0	0	40	2
06:00	0	0	0	0	0	0	0	0	0	2	10	15	20	13	4	4	3	0	0	0	0	0	0	71	3
07:00	0	0	0	0	0	0	0	0	0	2	6	16	21	20	2	2	2	0	2	0	0	0	0	73	3
08:00	0	0	0	0	0	0	0	1	1	3	8	30	46	43	15	13	4	1	0	0	0	0	0	165	7
09:00	0	0	0	0	0	0	0	0	1	8	26	40	69	37	28	13	5	1	0	0	1	0	0	229	10
10:00	0	0	0	0	0	0	1	0	1	3	28	62	69	38	27	11	4	1	0	0	0	0	0	245	11
11:00	0	0	0	0	0	0	0	0	1	8	23	60	68	53	34	5	9	4	1	0	0	0	0	266	12
12 PM	0	0	0	0	0	0	0	1	2	7	37	66	71	60	25	14	3	0	2	0	0	0	0	288	13
13:00	0	0	0	0	0	0	0	0	2	11	37	70	69	50	25	11	3	2	1	0	0	0	0	281	12
14:00	0	0	0	0	0	0	0	0	2	15	29	78	93	57	23	7	2	0	0	0	1	0	0	307	13
15:00	0	0	0	0	0	0	0	0	1	10	36	74	74	50	24	9	1	0	1	1	0	1	0	282	12
16:00	0	0	0	0	0	0	0	1	4	10	37	81	70	48	23	4	6	1	0	0	0	0	0	285	12
17:00	0	0	0	0	0	0	0	0	0	17	58	65	49	27	10	8	2	0	0	1	0	0	0	237	10
18:00	0	0	0	0	0	0	0	0	2	15	42	53	51	22	9	6	3	1	1	0	0	0	0	205	9
19:00	0	0	0	0	0	0	0	2	0	5	35	26	38	23	12	2	0	1	0	0	0	0	0	144	6
20:00	0	0	0	0	0	0	0	0	2	6	21	27	29	16	7	3	0	2	0	0	0	0	0	113	5
21:00	0	0	0	0	0	0	0	0	0	8	21	31	21	17	4	1	1	2	0	0	0	0	0	106	5
22:00	0	0	0	0	0	0	0	1	1	7	16	27	15	6	4	1	0	0	0	0	0	0	0	78	3
23:00	0	0	0	0	0	0	0	0	2	5	10	16	18	10	5	2	0	0	0	0	0	0	0	68	3
Percent	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.7%	4.2%	14.0 %	24.1 %	25.8 %	16.8 %	8.2%	3.5%	1.4%	0.5%	0.3%	0.1%	0.1%	0.0%	0.0%		
AM Peak						05:00	10:00	08:00	02:00	09:00	10:00	10:00	09:00	11:00	11:00	08:00	11:00	11:00	05:00		09:00			11:00	
Vol.						1	1	1	2	8	28	62	69	53	34	13	9	4	2		1			266	
PM Peak								19:00	16:00	17:00	17:00	16:00	14:00	12:00	12:00	12:00	16:00	13:00	12:00	15:00	14:00	15:00		14:00	
Vol.								2	4	17	58	81	93	60	25	14	6	2	2	1	1	1		307	

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Site Code: 22131
Station ID: U79
HIDDEN VALLEY RD from WABANAKI DR to HIDDEN VALLEY CRES
Date Start: 10-Nov-22
Date End: 16-Nov-22

NB, SB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Aver
11/13 /22	0	0	0	0	0	0	0	1	1	6	7	20	17	5	5	2	1	0	0	0	0	0	0	65	3
01:00	0	0	0	0	0	0	0	0	0	1	9	7	8	11	3	2	0	0	0	0	0	0	0	41	2
02:00	0	0	0	0	0	0	1	0	0	1	4	2	4	5	1	1	0	1	0	0	0	0	0	20	1
03:00	0	0	0	0	0	0	0	0	0	0	1	2	4	1	3	1	0	0	0	0	1	0	0	13	1
04:00	0	0	0	0	0	0	0	0	0	2	4	1	3	2	0	1	0	1	0	1	0	0	0	15	1
05:00	0	0	0	0	0	0	0	0	1	2	6	3	5	2	2	1	0	1	0	0	0	0	0	23	1
06:00	0	0	0	0	0	0	0	0	0	1	4	5	5	7	4	0	2	0	0	0	0	0	0	28	1
07:00	0	0	0	0	0	0	0	0	1	2	3	9	7	6	6	1	2	0	0	0	0	0	0	37	2
08:00	0	0	0	0	0	0	0	0	1	7	12	25	30	10	4	2	2	0	0	0	0	0	0	93	4
09:00	0	0	0	0	0	0	0	0	0	5	17	34	39	22	20	7	1	1	0	0	0	0	0	146	6
10:00	0	0	0	0	0	0	0	0	1	6	25	38	65	29	17	8	4	0	1	2	0	0	0	196	9
11:00	0	0	0	0	0	0	0	1	1	16	30	46	58	31	17	5	2	0	1	0	0	0	0	208	9
12 PM	0	0	0	0	0	1	0	1	2	14	25	46	65	50	24	10	4	1	0	0	1	0	0	244	11
13:00	0	0	0	0	0	0	0	0	0	9	31	69	62	47	19	14	4	0	0	1	0	0	0	256	11
14:00	0	0	0	0	0	0	0	0	1	8	28	42	61	36	24	11	5	2	0	0	0	2	0	220	10
15:00	0	0	0	0	0	0	0	0	6	9	34	65	69	38	35	6	5	4	0	0	2	0	0	273	12
16:00	0	0	0	0	0	0	0	1	3	10	33	63	76	27	17	10	4	1	1	0	0	0	0	246	11
17:00	0	0	0	0	0	0	0	3	4	8	35	57	43	29	18	4	0	1	0	0	0	0	0	202	9
18:00	0	0	0	0	0	0	2	1	1	11	26	41	33	23	6	3	2	0	0	0	0	0	0	149	6
19:00	0	0	0	0	0	0	0	0	1	11	16	30	32	19	10	8	4	0	0	0	0	0	0	131	6
20:00	0	0	0	0	0	0	0	1	1	5	14	33	24	15	12	5	2	0	0	0	0	0	0	112	5
21:00	0	0	0	0	0	0	0	0	2	3	14	20	25	19	8	3	1	0	0	0	0	0	0	95	4
22:00	0	0	0	0	0	0	0	1	3	6	9	24	15	8	3	1	1	0	0	0	0	0	0	71	3
23:00	0	0	0	0	0	0	0	0	0	2	7	8	12	4	7	2	1	0	0	0	0	0	0	43	2
Percent	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.3%	1.0%	5.0%	13.5 %	23.6 %	26.0 %	15.2 %	9.1%	3.7%	1.6%	0.4%	0.1%	0.1%	0.1%	0.1%	0.0%		
AM Peak							02:00	00:00	00:00	11:00	11:00	11:00	10:00	11:00	09:00	10:00	10:00	02:00	10:00	10:00	03:00			11:00	
Vol.							1	1	1	16	30	46	65	31	20	8	4	1	1	2	1			208	
PM Peak						12:00	18:00	17:00	15:00	12:00	17:00	13:00	16:00	12:00	15:00	13:00	14:00	15:00	16:00	13:00	15:00	14:00		15:00	
Vol.						1	2	3	6	14	35	69	76	50	35	14	5	4	1	1	2	2		273	

Ontario Traffic, Inc.
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Site Code: 22131
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HIDDEN VALLEY RD from WABANAKI DR to HIDDEN VALLEY CRES
Date Start: 10-Nov-22
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NB, SB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Aver
11/14 /22	0	0	0	0	0	0	0	0	0	1	2	2	6	4	1	1	0	1	0	0	0	0	0	18	1
01:00	0	0	0	0	0	0	0	0	2	1	1	2	6	2	2	1	0	0	0	0	0	0	0	17	1
02:00	0	0	0	0	0	1	0	1	2	1	1	3	3	2	3	1	1	1	0	0	0	0	0	20	1
03:00	0	0	0	0	0	0	0	0	4	1	2	4	3	3	0	0	0	0	0	0	0	0	0	17	1
04:00	0	0	0	0	0	0	0	0	4	2	7	6	12	3	3	1	1	0	0	0	0	0	0	39	2
05:00	0	0	0	0	0	0	0	0	5	5	11	18	23	16	19	9	3	1	1	1	0	0	0	112	5
06:00	0	0	0	0	0	0	3	0	1	15	43	47	70	42	26	9	8	1	4	1	0	0	0	270	12
07:00	0	0	0	0	1	2	3	4	9	42	75	111	95	60	22	10	5	1	1	1	1	0	0	443	19
08:00	0	0	0	0	0	1	1	1	4	16	54	91	93	52	30	11	5	3	1	0	0	0	0	363	16
09:00	0	0	0	0	0	0	0	1	3	13	44	85	76	45	28	7	2	2	0	1	0	0	0	307	13
10:00	0	0	0	0	1	0	0	2	6	18	46	61	60	47	31	6	1	2	0	0	0	0	0	281	12
11:00	0	0	0	0	0	0	0	0	0	22	27	62	63	44	24	14	2	4	0	0	0	0	0	262	11
12 PM	0	0	0	0	0	0	0	0	7	27	53	75	80	52	31	13	0	2	1	0	0	0	0	341	15
13:00	0	0	0	0	0	1	1	0	6	32	48	71	60	39	26	6	6	2	1	1	0	0	0	300	13
14:00	0	0	0	0	0	1	1	3	1	16	69	96	100	75	33	13	2	3	0	1	0	0	0	414	18
15:00	0	0	0	0	0	0	0	2	7	22	58	98	126	74	42	16	7	2	0	1	0	0	0	455	20
16:00	0	0	0	0	0	0	0	0	2	13	37	120	131	98	36	12	4	2	1	0	0	0	0	456	20
17:00	0	0	0	0	1	0	0	0	6	15	51	85	88	51	22	5	1	1	1	0	0	0	0	327	14
18:00	0	0	0	0	0	0	0	1	1	10	49	51	57	39	16	6	2	0	1	0	0	0	0	233	10
19:00	0	0	0	0	0	0	0	0	4	10	18	32	35	28	14	8	5	0	1	0	1	0	0	156	7
20:00	0	0	0	0	0	0	0	0	0	3	28	40	31	22	11	6	2	0	0	0	0	0	0	143	6
21:00	0	0	0	0	0	0	0	0	3	2	17	29	18	10	9	9	0	1	0	0	0	0	0	98	4
22:00	0	0	0	0	0	0	0	1	0	4	8	21	31	20	10	1	2	0	0	0	0	0	0	98	4
23:00	0	0	0	0	0	0	0	0	0	5	8	7	13	8	8	3	2	1	0	0	0	0	0	55	2
Percent	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.2%	0.3%	1.5%	5.7%	14.5 %	23.3 %	24.5 %	16.0 %	8.6%	3.2%	1.2%	0.6%	0.2%	0.1%	0.0%	0.0%	0.0%		
AM Peak					07:00	07:00	06:00	07:00	07:00	07:00	07:00	07:00	07:00	07:00	10:00	11:00	06:00	11:00	06:00	05:00	07:00			07:00	
Vol.					1	2	3	4	9	42	75	111	95	60	31	14	8	4	4	1	1			443	
PM Peak					17:00	13:00	13:00	14:00	12:00	13:00	14:00	16:00	16:00	16:00	15:00	15:00	15:00	14:00	12:00	13:00	19:00			16:00	
Vol.					1	1	1	3	7	32	69	120	131	98	42	16	7	3	1	1	1			456	

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HIDDEN VALLEY RD from WABANAKI DR to HIDDEN VALLEY CRES
Date Start: 10-Nov-22
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NB, SB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Aver
11/15 /22	0	0	0	0	0	0	0	0	1	0	5	5	7	2	2	0	1	0	0	0	0	0	0	23	1
01:00	0	0	0	0	0	0	0	0	1	2	1	4	6	0	2	0	1	0	0	0	0	0	0	17	1
02:00	0	0	0	0	0	0	2	0	0	4	4	3	3	1	1	3	1	1	0	0	0	0	0	23	1
03:00	0	0	0	0	0	0	0	0	0	5	0	5	2	2	3	0	0	0	0	0	0	0	0	17	1
04:00	0	0	0	0	0	0	0	1	2	0	7	7	7	5	1	0	0	2	0	0	0	0	0	32	1
05:00	0	0	0	0	0	0	0	1	0	7	7	17	30	15	20	5	4	0	0	0	0	0	0	106	5
06:00	0	0	0	0	0	1	1	2	5	19	53	57	43	41	26	16	2	2	2	0	0	0	0	270	12
07:00	0	0	0	0	1	1	2	4	16	48	84	99	97	38	24	9	5	1	0	1	0	0	0	430	19
08:00	0	0	0	0	0	0	0	1	4	15	43	93	88	60	33	11	4	4	0	0	0	0	0	356	15
09:00	0	0	0	0	0	0	0	1	4	20	43	90	69	40	15	9	2	0	0	0	0	0	0	293	13
10:00	0	0	0	0	0	1	0	3	11	22	50	77	69	39	14	3	2	0	0	0	0	0	0	291	13
11:00	0	0	0	0	1	1	1	6	6	9	29	55	73	48	25	7	1	0	1	0	1	0	0	264	11
12 PM	0	0	0	0	1	0	0	1	3	10	38	61	90	52	24	8	8	1	2	0	0	0	0	299	13
13:00	0	0	0	0	1	0	8	2	6	7	31	49	75	58	26	8	4	0	1	0	2	0	0	278	12
14:00	0	0	0	0	0	0	1	0	2	27	44	62	85	69	39	8	14	9	2	4	0	0	0	366	16
15:00	0	0	0	0	1	0	1	0	1	18	45	109	136	101	45	16	14	1	1	0	1	0	0	490	21
16:00	0	0	0	0	0	1	2	9	19	73	98	82	88	49	33	7	10	1	1	0	0	0	0	473	21
17:00	0	0	0	0	0	0	0	4	6	28	63	81	72	42	20	4	2	0	1	0	1	0	0	324	14
18:00	0	0	0	0	0	0	1	1	2	18	34	63	56	43	11	9	2	0	1	0	0	0	0	241	10
19:00	0	0	0	0	0	0	1	0	3	6	22	56	23	22	8	3	1	1	0	0	0	0	0	146	6
20:00	0	0	0	0	0	0	3	0	1	9	27	32	36	11	7	4	2	1	0	0	1	0	0	134	6
21:00	0	0	0	0	0	0	0	0	2	6	18	14	22	9	6	7	1	2	1	0	0	0	0	88	4
22:00	0	0	0	0	0	0	1	0	1	4	12	17	20	13	3	7	0	1	0	1	1	0	0	81	4
23:00	0	0	0	0	0	0	0	0	1	2	5	14	15	6	3	2	0	0	0	0	0	0	0	48	2
Percent	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.5%	0.7%	1.9%	7.1%	15.0 %	22.6 %	23.8 %	15.0 %	7.7%	2.9%	1.6%	0.5%	0.3%	0.1%	0.1%	0.0%	0.0%		
AM Peak					07:00	06:00	02:00	11:00	07:00	07:00	07:00	07:00	07:00	08:00	08:00	06:00	07:00	08:00	06:00	07:00	11:00			07:00	
Vol.					1	1	2	6	16	48	84	99	97	60	33	16	5	4	2	1	1			430	
PM Peak					12:00	16:00	13:00	16:00	16:00	16:00	16:00	15:00	15:00	15:00	15:00	15:00	14:00	14:00	12:00	14:00	13:00			15:00	
Vol.					1	1	8	9	19	73	98	109	136	101	45	16	14	9	2	4	2			490	

Ontario Traffic, Inc.
17705 Leslie St., Unit 6
Newmarket, Ontario L3Y 3E3
Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 22131
Station ID: U79
HIDDEN VALLEY RD from WABANAKI DR to HIDDEN VALLEY CRES
Date Start: 10-Nov-22
Date End: 16-Nov-22

NB, SB

Start Time	1 5	6 10	11 15	16 20	21 25	26 30	31 35	36 40	41 45	46 50	51 55	56 60	61 65	66 70	71 75	76 80	81 85	86 90	91 95	96 100	101 105	106 110	111 9999	Total	Aver
11/16 /22	0	0	0	0	0	0	0	0	0	0	2	3	2	4	1	0	0	0	0	0	1	0	0	13	1
01:00	0	0	0	0	0	0	0	0	0	1	1	2	3	4	0	0	2	0	0	0	0	0	0	13	1
02:00	0	0	0	0	0	1	0	0	2	1	2	1	1	2	2	0	1	0	0	0	0	0	0	13	1
03:00	0	0	0	0	0	0	0	0	0	1	0	10	0	1	2	1	0	0	0	0	0	0	0	15	1
04:00	0	0	0	0	0	0	0	1	4	3	2	7	8	5	1	0	1	1	0	0	0	0	0	33	1
05:00	0	0	0	0	0	0	0	2	2	3	10	20	23	27	7	3	0	0	0	0	0	0	0	97	4
06:00	0	0	0	0	1	0	2	3	3	31	28	54	62	58	21	7	5	0	0	2	0	1	0	278	12
07:00	0	0	0	0	0	2	2	6	3	28	62	103	121	62	40	12	8	2	1	0	0	0	0	452	20
08:00	0	0	0	0	0	1	0	7	5	11	56	104	97	64	35	9	3	1	0	0	1	0	0	394	17
09:00	0	0	0	0	0	0	6	0	4	16	46	67	75	57	19	9	2	2	1	0	1	0	0	305	13
10:00	0	0	0	0	0	0	0	0	0	10	81	69	50	39	22	4	3	0	0	0	0	0	0	278	12
11:00	0	0	0	0	0	0	0	0	2	9	25	64	65	44	16	8	4	2	2	0	0	0	0	241	10
12 PM	0	0	0	0	2	0	1	4	7	6	35	59	76	55	23	13	5	0	0	2	0	0	0	288	13
13:00	0	0	0	0	2	0	3	2	5	8	39	59	75	62	27	4	5	1	1	0	0	0	0	293	13
14:00	0	0	0	0	0	0	5	1	7	16	30	63	121	79	29	15	13	4	0	4	3	0	0	390	17
15:00	0	0	0	0	0	0	0	0	1	12	61	105	121	91	42	21	9	2	0	1	1	0	0	467	20
16:00	0	0	0	0	0	0	2	1	17	33	61	125	124	61	36	11	11	4	0	0	0	0	0	486	21
17:00	0	0	0	0	0	0	0	1	7	27	60	105	97	44	18	4	2	0	0	0	0	0	0	365	16
18:00	0	0	0	0	0	0	1	0	5	15	50	63	61	38	15	9	3	1	1	0	0	0	0	262	11
19:00	0	0	0	0	0	0	1	1	2	7	29	40	38	24	5	3	4	1	0	0	0	0	0	155	7
20:00	0	0	0	0	0	0	0	1	0	10	26	50	34	13	9	3	0	1	1	1	0	0	0	149	6
21:00	0	0	0	0	0	0	0	0	1	11	16	27	21	18	8	4	1	1	0	0	0	0	0	108	5
22:00	0	0	0	0	0	0	0	0	2	8	14	29	18	17	8	3	0	0	1	0	0	0	0	100	4
23:00	0	0	0	0	0	0	0	0	1	4	6	12	12	8	4	1	1	2	0	0	0	0	0	51	2
Percent	0.0%	0.0%	0.0%	0.0%	0.1%	0.1%	0.4%	0.6%	1.5%	5.2%	14.1 %	23.7 %	24.9 %	16.7 %	7.4%	2.7%	1.6%	0.5%	0.2%	0.2%	0.1%	0.0%	0.0%		
AM Peak					06:00	07:00	09:00	08:00	08:00	06:00	10:00	08:00	07:00	08:00	07:00	07:00	07:00	07:00	11:00	06:00	00:00	06:00		07:00	
Vol.					1	2	6	7	5	31	81	104	121	64	40	12	8	2	2	2	1	1		452	
PM Peak					12:00		14:00	12:00	16:00	16:00	15:00	16:00	16:00	15:00	15:00	15:00	14:00	14:00	13:00	14:00	14:00			16:00	
Vol.					2		5	4	17	33	61	125	124	91	42	21	13	4	1	4	3			486	
Total	0	0	0	0	15	22	75	159	472	1825	4742	7720	8153	5269	2630	998	457	169	71	40	30	5	0	32852	

Statistics

Mean Speed(Average) : 62 MPH
50th Percentile : 60 MPH
85th Percentile : 69 MPH

APPENDIX G – REGION OF WATERLOO TRAFFIC DATA

REGIONAL MUNICIPALITY OF WATERLOO
TURNING MOVEMENT COUNT

Region of Waterloo

Morning Peak Diagram

Count Period
From: 7:30 AM
To: 10:30 AM

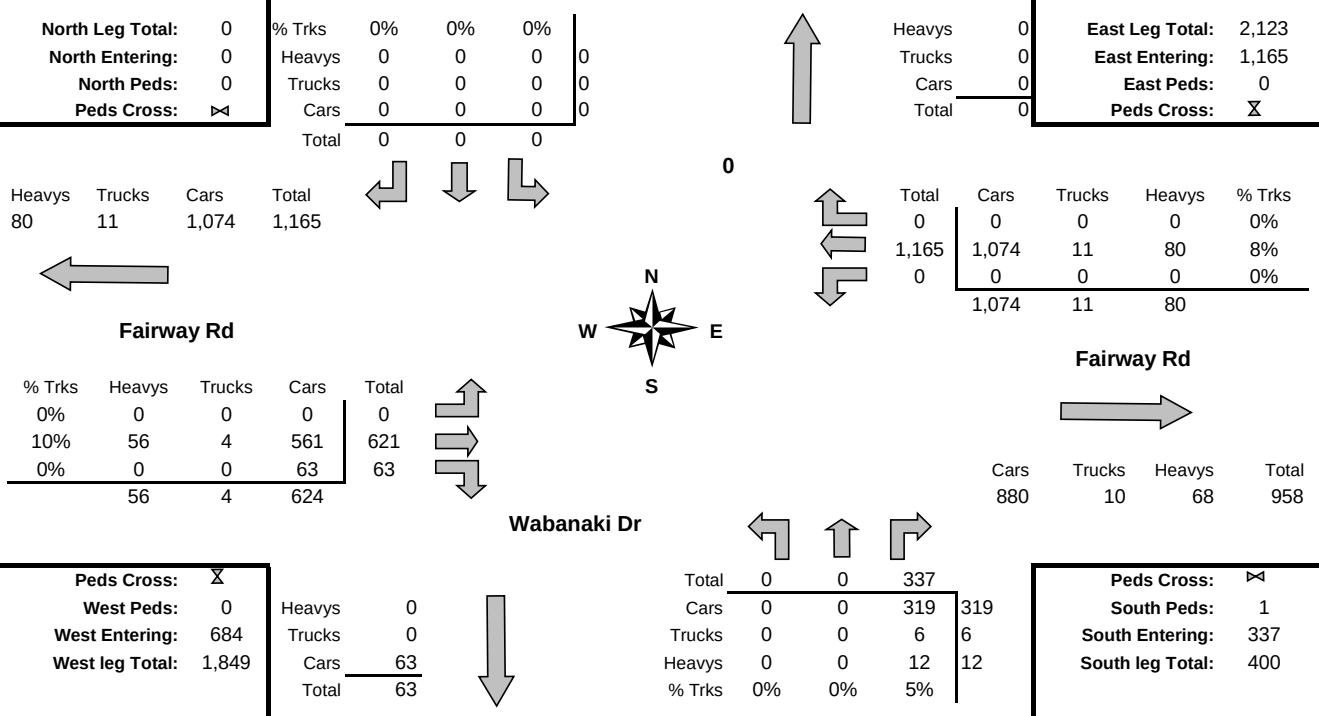
Peak Hour
From: 7:45 AM
To: 8:45 AM

Municipality: Kitchener
Intersection: Fairway Rd & Wabanaki Dr
Control: Non Signalized
Major Road: Fairway Rd

Weather conditions: Sunny

Person(s) who counted: AT28-YA

GeoID: 29041
Count Date: Tuesday, 18-Apr-17



Comments

To determine total vehicles entering the intersection during morning peak hour, add all leg totals entering.

Example 1: Total Entering = West leg total entering + South leg total entering + East leg total entering + North leg total entering
Therefore, total vehicles entering intersection = **2,186**

Example 2: Total vehicles entering from the west = eastbound left turn + eastbound through + eastbound right turn
Therefore, vehicles entering from the west = **684**

REGIONAL MUNICIPALITY OF WATERLOO
TURNING MOVEMENT COUNT

Region of Waterloo

Mid-day Peak Diagram

Count Period
From: 12:00 PM
To: 2:00 PM

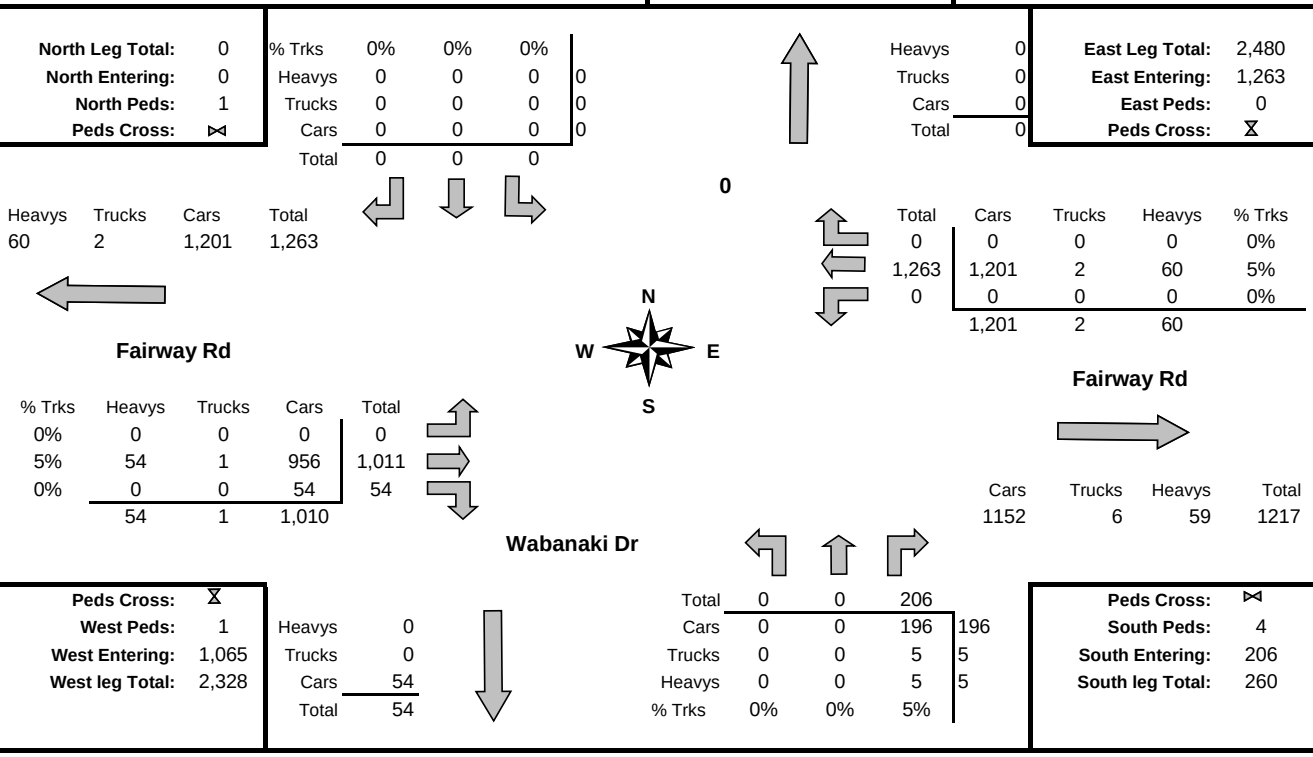
Peak Hour
From: 12:15 PM
To: 1:15 PM

Municipality: Kitchener
Intersection: Fairway Rd & Wabanaki Dr
Control: Non Signalized
Major Road: Fairway Rd

Weather conditions: Sunny

Person(s) who counted: AT28-YA

GeoID: 29041
Count Date: Tuesday, 18-Apr-17



Comments

To determine total vehicles entering the intersection during mid-day peak hour, add all leg totals entering.

Example 1: Total Entering = West leg total entering + South leg total entering + East leg total entering + North leg total entering
Therefore, total vehicles entering intersection = **2,534**

Example 2: Total vehicles entering from the west = eastbound left turn + eastbound through + eastbound right turn
Therefore, vehicles entering from the west = **1,065**

REGIONAL MUNICIPALITY OF WATERLOO
TURNING MOVEMENT COUNT

Region of Waterloo

Afternoon Peak Diagram

Count Period
From: 3:00 PM
To: 6:00 PM

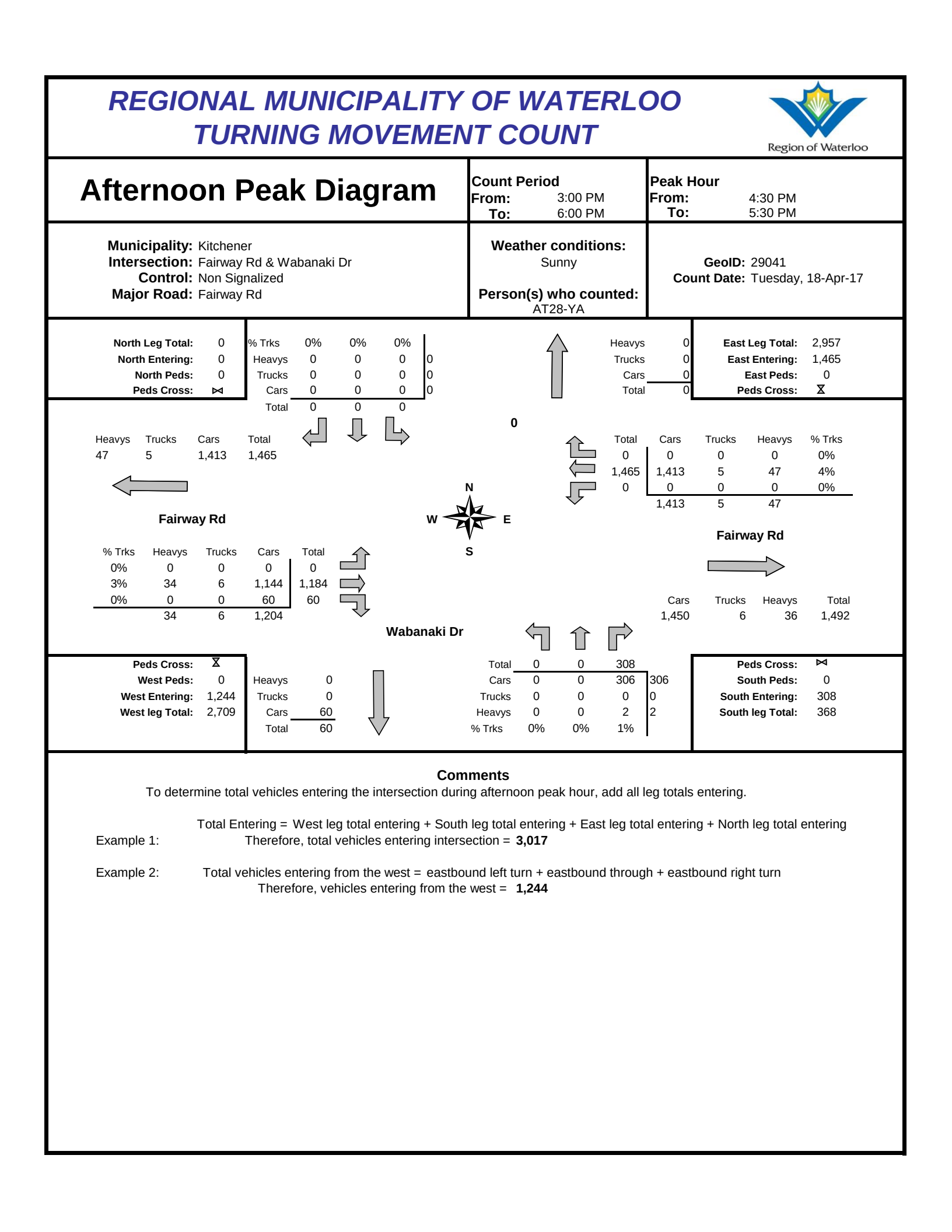
Peak Hour
From: 4:30 PM
To: 5:30 PM

Municipality: Kitchener
Intersection: Fairway Rd & Wabanaki Dr
Control: Non Signalized
Major Road: Fairway Rd

Weather conditions: Sunny

Person(s) who counted: AT28-YA

GeoID: 29041
Count Date: Tuesday, 18-Apr-17



Comments

To determine total vehicles entering the intersection during afternoon peak hour, add all leg totals entering.

Total Entering = West leg total entering + South leg total entering + East leg total entering + North leg total entering

Example 1: Therefore, total vehicles entering intersection = **3,017**

Example 2: Total vehicles entering from the west = eastbound left turn + eastbound through + eastbound right turn

Therefore, vehicles entering from the west = **1,244**

REGIONAL MUNICIPALITY OF WATERLOO
TURNING MOVEMENT COUNT

Region of Waterloo

Total Count Diagram

Municipality: Kitchener
Intersection: Fairway Rd & Wabanaki Dr
Control: Non Signalized
Major Road: Fairway Rd

Weather conditions: Sunny

Person(s) who counted: AT28-YA

GeoID: 29041
Count Date: Tuesday, 18-Apr-17

North Leg Total:	0
North Entering:	0
North Peds:	5
Peds Cross:	⋈
Bicycles Entering:	0
Buggies Entering:	0

% Trks	0%	0%	0%	
Heavys	0	0	0	0
Trucks	0	0	0	0
Cars	0	0	0	0
Total	0	0	0	

Heavys	0
Trucks	0
Cars	0
Total	0

East Leg Total:	19,443
East Entering:	9,938
East Peds:	2
Peds Cross:	⧖
Bicycles Entering:	11
Buggies Entering:	0

0

Heavys	Trucks	Cars	Total
515	41	9,382	9,938

Total	Cars	Trucks	Heavys	% Trks
0	0	0	0	0%
9,938	9,382	41	515	6%
0	0	0	0	0%
	9,382	41	515	

Fairway Rd

N
W E
S

Fairway Rd

% Trks	Heavys	Trucks	Cars	Total
0%	0	0	0	0
6%	407	22	6,911	7,340
1%	2	2	419	423
	409	24	7,330	

Cars	Trucks	Heavys	Total
8,987	40	478	9,505

Wabanaki Dr

Total	0	0	2,165	
Cars	0	0	2,076	2,076
Trucks	0	0	18	18
Heavys	0	0	71	71
% Trks	0%	0%	4%	

Peds Cross:	⧖
West Peds:	3
West Entering:	7,763
West leg Total:	17,701
Bicycles Entering:	6
Buggies Entering:	0

Heavys	2
Trucks	2
Cars	419
Total	423

Peds Cross:	⋈
South Peds:	12
South Entering:	2,165
South leg Total:	2,588
Bicycles Entering:	4
Buggies Entering:	0

Comments

To determine total vehicles entering the intersection, add all leg totals entering.

Example 1: Total Entering = West leg total entering + South leg total entering + East leg total entering + North leg total entering
Therefore, total vehicles entering intersection = **19,866**

Example 2: Total vehicles entering from the west = eastbound left turn + eastbound through + eastbound right turn
Therefore, vehicles entering from the west = **7,763**

Notes: None

REGIONAL MUNICIPALITY OF WATERLOO
TURNING MOVEMENT COUNT

Region of Waterloo

Estimated Daily Traffic

Total Factor = Monthly Factor 1 x Daily Factor 1 x 24 Hour Factor 1.74 = 1.740000

Municipality: Kitchener
Intersection: Fairway Rd & Wabanaki Dr
Control: Non Signalized
Major Road: Fairway Rd

Weather conditions: Sunny

Person(s) who counted: AT28-YA

GeoID: 29041
Count Date: Tuesday, 18-Apr-17

North Leg Total: 0
North Entering: 0
North Peds: N/A
Peds Cross: ⋈

% Trks	0%	0%	0%	
Heavys	0	0	0	0
Trucks	0	0	0	0
Cars	0	0	0	0
Total	0	0	0	

Heavys	0
Trucks	0
Cars	0
Total	0

East Leg Total: 33,831
East Entering: 17,292
East Peds: N/A
Peds Cross: ⧖

Heavys	Trucks	Cars	Total
896	71	16,325	17,292

0

Total	Cars	Trucks	Heavys	% Trks
0	0	0	0	0%
17,292	16,325	71	896	6%
0	0	0	0	0%
	16,325	71	896	

N
W E
S

Fairway Rd

% Trks	Heavys	Trucks	Cars	Total
0%	0	0	0	0
6%	708	38	12,025	12,772
1%	3	3	729	736
	712	42	12,754	

Fairway Rd

Cars	Trucks	Heavys	Total
15,637	70	832	16,539

Wabanaki Dr

Peds Cross: ⧖
West Peds: N/A
West Entering: 13,508
West leg Total: 30,800

Heavys	3
Trucks	3
Cars	729
Total	736

Total	0	0	3,767	
Cars	0	0	3,612	3,612
Trucks	0	0	31	31
Heavys	0	0	124	124
% Trks	0%	0%	4%	

Peds Cross: ⋈
South Peds: N/A
South Entering: 3,767
South leg Total: 4,503

Comments

To determine the EDT (Estimated Daily Traffic), add all four leg totals and divide by two.
This will give you the approximate number of vehicles entering and exiting the intersection in a 24-hour period

Example: $\frac{\text{(West leg total + South leg total + East leg total + North leg total)}}{2}$ ***EDT =*** ***34,567***

REGIONAL MUNICIPALITY OF WATERLOO
TURNING MOVEMENT COUNT

Region of Waterloo

Peak Hour Factor By Movement

Municipality: Kitchener
Intersection: Fairway Rd & Wabanaki Dr
Control: Non Signalized
Major Road: Fairway Rd

Weather conditions: Sunny

Person(s) who counted: AT28-YA

GeoID: 29041
Count Date: Tuesday, 18-Apr-17

North Approach PHF

AM Peak:	0.00
Mid-day Peak:	0.00
PM Peak:	0.00

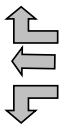
	Movement		
PM	0.00	0.00	0.00
MID	0.00	0.00	0.00
AM	0.00	0.00	0.00

East Approach PHF

AM Peak:	0.88
Mid-day Peak:	0.92
PM Peak:	0.95

0

AM AM Peak Hour
MID Mid-day Peak Hour
PM PM Peak Hour

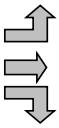


AM	MID	PM	
0.00	0.00	0.00	
0.88	0.92	0.95	Movement
0.00	0.00	0.00	

N
W E
S

Fairway Rd

Movement	PM	MID	AM
	0.00	0.00	0.00
	0.94	0.95	0.92
	0.75	0.79	0.58



Fairway Rd

Wabanaki Dr

0.00	0.00	0.81	AM
0.00	0.00	0.92	MID
0.00	0.00	0.85	PM

Movement

West Approach PHF

AM Peak:	0.97
Mid-day Peak:	0.95
PM Peak:	0.95

South Approach PHF

AM Peak:	0.81
Mid-day Peak:	0.92
PM Peak:	0.85

Comments

Intersection: Fairway Rd & Wabanaki Dr
GeoID: 29041
Municipality: Kitchener
Major Road: Fairway Rd

Intersection Control: Non Signalized
Date: Tuesday, 18-Apr-17
Name: AT28-YA
Weather: Sunny

	EASTBOUND			WESTBOUND			NORTHBOUND			SOUTHBOUND				
Approach Control		*Free Flow*			*Free Flow*			*Stop Control*			*N/A*			
Movement	LT	THRU	RT	LT	THRU	RT	LT	THRU	RT	LT	THRU	RT		
Approach Lanes	0	2	<	0	2	1	0	0	1	0	0	0	TOTAL	TOTAL HOUR
7:30 to 7:45	0	161	19	0	238	0	0	0	85	0	0	0	503	
7:45 to 8:00	0	141	27	0	330	0	0	0	104	0	0	0	602	
8:00 to 8:15	0	164	11	0	260	0	0	0	85	0	0	0	520	
8:15 to 8:30	0	148	16	0	319	0	0	0	74	0	0	0	557	2,182
8:30 to 8:45	0	168	9	0	256	0	0	0	74	0	0	0	507	2,186
8:45 to 9:00	0	164	12	0	277	0	0	0	70	0	0	0	523	2,107
9:00 to 9:15	0	160	10	0	286	0	0	0	47	0	0	0	503	2,090
9:15 to 9:30	0	158	6	0	219	0	0	0	58	0	0	0	441	1,974
9:30 to 9:45	0	163	7	0	232	0	0	0	48	0	0	0	450	1,917
9:45 to 10:00	0	147	11	0	250	0	0	0	50	0	0	0	458	1,852
10:00 to 10:15	0	174	12	0	228	0	0	0	64	0	0	0	478	1,827
10:15 to 10:30	0	168	9	0	273	0	0	0	46	0	0	0	496	1,882
AM Peak Hour														
7:45 to 8:45	**0**	**621**	**63**	**0**	**1,165**	**0**	**0**	**0**	**337**	**0**	**0**	**0**	**2,186**	
# of trucks in peak	0	4	0	0	11	0	0	0	6	0	0	0	21	
# of heavies in peak	0	56	0	0	80	0	0	0	12	0	0	0	148	
% heavies (Total)	0%	10%	0%	0%	8%	0%	0%	0%	5%	0%	0%	0%	8%	
12:00 to 12:15	0	215	14	0	296	0	0	0	65	0	0	0	590	
12:15 to 12:30	0	265	14	0	342	0	0	0	46	0	0	0	667	
12:30 to 12:45	0	240	13	0	329	0	0	0	56	0	0	0	638	
12:45 to 13:00	0	255	10	0	305	0	0	0	53	0	0	0	623	2,518
13:00 to 13:15	0	251	17	0	287	0	0	0	51	0	0	0	606	2,534
13:15 to 13:30	0	265	16	0	320	0	0	0	40	0	0	0	641	2,508
13:30 to 13:45	0	253	12	0	270	0	0	0	44	0	0	0	579	2,449
13:45 to 14:00	0	257	9	0	287	0	0	0	61	0	0	0	614	2,440
Midday Peak Hour														
12:15 to 13:15	**0**	**1,011**	**54**	**0**	**1,263**	**0**	**0**	**0**	**206**	**0**	**0**	**0**	**2,534**	
# of trucks in peak	0	1	0	0	2	0	0	0	5	0	0	0	8	
# of heavies in peak	0	54	0	0	60	0	0	0	5	0	0	0	119	
% heavies (Total)	0%	5%	0%	0%	5%	0%	0%	0%	5%	0%	0%	0%	5%	
15:00 to 15:15	0	318	9	0	325	0	0	0	113	0	0	0	765	
15:15 to 15:30	0	256	14	0	355	0	0	0	72	0	0	0	697	
15:30 to 15:45	0	313	17	0	398	0	0	0	83	0	0	0	811	
15:45 to 16:00	0	261	13	0	375	0	0	0	82	0	0	0	731	3,004
16:00 to 16:15	0	293	11	0	329	0	0	0	100	0	0	0	733	2,972
16:15 to 16:30	0	280	19	0	369	0	0	0	72	0	0	0	740	3,015
16:30 to 16:45	0	278	20	0	341	0	0	0	91	0	0	0	730	2,934
16:45 to 17:00	0	291	15	0	378	0	0	0	80	0	0	0	764	2,967
17:00 to 17:15	0	316	11	0	362	0	0	0	83	0	0	0	772	3,006
17:15 to 17:30	0	299	14	0	384	0	0	0	54	0	0	0	751	3,017
17:30 to 17:45	0	249	15	0	360	0	0	0	71	0	0	0	695	2,982
17:45 to 18:00	0	269	11	0	358	0	0	0	43	0	0	0	681	2,899
PM Peak Hour														
16:30 to 17:30	**0**	**1,184**	**60**	**0**	**1,465**	**0**	**0**	**0**	**308**	**0**	**0**	**0**	**3,017**	
# of trucks in peak	0	6	0	0	5	0	0	0	0	0	0	0	11	
# of heavies in peak	0	34	0	0	47	0	0	0	2	0	0	0	83	
% heavies (Total)	0%	3%	0%	0%	4%	0%	0%	0%	1%	0%	0%	0%	3%	

Intersection: Fairway Rd & Wabanaki Dr
GeoID: 29041
Municipality: Kitchener
Major Road: Fairway Rd

Intersection Control: Non Signalized
Date: Tuesday, 18-Apr-17
Name: AT28-YA
Weather: Sunny

PEDESTRIAN CROSSING

Time			Crossing Approach					
			East App.	West App.	North App.	South App.	TOTAL	TOTAL HOUR
7:30	to	7:45	1	0	0	1	2	
7:45	to	8:00	0	0	0	1	1	
8:00	to	8:15	0	0	0	0	0	
8:15	to	8:30	0	0	0	0	0	3
8:30	to	8:45	0	0	0	0	0	1
8:45	to	9:00	0	0	0	0	0	0
9:00	to	9:15	0	0	0	0	0	0
9:15	to	9:30	0	0	0	0	0	0
9:30	to	9:45	0	0	0	0	0	0
9:45	to	10:00	0	0	0	0	0	0
10:00	to	10:15	0	0	0	0	0	0
10:15	to	10:30	0	0	0	0	0	0
AM Peak Hour								
7:45	**to**	**8:45**	**0**	**0**	**0**	**1**	**1**	
12:00	to	12:15	0	0	0	0	0	
12:15	to	12:30	0	0	0	3	3	
12:30	to	12:45	0	0	0	0	0	
12:45	to	13:00	0	1	1	1	3	6
13:00	to	13:15	0	0	0	0	0	6
13:15	to	13:30	0	0	0	0	0	3
13:30	to	13:45	0	0	0	0	0	3
13:45	to	14:00	0	0	2	0	2	2
Midday Peak Hour								
12:15	**to**	**13:15**	0	1	1	4	**6**	
15:00	to	15:15	0	0	0	0	0	
15:15	to	15:30	0	1	0	1	2	
15:30	to	15:45	0	0	0	1	1	
15:45	to	16:00	0	1	1	1	3	6
16:00	to	16:15	0	0	0	0	0	6
16:15	to	16:30	1	0	0	0	1	5
16:30	to	16:45	0	0	0	0	0	4
16:45	to	17:00	0	0	0	0	0	1
17:00	to	17:15	0	0	0	0	0	1
17:15	to	17:30	0	0	0	0	0	0
17:30	to	17:45	0	0	0	1	1	1
17:45	to	18:00	0	0	1	2	3	4
PM Peak Hour								
16:30	**to**	**17:30**	0	0	0	0	**0**	

REGIONAL MUNICIPALITY OF WATERLOO
TURNING MOVEMENT COUNT

Region of Waterloo

Morning Peak Diagram

Count Period
From: 7:30 AM
To: 10:30 AM

Peak Hour
From: 7:45 AM
To: 8:45 AM

Municipality: Kitchener
Intersection: Weber St/King St & Hwy 8 NB Ramp
Control: Signalized
Major Road: Weber St/King St

Weather conditions: Cloudy

Person(s) who counted: AT21-NS

GeoID: 10968
Count Date: Thursday, 23-May-19

North Leg

North Leg Total:	1,114
North Entering:	539
North Peds:	0
Peds Cross:	⋈

% Trks	5%	7%	0%	
Heavys	7	19	0	26
Trucks	2	6	0	8
Cars	160	345	0	505
Total	169	370	0	

East Leg

Heavys	25
Trucks	9
Cars	541
Total	575

East Leg Total:	0
East Entering:	0
East Peds:	0
Peds Cross:	⋈

Weber St

Heavys	Trucks	Cars	Total
17	11	661	689

Total	Cars	Trucks	Heavys	% Trks
0	0	0	0	0%
0	0	0	0	0%
0	0	0	0	0%
	0	0	0	

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Hwy 8 NB Ramp

% Trks	Heavys	Trucks	Cars	Total
5%	4	2	106	112
0%	0	0	0	0
16%	31	10	217	258
	35	12	323	

0

Cars	Trucks	Heavys	Total
0	0	0	0

King St

Total	520	463	0	
Cars	501	435	0	936
Trucks	9	7	0	16
Heavys	10	21	0	31
% Trks	4%	6%	0%	

South Leg

Peds Cross:	⋈
South Peds:	0
South Entering:	983
South leg Total:	1,611

West Leg

Peds Cross:	⋈
West Peds:	4
West Entering:	370
West leg Total:	1,059

Heavys	50
Trucks	16
Cars	562
Total	628

Comments

To determine total vehicles entering the intersection during morning peak hour, add all leg totals entering.

Example 1: Total Entering = West leg total entering + South leg total entering + East leg total entering + North leg total entering
Therefore, total vehicles entering intersection = **1,892**

Example 2: Total vehicles entering from the west = eastbound left turn + eastbound through + eastbound right turn
Therefore, vehicles entering from the west = **370**

REGIONAL MUNICIPALITY OF WATERLOO
TURNING MOVEMENT COUNT

Region of Waterloo

Mid-day Peak Diagram

Count Period
From: 12:00 PM
To: 2:00 PM

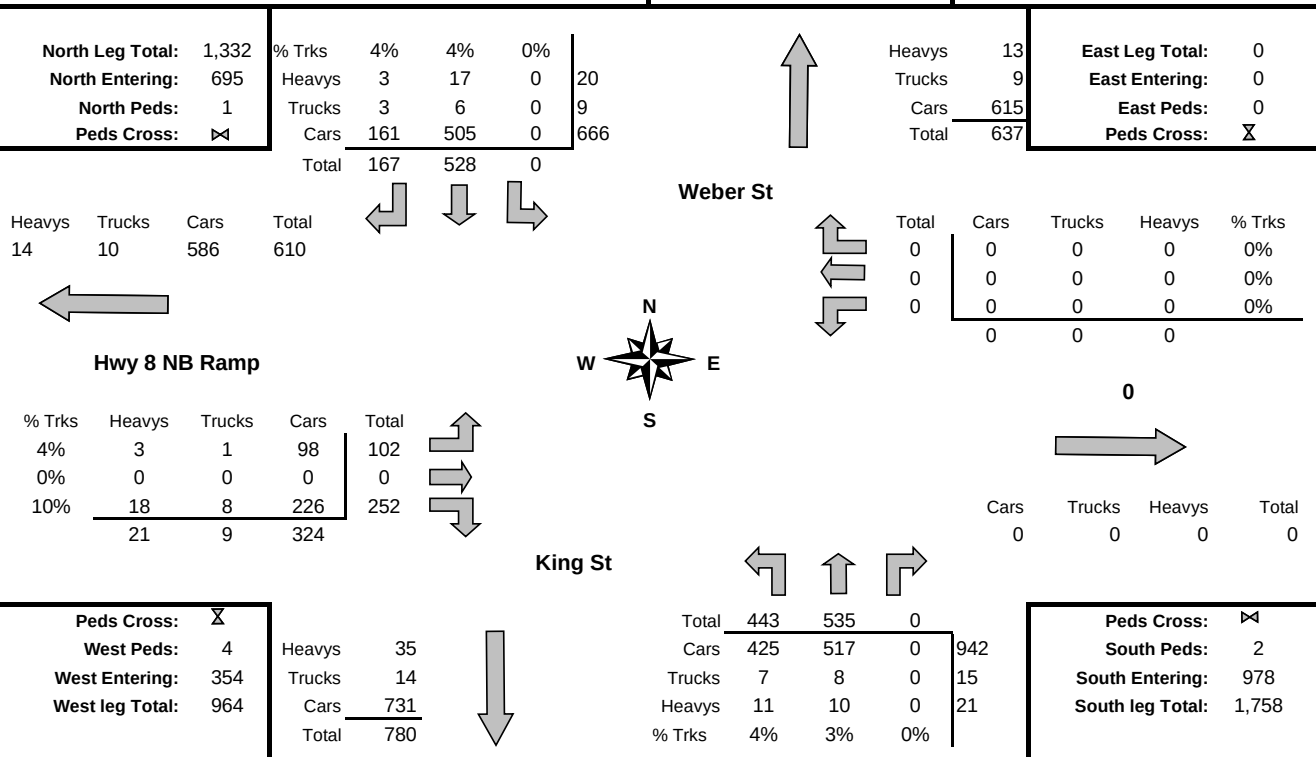
Peak Hour
From: 12:30 PM
To: 1:30 PM

Municipality: Kitchener
Intersection: Weber St/King St & Hwy 8 NB Ramp
Control: Signalized
Major Road: Weber St/King St

Weather conditions: Cloudy

Person(s) who counted: AT21-NS

GeoID: 10968
Count Date: Thursday, 23-May-19



Comments

To determine total vehicles entering the intersection during mid-day peak hour, add all leg totals entering.

Example 1: Total Entering = West leg total entering + South leg total entering + East leg total entering + North leg total entering
Therefore, total vehicles entering intersection = **2,027**

Example 2: Total vehicles entering from the west = eastbound left turn + eastbound through + eastbound right turn
Therefore, vehicles entering from the west = **354**

REGIONAL MUNICIPALITY OF WATERLOO
TURNING MOVEMENT COUNT

Region of Waterloo

Afternoon Peak Diagram

Count Period
From: 3:00 PM
To: 6:00 PM

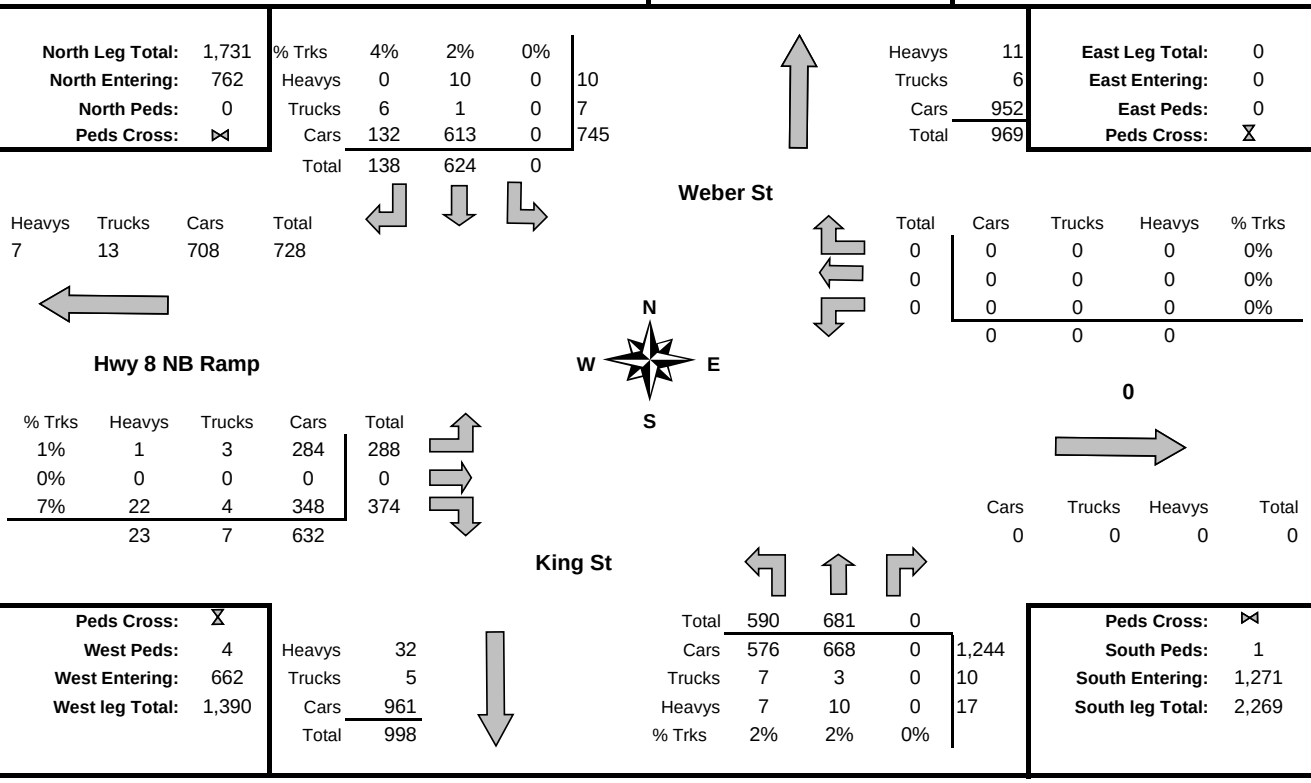
Peak Hour
From: 4:15 PM
To: 5:15 PM

Municipality: Kitchener
Intersection: Weber St/King St & Hwy 8 NB Ramp
Control: Signalized
Major Road: Weber St/King St

Weather conditions: Cloudy

Person(s) who counted: AT21-NS

GeoID: 10968
Count Date: Thursday, 23-May-19



Comments

To determine total vehicles entering the intersection during afternoon peak hour, add all leg totals entering.

Total Entering = West leg total entering + South leg total entering + East leg total entering + North leg total entering

Example 1: Therefore, total vehicles entering intersection = **2,695**

Example 2: Total vehicles entering from the west = eastbound left turn + eastbound through + eastbound right turn

Therefore, vehicles entering from the west = **662**

REGIONAL MUNICIPALITY OF WATERLOO
TURNING MOVEMENT COUNT

Region of Waterloo

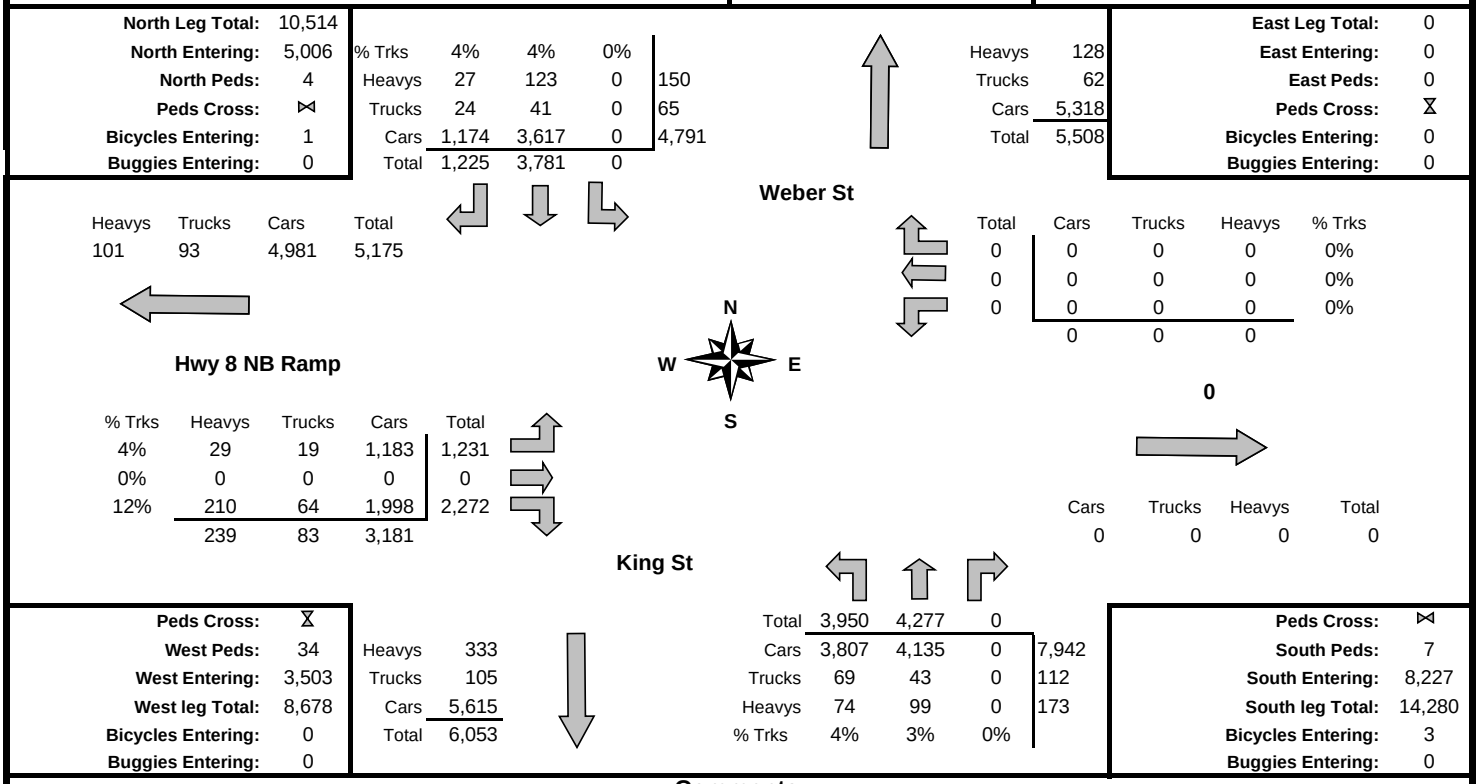
Total Count Diagram

Municipality: Kitchener
Intersection: Weber St/King St & Hwy 8 NB Ramp
Control: Signalized
Major Road: Weber St/King St

Weather conditions: Cloudy

Person(s) who counted: AT21-NS

GeoID: 10968
Count Date: Thursday, 23-May-19



Comments

To determine total vehicles entering the intersection, add all leg totals entering.

Example 1: Total Entering = West leg total entering + South leg total entering + East leg total entering + North leg total entering
Therefore, total vehicles entering intersection = **16,736**

Example 2: Total vehicles entering from the west = eastbound left turn + eastbound through + eastbound right turn
Therefore, vehicles entering from the west = **3,503**

Notes: None

REGIONAL MUNICIPALITY OF WATERLOO
TURNING MOVEMENT COUNT

Region of Waterloo

Estimated Daily Traffic

Total Factor = Monthly Factor 1 x Daily Factor 1 x 24 Hour Factor 1.74 = 1.740000

Municipality: Kitchener
Intersection: Weber St/King St & Hwy 8 NB Ramp
Control: Signalized
Major Road: Weber St/King St

Weather conditions: Cloudy

Person(s) who counted: AT21-NS

GeoID: 10968
Count Date: Thursday, 23-May-19

North Leg Total: 18,294
North Entering: 8,710
North Peds: N/A
Peds Cross: ⋈

% Trks	4%	4%	0%	
Heavys	47	214	0	261
Trucks	42	71	0	113
Cars	2,043	6,294	0	8,336
Total	2,132	6,579	0	

Heavys	223
Trucks	108
Cars	9,253
Total	9584

East Leg Total: 0
East Entering: 0
East Peds: N/A
Peds Cross: ⧖

Weber St

Heavys	Trucks	Cars	Total
176	162	8,667	9,005

Total	Cars	Trucks	Heavys	% Trks
0	0	0	0	0%
0	0	0	0	0%
0	0	0	0	0%
	0	0	0	

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Hwy 8 NB Ramp

% Trks	Heavys	Trucks	Cars	Total
4%	50	33	2,058	2,142
0%	0	0	0	0
12%	365	111	3,477	3,953
	416	144	5,535	

0

Cars	Trucks	Heavys	Total
0	0	0	0

King St

Peds Cross: ⧖
West Peds: N/A
West Entering: 6,095
West leg Total: 15,100

Heavys	579		
Trucks	183		
Cars	9,770		
Total	10,532		

Total	6,873	7,442	0	
Cars	6,624	7,195	0	13,819
Trucks	120	75	0	195
Heavys	129	172	0	301
% Trks	4%	3%	0%	

Peds Cross: ⋈
South Peds: N/A
South Entering: 14,315
South leg Total: 24,847

Comments

To determine the EDT (Estimated Daily Traffic), add all four leg totals and divide by two.
This will give you the approximate number of vehicles entering and exiting the intersection in a 24-hour period

Example: (West leg total + South leg total + East leg total + North leg total) / 2 ***EDT =*** ***29,121***

REGIONAL MUNICIPALITY OF WATERLOO
TURNING MOVEMENT COUNT

Region of Waterloo

Peak Hour Factor By Movement

Municipality: Kitchener
Intersection: Weber St/King St & Hwy 8 NB Ramp
Control: Signalized
Major Road: Weber St/King St

Weather conditions: Cloudy

Person(s) who counted: AT21-NS

GeoID: 10968
Count Date: Thursday, 23-May-19

North Approach PHF

AM Peak:	0.90
Mid-day Peak:	0.93
PM Peak:	0.93

	Movement		
PM	0.96	0.91	0.00
MID	0.93	0.94	0.00
AM	0.96	0.87	0.00

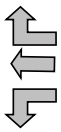
Weber St

East Approach PHF

AM Peak:	0.00
Mid-day Peak:	0.00
PM Peak:	0.00

AM AM Peak Hour
MID Mid-day Peak Hour
PM PM Peak Hour

AM	MID	PM	
0.00	0.00	0.00	
0.00	0.00	0.00	
0.00	0.00	0.00	Movement



Hwy 8 NB Ramp

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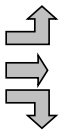
Movement	PM	MID	AM
	0.86	0.88	0.90
	0.00	0.00	0.00
	0.84	0.91	0.85



King St

0

0.94	0.94	0.00	AM
0.95	0.91	0.00	MID
0.95	0.91	0.00	PM

Movement

West Approach PHF

AM Peak:	0.88
Mid-day Peak:	0.94
PM Peak:	0.89

South Approach PHF

AM Peak:	0.97
Mid-day Peak:	0.96
PM Peak:	0.96

Comments

Intersection: Weber St/King St & Hwy 8 NB Ramp
GeoID: 10968
Municipality: Kitchener
Major Road: Weber St/King St

Intersection Control: Signalized
Date: Thursday, 23-May-19
Name: AT21-NS
Weather: Cloudy

			EASTBOUND			WESTBOUND			NORTHBOUND			SOUTHBOUND				
Approach Control			*Signalized*			*N/A*			*Signalized*			*Signalized*				
Movement			LT	THRU	RT	LT	THRU	RT	LT	THRU	RT	LT	THRU	RT		
Approach Lanes			2	0	1	0	0	0	1	2	0	0	2	<	TOTAL	TOTAL HOUR
7:30	to	7:45	22	0	46	0	0	0	118	75	0	0	85	54	400	
7:45	to	8:00	29	0	76	0	0	0	139	101	0	0	106	44	495	
8:00	to	8:15	22	0	58	0	0	0	135	119	0	0	81	39	454	
8:15	to	8:30	30	0	60	0	0	0	115	120	0	0	99	43	467	1,816
8:30	to	8:45	31	0	64	0	0	0	131	123	0	0	84	43	476	1,892
8:45	to	9:00	27	0	65	0	0	0	110	100	0	0	97	40	439	1,836
9:00	to	9:15	26	0	68	0	0	0	121	118	0	0	70	40	443	1,825
9:15	to	9:30	29	0	36	0	0	0	83	111	0	0	87	37	383	1,741
9:30	to	9:45	15	0	52	0	0	0	90	103	0	0	92	43	395	1,660
9:45	to	10:00	21	0	53	0	0	0	104	99	0	0	85	39	401	1,622
10:00	to	10:15	23	0	57	0	0	0	93	106	0	0	87	35	401	1,580
10:15	to	10:30	15	0	42	0	0	0	99	118	0	0	77	33	384	1,581
AM Peak Hour																
7:45	**to**	**8:45**	**112**	**0**	**258**	**0**	**0**	**0**	**520**	**463**	**0**	**0**	**370**	**169**	**1,892**	
# of trucks in peak			2	0	10	0	0	0	9	7	0	0	6	2	36	
# of heavies in peak			4	0	31	0	0	0	10	21	0	0	19	7	92	
% heavies (Total)			5%	0%	16%	0%	0%	0%	4%	6%	0%	0%	7%	5%	7%	
12:00	to	12:15	29	0	64	0	0	0	107	117	0	0	121	44	482	
12:15	to	12:30	24	0	70	0	0	0	106	122	0	0	116	32	470	
12:30	to	12:45	29	0	62	0	0	0	116	139	0	0	134	45	525	
12:45	to	13:00	25	0	59	0	0	0	98	147	0	0	141	45	515	1,992
13:00	to	13:15	23	0	62	0	0	0	113	133	0	0	133	39	503	2,013
13:15	to	13:30	25	0	69	0	0	0	116	116	0	0	120	38	484	2,027
13:30	to	13:45	23	0	75	0	0	0	129	125	0	0	111	30	493	1,995
13:45	to	14:00	23	0	64	0	0	0	127	122	0	0	145	30	511	1,991
Midday Peak Hour																
12:30	**to**	**13:30**	**102**	**0**	**252**	**0**	**0**	**0**	**443**	**535**	**0**	**0**	**528**	**167**	**2,027**	
# of trucks in peak			1	0	8	0	0	0	7	8	0	0	6	3	33	
# of heavies in peak			3	0	18	0	0	0	11	10	0	0	17	3	62	
% heavies (Total)			4%	0%	10%	0%	0%	0%	4%	3%	0%	0%	4%	4%	5%	
15:00	to	15:15	40	0	81	0	0	0	169	151	0	0	138	43	622	
15:15	to	15:30	42	0	82	0	0	0	135	168	0	0	127	32	586	
15:30	to	15:45	49	0	84	0	0	0	142	150	0	0	119	32	576	
15:45	to	16:00	57	0	97	0	0	0	137	158	0	0	146	36	631	2,415
16:00	to	16:15	56	0	102	0	0	0	162	177	0	0	128	36	661	2,454
16:15	to	16:30	75	0	111	0	0	0	152	169	0	0	142	36	685	2,553
16:30	to	16:45	57	0	85	0	0	0	155	167	0	0	142	36	642	2,619
16:45	to	17:00	84	0	93	0	0	0	141	157	0	0	168	33	676	2,664
17:00	to	17:15	72	0	85	0	0	0	142	188	0	0	172	33	692	2,695
17:15	to	17:30	91	0	95	0	0	0	124	182	0	0	142	45	679	2,689
17:30	to	17:45	64	0	81	0	0	0	111	138	0	0	152	33	579	2,626
17:45	to	18:00	53	0	74	0	0	0	130	158	0	0	134	37	586	2,536
PM Peak Hour																
16:15	**to**	**17:15**	**288**	**0**	**374**	**0**	**0**	**0**	**590**	**681**	**0**	**0**	**624**	**138**	**2,695**	
# of trucks in peak			3	0	4	0	0	0	7	3	0	0	1	6	24	
# of heavies in peak			1	0	22	0	0	0	7	10	0	0	10	0	50	
% heavies (Total)			1%	0%	7%	0%	0%	0%	2%	2%	0%	0%	2%	4%	3%	

Intersection: Weber St/King St & Hwy 8 NB Ramp
GeoID: 10968
Municipality: Kitchener
Major Road: Weber St/King St

Intersection Control: Signalized
Date: Thursday, 23-May-19
Name: AT21-NS
Weather: Cloudy

PEDESTRIAN CROSSING

Time			Crossing Approach					
			East App.	West App.	North App.	South App.	TOTAL	TOTAL HOUR
7:30	to	7:45	0	1	0	0	1	
7:45	to	8:00	0	0	0	0	0	
8:00	to	8:15	0	0	0	0	0	
8:15	to	8:30	0	2	0	0	2	3
8:30	to	8:45	0	2	0	0	2	4
8:45	to	9:00	0	0	0	0	0	4
9:00	to	9:15	0	1	0	0	1	5
9:15	to	9:30	0	0	0	0	0	3
9:30	to	9:45	0	0	0	1	1	2
9:45	to	10:00	0	0	0	0	0	2
10:00	to	10:15	0	1	0	0	1	2
10:15	to	10:30	0	1	0	0	1	3
AM Peak Hour							**9**	
7:45	**to**	**8:45**	**0**	**4**	**0**	**0**	**4**	
12:00	to	12:15	0	0	0	0	0	
12:15	to	12:30	0	0	0	1	1	
12:30	to	12:45	0	1	0	0	1	
12:45	to	13:00	0	1	1	0	2	4
13:00	to	13:15	0	0	0	0	0	4
13:15	to	13:30	0	2	0	2	4	7
13:30	to	13:45	0	0	0	0	0	6
13:45	to	14:00	0	1	0	0	1	5
Midday Peak Hour							**9**	
12:30	**to**	**13:30**	0	4	1	2	**7**	
15:00	to	15:15	0	2	0	0	2	
15:15	to	15:30	0	2	0	0	2	
15:30	to	15:45	0	3	0	2	5	
15:45	to	16:00	0	1	3	0	4	13
16:00	to	16:15	0	3	0	0	3	14
16:15	to	16:30	0	0	0	1	1	13
16:30	to	16:45	0	2	0	0	2	10
16:45	to	17:00	0	0	0	0	0	6
17:00	to	17:15	0	2	0	0	2	5
17:15	to	17:30	0	3	0	0	3	7
17:30	to	17:45	0	2	0	0	2	7
17:45	to	18:00	0	1	0	0	1	8
PM Peak Hour							**27**	
16:15	**to**	**17:15**	0	4	0	1	**5**	

REGIONAL MUNICIPALITY OF WATERLOO
TURNING MOVEMENT COUNT

Region of Waterloo

Morning Peak Diagram

Count Period
From: 7:30 AM
To: 10:30 AM

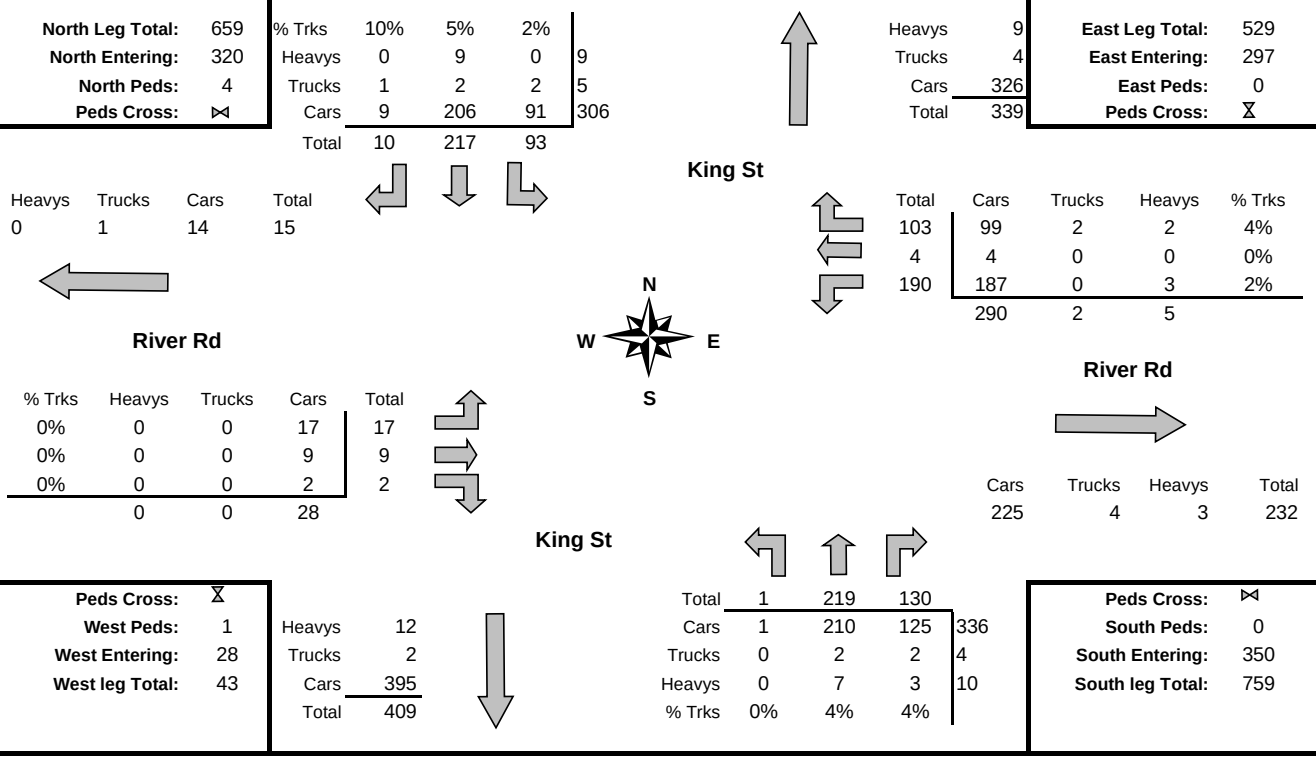
Peak Hour
From: 9:00 AM
To: 10:00 AM

Municipality: Kitchener
Intersection: King St & River Rd
Control: Signalized
Major Road: King St

Weather conditions: Cloudy

Person(s) who counted: AT23-JK

GeoID: 22125
Count Date: Wednesday, 30-Sep-20



Comments

To determine total vehicles entering the intersection during morning peak hour, add all leg totals entering.

Example 1: Total Entering = West leg total entering + South leg total entering + East leg total entering + North leg total entering
Therefore, total vehicles entering intersection = **995**

Example 2: Total vehicles entering from the west = eastbound left turn + eastbound through + eastbound right turn
Therefore, vehicles entering from the west = **28**

REGIONAL MUNICIPALITY OF WATERLOO
TURNING MOVEMENT COUNT

Region of Waterloo

Mid-day Peak Diagram

Count Period
From: 12:00 PM
To: 2:00 PM

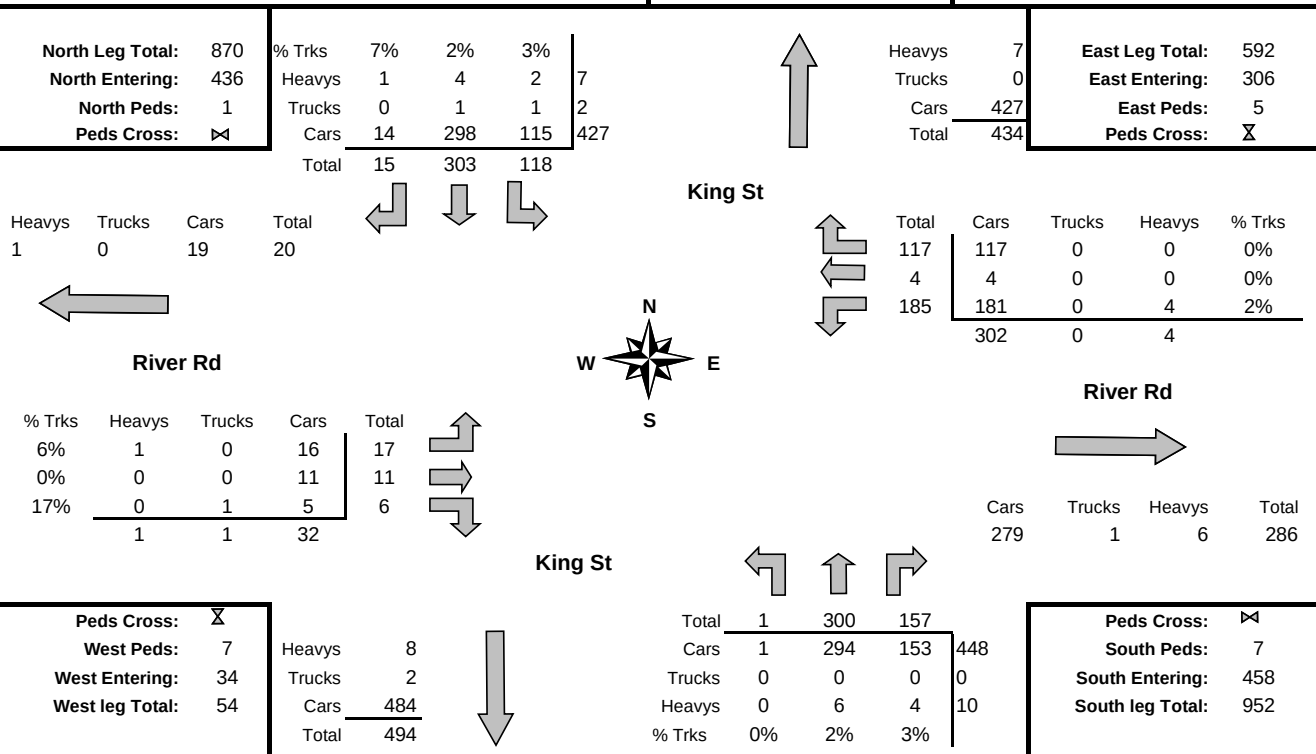
Peak Hour
From: 12:00 PM
To: 1:00 PM

Municipality: Kitchener
Intersection: King St & River Rd
Control: Signalized
Major Road: King St

Weather conditions: Cloudy

Person(s) who counted: AT23-JK

GeoID: 22125
Count Date: Wednesday, 30-Sep-20



Comments

To determine total vehicles entering the intersection during mid-day peak hour, add all leg totals entering.

Example 1: Total Entering = West leg total entering + South leg total entering + East leg total entering + North leg total entering
Therefore, total vehicles entering intersection = **1,234**

Example 2: Total vehicles entering from the west = eastbound left turn + eastbound through + eastbound right turn
Therefore, vehicles entering from the west = **34**

REGIONAL MUNICIPALITY OF WATERLOO
TURNING MOVEMENT COUNT

Region of Waterloo

Afternoon Peak Diagram

Count Period
From: 3:00 PM
To: 6:00 PM

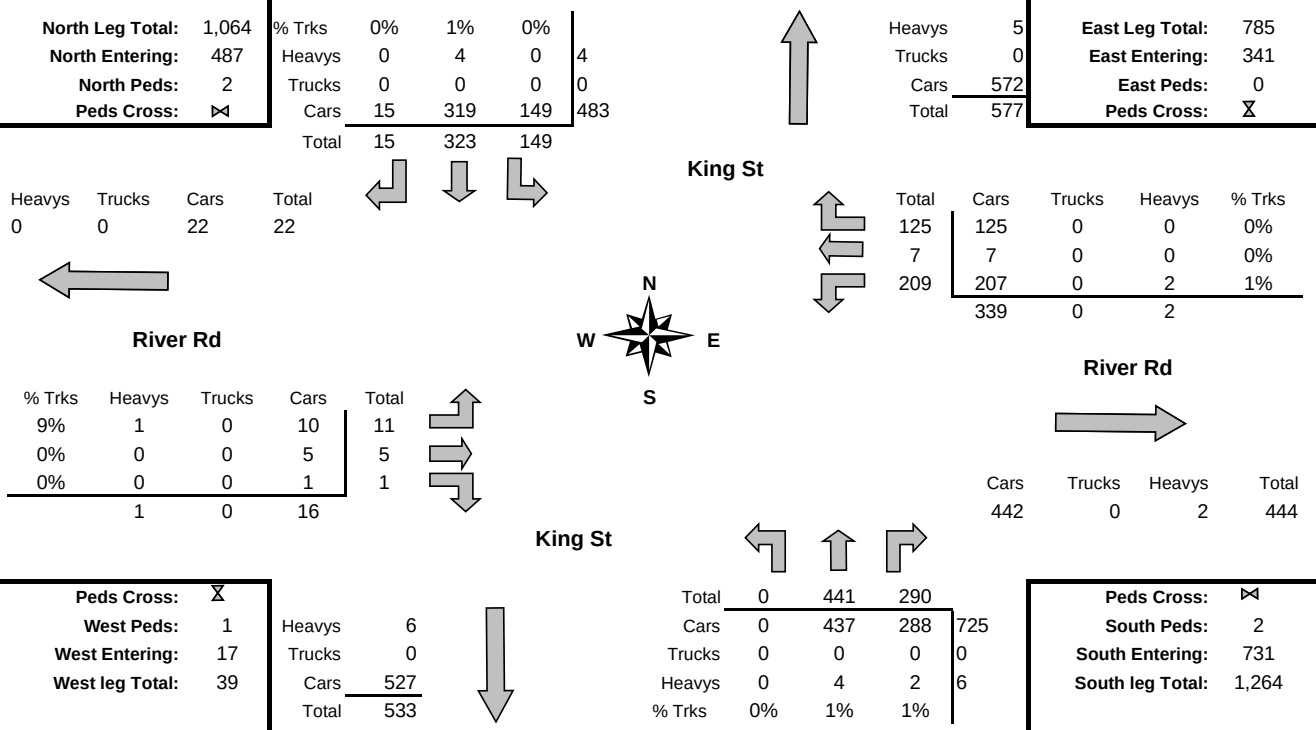
Peak Hour
From: 4:30 PM
To: 5:30 PM

Municipality: Kitchener
Intersection: King St & River Rd
Control: Signalized
Major Road: King St

Weather conditions: Cloudy

Person(s) who counted: AT23-JK

GeoID: 22125
Count Date: Wednesday, 30-Sep-20



Comments

To determine total vehicles entering the intersection during afternoon peak hour, add all leg totals entering.

Total Entering = West leg total entering + South leg total entering + East leg total entering + North leg total entering

Example 1: Therefore, total vehicles entering intersection = **1,576**

Example 2: Total vehicles entering from the west = eastbound left turn + eastbound through + eastbound right turn

Therefore, vehicles entering from the west = **17**

REGIONAL MUNICIPALITY OF WATERLOO
TURNING MOVEMENT COUNT

Region of Waterloo

Total Count Diagram

Municipality: Kitchener
Intersection: King St & River Rd
Control: Signalized
Major Road: King St

Weather conditions: Cloudy

Person(s) who counted: AT23-JK

GeoID: 22125
Count Date: Wednesday, 30-Sep-20

North Leg Total:	6,625
North Entering:	3,187
North Peds:	21
Peds Cross:	⋈
Bicycles Entering:	3
Buggies Entering:	0

% Trks	5%	3%	2%	
Heavys	3	49	11	63
Trucks	1	14	3	18
Cars	83	2,120	903	3,106
Total	87	2,183	917	

Heavys	65
Trucks	15
Cars	3,358
Total	3,438

East Leg Total:	4,871
East Entering:	2,489
East Peds:	16
Peds Cross:	⧖
Bicycles Entering:	6
Buggies Entering:	0

King St

Heavys	Trucks	Cars	Total
3	1	133	137

Total	Cars	Trucks	Heavys	% Trks
881	870	4	7	1%
41	41	0	0	0%
1,567	1,540	1	26	2%
	2,451	5	33	

River Rd

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% Trks	Heavys	Trucks	Cars	Total
4%	3	1	100	104
8%	5	0	54	59
7%	0	1	14	15
	8	2	168	

River Rd

Cars	Trucks	Heavys	Total
2,330	6	46	2,382

King St

Total	9	2,453	1,406	
Cars	9	2,388	1,373	3,770
Trucks	0	10	3	13
Heavys	0	55	30	85
% Trks	0%	3%	2%	

Peds Cross:	⧖
West Peds:	16
West Entering:	178
West leg Total:	315
Bicycles Entering:	3
Buggies Entering:	0

Heavys	75
Trucks	16
Cars	3,674
Total	3,765

Peds Cross:	⋈
South Peds:	12
South Entering:	3,868
South leg Total:	7,633
Bicycles Entering:	2
Buggies Entering:	0

Comments

To determine total vehicles entering the intersection, add all leg totals entering.
Example 1: Total Entering = West leg total entering + South leg total entering + East leg total entering + North leg total entering
Therefore, total vehicles entering intersection = **9,722**
Example 2: Total vehicles entering from the west = eastbound left turn + eastbound through + eastbound right turn
Therefore, vehicles entering from the west = **178**

Notes: None

REGIONAL MUNICIPALITY OF WATERLOO
TURNING MOVEMENT COUNT

Region of Waterloo

Estimated Daily Traffic

Total Factor = Monthly Factor 1 x Daily Factor 1 x 24 Hour Factor 1.74 = 1.740000

Municipality: Kitchener
Intersection: King St & River Rd
Control: Signalized
Major Road: King St

Weather conditions: Cloudy

Person(s) who counted: AT23-JK

GeoID: 22125
Count Date: Wednesday, 30-Sep-20

North Leg Total: 11,528
North Entering: 5,545
North Peds: N/A
Peds Cross: ⋈

% Trks	5%	3%	2%	
Heavys	5	85	19	110
Trucks	2	24	5	31
Cars	144	3,689	1,571	5,404
Total	151	3,798	1,596	

Heavys	Trucks	Cars	Total
5	2	231	238

River Rd

% Trks	Heavys	Trucks	Cars	Total
4%	5	2	174	181
8%	9	0	94	103
7%	0	2	24	26
	14	3	292	

King St

	Heavys	Trucks	Cars	Total
	113	26	5,843	5982

East Leg Total: 8,476
East Entering: 4,331
East Peds: N/A
Peds Cross: ⧖

King St

	Total	Cars	Trucks	Heavys	% Trks
	1,533	1,514	7	12	1%
	71	71	0	0	0%
	2,727	2,680	2	45	2%
		4,265	9	57	

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River Rd

Cars	Trucks	Heavys	Total
4,054	10	80	4,145

Peds Cross: ⧖
West Peds: N/A
West Entering: 310
West leg Total: 548

	Heavys	Trucks	Cars	Total
	131	28	6,393	6,551

King St

Total	16	4,268	2,446	
Cars	16	4,155	2,389	6,560
Trucks	0	17	5	23
Heavys	0	96	52	148
% Trks	0%	3%	2%	

Peds Cross: ⋈
South Peds: N/A
South Entering: 6,730
South leg Total: 13,281

Comments

To determine the EDT (Estimated Daily Traffic), add all four leg totals and divide by two.
This will give you the approximate number of vehicles entering and exiting the intersection in a 24-hour period

Example: $\frac{\text{(West leg total + South leg total + East leg total + North leg total)}}{2}$ ***EDT =*** ***16,916***

REGIONAL MUNICIPALITY OF WATERLOO
TURNING MOVEMENT COUNT

Region of Waterloo

Peak Hour Factor By Movement

Municipality: Kitchener
Intersection: King St & River Rd
Control: Signalized
Major Road: King St

Weather conditions: Cloudy

Person(s) who counted: AT23-JK

GeoID: 22125
Count Date: Wednesday, 30-Sep-20

North Approach PHF

AM Peak:	0.92
Mid-day Peak:	0.94
PM Peak:	0.88

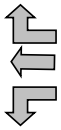
East Approach PHF

AM Peak:	0.87
Mid-day Peak:	0.86
PM Peak:	0.92

	Movement		
PM	0.75	0.84	0.87
MID	0.75	0.96	0.84
AM	0.63	0.82	0.89

King St

AM AM Peak Hour
MID Mid-day Peak Hour
PM PM Peak Hour



AM	MID	PM	
0.86	0.91	0.87	
0.50	0.50	0.58	
0.83	0.83	0.89	Movement

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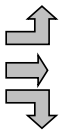
River Rd

Movement	PM	MID	AM
	0.92	0.71	0.53
	0.63	0.69	0.75
	0.25	0.38	0.50



River Rd

King St

0.25	0.86	0.88	AM	
0.25	0.88	0.89	MID	
0.00	0.96	0.97	PM	
	Movement			

West Approach PHF

AM Peak:	0.70
Mid-day Peak:	0.77
PM Peak:	0.85

South Approach PHF

AM Peak:	0.87
Mid-day Peak:	0.94
PM Peak:	0.98

Comments

Intersection: King St & River Rd
GeoID: 22125
Municipality: Kitchener
Major Road: King St

Intersection Control: Signalized
Date: Wednesday, 30-Sep-20
Name: AT23-JK
Weather: Cloudy

			EASTBOUND			WESTBOUND			NORTHBOUND			SOUTHBOUND			TOTAL	TOTAL HOUR
Approach Control			***Signalized***			***Signalized***			***Signalized***			***Signalized***				
7:30	to	7:45	2	0	0	47	0	26	1	49	19	16	64	0	224	
7:45	to	8:00	6	5	0	56	0	40	0	59	35	15	75	1	292	
8:00	to	8:15	3	1	1	51	2	24	0	34	36	16	56	1	225	
8:15	to	8:30	10	1	1	38	1	25	1	44	26	31	57	1	236	977
8:30	to	8:45	1	1	0	48	1	29	0	42	30	19	44	1	216	969
8:45	to	9:00	2	4	0	56	0	28	0	53	42	30	47	4	266	943
9:00	to	9:15	8	2	0	57	0	28	0	46	37	25	38	3	244	962
9:15	to	9:30	2	2	1	50	2	17	1	51	29	25	56	2	238	964
9:30	to	9:45	2	2	1	35	1	28	0	58	27	17	66	1	238	986
9:45	to	10:00	5	3	0	48	1	30	0	64	37	26	57	4	275	995
10:00	to	10:15	1	1	0	56	0	27	0	59	23	24	48	4	243	994
10:15	to	10:30	1	4	1	38	0	13	1	75	26	26	50	1	236	992
AM Peak Hour																
9:00	**to**	**10:00**	**17**	**9**	**2**	**190**	**4**	**103**	**1**	**219**	**130**	**93**	**217**	**10**	**995**	
# of trucks in peak			0	0	0	0	0	2	0	2	2	2	2	1	11	
# of heavies in peak			0	0	0	3	0	2	0	7	3	0	9	0	24	
% heavies (Total)			0%	0%	0%	2%	0%	4%	0%	4%	4%	2%	5%	10%	4%	
12:00	to	12:15	6	4	0	41	0	28	0	66	37	31	70	3	286	
12:15	to	12:30	2	1	1	47	2	28	0	78	44	35	77	4	319	
12:30	to	12:45	3	2	4	56	1	32	0	85	37	22	77	5	324	
12:45	to	13:00	6	4	1	41	1	29	1	71	39	30	79	3	305	1,234
13:00	to	13:15	3	1	0	46	0	28	1	76	34	30	59	3	281	1,229
13:15	to	13:30	4	1	0	37	1	43	0	73	36	28	77	4	304	1,214
13:30	to	13:45	4	1	0	55	1	18	0	86	38	16	69	1	289	1,179
13:45	to	14:00	2	1	0	52	1	21	2	83	32	31	87	4	316	1,190
Midday Peak Hour																
12:00	**to**	**13:00**	**17**	**11**	**6**	**185**	**4**	**117**	**1**	**300**	**157**	**118**	**303**	**15**	**1,234**	
# of trucks in peak			0	0	1	0	0	0	0	0	0	1	1	0	3	
# of heavies in peak			1	0	0	4	0	0	0	6	4	2	4	1	22	
% heavies (Total)			6%	0%	17%	2%	0%	0%	0%	2%	3%	3%	2%	7%	2%	
15:00	to	15:15	4	1	1	42	2	29	1	103	44	25	77	3	332	
15:15	to	15:30	4	3	0	60	3	29	0	102	67	33	57	0	358	
15:30	to	15:45	1	1	0	54	1	27	0	104	54	28	77	3	350	
15:45	to	16:00	3	2	0	47	1	25	0	92	53	41	73	3	340	1,380
16:00	to	16:15	3	2	1	58	4	24	0	109	60	35	87	4	387	1,435
16:15	to	16:30	2	0	1	54	1	25	0	93	60	40	83	5	364	1,441
16:30	to	16:45	3	0	1	54	3	36	0	107	75	43	72	5	399	1,490
16:45	to	17:00	3	2	0	42	1	28	0	111	71	35	74	5	372	1,522
17:00	to	17:15	2	2	0	54	0	31	0	108	72	40	96	2	407	1,542
17:15	to	17:30	3	1	0	59	3	30	0	115	72	31	81	3	398	1,576
17:30	to	17:45	2	2	0	37	3	32	0	93	67	39	79	1	355	1,532
17:45	to	18:00	1	2	0	51	4	23	0	64	47	34	74	3	303	1,463
PM Peak Hour																
16:30	**to**	**17:30**	**11**	**5**	**1**	**209**	**7**	**125**	**0**	**441**	**290**	**149**	**323**	**15**	**1,576**	
# of trucks in peak			0	0	0	0	0	0	0	0	0	0	0	0	0	
# of heavies in peak			1	0	0	2	0	0	0	4	2	0	4	0	13	
% heavies (Total)			9%	0%	0%	1%	0%	0%	0%	1%	1%	0%	1%	0%	1%	

Intersection: King St & River Rd
GeoID: 22125
Municipality: Kitchener
Major Road: King St

Intersection Control: Signalized
Date: Wednesday, 30-Sep-20
Name: AT23-JK
Weather: Cloudy

PEDESTRIAN CROSSING								
Time			Crossing Approach					
			East App.	West App.	North App.	South App.	TOTAL	TOTAL HOUR
7:30	to	7:45	0	0	1	0	1	
7:45	to	8:00	0	0	0	1	1	
8:00	to	8:15	4	1	3	0	8	
8:15	to	8:30	0	0	0	0	0	10
8:30	to	8:45	2	0	1	0	3	12
8:45	to	9:00	0	0	0	0	0	11
9:00	to	9:15	0	0	0	0	0	3
9:15	to	9:30	0	1	4	0	5	8
9:30	to	9:45	0	0	0	0	0	5
9:45	to	10:00	0	0	0	0	0	5
10:00	to	10:15	0	0	1	0	1	6
10:15	to	10:30	0	0	0	0	0	1
AM Peak Hour							**19**	
9:00	**to**	**10:00**	**0**	**1**	**4**	**0**	**5**	
12:00	to	12:15	3	4	1	5	13	
12:15	to	12:30	0	1	0	1	2	
12:30	to	12:45	1	0	0	0	1	
12:45	to	13:00	1	2	0	1	4	20
13:00	to	13:15	1	2	0	2	5	12
13:15	to	13:30	0	0	0	0	0	10
13:30	to	13:45	2	1	0	0	3	12
13:45	to	14:00	0	1	3	0	4	12
Midday Peak Hour							**32**	
12:00	**to**	**13:00**	5	7	1	7	**20**	
15:00	to	15:15	1	0	1	0	2	
15:15	to	15:30	1	0	1	0	2	
15:30	to	15:45	0	0	0	0	0	
15:45	to	16:00	0	0	0	0	0	4
16:00	to	16:15	0	0	0	0	0	2
16:15	to	16:30	0	0	1	0	1	1
16:30	to	16:45	0	0	1	0	1	2
16:45	to	17:00	0	1	1	1	3	5
17:00	to	17:15	0	0	0	0	0	5
17:15	to	17:30	0	0	0	1	1	5
17:30	to	17:45	0	0	2	0	2	6
17:45	to	18:00	0	2	0	0	2	5
PM Peak Hour							**14**	
16:30	**to**	**17:30**	0	1	2	2	**5**	

REGIONAL MUNICIPALITY OF WATERLOO
TURNING MOVEMENT COUNT

Region of Waterloo

Morning Peak Diagram

Count Period
From: 7:30 AM
To: 10:30 AM

Peak Hour
From: 7:45 AM
To: 8:45 AM

Municipality: Kitchener
Intersection: Fairway Rd @ Wilson Ave
Control: Signalized
Major Road: Fairway Rd

Weather conditions: Clear/Dry

Person(s) who counted: Cam

GeoID: 10710
Count Date: Tuesday, 17-May-22

North Leg Total: 693
North Entering: 358
North Peds: 5
Peds Cross: ⋈

% Trks	3%	5%	2%	
Heavys	2	2	2	6
Trucks	1	5	1	7
Cars	105	122	118	345
Total	108	129	121	

Heavys	Trucks	Cars	Total
21	22	654	697

Fairway Rd

% Trks	Heavys	Trucks	Cars	Total
10%	7	2	84	93
7%	18	9	346	373
3%	1	1	70	72
	26	12	500	

Wilson Ave

Heavys	27
Trucks	11
Cars	297
Total	335

East Leg Total: 1,537
East Entering: 936
East Peds: 4
Peds Cross: ⧖

Wilson Ave

Total	Cars	Trucks	Heavys	% Trks
76	66	1	9	13%
541	510	13	18	6%
319	280	13	26	12%
	856	27	53	

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Fairway Rd

Cars	Trucks	Heavys	Total
546	17	38	601

Wilson Ave

Total	48	166	107
Cars	39	147	82	268
Trucks	8	8	7	23
Heavys	1	11	18	30
% Trks	19%	11%	23%	

Peds Cross: ⧖
West Peds: 6
West Entering: 538
West leg Total: 1,235

Heavys	29
Trucks	19
Cars	472
Total	520

Peds Cross: ⋈
South Peds: 3
South Entering: 321
South leg Total: 841

Comments

To determine total vehicles entering the intersection during morning peak hour, add all leg totals entering.

Example 1: Total Entering = West leg total entering + South leg total entering + East leg total entering + North leg total entering
Therefore, total vehicles entering intersection = **2,153**

Example 2: Total vehicles entering from the west = eastbound left turn + eastbound through + eastbound right turn
Therefore, vehicles entering from the west = **538**

REGIONAL MUNICIPALITY OF WATERLOO
TURNING MOVEMENT COUNT

Region of Waterloo

Mid-day Peak Diagram

Count Period
From: 12:00 PM
To: 2:00 PM

Peak Hour
From: 1:00 PM
To: 2:00 PM

Municipality: Kitchener
Intersection: Fairway Rd @ Wilson Ave
Control: Signalized
Major Road: Fairway Rd

Weather conditions: Clear/Dry

Person(s) who counted: Cam

GeoID: 10710
Count Date: Tuesday, 17-May-22

North Leg Total: 885
North Entering: 444
North Peds: 27
Peds Cross: ⋈

% Trks	3%	9%	5%	
Heavys	2	1	0	3
Trucks	4	12	6	22
Cars	172	139	108	419
Total	178	152	114	

Heavys	Trucks	Cars	Total
16	21	964	1,001

East Leg Total: 1,879
East Entering: 1,049
East Peds: 21
Peds Cross: ⧖

Heavys	23
Trucks	10
Cars	408
Total	441

Wilson Ave

Total	Cars	Trucks	Heavys	% Trks
98	87	3	8	11%
680	654	12	14	4%
271	224	14	33	17%
	965	29	55	

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Fairway Rd

% Trks	Heavys	Trucks	Cars	Total
3%	4	2	184	190
5%	16	10	520	546
9%	3	5	79	87
	23	17	783	

Fairway Rd

Cars	Trucks	Heavys	Total
777	20	33	830

Wilson Ave

Peds Cross: ⧖
West Peds: 29
West Entering: 823
West leg Total: 1,824

Heavys	37
Trucks	31
Cars	442
Total	510

Total	143	153	170	
Cars	138	137	149	424
Trucks	5	5	4	14
Heavys	0	11	17	28
% Trks	3%	10%	12%	

Peds Cross: ⋈
South Peds: 22
South Entering: 466
South leg Total: 976

Comments

To determine total vehicles entering the intersection during mid-day peak hour, add all leg totals entering.

Example 1: Total Entering = West leg total entering + South leg total entering + East leg total entering + North leg total entering
Therefore, total vehicles entering intersection = **2,782**

Example 2: Total vehicles entering from the west = eastbound left turn + eastbound through + eastbound right turn
Therefore, vehicles entering from the west = **823**

REGIONAL MUNICIPALITY OF WATERLOO
TURNING MOVEMENT COUNT

Region of Waterloo

Afternoon Peak Diagram

Count Period
From: 3:00 PM
To: 6:00 PM

Peak Hour
From: 4:30 PM
To: 5:30 PM

Municipality: Kitchener
Intersection: Fairway Rd @ Wilson Ave
Control: Signalized
Major Road: Fairway Rd

Weather conditions: Clear/Dry

Person(s) who counted: Cam

GeoID: 10710
Count Date: Tuesday, 17-May-22

North Leg Total: 1,150
North Entering: 501
North Peds: 40
Peds Cross: ⋈

% Trks	1%	0%	0%	
Heavys	0	0	0	0
Trucks	1	0	1	2
Cars	138	157	204	499
Total	139	157	205	

Heavys	Trucks	Cars	Total
10	8	1,105	1,123

Fairway Rd

% Trks	Heavys	Trucks	Cars	Total
3%	4	1	193	198
1%	4	6	669	679
2%	1	0	54	55
	9	7	916	

Wilson Ave

Heavys	25
Trucks	2
Cars	622
Total	649

East Leg Total: 2,538
East Entering: 1,360
East Peds: 46
Peds Cross: ⋈

Wilson Ave

Total	Cars	Trucks	Heavys	% Trks
146	135	1	10	8%
864	849	5	10	2%
350	322	3	25	8%
1,306	9	45		

Fairway Rd

Cars	Trucks	Heavys	Total
1,151	12	15	1,178

Wilson Ave

Total	120	305	294	
Cars	118	294	278	690
Trucks	2	0	5	7
Heavys	0	11	11	22
% Trks	2%	4%	5%	

Peds Cross: ⋈
West Peds: 46
West Entering: 932
West leg Total: 2,055

Heavys	26
Trucks	3
Cars	533
Total	562

Peds Cross: ⋈
South Peds: 35
South Entering: 719
South leg Total: 1,281

Comments

To determine total vehicles entering the intersection during afternoon peak hour, add all leg totals entering.

Total Entering = West leg total entering + South leg total entering + East leg total entering + North leg total entering

Example 1: Therefore, total vehicles entering intersection = **3,512**

Example 2: Total vehicles entering from the west = eastbound left turn + eastbound through + eastbound right turn

Therefore, vehicles entering from the west = **932**

REGIONAL MUNICIPALITY OF WATERLOO
TURNING MOVEMENT COUNT

Region of Waterloo

Total Count Diagram

Municipality: Kitchener
Intersection: Fairway Rd @ Wilson Ave
Control: Signalized
Major Road: Fairway Rd

Weather conditions: Clear/Dry

Person(s) who counted: Cam

GeoID: 10710
Count Date: Tuesday, 17-May-22

North Leg Total:	7,079
North Entering:	3,377
North Peds:	211
Peds Cross:	⋈
Bicycles Entering:	13
Buggies Entering:	0

% Trks	3%	5%	3%	
Heavys	14	19	9	42
Trucks	18	40	21	79
Cars	1,120	1,057	1,079	3,256
Total	1,152	1,116	1,109	

Heavys	Trucks	Cars	Total
148	131	7,141	7,420

Fairway Rd

% Trks	Heavys	Trucks	Cars	Total
4%	38	10	1,257	1,305
4%	94	62	3,844	4,000
5%	11	12	487	510
	143	84	5,588	

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Wilson Ave

Heavys	188
Trucks	57
Cars	3,457
Total	3,702

	Total	Cars	Trucks	Heavys	% Trks
	841	758	12	71	10%
	5,420	5,203	88	129	4%
	2,370	2,038	76	256	14%
		7,999	176	456	

Fairway Rd

Cars	Trucks	Heavys	Total
6,210	124	198	6,532

Wilson Ave

Total	848	1,556	1,423	
Cars	818	1,442	1,287	3,547
Trucks	25	35	41	101
Heavys	5	79	95	179
% Trks	4%	7%	10%	

East Leg Total:	15,163
East Entering:	8,631
East Peds:	201
Peds Cross:	⧖
Bicycles Entering:	9
Buggies Entering:	0

Peds Cross:	⧖
West Peds:	238
West Entering:	5,815
West leg Total:	13,235
Bicycles Entering:	16
Buggies Entering:	0

Heavys	286
Trucks	128
Cars	3,582
Total	3,996

Peds Cross:	⋈
South Peds:	168
South Entering:	3,827
South leg Total:	7,823
Bicycles Entering:	17
Buggies Entering:	0

Comments

To determine total vehicles entering the intersection, add all leg totals entering.

Example 1: Total Entering = West leg total entering + South leg total entering + East leg total entering + North leg total entering
Therefore, total vehicles entering intersection = **21,650**

Example 2: Total vehicles entering from the west = eastbound left turn + eastbound through + eastbound right turn
Therefore, vehicles entering from the west = **5,815**

Notes: None

REGIONAL MUNICIPALITY OF WATERLOO
TURNING MOVEMENT COUNT

Region of Waterloo

Estimated Daily Traffic

Total Factor =	Monthly Factor	1	x	Daily Factor	1	x	24 Hour Factor	1.74	=	1.740000

Municipality: Kitchener
Intersection: Fairway Rd @ Wilson Ave
Control: Signalized
Major Road: Fairway Rd

Weather conditions: Clear/Dry

Person(s) who counted: Cam

GeoID: 10710
Count Date: Tuesday, 17-May-22

North Leg Total: 12,317
North Entering: 5,876
North Peds: N/A
Peds Cross: ⋈

% Trks	3%	5%	3%	
Heavys	24	33	16	73
Trucks	31	70	37	137
Cars	1,949	1,839	1,877	5,665
Total	2,004	1,942	1,930	

Heavys	Trucks	Cars	Total
258	228	12,425	12,911

East Leg Total: 26,384
East Entering: 15,018
East Peds: N/A
Peds Cross: ⧖

Heavys	327
Trucks	99
Cars	6,015
Total	6441

Wilson Ave

Total	Cars	Trucks	Heavys	% Trks
1,463	1,319	21	124	10%
9,431	9,053	153	224	4%
4,124	3,546	132	445	14%
	13,918	306	793	

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Fairway Rd

% Trks	Heavys	Trucks	Cars	Total
4%	66	17	2,187	2,271
4%	164	108	6,689	6,960
5%	19	21	847	887
	249	146	9,723	

Fairway Rd

Cars	Trucks	Heavys	Total
10,805	216	345	11,366

Wilson Ave

Peds Cross: ⧖
West Peds: N/A
West Entering: 10,118
West leg Total: 23,029

Heavys	498
Trucks	223
Cars	6,233
Total	6,953

Total	1,476	2,707	2,476	
Cars	1,423	2,509	2,239	6,172
Trucks	44	61	71	176
Heavys	9	137	165	311
% Trks	4%	7%	10%	

Peds Cross: ⋈
South Peds: N/A
South Entering: 6,659
South leg Total: 13,612

Comments

To determine the EDT (Estimated Daily Traffic), add all four leg totals and divide by two.
This will give you the approximate number of vehicles entering and exiting the intersection in a 24-hour period

Example: $\frac{\text{(West leg total + South leg total + East leg total + North leg total)}}{2}$ ***EDT =*** ***37,671***

REGIONAL MUNICIPALITY OF WATERLOO
TURNING MOVEMENT COUNT

Region of Waterloo

Peak Hour Factor By Movement

Municipality: Kitchener
Intersection: Fairway Rd @ Wilson Ave
Control: Signalized
Major Road: Fairway Rd

Weather conditions: Clear/Dry

Person(s) who counted: Cam

GeoID: 10710
Count Date: Tuesday, 17-May-22

North Approach PHF

AM Peak:	0.84
Mid-day Peak:	0.97
PM Peak:	0.97

	Movement		
PM	0.91	0.91	0.85
MID	0.75	0.90	0.86
AM	0.93	0.77	0.86

Wilson Ave

AM AM Peak Hour
MID Mid-day Peak Hour
PM PM Peak Hour

Fairway Rd

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Movement	AM	MID	PM
	0.90	0.91	0.87
	0.82	0.88	0.94
	0.85	0.85	0.96

Fairway Rd

Movement	PM	MID	AM
	0.93	0.91	0.68
	0.95	0.90	0.85
	0.76	0.78	0.67

Wilson Ave

East Approach PHF

AM Peak:	0.85
Mid-day Peak:	0.88
PM Peak:	0.94

West Approach PHF

AM Peak:	0.88
Mid-day Peak:	0.94
PM Peak:	0.96

0.86	0.75	0.79	AM	
0.76	0.83	0.80	MID	
0.91	0.91	0.89	PM	
	Movement			

South Approach PHF

AM Peak:	0.88
Mid-day Peak:	0.85
PM Peak:	0.96

Comments

Intersection: Fairway Rd @ Wilson Ave
GeoID: 10710
Municipality: Kitchener
Major Road: Fairway Rd

Intersection Control: Signalized
Date: Tuesday, 17-May-22
Name: Cam
Weather: Clear/Dry

			EASTBOUND			WESTBOUND			NORTHBOUND			SOUTHBOUND			TOTAL	TOTAL HOUR
Approach Control			***Signalized***			***Signalized***			***Signalized***			***Signalized***				
7:30	to	7:45	18	85	16	58	112	15	10	23	13	30	33	33	446	
7:45	to	8:00	15	110	27	94	164	18	11	55	25	35	42	29	625	
8:00	to	8:15	20	92	19	72	101	17	14	44	23	30	30	28	490	
8:15	to	8:30	24	88	16	86	118	21	9	30	34	33	28	26	513	2,074
8:30	to	8:45	34	83	10	67	158	20	14	37	25	23	29	25	525	2,153
8:45	to	9:00	19	85	14	62	159	16	23	36	26	32	36	29	537	2,065
9:00	to	9:15	27	87	14	65	109	18	14	39	21	34	22	25	475	2,050
9:15	to	9:30	33	80	16	64	91	12	15	36	37	38	28	20	470	2,007
9:30	to	9:45	25	82	16	51	119	18	27	38	24	31	26	21	478	1,960
9:45	to	10:00	34	94	15	63	134	19	13	33	25	38	15	23	506	1,929
10:00	to	10:15	20	87	12	60	120	12	26	33	33	24	22	17	466	1,920
10:15	to	10:30	37	105	12	54	148	17	26	37	35	37	18	22	548	1,998
AM Peak Hour																
7:45	**to**	**8:45**	**93**	**373**	**72**	**319**	**541**	**76**	**48**	**166**	**107**	**121**	**129**	**108**	**2,153**	
# of trucks in peak			2	9	1	13	13	1	8	8	7	1	5	1	69	
# of heavies in peak			7	18	1	26	18	9	1	11	18	2	2	2	115	
% heavies (Total)			10%	7%	3%	12%	6%	13%	19%	11%	23%	2%	5%	3%	9%	
12:00	to	12:15	38	123	24	72	163	16	40	38	54	32	40	52	692	
12:15	to	12:30	57	151	26	64	170	26	36	48	41	27	36	38	720	
12:30	to	12:45	44	116	22	68	169	27	28	48	45	30	34	48	679	
12:45	to	13:00	49	138	20	70	161	28	23	39	48	29	35	49	689	2,780
13:00	to	13:15	52	118	22	61	153	23	47	46	44	31	39	42	678	2,766
13:15	to	13:30	43	129	28	80	193	26	31	35	53	23	33	59	733	2,779
13:30	to	13:45	50	148	15	61	151	22	41	39	31	33	38	38	667	2,767
13:45	to	14:00	45	151	22	69	183	27	24	33	42	27	42	39	704	2,782
Midday Peak Hour																
13:00	**to**	**14:00**	**190**	**546**	**87**	**271**	**680**	**98**	**143**	**153**	**170**	**114**	**152**	**178**	**2,782**	
# of trucks in peak			2	10	5	14	12	3	5	5	4	6	12	4	82	
# of heavies in peak			4	16	3	33	14	8	0	11	17	0	1	2	109	
% heavies (Total)			3%	5%	9%	17%	4%	11%	3%	10%	12%	5%	9%	3%	7%	
15:00	to	15:15	60	136	12	73	161	28	48	69	53	34	35	49	758	
15:15	to	15:30	59	160	10	78	209	49	27	58	64	46	42	45	847	
15:30	to	15:45	50	136	9	65	171	35	39	53	63	27	47	48	743	
15:45	to	16:00	49	131	10	103	240	38	28	67	47	34	39	49	835	3,183
16:00	to	16:15	39	143	11	81	219	36	31	60	48	33	63	48	812	3,237
16:15	to	16:30	56	168	17	88	215	31	29	46	55	23	31	44	803	3,193
16:30	to	16:45	53	160	9	91	199	38	31	77	76	60	40	29	863	3,313
16:45	to	17:00	49	175	18	79	231	35	33	71	77	57	34	38	897	3,375
17:00	to	17:15	53	166	15	91	203	31	32	73	83	41	40	37	865	3,428
17:15	to	17:30	43	178	13	89	231	42	24	84	58	47	43	35	887	3,512
17:30	to	17:45	46	138	9	98	229	42	31	77	62	47	40	27	846	3,495
17:45	to	18:00	64	157	11	93	236	38	23	54	58	43	36	40	853	3,451
PM Peak Hour																
16:30	**to**	**17:30**	**198**	**679**	**55**	**350**	**864**	**146**	**120**	**305**	**294**	**205**	**157**	**139**	**3,512**	
# of trucks in peak			1	6	0	3	5	1	2	0	5	1	0	1	25	
# of heavies in peak			4	4	1	25	10	10	0	11	11	0	0	0	76	
% heavies (Total)			3%	1%	2%	8%	2%	8%	2%	4%	5%	0%	0%	1%	3%	

Intersection: Fairway Rd @ Wilson Ave
GeoID: 10710
Municipality: Kitchener
Major Road: Fairway Rd

Intersection Control: Signalized
Date: Tuesday, 17-May-22
Name: Cam
Weather: Clear/Dry

PEDESTRIAN CROSSING

Time			Crossing Approach					
			East App.	West App.	North App.	South App.	TOTAL	TOTAL HOUR
7:30	to	7:45	1	0	3	0	4	
7:45	to	8:00	2	1	2	1	6	
8:00	to	8:15	0	2	1	1	4	
8:15	to	8:30	2	3	1	1	7	21
8:30	to	8:45	0	0	1	0	1	18
8:45	to	9:00	3	3	7	1	14	26
9:00	to	9:15	3	3	0	1	7	29
9:15	to	9:30	3	6	7	1	17	39
9:30	to	9:45	2	4	2	4	12	50
9:45	to	10:00	1	6	3	2	12	48
10:00	to	10:15	3	3	2	3	11	52
10:15	to	10:30	1	8	6	5	20	55
AM Peak Hour							**115**	
7:45	**to**	**8:45**	**4**	**6**	**5**	**3**	**18**	
12:00	to	12:15	8	6	2	8	24	
12:15	to	12:30	7	4	2	6	19	
12:30	to	12:45	4	4	7	2	17	
12:45	to	13:00	4	3	3	5	15	75
13:00	to	13:15	3	3	4	4	14	65
13:15	to	13:30	5	16	9	5	35	81
13:30	to	13:45	9	4	3	10	26	90
13:45	to	14:00	4	6	11	3	24	99
Midday Peak Hour							**174**	
13:00	**to**	**14:00**	21	29	27	22	**99**	
15:00	to	15:15	8	16	13	7	44	
15:15	to	15:30	12	17	12	8	49	
15:30	to	15:45	11	12	15	6	44	
15:45	to	16:00	9	22	6	9	46	183
16:00	to	16:15	20	8	15	9	52	191
16:15	to	16:30	11	14	13	9	47	189
16:30	to	16:45	8	8	10	6	32	177
16:45	to	17:00	12	14	14	8	48	179
17:00	to	17:15	13	9	8	15	45	172
17:15	to	17:30	13	15	8	6	42	167
17:30	to	17:45	9	9	10	8	36	171
17:45	to	18:00	10	9	11	14	44	167
PM Peak Hour							**529**	
16:30	**to**	**17:30**	46	46	40	35	**167**	

REGIONAL MUNICIPALITY OF WATERLOO
TURNING MOVEMENT COUNT

Region of Waterloo

Morning Peak Diagram

Count Period
From: 7:30 AM
To: 10:30 AM

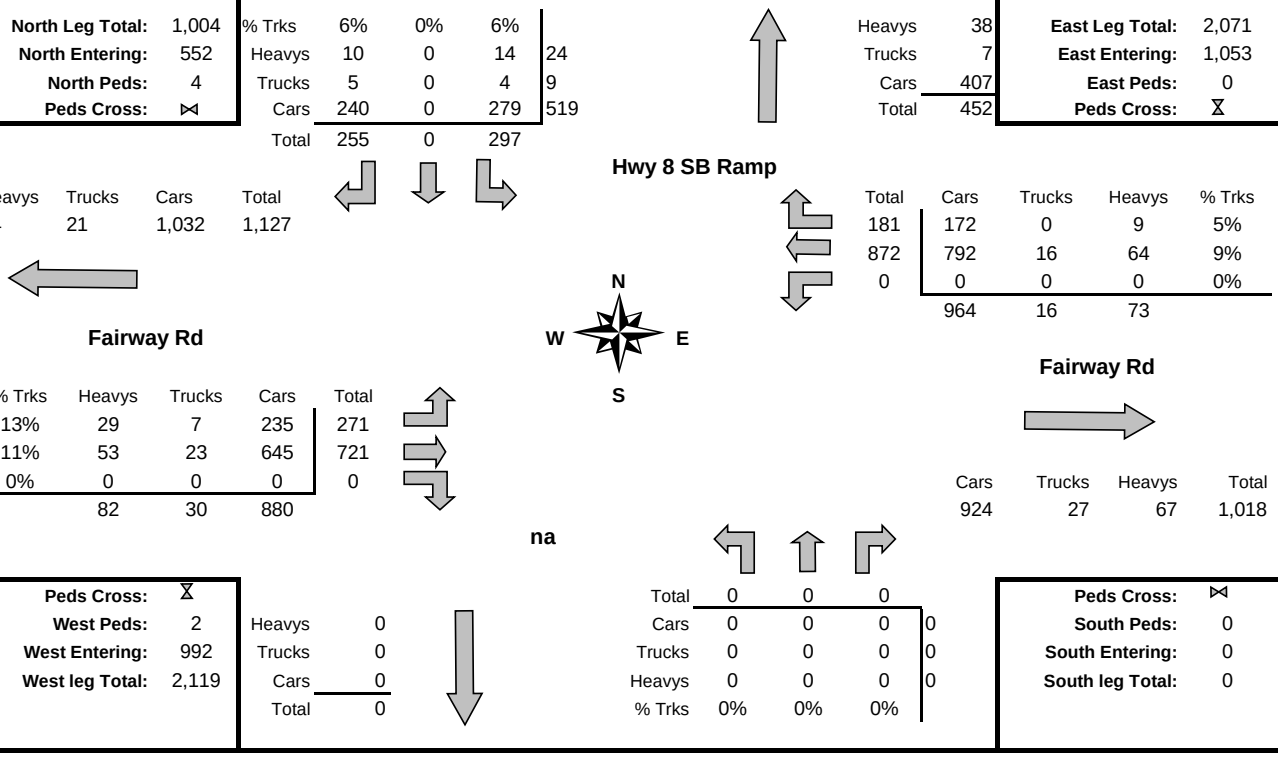
Peak Hour
From: 7:30 AM
To: 8:30 AM

Municipality: Kitchener
Intersection: Fairway Rd @ Hwy 8 SB Ramp
Control: Signalized
Major Road: Fairway Rd

Weather conditions: Clear/Dry

Person(s) who counted: Cam

GeoID: 22108
Count Date: Tuesday, 17-May-22



Comments

To determine total vehicles entering the intersection during morning peak hour, add all leg totals entering.

Example 1: Total Entering = West leg total entering + South leg total entering + East leg total entering + North leg total entering
Therefore, total vehicles entering intersection = **2,597**

Example 2: Total vehicles entering from the west = eastbound left turn + eastbound through + eastbound right turn
Therefore, vehicles entering from the west = **992**

REGIONAL MUNICIPALITY OF WATERLOO
TURNING MOVEMENT COUNT

Region of Waterloo

Mid-day Peak Diagram

Count Period
From: 12:00 PM
To: 2:00 PM

Peak Hour
From: 1:00 PM
To: 2:00 PM

Municipality: Kitchener
Intersection: Fairway Rd @ Hwy 8 SB Ramp
Control: Signalized
Major Road: Fairway Rd

Weather conditions: Clear/Dry

Person(s) who counted: Cam

GeoID: 22108
Count Date: Tuesday, 17-May-22

North Leg Total: 1,054
North Entering: 658
North Peds: 9
Peds Cross: ⋈

% Trks	5%	0%	7%	
Heavys	11	0	10	21
Trucks	9	0	8	17
Cars	372	0	248	620
Total	392	0	266	

Heavys	Trucks	Cars	Total
60	21	1,247	1,328

Heavys	Trucks	Cars	Total
46	19	331	396

East Leg Total: 2,283
East Entering: 1,047
East Peds: 0
Peds Cross: ⧖

Hwy 8 SB Ramp

Total	Cars	Trucks	Heavys	% Trks
111	90	6	15	19%
936	875	12	49	7%
0	0	0	0	0%
	965	18	64	

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Fairway Rd

% Trks	Heavys	Trucks	Cars	Total
15%	31	13	241	285
5%	39	10	921	970
0%	0	0	0	0
	70	23	1,162	

Fairway Rd

Cars	Trucks	Heavys	Total
1169	18	49	1236

na

Total	0	0	0	
Cars	0	0	0	0
Trucks	0	0	0	0
Heavys	0	0	0	0
% Trks	0%	0%	0%	

Peds Cross: ⧖
West Peds: 0
West Entering: 1,255
West leg Total: 2,583

Heavys	0
Trucks	0
Cars	0
Total	0

Peds Cross: ⋈
South Peds: 0
South Entering: 0
South leg Total: 0

Comments

To determine total vehicles entering the intersection during mid-day peak hour, add all leg totals entering.

Example 1: Total Entering = West leg total entering + South leg total entering + East leg total entering + North leg total entering
Therefore, total vehicles entering intersection = **2,960**

Example 2: Total vehicles entering from the west = eastbound left turn + eastbound through + eastbound right turn
Therefore, vehicles entering from the west = **1,255**

REGIONAL MUNICIPALITY OF WATERLOO
TURNING MOVEMENT COUNT

Region of Waterloo

Afternoon Peak Diagram

Count Period
From: 3:00 PM
To: 6:00 PM

Peak Hour
From: 5:00 PM
To: 6:00 PM

Municipality: Kitchener
Intersection: Fairway Rd @ Hwy 8 SB Ramp
Control: Signalized
Major Road: Fairway Rd

Weather conditions: Clear/Dry

Person(s) who counted: Cam

GeoID: 22108
Count Date: Tuesday, 17-May-22

North Leg Total: 1,705
North Entering: 1,253
North Peds: 25
Peds Cross: ⋈

	2%	0%	3%	
% Trks				
Heavys	8	0	6	14
Trucks	5	0	12	17
Cars	542	0	680	1,222
Total	555	0	698	

Heavys	Trucks	Cars	Total
49	10	1,762	1,821

Fairway Rd

% Trks	Heavys	Trucks	Cars	Total
5%	11	2	266	279
3%	32	7	1,159	1,198
0%	0	0	0	0
	43	9	1,425	

Hwy 8 SB Ramp

	Heavys	Trucks	Cars	Total
	14	4	434	452

East Leg Total: 3,335
East Entering: 1,439
East Peds: 0
Peds Cross: ⧖

	Total	Cars	Trucks	Heavys	% Trks
	173	168	2	3	3%
	1,266	1,220	5	41	4%
	0	0	0	0	0%
		1,388	7	44	

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Fairway Rd

Cars	Trucks	Heavys	Total
1,839	19	38	1,896

na

Total	0	0	0	
Cars	0	0	0	0
Trucks	0	0	0	0
Heavys	0	0	0	0
% Trks	0%	0%	0%	

Peds Cross: ⧖
West Peds: 9
West Entering: 1,477
West leg Total: 3,298

Heavys	0
Trucks	0
Cars	0
Total	0

Peds Cross: ⋈
South Peds: 0
South Entering: 0
South leg Total: 0

Comments

To determine total vehicles entering the intersection during afternoon peak hour, add all leg totals entering.

Total Entering = West leg total entering + South leg total entering + East leg total entering + North leg total entering

Example 1: Therefore, total vehicles entering intersection = **4,169**

Example 2: Total vehicles entering from the west = eastbound left turn + eastbound through + eastbound right turn
Therefore, vehicles entering from the west = **1,477**

REGIONAL MUNICIPALITY OF WATERLOO
TURNING MOVEMENT COUNT

Region of Waterloo

Total Count Diagram

Municipality: Kitchener
Intersection: Fairway Rd @ Hwy 8 SB Ramp
Control: Signalized
Major Road: Fairway Rd

Weather conditions: Clear/Dry

Person(s) who counted: Cam

GeoID: 22108
Count Date: Tuesday, 17-May-22

North Leg Total:	9,393
North Entering:	6,152
North Peds:	123
Peds Cross:	⋈
Bicycles Entering:	0
Buggies Entering:	0

% Trks	5%	0%	5%	
Heavys	104	0	92	196
Trucks	50	0	46	96
Cars	3,002	0	2,858	5,860
Total	3,156	0	2,996	

Heavys	248
Trucks	75
Cars	2,918
Total	3,241

East Leg Total:	19,469
East Entering:	9,088
East Peds:	0
Peds Cross:	⧖
Bicycles Entering:	10
Buggies Entering:	0

Heavys	Trucks	Cars	Total
513	167	10,473	11,153

Hwy 8 SB Ramp

Total	Cars	Trucks	Heavys	% Trks
1,091	1,007	15	69	8%
7,997	7,471	117	409	7%
0	0	0	0	0%
	8,478	132	478	

Fairway Rd

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% Trks	Heavys	Trucks	Cars	Total
11%	179	60	1,911	2,150
6%	304	149	6,932	7,385
0%	0	0	0	0
	483	209	8,843	

Fairway Rd

Cars	Trucks	Heavys	Total
9,790	195	396	10,381

na

Total	0	0	0	
Cars	0	0	0	0
Trucks	0	0	0	0
Heavys	0	0	0	0
% Trks	0%	0%	0%	

Peds Cross:	⧖
West Peds:	18
West Entering:	9,535
West leg Total:	20,688
Bicycles Entering:	15
Buggies Entering:	1

Heavys	0
Trucks	0
Cars	0
Total	0

Peds Cross:	⋈
South Peds:	0
South Entering:	0
South leg Total:	0
Bicycles Entering:	0
Buggies Entering:	0

Comments

To determine total vehicles entering the intersection, add all leg totals entering.

Example 1: Total Entering = West leg total entering + South leg total entering + East leg total entering + North leg total entering
Therefore, total vehicles entering intersection = **24,775**

Example 2: Total vehicles entering from the west = eastbound left turn + eastbound through + eastbound right turn
Therefore, vehicles entering from the west = **9,535**

Notes: None

REGIONAL MUNICIPALITY OF WATERLOO
TURNING MOVEMENT COUNT

Region of Waterloo

Estimated Daily Traffic

Total Factor = Monthly Factor 1 x Daily Factor 1 x 24 Hour Factor 1.74 = 1.740000

Municipality: Kitchener
Intersection: Fairway Rd @ Hwy 8 SB Ramp
Control: Signalized
Major Road: Fairway Rd

Weather conditions: Clear/Dry

Person(s) who counted: Cam

GeoID: 22108
Count Date: Tuesday, 17-May-22

North Leg Total: 16,344
North Entering: 10,704
North Peds: N/A
Peds Cross: ⋈

	5%	0%	5%	
% Trks				
Heavys	181	0	160	341
Trucks	87	0	80	167
Cars	5,223	0	4,973	10,196
Total	5,491	0	5,213	

East Leg Total: 33,876
East Entering: 15,813
East Peds: N/A
Peds Cross: ⧖

Heavys	432
Trucks	131
Cars	5,077
Total	5639

Hwy 8 SB Ramp

Heavys	Trucks	Cars	Total
893	291	18,223	19,406

Total	Cars	Trucks	Heavys	% Trks
1,898	1,752	26	120	8%
13,915	13,000	204	712	7%
0	0	0	0	0%
	14,752	230	832	

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Fairway Rd

% Trks	Heavys	Trucks	Cars	Total
11%	311	104	3,325	3,741
6%	529	259	12,062	12,850
0%	0	0	0	0
	840	364	15,387	

Fairway Rd

Cars	Trucks	Heavys	Total
17,035	339	689	18,063

na

Peds Cross: ⧖
West Peds: N/A
West Entering: 16,591
West leg Total: 35,997

Heavys	0
Trucks	0
Cars	0
Total	0

Total	0	0	0	
Cars	0	0	0	0
Trucks	0	0	0	0
Heavys	0	0	0	0
% Trks	0%	0%	0%	

Peds Cross: ⋈
South Peds: N/A
South Entering: 0
South leg Total: 0

Comments

To determine the EDT (Estimated Daily Traffic), add all four leg totals and divide by two.
This will give you the approximate number of vehicles entering and exiting the intersection in a 24-hour period

Example: (West leg total + South leg total + East leg total + North leg total) / 2 ***EDT =*** ***43,109***

REGIONAL MUNICIPALITY OF WATERLOO
TURNING MOVEMENT COUNT

Region of Waterloo

Peak Hour Factor By Movement

Municipality: Kitchener
Intersection: Fairway Rd @ Hwy 8 SB Ramp
Control: Signalized
Major Road: Fairway Rd

Weather conditions: Clear/Dry

Person(s) who counted: Cam

GeoID: 22108
Count Date: Tuesday, 17-May-22

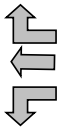
North Approach PHF

AM Peak:	0.81
Mid-day Peak:	0.93
PM Peak:	0.88

	Movement		
PM	0.89	0.00	0.88
MID	0.92	0.00	0.94
AM	0.80	0.00	0.82

Hwy 8 SB Ramp

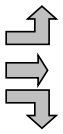
AM AM Peak Hour
MID Mid-day Peak Hour
PM PM Peak Hour



AM	MID	PM	
0.87	0.77	0.68	
0.89	0.95	0.94	Movement
0.00	0.00	0.00	

Fairway Rd

Movement	PM	MID	AM
	0.78	0.89	0.88
	0.93	0.95	0.96
	0.00	0.00	0.00



Fairway Rd

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0.00	0.00	0.00	AM	
0.00	0.00	0.00	MID	
0.00	0.00	0.00	PM	
	Movement			

West Approach PHF

AM Peak:	0.95
Mid-day Peak:	0.94
PM Peak:	0.93

East Approach PHF

AM Peak:	0.90
Mid-day Peak:	0.96
PM Peak:	0.94

South Approach PHF

AM Peak:	0.00
Mid-day Peak:	0.00
PM Peak:	0.00

Comments

Intersection: Fairway Rd @ Hwy 8 SB Ramp
GeoID: 22108
Municipality: Kitchener
Major Road: Fairway Rd

Intersection Control: Signalized
Date: Tuesday, 17-May-22
Name: Cam
Weather: Clear/Dry

			EASTBOUND			WESTBOUND			NORTHBOUND			SOUTHBOUND			TOTAL	TOTAL HOUR
Approach Control			***Signalized***			***Signalized***			***N/A***			***Signalized***				
7:30	to	7:45	69	185	0	0	214	52	0	0	0	62	0	46	628	
7:45	to	8:00	77	185	0	0	245	48	0	0	0	91	0	80	726	
8:00	to	8:15	65	163	0	0	182	43	0	0	0	72	0	61	586	
8:15	to	8:30	60	188	0	0	231	38	0	0	0	72	0	68	657	2,597
8:30	to	8:45	55	170	0	0	215	30	0	0	0	73	0	80	623	2,592
8:45	to	9:00	55	180	0	0	204	36	0	0	0	99	0	78	652	2,518
9:00	to	9:15	46	150	0	0	207	35	0	0	0	67	0	65	570	2,502
9:15	to	9:30	38	152	0	0	181	26	0	0	0	67	0	64	528	2,373
9:30	to	9:45	55	147	0	0	206	25	0	0	0	68	0	64	565	2,315
9:45	to	10:00	48	162	0	0	186	25	0	0	0	75	0	84	580	2,243
10:00	to	10:15	43	148	0	0	180	37	0	0	0	63	0	94	565	2,238
10:15	to	10:30	55	172	0	0	199	28	0	0	0	67	0	74	595	2,305
AM Peak Hour																
7:30	**to**	**8:30**	**271**	**721**	**0**	**0**	**872**	**181**	**0**	**0**	**0**	**297**	**0**	**255**	**2,597**	
# of trucks in peak			7	23	0	0	16	0	0	0	0	4	0	5	55	
# of heavies in peak			29	53	0	0	64	9	0	0	0	14	0	10	179	
% heavies (Total)			13%	11%	0%	0%	9%	5%	0%	0%	0%	6%	0%	6%	9%	
12:00	to	12:15	71	206	0	0	233	36	0	0	0	75	0	94	715	
12:15	to	12:30	66	233	0	0	226	23	0	0	0	72	0	114	734	
12:30	to	12:45	67	205	0	0	236	36	0	0	0	72	0	106	722	
12:45	to	13:00	68	207	0	0	197	20	0	0	0	75	0	106	673	2,844
13:00	to	13:15	67	256	0	0	233	22	0	0	0	71	0	106	755	2,884
13:15	to	13:30	80	225	0	0	247	25	0	0	0	71	0	92	740	2,890
13:30	to	13:45	61	233	0	0	227	28	0	0	0	68	0	103	720	2,888
13:45	to	14:00	77	256	0	0	229	36	0	0	0	56	0	91	745	2,960
Midday Peak Hour																
13:00	**to**	**14:00**	**285**	**970**	**0**	**0**	**936**	**111**	**0**	**0**	**0**	**266**	**0**	**392**	**2,960**	
# of trucks in peak			13	10	0	0	12	6	0	0	0	8	0	9	58	
# of heavies in peak			31	39	0	0	49	15	0	0	0	10	0	11	155	
% heavies (Total)			15%	5%	0%	0%	7%	19%	0%	0%	0%	7%	0%	5%	7%	
15:00	to	15:15	72	319	0	0	256	29	0	0	0	91	0	99	866	
15:15	to	15:30	77	306	0	0	314	36	0	0	0	116	0	103	952	
15:30	to	15:45	91	268	0	0	283	35	0	0	0	103	0	117	897	
15:45	to	16:00	77	247	0	0	332	23	0	0	0	107	0	122	908	3,623
16:00	to	16:15	73	311	0	0	304	24	0	0	0	117	0	124	953	3,710
16:15	to	16:30	85	286	0	0	306	27	0	0	0	121	0	121	946	3,704
16:30	to	16:45	91	311	0	0	335	50	0	0	0	93	0	107	987	3,794
16:45	to	17:00	82	316	0	0	323	45	0	0	0	114	0	138	1,018	3,904
17:00	to	17:15	73	323	0	0	320	37	0	0	0	154	0	150	1,057	4,008
17:15	to	17:30	50	271	0	0	305	29	0	0	0	188	0	132	975	4,037
17:30	to	17:45	66	295	0	0	338	43	0	0	0	199	0	156	1,097	4,147
17:45	to	18:00	90	309	0	0	303	64	0	0	0	157	0	117	1,040	4,169
PM Peak Hour																
17:00	**to**	**18:00**	**279**	**1,198**	**0**	**0**	**1,266**	**173**	**0**	**0**	**0**	**698**	**0**	**555**	**4,169**	
# of trucks in peak			2	7	0	0	5	2	0	0	0	12	0	5	33	
# of heavies in peak			11	32	0	0	41	3	0	0	0	6	0	8	101	
% heavies (Total)			5%	3%	0%	0%	4%	3%	0%	0%	0%	3%	0%	2%	3%	

Intersection: Fairway Rd @ Hwy 8 SB Ramp
GeoID: 22108
Municipality: Kitchener
Major Road: Fairway Rd

Intersection Control: Signalized
Date: Tuesday, 17-May-22
Name: Cam
Weather: Clear/Dry

PEDESTRIAN CROSSING								
Time			Crossing Approach					
			East App.	West App.	North App.	South App.	TOTAL	TOTAL HOUR
7:30	to	7:45	0	0	2	0	2	
7:45	to	8:00	0	0	0	0	0	
8:00	to	8:15	0	0	1	0	1	
8:15	to	8:30	0	2	1	0	3	6
8:30	to	8:45	0	0	5	0	5	9
8:45	to	9:00	0	0	5	0	5	14
9:00	to	9:15	0	0	3	0	3	16
9:15	to	9:30	0	0	1	0	1	14
9:30	to	9:45	0	0	5	0	5	14
9:45	to	10:00	0	0	5	0	5	14
10:00	to	10:15	0	0	4	0	4	15
10:15	to	10:30	0	1	0	0	1	15
AM Peak Hour							**35**	
7:30	**to**	**8:30**	**0**	**2**	**4**	**0**	**6**	
12:00	to	12:15	0	0	4	0	4	
12:15	to	12:30	0	0	0	0	0	
12:30	to	12:45	0	0	2	0	2	
12:45	to	13:00	0	0	4	0	4	10
13:00	to	13:15	0	0	2	0	2	8
13:15	to	13:30	0	0	1	0	1	9
13:30	to	13:45	0	0	5	0	5	12
13:45	to	14:00	0	0	1	0	1	9
Midday Peak Hour							**19**	
13:00	**to**	**14:00**	0	0	9	0	**9**	
15:00	to	15:15	0	2	3	0	5	
15:15	to	15:30	0	0	7	0	7	
15:30	to	15:45	0	0	4	0	4	
15:45	to	16:00	0	0	11	0	11	27
16:00	to	16:15	0	0	3	0	3	25
16:15	to	16:30	0	2	8	0	10	28
16:30	to	16:45	0	2	7	0	9	33
16:45	to	17:00	0	0	4	0	4	26
17:00	to	17:15	0	3	6	0	9	32
17:15	to	17:30	0	3	10	0	13	35
17:30	to	17:45	0	1	6	0	7	33
17:45	to	18:00	0	2	3	0	5	34
PM Peak Hour							**87**	
17:00	**to**	**18:00**	0	9	25	0	**34**	

REGIONAL MUNICIPALITY OF WATERLOO
TURNING MOVEMENT COUNT

Region of Waterloo

Morning Peak Diagram

Count Period
From: 7:30 AM
To: 10:30 AM

Peak Hour
From: 7:45 AM
To: 8:45 AM

Municipality: Kitchener
Intersection: King St @ Fairway Rd
Control: Signalized
Major Road: Fairway Rd

Weather conditions: Cloudy/Dry

Person(s) who counted: Matt & Doris

GeoID: 22325
Count Date: Tuesday, 17-May-22

North Leg Total: 1,041
North Entering: 527
North Peds: 10
Peds Cross: ⋈

% Trks	15%	4%	20%	
Heavys	40	5	3	48
Trucks	11	2	1	14
Cars	295	154	16	465
Total	346	161	20	

Heavys	Trucks	Cars	Total
65	32	934	1,031

East Leg Total: 1,066
East Entering: 590
East Peds: 13
Peds Cross: ⧖

Heavys	23
Trucks	20
Cars	471
Total	514

King St

Total	Cars	Trucks	Heavys	% Trks
24	18	2	4	25%
545	510	17	18	6%
21	21	0	0	0%
	549	19	22	

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Fairway Rd

% Trks	Heavys	Trucks	Cars	Total
12%	16	15	226	257
9%	20	21	400	441
7%	9	10	247	266
	45	46	873	

Fairway Rd

Cars	Trucks	Heavys	Total
430	23	23	476

King St

Peds Cross: ⧖
West Peds: 10
West Entering: 964
West leg Total: 1,995

Heavys	14
Trucks	12
Cars	422
Total	448

Total	140	233	15	
Cars	129	227	14	370
Trucks	4	3	1	8
Heavys	7	3	0	10
% Trks	8%	3%	7%	

Peds Cross: ⋈
South Peds: 7
South Entering: 388
South leg Total: 836

Comments

To determine total vehicles entering the intersection during morning peak hour, add all leg totals entering.

Example 1: Total Entering = West leg total entering + South leg total entering + East leg total entering + North leg total entering
Therefore, total vehicles entering intersection = **2,469**

Example 2: Total vehicles entering from the west = eastbound left turn + eastbound through + eastbound right turn
Therefore, vehicles entering from the west = **964**

REGIONAL MUNICIPALITY OF WATERLOO
TURNING MOVEMENT COUNT

Region of Waterloo

Mid-day Peak Diagram

Count Period
From: 12:00 PM
To: 2:00 PM

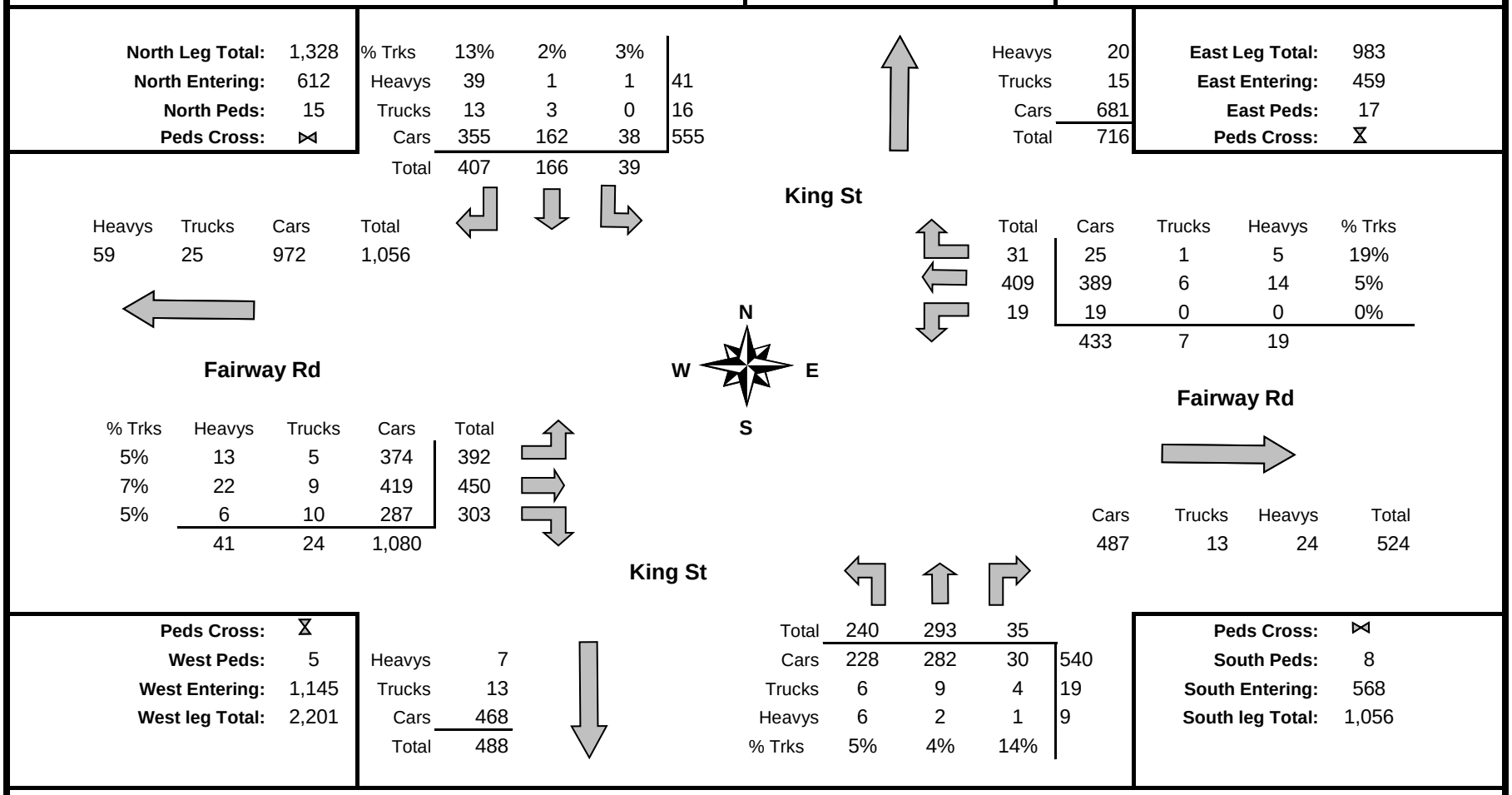
Peak Hour
From: 1:00 PM
To: 2:00 PM

Municipality: Kitchener
Intersection: King St @ Fairway Rd
Control: Signalized
Major Road: Fairway Rd

Weather conditions: Cloudy/Dry

Person(s) who counted: Matt & Doris

GeoID: 22325
Count Date: Tuesday, 17-May-22



Comments

To determine total vehicles entering the intersection during mid-day peak hour, add all leg totals entering.

Example 1: Total Entering = West leg total entering + South leg total entering + East leg total entering + North leg total entering
Therefore, total vehicles entering intersection = **2,784**

Example 2: Total vehicles entering from the west = eastbound left turn + eastbound through + eastbound right turn
Therefore, vehicles entering from the west = **1,145**

REGIONAL MUNICIPALITY OF WATERLOO
TURNING MOVEMENT COUNT

Region of Waterloo

Afternoon Peak Diagram

Count Period
From: 3:00 PM
To: 6:00 PM

Peak Hour
From: 4:30 PM
To: 5:30 PM

Municipality: Kitchener
Intersection: King St @ Fairway Rd
Control: Signalized
Major Road: Fairway Rd

Weather conditions: Cloudy/Dry

Person(s) who counted: Matt & Doris

GeoID: 22325
Count Date: Tuesday, 17-May-22

North Leg Total: 1,631
North Entering: 762
North Peds: 23
Peds Cross: ⋈

% Trks	6%	2%	0%	
Heavys	25	2	0	27
Trucks	4	2	0	6
Cars	475	218	36	729
Total	504	222	36	

Heavys	Trucks	Cars	Total
43	16	1,357	1,416

Fairway Rd

% Trks	Heavys	Trucks	Cars	Total
4%	9	9	436	454
4%	19	12	727	758
5%	14	8	439	461
	42	29	1,602	

Heavys	11
Trucks	12
Cars	846
Total	869

East Leg Total: 1,468
East Entering: 644
East Peds: 17
Peds Cross: ⋈

King St

Total	Cars	Trucks	Heavys	% Trks
28	27	1	0	4%
589	570	6	13	3%
27	26	1	0	4%
623	8	13		

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Fairway Rd

Cars	Trucks	Heavys	Total
791	14	19	824

King St

Total	323	387	30	
Cars	312	383	28	723
Trucks	6	2	2	10
Heavys	5	2	0	7
% Trks	3%	1%	7%	

Peds Cross: ⧖
West Peds: 17
West Entering: 1,673
West leg Total: 3,089

Heavys	16
Trucks	11
Cars	683
Total	710

Peds Cross: ⋈
South Peds: 16
South Entering: 740
South leg Total: 1,450

Comments

To determine total vehicles entering the intersection during afternoon peak hour, add all leg totals entering.

Total Entering = West leg total entering + South leg total entering + East leg total entering + North leg total entering

Example 1: Therefore, total vehicles entering intersection = **3,819**

Example 2: Total vehicles entering from the west = eastbound left turn + eastbound through + eastbound right turn

Therefore, vehicles entering from the west = **1,673**

REGIONAL MUNICIPALITY OF WATERLOO
TURNING MOVEMENT COUNT

Region of Waterloo

Total Count Diagram

Municipality: Kitchener
Intersection: King St @ Fairway Rd
Control: Signalized
Major Road: Fairway Rd

Weather conditions: Cloudy/Dry

Person(s) who counted: Matt & Doris

GeoID: 22325
Count Date: Tuesday, 17-May-22

North Leg Total:	10,538
North Entering:	5,028
North Peds:	119
Peds Cross:	⋈
Bicycles Entering:	10
Buggies Entering:	0

% Trks	10%	3%	5%	
Heavys	260	22	8	290
Trucks	74	22	3	99
Cars	2,956	1,459	224	4,639
Total	3,290	1,503	235	

East Leg Total:	9,090
East Entering:	4,295
East Peds:	121
Peds Cross:	⧖
Bicycles Entering:	9
Buggies Entering:	0

Heavys	Trucks	Cars	Total
440	191	8,309	8,940

Heavys	155
Trucks	109
Cars	5,246
Total	5,510

King St

Total	Cars	Trucks	Heavys	% Trks
236	202	6	28	14%
3,890	3,676	79	135	6%
169	163	5	1	4%
	4,041	90	164	

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Fairway Rd

% Trks	Heavys	Trucks	Cars	Total
6%	112	69	2,699	2,880
7%	174	124	4,078	4,376
5%	62	56	2,468	2,586
	348	249	9,245	

Fairway Rd

Cars	Trucks	Heavys	Total
4,472	138	185	4,795

King St

Peds Cross:	⧖
West Peds:	81
West Entering:	9,842
West leg Total:	18,782
Bicycles Entering:	9
Buggies Entering:	0

Heavys	85
Trucks	83
Cars	4,090
Total	4,258

Total	1,760	2,394	184	
Cars	1,677	2,345	170	4,192
Trucks	38	34	11	83
Heavys	45	15	3	63
% Trks	5%	2%	8%	

Peds Cross:	⋈
South Peds:	81
South Entering:	4,338
South leg Total:	8,596
Bicycles Entering:	21
Buggies Entering:	0

Comments

To determine total vehicles entering the intersection, add all leg totals entering.

Example 1: Total Entering = West leg total entering + South leg total entering + East leg total entering + North leg total entering
Therefore, total vehicles entering intersection = **23,503**

Example 2: Total vehicles entering from the west = eastbound left turn + eastbound through + eastbound right turn
Therefore, vehicles entering from the west = **9,842**

Notes: None

REGIONAL MUNICIPALITY OF WATERLOO
TURNING MOVEMENT COUNT

Region of Waterloo

Estimated Daily Traffic

Total Factor =	Monthly Factor	1	x	Daily Factor	1	x	24 Hour Factor	1.74	=	1.740000

Municipality: Kitchener
Intersection: King St @ Fairway Rd
Control: Signalized
Major Road: Fairway Rd

Weather conditions: Cloudy/Dry

Person(s) who counted: Matt & Doris

GeoID: 22325
Count Date: Tuesday, 17-May-22

North Leg Total: 18,336
North Entering: 8,749
North Peds: N/A
Peds Cross: ⋈

% Trks	10%	3%	5%	
Heavys	452	38	14	505
Trucks	129	38	5	172
Cars	5,143	2,539	390	8,072
Total	5,725	2,615	409	

Heavys	Trucks	Cars	Total
766	332	14,458	15,556

Fairway Rd

% Trks	Heavys	Trucks	Cars	Total
6%	195	120	4,696	5,011
7%	303	216	7,096	7,614
5%	108	97	4,294	4,500
	606	433	16,086	

East Leg Total: 15,817
East Entering: 7,473
East Peds: N/A
Peds Cross: ⧖

Heavys	270
Trucks	190
Cars	9,128
Total	9587

King St

Total	Cars	Trucks	Heavys	% Trks
411	351	10	49	14%
6,769	6,396	137	235	6%
294	284	9	2	4%
	7,031	157	285	

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Fairway Rd

Cars	Trucks	Heavys	Total
7,781	240	322	8,343

King St

Peds Cross: ⧖
West Peds: N/A
West Entering: 17,125
West leg Total: 32,681

Heavys	148
Trucks	144
Cars	7,117
Total	7,409

Total	3,062	4,166	320	
Cars	2,918	4,080	296	7,294
Trucks	66	59	19	144
Heavys	78	26	5	110
% Trks	5%	2%	8%	

Peds Cross: ⋈
South Peds: N/A
South Entering: 7,548
South leg Total: 14,957

Comments

To determine the EDT (Estimated Daily Traffic), add all four leg totals and divide by two.
This will give you the approximate number of vehicles entering and exiting the intersection in a 24-hour period

Example: $\frac{\text{(West leg total + South leg total + East leg total + North leg total)}}{2}$ ***EDT =*** ***40,895***

REGIONAL MUNICIPALITY OF WATERLOO
TURNING MOVEMENT COUNT

Region of Waterloo

Peak Hour Factor By Movement

Municipality: Kitchener
Intersection: King St @ Fairway Rd
Control: Signalized
Major Road: Fairway Rd

Weather conditions: Cloudy/Dry

Person(s) who counted: Matt & Doris

GeoID: 22325
Count Date: Tuesday, 17-May-22

North Approach PHF

AM Peak:	0.85
Mid-day Peak:	0.95
PM Peak:	0.95

	Movement		
PM	0.89	0.83	0.75
MID	0.93	0.88	0.61
AM	0.85	0.88	0.71

King St

AM AM Peak Hour
MID Mid-day Peak Hour
PM PM Peak Hour

Fairway Rd

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Movement	AM	MID	PM
	0.86	0.78	0.88
	0.85	0.93	0.98
	0.53	0.59	0.75

Fairway Rd

Movement	PM	MID	AM
	0.83	0.79	0.88
	0.91	0.95	0.90
	0.65	0.81	0.71

King St

East Approach PHF

AM Peak:	0.85
Mid-day Peak:	0.93
PM Peak:	0.98

West Approach PHF

AM Peak:	0.95
Mid-day Peak:	0.93
PM Peak:	0.90

0.81	0.91	0.63	AM
0.90	0.76	0.63	MID
0.89	0.77	0.75	PM

Movement

South Approach PHF

AM Peak:	0.92
Mid-day Peak:	0.85
PM Peak:	0.83

Comments

Intersection: King St @ Fairway Rd
GeoID: 22325
Municipality: Kitchener
Major Road: Fairway Rd

Intersection Control: Signalized
Date: Tuesday, 17-May-22
Name: Matt & Doris
Weather: Cloudy/Dry

			EASTBOUND			WESTBOUND			NORTHBOUND			SOUTHBOUND			TOTAL	TOTAL HOUR
Approach Control			***Signalized***			***Signalized***			***Signalized***			***Signalized***				
7:30	to	7:45	70	100	60	4	149	3	30	60	1	4	31	85	597	
7:45	to	8:00	63	97	94	7	161	5	35	55	3	7	46	102	675	
8:00	to	8:15	64	115	55	10	118	7	26	64	4	2	44	77	586	
8:15	to	8:30	73	123	57	0	129	5	36	57	2	6	32	82	602	2,460
8:30	to	8:45	57	106	60	4	137	7	43	57	6	5	39	85	606	2,469
8:45	to	9:00	90	109	68	9	135	7	35	70	6	4	38	83	654	2,448
9:00	to	9:15	53	93	52	8	90	7	50	61	2	6	39	87	548	2,410
9:15	to	9:30	57	85	66	1	93	6	38	66	5	5	40	80	542	2,350
9:30	to	9:45	60	65	73	6	110	6	34	56	2	2	52	80	546	2,290
9:45	to	10:00	80	99	56	7	95	10	38	78	4	6	40	79	592	2,228
10:00	to	10:15	75	96	44	5	90	8	37	66	10	10	47	93	581	2,261
10:15	to	10:30	64	115	54	5	92	6	41	67	4	4	29	87	568	2,287
AM Peak Hour																
7:45	**to**	**8:45**	**257**	**441**	**266**	**21**	**545**	**24**	**140**	**233**	**15**	**20**	**161**	**346**	**2,469**	
# of trucks in peak			15	21	10	0	17	2	4	3	1	1	2	11	87	
# of heavies in peak			16	20	9	0	18	4	7	3	0	3	5	40	125	
% heavies (Total)			12%	9%	7%	0%	6%	25%	8%	3%	7%	20%	4%	15%	9%	
12:00	to	12:15	67	91	60	3	87	9	46	60	3	7	32	72	537	
12:15	to	12:30	77	126	81	2	103	4	44	70	3	4	56	99	669	
12:30	to	12:45	113	135	67	6	110	7	65	69	3	4	47	97	723	
12:45	to	13:00	75	114	90	2	94	9	46	66	5	6	45	105	657	2,586
13:00	to	13:15	83	119	93	3	105	5	55	56	14	7	40	110	690	2,739
13:15	to	13:30	94	108	72	4	94	10	65	96	6	3	44	104	700	2,770
13:30	to	13:45	91	104	73	4	110	10	53	68	3	13	47	101	677	2,724
13:45	to	14:00	124	119	65	8	100	6	67	73	12	16	35	92	717	2,784
Midday Peak Hour																
13:00	**to**	**14:00**	**392**	**450**	**303**	**19**	**409**	**31**	**240**	**293**	**35**	**39**	**166**	**407**	**2,784**	
# of trucks in peak			5	9	10	0	6	1	6	9	4	0	3	13	66	
# of heavies in peak			13	22	6	0	14	5	6	2	1	1	1	39	110	
% heavies (Total)			5%	7%	5%	0%	5%	19%	5%	4%	14%	3%	2%	13%	6%	
15:00	to	15:15	121	206	85	7	104	10	77	81	6	12	41	103	853	
15:15	to	15:30	129	196	94	4	136	13	66	77	6	15	51	125	912	
15:30	to	15:45	128	175	86	5	136	15	73	97	5	6	49	119	894	
15:45	to	16:00	111	163	87	6	153	9	64	101	5	7	61	122	889	3,548
16:00	to	16:15	110	185	85	5	137	5	75	101	7	9	54	125	898	3,593
16:15	to	16:30	117	191	89	6	145	10	70	80	7	14	64	112	905	3,586
16:30	to	16:45	120	208	83	7	146	7	85	88	7	8	52	141	952	3,644
16:45	to	17:00	136	187	105	9	146	8	82	82	10	4	43	138	950	3,705
17:00	to	17:15	98	176	97	5	147	5	91	126	6	12	60	111	934	3,741
17:15	to	17:30	100	187	176	6	150	8	65	91	7	12	67	114	983	3,819
17:30	to	17:45	88	171	147	7	146	4	71	86	7	9	68	145	949	3,816
17:45	to	18:00	92	212	112	4	142	5	57	69	13	6	70	135	917	3,783
PM Peak Hour																
16:30	**to**	**17:30**	**454**	**758**	**461**	**27**	**589**	**28**	**323**	**387**	**30**	**36**	**222**	**504**	**3,819**	
# of trucks in peak			9	12	8	1	6	1	6	2	2	0	2	4	53	
# of heavies in peak			9	19	14	0	13	0	5	2	0	0	2	25	89	
% heavies (Total)			4%	4%	5%	4%	3%	4%	3%	1%	7%	0%	2%	6%	4%	

Intersection: King St @ Fairway Rd
GeoID: 22325
Municipality: Kitchener
Major Road: Fairway Rd

Intersection Control: Signalized
Date: Tuesday, 17-May-22
Name: Matt & Doris
Weather: Cloudy/Dry

PEDESTRIAN CROSSING								
Time			Crossing Approach					
			East App.	West App.	North App.	South App.	TOTAL	TOTAL HOUR
7:30	to	7:45	10	0	3	7	20	
7:45	to	8:00	6	4	3	2	15	
8:00	to	8:15	1	1	2	2	6	
8:15	to	8:30	3	3	3	2	11	52
8:30	to	8:45	3	2	2	1	8	40
8:45	to	9:00	4	0	3	1	8	33
9:00	to	9:15	4	2	3	4	13	40
9:15	to	9:30	0	0	2	0	2	31
9:30	to	9:45	5	2	5	3	15	38
9:45	to	10:00	0	4	5	2	11	41
10:00	to	10:15	2	0	0	3	5	33
10:15	to	10:30	4	2	1	0	7	38
AM Peak Hour							**121**	
7:45	**to**	**8:45**	**13**	**10**	**10**	**7**	**40**	
12:00	to	12:15	1	1	0	0	2	
12:15	to	12:30	10	1	4	4	19	
12:30	to	12:45	3	4	3	0	10	
12:45	to	13:00	2	2	3	2	9	40
13:00	to	13:15	5	0	7	1	13	51
13:15	to	13:30	3	1	2	4	10	42
13:30	to	13:45	5	2	3	2	12	44
13:45	to	14:00	4	2	3	1	10	45
Midday Peak Hour							**85**	
13:00	**to**	**14:00**	17	5	15	8	**45**	
15:00	to	15:15	2	4	2	1	9	
15:15	to	15:30	3	5	6	1	15	
15:30	to	15:45	4	2	3	3	12	
15:45	to	16:00	6	6	1	11	24	60
16:00	to	16:15	4	3	1	2	10	61
16:15	to	16:30	4	6	9	6	25	71
16:30	to	16:45	2	3	4	5	14	73
16:45	to	17:00	7	6	10	6	29	78
17:00	to	17:15	5	4	6	3	18	86
17:15	to	17:30	3	4	3	2	12	73
17:30	to	17:45	2	2	10	0	14	73
17:45	to	18:00	4	3	7	0	14	58
PM Peak Hour							**196**	
16:30	**to**	**17:30**	17	17	23	16	**73**	

REGIONAL MUNICIPALITY OF WATERLOO
TURNING MOVEMENT COUNT

Region of Waterloo

Morning Peak Diagram

Count Period
From: 7:30 AM
To: 10:30 AM

Peak Hour
From: 7:45 AM
To: 8:45 AM

Municipality: Kitchener
Intersection: Fairway Rd & Fairway Best Mall/500/560 Fairwa
Control: Signalized
Major Road: Fairway Rd

Weather conditions: Cloudy

Person(s) who counted: AT03-EZ

GeoID: 28245
Count Date: Thursday, 07-Nov-19

North Leg Total: 32
North Entering: 11
North Peds: 5
Peds Cross: ⋈

% Trks	0%	0%	0%	
Heavys	0	0	0	0
Trucks	0	0	0	0
Cars	6	0	5	11
Total	6	0	5	

Heavys	0
Trucks	0
Cars	21
Total	21

East Leg Total: 1,536
East Entering: 801
East Peds: 3
Peds Cross: ⧖

Heavys	Trucks	Cars	Total
33	8	758	799

Fairway Rd

500/560 Fairway Rd

Total	Cars	Trucks	Heavys	% Trks
3	3	0	0	0%
770	729	8	33	5%
28	28	0	0	0%
	760	8	33	

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Fairway Rd

% Trks	Heavys	Trucks	Cars	Total
0%	0	0	17	17
6%	28	13	664	705
6%	1	0	17	18
	29	13	698	

Fairway Rd

Cars	Trucks	Heavys	Total
694	13	28	735

Fairway Best Mall

Peds Cross: ⧖
West Peds: 2
West Entering: 740
West leg Total: 1,539

Heavys	1
Trucks	0
Cars	45
Total	46

Total	23	1	25	
Cars	23	1	25	49
Trucks	0	0	0	0
Heavys	0	0	0	0
% Trks	0%	0%	0%	

Peds Cross: ⋈
South Peds: 1
South Entering: 49
South leg Total: 95

Comments

To determine total vehicles entering the intersection during morning peak hour, add all leg totals entering.

Example 1: Total Entering = West leg total entering + South leg total entering + East leg total entering + North leg total entering
Therefore, total vehicles entering intersection = **1,601**

Example 2: Total vehicles entering from the west = eastbound left turn + eastbound through + eastbound right turn
Therefore, vehicles entering from the west = **740**

REGIONAL MUNICIPALITY OF WATERLOO
TURNING MOVEMENT COUNT

Region of Waterloo

Mid-day Peak Diagram

Count Period
From: 12:00 PM
To: 2:00 PM

Peak Hour
From: 1:00 PM
To: 2:00 PM

Municipality: Kitchener
Intersection: Fairway Rd & Fairway Best Mall/500/560 Fairwa
Control: Signalized
Major Road: Fairway Rd

Weather conditions: Cloudy

Person(s) who counted: AT03-EZ

GeoID: 28245
Count Date: Thursday, 07-Nov-19

North Leg Total: 169
North Entering: 109
North Peds: 9
Peds Cross: ⋈

% Trks	0%	0%	5%		
Heavys	0	0	1	1	
Trucks	0	0	1	1	
Cars	56	12	39	107	
Total	56	12	41		

Heavys	0
Trucks	0
Cars	60
Total	60

East Leg Total: 2,796
East Entering: 1,533
East Peds: 7
Peds Cross: ⧖

Heavys	Trucks	Cars	Total
28	6	1,516	1,550

500/560 Fairway Rd

Total	Cars	Trucks	Heavys	% Trks
16	16	0	0	0%
1,304	1,271	6	27	3%
213	212	1	0	0%
	1,499	7	27	

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Fairway Rd

% Trks	Heavys	Trucks	Cars	Total
0%	0	0	36	36
5%	34	14	986	1,034
0%	0	0	84	84
	34	14	1,106	

Fairway Rd

Cars	Trucks	Heavys	Total
1212	15	36	1263

Fairway Best Mall

Peds Cross: ⧖
West Peds: 12
West Entering: 1,154
West leg Total: 2,704

Heavys	0
Trucks	1
Cars	308
Total	309

Total	190	8	188	
Cars	189	8	187	384
Trucks	0	0	0	0
Heavys	1	0	1	2
% Trks	1%	0%	1%	

Peds Cross: ⋈
South Peds: 6
South Entering: 386
South leg Total: 695

Comments

To determine total vehicles entering the intersection during mid-day peak hour, add all leg totals entering.

Example 1: Total Entering = West leg total entering + South leg total entering + East leg total entering + North leg total entering
Therefore, total vehicles entering intersection = **3,182**

Example 2: Total vehicles entering from the west = eastbound left turn + eastbound through + eastbound right turn
Therefore, vehicles entering from the west = **1,154**

REGIONAL MUNICIPALITY OF WATERLOO
TURNING MOVEMENT COUNT

Region of Waterloo

Afternoon Peak Diagram

Count Period
From: 3:00 PM
To: 6:00 PM

Peak Hour
From: 4:15 PM
To: 5:15 PM

Municipality: Kitchener
Intersection: Fairway Rd & Fairway Best Mall/500/560 Fairwa
Control: Signalized
Major Road: Fairway Rd

Weather conditions: Cloudy

Person(s) who counted: AT03-EZ

GeoID: 28245
Count Date: Thursday, 07-Nov-19

North Leg Total:	63
North Entering:	39
North Peds:	6
Peds Cross:	⋈

% Trks	0%	50%	0%	
Heavys	0	0	0	0
Trucks	0	1	0	1
Cars	19	1	18	38
Total	19	2	18	

Heavys	0
Trucks	0
Cars	24
Total	24

East Leg Total:	2,088
East Entering:	1,164
East Peds:	4
Peds Cross:	⋈

Heavys	Trucks	Cars	Total
24	2	1,226	1,252

500/560 Fairway Rd

Total	Cars	Trucks	Heavys	% Trks
1	1	0	0	0%
1,036	1,010	2	24	3%
127	125	0	2	2%
	1,136	2	26	

Fairway Rd

% Trks	Heavys	Trucks	Cars	Total
0%	0	0	21	21
1%	6	3	765	774
0%	0	0	86	86
	6	3	872	

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Fairway Rd

Cars	Trucks	Heavys	Total
913	3	8	924

Fairway Best Mall

Total	197	2	132	
Cars	197	2	130	329
Trucks	0	0	0	0
Heavys	0	0	2	2
% Trks	0%	0%	2%	

Peds Cross:	⧖
West Peds:	23
West Entering:	881
West leg Total:	2,133

Heavys	2
Trucks	1
Cars	212
Total	215

Peds Cross:	⋈
South Peds:	4
South Entering:	331
South leg Total:	546

Comments

To determine total vehicles entering the intersection during afternoon peak hour, add all leg totals entering.

Total Entering = West leg total entering + South leg total entering + East leg total entering + North leg total entering

Example 1: Therefore, total vehicles entering intersection = **2,415**

Example 2: Total vehicles entering from the west = eastbound left turn + eastbound through + eastbound right turn
Therefore, vehicles entering from the west = **881**

REGIONAL MUNICIPALITY OF WATERLOO
TURNING MOVEMENT COUNT

Region of Waterloo

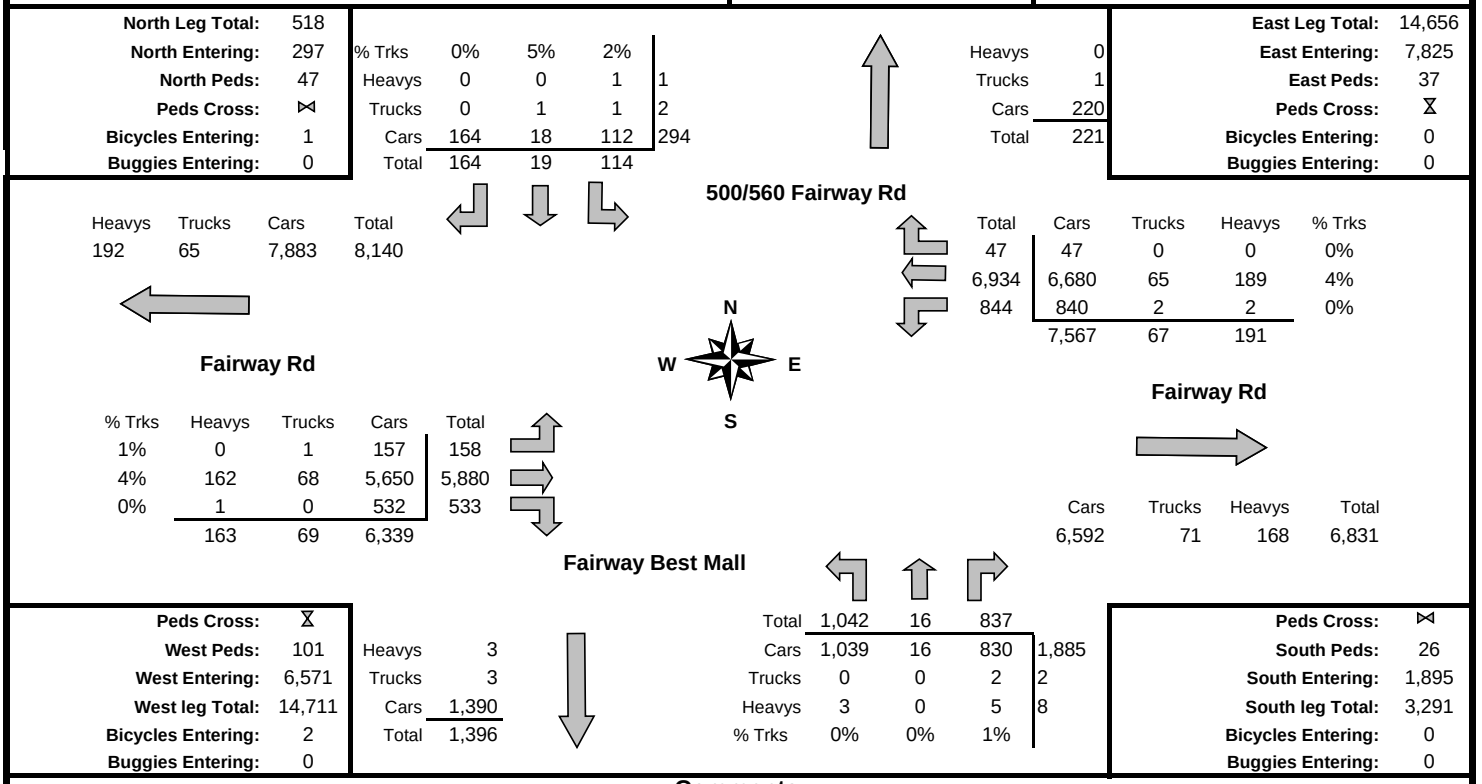
Total Count Diagram

Municipality: Kitchener
Intersection: Fairway Rd & Fairway Best Mall/500/560 Fairwa
Control: Signalized
Major Road: Fairway Rd

Weather conditions: Cloudy

Person(s) who counted: AT03-EZ

GeoID: 28245
Count Date: Thursday, 07-Nov-19



Comments

To determine total vehicles entering the intersection, add all leg totals entering.

Example 1: Total Entering = West leg total entering + South leg total entering + East leg total entering + North leg total entering
Therefore, total vehicles entering intersection = **16,588**

Example 2: Total vehicles entering from the west = eastbound left turn + eastbound through + eastbound right turn
Therefore, vehicles entering from the west = **6,571**

Notes: None

REGIONAL MUNICIPALITY OF WATERLOO
TURNING MOVEMENT COUNT

Region of Waterloo

Estimated Daily Traffic

Total Factor = Monthly Factor 1 x Daily Factor 1 x 24 Hour Factor 1.74 = 1.740000

Municipality: Kitchener
Intersection: Fairway Rd & Fairway Best Mall/500/560 Fairwa
Control: Signalized
Major Road: Fairway Rd

Weather conditions: Cloudy

Person(s) who counted: AT03-EZ

GeoID: 28245
Count Date: Thursday, 07-Nov-19

North Leg Total: 901
North Entering: 517
North Peds: N/A
Peds Cross: ⋈

	0%	5%	2%	
% Trks				
Heavys	0	0	2	2
Trucks	0	2	2	3
Cars	285	31	195	512
Total	285	33	198	

Heavys	0
Trucks	2
Cars	383
Total	385

East Leg Total: 25,501
East Entering: 13,616
East Peds: N/A
Peds Cross: ⧖

Heavys	Trucks	Cars	Total
334	113	13,716	14,164

500/560 Fairway Rd

Total	Cars	Trucks	Heavys	% Trks
82	82	0	0	0%
12,065	11,623	113	329	4%
1,469	1,462	3	3	0%
	13,167	117	332	

Fairway Rd

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Fairway Rd

% Trks	Heavys	Trucks	Cars	Total
1%	0	2	273	275
4%	282	118	9,831	10,231
0%	2	0	926	927
	284	120	11,030	

Cars	Trucks	Heavys	Total
11,470	124	292	11,886

Fairway Best Mall

Peds Cross: ⧖
West Peds: N/A
West Entering: 11,434
West leg Total: 25,597

Heavys	5
Trucks	5
Cars	2,419
Total	2,429

Total	1,813	28	1,456	
Cars	1,808	28	1,444	3,280
Trucks	0	0	3	3
Heavys	5	0	9	14
% Trks	0%	0%	1%	

Peds Cross: ⋈
South Peds: N/A
South Entering: 3,297
South leg Total: 5,726

Comments

To determine the EDT (Estimated Daily Traffic), add all four leg totals and divide by two.
This will give you the approximate number of vehicles entering and exiting the intersection in a 24-hour period

Example: $\frac{\text{(West leg total + South leg total + East leg total + North leg total)}}{2}$ ***EDT =*** ***28,863***

REGIONAL MUNICIPALITY OF WATERLOO
TURNING MOVEMENT COUNT

Region of Waterloo

Peak Hour Factor By Movement

Municipality: Kitchener
Intersection: Fairway Rd & Fairway Best Mall/500/560 Fairwa
Control: Signalized
Major Road: Fairway Rd

Weather conditions: Cloudy

Person(s) who counted: AT03-EZ

GeoID: 28245
Count Date: Thursday, 07-Nov-19

North Approach PHF

AM Peak:	0.46
Mid-day Peak:	0.59
PM Peak:	0.61

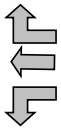
East Approach PHF

AM Peak:	0.91
Mid-day Peak:	0.70
PM Peak:	0.92

AM AM Peak Hour
MID Mid-day Peak Hour
PM PM Peak Hour

	Movement		
PM	0.59	0.25	0.56
MID	0.56	0.75	0.57
AM	0.50	0.00	0.42

500/560 Fairway Rd

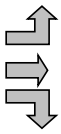


AM	MID	PM	
0.75	0.80	0.25	Movement
0.91	0.70	0.92	
0.78	0.69	0.93	

N
W E
S

Fairway Rd

Movement	PM	MID	AM
	0.66	0.56	0.53
	0.89	0.71	0.86
	0.74	0.84	0.64



Fairway Rd

Fairway Best Mall

0.52	0.25	0.69	AM
0.81	0.67	0.66	MID
0.90	0.50	0.94	PM
Movement			

West Approach PHF

AM Peak:	0.84
Mid-day Peak:	0.73
PM Peak:	0.88

South Approach PHF

AM Peak:	0.68
Mid-day Peak:	0.80
PM Peak:	0.94

Comments

Intersection: Fairway Rd & Fairway Best Mall/500
GeoID: 28245
Municipality: Kitchener
Major Road: Fairway Rd

Intersection Control: Signalized
Date: Thursday, 07-Nov-19
Name: AT03-EZ
Weather: Cloudy

			EASTBOUND			WESTBOUND			NORTHBOUND			SOUTHBOUND				
Approach Control			*Signalized*			*Signalized*			*Signalized*			*Signalized*				
Movement			LT	THRU	RT	LT	THRU	RT	LT	THRU	RT	LT	THRU	RT		
Approach Lanes			1	2	<	1	2	<	>	1	1	1	1	<	TOTAL	TOTAL HOUR
7:30	to	7:45	1	149	3	2	154	0	2	0	3	0	0	0	314	
7:45	to	8:00	8	204	7	7	211	1	4	0	3	0	0	1	446	
8:00	to	8:15	5	172	4	9	173	1	4	0	6	1	0	2	377	
8:15	to	8:30	3	166	4	6	208	1	4	1	9	3	0	3	408	1,545
8:30	to	8:45	1	163	3	6	178	0	11	0	7	1	0	0	370	1,601
8:45	to	9:00	3	132	11	12	170	2	12	0	5	1	0	3	351	1,506
9:00	to	9:15	3	129	9	14	181	0	5	0	11	0	0	2	354	1,483
9:15	to	9:30	4	146	16	15	136	1	15	0	14	1	0	3	351	1,426
9:30	to	9:45	3	135	7	13	144	1	10	0	16	2	0	2	333	1,389
9:45	to	10:00	2	174	13	13	125	1	13	1	14	0	0	6	362	1,400
10:00	to	10:15	5	137	18	21	125	0	28	0	15	4	1	1	355	1,401
10:15	to	10:30	1	170	19	26	147	1	25	0	21	3	0	2	415	1,465
AM Peak Hour																
7:45	**to**	**8:45**	**17**	**705**	**18**	**28**	**770**	**3**	**23**	**1**	**25**	**5**	**0**	**6**	**1,601**	
# of trucks in peak			0	13	0	0	8	0	0	0	0	0	0	0	21	
# of heavies in peak			0	28	1	0	33	0	0	0	0	0	0	0	62	
% heavies (Total)			0%	6%	6%	0%	5%	0%	0%	0%	0%	0%	0%	0%	5%	
12:00	to	12:15	3	186	19	25	194	1	40	0	36	2	0	4	510	
12:15	to	12:30	7	198	29	26	229	0	39	2	35	3	1	8	577	
12:30	to	12:45	3	181	12	34	215	0	44	1	32	6	0	1	529	
12:45	to	13:00	12	194	15	29	209	2	47	1	34	0	0	4	547	2,163
13:00	to	13:15	5	179	19	28	218	4	49	2	31	3	4	7	549	2,202
13:15	to	13:30	3	142	21	41	219	3	38	1	26	4	1	5	504	2,129
13:30	to	13:45	16	350	25	77	463	4	59	2	60	16	4	19	1,095	2,695
13:45	to	14:00	12	363	19	67	404	5	44	3	71	18	3	25	1,034	3,182
Midday Peak Hour																
13:00	**to**	**14:00**	**36**	**1,034**	**84**	**213**	**1,304**	**16**	**190**	**8**	**188**	**41**	**12**	**56**	**3,182**	
# of trucks in peak			0	14	0	1	6	0	0	0	0	1	0	0	22	
# of heavies in peak			0	34	0	0	27	0	1	0	1	1	0	0	64	
% heavies (Total)			0%	5%	0%	0%	3%	0%	1%	0%	1%	5%	0%	0%	3%	
15:00	to	15:15	3	183	12	28	235	3	44	0	35	3	0	3	549	
15:15	to	15:30	8	197	18	26	233	5	39	0	26	4	0	6	562	
15:30	to	15:45	4	189	16	29	210	3	37	0	31	5	0	9	533	
15:45	to	16:00	5	164	34	36	186	3	50	0	32	4	0	9	523	2,167
16:00	to	16:15	7	170	20	18	252	1	44	0	20	5	0	6	543	2,161
16:15	to	16:30	3	187	12	33	282	0	42	1	33	3	0	4	600	2,199
16:30	to	16:45	3	177	29	28	271	0	55	0	33	4	2	5	607	2,273
16:45	to	17:00	7	218	24	34	232	1	50	0	35	3	0	2	606	2,356
17:00	to	17:15	8	192	21	32	251	0	50	1	31	8	0	8	602	2,415
17:15	to	17:30	5	205	28	31	233	1	36	0	36	2	1	8	586	2,401
17:30	to	17:45	2	171	24	37	218	2	46	0	39	2	1	4	546	2,340
17:45	to	18:00	3	157	22	41	228	0	56	0	37	3	1	2	550	2,284
PM Peak Hour																
16:15	**to**	**17:15**	**21**	**774**	**86**	**127**	**1,036**	**1**	**197**	**2**	**132**	**18**	**2**	**19**	**2,415**	
# of trucks in peak			0	3	0	0	2	0	0	0	0	0	1	0	6	
# of heavies in peak			0	6	0	2	24	0	0	0	2	0	0	0	34	
% heavies (Total)			0%	1%	0%	2%	3%	0%	0%	0%	2%	0%	50%	0%	2%	

Intersection: Fairway Rd & Fairway Best Mall/500/S
GeoID: 28245
Municipality: Kitchener
Major Road: Fairway Rd

Intersection Control: Signalized
Date: Thursday, 07-Nov-19
Name: AT03-EZ
Weather: Cloudy

PEDESTRIAN CROSSING								
Time			Crossing Approach					
			East App.	West App.	North App.	South App.	TOTAL	TOTAL HOUR
7:30	to	7:45	1	0	0	2	3	
7:45	to	8:00	2	0	1	0	3	
8:00	to	8:15	0	0	0	0	0	
8:15	to	8:30	0	1	3	1	5	11
8:30	to	8:45	1	1	1	0	3	11
8:45	to	9:00	1	2	3	0	6	14
9:00	to	9:15	2	3	4	1	10	24
9:15	to	9:30	0	0	2	1	3	22
9:30	to	9:45	1	1	0	1	3	22
9:45	to	10:00	1	2	1	2	6	22
10:00	to	10:15	2	4	1	0	7	19
10:15	to	10:30	3	3	5	1	12	28
AM Peak Hour							**61**	
7:45	**to**	**8:45**	**3**	**2**	**5**	**1**	**11**	
12:00	to	12:15	3	4	0	1	8	
12:15	to	12:30	1	2	0	1	4	
12:30	to	12:45	0	2	4	2	8	
12:45	to	13:00	2	4	1	1	8	28
13:00	to	13:15	2	4	1	2	9	29
13:15	to	13:30	0	5	1	1	7	32
13:30	to	13:45	0	1	1	2	4	28
13:45	to	14:00	5	2	6	1	14	34
Midday Peak Hour							**62**	
13:00	**to**	**14:00**	7	12	9	6	**34**	
15:00	to	15:15	0	4	0	0	4	
15:15	to	15:30	0	2	0	0	2	
15:30	to	15:45	3	7	0	0	10	
15:45	to	16:00	0	6	0	0	6	22
16:00	to	16:15	0	8	6	1	15	33
16:15	to	16:30	2	5	4	1	12	43
16:30	to	16:45	0	3	0	0	3	36
16:45	to	17:00	0	9	2	1	12	42
17:00	to	17:15	2	6	0	2	10	37
17:15	to	17:30	3	8	0	1	12	37
17:30	to	17:45	0	1	0	0	1	35
17:45	to	18:00	0	1	0	0	1	24
PM Peak Hour							**88**	
16:15	**to**	**17:15**	4	23	6	4	**37**	

CURRENT TRAFFIC SIGNAL TIMING

INT # **290** | **FAIRWAY ROAD @ Hwy 8 EB Ramp** | T08-50/ **44K**

Date Prepared: **January 23, 2023**

Mode of Control **Semi-Actuated**

Left Info	**Actuated**	**EB**	LT	-	**FAIRWAY ROAD**
	Actuated	**SB**	LT	-	**Hwy 8 EB Ramp**
Right Info	**Actuated**	**WB**	RTA	-	**Overlap with SBLT phase**
	Actuated	**SB**	RTA	-	**Overlap with EBLT phase and SBLT when no ped called**

*Offsets are a percentage of the cycle length and refers to the beginning of Main Street green

Max 1 6:00-22:00 Monday-Friday 7:00-22:00 Saturday, 7:00-22:00 Sunday

FAIRWAY ROAD

EBL Green Arrow	Min	8.0	seconds				
	Ext	4.0	seconds				
	Max	20.0	seconds				
EBL Amber Arrow		3.0	seconds				
All Red		2.0	seconds				
Green		40.0	seconds				
Amber		3.7	seconds	Walk	10.0	seconds	
All Red		3.1	seconds	FDW	30.0	seconds	

Hwy 8 EB Ramp

				Pedestrian Call		
Green	Min	10.0	seconds	Green/Walk	9.0	seconds
	Ext	4.0	seconds	Green/FDW	23.0	seconds
	Max	32.0	seconds	Green/SDW	FALSE	seconds
Amber		3.3	seconds	Amber	3.3	seconds
All Red		3.8	seconds	All Red	3.8	seconds
TOTAL		110.9	seconds			

Min=Minimum Time
Ext=Extension Time
Max=Maximum Time

This signal timing cannot be presented as evidence in a court of law.

Max 2 All Other Times

FAIRWAY ROAD

EBL Green Arrow	Min	8.0	seconds			
	Ext	4.0	seconds			
	Max	20.0	seconds			
EBL Amber Arrow		3.0	seconds			
All Red		2.0	seconds			
Green		40.0	seconds			
Amber		3.7	seconds	Walk	10.0	seconds
All Red		3.1	seconds	FDW	30.0	seconds

Hwy 8 EB Ramp

				Pedestrian Call		
Green	Min	10.0	seconds	Green/Walk	9.0	seconds
	Ext	4.0	seconds	Green/FDW	23.0	seconds
	Max	40.0	seconds	Green/SDW	8.0	seconds
Amber		3.3	seconds	Amber	3.3	seconds
All Red		3.8	seconds	All Red	3.8	seconds
TOTAL		118.9	seconds			

Min=Minimum Time
Ext=Extension Time
Max=Maximum Time

This signal timing cannot be presented as evidence in a court of law.

Region of Waterloo

CURRENT TRAFFIC SIGNAL TIMING

INT # 482 KING STREET-WEBER STREET @ Hwy 8 Ramp T08-50/ 92K

Date Prepared: January 23, 2023

Mode of Control Pre-timed running SEMI-ACTUATED

Left Info Actuated NB LT - KING STREET-WEBER STREET

*Offsets are a percentage of the cycle length and refers to the beginning of Main Street green

Pattern 1 7:00-10:00 Monday to Friday

KING STREET-WEBER STREET OFFSET 3%

NBL	Green Arrow	Min	5.0	seconds				
		Ext	5.0	seconds				
		Max	25.7	seconds				
NBL	Amber Arrow		3.0	seconds				
All Red			1.0	seconds				
Green			28.2	seconds				
Amber			4.0	seconds	Walk	17.2	seconds	
All Red			2.0	seconds	FDW	11.0	seconds	

Hwy 8 Ramp

Green	Min	10.0	seconds	Green/Walk	7.0	seconds	
	Ext	3.0	seconds	Green/FDW	13.0	seconds	
	Max	20.1	seconds	Green/SDW	0.1	seconds	
Amber		4.0	seconds	Amber	4.0	seconds	
All Red		2.0	seconds	All Red	2.0	seconds	
TOTAL		90.0	seconds				

Pattern 2 10:00-14:00 Monday to Friday

KING STREET-WEBER STREET OFFSET 6%

NBL	Green Arrow	Min	5.0	seconds				
		Ext	5.0	seconds				
		Max	21.6	seconds				
NBL	Amber Arrow		3.0	seconds				
All Red			1.0	seconds				
Green			22.0	seconds				
Amber			4.0	seconds	Walk	11.0	seconds	
All Red			2.0	seconds	FDW	11.0	seconds	

Hwy 8 Ramp

Green	Min	10.0	seconds	Green/Walk	7.0	seconds	
	Ext	3.0	seconds	Green/FDW	13.0	seconds	
	Max	20.4	seconds	Green/SDW	0.4	seconds	
Amber		4.0	seconds	Amber	4.0	seconds	
All Red		2.0	seconds	All Red	2.0	seconds	
TOTAL		80.0	seconds				

Min=Minimum Time
Ext=Extension Time
Max=Maximum Time

This signal timing cannot be presented as evidence in a court of law.

Pattern 3 14:00-22:00 M-F, 8:30-22:00 Sat, 11:00-19:00 Sun

KING STREET-WEBER STREET OFFSET 53%

NBL	Green Arrow	Min	5.0	seconds				
		Ext	5.0	seconds				
		Max	32.0	seconds				
NBL	Amber Arrow		3.0	seconds				
All Red			1.0	seconds				
Green			32.0	seconds				
Amber			4.0	seconds	Walk	21.0	seconds	
All Red			2.0	seconds	FDW	11.0	seconds	

Hwy 8 Ramp

Green	Min	10.0	seconds	Pedestrian Call			
	Ext	3.0	seconds	Green/Walk	7.0	seconds	
	Max	20.0	seconds	Green/FDW	13.0	seconds	
Amber		4.0	seconds	Green/SDW	0.0	seconds	
All Red		2.0	seconds	Amber	4.0	seconds	
TOTAL		100.0	seconds	All Red	2.0	seconds	

Max 2 All Other Times

KING STREET-WEBER STREET

Green		30.0	seconds				
Amber		4.0	seconds	Walk	19.0	seconds	
All Red		2.0	seconds	FDW	11.0	seconds	

Hwy 8 Ramp

Green	Min	10.0	seconds	Pedestrian Call			
	Ext	3.0	seconds	Green/Walk	7.0	seconds	
	Max	20.0	seconds	Green/FDW	13.0	seconds	
Amber		4.0	seconds	Green/SDW	0.0	seconds	
All Red		2.0	seconds	Amber	4.0	seconds	
TOTAL		62.0	seconds	All Red	2.0	seconds	

Min=Minimum Time
Ext=Extension Time
Max=Maximum Time

This signal timing cannot be presented as evidence in a court of law.

Region of Waterloo

CURRENT TRAFFIC SIGNAL TIMING

INT # **331** | **KING STREET @ River Road** | T08-50/ **176K**

Date Prepared: **January 27, 2023**

Mode of Control **Fixed Time**

Left Info

Actuated	**SB** LT	-	**KING STREET**
Non-actuated	**WB** LT	-	**River Road** **(used as part of track clearance squence only)**

*Offsets are a percentage of the cycle length and refers to the beginning of Main Street green

Max 1 14:00 - 20:00 Monday to Friday

KING STREET

SBL Green Arrow	Min	5.0	seconds			
	Ext	3.0	seconds			
	Max	7.0	seconds			
SBL Amber Arrow		3.0	seconds			
All Red		1.0	seconds			
Green		51.0	seconds			
Amber		4.0	seconds	Walk	35.0	seconds
All Red		2.0	seconds	FDW	16.0	seconds

River Road

Green		26.0	seconds			
Amber		4.0	seconds	Walk	15.0	seconds
All Red		2.0	seconds	FDW	11.0	seconds
TOTAL		100.0	seconds			

Max 2 0600-1400 Monday to Friday, 0830-2000 Saturday, 1100-1800 Sunday

KING STREET

SBL Green Arrow	Min	5.0	seconds			
	Ext	3.0	seconds			
	Max	7.0	seconds			
SBL Amber Arrow		3.0	seconds			
All Red		1.0	seconds			
Green		51.0	seconds			
Amber		4.0	seconds	Walk	35.0	seconds
All Red		2.0	seconds	FDW	16.0	seconds

River Road

Green		26.0	seconds			
Amber		4.0	seconds	Walk	15.0	seconds
All Red		2.0	seconds	FDW	11.0	seconds
TOTAL		100.0	seconds			

Min=Minimum Time
Ext=Extension Time
Max=Maximum Time

This signal timing cannot be presented as evidence in a court of law.

Max 3 All Other times

KING STREET

SBL Green Arrow	Min	5.0	seconds			
	Ext	3.0	seconds			
	Max	7.0	seconds			
SBL Amber Arrow		3.0	seconds			
All Red		1.0	seconds			
Green		51.0	seconds			
Amber		4.0	seconds	Walk	35.0	seconds
All Red		2.0	seconds	FDW	16.0	seconds

River Road

Green		26.0	seconds			
Amber		4.0	seconds	Walk	15.0	seconds
All Red		2.0	seconds	FDW	11.0	seconds
TOTAL		100.0	seconds			

Min=Minimum Time
Ext=Extension Time
Max=Maximum Time

This signal timing cannot be presented as evidence in a court of law.

Region of Waterloo

CURRENT TRAFFIC SIGNAL TIMING

INT # 381 | FAIRWAY ROAD @ Wilson Avenue | T08-50/ 48K

Date Prepared: January 27, 2023

Mode of Control: Pre-timed running SEMI-ACTUATED

Left Info

Actuated	EB	LT	-	FAIRWAY ROAD
Actuated	WB	LT	-	FAIRWAY ROAD
Actuated	NB	LT	-	WILSON AVENUE
Actuated	SB	LT	-	WILSON AVENUE

Right Info: NB RT Arrow overlaps with WB LT

*Offsets are a percentage of the cycle length and refers to the beginning of Main Street green

Pattern 1 06-9:30M-F, 07:00-09:00 Sat, 07-10 Sun

FAIRWAY ROAD

									OFFSET		25%
EBL	Green Arrow	in	5.0	seconds	WBL	Green Arrow			Min	5.0	seconds
		xt	4.0	seconds					Ext	4.0	seconds
		ax	11.0	seconds					Max	12.0	seconds
EBL	Amber		3.0	seconds	WBL	Amber Arrow				3.0	seconds
All Red			1.0	seconds	All Red					1.0	seconds
Green			39.0	seconds							
Amber			4.0	seconds	Walk		22.0	seconds			
All Red			2.0	seconds	FDW		17.0	seconds			

Wilson Avenue

				Pedestrian Call			
Green	in	8.0	seconds	Green/Walk	7.0	seconds	
	xt	3.0	seconds	Green/FDW	25.0	seconds	
	ax	33.0	seconds	Green/SDW	1.0	seconds	
Amber		4.0	seconds	Amber	4.0	seconds	
All Red		2.0	seconds	All Red	2.0	seconds	
TOTAL		100.0	seconds				

Min=Minimum Time
Ext=Extension Time
Max=Maximum Time

This signal timing cannot be presented as evidence in a court of law.

Pattern 2 9:30-22:00 M-F,09:00-22:00 Sa, 10:00-20:00 Su

FAIRWAY ROAD									OFFSET		26%
EBL	Green Arrow	in	5.0	seconds	WBL	Green Arrow			Min	5.0	seconds
		xt	4.0	seconds					Ext	4.0	seconds
		ax	20.0	seconds					Max	23.6	seconds
EBL	Amber		3.0	seconds	WBL	Amber Arrow				3.0	seconds
All Red			1.0	seconds	All Red					1.0	seconds
Green			36.0	seconds							
Amber			4.0	seconds	Walk	19.0	seconds				
All Red			2.0	seconds	FDW	17.0	seconds				

Wilson Avenue										
SBL	Green Arrow	in	5.0	seconds	NBL	Green Arrow		Min	5.0	seconds
		xt	3.0	seconds				Ext	3.0	seconds
		ax	8.0	seconds				Max	8.0	seconds
SBL	Amber		3.0	seconds	NBL	Amber Arrow			3.0	seconds
All Red			1.0	seconds	All Red				1.0	seconds
					Pedestrian Call					
Green		in	8.0	seconds	Green/Walk	7.0	seconds			
		xt	3.0	seconds	Green/FDW	25.0	seconds			
		ax	32.4	seconds	Green/SDW	0.4	seconds			
Amber			4.0	seconds	Amber	4.0	seconds			
All Red			2.0	seconds	All Red	2.0	seconds			
TOTAL			120.0	seconds						

Max 2 All Other Times

FAIRWAY ROAD							
Green			35.0	seconds			
Amber			4.0	seconds	Walk	18.0	seconds
All Red			2.0	seconds	FDW	17.0	seconds

Wilson Avenue							
					Pedestrian Call		
Green		in	8.0	seconds	Green/Walk	7.0	seconds
		xt	3.0	seconds	Green/FDW	25.0	seconds
		ax	20.0	seconds	Green/SDW	0.0	seconds
Amber			4.0	seconds	Amber	4.0	seconds
All Red			2.0	seconds	All Red	2.0	seconds
TOTAL			67.0	seconds			

Min=Minimum Time
Ext=Extension Time
Max=Maximum Time

This signal timing cannot be presented as evidence in a court of law.

Region of Waterloo

CURRENT TRAFFIC SIGNAL TIMING

INT # 485 | FAIRWAY ROAD @ King Street | T08-50/ 485

Date Prepared: January 27, 2023

Mode of Control: Pre-timed running FIXED TIME

Left Info					
Actuated	WB	LT	-	FAIRWAY ROAD
Actuated	EB	LT	-	FAIRWAY ROAD
Actuated	SB	LT	-	KING STREET

Right Info: SB RT Arrow overlaps with EB LT

*Offsets are a percentage of the cycle length and refers to the beginning of Main Street green

Pattern 1 06:00 - 10:00 Monday to Friday

FAIRWAY ROAD OFFSET 0%

EBL	Green Arrow	Min	10.0	seconds	WBL	Green Arrow			Min	5.0	seconds
		Ext	3.0	seconds					Ext	3.0	seconds
		Max	16.0	seconds					Max	5.9	seconds
EBL	Amber Arrow		4.0	seconds	WBL	Amber Arrow				3.0	seconds
All Red			2.0	seconds	All Red					1.0	seconds
Green			30.3	seconds							
Amber			4.0	seconds	Walk		9.3	seconds			
All Red			2.0	seconds	FDW		21.0	seconds			

King Street

					NBL	Green Arrow			Min	5.0	seconds
									Ext	3.0	seconds
									Max	11.6	seconds
					NBL	Amber Arrow				4.0	seconds
					All Red					2.0	seconds
Green			28.1	seconds							
Amber			4.0	seconds	Walk		8.1	seconds			
All Red			2.0	seconds	FDW		20.0	seconds			
TOTAL			110.0	seconds							

Min=Minimum Time
Ext=Extension Time
Max=Maximum Time

This signal timing cannot be presented as evidence in a court of law.

Pattern 2 10:00-15:00 M-F, 09:00-22:00 Sa, 10:00-19:00 Su

FAIRWAY ROAD									OFFSET	0%
EBL	Green Arrow	Min	10.0	seconds	WBL	Green Arrow			Min 5.0	seconds
		Ext	3.0	seconds					Ext 3.0	seconds
		Max	17.1	seconds					Max 7.0	seconds
EBL	Amber Arrow		4.0	seconds	WBL	Amber Arrow			3.0	seconds
All Red			2.0	seconds	All Red				1.0	seconds
Green			30.3	seconds						
Amber			4.0	seconds	Walk	9.3	seconds			
All Red			2.0	seconds	FDW	21.0	seconds			

King Street

					NBL	Green Arrow			Min 5.0	seconds
									Ext 3.0	seconds
									Max 10.5	seconds
					NBL	Amber Arrow			4.0	seconds
					All Red				2.0	seconds
Green			28.1	seconds						
Amber			4.0	seconds	Walk	8.1	seconds			
All Red			2.0	seconds	FDW	20.0	seconds			
TOTAL			110.0	seconds						

Pattern 3 15:00-22:00 Monday to Friday

FAIRWAY ROAD									OFFSET	0%
EBL	Green Arrow	Min	10.0	seconds	WBL	Green Arrow			Min 5.0	seconds
		Ext	3.0	seconds					Ext 3.0	seconds
		Max	26.5	seconds					Max 6.4	seconds
EBL	Amber Arrow		4.0	seconds	WBL	Amber Arrow			3.0	seconds
All Red			2.0	seconds	All Red				1.0	seconds
Green			33.0	seconds						
Amber			4.0	seconds	Walk	12.0	seconds			
All Red			2.0	seconds	FDW	21.0	seconds			

King Street

					NBL	Green Arrow			Min 5.0	seconds
									Ext 3.0	seconds
									Max 18.7	seconds
					NBL	Amber Arrow			4.0	seconds
					All Red				2.0	seconds
Green			27.8	seconds						
Amber			4.0	seconds	Walk	7.8	seconds			
All Red			2.0	seconds	FDW	20.0	seconds			
TOTAL			130.0	seconds						

Min=Minimum Time
Ext=Extension Time
Max=Maximum Time

This signal timing cannot be presented as evidence in a court of law.

Pattern 4 All other Times

FAIRWAY ROAD OFFSET 0%

EBL	Green Arrow	Min	10.0	seconds						
		Ext	3.0	seconds						
		Max	10.0	seconds						
EBL	Amber Arrow		4.0	seconds						
All Red			2.0	seconds						
Green			28.0	seconds						
Amber			4.0	seconds	Walk		7.0	seconds		
All Red			2.0	seconds	FDW		21.0	seconds		

King Street

					NBL	Green Arrow			Min	5.0 seconds
									Ext	3.0 seconds
									Max	10.0 seconds
					NBL	Amber Arrow				4.0 seconds
					All Red					2.0 seconds
Green			28.0	seconds						
Amber			4.0	seconds	Walk		8.0	seconds		
All Red			2.0	seconds	FDW		20.0	seconds		
TOTAL			100.0	seconds						

Min=Minimum Time
Ext=Extension Time
Max=Maximum Time

This signal timing cannot be presented as evidence in a court of law.

Region of Waterloo

CURRENT TRAFFIC SIGNAL TIMING

INT # 291 | FAIRWAY ROAD @ Fairview Park Mall/Cineplex Entrance | T08-50/ 47K

Date Prepared: June 7, 2023

Mode of Control: Pre-timed running SEMI-ACTUATED

Left Info					
Actuated	EB	LT	-	FAIRWAY ROAD	
Actuated	WB	LT	-	FAIRWAY ROAD	
Actuated	SB	LT	-	FAIRVIEW PARK MALL/CINEPLEX ENTRANCE	

*Offsets are a percentage of the cycle length and refers to the beginning of Main Street green

Pattern 1 06:00-9:30 Mon-Fri, 07:00-09:00 Sat, 07:00-10:00 Sun

FAIRWAY ROAD

									OFFSET	26%
EBL	Green Arrow	Min	5.0	seconds	WBL	Green Arrow		Min	5.0	seconds
		Ext	3.0	seconds				Ext	3.0	seconds
		Max	6.0	seconds				Max	6.0	seconds
EBL	Amber Arrow		3.0	seconds	WBL	Amber Arrow			3.0	seconds
All Red			1.0	seconds	All Red				1.0	seconds
Green			43.0	seconds						
Amber			4.0	seconds	Walk	22.0	seconds			
All Red			2.0	seconds	FDW	21.0	seconds			

Fairview Park Mall/Cineplex Entrance

SBL	Green Arrow	Min	5.0	seconds			
		Ext	3.0	seconds			
		Max	11.0	seconds			
SBL	Amber Arrow		4.0	seconds			
All Red			2.0	seconds			
					Pedestrian Call		
Green		Min	8.0	seconds	Green/Walk	12.0	seconds
		Ext	3.0	seconds	Green/FDW	15.0	seconds
		Max	18.0	seconds	Green/SDW	0.0	seconds
Amber			4.0	seconds	Amber	4.0	seconds
All Red			2.0	seconds	All Red	2.0	seconds
TOTAL			100.0	seconds			

Min=Minimum Time
Ext=Extension Time
Max=Maximum Time

This signal timing cannot be presented as evidence in a court of law.

Pattern 2 09:30-22:00 Mon-Fri,09:00-22:00 Sat, 10:00-20:00 Sun

FAIRWAY ROAD									OFFSET	23%
EBL	Green Arrow	Min	5.0	seconds	WBL	Green Arrow			Min 5.0	seconds
		Ext	3.0	seconds					Ext 3.0	seconds
		Max	12.8	seconds					Max 12.8	seconds
EBL	Amber Arrow		3.0	seconds	WBL	Amber Arrow			3.0	seconds
All Red			1.0	seconds	All Red				1.0	seconds
Green			52.8	seconds						
Amber			4.0	seconds	Walk		31.8	seconds		
All Red			2.0	seconds	FDW		21.0	seconds		

Fairview Park Mall/Cineplex Entrance

SBL	Green Arrow	Min	5.0	seconds				
		Ext	3.0	seconds				
		Max	16.8	seconds				
SBL	Amber Arrow		4.0	seconds				
All Red			2.0	seconds				
					Pedestrian Call			
Green		Min	8.0	seconds	Green/Walk	12.0	seconds	
		Ext	3.0	seconds	Green/FDW	15.0	seconds	
		Max	15.6	seconds	Green/SDW	0.0	seconds	
Amber			4.0	seconds	Amber	4.0	seconds	
All Red			2.0	seconds	All Red	2.0	seconds	
TOTAL			120.0	seconds				

MAX 2 All Other Times

FAIRWAY ROAD							
Green			35.0	seconds			
Amber			4.0	seconds	Walk	14.0	seconds
All Red			2.0	seconds	FDW	21.0	seconds

Fairview Park Mall/Cineplex Entrance

SBL	Green Arrow	Min	5.0	seconds				
		Ext	3.0	seconds				
		Max	12.0	seconds				
SBL	Amber Arrow		4.0	seconds				
All Red			2.0	seconds				
					Pedestrian Call			
Green		Min	8.0	seconds	Green/Walk	12.0	seconds	
		Ext	3.0	seconds	Green/FDW	15.0	seconds	
		Max	20.0	seconds	Green/SDW	0.0	seconds	
Amber			4.0	seconds	Amber	4.0	seconds	
All Red			2.0	seconds	All Red	2.0	seconds	

Min=Minimum Time
Ext=Extension Time
Max=Maximum Time

This signal timing cannot be presented as evidence in a court of law.

APPENDIX H – COLLECTED TRAFFIC DATA

Horizon Data Services Ltd

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"Your Traffic Count Specialist"

File Name : Fairway Road South at Wabanaki Drive
Site Code : 00000000
Start Date : 02/16/2023
Page No : 1

Groups Printed- Cars - Trucks - Heavys - Cyclists

	Fairway Rd S From North					Wabanaki Dr From East					Fairway Rd S From South					From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	0	146	0	1	147	54	0	0	0	54	5	135	0	0	140	0	0	0	0	0	341
07:15 AM	0	215	0	0	215	71	0	0	0	71	14	140	0	0	154	0	0	0	0	0	440
07:30 AM	0	208	0	0	208	98	0	0	1	99	17	169	0	0	186	0	0	0	0	0	493
07:45 AM	0	313	0	0	313	87	0	0	1	88	35	164	0	0	199	0	0	0	0	0	600
Total	0	882	0	1	883	310	0	0	2	312	71	608	0	0	679	0	0	0	0	0	1874
08:00 AM	0	261	0	0	261	80	0	0	0	80	14	178	0	0	192	0	0	0	0	0	533
08:15 AM	0	242	0	0	242	72	0	0	0	72	14	175	0	0	189	0	0	0	0	0	503
08:30 AM	0	270	0	0	270	98	0	0	0	98	10	183	0	0	193	0	0	0	0	0	561
08:45 AM	0	236	0	0	236	83	0	0	0	83	10	151	0	0	161	0	0	0	0	0	480
Total	0	1009	0	0	1009	333	0	0	0	333	48	687	0	0	735	0	0	0	0	0	2077
09:00 AM	0	208	0	0	208	63	0	0	0	63	12	153	0	0	165	0	0	0	0	0	436
09:15 AM	0	247	0	2	249	41	0	0	2	43	4	123	0	0	127	0	0	0	0	0	419
09:30 AM	0	220	0	0	220	64	0	0	0	64	5	145	0	0	150	0	0	0	0	0	434
09:45 AM	0	225	0	0	225	59	0	0	0	59	4	147	0	0	151	0	0	0	0	0	435
Total	0	900	0	2	902	227	0	0	2	229	25	568	0	0	593	0	0	0	0	0	1724
03:00 PM	0	325	0	0	325	81	0	0	0	81	11	305	0	0	316	0	0	0	0	0	722
03:15 PM	0	333	0	0	333	63	0	0	0	63	12	271	0	0	283	0	0	0	0	0	679
03:30 PM	0	358	0	0	358	77	0	0	0	77	11	276	0	0	287	0	0	0	0	0	722
03:45 PM	0	379	0	0	379	74	0	0	2	76	17	285	0	0	302	0	0	0	0	0	757
Total	0	1395	0	0	1395	295	0	0	2	297	51	1137	0	0	1188	0	0	0	0	0	2880
04:00 PM	0	378	0	0	378	84	0	0	1	85	14	293	0	0	307	0	0	0	0	0	770
04:15 PM	0	372	0	0	372	92	0	0	0	92	8	347	0	3	358	0	0	0	0	0	822
04:30 PM	0	368	0	0	368	93	0	0	0	93	9	307	0	0	316	0	0	0	0	0	777
04:45 PM	0	387	0	0	387	78	0	0	0	78	18	325	0	0	343	0	0	0	0	0	808
Total	0	1505	0	0	1505	347	0	0	1	348	49	1272	0	3	1324	0	0	0	0	0	3177
05:00 PM	0	377	0	0	377	95	0	0	2	97	13	349	0	0	362	0	0	0	0	0	836
05:15 PM	0	371	0	0	371	78	0	0	0	78	12	298	0	0	310	0	0	0	0	0	759
05:30 PM	0	377	0	0	377	79	0	0	0	79	6	244	0	0	250	0	0	0	0	0	706
05:45 PM	0	372	0	0	372	62	0	0	0	62	8	240	0	0	248	0	0	0	0	0	682
Total	0	1497	0	0	1497	314	0	0	2	316	39	1131	0	0	1170	0	0	0	0	0	2983

Horizon Data Services Ltd

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"Your Traffic Count Specialist"

File Name : Fairway Road South at Wabanaki Drive
Site Code : 00000000
Start Date : 02/16/2023
Page No : 2

Groups Printed- Cars - Trucks - Heavys - Cyclists

	Fairway Rd S From North					Wabanaki Dr From East					Fairway Rd S From South					From West					
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Grand Total	0	7188	0	3	7191	1826	0	0	9	1835	283	5403	0	3	5689	0	0	0	0	0	14715
Apprch %	0	100	0	0		99.5	0	0	0.5		5	95	0	0.1		0	0	0	0		
Total %	0	48.8	0	0	48.9	12.4	0	0	0.1	12.5	1.9	36.7	0	0	38.7	0	0	0	0	0	
Cars	0	6732	0	3	6735	1699	0	0	9	1708	257	5067	0	3	5327	0	0	0	0	0	13770
% Cars	0	93.7	0	100	93.7	93	0	0	100	93.1	90.8	93.8	0	100	93.6	0	0	0	0	0	93.6
Trucks	0	123	0	0	123	52	0	0	0	52	2	82	0	0	84	0	0	0	0	0	259
% Trucks	0	1.7	0	0	1.7	2.8	0	0	0	2.8	0.7	1.5	0	0	1.5	0	0	0	0	0	1.8
Heavys	0	333	0	0	333	75	0	0	0	75	24	254	0	0	278	0	0	0	0	0	686
% Heavys	0	4.6	0	0	4.6	4.1	0	0	0	4.1	8.5	4.7	0	0	4.9	0	0	0	0	0	4.7
Cyclists	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Cyclists	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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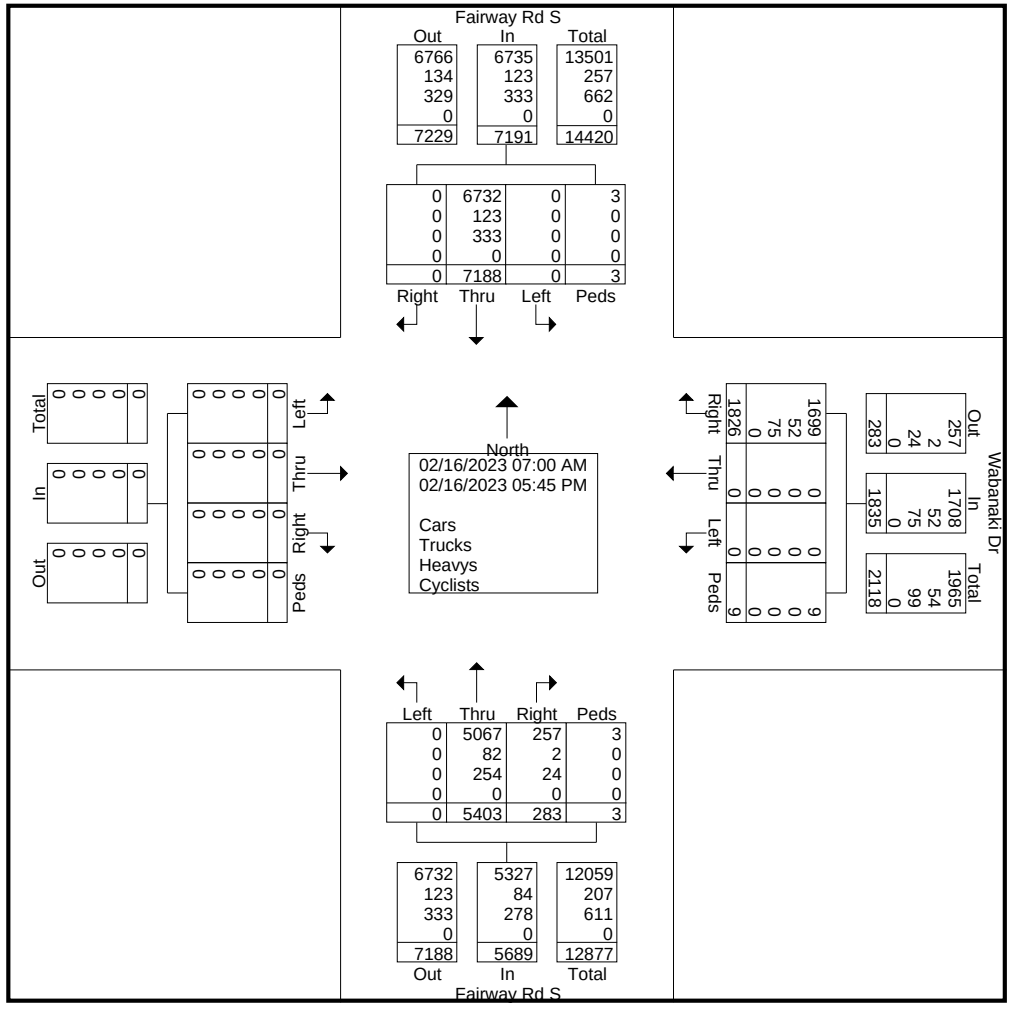
File Name : Fairway Road South at Wabanaki Drive
Site Code : 00000000
Start Date : 02/16/2023
Page No : 3



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"Your Traffic Count Specialist"

File Name : Fairway Road South at Wabanaki Drive
Site Code : 00000000
Start Date : 02/16/2023

	Fairway Rd S From North					Wabanaki Dr From East					Fairway Rd S From South					From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	0	**313**	0	0	**313**	87	0	0	**1**	88	**35**	164	0	0	**199**	0	0	0	0	0	**600**
08:00 AM	0	261	0	0	261	80	0	0	0	80	14	178	0	0	192	0	0	0	0	0	533
08:15 AM	0	242	0	0	242	72	0	0	0	72	14	175	0	0	189	0	0	0	0	0	503
08:30 AM	0	270	0	0	270	**98**	0	0	0	**98**	10	**183**	0	0	193	0	0	0	0	0	561
Total Volume	0	1086	0	0	1086	337	0	0	1	338	73	700	0	0	773	0	0	0	0	0	2197
% App. Total	0	100	0	0		99.7	0	0	0.3		9.4	90.6	0	0		0	0	0	0		
PHF	.000	.867	.000	.000	.867	.860	.000	.000	.250	.862	.521	.956	.000	.000	.971	.000	.000	.000	.000	.000	.915
Cars	0	986	0	0	986	311	0	0	1	312	69	625	0	0	694	0	0	0	0	0	1992
% Cars	0	90.8	0	0	90.8	92.3	0	0	100	92.3	94.5	89.3	0	0	89.8	0	0	0	0	0	90.7
Trucks	0	32	0	0	32	12	0	0	0	12	0	20	0	0	20	0	0	0	0	0	64
% Trucks	0	2.9	0	0	2.9	3.6	0	0	0	3.6	0	2.9	0	0	2.6	0	0	0	0	0	2.9
Heavys	0	68	0	0	68	14	0	0	0	14	4	55	0	0	59	0	0	0	0	0	141
% Heavys	0	6.3	0	0	6.3	4.2	0	0	0	4.1	5.5	7.9	0	0	7.6	0	0	0	0	0	6.4
Cyclists	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Cyclists	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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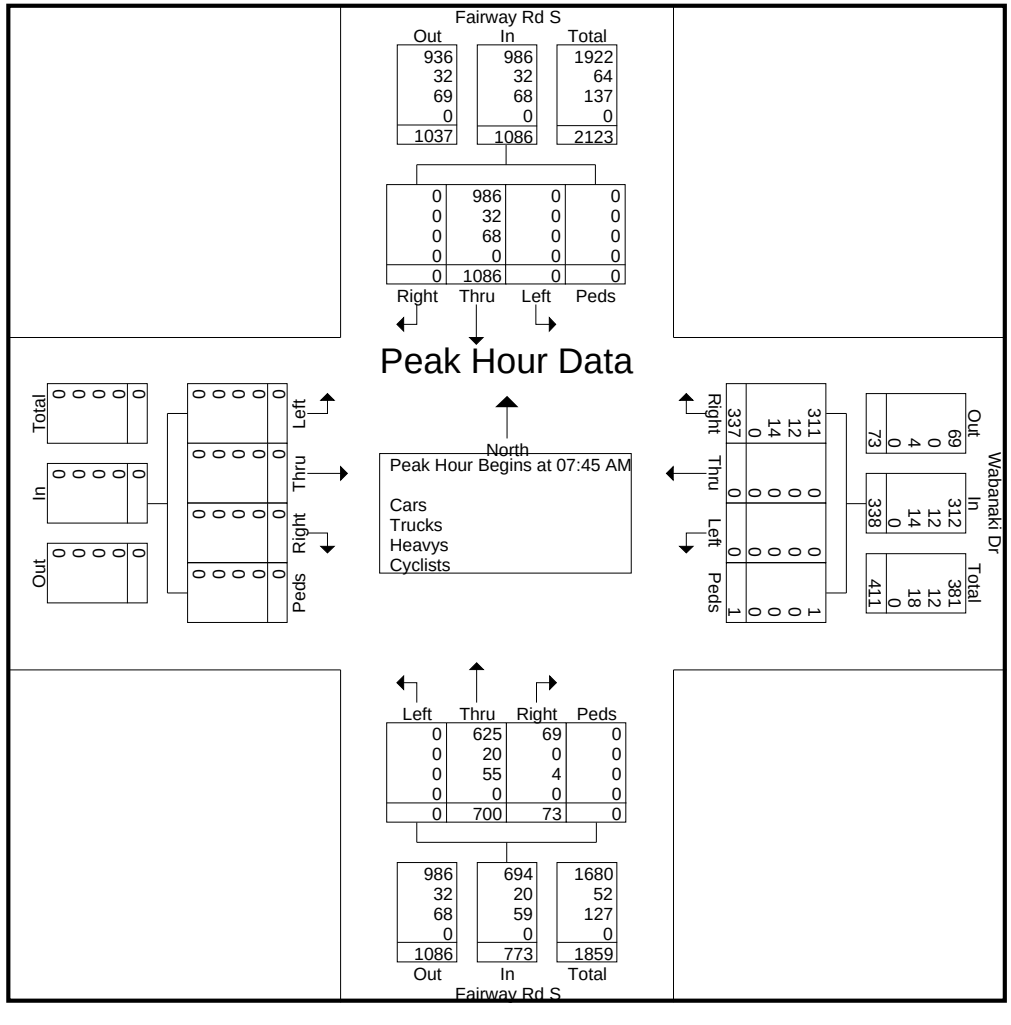
File Name : Fairway Road South at Wabanaki Drive
Site Code : 00000000
Start Date : 02/16/2023
Page No : 5



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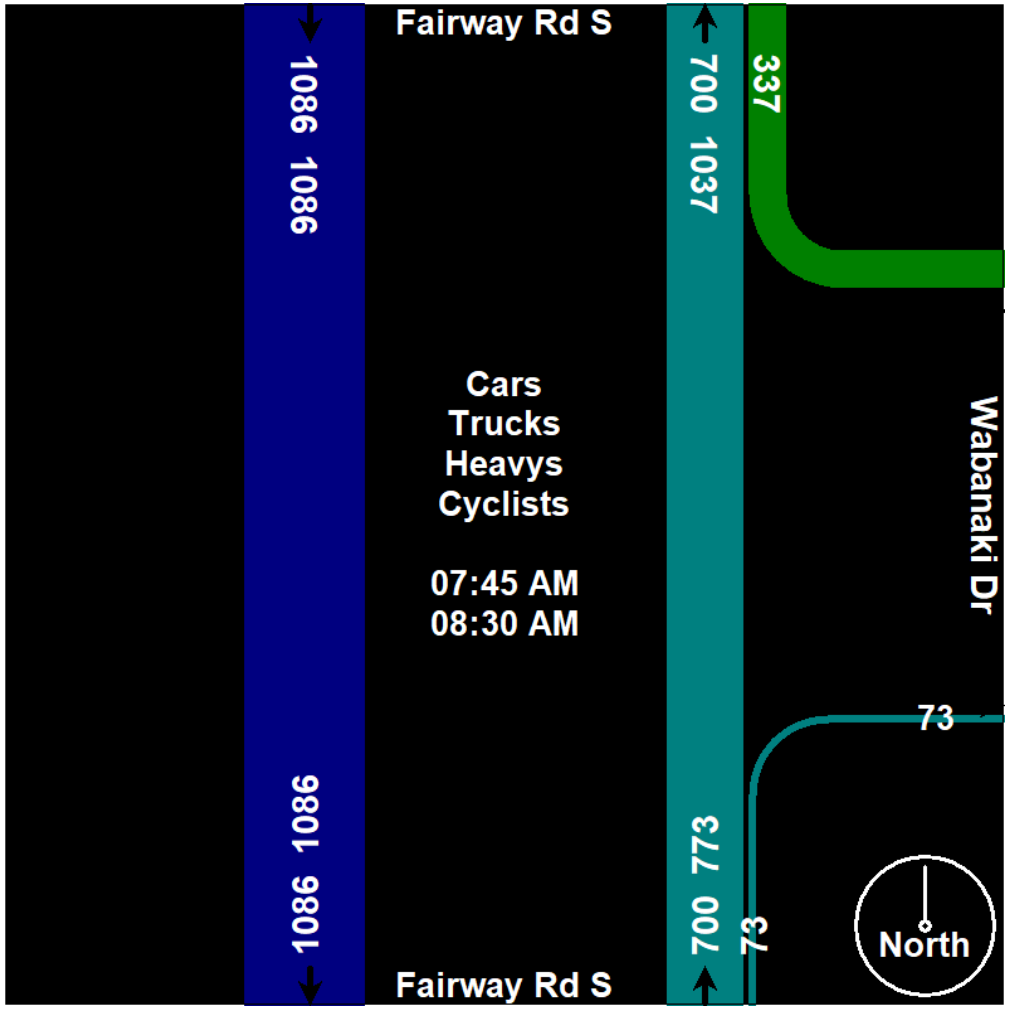
File Name : Fairway Road South at Wabanaki Drive
Site Code : 00000000
Start Date : 02/16/2023
Page No : 6



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File Name : Fairway Road South at Wabanaki Drive
Site Code : 00000000
Start Date : 02/16/2023
Page No : 7

	Fairway Rd S From North					Wabanaki Dr From East					Fairway Rd S From South					From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:15 PM																					
04:15 PM	0	372	0	0	372	92	0	0	0	92	8	347	0	**3**	358	0	0	0	0	0	822
04:30 PM	0	368	0	0	368	93	0	0	0	93	9	307	0	0	316	0	0	0	0	0	777
04:45 PM	0	**387**	0	0	**387**	78	0	0	0	78	**18**	325	0	0	343	0	0	0	0	0	808
05:00 PM	0	377	0	0	377	**95**	0	0	**2**	**97**	13	**349**	0	0	**362**	0	0	0	0	0	**836**
Total Volume	0	1504	0	0	1504	358	0	0	2	360	48	1328	0	3	1379	0	0	0	0	0	3243
% App. Total	0	100	0	0		99.4	0	0	0.6		3.5	96.3	0	0.2		0	0	0	0		
PHF	.000	.972	.000	.000	.972	.942	.000	.000	.250	.928	.667	.951	.000	.250	.952	.000	.000	.000	.000	.000	.970
Cars	0	1423	0	0	1423	348	0	0	2	350	44	1276	0	3	1323	0	0	0	0	0	3096
% Cars	0	94.6	0	0	94.6	97.2	0	0	100	97.2	91.7	96.1	0	100	95.9	0	0	0	0	0	95.5
Trucks	0	28	0	0	28	5	0	0	0	5	0	11	0	0	11	0	0	0	0	0	44
% Trucks	0	1.9	0	0	1.9	1.4	0	0	0	1.4	0	0.8	0	0	0.8	0	0	0	0	0	1.4
Heavys	0	53	0	0	53	5	0	0	0	5	4	41	0	0	45	0	0	0	0	0	103
% Heavys	0	3.5	0	0	3.5	1.4	0	0	0	1.4	8.3	3.1	0	0	3.3	0	0	0	0	0	3.2
Cyclists	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Cyclists	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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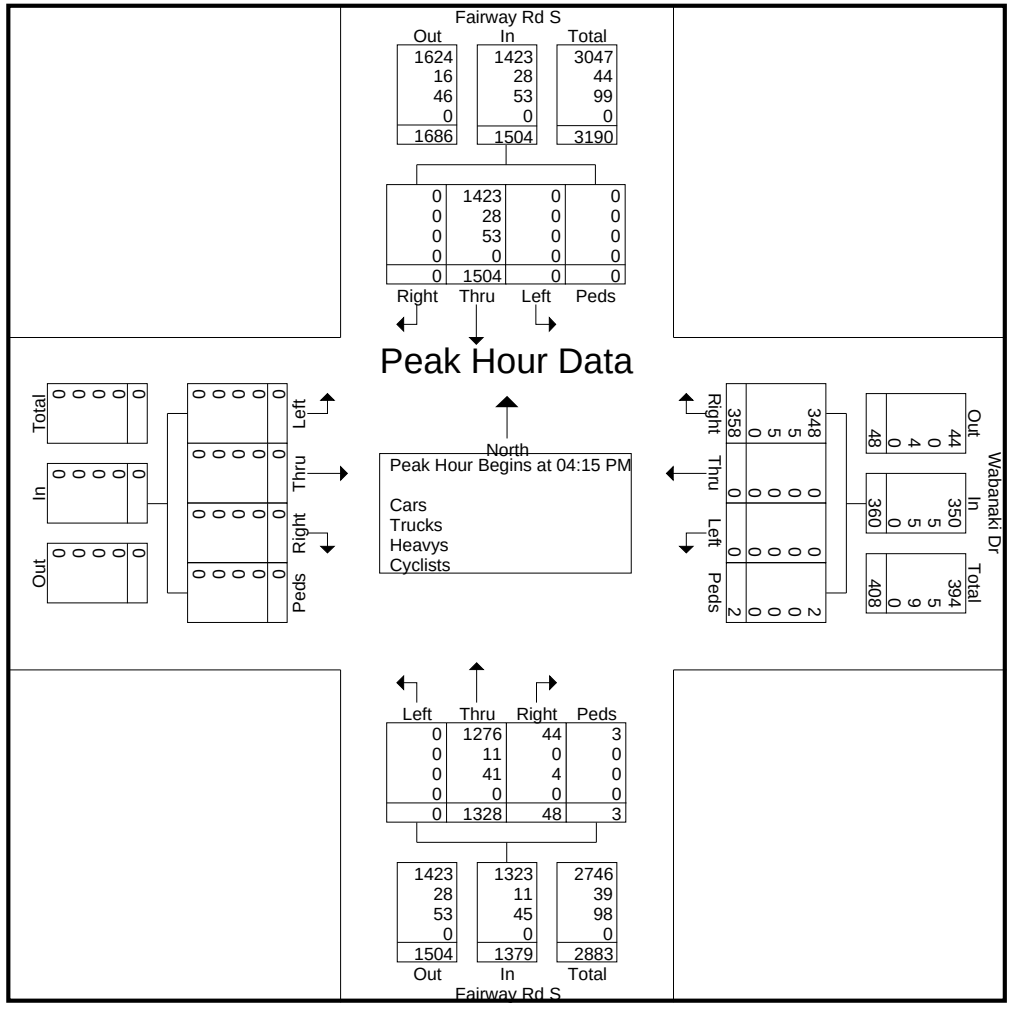
File Name : Fairway Road South at Wabanaki Drive
Site Code : 00000000
Start Date : 02/16/2023



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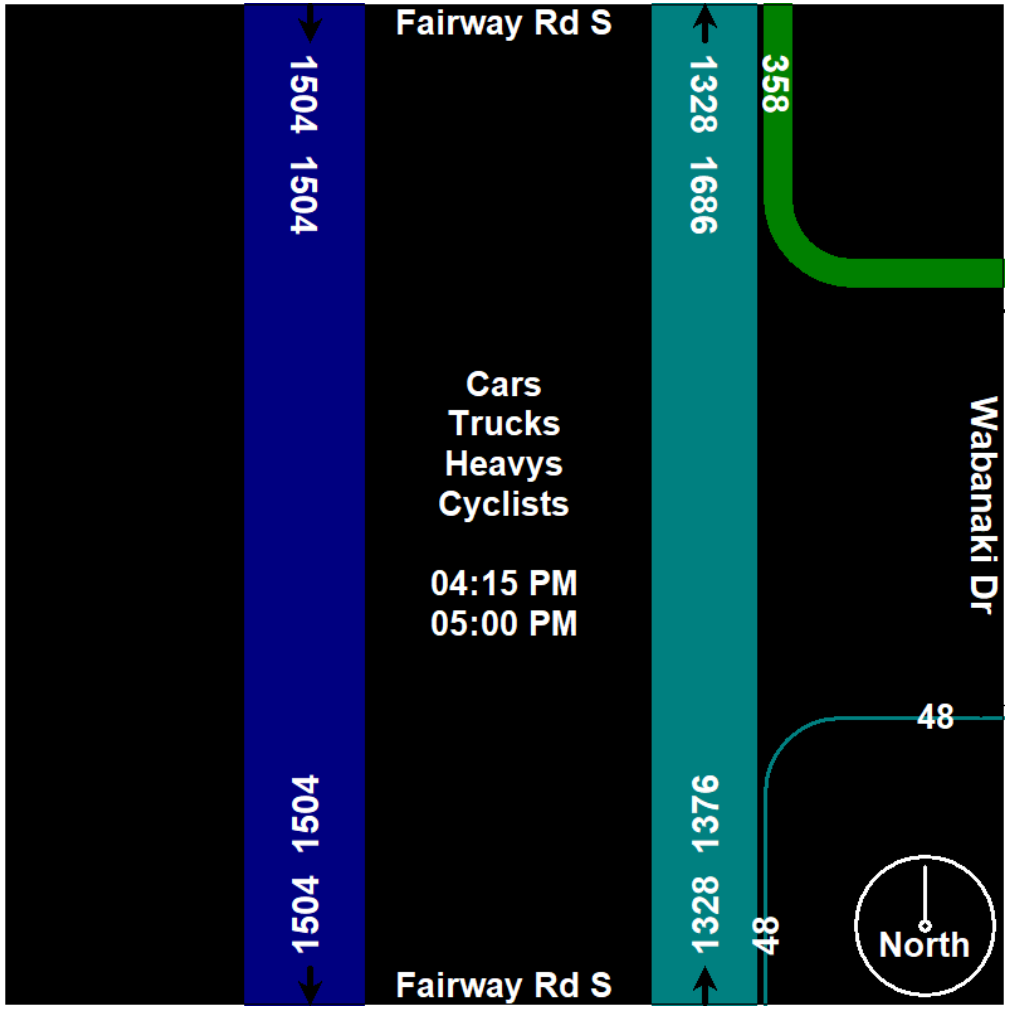
File Name : Fairway Road South at Wabanaki Drive
Site Code : 00000000
Start Date : 02/16/2023
Page No : 9



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"Your Traffic Count Specialist"

File Name : Goodrich Drive at Wabanaki Drive
Site Code : 00000000
Start Date : 02/16/2023
Page No : 1

Groups Printed- Cars - Trucks - Heavys - Cyclists

	Wabanaki Dr From North					Hidden Valley Rd From East					Wabanaki Dr From South					Goodrich Dr From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	2	6	2	1	11	3	0	1	0	4	1	43	5	0	49	4	0	9	1	14	78
07:15 AM	5	5	3	0	13	9	1	3	0	13	1	54	2	0	57	5	3	9	0	17	100
07:30 AM	6	10	2	2	20	6	0	2	1	9	4	83	8	0	95	1	1	5	2	9	133
07:45 AM	17	19	3	3	42	15	5	5	0	25	2	68	4	1	75	4	3	8	3	18	160
Total	30	40	10	6	86	33	6	11	1	51	8	248	19	1	276	14	7	31	6	58	471
08:00 AM	3	11	4	3	21	6	4	2	1	13	0	74	3	0	77	4	2	4	3	13	124
08:15 AM	6	6	4	2	18	3	1	3	1	8	5	60	4	0	69	3	2	7	2	14	109
08:30 AM	2	6	5	0	13	12	5	4	0	21	3	78	8	0	89	5	2	7	0	14	137
08:45 AM	4	8	4	0	16	6	4	6	0	16	2	69	2	0	73	9	4	8	0	21	126
Total	15	31	17	5	68	27	14	15	2	58	10	281	17	0	308	21	10	26	5	62	496
09:00 AM	1	8	7	0	16	11	3	0	0	14	1	48	1	0	50	4	1	3	0	8	88
09:15 AM	0	6	4	0	10	7	2	3	0	12	2	30	4	0	36	5	2	8	0	15	73
09:30 AM	0	5	4	0	9	5	0	0	0	5	0	53	1	0	54	5	0	7	0	12	80
09:45 AM	1	7	3	1	12	4	1	2	1	8	3	59	4	0	66	13	2	4	0	19	105
Total	2	26	18	1	47	27	6	5	1	39	6	190	10	0	206	27	5	22	0	54	346
03:00 PM	4	9	5	1	19	7	1	1	0	9	7	51	2	0	60	17	2	24	1	44	132
03:15 PM	0	15	7	1	23	7	4	4	0	15	1	47	0	0	48	2	2	15	0	19	105
03:30 PM	0	9	5	1	15	2	3	0	1	6	3	55	1	1	60	13	2	19	1	35	116
03:45 PM	4	20	9	0	33	2	2	4	0	8	3	52	0	1	56	12	1	22	0	35	132
Total	8	53	26	3	90	18	10	9	1	38	14	205	3	2	224	44	7	80	2	133	485
04:00 PM	1	18	10	3	32	4	1	4	0	9	2	55	1	0	58	19	3	26	2	50	149
04:15 PM	0	13	6	1	20	6	1	0	0	7	5	82	1	0	88	8	3	17	1	29	144
04:30 PM	0	20	4	1	25	5	1	2	1	9	3	71	6	0	80	3	2	18	1	24	138
04:45 PM	1	17	6	0	24	5	2	1	2	10	4	72	2	0	78	1	0	8	0	9	121
Total	2	68	26	5	101	20	5	7	3	35	14	280	10	0	304	31	8	69	4	112	552
05:00 PM	0	11	10	1	22	5	1	3	0	9	4	82	2	0	88	2	2	10	0	14	133
05:15 PM	1	20	9	3	33	1	5	2	0	8	5	72	1	0	78	4	6	5	2	17	136
05:30 PM	1	10	4	0	15	5	4	1	0	10	2	74	1	0	77	4	1	8	0	13	115
05:45 PM	1	15	9	0	25	3	0	0	0	3	2	55	1	0	58	1	2	5	0	8	94
Total	3	56	32	4	95	14	10	6	0	30	13	283	5	0	301	11	11	28	2	52	478

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File Name : Goodrich Drive at Wabanaki Drive
Site Code : 00000000
Start Date : 02/16/2023

Groups Printed- Cars - Trucks - Heavys - Cyclists

	Wabanaki Dr From North					Hidden Valley Rd From East					Wabanaki Dr From South					Goodrich Dr From West					
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Grand Total	60	274	129	24	487	139	51	53	8	251	65	1487	64	3	1619	148	48	256	19	471	2828
Apprch %	12.3	56.3	26.5	4.9		55.4	20.3	21.1	3.2		4	91.8	4	0.2		31.4	10.2	54.4	4		
Total %	2.1	9.7	4.6	0.8	17.2	4.9	1.8	1.9	0.3	8.9	2.3	52.6	2.3	0.1	57.2	5.2	1.7	9.1	0.7	16.7	
Cars	58	248	128	24	458	132	46	52	8	238	60	1409	47	3	1519	128	38	218	19	403	2618
% Cars	96.7	90.5	99.2	100	94	95	90.2	98.1	100	94.8	92.3	94.8	73.4	100	93.8	86.5	79.2	85.2	100	85.6	92.6
Trucks	1	1	1	0	3	2	2	1	0	5	2	39	5	0	46	5	1	11	0	17	71
% Trucks	1.7	0.4	0.8	0	0.6	1.4	3.9	1.9	0	2	3.1	2.6	7.8	0	2.8	3.4	2.1	4.3	0	3.6	2.5
Heavys	0	25	0	0	25	5	2	0	0	7	3	39	12	0	54	15	8	27	0	50	136
% Heavys	0	9.1	0	0	5.1	3.6	3.9	0	0	2.8	4.6	2.6	18.8	0	3.3	10.1	16.7	10.5	0	10.6	4.8
Cyclists	1	0	0	0	1	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	3
% Cyclists	1.7	0	0	0	0.2	0	2	0	0	0.4	0	0	0	0	0	0	2.1	0	0	0.2	0.1

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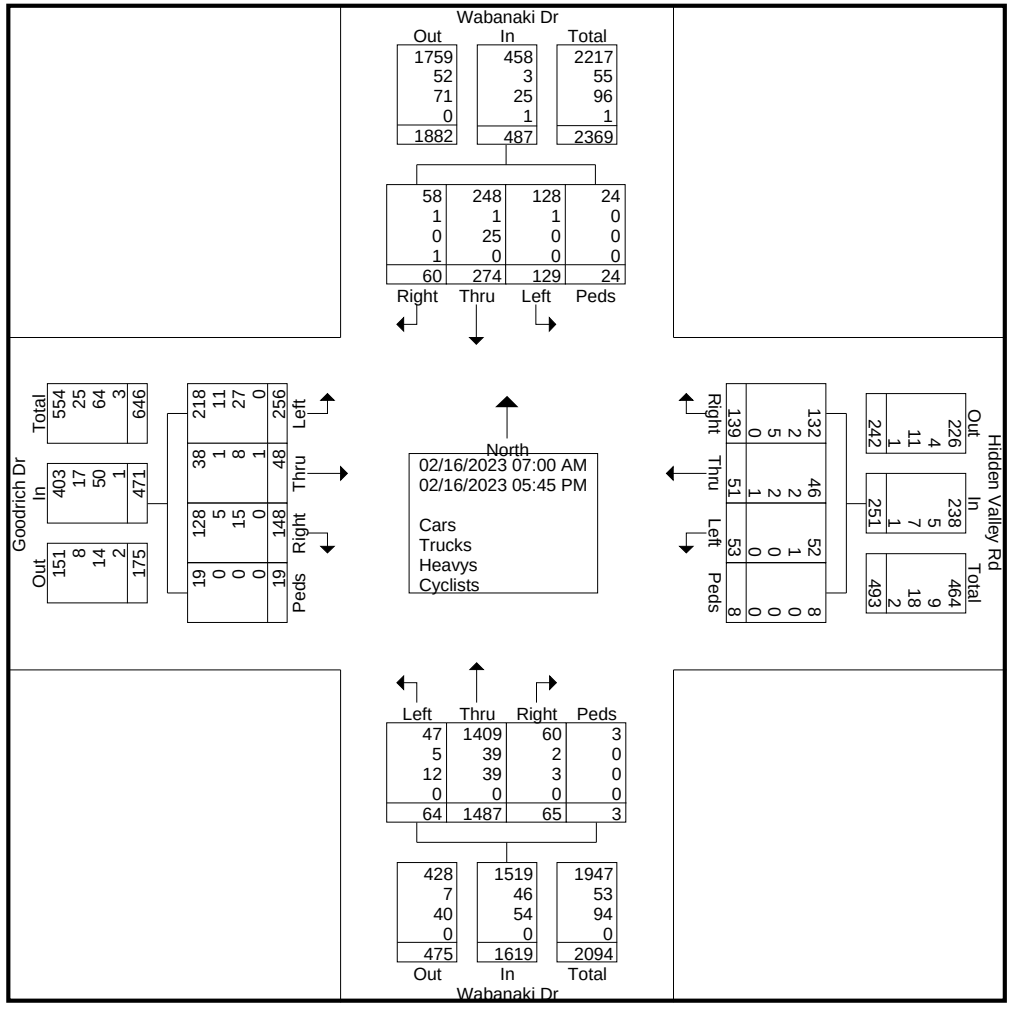
Start Date : 02/16/2023



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File Name : Goodrich Drive at Wabanaki Drive
Site Code : 00000000
Start Date : 02/16/2023

	Wabanaki Dr From North					Hidden Valley Rd From East					Wabanaki Dr From South					Goodrich Dr From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	**17**	**19**	3	**3**	**42**	**15**	**5**	**5**	0	**25**	2	68	4	**1**	75	4	**3**	**8**	**3**	**18**	**160**
08:00 AM	3	11	4	3	21	6	4	2	**1**	13	0	74	3	0	77	4	2	4	3	13	124
08:15 AM	6	6	4	2	18	3	1	3	1	8	**5**	60	4	0	69	3	2	7	2	14	109
08:30 AM	2	6	**5**	0	13	12	5	4	0	21	3	**78**	**8**	0	**89**	**5**	2	7	0	14	137
Total Volume	28	42	16	8	94	36	15	14	2	67	10	280	19	1	310	16	9	26	8	59	530
% App. Total	29.8	44.7	17	8.5		53.7	22.4	20.9	3		3.2	90.3	6.1	0.3		27.1	15.3	44.1	13.6		
PHF	.412	.553	.800	.667	.560	.600	.750	.700	.500	.670	.500	.897	.594	.250	.871	.800	.750	.813	.667	.819	.828
Cars	26	37	16	8	87	34	13	14	2	63	9	270	14	1	294	13	6	16	8	43	487
% Cars	92.9	88.1	100	100	92.6	94.4	86.7	100	100	94.0	90.0	96.4	73.7	100	94.8	81.3	66.7	61.5	100	72.9	91.9
Trucks	1	0	0	0	1	1	0	0	0	1	1	6	2	0	9	1	0	4	0	5	16
% Trucks	3.6	0	0	0	1.1	2.8	0	0	0	1.5	10.0	2.1	10.5	0	2.9	6.3	0	15.4	0	8.5	3.0
Heavys	0	5	0	0	5	1	2	0	0	3	0	4	3	0	7	2	3	6	0	11	26
% Heavys	0	11.9	0	0	5.3	2.8	13.3	0	0	4.5	0	1.4	15.8	0	2.3	12.5	33.3	23.1	0	18.6	4.9
Cyclists	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
% Cyclists	3.6	0	0	0	1.1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2

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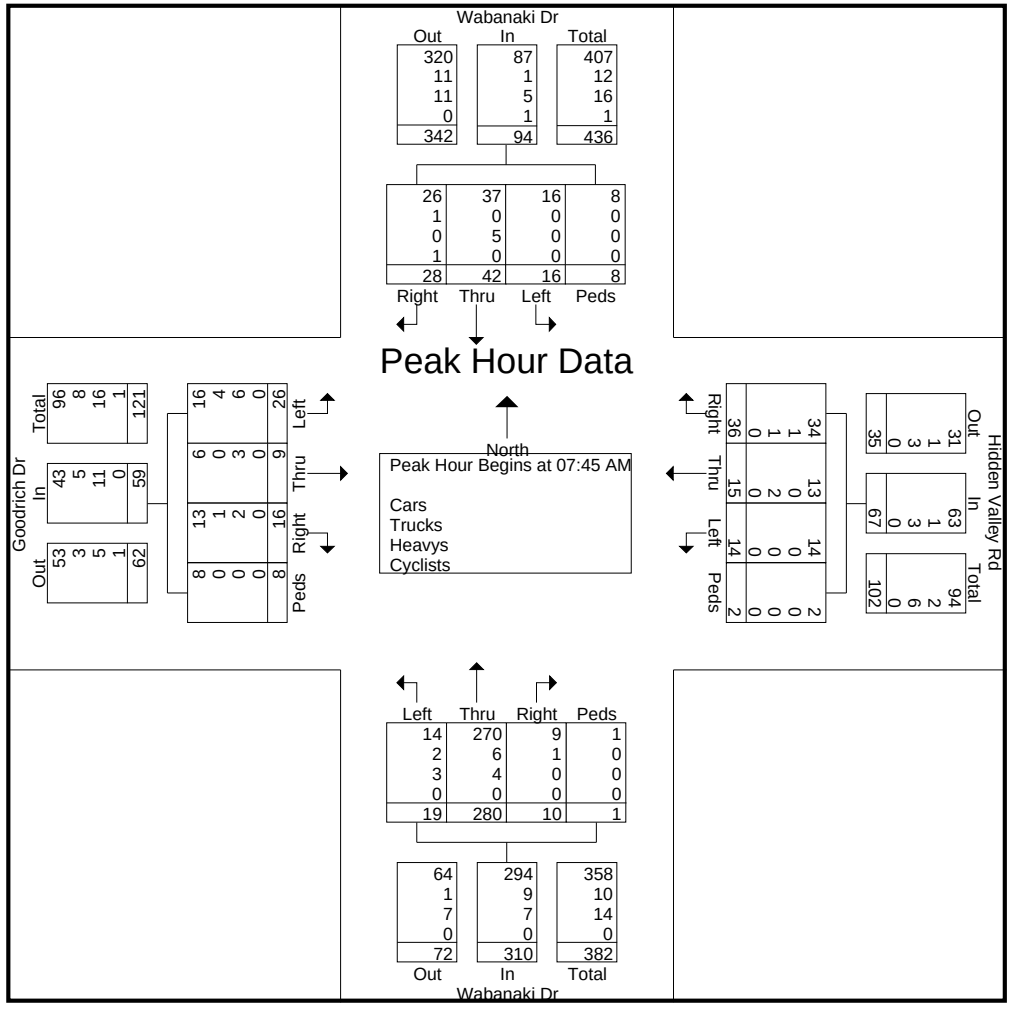
File Name : Goodrich Drive at Wabanaki Drive
Site Code : 00000000
Start Date : 02/16/2023
Page No : 5



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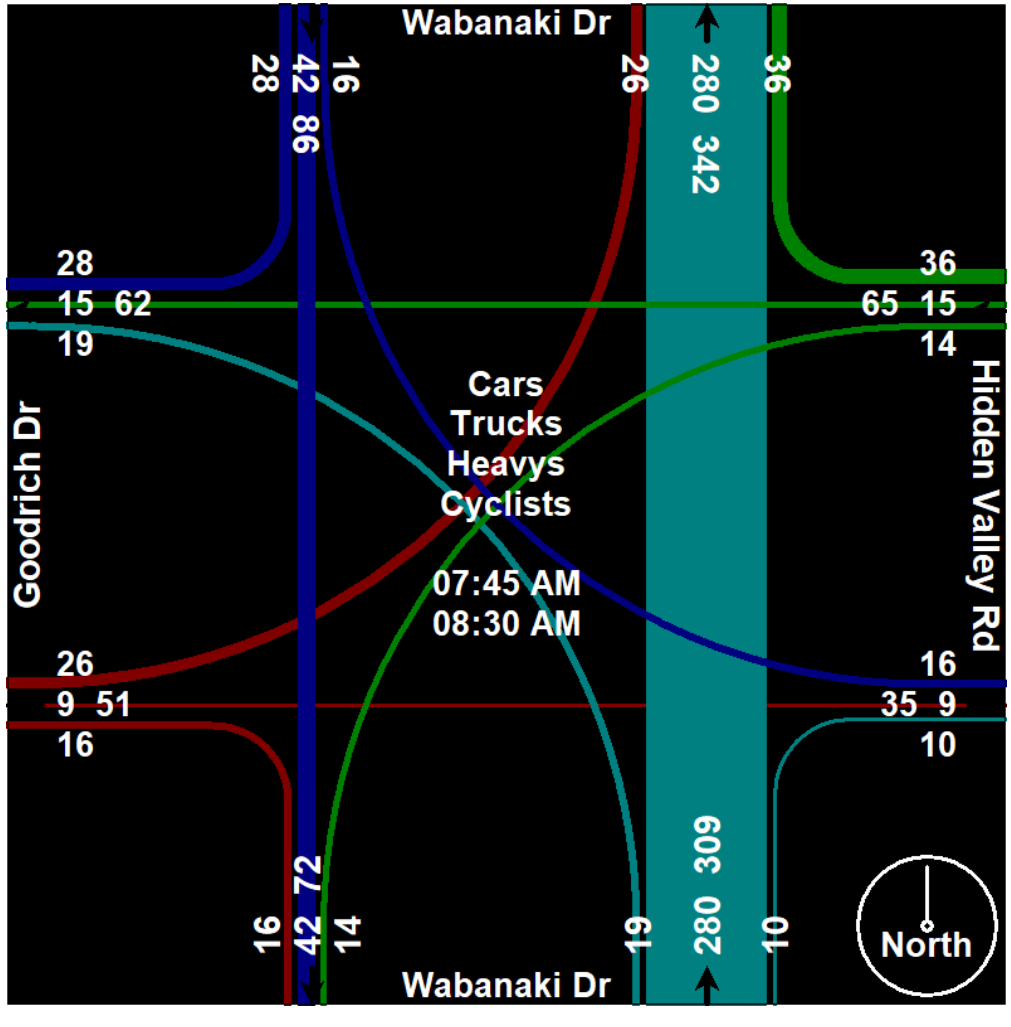
Start Date : 02/16/2023



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File Name : Goodrich Drive at Wabanaki Drive
Site Code : 00000000
Start Date : 02/16/2023
Page No : 7

	Wabanaki Dr From North					Hidden Valley Rd From East					Wabanaki Dr From South					Goodrich Dr From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 03:45 PM																					
03:45 PM	**4**	**20**	9	0	**33**	2	**2**	**4**	0	8	3	52	0	**1**	56	12	1	22	0	35	132
04:00 PM	1	18	**10**	**3**	32	4	1	4	0	**9**	2	55	1	0	58	**19**	**3**	**26**	**2**	**50**	**149**
04:15 PM	0	13	6	1	20	**6**	1	0	0	7	**5**	**82**	1	0	**88**	8	3	17	1	29	144
04:30 PM	0	20	4	1	25	5	1	2	**1**	9	3	71	**6**	0	80	3	2	18	1	24	138
Total Volume	5	71	29	5	110	17	5	10	1	33	13	260	8	1	282	42	9	83	4	138	563
% App. Total	4.5	64.5	26.4	4.5		51.5	15.2	30.3	3		4.6	92.2	2.8	0.4		30.4	6.5	60.1	2.9		
PHF	.313	.888	.725	.417	.833	.708	.625	.625	.250	.917	.650	.793	.333	.250	.801	.553	.750	.798	.500	.690	.945
Cars	5	65	28	5	103	14	5	9	1	29	13	253	6	1	273	40	6	78	4	128	533
% Cars	100	91.5	96.6	100	93.6	82.4	100	90.0	100	87.9	100	97.3	75.0	100	96.8	95.2	66.7	94.0	100	92.8	94.7
Trucks	0	1	1	0	2	1	0	1	0	2	0	5	0	0	5	0	0	1	0	1	10
% Trucks	0	1.4	3.4	0	1.8	5.9	0	10.0	0	6.1	0	1.9	0	0	1.8	0	0	1.2	0	0.7	1.8
Heavys	0	5	0	0	5	2	0	0	0	2	0	2	2	0	4	2	3	4	0	9	20
% Heavys	0	7.0	0	0	4.5	11.8	0	0	0	6.1	0	0.8	25.0	0	1.4	4.8	33.3	4.8	0	6.5	3.6
Cyclists	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Cyclists	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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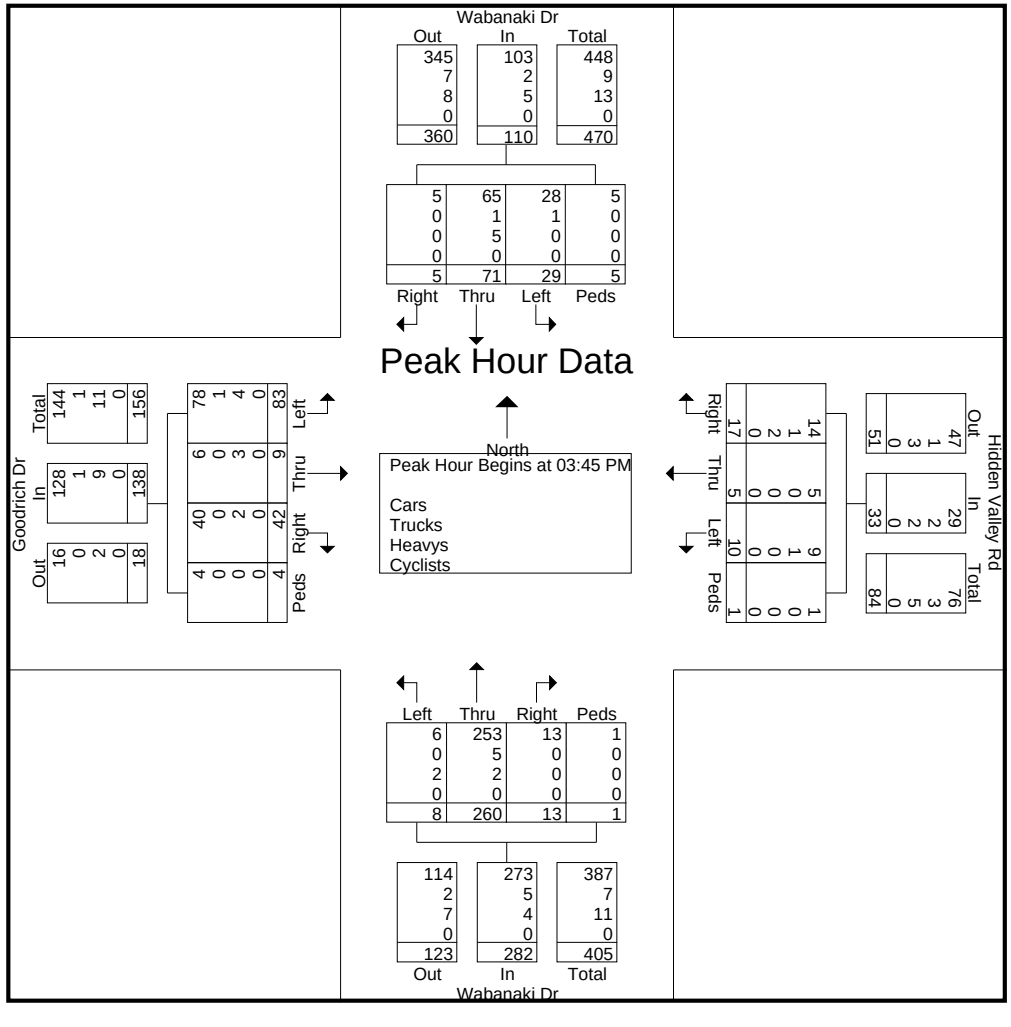
File Name : Goodrich Drive at Wabanaki Drive
Site Code : 00000000
Start Date : 02/16/2023
Page No : 8



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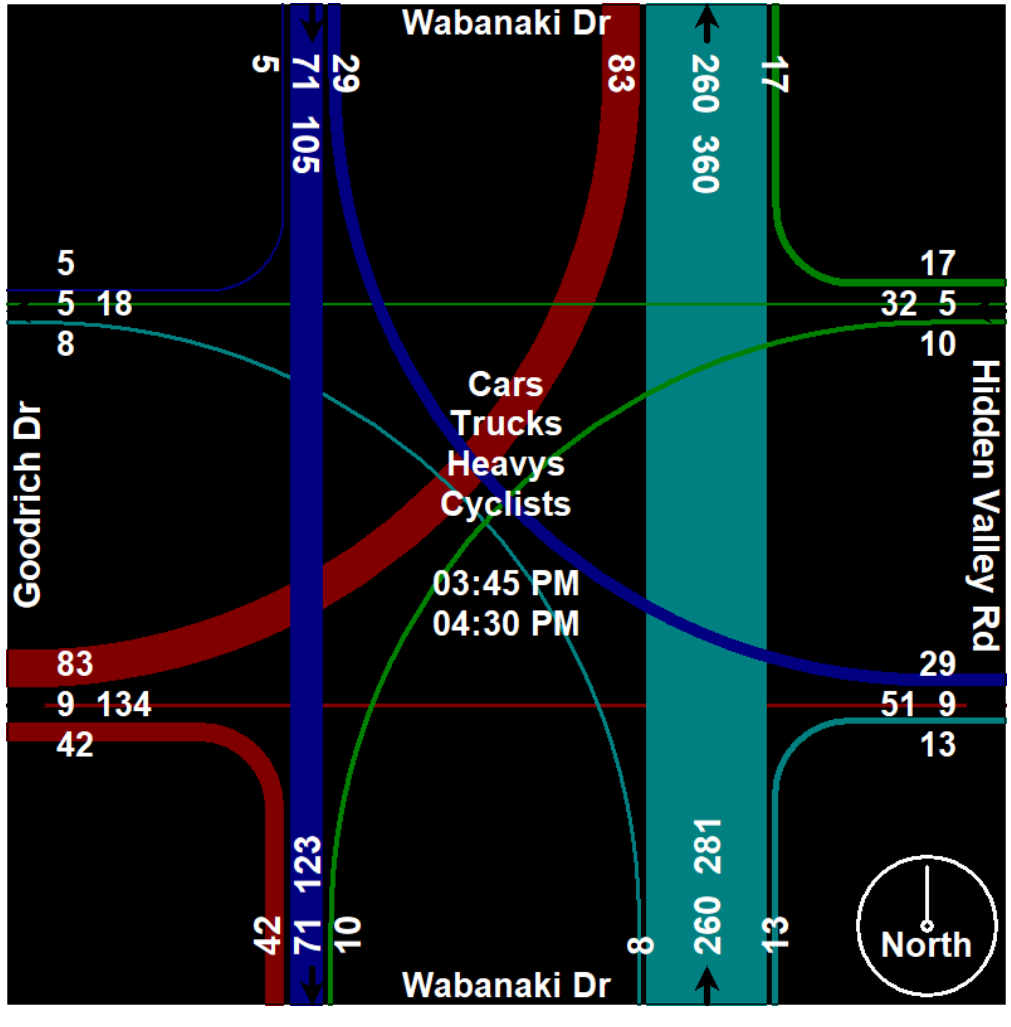

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File Name : Hidden Valley Road at Wabanaki Drive
Site Code : 00000000
Start Date : 02/16/2023
Page No : 1

Groups Printed- Cars - Trucks - Heavys - Cyclists

	Wabanaki Dr From North					Hidden Valley Rd From East					Wabanaki Dr From South					From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	0	7	0	0	7	1	0	0	1	2	1	50	0	0	51	0	0	0	0	0	60
07:15 AM	0	17	0	0	17	0	0	0	2	2	1	81	0	0	82	0	0	0	0	0	101
07:30 AM	0	17	0	1	18	3	0	0	3	6	1	89	0	0	90	0	0	0	0	0	114
07:45 AM	0	41	1	0	42	3	0	1	3	7	2	86	0	0	88	0	0	0	0	0	137
Total	0	82	1	1	84	7	0	1	9	17	5	306	0	0	311	0	0	0	0	0	412
08:00 AM	0	15	2	0	17	1	0	0	4	5	0	82	0	0	82	0	0	0	0	0	104
08:15 AM	0	15	3	0	18	3	0	1	1	5	0	76	0	0	76	0	0	0	0	0	99
08:30 AM	0	12	2	0	14	5	0	0	0	5	0	95	0	0	95	0	0	0	0	0	114
08:45 AM	0	17	0	0	17	1	0	0	0	1	0	81	0	0	81	0	0	0	0	0	99
Total	0	59	7	0	66	10	0	1	5	16	0	334	0	0	334	0	0	0	0	0	416
09:00 AM	0	16	0	0	16	1	0	0	0	1	0	63	0	0	63	0	0	0	0	0	80
09:15 AM	0	8	0	0	8	3	0	0	0	3	0	46	0	0	46	0	0	0	0	0	57
09:30 AM	0	10	0	0	10	1	0	0	0	1	0	65	0	0	65	0	0	0	0	0	76
09:45 AM	0	9	0	0	9	2	0	1	2	5	2	62	0	0	64	0	0	0	0	0	78
Total	0	43	0	0	43	7	0	1	2	10	2	236	0	0	238	0	0	0	0	0	291
03:00 PM	0	18	1	0	19	2	0	0	1	3	0	77	0	0	77	0	0	0	0	0	99
03:15 PM	0	22	2	1	25	0	0	0	1	1	0	67	0	0	67	0	0	0	0	0	93
03:30 PM	0	18	1	0	19	0	0	0	2	2	0	80	0	0	80	0	0	0	0	0	101
03:45 PM	0	29	2	0	31	3	0	0	4	7	0	72	0	0	72	0	0	0	0	0	110
Total	0	87	6	1	94	5	0	0	8	13	0	296	0	0	296	0	0	0	0	0	403
04:00 PM	0	26	4	0	30	2	0	0	1	3	0	90	0	0	90	0	0	0	0	0	123
04:15 PM	0	22	2	0	24	1	0	0	3	4	1	101	0	0	102	0	0	0	0	0	130
04:30 PM	0	26	4	0	30	2	0	0	3	5	0	97	0	0	97	0	0	0	0	0	132
04:45 PM	0	24	2	0	26	0	0	0	0	0	0	90	0	0	90	0	0	0	0	0	116
Total	0	98	12	0	110	5	0	0	7	12	1	378	0	0	379	0	0	0	0	0	501
05:00 PM	0	23	3	0	26	1	0	0	2	3	0	91	0	0	91	0	0	0	0	0	120
05:15 PM	0	25	1	0	26	2	0	0	2	4	0	73	0	0	73	0	0	0	0	0	103
05:30 PM	0	15	2	0	17	1	0	0	2	3	0	89	0	0	89	0	0	0	0	0	109
05:45 PM	0	25	1	0	26	0	0	0	0	0	0	64	0	0	64	0	0	0	0	0	90
Total	0	88	7	0	95	4	0	0	6	10	0	317	0	0	317	0	0	0	0	0	422

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File Name : Hidden Valley Road at Wabanaki Drive
Site Code : 00000000
Start Date : 02/16/2023

Groups Printed- Cars - Trucks - Heavys - Cyclists

	Wabanaki Dr From North					Hidden Valley Rd From East					Wabanaki Dr From South					From West					
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Grand Total	0	457	33	2	492	38	0	3	37	78	8	1867	0	0	1875	0	0	0	0	0	2445
Apprch %	0	92.9	6.7	0.4		48.7	0	3.8	47.4		0.4	99.6	0	0		0	0	0	0		
Total %	0	18.7	1.3	0.1	20.1	1.6	0	0.1	1.5	3.2	0.3	76.4	0	0	76.7	0	0	0	0	0	
Cars	0	428	32	2	462	34	0	3	37	74	8	1742	0	0	1750	0	0	0	0	0	2286
% Cars	0	93.7	97	100	93.9	89.5	0	100	100	94.9	100	93.3	0	0	93.3	0	0	0	0	0	93.5
Trucks	0	4	0	0	4	0	0	0	0	0	0	55	0	0	55	0	0	0	0	0	59
% Trucks	0	0.9	0	0	0.8	0	0	0	0	0	0	2.9	0	0	2.9	0	0	0	0	0	2.4
Heavys	0	25	0	0	25	4	0	0	0	4	0	70	0	0	70	0	0	0	0	0	99
% Heavys	0	5.5	0	0	5.1	10.5	0	0	0	5.1	0	3.7	0	0	3.7	0	0	0	0	0	4
Cyclists	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
% Cyclists	0	0	3	0	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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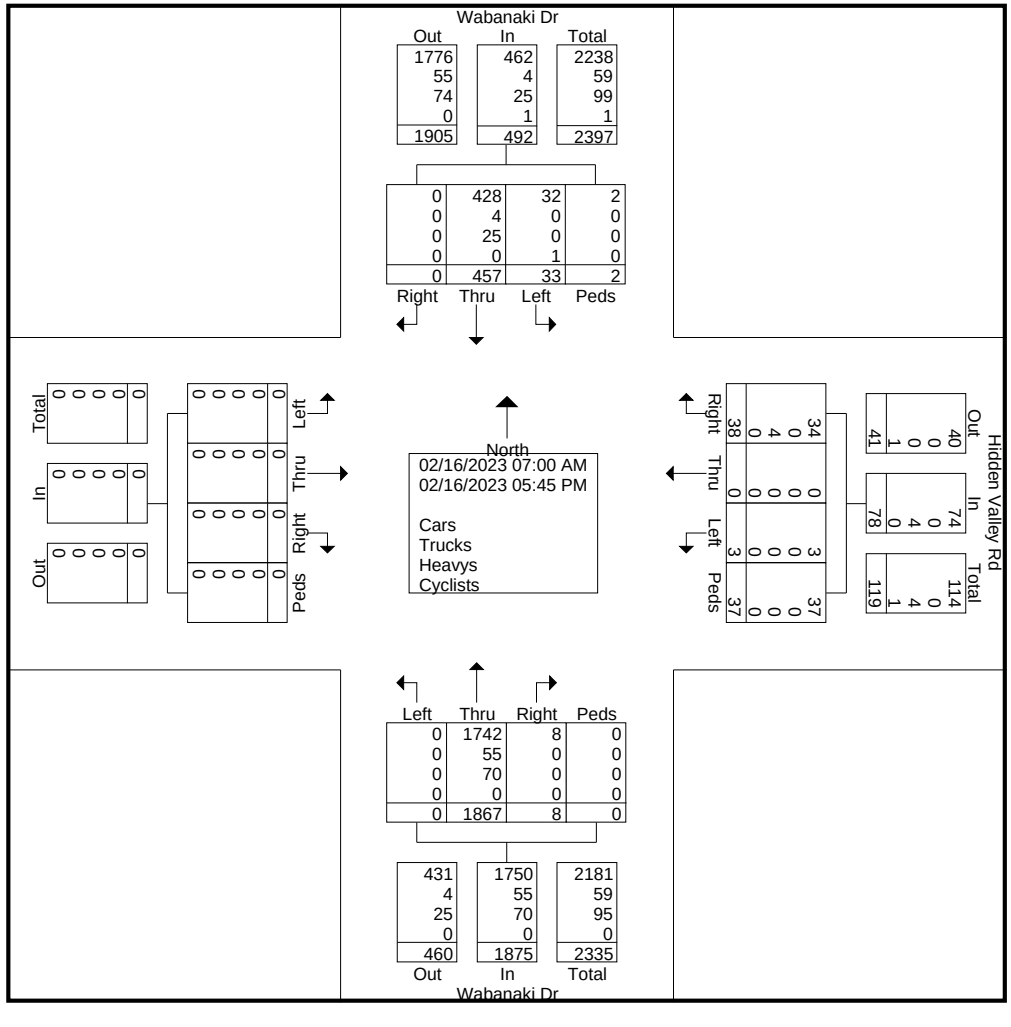
Site Code : 00000000
Start Date : 02/16/2023



Horizon Data Services Ltd

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"Your Traffic Count Specialist"

File Name : Hidden Valley Road at Wabanaki Drive
Site Code : 00000000
Start Date : 02/16/2023

	Wabanaki Dr From North					Hidden Valley Rd From East					Wabanaki Dr From South					From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:15 AM																					
07:15 AM	0	17	0	0	17	0	0	0	2	2	1	81	0	0	82	0	0	0	0	0	101
07:30 AM	0	17	0	**1**	18	**3**	0	0	3	6	1	**89**	0	0	**90**	0	0	0	0	0	114
07:45 AM	0	**41**	1	0	**42**	3	0	**1**	3	**7**	**2**	86	0	0	88	0	0	0	0	0	**137**
08:00 AM	0	15	**2**	0	17	1	0	0	**4**	5	0	82	0	0	82	0	0	0	0	0	104
Total Volume	0	90	3	1	94	7	0	1	12	20	4	338	0	0	342	0	0	0	0	0	456
% App. Total	0	95.7	3.2	1.1		35	0	5	60		1.2	98.8	0	0		0	0	0	0		
PHF	.000	.549	.375	.250	.560	.583	.000	.250	.750	.714	.500	.949	.000	.000	.950	.000	.000	.000	.000	.000	.832
Cars	0	85	3	1	89	6	0	1	12	19	4	294	0	0	298	0	0	0	0	0	406
% Cars	0	94.4	100	100	94.7	85.7	0	100	100	95.0	100	87.0	0	0	87.1	0	0	0	0	0	89.0
Trucks	0	0	0	0	0	0	0	0	0	0	0	17	0	0	17	0	0	0	0	0	17
% Trucks	0	0	0	0	0	0	0	0	0	0	0	5.0	0	0	5.0	0	0	0	0	0	3.7
Heavys	0	5	0	0	5	1	0	0	0	1	0	27	0	0	27	0	0	0	0	0	33
% Heavys	0	5.6	0	0	5.3	14.3	0	0	0	5.0	0	8.0	0	0	7.9	0	0	0	0	0	7.2
Cyclists	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Cyclists	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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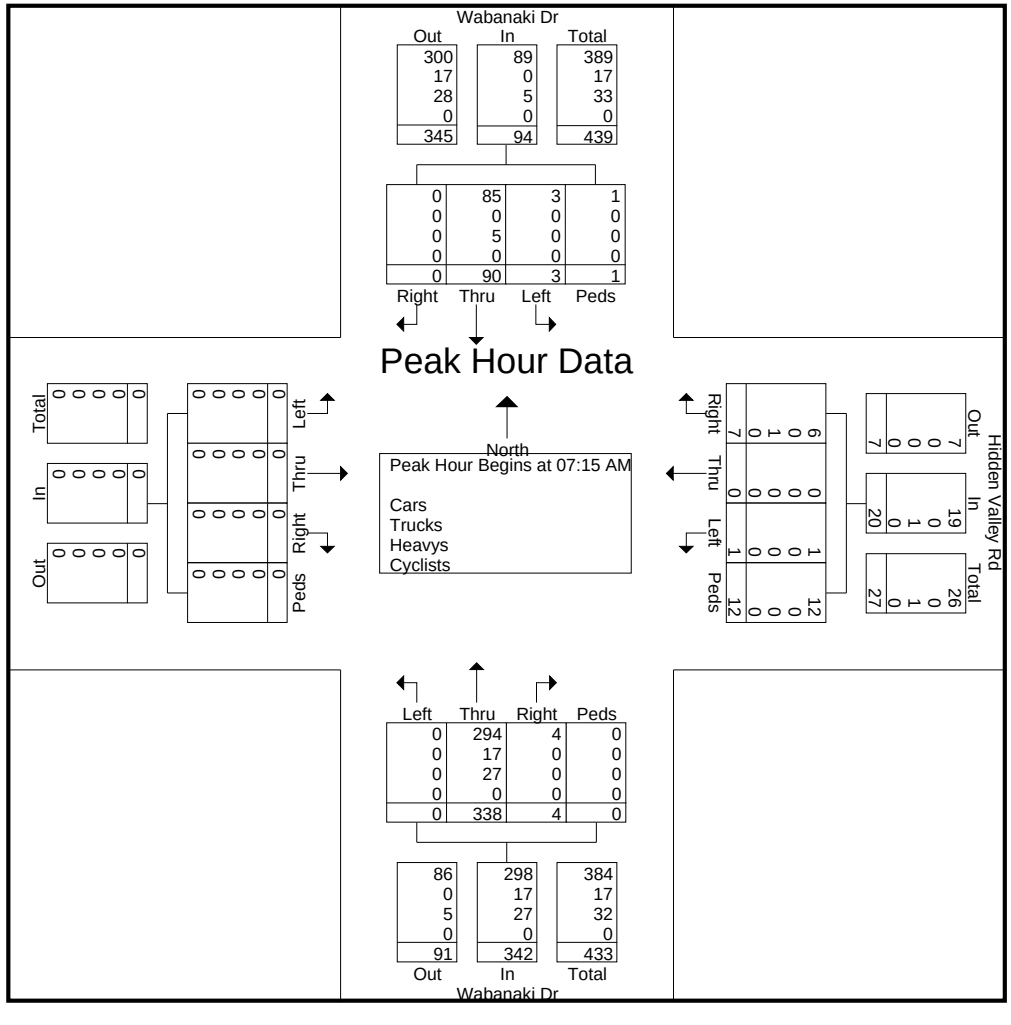
File Name : Hidden Valley Road at Wabanaki Drive
Site Code : 00000000
Start Date : 02/16/2023



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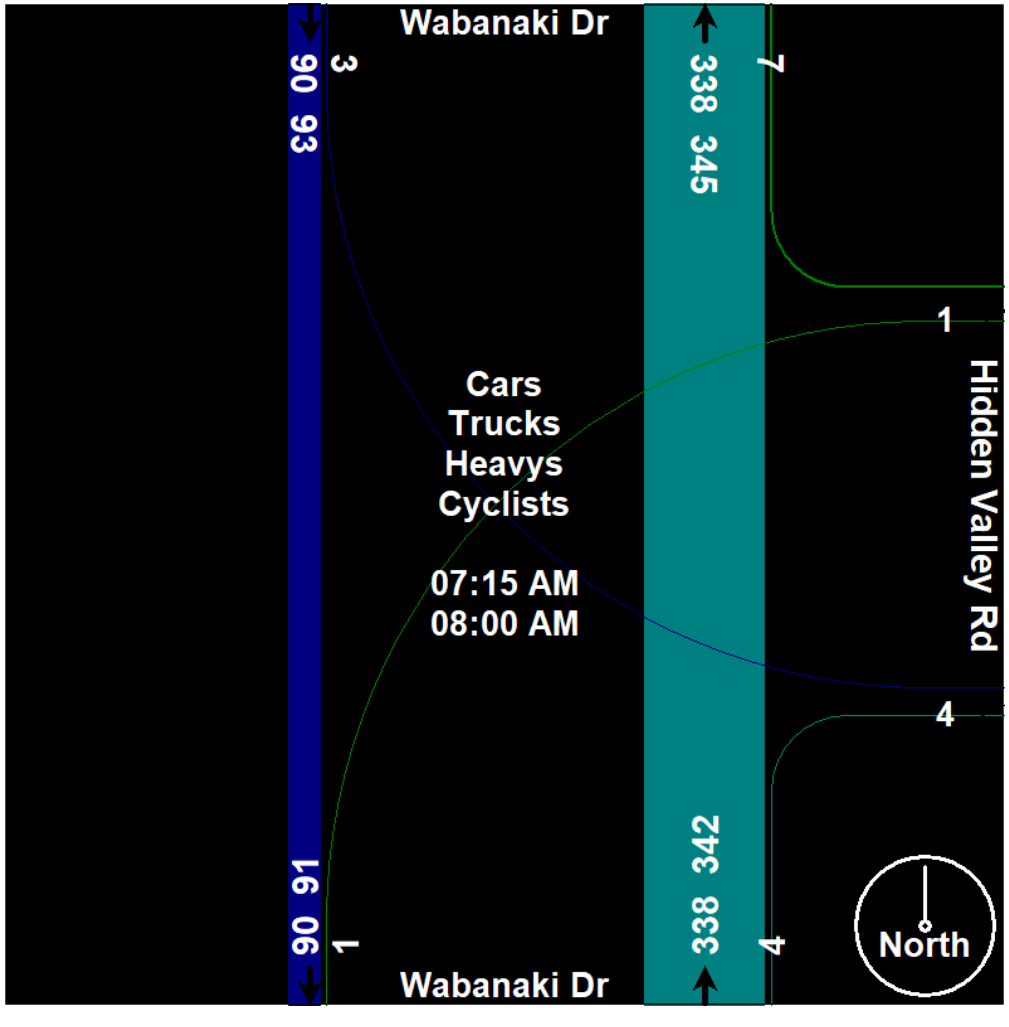
File Name : Hidden Valley Road at Wabanaki Drive
Site Code : 00000000
Start Date : 02/16/2023
Page No : 6



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File Name : Hidden Valley Road at Wabanaki Drive
Site Code : 00000000
Start Date : 02/16/2023
Page No : 7

	Wabanaki Dr From North					Hidden Valley Rd From East					Wabanaki Dr From South					From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	0	**26**	**4**	0	**30**	**2**	0	0	1	3	0	90	0	0	90	0	0	0	0	0	123
04:15 PM	0	22	2	0	24	1	0	0	**3**	4	**1**	**101**	0	0	**102**	0	0	0	0	0	130
04:30 PM	0	26	4	0	30	2	0	0	3	**5**	0	97	0	0	97	0	0	0	0	0	**132**
04:45 PM	0	24	2	0	26	0	0	0	0	0	0	90	0	0	90	0	0	0	0	0	116
Total Volume	0	98	12	0	110	5	0	0	7	12	1	378	0	0	379	0	0	0	0	0	501
% App. Total	0	89.1	10.9	0		41.7	0	0	58.3		0.3	99.7	0	0		0	0	0	0		
PHF	.000	.942	.750	.000	.917	.625	.000	.000	.583	.600	.250	.936	.000	.000	.929	.000	.000	.000	.000	.000	.949
Cars	0	91	11	0	102	5	0	0	7	12	1	364	0	0	365	0	0	0	0	0	479
% Cars	0	92.9	91.7	0	92.7	100	0	0	100	100	100	96.3	0	0	96.3	0	0	0	0	0	95.6
Trucks	0	2	0	0	2	0	0	0	0	0	0	6	0	0	6	0	0	0	0	0	8
% Trucks	0	2.0	0	0	1.8	0	0	0	0	0	0	1.6	0	0	1.6	0	0	0	0	0	1.6
Heavys	0	5	0	0	5	0	0	0	0	0	0	8	0	0	8	0	0	0	0	0	13
% Heavys	0	5.1	0	0	4.5	0	0	0	0	0	0	2.1	0	0	2.1	0	0	0	0	0	2.6
Cyclists	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
% Cyclists	0	0	8.3	0	0.9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.2

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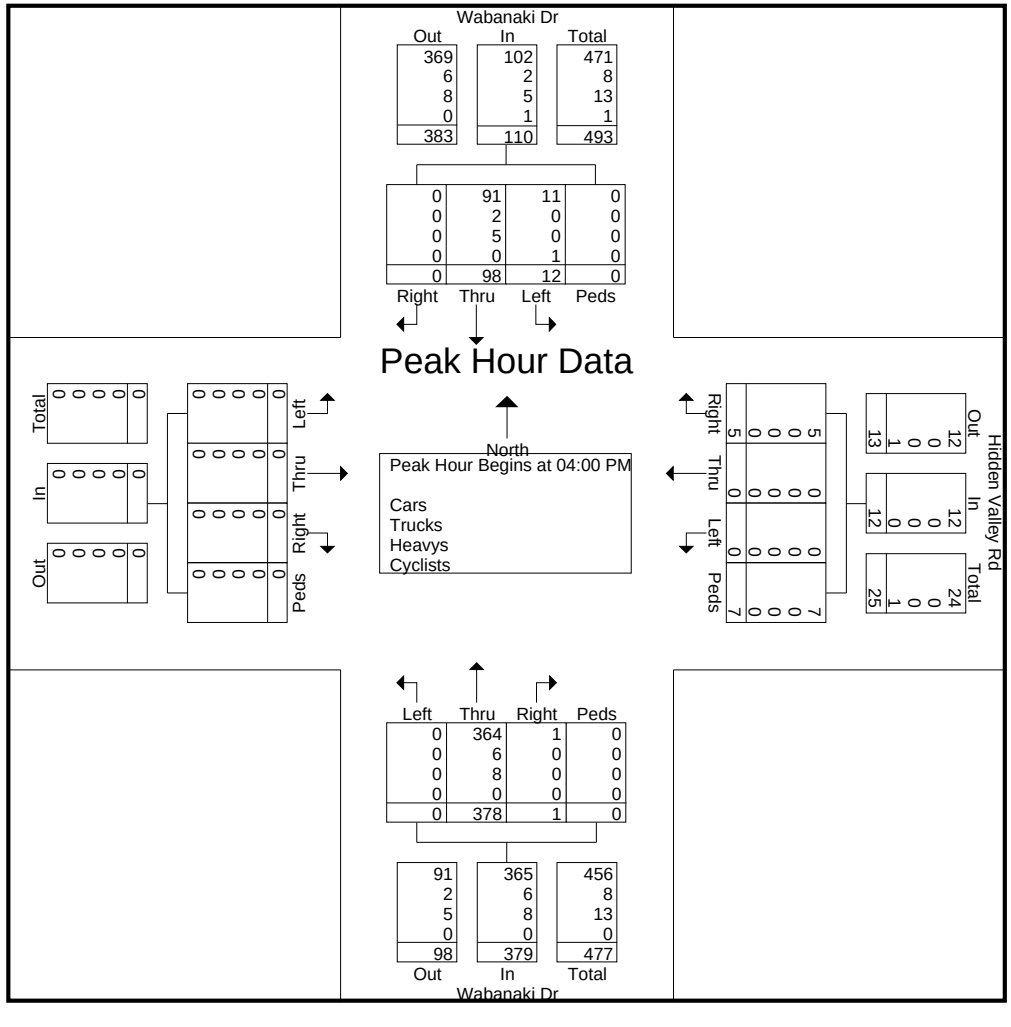
File Name : Hidden Valley Road at Wabanaki Drive
Site Code : 00000000
Start Date : 02/16/2023



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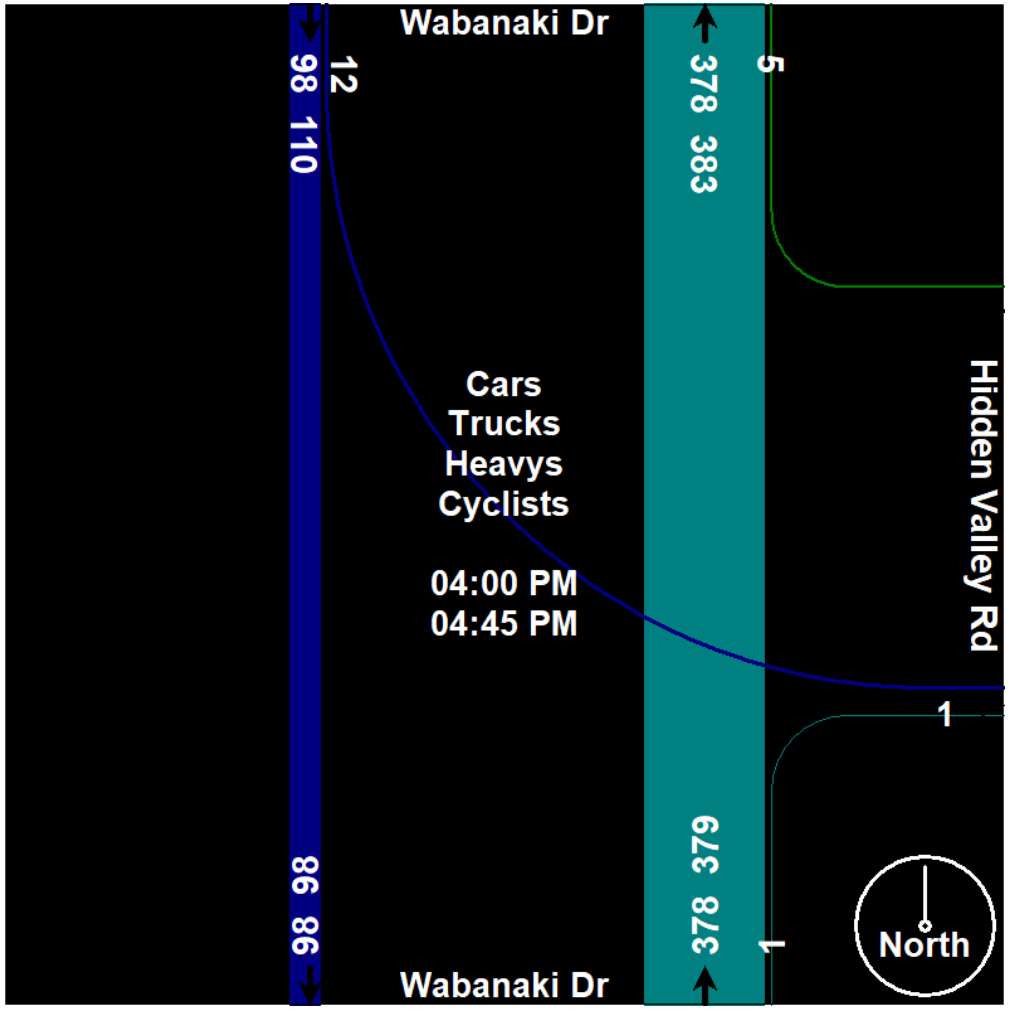
File Name : Hidden Valley Road at Wabanaki Drive
Site Code : 00000000
Start Date : 02/16/2023
Page No : 9



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"Your Traffic Count Specialist"

File Name : King Street East at Hwy 8NB ramps
Site Code : 00000000
Start Date : 02/21/2023

Groups Printed- Cars - Trucks - Heavys - Cyclists

	From North					King St E From East					Hwy 8NB-Off ramp From South					King St E From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	35	74	1	110	38	0	9	1	48	36	56	0	1	93	251
07:15 AM	0	0	0	0	0	0	59	77	0	136	43	0	13	1	57	37	67	0	0	104	297
07:30 AM	0	0	0	0	0	0	63	123	0	186	53	0	10	1	64	45	83	0	0	128	378
07:45 AM	0	0	0	0	0	0	89	143	1	233	75	0	29	0	104	52	79	0	1	132	469
Total	0	0	0	0	0	0	246	417	2	665	209	0	61	3	273	170	285	0	2	457	1395
08:00 AM	0	0	0	0	0	0	91	140	0	231	54	0	29	0	83	37	102	0	0	139	453
08:15 AM	0	0	0	0	0	0	88	110	2	200	72	0	26	1	99	39	70	0	2	111	410
08:30 AM	0	0	0	0	0	0	104	123	0	227	57	0	23	0	80	45	71	0	0	116	423
08:45 AM	0	0	0	0	0	0	96	111	0	207	72	0	20	2	94	25	87	0	0	112	413
Total	0	0	0	0	0	0	379	484	2	865	255	0	98	3	356	146	330	0	2	478	1699
09:00 AM	0	0	0	0	0	0	121	108	1	230	52	0	24	2	78	22	83	0	1	106	414
09:15 AM	0	0	0	0	0	0	92	82	0	174	60	0	15	1	76	31	93	0	0	124	374
09:30 AM	0	0	0	0	0	0	96	116	0	212	54	0	21	2	77	22	102	0	0	124	413
09:45 AM	0	0	0	0	0	0	85	98	0	183	61	0	21	0	82	29	109	0	0	138	403
Total	0	0	0	0	0	0	394	404	1	799	227	0	81	5	313	104	387	0	1	492	1604
03:00 PM	0	0	0	0	0	0	142	137	0	279	93	0	44	0	137	40	156	0	0	196	612
03:15 PM	0	0	0	0	0	0	153	125	1	279	95	0	51	0	146	41	131	0	0	172	597
03:30 PM	0	0	0	0	0	0	150	142	1	293	79	0	52	0	131	39	124	0	0	163	587
03:45 PM	0	0	0	0	0	0	130	135	1	266	98	0	68	1	167	45	150	0	0	195	628
Total	0	0	0	0	0	0	575	539	3	1117	365	0	215	1	581	165	561	0	0	726	2424
04:00 PM	0	0	0	0	0	0	127	135	0	262	91	0	68	0	159	50	142	0	0	192	613
04:15 PM	0	0	0	0	0	0	142	116	0	258	102	0	60	1	163	33	126	0	0	159	580
04:30 PM	0	0	0	0	0	0	142	138	2	282	92	0	42	0	134	44	137	0	0	181	597
04:45 PM	0	0	0	0	0	0	137	146	0	283	114	0	67	0	181	36	144	0	0	180	644
Total	0	0	0	0	0	0	548	535	2	1085	399	0	237	1	637	163	549	0	0	712	2434
05:00 PM	0	0	0	0	0	0	171	128	0	299	105	0	76	1	182	39	139	0	0	178	659
05:15 PM	0	0	0	0	0	0	134	108	0	242	119	0	66	0	185	34	140	0	0	174	601
05:30 PM	0	0	0	0	0	0	130	107	0	237	95	0	56	0	151	45	119	0	0	164	552
05:45 PM	0	0	0	0	0	0	134	104	0	238	94	0	44	4	142	30	114	0	1	145	525
Total	0	0	0	0	0	0	569	447	0	1016	413	0	242	5	660	148	512	0	1	661	2337

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"Your Traffic Count Specialist"

File Name : King Street East at Hwy 8NB ramps
Site Code : 00000000
Start Date : 02/21/2023
Page No : 2

Groups Printed- Cars - Trucks - Heavys - Cyclists

	From North					King St E From East					Hwy 8NB-Off ramp From South					King St E From West					
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Grand Total	0	0	0	0	0	0	2711	2826	10	5547	1868	0	934	18	2820	896	2624	0	6	3526	11893
Apprch %	0	0	0	0		0	48.9	50.9	0.2		66.2	0	33.1	0.6		25.4	74.4	0	0.2		
Total %	0	0	0	0	0	0	22.8	23.8	0.1	46.6	15.7	0	7.9	0.2	23.7	7.5	22.1	0	0.1	29.6	
Cars	0	0	0	0	0	0	2625	2744	10	5379	1706	0	911	18	2635	859	2533	0	6	3398	11412
% Cars	0	0	0	0	0	0	96.8	97.1	100	97	91.3	0	97.5	100	93.4	95.9	96.5	0	100	96.4	96
Trucks	0	0	0	0	0	0	33	42	0	75	42	0	6	0	48	19	34	0	0	53	176
% Trucks	0	0	0	0	0	0	1.2	1.5	0	1.4	2.2	0	0.6	0	1.7	2.1	1.3	0	0	1.5	1.5
Heavys	0	0	0	0	0	0	53	40	0	93	120	0	17	0	137	18	57	0	0	75	305
% Heavys	0	0	0	0	0	0	2	1.4	0	1.7	6.4	0	1.8	0	4.9	2	2.2	0	0	2.1	2.6
Cyclists	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Cyclists	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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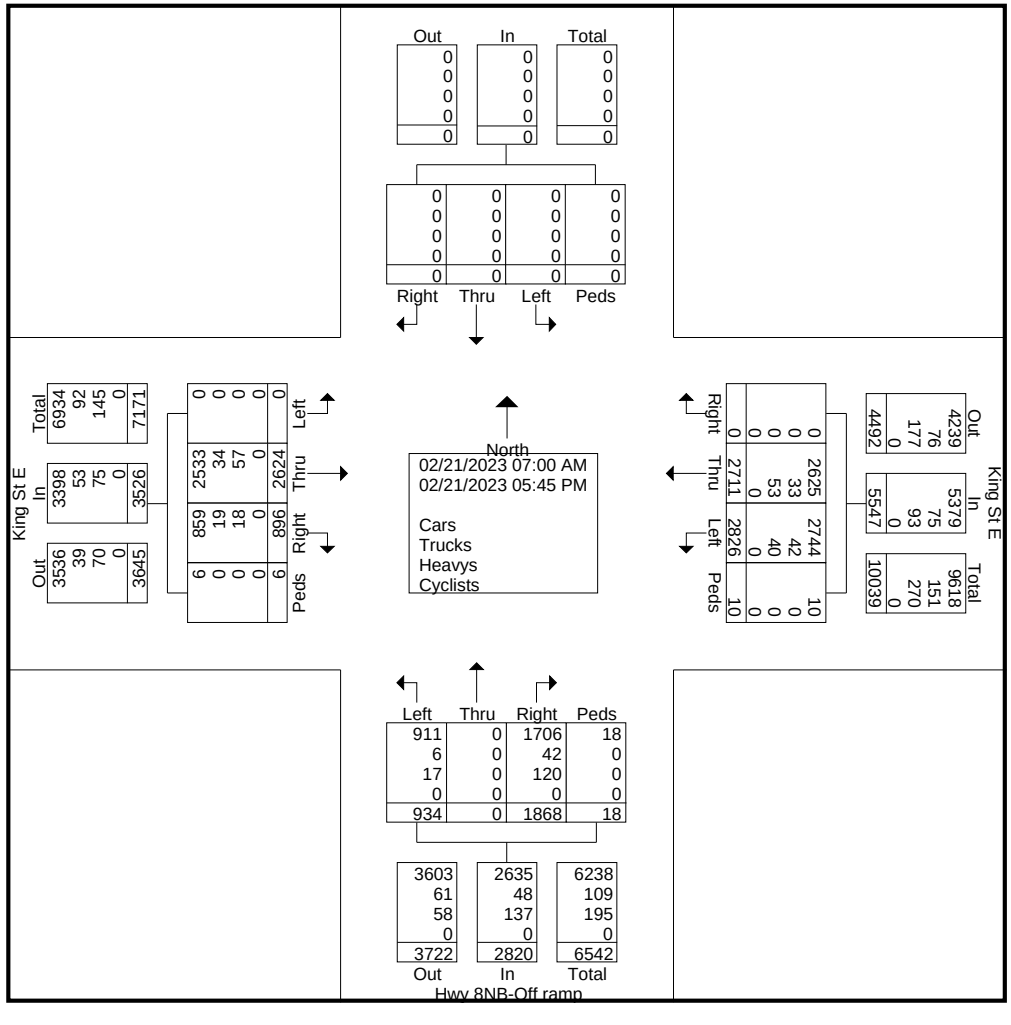
File Name : King Street East at Hwy 8NB ramps
Site Code : 00000000
Start Date : 02/21/2023
Page No : 3



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File Name : King Street East at Hwy 8NB ramps
Site Code : 00000000
Start Date : 02/21/2023

	From North					King St E From East					Hwy 8NB-Off ramp From South					King St E From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	0	0	0	0	0	0	89	**143**	1	**233**	**75**	0	**29**	0	**104**	**52**	79	0	1	132	**469**
08:00 AM	0	0	0	0	0	0	91	140	0	231	54	0	29	0	83	37	**102**	0	0	**139**	453
08:15 AM	0	0	0	0	0	0	88	110	**2**	200	72	0	26	**1**	99	39	70	0	**2**	111	410
08:30 AM	0	0	0	0	0	0	**104**	123	0	227	57	0	23	0	80	45	71	0	0	116	423
Total Volume	0	0	0	0	0	0	372	516	3	891	258	0	107	1	366	173	322	0	3	498	1755
% App. Total	0	0	0	0		0	41.8	57.9	0.3		70.5	0	29.2	0.3		34.7	64.7	0	0.6		
PHF	.000	.000	.000	.000	.000	.000	.894	.902	.375	.956	.860	.000	.922	.250	.880	.832	.789	.000	.375	.896	.936
Cars	0	0	0	0	0	0	350	503	3	856	218	0	103	1	322	164	308	0	3	475	1653
% Cars	0	0	0	0	0	0	94.1	97.5	100	96.1	84.5	0	96.3	100	88.0	94.8	95.7	0	100	95.4	94.2
Trucks	0	0	0	0	0	0	7	8	0	15	9	0	1	0	10	4	5	0	0	9	34
% Trucks	0	0	0	0	0	0	1.9	1.6	0	1.7	3.5	0	0.9	0	2.7	2.3	1.6	0	0	1.8	1.9
Heavys	0	0	0	0	0	0	15	5	0	20	31	0	3	0	34	5	9	0	0	14	68
% Heavys	0	0	0	0	0	0	4.0	1.0	0	2.2	12.0	0	2.8	0	9.3	2.9	2.8	0	0	2.8	3.9
Cyclists	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Cyclists	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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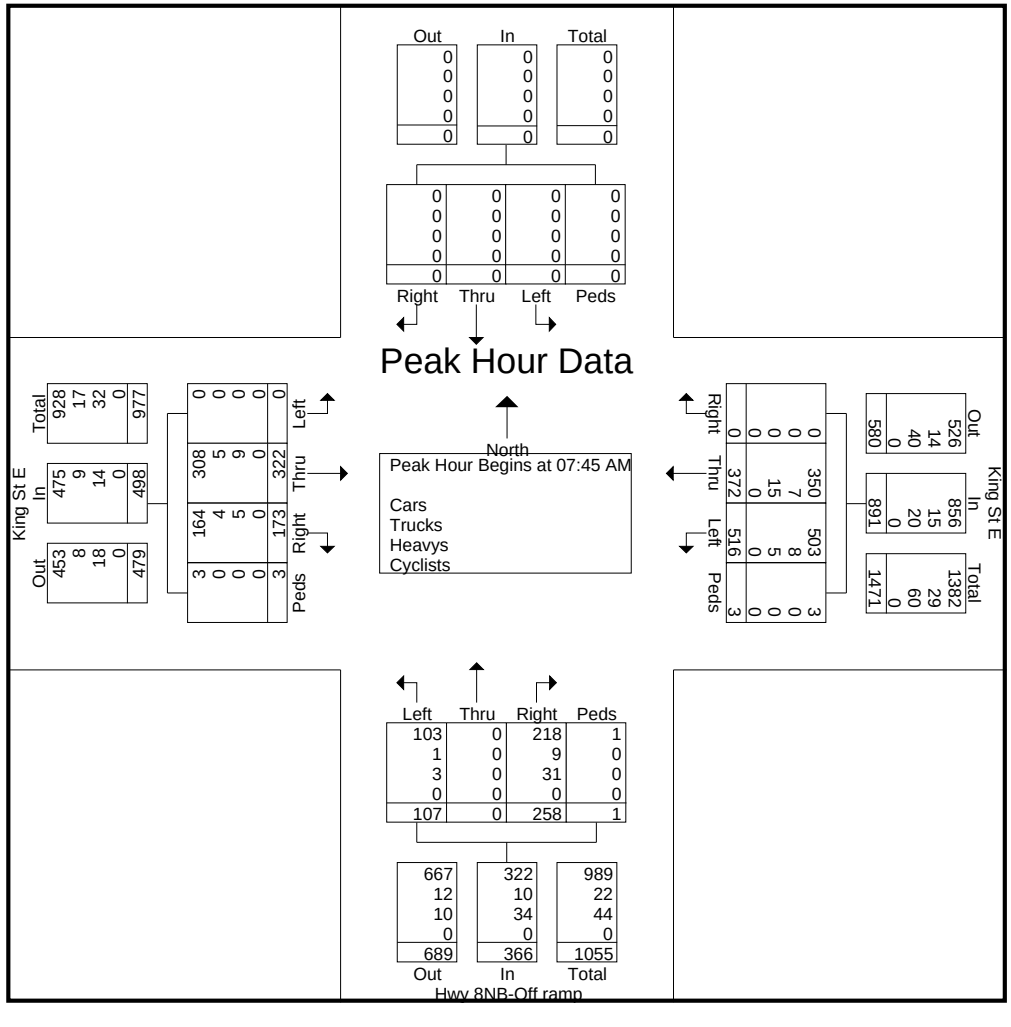
Site Code : 00000000
Start Date : 02/21/2023



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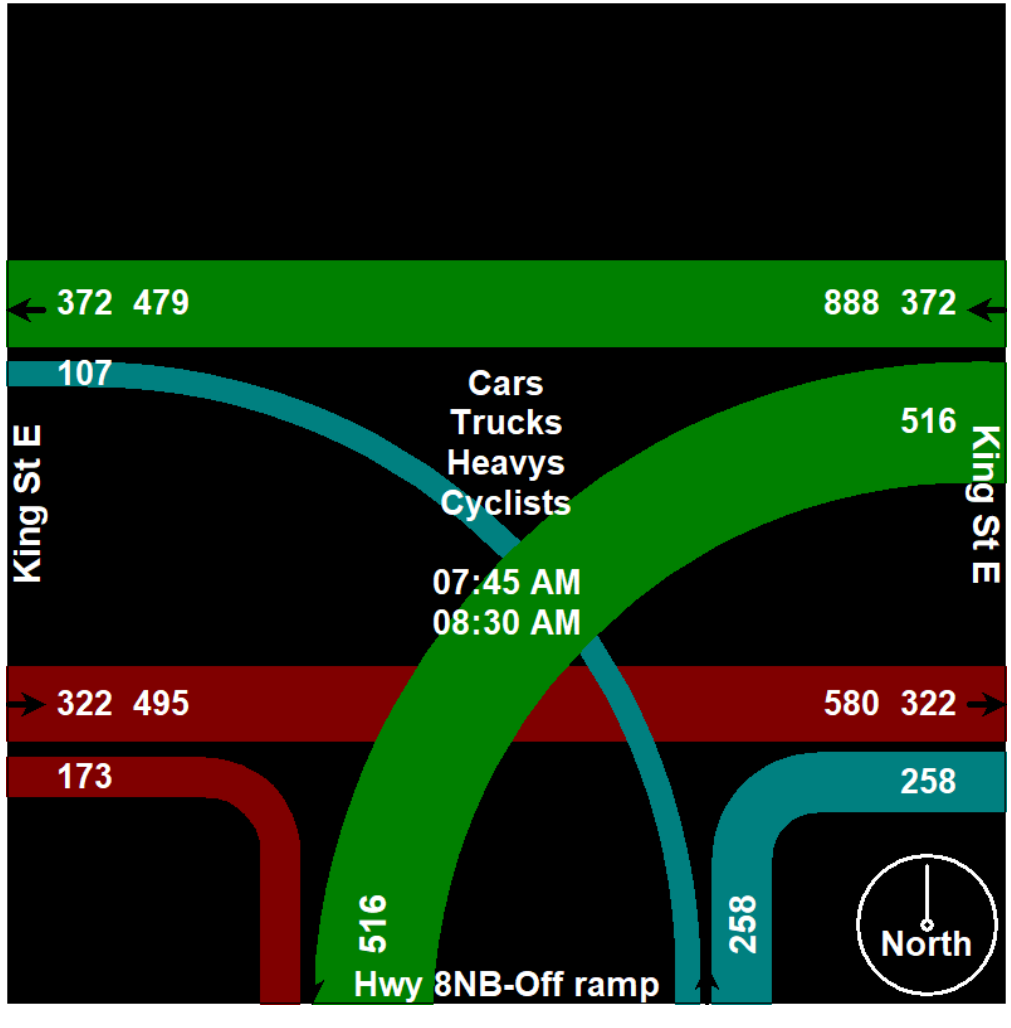
Site Code : 00000000
Start Date : 02/21/2023
Page No : 6



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File Name : King Street East at Hwy 8NB ramps
Site Code : 00000000
Start Date : 02/21/2023
Page No : 7

	From North					King St E From East					Hwy 8NB-Off ramp From South					King St E From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:30 PM																					
04:30 PM	0	0	0	0	0	0	142	138	**2**	282	92	0	42	0	134	**44**	137	0	0	**181**	597
04:45 PM	0	0	0	0	0	0	137	**146**	0	283	114	0	67	0	181	36	**144**	0	0	180	644
05:00 PM	0	0	0	0	0	0	**171**	128	0	**299**	105	0	**76**	**1**	182	39	139	0	0	178	**659**
05:15 PM	0	0	0	0	0	0	134	108	0	242	**119**	0	66	0	**185**	34	140	0	0	174	601
Total Volume	0	0	0	0	0	0	584	520	2	1106	430	0	251	1	682	153	560	0	0	713	2501
% App. Total	0	0	0	0		0	52.8	47	0.2		63	0	36.8	0.1		21.5	78.5	0	0		
PHF	.000	.000	.000	.000	.000	.000	.854	.890	.250	.925	.903	.000	.826	.250	.922	.869	.972	.000	.000	.985	.949
Cars	0	0	0	0	0	0	577	514	2	1093	414	0	251	1	666	150	550	0	0	700	2459
% Cars	0	0	0	0	0	0	98.8	98.8	100	98.8	96.3	0	100	100	97.7	98.0	98.2	0	0	98.2	98.3
Trucks	0	0	0	0	0	0	2	4	0	6	3	0	0	0	3	1	4	0	0	5	14
% Trucks	0	0	0	0	0	0	0.3	0.8	0	0.5	0.7	0	0	0	0.4	0.7	0.7	0	0	0.7	0.6
Heavys	0	0	0	0	0	0	5	2	0	7	13	0	0	0	13	2	6	0	0	8	28
% Heavys	0	0	0	0	0	0	0.9	0.4	0	0.6	3.0	0	0	0	1.9	1.3	1.1	0	0	1.1	1.1
Cyclists	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Cyclists	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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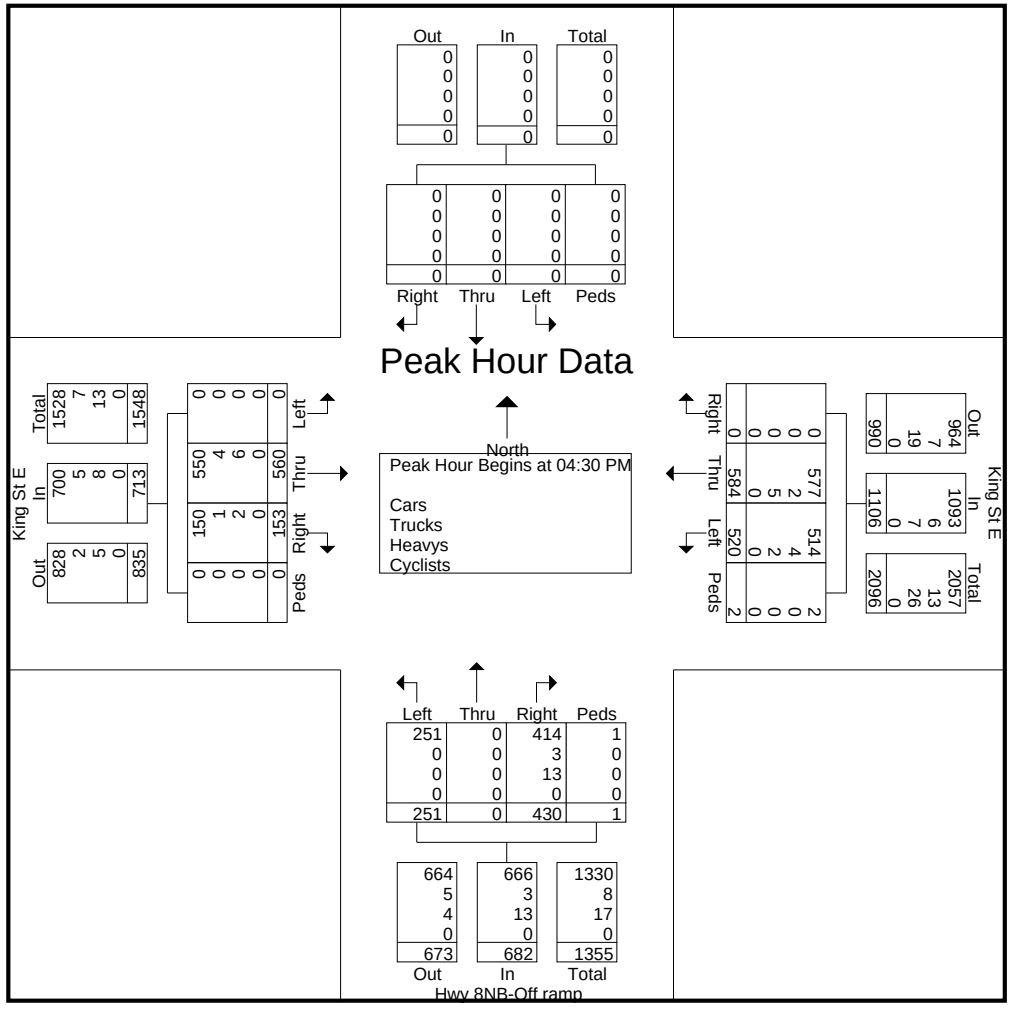
File Name : King Street East at Hwy 8NB ramps
Site Code : 00000000
Start Date : 02/21/2023
Page No : 8



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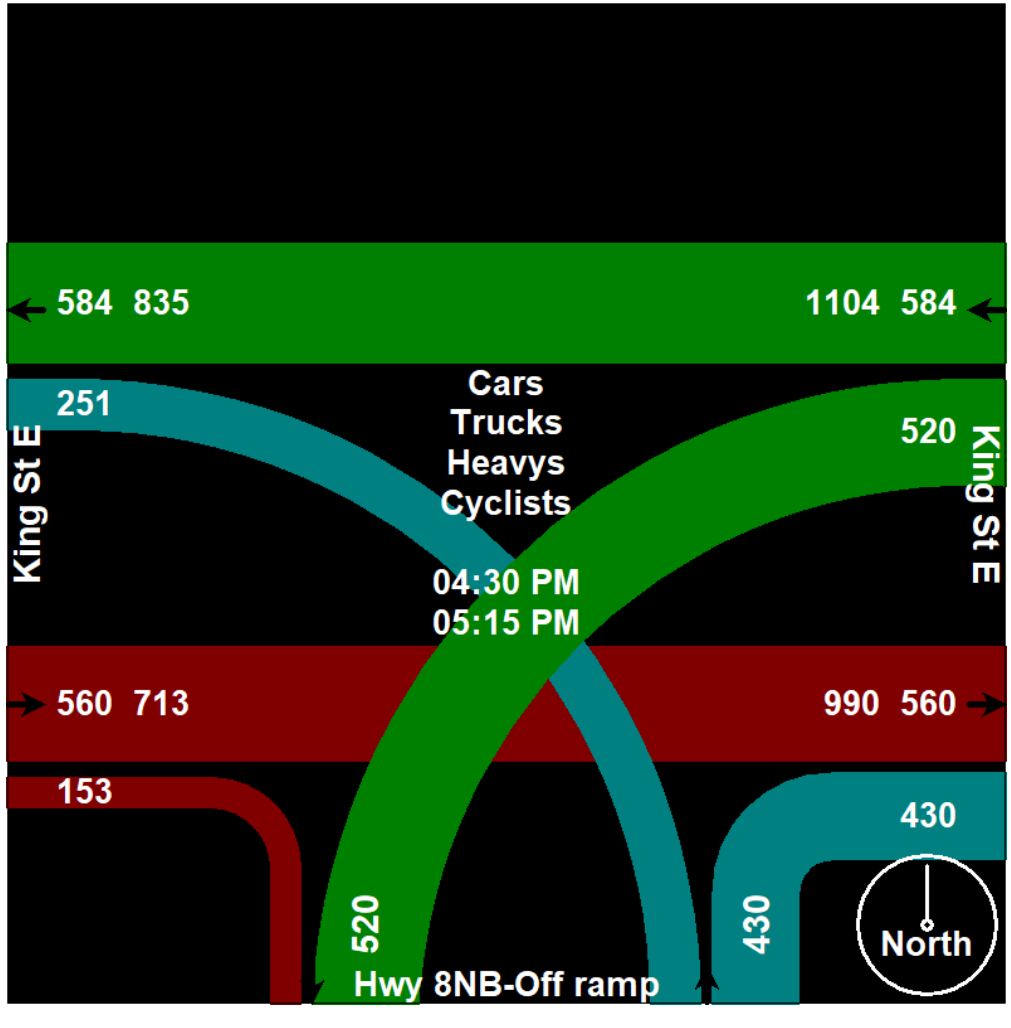
File Name : King Street East at Hwy 8NB ramps
Site Code : 00000000
Start Date : 02/21/2023
Page No : 9



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"Your Traffic Count Specialist"

File Name : King Street East at River Road
Site Code : 00000000
Start Date : 02/16/2023
Page No : 1

Groups Printed- Cars - Trucks - Heavys - Cyclists

	River Rd From North					King St E From East					River Rd From South					King St E From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	15	0	36	0	51	14	49	0	0	63	2	0	1	0	3	1	42	8	0	51	168
07:15 AM	30	0	44	0	74	22	39	1	0	62	1	1	1	0	3	0	46	13	0	59	198
07:30 AM	20	1	69	0	90	23	44	0	0	67	0	2	4	0	6	2	50	9	0	61	224
07:45 AM	39	0	58	0	97	25	57	2	2	86	1	3	1	0	5	2	71	25	1	99	287
Total	104	1	207	0	312	84	189	3	2	278	4	6	7	0	17	5	209	55	1	270	877
08:00 AM	47	1	47	0	95	25	38	0	0	63	0	1	4	0	5	1	51	18	0	70	233
08:15 AM	32	1	53	1	87	34	51	0	0	85	0	2	6	0	8	2	62	34	1	99	279
08:30 AM	40	0	48	0	88	21	58	0	0	79	1	1	5	0	7	2	56	43	2	103	277
08:45 AM	48	1	50	0	99	17	54	0	0	71	1	6	9	0	16	1	55	28	0	84	270
Total	167	3	198	1	369	97	201	0	0	298	2	10	24	0	36	6	224	123	3	356	1059
09:00 AM	32	2	52	0	86	26	52	0	0	78	0	1	4	1	6	4	43	21	1	69	239
09:15 AM	27	0	54	0	81	25	48	1	0	74	0	0	2	0	2	3	55	15	4	77	234
09:30 AM	29	2	43	0	74	29	45	0	0	74	0	0	5	0	5	2	69	28	1	100	253
09:45 AM	28	0	37	0	65	21	64	0	0	85	1	0	1	1	3	1	61	28	1	91	244
Total	116	4	186	0	306	101	209	1	0	311	1	1	12	2	16	10	228	92	7	337	970
03:00 PM	30	4	54	0	88	55	97	1	0	153	0	0	3	0	3	3	69	45	0	117	361
03:15 PM	26	4	47	0	77	53	94	0	1	148	0	4	2	1	7	1	66	38	0	105	337
03:30 PM	47	0	62	2	111	55	88	0	0	143	0	1	3	0	4	3	68	49	3	123	381
03:45 PM	43	4	46	0	93	54	107	0	2	163	2	1	0	1	4	4	83	55	1	143	403
Total	146	12	209	2	369	217	386	1	3	607	2	6	8	2	18	11	286	187	4	488	1482
04:00 PM	31	3	54	0	88	58	118	0	0	176	0	1	4	1	6	7	92	51	1	151	421
04:15 PM	29	3	59	0	91	54	107	0	0	161	0	4	2	0	6	4	79	39	1	123	381
04:30 PM	32	4	70	0	106	51	118	0	2	171	1	6	3	1	11	1	98	28	1	128	416
04:45 PM	46	0	57	1	104	68	123	0	2	193	0	1	2	2	5	0	88	55	1	144	446
Total	138	10	240	1	389	231	466	0	4	701	1	12	11	4	28	12	357	173	4	546	1664
05:00 PM	30	2	57	0	89	59	110	0	1	170	0	2	3	0	5	5	96	50	1	152	416
05:15 PM	21	2	64	0	87	51	92	0	0	143	0	1	6	0	7	2	93	40	4	139	376
05:30 PM	37	1	49	0	87	59	81	0	0	140	1	4	0	0	5	4	51	31	1	87	319
05:45 PM	38	2	43	1	84	38	65	0	0	103	1	1	1	1	4	3	71	51	1	126	317
Total	126	7	213	1	347	207	348	0	1	556	2	8	10	1	21	14	311	172	7	504	1428

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"Your Traffic Count Specialist"

File Name : King Street East at River Road
Site Code : 00000000
Start Date : 02/16/2023

Groups Printed- Cars - Trucks - Heavys - Cyclists

	River Rd From North					King St E From East					River Rd From South					King St E From West					
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Grand Total	797	37	1253	5	2092	937	1799	5	10	2751	12	43	72	9	136	58	1615	802	26	2501	7480
Apprch %	38.1	1.8	59.9	0.2		34.1	65.4	0.2	0.4		8.8	31.6	52.9	6.6		2.3	64.6	32.1	1		
Total %	10.7	0.5	16.8	0.1	28	12.5	24.1	0.1	0.1	36.8	0.2	0.6	1	0.1	1.8	0.8	21.6	10.7	0.3	33.4	
Cars	786	36	1225	5	2052	922	1740	5	10	2677	12	40	69	9	130	52	1561	786	26	2425	7284
% Cars	98.6	97.3	97.8	100	98.1	98.4	96.7	100	100	97.3	100	93	95.8	100	95.6	89.7	96.7	98	100	97	97.4
Trucks	6	0	10	0	16	10	22	0	0	32	0	0	1	0	1	3	14	8	0	25	74
% Trucks	0.8	0	0.8	0	0.8	1.1	1.2	0	0	1.2	0	0	1.4	0	0.7	5.2	0.9	1	0	1	1
Heavys	5	1	18	0	24	5	37	0	0	42	0	3	2	0	5	3	40	8	0	51	122
% Heavys	0.6	2.7	1.4	0	1.1	0.5	2.1	0	0	1.5	0	7	2.8	0	3.7	5.2	2.5	1	0	2	1.6
Cyclists	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Cyclists	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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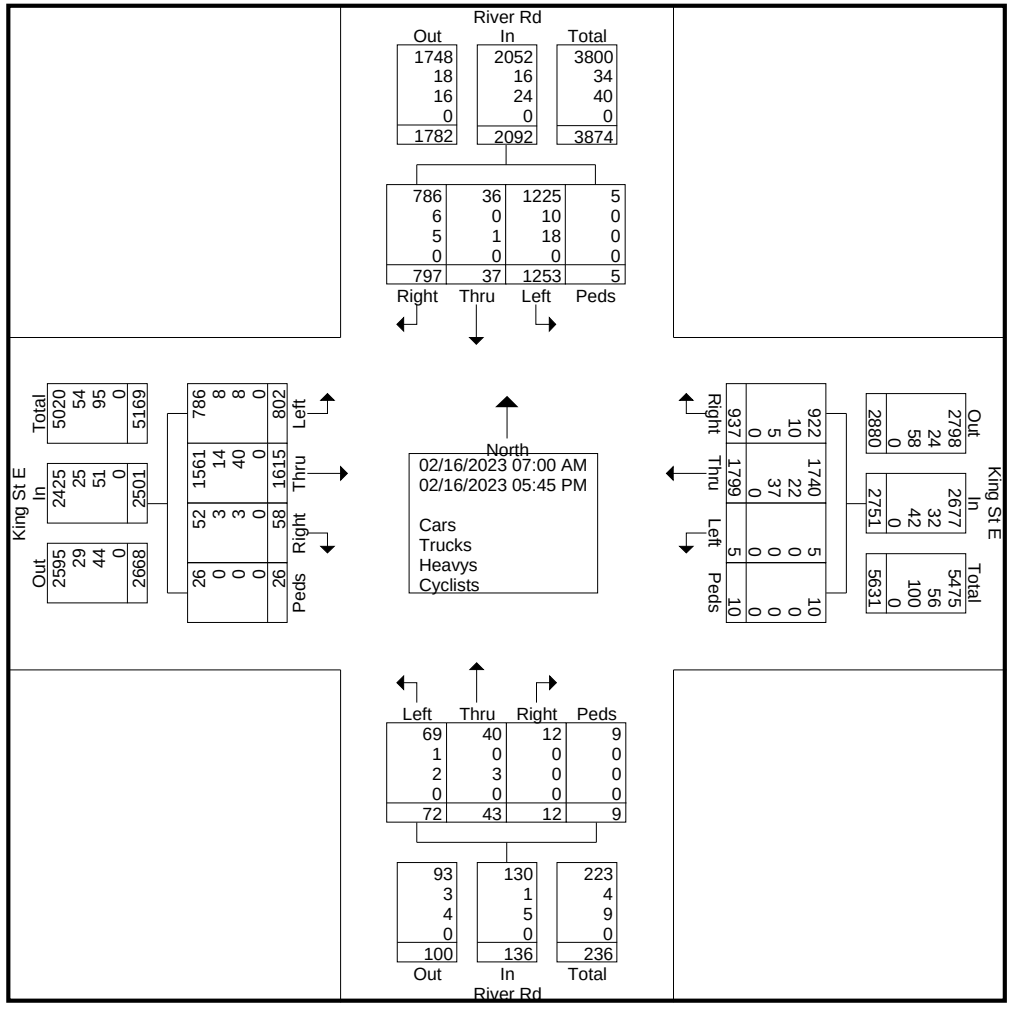
File Name : King Street East at River Road
Site Code : 00000000
Start Date : 02/16/2023
Page No : 3



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"Your Traffic Count Specialist"

File Name : King Street East at River Road
Site Code : 00000000
Start Date : 02/16/2023

	River Rd From North					King St E From East					River Rd From South					King St E From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	39	0	**58**	0	**97**	25	57	**2**	**2**	**86**	**1**	**3**	1	0	5	**2**	**71**	25	1	99	**287**
08:00 AM	**47**	**1**	47	0	95	25	38	0	0	63	0	1	4	0	5	1	51	18	0	70	233
08:15 AM	32	1	53	**1**	87	**34**	51	0	0	85	0	2	**6**	0	**8**	2	62	34	1	99	279
08:30 AM	40	0	48	0	88	21	**58**	0	0	79	1	1	5	0	7	2	56	**43**	**2**	**103**	277
Total Volume	158	2	206	1	367	105	204	2	2	313	2	7	16	0	25	7	240	120	4	371	1076
% App. Total	43.1	0.5	56.1	0.3		33.5	65.2	0.6	0.6		8	28	64	0		1.9	64.7	32.3	1.1		
PHF	.840	.500	.888	.250	.946	.772	.879	.250	.250	.910	.500	.583	.667	.000	.781	.875	.845	.698	.500	.900	.937
Cars	156	2	200	1	359	98	191	2	2	293	2	7	15	0	24	4	231	116	4	355	1031
% Cars	98.7	100	97.1	100	97.8	93.3	93.6	100	100	93.6	100	100	93.8	0	96.0	57.1	96.3	96.7	100	95.7	95.8
Trucks	1	0	2	0	3	4	5	0	0	9	0	0	0	0	0	1	3	1	0	5	17
% Trucks	0.6	0	1.0	0	0.8	3.8	2.5	0	0	2.9	0	0	0	0	0	14.3	1.3	0.8	0	1.3	1.6
Heavys	1	0	4	0	5	3	8	0	0	11	0	0	1	0	1	2	6	3	0	11	28
% Heavys	0.6	0	1.9	0	1.4	2.9	3.9	0	0	3.5	0	0	6.3	0	4.0	28.6	2.5	2.5	0	3.0	2.6
Cyclists	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Cyclists	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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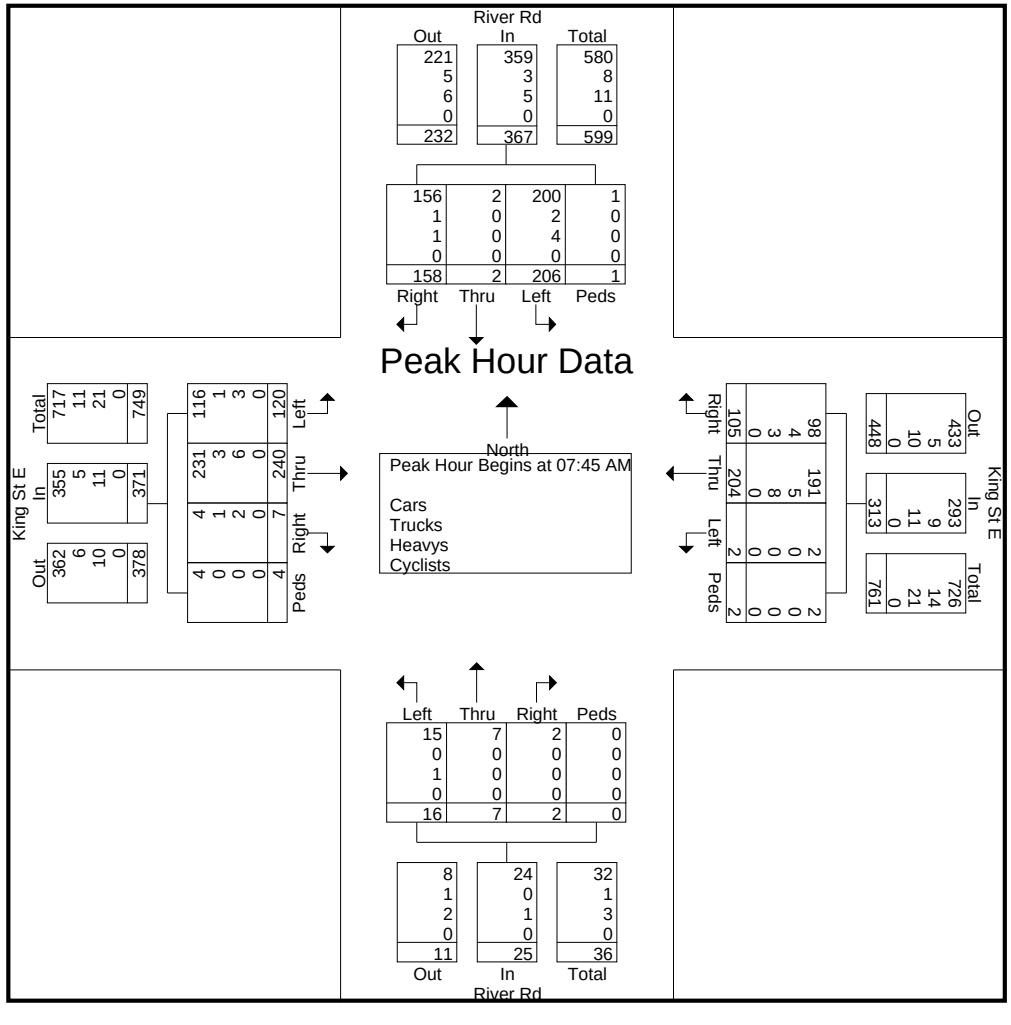
File Name : King Street East at River Road
Site Code : 00000000
Start Date : 02/16/2023
Page No : 5



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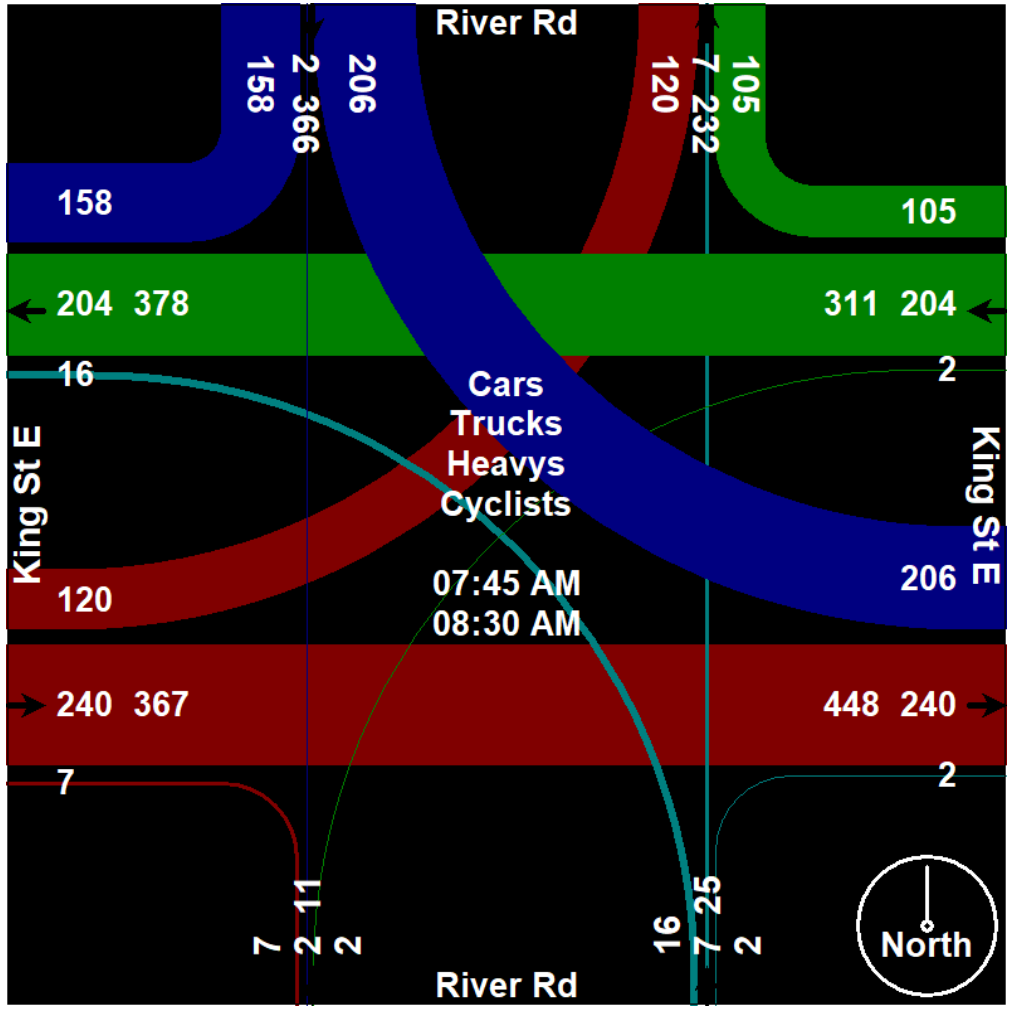
File Name : King Street East at River Road
Site Code : 00000000
Start Date : 02/16/2023
Page No : 6



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File Name : King Street East at River Road
Site Code : 00000000
Start Date : 02/16/2023
Page No : 7

	River Rd From North					King St E From East					River Rd From South					King St E From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	31	3	54	0	88	58	118	0	0	176	0	1	**4**	1	6	**7**	92	51	**1**	**151**	421
04:15 PM	29	3	59	0	91	54	107	0	0	161	0	4	2	0	6	4	79	39	1	123	381
04:30 PM	32	**4**	**70**	0	**106**	51	118	0	**2**	171	**1**	**6**	3	1	**11**	1	**98**	28	1	128	416
04:45 PM	**46**	0	57	**1**	104	**68**	**123**	0	2	**193**	0	1	2	**2**	5	0	88	**55**	1	144	**446**
Total Volume	138	10	240	1	389	231	466	0	4	701	1	12	11	4	28	12	357	173	4	546	1664
% App. Total	35.5	2.6	61.7	0.3		33	66.5	0	0.6		3.6	42.9	39.3	14.3		2.2	65.4	31.7	0.7		
PHF	.750	.625	.857	.250	.917	.849	.947	.000	.500	.908	.250	.500	.688	.500	.636	.429	.911	.786	1.00	.904	.933
Cars	137	10	238	1	386	230	457	0	4	691	1	11	10	4	26	10	349	173	4	536	1639
% Cars	99.3	100	99.2	100	99.2	99.6	98.1	0	100	98.6	100	91.7	90.9	100	92.9	83.3	97.8	100	100	98.2	98.5
Trucks	0	0	1	0	1	1	4	0	0	5	0	0	1	0	1	1	1	0	0	2	9
% Trucks	0	0	0.4	0	0.3	0.4	0.9	0	0	0.7	0	0	9.1	0	3.6	8.3	0.3	0	0	0.4	0.5
Heavys	1	0	1	0	2	0	5	0	0	5	0	1	0	0	1	1	7	0	0	8	16
% Heavys	0.7	0	0.4	0	0.5	0	1.1	0	0	0.7	0	8.3	0	0	3.6	8.3	2.0	0	0	1.5	1.0
Cyclists	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Cyclists	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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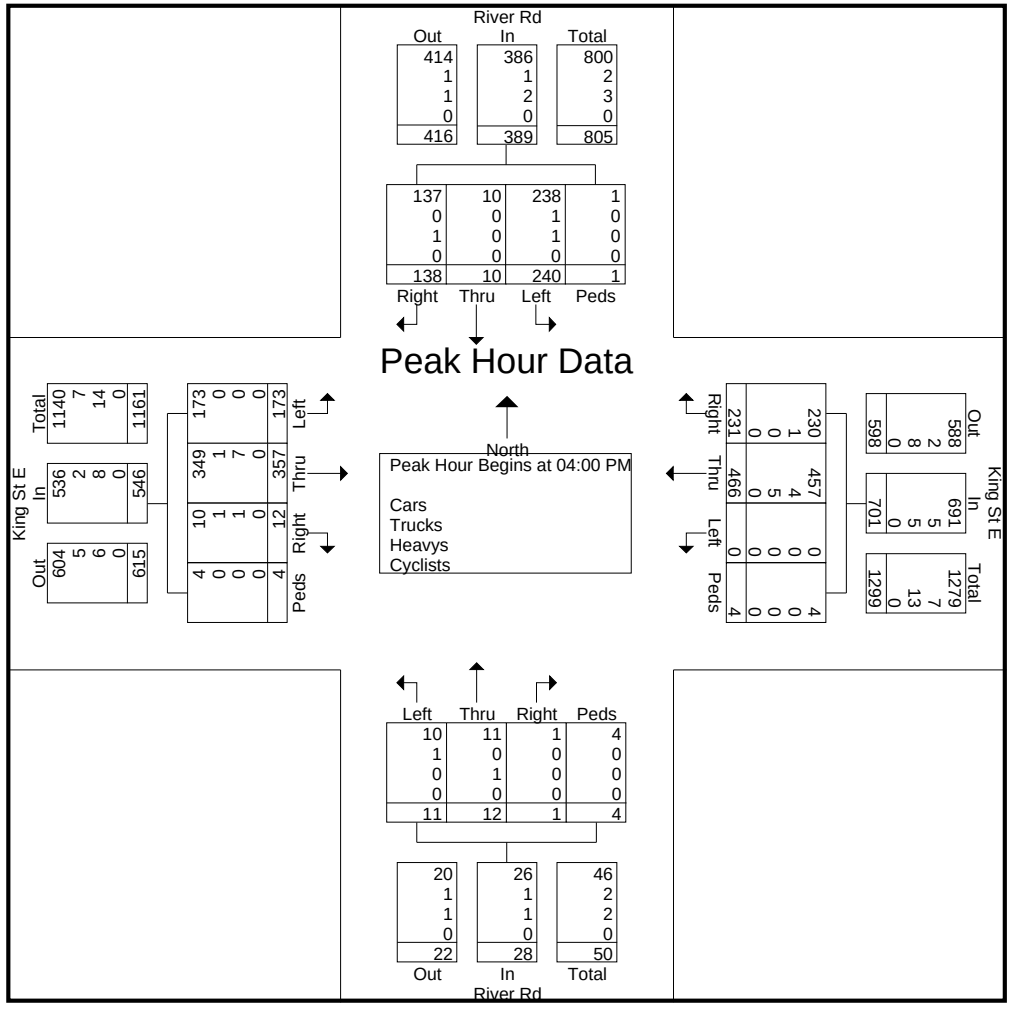
File Name : King Street East at River Road
Site Code : 00000000
Start Date : 02/16/2023
Page No : 8



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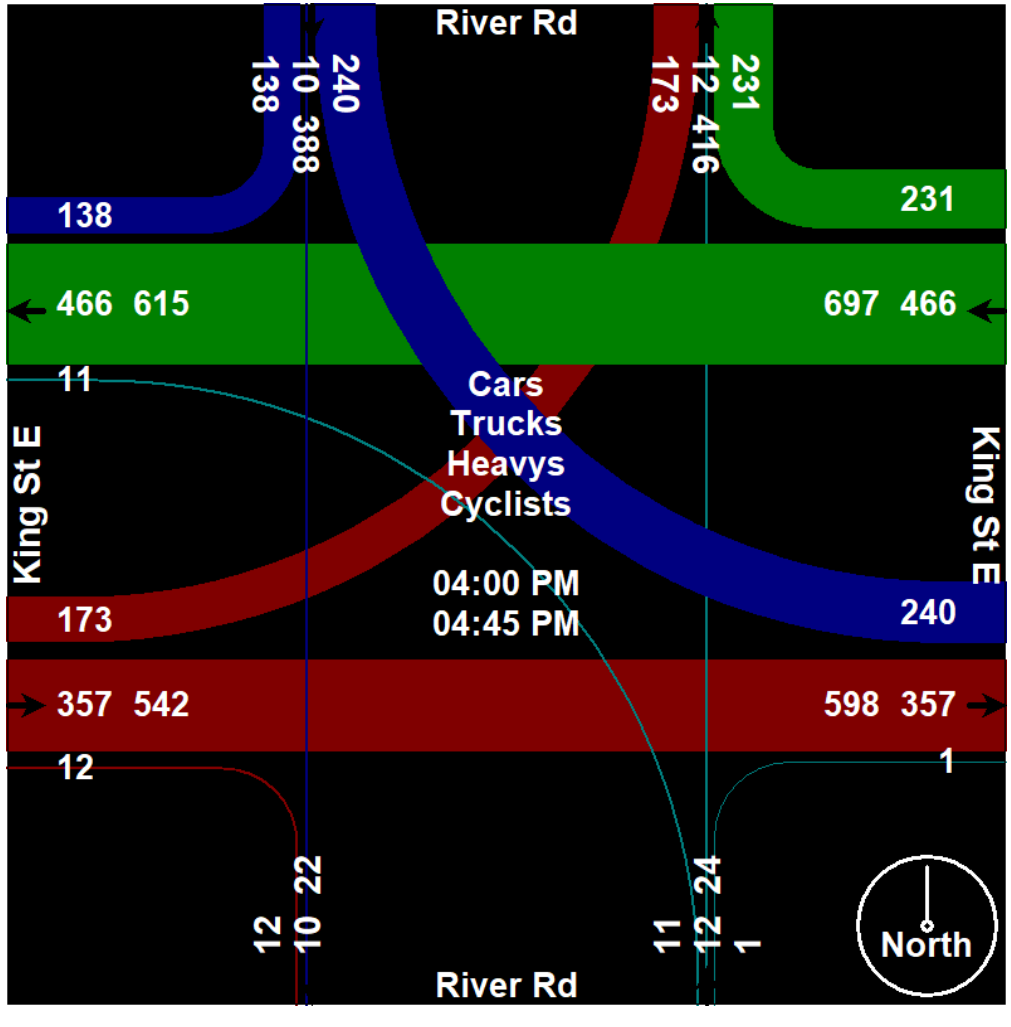

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"Your Traffic Count Specialist"

File Name : Manitou Dtive at Wabanaki Drive
Site Code : 00000000
Start Date : 02/16/2023
Page No : 1

Groups Printed- Cars - Trucks - Heavys - Cyclists

	Manitou Dr From North					Wabanaki Dr From East					Manitou Dr From South					Driveway From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	0	33	16	0	49	17	0	43	0	60	74	42	0	0	116	0	0	0	0	0	225
07:15 AM	0	33	17	0	50	15	0	46	1	62	90	57	0	1	148	0	0	0	0	0	260
07:30 AM	0	51	25	0	76	11	0	57	0	68	130	71	0	2	203	0	0	0	0	0	347
07:45 AM	0	62	22	0	84	9	0	61	0	70	145	95	0	0	240	0	0	0	0	0	394
Total	0	179	80	0	259	52	0	207	1	260	439	265	0	3	707	0	0	0	0	0	1226
08:00 AM	0	51	19	0	70	18	0	64	1	83	132	76	2	0	210	0	0	1	0	1	364
08:15 AM	1	53	16	0	70	14	0	77	0	91	121	83	1	0	205	0	0	0	0	0	366
08:30 AM	1	35	18	0	54	21	0	68	0	89	144	93	0	2	239	0	0	0	0	0	382
08:45 AM	0	57	26	0	83	23	1	69	0	93	125	88	0	1	214	0	0	0	2	2	392
Total	2	196	79	0	277	76	1	278	1	356	522	340	3	3	868	0	0	1	2	3	1504
09:00 AM	0	49	14	0	63	13	0	59	2	74	98	80	0	2	180	1	0	0	1	2	319
09:15 AM	1	53	23	0	77	14	0	47	1	62	89	88	0	0	177	0	0	0	1	1	317
09:30 AM	1	50	20	1	72	13	0	40	0	53	106	75	0	0	181	0	0	0	1	1	307
09:45 AM	1	59	20	0	80	27	1	57	0	85	102	74	0	0	176	1	0	1	0	2	343
Total	3	211	77	1	292	67	1	203	3	274	395	317	0	2	714	2	0	1	3	6	1286
03:00 PM	1	93	22	0	116	53	0	119	0	172	88	95	0	1	184	1	0	0	2	3	475
03:15 PM	1	100	13	0	114	24	0	103	1	128	113	96	0	0	209	1	0	0	2	3	454
03:30 PM	0	86	24	0	110	36	0	128	0	164	108	98	2	9	217	1	1	1	1	4	495
03:45 PM	0	94	15	0	109	22	0	127	0	149	136	102	1	0	239	0	0	0	0	0	497
Total	2	373	74	0	449	135	0	477	1	613	445	391	3	10	849	3	1	1	5	10	1921
04:00 PM	1	103	21	0	125	40	0	144	0	184	129	95	0	2	226	0	0	1	0	1	536
04:15 PM	1	116	20	0	137	21	0	134	0	155	137	105	0	1	243	1	1	0	0	2	537
04:30 PM	2	110	24	0	136	42	0	136	0	178	137	114	2	0	253	0	0	0	0	0	567
04:45 PM	0	111	17	0	128	39	0	143	0	182	118	122	0	1	241	0	0	0	0	0	551
Total	4	440	82	0	526	142	0	557	0	699	521	436	2	4	963	1	1	1	0	3	2191
05:00 PM	1	124	20	0	145	31	0	134	1	166	133	126	0	1	260	0	1	1	0	2	573
05:15 PM	2	98	21	0	121	27	0	131	1	159	123	115	0	0	238	0	0	1	1	2	520
05:30 PM	0	99	8	0	107	14	0	102	0	116	139	117	0	1	257	1	0	0	0	1	481
05:45 PM	0	95	10	0	105	13	0	109	0	122	114	85	0	0	199	0	0	2	0	2	428
Total	3	416	59	0	478	85	0	476	2	563	509	443	0	2	954	1	1	4	1	7	2002

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"Your Traffic Count Specialist"

File Name : Manitou Dtive at Wabanaki Drive
Site Code : 00000000
Start Date : 02/16/2023

Groups Printed- Cars - Trucks - Heavys - Cyclists

	Manitou Dr From North					Wabanaki Dr From East					Manitou Dr From South					Driveway From West					
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Grand Total	14	1815	451	1	2281	557	2	2198	8	2765	2831	2192	8	24	5055	7	3	8	11	29	10130
Apprch %	0.6	79.6	19.8	0		20.1	0.1	79.5	0.3		56	43.4	0.2	0.5		24.1	10.3	27.6	37.9		
Total %	0.1	17.9	4.5	0	22.5	5.5	0	21.7	0.1	27.3	27.9	21.6	0.1	0.2	49.9	0.1	0	0.1	0.1	0.3	
Cars	14	1728	413	1	2156	519	2	2059	8	2588	2651	2082	8	24	4765	7	3	8	11	29	9538
% Cars	100	95.2	91.6	100	94.5	93.2	100	93.7	100	93.6	93.6	95	100	100	94.3	100	100	100	100	100	94.2
Trucks	0	31	22	0	53	14	0	38	0	52	71	37	0	0	108	0	0	0	0	0	213
% Trucks	0	1.7	4.9	0	2.3	2.5	0	1.7	0	1.9	2.5	1.7	0	0	2.1	0	0	0	0	0	2.1
Heavys	0	56	16	0	72	24	0	100	0	124	109	73	0	0	182	0	0	0	0	0	378
% Heavys	0	3.1	3.5	0	3.2	4.3	0	4.5	0	4.5	3.9	3.3	0	0	3.6	0	0	0	0	0	3.7
Cyclists	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1
% Cyclists	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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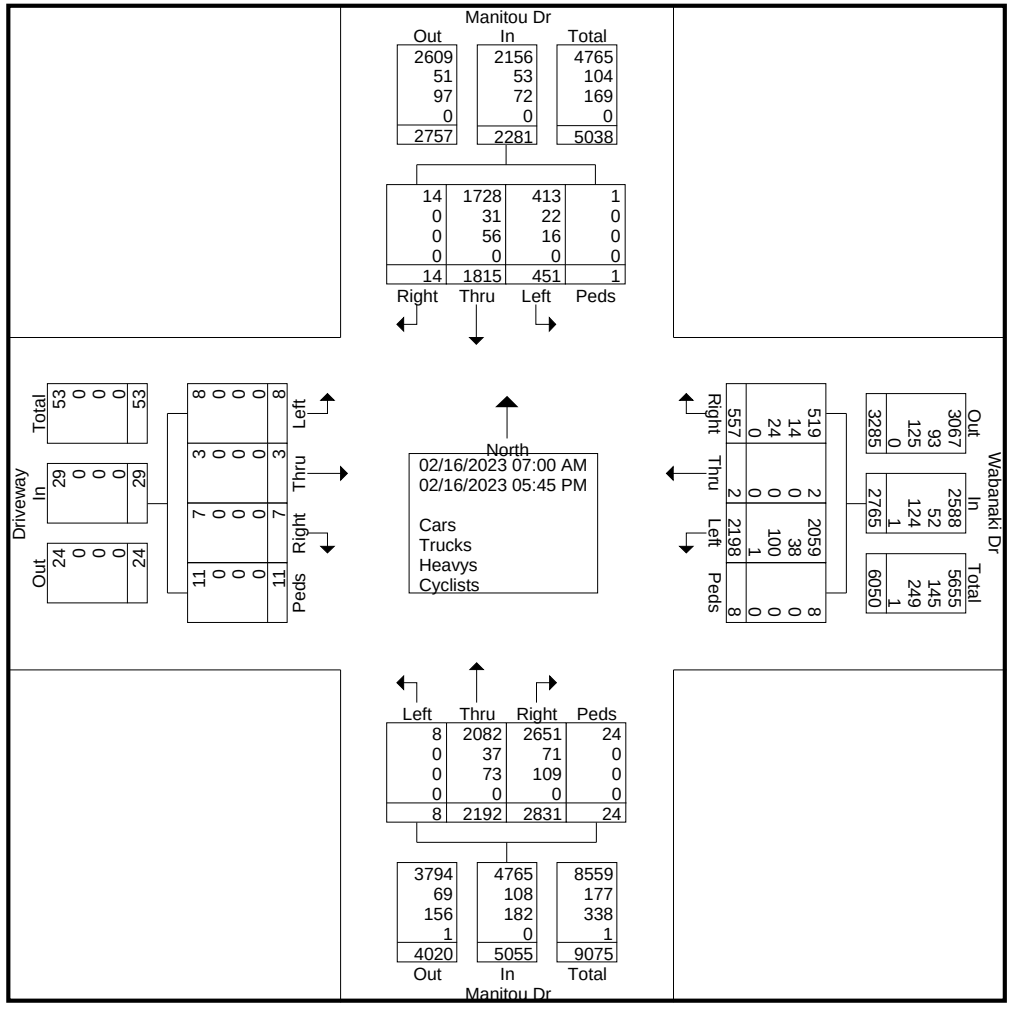
File Name : Manitou Dtive at Wabanaki Drive
Site Code : 00000000
Start Date : 02/16/2023
Page No : 3



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File Name : Manitou Dtive at Wabanaki Drive
Site Code : 00000000
Start Date : 02/16/2023

	Manitou Dr From North					Wabanaki Dr From East					Manitou Dr From South					Driveway From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	0	**62**	**22**	0	**84**	9	0	61	0	70	**145**	**95**	0	0	**240**	0	0	0	0	0	**394**
08:00 AM	0	51	19	0	70	18	0	64	**1**	83	132	76	**2**	0	210	0	0	**1**	0	**1**	364
08:15 AM	**1**	53	16	0	70	14	0	**77**	0	**91**	121	83	1	0	205	0	0	0	0	0	366
08:30 AM	1	35	18	0	54	**21**	0	68	0	89	144	93	0	**2**	239	0	0	0	0	0	382
Total Volume	2	201	75	0	278	62	0	270	1	333	542	347	3	2	894	0	0	1	0	1	1506
% App. Total	0.7	72.3	27	0		18.6	0	81.1	0.3		60.6	38.8	0.3	0.2		0	0	100	0		
PHF	.500	.810	.852	.000	.827	.738	.000	.877	.250	.915	.934	.913	.375	.250	.931	.000	.000	.250	.000	.250	.956
Cars	2	192	72	0	266	56	0	247	1	304	515	320	3	2	840	0	0	1	0	1	1411
% Cars	100	95.5	96.0	0	95.7	90.3	0	91.5	100	91.3	95.0	92.2	100	100	94.0	0	0	100	0	100	93.7
Trucks	0	2	2	0	4	2	0	6	0	8	9	8	0	0	17	0	0	0	0	0	29
% Trucks	0	1.0	2.7	0	1.4	3.2	0	2.2	0	2.4	1.7	2.3	0	0	1.9	0	0	0	0	0	1.9
Heavys	0	7	1	0	8	4	0	17	0	21	18	19	0	0	37	0	0	0	0	0	66
% Heavys	0	3.5	1.3	0	2.9	6.5	0	6.3	0	6.3	3.3	5.5	0	0	4.1	0	0	0	0	0	4.4
Cyclists	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Cyclists	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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Site Code : 00000000
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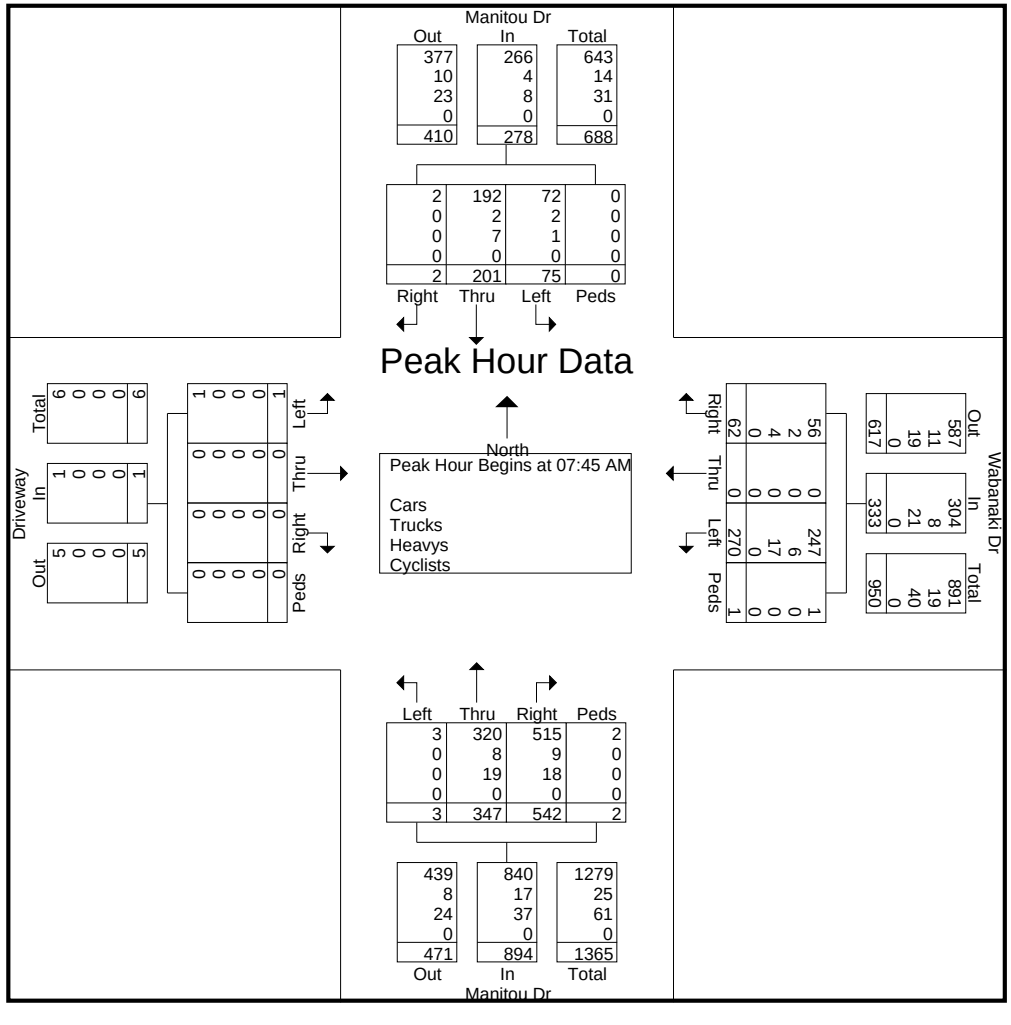
Page No : 5



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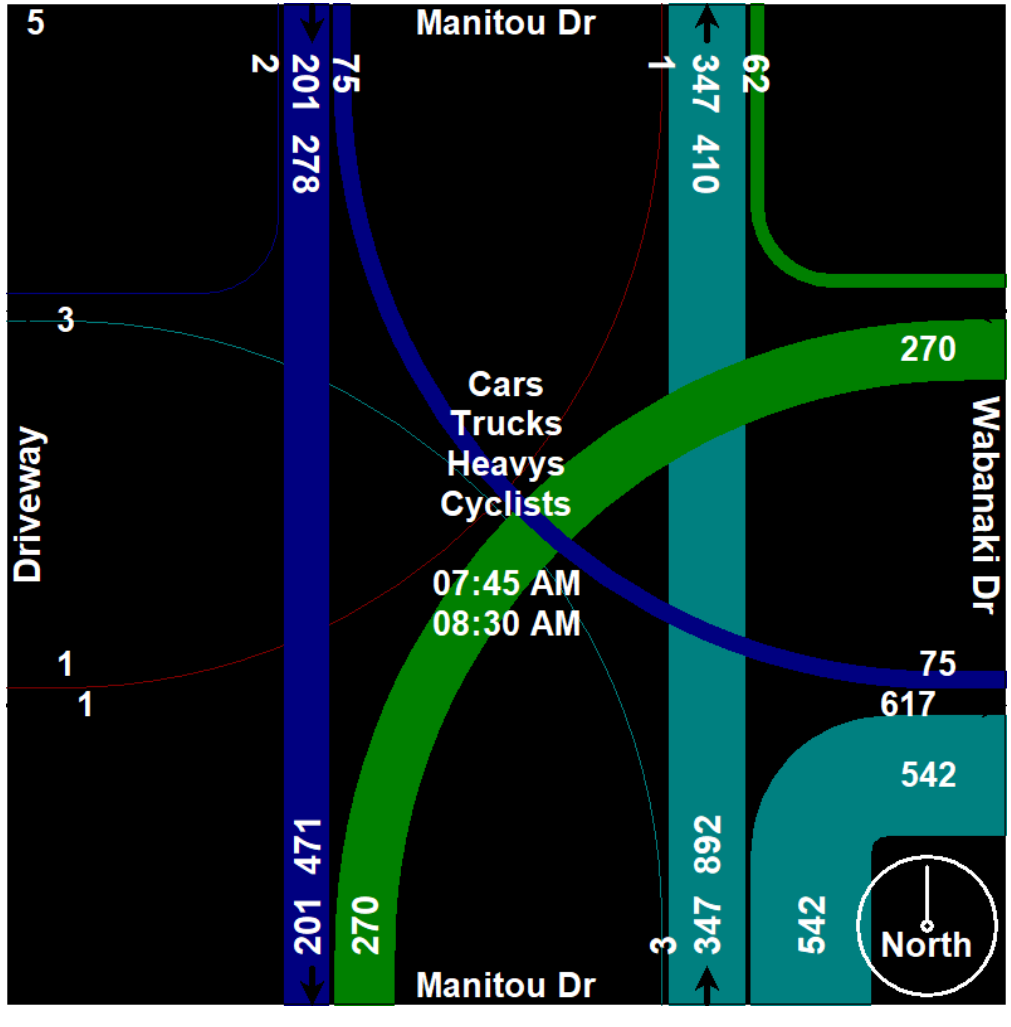

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Site Code : 00000000
Start Date : 02/16/2023
Page No : 7

	Manitou Dr From North					Wabanaki Dr From East					Manitou Dr From South					Driveway From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:15 PM																					
04:15 PM	1	116	20	0	137	21	0	134	0	155	**137**	105	0	**1**	243	**1**	**1**	0	0	**2**	537
04:30 PM	**2**	110	**24**	0	136	**42**	0	136	0	178	137	114	**2**	0	253	0	0	0	0	0	567
04:45 PM	0	111	17	0	128	39	0	**143**	0	**182**	118	122	0	1	241	0	0	0	0	0	551
05:00 PM	1	**124**	20	0	**145**	31	0	134	**1**	166	133	**126**	0	1	**260**	0	1	**1**	0	2	**573**
Total Volume	4	461	81	0	546	133	0	547	1	681	525	467	2	3	997	1	2	1	0	4	2228
% App. Total	0.7	84.4	14.8	0		19.5	0	80.3	0.1		52.7	46.8	0.2	0.3		25	50	25	0		
PHF	.500	.929	.844	.000	.941	.792	.000	.956	.250	.935	.958	.927	.250	.750	.959	.250	.500	.250	.000	.500	.972
Cars	4	450	73	0	527	132	0	529	1	662	497	455	2	3	957	1	2	1	0	4	2150
% Cars	100	97.6	90.1	0	96.5	99.2	0	96.7	100	97.2	94.7	97.4	100	100	96.0	100	100	100	0	100	96.5
Trucks	0	2	6	0	8	0	0	4	0	4	10	5	0	0	15	0	0	0	0	0	27
% Trucks	0	0.4	7.4	0	1.5	0	0	0.7	0	0.6	1.9	1.1	0	0	1.5	0	0	0	0	0	1.2
Heavys	0	9	2	0	11	1	0	14	0	15	18	7	0	0	25	0	0	0	0	0	51
% Heavys	0	2.0	2.5	0	2.0	0.8	0	2.6	0	2.2	3.4	1.5	0	0	2.5	0	0	0	0	0	2.3
Cyclists	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Cyclists	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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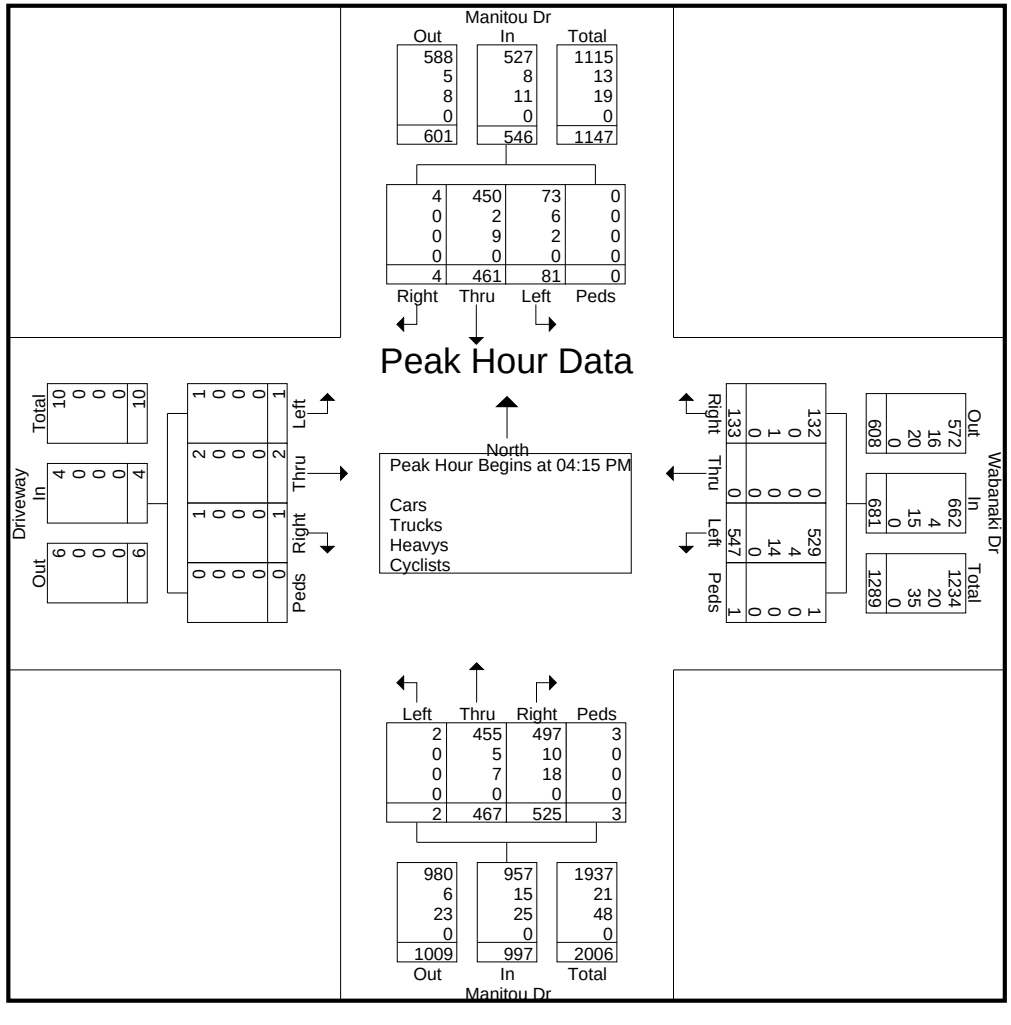
File Name : Manitou Dtive at Wabanaki Drive
Site Code : 00000000
Start Date : 02/16/2023
Page No : 8



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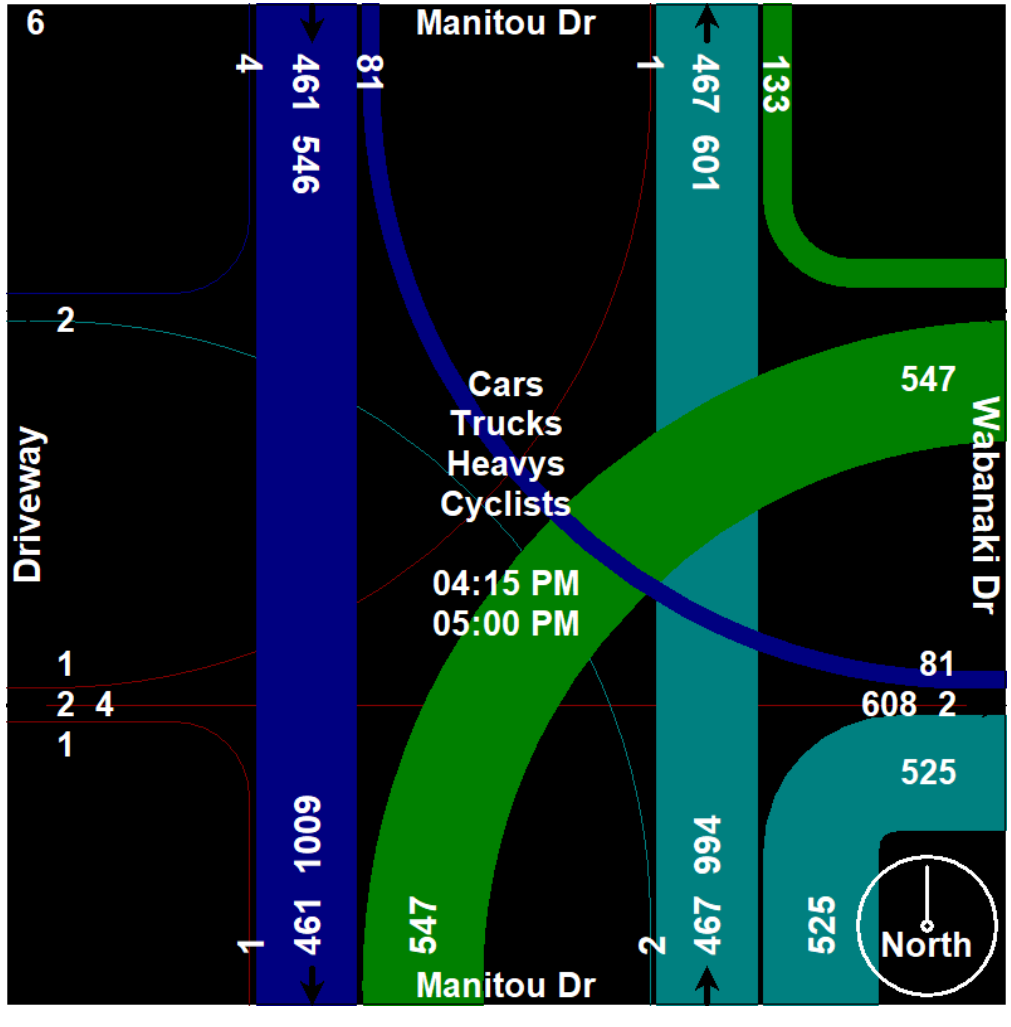

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"Your Traffic Count Specialist"

File Name : Wilson Avenue at Wabanaki Drive
Site Code : 00000000
Start Date : 02/16/2023
Page No : 1

Groups Printed- Cars - Trucks - Heavys - Cyclists

	Wilson Ave From North					Wabanaki Dr From East					Wilson Ave From South					Wabanaki Dr From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	53	3	1	1	58	1	8	1	0	10	0	1	1	0	2	3	48	36	0	87	157
07:15 AM	53	4	0	0	57	3	9	0	0	12	0	0	2	0	2	6	60	35	0	101	172
07:30 AM	57	4	2	1	64	5	14	0	0	19	1	0	2	0	3	5	79	56	0	140	226
07:45 AM	80	11	0	0	91	8	16	6	3	33	0	0	1	3	4	13	79	62	0	154	282
Total	243	22	3	2	270	17	47	7	3	74	1	1	6	3	11	27	266	189	0	482	837
08:00 AM	68	11	1	0	80	5	15	3	0	23	1	2	0	0	3	10	80	59	0	149	255
08:15 AM	83	6	0	0	89	4	17	0	0	21	0	0	2	1	3	6	67	57	0	130	243
08:30 AM	64	2	0	0	66	4	21	1	0	26	1	1	1	0	3	7	82	65	0	154	249
08:45 AM	76	2	0	0	78	1	19	3	0	23	0	1	5	1	7	13	68	61	0	142	250
Total	291	21	1	0	313	14	72	7	0	93	2	4	8	2	16	36	297	242	0	575	997
09:00 AM	65	4	0	0	69	0	9	2	0	11	2	4	3	0	9	4	35	64	0	103	192
09:15 AM	51	6	0	0	57	1	16	1	1	19	1	1	0	0	2	5	37	50	0	92	170
09:30 AM	45	2	2	0	49	1	4	0	0	5	0	2	1	0	3	6	59	59	0	124	181
09:45 AM	58	2	1	1	62	2	22	0	0	24	1	0	3	0	4	9	63	49	0	121	211
Total	219	14	3	1	237	4	51	3	1	59	4	7	7	0	18	24	194	222	0	440	754
03:00 PM	110	1	0	0	111	2	36	0	0	38	6	7	9	1	23	3	59	61	0	123	295
03:15 PM	108	1	0	1	110	3	20	2	0	25	3	2	2	1	8	8	46	81	0	135	278
03:30 PM	122	5	0	2	129	0	26	1	0	27	4	2	4	1	11	4	56	69	0	129	296
03:45 PM	113	2	1	0	116	4	31	7	0	42	1	2	4	0	7	3	54	88	0	145	310
Total	453	9	1	3	466	9	113	10	0	132	14	13	19	3	49	18	215	299	0	532	1179
04:00 PM	122	1	1	2	126	1	49	3	0	53	2	4	4	0	10	2	59	88	0	149	338
04:15 PM	110	3	1	0	114	1	23	0	0	24	2	2	4	0	8	2	77	83	0	162	308
04:30 PM	132	4	0	0	136	2	27	1	0	30	10	7	24	0	41	8	74	86	0	168	375
04:45 PM	144	3	0	0	147	2	19	0	0	21	6	4	5	0	15	4	69	99	0	172	355
Total	508	11	2	2	523	6	118	4	0	128	20	17	37	0	74	16	279	356	0	651	1376
05:00 PM	125	1	0	0	126	0	30	0	0	30	6	3	1	0	10	3	72	86	0	161	327
05:15 PM	108	0	0	1	109	6	29	0	0	35	2	2	7	0	11	1	69	73	0	143	298
05:30 PM	90	2	0	0	92	0	18	0	0	18	0	2	1	1	4	1	79	70	0	150	264
05:45 PM	109	0	0	1	110	0	17	0	1	18	0	1	3	0	4	2	57	70	0	129	261
Total	432	3	0	2	437	6	94	0	1	101	8	8	12	1	29	7	277	299	0	583	1150

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"Your Traffic Count Specialist"

File Name : Wilson Avenue at Wabanaki Drive
Site Code : 00000000
Start Date : 02/16/2023

Groups Printed- Cars - Trucks - Heavys - Cyclists

	Wilson Ave From North					Wabanaki Dr From East					Wilson Ave From South					Wabanaki Dr From West					
	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Grand Total	2146	80	10	10	2246	56	495	31	5	587	49	50	89	9	197	128	1528	1607	0	3263	6293
Apprch %	95.5	3.6	0.4	0.4		9.5	84.3	5.3	0.9		24.9	25.4	45.2	4.6		3.9	46.8	49.2	0		
Total %	34.1	1.3	0.2	0.2	35.7	0.9	7.9	0.5	0.1	9.3	0.8	0.8	1.4	0.1	3.1	2	24.3	25.5	0	51.9	
Cars	2028	70	10	10	2118	47	435	31	5	518	46	49	86	9	190	118	1458	1510	0	3086	5912
% Cars	94.5	87.5	100	100	94.3	83.9	87.9	100	100	88.2	93.9	98	96.6	100	96.4	92.2	95.4	94	0	94.6	93.9
Trucks	36	7	0	0	43	4	9	0	0	13	2	1	2	0	5	3	29	26	0	58	119
% Trucks	1.7	8.8	0	0	1.9	7.1	1.8	0	0	2.2	4.1	2	2.2	0	2.5	2.3	1.9	1.6	0	1.8	1.9
Heavys	82	2	0	0	84	4	51	0	0	55	1	0	1	0	2	7	41	71	0	119	260
% Heavys	3.8	2.5	0	0	3.7	7.1	10.3	0	0	9.4	2	0	1.1	0	1	5.5	2.7	4.4	0	3.6	4.1
Cyclists	0	1	0	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
% Cyclists	0	1.2	0	0	0	1.8	0	0	0	0.2	0	0	0	0	0	0	0	0	0	0	0

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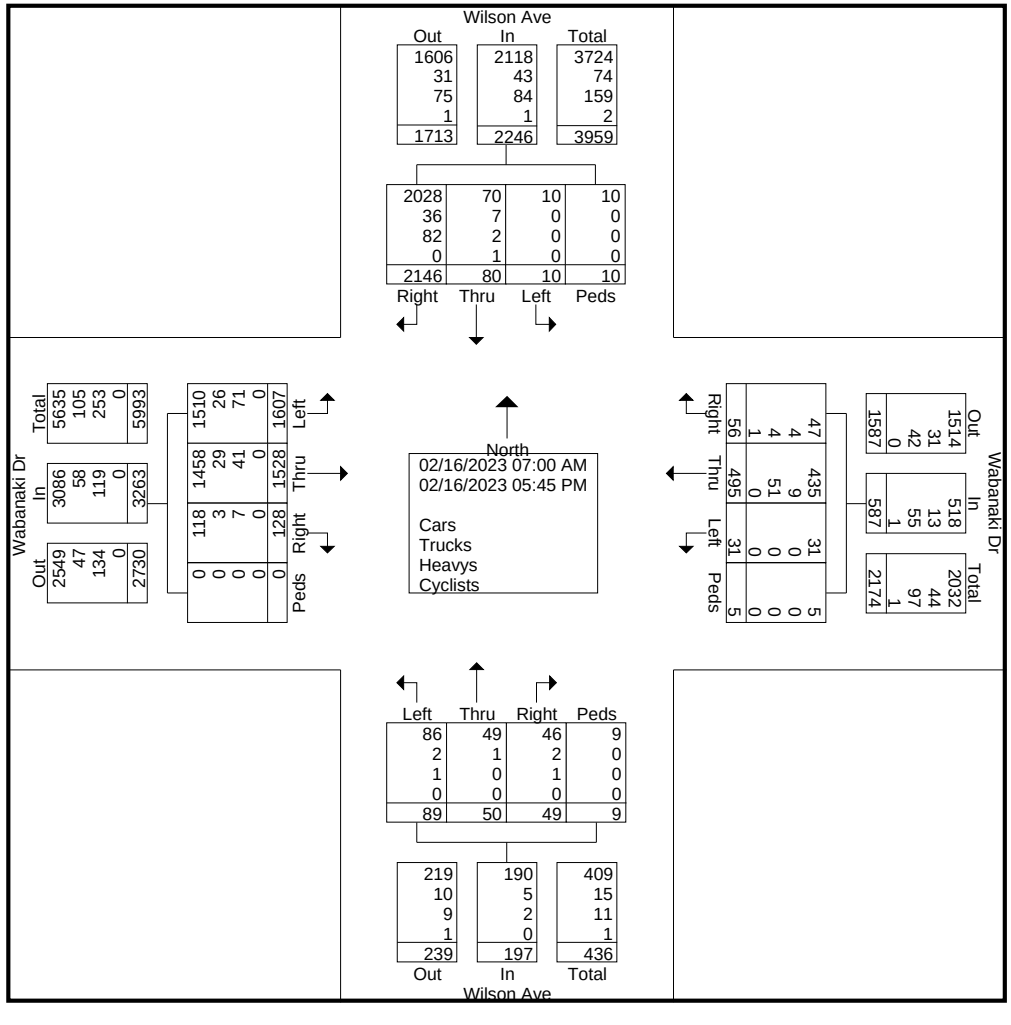

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Site Code : 00000000
Start Date : 02/16/2023

	Wilson Ave From North					Wabanaki Dr From East					Wilson Ave From South					Wabanaki Dr From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 09:45 AM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 07:45 AM																					
07:45 AM	80	**11**	0	0	**91**	**8**	16	**6**	**3**	**33**	0	0	1	**3**	**4**	**13**	79	62	0	**154**	**282**
08:00 AM	68	11	**1**	0	80	5	15	3	0	23	**1**	**2**	0	0	3	10	80	59	0	149	255
08:15 AM	**83**	6	0	0	89	4	17	0	0	21	0	0	**2**	1	3	6	67	57	0	130	243
08:30 AM	64	2	0	0	66	4	**21**	1	0	26	1	1	1	0	3	7	**82**	**65**	0	154	249
Total Volume	295	30	1	0	326	21	69	10	3	103	2	3	4	4	13	36	308	243	0	587	1029
% App. Total	90.5	9.2	0.3	0		20.4	67	9.7	2.9		15.4	23.1	30.8	30.8		6.1	52.5	41.4	0		
PHF	.889	.682	.250	.000	.896	.656	.821	.417	.250	.780	.500	.375	.500	.333	.813	.692	.939	.935	.000	.953	.912
Cars	277	26	1	0	304	19	59	10	3	91	1	3	4	4	12	32	300	226	0	558	965
% Cars	93.9	86.7	100	0	93.3	90.5	85.5	100	100	88.3	50.0	100	100	100	92.3	88.9	97.4	93.0	0	95.1	93.8
Trucks	3	2	0	0	5	1	3	0	0	4	0	0	0	0	0	1	4	5	0	10	19
% Trucks	1.0	6.7	0	0	1.5	4.8	4.3	0	0	3.9	0	0	0	0	0	2.8	1.3	2.1	0	1.7	1.8
Heavys	15	2	0	0	17	1	7	0	0	8	1	0	0	0	1	3	4	12	0	19	45
% Heavys	5.1	6.7	0	0	5.2	4.8	10.1	0	0	7.8	50.0	0	0	0	7.7	8.3	1.3	4.9	0	3.2	4.4
Cyclists	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% Cyclists	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

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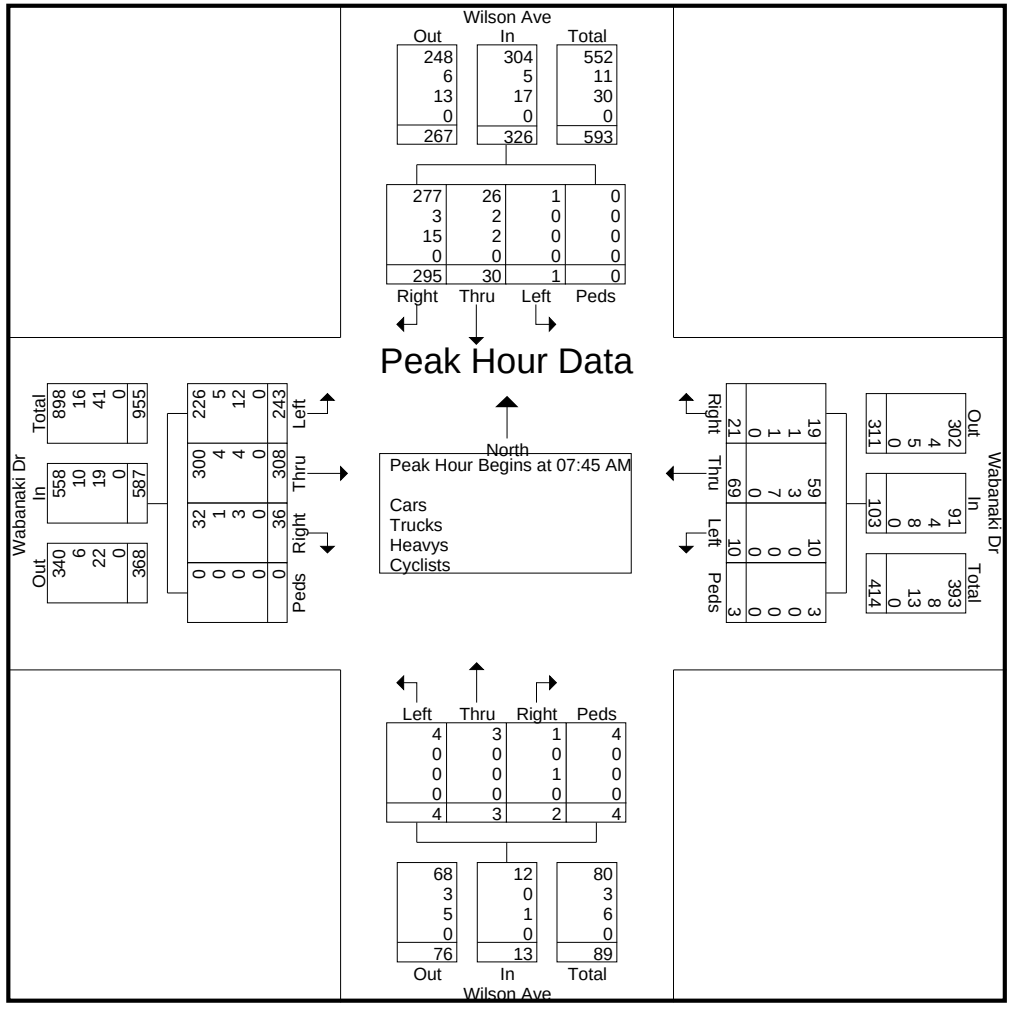

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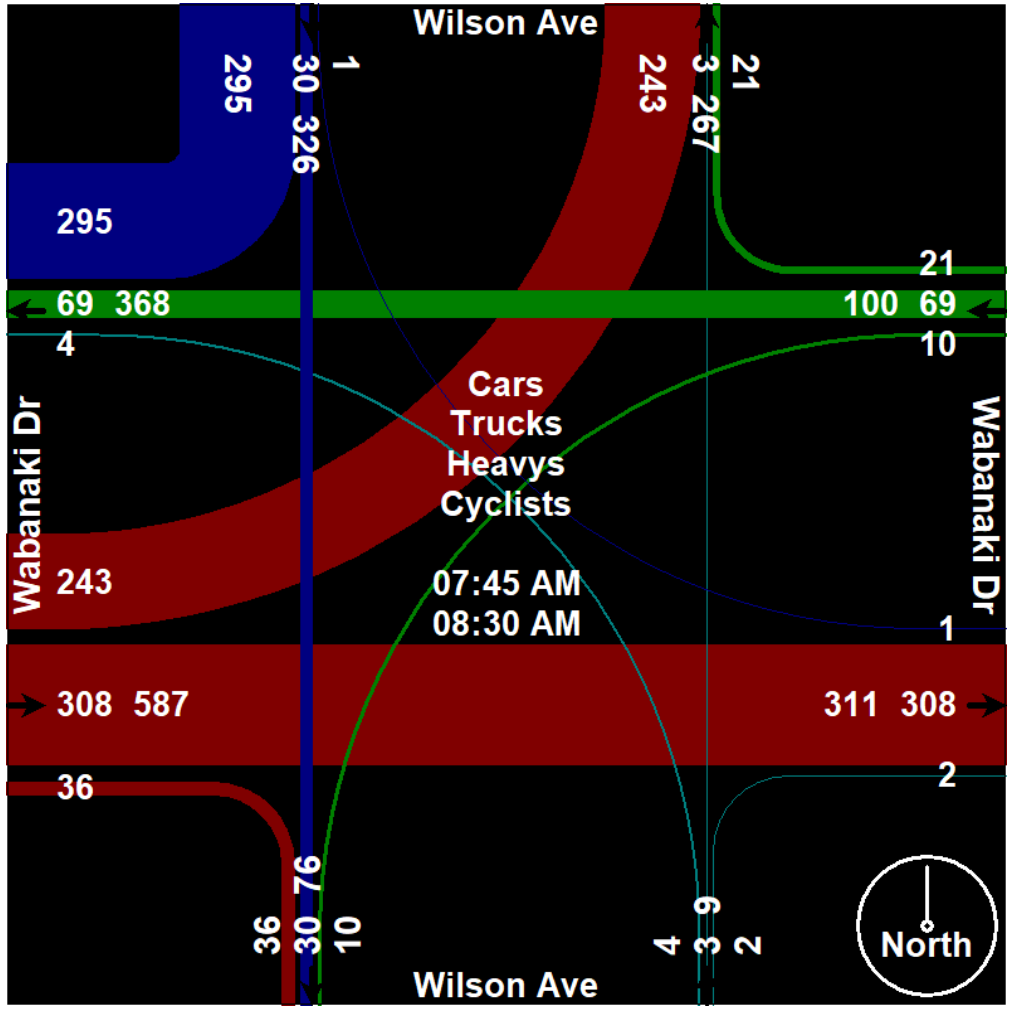

Horizon Data Services Ltd

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Phone: (416) 840-6619 Fax: (416) 840-5297
"Your Traffic Count Specialist"

File Name : Wilson Avenue at Wabanaki Drive
Site Code : 00000000
Start Date : 02/16/2023
Page No : 7

	Wilson Ave From North					Wabanaki Dr From East					Wilson Ave From South					Wabanaki Dr From West					
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
Peak Hour Analysis From 03:00 PM to 05:45 PM - Peak 1 of 1																					
Peak Hour for Entire Intersection Begins at 04:00 PM																					
04:00 PM	122	1	**1**	**2**	126	1	**49**	**3**	0	**53**	2	4	4	0	10	2	59	88	0	149	338
04:15 PM	110	3	1	0	114	1	23	0	0	24	2	2	4	0	8	2	**77**	83	0	162	308
04:30 PM	132	**4**	0	0	136	**2**	27	1	0	30	**10**	**7**	**24**	0	**41**	**8**	74	86	0	168	**375**
04:45 PM	**144**	3	0	0	**147**	2	19	0	0	21	6	4	5	0	15	4	69	**99**	0	**172**	355
Total Volume	508	11	2	2	523	6	118	4	0	128	20	17	37	0	74	16	279	356	0	651	1376
% App. Total	97.1	2.1	0.4	0.4		4.7	92.2	3.1	0		27	23	50	0		2.5	42.9	54.7	0		
PHF	.882	.688	.500	.250	.889	.750	.602	.333	.000	.604	.500	.607	.385	.000	.451	.500	.906	.899	.000	.946	.917
Cars	484	9	2	2	497	6	109	4	0	119	20	17	36	0	73	16	269	341	0	626	1315
% Cars	95.3	81.8	100	100	95.0	100	92.4	100	0	93.0	100	100	97.3	0	98.6	100	96.4	95.8	0	96.2	95.6
Trucks	12	1	0	0	13	0	1	0	0	1	0	0	1	0	1	0	4	3	0	7	22
% Trucks	2.4	9.1	0	0	2.5	0	0.8	0	0	0.8	0	0	2.7	0	1.4	0	1.4	0.8	0	1.1	1.6
Heavys	12	0	0	0	12	0	8	0	0	8	0	0	0	0	0	0	6	12	0	18	38
% Heavys	2.4	0	0	0	2.3	0	6.8	0	0	6.3	0	0	0	0	0	0	2.2	3.4	0	2.8	2.8
Cyclists	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
% Cyclists	0	9.1	0	0	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1

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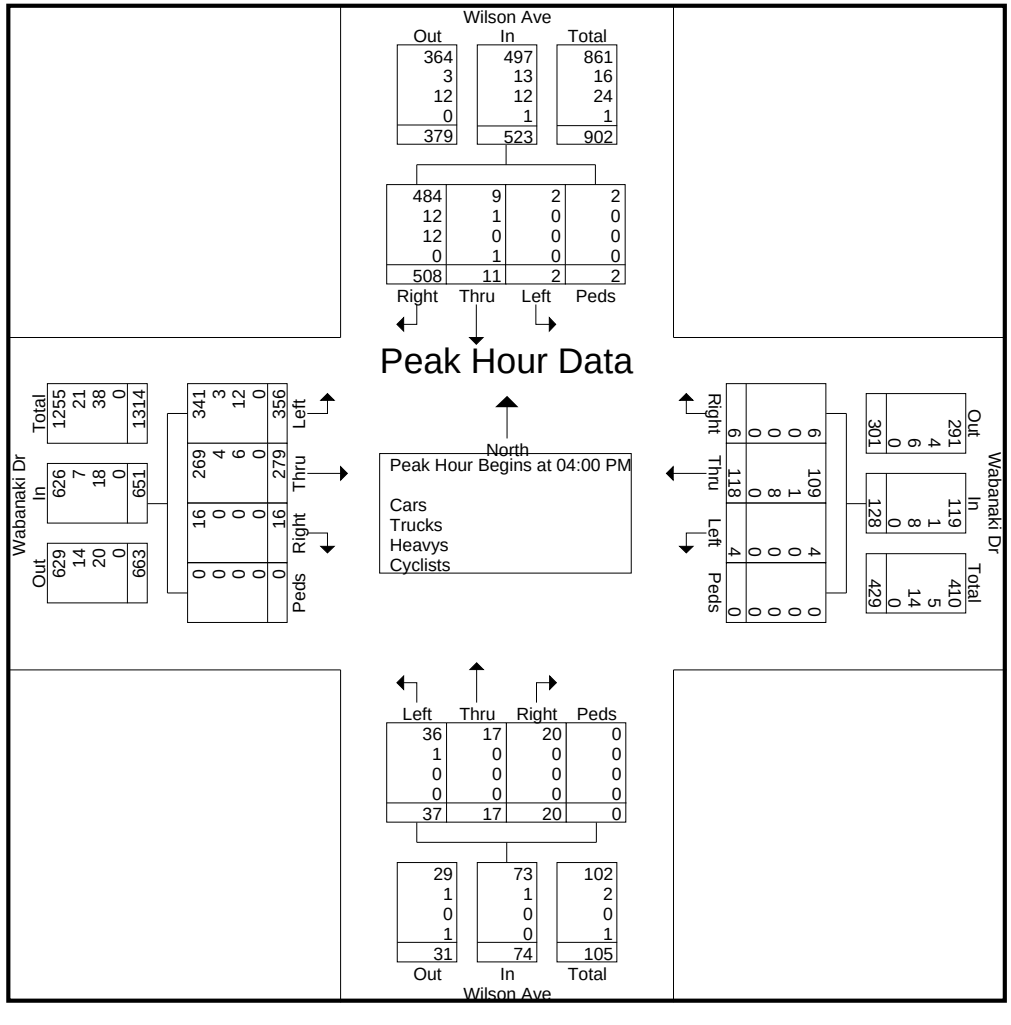

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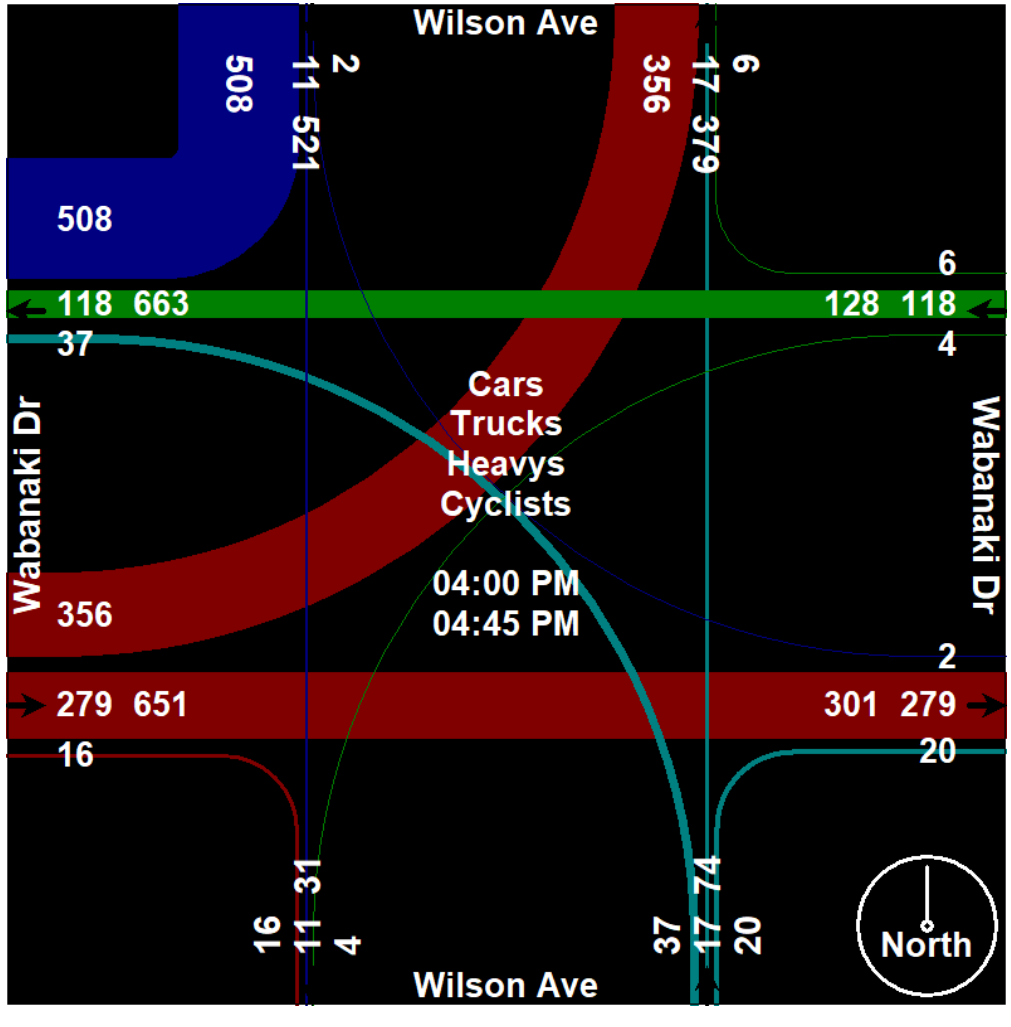


APPENDIX I – GROWTH RATE CORRESPONDENCE

Matthew Loni

From: Oriana Aguas <OAguas@regionofwaterloo.ca>

Sent: January 24, 2023 5:27 PM
To: Kassel Prince
Cc: Matthew Loni; Richard Kelly-Ruetz; Mehemed Delibasic; Paula Sawicki
Subject: RE: Kitchener - Q22-006 - Hidden Valley Transportation and Noise Study - ROW Traffic Data
Attachments: MioVisision_Fairway at Wilson_2022_Last_Quater.csv; 10968.pdf; 22108.pdf; 22125.pdf; 22325.pdf; 29041.pdf; 10710.pdf

Hello Kassel,

Please see attached:

1. the latest TMCs that the Region has available for the requested intersections as summarized in the table below.
2. The MioVision data for the intersection Fairway Road at Wilson Ave. The data is the median of the traffic in the last quarter of 2022. I can get a different time range for the data. Please let me know the exact time period if you prefer a different one. We have data for all of 2022.

See a summary of the attachments below.

street_1	street_2	GEO_ID	Latest TMC Year	MioVision Data?
FAIRWAY RD	Wilson Ave	10710	2022	yes
FAIRWAY RD	Wabanaki Dr (RT Only)	29041	2017	no
FAIRWAY RD	Hwy 8 SB Ramp	22108	2022	no
KING ST	FAIRWAY RD	22325	2022	no
KING ST	RIVER RD/River Rd	22125	2020	no
KING ST	Hwy 8 NB Ramp	10968	2019	no

Please use the following growth rates for this study on the regional roads:

- King St E – 0% for the horizon years 2027, 2032, 2042
- Fairway Rd S – 1% for the horizon years 2027, 2032, 2042

Horizon years were taken from the Hidden Valley Secondary Plan Transportation Impact Assessment & Preliminary Noise Analysis - TERMS OF REFERENCE.

Please let me know if you have any questions.

Regards,

Oriana Aguas (she/her)
Engineering Intern, Transportation Planning,
Transporation and Environmental Services, Region of Waterloo
150 Frederick Street, Kitchener, ON, N2H 2L9
Cell: 226-753-5403
oaguas@regionofwaterloo.ca

APPENDIX J – TRAFFIC VOLUME FIGURES

Figure 1-1:
2023 Existing Traffic Volumes
AM and PM Peak Hour

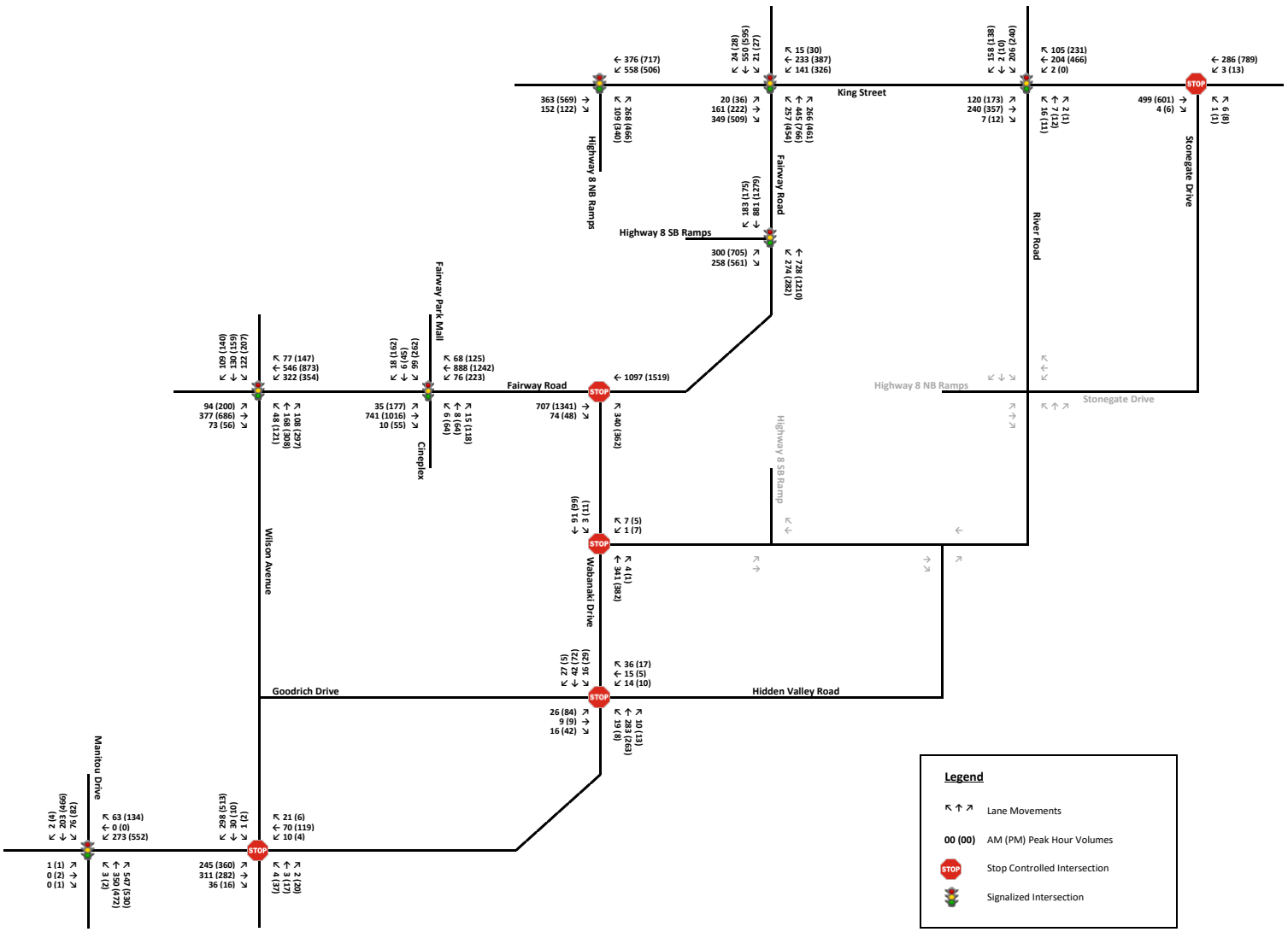


Figure 1-2:
2023 Existing Traffic Volume Balancing Adjustments
AM and PM Peak Hour

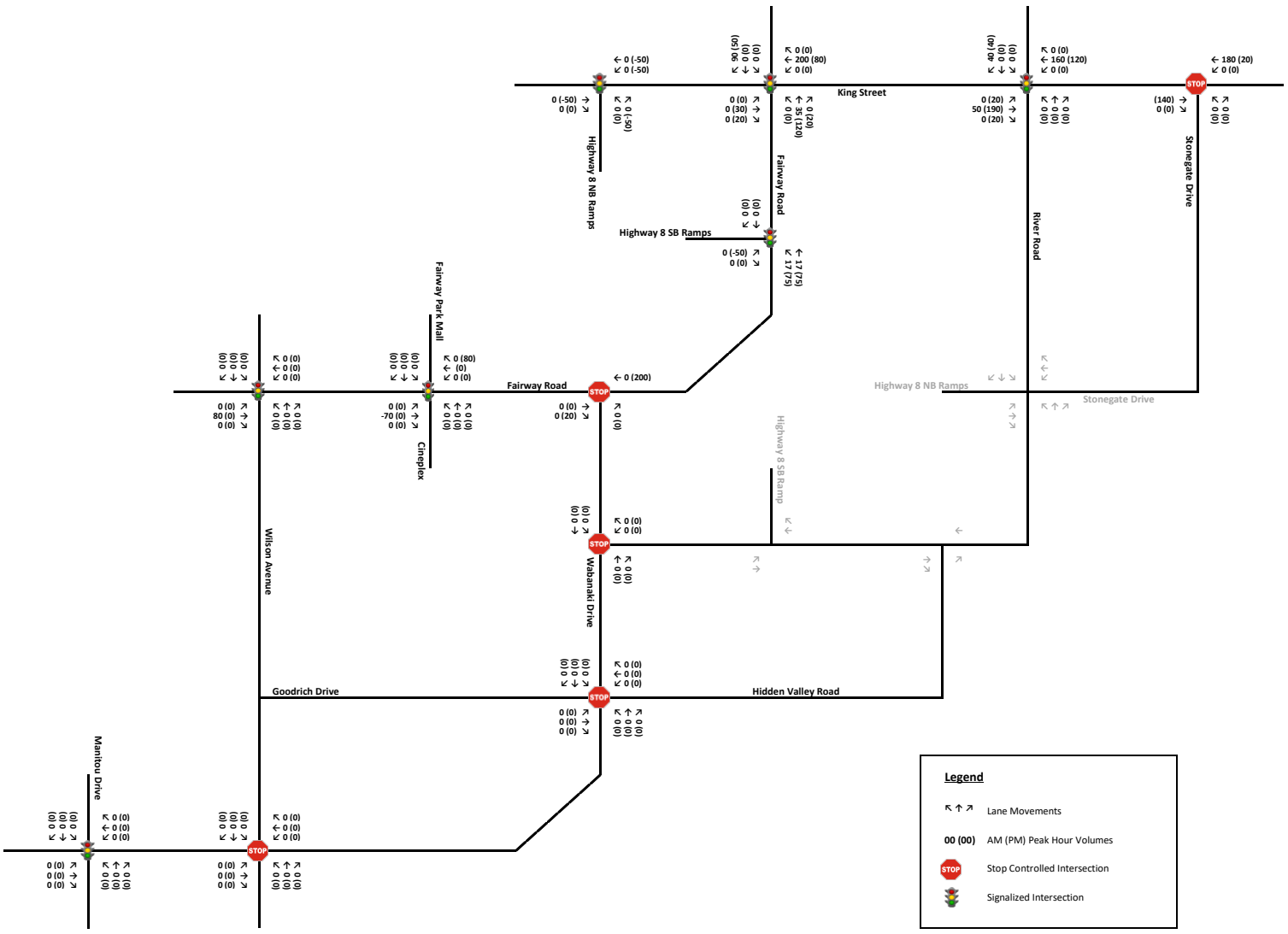


Figure 1-3:
2023 Existing Traffic Volumes Balanced
AM and PM Peak Hour

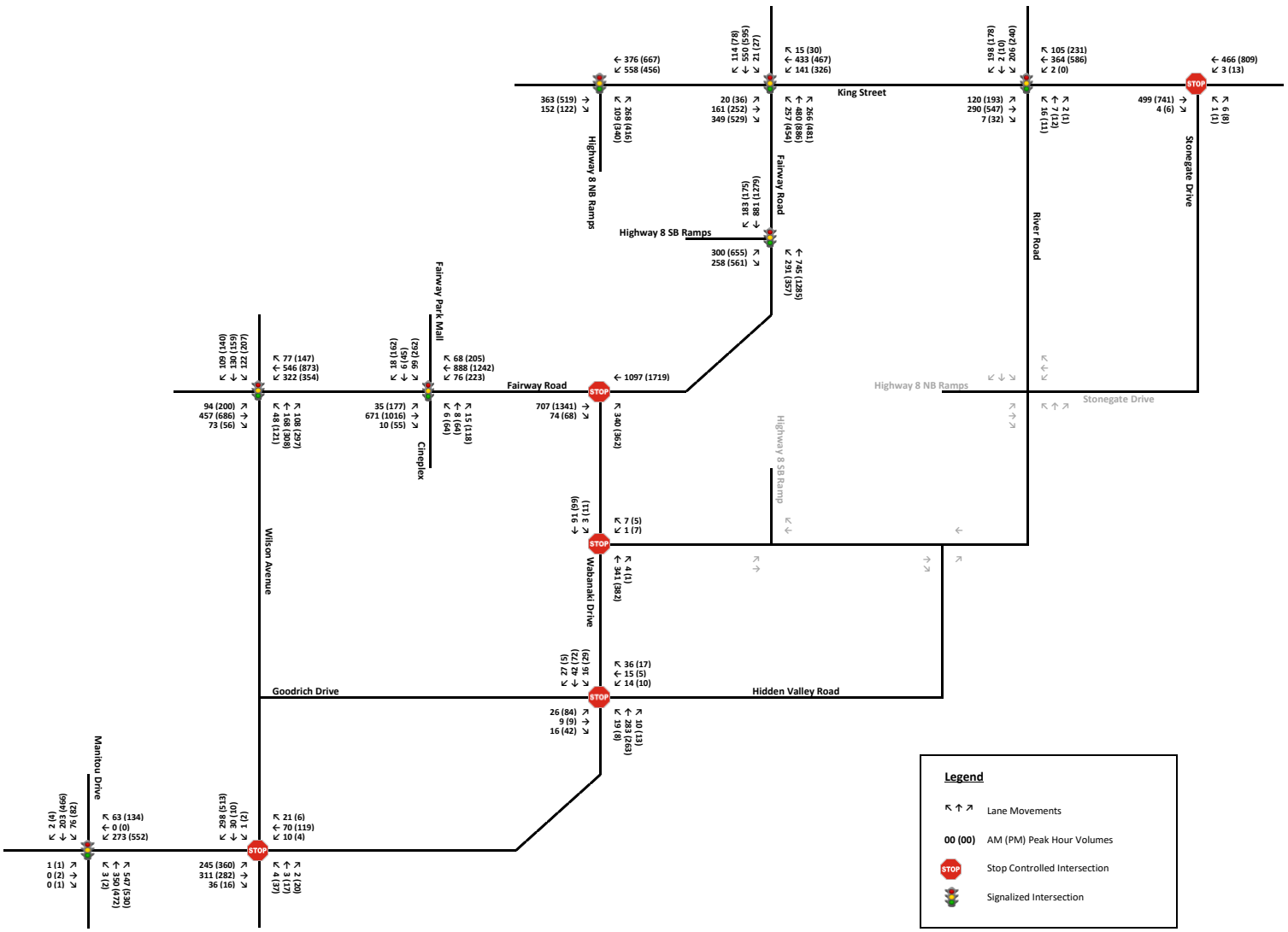
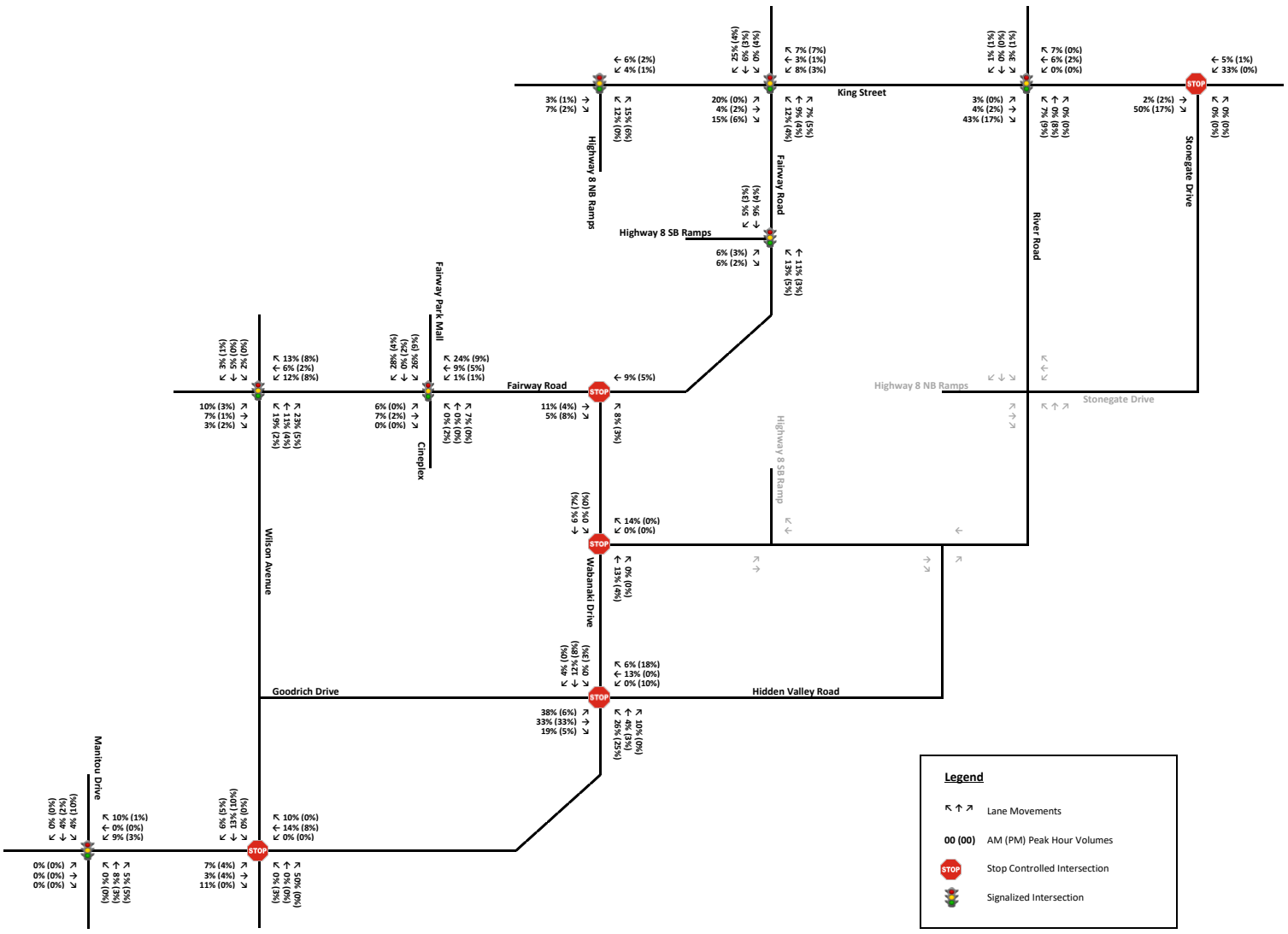


Figure 1-4:
2023 Existing Commercial Vehicle Percentage
AM and PM Peak Hour



Future Network Trip Distribution Assumptions

The following assumptions were made when redistributing the existing traffic into the future road network. Due to the significance of the traffic redistribution required to account for the changes to the study area road network, assumptions related to the redistribution have numbers assigned to each to identify which sheet of the changes were applied within.

- (1) Weighted portion of northbound traffic at King Street and Stonegate Drive accessing Highway 8 northbound and southbound on-ramps directed to new River Road ramps;
- (1) Remaining northbound traffic at King Street and Stonegate Drive directed through River Road and Stonegate Drive, and River Road and King Street intersections;
- (1) Westbound left-turning traffic at King Street and Stonegate Drive directed through River Road and King Street, and River Road and Stonegate Drive intersections;
- (1) Weighted portion of northbound traffic at Fairway Road and Wilson Avenue accessing Highway 8 northbound and southbound on-ramps directed to new River Road ramps via Goodrich Drive;
- (1) Weighted portion of northbound traffic at Fairway Road and Wabanaki Drive accessing Highway 8 northbound and southbound on-ramps directed to new River Road ramps;
- (2) Weighted portion of northbound right-turning traffic at King Street and Fairway Road from Wabanaki Drive and Wilson Avenue diverted to River Road;
- (2) Weighted portion of westbound traffic on King Street to Highway 8 northbound and southbound on-ramps directed to new River Road ramps;
- (2) Redirect vehicles using King Street and River Road south leg via River Road to Stonegate extension;
- (3) Weighted portion of southbound right-turning traffic at King Street and River Road to Highway 8 northbound and southbound on-ramps directed to new River Road ramps;
- (3) 20% of southbound left-turning traffic at King Street and River Road directed to Highway 8 southbound on-ramp;
- (3) 50% of southbound on Fairway Road to Wilson Avenue diverted to River Road extension;
- (4) Weighted portion accessing Wilson Avenue coming from River Road directed via River Road extension and Goodrich Drive;
- (4) Weighted portion of northbound right-turning traffic at existing Highway 8 northbound off-ramp to Fairway Road northbound diverted to new Highway 8 northbound off-ramp (50% north on River Road, 50% west on King Street to Fairway Road);
- (4) Weighted portion of northbound right-turning traffic at existing Highway 8 northbound off-ramp to Wilson Avenue diverted to new Highway 8 northbound off-ramp;
- (4) Weighted portion of northbound right-turn traffic at the existing Highway 8 northbound off-ramp through River Road intersection diverted to new Highway 8 northbound off-ramp;
- (5) 20% from Fairway Road (Wilson Avenue southbound at Fairway, Fairway Road eastbound at Wilson Avenue, Fairview Park Mall southbound at Fairway Road, and Cineplex northbound at Fairway Road) to Highway 8 northbound to new ramps;

- (5) 10% from Fairway Road (Wilson Avenue southbound at Fairway Road, Fairway Road eastbound at Wilson Avenue, Fairview Park Mall southbound at Fairway Road, and Cineplex northbound at Fairway Road) to Highway 8 southbound to new ramps, and
- (5) Weighted portion of northbound traffic at King Street and River Road extension accessing Highway 8 northbound and southbound on-ramps directed to new River Road ramps.

The following assumptions were made when redistributing other area developments site traffic volumes into the future network:

- 80% of traffic to Highway 8 northbound diverted to new River Road northbound on-ramp;
- 80% of traffic from Highway 8 northbound off-ramp diverted to new River Road northbound off-ramp;
- 80% of traffic from River Road, east of Stonegate Drive, diverted to new River Road northbound on-ramp (assumed to be coming from Highway 8 northbound via the Sportsworld Drive interchange);
- 80% of traffic to River Road, east of Stonegate Drive, diverted to new River Road southbound on-ramp (assumed to be accessing Highway 8 southbound via Sportsworld Drive interchange);
- 80% of traffic to Highway 8 southbound diverted to new River Road southbound on-ramp.

Figure 2-1:
2028 Future Volume Redistribution 1
AM and PM Peak Hour

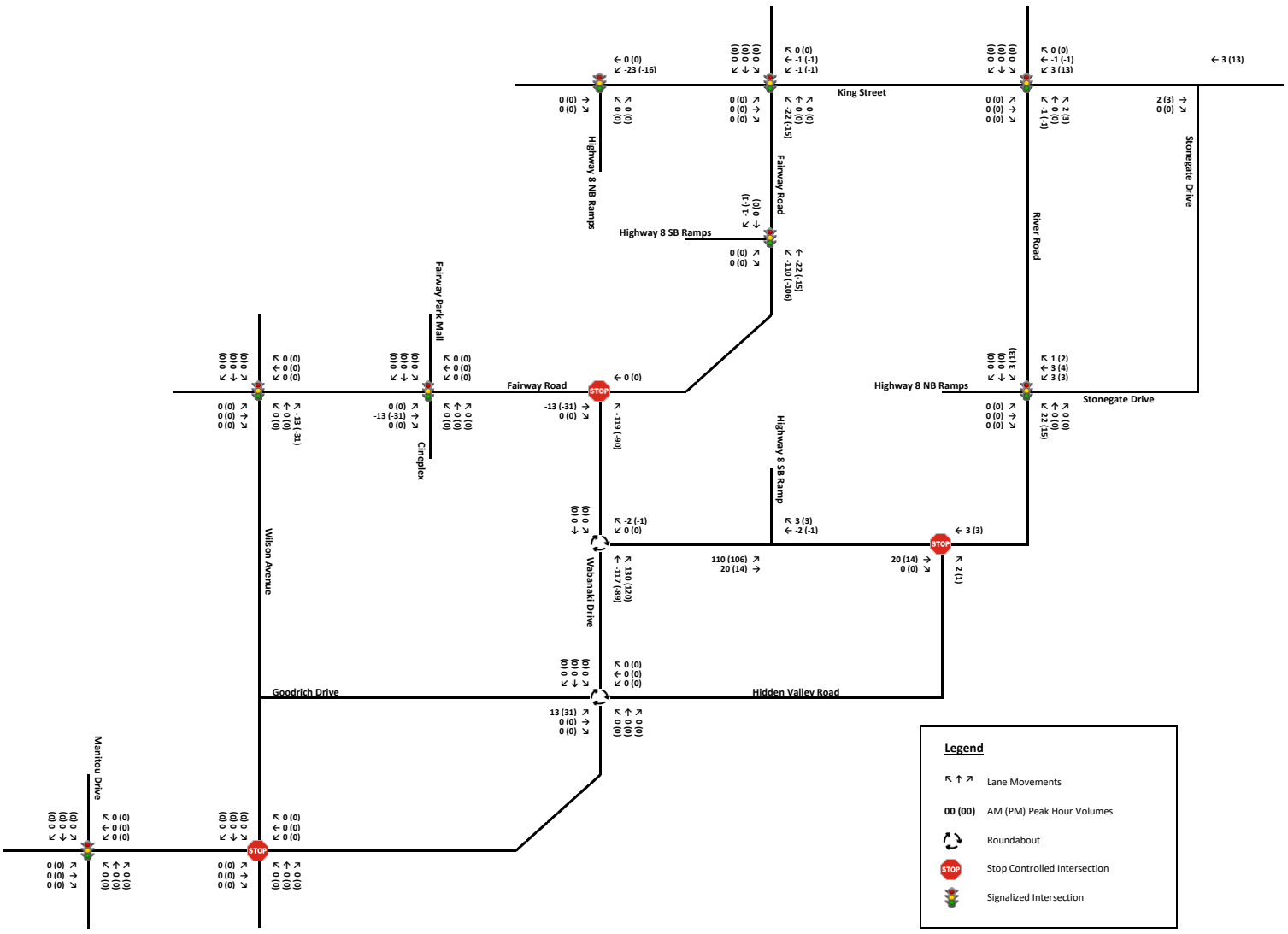


Figure 2-2:
2028 Future Volume Redistribution 2
AM and PM Peak Hour

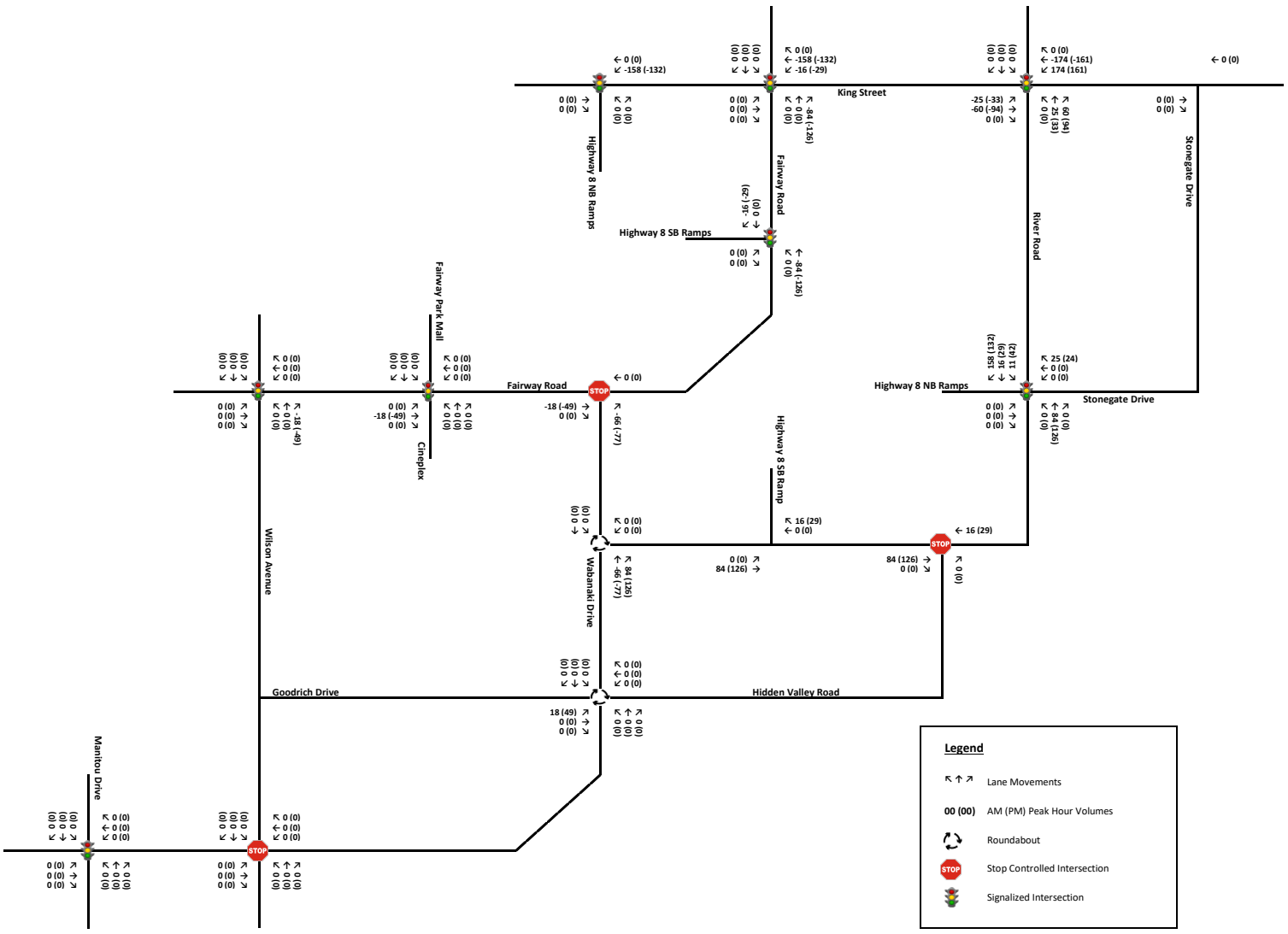


Figure 2-3:
2028 Future Volume Redistribution 3
AM and PM Peak Hour

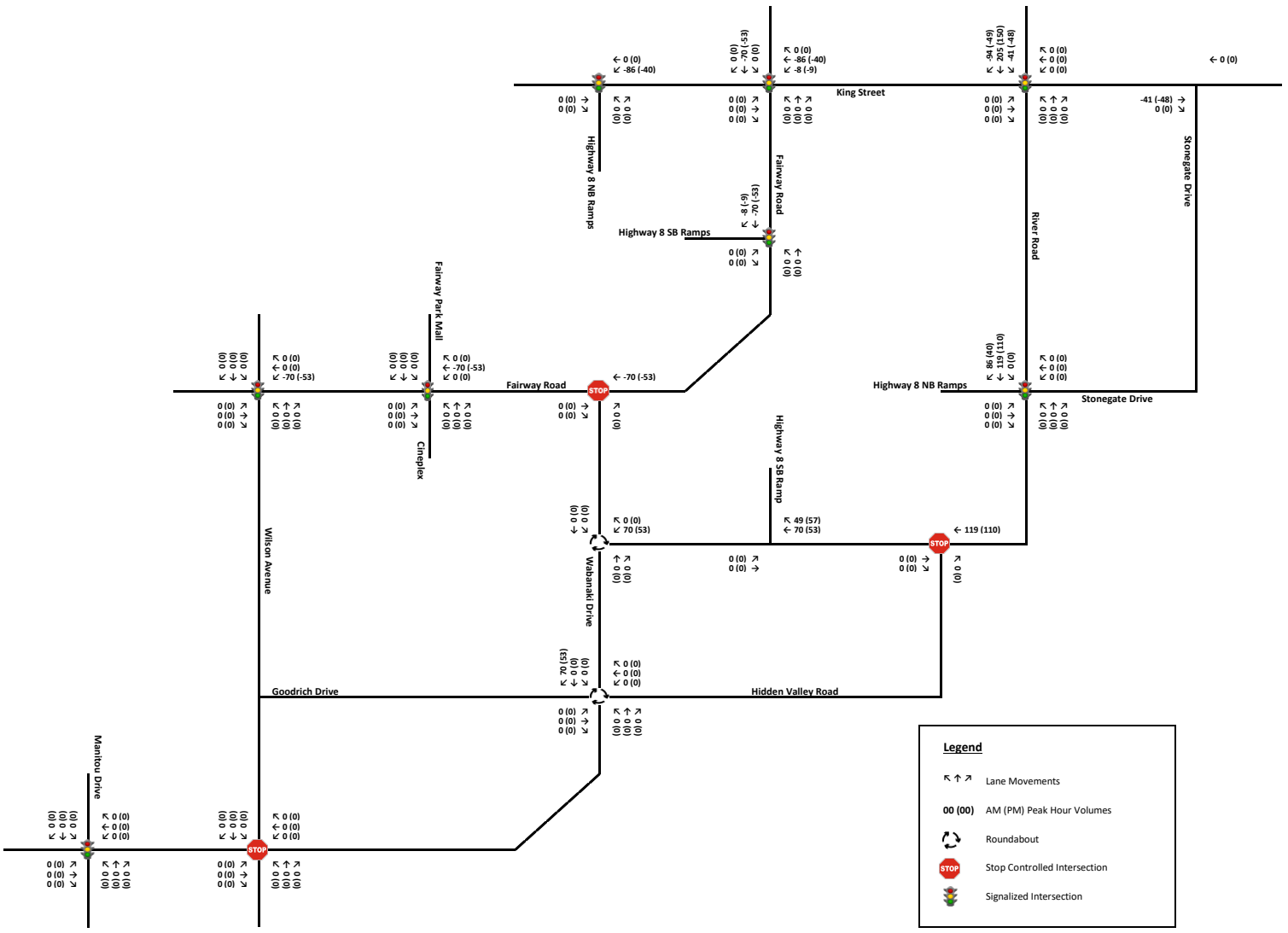


Figure 2-4:
2028 Future Volume Redistribution 4
AM and PM Peak Hour

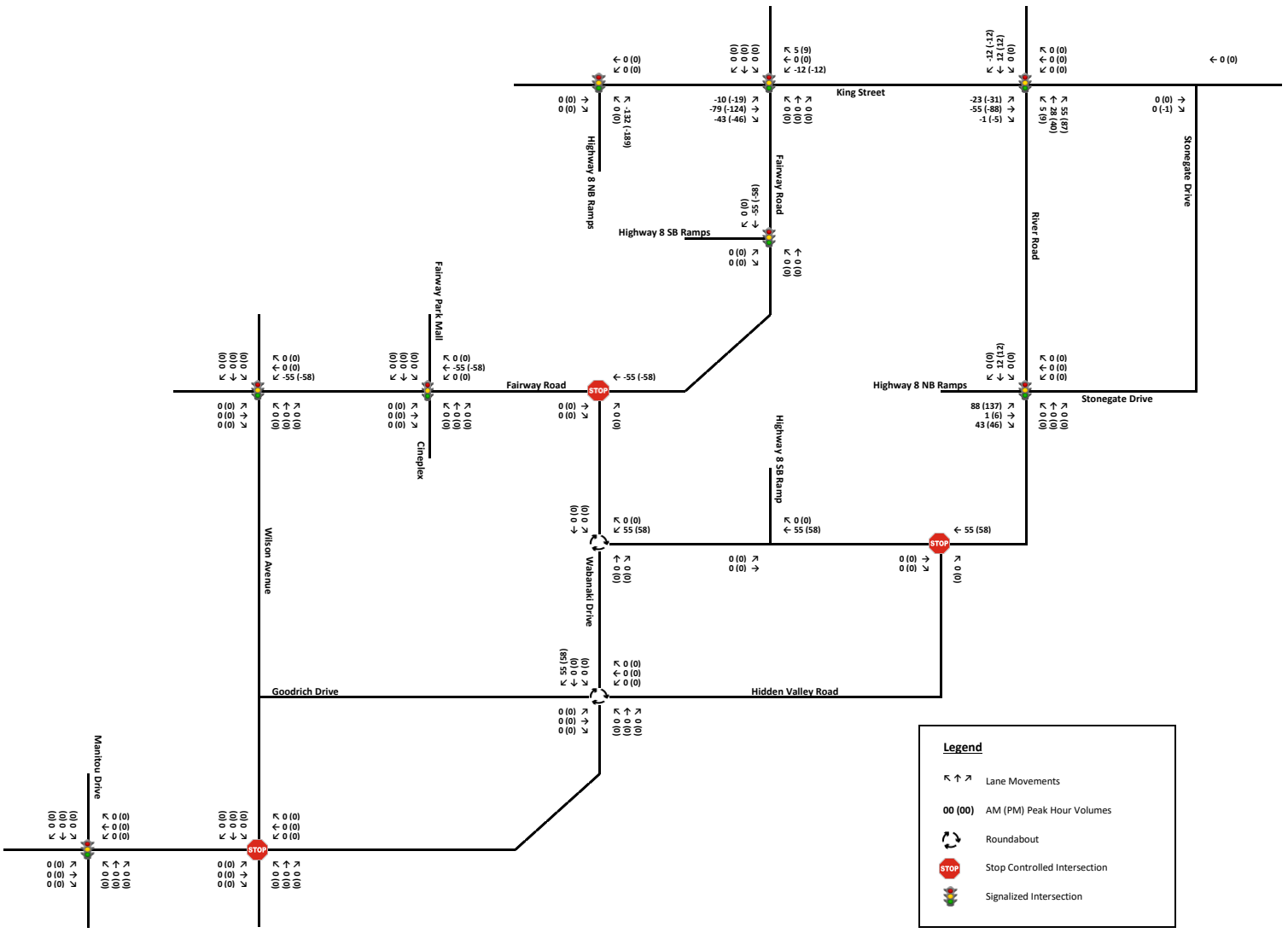


Figure 2-5:
2028 Future Volume Redistribution 5
AM and PM Peak Hour

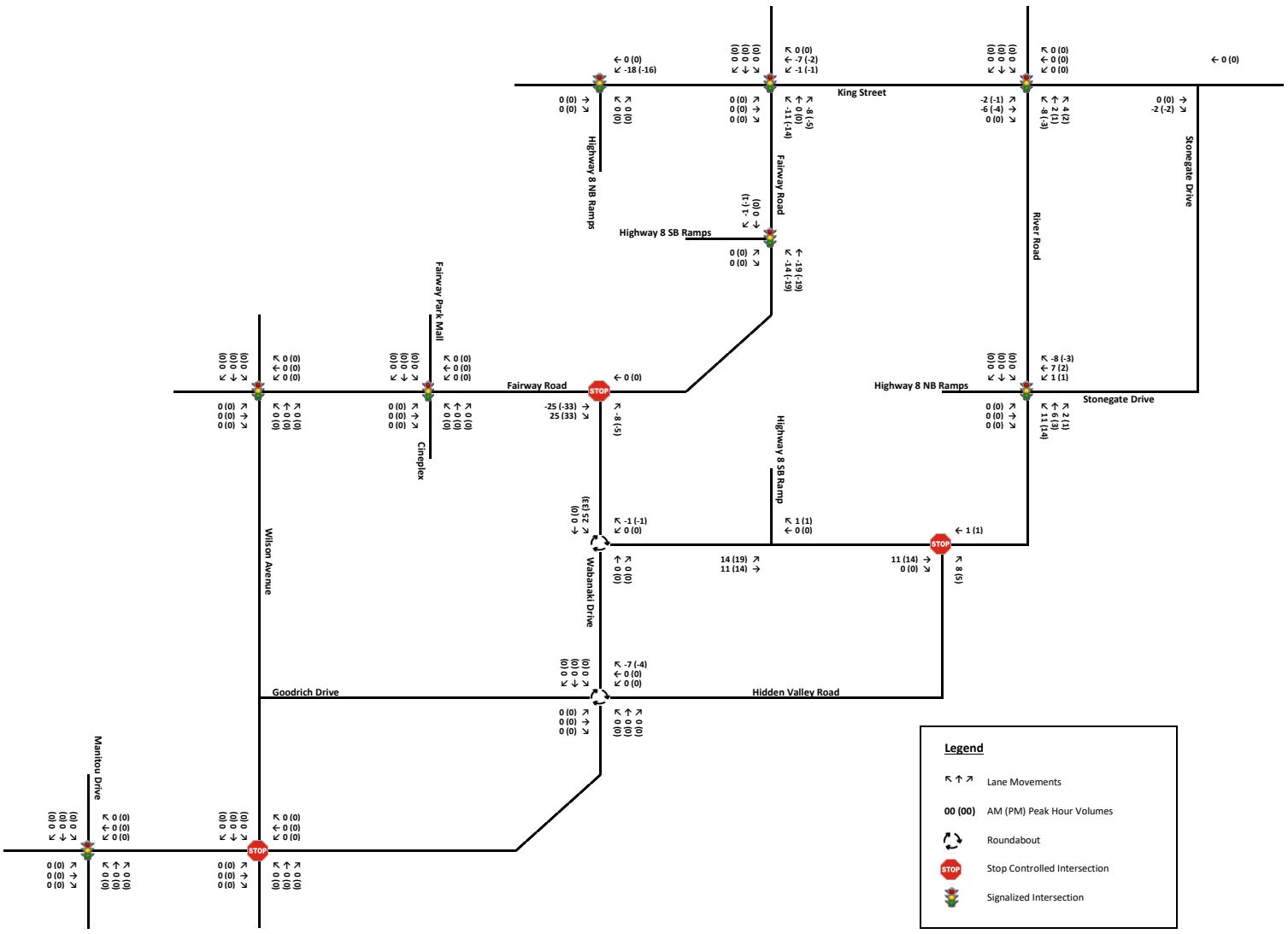


Figure 2-6:
2028 Future Volume Redistribution Total
AM and PM Peak Hour

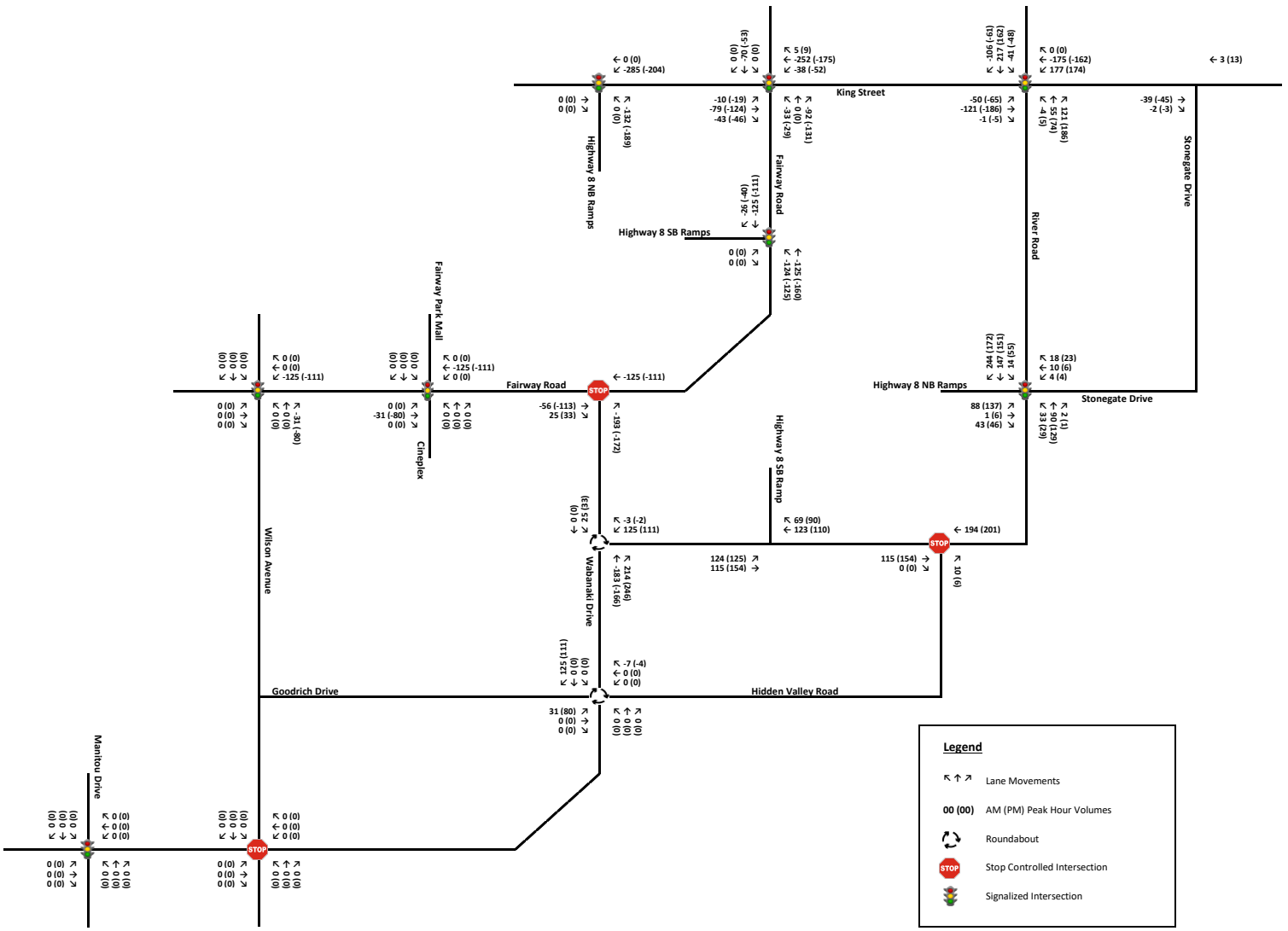


Figure 2-7:
Redistributed Background Development Traffic
AM and PM Peak Hour

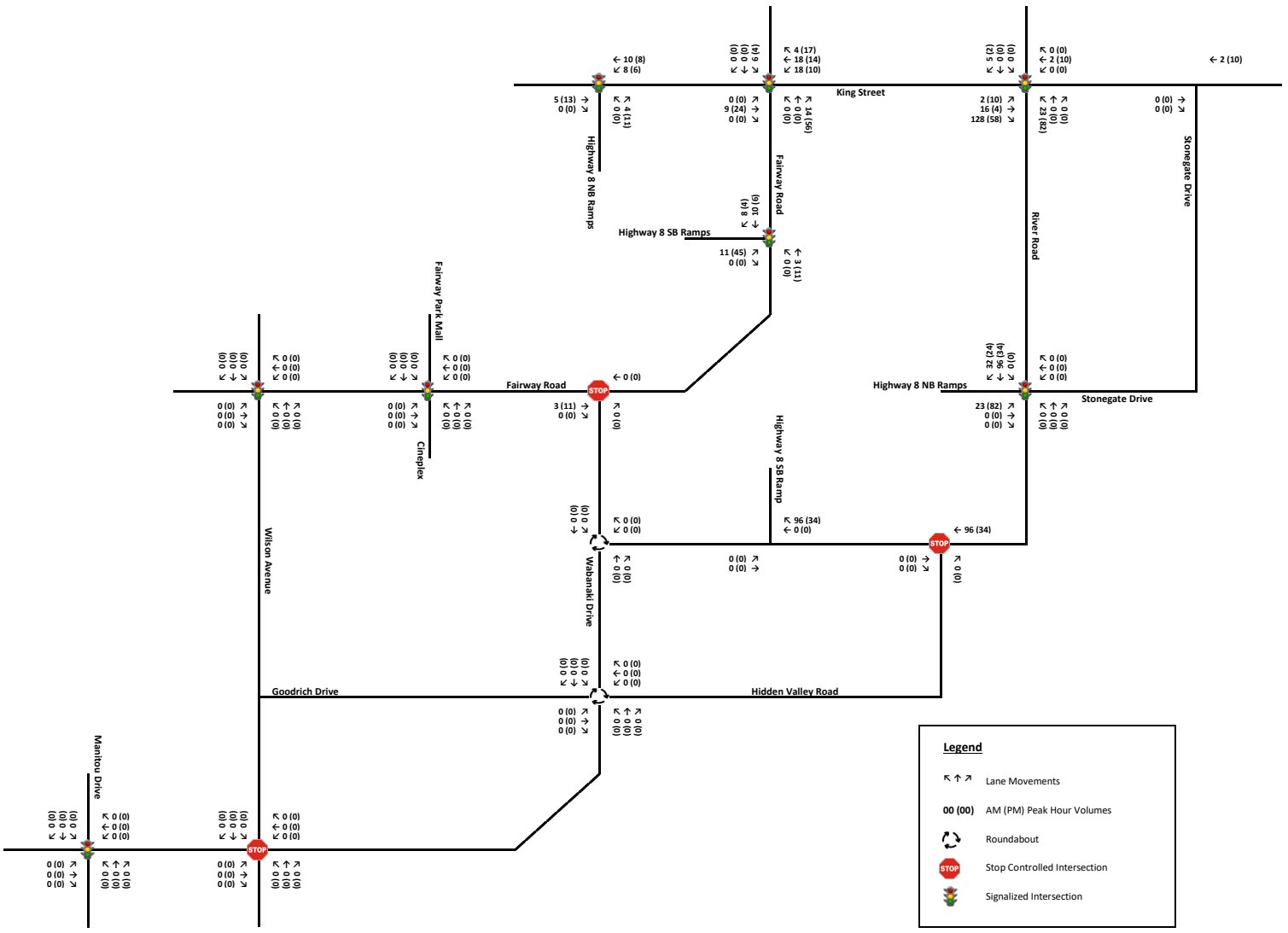


Figure 3-1:
2028 Background Traffic Volumes
AM and PM Peak Hour

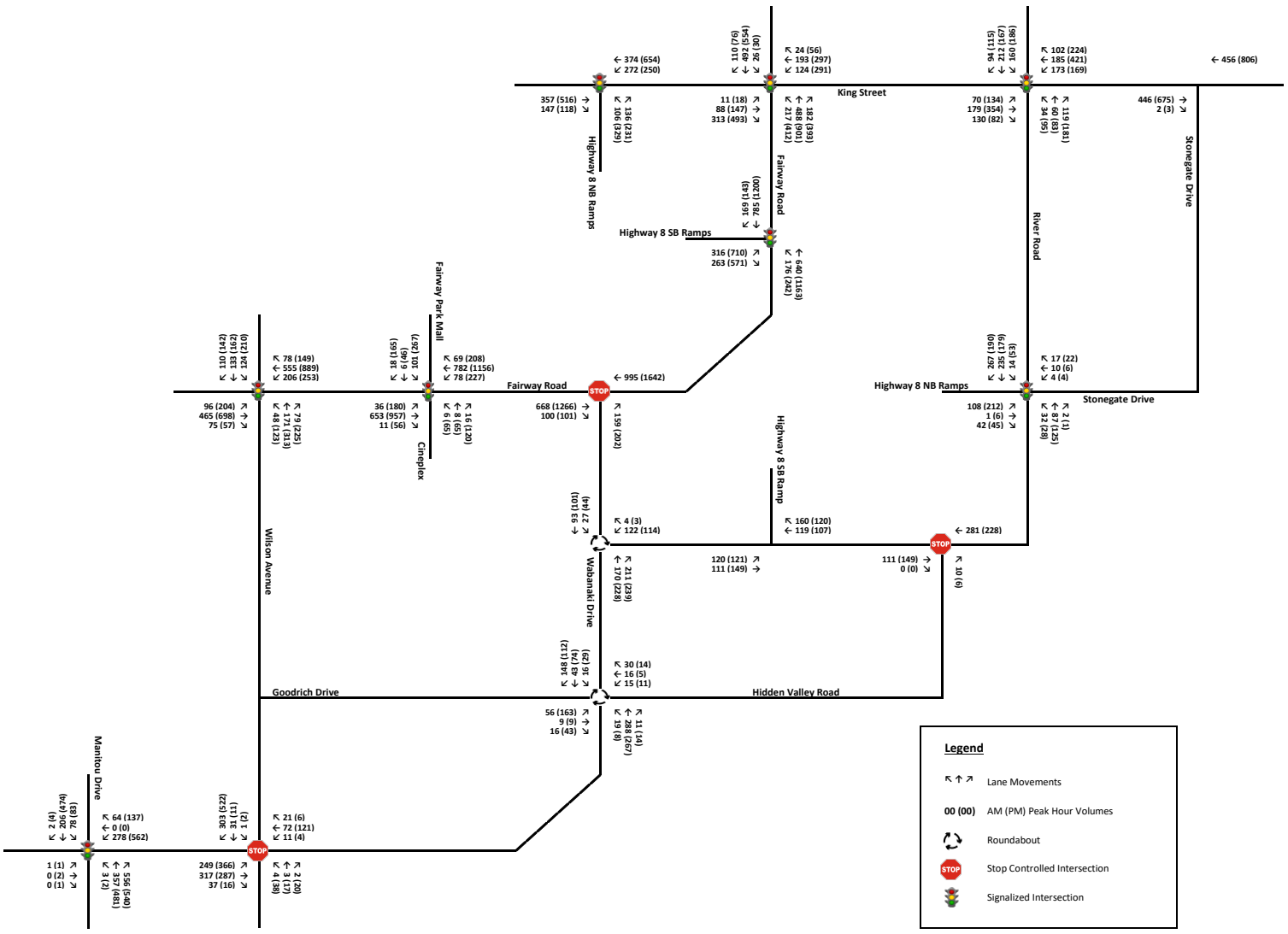


Figure 3-2:
2033 Background Traffic Volumes
AM and PM Peak Hour

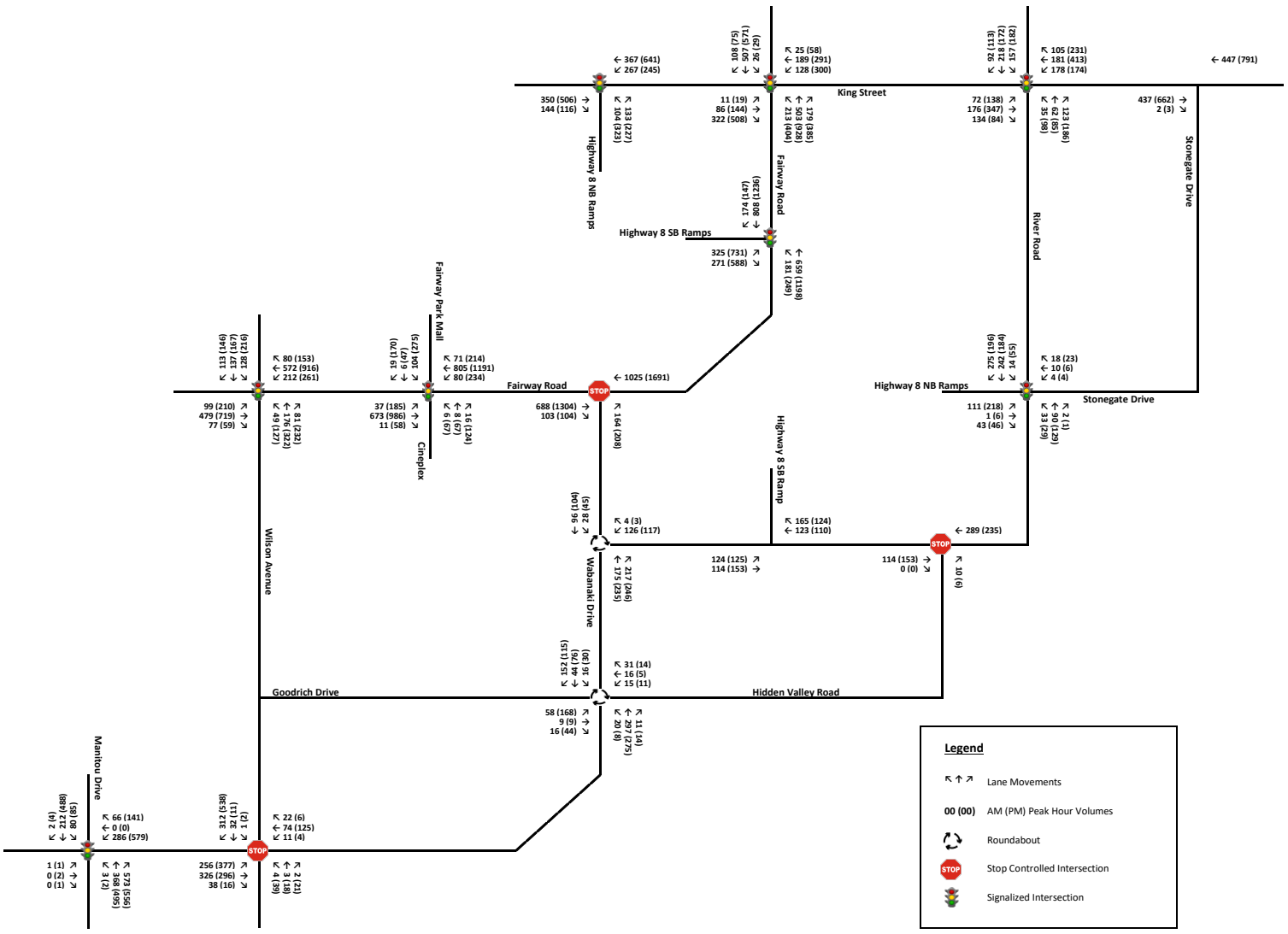


Figure 3-3:
2043 Background Traffic Volumes
AM and PM Peak Hour

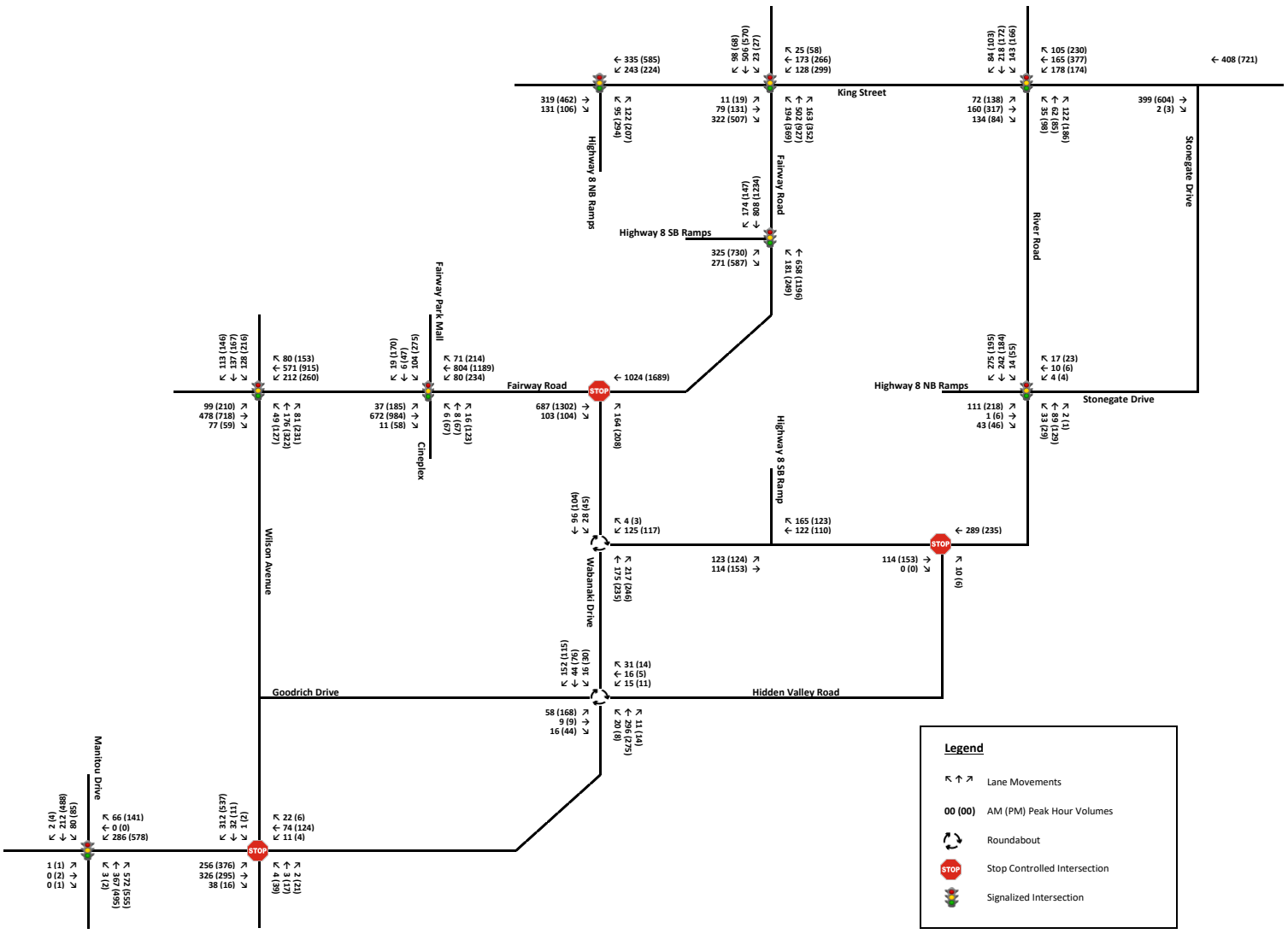


Figure 4-1:
Site Generated Inbound External Trip Assignment and Distribution
AM and PM Peak Hour

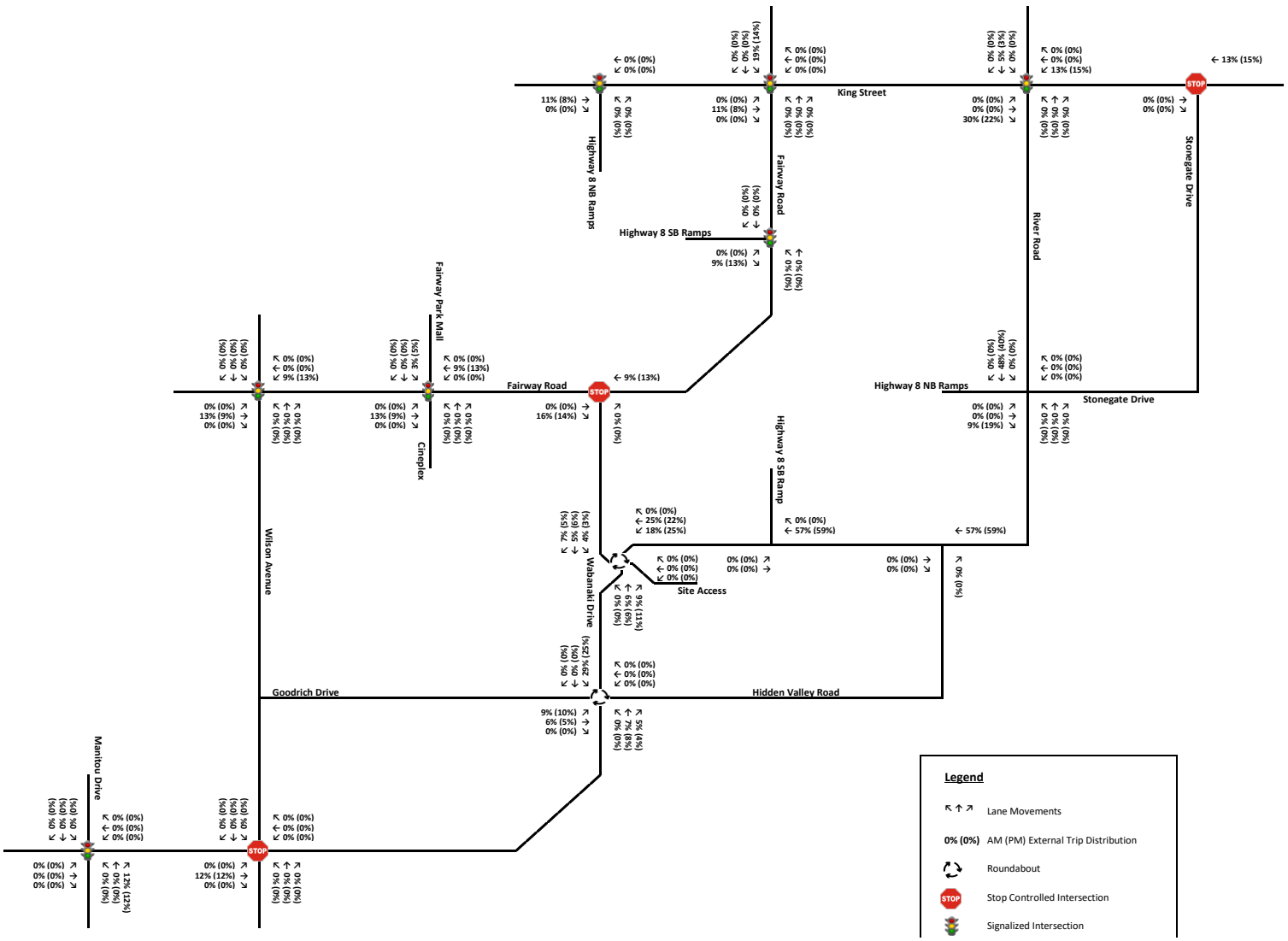


Figure 4-2:
Site Generated Outbound External Trip Assignment and Distribution
AM and PM Peak Hour

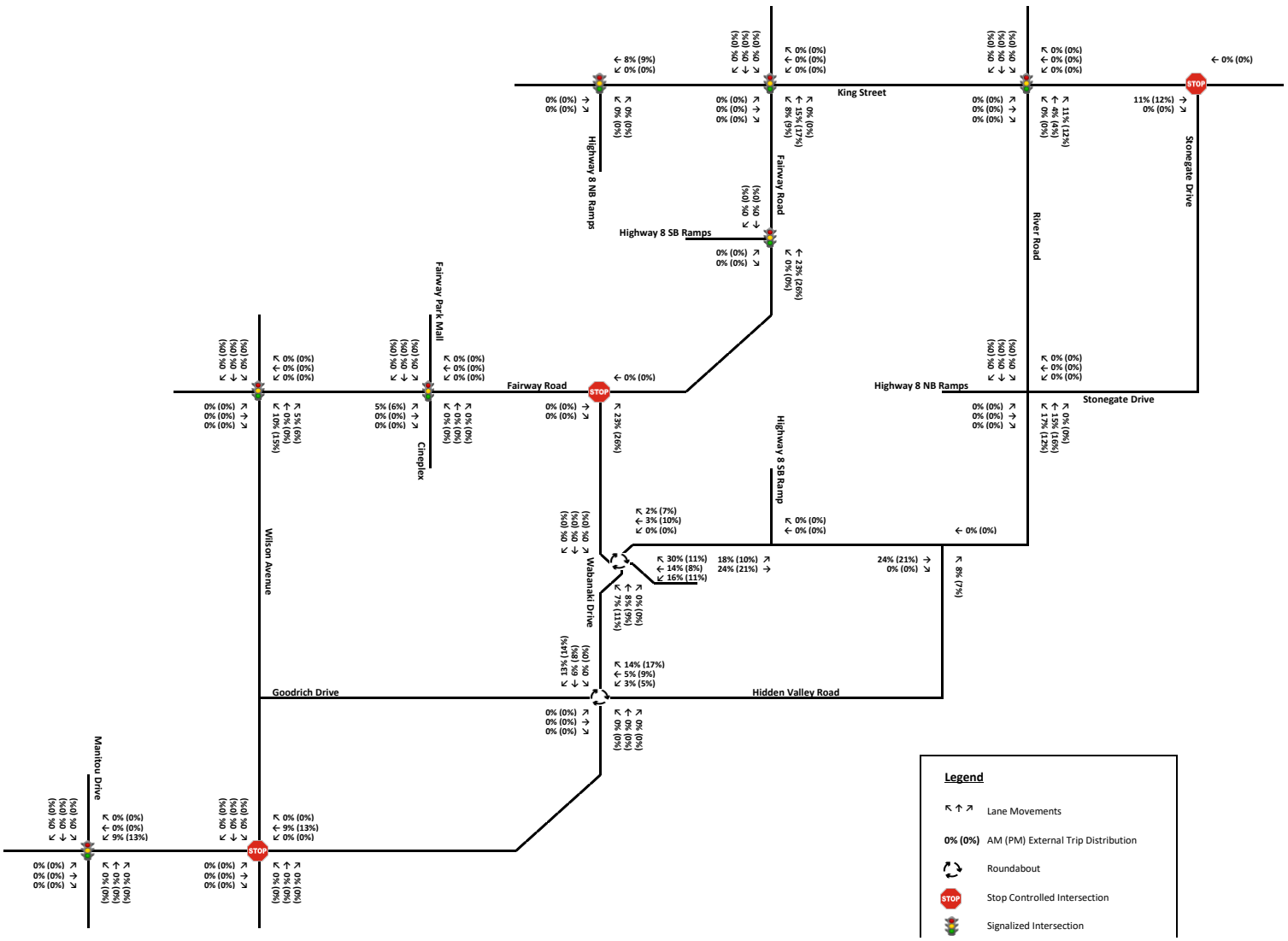


Figure 4-3:
2028 Site Generated Trip Volumes,
AM and PM Peak Hour

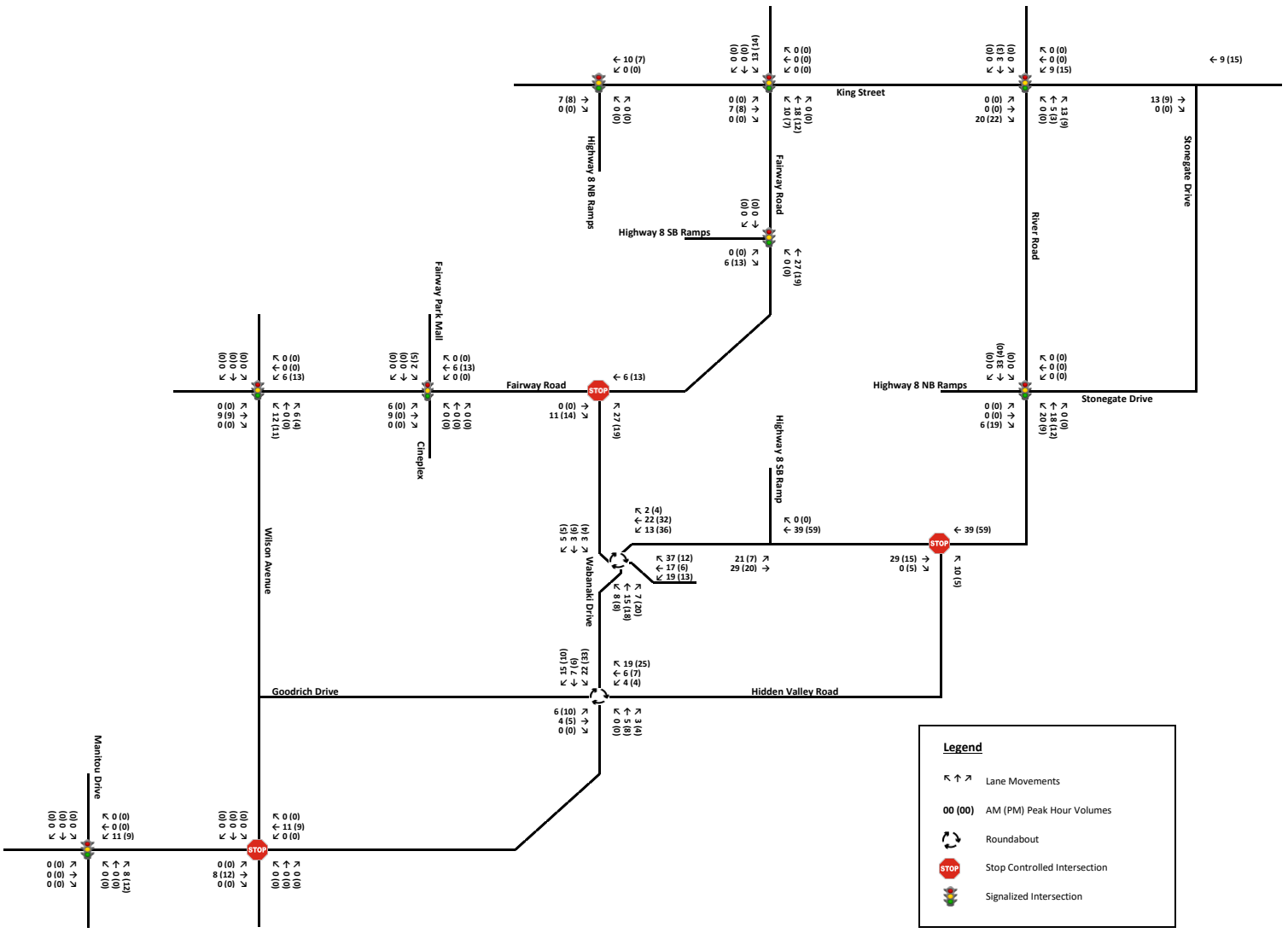


Figure 4-4:
2033 Site Generated Trip Volumes,
AM and PM Peak Hour

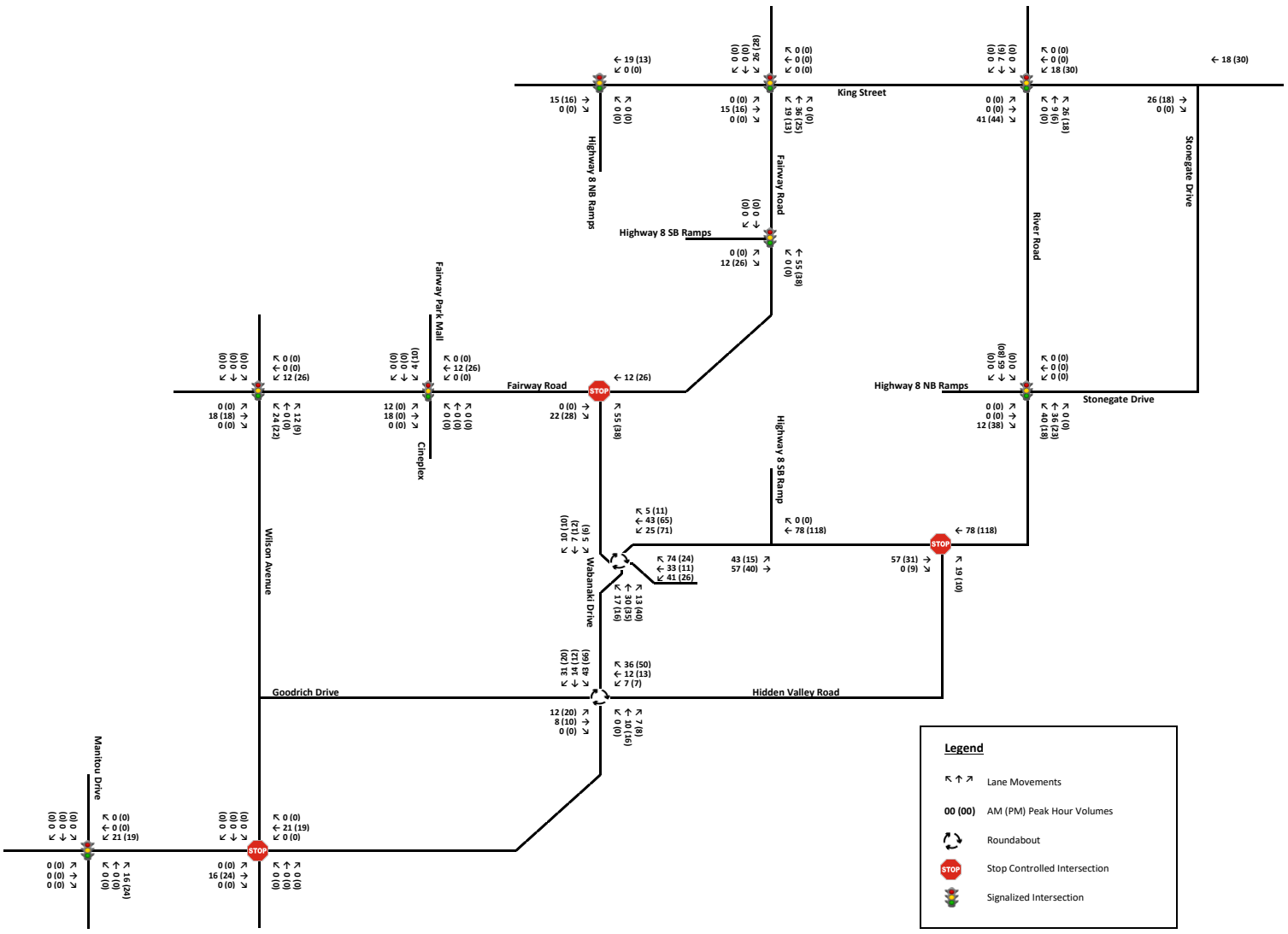


Figure 4-5:
2043 Site Generated Trip Volumes
AM and PM Peak Hour

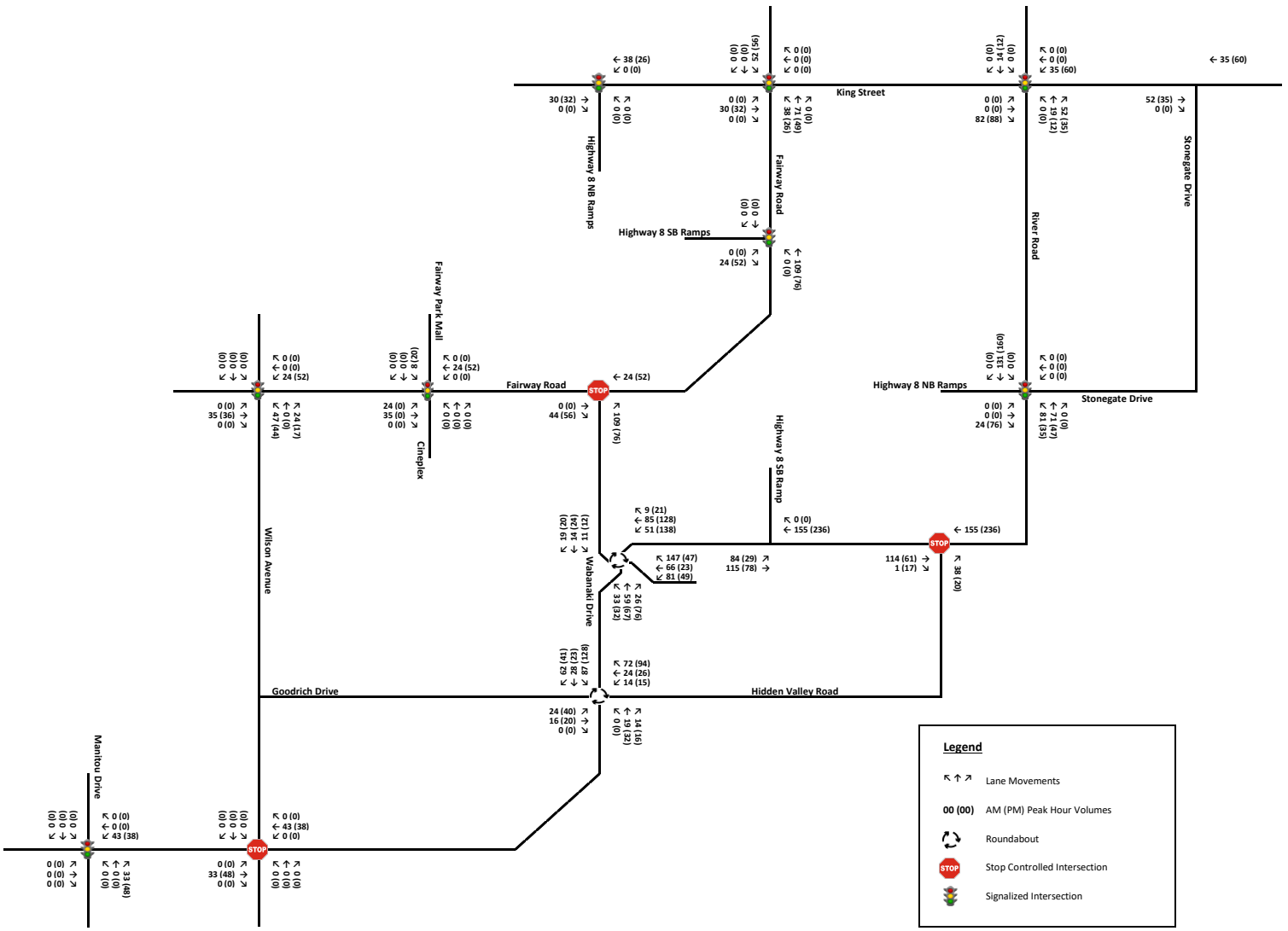


Figure 5-1:
2028 Total Traffic Volumes
AM and PM Peak Hour

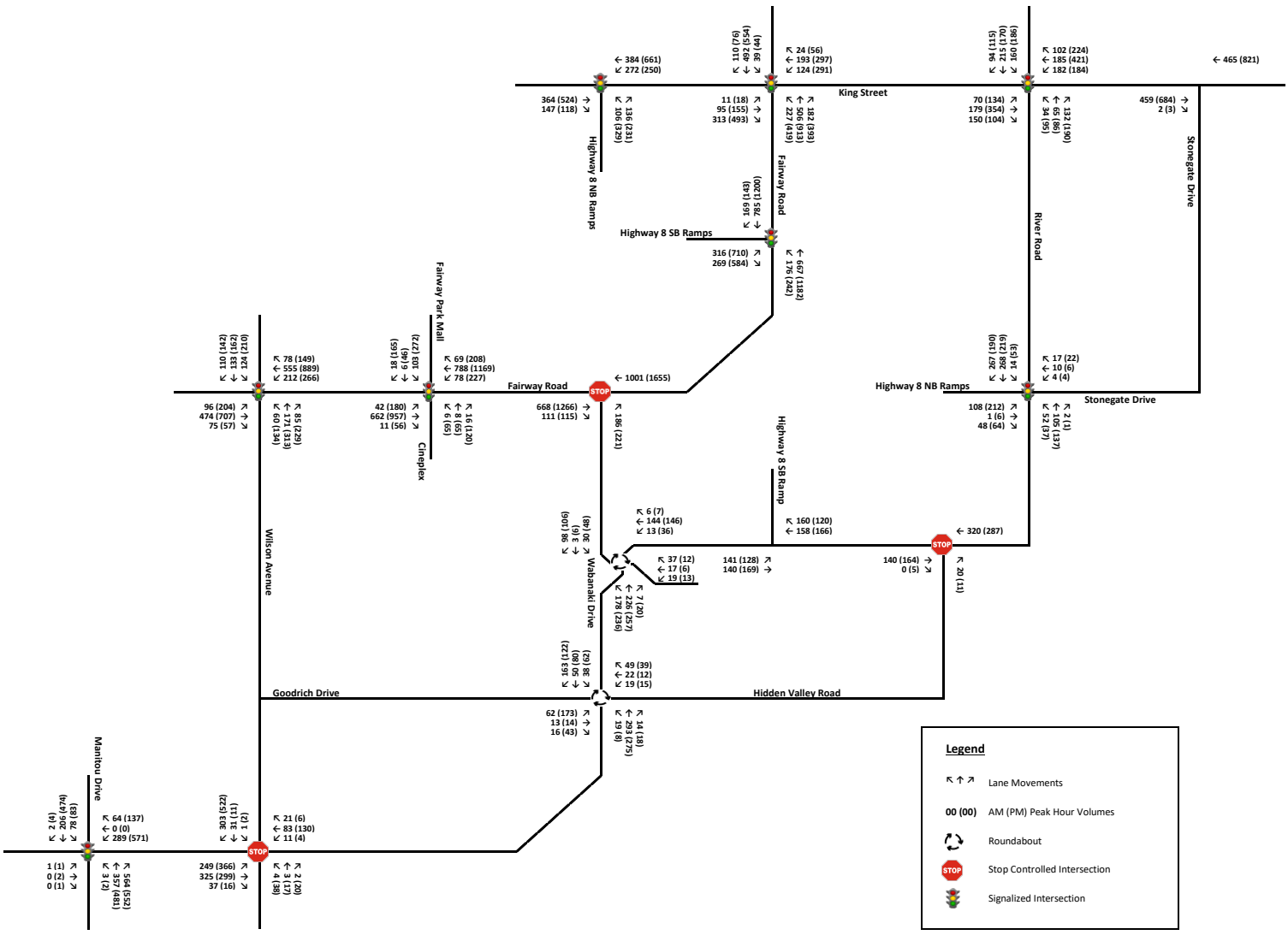


Figure 5-2:
2033 Total Traffic Volumes
AM and PM Peak Hour

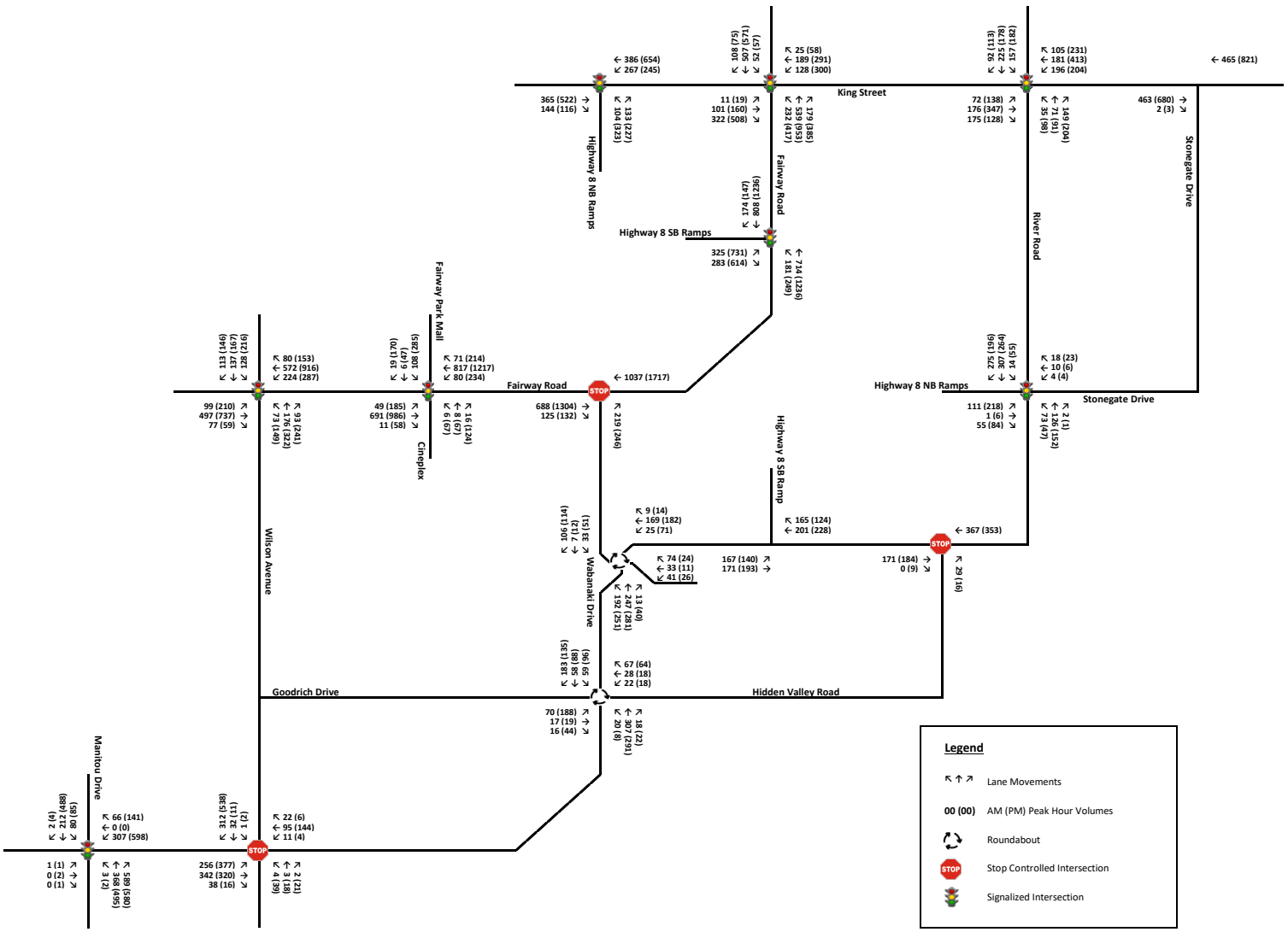
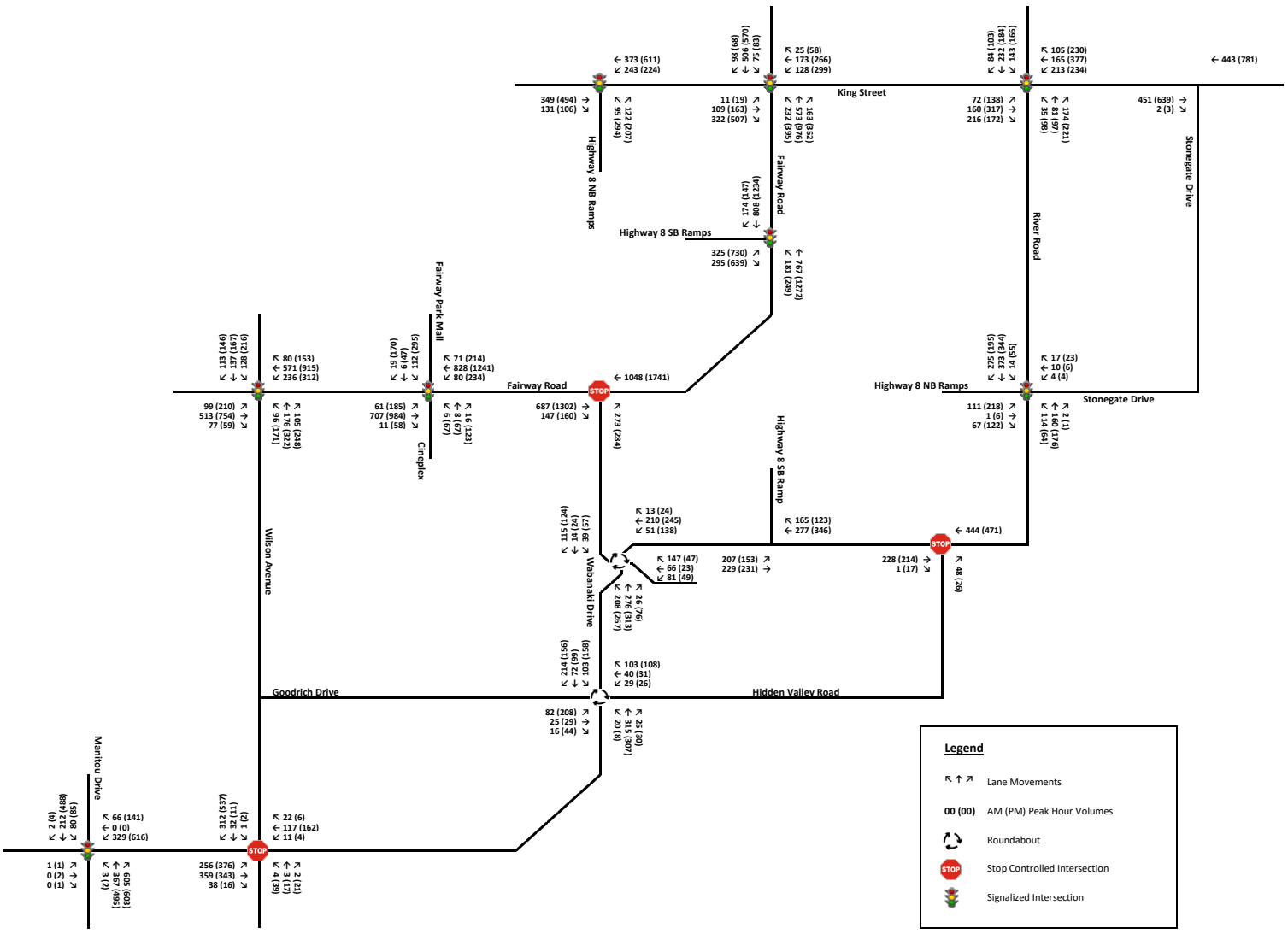


Figure 5-3:
2043 Total Traffic Volumes
AM and PM Peak Hour



APPENDIX K – SYNCHRO CAPACITY ANALYSIS REPORTS

Capacity Analysis
2023 Existing Conditions

Synchro Analysis Summary
2023 Existing Conditions

Intersection	Approach - Movement	Storage Length (m)	AM Peak				PM Peak			
			LOS	V/C	Delay (s)	Queue (m)	LOS	V/C	Delay (s)	Queue (m)
King St & River Rd	**Intersection**	-	**B**	-	**15.4**	-	**B**	-	**17.7**	-
	EB - L	45	A	0.23	8.1	27	B	0.51	12.2	34
	EB - TR	-	A	0.3	8.9	41	B	0.57	12.8	72
	WB - L	50	B	0	11	2	-	-	-	-
	WB - T	-	B	0.38	15.3	63	B	0.59	19.2	100
	WB - R	50	A	0.13	2.8	18	A	0.26	2.8	29
	NB - LTR	-	C	0.07	25.8	17	C	0.07	26.5	16
	SB - LT	-	D	0.66	43	57	D	0.77	50.6	79
	SB - R	-	A	0.36	6.2	29	A	0.34	6.2	37
King St & Stonegate Dr	**Intersection**	-	**A**	-	**0.1**	-	**A**	-	**0.1**	-
	EB - TR	-	-	-	-	0	-	-	-	0
	WB - L	100	A	0	8.9	4	A	0.02	9.2	8
	WB - T	-	-	-	-	0	-	-	-	0
	NB - LR	-	B	0.01	12.3	6	C	0.03	16.3	9
Fairway Rd Highway 8 Ramps	**Intersection**	-	**B**	-	**14**	-	**C**	-	**25.5**	-
	EB - L	75**	C	0.47	33.7	52	D	0.71	38.6	**224**
	EB - R	50**	B	0.26	15.8	42	B	0.46	17	**168**
	NB - L	85	B	0.65	13.8	71	E	**0.93**	59.8	**164**
	NB - T	-	A	0.33	6	54	B	0.59	13.4	232
	SB - T	-	B	0.39	16.3	77	C	0.64	28.4	110
	SB - R	75	A	0.18	1.1	25	A	0.17	1.4	48
Fairway Rd & Wabanaki Dr	**Intersection**	-	**A**	-	**2.9**	-	**A**	-	**7.5**	-
	EB - TR*	-	-	-	-	2	-	-	-	16
	WB - T*	-	-	-	-	54	-	-	-	44
	NB - R	-	C	0.58	19.1	48	**F**	**0.97**	72.6	198
Fairway Rd & Fairview Park Mall / Cineplex	**Intersection**	-	**B**	-	**10.6**	-	**C**	-	**23.8**	-
	EB - L	40	A	0.08	5.3	14	C	0.65	33.1	**51**
	EB - TR	-	A	0.3	8.3	32	B	0.6	18	82
	WB - L	130	A	0.14	6.1	21	C	0.68	23	78
	WB - T	-	B	0.39	10.6	70	C	0.7	26.1	147
	WB - R	-	A	0.07	0.1	19	A	0.24	4.1	70
	NB - L	-	D	0.04	41.5	7	E	0.44	57.9	29
	NB - TR	-	C	0.13	25.8	14	D	0.68	44.7	60
	SB - L	40	C	0.24	32.4	31	C	0.46	34.3	**50**
	SB - TR	-	B	0.08	15.2	15	A	0.35	9.5	48
Fairway Rd & Wilson Ave	**Intersection**	-	**B**	-	**18.5**	-	**D**	-	**36.2**	-
	EB - L	120	A	0.18	6.9	26	B	0.56	19.7	59
	EB - TR	-	B	0.32	14.9	59	C	0.61	34.7	97
	WB - L	160	C	0.56	20.5	80	D	0.8	51.7	142
	WB - T	-	A	0.26	7.3	43	C	0.56	25.6	98
	WB - R	30	A	0.09	1.3	21	B	0.24	12.6	**62**
	NB - L	95	D	0.29	36.1	28	C	0.39	32.2	47
	NB - T	-	D	0.51	40.2	53	D	0.75	54.1	97
	NB - R	-	A	0.2	4	24	B	0.48	18.8	68
	SB - L	45	E	0.72	60	38	**F**	**1.03**	106.1	57
	SB - T	-	D	0.4	37.2	40	D	0.4	41.1	372
	SB - R	45	B	0.48	13.4	9	B	0.51	12.7	**90**
Wabanaki Dr & Hidden Valley Dr	**Intersection**	-	**A**	-	**0.3**	-	**A**	-	**0.4**	-
	WB - LR	-	B	0.01	10.7	10	B	0.02	11.5	10
	NB - TR*	-	-	-	-	0	-	-	-	99
	SB - LT	-	A	0	8	1	A	0.01	8.1	7
Wabanaki Dr & Goodrich Dr / Hidden Valley Dr	**Intersection**	-	**A**	-	**9.9**	-	**A**	-	**9.9**	-
	EB - LTR	-	A	0.08	9	22	A	0.19	9.1	20
	WB - LTR	-	A	0.08	8.1	15	A	0.04	8.2	16
	NB - LTR	-	B	0.41	11	30	B	0.38	10.9	27
	SB - LTR	-	A	0.11	7.9	17	A	0.14	8.6	20
Wilson Ave & Wabanaki Dr	**Intersection**	-	**A**	-	**5.9**	-	**B**	-	**13.7**	-
	EB - L	-	A	0.17	7.9	15	A	0.25	8.3	23
	EB - TR*	-	-	-	-	1	-	-	-	3
	WB - LT	-	A	0.01	8	3	A	0	7.8	4
	WB - R*	45	-	-	-	2	-	-	-	0
	NB - LTR	-	C	0.05	24.9	9	**F**	0.77	116.1	21
	SB - LT	-	D	0.15	25.2	14	D	0.09	33.1	9
	SB - R	-	B	0.3	10.3	0	B	0.56	13.7	3

Notes: **Bold Red** used for LOS F, V/C ≥ 0.85, and queueing greater than available storage

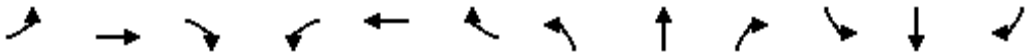
* = movement operates under free-flow movement

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	322	173	516	372	107	258
Future Volume (vph)	322	173	516	372	107	258
Ideal Flow (vphpl)	1775	1000	1775	1900	1775	1750
Storage Length (m)		0.0	70.0		0.0	25.0
Storage Lanes		0	1		2	1
Taper Length (m)			35.0		7.5	
Lane Util. Factor	0.95	0.95	1.00	0.95	0.97	1.00
Ped Bike Factor	0.99		1.00		0.99	0.98
Frt	0.948					0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	3041	0	1637	3406	3146	1282
Flt Permitted			0.422		0.950	
Satd. Flow (perm)	3041	0	727	3406	3124	1262
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	118					258
Link Speed (k/h)	50			50	50	
Link Distance (m)	230.8			412.4	232.7	
Travel Time (s)	16.6			29.7	16.8	
Confl. Peds. (#/hr)		1	1		3	3
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	5%	3%	6%	4%	16%
Adj. Flow (vph)	322	173	516	372	107	258
Shared Lane Traffic (%)						
Lane Group Flow (vph)	495	0	516	372	107	258
Turn Type	NA		pm+pt	NA	Prot	Perm
Protected Phases	2		1	2	4	
Permitted Phases			2	1		4
Detector Phase	2		1	2	4	4
Switch Phase						
Minimum Initial (s)	28.2		5.0	28.2	10.0	10.0
Minimum Split (s)	34.2		9.0	34.2	16.0	16.0
Total Split (s)	34.2		29.7	34.2	26.1	26.1
Total Split (%)	38.0%		33.0%	38.0%	29.0%	29.0%
Maximum Green (s)	28.2		25.7	28.2	20.1	20.1
Yellow Time (s)	4.0		3.0	4.0	4.0	4.0
All-Red Time (s)	2.0		1.0	2.0	2.0	2.0
Lost Time Adjust (s)	-2.0		0.0	-2.0	-2.0	-2.0
Total Lost Time (s)	4.0		4.0	4.0	4.0	4.0
Lead/Lag	Lag		Lead	Lag		
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		5.0	3.0	3.0	3.0
Recall Mode	C-Max		None	C-Max	None	None
Walk Time (s)	17.2			17.2	7.0	7.0
Flash Dont Walk (s)	11.0			11.0	13.0	13.0
Pedestrian Calls (#/hr)	0			0	0	0
Act Effct Green (s)	42.0		64.6	68.6	13.4	13.4
Actuated g/C Ratio	0.47		0.72	0.76	0.15	0.15
v/c Ratio	0.33		0.69	0.14	0.23	0.64

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Control Delay	13.6		10.3	3.2	34.3	12.1
Queue Delay	0.0		0.0	0.0	0.0	0.0
Total Delay	13.6		10.3	3.2	34.3	12.1
LOS	B		B	A	C	B
Approach Delay	13.6			7.3	18.6	
Approach LOS	B			A	B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 90			
Actuated Cycle Length: 90			
Offset: 2.7 (3%), Referenced to phase 2:EBWB, Start of Green			
Natural Cycle: 65			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.69			
Intersection Signal Delay: 11.5		Intersection LOS: B	
Intersection Capacity Utilization 73.2%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 1: Hwy. 8 NB Ramp & Weber St/King St

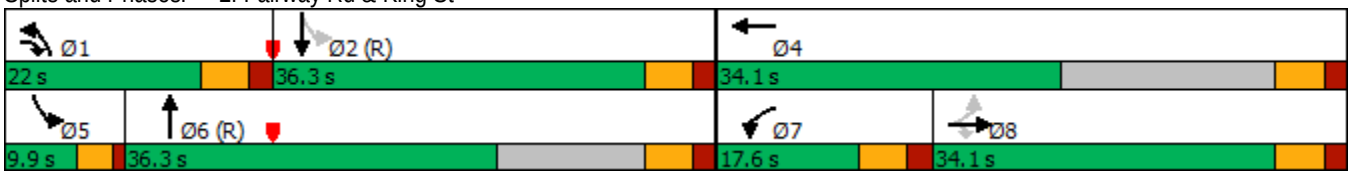


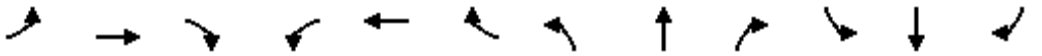
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	161	346	140	403	15	257	480	266	21	550	114
Future Volume (vph)	20	161	346	140	403	15	257	480	266	21	550	114
Ideal Flow (vphpl)	1775	1900	1750	1775	1650	1000	1775	1775	1000	1775	1775	1000
Storage Length (m)	65.0		0.0	62.0		0.0	90.0		0.0	50.0		0.0
Storage Lanes	1		1	2		0	2		0	1		0
Taper Length (m)	50.0			65.0			40.0			20.0		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	0.97	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	0.99		0.98	0.99	1.00		0.99	0.99		1.00	1.00	
Frt			0.850		0.995			0.947			0.974	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1405	1827	1293	3029	1590	0	2921	2915	0	1686	2995	0
Flt Permitted	0.518			0.950			0.950			0.368		
Satd. Flow (perm)	760	1827	1263	3001	1590	0	2900	2915	0	650	2995	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			128		2			115			22	
Link Speed (k/h)		50			50			60			50	
Link Distance (m)		412.4			1100.5			498.0			338.4	
Travel Time (s)		29.7			79.2			29.9			24.4	
Confl. Peds. (#/hr)	13		10	10		13	10		7	7		10
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	20%	4%	15%	8%	3%	7%	12%	9%	7%	0%	6%	25%
Adj. Flow (vph)	20	161	346	140	403	15	257	480	266	21	550	114
Shared Lane Traffic (%)												
Lane Group Flow (vph)	20	161	346	140	418	0	257	746	0	21	664	0
Turn Type	Perm	NA	pm+ov	Prot	NA		Prot	NA		pm+pt	NA	
Protected Phases		8	1	7	4		1	6		5	2	
Permitted Phases	8		8							2		
Detector Phase	8	8	1	7	4		1	6		5	2	
Switch Phase												
Minimum Initial (s)	28.1	28.1	10.0	5.0	28.1		10.0	30.3		5.0	30.3	
Minimum Split (s)	34.1	34.1	16.0	11.0	34.1		16.0	36.3		9.0	36.3	
Total Split (s)	34.1	34.1	22.0	17.6	34.1		22.0	36.3		9.9	36.3	
Total Split (%)	31.0%	31.0%	20.0%	16.0%	31.0%		20.0%	33.0%		9.0%	33.0%	
Maximum Green (s)	28.1	28.1	16.0	11.6	28.1		16.0	30.3		5.9	30.3	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		3.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0		1.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0		-2.0	-2.0		0.0	-2.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lag	Lag	Lead	Lead			Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	Max	Max	None	None	Max		None	C-Max		None	C-Max	
Walk Time (s)	8.1	8.1			8.1			9.3			9.3	
Flash Dont Walk (s)	20.0	20.0			20.0			21.0			21.0	
Pedestrian Calls (#/hr)	0	0			0			0			0	
Act Effct Green (s)	31.7	31.7	47.8	12.0	47.7		16.1	50.3		40.0	34.2	
Actuated g/C Ratio	0.29	0.29	0.43	0.11	0.43		0.15	0.46		0.36	0.31	
v/c Ratio	0.09	0.31	0.55	0.42	0.61		0.60	0.53		0.07	0.70	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay	31.1	33.1	16.1	49.5	28.4		49.9	20.3		16.1	37.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	31.1	33.1	16.1	49.5	28.4		49.9	20.3		16.1	37.5	
LOS	C	C	B	D	C		D	C		B	D	
Approach Delay		21.9			33.7			27.9			36.8	
Approach LOS		C			C			C			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110			
Actuated Cycle Length: 110			
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBT, Start of Green			
Natural Cycle: 100			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.70			
Intersection Signal Delay: 30.1		Intersection LOS: C	
Intersection Capacity Utilization 95.9%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 2: Fairway Rd & King St



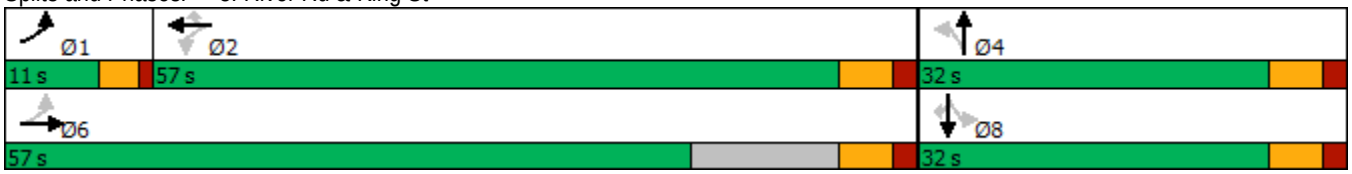


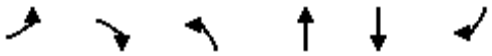
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	120	310	7	2	334	105	16	7	2	206	2	198
Future Volume (vph)	120	310	7	2	334	105	16	7	2	206	2	198
Ideal Flow (vphpl)	1775	1650	1000	1775	1900	1750	1000	1550	1000	1000	1650	1750
Storage Length (m)	45.0		0.0	50.0		50.0	0.0		0.0	0.0		0.0
Storage Lanes	1		0	1		1	0		0	0		1
Taper Length (m)	60.0			70.0			7.5			7.5		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00					0.99		0.99			1.00	0.97
Frt		0.997				0.850		0.989				0.850
Flt Protected	0.950			0.950				0.969			0.953	
Satd. Flow (prot)	1637	1569	0	1686	1792	1390	0	1428	0	0	1557	1473
Flt Permitted	0.451			0.568				0.816			0.710	
Satd. Flow (perm)	777	1569	0	1008	1792	1373	0	1198	0	0	1156	1432
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2				105		2				198
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		1100.5			425.6			107.0			178.4	
Travel Time (s)		79.2			30.6			7.7			12.8	
Confl. Peds. (#/hr)	1					1	4		2	2		4
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	3%	4%	43%	0%	6%	7%	6%	0%	0%	1%	0%	1%
Adj. Flow (vph)	120	310	7	2	334	105	16	7	2	206	2	198
Shared Lane Traffic (%)												
Lane Group Flow (vph)	120	317	0	2	334	105	0	25	0	0	208	198
Turn Type	pm+pt	NA		Perm	NA	Perm	Perm	NA		Perm	NA	Perm
Protected Phases	1	6			2			4			8	
Permitted Phases	6			2		2	4			8		8
Detector Phase	1	6		2	2	2	4	4		8	8	8
Switch Phase												
Minimum Initial (s)	5.0	51.0		51.0	51.0	51.0	26.0	26.0		26.0	26.0	26.0
Minimum Split (s)	9.0	57.0		57.0	57.0	57.0	32.0	32.0		32.0	32.0	32.0
Total Split (s)	11.0	57.0		57.0	57.0	57.0	32.0	32.0		32.0	32.0	32.0
Total Split (%)	11.0%	57.0%		57.0%	57.0%	57.0%	32.0%	32.0%		32.0%	32.0%	32.0%
Maximum Green (s)	7.0	51.0		51.0	51.0	51.0	26.0	26.0		26.0	26.0	26.0
Yellow Time (s)	3.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	1.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	-2.0		-2.0	-2.0	-2.0		-2.0			-2.0	-2.0
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	4.0
Lead/Lag	Lead			Lag	Lag	Lag						
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	Max		Max	Max	Max	Max	Max		Max	Max	Max
Walk Time (s)		35.0		35.0	35.0	35.0	15.0	15.0		15.0	15.0	15.0
Flash Dont Walk (s)		16.0		16.0	16.0	16.0	11.0	11.0		11.0	11.0	11.0
Pedestrian Calls (#/hr)		0		0	0	0	0	0		0	0	0
Act Effct Green (s)	63.9	63.9		53.0	53.0	53.0		28.0			28.0	28.0
Actuated g/C Ratio	0.64	0.64		0.53	0.53	0.53		0.28			0.28	0.28
v/c Ratio	0.22	0.32		0.00	0.35	0.13		0.07			0.64	0.36

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay	8.0	9.1		11.0	14.9	2.8		25.8			42.2	6.2
Queue Delay	0.0	0.0		0.0	0.0	0.0		0.0			0.0	0.0
Total Delay	8.0	9.1		11.0	14.9	2.8		25.8			42.2	6.2
LOS	A	A		B	B	A		C			D	A
Approach Delay		8.8			12.0			25.8			24.6	
Approach LOS		A			B			C			C	

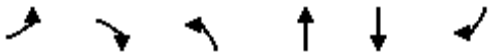
Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 99.9			
Natural Cycle: 100			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.64			
Intersection Signal Delay: 15.1		Intersection LOS: B	
Intersection Capacity Utilization 116.7%		ICU Level of Service H	
Analysis Period (min) 15			

Splits and Phases: 3: River Rd & King St





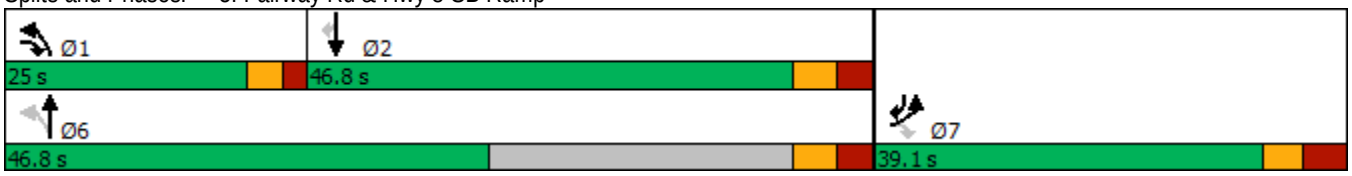
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	300	258	291	745	881	183
Future Volume (vph)	300	258	291	745	881	183
Ideal Flow (vphpl)	1775	1750	1775	1900	1900	1750
Lane Width (m)	3.5	3.5	3.5	3.5	3.5	3.5
Storage Length (m)	75.0	50.0	85.0			75.0
Storage Lanes	1	1	1			1
Taper Length (m)	60.0		75.0			
Lane Util. Factor	0.97	0.88	1.00	0.95	0.91	1.00
Ped Bike Factor		0.99	1.00			0.97
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	3052	2442	1476	3216	4706	1401
Flt Permitted	0.950		0.242			
Satd. Flow (perm)	3052	2408	375	3216	4706	1363
Right Turn on Red		No				Yes
Satd. Flow (RTOR)						183
Link Speed (k/h)	50			60	60	
Link Distance (m)	279.0			302.0	498.0	
Travel Time (s)	20.1			18.1	29.9	
Confl. Peds. (#/hr)		2	4			4
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	6%	6%	13%	11%	9%	5%
Adj. Flow (vph)	300	258	291	745	881	183
Shared Lane Traffic (%)						
Lane Group Flow (vph)	300	258	291	745	881	183
Turn Type	Prot	pm+ov	pm+pt	NA	NA	pm+ov
Protected Phases	7	1	1	6	2	7
Permitted Phases		7	6			2
Detector Phase	7	1	1	6	2	7
Switch Phase						
Minimum Initial (s)	10.0	8.0	8.0	40.0	40.0	10.0
Minimum Split (s)	17.1	13.0	13.0	46.8	46.8	17.1
Total Split (s)	39.1	25.0	25.0	46.8	46.8	39.1
Total Split (%)	35.3%	22.5%	22.5%	42.2%	42.2%	35.3%
Maximum Green (s)	32.0	20.0	20.0	40.0	40.0	32.0
Yellow Time (s)	3.3	3.0	3.0	3.7	3.7	3.3
All-Red Time (s)	3.8	2.0	2.0	3.1	3.1	3.8
Lost Time Adjust (s)	-3.1	-2.5	-1.0	-2.8	-2.8	-3.1
Total Lost Time (s)	4.0	2.5	4.0	4.0	4.0	4.0
Lead/Lag		Lead	Lead		Lag	
Lead-Lag Optimize?						
Vehicle Extension (s)	4.0	4.0	4.0	3.0	3.0	4.0
Recall Mode	None	None	None	Max	Max	None
Walk Time (s)	9.0			10.0	10.0	9.0
Flash Dont Walk (s)	23.0			30.0	30.0	23.0
Pedestrian Calls (#/hr)	0			0	0	0
Act Effct Green (s)	18.7	36.8	62.2	62.2	43.1	61.8
Actuated g/C Ratio	0.21	0.41	0.70	0.70	0.48	0.69

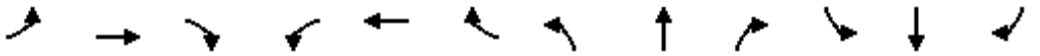


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
v/c Ratio	0.47	0.26	0.65	0.33	0.39	0.18
Control Delay	33.7	15.8	13.8	6.0	16.3	1.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	33.7	15.8	13.8	6.0	16.3	1.1
LOS	C	B	B	A	B	A
Approach Delay	25.4			8.2	13.7	
Approach LOS	C			A	B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110.9			
Actuated Cycle Length: 89			
Natural Cycle: 80			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.65			
Intersection Signal Delay: 14.0		Intersection LOS: B	
Intersection Capacity Utilization 70.9%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 5: Fairway Rd & Hwy 8 SB Ramp



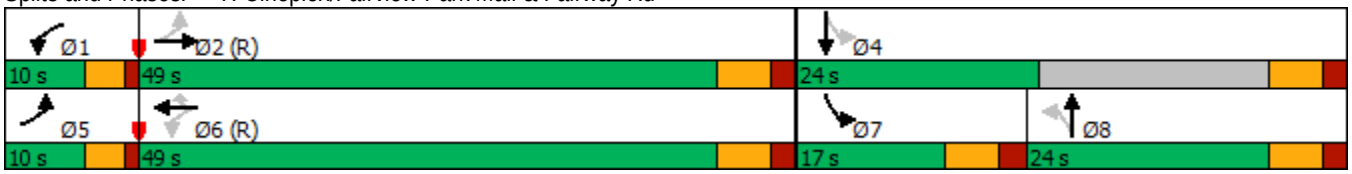


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	18	691	18	29	961	3	24	1	26	5	0	6
Future Volume (vph)	18	691	18	29	961	3	24	1	26	5	0	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	40.0		0.0	130.0		0.0	0.0		0.0	40.0		0.0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (m)	45.0			40.0			7.5			15.0		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	0.97	1.00	1.00
Frt		0.996				0.850		0.856			0.850	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3392	0	1805	3438	1615	1805	1626	0	3502	1615	0
Flt Permitted	0.277			0.362			0.769			0.357		
Satd. Flow (perm)	526	3392	0	688	3438	1615	1461	1626	0	1316	1615	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		3				142		26			182	
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		276.4			205.3			142.3			155.5	
Travel Time (s)		16.6			12.3			10.2			11.2	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	6%	6%	0%	5%	0%	0%	0%	0%	0%	0%	0%
Adj. Flow (vph)	18	691	18	29	961	3	24	1	26	5	0	6
Shared Lane Traffic (%)												
Lane Group Flow (vph)	18	709	0	29	961	3	24	27	0	5	6	0
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Perm	NA		pm+pt	NA	
Protected Phases	5	2		1	6			8		7	4	
Permitted Phases	2			6		6	8			4		
Detector Phase	5	2		1	6	6	8	8		7	4	
Switch Phase												
Minimum Initial (s)	5.0	43.0		5.0	43.0	43.0	8.0	8.0		5.0	8.0	
Minimum Split (s)	9.0	49.0		9.0	49.0	49.0	14.0	14.0		11.0	14.0	
Total Split (s)	10.0	49.0		10.0	49.0	49.0	24.0	24.0		17.0	24.0	
Total Split (%)	10.0%	49.0%		10.0%	49.0%	49.0%	24.0%	24.0%		17.0%	24.0%	
Maximum Green (s)	6.0	43.0		6.0	43.0	43.0	18.0	18.0		11.0	18.0	
Yellow Time (s)	3.0	4.0		3.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	2.0		1.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	6.0		4.0	6.0	6.0	6.0	6.0		6.0	6.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lag	Lag		Lead		
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	C-Max		None	C-Max	C-Max	None	None		None	None	
Walk Time (s)		22.0			22.0	22.0	12.0	12.0			12.0	
Flash Dont Walk (s)		21.0			21.0	21.0	15.0	15.0			15.0	
Pedestrian Calls (#/hr)		0			0	0	0	0			0	
Act Effct Green (s)	82.3	79.2		83.3	81.2	81.2	8.4	8.4		9.8	10.8	
Actuated g/C Ratio	0.82	0.79		0.83	0.81	0.81	0.08	0.08		0.10	0.11	
v/c Ratio	0.04	0.26		0.05	0.34	0.00	0.20	0.17		0.02	0.02	
Control Delay	2.9	5.0		3.3	6.0	0.0	46.5	19.0		36.0	0.2	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay	2.9	5.0		3.3	6.0	0.0	46.5	19.0		36.0	0.2	
LOS	A	A		A	A	A	D	B		D	A	
Approach Delay		4.9			5.9			32.0			16.5	
Approach LOS		A			A			C			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 24 (24%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 85			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.34			
Intersection Signal Delay: 6.3		Intersection LOS: A	
Intersection Capacity Utilization 60.0%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 7: Cineplex/Fairview Park Mall & Fairway Rd

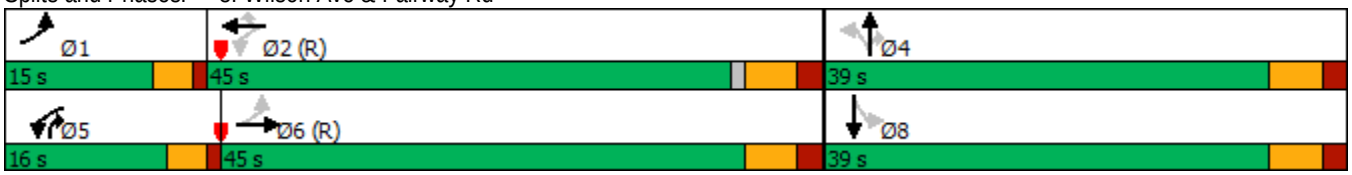


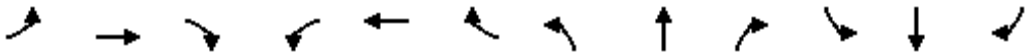
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	94	427	73	322	546	77	48	168	108	122	130	109
Future Volume (vph)	94	427	73	322	546	77	48	168	108	122	130	109
Ideal Flow (vphpl)	1775	1775	1000	1775	1900	1750	1775	1900	1750	1775	1775	1000
Lane Width (m)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Storage Length (m)	120.0		0.0	160.0		30.0	95.0		0.0	45.0		45.0
Storage Lanes	1		0	1		1	1		1	1		1
Taper Length (m)	60.0			40.0			7.5			10.0		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Ped Bike Factor	1.00	1.00		1.00		0.97	1.00		0.98	1.00	0.99	
Frt		0.978				0.850			0.850		0.932	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1516	3059	0	1489	3368	1302	1401	1693	1196	1635	2962	0
Flt Permitted	0.448			0.402			0.539			0.506		
Satd. Flow (perm)	713	3059	0	629	3368	1268	792	1693	1177	868	2962	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		23				77			108		109	
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		450.5			276.4			297.0			324.1	
Travel Time (s)		27.0			16.6			21.4			23.3	
Confl. Peds. (#/hr)	5		3	3		5	6		4	4		6
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	10%	7%	3%	12%	6%	13%	19%	11%	23%	2%	5%	3%
Adj. Flow (vph)	94	427	73	322	546	77	48	168	108	122	130	109
Shared Lane Traffic (%)												
Lane Group Flow (vph)	94	500	0	322	546	77	48	168	108	122	239	0
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Perm	NA	pm+ov	Perm	NA	
Protected Phases	1	6		5	2			4	5		8	
Permitted Phases	6			2		2	4		4	8		
Detector Phase	1	6		5	2	2	4	4	5	8	8	
Switch Phase												
Minimum Initial (s)	5.0	39.0		5.0	39.0	39.0	8.0	8.0	5.0	8.0	8.0	
Minimum Split (s)	9.0	45.0		9.0	45.0	45.0	14.0	14.0	9.0	14.0	14.0	
Total Split (s)	15.0	45.0		16.0	45.0	45.0	39.0	39.0	16.0	39.0	39.0	
Total Split (%)	15.0%	45.0%		16.0%	45.0%	45.0%	39.0%	39.0%	16.0%	39.0%	39.0%	
Maximum Green (s)	11.0	39.0		12.0	39.0	39.0	33.0	33.0	12.0	33.0	33.0	
Yellow Time (s)	3.0	4.0		3.0	4.0	4.0	4.0	4.0	3.0	4.0	4.0	
All-Red Time (s)	1.0	2.0		1.0	2.0	2.0	2.0	2.0	1.0	2.0	2.0	
Lost Time Adjust (s)	0.0	-2.0		0.0	-2.0	-2.0	-2.0	-2.0	0.0	-2.0	-2.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag			Lead			
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	3.0		4.0	3.0	3.0	3.0	3.0	4.0	3.0	3.0	
Recall Mode	None	C-Max		None	C-Max	C-Max	None	None	None	None	None	
Walk Time (s)		22.0			22.0	22.0	7.0	7.0		7.0	7.0	
Flash Dont Walk (s)		17.0			17.0	17.0	25.0	25.0		25.0	25.0	
Pedestrian Calls (#/hr)		0			0	0	0	0		0	0	
Act Effct Green (s)	62.3	53.8		72.7	62.4	62.4	19.3	19.3	34.2	19.3	19.3	
Actuated g/C Ratio	0.62	0.54		0.73	0.62	0.62	0.19	0.19	0.34	0.19	0.19	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.18	0.30		0.55	0.26	0.09	0.32	0.52	0.23	0.73	0.36	
Control Delay	6.8	14.6		14.4	6.9	0.9	37.9	40.6	4.0	61.3	18.9	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	6.8	14.6		14.4	6.9	0.9	37.9	40.6	4.0	61.3	18.9	
LOS	A	B		B	A	A	D	D	A	E	B	
Approach Delay		13.4			9.0			28.0			33.2	
Approach LOS		B			A			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 25 (25%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.73			
Intersection Signal Delay: 16.8		Intersection LOS: B	
Intersection Capacity Utilization 83.2%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 8: Wilson Ave & Fairway Rd





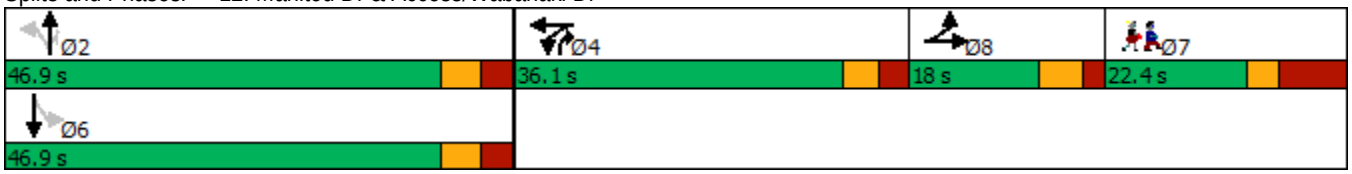
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	0	0	270	0	62	3	347	542	75	201	2
Future Volume (vph)	1	0	0	270	0	62	3	347	542	75	201	2
Ideal Flow (vphpl)	1000	1550	1000	1775	1650	1000	1000	1775	1750	1000	1650	1000
Storage Length (m)	0.0		0.0	0.0		0.0	0.0		70.0	0.0		0.0
Storage Lanes	0		0	1		0	0		1	0		0
Taper Length (m)	7.5			7.5			7.5			7.5		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	0.95
Ped Bike Factor				1.00	1.00				0.99		1.00	
Frt					0.943				0.850		0.999	
Flt Protected		0.950		0.950	0.970						0.987	
Satd. Flow (prot)	0	1472	0	1470	1311	0	0	3125	1417	0	2973	0
Flt Permitted		0.950		0.950	0.970			0.953			0.787	
Satd. Flow (perm)	0	1472	0	1463	1307	0	0	2978	1397	0	2370	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)					171				542		1	
Link Speed (k/h)		50			50			60			60	
Link Distance (m)		83.1			666.1			292.0			328.5	
Travel Time (s)		6.0			48.0			17.5			19.7	
Confl. Peds. (#/hr)			2	2					1	1		
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	9%	0%	10%	0%	8%	5%	4%	4%	0%
Adj. Flow (vph)	1	0	0	270	0	62	3	347	542	75	201	2
Shared Lane Traffic (%)				37%								
Lane Group Flow (vph)	0	1	0	170	162	0	0	350	542	0	278	0
Turn Type	Split	NA		Split	NA		Perm	NA	pm+ov	Perm	NA	
Protected Phases	8	8		4	4			2	4		6	
Permitted Phases							2		2	6		
Detector Phase	8	8		4	4		2	2	4	6	6	
Switch Phase												
Minimum Initial (s)	8.0	8.0		8.0	8.0		40.0	40.0	8.0	40.0	40.0	
Minimum Split (s)	14.0	14.0		14.1	14.1		46.9	46.9	14.1	46.9	46.9	
Total Split (s)	18.0	18.0		36.1	36.1		46.9	46.9	36.1	46.9	46.9	
Total Split (%)	14.6%	14.6%		29.3%	29.3%		38.0%	38.0%	29.3%	38.0%	38.0%	
Maximum Green (s)	12.0	12.0		30.0	30.0		40.0	40.0	30.0	40.0	40.0	
Yellow Time (s)	4.0	4.0		3.3	3.3		3.7	3.7	3.3	3.7	3.7	
All-Red Time (s)	2.0	2.0		2.8	2.8		3.2	3.2	2.8	3.2	3.2	
Lost Time Adjust (s)		-2.0		-2.0	-2.0			-2.0	-2.0		-2.0	
Total Lost Time (s)		4.0		4.1	4.1			4.9	4.1		4.9	
Lead/Lag	Lead	Lead										
Lead-Lag Optimize?	Yes	Yes										
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None		None	None		Max	Max	None	Max	Max	
Walk Time (s)	8.0	8.0		8.0	8.0		30.0	30.0	8.0	30.0	30.0	
Flash Dont Walk (s)	8.0	8.0		10.0	10.0		10.0	10.0	10.0	10.0	10.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0	0	0	0	
Act Effct Green (s)		10.2		15.9	15.9			42.7	59.5		42.7	
Actuated g/C Ratio		0.15		0.23	0.23			0.61	0.85		0.61	
v/c Ratio		0.00		0.51	0.38			0.19	0.43		0.19	

Lane Group	Ø7
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (m)	
Storage Lanes	
Taper Length (m)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (k/h)	
Link Distance (m)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	7
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	10.0
Minimum Split (s)	19.4
Total Split (s)	22.4
Total Split (%)	18%
Maximum Green (s)	13.0
Yellow Time (s)	3.0
All-Red Time (s)	6.4
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	Lag
Lead-Lag Optimize?	
Vehicle Extension (s)	5.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay		31.0		29.9	6.6			8.2	1.2		8.4	
Queue Delay		0.0		0.0	0.0			0.0	0.0		0.0	
Total Delay		31.0		29.9	6.6			8.2	1.2		8.4	
LOS		C		C	A			A	A		A	
Approach Delay		31.0			18.5			3.9			8.4	
Approach LOS		C			B			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 123.4			
Actuated Cycle Length: 70			
Natural Cycle: 95			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.51			
Intersection Signal Delay: 8.0		Intersection LOS: A	
Intersection Capacity Utilization 88.1%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 12: Manitou Dr & Access/Wabanaki Dr



Lane Group	Ø7
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	

Intersection Summary

Intersection	
Int Delay, s/veh	0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	512	17	5	452	3	7
Future Vol, veh/h	512	17	5	452	3	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	6	6	4	6	0	14
Mvmt Flow	512	17	5	452	3	7

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	529	0	983	521
Stage 1	-	-	-	-	521	-
Stage 2	-	-	-	-	462	-
Critical Hdwy	-	-	4.14	-	6.4	6.34
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.236	-	3.5	3.426
Pot Cap-1 Maneuver	-	-	1028	-	278	532
Stage 1	-	-	-	-	600	-
Stage 2	-	-	-	-	638	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1028	-	277	532
Mov Cap-2 Maneuver	-	-	-	-	277	-
Stage 1	-	-	-	-	600	-
Stage 2	-	-	-	-	635	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	13.8
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	417	-	-	1028	-
HCM Lane V/C Ratio	0.024	-	-	0.005	-
HCM Control Delay (s)	13.8	-	-	8.5	-
HCM Lane LOS	B	-	-	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	2.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	700	73	0	1086	0	337
Future Vol, veh/h	700	73	0	1086	0	337
Conflicting Peds, #/hr	0	1	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	11	5	0	9	0	8
Mvmt Flow	700	73	0	1086	0	337

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	388
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.06
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.38
Pot Cap-1 Maneuver	-	-	0	-	0	594
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	593
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	18.8
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	593	-	-	-
HCM Lane V/C Ratio	0.568	-	-	-
HCM Control Delay (s)	18.8	-	-	-
HCM Lane LOS	C	-	-	-
HCM 95th %tile Q(veh)	3.6	-	-	-

Intersection	
Int Delay, s/veh	0.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	1	7	338	4	3	90
Future Vol, veh/h	1	7	338	4	3	90
Conflicting Peds, #/hr	0	1	0	12	12	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	14	13	0	0	6
Mvmt Flow	1	7	338	4	3	90

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	448	353	0	0	354	0
Stage 1	352	-	-	-	-	-
Stage 2	96	-	-	-	-	-
Critical Hdwy	6.4	6.34	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.426	-	-	2.2	-
Pot Cap-1 Maneuver	572	664	-	-	1216	-
Stage 1	716	-	-	-	-	-
Stage 2	933	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	564	656	-	-	1203	-
Mov Cap-2 Maneuver	564	-	-	-	-	-
Stage 1	708	-	-	-	-	-
Stage 2	930	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.7	0	0.3
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	643	1203	-
HCM Lane V/C Ratio	-	-	0.012	0.002	-
HCM Control Delay (s)	-	-	10.7	8	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Int Delay, s/veh	5.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	243	308	36	10	69	21	4	3	2	1	30	295
Future Vol, veh/h	243	308	36	10	69	21	4	3	2	1	30	295
Conflicting Peds, #/hr	1	0	4	4	0	1	0	0	3	3	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	0	-	-	-	-	45	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	7	3	11	0	14	10	0	0	50	0	13	6
Mvmt Flow	243	308	36	10	69	21	4	3	2	1	30	295

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	91	0	0	348	0	0	931	927	333	908	924	70
Stage 1	-	-	-	-	-	-	816	816	-	90	90	-
Stage 2	-	-	-	-	-	-	115	111	-	818	834	-
Critical Hdwy	4.17	-	-	4.1	-	-	7.1	6.5	6.7	7.1	6.63	6.26
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.63	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.63	-
Follow-up Hdwy	2.263	-	-	2.2	-	-	3.5	4	3.75	3.5	4.117	3.354
Pot Cap-1 Maneuver	1473	-	-	1222	-	-	249	270	611	258	258	982
Stage 1	-	-	-	-	-	-	374	393	-	922	799	-
Stage 2	-	-	-	-	-	-	895	807	-	373	368	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1472	-	-	1217	-	-	135	222	607	220	212	981
Mov Cap-2 Maneuver	-	-	-	-	-	-	135	222	-	220	212	-
Stage 1	-	-	-	-	-	-	311	327	-	769	791	-
Stage 2	-	-	-	-	-	-	597	799	-	307	306	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	3.3	0.8	24.5	11.6
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	194	1472	-	-	1217	-	-	212	981
HCM Lane V/C Ratio	0.046	0.165	-	-	0.008	-	-	0.146	0.301
HCM Control Delay (s)	24.5	7.9	-	-	8	0	-	24.9	10.2
HCM Lane LOS	C	A	-	-	A	A	-	C	B
HCM 95th %tile Q(veh)	0.1	0.6	-	-	0	-	-	0.5	1.3

Intersection	
Intersection Delay, s/veh	9.9
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	26	9	16	14	15	36	19	280	10	16	42	27
Future Vol, veh/h	26	9	16	14	15	36	19	280	10	16	42	27
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	38	33	19	0	13	6	26	4	10	0	12	4
Mvmt Flow	26	9	16	14	15	36	19	280	10	16	42	27
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	9	8.1	10.9	7.9
HCM LOS	A	A	B	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	6%	51%	22%	19%
Vol Thru, %	91%	18%	23%	49%
Vol Right, %	3%	31%	55%	32%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	309	51	65	85
LT Vol	19	26	14	16
Through Vol	280	9	15	42
RT Vol	10	16	36	27
Lane Flow Rate	309	51	65	85
Geometry Grp	1	1	1	1
Degree of Util (X)	0.405	0.078	0.084	0.104
Departure Headway (Hd)	4.72	5.491	4.63	4.397
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	763	652	773	814
Service Time	2.744	3.526	2.662	2.427
HCM Lane V/C Ratio	0.405	0.078	0.084	0.104
HCM Control Delay	10.9	9	8.1	7.9
HCM Lane LOS	B	A	A	A
HCM 95th-tile Q	2	0.3	0.3	0.3

Intersection: 1: Hwy. 8 NB Ramp & Weber St/King St

Movement	EB	EB	WB	WB	WB	NB	NB	NB
Directions Served	T	TR	L	T	T	L	L	R
Maximum Queue (m)	56.2	78.4	96.6	54.2	46.7	35.2	19.4	9.5
Average Queue (m)	21.9	36.8	48.1	18.6	23.1	17.1	3.9	0.6
95th Queue (m)	44.4	67.7	85.2	40.3	41.7	29.6	13.1	9.1
Link Distance (m)	222.2	222.2		384.3	384.3	218.1	218.1	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (m)			70.0					25.0
Storage Blk Time (%)			3				0	0
Queuing Penalty (veh)			5				0	0

Intersection: 2: Fairway Rd & King St

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	L	T	R	L	L	TR	L	L	T	TR	L	T
Maximum Queue (m)	25.0	58.8	72.8	34.0	42.1	118.1	58.5	60.5	81.8	96.4	58.8	94.1
Average Queue (m)	5.7	27.8	31.4	14.2	21.5	56.7	30.2	27.5	38.2	53.7	6.8	57.8
95th Queue (m)	17.3	52.4	59.4	29.5	35.2	97.8	49.2	48.5	66.9	86.7	28.8	86.0
Link Distance (m)		384.3	384.3			1071.7			474.7	474.7		323.2
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	65.0			62.0	62.0		90.0	90.0			50.0	
Storage Blk Time (%)		1				8			0			14
Queuing Penalty (veh)		0				11			0			3

Intersection: 2: Fairway Rd & King St

Movement	SB
Directions Served	TR
Maximum Queue (m)	118.1
Average Queue (m)	62.0
95th Queue (m)	97.4
Link Distance (m)	323.2
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 3: River Rd & King St

Movement	EB	EB	WB	WB	WB	NB	SB	SB
Directions Served	L	TR	L	T	R	LTR	LT	R
Maximum Queue (m)	31.6	55.0	7.2	76.4	20.0	22.3	64.5	32.1
Average Queue (m)	13.0	23.1	0.5	33.4	8.7	6.7	29.0	13.1
95th Queue (m)	26.3	47.4	3.4	59.9	17.8	17.4	53.9	25.1
Link Distance (m)		1071.7		402.4		94.9	162.1	162.1
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (m)	45.0		50.0		50.0			
Storage Blk Time (%)		1		2				
Queuing Penalty (veh)		1		2				

Intersection: 4: Stonegate Dr & King St

Movement	WB	NB
Directions Served	L	LR
Maximum Queue (m)	5.6	13.7
Average Queue (m)	0.4	2.8
95th Queue (m)	3.3	10.4
Link Distance (m)		116.5
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)	100.0	
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 5: Fairway Rd & Hwy 8 SB Ramp

Movement	EB	EB	EB	EB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	L	R	R	L	T	T	T	T	T	R
Maximum Queue (m)	51.4	55.1	53.0	43.0	76.8	66.9	64.2	84.8	85.2	72.3	38.0
Average Queue (m)	22.7	32.4	27.9	8.5	36.4	30.8	27.7	46.2	45.9	36.1	12.4
95th Queue (m)	43.1	50.9	47.3	28.0	63.0	55.0	51.0	77.4	76.5	63.8	28.8
Link Distance (m)		256.6	256.6			273.9	273.9	474.7	474.7	474.7	
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (m)	75.0			50.0	85.0						75.0
Storage Blk Time (%)			1	0	0					0	
Queuing Penalty (veh)			1	0	1					0	

Intersection: 6: Wabanaki Dr & Fairway Rd

Movement	EB	NB
Directions Served	TR	R
Maximum Queue (m)	1.9	54.4
Average Queue (m)	0.1	27.3
95th Queue (m)	1.3	44.4
Link Distance (m)	183.4	229.2
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 7: Cineplex/Fairview Park Mall & Fairway Rd

Movement	EB	EB	EB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	T	L	TR	L	L	TR
Maximum Queue (m)	12.7	34.1	24.3	11.5	57.6	57.2	21.5	12.7	1.6	9.2	8.2
Average Queue (m)	3.2	8.4	6.6	3.9	9.4	10.4	6.7	4.5	0.1	1.0	1.2
95th Queue (m)	10.4	23.8	19.6	10.6	33.8	35.1	16.6	11.8	1.3	5.1	5.6
Link Distance (m)		251.1	251.1		183.4	183.4	128.5	128.5		136.6	136.6
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (m)	40.0			130.0					40.0		
Storage Blk Time (%)		0									
Queuing Penalty (veh)		0									

Intersection: 8: Wilson Ave & Fairway Rd

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	TR	L	T	T	R	L	T	R	L	T
Maximum Queue (m)	27.6	58.9	57.4	84.7	60.2	62.2	48.3	34.3	65.8	28.4	47.6	51.6
Average Queue (m)	13.3	34.2	28.6	37.7	21.0	23.0	6.8	12.5	29.8	12.1	24.4	18.4
95th Queue (m)	25.0	54.2	49.4	70.5	46.4	47.3	23.7	28.2	52.7	23.8	43.6	38.1
Link Distance (m)		436.6	436.6		251.1	251.1			283.3	283.3		306.3
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	120.0			160.0			30.0	95.0			45.0	
Storage Blk Time (%)						4			0		2	0
Queuing Penalty (veh)						3			0		5	0

Intersection: 8: Wilson Ave & Fairway Rd

Movement	SB
Directions Served	TR
Maximum Queue (m)	38.6
Average Queue (m)	12.3
95th Queue (m)	26.8
Link Distance (m)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	45.0
Storage Blk Time (%)	0
Queuing Penalty (veh)	0

Intersection: 9: Wabanaki Dr & Hidden Valley Rd

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (m)	13.0	1.8
Average Queue (m)	2.2	0.1
95th Queue (m)	9.2	1.9
Link Distance (m)	184.6	229.2
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 10: Wabanaki Dr & Goodrich Dr/Hidden Valley Rd

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (m)	22.1	19.7	35.2	21.6
Average Queue (m)	10.2	8.6	18.7	10.4
95th Queue (m)	20.9	15.1	28.5	17.1
Link Distance (m)	269.9	162.8	1040.0	570.8
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 11: Wilson Ave & Wabanaki Dr

Movement	EB	EB	WB	WB	NB	SB
Directions Served	L	TR	LT	R	LTR	LT
Maximum Queue (m)	23.2	9.8	9.0	1.0	15.3	19.9
Average Queue (m)	5.2	0.6	1.1	0.0	2.9	6.8
95th Queue (m)	16.0	4.7	5.8	0.7	10.8	16.2
Link Distance (m)	638.8	638.8	1040.0		120.7	264.2
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (m)				45.0		
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 12: Manitou Dr & Access/Wabanaki Dr

Movement	EB	WB	WB	NB	NB	NB	SB	SB
Directions Served	LTR	L	LTR	LT	T	R	LT	TR
Maximum Queue (m)	6.3	39.7	53.3	37.7	19.5	45.9	37.2	23.2
Average Queue (m)	0.5	18.0	25.1	15.4	5.6	13.1	16.6	4.0
95th Queue (m)	3.3	34.0	42.1	30.1	15.1	28.4	30.0	13.9
Link Distance (m)	69.9	638.8	638.8	277.4	277.4		317.0	317.0
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (m)						70.0		
Storage Blk Time (%)						0		
Queuing Penalty (veh)						0		

Network Summary

Network wide Queuing Penalty: 33

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	560	153	520	584	251	430
Future Volume (vph)	560	153	520	584	251	430
Ideal Flow (vphpl)	1775	1000	1775	1900	1775	1750
Storage Length (m)		0.0	70.0		0.0	25.0
Storage Lanes		0	1		2	1
Taper Length (m)			35.0		7.5	
Lane Util. Factor	0.95	0.95	1.00	0.95	0.97	1.00
Ped Bike Factor	1.00		1.00			0.99
Frt	0.968					0.850
Flt Protected			0.950		0.950	
Satd. Flow (prot)	3186	0	1670	3574	3271	1430
Flt Permitted			0.282		0.950	
Satd. Flow (perm)	3186	0	495	3574	3271	1409
Right Turn on Red		Yes				Yes
Satd. Flow (RTOR)	38					430
Link Speed (k/h)	50			50	50	
Link Distance (m)	230.8			412.4	232.7	
Travel Time (s)	16.6			29.7	16.8	
Confl. Peds. (#/hr)		1	1			2
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	2%	2%	1%	1%	0%	4%
Adj. Flow (vph)	560	153	520	584	251	430
Shared Lane Traffic (%)						
Lane Group Flow (vph)	713	0	520	584	251	430
Turn Type	NA		pm+pt	NA	Prot	Perm
Protected Phases	2		1	2	4	
Permitted Phases			2	1		4
Detector Phase	2		1	2	4	4
Switch Phase						
Minimum Initial (s)	32.0		5.0	32.0	10.0	10.0
Minimum Split (s)	38.0		9.0	38.0	16.0	16.0
Total Split (s)	38.0		36.0	38.0	26.0	26.0
Total Split (%)	38.0%		36.0%	38.0%	26.0%	26.0%
Maximum Green (s)	32.0		32.0	32.0	20.0	20.0
Yellow Time (s)	4.0		3.0	4.0	4.0	4.0
All-Red Time (s)	2.0		1.0	2.0	2.0	2.0
Lost Time Adjust (s)	-2.0		0.0	-2.0	-2.0	-2.0
Total Lost Time (s)	4.0		4.0	4.0	4.0	4.0
Lead/Lag	Lag		Lead	Lag		
Lead-Lag Optimize?						
Vehicle Extension (s)	3.0		5.0	3.0	3.0	3.0
Recall Mode	C-Max		None	C-Max	None	None
Walk Time (s)	21.0			21.0	7.0	7.0
Flash Dont Walk (s)	11.0			11.0	13.0	13.0
Pedestrian Calls (#/hr)	0			0	0	0
Act Effct Green (s)	43.6		72.3	76.3	15.7	15.7
Actuated g/C Ratio	0.44		0.72	0.76	0.16	0.16
v/c Ratio	0.51		0.75	0.21	0.49	0.74

Lane Group	EBT	EBR	WBL	WBT	NBL	NBR
Control Delay	22.4		17.6	3.9	41.1	11.9
Queue Delay	0.0		0.0	0.0	0.0	0.0
Total Delay	22.4		17.6	3.9	41.1	11.9
LOS	C		B	A	D	B
Approach Delay	22.4			10.3	22.7	
Approach LOS	C			B	C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 53 (53%), Referenced to phase 2:EBWB, Start of Green			
Natural Cycle: 75			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.75			
Intersection Signal Delay: 17.1		Intersection LOS: B	
Intersection Capacity Utilization 76.4%		ICU Level of Service D	
Analysis Period (min) 15			

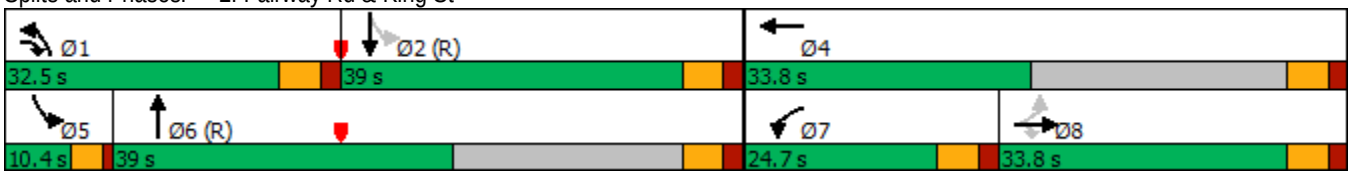
Splits and Phases: 1: Hwy. 8 NB Ramp & Weber St/King St

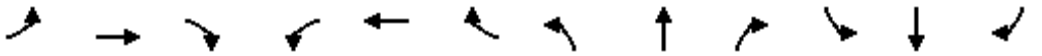
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	36	252	504	323	387	30	454	906	501	27	595	58
Future Volume (vph)	36	252	504	323	387	30	454	906	501	27	595	58
Ideal Flow (vphpl)	1775	1900	1750	1775	1650	1000	1775	1775	1000	1775	1775	1000
Storage Length (m)	65.0		0.0	62.0		0.0	90.0		0.0	50.0		0.0
Storage Lanes	1		1	2		0	2		0	1		0
Taper Length (m)	50.0			65.0			40.0			20.0		
Lane Util. Factor	1.00	1.00	1.00	0.97	1.00	1.00	0.97	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	0.99		0.96	0.98	1.00		0.98	0.98		1.00	1.00	
Frt			0.850		0.989			0.947			0.987	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1686	1863	1403	3176	1605	0	3146	3005	0	1621	3218	0
Flt Permitted	0.518			0.950			0.950			0.113		
Satd. Flow (perm)	907	1863	1354	3123	1605	0	3088	3005	0	192	3218	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			76		4			103			8	
Link Speed (k/h)		50			50			60			50	
Link Distance (m)		412.4			1100.5			498.0			338.4	
Travel Time (s)		29.7			79.2			29.9			24.4	
Confl. Peds. (#/hr)	17		17	17		17	23		16	16		23
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	2%	6%	3%	1%	7%	4%	4%	5%	4%	3%	4%
Adj. Flow (vph)	36	252	504	323	387	30	454	906	501	27	595	58
Shared Lane Traffic (%)												
Lane Group Flow (vph)	36	252	504	323	417	0	454	1407	0	27	653	0
Turn Type	Perm	NA	pm+ov	Prot	NA		Prot	NA		pm+pt	NA	
Protected Phases		8	1	7	4		1	6		5	2	
Permitted Phases	8		8							2		
Detector Phase	8	8	1	7	4		1	6		5	2	
Switch Phase												
Minimum Initial (s)	27.8	27.8	10.0	5.0	27.8		10.0	33.0		5.0	33.0	
Minimum Split (s)	33.8	33.8	16.0	11.0	33.8		16.0	39.0		9.0	39.0	
Total Split (s)	33.8	33.8	32.5	24.7	33.8		32.5	39.0		10.4	39.0	
Total Split (%)	26.0%	26.0%	25.0%	19.0%	26.0%		25.0%	30.0%		8.0%	30.0%	
Maximum Green (s)	27.8	27.8	26.5	18.7	27.8		26.5	33.0		6.4	33.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		3.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0		1.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0		-2.0	-2.0		0.0	-2.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag	Lag	Lag	Lead	Lead			Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	Max	Max	None	None	Max		None	C-Max		None	C-Max	
Walk Time (s)	7.8	7.8			7.8			12.0			12.0	
Flash Dont Walk (s)	20.0	20.0			20.0			21.0			21.0	
Pedestrian Calls (#/hr)	0	0			0			0			0	
Act Effct Green (s)	31.3	31.3	57.5	19.2	54.5		26.1	61.3		43.5	37.4	
Actuated g/C Ratio	0.24	0.24	0.44	0.15	0.42		0.20	0.47		0.33	0.29	
v/c Ratio	0.17	0.56	0.78	0.69	0.62		0.72	0.96		0.21	0.70	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay	42.5	49.5	33.4	60.7	34.2		55.2	46.8		22.3	46.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	42.5	49.5	33.4	60.7	34.2		55.2	46.8		22.3	46.2	
LOS	D	D	C	E	C		E	D		C	D	
Approach Delay		38.9			45.7			48.8			45.2	
Approach LOS		D			D			D			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 130			
Actuated Cycle Length: 130			
Offset: 0 (0%), Referenced to phase 2:SBTL and 6:NBT, Start of Green			
Natural Cycle: 110			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.96			
Intersection Signal Delay: 45.7		Intersection LOS: D	
Intersection Capacity Utilization 110.9%		ICU Level of Service H	
Analysis Period (min) 15			

Splits and Phases: 2: Fairway Rd & King St



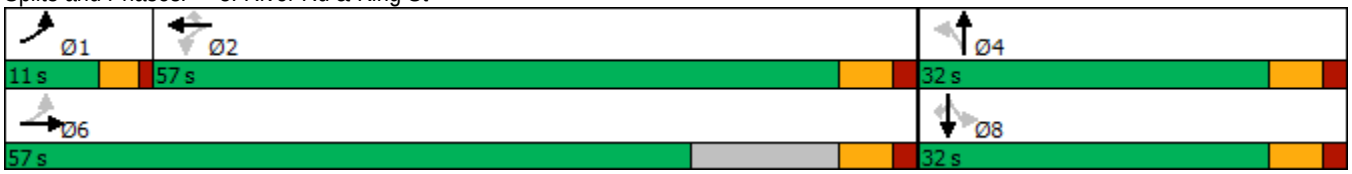


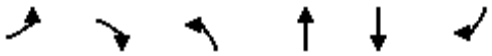
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	193	547	32	0	556	231	11	12	1	240	10	168
Future Volume (vph)	193	547	32	0	556	231	11	12	1	240	10	168
Ideal Flow (vphpl)	1775	1650	1000	1775	1900	1750	1000	1550	1000	1000	1650	1750
Storage Length (m)	45.0		0.0	50.0		50.0	0.0		0.0	0.0		0.0
Storage Lanes	1		0	1		1	0		0	0		1
Taper Length (m)	60.0			70.0			7.5			7.5		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00	1.00				0.99		1.00			0.99	0.97
Frt		0.992				0.850		0.994				0.850
Flt Protected	0.950							0.978			0.954	
Satd. Flow (prot)	1686	1590	0	1775	1863	1488	0	1392	0	0	1559	1473
Flt Permitted	0.282							0.861			0.717	
Satd. Flow (perm)	500	1590	0	1775	1863	1469	0	1223	0	0	1163	1432
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6				231		1				168
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		1100.5			425.6			107.0			178.4	
Travel Time (s)		79.2			30.6			7.7			12.8	
Confl. Peds. (#/hr)	1		4	4		1	4		4	4		4
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	2%	17%	0%	2%	0%	9%	8%	0%	1%	0%	1%
Adj. Flow (vph)	193	547	32	0	556	231	11	12	1	240	10	168
Shared Lane Traffic (%)												
Lane Group Flow (vph)	193	579	0	0	556	231	0	24	0	0	250	168
Turn Type	pm+pt	NA		Perm	NA	Perm	Perm	NA		Perm	NA	Perm
Protected Phases	1	6			2			4			8	
Permitted Phases	6			2		2	4			8		8
Detector Phase	1	6		2	2	2	4	4		8	8	8
Switch Phase												
Minimum Initial (s)	5.0	51.0		51.0	51.0	51.0	26.0	26.0		26.0	26.0	26.0
Minimum Split (s)	9.0	57.0		57.0	57.0	57.0	32.0	32.0		32.0	32.0	32.0
Total Split (s)	11.0	57.0		57.0	57.0	57.0	32.0	32.0		32.0	32.0	32.0
Total Split (%)	11.0%	57.0%		57.0%	57.0%	57.0%	32.0%	32.0%		32.0%	32.0%	32.0%
Maximum Green (s)	7.0	51.0		51.0	51.0	51.0	26.0	26.0		26.0	26.0	26.0
Yellow Time (s)	3.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	1.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	0.0	-2.0		-2.0	-2.0	-2.0		-2.0			-2.0	-2.0
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	4.0
Lead/Lag	Lead			Lag	Lag	Lag						
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	None	Max		Max	Max	Max	Max	Max		Max	Max	Max
Walk Time (s)		35.0		35.0	35.0	35.0	15.0	15.0		15.0	15.0	15.0
Flash Dont Walk (s)		16.0		16.0	16.0	16.0	11.0	11.0		11.0	11.0	11.0
Pedestrian Calls (#/hr)		0		0	0	0	0	0		0	0	0
Act Effct Green (s)	64.0	64.0			53.0	53.0		28.0			28.0	28.0
Actuated g/C Ratio	0.64	0.64			0.53	0.53		0.28			0.28	0.28
v/c Ratio	0.48	0.57			0.56	0.26		0.07			0.77	0.32

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay	11.5	12.8			18.5	2.4		26.5			50.6	6.3
Queue Delay	0.0	0.0			0.0	0.0		0.0			0.0	0.0
Total Delay	11.5	12.8			18.5	2.4		26.5			50.6	6.3
LOS	B	B			B	A		C			D	A
Approach Delay		12.5			13.8			26.5			32.8	
Approach LOS		B			B			C			C	

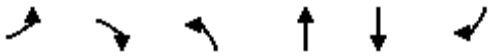
Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Natural Cycle: 100			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.77			
Intersection Signal Delay: 17.4		Intersection LOS: B	
Intersection Capacity Utilization 124.6%		ICU Level of Service H	
Analysis Period (min) 15			

Splits and Phases: 3: River Rd & King St





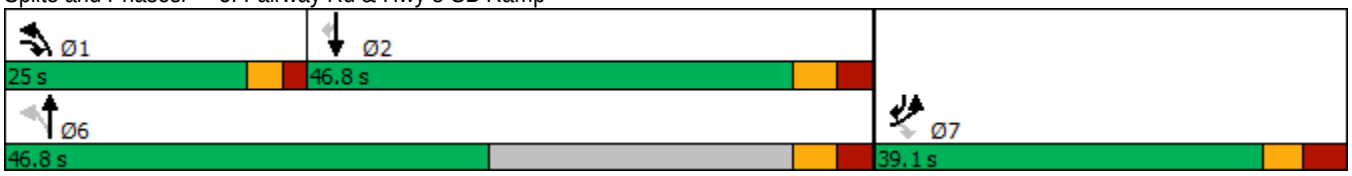
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	655	561	379	1307	1279	175
Future Volume (vph)	655	561	379	1307	1279	175
Ideal Flow (vphpl)	1775	1750	1775	1900	1900	1750
Lane Width (m)	3.5	3.5	3.5	3.5	3.5	3.5
Storage Length (m)	75.0	50.0	85.0			75.0
Storage Lanes	1	1	1			1
Taper Length (m)	60.0		75.0			
Lane Util. Factor	0.97	0.88	1.00	0.95	0.91	1.00
Ped Bike Factor		0.98	1.00			0.94
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	3141	2538	1588	3466	4932	1428
Flt Permitted	0.950		0.101			
Satd. Flow (perm)	3141	2484	168	3466	4932	1339
Right Turn on Red		No				Yes
Satd. Flow (RTOR)						128
Link Speed (k/h)	50			60	60	
Link Distance (m)	279.0			302.0	498.0	
Travel Time (s)	20.1			18.1	29.9	
Confl. Peds. (#/hr)		9	25			25
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	3%	2%	5%	3%	4%	3%
Adj. Flow (vph)	655	561	379	1307	1279	175
Shared Lane Traffic (%)						
Lane Group Flow (vph)	655	561	379	1307	1279	175
Turn Type	Prot	pm+ov	pm+pt	NA	NA	pm+ov
Protected Phases	7	1	1	6	2	7
Permitted Phases		7	6			2
Detector Phase	7	1	1	6	2	7
Switch Phase						
Minimum Initial (s)	10.0	8.0	8.0	40.0	40.0	10.0
Minimum Split (s)	17.1	13.0	13.0	46.8	46.8	17.1
Total Split (s)	39.1	25.0	25.0	46.8	46.8	39.1
Total Split (%)	35.3%	22.5%	22.5%	42.2%	42.2%	35.3%
Maximum Green (s)	32.0	20.0	20.0	40.0	40.0	32.0
Yellow Time (s)	3.3	3.0	3.0	3.7	3.7	3.3
All-Red Time (s)	3.8	2.0	2.0	3.1	3.1	3.8
Lost Time Adjust (s)	-3.1	-2.5	-1.0	-2.8	-2.8	-3.1
Total Lost Time (s)	4.0	2.5	4.0	4.0	4.0	4.0
Lead/Lag		Lead	Lead		Lag	
Lead-Lag Optimize?						
Vehicle Extension (s)	4.0	4.0	4.0	3.0	3.0	4.0
Recall Mode	None	None	None	Max	Max	None
Walk Time (s)	9.0			10.0	10.0	9.0
Flash Dont Walk (s)	23.0			30.0	30.0	23.0
Pedestrian Calls (#/hr)	0			0	0	0
Act Effct Green (s)	31.7	55.7	67.9	67.9	42.9	74.5
Actuated g/C Ratio	0.29	0.52	0.63	0.63	0.40	0.69

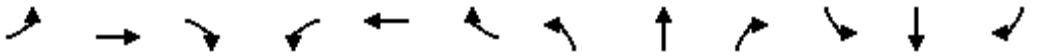


Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
v/c Ratio	0.71	0.43	0.99	0.60	0.65	0.18
Control Delay	38.5	15.8	74.0	13.7	28.7	1.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	38.5	15.8	74.0	13.7	28.7	1.8
LOS	D	B	E	B	C	A
Approach Delay	28.0			27.2	25.4	
Approach LOS	C			C	C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110.9			
Actuated Cycle Length: 107.6			
Natural Cycle: 90			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.99			
Intersection Signal Delay: 26.8		Intersection LOS: C	
Intersection Capacity Utilization 87.5%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 5: Fairway Rd & Hwy 8 SB Ramp



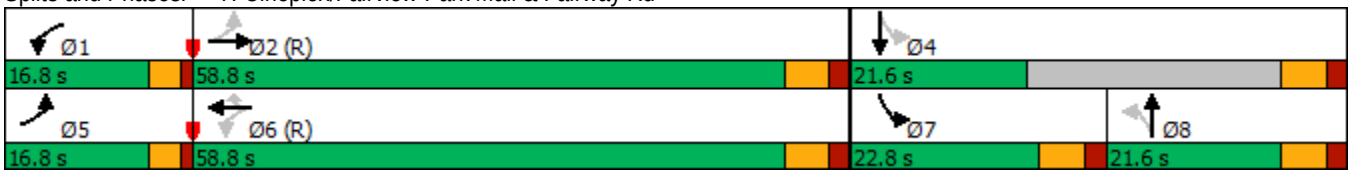


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	22	1125	90	132	1258	1	205	2	137	19	2	20
Future Volume (vph)	22	1125	90	132	1258	1	205	2	137	19	2	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	40.0		0.0	130.0		0.0	0.0		0.0	40.0		0.0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (m)	45.0			40.0			7.5			15.0		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	0.97	1.00	1.00
Frt		0.989				0.850		0.852			0.864	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3538	0	1770	3505	1615	1805	1588	0	3502	1570	0
Flt Permitted	0.142			0.114			0.743			0.513		
Satd. Flow (perm)	270	3538	0	212	3505	1615	1412	1588	0	1891	1570	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		9				118		137			20	
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		276.4			205.3			142.3			155.5	
Travel Time (s)		19.9			14.8			10.2			11.2	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	1%	0%	2%	3%	0%	0%	0%	2%	0%	50%	0%
Adj. Flow (vph)	22	1125	90	132	1258	1	205	2	137	19	2	20
Shared Lane Traffic (%)												
Lane Group Flow (vph)	22	1215	0	132	1258	1	205	139	0	19	22	0
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Perm	NA		pm+pt	NA	
Protected Phases	5	2		1	6			8		7	4	
Permitted Phases	2			6		6	8			4		
Detector Phase	5	2		1	6	6	8	8		7	4	
Switch Phase												
Minimum Initial (s)	5.0	52.8		5.0	52.8	52.8	8.0	8.0		5.0	8.0	
Minimum Split (s)	9.0	58.8		9.0	58.8	58.8	14.0	14.0		11.0	14.0	
Total Split (s)	16.8	58.8		16.8	58.8	58.8	21.6	21.6		22.8	21.6	
Total Split (%)	14.0%	49.0%		14.0%	49.0%	49.0%	18.0%	18.0%		19.0%	18.0%	
Maximum Green (s)	12.8	52.8		12.8	52.8	52.8	15.6	15.6		16.8	15.6	
Yellow Time (s)	3.0	4.0		3.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	2.0		1.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Lost Time (s)	4.0	6.0		4.0	6.0	6.0	6.0	6.0		6.0	6.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lag	Lag		Lead		
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	C-Max		None	C-Max	C-Max	None	None		None	None	
Walk Time (s)		31.8			31.8	31.8	12.0	12.0			12.0	
Flash Dont Walk (s)		21.0			21.0	21.0	15.0	15.0			15.0	
Pedestrian Calls (#/hr)		0			0	0	0	0			0	
Act Effct Green (s)	70.4	62.3		77.4	69.4	69.4	27.3	27.3		32.4	32.4	
Actuated g/C Ratio	0.59	0.52		0.64	0.58	0.58	0.23	0.23		0.27	0.27	
v/c Ratio	0.09	0.66		0.51	0.62	0.00	0.64	0.30		0.03	0.05	
Control Delay	5.8	22.3		16.2	20.1	0.0	52.9	8.5		30.0	12.5	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay	5.8	22.3		16.2	20.1	0.0	52.9	8.5		30.0	12.5	
LOS	A	C		B	C	A	D	A		C	B	
Approach Delay		22.1			19.7			35.0			20.6	
Approach LOS		C			B			C			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 82.8 (69%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 95			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.66			
Intersection Signal Delay: 22.4		Intersection LOS: C	
Intersection Capacity Utilization 82.7%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 7: Cineplex/Fairview Park Mall & Fairway Rd

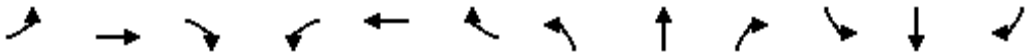


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	200	686	56	354	873	167	121	308	297	207	159	140
Future Volume (vph)	200	686	56	354	873	167	121	308	297	207	159	140
Ideal Flow (vphpl)	1775	1775	1000	1775	1900	1750	1775	1900	1750	1775	1775	1000
Lane Width (m)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Storage Length (m)	120.0		0.0	160.0		30.0	95.0		0.0	45.0		45.0
Storage Lanes	1		0	1		1	1		1	1		1
Taper Length (m)	60.0			40.0			7.5			10.0		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Ped Bike Factor	0.99	1.00		0.99		0.91	0.97		0.94	0.97	0.97	
Frt		0.989				0.850			0.850		0.930	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1619	3252	0	1544	3500	1362	1635	1807	1401	1668	2996	0
Flt Permitted	0.251			0.205			0.468			0.257		
Satd. Flow (perm)	422	3252	0	330	3500	1246	780	1807	1313	439	2996	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7				100			73		140	
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		450.5			276.4			297.0			324.1	
Travel Time (s)		27.0			16.6			21.4			23.3	
Confl. Peds. (#/hr)	40		35	35		40	46		46	46		46
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	3%	1%	2%	8%	2%	8%	2%	4%	5%	0%	0%	1%
Adj. Flow (vph)	200	686	56	354	873	167	121	308	297	207	159	140
Shared Lane Traffic (%)												
Lane Group Flow (vph)	200	742	0	354	873	167	121	308	297	207	299	0
Turn Type	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	pm+ov	pm+pt	NA	
Protected Phases	1	6		5	2		7	4	5	3	8	
Permitted Phases	6			2		2	4		4	8		
Detector Phase	1	6		5	2	2	7	4	5	3	8	
Switch Phase												
Minimum Initial (s)	5.0	36.0		5.0	36.0	36.0	5.0	8.0	5.0	5.0	8.0	
Minimum Split (s)	9.0	42.0		9.0	42.0	42.0	9.0	14.0	9.0	9.0	14.0	
Total Split (s)	24.0	42.0		27.6	42.0	42.0	12.0	38.4	27.6	12.0	38.4	
Total Split (%)	20.0%	35.0%		23.0%	35.0%	35.0%	10.0%	32.0%	23.0%	10.0%	32.0%	
Maximum Green (s)	20.0	36.0		23.6	36.0	36.0	8.0	32.4	23.6	8.0	32.4	
Yellow Time (s)	3.0	4.0		3.0	4.0	4.0	3.0	4.0	3.0	3.0	4.0	
All-Red Time (s)	1.0	2.0		1.0	2.0	2.0	1.0	2.0	1.0	1.0	2.0	
Lost Time Adjust (s)	0.0	-2.0		0.0	-2.0	-2.0	-2.0	-2.0	0.0	-2.0	-2.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	2.0	4.0	4.0	2.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	3.0		4.0	3.0	3.0	3.0	3.0	4.0	3.0	3.0	
Recall Mode	None	C-Max		None	C-Max	C-Max	None	None	None	None	None	
Walk Time (s)		19.0			19.0	19.0		7.0			7.0	
Flash Dont Walk (s)		17.0			17.0	17.0		25.0			25.0	
Pedestrian Calls (#/hr)		0			0	0		0			0	
Act Effct Green (s)	59.5	44.8		72.5	53.8	53.8	39.4	27.4	51.2	39.4	27.4	
Actuated g/C Ratio	0.50	0.37		0.60	0.45	0.45	0.33	0.23	0.43	0.33	0.23	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.56	0.61		0.80	0.56	0.27	0.37	0.75	0.48	0.84	0.38	
Control Delay	19.7	34.5		31.3	36.0	20.4	29.9	54.1	17.9	58.9	20.7	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	19.7	34.5		31.3	36.0	20.4	29.9	54.1	17.9	58.9	20.7	
LOS	B	C		C	D	C	C	D	B	E	C	
Approach Delay		31.4			32.9			35.3			36.3	
Approach LOS		C			C			D			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 31.2 (26%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.84			
Intersection Signal Delay: 33.5		Intersection LOS: C	
Intersection Capacity Utilization 101.0%		ICU Level of Service G	
Analysis Period (min) 15			

Splits and Phases: 8: Wilson Ave & Fairway Rd



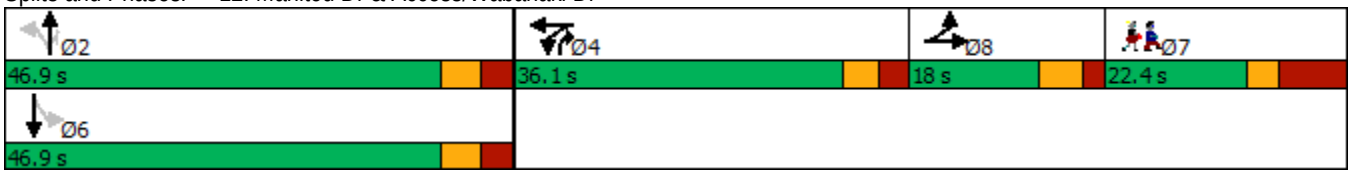
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	2	1	547	0	133	2	467	525	81	461	4
Future Volume (vph)	1	2	1	547	0	133	2	467	525	81	461	4
Ideal Flow (vphpl)	1000	1550	1000	1775	1650	1000	1000	1775	1750	1000	1650	1000
Storage Length (m)	0.0		0.0	0.0		0.0	0.0		70.0	0.0		0.0
Storage Lanes	0		0	1		0	0		1	0		0
Taper Length (m)	7.5			7.5			7.5			7.5		
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95	1.00	0.95	0.95	0.95
Ped Bike Factor		1.00		0.99	1.00				0.99		1.00	
Frt		0.966			0.940				0.850		0.999	
Flt Protected		0.988		0.950	0.971						0.993	
Satd. Flow (prot)	0	1472	0	1555	1400	0	0	3275	1417	0	3014	0
Flt Permitted		0.988		0.950	0.971			0.953			0.807	
Satd. Flow (perm)	0	1472	0	1545	1394	0	0	3121	1397	0	2450	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		1			171				525		1	
Link Speed (k/h)		50			50			60			60	
Link Distance (m)		83.1			666.1			292.0			328.5	
Travel Time (s)		6.0			48.0			17.5			19.7	
Confl. Peds. (#/hr)			3	3					1	1		
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	0%	0%	3%	0%	1%	0%	3%	5%	10%	2%	0%
Adj. Flow (vph)	1	2	1	547	0	133	2	467	525	81	461	4
Shared Lane Traffic (%)				36%								
Lane Group Flow (vph)	0	4	0	350	330	0	0	469	525	0	546	0
Turn Type	Split	NA		Split	NA		Perm	NA	pm+ov	Perm	NA	
Protected Phases	8	8		4	4			2	4		6	
Permitted Phases							2		2	6		
Detector Phase	8	8		4	4		2	2	4	6	6	
Switch Phase												
Minimum Initial (s)	8.0	8.0		8.0	8.0		40.0	40.0	8.0	40.0	40.0	
Minimum Split (s)	14.0	14.0		14.1	14.1		46.9	46.9	14.1	46.9	46.9	
Total Split (s)	18.0	18.0		36.1	36.1		46.9	46.9	36.1	46.9	46.9	
Total Split (%)	14.6%	14.6%		29.3%	29.3%		38.0%	38.0%	29.3%	38.0%	38.0%	
Maximum Green (s)	12.0	12.0		30.0	30.0		40.0	40.0	30.0	40.0	40.0	
Yellow Time (s)	4.0	4.0		3.3	3.3		3.7	3.7	3.3	3.7	3.7	
All-Red Time (s)	2.0	2.0		2.8	2.8		3.2	3.2	2.8	3.2	3.2	
Lost Time Adjust (s)		-2.0		-2.0	-2.0			-2.0	-2.0		-2.0	
Total Lost Time (s)		4.0		4.1	4.1			4.9	4.1		4.9	
Lead/Lag	Lead	Lead										
Lead-Lag Optimize?	Yes	Yes										
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Recall Mode	None	None		None	None		Max	Max	None	Max	Max	
Walk Time (s)	8.0	8.0		8.0	8.0		30.0	30.0	8.0	30.0	30.0	
Flash Dont Walk (s)	8.0	8.0		10.0	10.0		10.0	10.0	10.0	10.0	10.0	
Pedestrian Calls (#/hr)	0	0		0	0		0	0	0	0	0	
Act Effct Green (s)		10.1		26.7	26.7			42.5	70.0		42.5	
Actuated g/C Ratio		0.13		0.33	0.33			0.53	0.87		0.53	
v/c Ratio		0.02		0.68	0.57			0.29	0.41		0.42	

Lane Group	Ø7
Lane Configurations	
Traffic Volume (vph)	
Future Volume (vph)	
Ideal Flow (vphpl)	
Storage Length (m)	
Storage Lanes	
Taper Length (m)	
Lane Util. Factor	
Ped Bike Factor	
Frt	
Flt Protected	
Satd. Flow (prot)	
Flt Permitted	
Satd. Flow (perm)	
Right Turn on Red	
Satd. Flow (RTOR)	
Link Speed (k/h)	
Link Distance (m)	
Travel Time (s)	
Confl. Peds. (#/hr)	
Peak Hour Factor	
Heavy Vehicles (%)	
Adj. Flow (vph)	
Shared Lane Traffic (%)	
Lane Group Flow (vph)	
Turn Type	
Protected Phases	7
Permitted Phases	
Detector Phase	
Switch Phase	
Minimum Initial (s)	10.0
Minimum Split (s)	19.4
Total Split (s)	22.4
Total Split (%)	18%
Maximum Green (s)	13.0
Yellow Time (s)	3.0
All-Red Time (s)	6.4
Lost Time Adjust (s)	
Total Lost Time (s)	
Lead/Lag	Lag
Lead-Lag Optimize?	
Vehicle Extension (s)	5.0
Recall Mode	None
Walk Time (s)	
Flash Dont Walk (s)	
Pedestrian Calls (#/hr)	
Act Effct Green (s)	
Actuated g/C Ratio	
v/c Ratio	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay		33.2		31.5	15.0			12.8	1.1		14.6	
Queue Delay		0.0		0.0	0.0			0.0	0.0		0.0	
Total Delay		33.2		31.5	15.0			12.8	1.1		14.6	
LOS		C		C	B			B	A		B	
Approach Delay		33.3			23.5			6.6			14.6	
Approach LOS		C			C			A			B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 123.4			
Actuated Cycle Length: 80.6			
Natural Cycle: 105			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.68			
Intersection Signal Delay: 13.8		Intersection LOS: B	
Intersection Capacity Utilization 107.0%		ICU Level of Service G	
Analysis Period (min) 15			

Splits and Phases: 12: Manitou Dr & Access/Wabanaki Dr



Lane Group	Ø7
Control Delay	
Queue Delay	
Total Delay	
LOS	
Approach Delay	
Approach LOS	

Intersection Summary

Intersection	
Int Delay, s/veh	0.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	738	57	23	784	5	11
Future Vol, veh/h	738	57	23	784	5	11
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	0	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	738	57	23	784	5	11

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	795	0	1597	767
Stage 1	-	-	-	-	767	-
Stage 2	-	-	-	-	830	-
Critical Hdwy	-	-	4.12	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	-	-	2.218	-	3.518	3.318
Pot Cap-1 Maneuver	-	-	826	-	117	402
Stage 1	-	-	-	-	458	-
Stage 2	-	-	-	-	428	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	826	-	114	402
Mov Cap-2 Maneuver	-	-	-	-	114	-
Stage 1	-	-	-	-	458	-
Stage 2	-	-	-	-	416	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.3	22.2
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	225	-	-	826	-
HCM Lane V/C Ratio	0.071	-	-	0.028	-
HCM Control Delay (s)	22.2	-	-	9.5	-
HCM Lane LOS	C	-	-	A	-
HCM 95th %tile Q(veh)	0.2	-	-	0.1	-

Intersection	
Int Delay, s/veh	7.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1328	68	0	1604	0	358
Future Vol, veh/h	1328	68	0	1604	0	358
Conflicting Peds, #/hr	0	2	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	4	8	0	5	0	3
Mvmt Flow	1328	68	0	1604	0	358

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	700
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.96
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.33
Pot Cap-1 Maneuver	-	-	0	-	0	379
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	378
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	67.4
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	378	-	-	-
HCM Lane V/C Ratio	0.947	-	-	-
HCM Control Delay (s)	67.4	-	-	-
HCM Lane LOS	F	-	-	-
HCM 95th %tile Q(veh)	10.4	-	-	-

Intersection	
Int Delay, s/veh	0.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	7	5	378	1	11	98
Future Vol, veh/h	7	5	378	1	11	98
Conflicting Peds, #/hr	0	0	0	7	7	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	0	0	4	0	0	7
Mvmt Flow	7	5	378	1	11	98

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	506	386	0	0	386	0
Stage 1	386	-	-	-	-	-
Stage 2	120	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	530	666	-	-	1184	-
Stage 1	691	-	-	-	-	-
Stage 2	910	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	522	662	-	-	1176	-
Mov Cap-2 Maneuver	522	-	-	-	-	-
Stage 1	687	-	-	-	-	-
Stage 2	901	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.4	0	0.8
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	572	1176	-
HCM Lane V/C Ratio	-	-	0.021	0.009	-
HCM Control Delay (s)	-	-	11.4	8.1	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Int Delay, s/veh	13.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	356	279	16	4	118	6	37	17	20	2	10	508
Future Vol, veh/h	356	279	16	4	118	6	37	17	20	2	10	508
Conflicting Peds, #/hr	2	0	0	0	0	2	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	0	-	-	-	-	45	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	4	4	0	0	8	0	3	0	0	0	10	5
Mvmt Flow	356	279	16	4	118	6	37	17	20	2	10	508

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	126	0	0	295	0	0	1133	1133	287	1146	1135	120
Stage 1	-	-	-	-	-	-	999	999	-	128	128	-
Stage 2	-	-	-	-	-	-	134	134	-	1018	1007	-
Critical Hdwy	4.14	-	-	4.1	-	-	7.13	6.5	6.2	7.1	6.6	6.25
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.5	-	6.1	5.6	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.5	-	6.1	5.6	-
Follow-up Hdwy	2.236	-	-	2.2	-	-	3.527	4	3.3	3.5	4.09	3.345
Pot Cap-1 Maneuver	1448	-	-	1278	-	-	179	205	757	178	196	923
Stage 1	-	-	-	-	-	-	292	324	-	881	775	-
Stage 2	-	-	-	-	-	-	867	789	-	289	309	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1445	-	-	1278	-	-	62	154	757	129	147	921
Mov Cap-2 Maneuver	-	-	-	-	-	-	62	154	-	129	147	-
Stage 1	-	-	-	-	-	-	220	244	-	663	771	-
Stage 2	-	-	-	-	-	-	383	785	-	197	233	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	4.5	0.2	104.5	14
HCM LOS			F	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	101	1445	-	-	1278	-	-	144	921
HCM Lane V/C Ratio	0.733	0.246	-	-	0.003	-	-	0.083	0.552
HCM Control Delay (s)	104.5	8.3	-	-	7.8	0	-	32.3	13.6
HCM Lane LOS	F	A	-	-	A	A	-	D	B
HCM 95th %tile Q(veh)	3.8	1	-	-	0	-	-	0.3	3.5

Intersection	
Intersection Delay, s/veh	9.8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	83	9	42	10	5	17	8	260	13	29	71	5
Future Vol, veh/h	83	9	42	10	5	17	8	260	13	29	71	5
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles, %	6	33	5	10	0	18	25	3	0	3	8	0
Mvmt Flow	83	9	42	10	5	17	8	260	13	29	71	5
Number of Lanes	0	1	0	0	1	0	0	1	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	9.1	8.2	10.8	8.5
HCM LOS	A	A	B	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	3%	62%	31%	28%
Vol Thru, %	93%	7%	16%	68%
Vol Right, %	5%	31%	53%	5%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	281	134	32	105
LT Vol	8	83	10	29
Through Vol	260	9	5	71
RT Vol	13	42	17	5
Lane Flow Rate	281	134	32	105
Geometry Grp	1	1	1	1
Degree of Util (X)	0.378	0.183	0.044	0.138
Departure Headway (Hd)	4.84	4.922	4.94	4.731
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	742	728	722	756
Service Time	2.874	2.962	2.991	2.773
HCM Lane V/C Ratio	0.379	0.184	0.044	0.139
HCM Control Delay	10.8	9.1	8.2	8.5
HCM Lane LOS	B	A	A	A
HCM 95th-tile Q	1.8	0.7	0.1	0.5

Intersection: 1: Hwy. 8 NB Ramp & Weber St/King St

Movement	EB	EB	WB	WB	WB	NB	NB	NB
Directions Served	T	TR	L	T	T	L	L	R
Maximum Queue (m)	79.6	98.4	98.6	90.0	70.1	57.4	59.4	73.0
Average Queue (m)	43.6	52.7	58.9	36.3	37.6	33.6	18.7	9.3
95th Queue (m)	70.5	87.0	94.3	70.3	62.5	52.3	44.2	44.3
Link Distance (m)	222.2	222.2		384.3	384.3	218.1	218.1	
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (m)			70.0					25.0
Storage Blk Time (%)			6	0			1	0
Queuing Penalty (veh)			18	1			6	0

Intersection: 2: Fairway Rd & King St

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	NB	SB	SB
Directions Served	L	T	R	L	L	TR	L	L	T	TR	L	T
Maximum Queue (m)	23.6	85.4	221.3	65.4	71.4	107.6	83.9	130.0	372.7	383.5	61.3	110.0
Average Queue (m)	8.9	50.1	50.4	36.0	43.1	64.9	52.9	101.7	240.8	252.9	11.5	68.8
95th Queue (m)	19.8	79.7	124.9	58.5	65.0	103.2	76.2	167.6	418.7	431.4	42.7	100.0
Link Distance (m)		384.3	384.3			1071.7			474.7	474.7		323.2
Upstream Blk Time (%)			0						0	0		
Queuing Penalty (veh)			0						0	0		
Storage Bay Dist (m)	65.0			62.0	62.0		90.0	90.0			50.0	
Storage Blk Time (%)		5		0	1	12	0	0	32			23
Queuing Penalty (veh)		2		1	6	38	1	2	143			6

Intersection: 2: Fairway Rd & King St

Movement	SB
Directions Served	TR
Maximum Queue (m)	107.1
Average Queue (m)	63.9
95th Queue (m)	93.0
Link Distance (m)	323.2
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 3: River Rd & King St

Movement	EB	EB	WB	WB	NB	SB	SB
Directions Served	L	TR	T	R	LTR	LT	R
Maximum Queue (m)	54.3	87.6	129.2	64.3	23.8	67.3	41.4
Average Queue (m)	20.9	45.8	60.2	16.0	5.7	36.8	15.2
95th Queue (m)	39.7	74.3	103.6	42.4	17.7	61.8	30.7
Link Distance (m)		1071.7	402.4		94.9	162.1	162.1
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (m)	45.0			50.0			
Storage Blk Time (%)	0	8	11				
Queuing Penalty (veh)	2	15	26				

Intersection: 4: Stonegate Dr & King St

Movement	WB	NB
Directions Served	L	LR
Maximum Queue (m)	13.4	13.0
Average Queue (m)	3.4	3.6
95th Queue (m)	11.2	11.3
Link Distance (m)		116.5
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)	100.0	
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 5: Fairway Rd & Hwy 8 SB Ramp

Movement	EB	EB	EB	EB	NB	NB	NB	SB	SB	SB	SB
Directions Served	L	L	R	R	L	T	T	T	T	T	R
Maximum Queue (m)	94.7	106.0	98.6	84.3	140.0	170.9	158.2	115.1	117.6	114.0	72.5
Average Queue (m)	57.3	68.9	51.3	34.3	85.6	78.8	69.4	74.8	74.8	67.3	18.2
95th Queue (m)	85.1	95.7	82.1	72.3	155.0	152.4	124.4	109.0	110.4	102.7	48.8
Link Distance (m)		256.6	256.6			273.9	273.9	474.7	474.7	474.7	
Upstream Blk Time (%)											
Queuing Penalty (veh)											
Storage Bay Dist (m)	75.0			50.0	85.0						75.0
Storage Blk Time (%)	1	6	8	0	25	2				4	
Queuing Penalty (veh)	3	19	22	1	163	6				8	

Intersection: 6: Wabanaki Dr & Fairway Rd

Movement	EB	EB	NB
Directions Served	T	TR	R
Maximum Queue (m)	22.2	6.4	116.0
Average Queue (m)	0.7	0.3	54.2
95th Queue (m)	15.7	3.2	103.4
Link Distance (m)	183.4	183.4	229.2
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 7: Cineplex/Fairview Park Mall & Fairway Rd

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	T	R	L	TR	L	L	TR
Maximum Queue (m)	30.7	111.2	105.3	41.6	105.5	109.6	1.8	75.0	36.7	10.1	13.2	18.4
Average Queue (m)	5.2	38.6	39.0	17.0	44.7	47.7	0.1	46.2	18.2	2.1	3.7	4.4
95th Queue (m)	19.2	86.2	85.1	32.4	91.5	94.1	1.2	70.3	31.6	7.9	11.1	13.3
Link Distance (m)		251.1	251.1		183.4	183.4	183.4	128.5	128.5		136.6	136.6
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	40.0			130.0						40.0		
Storage Blk Time (%)		5										
Queuing Penalty (veh)		1										

Intersection: 8: Wilson Ave & Fairway Rd

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	TR	L	T	T	R	L	T	R	L	T
Maximum Queue (m)	57.8	109.6	106.8	159.4	143.0	128.4	55.0	55.3	104.9	66.8	54.9	187.6
Average Queue (m)	34.8	67.5	65.1	83.7	81.0	83.9	41.3	21.2	52.7	28.1	40.3	64.5
95th Queue (m)	53.9	94.8	93.6	142.1	124.2	120.6	71.4	44.7	87.1	53.1	63.6	183.4
Link Distance (m)		436.6	436.6		251.1	251.1			283.3	283.3		306.3
Upstream Blk Time (%)												0
Queuing Penalty (veh)												0
Storage Bay Dist (m)	120.0			160.0			30.0	95.0			45.0	
Storage Blk Time (%)		0		2	0	41	3		1		34	0
Queuing Penalty (veh)		0		7	0	68	15		1		100	1

Intersection: 8: Wilson Ave & Fairway Rd

Movement	SB
Directions Served	TR
Maximum Queue (m)	65.0
Average Queue (m)	30.9
95th Queue (m)	68.6
Link Distance (m)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	45.0
Storage Blk Time (%)	1
Queuing Penalty (veh)	4

Intersection: 9: Wabanaki Dr & Hidden Valley Rd

Movement	WB	SB
Directions Served	LR	LT
Maximum Queue (m)	10.3	9.1
Average Queue (m)	2.8	1.3
95th Queue (m)	9.7	6.5
Link Distance (m)	184.6	229.2
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 10: Wabanaki Dr & Goodrich Dr/Hidden Valley Rd

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	LTR	LTR
Maximum Queue (m)	23.7	16.3	32.9	20.5
Average Queue (m)	12.2	5.5	17.5	11.3
95th Queue (m)	19.9	13.9	27.5	17.8
Link Distance (m)	269.9	162.8	1040.0	570.8
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 11: Wilson Ave & Wabanaki Dr

Movement	EB	WB	NB	SB	SB
Directions Served	L	LT	LTR	LT	R
Maximum Queue (m)	23.4	4.3	26.1	10.9	2.5
Average Queue (m)	9.6	0.1	10.3	2.6	0.1
95th Queue (m)	19.8	2.3	20.9	9.1	1.3
Link Distance (m)	638.8	1040.0	120.7	264.2	264.2
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (m)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 12: Manitou Dr & Access/Wabanaki Dr

Movement	EB	WB	WB	NB	NB	NB	SB	SB
Directions Served	LTR	L	LTR	LT	T	R	LT	TR
Maximum Queue (m)	10.5	64.7	66.3	54.4	44.7	30.6	71.0	59.8
Average Queue (m)	1.1	34.9	43.1	26.7	12.5	12.0	36.4	22.0
95th Queue (m)	5.8	55.6	61.2	45.3	32.2	23.4	61.7	48.7
Link Distance (m)	69.9	638.8	638.8	277.4	277.4		317.0	317.0
Upstream Blk Time (%)								
Queuing Penalty (veh)								
Storage Bay Dist (m)						70.0		
Storage Blk Time (%)								
Queuing Penalty (veh)								

Network Summary

Network wide Queuing Penalty: 689

Capacity Analysis
2028 Background Conditions

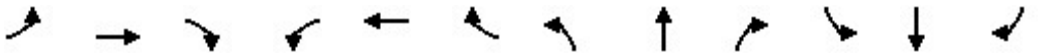
Synchro Analysis Summary
2028 Background Conditions

Intersection	Approach - Movement	Storage Length (m)	AM Peak				PM Peak			
			LOS	V/C	Delay (s)	Queue (m)	LOS	V/C	Delay (s)	Queue (m)
King St & River Rd	**Intersection**	-	**B**	-	**16.9**	-	**B**	-	**18.6**	-
	EB - L	45	B	0.13	15.0	22	C	0.38	20.3	45
	EB - T	-	B	0.22	14.6	37	B	0.43	17.5	63
	EB - R	45	A	0.36	5.7	28	A	0.21	4.6	18
	WB - L	50	B	0.30	16.2	43	B	0.40	18.9	48
	WB - T	-	B	0.20	14.3	44	B	0.44	17.5	75
	WB - R	50	A	0.13	3.1	18	A	0.26	2.6	23
	NB - L	75	C	0.16	21.1	14	C	0.43	27.8	30
	NB - TR	-	B	0.23	11.6	25	B	0.32	11.1	38
	SB - L	45	D	0.65	38.0	37	D	0.81	54.1	**46**
	SB - TR	-	C	0.30	21.8	44	B	0.30	18.0	39
King St & Stonegate Dr	**Intersection**	-	-	-	-	-	-	-	-	-
	EB - TR*	-	-	-	-	0	-	-	-	0
	WB - T*	-	-	-	-	0	-	-	-	0
Fairway Rd Highway 8 Ramps	**Intersection**	-	**B**	-	**13.3**	-	**C**	-	**22.5**	-
	EB - L	75**	C	0.47	31.8	52	D	0.74	38.1	**109**
	EB - R	50**	B	0.30	17.8	43	B	0.48	17.6	**71**
	NB - L	85	A	0.40	8.1	46	C	0.68	27.0	58
	NB - T	-	A	0.29	6.0	46	B	0.54	13.1	87
	SB - T	-	B	0.33	14.1	63	C	0.59	26.3	97
	SB - R	75	A	0.16	0.9	21	A	0.14	1.0	25
Fairway Rd & Wabanaki Dr	**Intersection**	-	**A**	-	**1.1**	-	**A**	-	**1.5**	-
	EB - TR*	-	-	-	-	1	-	-	-	1
	WB - T*	-	-	-	-	0	-	-	-	7
	NB - R	-	B	0.27	13.2	26	C	0.52	24.0	41
Fairway Rd & Fairview Park Mall / Cineplex	**Intersection**	-	**B**	-	**11.0**	-	**C**	-	**23.7**	-
	EB - L	40	A	0.07	5.2	15	C	0.61	25.4	**51**
	EB - TR	-	A	0.29	8.1	32	B	0.56	15.7	65
	WB - L	130	A	0.14	6.1	17	C	0.66	20.7	54
	WB - T	-	B	0.34	10.1	52	C	0.65	24.7	115
	WB - R	-	A	0.07	0.1	15	A	0.24	3.2	41
	NB - L	-	D	0.04	41.5	10	E	0.45	58.1	28
	NB - TR	-	C	0.13	25.3	16	D	0.69	45.4	63
	SB - L	40	D	0.33	43.8	36	D	0.60	54.2	**68**
	SB - TR	-	B	0.08	15.2	14	A	0.36	9.9	53
Fairway Rd & Wilson Ave	**Intersection**	-	**B**	-	**17.2**	-	**D**	-	**38.7**	-
	EB - L	120	A	0.18	6.5	26	C	0.63	24.7	54
	EB - TR	-	B	0.31	13.1	56	C	0.59	32.8	97
	WB - L	160	B	0.39	10.7	43	D	0.70	42.6	92
	WB - T	-	A	0.27	7.4	41	D	0.63	52.9	138
	WB - R	30	A	0.10	1.3	17	C	0.26	26.0	**74**
	NB - L	95	D	0.28	35.8	29	C	0.36	28.9	54
	NB - T	-	D	0.51	40.0	52	D	0.76	54.6	102
	NB - R	-	A	0.19	4.7	21	B	0.40	14.4	36
	SB - L	45	E	0.73	60.5	44	D	0.79	48.8	**55**
	SB - T	-	D	0.40	37.0	49	D	0.33	35.3	66
	SB - R	45	B	0.45	11.9	18	A	0.45	9.6	35
Wilson Ave & Wabanaki Dr	**Intersection**	-	**A**	-	**6.0**	-	**B**	-	**14.9**	-
	EB - L	-	A	0.17	8.0	14	A	0.25	8.3	21
	EB - TR*	-	-	-	-	4	-	-	-	0
	WB - LT	-	A	0.01	8.0	6	A	0.00	7.8	4
	WB - R*	45	-	-	-	0	-	-	-	0
	NB - LTR	-	D	0.05	25.7	10	**F**	0.83	135.6	19
	SB - LT	-	D	0.16	25.9	15	D	0.10	34.2	11
	SB - R	-	B	0.31	10.3	2	B	0.57	14.0	1
River Rd Ex & Highway 8 NB Ramps / Stonegate Dr	**Intersection**	-	**A**	-	**5.9**	-	**A**	-	**7.4**	
	EB - L	140*	B	0.12	11.6	12	B	0.20	10.3	17
	EB - T		B	0.12	11.6	20	B	0.20	10.3	28
	EB - R	140	A	0.09	1.3	15	A	0.08	1.4	13
	WB - L	15	B	0.01	12.2	6	B	0.01	12.2	5
	WB - TR	-	A	0.06	8.9	14	A	0.06	8.1	13
	NB - L	90	A	0.07	8.9	14	B	0.06	10.1	12
	NB - TR	-	A	0.05	7.6	9	A	0.08	8.9	14
	SB - L	45	A	0.02	8.5	7	A	0.09	10.0	17
	Red used for LOS F	-	A	0.26	4.3	29	A	0.22	5.2	26
River Rd Ex & Hidden Valley Dr	**Intersection**	-	**A**	-	**0.2**	-	**A**	-	**0.1**	
	EB - TR*	-	-	-	-	0	-	-	-	0
	WB - T*	-	-	-	-	0	-	-	-	0
	NB - R	-	A	0.01	8.6	8	A	0.01	8.7	7
River Rd Ex & Highway 8 SB Ramp	**Intersection**	-	**A**	-	**1.9**	-	**A**	-	**1.9**	
	EB - L	90	A	0.09	8.1	15	A	0.09	8.0	13
	EB - T*	-	-	-	-	0	-	-	-	0
	WB - TR*	-	-	-	-	3	-	-	-	0

Notes: **Bold Red** used for LOS F, V/C ≥ 0.85, and queueing greater than available storage

* = movement operates under free-flow movement

** = Storage applies to one of two lanes used for this movement while the second lane has no associated storage length

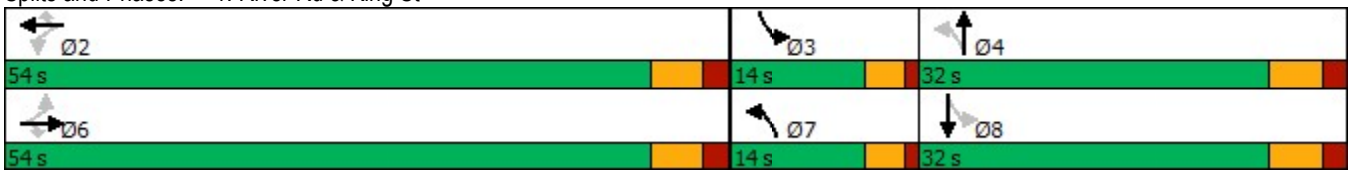


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	70	179	130	173	185	102	34	60	119	160	212	94
Future Volume (vph)	70	179	130	173	185	102	34	60	119	160	212	94
Ideal Flow (vphpl)	1775	1650	1000	1775	1900	1750	1000	1550	1000	1000	1650	1750
Storage Length (m)	45.0		45.0	50.0		50.0	75.0		0.0	45.0		0.0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (m)	60.0			70.0			40.0			60.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	1.00					0.99	1.00	0.98		1.00	0.99	
Frt			0.850			0.850		0.900			0.954	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1637	1587	594	1686	1792	1390	888	2557	0	922	2956	0
Flt Permitted	0.617			0.624			0.565			0.555		
Satd. Flow (perm)	1063	1587	594	1108	1792	1373	526	2557	0	537	2956	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			130			102		119			70	
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		1100.5			425.6			212.4			178.4	
Travel Time (s)		66.0			25.5			12.7			10.7	
Confl. Peds. (#/hr)	1					1	4		2	2		4
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	3%	4%	43%	0%	6%	7%	7%	2%	2%	3%	0%	1%
Adj. Flow (vph)	70	179	130	173	185	102	34	60	119	160	212	94
Shared Lane Traffic (%)												
Lane Group Flow (vph)	70	179	130	173	185	102	34	179	0	160	306	0
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		6			2		7	4		3	8	
Permitted Phases	6		6	2		2	4			8		
Detector Phase	6	6	6	2	2	2	7	4		3	8	
Switch Phase												
Minimum Initial (s)	48.0	48.0	48.0	48.0	48.0	48.0	5.0	26.0		5.0	26.0	
Minimum Split (s)	54.0	54.0	54.0	54.0	54.0	54.0	11.0	32.0		11.0	32.0	
Total Split (s)	54.0	54.0	54.0	54.0	54.0	54.0	14.0	32.0		14.0	32.0	
Total Split (%)	54.0%	54.0%	54.0%	54.0%	54.0%	54.0%	14.0%	32.0%		14.0%	32.0%	
Maximum Green (s)	48.0	48.0	48.0	48.0	48.0	48.0	10.0	26.0		10.0	26.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	3.0	4.0		3.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	1.0	2.0		1.0	2.0	
Lost Time Adjust (s)	0.0	-2.0	0.0	-2.0	-2.0	-2.0	0.0	-2.0		0.0	-2.0	
Total Lost Time (s)	6.0	4.0	6.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	Max	Max	Max	Max	Max	Max	None	Max		None	Max	
Walk Time (s)	35.0	35.0	35.0	35.0	35.0	35.0		15.0			15.0	
Flash Dont Walk (s)	16.0	16.0	16.0	16.0	16.0	16.0		11.0			11.0	
Pedestrian Calls (#/hr)	0	0	0	0	0	0		0			0	
Act Effct Green (s)	51.0	53.0	51.0	53.0	53.0	53.0	35.8	28.0		40.2	34.2	
Actuated g/C Ratio	0.50	0.51	0.50	0.51	0.51	0.51	0.35	0.27		0.39	0.33	
v/c Ratio	0.13	0.22	0.36	0.30	0.20	0.13	0.16	0.23		0.65	0.30	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay	15.0	14.6	5.7	16.2	14.3	3.1	21.1	11.6		38.0	21.8	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	15.0	14.6	5.7	16.2	14.3	3.1	21.1	11.6		38.0	21.8	
LOS	B	B	A	B	B	A	C	B		D	C	
Approach Delay		11.6			12.5			13.1			27.4	
Approach LOS		B			B			B			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 103			
Natural Cycle: 100			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.65			
Intersection Signal Delay: 16.9		Intersection LOS: B	
Intersection Capacity Utilization 134.3%		ICU Level of Service H	
Analysis Period (min) 15			

Splits and Phases: 1: River Rd & King St

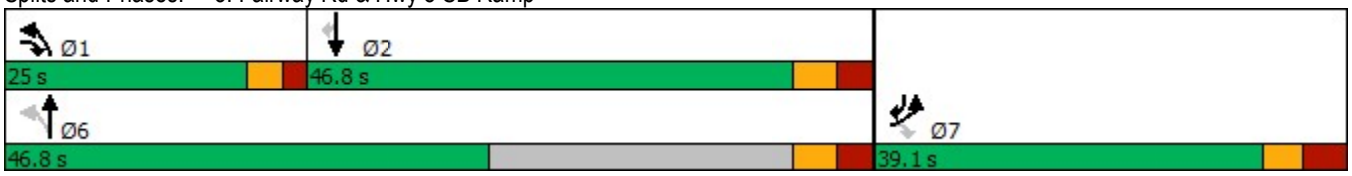


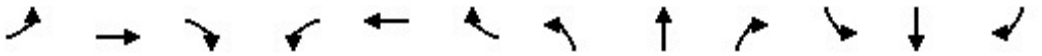
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	316	263	176	640	785	169
Future Volume (vph)	316	263	176	640	785	169
Ideal Flow (vphpl)	1775	1750	1775	1900	1900	1750
Lane Width (m)	3.5	3.5	3.5	3.5	3.5	3.5
Storage Length (m)	75.0	50.0	85.0			75.0
Storage Lanes	1	1	1			1
Taper Length (m)	60.0		75.0			
Lane Util. Factor	0.97	0.88	1.00	0.95	0.91	1.00
Ped Bike Factor		0.99	1.00			0.97
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	3052	2442	1476	3216	4706	1401
Flt Permitted	0.950		0.282			
Satd. Flow (perm)	3052	2408	437	3216	4706	1363
Right Turn on Red		No				Yes
Satd. Flow (RTOR)						169
Link Speed (k/h)	60			60	60	
Link Distance (m)	404.4			302.0	498.0	
Travel Time (s)	24.3			18.1	29.9	
Confl. Peds. (#/hr)		2	4			4
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	6%	6%	13%	11%	9%	5%
Adj. Flow (vph)	316	263	176	640	785	169
Shared Lane Traffic (%)						
Lane Group Flow (vph)	316	263	176	640	785	169
Turn Type	Prot	pm+ov	pm+pt	NA	NA	pm+ov
Protected Phases	7	1	1	6	2	7
Permitted Phases		7	6			2
Detector Phase	7	1	1	6	2	7
Switch Phase						
Minimum Initial (s)	10.0	8.0	8.0	40.0	40.0	10.0
Minimum Split (s)	17.1	13.0	13.0	46.8	46.8	17.1
Total Split (s)	39.1	25.0	25.0	46.8	46.8	39.1
Total Split (%)	35.3%	22.5%	22.5%	42.2%	42.2%	35.3%
Maximum Green (s)	32.0	20.0	20.0	40.0	40.0	32.0
Yellow Time (s)	3.3	3.0	3.0	3.7	3.7	3.3
All-Red Time (s)	3.8	2.0	2.0	3.1	3.1	3.8
Lost Time Adjust (s)	-3.1	-1.0	-1.0	-2.8	-2.8	-3.1
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag		Lead	Lead		Lag	
Lead-Lag Optimize?						
Vehicle Extension (s)	4.0	4.0	4.0	3.0	3.0	4.0
Recall Mode	None	None	None	Max	Max	None
Walk Time (s)	9.0			10.0	10.0	9.0
Flash Dont Walk (s)	23.0			30.0	30.0	23.0
Pedestrian Calls (#/hr)	0			0	0	0
Act Effct Green (s)	18.8	30.6	58.9	58.9	43.0	61.8
Actuated g/C Ratio	0.22	0.36	0.69	0.69	0.50	0.72

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
v/c Ratio	0.47	0.30	0.40	0.29	0.33	0.16
Control Delay	31.8	17.8	8.1	6.0	14.1	0.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	31.8	17.8	8.1	6.0	14.1	0.9
LOS	C	B	A	A	B	A
Approach Delay	25.4			6.5	11.8	
Approach LOS	C			A	B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110.9			
Actuated Cycle Length: 85.7			
Natural Cycle: 80			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.47			
Intersection Signal Delay: 13.3		Intersection LOS: B	
Intersection Capacity Utilization 64.5%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 3: Fairway Rd & Hwy 8 SB Ramp



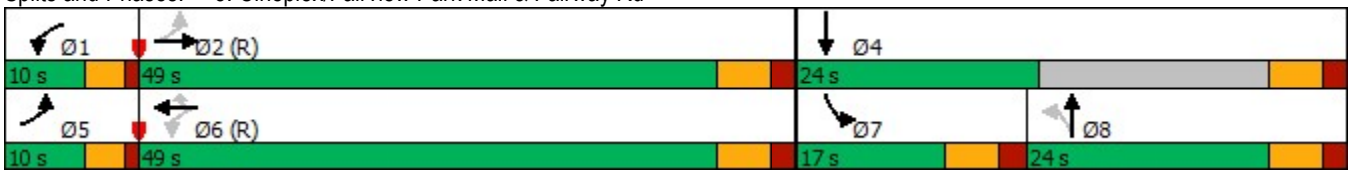


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	36	653	11	78	782	69	6	8	16	101	6	18
Future Volume (vph)	36	653	11	78	782	69	6	8	16	101	6	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	40.0		0.0	130.0		0.0	0.0		0.0	40.0		0.0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (m)	45.0			40.0			7.5			15.0		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	0.97	1.00	1.00
Frt		0.998				0.850		0.900			0.887	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1703	3371	0	1787	3312	1302	1805	1634	0	2779	1393	0
Flt Permitted	0.326			0.354			0.742			0.950		
Satd. Flow (perm)	584	3371	0	666	3312	1302	1410	1634	0	2779	1393	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2				142		16			18	
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		276.4			205.3			142.3			155.5	
Travel Time (s)		16.6			12.3			10.2			11.2	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	6%	7%	0%	1%	9%	24%	0%	0%	7%	26%	0%	28%
Adj. Flow (vph)	36	653	11	78	782	69	6	8	16	101	6	18
Shared Lane Traffic (%)												
Lane Group Flow (vph)	36	664	0	78	782	69	6	24	0	101	24	0
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Perm	NA		Prot	NA	
Protected Phases	5	2		1	6			8		7	4	
Permitted Phases	2			6		6	8					
Detector Phase	5	2		1	6	6	8	8		7	4	
Switch Phase												
Minimum Initial (s)	5.0	43.0		5.0	43.0	43.0	8.0	8.0		5.0	8.0	
Minimum Split (s)	9.0	49.0		9.0	49.0	49.0	14.0	14.0		11.0	14.0	
Total Split (s)	10.0	49.0		10.0	49.0	49.0	24.0	24.0		17.0	24.0	
Total Split (%)	10.0%	49.0%		10.0%	49.0%	49.0%	24.0%	24.0%		17.0%	24.0%	
Maximum Green (s)	6.0	43.0		6.0	43.0	43.0	18.0	18.0		11.0	18.0	
Yellow Time (s)	3.0	4.0		3.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	2.0		1.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	-2.0		0.0	-2.0	-2.0	-2.0	-2.0		-2.0	-2.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lag	Lag		Lead		
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	C-Max		None	C-Max	C-Max	None	None		None	None	
Walk Time (s)		22.0			22.0	22.0	12.0	12.0			12.0	
Flash Dont Walk (s)		21.0			21.0	21.0	15.0	15.0			15.0	
Pedestrian Calls (#/hr)		0			0	0	0	0			0	
Act Effct Green (s)	71.2	66.9		73.4	69.5	69.5	10.0	10.0		10.9	19.7	
Actuated g/C Ratio	0.71	0.67		0.73	0.70	0.70	0.10	0.10		0.11	0.20	
v/c Ratio	0.07	0.29		0.14	0.34	0.07	0.04	0.13		0.33	0.08	
Control Delay	5.2	8.1		6.1	10.1	0.1	41.5	25.3		43.8	15.2	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay	5.2	8.1		6.1	10.1	0.1	41.5	25.3		43.8	15.2	
LOS	A	A		A	B	A	D	C		D	B	
Approach Delay		8.0			9.1			28.5			38.3	
Approach LOS		A			A			C			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 26 (26%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 85			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.34			
Intersection Signal Delay: 11.0		Intersection LOS: B	
Intersection Capacity Utilization 59.7%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 5: Cineplex/Fairview Park Mall & Fairway Rd

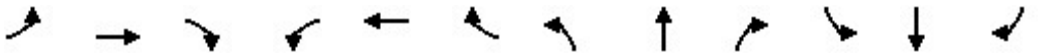


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	96	465	75	206	555	78	48	171	79	124	133	110
Future Volume (vph)	96	465	75	206	555	78	48	171	79	124	133	110
Ideal Flow (vphpl)	1775	1775	1000	1775	1900	1750	1775	1900	1750	1775	1775	1000
Lane Width (m)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Storage Length (m)	120.0		0.0	160.0		30.0	95.0		0.0	45.0		45.0
Storage Lanes	1		0	1		1	1		1	1		1
Taper Length (m)	60.0			40.0			7.5			10.0		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00	1.00		1.00		0.97	1.00		0.98	1.00		0.98
Frt		0.979				0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1516	3061	0	1489	3368	1302	1401	1693	1196	1635	1672	816
Flt Permitted	0.444			0.389			0.590			0.503		
Satd. Flow (perm)	707	3061	0	609	3368	1268	866	1693	1177	863	1672	802
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		22				78			79			110
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		450.5			276.4			297.0			324.1	
Travel Time (s)		27.0			16.6			21.4			23.3	
Confl. Peds. (#/hr)	5		3	3		5	6		4	4		6
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	10%	7%	3%	12%	6%	13%	19%	11%	23%	2%	5%	3%
Adj. Flow (vph)	96	465	75	206	555	78	48	171	79	124	133	110
Shared Lane Traffic (%)												
Lane Group Flow (vph)	96	540	0	206	555	78	48	171	79	124	133	110
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Perm	NA	pm+ov	Perm	NA	Perm
Protected Phases	1	6		5	2			4	5		8	
Permitted Phases	6			2		2	4		4	8		8
Detector Phase	1	6		5	2	2	4	4	5	8	8	8
Switch Phase												
Minimum Initial (s)	5.0	39.0		5.0	39.0	39.0	8.0	8.0	5.0	8.0	8.0	8.0
Minimum Split (s)	9.0	45.0		9.0	45.0	45.0	14.0	14.0	9.0	14.0	14.0	14.0
Total Split (s)	15.0	45.0		16.0	45.0	45.0	39.0	39.0	16.0	39.0	39.0	39.0
Total Split (%)	15.0%	45.0%		16.0%	45.0%	45.0%	39.0%	39.0%	16.0%	39.0%	39.0%	39.0%
Maximum Green (s)	11.0	39.0		12.0	39.0	39.0	33.0	33.0	12.0	33.0	33.0	33.0
Yellow Time (s)	3.0	4.0		3.0	4.0	4.0	4.0	4.0	3.0	4.0	4.0	4.0
All-Red Time (s)	1.0	2.0		1.0	2.0	2.0	2.0	2.0	1.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	-2.0		0.0	-2.0	-2.0	-2.0	-2.0	0.0	-2.0	-2.0	-2.0
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag		Lead	Lag	Lag			Lead			
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	3.0		4.0	3.0	3.0	3.0	3.0	4.0	3.0	3.0	3.0
Recall Mode	None	C-Max		None	C-Max	C-Max	None	None	None	None	None	None
Walk Time (s)		22.0			22.0	22.0	7.0	7.0		7.0	7.0	7.0
Flash Dont Walk (s)		17.0			17.0	17.0	25.0	25.0		25.0	25.0	25.0
Pedestrian Calls (#/hr)		0			0	0	0	0		0	0	0
Act Effct Green (s)	65.4	56.9		71.5	61.8	61.8	19.7	19.7	31.1	19.7	19.7	19.7
Actuated g/C Ratio	0.65	0.57		0.72	0.62	0.62	0.20	0.20	0.31	0.20	0.20	0.20

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.18	0.31		0.39	0.27	0.10	0.28	0.51	0.19	0.73	0.40	0.45
Control Delay	6.5	13.1		10.7	7.4	1.3	35.8	40.0	4.7	60.5	37.0	11.9
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	6.5	13.1		10.7	7.4	1.3	35.8	40.0	4.7	60.5	37.0	11.9
LOS	A	B		B	A	A	D	D	A	E	D	B
Approach Delay		12.1			7.7			29.9			37.4	
Approach LOS		B			A			C			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 25 (25%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.73			
Intersection Signal Delay: 17.2		Intersection LOS: B	
Intersection Capacity Utilization 76.6%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 6: Wilson Ave & Fairway Rd

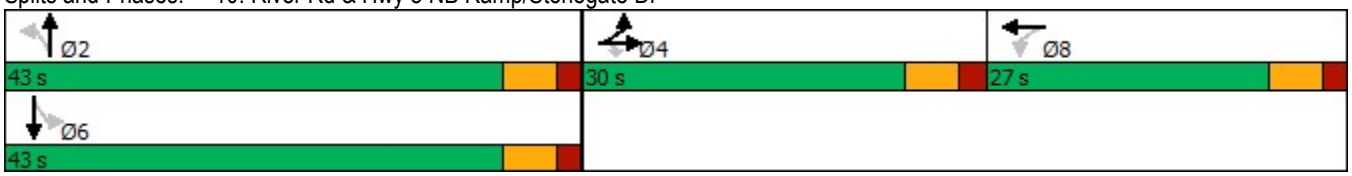


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	108	1	42	4	10	17	32	87	2	14	235	267
Future Volume (vph)	108	1	42	4	10	17	32	87	2	14	235	267
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	140.0		140.0	15.0		0.0	90.0		0.0	45.0		0.0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (m)	70.0			15.0			70.0			30.0		
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850		0.906			0.997			0.920	
Flt Protected	0.950	0.953		0.950			0.950			0.950		
Satd. Flow (prot)	1681	1686	1583	1770	1688	0	1770	3529	0	1770	3256	0
Flt Permitted	0.950	0.953					0.468			0.696		
Satd. Flow (perm)	1681	1686	1583	1863	1688	0	872	3529	0	1296	3256	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			98		17			2			267	
Link Speed (k/h)		50			40			60			60	
Link Distance (m)		231.4			154.4			218.6			212.4	
Travel Time (s)		16.7			13.9			13.1			12.7	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	108	1	42	4	10	17	32	87	2	14	235	267
Shared Lane Traffic (%)	50%											
Lane Group Flow (vph)	54	55	42	4	27	0	32	89	0	14	502	0
Turn Type	Split	NA	Perm	Perm	NA		Perm	NA		Perm	NA	
Protected Phases	4	4			8			2			6	
Permitted Phases			4	8			2			6		
Detector Phase	4	4	4	8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	24.0	24.0	24.0	24.0	24.0		24.0	24.0		24.0	24.0	
Total Split (s)	30.0	30.0	30.0	27.0	27.0		43.0	43.0		43.0	43.0	
Total Split (%)	30.0%	30.0%	30.0%	27.0%	27.0%		43.0%	43.0%		43.0%	43.0%	
Maximum Green (s)	24.0	24.0	24.0	21.0	21.0		37.0	37.0		37.0	37.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0		-2.0	-2.0		-2.0	-2.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None		Min	Min		Min	Min	
Walk Time (s)	7.0	7.0	7.0	7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0	0	0	0		0	0		0	0	
Act Effct Green (s)	9.1	9.1	9.1	8.2	8.2		18.8	18.8		18.8	18.8	
Actuated g/C Ratio	0.27	0.27	0.27	0.24	0.24		0.55	0.55		0.55	0.55	
v/c Ratio	0.12	0.12	0.09	0.01	0.06		0.07	0.05		0.02	0.26	
Control Delay	11.6	11.6	1.3	12.2	8.9		8.9	7.6		8.5	4.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	11.6	11.6	1.3	12.2	8.9		8.9	7.6		8.5	4.3	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	B	B	A	B	A		A	A		A	A	
Approach Delay		8.7			9.4			7.9			4.4	
Approach LOS		A			A			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 34.2			
Natural Cycle: 75			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.26			
Intersection Signal Delay: 5.9		Intersection LOS: A	
Intersection Capacity Utilization 38.9%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 10: River Rd & Hwy 8 NB Ramp/Stonegate Dr



Intersection	
Int Delay, s/veh	1.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	668	100	0	995	0	159
Future Vol, veh/h	668	100	0	995	0	159
Conflicting Peds, #/hr	0	1	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	11	5	0	9	0	8
Mvmt Flow	668	100	0	995	0	159

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	385
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.06
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.38
Pot Cap-1 Maneuver	-	-	0	-	0	597
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	596
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	13.2
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	596	-	-	-
HCM Lane V/C Ratio	0.267	-	-	-
HCM Control Delay (s)	13.2	-	-	-
HCM Lane LOS	B	-	-	-
HCM 95th %tile Q(veh)	1.1	-	-	-

Intersection	
Int Delay, s/veh	6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	249	317	37	11	72	21	4	3	2	1	31	303
Future Vol, veh/h	249	317	37	11	72	21	4	3	2	1	31	303
Conflicting Peds, #/hr	1	0	4	4	0	1	0	0	3	3	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	0	-	-	-	-	45	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	7	3	11	0	14	10	0	0	50	0	13	6
Mvmt Flow	249	317	37	11	72	21	4	3	2	1	31	303

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	94	0	0	358	0	0	958	954	343	934	951	73
Stage 1	-	-	-	-	-	-	838	838	-	95	95	-
Stage 2	-	-	-	-	-	-	120	116	-	839	856	-
Critical Hdwy	4.17	-	-	4.1	-	-	7.1	6.5	6.7	7.1	6.63	6.26
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.63	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.63	-
Follow-up Hdwy	2.263	-	-	2.2	-	-	3.5	4	3.75	3.5	4.117	3.354
Pot Cap-1 Maneuver	1469	-	-	1212	-	-	239	261	603	248	249	978
Stage 1	-	-	-	-	-	-	364	384	-	917	795	-
Stage 2	-	-	-	-	-	-	889	803	-	363	360	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1468	-	-	1208	-	-	126	213	599	210	204	977
Mov Cap-2 Maneuver	-	-	-	-	-	-	126	213	-	210	204	-
Stage 1	-	-	-	-	-	-	301	318	-	761	786	-
Stage 2	-	-	-	-	-	-	583	794	-	297	298	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	3.3	0.8	25.7	11.8
HCM LOS			D	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	183	1468	-	-	1208	-	-	204	977
HCM Lane V/C Ratio	0.049	0.17	-	-	0.009	-	-	0.157	0.31
HCM Control Delay (s)	25.7	8	-	-	8	0	-	25.9	10.3
HCM Lane LOS	D	A	-	-	A	A	-	D	B
HCM 95th %tile Q(veh)	0.2	0.6	-	-	0	-	-	0.5	1.3

Intersection	
Int Delay, s/veh	0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	111	0	0	281	0	10
Future Vol, veh/h	111	0	0	281	0	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	111	0	0	281	0	10

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	56
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	-	-	0	-	0	999
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	999
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	8.6
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	999	-	-	-
HCM Lane V/C Ratio	0.01	-	-	-
HCM Control Delay (s)	8.6	-	-	-
HCM Lane LOS	A	-	-	-
HCM 95th %tile Q(veh)	0	-	-	-

Intersection: 1: River Rd & King St

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	T	R	L	T	TR	L	T	TR
Maximum Queue (m)	26.0	49.0	38.2	49.8	55.7	22.9	18.0	22.6	32.5	44.6	38.7	55.9
Average Queue (m)	9.9	17.8	14.4	24.0	23.0	8.3	5.7	4.0	12.7	21.2	11.4	21.9
95th Queue (m)	21.7	36.5	27.9	43.1	44.3	17.6	14.4	12.5	25.2	37.1	26.4	43.8
Link Distance (m)		1068.8			402.4			185.1	185.1		162.1	162.1
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	45.0		45.0	50.0		50.0	75.0			45.0		
Storage Blk Time (%)		0	0	0	0					0	0	
Queuing Penalty (veh)		1	0	1	1					0	0	

Intersection: 3: Fairway Rd & Hwy 8 SB Ramp

Movement	EB	EB	EB	EB	NB	NB	NB	SB	SB	SB	SB	
Directions Served	L	L	R	R	L	T	T	T	T	T	R	
Maximum Queue (m)	51.2	52.8	52.3	43.5	63.9	49.4	47.4	64.9	79.7	58.4	27.2	
Average Queue (m)	24.3	34.4	25.0	11.2	24.9	25.1	24.3	34.7	35.4	26.5	9.0	
95th Queue (m)	43.6	51.5	42.9	29.0	46.1	46.4	43.7	61.1	63.4	50.3	21.1	
Link Distance (m)		382.8	382.8			274.9	274.9	474.0	474.0	474.0		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	75.0			50.0	85.0						75.0	
Storage Blk Time (%)			0	0	0					0		
Queuing Penalty (veh)			1	0	0					0		

Intersection: 5: Cineplex/Fairview Park Mall & Fairway Rd

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	T	R	L	TR	L	L	TR
Maximum Queue (m)	21.7	39.7	43.0	21.5	60.4	70.0	19.6	12.6	19.4	37.2	44.4	18.5
Average Queue (m)	5.8	14.5	12.6	8.2	18.7	22.9	4.7	2.8	6.4	9.7	18.1	4.8
95th Queue (m)	15.4	31.5	31.7	17.2	47.6	52.1	14.9	9.8	15.6	26.1	36.4	14.2
Link Distance (m)		251.1	251.1		183.4	183.4	183.4	128.5	128.5		136.6	136.6
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	40.0			130.0						40.0		
Storage Blk Time (%)	0	0								0	1	
Queuing Penalty (veh)	0	0								0	0	

Intersection: 6: Wilson Ave & Fairway Rd

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	TR	L	T	T	R	L	T	R	L	T
Maximum Queue (m)	35.0	61.6	56.9	54.9	46.7	57.7	25.0	37.4	66.6	26.3	50.6	64.6
Average Queue (m)	13.5	34.1	28.9	23.1	16.7	21.0	5.6	12.1	28.4	10.4	25.1	21.9
95th Queue (m)	26.3	56.3	51.7	42.9	37.2	40.8	16.9	28.5	52.1	21.2	44.4	48.5
Link Distance (m)		436.6	436.6		251.1	251.1			283.3	283.3		306.3
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	120.0			160.0			30.0	95.0			45.0	
Storage Blk Time (%)						4	0				2	1
Queuing Penalty (veh)						3	0				5	2

Intersection: 6: Wilson Ave & Fairway Rd

Movement	SB
Directions Served	R
Maximum Queue (m)	26.0
Average Queue (m)	9.0
95th Queue (m)	18.3
Link Distance (m)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	45.0
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 10: River Rd & Hwy 8 NB Ramp/Stonegate Dr

Movement	EB	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB	
Directions Served	L	LT	R	L	TR	L	T	TR	L	T	TR	
Maximum Queue (m)	15.2	26.6	17.9	9.9	16.5	17.4	11.1	13.1	8.8	24.3	34.7	
Average Queue (m)	3.7	11.0	6.5	0.9	5.6	5.2	2.5	2.7	1.7	8.2	15.1	
95th Queue (m)	11.6	19.8	14.7	5.6	13.9	13.8	8.3	9.3	7.3	18.2	29.0	
Link Distance (m)		217.2			139.9		199.5	199.5		185.1	185.1	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	140.0		140.0	15.0		90.0			45.0			
Storage Blk Time (%)				0	1							
Queuing Penalty (veh)				0	0							

Zone Summary

Zone wide Queuing Penalty: 15

Intersection: 2: Stonegate Dr & King St

Movement
Directions Served
Maximum Queue (m)
Average Queue (m)
95th Queue (m)
Link Distance (m)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (m)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 4: Wabanaki Dr & Fairway Rd

Movement	EB	EB	NB
Directions Served	T	TR	R
Maximum Queue (m)	1.4	1.3	33.0
Average Queue (m)	0.0	0.1	15.5
95th Queue (m)	1.0	1.2	25.9
Link Distance (m)	183.4	183.4	236.0
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 9: Wilson Ave & Wabanaki Dr

Movement	EB	EB	WB	NB	SB	SB
Directions Served	L	TR	LT	LTR	LT	R
Maximum Queue (m)	19.3	9.1	12.3	15.3	19.5	3.0
Average Queue (m)	4.4	0.4	0.9	2.9	6.4	0.1
95th Queue (m)	13.5	3.9	5.7	10.4	15.1	2.1
Link Distance (m)	638.8	638.8	1016.3	120.7	264.2	264.2
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (m)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 11: Hidden Valley Rd & River Rd

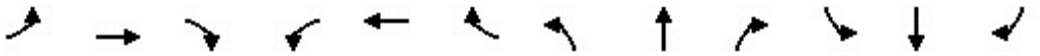
Movement	NB
Directions Served	R
Maximum Queue (m)	8.3
Average Queue (m)	2.1
95th Queue (m)	8.0
Link Distance (m)	192.8
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 12: River Rd & Hwy 8 SB Ramp

Movement	EB	WB
Directions Served	L	TR
Maximum Queue (m)	17.0	6.6
Average Queue (m)	7.2	0.3
95th Queue (m)	15.0	2.6
Link Distance (m)		293.2
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)	90.0	
Storage Blk Time (%)		
Queuing Penalty (veh)		

Zone Summary

Zone wide Queuing Penalty: 0

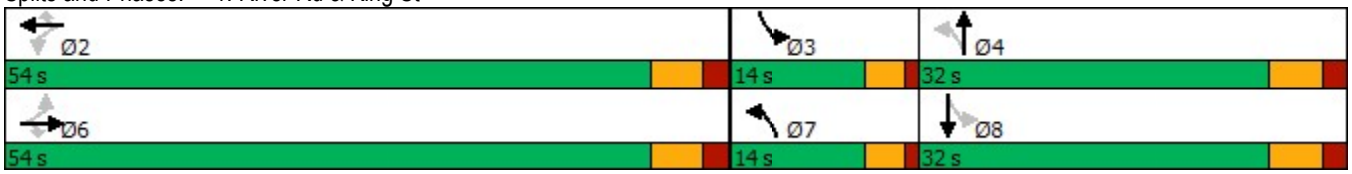


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	134	354	82	169	421	224	95	83	181	186	167	115
Future Volume (vph)	134	354	82	169	421	224	95	83	181	186	167	115
Ideal Flow (vphpl)	1775	1650	1000	1775	1900	1750	1000	1550	1000	1000	1650	1750
Storage Length (m)	45.0		45.0	50.0		50.0	75.0		0.0	45.0		0.0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (m)	60.0			70.0			40.0			60.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	1.00		0.99	1.00		0.99	1.00	0.98		0.99	0.99	
Frt			0.850			0.850		0.897			0.939	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1686	1618	726	1686	1863	1488	872	2528	0	941	2899	0
Flt Permitted	0.400			0.462			0.567			0.501		
Satd. Flow (perm)	710	1618	716	819	1863	1469	518	2528	0	493	2899	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			82			224		181			115	
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		1100.5			425.6			212.4			178.4	
Travel Time (s)		66.0			25.5			12.7			10.7	
Confl. Peds. (#/hr)	1		4	4		1	4		4	4		4
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	2%	17%	0%	2%	0%	9%	8%	0%	1%	0%	1%
Adj. Flow (vph)	134	354	82	169	421	224	95	83	181	186	167	115
Shared Lane Traffic (%)												
Lane Group Flow (vph)	134	354	82	169	421	224	95	264	0	186	282	0
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		6			2		7	4		3	8	
Permitted Phases	6		6	2		2	4			8		
Detector Phase	6	6	6	2	2	2	7	4		3	8	
Switch Phase												
Minimum Initial (s)	48.0	48.0	48.0	48.0	48.0	48.0	5.0	26.0		5.0	26.0	
Minimum Split (s)	54.0	54.0	54.0	54.0	54.0	54.0	11.0	32.0		11.0	32.0	
Total Split (s)	54.0	54.0	54.0	54.0	54.0	54.0	14.0	32.0		14.0	32.0	
Total Split (%)	54.0%	54.0%	54.0%	54.0%	54.0%	54.0%	14.0%	32.0%		14.0%	32.0%	
Maximum Green (s)	48.0	48.0	48.0	48.0	48.0	48.0	10.0	26.0		10.0	26.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	3.0	4.0		3.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	1.0	2.0		1.0	2.0	
Lost Time Adjust (s)	0.0	-2.0	0.0	-2.0	-2.0	-2.0	0.0	-2.0		0.0	-2.0	
Total Lost Time (s)	6.0	4.0	6.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	Max	Max	Max	Max	Max	Max	None	Max		None	Max	
Walk Time (s)	35.0	35.0	35.0	35.0	35.0	35.0		15.0			15.0	
Flash Dont Walk (s)	16.0	16.0	16.0	16.0	16.0	16.0		11.0			11.0	
Pedestrian Calls (#/hr)	0	0	0	0	0	0		0			0	
Act Effct Green (s)	51.0	53.0	51.0	53.0	53.0	53.0	37.4	28.0		38.8	30.8	
Actuated g/C Ratio	0.50	0.51	0.50	0.51	0.51	0.51	0.36	0.27		0.38	0.30	
v/c Ratio	0.38	0.43	0.21	0.40	0.44	0.26	0.43	0.32		0.81	0.30	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay	20.3	17.5	4.6	18.9	17.5	2.6	27.8	11.1		54.1	18.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	20.3	17.5	4.6	18.9	17.5	2.6	27.8	11.1		54.1	18.0	
LOS	C	B	A	B	B	A	C	B		D	B	
Approach Delay		16.3			13.7			15.5			32.4	
Approach LOS		B			B			B			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 103			
Natural Cycle: 100			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.81			
Intersection Signal Delay: 18.6		Intersection LOS: B	
Intersection Capacity Utilization 138.7%		ICU Level of Service H	
Analysis Period (min) 15			

Splits and Phases: 1: River Rd & King St

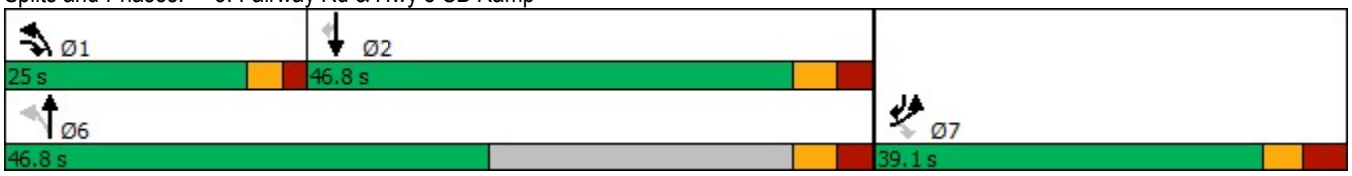


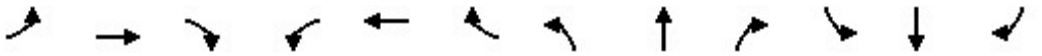
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	710	571	242	1163	1200	143
Future Volume (vph)	710	571	242	1163	1200	143
Ideal Flow (vphpl)	1775	1750	1775	1900	1900	1750
Lane Width (m)	3.5	3.5	3.5	3.5	3.5	3.5
Storage Length (m)	75.0	50.0	85.0			75.0
Storage Lanes	1	1	1			1
Taper Length (m)	60.0		75.0			
Lane Util. Factor	0.97	0.88	1.00	0.95	0.91	1.00
Ped Bike Factor		0.98	1.00			0.94
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	3141	2538	1588	3466	4932	1428
Flt Permitted	0.950		0.125			
Satd. Flow (perm)	3141	2484	208	3466	4932	1339
Right Turn on Red		No				Yes
Satd. Flow (RTOR)						143
Link Speed (k/h)	60			60	60	
Link Distance (m)	404.4			302.0	498.0	
Travel Time (s)	24.3			18.1	29.9	
Confl. Peds. (#/hr)		9	25			25
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	3%	2%	5%	3%	4%	3%
Adj. Flow (vph)	710	571	242	1163	1200	143
Shared Lane Traffic (%)						
Lane Group Flow (vph)	710	571	242	1163	1200	143
Turn Type	Prot	pm+ov	pm+pt	NA	NA	pm+ov
Protected Phases	7	1	1	6	2	7
Permitted Phases		7	6			2
Detector Phase	7	1	1	6	2	7
Switch Phase						
Minimum Initial (s)	10.0	8.0	8.0	40.0	40.0	10.0
Minimum Split (s)	17.1	13.0	13.0	46.8	46.8	17.1
Total Split (s)	39.1	25.0	25.0	46.8	46.8	39.1
Total Split (%)	35.3%	22.5%	22.5%	42.2%	42.2%	35.3%
Maximum Green (s)	32.0	20.0	20.0	40.0	40.0	32.0
Yellow Time (s)	3.3	3.0	3.0	3.7	3.7	3.3
All-Red Time (s)	3.8	2.0	2.0	3.1	3.1	3.8
Lost Time Adjust (s)	-3.1	-1.0	-1.0	-2.8	-2.8	-3.1
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag		Lead	Lead		Lag	
Lead-Lag Optimize?						
Vehicle Extension (s)	4.0	4.0	4.0	3.0	3.0	4.0
Recall Mode	None	None	None	Max	Max	None
Walk Time (s)	9.0			10.0	10.0	9.0
Flash Dont Walk (s)	23.0			30.0	30.0	23.0
Pedestrian Calls (#/hr)	0			0	0	0
Act Effct Green (s)	32.0	49.4	64.4	64.4	43.0	75.1
Actuated g/C Ratio	0.31	0.47	0.62	0.62	0.41	0.72

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
v/c Ratio	0.74	0.48	0.68	0.54	0.59	0.14
Control Delay	38.1	17.6	27.0	13.1	26.3	1.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	38.1	17.6	27.0	13.1	26.3	1.0
LOS	D	B	C	B	C	A
Approach Delay	28.9			15.5	23.6	
Approach LOS	C			B	C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110.9			
Actuated Cycle Length: 104.5			
Natural Cycle: 80			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.74			
Intersection Signal Delay: 22.5		Intersection LOS: C	
Intersection Capacity Utilization 80.7%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 3: Fairway Rd & Hwy 8 SB Ramp



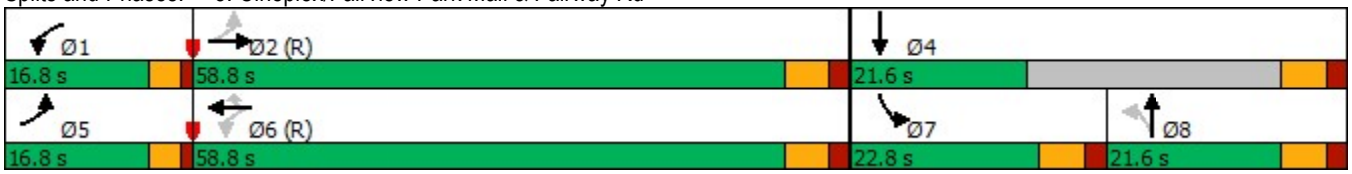


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	180	957	56	227	1156	208	65	65	120	267	46	165
Future Volume (vph)	180	957	56	227	1156	208	65	65	120	267	46	165
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	40.0		0.0	130.0		0.0	0.0		0.0	40.0		0.0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (m)	45.0			40.0			7.5			15.0		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	0.97	1.00	1.00
Frt		0.992				0.850		0.903			0.883	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3515	0	1787	3438	1482	1770	1716	0	3213	1620	0
Flt Permitted	0.142			0.181			0.626			0.950		
Satd. Flow (perm)	270	3515	0	340	3438	1482	1166	1716	0	3213	1620	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6				208		65			162	
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		276.4			205.3			142.3			155.5	
Travel Time (s)		16.6			12.3			10.2			11.2	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	2%	0%	1%	5%	9%	2%	0%	0%	9%	2%	4%
Adj. Flow (vph)	180	957	56	227	1156	208	65	65	120	267	46	165
Shared Lane Traffic (%)												
Lane Group Flow (vph)	180	1013	0	227	1156	208	65	185	0	267	211	0
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Perm	NA		Prot	NA	
Protected Phases	5	2		1	6			8		7	4	
Permitted Phases	2			6		6	8					
Detector Phase	5	2		1	6	6	8	8		7	4	
Switch Phase												
Minimum Initial (s)	5.0	52.8		5.0	52.8	52.8	8.0	8.0		5.0	8.0	
Minimum Split (s)	9.0	58.8		9.0	58.8	58.8	14.0	14.0		11.0	14.0	
Total Split (s)	16.8	58.8		16.8	58.8	58.8	21.6	21.6		22.8	21.6	
Total Split (%)	14.0%	49.0%		14.0%	49.0%	49.0%	18.0%	18.0%		19.0%	18.0%	
Maximum Green (s)	12.8	52.8		12.8	52.8	52.8	15.6	15.6		16.8	15.6	
Yellow Time (s)	3.0	4.0		3.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	2.0		1.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	-2.0		0.0	-2.0	-2.0	-2.0	-2.0		-2.0	-2.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lag	Lag		Lead		
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	C-Max		None	C-Max	C-Max	None	None		None	None	
Walk Time (s)		31.8			31.8	31.8	12.0	12.0			12.0	
Flash Dont Walk (s)		21.0			21.0	21.0	15.0	15.0			15.0	
Pedestrian Calls (#/hr)		0			0	0	0	0			0	
Act Effct Green (s)	71.7	61.2		73.3	62.0	62.0	14.9	14.9		16.7	35.5	
Actuated g/C Ratio	0.60	0.51		0.61	0.52	0.52	0.12	0.12		0.14	0.30	
v/c Ratio	0.61	0.56		0.66	0.65	0.24	0.45	0.69		0.60	0.36	
Control Delay	25.4	15.7		20.7	24.7	3.2	58.1	45.4		54.2	9.9	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay	25.4	15.7		20.7	24.7	3.2	58.1	45.4		54.2	9.9	
LOS	C	B		C	C	A	E	D		D	A	
Approach Delay		17.2			21.3			48.7			34.6	
Approach LOS		B			C			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 27.6 (23%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 95			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.69			
Intersection Signal Delay: 23.7		Intersection LOS: C	
Intersection Capacity Utilization 89.2%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 5: Cineplex/Fairview Park Mall & Fairway Rd

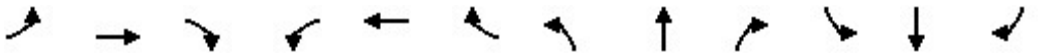


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	204	698	57	253	889	149	123	313	225	210	162	142
Future Volume (vph)	204	698	57	253	889	149	123	313	225	210	162	142
Ideal Flow (vphpl)	1775	1775	1000	1775	1900	1750	1775	1900	1750	1775	1775	1000
Lane Width (m)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Storage Length (m)	120.0		0.0	160.0		30.0	95.0		0.0	45.0		45.0
Storage Lanes	1		0	1		1	1		1	1		1
Taper Length (m)	60.0			40.0			7.5			10.0		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.99	1.00		0.99		0.91	0.96		0.94	0.98		0.94
Frt		0.989				0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1619	3225	0	1544	3500	1362	1635	1807	1401	1668	1755	832
Flt Permitted	0.178			0.224			0.654			0.196		
Satd. Flow (perm)	299	3225	0	361	3500	1246	1079	1807	1313	336	1755	780
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7				136			100			142
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		450.5			276.4			297.0			324.1	
Travel Time (s)		27.0			16.6			21.4			23.3	
Confl. Peds. (#/hr)	40		35	35		40	46		46	46		46
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	3%	2%	1%	8%	2%	8%	2%	4%	5%	0%	0%	1%
Adj. Flow (vph)	204	698	57	253	889	149	123	313	225	210	162	142
Shared Lane Traffic (%)												
Lane Group Flow (vph)	204	755	0	253	889	149	123	313	225	210	162	142
Turn Type	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	pm+ov	pm+pt	NA	Perm
Protected Phases	1	6		5	2		7	4	5	3	8	
Permitted Phases	6			2		2	4		4	8		8
Detector Phase	1	6		5	2	2	7	4	5	3	8	8
Switch Phase												
Minimum Initial (s)	5.0	34.0		5.0	34.0	34.0	5.0	8.0	5.0	5.0	8.0	8.0
Minimum Split (s)	9.0	43.0		9.0	43.0	43.0	9.0	14.0	9.0	9.0	14.0	14.0
Total Split (s)	22.0	43.0		22.0	43.0	43.0	11.0	38.0	22.0	17.0	38.0	38.0
Total Split (%)	18.3%	35.8%		18.3%	35.8%	35.8%	9.2%	31.7%	18.3%	14.2%	31.7%	31.7%
Maximum Green (s)	18.0	37.0		18.0	37.0	37.0	7.0	32.0	18.0	13.0	32.0	32.0
Yellow Time (s)	3.0	4.0		3.0	4.0	4.0	3.0	4.0	3.0	3.0	4.0	4.0
All-Red Time (s)	1.0	2.0		1.0	2.0	2.0	1.0	2.0	1.0	1.0	2.0	2.0
Lost Time Adjust (s)	0.0	-2.0		0.0	-2.0	-2.0	0.0	-2.0	0.0	0.0	-2.0	-2.0
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	3.0		4.0	3.0	3.0	3.0	3.0	4.0	3.0	3.0	3.0
Recall Mode	None	C-Max		None	C-Max	C-Max	None	None	None	None	None	None
Walk Time (s)		19.0			19.0	19.0		7.0			7.0	7.0
Flash Dont Walk (s)		17.0			17.0	17.0		25.0			25.0	25.0
Pedestrian Calls (#/hr)		0			0	0		0			0	0
Act Effct Green (s)	62.6	47.1		64.9	48.2	48.2	34.6	27.6	44.2	44.3	33.3	33.3
Actuated g/C Ratio	0.52	0.39		0.54	0.40	0.40	0.29	0.23	0.37	0.37	0.28	0.28

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.63	0.59		0.70	0.63	0.26	0.36	0.76	0.40	0.79	0.33	0.45
Control Delay	24.7	32.8		42.6	52.9	26.0	28.9	54.6	14.4	48.8	35.3	9.6
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	24.7	32.8		42.6	52.9	26.0	28.9	54.6	14.4	48.8	35.3	9.6
LOS	C	C		D	D	C	C	D	B	D	D	A
Approach Delay		31.0			47.8			36.1			33.7	
Approach LOS		C			D			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green			
Natural Cycle: 80			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.79			
Intersection Signal Delay: 38.7		Intersection LOS: D	
Intersection Capacity Utilization 95.3%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 6: Wilson Ave & Fairway Rd

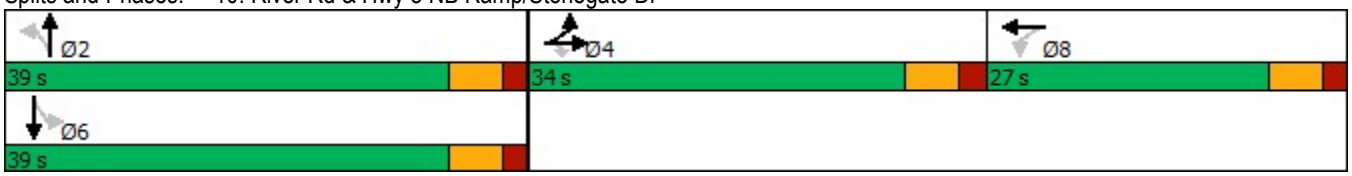


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	212	6	45	4	6	22	28	125	1	53	179	190
Future Volume (vph)	212	6	45	4	6	22	28	125	1	53	179	190
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	140.0		140.0	15.0		0.0	90.0		0.0	45.0		0.0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (m)	70.0			15.0			70.0			30.0		
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850		0.882			0.999			0.923	
Flt Protected	0.950	0.955		0.950			0.950			0.950		
Satd. Flow (prot)	1681	1690	1583	1770	1643	0	1770	3536	0	1770	3267	0
Flt Permitted	0.950	0.955					0.532			0.672		
Satd. Flow (perm)	1681	1690	1583	1863	1643	0	991	3536	0	1252	3267	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			98		22			1			190	
Link Speed (k/h)		50			40			60			60	
Link Distance (m)		231.4			154.4			218.6			212.4	
Travel Time (s)		16.7			13.9			13.1			12.7	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	212	6	45	4	6	22	28	125	1	53	179	190
Shared Lane Traffic (%)	49%											
Lane Group Flow (vph)	108	110	45	4	28	0	28	126	0	53	369	0
Turn Type	Split	NA	Perm	Perm	NA		Perm	NA		Perm	NA	
Protected Phases	4	4			8			2			6	
Permitted Phases			4	8			2			6		
Detector Phase	4	4	4	8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	24.0	24.0	24.0	24.0	24.0		24.0	24.0		24.0	24.0	
Total Split (s)	34.0	34.0	34.0	27.0	27.0		39.0	39.0		39.0	39.0	
Total Split (%)	34.0%	34.0%	34.0%	27.0%	27.0%		39.0%	39.0%		39.0%	39.0%	
Maximum Green (s)	28.0	28.0	28.0	21.0	21.0		33.0	33.0		33.0	33.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0		-2.0	-2.0		-2.0	-2.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None		Min	Min		Min	Min	
Walk Time (s)	7.0	7.0	7.0	7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0	0	0	0		0	0		0	0	
Act Effct Green (s)	10.2	10.2	10.2	8.2	8.2		15.0	15.0		15.0	15.0	
Actuated g/C Ratio	0.32	0.32	0.32	0.26	0.26		0.48	0.48		0.48	0.48	
v/c Ratio	0.20	0.20	0.08	0.01	0.06		0.06	0.08		0.09	0.22	
Control Delay	10.3	10.3	1.4	12.2	8.1		10.1	8.9		10.0	5.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	10.3	10.3	1.4	12.2	8.1		10.1	8.9		10.0	5.2	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	B	B	A	B	A		B	A		A	A	
Approach Delay		8.8			8.6			9.2			5.8	
Approach LOS		A			A			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 31.5			
Natural Cycle: 75			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.22			
Intersection Signal Delay: 7.4		Intersection LOS: A	
Intersection Capacity Utilization 37.9%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 10: River Rd & Hwy 8 NB Ramp/Stonegate Dr



Intersection	
Int Delay, s/veh	1.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1266	101	0	1642	0	202
Future Vol, veh/h	1266	101	0	1642	0	202
Conflicting Peds, #/hr	0	2	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	4	8	0	5	0	3
Mvmt Flow	1266	101	0	1642	0	202

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	686
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.96
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.33
Pot Cap-1 Maneuver	-	-	0	-	0	388
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	387
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	24
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	387	-	-	-
HCM Lane V/C Ratio	0.522	-	-	-
HCM Control Delay (s)	24	-	-	-
HCM Lane LOS	C	-	-	-
HCM 95th %tile Q(veh)	2.9	-	-	-

Intersection	
Int Delay, s/veh	14.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	366	287	16	4	121	6	38	17	20	2	11	522
Future Vol, veh/h	366	287	16	4	121	6	38	17	20	2	11	522
Conflicting Peds, #/hr	2	0	0	0	0	2	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	0	-	-	-	-	45	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	4	4	0	0	8	0	3	0	0	0	10	5
Mvmt Flow	366	287	16	4	121	6	38	17	20	2	11	522

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	129	0	0	303	0	0	1165	1164	295	1177	1166	123
Stage 1	-	-	-	-	-	-	1027	1027	-	131	131	-
Stage 2	-	-	-	-	-	-	138	137	-	1046	1035	-
Critical Hdwy	4.14	-	-	4.1	-	-	7.13	6.5	6.2	7.1	6.6	6.25
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.5	-	6.1	5.6	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.5	-	6.1	5.6	-
Follow-up Hdwy	2.236	-	-	2.2	-	-	3.527	4	3.3	3.5	4.09	3.345
Pot Cap-1 Maneuver	1444	-	-	1269	-	-	170	196	749	169	187	920
Stage 1	-	-	-	-	-	-	282	314	-	877	773	-
Stage 2	-	-	-	-	-	-	863	787	-	278	299	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1441	-	-	1269	-	-	55	145	749	120	139	918
Mov Cap-2 Maneuver	-	-	-	-	-	-	55	145	-	120	139	-
Stage 1	-	-	-	-	-	-	210	234	-	653	769	-
Stage 2	-	-	-	-	-	-	366	783	-	187	223	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	4.6	0.2	135.6	14.5
HCM LOS			F	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	90	1441	-	-	1269	-	-	136	918
HCM Lane V/C Ratio	0.833	0.254	-	-	0.003	-	-	0.096	0.569
HCM Control Delay (s)	135.6	8.3	-	-	7.8	0	-	34.2	14
HCM Lane LOS	F	A	-	-	A	A	-	D	B
HCM 95th %tile Q(veh)	4.4	1	-	-	0	-	-	0.3	3.7

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	149	0	0	228	0	6
Future Vol, veh/h	149	0	0	228	0	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	149	0	0	228	0	6

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	75
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	-	-	0	-	0	971
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	971
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	8.7
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	971	-	-	-
HCM Lane V/C Ratio	0.006	-	-	-
HCM Control Delay (s)	8.7	-	-	-
HCM Lane LOS	A	-	-	-
HCM 95th %tile Q(veh)	0	-	-	-

Intersection: 1: River Rd & King St

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	T	R	L	T	TR	L	T	TR
Maximum Queue (m)	53.4	73.7	21.0	54.4	85.8	23.8	36.0	26.2	47.8	55.9	37.2	46.4
Average Queue (m)	24.2	38.7	8.0	27.7	45.2	13.2	14.8	7.7	20.8	25.9	11.2	20.1
95th Queue (m)	44.9	63.4	18.2	48.1	74.6	22.7	29.9	18.9	38.4	45.7	27.1	38.6
Link Distance (m)		1068.8			402.4			185.1	185.1		162.1	162.1
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	45.0		45.0	50.0		50.0	75.0			45.0		
Storage Blk Time (%)	2	5		1	5					1	0	
Queuing Penalty (veh)	10	10		6	19					1	0	

Intersection: 3: Fairway Rd & Hwy 8 SB Ramp

Movement	EB	EB	EB	EB	NB	NB	NB	SB	SB	SB	SB	
Directions Served	L	L	R	R	L	T	T	T	T	T	R	
Maximum Queue (m)	114.2	127.8	78.4	70.2	69.8	90.2	92.6	103.2	103.2	92.0	32.3	
Average Queue (m)	67.6	75.4	45.3	30.3	34.4	52.6	52.4	63.5	65.0	53.2	11.1	
95th Queue (m)	100.1	109.4	70.5	59.2	58.2	84.4	86.6	95.4	96.9	84.5	24.6	
Link Distance (m)		382.8	382.8			274.9	274.9	474.0	474.0	474.0		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	75.0			50.0	85.0						75.0	
Storage Blk Time (%)	5	10	5	0	0	0				1		
Queuing Penalty (veh)	17	36	14	1	1	1				2		

Intersection: 5: Cineplex/Fairview Park Mall & Fairway Rd

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	T	R	L	TR	L	L	TR
Maximum Queue (m)	60.8	83.6	89.0	60.2	119.7	124.4	72.0	32.0	73.6	54.0	80.7	62.3
Average Queue (m)	28.6	34.7	35.9	32.5	67.2	71.0	16.2	12.9	32.8	28.8	41.2	28.4
95th Queue (m)	50.6	62.7	65.1	53.5	112.8	114.9	41.4	27.6	63.1	56.5	67.9	52.5
Link Distance (m)		251.1	251.1		183.4	183.4	183.4	128.5	128.5		136.6	136.6
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	40.0			130.0						40.0		
Storage Blk Time (%)	5	5			0					3	17	
Queuing Penalty (veh)	23	8			0					4	22	

Intersection: 6: Wilson Ave & Fairway Rd

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	TR	L	T	T	R	L	T	R	L	T
Maximum Queue (m)	66.8	103.2	104.6	104.6	133.4	144.2	55.0	102.1	126.6	50.3	54.7	92.9
Average Queue (m)	30.4	71.3	67.8	53.2	98.6	105.9	42.3	23.3	62.7	19.3	34.0	27.9
95th Queue (m)	53.9	96.5	93.9	92.3	127.2	137.5	73.7	54.3	101.8	35.7	54.6	66.0
Link Distance (m)		436.6	436.6		251.1	251.1			283.3	283.3		306.3
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	120.0			160.0			30.0	95.0			45.0	
Storage Blk Time (%)						50	3		2		7	2
Queuing Penalty (veh)						75	13		3		21	6

Intersection: 6: Wilson Ave & Fairway Rd

Movement	SB
Directions Served	R
Maximum Queue (m)	46.5
Average Queue (m)	14.7
95th Queue (m)	34.6
Link Distance (m)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	45.0
Storage Blk Time (%)	0
Queuing Penalty (veh)	0

Intersection: 10: River Rd & Hwy 8 NB Ramp/Stonegate Dr

Movement	EB	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB	
Directions Served	L	LT	R	L	TR	L	T	TR	L	T	TR	
Maximum Queue (m)	21.3	32.0	14.7	9.8	15.4	15.4	19.3	13.8	22.0	23.5	32.4	
Average Queue (m)	8.3	16.8	5.9	0.9	5.8	3.9	5.4	4.7	7.3	8.5	15.0	
95th Queue (m)	17.0	28.2	13.3	5.3	13.4	11.6	13.8	12.2	16.8	18.4	26.3	
Link Distance (m)		217.2			139.9		199.5	199.5		185.1	185.1	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	140.0		140.0	15.0		90.0			45.0			
Storage Blk Time (%)				0	0							
Queuing Penalty (veh)				0	0							

Zone Summary

Zone wide Queuing Penalty: 293

Intersection: 2: Stonegate Dr & King St

Movement
Directions Served
Maximum Queue (m)
Average Queue (m)
95th Queue (m)
Link Distance (m)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (m)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 4: Wabanaki Dr & Fairway Rd

Movement	EB	WB	WB	NB
Directions Served	T	T	T	R
Maximum Queue (m)	0.9	3.3	9.4	52.2
Average Queue (m)	0.0	0.1	0.3	22.7
95th Queue (m)	0.6	2.4	6.6	40.8
Link Distance (m)	183.4	274.9	274.9	236.0
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 9: Wilson Ave & Wabanaki Dr

Movement	EB	WB	NB	SB	SB
Directions Served	L	LT	LTR	LT	R
Maximum Queue (m)	24.1	7.3	25.0	14.0	1.1
Average Queue (m)	9.2	0.4	10.3	3.3	0.0
95th Queue (m)	20.8	4.4	18.5	10.9	0.7
Link Distance (m)	638.8	1016.3	120.7	264.2	264.2
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (m)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 11: Hidden Valley Rd & River Rd

Movement	NB
Directions Served	R
Maximum Queue (m)	8.2
Average Queue (m)	1.5
95th Queue (m)	6.7
Link Distance (m)	192.8
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 12: River Rd & Hwy 8 SB Ramp

Movement	EB
Directions Served	L
Maximum Queue (m)	11.8
Average Queue (m)	5.4
95th Queue (m)	13.1
Link Distance (m)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	90.0
Storage Blk Time (%)	
Queuing Penalty (veh)	

Zone Summary

Zone wide Queuing Penalty: 0

Capacity Analysis
2033 Background Conditions

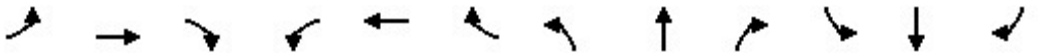
Synchro Analysis Summary
2033 Background Conditions

Intersection	Approach - Movement	Storage Length (m)	AM Peak				PM Peak			
			LOS	V/C	Delay (s)	Queue (m)	LOS	V/C	Delay (s)	Queue (m)
King St & River Rd	**Intersection**	-	**B**	-	**16.9**	-	**B**	-	**18.4**	-
	EB - L	45	B	0.14	15.0	24	C	0.39	20.3	45
	EB - T	-	B	0.22	14.5	37	B	0.42	17.4	64
	EB - R	45	A	0.37	5.8	28	A	0.21	4.5	19
	WB - L	50	B	0.31	16.3	46	B	0.41	19.0	**54**
	WB - T	-	B	0.20	14.2	39	B	0.43	17.4	77
	WB - R	50	A	0.14	3.1	17	A	0.27	2.6	29
	NB - L	75	C	0.17	21.1	13	C	0.45	28.4	27
	NB - TR	-	B	0.24	11.6	26	B	0.33	11.1	37
	SB - L	45	D	0.64	37.7	40	D	0.80	52.9	41
	SB - TR	-	C	0.30	22.4	45	B	0.30	18.4	46
King St & Stonegate Dr	**Intersection**	-	-	-	-	-	-	-	-	-
	EB - TR*	-	-	-	-	0	-	-	-	0
	WB - T*	-	-	-	-	0	-	-	-	0
Fairway Rd Highway 8 Ramps	**Intersection**	-	**B**	-	**13.5**	-	**C**	-	**23.2**	-
	EB - L	75**	C	0.48	32.0	52	D	0.76	39.0	**131**
	EB - R	50**	B	0.31	17.8	46	B	0.49	17.7	**95**
	NB - L	85	A	0.42	8.4	41	C	0.70	30.3	64
	NB - T	-	A	0.30	6.2	52	B	0.56	13.4	90
	SB - T	-	B	0.34	14.4	63	C	0.61	27.2	101
	SB - R	75	A	0.17	0.9	22	A	0.14	1.0	28
Fairway Rd & Wabanaki Dr	**Intersection**	-	**A**	-	**1.1**	-	**A**	-	**1.6**	-
	EB - TR*	-	-	-	-	3	-	-	-	4
	WB - T*	-	-	-	-	1	-	-	-	3
	NB - R	-	B	0.28	13.5	28	D	0.56	25.9	51
Fairway Rd & Fairview Park Mall / Cineplex	**Intersection**	-	**B**	-	**11.1**	-	**C**	-	**25.0**	-
	EB - L	40	A	0.08	5.1	13	C	0.65	34.0	**50**
	EB - TR	-	A	0.30	8.1	32	B	0.59	16.3	74
	WB - L	130	A	0.14	6.2	18	C	0.70	24.1	65
	WB - T	-	B	0.35	10.3	59	C	0.68	25.7	129
	WB - R	-	A	0.07	0.2	15	A	0.25	3.6	34
	NB - L	-	D	0.04	41.5	7	E	0.46	58.6	28
	NB - TR	-	C	0.13	25.3	15	D	0.70	46.8	63
	SB - L	40	D	0.34	43.9	37	D	0.61	54.4	**66**
	SB - TR	-	B	0.09	15.0	16	B	0.36	10.2	56
Fairway Rd & Wilson Ave	**Intersection**	-	**B**	-	**17.5**	-	**C**	-	**32.6**	-
	EB - L	120	A	0.19	6.8	27	C	0.66	28.1	60
	EB - TR	-	B	0.32	13.7	54	C	0.63	34.1	100
	WB - L	160	B	0.40	11.8	48	D	0.74	46.7	93
	WB - T	-	A	0.28	7.6	42	C	0.66	28.1	114
	WB - R	30	A	0.10	1.4	19	A	0.27	8.9	**69**
	NB - L	95	D	0.28	35.3	26	C	0.37	28.9	55
	NB - T	-	D	0.51	39.5	52	D	0.76	54.9	102
	NB - R	-	A	0.19	4.5	22	B	0.41	14.6	43
	SB - L	45	E	0.74	61.4	**46**	D	0.82	51.8	**58**
	SB - T	-	D	0.41	36.6	41	D	0.34	35.1	81
	SB - R	45	B	0.45	11.6	24	A	0.45	9.5	40
Wilson Ave & Wabanaki Dr	**Intersection**	-	**A**	-	**6.0**	-	**C**	-	**17.3**	-
	EB - L	-	A	0.18	8.0	14	A	0.26	8.4	20
	EB - TR*	-	-	-	-	2	-	-	-	0
	WB - LT	-	A	0.01	8.0	6	A	0.00	7.9	3
	WB - R*	45	-	-	-	0	-	-	-	0
	NB - LTR	-	D	0.05	27.1	9	**F**	**0.95**	175.5	18
	SB - LT	-	D	0.17	27.2	18	E	0.10	36.3	10
	SB - R	-	B	0.32	10.4	1	B	0.59	14.4	0
River Rd Ex & Highway 8 NB Ramps / Stonegate Dr	**Intersection**	-	**A**	-	**6.0**	-	**A**	-	**7.4**	
	EB - L	140*	B	0.12	11.7	10	B	0.20	10.3	19
	EB - T	-	B	0.13	11.8	19	B	0.20	10.3	28
	EB - R	140	A	0.09	1.4	14	A	0.08	1.4	14
	WB - L	15	B	0.01	12.5	4	B	0.01	12.5	6
	WB - TR	-	A	0.07	8.9	13	A	0.07	8.1	13
	NB - L	90	A	0.07	9.0	12	B	0.06	10.2	12
	NB - TR	-	A	0.05	7.6	9	A	0.08	9.0	14
	SB - L	45	A	0.02	8.6	8	B	0.09	10.0	17
	ed used for LOS	-	A	0.27	4.3	29	A	0.23	5.2	28
River Rd Ex & Hidden Valley Dr	**Intersection**	-	**A**	-	**0.2**	-	**A**	-	**0.1**	
	EB - TR*	-	-	-	-	0	-	-	-	0
	WB - T*	-	-	-	-	0	-	-	-	0
	NB - R	-	A	0.01	8.6	9	A	0.01	8.7	7
River Rd Ex & Highway 8 SB Ramp	**Intersection**	-	**A**	-	**1.9**	-	**A**	-	**1.9**	
	EB - L	90	A	0.10	8.1	17	A	0.09	8.0	13
	EB - T*	-	-	-	-	0	-	-	-	0
	WB - TR*	-	-	-	-	3	-	-	-	0

Notes: **Bold Red** used for LOS F, V/C ≥ 0.85, and queueing greater than available storage

* = movement operates under free-flow movement

** = Storage applies to one of two lanes used for this movement while the second lane has no associated storage length

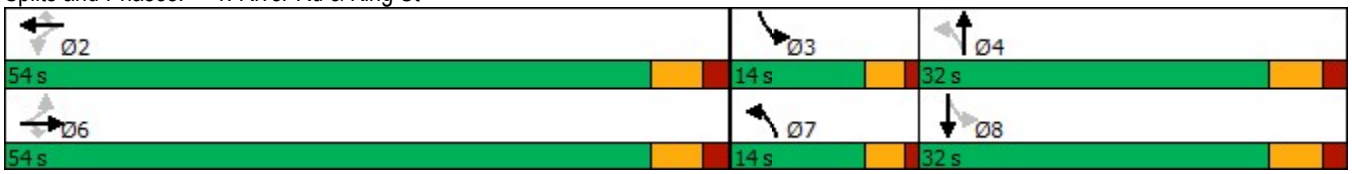


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	72	176	134	178	181	105	35	62	123	157	218	92
Future Volume (vph)	72	176	134	178	181	105	35	62	123	157	218	92
Ideal Flow (vphpl)	1775	1650	1000	1775	1900	1750	1000	1550	1000	1000	1650	1750
Storage Length (m)	45.0		45.0	50.0		50.0	75.0		0.0	45.0		0.0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (m)	60.0			70.0			40.0			60.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	1.00					0.99	1.00	0.98		1.00	0.99	
Frt			0.850			0.850		0.900			0.955	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1637	1587	594	1686	1792	1390	888	2557	0	922	2961	0
Flt Permitted	0.621			0.627			0.563			0.549		
Satd. Flow (perm)	1070	1587	594	1113	1792	1373	524	2557	0	531	2961	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			134			105		123			65	
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		1100.5			425.6			212.4			178.4	
Travel Time (s)		66.0			25.5			12.7			10.7	
Confl. Peds. (#/hr)	1					1	4		2	2		4
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	3%	4%	43%	0%	6%	7%	7%	2%	2%	3%	0%	1%
Adj. Flow (vph)	72	176	134	178	181	105	35	62	123	157	218	92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	72	176	134	178	181	105	35	185	0	157	310	0
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		6			2		7	4		3	8	
Permitted Phases	6		6	2		2	4			8		
Detector Phase	6	6	6	2	2	2	7	4		3	8	
Switch Phase												
Minimum Initial (s)	48.0	48.0	48.0	48.0	48.0	48.0	5.0	26.0		5.0	26.0	
Minimum Split (s)	54.0	54.0	54.0	54.0	54.0	54.0	11.0	32.0		11.0	32.0	
Total Split (s)	54.0	54.0	54.0	54.0	54.0	54.0	14.0	32.0		14.0	32.0	
Total Split (%)	54.0%	54.0%	54.0%	54.0%	54.0%	54.0%	14.0%	32.0%		14.0%	32.0%	
Maximum Green (s)	48.0	48.0	48.0	48.0	48.0	48.0	10.0	26.0		10.0	26.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	3.0	4.0		3.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	1.0	2.0		1.0	2.0	
Lost Time Adjust (s)	0.0	-2.0	0.0	-2.0	-2.0	-2.0	0.0	-2.0		0.0	-2.0	
Total Lost Time (s)	6.0	4.0	6.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	Max	Max	Max	Max	Max	Max	None	Max		None	Max	
Walk Time (s)	35.0	35.0	35.0	35.0	35.0	35.0		15.0			15.0	
Flash Dont Walk (s)	16.0	16.0	16.0	16.0	16.0	16.0		11.0			11.0	
Pedestrian Calls (#/hr)	0	0	0	0	0	0		0			0	
Act Effct Green (s)	51.0	53.0	51.0	53.0	53.0	53.0	35.9	28.0		40.1	34.1	
Actuated g/C Ratio	0.50	0.51	0.50	0.51	0.51	0.51	0.35	0.27		0.39	0.33	
v/c Ratio	0.14	0.22	0.37	0.31	0.20	0.14	0.17	0.24		0.64	0.30	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay	15.0	14.5	5.8	16.3	14.2	3.1	21.1	11.6		37.7	22.4	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	15.0	14.5	5.8	16.3	14.2	3.1	21.1	11.6		37.7	22.4	
LOS	B	B	A	B	B	A	C	B		D	C	
Approach Delay		11.6			12.5			13.1			27.5	
Approach LOS		B			B			B			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 103			
Natural Cycle: 100			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.64			
Intersection Signal Delay: 16.9		Intersection LOS: B	
Intersection Capacity Utilization 134.0%		ICU Level of Service H	
Analysis Period (min) 15			

Splits and Phases: 1: River Rd & King St

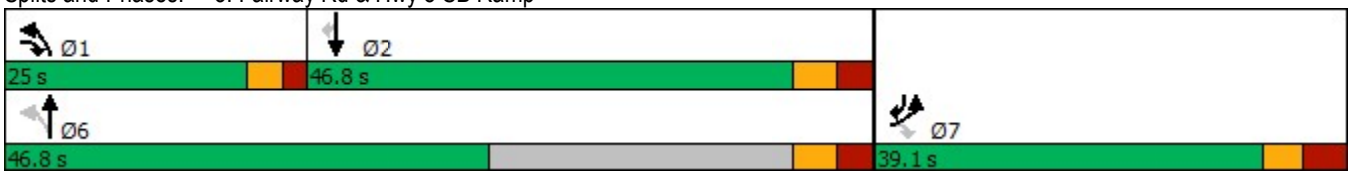


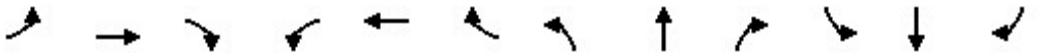
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	325	271	181	659	808	174
Future Volume (vph)	325	271	181	659	808	174
Ideal Flow (vphpl)	1775	1750	1775	1900	1900	1750
Lane Width (m)	3.5	3.5	3.5	3.5	3.5	3.5
Storage Length (m)	75.0	50.0	85.0			75.0
Storage Lanes	1	1	1			1
Taper Length (m)	60.0		75.0			
Lane Util. Factor	0.97	0.88	1.00	0.95	0.91	1.00
Ped Bike Factor		0.99	1.00			0.97
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	3052	2442	1476	3216	4706	1401
Flt Permitted	0.950		0.272			
Satd. Flow (perm)	3052	2408	422	3216	4706	1363
Right Turn on Red		No				Yes
Satd. Flow (RTOR)						174
Link Speed (k/h)	60			60	60	
Link Distance (m)	404.4			302.0	498.0	
Travel Time (s)	24.3			18.1	29.9	
Confl. Peds. (#/hr)		2	4			4
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	6%	6%	13%	11%	9%	5%
Adj. Flow (vph)	325	271	181	659	808	174
Shared Lane Traffic (%)						
Lane Group Flow (vph)	325	271	181	659	808	174
Turn Type	Prot	pm+ov	pm+pt	NA	NA	pm+ov
Protected Phases	7	1	1	6	2	7
Permitted Phases		7	6			2
Detector Phase	7	1	1	6	2	7
Switch Phase						
Minimum Initial (s)	10.0	8.0	8.0	40.0	40.0	10.0
Minimum Split (s)	17.1	13.0	13.0	46.8	46.8	17.1
Total Split (s)	39.1	25.0	25.0	46.8	46.8	39.1
Total Split (%)	35.3%	22.5%	22.5%	42.2%	42.2%	35.3%
Maximum Green (s)	32.0	20.0	20.0	40.0	40.0	32.0
Yellow Time (s)	3.3	3.0	3.0	3.7	3.7	3.3
All-Red Time (s)	3.8	2.0	2.0	3.1	3.1	3.8
Lost Time Adjust (s)	-3.1	-1.0	-1.0	-2.8	-2.8	-3.1
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag		Lead	Lead		Lag	
Lead-Lag Optimize?						
Vehicle Extension (s)	4.0	4.0	4.0	3.0	3.0	4.0
Recall Mode	None	None	None	Max	Max	None
Walk Time (s)	9.0			10.0	10.0	9.0
Flash Dont Walk (s)	23.0			30.0	30.0	23.0
Pedestrian Calls (#/hr)	0			0	0	0
Act Effct Green (s)	19.0	31.0	59.0	59.0	43.0	62.1
Actuated g/C Ratio	0.22	0.36	0.69	0.69	0.50	0.72

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
v/c Ratio	0.48	0.31	0.42	0.30	0.34	0.17
Control Delay	32.0	17.8	8.4	6.2	14.4	0.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	32.0	17.8	8.4	6.2	14.4	0.9
LOS	C	B	A	A	B	A
Approach Delay	25.5			6.6	12.0	
Approach LOS	C			A	B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110.9			
Actuated Cycle Length: 86.1			
Natural Cycle: 80			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.48			
Intersection Signal Delay: 13.5		Intersection LOS: B	
Intersection Capacity Utilization 65.1%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 3: Fairway Rd & Hwy 8 SB Ramp



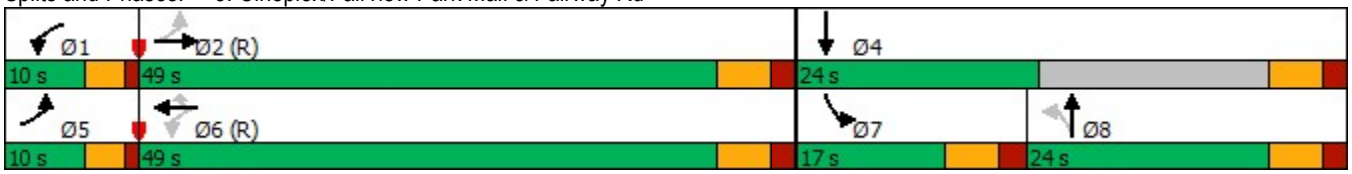


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	37	673	11	80	805	71	6	8	16	104	6	19
Future Volume (vph)	37	673	11	80	805	71	6	8	16	104	6	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	40.0		0.0	130.0		0.0	0.0		0.0	40.0		0.0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (m)	45.0			40.0			7.5			15.0		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	0.97	1.00	1.00
Frt		0.998				0.850		0.900			0.886	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1703	3371	0	1787	3312	1302	1805	1634	0	2779	1388	0
Flt Permitted	0.317			0.344			0.741			0.950		
Satd. Flow (perm)	568	3371	0	647	3312	1302	1408	1634	0	2779	1388	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2				142		16			19	
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		276.4			205.3			142.3			155.5	
Travel Time (s)		16.6			12.3			10.2			11.2	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	6%	7%	0%	1%	9%	24%	0%	0%	7%	26%	0%	28%
Adj. Flow (vph)	37	673	11	80	805	71	6	8	16	104	6	19
Shared Lane Traffic (%)												
Lane Group Flow (vph)	37	684	0	80	805	71	6	24	0	104	25	0
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Perm	NA		Prot	NA	
Protected Phases	5	2		1	6			8		7	4	
Permitted Phases	2			6		6	8					
Detector Phase	5	2		1	6	6	8	8		7	4	
Switch Phase												
Minimum Initial (s)	5.0	43.0		5.0	43.0	43.0	8.0	8.0		5.0	8.0	
Minimum Split (s)	9.0	49.0		9.0	49.0	49.0	14.0	14.0		11.0	14.0	
Total Split (s)	10.0	49.0		10.0	49.0	49.0	24.0	24.0		17.0	24.0	
Total Split (%)	10.0%	49.0%		10.0%	49.0%	49.0%	24.0%	24.0%		17.0%	24.0%	
Maximum Green (s)	6.0	43.0		6.0	43.0	43.0	18.0	18.0		11.0	18.0	
Yellow Time (s)	3.0	4.0		3.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	2.0		1.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	-2.0		0.0	-2.0	-2.0	-2.0	-2.0		-2.0	-2.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lag	Lag		Lead		
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	C-Max		None	C-Max	C-Max	None	None		None	None	
Walk Time (s)		22.0			22.0	22.0	12.0	12.0			12.0	
Flash Dont Walk (s)		21.0			21.0	21.0	15.0	15.0			15.0	
Pedestrian Calls (#/hr)		0			0	0	0	0			0	
Act Effct Green (s)	71.2	66.8		73.3	69.5	69.5	10.0	10.0		10.9	19.7	
Actuated g/C Ratio	0.71	0.67		0.73	0.70	0.70	0.10	0.10		0.11	0.20	
v/c Ratio	0.08	0.30		0.14	0.35	0.07	0.04	0.13		0.34	0.09	
Control Delay	5.1	8.1		6.2	10.3	0.2	41.5	25.3		43.9	15.0	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay	5.1	8.1		6.2	10.3	0.2	41.5	25.3		43.9	15.0	
LOS	A	A		A	B	A	D	C		D	B	
Approach Delay		8.0			9.2			28.5			38.3	
Approach LOS		A			A			C			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 26 (26%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 85			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.35			
Intersection Signal Delay: 11.1		Intersection LOS: B	
Intersection Capacity Utilization 59.9%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 5: Cineplex/Fairview Park Mall & Fairway Rd

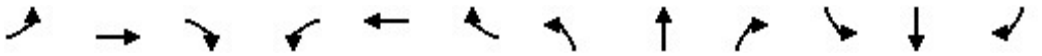


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	99	479	77	212	572	80	49	176	81	128	137	113
Future Volume (vph)	99	479	77	212	572	80	49	176	81	128	137	113
Ideal Flow (vphpl)	1775	1775	1000	1775	1900	1750	1775	1900	1750	1775	1775	1000
Lane Width (m)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Storage Length (m)	120.0		0.0	160.0		30.0	95.0		0.0	45.0		45.0
Storage Lanes	1		0	1		1	1		1	1		1
Taper Length (m)	60.0			40.0			7.5			10.0		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00	1.00		1.00		0.97	1.00		0.98	1.00		0.98
Frt		0.979				0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1516	3061	0	1489	3368	1302	1401	1693	1196	1635	1672	816
Flt Permitted	0.437			0.379			0.584			0.497		
Satd. Flow (perm)	695	3061	0	593	3368	1268	857	1693	1177	853	1672	802
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		22				78			81			113
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		450.5			276.4			297.0			324.1	
Travel Time (s)		27.0			16.6			21.4			23.3	
Confl. Peds. (#/hr)	5		3	3		5	6		4	4		6
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	10%	7%	3%	12%	6%	13%	19%	11%	23%	2%	5%	3%
Adj. Flow (vph)	99	479	77	212	572	80	49	176	81	128	137	113
Shared Lane Traffic (%)												
Lane Group Flow (vph)	99	556	0	212	572	80	49	176	81	128	137	113
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Perm	NA	pm+ov	Perm	NA	Perm
Protected Phases	1	6		5	2			4	5		8	
Permitted Phases	6			2		2	4		4	8		8
Detector Phase	1	6		5	2	2	4	4	5	8	8	8
Switch Phase												
Minimum Initial (s)	5.0	39.0		5.0	39.0	39.0	8.0	8.0	5.0	8.0	8.0	8.0
Minimum Split (s)	9.0	45.0		9.0	45.0	45.0	14.0	14.0	9.0	14.0	14.0	14.0
Total Split (s)	15.0	45.0		16.0	45.0	45.0	39.0	39.0	16.0	39.0	39.0	39.0
Total Split (%)	15.0%	45.0%		16.0%	45.0%	45.0%	39.0%	39.0%	16.0%	39.0%	39.0%	39.0%
Maximum Green (s)	11.0	39.0		12.0	39.0	39.0	33.0	33.0	12.0	33.0	33.0	33.0
Yellow Time (s)	3.0	4.0		3.0	4.0	4.0	4.0	4.0	3.0	4.0	4.0	4.0
All-Red Time (s)	1.0	2.0		1.0	2.0	2.0	2.0	2.0	1.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	-2.0		0.0	-2.0	-2.0	-2.0	-2.0	0.0	-2.0	-2.0	-2.0
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag		Lead	Lag	Lag			Lead			
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	3.0		4.0	3.0	3.0	3.0	3.0	4.0	3.0	3.0	3.0
Recall Mode	None	C-Max		None	C-Max	C-Max	None	None	None	None	None	None
Walk Time (s)		22.0			22.0	22.0	7.0	7.0		7.0	7.0	7.0
Flash Dont Walk (s)		17.0			17.0	17.0	25.0	25.0		25.0	25.0	25.0
Pedestrian Calls (#/hr)		0			0	0	0	0		0	0	0
Act Effct Green (s)	64.8	56.1		71.0	61.2	61.2	20.2	20.2	31.9	20.2	20.2	20.2
Actuated g/C Ratio	0.65	0.56		0.71	0.61	0.61	0.20	0.20	0.32	0.20	0.20	0.20

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.19	0.32		0.40	0.28	0.10	0.28	0.51	0.19	0.74	0.41	0.45
Control Delay	6.8	13.7		11.8	7.6	1.4	35.3	39.5	4.5	61.4	36.6	11.6
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	6.8	13.7		11.8	7.6	1.4	35.3	39.5	4.5	61.4	36.6	11.6
LOS	A	B		B	A	A	D	D	A	E	D	B
Approach Delay		12.6			8.1			29.6			37.5	
Approach LOS		B			A			C			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 25 (25%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.74			
Intersection Signal Delay: 17.5		Intersection LOS: B	
Intersection Capacity Utilization 77.4%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 6: Wilson Ave & Fairway Rd

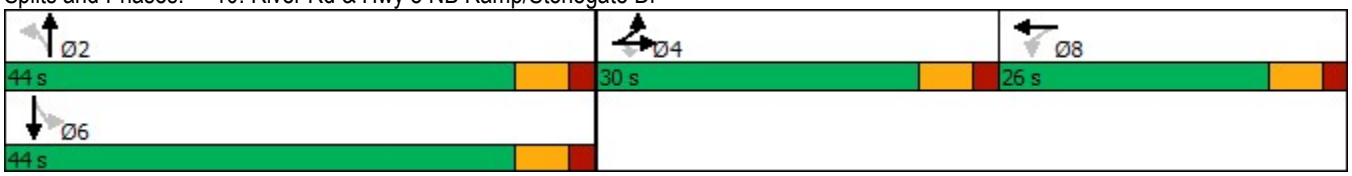


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	111	1	43	4	10	18	33	90	2	14	242	275
Future Volume (vph)	111	1	43	4	10	18	33	90	2	14	242	275
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	140.0		140.0	15.0		0.0	90.0		0.0	45.0		0.0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (m)	70.0			15.0			70.0			30.0		
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850		0.904			0.997			0.920	
Flt Protected	0.950	0.953		0.950			0.950			0.950		
Satd. Flow (prot)	1681	1686	1583	1770	1684	0	1770	3529	0	1770	3256	0
Flt Permitted	0.950	0.953					0.460			0.694		
Satd. Flow (perm)	1681	1686	1583	1863	1684	0	857	3529	0	1293	3256	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			98		18			2			275	
Link Speed (k/h)		50			40			60			60	
Link Distance (m)		231.4			154.4			218.6			212.4	
Travel Time (s)		16.7			13.9			13.1			12.7	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	111	1	43	4	10	18	33	90	2	14	242	275
Shared Lane Traffic (%)	50%											
Lane Group Flow (vph)	55	57	43	4	28	0	33	92	0	14	517	0
Turn Type	Split	NA	Perm	Perm	NA		Perm	NA		Perm	NA	
Protected Phases	4	4			8			2			6	
Permitted Phases			4	8			2			6		
Detector Phase	4	4	4	8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	24.0	24.0	24.0	24.0	24.0		24.0	24.0		24.0	24.0	
Total Split (s)	30.0	30.0	30.0	26.0	26.0		44.0	44.0		44.0	44.0	
Total Split (%)	30.0%	30.0%	30.0%	26.0%	26.0%		44.0%	44.0%		44.0%	44.0%	
Maximum Green (s)	24.0	24.0	24.0	20.0	20.0		38.0	38.0		38.0	38.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0		-2.0	-2.0		-2.0	-2.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None		Min	Min		Min	Min	
Walk Time (s)	7.0	7.0	7.0	7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0	0	0	0		0	0		0	0	
Act Effct Green (s)	9.2	9.2	9.2	8.3	8.3		19.0	19.0		19.0	19.0	
Actuated g/C Ratio	0.27	0.27	0.27	0.24	0.24		0.55	0.55		0.55	0.55	
v/c Ratio	0.12	0.13	0.09	0.01	0.07		0.07	0.05		0.02	0.27	
Control Delay	11.7	11.8	1.4	12.5	8.9		9.0	7.6		8.6	4.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	11.7	11.8	1.4	12.5	8.9		9.0	7.6		8.6	4.3	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	B	B	A	B	A		A	A		A	A	
Approach Delay		8.9			9.3			8.0			4.4	
Approach LOS		A			A			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 34.5			
Natural Cycle: 75			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.27			
Intersection Signal Delay: 6.0		Intersection LOS: A	
Intersection Capacity Utilization 39.5%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 10: River Rd & Hwy 8 NB Ramp/Stonegate Dr



Intersection	
Int Delay, s/veh	1.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	688	103	0	1025	0	164
Future Vol, veh/h	688	103	0	1025	0	164
Conflicting Peds, #/hr	0	1	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	11	5	0	9	0	8
Mvmt Flow	688	103	0	1025	0	164

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	397
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.06
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.38
Pot Cap-1 Maneuver	-	-	0	-	0	586
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	585
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	13.5
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	585	-	-	-
HCM Lane V/C Ratio	0.28	-	-	-
HCM Control Delay (s)	13.5	-	-	-
HCM Lane LOS	B	-	-	-
HCM 95th %tile Q(veh)	1.1	-	-	-

Intersection	
Int Delay, s/veh	6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	256	326	38	11	74	22	4	3	2	1	32	312
Future Vol, veh/h	256	326	38	11	74	22	4	3	2	1	32	312
Conflicting Peds, #/hr	1	0	4	4	0	1	0	0	3	3	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	0	-	-	-	-	45	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	7	3	11	0	14	10	0	0	50	0	13	6
Mvmt Flow	256	326	38	11	74	22	4	3	2	1	32	312

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	97	0	0	368	0	0	984	980	352	960	977	75
Stage 1	-	-	-	-	-	-	861	861	-	97	97	-
Stage 2	-	-	-	-	-	-	123	119	-	863	880	-
Critical Hdwy	4.17	-	-	4.1	-	-	7.1	6.5	6.7	7.1	6.63	6.26
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.63	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.63	-
Follow-up Hdwy	2.263	-	-	2.2	-	-	3.5	4	3.75	3.5	4.117	3.354
Pot Cap-1 Maneuver	1466	-	-	1202	-	-	229	252	596	238	240	975
Stage 1	-	-	-	-	-	-	353	375	-	914	794	-
Stage 2	-	-	-	-	-	-	886	801	-	352	350	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1465	-	-	1198	-	-	117	205	592	201	195	974
Mov Cap-2 Maneuver	-	-	-	-	-	-	117	205	-	201	195	-
Stage 1	-	-	-	-	-	-	290	308	-	753	785	-
Stage 2	-	-	-	-	-	-	572	792	-	286	288	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	3.3	0.8	27.1	12
HCM LOS			D	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	172	1465	-	-	1198	-	-	195	974
HCM Lane V/C Ratio	0.052	0.175	-	-	0.009	-	-	0.169	0.32
HCM Control Delay (s)	27.1	8	-	-	8	0	-	27.2	10.4
HCM Lane LOS	D	A	-	-	A	A	-	D	B
HCM 95th %tile Q(veh)	0.2	0.6	-	-	0	-	-	0.6	1.4

Intersection	
Int Delay, s/veh	0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	114	0	0	289	0	10
Future Vol, veh/h	114	0	0	289	0	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	114	0	0	289	0	10

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	57
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	-	-	0	-	0	997
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	997
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	8.6
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	997	-	-	-
HCM Lane V/C Ratio	0.01	-	-	-
HCM Control Delay (s)	8.6	-	-	-
HCM Lane LOS	A	-	-	-
HCM 95th %tile Q(veh)	0	-	-	-

Intersection: 1: River Rd & King St

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	T	R	L	T	TR	L	T	TR
Maximum Queue (m)	29.4	43.5	33.0	56.6	46.2	21.0	17.5	14.3	32.0	46.8	37.1	56.9
Average Queue (m)	10.8	19.5	14.6	24.8	20.5	8.2	4.9	3.8	12.8	21.3	11.1	23.1
95th Queue (m)	23.7	37.0	27.9	45.5	39.4	17.3	13.1	10.2	26.2	40.1	27.0	45.0
Link Distance (m)		1068.8			402.4			185.1	185.1		162.1	162.1
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	45.0		45.0	50.0		50.0	75.0			45.0		
Storage Blk Time (%)	0	0	0	1	0					1	0	
Queuing Penalty (veh)	0	0	0	3	0					1	0	

Intersection: 3: Fairway Rd & Hwy 8 SB Ramp

Movement	EB	EB	EB	EB	NB	NB	NB	SB	SB	SB	SB	
Directions Served	L	L	R	R	L	T	T	T	T	T	R	
Maximum Queue (m)	53.3	62.2	54.5	42.1	49.9	68.0	65.7	71.7	67.6	60.5	29.5	
Average Queue (m)	24.0	33.0	25.9	12.6	22.9	28.2	28.2	35.6	35.0	27.6	10.4	
95th Queue (m)	44.1	51.6	45.8	30.6	41.1	51.6	52.3	63.2	62.0	53.0	22.4	
Link Distance (m)		382.8	382.8			274.9	274.9	474.0	474.0	474.0		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	75.0			50.0	85.0						75.0	
Storage Blk Time (%)		0	1	0		0				0		
Queuing Penalty (veh)		0	1	0		0				0		

Intersection: 5: Cineplex/Fairview Park Mall & Fairway Rd

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	T	R	L	TR	L	L	TR
Maximum Queue (m)	17.1	42.3	39.2	23.0	74.6	75.6	21.7	10.0	19.9	37.6	46.2	21.7
Average Queue (m)	4.4	15.1	12.8	8.7	22.6	26.1	4.6	1.6	6.4	10.9	19.1	5.8
95th Queue (m)	12.9	32.0	28.8	17.9	56.2	58.5	14.6	7.1	15.2	27.4	36.8	16.2
Link Distance (m)		251.1	251.1		183.4	183.4	183.4	128.5	128.5		136.6	136.6
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	40.0			130.0						40.0		
Storage Blk Time (%)		0								0	1	
Queuing Penalty (veh)		0								0	0	

Intersection: 6: Wilson Ave & Fairway Rd

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	TR	L	T	T	R	L	T	R	L	T
Maximum Queue (m)	30.8	60.3	66.8	62.6	44.8	49.7	33.5	30.0	60.4	26.0	54.0	53.7
Average Queue (m)	13.7	31.9	29.2	25.6	18.6	21.3	5.6	12.7	31.0	11.0	25.8	21.3
95th Queue (m)	26.5	53.7	53.3	48.2	39.9	42.1	18.5	26.3	52.4	22.3	46.2	40.9
Link Distance (m)		436.6	436.6		251.1	251.1			283.3	283.3		306.3
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	120.0			160.0			30.0	95.0			45.0	
Storage Blk Time (%)						5	0				2	1
Queuing Penalty (veh)						4	0				5	3

Intersection: 6: Wilson Ave & Fairway Rd

Movement	SB
Directions Served	R
Maximum Queue (m)	39.9
Average Queue (m)	9.0
95th Queue (m)	23.9
Link Distance (m)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	45.0
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 10: River Rd & Hwy 8 NB Ramp/Stonegate Dr

Movement	EB	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB	
Directions Served	L	LT	R	L	TR	L	T	TR	L	T	TR	
Maximum Queue (m)	10.4	22.6	15.4	8.6	12.6	13.4	8.8	12.4	9.9	23.5	35.8	
Average Queue (m)	3.1	11.0	6.4	0.6	5.5	4.7	2.1	2.9	2.0	8.5	15.7	
95th Queue (m)	10.1	18.8	14.4	4.3	12.8	11.8	7.6	9.2	8.1	18.3	28.9	
Link Distance (m)		217.2			139.9		199.5	199.5		185.1	185.1	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	140.0		140.0	15.0		90.0			45.0			
Storage Blk Time (%)					0							
Queuing Penalty (veh)					0							

Zone Summary

Zone wide Queuing Penalty: 17

Intersection: 2: Stonegate Dr & King St

Movement
Directions Served
Maximum Queue (m)
Average Queue (m)
95th Queue (m)
Link Distance (m)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (m)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 4: Wabanaki Dr & Fairway Rd

Movement	EB	EB	WB	NB
Directions Served	T	TR	T	R
Maximum Queue (m)	2.3	4.3	1.4	34.6
Average Queue (m)	0.1	0.2	0.0	16.4
95th Queue (m)	1.6	2.5	1.0	27.8
Link Distance (m)	183.4	183.4	274.9	236.0
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 9: Wilson Ave & Wabanaki Dr

Movement	EB	EB	WB	NB	SB	SB
Directions Served	L	TR	LT	LTR	LT	R
Maximum Queue (m)	20.1	4.3	9.4	10.8	22.6	1.7
Average Queue (m)	4.5	0.2	1.0	2.3	7.3	0.1
95th Queue (m)	14.1	2.0	5.5	8.7	17.8	1.2
Link Distance (m)	638.8	638.8	1016.3	120.7	264.2	264.2
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (m)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 11: Hidden Valley Rd & River Rd

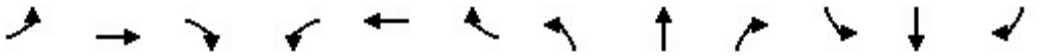
Movement	NB
Directions Served	R
Maximum Queue (m)	8.3
Average Queue (m)	2.5
95th Queue (m)	8.7
Link Distance (m)	192.8
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 12: River Rd & Hwy 8 SB Ramp

Movement	EB	WB
Directions Served	L	TR
Maximum Queue (m)	18.3	6.6
Average Queue (m)	7.9	0.5
95th Queue (m)	16.6	3.2
Link Distance (m)		293.2
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)	90.0	
Storage Blk Time (%)		
Queuing Penalty (veh)		

Zone Summary

Zone wide Queuing Penalty: 0

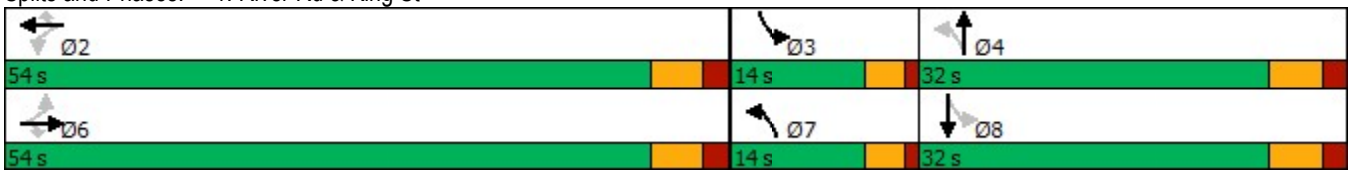


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	138	347	84	174	413	231	98	85	186	182	172	113
Future Volume (vph)	138	347	84	174	413	231	98	85	186	182	172	113
Ideal Flow (vphpl)	1775	1650	1000	1775	1900	1750	1000	1550	1000	1000	1650	1750
Storage Length (m)	45.0		45.0	50.0		50.0	75.0		0.0	45.0		0.0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (m)	60.0			70.0			40.0			60.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	1.00		0.99	1.00		0.99	1.00	0.98		0.99	0.99	
Frt			0.850			0.850		0.897			0.941	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1686	1618	726	1686	1863	1488	872	2528	0	941	2906	0
Flt Permitted	0.407			0.468			0.563			0.494		
Satd. Flow (perm)	722	1618	716	830	1863	1469	514	2528	0	487	2906	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			84			231		186			113	
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		1100.5			425.6			212.4			178.4	
Travel Time (s)		66.0			25.5			12.7			10.7	
Confl. Peds. (#/hr)	1		4	4		1	4		4	4		4
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	2%	17%	0%	2%	0%	9%	8%	0%	1%	0%	1%
Adj. Flow (vph)	138	347	84	174	413	231	98	85	186	182	172	113
Shared Lane Traffic (%)												
Lane Group Flow (vph)	138	347	84	174	413	231	98	271	0	182	285	0
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		6			2		7	4		3	8	
Permitted Phases	6		6	2		2	4			8		
Detector Phase	6	6	6	2	2	2	7	4		3	8	
Switch Phase												
Minimum Initial (s)	48.0	48.0	48.0	48.0	48.0	48.0	5.0	26.0		5.0	26.0	
Minimum Split (s)	54.0	54.0	54.0	54.0	54.0	54.0	11.0	32.0		11.0	32.0	
Total Split (s)	54.0	54.0	54.0	54.0	54.0	54.0	14.0	32.0		14.0	32.0	
Total Split (%)	54.0%	54.0%	54.0%	54.0%	54.0%	54.0%	14.0%	32.0%		14.0%	32.0%	
Maximum Green (s)	48.0	48.0	48.0	48.0	48.0	48.0	10.0	26.0		10.0	26.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	3.0	4.0		3.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	1.0	2.0		1.0	2.0	
Lost Time Adjust (s)	0.0	-2.0	0.0	-2.0	-2.0	-2.0	0.0	-2.0		0.0	-2.0	
Total Lost Time (s)	6.0	4.0	6.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	Max	Max	Max	Max	Max	Max	None	Max		None	Max	
Walk Time (s)	35.0	35.0	35.0	35.0	35.0	35.0		15.0			15.0	
Flash Dont Walk (s)	16.0	16.0	16.0	16.0	16.0	16.0		11.0			11.0	
Pedestrian Calls (#/hr)	0	0	0	0	0	0		0			0	
Act Effct Green (s)	51.0	53.0	51.0	53.0	53.0	53.0	37.4	28.0		38.8	30.8	
Actuated g/C Ratio	0.50	0.51	0.50	0.51	0.51	0.51	0.36	0.27		0.38	0.30	
v/c Ratio	0.39	0.42	0.21	0.41	0.43	0.27	0.45	0.33		0.80	0.30	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay	20.3	17.4	4.5	19.0	17.4	2.6	28.4	11.1		52.9	18.4	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	20.3	17.4	4.5	19.0	17.4	2.6	28.4	11.1		52.9	18.4	
LOS	C	B	A	B	B	A	C	B		D	B	
Approach Delay		16.2			13.5			15.7			31.8	
Approach LOS		B			B			B			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 103			
Natural Cycle: 100			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.80			
Intersection Signal Delay: 18.4		Intersection LOS: B	
Intersection Capacity Utilization 138.3%		ICU Level of Service H	
Analysis Period (min) 15			

Splits and Phases: 1: River Rd & King St

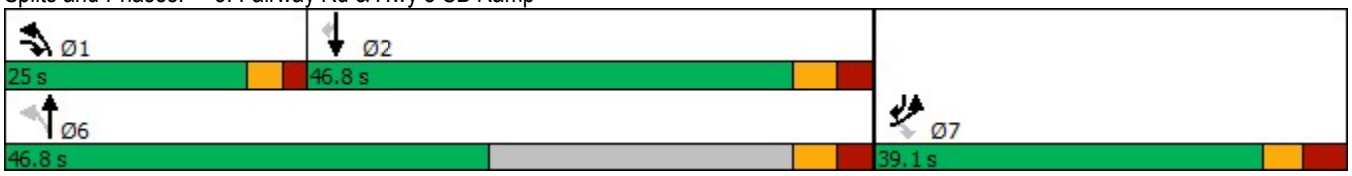


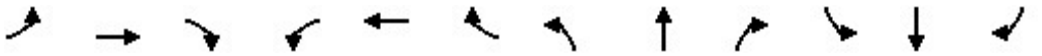
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	731	588	249	1198	1236	147
Future Volume (vph)	731	588	249	1198	1236	147
Ideal Flow (vphpl)	1775	1750	1775	1900	1900	1750
Lane Width (m)	3.5	3.5	3.5	3.5	3.5	3.5
Storage Length (m)	75.0	50.0	85.0			75.0
Storage Lanes	1	1	1			1
Taper Length (m)	60.0		75.0			
Lane Util. Factor	0.97	0.88	1.00	0.95	0.91	1.00
Ped Bike Factor		0.98	1.00			0.94
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	3141	2538	1588	3466	4932	1428
Flt Permitted	0.950		0.115			
Satd. Flow (perm)	3141	2484	191	3466	4932	1339
Right Turn on Red		No				Yes
Satd. Flow (RTOR)						147
Link Speed (k/h)	60			60	60	
Link Distance (m)	404.4			302.0	498.0	
Travel Time (s)	24.3			18.1	29.9	
Confl. Peds. (#/hr)		9	25			25
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	3%	2%	5%	3%	4%	3%
Adj. Flow (vph)	731	588	249	1198	1236	147
Shared Lane Traffic (%)						
Lane Group Flow (vph)	731	588	249	1198	1236	147
Turn Type	Prot	pm+ov	pm+pt	NA	NA	pm+ov
Protected Phases	7	1	1	6	2	7
Permitted Phases		7	6			2
Detector Phase	7	1	1	6	2	7
Switch Phase						
Minimum Initial (s)	10.0	8.0	8.0	40.0	40.0	10.0
Minimum Split (s)	17.1	13.0	13.0	46.8	46.8	17.1
Total Split (s)	39.1	25.0	25.0	46.8	46.8	39.1
Total Split (%)	35.3%	22.5%	22.5%	42.2%	42.2%	35.3%
Maximum Green (s)	32.0	20.0	20.0	40.0	40.0	32.0
Yellow Time (s)	3.3	3.0	3.0	3.7	3.7	3.3
All-Red Time (s)	3.8	2.0	2.0	3.1	3.1	3.8
Lost Time Adjust (s)	-3.1	-1.0	-1.0	-2.8	-2.8	-3.1
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag		Lead	Lead		Lag	
Lead-Lag Optimize?						
Vehicle Extension (s)	4.0	4.0	4.0	3.0	3.0	4.0
Recall Mode	None	None	None	Max	Max	None
Walk Time (s)	9.0			10.0	10.0	9.0
Flash Dont Walk (s)	23.0			30.0	30.0	23.0
Pedestrian Calls (#/hr)	0			0	0	0
Act Effct Green (s)	32.4	50.3	65.0	65.0	43.0	75.4
Actuated g/C Ratio	0.31	0.48	0.62	0.62	0.41	0.72

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
v/c Ratio	0.76	0.49	0.70	0.56	0.61	0.14
Control Delay	39.0	17.7	30.3	13.4	27.2	1.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	39.0	17.7	30.3	13.4	27.2	1.0
LOS	D	B	C	B	C	A
Approach Delay	29.5			16.3	24.4	
Approach LOS	C			B	C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110.9			
Actuated Cycle Length: 105.4			
Natural Cycle: 90			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.76			
Intersection Signal Delay: 23.2		Intersection LOS: C	
Intersection Capacity Utilization 81.5%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 3: Fairway Rd & Hwy 8 SB Ramp



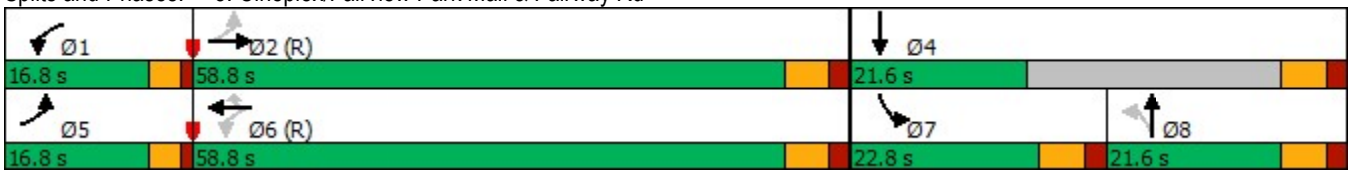


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	185	986	58	234	1191	214	67	67	124	275	47	170
Future Volume (vph)	185	986	58	234	1191	214	67	67	124	275	47	170
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	40.0		0.0	130.0		0.0	0.0		0.0	40.0		0.0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (m)	45.0			40.0			7.5			15.0		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	0.97	1.00	1.00
Frt		0.992				0.850		0.903			0.882	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3515	0	1787	3438	1482	1770	1716	0	3213	1618	0
Flt Permitted	0.130			0.168			0.622			0.950		
Satd. Flow (perm)	247	3515	0	316	3438	1482	1159	1716	0	3213	1618	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7				207		65			164	
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		276.4			205.3			142.3			155.5	
Travel Time (s)		16.6			12.3			10.2			11.2	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	2%	0%	1%	5%	9%	2%	0%	0%	9%	2%	4%
Adj. Flow (vph)	185	986	58	234	1191	214	67	67	124	275	47	170
Shared Lane Traffic (%)												
Lane Group Flow (vph)	185	1044	0	234	1191	214	67	191	0	275	217	0
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Perm	NA		Prot	NA	
Protected Phases	5	2		1	6			8		7	4	
Permitted Phases	2			6		6	8					
Detector Phase	5	2		1	6	6	8	8		7	4	
Switch Phase												
Minimum Initial (s)	5.0	52.8		5.0	52.8	52.8	8.0	8.0		5.0	8.0	
Minimum Split (s)	9.0	58.8		9.0	58.8	58.8	14.0	14.0		11.0	14.0	
Total Split (s)	16.8	58.8		16.8	58.8	58.8	21.6	21.6		22.8	21.6	
Total Split (%)	14.0%	49.0%		14.0%	49.0%	49.0%	18.0%	18.0%		19.0%	18.0%	
Maximum Green (s)	12.8	52.8		12.8	52.8	52.8	15.6	15.6		16.8	15.6	
Yellow Time (s)	3.0	4.0		3.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	2.0		1.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	-2.0		0.0	-2.0	-2.0	-2.0	-2.0		-2.0	-2.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lag	Lag		Lead		
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	C-Max		None	C-Max	C-Max	None	None		None	None	
Walk Time (s)		31.8			31.8	31.8	12.0	12.0			12.0	
Flash Dont Walk (s)		21.0			21.0	21.0	15.0	15.0			15.0	
Pedestrian Calls (#/hr)		0			0	0	0	0			0	
Act Effct Green (s)	71.3	60.6		73.0	61.4	61.4	15.0	15.0		16.8	35.9	
Actuated g/C Ratio	0.59	0.50		0.61	0.51	0.51	0.12	0.12		0.14	0.30	
v/c Ratio	0.65	0.59		0.70	0.68	0.25	0.46	0.70		0.61	0.36	
Control Delay	34.0	16.3		24.1	25.7	3.6	58.6	46.8		54.4	10.2	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay	34.0	16.3		24.1	25.7	3.6	58.6	46.8		54.4	10.2	
LOS	C	B		C	C	A	E	D		D	B	
Approach Delay		18.9			22.6			49.9			34.9	
Approach LOS		B			C			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 27.6 (23%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 95			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.70			
Intersection Signal Delay: 25.0		Intersection LOS: C	
Intersection Capacity Utilization 89.9%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 5: Cineplex/Fairview Park Mall & Fairway Rd

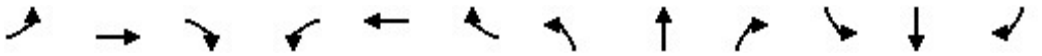


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	210	719	59	261	916	153	127	322	232	216	167	146
Future Volume (vph)	210	719	59	261	916	153	127	322	232	216	167	146
Ideal Flow (vphpl)	1775	1775	1000	1775	1900	1750	1775	1900	1750	1775	1775	1000
Lane Width (m)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Storage Length (m)	120.0		0.0	160.0		30.0	95.0		0.0	45.0		45.0
Storage Lanes	1		0	1		1	1		1	1		1
Taper Length (m)	60.0			40.0			7.5			10.0		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.99	1.00		0.99		0.91	0.96		0.94	0.98		0.94
Frt		0.989				0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1619	3225	0	1544	3500	1362	1635	1807	1401	1668	1755	832
Flt Permitted	0.160			0.206			0.651			0.188		
Satd. Flow (perm)	269	3225	0	332	3500	1246	1074	1807	1313	322	1755	780
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7				136			100			146
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		450.5			276.4			297.0			324.1	
Travel Time (s)		27.0			16.6			21.4			23.3	
Confl. Peds. (#/hr)	40		35	35		40	46		46	46		46
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	3%	2%	1%	8%	2%	8%	2%	4%	5%	0%	0%	1%
Adj. Flow (vph)	210	719	59	261	916	153	127	322	232	216	167	146
Shared Lane Traffic (%)												
Lane Group Flow (vph)	210	778	0	261	916	153	127	322	232	216	167	146
Turn Type	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	pm+ov	pm+pt	NA	Perm
Protected Phases	1	6		5	2		7	4	5	3	8	
Permitted Phases	6			2		2	4		4	8		8
Detector Phase	1	6		5	2	2	7	4	5	3	8	8
Switch Phase												
Minimum Initial (s)	5.0	36.0		5.0	36.0	36.0	5.0	8.0	5.0	5.0	8.0	8.0
Minimum Split (s)	9.0	42.0		9.0	42.0	42.0	9.0	14.0	9.0	9.0	14.0	14.0
Total Split (s)	22.0	43.0		22.0	43.0	43.0	11.0	38.0	22.0	17.0	38.0	38.0
Total Split (%)	18.3%	35.8%		18.3%	35.8%	35.8%	9.2%	31.7%	18.3%	14.2%	31.7%	31.7%
Maximum Green (s)	18.0	37.0		18.0	37.0	37.0	7.0	32.0	18.0	13.0	32.0	32.0
Yellow Time (s)	3.0	4.0		3.0	4.0	4.0	3.0	4.0	3.0	3.0	4.0	4.0
All-Red Time (s)	1.0	2.0		1.0	2.0	2.0	1.0	2.0	1.0	1.0	2.0	2.0
Lost Time Adjust (s)	0.0	-2.0		0.0	-2.0	-2.0	0.0	-2.0	0.0	0.0	-2.0	-2.0
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	3.0		4.0	3.0	3.0	3.0	3.0	4.0	3.0	3.0	3.0
Recall Mode	None	C-Max		None	C-Max	C-Max	None	None	None	None	None	None
Walk Time (s)		19.0			19.0	19.0		7.0			7.0	7.0
Flash Dont Walk (s)		17.0			17.0	17.0		25.0			25.0	25.0
Pedestrian Calls (#/hr)		0			0	0		0			0	0
Act Effct Green (s)	61.9	46.0		64.6	47.3	47.3	35.0	28.0	45.3	44.7	33.7	33.7
Actuated g/C Ratio	0.52	0.38		0.54	0.39	0.39	0.29	0.23	0.38	0.37	0.28	0.28

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.66	0.63		0.74	0.66	0.27	0.37	0.76	0.41	0.82	0.34	0.45
Control Delay	28.1	34.1		46.7	28.1	8.9	28.9	54.9	14.6	51.8	35.1	9.5
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	28.1	34.1		46.7	28.1	8.9	28.9	54.9	14.6	51.8	35.1	9.5
LOS	C	C		D	C	A	C	D	B	D	D	A
Approach Delay		32.8			29.5			36.3			34.9	
Approach LOS		C			C			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 31.2 (26%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.82			
Intersection Signal Delay: 32.6		Intersection LOS: C	
Intersection Capacity Utilization 96.2%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 6: Wilson Ave & Fairway Rd

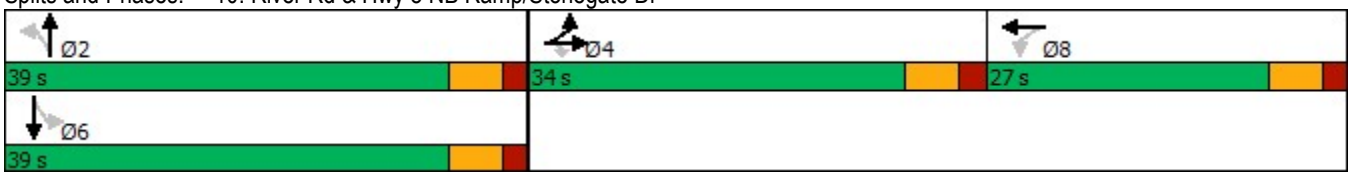


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	218	6	46	4	6	23	29	129	1	55	184	196
Future Volume (vph)	218	6	46	4	6	23	29	129	1	55	184	196
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	140.0		140.0	15.0		0.0	90.0		0.0	45.0		0.0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (m)	70.0			15.0			70.0			30.0		
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850		0.881			0.999			0.923	
Flt Protected	0.950	0.955		0.950			0.950			0.950		
Satd. Flow (prot)	1681	1690	1583	1770	1641	0	1770	3536	0	1770	3267	0
Flt Permitted	0.950	0.955					0.526			0.670		
Satd. Flow (perm)	1681	1690	1583	1863	1641	0	980	3536	0	1248	3267	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			98		23			1			196	
Link Speed (k/h)		50			40			60			60	
Link Distance (m)		231.4			154.4			218.6			212.4	
Travel Time (s)		16.7			13.9			13.1			12.7	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	218	6	46	4	6	23	29	129	1	55	184	196
Shared Lane Traffic (%)	49%											
Lane Group Flow (vph)	111	113	46	4	29	0	29	130	0	55	380	0
Turn Type	Split	NA	Perm	Perm	NA		Perm	NA		Perm	NA	
Protected Phases	4	4			8			2			6	
Permitted Phases			4	8			2			6		
Detector Phase	4	4	4	8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	24.0	24.0	24.0	24.0	24.0		24.0	24.0		24.0	24.0	
Total Split (s)	34.0	34.0	34.0	27.0	27.0		39.0	39.0		39.0	39.0	
Total Split (%)	34.0%	34.0%	34.0%	27.0%	27.0%		39.0%	39.0%		39.0%	39.0%	
Maximum Green (s)	28.0	28.0	28.0	21.0	21.0		33.0	33.0		33.0	33.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0		-2.0	-2.0		-2.0	-2.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None		Min	Min		Min	Min	
Walk Time (s)	7.0	7.0	7.0	7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0	0	0	0		0	0		0	0	
Act Effct Green (s)	10.3	10.3	10.3	8.2	8.2		15.0	15.0		15.0	15.0	
Actuated g/C Ratio	0.33	0.33	0.33	0.26	0.26		0.47	0.47		0.47	0.47	
v/c Ratio	0.20	0.20	0.08	0.01	0.07		0.06	0.08		0.09	0.23	
Control Delay	10.3	10.3	1.4	12.5	8.1		10.2	9.0		10.0	5.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	10.3	10.3	1.4	12.5	8.1		10.2	9.0		10.0	5.2	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	B	B	A	B	A		B	A		B	A	
Approach Delay		8.8			8.6			9.2			5.8	
Approach LOS		A			A			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 31.6			
Natural Cycle: 75			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.23			
Intersection Signal Delay: 7.4		Intersection LOS: A	
Intersection Capacity Utilization 38.4%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 10: River Rd & Hwy 8 NB Ramp/Stonegate Dr



Intersection	
Int Delay, s/veh	1.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1304	104	0	1691	0	208
Future Vol, veh/h	1304	104	0	1691	0	208
Conflicting Peds, #/hr	0	2	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	4	8	0	5	0	3
Mvmt Flow	1304	104	0	1691	0	208

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	706
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.96
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.33
Pot Cap-1 Maneuver	-	-	0	-	0	376
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	375
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	25.9
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	375	-	-	-
HCM Lane V/C Ratio	0.555	-	-	-
HCM Control Delay (s)	25.9	-	-	-
HCM Lane LOS	D	-	-	-
HCM 95th %tile Q(veh)	3.2	-	-	-

Intersection	
Int Delay, s/veh	17.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	377	296	16	4	125	6	39	18	21	2	11	538
Future Vol, veh/h	377	296	16	4	125	6	39	18	21	2	11	538
Conflicting Peds, #/hr	2	0	0	0	0	2	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	0	-	-	-	-	45	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	4	4	0	0	8	0	3	0	0	0	10	5
Mvmt Flow	377	296	16	4	125	6	39	18	21	2	11	538

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	133	0	0	312	0	0	1200	1199	304	1213	1201	127
Stage 1	-	-	-	-	-	-	1058	1058	-	135	135	-
Stage 2	-	-	-	-	-	-	142	141	-	1078	1066	-
Critical Hdwy	4.14	-	-	4.1	-	-	7.13	6.5	6.2	7.1	6.6	6.25
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.5	-	6.1	5.6	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.5	-	6.1	5.6	-
Follow-up Hdwy	2.236	-	-	2.2	-	-	3.527	4	3.3	3.5	4.09	3.345
Pot Cap-1 Maneuver	1440	-	-	1260	-	-	161	187	740	160	178	915
Stage 1	-	-	-	-	-	-	271	304	-	873	770	-
Stage 2	-	-	-	-	-	-	859	784	-	267	289	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1437	-	-	1260	-	-	49	137	740	112	131	913
Mov Cap-2 Maneuver	-	-	-	-	-	-	49	137	-	112	131	-
Stage 1	-	-	-	-	-	-	200	224	-	643	766	-
Stage 2	-	-	-	-	-	-	347	780	-	176	213	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	4.6	0.2	175.5	14.9
HCM LOS			F	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	82	1437	-	-	1260	-	-	128	913
HCM Lane V/C Ratio	0.951	0.262	-	-	0.003	-	-	0.102	0.589
HCM Control Delay (s)	175.5	8.4	-	-	7.9	0	-	36.3	14.4
HCM Lane LOS	F	A	-	-	A	A	-	E	B
HCM 95th %tile Q(veh)	5.2	1.1	-	-	0	-	-	0.3	4

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	153	0	0	235	0	6
Future Vol, veh/h	153	0	0	235	0	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	153	0	0	235	0	6

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	77
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	-	-	0	-	0	968
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	968
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	8.7
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	968	-	-	-
HCM Lane V/C Ratio	0.006	-	-	-
HCM Control Delay (s)	8.7	-	-	-
HCM Lane LOS	A	-	-	-
HCM 95th %tile Q(veh)	0	-	-	-

Intersection: 1: River Rd & King St

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	T	R	L	T	TR	L	T	TR
Maximum Queue (m)	55.3	70.1	20.5	65.1	92.9	40.6	34.4	32.0	43.0	47.4	49.2	60.6
Average Queue (m)	25.9	38.0	9.4	31.0	46.8	13.0	14.1	7.8	19.7	23.7	13.3	23.7
95th Queue (m)	44.7	63.5	19.0	54.3	76.9	29.4	27.1	20.8	37.3	41.4	31.9	45.9
Link Distance (m)		1068.8			402.4			185.1	185.1		162.1	162.1
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	45.0		45.0	50.0		50.0	75.0			45.0		
Storage Blk Time (%)	2	4		3	5					1	0	
Queuing Penalty (veh)	8	8		20	20					1	0	

Intersection: 3: Fairway Rd & Hwy 8 SB Ramp

Movement	EB	EB	EB	EB	NB	NB	NB	SB	SB	SB	SB	
Directions Served	L	L	R	R	L	T	T	T	T	T	R	
Maximum Queue (m)	124.5	150.4	104.8	69.3	72.6	96.0	90.5	103.8	108.9	96.4	43.5	
Average Queue (m)	78.1	85.6	51.4	34.3	37.8	55.0	55.2	66.5	66.6	55.4	11.2	
95th Queue (m)	116.9	131.0	94.9	65.3	64.1	87.5	89.7	99.6	100.5	87.8	27.5	
Link Distance (m)		382.8	382.8			274.9	274.9	474.0	474.0	474.0		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	75.0			50.0	85.0						75.0	
Storage Blk Time (%)	11	21	6	0	0	1				1		
Queuing Penalty (veh)	41	76	17	1	0	1				2		

Intersection: 5: Cineplex/Fairview Park Mall & Fairway Rd

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	T	R	L	TR	L	L	TR
Maximum Queue (m)	54.1	83.5	81.7	79.1	128.5	130.6	48.3	38.1	75.6	54.9	73.1	71.0
Average Queue (m)	31.7	51.0	51.2	36.9	78.4	81.1	16.0	12.9	33.6	28.8	40.4	28.8
95th Queue (m)	49.9	73.9	74.2	64.9	125.5	128.5	33.7	27.8	62.9	55.4	66.1	55.6
Link Distance (m)		251.1	251.1		183.4	183.4	183.4	128.5	128.5		136.6	136.6
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	40.0			130.0						40.0		
Storage Blk Time (%)	5	21			0					3	16	
Queuing Penalty (veh)	24	39			0					4	22	

Intersection: 6: Wilson Ave & Fairway Rd

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	TR	L	T	T	R	L	T	R	L	T
Maximum Queue (m)	65.4	108.4	106.6	107.9	132.2	135.6	55.0	82.8	116.8	53.8	54.6	102.4
Average Queue (m)	39.6	70.8	66.5	58.4	65.0	71.2	34.7	23.7	63.8	22.4	36.2	34.2
95th Queue (m)	59.6	99.6	97.9	92.6	105.1	113.8	69.1	54.7	102.2	42.7	58.4	81.0
Link Distance (m)		436.6	436.6		251.1	251.1			283.3	283.3		306.3
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	120.0			160.0			30.0	95.0			45.0	
Storage Blk Time (%)		0			0	49	2	0	1		12	2
Queuing Penalty (veh)		0			0	75	9	0	1		37	6

Intersection: 6: Wilson Ave & Fairway Rd

Movement	SB
Directions Served	R
Maximum Queue (m)	50.2
Average Queue (m)	15.1
95th Queue (m)	40.4
Link Distance (m)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	45.0
Storage Blk Time (%)	0
Queuing Penalty (veh)	1

Intersection: 10: River Rd & Hwy 8 NB Ramp/Stonegate Dr

Movement	EB	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB	
Directions Served	L	LT	R	L	TR	L	T	TR	L	T	TR	
Maximum Queue (m)	25.0	36.8	14.9	9.5	15.3	15.5	18.8	18.8	20.4	23.2	35.1	
Average Queue (m)	8.6	16.2	6.7	1.3	5.4	4.8	5.5	5.6	8.1	9.1	16.5	
95th Queue (m)	18.5	28.1	13.7	6.2	13.1	12.4	14.1	14.1	17.4	19.3	27.7	
Link Distance (m)		217.2			139.9		199.5	199.5		185.1	185.1	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	140.0		140.0	15.0		90.0			45.0			
Storage Blk Time (%)				0	1							
Queuing Penalty (veh)				0	0							

Zone Summary

Zone wide Queuing Penalty: 415

Intersection: 2: Stonegate Dr & King St

Movement
Directions Served
Maximum Queue (m)
Average Queue (m)
95th Queue (m)
Link Distance (m)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (m)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 4: Wabanaki Dr & Fairway Rd

Movement	EB	EB	WB	WB	NB
Directions Served	T	TR	T	T	R
Maximum Queue (m)	5.0	7.9	1.7	6.4	61.1
Average Queue (m)	0.2	0.3	0.1	0.2	27.4
95th Queue (m)	2.1	3.5	1.2	3.2	51.0
Link Distance (m)	183.4	183.4	274.9	274.9	236.0
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (m)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 9: Wilson Ave & Wabanaki Dr

Movement	EB	WB	NB	SB
Directions Served	L	LT	LTR	LT
Maximum Queue (m)	25.1	6.7	23.7	13.2
Average Queue (m)	9.1	0.3	9.8	2.6
95th Queue (m)	20.2	3.1	18.0	9.5
Link Distance (m)	638.8	1016.3	120.7	264.2
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 11: Hidden Valley Rd & River Rd

Movement	NB
Directions Served	R
Maximum Queue (m)	8.3
Average Queue (m)	1.7
95th Queue (m)	7.1
Link Distance (m)	192.8
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 12: River Rd & Hwy 8 SB Ramp

Movement	EB
Directions Served	L
Maximum Queue (m)	15.3
Average Queue (m)	5.2
95th Queue (m)	13.4
Link Distance (m)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	90.0
Storage Blk Time (%)	
Queuing Penalty (veh)	

Zone Summary

Zone wide Queuing Penalty: 0

Capacity Analysis
2043 Background Conditions

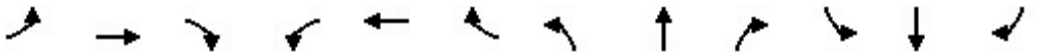
Synchro Analysis Summary
2043 Background Conditions

Intersection	Approach - Movement	Storage Length (m)	AM Peak				PM Peak			
			LOS	V/C	Delay (s)	Queue (m)	LOS	V/C	Delay (s)	Queue (m)
King St & River Rd	**Intersection**	**-**	**B**	**-**	**16.5**	**-**	**B**	**-**	**17.4**	**-**
	EB - L	45	B	0.13	14.9	26	B	0.36	19.4	45
	EB - T	-	B	0.20	14.3	35	B	0.38	16.8	61
	EB - R	45	A	0.37	5.8	29	A	0.21	4.5	20
	WB - L	50	B	0.30	16.1	41	B	0.39	18.4	49
	WB - T	-	B	0.18	14.0	33	B	0.39	16.8	65
	WB - R	50	A	0.14	3.1	18	A	0.27	2.6	23
	NB - L	75	C	0.17	21.1	15	C	0.44	28.2	32
	NB - TR	-	B	0.23	11.7	29	B	0.33	11.1	43
	SB - L	45	C	0.59	34.2	32	D	0.73	45.2	39
	SB - TR	-	C	0.30	23.0	45	B	0.29	19.0	41
King St & Stonegate Dr	**Intersection**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
	EB - TR*	-	-	-	-	0	-	-	-	0
	WB - T*	-	-	-	-	0	-	-	-	0
Fairway Rd Highway 8 Ramps	**Intersection**	**-**	**B**	**-**	**13.7**	**-**	**C**	**-**	**23.1**	**-**
	EB - L	75**	C	0.48	32.0	54	D	0.76	39.0	**132**
	EB - R	50**	B	0.36	19.6	43	B	0.49	17.6	**77**
	NB - L	85	A	0.42	8.4	45	C	0.70	30.0	61
	NB - T	-	A	0.30	6.2	48	B	0.56	13.4	89
	SB - T	-	B	0.34	14.4	66	C	0.61	27.1	100
	SB - R	75	A	0.17	0.9	21	A	0.14	1.0	34
Fairway Rd & Wabanaki Dr	**Intersection**	**-**	**A**	**-**	**1.1**	**-**	**A**	**-**	**1.6**	**-**
	EB - TR*	-	-	-	-	3	-	-	-	1
	WB - T*	-	-	-	-	1	-	-	-	4
	NB - R	-	B	0.28	13.5	26	D	0.55	25.8	45
Fairway Rd & Fairview Park Mall / Cineplex	**Intersection**	**-**	**B**	**-**	**11.1**	**-**	**C**	**-**	**24.9**	**-**
	EB - L	40	A	0.08	5.1	15	C	0.65	33.7	**55**
	EB - TR	-	A	0.30	8.1	30	B	0.59	16.3	73
	WB - L	130	A	0.14	6.2	19	C	0.70	23.8	59
	WB - T	-	B	0.35	10.3	55	C	0.68	25.6	131
	WB - R	-	A	0.07	0.2	16	A	0.25	3.6	42
	NB - L	-	D	0.04	41.5	7	E	0.47	58.7	31
	NB - TR	-	C	0.13	25.3	14	D	0.70	46.7	60
	SB - L	40	D	0.34	43.9	35	D	0.61	54.4	**70**
	SB - TR	-	B	0.09	15.0	13	B	0.36	10.2	52
Fairway Rd & Wilson Ave	**Intersection**	**-**	**B**	**-**	**17.5**	**-**	**C**	**-**	**32.5**	**-**
	EB - L	120	A	0.19	6.8	29	C	0.66	28.0	64
	EB - TR	-	B	0.32	13.7	55	C	0.63	34.1	95
	WB - L	160	B	0.40	11.8	49	D	0.74	46.2	92
	WB - T	-	A	0.28	7.6	46	C	0.66	28.0	121
	WB - R	30	A	0.10	1.4	21	A	0.27	8.9	**68**
	NB - L	95	D	0.28	35.3	30	C	0.37	28.9	45
	NB - T	-	D	0.51	39.5	52	D	0.76	54.9	94
	NB - R	-	A	0.19	4.5	20	B	0.41	14.5	43
	SB - L	45	E	0.74	61.4	44	D	0.82	51.8	**57**
	SB - T	-	D	0.41	36.6	40	D	0.34	35.1	83
	SB - R	45	B	0.45	11.6	17	A	0.45	9.5	39
Wilson Ave & Wabanaki Dr	**Intersection**	**-**	**A**	**-**	**6.0**	**-**	**C**	**-**	**16.8**	**-**
	EB - L	-	A	0.18	8.0	15	A	0.26	8.4	21
	EB - TR*	-	-	-	-	4	-	-	-	2
	WB - LT	-	A	0.01	8.0	5	A	0.00	7.9	2
	WB - R*	45	-	-	-	1	-	-	-	0
	NB - LTR	-	D	0.05	27.1	8	**F**	**0.93**	167.7	20
	SB - LT	-	D	0.17	27.2	17	E	0.10	36.0	10
	SB - R	-	B	0.32	10.4	0	B	0.59	14.4	2
River Rd Ex & Highway 8 NB Ramps / Stonegate Dr	**Intersection**	**-**	**A**	**-**	**6.0**	**-**	**A**	**-**	**7.4**	
	EB - L	140*	B	0.12	11.7	11	B	0.20	10.3	18
	EB - T	-	B	0.13	11.7	20	B	0.20	10.3	27
	EB - R	140	A	0.09	1.4	14	A	0.08	1.4	13
	WB - L	15	B	0.01	12.5	5	B	0.01	12.5	4
	WB - TR	-	A	0.07	9.1	13	A	0.07	8.1	13
	NB - L	90	A	0.07	9.0	13	B	0.06	10.2	13
	NB - TR	-	A	0.05	7.6	10	A	0.08	9.0	13
	SB - L	45	A	0.02	8.5	6	B	0.09	10.0	16
	ed used for LOS	-	A	0.27	4.3	31	A	0.23	5.2	24
River Rd Ex & Hidden Valley Dr	**Intersection**	**-**	**A**	**-**	**0.2**	**-**	**A**	**-**	**0.1**	
	EB - TR*	-	-	-	-	0	-	-	-	0
	WB - T*	-	-	-	-	0	-	-	-	0
	NB - R	-	A	0.01	8.6	7	A	0.01	8.7	7
River Rd Ex & Highway 8 SB Ramp	**Intersection**	**-**	**A**	**-**	**1.9**	**-**	**A**	**-**	**1.9**	
	EB - L	90	A	0.10	8.1	16	A	0.09	8.0	14
	EB - T*	-	-	-	-	0	-	-	-	0
	WB - TR*	-	-	-	-	2	-	-	-	0

Notes: **Bold Red** used for LOS F, V/C ≥ 0.85, and queueing greater than available storage

* = movement operates under free-flow movement

** = Storage applies to one of two lanes used for this movement while the second lane has no associated storage length

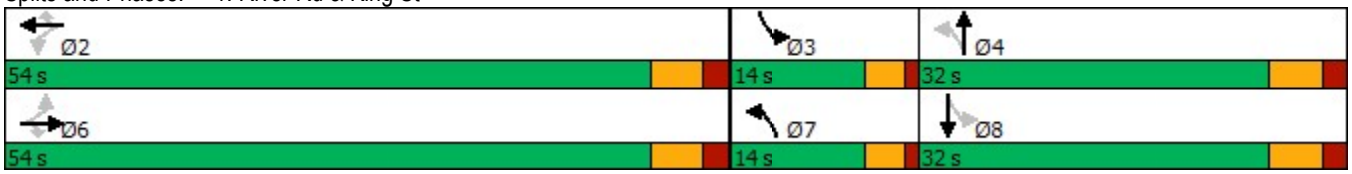


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	72	160	134	178	165	105	35	62	122	143	218	84
Future Volume (vph)	72	160	134	178	165	105	35	62	122	143	218	84
Ideal Flow (vphpl)	1775	1650	1000	1775	1900	1750	1000	1550	1000	1000	1650	1750
Storage Length (m)	45.0		45.0	50.0		50.0	75.0		0.0	45.0		0.0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (m)	60.0			70.0			40.0			60.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	1.00					0.99	1.00	0.98		1.00	0.99	
Frt			0.850			0.850		0.901			0.958	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1637	1587	594	1686	1792	1390	888	2560	0	922	2972	0
Flt Permitted	0.637			0.643			0.568			0.550		
Satd. Flow (perm)	1097	1587	594	1141	1792	1373	528	2560	0	532	2972	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			134			105		122			56	
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		1100.5			425.6			212.4			178.4	
Travel Time (s)		66.0			25.5			12.7			10.7	
Confl. Peds. (#/hr)	1					1	4		2	2		4
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	3%	4%	43%	0%	6%	7%	7%	2%	2%	3%	0%	1%
Adj. Flow (vph)	72	160	134	178	165	105	35	62	122	143	218	84
Shared Lane Traffic (%)												
Lane Group Flow (vph)	72	160	134	178	165	105	35	184	0	143	302	0
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		6			2		7	4		3	8	
Permitted Phases	6		6	2		2	4			8		
Detector Phase	6	6	6	2	2	2	7	4		3	8	
Switch Phase												
Minimum Initial (s)	48.0	48.0	48.0	48.0	48.0	48.0	5.0	26.0		5.0	26.0	
Minimum Split (s)	54.0	54.0	54.0	54.0	54.0	54.0	11.0	32.0		11.0	32.0	
Total Split (s)	54.0	54.0	54.0	54.0	54.0	54.0	14.0	32.0		14.0	32.0	
Total Split (%)	54.0%	54.0%	54.0%	54.0%	54.0%	54.0%	14.0%	32.0%		14.0%	32.0%	
Maximum Green (s)	48.0	48.0	48.0	48.0	48.0	48.0	10.0	26.0		10.0	26.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	3.0	4.0		3.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	1.0	2.0		1.0	2.0	
Lost Time Adjust (s)	0.0	-2.0	0.0	-2.0	-2.0	-2.0	0.0	-2.0		0.0	-2.0	
Total Lost Time (s)	6.0	4.0	6.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	Max	Max	Max	Max	Max	Max	None	Max		None	Max	
Walk Time (s)	35.0	35.0	35.0	35.0	35.0	35.0		15.0			15.0	
Flash Dont Walk (s)	16.0	16.0	16.0	16.0	16.0	16.0		11.0			11.0	
Pedestrian Calls (#/hr)	0	0	0	0	0	0		0			0	
Act Effct Green (s)	51.0	53.0	51.0	53.0	53.0	53.0	35.9	28.0		39.9	33.9	
Actuated g/C Ratio	0.50	0.52	0.50	0.52	0.52	0.52	0.35	0.27		0.39	0.33	
v/c Ratio	0.13	0.20	0.37	0.30	0.18	0.14	0.17	0.23		0.59	0.30	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay	14.9	14.3	5.8	16.1	14.0	3.1	21.1	11.7		34.2	23.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	14.9	14.3	5.8	16.1	14.0	3.1	21.1	11.7		34.2	23.0	
LOS	B	B	A	B	B	A	C	B		C	C	
Approach Delay		11.3			12.3			13.2			26.6	
Approach LOS		B			B			B			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 102.8			
Natural Cycle: 100			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.59			
Intersection Signal Delay: 16.5		Intersection LOS: B	
Intersection Capacity Utilization 132.6%		ICU Level of Service H	
Analysis Period (min) 15			

Splits and Phases: 1: River Rd & King St

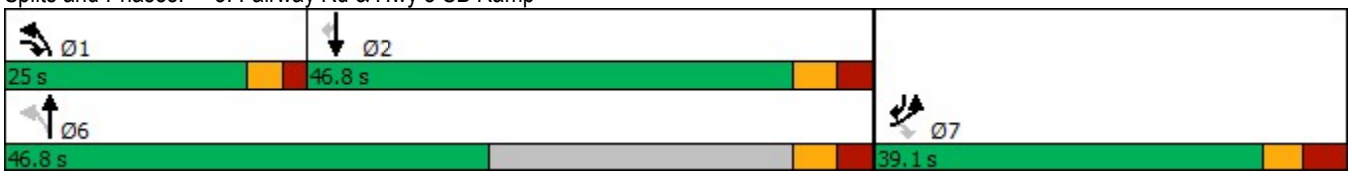


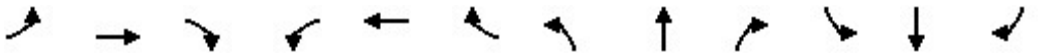
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	325	271	181	658	808	174
Future Volume (vph)	325	271	181	658	808	174
Ideal Flow (vphpl)	1775	1750	1775	1900	1900	1750
Lane Width (m)	3.5	3.5	3.5	3.5	3.5	3.5
Storage Length (m)	75.0	50.0	85.0			75.0
Storage Lanes	1	1	1			1
Taper Length (m)	60.0		75.0			
Lane Util. Factor	0.97	0.88	1.00	0.95	0.91	1.00
Ped Bike Factor		0.99	1.00			0.97
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	3052	2442	1476	3216	4706	1401
Flt Permitted	0.950		0.272			
Satd. Flow (perm)	3052	2408	422	3216	4706	1363
Right Turn on Red		No				Yes
Satd. Flow (RTOR)						174
Link Speed (k/h)	60			60	60	
Link Distance (m)	404.4			302.0	498.0	
Travel Time (s)	24.3			18.1	29.9	
Confl. Peds. (#/hr)		2	4			4
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	6%	6%	13%	11%	9%	5%
Adj. Flow (vph)	325	271	181	658	808	174
Shared Lane Traffic (%)						
Lane Group Flow (vph)	325	271	181	658	808	174
Turn Type	Prot	pm+ov	pm+pt	NA	NA	pm+ov
Protected Phases	7	1	1	6	2	7
Permitted Phases		7	6			2
Detector Phase	7	1	1	6	2	7
Switch Phase						
Minimum Initial (s)	10.0	8.0	8.0	40.0	40.0	10.0
Minimum Split (s)	17.1	13.0	13.0	46.8	46.8	17.1
Total Split (s)	39.1	25.0	25.0	46.8	46.8	39.1
Total Split (%)	35.3%	22.5%	22.5%	42.2%	42.2%	35.3%
Maximum Green (s)	32.0	20.0	20.0	40.0	40.0	32.0
Yellow Time (s)	3.3	3.0	3.0	3.7	3.7	3.3
All-Red Time (s)	3.8	2.0	2.0	3.1	3.1	3.8
Lost Time Adjust (s)	-3.1	1.0	-1.0	-2.8	-2.8	-3.1
Total Lost Time (s)	4.0	6.0	4.0	4.0	4.0	4.0
Lead/Lag		Lead	Lead		Lag	
Lead-Lag Optimize?						
Vehicle Extension (s)	4.0	4.0	4.0	3.0	3.0	4.0
Recall Mode	None	None	None	Max	Max	None
Walk Time (s)	9.0			10.0	10.0	9.0
Flash Dont Walk (s)	23.0			30.0	30.0	23.0
Pedestrian Calls (#/hr)	0			0	0	0
Act Effct Green (s)	19.0	27.0	59.0	59.0	43.0	62.1
Actuated g/C Ratio	0.22	0.31	0.69	0.69	0.50	0.72

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
v/c Ratio	0.48	0.36	0.42	0.30	0.34	0.17
Control Delay	32.0	19.6	8.4	6.2	14.4	0.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	32.0	19.6	8.4	6.2	14.4	0.9
LOS	C	B	A	A	B	A
Approach Delay	26.3			6.6	12.0	
Approach LOS	C			A	B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110.9			
Actuated Cycle Length: 86.1			
Natural Cycle: 80			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.48			
Intersection Signal Delay: 13.7		Intersection LOS: B	
Intersection Capacity Utilization 65.1%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 3: Fairway Rd & Hwy 8 SB Ramp



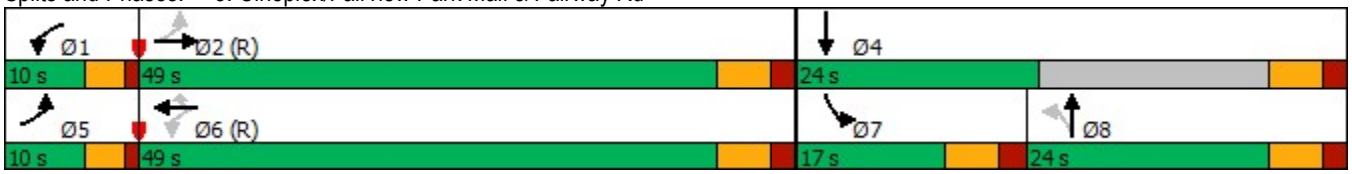


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	37	672	11	80	804	71	6	8	16	104	6	19
Future Volume (vph)	37	672	11	80	804	71	6	8	16	104	6	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	40.0		0.0	130.0		0.0	0.0		0.0	40.0		0.0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (m)	45.0			40.0			7.5			15.0		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	0.97	1.00	1.00
Frt		0.998				0.850		0.900			0.886	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1703	3371	0	1787	3312	1302	1805	1634	0	2779	1388	0
Flt Permitted	0.317			0.344			0.741			0.950		
Satd. Flow (perm)	568	3371	0	647	3312	1302	1408	1634	0	2779	1388	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2				142		16			19	
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		276.4			205.3			142.3			155.5	
Travel Time (s)		16.6			12.3			10.2			11.2	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	6%	7%	0%	1%	9%	24%	0%	0%	7%	26%	0%	28%
Adj. Flow (vph)	37	672	11	80	804	71	6	8	16	104	6	19
Shared Lane Traffic (%)												
Lane Group Flow (vph)	37	683	0	80	804	71	6	24	0	104	25	0
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Perm	NA		Prot	NA	
Protected Phases	5	2		1	6			8		7	4	
Permitted Phases	2			6		6	8					
Detector Phase	5	2		1	6	6	8	8		7	4	
Switch Phase												
Minimum Initial (s)	5.0	43.0		5.0	43.0	43.0	8.0	8.0		5.0	8.0	
Minimum Split (s)	9.0	49.0		9.0	49.0	49.0	14.0	14.0		11.0	14.0	
Total Split (s)	10.0	49.0		10.0	49.0	49.0	24.0	24.0		17.0	24.0	
Total Split (%)	10.0%	49.0%		10.0%	49.0%	49.0%	24.0%	24.0%		17.0%	24.0%	
Maximum Green (s)	6.0	43.0		6.0	43.0	43.0	18.0	18.0		11.0	18.0	
Yellow Time (s)	3.0	4.0		3.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	2.0		1.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	-2.0		0.0	-2.0	-2.0	-2.0	-2.0		-2.0	-2.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lag	Lag		Lead		
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	C-Max		None	C-Max	C-Max	None	None		None	None	
Walk Time (s)		22.0			22.0	22.0	12.0	12.0			12.0	
Flash Dont Walk (s)		21.0			21.0	21.0	15.0	15.0			15.0	
Pedestrian Calls (#/hr)		0			0	0	0	0			0	
Act Effct Green (s)	71.2	66.8		73.3	69.5	69.5	10.0	10.0		10.9	19.7	
Actuated g/C Ratio	0.71	0.67		0.73	0.70	0.70	0.10	0.10		0.11	0.20	
v/c Ratio	0.08	0.30		0.14	0.35	0.07	0.04	0.13		0.34	0.09	
Control Delay	5.1	8.1		6.2	10.3	0.2	41.5	25.3		43.9	15.0	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay	5.1	8.1		6.2	10.3	0.2	41.5	25.3		43.9	15.0	
LOS	A	A		A	B	A	D	C		D	B	
Approach Delay		8.0			9.2			28.5			38.3	
Approach LOS		A			A			C			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 26 (26%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 85			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.35			
Intersection Signal Delay: 11.1		Intersection LOS: B	
Intersection Capacity Utilization 59.9%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 5: Cineplex/Fairview Park Mall & Fairway Rd

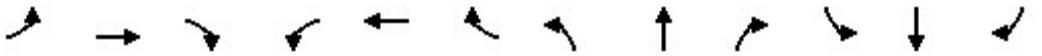


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	99	478	77	212	571	80	49	176	81	128	137	113
Future Volume (vph)	99	478	77	212	571	80	49	176	81	128	137	113
Ideal Flow (vphpl)	1775	1775	1000	1775	1900	1750	1775	1900	1750	1775	1775	1000
Lane Width (m)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Storage Length (m)	120.0		0.0	160.0		30.0	95.0		0.0	45.0		45.0
Storage Lanes	1		0	1		1	1		1	1		1
Taper Length (m)	60.0			40.0			7.5			10.0		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00	1.00		1.00		0.97	1.00		0.98	1.00		0.98
Frt		0.979				0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1516	3061	0	1489	3368	1302	1401	1693	1196	1635	1672	816
Flt Permitted	0.437			0.379			0.584			0.497		
Satd. Flow (perm)	695	3061	0	593	3368	1268	857	1693	1177	853	1672	802
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		22				78			81			113
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		450.5			276.4			297.0			324.1	
Travel Time (s)		27.0			16.6			21.4			23.3	
Confl. Peds. (#/hr)	5		3	3		5	6		4	4		6
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	10%	7%	3%	12%	6%	13%	19%	11%	23%	2%	5%	3%
Adj. Flow (vph)	99	478	77	212	571	80	49	176	81	128	137	113
Shared Lane Traffic (%)												
Lane Group Flow (vph)	99	555	0	212	571	80	49	176	81	128	137	113
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Perm	NA	pm+ov	Perm	NA	Perm
Protected Phases	1	6		5	2			4	5		8	
Permitted Phases	6			2		2	4		4	8		8
Detector Phase	1	6		5	2	2	4	4	5	8	8	8
Switch Phase												
Minimum Initial (s)	5.0	39.0		5.0	39.0	39.0	8.0	8.0	5.0	8.0	8.0	8.0
Minimum Split (s)	9.0	45.0		9.0	45.0	45.0	14.0	14.0	9.0	14.0	14.0	14.0
Total Split (s)	15.0	45.0		16.0	45.0	45.0	39.0	39.0	16.0	39.0	39.0	39.0
Total Split (%)	15.0%	45.0%		16.0%	45.0%	45.0%	39.0%	39.0%	16.0%	39.0%	39.0%	39.0%
Maximum Green (s)	11.0	39.0		12.0	39.0	39.0	33.0	33.0	12.0	33.0	33.0	33.0
Yellow Time (s)	3.0	4.0		3.0	4.0	4.0	4.0	4.0	3.0	4.0	4.0	4.0
All-Red Time (s)	1.0	2.0		1.0	2.0	2.0	2.0	2.0	1.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	-2.0		0.0	-2.0	-2.0	-2.0	-2.0	0.0	-2.0	-2.0	-2.0
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag		Lead	Lag	Lag			Lead			
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	3.0		4.0	3.0	3.0	3.0	3.0	4.0	3.0	3.0	3.0
Recall Mode	None	C-Max		None	C-Max	C-Max	None	None	None	None	None	None
Walk Time (s)		22.0			22.0	22.0	7.0	7.0		7.0	7.0	7.0
Flash Dont Walk (s)		17.0			17.0	17.0	25.0	25.0		25.0	25.0	25.0
Pedestrian Calls (#/hr)		0			0	0	0	0		0	0	0
Act Effct Green (s)	64.8	56.1		71.0	61.2	61.2	20.2	20.2	31.9	20.2	20.2	20.2
Actuated g/C Ratio	0.65	0.56		0.71	0.61	0.61	0.20	0.20	0.32	0.20	0.20	0.20

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.19	0.32		0.40	0.28	0.10	0.28	0.51	0.19	0.74	0.41	0.45
Control Delay	6.8	13.7		11.8	7.6	1.4	35.3	39.5	4.5	61.4	36.6	11.6
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	6.8	13.7		11.8	7.6	1.4	35.3	39.5	4.5	61.4	36.6	11.6
LOS	A	B		B	A	A	D	D	A	E	D	B
Approach Delay		12.6			8.1			29.6			37.5	
Approach LOS		B			A			C			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 25 (25%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.74			
Intersection Signal Delay: 17.5		Intersection LOS: B	
Intersection Capacity Utilization 77.4%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 6: Wilson Ave & Fairway Rd

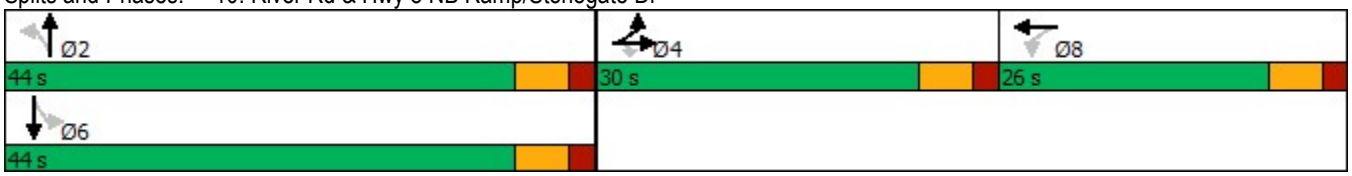


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	111	1	43	4	10	17	33	89	2	14	242	275
Future Volume (vph)	111	1	43	4	10	17	33	89	2	14	242	275
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	140.0		140.0	15.0		0.0	90.0		0.0	45.0		0.0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (m)	70.0			15.0			70.0			30.0		
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850		0.906			0.997			0.920	
Flt Protected	0.950	0.953		0.950			0.950			0.950		
Satd. Flow (prot)	1681	1686	1583	1770	1688	0	1770	3529	0	1770	3256	0
Flt Permitted	0.950	0.953					0.460			0.695		
Satd. Flow (perm)	1681	1686	1583	1863	1688	0	857	3529	0	1295	3256	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			98		17			2			275	
Link Speed (k/h)		50			40			60			60	
Link Distance (m)		231.4			154.4			218.6			212.4	
Travel Time (s)		16.7			13.9			13.1			12.7	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	111	1	43	4	10	17	33	89	2	14	242	275
Shared Lane Traffic (%)	50%											
Lane Group Flow (vph)	55	57	43	4	27	0	33	91	0	14	517	0
Turn Type	Split	NA	Perm	Perm	NA		Perm	NA		Perm	NA	
Protected Phases	4	4			8			2			6	
Permitted Phases			4	8			2			6		
Detector Phase	4	4	4	8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	24.0	24.0	24.0	24.0	24.0		24.0	24.0		24.0	24.0	
Total Split (s)	30.0	30.0	30.0	26.0	26.0		44.0	44.0		44.0	44.0	
Total Split (%)	30.0%	30.0%	30.0%	26.0%	26.0%		44.0%	44.0%		44.0%	44.0%	
Maximum Green (s)	24.0	24.0	24.0	20.0	20.0		38.0	38.0		38.0	38.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0		-2.0	-2.0		-2.0	-2.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None		Min	Min		Min	Min	
Walk Time (s)	7.0	7.0	7.0	7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0	0	0	0		0	0		0	0	
Act Effct Green (s)	9.2	9.2	9.2	8.2	8.2		19.0	19.0		19.0	19.0	
Actuated g/C Ratio	0.27	0.27	0.27	0.24	0.24		0.55	0.55		0.55	0.55	
v/c Ratio	0.12	0.13	0.09	0.01	0.07		0.07	0.05		0.02	0.27	
Control Delay	11.7	11.7	1.4	12.5	9.1		9.0	7.6		8.5	4.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	11.7	11.7	1.4	12.5	9.1		9.0	7.6		8.5	4.3	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	B	B	A	B	A		A	A		A	A	
Approach Delay		8.9			9.5			7.9			4.4	
Approach LOS		A			A			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 34.5			
Natural Cycle: 75			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.27			
Intersection Signal Delay: 6.0		Intersection LOS: A	
Intersection Capacity Utilization 39.5%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 10: River Rd & Hwy 8 NB Ramp/Stonegate Dr



Intersection	
Int Delay, s/veh	1.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	687	103	0	1024	0	164
Future Vol, veh/h	687	103	0	1024	0	164
Conflicting Peds, #/hr	0	1	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	11	5	0	9	0	8
Mvmt Flow	687	103	0	1024	0	164

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	396
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.06
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.38
Pot Cap-1 Maneuver	-	-	0	-	0	587
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	586
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	13.5
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	586	-	-	-
HCM Lane V/C Ratio	0.28	-	-	-
HCM Control Delay (s)	13.5	-	-	-
HCM Lane LOS	B	-	-	-
HCM 95th %tile Q(veh)	1.1	-	-	-

Intersection	
Int Delay, s/veh	6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	256	326	38	11	74	22	4	3	2	1	32	312
Future Vol, veh/h	256	326	38	11	74	22	4	3	2	1	32	312
Conflicting Peds, #/hr	1	0	4	4	0	1	0	0	3	3	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	0	-	-	-	-	45	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	7	3	11	0	14	10	0	0	50	0	13	6
Mvmt Flow	256	326	38	11	74	22	4	3	2	1	32	312

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	97	0	0	368	0	0	984	980	352	960	977	75
Stage 1	-	-	-	-	-	-	861	861	-	97	97	-
Stage 2	-	-	-	-	-	-	123	119	-	863	880	-
Critical Hdwy	4.17	-	-	4.1	-	-	7.1	6.5	6.7	7.1	6.63	6.26
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.63	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.63	-
Follow-up Hdwy	2.263	-	-	2.2	-	-	3.5	4	3.75	3.5	4.117	3.354
Pot Cap-1 Maneuver	1466	-	-	1202	-	-	229	252	596	238	240	975
Stage 1	-	-	-	-	-	-	353	375	-	914	794	-
Stage 2	-	-	-	-	-	-	886	801	-	352	350	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1465	-	-	1198	-	-	117	205	592	201	195	974
Mov Cap-2 Maneuver	-	-	-	-	-	-	117	205	-	201	195	-
Stage 1	-	-	-	-	-	-	290	308	-	753	785	-
Stage 2	-	-	-	-	-	-	572	792	-	286	288	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	3.3	0.8	27.1	12
HCM LOS			D	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	172	1465	-	-	1198	-	-	195	974
HCM Lane V/C Ratio	0.052	0.175	-	-	0.009	-	-	0.169	0.32
HCM Control Delay (s)	27.1	8	-	-	8	0	-	27.2	10.4
HCM Lane LOS	D	A	-	-	A	A	-	D	B
HCM 95th %tile Q(veh)	0.2	0.6	-	-	0	-	-	0.6	1.4

Intersection	
Int Delay, s/veh	0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	114	0	0	289	0	10
Future Vol, veh/h	114	0	0	289	0	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	114	0	0	289	0	10

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	57
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	-	-	0	-	0	997
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	997
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	8.6
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	997	-	-	-
HCM Lane V/C Ratio	0.01	-	-	-
HCM Control Delay (s)	8.6	-	-	-
HCM Lane LOS	A	-	-	-
HCM 95th %tile Q(veh)	0	-	-	-

Intersection: 1: River Rd & King St

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	T	R	L	T	TR	L	T	TR
Maximum Queue (m)	31.1	44.3	31.8	48.6	38.5	24.5	23.8	22.2	38.9	38.3	34.2	49.2
Average Queue (m)	11.7	17.6	15.3	23.8	16.9	8.2	5.2	4.5	13.5	17.4	11.2	23.4
95th Queue (m)	25.6	35.3	28.9	41.1	32.8	18.0	14.5	13.8	29.4	31.5	24.5	44.6
Link Distance (m)		1068.8			402.4			185.1	185.1		162.1	162.1
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	45.0		45.0	50.0		50.0	75.0			45.0		
Storage Blk Time (%)		0		0	0					0	0	
Queuing Penalty (veh)		0		1	0					0	0	

Intersection: 3: Fairway Rd & Hwy 8 SB Ramp

Movement	EB	EB	EB	EB	NB	NB	NB	SB	SB	SB	SB	
Directions Served	L	L	R	R	L	T	T	T	T	T	R	
Maximum Queue (m)	51.8	61.8	50.4	41.5	51.0	57.1	56.3	71.2	70.4	59.2	26.3	
Average Queue (m)	23.6	34.2	25.4	10.9	26.1	26.2	27.0	39.4	38.8	30.5	10.4	
95th Queue (m)	46.5	54.1	42.8	28.7	45.0	48.3	48.0	65.8	65.0	53.0	21.3	
Link Distance (m)		382.8	382.8			274.9	274.9	474.0	474.0	474.0		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	75.0			50.0	85.0						75.0	
Storage Blk Time (%)		0	0	0						0		
Queuing Penalty (veh)		0	0	0						0		

Intersection: 5: Cineplex/Fairview Park Mall & Fairway Rd

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	T	R	L	TR	L	L	TR
Maximum Queue (m)	16.9	36.0	36.4	22.5	70.4	67.2	22.4	11.2	18.7	32.5	42.3	16.3
Average Queue (m)	5.8	14.3	11.9	8.9	21.3	24.2	5.0	1.7	5.1	10.0	19.5	4.9
95th Queue (m)	15.0	30.4	28.8	18.5	53.8	55.2	15.5	7.4	14.1	25.5	35.4	13.1
Link Distance (m)		251.1	251.1		183.4	183.4	183.4	128.5	128.5		136.6	136.6
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	40.0			130.0						40.0		
Storage Blk Time (%)		0								0	1	
Queuing Penalty (veh)		0								0	0	

Intersection: 6: Wilson Ave & Fairway Rd

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	TR	L	T	T	R	L	T	R	L	T
Maximum Queue (m)	34.9	63.8	60.4	61.6	52.4	59.5	41.8	35.3	68.8	23.0	49.4	49.8
Average Queue (m)	14.8	32.4	27.9	26.4	19.0	22.4	6.4	14.2	27.6	9.9	24.8	21.3
95th Queue (m)	29.1	55.0	50.3	48.5	41.2	45.6	21.0	29.8	52.0	20.4	44.1	39.5
Link Distance (m)		436.6	436.6		251.1	251.1			283.3	283.3		306.3
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	120.0			160.0			30.0	95.0			45.0	
Storage Blk Time (%)						5	0		0		1	1
Queuing Penalty (veh)						4	0		0		4	1

Intersection: 6: Wilson Ave & Fairway Rd

Movement	SB
Directions Served	R
Maximum Queue (m)	20.2
Average Queue (m)	8.5
95th Queue (m)	16.5
Link Distance (m)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	45.0
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 10: River Rd & Hwy 8 NB Ramp/Stonegate Dr

Movement	EB	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB	
Directions Served	L	LT	R	L	TR	L	T	TR	L	T	TR	
Maximum Queue (m)	10.3	22.0	17.2	8.6	15.2	14.7	14.0	14.4	8.8	22.6	40.7	
Average Queue (m)	4.0	11.6	6.4	0.7	5.3	5.0	2.3	3.0	1.1	8.6	16.3	
95th Queue (m)	11.4	20.4	14.4	4.6	13.2	12.8	8.6	9.8	5.9	18.2	30.8	
Link Distance (m)		217.2			139.9		199.5	199.5		185.1	185.1	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	140.0		140.0	15.0		90.0			45.0			
Storage Blk Time (%)					0							
Queuing Penalty (veh)					0							

Zone Summary

Zone wide Queuing Penalty: 11

Intersection: 2: Stonegate Dr & King St

Movement
Directions Served
Maximum Queue (m)
Average Queue (m)
95th Queue (m)
Link Distance (m)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (m)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 4: Wabanaki Dr & Fairway Rd

Movement	EB	WB	NB
Directions Served	TR	T	R
Maximum Queue (m)	6.0	1.7	29.5
Average Queue (m)	0.2	0.1	15.2
95th Queue (m)	2.7	1.2	25.8
Link Distance (m)	183.4	274.9	236.0
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (m)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 9: Wilson Ave & Wabanaki Dr

Movement	EB	EB	WB	WB	NB	SB
Directions Served	L	TR	LT	R	LTR	LT
Maximum Queue (m)	19.1	8.1	10.6	1.4	10.8	23.6
Average Queue (m)	5.5	0.3	0.8	0.0	2.0	6.9
95th Queue (m)	15.1	3.7	5.2	1.0	8.2	17.1
Link Distance (m)	638.8	638.8	1016.3		120.7	264.2
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (m)				45.0		
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 11: Hidden Valley Rd & River Rd

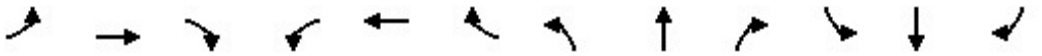
Movement	NB
Directions Served	R
Maximum Queue (m)	8.2
Average Queue (m)	1.7
95th Queue (m)	7.2
Link Distance (m)	192.8
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 12: River Rd & Hwy 8 SB Ramp

Movement	EB	WB
Directions Served	L	TR
Maximum Queue (m)	20.4	5.3
Average Queue (m)	7.5	0.3
95th Queue (m)	16.4	2.4
Link Distance (m)		293.2
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)	90.0	
Storage Blk Time (%)		
Queuing Penalty (veh)		

Zone Summary

Zone wide Queuing Penalty: 0

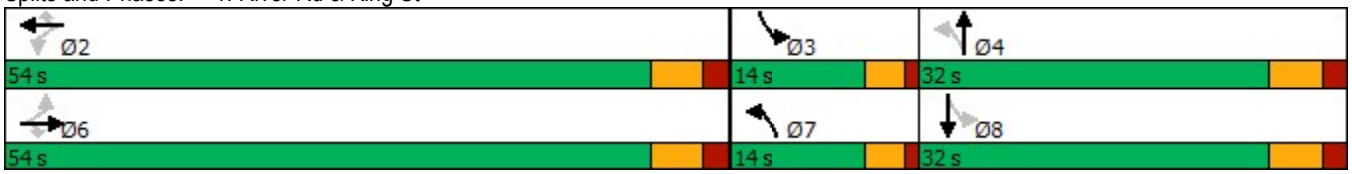


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	138	317	84	174	377	230	98	85	186	166	172	103
Future Volume (vph)	138	317	84	174	377	230	98	85	186	166	172	103
Ideal Flow (vphpl)	1775	1650	1000	1775	1900	1750	1000	1550	1000	1000	1650	1750
Storage Length (m)	45.0		45.0	50.0		50.0	75.0		0.0	45.0		0.0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (m)	60.0			70.0			40.0			60.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	1.00		0.99	1.00		0.99	0.99	0.98		0.99	0.99	
Frt			0.850			0.850		0.897			0.944	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1686	1618	726	1686	1863	1488	872	2528	0	941	2918	0
Flt Permitted	0.438			0.495			0.574			0.494		
Satd. Flow (perm)	777	1618	716	877	1863	1469	524	2528	0	487	2918	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			84			230		186			103	
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		1100.5			425.6			212.4			178.4	
Travel Time (s)		66.0			25.5			12.7			10.7	
Confl. Peds. (#/hr)	1		4	4		1	4		4	4		4
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	2%	17%	0%	2%	0%	9%	8%	0%	1%	0%	1%
Adj. Flow (vph)	138	317	84	174	377	230	98	85	186	166	172	103
Shared Lane Traffic (%)												
Lane Group Flow (vph)	138	317	84	174	377	230	98	271	0	166	275	0
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		6			2		7	4		3	8	
Permitted Phases	6		6	2		2	4			8		
Detector Phase	6	6	6	2	2	2	7	4		3	8	
Switch Phase												
Minimum Initial (s)	48.0	48.0	48.0	48.0	48.0	48.0	5.0	26.0		5.0	26.0	
Minimum Split (s)	54.0	54.0	54.0	54.0	54.0	54.0	11.0	32.0		11.0	32.0	
Total Split (s)	54.0	54.0	54.0	54.0	54.0	54.0	14.0	32.0		14.0	32.0	
Total Split (%)	54.0%	54.0%	54.0%	54.0%	54.0%	54.0%	14.0%	32.0%		14.0%	32.0%	
Maximum Green (s)	48.0	48.0	48.0	48.0	48.0	48.0	10.0	26.0		10.0	26.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	3.0	4.0		3.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	1.0	2.0		1.0	2.0	
Lost Time Adjust (s)	0.0	-2.0	0.0	-2.0	-2.0	-2.0	0.0	-2.0		0.0	-2.0	
Total Lost Time (s)	6.0	4.0	6.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	Max	Max	Max	Max	Max	Max	None	Max		None	Max	
Walk Time (s)	35.0	35.0	35.0	35.0	35.0	35.0		15.0			15.0	
Flash Dont Walk (s)	16.0	16.0	16.0	16.0	16.0	16.0		11.0			11.0	
Pedestrian Calls (#/hr)	0	0	0	0	0	0		0			0	
Act Effct Green (s)	51.0	53.0	51.0	53.0	53.0	53.0	37.4	28.0		38.8	30.8	
Actuated g/C Ratio	0.50	0.51	0.50	0.51	0.51	0.51	0.36	0.27		0.38	0.30	
v/c Ratio	0.36	0.38	0.21	0.39	0.39	0.27	0.44	0.33		0.73	0.29	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay	19.4	16.8	4.5	18.4	16.8	2.6	28.2	11.1		45.2	19.0	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	19.4	16.8	4.5	18.4	16.8	2.6	28.2	11.1		45.2	19.0	
LOS	B	B	A	B	B	A	C	B		D	B	
Approach Delay		15.5			12.9			15.6			28.8	
Approach LOS		B			B			B			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 103			
Natural Cycle: 100			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.73			
Intersection Signal Delay: 17.4		Intersection LOS: B	
Intersection Capacity Utilization 136.6%		ICU Level of Service H	
Analysis Period (min) 15			

Splits and Phases: 1: River Rd & King St

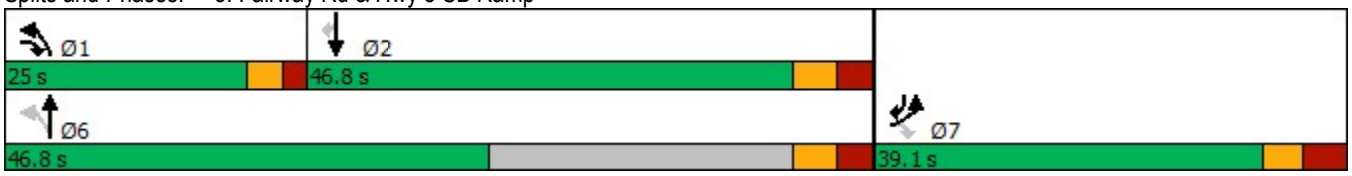


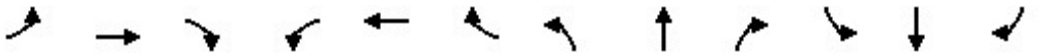
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	730	587	249	1196	1234	147
Future Volume (vph)	730	587	249	1196	1234	147
Ideal Flow (vphpl)	1775	1750	1775	1900	1900	1750
Lane Width (m)	3.5	3.5	3.5	3.5	3.5	3.5
Storage Length (m)	75.0	50.0	85.0			75.0
Storage Lanes	1	1	1			1
Taper Length (m)	60.0		75.0			
Lane Util. Factor	0.97	0.88	1.00	0.95	0.91	1.00
Ped Bike Factor		0.98	1.00			0.94
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	3141	2538	1588	3466	4932	1428
Flt Permitted	0.950		0.116			
Satd. Flow (perm)	3141	2484	193	3466	4932	1339
Right Turn on Red		No				Yes
Satd. Flow (RTOR)						147
Link Speed (k/h)	60			60	60	
Link Distance (m)	404.4			302.0	498.0	
Travel Time (s)	24.3			18.1	29.9	
Confl. Peds. (#/hr)		9	25			25
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	3%	2%	5%	3%	4%	3%
Adj. Flow (vph)	730	587	249	1196	1234	147
Shared Lane Traffic (%)						
Lane Group Flow (vph)	730	587	249	1196	1234	147
Turn Type	Prot	pm+ov	pm+pt	NA	NA	pm+ov
Protected Phases	7	1	1	6	2	7
Permitted Phases		7	6			2
Detector Phase	7	1	1	6	2	7
Switch Phase						
Minimum Initial (s)	10.0	8.0	8.0	40.0	40.0	10.0
Minimum Split (s)	17.1	13.0	13.0	46.8	46.8	17.1
Total Split (s)	39.1	25.0	25.0	46.8	46.8	39.1
Total Split (%)	35.3%	22.5%	22.5%	42.2%	42.2%	35.3%
Maximum Green (s)	32.0	20.0	20.0	40.0	40.0	32.0
Yellow Time (s)	3.3	3.0	3.0	3.7	3.7	3.3
All-Red Time (s)	3.8	2.0	2.0	3.1	3.1	3.8
Lost Time Adjust (s)	-3.1	-1.0	-1.0	-2.8	-2.8	-3.1
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag		Lead	Lead		Lag	
Lead-Lag Optimize?						
Vehicle Extension (s)	4.0	4.0	4.0	3.0	3.0	4.0
Recall Mode	None	None	None	Max	Max	None
Walk Time (s)	9.0			10.0	10.0	9.0
Flash Dont Walk (s)	23.0			30.0	30.0	23.0
Pedestrian Calls (#/hr)	0			0	0	0
Act Effct Green (s)	32.3	50.2	64.9	64.9	43.0	75.4
Actuated g/C Ratio	0.31	0.48	0.62	0.62	0.41	0.72

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
v/c Ratio	0.76	0.49	0.70	0.56	0.61	0.14
Control Delay	39.0	17.6	30.0	13.4	27.1	1.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	39.0	17.6	30.0	13.4	27.1	1.0
LOS	D	B	C	B	C	A
Approach Delay	29.5			16.2	24.3	
Approach LOS	C			B	C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110.9			
Actuated Cycle Length: 105.3			
Natural Cycle: 90			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.76			
Intersection Signal Delay: 23.1		Intersection LOS: C	
Intersection Capacity Utilization 81.5%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 3: Fairway Rd & Hwy 8 SB Ramp



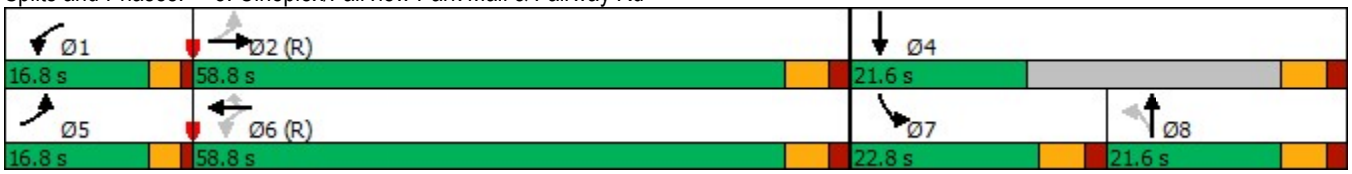


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	185	984	58	234	1189	214	67	67	123	275	47	170
Future Volume (vph)	185	984	58	234	1189	214	67	67	123	275	47	170
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	40.0		0.0	130.0		0.0	0.0		0.0	40.0		0.0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (m)	45.0			40.0			7.5			15.0		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	0.97	1.00	1.00
Frt		0.992				0.850		0.903			0.882	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3515	0	1787	3438	1482	1770	1716	0	3213	1618	0
Flt Permitted	0.131			0.169			0.622			0.950		
Satd. Flow (perm)	249	3515	0	318	3438	1482	1159	1716	0	3213	1618	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7				208		65			164	
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		276.4			205.3			142.3			155.5	
Travel Time (s)		16.6			12.3			10.2			11.2	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	2%	0%	1%	5%	9%	2%	0%	0%	9%	2%	4%
Adj. Flow (vph)	185	984	58	234	1189	214	67	67	123	275	47	170
Shared Lane Traffic (%)												
Lane Group Flow (vph)	185	1042	0	234	1189	214	67	190	0	275	217	0
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Perm	NA		Prot	NA	
Protected Phases	5	2		1	6			8		7	4	
Permitted Phases	2			6		6	8					
Detector Phase	5	2		1	6	6	8	8		7	4	
Switch Phase												
Minimum Initial (s)	5.0	52.8		5.0	52.8	52.8	8.0	8.0		5.0	8.0	
Minimum Split (s)	9.0	58.8		9.0	58.8	58.8	14.0	14.0		11.0	14.0	
Total Split (s)	16.8	58.8		16.8	58.8	58.8	21.6	21.6		22.8	21.6	
Total Split (%)	14.0%	49.0%		14.0%	49.0%	49.0%	18.0%	18.0%		19.0%	18.0%	
Maximum Green (s)	12.8	52.8		12.8	52.8	52.8	15.6	15.6		16.8	15.6	
Yellow Time (s)	3.0	4.0		3.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	2.0		1.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	-2.0		0.0	-2.0	-2.0	-2.0	-2.0		-2.0	-2.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lag	Lag		Lead		
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	C-Max		None	C-Max	C-Max	None	None		None	None	
Walk Time (s)		31.8			31.8	31.8	12.0	12.0			12.0	
Flash Dont Walk (s)		21.0			21.0	21.0	15.0	15.0			15.0	
Pedestrian Calls (#/hr)		0			0	0	0	0			0	
Act Effct Green (s)	71.3	60.6		73.0	61.5	61.5	15.0	15.0		16.8	35.8	
Actuated g/C Ratio	0.59	0.50		0.61	0.51	0.51	0.12	0.12		0.14	0.30	
v/c Ratio	0.65	0.59		0.70	0.68	0.25	0.47	0.70		0.61	0.36	
Control Delay	33.7	16.3		23.8	25.6	3.6	58.7	46.7		54.4	10.2	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay	33.7	16.3		23.8	25.6	3.6	58.7	46.7		54.4	10.2	
LOS	C	B		C	C	A	E	D		D	B	
Approach Delay		18.9			22.5			49.8			34.9	
Approach LOS		B			C			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 27.6 (23%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 95			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.70			
Intersection Signal Delay: 24.9		Intersection LOS: C	
Intersection Capacity Utilization 89.9%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 5: Cineplex/Fairview Park Mall & Fairway Rd

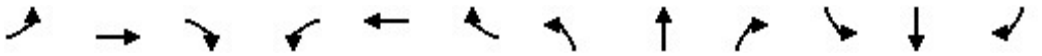


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	210	718	59	260	915	153	127	322	231	216	167	146
Future Volume (vph)	210	718	59	260	915	153	127	322	231	216	167	146
Ideal Flow (vphpl)	1775	1775	1000	1775	1900	1750	1775	1900	1750	1775	1775	1000
Lane Width (m)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Storage Length (m)	120.0		0.0	160.0		30.0	95.0		0.0	45.0		45.0
Storage Lanes	1		0	1		1	1		1	1		1
Taper Length (m)	60.0			40.0			7.5			10.0		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.99	1.00		0.99		0.91	0.96		0.94	0.98		0.94
Frt		0.989				0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1619	3225	0	1544	3500	1362	1635	1807	1401	1668	1755	832
Flt Permitted	0.160			0.208			0.651			0.188		
Satd. Flow (perm)	269	3225	0	335	3500	1246	1074	1807	1313	322	1755	780
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7				136			100			146
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		450.5			276.4			297.0			324.1	
Travel Time (s)		27.0			16.6			21.4			23.3	
Confl. Peds. (#/hr)	40		35	35		40	46		46	46		46
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	3%	2%	1%	8%	2%	8%	2%	4%	5%	0%	0%	1%
Adj. Flow (vph)	210	718	59	260	915	153	127	322	231	216	167	146
Shared Lane Traffic (%)												
Lane Group Flow (vph)	210	777	0	260	915	153	127	322	231	216	167	146
Turn Type	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	pm+ov	pm+pt	NA	Perm
Protected Phases	1	6		5	2		7	4	5	3	8	
Permitted Phases	6			2		2	4		4	8		8
Detector Phase	1	6		5	2	2	7	4	5	3	8	8
Switch Phase												
Minimum Initial (s)	5.0	36.0		5.0	36.0	36.0	5.0	8.0	5.0	5.0	8.0	8.0
Minimum Split (s)	9.0	42.0		9.0	42.0	42.0	9.0	14.0	9.0	9.0	14.0	14.0
Total Split (s)	22.0	43.0		22.0	43.0	43.0	11.0	38.0	22.0	17.0	38.0	38.0
Total Split (%)	18.3%	35.8%		18.3%	35.8%	35.8%	9.2%	31.7%	18.3%	14.2%	31.7%	31.7%
Maximum Green (s)	18.0	37.0		18.0	37.0	37.0	7.0	32.0	18.0	13.0	32.0	32.0
Yellow Time (s)	3.0	4.0		3.0	4.0	4.0	3.0	4.0	3.0	3.0	4.0	4.0
All-Red Time (s)	1.0	2.0		1.0	2.0	2.0	1.0	2.0	1.0	1.0	2.0	2.0
Lost Time Adjust (s)	0.0	-2.0		0.0	-2.0	-2.0	0.0	-2.0	0.0	0.0	-2.0	-2.0
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	3.0		4.0	3.0	3.0	3.0	3.0	4.0	3.0	3.0	3.0
Recall Mode	None	C-Max		None	C-Max	C-Max	None	None	None	None	None	None
Walk Time (s)		19.0			19.0	19.0		7.0			7.0	7.0
Flash Dont Walk (s)		17.0			17.0	17.0		25.0			25.0	25.0
Pedestrian Calls (#/hr)		0			0	0		0			0	0
Act Effct Green (s)	62.0	46.0		64.5	47.3	47.3	35.0	28.0	45.2	44.7	33.7	33.7
Actuated g/C Ratio	0.52	0.38		0.54	0.39	0.39	0.29	0.23	0.38	0.37	0.28	0.28

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.66	0.63		0.74	0.66	0.27	0.37	0.76	0.41	0.82	0.34	0.45
Control Delay	28.0	34.1		46.2	28.0	8.9	28.9	54.9	14.5	51.8	35.1	9.5
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	28.0	34.1		46.2	28.0	8.9	28.9	54.9	14.5	51.8	35.1	9.5
LOS	C	C		D	C	A	C	D	B	D	D	A
Approach Delay		32.8			29.4			36.3			34.9	
Approach LOS		C			C			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 31.2 (26%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.82			
Intersection Signal Delay: 32.5		Intersection LOS: C	
Intersection Capacity Utilization 96.1%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 6: Wilson Ave & Fairway Rd

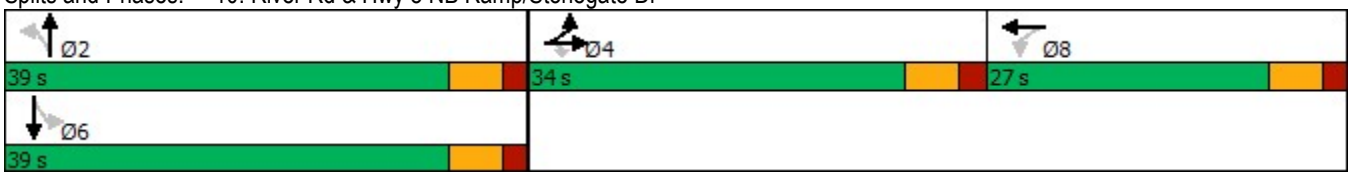


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	218	6	46	4	6	23	29	129	1	55	184	195
Future Volume (vph)	218	6	46	4	6	23	29	129	1	55	184	195
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	140.0		140.0	15.0		0.0	90.0		0.0	45.0		0.0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (m)	70.0			15.0			70.0			30.0		
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850		0.881			0.999			0.923	
Flt Protected	0.950	0.955		0.950			0.950			0.950		
Satd. Flow (prot)	1681	1690	1583	1770	1641	0	1770	3536	0	1770	3267	0
Flt Permitted	0.950	0.955					0.527			0.670		
Satd. Flow (perm)	1681	1690	1583	1863	1641	0	982	3536	0	1248	3267	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			98		23			1			195	
Link Speed (k/h)		50			40			60			60	
Link Distance (m)		231.4			154.4			218.6			212.4	
Travel Time (s)		16.7			13.9			13.1			12.7	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	218	6	46	4	6	23	29	129	1	55	184	195
Shared Lane Traffic (%)	49%											
Lane Group Flow (vph)	111	113	46	4	29	0	29	130	0	55	379	0
Turn Type	Split	NA	Perm	Perm	NA		Perm	NA		Perm	NA	
Protected Phases	4	4			8			2			6	
Permitted Phases			4	8			2			6		
Detector Phase	4	4	4	8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	5.0	5.0	5.0	5.0	5.0		5.0	5.0		5.0	5.0	
Minimum Split (s)	24.0	24.0	24.0	24.0	24.0		24.0	24.0		24.0	24.0	
Total Split (s)	34.0	34.0	34.0	27.0	27.0		39.0	39.0		39.0	39.0	
Total Split (%)	34.0%	34.0%	34.0%	27.0%	27.0%		39.0%	39.0%		39.0%	39.0%	
Maximum Green (s)	28.0	28.0	28.0	21.0	21.0		33.0	33.0		33.0	33.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0		-2.0	-2.0		-2.0	-2.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None		Min	Min		Min	Min	
Walk Time (s)	7.0	7.0	7.0	7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0	0	0	0		0	0		0	0	
Act Effct Green (s)	10.3	10.3	10.3	8.2	8.2		15.0	15.0		15.0	15.0	
Actuated g/C Ratio	0.33	0.33	0.33	0.26	0.26		0.47	0.47		0.47	0.47	
v/c Ratio	0.20	0.20	0.08	0.01	0.07		0.06	0.08		0.09	0.23	
Control Delay	10.3	10.3	1.4	12.5	8.1		10.2	9.0		10.0	5.2	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	10.3	10.3	1.4	12.5	8.1		10.2	9.0		10.0	5.2	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	B	B	A	B	A		B	A		B	A	
Approach Delay		8.8			8.6			9.2			5.8	
Approach LOS		A			A			A			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 31.6			
Natural Cycle: 75			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.23			
Intersection Signal Delay: 7.4		Intersection LOS: A	
Intersection Capacity Utilization 38.4%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 10: River Rd & Hwy 8 NB Ramp/Stonegate Dr



Intersection	
Int Delay, s/veh	1.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1302	104	0	1689	0	208
Future Vol, veh/h	1302	104	0	1689	0	208
Conflicting Peds, #/hr	0	2	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	4	8	0	5	0	3
Mvmt Flow	1302	104	0	1689	0	208

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	705
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.96
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.33
Pot Cap-1 Maneuver	-	-	0	-	0	377
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	376
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	25.8
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	376	-	-	-
HCM Lane V/C Ratio	0.553	-	-	-
HCM Control Delay (s)	25.8	-	-	-
HCM Lane LOS	D	-	-	-
HCM 95th %tile Q(veh)	3.2	-	-	-

Intersection	
Int Delay, s/veh	16.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	376	295	16	4	124	6	39	17	21	2	11	537
Future Vol, veh/h	376	295	16	4	124	6	39	17	21	2	11	537
Conflicting Peds, #/hr	2	0	0	0	0	2	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	0	-	-	-	-	45	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	4	4	0	0	8	0	3	0	0	0	10	5
Mvmt Flow	376	295	16	4	124	6	39	17	21	2	11	537

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	132	0	0	311	0	0	1196	1195	303	1208	1197	126
Stage 1	-	-	-	-	-	-	1055	1055	-	134	134	-
Stage 2	-	-	-	-	-	-	141	140	-	1074	1063	-
Critical Hdwy	4.14	-	-	4.1	-	-	7.13	6.5	6.2	7.1	6.6	6.25
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.5	-	6.1	5.6	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.5	-	6.1	5.6	-
Follow-up Hdwy	2.236	-	-	2.2	-	-	3.527	4	3.3	3.5	4.09	3.345
Pot Cap-1 Maneuver	1441	-	-	1261	-	-	162	188	741	161	179	916
Stage 1	-	-	-	-	-	-	272	305	-	874	770	-
Stage 2	-	-	-	-	-	-	860	785	-	269	290	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1438	-	-	1261	-	-	50	138	741	113	132	914
Mov Cap-2 Maneuver	-	-	-	-	-	-	50	138	-	113	132	-
Stage 1	-	-	-	-	-	-	201	225	-	644	766	-
Stage 2	-	-	-	-	-	-	349	781	-	178	214	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	4.6	0.2	167.7	14.9
HCM LOS			F	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	83	1438	-	-	1261	-	-	129	914
HCM Lane V/C Ratio	0.928	0.261	-	-	0.003	-	-	0.101	0.588
HCM Control Delay (s)	167.7	8.4	-	-	7.9	0	-	36	14.4
HCM Lane LOS	F	A	-	-	A	A	-	E	B
HCM 95th %tile Q(veh)	5	1.1	-	-	0	-	-	0.3	3.9

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	153	0	0	235	0	6
Future Vol, veh/h	153	0	0	235	0	6
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	153	0	0	235	0	6

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	77
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	-	-	0	-	0	968
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	968
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	8.7
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	968	-	-	-
HCM Lane V/C Ratio	0.006	-	-	-
HCM Control Delay (s)	8.7	-	-	-
HCM Lane LOS	A	-	-	-
HCM 95th %tile Q(veh)	0	-	-	-

Intersection: 1: River Rd & King St

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	T	R	L	T	TR	L	T	TR
Maximum Queue (m)	51.9	72.5	23.1	58.7	73.8	26.3	44.2	35.0	57.5	46.1	29.7	53.8
Average Queue (m)	26.0	34.2	9.7	27.4	39.5	13.4	15.5	7.8	21.1	21.1	9.8	21.3
95th Queue (m)	44.9	60.8	20.0	49.3	65.2	22.5	32.3	22.2	42.7	38.7	22.2	41.1
Link Distance (m)		1068.8			402.4			185.1	185.1		162.1	162.1
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	45.0		45.0	50.0		50.0	75.0			45.0		
Storage Blk Time (%)	2	4		2	3					1		
Queuing Penalty (veh)	9	8		11	12					1		

Intersection: 3: Fairway Rd & Hwy 8 SB Ramp

Movement	EB	EB	EB	EB	NB	NB	NB	SB	SB	SB	SB	
Directions Served	L	L	R	R	L	T	T	T	T	T	R	
Maximum Queue (m)	122.6	158.6	98.0	67.7	65.4	95.8	98.9	105.1	114.0	95.4	44.2	
Average Queue (m)	75.5	85.2	46.7	29.9	37.7	53.4	54.4	66.8	66.8	58.3	13.3	
95th Queue (m)	115.3	132.0	76.8	58.8	60.5	87.9	89.2	99.2	99.8	89.8	34.1	
Link Distance (m)		382.8	382.8			274.9	274.9	474.0	474.0	474.0		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	75.0			50.0	85.0						75.0	
Storage Blk Time (%)	10	19	5	0		1				2		
Queuing Penalty (veh)	37	70	15	1		2				3		

Intersection: 5: Cineplex/Fairview Park Mall & Fairway Rd

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	T	R	L	TR	L	L	TR
Maximum Queue (m)	62.2	79.6	77.0	70.6	139.5	149.8	61.3	39.0	63.1	54.8	87.4	61.7
Average Queue (m)	33.1	51.3	50.1	34.7	79.0	81.4	19.6	15.3	34.2	29.4	42.5	27.9
95th Queue (m)	54.5	73.2	71.8	59.2	128.0	131.0	42.3	30.7	60.1	58.5	70.1	51.7
Link Distance (m)		251.1	251.1		183.4	183.4	183.4	128.5	128.5		136.6	136.6
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	40.0			130.0						40.0		
Storage Blk Time (%)	6	19			1					4	18	
Queuing Penalty (veh)	31	36			2					5	25	

Intersection: 6: Wilson Ave & Fairway Rd

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	TR	L	T	T	R	L	T	R	L	T
Maximum Queue (m)	71.8	100.5	93.8	95.1	131.8	138.7	55.0	68.9	107.9	52.8	54.8	112.0
Average Queue (m)	39.7	69.7	64.0	56.5	72.3	76.2	33.9	21.7	58.1	22.4	35.1	33.5
95th Queue (m)	63.5	94.8	89.9	91.9	114.9	120.8	67.5	44.8	93.6	42.9	56.9	83.1
Link Distance (m)		436.6	436.6		251.1	251.1			283.3	283.3		306.3
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	120.0			160.0			30.0	95.0			45.0	
Storage Blk Time (%)					0	51	2		1		11	2
Queuing Penalty (veh)					0	78	7		1		35	8

Intersection: 6: Wilson Ave & Fairway Rd

Movement	SB
Directions Served	R
Maximum Queue (m)	58.2
Average Queue (m)	15.1
95th Queue (m)	39.0
Link Distance (m)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	45.0
Storage Blk Time (%)	0
Queuing Penalty (veh)	0

Intersection: 10: River Rd & Hwy 8 NB Ramp/Stonegate Dr

Movement	EB	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB	
Directions Served	L	LT	R	L	TR	L	T	TR	L	T	TR	
Maximum Queue (m)	20.6	33.4	12.5	8.5	13.6	15.6	15.2	15.1	18.7	21.5	30.9	
Average Queue (m)	8.9	15.8	5.6	0.6	5.3	4.8	5.0	5.3	7.1	8.5	14.7	
95th Queue (m)	18.2	27.0	12.5	3.9	12.9	12.5	12.7	12.8	15.9	18.2	24.4	
Link Distance (m)		217.2			139.9		199.5	199.5		185.1	185.1	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	140.0		140.0	15.0		90.0			45.0			
Storage Blk Time (%)					1							
Queuing Penalty (veh)					0							

Zone Summary

Zone wide Queuing Penalty: 395

Intersection: 2: Stonegate Dr & King St

Movement
Directions Served
Maximum Queue (m)
Average Queue (m)
95th Queue (m)
Link Distance (m)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (m)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 4: Wabanaki Dr & Fairway Rd

Movement	EB	WB	WB	NB
Directions Served	TR	T	T	R
Maximum Queue (m)	2.6	5.0	6.3	58.9
Average Queue (m)	0.1	0.2	0.2	23.6
95th Queue (m)	1.3	3.5	4.4	45.4
Link Distance (m)	183.4	274.9	274.9	236.0
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (m)				
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 9: Wilson Ave & Wabanaki Dr

Movement	EB	EB	WB	NB	SB	SB
Directions Served	L	TR	LT	LTR	LT	R
Maximum Queue (m)	28.4	3.4	3.1	22.6	13.0	3.0
Average Queue (m)	9.6	0.1	0.2	10.4	3.0	0.1
95th Queue (m)	20.6	2.4	2.3	19.6	10.0	1.5
Link Distance (m)	638.8	638.8	1016.3	120.7	264.2	264.2
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (m)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 11: Hidden Valley Rd & River Rd

Movement	NB
Directions Served	R
Maximum Queue (m)	9.5
Average Queue (m)	1.4
95th Queue (m)	6.7
Link Distance (m)	192.8
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 19: River Rd & Hwy 8 SB Ramp

Movement	EB
Directions Served	L
Maximum Queue (m)	17.3
Average Queue (m)	5.4
95th Queue (m)	14.1
Link Distance (m)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	90.0
Storage Blk Time (%)	
Queuing Penalty (veh)	

Zone Summary

Zone wide Queuing Penalty: 0

Capacity Analysis
2028 Total Traffic Conditions

Synchro Analysis Summary
2028 Total Traffic Conditions

Intersection	Approach - Movement	Storage Length (m)	AM Peak				PM Peak			
			LOS	V/C	Delay (s)	Queue (m)	LOS	V/C	Delay (s)	Queue (m)
King St & River Rd	**Intersection**	-	**B**	-	**16.5**	-	**B**	-	**18.3**	-
	EB - L	45	B	0.14	15.5	24	C	0.40	21.3	40
	EB - T	-	B	0.23	15.0	36	B	0.44	18.2	65
	EB - R	45	A	0.41	6.4	30	A	0.26	4.8	22
	WB - L	50	B	0.33	17.1	43	C	0.45	20.7	**56**
	WB - T	-	B	0.21	14.7	36	B	0.45	18.1	72
	WB - R	50	A	0.14	3.2	17	A	0.26	2.7	21
	NB - L	75	B	0.16	19.7	14	C	0.42	25.8	29
	NB - TR	-	B	0.24	10.9	34	B	0.33	10.5	46
	SB - L	45	D	0.64	35.8	33	D	0.79	50.0	**48**
	SB - TR	-	C	0.29	20.9	41	B	0.29	17.3	46
King St & Stonegate Dr	**Intersection**	-	-	-	-	-	-	-	-	-
	EB - TR*	-	-	-	-	0	-	-	-	0
	WB - T*	-	-	-	-	0	-	-	-	0
Fairway Rd Highway 8 Ramps	**Intersection**	-	**B**	-	**13.2**	-	**C**	-	**22.5**	-
	EB - L	75**	C	0.47	31.8	54	D	0.74	38.1	**120**
	EB - R	50**	B	0.31	17.9	47	B	0.49	17.8	**103**
	NB - L	85	A	0.40	8.1	42	C	0.68	27.0	60
	NB - T	-	A	0.30	6.1	47	B	0.55	13.2	90
	SB - T	-	B	0.33	14.1	71	C	0.59	26.3	95
	SB - R	75	A	0.16	0.9	23	A	0.14	1.0	24
Fairway Rd & Wabanaki Dr	**Intersection**	-	**A**	-	**1.3**	-	**A**	-	**1.8**	-
	EB - TR*	-	-	-	-	2	-	-	-	2
	WB - T*	-	-	-	-	0	-	-	-	57
	NB - R	-	B	0.32	13.9	27	D	0.58	26.5	51
Fairway Rd & Fairview Park Mall / Cineplex	**Intersection**	-	**B**	-	**11.1**	-	**C**	-	**23.8**	-
	EB - L	40	A	0.09	5.2	16	C	0.62	27.1	**53**
	EB - TR	-	A	0.30	8.1	30	B	0.57	15.4	65
	WB - L	130	A	0.14	6.1	18	C	0.66	20.8	55
	WB - T	-	B	0.34	10.3	54	C	0.66	25.0	117
	WB - R	-	A	0.07	0.1	19	A	0.24	3.4	44
	NB - L	-	D	0.04	41.5	9	E	0.45	58.1	28
	NB - TR	-	C	0.13	25.3	15	D	0.69	45.4	63
	SB - L	40	D	0.34	43.9	**44**	D	0.61	54.3	**71**
	SB - TR	-	B	0.08	15.1	16	A	0.35	9.9	54
Fairway Rd & Wilson Ave	**Intersection**	-	**B**	-	**17.4**	-	**D**	-	**39.1**	-
	EB - L	120	A	0.18	6.5	26	C	0.62	24.6	60
	EB - TR	-	B	0.31	13.3	56	C	0.61	33.6	102
	WB - L	160	B	0.40	11.5	50	D	0.73	44.5	91
	WB - T	-	A	0.27	7.4	47	D	0.63	53.1	143
	WB - R	30	A	0.10	1.3	22	C	0.26	26.0	**75**
	NB - L	95	D	0.35	38.0	36	C	0.39	29.8	50
	NB - T	-	D	0.51	40.0	53	D	0.76	54.6	95
	NB - R	-	A	0.20	4.6	24	B	0.40	14.4	48
	SB - L	45	E	0.73	60.5	40	D	0.79	48.8	**54**
	SB - T	-	D	0.40	37.0	41	D	0.33	35.3	60
	SB - R	45	B	0.45	11.9	21	A	0.45	9.6	36
Wilson Ave & Wabanaki Dr	**Intersection**	-	**A**	-	**5.9**	-	**C**	-	**15.3**	-
	EB - L	-	A	0.17	8.0	16	A	0.26	8.4	21
	EB - TR*	-	-	-	-	4	-	-	-	3
	WB - LT	-	A	0.01	8.0	7	A	0.00	7.9	3
	WB - R*	45	-	-	-	2	-	-	-	0
	NB - LTR	-	D	0.05	26.4	10	**F**	**0.86**	145.8	19
	SB - LT	-	D	0.16	26.5	15	E	0.10	35.2	11
	SB - R	-	B	0.32	10.4	0	B	0.58	14.2	0
River Rd Ex & Highway 8 NB Ramps / Stonegate Dr	**Intersection**	-	**A**	-	**8.0**	-	**A**	-	**10.0**	-
	EB - L	140*	B	0.13	17.9	11	B	0.26	18.9	19
	EB - T	-	B	0.13	18.0	21	B	0.27	18.9	34
	EB - R	140	A	0.1	1.9	14	A	0.14	3.2	15
	WB - L	15	B	0.01	17.8	6	B	0.01	18.2	4
	WB - TR	-	B	0.06	12.1	13	B	0.07	11.2	14
	NB - L	90	B	0.11	11.4	16	B	0.08	11.4	14
	NB - TR	-	A	0.05	9.5	12	A	0.08	9.8	13
	ed used for LOS	45	B	0.02	10.6	9	B	0.09	11.1	15
	SB - TR	-	A	0.27	5.5	32	A	0.24	5.9	32
River Rd Ex & Hidden Valley Dr	**Intersection**	-	**A**	-	**0.4**	-	**A**	-	**0.2**	-
	EB - TR*	-	-	-	-	0	-	-	-	0
	WB - T*	-	-	-	-	0	-	-	-	0
	NB - R	-	A	0.02	8.8	11	A	0.01	8.8	8
River Rd Ex & Highway 8 SB Ramp	**Intersection**	-	**A**	-	**2.0**	-	**A**	-	**1.8**	-
	EB - L	90	A	0.11	8.3	16	A	0.10	8.2	15
	EB - T*	-	-	-	-	0	-	-	-	0
	Bold Red used fo	-	-	-	-	3	-	-	-	0

Notes: * = movement operates under free-flow movement

** = Storage applies to one of two lanes used for this movement while the second lane has no associated storage length

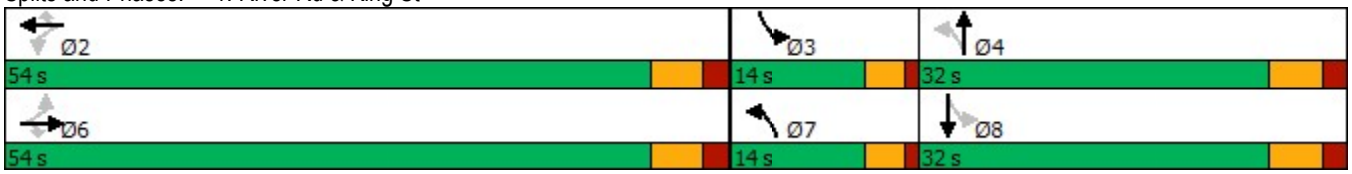
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	70	179	150	182	185	102	34	65	132	160	215	94
Future Volume (vph)	70	179	150	182	185	102	34	65	132	160	215	94
Ideal Flow (vphpl)	1775	1650	1000	1775	1900	1750	1000	1550	1000	1000	1650	1750
Storage Length (m)	45.0		45.0	50.0		50.0	75.0		0.0	45.0		0.0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (m)	60.0			70.0			40.0			60.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	1.00					0.99	1.00	0.98		1.00	0.99	
Frt			0.850			0.850		0.899			0.954	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1637	1587	594	1686	1792	1390	888	2554	0	922	2957	0
Flt Permitted	0.615			0.623			0.564			0.541		
Satd. Flow (perm)	1059	1587	594	1106	1792	1373	525	2554	0	524	2957	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			150			102		132			68	
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		1100.5			425.6			212.4			178.4	
Travel Time (s)		66.0			25.5			12.7			10.7	
Confl. Peds. (#/hr)	1					1	4		2	2		4
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	3%	4%	43%	0%	6%	7%	7%	2%	2%	3%	0%	1%
Adj. Flow (vph)	70	179	150	182	185	102	34	65	132	160	215	94
Shared Lane Traffic (%)												
Lane Group Flow (vph)	70	179	150	182	185	102	34	197	0	160	309	0
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		6			2		7	4		3	8	
Permitted Phases	6		6	2		2	4			8		
Detector Phase	6	6	6	2	2	2	7	4		3	8	
Switch Phase												
Minimum Initial (s)	48.0	48.0	48.0	48.0	48.0	48.0	5.0	26.0		5.0	26.0	
Minimum Split (s)	54.0	54.0	54.0	54.0	54.0	54.0	11.0	32.0		11.0	32.0	
Total Split (s)	54.0	54.0	54.0	54.0	54.0	54.0	14.0	32.0		14.0	32.0	
Total Split (%)	54.0%	54.0%	54.0%	54.0%	54.0%	54.0%	14.0%	32.0%		14.0%	32.0%	
Maximum Green (s)	48.0	48.0	48.0	48.0	48.0	48.0	10.0	26.0		10.0	26.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	3.0	4.0		3.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	1.0	2.0		1.0	2.0	
Lost Time Adjust (s)	0.0	-2.0	0.0	-2.0	-2.0	-2.0	0.0	-2.0		0.0	-2.0	
Total Lost Time (s)	6.0	4.0	6.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	Min	Min	Min	Min	Min	Min	None	None		None	None	
Walk Time (s)	35.0	35.0	35.0	35.0	35.0	35.0		15.0			15.0	
Flash Dont Walk (s)	16.0	16.0	16.0	16.0	16.0	16.0		11.0			11.0	
Pedestrian Calls (#/hr)	0	0	0	0	0	0		0			0	
Act Effct Green (s)	48.0	50.0	48.0	50.0	50.0	50.0	35.8	28.0		40.1	34.2	
Actuated g/C Ratio	0.48	0.50	0.48	0.50	0.50	0.50	0.36	0.28		0.40	0.34	
v/c Ratio	0.14	0.23	0.41	0.33	0.21	0.14	0.16	0.24		0.64	0.29	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay	15.5	15.0	6.4	17.1	14.7	3.2	19.7	10.9		35.8	20.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	15.5	15.0	6.4	17.1	14.7	3.2	19.7	10.9		35.8	20.9	
LOS	B	B	A	B	B	A	B	B		D	C	
Approach Delay		11.9			13.1			12.2			26.0	
Approach LOS		B			B			B			C	

Intersection Summary

Area Type: Other
Cycle Length: 100
Actuated Cycle Length: 99.9
Natural Cycle: 100
Control Type: Semi Act-Uncoord
Maximum v/c Ratio: 0.64
Intersection Signal Delay: 16.5 Intersection LOS: B
Intersection Capacity Utilization 131.9% ICU Level of Service H
Analysis Period (min) 15

Splits and Phases: 1: River Rd & King St

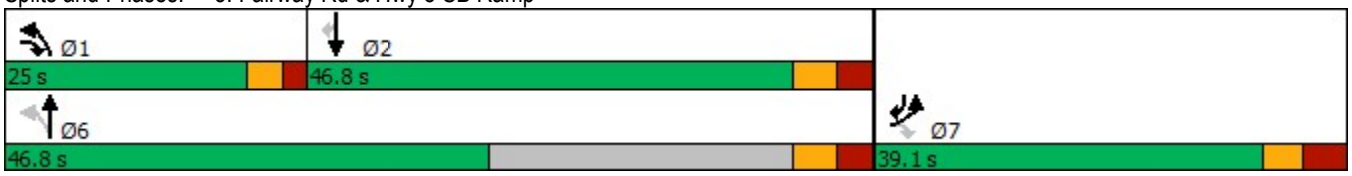


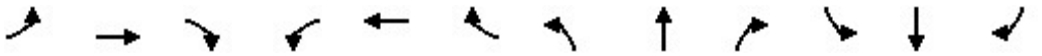
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	316	269	176	667	785	169
Future Volume (vph)	316	269	176	667	785	169
Ideal Flow (vphpl)	1775	1750	1775	1900	1900	1750
Lane Width (m)	3.5	3.5	3.5	3.5	3.5	3.5
Storage Length (m)	75.0	50.0	85.0			75.0
Storage Lanes	1	1	1			1
Taper Length (m)	60.0		75.0			
Lane Util. Factor	0.97	0.88	1.00	0.95	0.91	1.00
Ped Bike Factor		0.99	1.00			0.97
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	3052	2442	1476	3216	4706	1401
Flt Permitted	0.950		0.282			
Satd. Flow (perm)	3052	2408	437	3216	4706	1363
Right Turn on Red		No				Yes
Satd. Flow (RTOR)						169
Link Speed (k/h)	60			60	60	
Link Distance (m)	404.4			302.0	498.0	
Travel Time (s)	24.3			18.1	29.9	
Confl. Peds. (#/hr)		2	4			4
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	6%	6%	13%	11%	9%	5%
Adj. Flow (vph)	316	269	176	667	785	169
Shared Lane Traffic (%)						
Lane Group Flow (vph)	316	269	176	667	785	169
Turn Type	Prot	pm+ov	pm+pt	NA	NA	pm+ov
Protected Phases	7	1	1	6	2	7
Permitted Phases		7	6			2
Detector Phase	7	1	1	6	2	7
Switch Phase						
Minimum Initial (s)	10.0	8.0	8.0	40.0	40.0	10.0
Minimum Split (s)	17.1	13.0	13.0	46.8	46.8	17.1
Total Split (s)	39.1	25.0	25.0	46.8	46.8	39.1
Total Split (%)	35.3%	22.5%	22.5%	42.2%	42.2%	35.3%
Maximum Green (s)	32.0	20.0	20.0	40.0	40.0	32.0
Yellow Time (s)	3.3	3.0	3.0	3.7	3.7	3.3
All-Red Time (s)	3.8	2.0	2.0	3.1	3.1	3.8
Lost Time Adjust (s)	-3.1	-1.0	-1.0	-2.8	-2.8	-3.1
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag		Lead	Lead		Lag	
Lead-Lag Optimize?						
Vehicle Extension (s)	4.0	4.0	4.0	3.0	3.0	4.0
Recall Mode	None	None	None	Max	Max	None
Walk Time (s)	9.0			10.0	10.0	9.0
Flash Dont Walk (s)	23.0			30.0	30.0	23.0
Pedestrian Calls (#/hr)	0			0	0	0
Act Effct Green (s)	18.8	30.6	58.9	58.9	43.0	61.8
Actuated g/C Ratio	0.22	0.36	0.69	0.69	0.50	0.72

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
v/c Ratio	0.47	0.31	0.40	0.30	0.33	0.16
Control Delay	31.8	17.9	8.1	6.1	14.1	0.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	31.8	17.9	8.1	6.1	14.1	0.9
LOS	C	B	A	A	B	A
Approach Delay	25.4			6.5	11.8	
Approach LOS	C			A	B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110.9			
Actuated Cycle Length: 85.7			
Natural Cycle: 80			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.47			
Intersection Signal Delay: 13.2		Intersection LOS: B	
Intersection Capacity Utilization 64.5%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 3: Fairway Rd & Hwy 8 SB Ramp



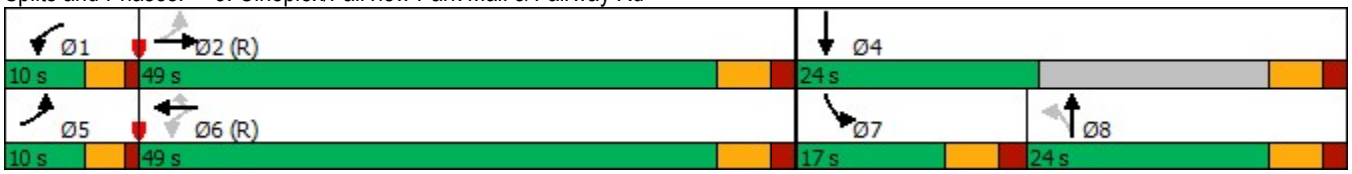


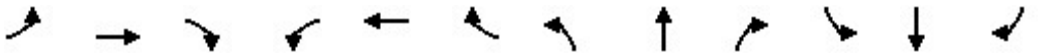
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	42	662	11	78	788	69	6	8	16	103	6	18
Future Volume (vph)	42	662	11	78	788	69	6	8	16	103	6	18
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	40.0		0.0	130.0		0.0	0.0		0.0	40.0		0.0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (m)	45.0			40.0			7.5			15.0		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	0.97	1.00	1.00
Frt		0.998				0.850		0.900			0.887	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1703	3371	0	1787	3312	1302	1805	1634	0	2779	1393	0
Flt Permitted	0.323			0.350			0.742			0.950		
Satd. Flow (perm)	579	3371	0	658	3312	1302	1410	1634	0	2779	1393	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2				142		16			18	
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		276.4			205.3			142.3			155.5	
Travel Time (s)		16.6			12.3			10.2			11.2	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	6%	7%	0%	1%	9%	24%	0%	0%	7%	26%	0%	28%
Adj. Flow (vph)	42	662	11	78	788	69	6	8	16	103	6	18
Shared Lane Traffic (%)												
Lane Group Flow (vph)	42	673	0	78	788	69	6	24	0	103	24	0
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Perm	NA		Prot	NA	
Protected Phases	5	2		1	6			8		7	4	
Permitted Phases	2			6		6	8					
Detector Phase	5	2		1	6	6	8	8		7	4	
Switch Phase												
Minimum Initial (s)	5.0	43.0		5.0	43.0	43.0	8.0	8.0		5.0	8.0	
Minimum Split (s)	9.0	49.0		9.0	49.0	49.0	14.0	14.0		11.0	14.0	
Total Split (s)	10.0	49.0		10.0	49.0	49.0	24.0	24.0		17.0	24.0	
Total Split (%)	10.0%	49.0%		10.0%	49.0%	49.0%	24.0%	24.0%		17.0%	24.0%	
Maximum Green (s)	6.0	43.0		6.0	43.0	43.0	18.0	18.0		11.0	18.0	
Yellow Time (s)	3.0	4.0		3.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	2.0		1.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	-2.0		0.0	-2.0	-2.0	-2.0	-2.0		-2.0	-2.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lag	Lag		Lead		
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	C-Max		None	C-Max	C-Max	None	None		None	None	
Walk Time (s)		22.0			22.0	22.0	12.0	12.0			12.0	
Flash Dont Walk (s)		21.0			21.0	21.0	15.0	15.0			15.0	
Pedestrian Calls (#/hr)		0			0	0	0	0			0	
Act Effct Green (s)	71.3	66.9		73.3	69.4	69.4	10.0	10.0		10.9	19.7	
Actuated g/C Ratio	0.71	0.67		0.73	0.69	0.69	0.10	0.10		0.11	0.20	
v/c Ratio	0.09	0.30		0.14	0.34	0.07	0.04	0.13		0.34	0.08	
Control Delay	5.2	8.1		6.1	10.3	0.1	41.5	25.3		43.9	15.1	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay	5.2	8.1		6.1	10.3	0.1	41.5	25.3		43.9	15.1	
LOS	A	A		A	B	A	D	C		D	B	
Approach Delay		7.9			9.2			28.5			38.4	
Approach LOS		A			A			C			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 26 (26%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 85			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.34			
Intersection Signal Delay: 11.1		Intersection LOS: B	
Intersection Capacity Utilization 59.8%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 5: Cineplex/Fairview Park Mall & Fairway Rd



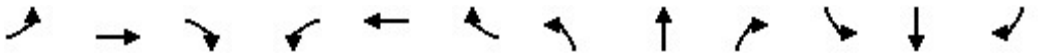


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	96	474	75	212	555	78	60	171	85	124	133	110
Future Volume (vph)	96	474	75	212	555	78	60	171	85	124	133	110
Ideal Flow (vphpl)	1775	1775	1000	1775	1900	1750	1775	1900	1750	1775	1775	1000
Lane Width (m)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Storage Length (m)	120.0		0.0	160.0		30.0	95.0		0.0	45.0		45.0
Storage Lanes	1		0	1		1	1		1	1		1
Taper Length (m)	60.0			40.0			7.5			10.0		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00	1.00		1.00		0.97	1.00		0.98	1.00		0.98
Frt		0.980				0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1516	3064	0	1489	3368	1302	1401	1693	1196	1635	1672	816
Flt Permitted	0.444			0.384			0.590			0.503		
Satd. Flow (perm)	707	3064	0	601	3368	1268	866	1693	1177	863	1672	802
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		21				78			85			110
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		450.5			276.4			297.0			324.1	
Travel Time (s)		27.0			16.6			21.4			23.3	
Confl. Peds. (#/hr)	5		3	3		5	6		4	4		6
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	10%	7%	3%	12%	6%	13%	19%	11%	23%	2%	5%	3%
Adj. Flow (vph)	96	474	75	212	555	78	60	171	85	124	133	110
Shared Lane Traffic (%)												
Lane Group Flow (vph)	96	549	0	212	555	78	60	171	85	124	133	110
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Perm	NA	pm+ov	Perm	NA	Perm
Protected Phases	1	6		5	2			4	5		8	
Permitted Phases	6			2		2	4		4	8		8
Detector Phase	1	6		5	2	2	4	4	5	8	8	8
Switch Phase												
Minimum Initial (s)	5.0	39.0		5.0	39.0	39.0	8.0	8.0	5.0	8.0	8.0	8.0
Minimum Split (s)	9.0	45.0		9.0	45.0	45.0	14.0	14.0	9.0	14.0	14.0	14.0
Total Split (s)	15.0	45.0		16.0	45.0	45.0	39.0	39.0	16.0	39.0	39.0	39.0
Total Split (%)	15.0%	45.0%		16.0%	45.0%	45.0%	39.0%	39.0%	16.0%	39.0%	39.0%	39.0%
Maximum Green (s)	11.0	39.0		12.0	39.0	39.0	33.0	33.0	12.0	33.0	33.0	33.0
Yellow Time (s)	3.0	4.0		3.0	4.0	4.0	4.0	4.0	3.0	4.0	4.0	4.0
All-Red Time (s)	1.0	2.0		1.0	2.0	2.0	2.0	2.0	1.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	-2.0		0.0	-2.0	-2.0	-2.0	-2.0	0.0	-2.0	-2.0	-2.0
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag		Lead	Lag	Lag			Lead			
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	3.0		4.0	3.0	3.0	3.0	3.0	4.0	3.0	3.0	3.0
Recall Mode	None	C-Max		None	C-Max	C-Max	None	None	None	None	None	None
Walk Time (s)		22.0			22.0	22.0	7.0	7.0		7.0	7.0	7.0
Flash Dont Walk (s)		17.0			17.0	17.0	25.0	25.0		25.0	25.0	25.0
Pedestrian Calls (#/hr)		0			0	0	0	0		0	0	0
Act Effct Green (s)	65.3	56.7		71.5	61.8	61.8	19.7	19.7	31.3	19.7	19.7	19.7
Actuated g/C Ratio	0.65	0.57		0.72	0.62	0.62	0.20	0.20	0.31	0.20	0.20	0.20

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.18	0.31		0.40	0.27	0.10	0.35	0.51	0.20	0.73	0.40	0.45
Control Delay	6.5	13.3		11.5	7.4	1.3	38.0	40.0	4.6	60.5	37.0	11.9
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	6.5	13.3		11.5	7.4	1.3	38.0	40.0	4.6	60.5	37.0	11.9
LOS	A	B		B	A	A	D	D	A	E	D	B
Approach Delay		12.3			7.9			30.1			37.4	
Approach LOS		B			A			C			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 25 (25%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.73			
Intersection Signal Delay: 17.4		Intersection LOS: B	
Intersection Capacity Utilization 77.0%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 6: Wilson Ave & Fairway Rd

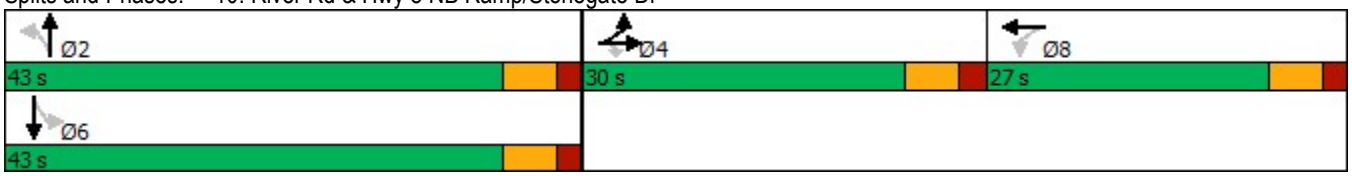


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	108	1	48	4	10	17	52	105	2	14	268	267
Future Volume (vph)	108	1	48	4	10	17	52	105	2	14	268	267
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	140.0		140.0	15.0		0.0	90.0		0.0	45.0		0.0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (m)	70.0			15.0			70.0			30.0		
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850		0.906			0.997			0.925	
Flt Protected	0.950	0.953		0.950			0.950			0.950		
Satd. Flow (prot)	1681	1686	1583	1770	1688	0	1770	3529	0	1770	3274	0
Flt Permitted	0.950	0.953		0.755			0.435			0.684		
Satd. Flow (perm)	1681	1686	1583	1406	1688	0	810	3529	0	1274	3274	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			98		17			2			267	
Link Speed (k/h)		50			40			60			60	
Link Distance (m)		231.4			154.4			218.6			212.4	
Travel Time (s)		16.7			13.9			13.1			12.7	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	108	1	48	4	10	17	52	105	2	14	268	267
Shared Lane Traffic (%)	50%											
Lane Group Flow (vph)	54	55	48	4	27	0	52	107	0	14	535	0
Turn Type	Split	NA	Perm	Perm	NA		Perm	NA		Perm	NA	
Protected Phases	4	4			8			2			6	
Permitted Phases			4	8			2			6		
Detector Phase	4	4	4	8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0		20.0	20.0		20.0	20.0	
Minimum Split (s)	24.0	24.0	24.0	24.0	24.0		26.0	26.0		26.0	26.0	
Total Split (s)	30.0	30.0	30.0	27.0	27.0		43.0	43.0		43.0	43.0	
Total Split (%)	30.0%	30.0%	30.0%	27.0%	27.0%		43.0%	43.0%		43.0%	43.0%	
Maximum Green (s)	24.0	24.0	24.0	21.0	21.0		37.0	37.0		37.0	37.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0		-2.0	-2.0		-2.0	-2.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None		Min	Min		Min	Min	
Walk Time (s)	7.0	7.0	7.0	7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0	0	0	0		0	0		0	0	
Act Effct Green (s)	12.3	12.3	12.3	12.3	12.3		27.1	27.1		27.1	27.1	
Actuated g/C Ratio	0.26	0.26	0.26	0.26	0.26		0.56	0.56		0.56	0.56	
v/c Ratio	0.13	0.13	0.10	0.01	0.06		0.11	0.05		0.02	0.27	
Control Delay	17.9	18.0	1.9	17.8	12.1		11.4	9.5		10.6	5.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	17.9	18.0	1.9	17.8	12.1		11.4	9.5		10.6	5.5	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	B	B	A	B	B		B	A		B	A	
Approach Delay		13.0			12.9			10.2			5.7	
Approach LOS		B			B			B			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 48.2			
Natural Cycle: 75			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.27			
Intersection Signal Delay: 8.0		Intersection LOS: A	
Intersection Capacity Utilization 53.0%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 10: River Rd & Hwy 8 NB Ramp/Stonegate Dr



Intersection	
Int Delay, s/veh	1.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	668	111	0	1001	0	186
Future Vol, veh/h	668	111	0	1001	0	186
Conflicting Peds, #/hr	0	1	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	11	5	0	9	0	8
Mvmt Flow	668	111	0	1001	0	186

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	391
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.06
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.38
Pot Cap-1 Maneuver	-	-	0	-	0	591
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	590
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	13.9
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	590	-	-	-
HCM Lane V/C Ratio	0.315	-	-	-
HCM Control Delay (s)	13.9	-	-	-
HCM Lane LOS	B	-	-	-
HCM 95th %tile Q(veh)	1.3	-	-	-

Intersection	
Int Delay, s/veh	5.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	249	325	37	11	83	21	4	3	2	1	31	303
Future Vol, veh/h	249	325	37	11	83	21	4	3	2	1	31	303
Conflicting Peds, #/hr	1	0	4	4	0	1	0	0	3	3	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	0	-	-	-	-	45	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	7	3	11	0	14	10	0	0	50	0	13	6
Mvmt Flow	249	325	37	11	83	21	4	3	2	1	31	303

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	105	0	0	366	0	0	977	973	351	953	970	84
Stage 1	-	-	-	-	-	-	846	846	-	106	106	-
Stage 2	-	-	-	-	-	-	131	127	-	847	864	-
Critical Hdwy	4.17	-	-	4.1	-	-	7.1	6.5	6.7	7.1	6.63	6.26
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.63	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.63	-
Follow-up Hdwy	2.263	-	-	2.2	-	-	3.5	4	3.75	3.5	4.117	3.354
Pot Cap-1 Maneuver	1456	-	-	1204	-	-	232	254	596	241	243	964
Stage 1	-	-	-	-	-	-	360	381	-	905	787	-
Stage 2	-	-	-	-	-	-	877	795	-	359	356	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1455	-	-	1200	-	-	121	208	592	204	199	963
Mov Cap-2 Maneuver	-	-	-	-	-	-	121	208	-	204	199	-
Stage 1	-	-	-	-	-	-	297	315	-	749	778	-
Stage 2	-	-	-	-	-	-	571	786	-	293	294	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	3.3	0.8	26.4	11.9
HCM LOS			D	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	177	1455	-	-	1200	-	-	199	963
HCM Lane V/C Ratio	0.051	0.171	-	-	0.009	-	-	0.161	0.315
HCM Control Delay (s)	26.4	8	-	-	8	0	-	26.5	10.4
HCM Lane LOS	D	A	-	-	A	A	-	D	B
HCM 95th %tile Q(veh)	0.2	0.6	-	-	0	-	-	0.6	1.4

Intersection	
Int Delay, s/veh	0.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	140	0	0	320	0	20
Future Vol, veh/h	140	0	0	320	0	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	140	0	0	320	0	20

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	70
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	-	-	0	-	0	978
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	978
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	8.8
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	978	-	-	-
HCM Lane V/C Ratio	0.02	-	-	-
HCM Control Delay (s)	8.8	-	-	-
HCM Lane LOS	A	-	-	-
HCM 95th %tile Q(veh)	0.1	-	-	-

Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	6:40	6:40	6:40	6:40	6:40	6:40
End Time	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	80	80	80	80	80	80
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1
Vehs Entered	7537	7397	7476	7373	7425	7446
Vehs Exited	7506	7401	7459	7365	7407	7428
Starting Vehs	276	284	263	288	268	276
Ending Vehs	307	280	280	296	286	286
Travel Distance (km)	10082	9968	9983	9869	9939	9968
Travel Time (hr)	277.1	268.8	272.4	270.0	270.7	271.8
Total Delay (hr)	81.2	74.3	77.7	78.1	76.9	77.6
Total Stops	7937	7523	7496	7649	7685	7658
Fuel Used (l)	875.7	863.0	862.6	855.8	857.9	863.0

Interval #0 Information Seeding

Start Time	6:40
End Time	7:00
Total Time (min)	20

Volumes adjusted by Growth Factors.

No data recorded this interval.

Interval #1 Information Recording

Start Time	7:00
End Time	8:00
Total Time (min)	60

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	Avg
Vehs Entered	7537	7397	7476	7373	7425	7446
Vehs Exited	7506	7401	7459	7365	7407	7428
Starting Vehs	276	284	263	288	268	276
Ending Vehs	307	280	280	296	286	286
Travel Distance (km)	10082	9968	9983	9869	9939	9968
Travel Time (hr)	277.1	268.8	272.4	270.0	270.7	271.8
Total Delay (hr)	81.2	74.3	77.7	78.1	76.9	77.6
Total Stops	7937	7523	7496	7649	7685	7658
Fuel Used (l)	875.7	863.0	862.6	855.8	857.9	863.0

Intersection: 1: River Rd & King St

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	T	R	L	T	TR	L	T	TR
Maximum Queue (m)	28.4	41.9	36.9	48.4	41.1	20.8	17.5	23.7	43.5	37.6	39.5	49.4
Average Queue (m)	10.3	18.9	15.1	24.3	19.9	8.1	5.5	4.4	16.3	18.3	11.0	22.9
95th Queue (m)	23.9	35.7	29.5	43.0	36.3	17.4	14.3	13.6	33.9	33.2	26.3	41.2
Link Distance (m)		1068.8			402.4			185.1	185.1		162.1	162.1
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	45.0		45.0	50.0		50.0	75.0			45.0		
Storage Blk Time (%)	0	0	0	1	0					0	0	
Queuing Penalty (veh)	0	0	0	2	0					0	0	

Intersection: 3: Fairway Rd & Hwy 8 SB Ramp

Movement	EB	EB	EB	EB	NB	NB	NB	SB	SB	SB	SB	
Directions Served	L	L	R	R	L	T	T	T	T	T	R	
Maximum Queue (m)	53.4	63.3	53.9	46.1	48.9	49.0	52.2	81.5	75.2	67.2	34.6	
Average Queue (m)	24.5	34.2	27.5	11.0	24.3	24.2	25.8	40.7	39.7	32.0	10.5	
95th Queue (m)	45.8	54.0	46.8	29.3	41.6	43.9	47.1	70.5	68.9	58.3	23.2	
Link Distance (m)		382.8	382.8			274.9	274.9	474.0	474.0	474.0		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	75.0			50.0	85.0						75.0	
Storage Blk Time (%)		0	0	0						0		
Queuing Penalty (veh)		0	0	0						0		

Intersection: 5: Cineplex/Fairview Park Mall & Fairway Rd

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	T	R	L	TR	L	L	TR
Maximum Queue (m)	19.4	37.8	34.6	22.0	67.5	64.7	31.5	12.9	20.0	45.2	57.7	20.1
Average Queue (m)	6.8	14.8	13.5	8.5	21.1	23.7	5.9	2.1	5.4	10.7	20.5	5.3
95th Queue (m)	16.0	29.8	29.9	18.2	52.5	53.9	19.3	8.7	14.8	28.3	43.8	16.2
Link Distance (m)		251.1	251.1		183.4	183.4	183.4	128.5	128.5		136.6	136.6
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	40.0			130.0						40.0		
Storage Blk Time (%)		0								0	2	
Queuing Penalty (veh)		0								0	1	

Intersection: 6: Wilson Ave & Fairway Rd

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	TR	L	T	T	R	L	T	R	L	T
Maximum Queue (m)	31.1	62.6	63.6	63.0	49.8	56.9	36.3	44.9	63.1	31.2	51.6	58.9
Average Queue (m)	13.7	33.0	26.5	27.3	20.7	24.3	6.7	16.8	29.5	11.4	23.6	19.9
95th Queue (m)	26.1	56.2	51.0	49.9	43.3	47.3	21.8	35.6	52.9	23.7	40.3	40.5
Link Distance (m)		436.6	436.6		251.1	251.1			283.3	283.3		306.3
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	120.0			160.0			30.0	95.0			45.0	
Storage Blk Time (%)						6	0				1	1
Queuing Penalty (veh)						5	0				2	2

Intersection: 6: Wilson Ave & Fairway Rd

Movement	SB
Directions Served	R
Maximum Queue (m)	30.7
Average Queue (m)	9.0
95th Queue (m)	20.5
Link Distance (m)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	45.0
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 10: River Rd & Hwy 8 NB Ramp/Stonegate Dr

Movement	EB	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB	
Directions Served	L	LT	R	L	TR	L	T	TR	L	T	TR	
Maximum Queue (m)	14.0	25.1	16.0	9.7	14.9	19.2	15.4	16.0	11.3	27.6	37.6	
Average Queue (m)	3.2	11.8	6.4	1.2	5.3	6.9	3.1	4.1	2.5	10.8	18.0	
95th Queue (m)	10.8	21.3	14.1	6.1	13.2	15.6	9.9	11.8	9.1	21.9	31.6	
Link Distance (m)		217.2			139.9		199.5	199.5		185.1	185.1	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	140.0		140.0	15.0		90.0			45.0			
Storage Blk Time (%)				0	1							
Queuing Penalty (veh)				0	0							

Zone Summary

Zone wide Queuing Penalty: 13

Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	6:40	6:40	6:40	6:40	6:40	6:40
End Time	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	80	80	80	80	80	80
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1
Vehs Entered	7537	7397	7476	7373	7425	7446
Vehs Exited	7506	7401	7459	7365	7407	7428
Starting Vehs	276	284	263	288	268	276
Ending Vehs	307	280	280	296	286	286
Travel Distance (km)	10082	9968	9983	9869	9939	9968
Travel Time (hr)	277.1	268.8	272.4	270.0	270.7	271.8
Total Delay (hr)	81.2	74.3	77.7	78.1	76.9	77.6
Total Stops	7937	7523	7496	7649	7685	7658
Fuel Used (l)	875.7	863.0	862.6	855.8	857.9	863.0

Interval #0 Information Seeding

Start Time	6:40
End Time	7:00
Total Time (min)	20

Volumes adjusted by Growth Factors.

No data recorded this interval.

Interval #1 Information Recording

Start Time	7:00
End Time	8:00
Total Time (min)	60

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	Avg
Vehs Entered	7537	7397	7476	7373	7425	7446
Vehs Exited	7506	7401	7459	7365	7407	7428
Starting Vehs	276	284	263	288	268	276
Ending Vehs	307	280	280	296	286	286
Travel Distance (km)	10082	9968	9983	9869	9939	9968
Travel Time (hr)	277.1	268.8	272.4	270.0	270.7	271.8
Total Delay (hr)	81.2	74.3	77.7	78.1	76.9	77.6
Total Stops	7937	7523	7496	7649	7685	7658
Fuel Used (l)	875.7	863.0	862.6	855.8	857.9	863.0

Intersection: 2: Stonegate Dr & King St

Movement
Directions Served
Maximum Queue (m)
Average Queue (m)
95th Queue (m)
Link Distance (m)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (m)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 4: Wabanaki Dr & Fairway Rd

Movement	EB	NB
Directions Served	TR	R
Maximum Queue (m)	5.4	33.2
Average Queue (m)	0.2	16.4
95th Queue (m)	2.3	26.8
Link Distance (m)	183.4	236.0
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 9: Wilson Ave & Wabanaki Dr

Movement	EB	EB	WB	WB	NB	SB
Directions Served	L	TR	LT	R	LTR	LT
Maximum Queue (m)	22.2	8.8	14.2	5.5	15.1	19.1
Average Queue (m)	5.8	0.5	1.4	0.2	2.8	6.2
95th Queue (m)	16.2	3.8	7.4	2.4	10.2	15.4
Link Distance (m)	638.8	638.8	1016.3		120.7	264.2
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (m)				45.0		
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 11: Hidden Valley Rd & River Rd

Movement	NB
Directions Served	R
Maximum Queue (m)	8.3
Average Queue (m)	4.1
95th Queue (m)	10.8
Link Distance (m)	192.8
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 19: River Rd & Hwy 8 SB Ramp

Movement	EB	WB
Directions Served	L	TR
Maximum Queue (m)	17.1	6.2
Average Queue (m)	8.0	0.4
95th Queue (m)	16.0	3.2
Link Distance (m)		293.2
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)	90.0	
Storage Blk Time (%)		
Queuing Penalty (veh)		

Zone Summary

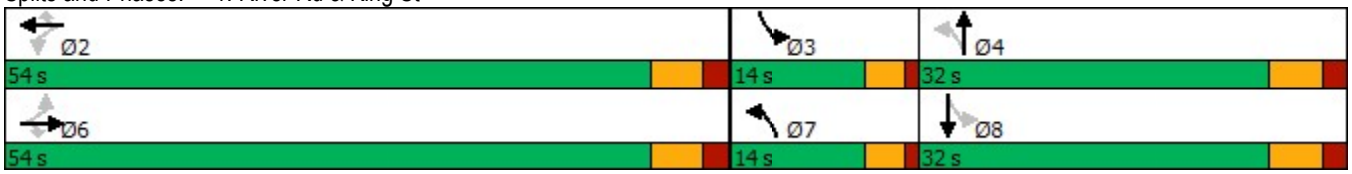
Zone wide Queuing Penalty: 0

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	134	354	104	184	421	224	95	86	190	186	170	115
Future Volume (vph)	134	354	104	184	421	224	95	86	190	186	170	115
Ideal Flow (vphpl)	1775	1650	1000	1775	1900	1750	1000	1550	1000	1000	1650	1750
Storage Length (m)	45.0		45.0	50.0		50.0	75.0		0.0	45.0		0.0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (m)	60.0			70.0			40.0			60.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	1.00		0.99	1.00		0.99	1.00	0.98		0.99	0.99	
Frt			0.850			0.850		0.897			0.939	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1686	1618	726	1686	1863	1488	872	2529	0	941	2899	0
Flt Permitted	0.393			0.457			0.569			0.495		
Satd. Flow (perm)	697	1618	716	810	1863	1469	519	2529	0	488	2899	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			104			224		190			115	
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		1100.5			425.6			212.4			178.4	
Travel Time (s)		66.0			25.5			12.7			10.7	
Confl. Peds. (#/hr)	1		4	4		1	4		4	4		4
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	2%	17%	0%	2%	0%	9%	8%	0%	1%	0%	1%
Adj. Flow (vph)	134	354	104	184	421	224	95	86	190	186	170	115
Shared Lane Traffic (%)												
Lane Group Flow (vph)	134	354	104	184	421	224	95	276	0	186	285	0
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		6			2		7	4		3	8	
Permitted Phases	6		6	2		2	4			8		
Detector Phase	6	6	6	2	2	2	7	4		3	8	
Switch Phase												
Minimum Initial (s)	48.0	48.0	48.0	48.0	48.0	48.0	5.0	26.0		5.0	26.0	
Minimum Split (s)	54.0	54.0	54.0	54.0	54.0	54.0	11.0	32.0		11.0	32.0	
Total Split (s)	54.0	54.0	54.0	54.0	54.0	54.0	14.0	32.0		14.0	32.0	
Total Split (%)	54.0%	54.0%	54.0%	54.0%	54.0%	54.0%	14.0%	32.0%		14.0%	32.0%	
Maximum Green (s)	48.0	48.0	48.0	48.0	48.0	48.0	10.0	26.0		10.0	26.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	3.0	4.0		3.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	1.0	2.0		1.0	2.0	
Lost Time Adjust (s)	0.0	-2.0	0.0	-2.0	-2.0	-2.0	0.0	-2.0		0.0	-2.0	
Total Lost Time (s)	6.0	4.0	6.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	Min	Min	Min	Min	Min	Min	None	None		None	None	
Walk Time (s)	35.0	35.0	35.0	35.0	35.0	35.0		15.0			15.0	
Flash Dont Walk (s)	16.0	16.0	16.0	16.0	16.0	16.0		11.0			11.0	
Pedestrian Calls (#/hr)	0	0	0	0	0	0		0			0	
Act Effct Green (s)	48.0	50.0	48.0	50.0	50.0	50.0	37.4	28.0		38.8	30.8	
Actuated g/C Ratio	0.48	0.50	0.48	0.50	0.50	0.50	0.37	0.28		0.39	0.31	
v/c Ratio	0.40	0.44	0.26	0.45	0.45	0.26	0.42	0.33		0.79	0.29	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay	21.3	18.2	4.8	20.7	18.1	2.7	25.8	10.5		50.0	17.3	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	21.3	18.2	4.8	20.7	18.1	2.7	25.8	10.5		50.0	17.3	
LOS	C	B	A	C	B	A	C	B		D	B	
Approach Delay		16.5			14.5			14.5			30.2	
Approach LOS		B			B			B			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Natural Cycle: 100			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.79			
Intersection Signal Delay: 18.3		Intersection LOS: B	
Intersection Capacity Utilization 135.0%		ICU Level of Service H	
Analysis Period (min) 15			

Splits and Phases: 1: River Rd & King St

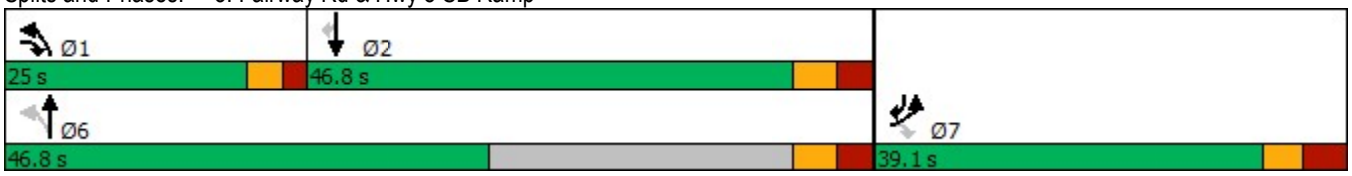


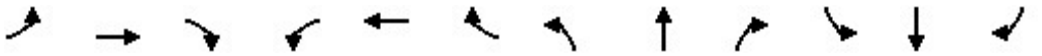
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	710	584	242	1182	1200	143
Future Volume (vph)	710	584	242	1182	1200	143
Ideal Flow (vphpl)	1775	1750	1775	1900	1900	1750
Lane Width (m)	3.5	3.5	3.5	3.5	3.5	3.5
Storage Length (m)	75.0	50.0	85.0			75.0
Storage Lanes	1	1	1			1
Taper Length (m)	60.0		75.0			
Lane Util. Factor	0.97	0.88	1.00	0.95	0.91	1.00
Ped Bike Factor		0.98	1.00			0.94
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	3141	2538	1588	3466	4932	1428
Flt Permitted	0.950		0.125			
Satd. Flow (perm)	3141	2484	208	3466	4932	1339
Right Turn on Red		No				Yes
Satd. Flow (RTOR)						143
Link Speed (k/h)	60			60	60	
Link Distance (m)	404.4			302.0	498.0	
Travel Time (s)	24.3			18.1	29.9	
Confl. Peds. (#/hr)		9	25			25
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	3%	2%	5%	3%	4%	3%
Adj. Flow (vph)	710	584	242	1182	1200	143
Shared Lane Traffic (%)						
Lane Group Flow (vph)	710	584	242	1182	1200	143
Turn Type	Prot	pm+ov	pm+pt	NA	NA	pm+ov
Protected Phases	7	1	1	6	2	7
Permitted Phases		7	6			2
Detector Phase	7	1	1	6	2	7
Switch Phase						
Minimum Initial (s)	10.0	8.0	8.0	40.0	40.0	10.0
Minimum Split (s)	17.1	13.0	13.0	46.8	46.8	17.1
Total Split (s)	39.1	25.0	25.0	46.8	46.8	39.1
Total Split (%)	35.3%	22.5%	22.5%	42.2%	42.2%	35.3%
Maximum Green (s)	32.0	20.0	20.0	40.0	40.0	32.0
Yellow Time (s)	3.3	3.0	3.0	3.7	3.7	3.3
All-Red Time (s)	3.8	2.0	2.0	3.1	3.1	3.8
Lost Time Adjust (s)	-3.1	-1.0	-1.0	-2.8	-2.8	-3.1
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag		Lead	Lead		Lag	
Lead-Lag Optimize?						
Vehicle Extension (s)	4.0	4.0	4.0	3.0	3.0	4.0
Recall Mode	None	None	None	Max	Max	None
Walk Time (s)	9.0			10.0	10.0	9.0
Flash Dont Walk (s)	23.0			30.0	30.0	23.0
Pedestrian Calls (#/hr)	0			0	0	0
Act Effct Green (s)	32.0	49.4	64.4	64.4	43.0	75.1
Actuated g/C Ratio	0.31	0.47	0.62	0.62	0.41	0.72

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
v/c Ratio	0.74	0.49	0.68	0.55	0.59	0.14
Control Delay	38.1	17.8	27.0	13.2	26.3	1.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	38.1	17.8	27.0	13.2	26.3	1.0
LOS	D	B	C	B	C	A
Approach Delay	28.9			15.5	23.6	
Approach LOS	C			B	C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110.9			
Actuated Cycle Length: 104.5			
Natural Cycle: 80			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.74			
Intersection Signal Delay: 22.5		Intersection LOS: C	
Intersection Capacity Utilization 80.7%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 3: Fairway Rd & Hwy 8 SB Ramp



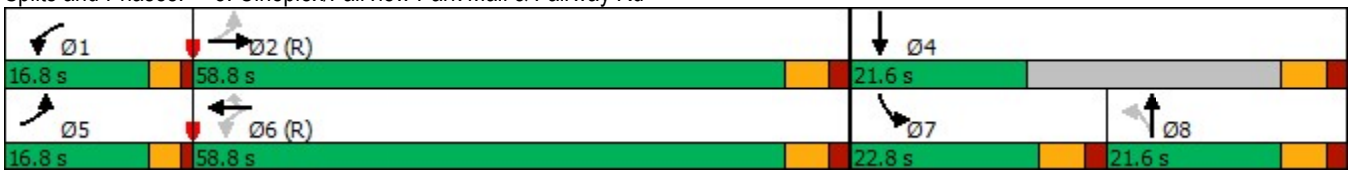


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	180	957	56	227	1169	208	65	65	120	272	46	165
Future Volume (vph)	180	957	56	227	1169	208	65	65	120	272	46	165
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	40.0		0.0	130.0		0.0	0.0		0.0	40.0		0.0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (m)	45.0			40.0			7.5			15.0		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	0.97	1.00	1.00
Frt		0.992				0.850		0.903			0.883	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3515	0	1787	3438	1482	1770	1716	0	3213	1620	0
Flt Permitted	0.138			0.181			0.626			0.950		
Satd. Flow (perm)	262	3515	0	340	3438	1482	1166	1716	0	3213	1620	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6				205		65			162	
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		276.4			205.3			142.3			155.5	
Travel Time (s)		16.6			12.3			10.2			11.2	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	2%	0%	1%	5%	9%	2%	0%	0%	9%	2%	4%
Adj. Flow (vph)	180	957	56	227	1169	208	65	65	120	272	46	165
Shared Lane Traffic (%)												
Lane Group Flow (vph)	180	1013	0	227	1169	208	65	185	0	272	211	0
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Perm	NA		Prot	NA	
Protected Phases	5	2		1	6			8		7	4	
Permitted Phases	2			6		6	8					
Detector Phase	5	2		1	6	6	8	8		7	4	
Switch Phase												
Minimum Initial (s)	5.0	52.8		5.0	52.8	52.8	8.0	8.0		5.0	8.0	
Minimum Split (s)	9.0	58.8		9.0	58.8	58.8	14.0	14.0		11.0	14.0	
Total Split (s)	16.8	58.8		16.8	58.8	58.8	21.6	21.6		22.8	21.6	
Total Split (%)	14.0%	49.0%		14.0%	49.0%	49.0%	18.0%	18.0%		19.0%	18.0%	
Maximum Green (s)	12.8	52.8		12.8	52.8	52.8	15.6	15.6		16.8	15.6	
Yellow Time (s)	3.0	4.0		3.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	2.0		1.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	-2.0		0.0	-2.0	-2.0	-2.0	-2.0		-2.0	-2.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lag	Lag		Lead		
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	C-Max		None	C-Max	C-Max	None	None		None	None	
Walk Time (s)		31.8			31.8	31.8	12.0	12.0			12.0	
Flash Dont Walk (s)		21.0			21.0	21.0	15.0	15.0			15.0	
Pedestrian Calls (#/hr)		0			0	0	0	0			0	
Act Effct Green (s)	71.5	61.1		73.1	61.9	61.9	14.9	14.9		16.8	35.7	
Actuated g/C Ratio	0.60	0.51		0.61	0.52	0.52	0.12	0.12		0.14	0.30	
v/c Ratio	0.62	0.57		0.66	0.66	0.24	0.45	0.69		0.61	0.35	
Control Delay	27.1	15.4		20.8	25.0	3.4	58.1	45.4		54.3	9.9	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay	27.1	15.4		20.8	25.0	3.4	58.1	45.4		54.3	9.9	
LOS	C	B		C	C	A	E	D		D	A	
Approach Delay		17.2			21.6			48.7			34.9	
Approach LOS		B			C			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 27.6 (23%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 95			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.69			
Intersection Signal Delay: 23.8		Intersection LOS: C	
Intersection Capacity Utilization 89.2%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 5: Cineplex/Fairview Park Mall & Fairway Rd

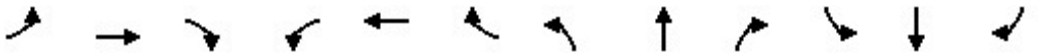


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	204	707	57	266	889	149	134	313	229	210	162	142
Future Volume (vph)	204	707	57	266	889	149	134	313	229	210	162	142
Ideal Flow (vphpl)	1775	1775	1000	1775	1900	1750	1775	1900	1750	1775	1775	1000
Lane Width (m)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Storage Length (m)	120.0		0.0	160.0		30.0	95.0		0.0	45.0		45.0
Storage Lanes	1		0	1		1	1		1	1		1
Taper Length (m)	60.0			40.0			7.5			10.0		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.99	1.00		0.99		0.91	0.96		0.94	0.98		0.94
Frt		0.989				0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1619	3225	0	1544	3500	1362	1635	1807	1401	1668	1755	832
Flt Permitted	0.181			0.211			0.654			0.196		
Satd. Flow (perm)	305	3225	0	340	3500	1246	1079	1807	1313	336	1755	780
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7				136			100			142
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		450.5			276.4			297.0			324.1	
Travel Time (s)		27.0			16.6			21.4			23.3	
Confl. Peds. (#/hr)	40		35	35		40	46		46	46		46
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	3%	2%	1%	8%	2%	8%	2%	4%	5%	0%	0%	1%
Adj. Flow (vph)	204	707	57	266	889	149	134	313	229	210	162	142
Shared Lane Traffic (%)												
Lane Group Flow (vph)	204	764	0	266	889	149	134	313	229	210	162	142
Turn Type	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	pm+ov	pm+pt	NA	Perm
Protected Phases	1	6		5	2		7	4	5	3	8	
Permitted Phases	6			2		2	4		4	8		8
Detector Phase	1	6		5	2	2	7	4	5	3	8	8
Switch Phase												
Minimum Initial (s)	5.0	34.0		5.0	34.0	34.0	5.0	8.0	5.0	5.0	8.0	8.0
Minimum Split (s)	9.0	43.0		9.0	43.0	43.0	9.0	14.0	9.0	9.0	14.0	14.0
Total Split (s)	22.0	43.0		22.0	43.0	43.0	11.0	38.0	22.0	17.0	38.0	38.0
Total Split (%)	18.3%	35.8%		18.3%	35.8%	35.8%	9.2%	31.7%	18.3%	14.2%	31.7%	31.7%
Maximum Green (s)	18.0	37.0		18.0	37.0	37.0	7.0	32.0	18.0	13.0	32.0	32.0
Yellow Time (s)	3.0	4.0		3.0	4.0	4.0	3.0	4.0	3.0	3.0	4.0	4.0
All-Red Time (s)	1.0	2.0		1.0	2.0	2.0	1.0	2.0	1.0	1.0	2.0	2.0
Lost Time Adjust (s)	0.0	-2.0		0.0	-2.0	-2.0	0.0	-2.0	0.0	0.0	-2.0	-2.0
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	3.0		4.0	3.0	3.0	3.0	3.0	4.0	3.0	3.0	3.0
Recall Mode	None	C-Max		None	C-Max	C-Max	None	None	None	None	None	None
Walk Time (s)		19.0			19.0	19.0		7.0			7.0	7.0
Flash Dont Walk (s)		17.0			17.0	17.0		25.0			25.0	25.0
Pedestrian Calls (#/hr)		0			0	0		0			0	0
Act Effct Green (s)	61.8	46.2		65.7	48.2	48.2	34.6	27.6	45.1	44.3	33.3	33.3
Actuated g/C Ratio	0.52	0.38		0.55	0.40	0.40	0.29	0.23	0.38	0.37	0.28	0.28

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.62	0.61		0.73	0.63	0.26	0.39	0.76	0.40	0.79	0.33	0.45
Control Delay	24.6	33.6		44.5	53.1	26.0	29.8	54.6	14.4	48.8	35.3	9.6
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	24.6	33.6		44.5	53.1	26.0	29.8	54.6	14.4	48.8	35.3	9.6
LOS	C	C		D	D	C	C	D	B	D	D	A
Approach Delay		31.7			48.2			36.1			33.7	
Approach LOS		C			D			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 0 (0%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.79			
Intersection Signal Delay: 39.1		Intersection LOS: D	
Intersection Capacity Utilization 96.0%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 6: Wilson Ave & Fairway Rd

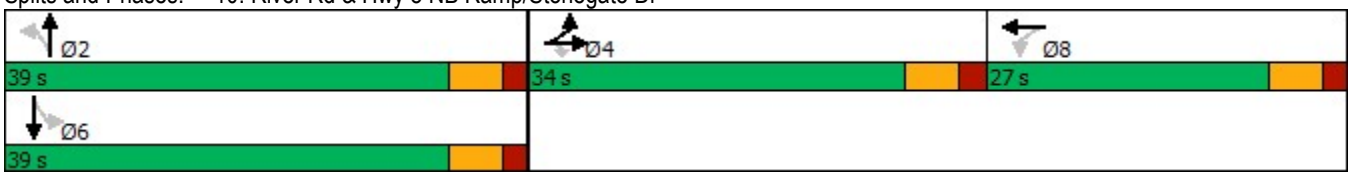


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	212	6	64	4	6	22	37	137	1	53	219	190
Future Volume (vph)	212	6	64	4	6	22	37	137	1	53	219	190
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	140.0		140.0	15.0		0.0	90.0		0.0	45.0		0.0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (m)	70.0			15.0			70.0			30.0		
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850		0.882			0.999			0.930	
Flt Protected	0.950	0.955		0.950			0.950			0.950		
Satd. Flow (prot)	1681	1690	1583	1770	1643	0	1770	3536	0	1770	3291	0
Flt Permitted	0.950	0.955		0.727			0.510			0.664		
Satd. Flow (perm)	1681	1690	1583	1354	1643	0	950	3536	0	1237	3291	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			98		22			1			190	
Link Speed (k/h)		50			40			60			60	
Link Distance (m)		231.4			154.4			218.6			212.4	
Travel Time (s)		16.7			13.9			13.1			12.7	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	212	6	64	4	6	22	37	137	1	53	219	190
Shared Lane Traffic (%)	49%											
Lane Group Flow (vph)	108	110	64	4	28	0	37	138	0	53	409	0
Turn Type	Split	NA	Perm	Perm	NA		Perm	NA		Perm	NA	
Protected Phases	4	4			8			2			6	
Permitted Phases			4	8			2			6		
Detector Phase	4	4	4	8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0		20.0	20.0		20.0	20.0	
Minimum Split (s)	24.0	24.0	24.0	24.0	24.0		26.0	26.0		26.0	26.0	
Total Split (s)	34.0	34.0	34.0	27.0	27.0		39.0	39.0		39.0	39.0	
Total Split (%)	34.0%	34.0%	34.0%	27.0%	27.0%		39.0%	39.0%		39.0%	39.0%	
Maximum Green (s)	28.0	28.0	28.0	21.0	21.0		33.0	33.0		33.0	33.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0		-2.0	-2.0		-2.0	-2.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None		Min	Min		Min	Min	
Walk Time (s)	7.0	7.0	7.0	7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0	0	0	0		0	0		0	0	
Act Effct Green (s)	12.7	12.7	12.7	12.3	12.3		25.3	25.3		25.3	25.3	
Actuated g/C Ratio	0.25	0.25	0.25	0.24	0.24		0.49	0.49		0.49	0.49	
v/c Ratio	0.26	0.27	0.14	0.01	0.07		0.08	0.08		0.09	0.24	
Control Delay	18.9	18.9	3.2	18.2	11.2		11.4	9.8		11.1	5.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	18.9	18.9	3.2	18.2	11.2		11.4	9.8		11.1	5.9	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	B	B	A	B	B		B	A		B	A	
Approach Delay		15.3			12.1			10.2			6.5	
Approach LOS		B			B			B			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 51.8			
Natural Cycle: 75			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.27			
Intersection Signal Delay: 10.0		Intersection LOS: A	
Intersection Capacity Utilization 56.0%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 10: River Rd & Hwy 8 NB Ramp/Stonegate Dr



Intersection	
Int Delay, s/veh	1.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1266	115	0	1655	0	221
Future Vol, veh/h	1266	115	0	1655	0	221
Conflicting Peds, #/hr	0	2	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	4	8	0	5	0	3
Mvmt Flow	1266	115	0	1655	0	221

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	693
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.96
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.33
Pot Cap-1 Maneuver	-	-	0	-	0	384
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	383
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	26.5
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	383	-	-	-
HCM Lane V/C Ratio	0.577	-	-	-
HCM Control Delay (s)	26.5	-	-	-
HCM Lane LOS	D	-	-	-
HCM 95th %tile Q(veh)	3.5	-	-	-

Intersection	
Int Delay, s/veh	15.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	366	299	16	4	130	6	38	17	20	2	11	522
Future Vol, veh/h	366	299	16	4	130	6	38	17	20	2	11	522
Conflicting Peds, #/hr	2	0	0	0	0	2	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	0	-	-	-	-	45	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	4	4	0	0	8	0	3	0	0	0	10	5
Mvmt Flow	366	299	16	4	130	6	38	17	20	2	11	522

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	138	0	0	315	0	0	1186	1185	307	1198	1187	132
Stage 1	-	-	-	-	-	-	1039	1039	-	140	140	-
Stage 2	-	-	-	-	-	-	147	146	-	1058	1047	-
Critical Hdwy	4.14	-	-	4.1	-	-	7.13	6.5	6.2	7.1	6.6	6.25
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.5	-	6.1	5.6	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.5	-	6.1	5.6	-
Follow-up Hdwy	2.236	-	-	2.2	-	-	3.527	4	3.3	3.5	4.09	3.345
Pot Cap-1 Maneuver	1433	-	-	1257	-	-	165	191	738	164	182	909
Stage 1	-	-	-	-	-	-	277	310	-	868	766	-
Stage 2	-	-	-	-	-	-	853	780	-	274	295	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1430	-	-	1257	-	-	53	141	738	116	135	907
Mov Cap-2 Maneuver	-	-	-	-	-	-	53	141	-	116	135	-
Stage 1	-	-	-	-	-	-	206	231	-	645	762	-
Stage 2	-	-	-	-	-	-	356	776	-	184	219	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	4.5	0.2	145.8	14.7
HCM LOS			F	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	87	1430	-	-	1257	-	-	132	907
HCM Lane V/C Ratio	0.862	0.256	-	-	0.003	-	-	0.098	0.576
HCM Control Delay (s)	145.8	8.4	-	-	7.9	0	-	35.2	14.2
HCM Lane LOS	F	A	-	-	A	A	-	E	B
HCM 95th %tile Q(veh)	4.6	1	-	-	0	-	-	0.3	3.8

Intersection	
Int Delay, s/veh	0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	164	5	0	287	0	11
Future Vol, veh/h	164	5	0	287	0	11
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	164	5	0	287	0	11

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	85
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	-	-	0	-	0	957
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	957
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	8.8
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	957	-	-	-
HCM Lane V/C Ratio	0.011	-	-	-
HCM Control Delay (s)	8.8	-	-	-
HCM Lane LOS	A	-	-	-
HCM 95th %tile Q(veh)	0	-	-	-

Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	3:40	3:40	3:40	3:40	3:40	3:40
End Time	5:00	5:00	5:00	5:00	5:00	5:00
Total Time (min)	80	80	80	80	80	80
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1
Vehs Entered	11096	11163	11413	11233	11408	11266
Vehs Exited	11026	11215	11319	11153	11366	11217
Starting Vehs	492	503	454	496	476	478
Ending Vehs	562	451	548	576	518	529
Travel Distance (km)	14813	14921	15192	15060	15233	15044
Travel Time (hr)	488.3	491.9	508.7	506.0	507.0	500.4
Total Delay (hr)	203.1	204.6	216.3	215.9	213.5	210.7
Total Stops	15276	15429	15736	15769	15656	15570
Fuel Used (l)	1376.6	1386.4	1419.4	1408.4	1421.4	1402.5

Interval #0 Information Seeding

Start Time	3:40
End Time	4:00
Total Time (min)	20

Volumes adjusted by Growth Factors.

No data recorded this interval.

Interval #1 Information Recording

Start Time	4:00
End Time	5:00
Total Time (min)	60

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	Avg
Vehs Entered	11096	11163	11413	11233	11408	11266
Vehs Exited	11026	11215	11319	11153	11366	11217
Starting Vehs	492	503	454	496	476	478
Ending Vehs	562	451	548	576	518	529
Travel Distance (km)	14813	14921	15192	15060	15233	15044
Travel Time (hr)	488.3	491.9	508.7	506.0	507.0	500.4
Total Delay (hr)	203.1	204.6	216.3	215.9	213.5	210.7
Total Stops	15276	15429	15736	15769	15656	15570
Fuel Used (l)	1376.6	1386.4	1419.4	1408.4	1421.4	1402.5

Intersection: 1: River Rd & King St

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	T	R	L	T	TR	L	T	TR
Maximum Queue (m)	43.7	77.5	27.1	66.3	81.3	25.2	35.1	31.6	55.1	56.9	37.8	53.4
Average Queue (m)	23.4	41.1	11.0	32.4	44.2	12.7	14.6	8.0	23.9	26.0	12.8	24.3
95th Queue (m)	40.0	65.2	22.0	55.6	71.8	21.4	29.0	21.0	46.2	47.6	28.5	45.5
Link Distance (m)		1068.8			402.4			185.1	185.1		162.1	162.1
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	45.0		45.0	50.0		50.0	75.0			45.0		
Storage Blk Time (%)	0	5		3	5					3	0	
Queuing Penalty (veh)	2	13		22	22					3	0	

Intersection: 3: Fairway Rd & Hwy 8 SB Ramp

Movement	EB	EB	EB	EB	NB	NB	NB	SB	SB	SB	SB	
Directions Served	L	L	R	R	L	T	T	T	T	T	R	
Maximum Queue (m)	119.6	133.4	160.3	79.4	71.8	98.7	98.1	105.9	102.1	92.4	28.3	
Average Queue (m)	69.8	78.1	48.3	29.8	36.5	56.5	57.2	63.9	64.5	54.7	11.9	
95th Queue (m)	109.9	119.9	102.7	59.2	60.4	90.0	90.0	95.2	95.2	85.8	23.6	
Link Distance (m)		382.8	382.8			274.9	274.9	474.0	474.0	474.0		
Upstream Blk Time (%)			0									
Queuing Penalty (veh)			0									
Storage Bay Dist (m)	75.0			50.0	85.0						75.0	
Storage Blk Time (%)	7	14	4	0	0	1				1		
Queuing Penalty (veh)	24	50	11	1	0	2				2		

Intersection: 5: Cineplex/Fairview Park Mall & Fairway Rd

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	T	R	L	TR	L	L	TR
Maximum Queue (m)	63.1	80.1	78.2	61.3	126.7	127.4	67.0	35.1	68.6	54.9	86.2	66.1
Average Queue (m)	31.5	37.0	38.0	32.3	71.0	73.4	18.2	13.6	34.5	29.4	43.6	27.6
95th Queue (m)	53.0	63.0	65.2	54.6	116.8	116.9	44.4	28.1	63.4	57.6	71.0	53.7
Link Distance (m)		251.1	251.1		183.4	183.4	183.4	128.5	128.5		136.6	136.6
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	40.0			130.0						40.0		
Storage Blk Time (%)	7	4			0					4	18	
Queuing Penalty (veh)	34	8			0					5	25	

Intersection: 6: Wilson Ave & Fairway Rd

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	TR	L	T	T	R	L	T	R	L	T
Maximum Queue (m)	78.6	107.8	102.3	102.8	141.9	147.1	55.0	77.9	110.0	76.9	54.4	85.6
Average Queue (m)	34.1	73.3	68.6	55.3	101.9	109.4	41.4	24.1	58.5	23.0	33.8	28.2
95th Queue (m)	60.0	102.3	96.3	91.2	132.9	142.5	74.8	50.3	95.1	48.1	53.6	59.8
Link Distance (m)		436.6	436.6		251.1	251.1			283.3	283.3		306.3
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	120.0			160.0			30.0	95.0			45.0	
Storage Blk Time (%)		0				52	3		1		5	1
Queuing Penalty (veh)		0				77	12		1		17	5

Intersection: 6: Wilson Ave & Fairway Rd

Movement	SB
Directions Served	R
Maximum Queue (m)	55.7
Average Queue (m)	14.5
95th Queue (m)	36.0
Link Distance (m)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	45.0
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 10: River Rd & Hwy 8 NB Ramp/Stonegate Dr

Movement	EB	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB	
Directions Served	L	LT	R	L	TR	L	T	TR	L	T	TR	
Maximum Queue (m)	21.3	38.7	17.8	8.6	13.6	18.5	17.6	15.8	18.0	32.3	41.5	
Average Queue (m)	9.1	19.7	7.6	0.6	5.9	5.5	5.5	5.3	6.4	11.4	18.1	
95th Queue (m)	18.9	33.7	14.6	4.3	13.6	14.1	14.5	12.8	15.0	24.1	32.4	
Link Distance (m)		217.2			139.9		199.5	199.5		185.1	185.1	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	140.0		140.0	15.0		90.0			45.0			
Storage Blk Time (%)					0					0		
Queuing Penalty (veh)					0					0		

Zone Summary

Zone wide Queuing Penalty: 337

Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	3:40	3:40	3:40	3:40	3:40	3:40
End Time	5:00	5:00	5:00	5:00	5:00	5:00
Total Time (min)	80	80	80	80	80	80
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1
Vehs Entered	11096	11163	11413	11233	11408	11266
Vehs Exited	11026	11215	11319	11153	11366	11217
Starting Vehs	492	503	454	496	476	478
Ending Vehs	562	451	548	576	518	529
Travel Distance (km)	14813	14921	15192	15060	15233	15044
Travel Time (hr)	488.3	491.9	508.7	506.0	507.0	500.4
Total Delay (hr)	203.1	204.6	216.3	215.9	213.5	210.7
Total Stops	15276	15429	15736	15769	15656	15570
Fuel Used (l)	1376.6	1386.4	1419.4	1408.4	1421.4	1402.5

Interval #0 Information Seeding

Start Time	3:40
End Time	4:00
Total Time (min)	20

Volumes adjusted by Growth Factors.

No data recorded this interval.

Interval #1 Information Recording

Start Time	4:00
End Time	5:00
Total Time (min)	60

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	Avg
Vehs Entered	11096	11163	11413	11233	11408	11266
Vehs Exited	11026	11215	11319	11153	11366	11217
Starting Vehs	492	503	454	496	476	478
Ending Vehs	562	451	548	576	518	529
Travel Distance (km)	14813	14921	15192	15060	15233	15044
Travel Time (hr)	488.3	491.9	508.7	506.0	507.0	500.4
Total Delay (hr)	203.1	204.6	216.3	215.9	213.5	210.7
Total Stops	15276	15429	15736	15769	15656	15570
Fuel Used (l)	1376.6	1386.4	1419.4	1408.4	1421.4	1402.5

Intersection: 2: Stonegate Dr & King St

Movement
Directions Served
Maximum Queue (m)
Average Queue (m)
95th Queue (m)
Link Distance (m)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (m)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 4: Wabanaki Dr & Fairway Rd

Movement	EB	EB	WB	WB	NB
Directions Served	T	TR	T	T	R
Maximum Queue (m)	3.9	1.3	112.7	55.1	64.0
Average Queue (m)	0.2	0.0	3.8	1.9	26.2
95th Queue (m)	2.2	0.9	56.5	38.9	50.7
Link Distance (m)	183.4	183.4	274.9	274.9	236.0
Upstream Blk Time (%)			0	0	
Queuing Penalty (veh)			0	0	
Storage Bay Dist (m)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 9: Wilson Ave & Wabanaki Dr

Movement	EB	EB	WB	NB	SB
Directions Served	L	TR	LT	LTR	LT
Maximum Queue (m)	25.6	6.6	5.9	26.9	15.4
Average Queue (m)	9.8	0.2	0.2	10.1	3.3
95th Queue (m)	20.8	3.3	2.6	19.3	11.1
Link Distance (m)	638.8	638.8	1016.3	120.7	264.2
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (m)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 11: Hidden Valley Rd & River Rd

Movement	NB
Directions Served	R
Maximum Queue (m)	10.7
Average Queue (m)	2.1
95th Queue (m)	8.1
Link Distance (m)	192.8
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 19: River Rd & Hwy 8 SB Ramp

Movement	EB
Directions Served	L
Maximum Queue (m)	18.9
Average Queue (m)	5.8
95th Queue (m)	14.9
Link Distance (m)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	90.0
Storage Blk Time (%)	
Queuing Penalty (veh)	

Zone Summary

Zone wide Queuing Penalty: 0

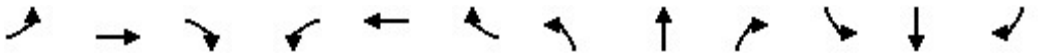
Capacity Analysis
2033 Total Traffic Conditions

Synchro Analysis Summary
2033 Total Traffic Conditions

Intersection	Approach - Movement	Storage Length (m)	AM Peak				PM Peak			
			LOS	V/C	Delay (s)	Queue (m)	LOS	V/C	Delay (s)	Queue (m)
King St & River Rd	**Intersection**	-	**B**	-	**16.5**	-	**B**	-	**18.2**	-
	EB - L	45	B	0.14	15.5	23	C	0.41	21.4	**47**
	EB - T	-	B	0.22	15.0	37	B	0.43	18.0	62
	EB - R	45	A	0.47	6.9	35	A	0.31	4.9	23
	WB - L	50	B	0.35	17.5	44	C	0.50	21.9	**56**
	WB - T	-	B	0.20	14.7	38	B	0.44	18.0	72
	WB - R	50	A	0.14	3.2	18	A	0.27	2.7	23
	NB - L	75	B	0.16	19.8	16	C	0.43	26.3	33
	NB - TR	-	B	0.27	10.7	34	B	0.35	10.5	43
	SB - L	45	D	0.65	36.4	39	D	0.79	50.4	**46**
	SB - TR	-	C	0.30	21.7	44	B	0.30	17.7	44
King St & Stonegate Dr	**Intersection**	-	-	-	-	-	-	-	-	-
	EB - TR*	-	-	-	-	0	-	-	-	0
	WB - T*	-	-	-	-	0	-	-	-	0
Fairway Rd Highway 8 Ramps	**Intersection**	-	**B**	-	**13.4**	-	**C**	-	**23.2**	-
	EB - L	75**	C	0.48	32.0	56	D	0.76	39.2	**143**
	EB - R	50**	B	0.32	17.9	45	B	0.51	18.0	**124**
	NB - L	85	A	0.42	8.4	47	C	0.70	30.1	71
	NB - T	-	A	0.32	6.3	56	B	0.58	13.7	94
	SB - T	-	B	0.34	14.4	63	C	0.61	27.2	97
	SB - R	75	A	0.17	0.9	25	A	0.14	1.0	29
Fairway Rd & Wabanaki Dr	**Intersection**	-	**A**	-	**1.6**	-	**A**	-	**2.4**	-
	EB - TR*	-	-	-	-	0	-	-	-	4
	WB - T*	-	-	-	-	1	-	-	-	47
	NB - R	-	C	0.38	15.1	34	D	0.67	32.6	49
Fairway Rd & Fairview Park Mall / Cineplex	**Intersection**	-	**B**	-	**11.7**	-	**C**	-	**25.5**	-
	EB - L	40	A	0.11	5.3	18	D	0.66	36.8	**54**
	EB - TR	-	A	0.33	8.4	32	B	0.59	16.3	79
	WB - L	130	A	0.15	6.3	17	C	0.70	24.2	82
	WB - T	-	B	0.39	11.4	56	C	0.70	26.4	140
	WB - R	-	A	0.08	0.2	16	A	0.25	3.9	42
	NB - L	-	D	0.04	41.5	7	E	0.46	58.6	31
	NB - TR	-	C	0.13	25.3	17	D	0.70	46.8	66
	SB - L	40	D	0.34	43.7	38	D	0.63	54.8	**82**
	SB - TR	-	B	0.09	14.9	16	B	0.36	10.1	58
Fairway Rd & Wilson Ave	**Intersection**	-	**B**	-	**18.0**	-	**C**	-	**34.1**	-
	EB - L	120	A	0.19	6.8	27	C	0.66	27.6	67
	EB - TR	-	B	0.33	14.1	57	D	0.67	36.5	123
	WB - L	160	B	0.43	13.6	51	D	0.80	54.9	118
	WB - T	-	A	0.28	7.6	45	C	0.66	28.9	108
	WB - R	30	A	0.10	1.4	20	A	0.27	9.4	**69**
	NB - L	95	D	0.42	40.2	38	C	0.43	30.9	59
	NB - T	-	D	0.51	39.5	61	D	0.76	54.9	94
	NB - R	-	A	0.21	4.3	24	B	0.41	14.5	44
	SB - L	45	E	0.74	61.4	**48**	D	0.82	51.8	**58**
	SB - T	-	D	0.41	36.6	42	D	0.34	35.1	70
	SB - R	45	B	0.45	11.6	20	A	0.45	9.5	40
Wilson Ave & Wabanaki Dr	**Intersection**	-	**A**	-	**5.9**	-	**C**	-	**19.3**	-
	EB - L	-	A	0.18	8.0	16	A	0.27	8.5	20
	EB - TR*	-	-	-	-	3	-	-	-	4
	WB - LT	-	A	0.01	8.1	7	A	0.00	7.9	2
	WB - R*	45	-	-	-	0	-	-	-	0
	NB - LTR	-	D	0.06	28.7	10	**F**	**1.05**	218.2	20
	SB - LT	-	D	0.18	28.6	16	E	0.11	38.9	11
	SB - R	-	B	0.33	10.6	1	C	0.60	15.0	1
River Rd Ex & Highway 8 NB Ramps / Stonegate Dr	**Intersection**	-	**A**	-	**8.3**	-	**B**	-	**10.1**	-
	EB - L	140*	B	0.13	18.0	11	B	0.26	18.8	22
	EB - T	-	B	0.13	18.0	23	B	0.26	18.9	33
	EB - R	140	A	0.12	2.5	15	A	0.18	5.3	16
	WB - L	15	B	0.01	17.8	6	B	0.01	18.5	6
	WB - TR	-	B	0.06	12.1	14	B	0.07	11.0	13
	NB - L	90	B	0.17	12.2	20	B	0.11	11.7	16
	NB - TR	-	A	0.06	9.6	15	A	0.09	9.9	17
	ed used for LOS	45	B	0.02	10.6	8	B	0.09	11.2	18
	SB - TR	-	A	0.3	5.9	37	A	0.27	6.4	32
River Rd Ex & Hidden Valley Dr	**Intersection**	-	**A**	-	**0.5**	-	**A**	-	**0.3**	-
	EB - TR*	-	-	-	-	0	-	-	-	0
	WB - T*	-	-	-	-	0	-	-	-	0
	NB - R	-	A	0.03	8.9	13	A	0.02	8.9	11
River Rd Ex & Highway 8 SB Ramp	**Intersection**	-	**A**	-	**2.0**	-	**A**	-	**1.7**	-
	EB - L	90	A	0.14	8.5	19	A	0.12	8.4	16
	EB - T*	-	-	-	-	0	-	-	-	0
	Bold Red used fo	-	-	-	-	4	-	-	-	0

Notes: * = movement operates under free-flow movement

** = Storage applies to one of two lanes used for this movement while the second lane has no associated storage length

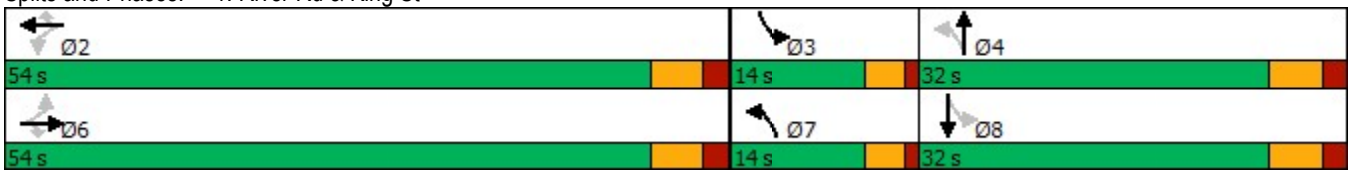


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	72	176	175	196	181	105	35	71	149	157	225	92
Future Volume (vph)	72	176	175	196	181	105	35	71	149	157	225	92
Ideal Flow (vphpl)	1775	1650	1000	1775	1900	1750	1000	1550	1000	1000	1650	1750
Storage Length (m)	45.0		45.0	50.0		50.0	75.0		0.0	45.0		0.0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (m)	60.0			70.0			40.0			60.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	1.00					0.99	1.00	0.98		1.00	0.99	
Frt			0.850			0.850		0.898			0.956	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1637	1587	594	1686	1792	1390	888	2551	0	922	2965	0
Flt Permitted	0.620			0.626			0.560			0.518		
Satd. Flow (perm)	1068	1587	594	1111	1792	1373	521	2551	0	502	2965	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			175			105		149			61	
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		1100.5			425.6			212.4			178.4	
Travel Time (s)		66.0			25.5			12.7			10.7	
Confl. Peds. (#/hr)	1					1	4		2	2		4
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	3%	4%	43%	0%	6%	7%	7%	2%	2%	3%	0%	1%
Adj. Flow (vph)	72	176	175	196	181	105	35	71	149	157	225	92
Shared Lane Traffic (%)												
Lane Group Flow (vph)	72	176	175	196	181	105	35	220	0	157	317	0
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		6			2		7	4		3	8	
Permitted Phases	6		6	2		2	4			8		
Detector Phase	6	6	6	2	2	2	7	4		3	8	
Switch Phase												
Minimum Initial (s)	48.0	48.0	48.0	48.0	48.0	48.0	5.0	26.0		5.0	26.0	
Minimum Split (s)	54.0	54.0	54.0	54.0	54.0	54.0	11.0	32.0		11.0	32.0	
Total Split (s)	54.0	54.0	54.0	54.0	54.0	54.0	14.0	32.0		14.0	32.0	
Total Split (%)	54.0%	54.0%	54.0%	54.0%	54.0%	54.0%	14.0%	32.0%		14.0%	32.0%	
Maximum Green (s)	48.0	48.0	48.0	48.0	48.0	48.0	10.0	26.0		10.0	26.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	3.0	4.0		3.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	1.0	2.0		1.0	2.0	
Lost Time Adjust (s)	0.0	-2.0	0.0	-2.0	-2.0	-2.0	0.0	-2.0		0.0	-2.0	
Total Lost Time (s)	6.0	4.0	6.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	Min	Min	Min	Min	Min	Min	None	None		None	None	
Walk Time (s)	35.0	35.0	35.0	35.0	35.0	35.0		15.0			15.0	
Flash Dont Walk (s)	16.0	16.0	16.0	16.0	16.0	16.0		11.0			11.0	
Pedestrian Calls (#/hr)	0	0	0	0	0	0		0			0	
Act Effct Green (s)	48.0	50.0	48.0	50.0	50.0	50.0	35.8	28.0		40.1	34.1	
Actuated g/C Ratio	0.48	0.50	0.48	0.50	0.50	0.50	0.36	0.28		0.40	0.34	
v/c Ratio	0.14	0.22	0.47	0.35	0.20	0.14	0.16	0.27		0.65	0.30	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay	15.5	15.0	6.9	17.5	14.7	3.2	19.8	10.7		36.4	21.7	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	15.5	15.0	6.9	17.5	14.7	3.2	19.8	10.7		36.4	21.7	
LOS	B	B	A	B	B	A	B	B		D	C	
Approach Delay		11.7			13.3			12.0			26.5	
Approach LOS		B			B			B			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 99.9			
Natural Cycle: 100			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.65			
Intersection Signal Delay: 16.5		Intersection LOS: B	
Intersection Capacity Utilization 131.6%		ICU Level of Service H	
Analysis Period (min) 15			

Splits and Phases: 1: River Rd & King St

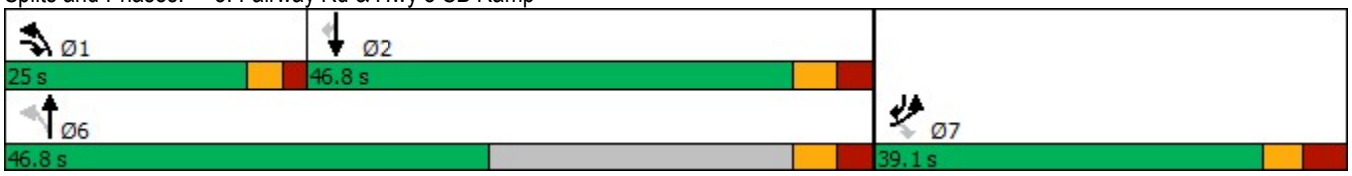


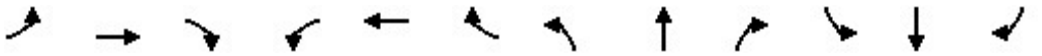
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	325	283	181	714	808	174
Future Volume (vph)	325	283	181	714	808	174
Ideal Flow (vphpl)	1775	1750	1775	1900	1900	1750
Lane Width (m)	3.5	3.5	3.5	3.5	3.5	3.5
Storage Length (m)	75.0	50.0	85.0			75.0
Storage Lanes	1	1	1			1
Taper Length (m)	60.0		75.0			
Lane Util. Factor	0.97	0.88	1.00	0.95	0.91	1.00
Ped Bike Factor		0.99	1.00			0.97
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	3052	2442	1476	3216	4706	1401
Flt Permitted	0.950		0.272			
Satd. Flow (perm)	3052	2408	422	3216	4706	1363
Right Turn on Red		No				Yes
Satd. Flow (RTOR)						174
Link Speed (k/h)	60			60	60	
Link Distance (m)	404.4			302.0	498.0	
Travel Time (s)	24.3			18.1	29.9	
Confl. Peds. (#/hr)		2	4			4
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	6%	6%	13%	11%	9%	5%
Adj. Flow (vph)	325	283	181	714	808	174
Shared Lane Traffic (%)						
Lane Group Flow (vph)	325	283	181	714	808	174
Turn Type	Prot	pm+ov	pm+pt	NA	NA	pm+ov
Protected Phases	7	1	1	6	2	7
Permitted Phases		7	6			2
Detector Phase	7	1	1	6	2	7
Switch Phase						
Minimum Initial (s)	10.0	8.0	8.0	40.0	40.0	10.0
Minimum Split (s)	17.1	13.0	13.0	46.8	46.8	17.1
Total Split (s)	39.1	25.0	25.0	46.8	46.8	39.1
Total Split (%)	35.3%	22.5%	22.5%	42.2%	42.2%	35.3%
Maximum Green (s)	32.0	20.0	20.0	40.0	40.0	32.0
Yellow Time (s)	3.3	3.0	3.0	3.7	3.7	3.3
All-Red Time (s)	3.8	2.0	2.0	3.1	3.1	3.8
Lost Time Adjust (s)	-3.1	-1.0	-1.0	-2.8	-2.8	-3.1
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag		Lead	Lead		Lag	
Lead-Lag Optimize?						
Vehicle Extension (s)	4.0	4.0	4.0	3.0	3.0	4.0
Recall Mode	None	None	None	Max	Max	None
Walk Time (s)	9.0			10.0	10.0	9.0
Flash Dont Walk (s)	23.0			30.0	30.0	23.0
Pedestrian Calls (#/hr)	0			0	0	0
Act Effct Green (s)	19.0	31.0	59.0	59.0	43.0	62.1
Actuated g/C Ratio	0.22	0.36	0.69	0.69	0.50	0.72

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
v/c Ratio	0.48	0.32	0.42	0.32	0.34	0.17
Control Delay	32.0	17.9	8.4	6.3	14.4	0.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	32.0	17.9	8.4	6.3	14.4	0.9
LOS	C	B	A	A	B	A
Approach Delay	25.4			6.8	12.0	
Approach LOS	C			A	B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110.9			
Actuated Cycle Length: 86.1			
Natural Cycle: 80			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.48			
Intersection Signal Delay: 13.4		Intersection LOS: B	
Intersection Capacity Utilization 65.1%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 3: Fairway Rd & Hwy 8 SB Ramp



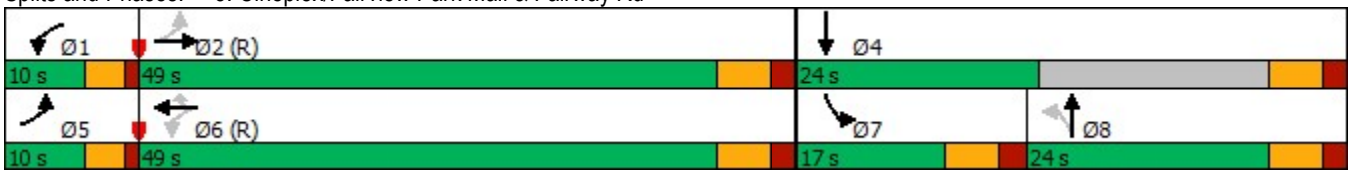


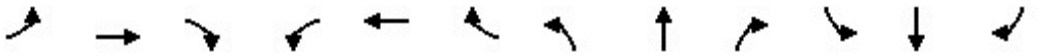
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	49	691	11	80	817	71	6	8	16	108	6	19
Future Volume (vph)	49	691	11	80	817	71	6	8	16	108	6	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	40.0		0.0	130.0		0.0	0.0		0.0	40.0		0.0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (m)	45.0			40.0			7.5			15.0		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	0.97	1.00	1.00
Frt		0.998				0.850		0.900			0.886	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1703	3371	0	1787	3312	1302	1805	1634	0	2779	1388	0
Flt Permitted	0.298			0.339			0.741			0.950		
Satd. Flow (perm)	534	3371	0	638	3312	1302	1408	1634	0	2779	1388	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2				142		16			19	
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		276.4			205.3			142.3			155.5	
Travel Time (s)		16.6			12.3			10.2			11.2	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	6%	7%	0%	1%	9%	24%	0%	0%	7%	26%	0%	28%
Adj. Flow (vph)	49	691	11	80	817	71	6	8	16	108	6	19
Shared Lane Traffic (%)												
Lane Group Flow (vph)	49	702	0	80	817	71	6	24	0	108	25	0
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Perm	NA		Prot	NA	
Protected Phases	5	2		1	6			8		7	4	
Permitted Phases	2			6		6	8					
Detector Phase	5	2		1	6	6	8	8		7	4	
Switch Phase												
Minimum Initial (s)	5.0	43.0		5.0	43.0	43.0	8.0	8.0		5.0	8.0	
Minimum Split (s)	9.0	49.0		9.0	49.0	49.0	14.0	14.0		11.0	14.0	
Total Split (s)	10.0	49.0		10.0	49.0	49.0	24.0	24.0		17.0	24.0	
Total Split (%)	10.0%	49.0%		10.0%	49.0%	49.0%	24.0%	24.0%		17.0%	24.0%	
Maximum Green (s)	6.0	43.0		6.0	43.0	43.0	18.0	18.0		11.0	18.0	
Yellow Time (s)	3.0	4.0		3.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	2.0		1.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	-2.0		0.0	-2.0	-2.0	-2.0	-2.0		-2.0	-2.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lag	Lag		Lead		
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	C-Max		None	C-Max	C-Max	None	None		None	None	
Walk Time (s)		22.0			22.0	22.0	12.0	12.0			12.0	
Flash Dont Walk (s)		21.0			21.0	21.0	15.0	15.0			15.0	
Pedestrian Calls (#/hr)		0			0	0	0	0			0	
Act Effct Green (s)	68.5	63.1		69.6	63.7	63.7	10.0	10.0		11.3	19.8	
Actuated g/C Ratio	0.68	0.63		0.70	0.64	0.64	0.10	0.10		0.11	0.20	
v/c Ratio	0.11	0.33		0.15	0.39	0.08	0.04	0.13		0.34	0.09	
Control Delay	5.3	8.4		6.3	11.4	0.2	41.5	25.3		43.7	14.9	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay	5.3	8.4		6.3	11.4	0.2	41.5	25.3		43.7	14.9	
LOS	A	A		A	B	A	D	C		D	B	
Approach Delay		8.2			10.2			28.5			38.3	
Approach LOS		A			B			C			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 26 (26%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 85			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.39			
Intersection Signal Delay: 11.7		Intersection LOS: B	
Intersection Capacity Utilization 60.0%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 5: Cineplex/Fairview Park Mall & Fairway Rd



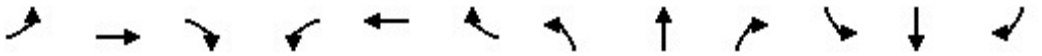


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	99	497	77	224	572	80	73	176	93	128	137	113
Future Volume (vph)	99	497	77	224	572	80	73	176	93	128	137	113
Ideal Flow (vphpl)	1775	1775	1000	1775	1900	1750	1775	1900	1750	1775	1775	1000
Lane Width (m)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Storage Length (m)	120.0		0.0	160.0		30.0	95.0		0.0	45.0		45.0
Storage Lanes	1		0	1		1	1		1	1		1
Taper Length (m)	60.0			40.0			7.5			10.0		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00	1.00		1.00		0.97	1.00		0.98	1.00		0.98
Frt		0.980				0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1516	3064	0	1489	3368	1302	1401	1693	1196	1635	1672	816
Flt Permitted	0.437			0.369			0.584			0.497		
Satd. Flow (perm)	695	3064	0	578	3368	1268	857	1693	1177	853	1672	802
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		21				78			93			113
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		450.5			276.4			297.0			324.1	
Travel Time (s)		27.0			16.6			21.4			23.3	
Confl. Peds. (#/hr)	5		3	3		5	6		4	4		6
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	10%	7%	3%	12%	6%	13%	19%	11%	23%	2%	5%	3%
Adj. Flow (vph)	99	497	77	224	572	80	73	176	93	128	137	113
Shared Lane Traffic (%)												
Lane Group Flow (vph)	99	574	0	224	572	80	73	176	93	128	137	113
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Perm	NA	pm+ov	Perm	NA	Perm
Protected Phases	1	6		5	2			4	5		8	
Permitted Phases	6			2		2	4		4	8		8
Detector Phase	1	6		5	2	2	4	4	5	8	8	8
Switch Phase												
Minimum Initial (s)	5.0	39.0		5.0	39.0	39.0	8.0	8.0	5.0	8.0	8.0	8.0
Minimum Split (s)	9.0	45.0		9.0	45.0	45.0	14.0	14.0	9.0	14.0	14.0	14.0
Total Split (s)	15.0	45.0		16.0	45.0	45.0	39.0	39.0	16.0	39.0	39.0	39.0
Total Split (%)	15.0%	45.0%		16.0%	45.0%	45.0%	39.0%	39.0%	16.0%	39.0%	39.0%	39.0%
Maximum Green (s)	11.0	39.0		12.0	39.0	39.0	33.0	33.0	12.0	33.0	33.0	33.0
Yellow Time (s)	3.0	4.0		3.0	4.0	4.0	4.0	4.0	3.0	4.0	4.0	4.0
All-Red Time (s)	1.0	2.0		1.0	2.0	2.0	2.0	2.0	1.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	-2.0		0.0	-2.0	-2.0	-2.0	-2.0	0.0	-2.0	-2.0	-2.0
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag		Lead	Lag	Lag			Lead			
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	3.0		4.0	3.0	3.0	3.0	3.0	4.0	3.0	3.0	3.0
Recall Mode	None	C-Max		None	C-Max	C-Max	None	None	None	None	None	None
Walk Time (s)		22.0			22.0	22.0	7.0	7.0		7.0	7.0	7.0
Flash Dont Walk (s)		17.0			17.0	17.0	25.0	25.0		25.0	25.0	25.0
Pedestrian Calls (#/hr)		0			0	0	0	0		0	0	0
Act Effct Green (s)	64.4	55.7		71.2	61.2	61.2	20.2	20.2	32.3	20.2	20.2	20.2
Actuated g/C Ratio	0.64	0.56		0.71	0.61	0.61	0.20	0.20	0.32	0.20	0.20	0.20

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.19	0.33		0.43	0.28	0.10	0.42	0.51	0.21	0.74	0.41	0.45
Control Delay	6.8	14.1		13.6	7.6	1.4	40.2	39.5	4.3	61.4	36.6	11.6
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	6.8	14.1		13.6	7.6	1.4	40.2	39.5	4.3	61.4	36.6	11.6
LOS	A	B		B	A	A	D	D	A	E	D	B
Approach Delay		13.1			8.6			30.1			37.5	
Approach LOS		B			A			C			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 25 (25%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.74			
Intersection Signal Delay: 18.0		Intersection LOS: B	
Intersection Capacity Utilization 78.1%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 6: Wilson Ave & Fairway Rd

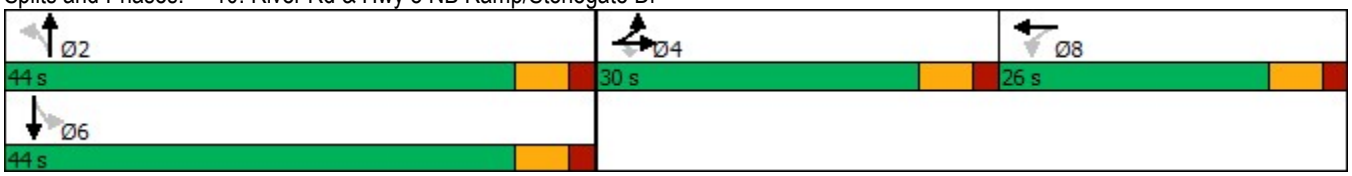


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	111	1	55	4	10	18	73	126	2	14	307	275
Future Volume (vph)	111	1	55	4	10	18	73	126	2	14	307	275
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	140.0		140.0	15.0		0.0	90.0		0.0	45.0		0.0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (m)	70.0			15.0			70.0			30.0		
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850		0.904			0.998			0.929	
Flt Protected	0.950	0.953		0.950			0.950			0.950		
Satd. Flow (prot)	1681	1686	1583	1770	1684	0	1770	3532	0	1770	3288	0
Flt Permitted	0.950	0.953		0.755			0.406			0.671		
Satd. Flow (perm)	1681	1686	1583	1406	1684	0	756	3532	0	1250	3288	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			98		18			2			270	
Link Speed (k/h)		50			40			60			60	
Link Distance (m)		231.4			154.4			218.6			212.4	
Travel Time (s)		16.7			13.9			13.1			12.7	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	111	1	55	4	10	18	73	126	2	14	307	275
Shared Lane Traffic (%)	50%											
Lane Group Flow (vph)	55	57	55	4	28	0	73	128	0	14	582	0
Turn Type	Split	NA	Perm	Perm	NA		Perm	NA		Perm	NA	
Protected Phases	4	4			8			2			6	
Permitted Phases			4	8			2			6		
Detector Phase	4	4	4	8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0		20.0	20.0		20.0	20.0	
Minimum Split (s)	24.0	24.0	24.0	24.0	24.0		26.0	26.0		26.0	26.0	
Total Split (s)	30.0	30.0	30.0	26.0	26.0		44.0	44.0		44.0	44.0	
Total Split (%)	30.0%	30.0%	30.0%	26.0%	26.0%		44.0%	44.0%		44.0%	44.0%	
Maximum Green (s)	24.0	24.0	24.0	20.0	20.0		38.0	38.0		38.0	38.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0		-2.0	-2.0		-2.0	-2.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None		Min	Min		Min	Min	
Walk Time (s)	7.0	7.0	7.0	7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0	0	0	0		0	0		0	0	
Act Effct Green (s)	12.3	12.3	12.3	12.3	12.3		27.1	27.1		27.1	27.1	
Actuated g/C Ratio	0.26	0.26	0.26	0.26	0.26		0.56	0.56		0.56	0.56	
v/c Ratio	0.13	0.13	0.12	0.01	0.06		0.17	0.06		0.02	0.30	
Control Delay	18.0	18.0	2.5	17.8	12.1		12.2	9.6		10.6	5.9	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	18.0	18.0	2.5	17.8	12.1		12.2	9.6		10.6	5.9	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	B	B	A	B	B		B	A		B	A	
Approach Delay		12.9			12.8			10.5			6.0	
Approach LOS		B			B			B			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 48.2			
Natural Cycle: 75			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.30			
Intersection Signal Delay: 8.3		Intersection LOS: A	
Intersection Capacity Utilization 53.7%		ICU Level of Service A	
Analysis Period (min) 15			

Splits and Phases: 10: River Rd & Hwy 8 NB Ramp/Stonegate Dr



Intersection	
Int Delay, s/veh	1.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	688	125	0	1037	0	219
Future Vol, veh/h	688	125	0	1037	0	219
Conflicting Peds, #/hr	0	1	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	11	5	0	9	0	8
Mvmt Flow	688	125	0	1037	0	219

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	408
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.06
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.38
Pot Cap-1 Maneuver	-	-	0	-	0	576
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	575
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	15.1
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	575	-	-	-
HCM Lane V/C Ratio	0.381	-	-	-
HCM Control Delay (s)	15.1	-	-	-
HCM Lane LOS	C	-	-	-
HCM 95th %tile Q(veh)	1.8	-	-	-

Intersection	
Int Delay, s/veh	5.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	256	342	38	11	95	22	4	3	2	1	32	312
Future Vol, veh/h	256	342	38	11	95	22	4	3	2	1	32	312
Conflicting Peds, #/hr	1	0	4	4	0	1	0	0	3	3	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	0	-	-	-	-	45	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	7	3	11	0	14	10	0	0	50	0	13	6
Mvmt Flow	256	342	38	11	95	22	4	3	2	1	32	312

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	118	0	0	384	0	0	1021	1017	368	997	1014	96
Stage 1	-	-	-	-	-	-	877	877	-	118	118	-
Stage 2	-	-	-	-	-	-	144	140	-	879	896	-
Critical Hdwy	4.17	-	-	4.1	-	-	7.1	6.5	6.7	7.1	6.63	6.26
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.63	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.63	-
Follow-up Hdwy	2.263	-	-	2.2	-	-	3.5	4	3.75	3.5	4.117	3.354
Pot Cap-1 Maneuver	1440	-	-	1186	-	-	217	239	583	225	228	950
Stage 1	-	-	-	-	-	-	346	369	-	891	777	-
Stage 2	-	-	-	-	-	-	864	785	-	345	344	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1439	-	-	1182	-	-	108	194	579	189	185	949
Mov Cap-2 Maneuver	-	-	-	-	-	-	108	194	-	189	185	-
Stage 1	-	-	-	-	-	-	283	302	-	732	768	-
Stage 2	-	-	-	-	-	-	550	776	-	279	282	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	3.2	0.7	28.7	12.3
HCM LOS			D	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	161	1439	-	-	1182	-	-	185	949
HCM Lane V/C Ratio	0.056	0.178	-	-	0.009	-	-	0.178	0.329
HCM Control Delay (s)	28.7	8	-	-	8.1	0	-	28.6	10.6
HCM Lane LOS	D	A	-	-	A	A	-	D	B
HCM 95th %tile Q(veh)	0.2	0.6	-	-	0	-	-	0.6	1.4

Intersection	
Int Delay, s/veh	0.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	171	0	0	367	0	29
Future Vol, veh/h	171	0	0	367	0	29
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	171	0	0	367	0	29

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	86
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	-	-	0	-	0	956
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	956
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	8.9
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	956	-	-	-
HCM Lane V/C Ratio	0.03	-	-	-
HCM Control Delay (s)	8.9	-	-	-
HCM Lane LOS	A	-	-	-
HCM 95th %tile Q(veh)	0.1	-	-	-

Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	6:40	6:40	6:40	6:40	6:40	6:40
End Time	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	80	80	80	80	80	80
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1
Vehs Entered	7964	7647	7792	7997	7999	7876
Vehs Exited	7983	7647	7777	8013	8034	7888
Starting Vehs	282	279	263	294	317	285
Ending Vehs	263	279	278	278	282	276
Travel Distance (km)	10643	10203	10368	10631	10728	10515
Travel Time (hr)	292.2	279.1	282.2	291.0	296.8	288.3
Total Delay (hr)	84.6	81.0	79.7	83.6	87.7	83.3
Total Stops	8356	7938	7996	8247	8406	8190
Fuel Used (l)	927.7	892.6	897.5	926.7	932.1	915.3

Interval #0 Information Seeding

Start Time	6:40
End Time	7:00
Total Time (min)	20

Volumes adjusted by Growth Factors.

No data recorded this interval.

Interval #1 Information Recording

Start Time	7:00
End Time	8:00
Total Time (min)	60

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	Avg
Vehs Entered	7964	7647	7792	7997	7999	7876
Vehs Exited	7983	7647	7777	8013	8034	7888
Starting Vehs	282	279	263	294	317	285
Ending Vehs	263	279	278	278	282	276
Travel Distance (km)	10643	10203	10368	10631	10728	10515
Travel Time (hr)	292.2	279.1	282.2	291.0	296.8	288.3
Total Delay (hr)	84.6	81.0	79.7	83.6	87.7	83.3
Total Stops	8356	7938	7996	8247	8406	8190
Fuel Used (l)	927.7	892.6	897.5	926.7	932.1	915.3

Intersection: 1: River Rd & King St

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	T	R	L	T	TR	L	T	TR
Maximum Queue (m)	27.9	40.5	45.1	46.9	51.9	20.9	20.3	23.6	43.4	51.4	34.8	51.0
Average Queue (m)	10.9	19.9	18.4	26.8	18.4	9.3	6.1	6.1	17.2	20.5	11.9	23.3
95th Queue (m)	23.3	36.7	34.6	43.8	38.0	18.4	15.5	17.0	33.8	39.1	27.6	44.1
Link Distance (m)		1068.8			402.4			185.1	185.1		162.1	162.1
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	45.0		45.0	50.0		50.0	75.0			45.0		
Storage Blk Time (%)		0	0	0	0					1	0	
Queuing Penalty (veh)		0	1	1	0					1	0	

Intersection: 3: Fairway Rd & Hwy 8 SB Ramp

Movement	EB	EB	EB	EB	NB	NB	NB	SB	SB	SB	SB	
Directions Served	L	L	R	R	L	T	T	T	T	T	R	
Maximum Queue (m)	63.8	72.0	48.3	39.1	56.2	64.7	63.0	70.0	69.5	61.3	31.1	
Average Queue (m)	25.5	34.6	25.0	11.4	26.3	30.2	29.6	37.6	37.8	29.5	11.2	
95th Queue (m)	50.0	55.9	44.5	30.9	46.7	55.8	52.6	63.0	62.7	52.2	24.6	
Link Distance (m)		382.8	382.8			274.9	274.9	474.0	474.0	474.0		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	75.0			50.0	85.0						75.0	
Storage Blk Time (%)	0	0	0	0		0						
Queuing Penalty (veh)	0	0	0	0		0						

Intersection: 5: Cineplex/Fairview Park Mall & Fairway Rd

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	T	R	L	TR	L	L	TR
Maximum Queue (m)	22.6	38.2	42.5	20.1	63.2	67.6	20.7	11.3	22.7	37.5	46.6	19.8
Average Queue (m)	7.7	15.6	14.1	8.0	23.7	26.9	5.0	1.5	6.6	10.8	20.5	5.5
95th Queue (m)	18.0	31.1	32.2	16.5	53.4	55.8	15.6	7.1	16.9	26.4	38.1	15.6
Link Distance (m)		251.1	251.1		183.4	183.4	183.4	128.5	128.5		136.6	136.6
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	40.0			130.0						40.0		
Storage Blk Time (%)		0								0	1	
Queuing Penalty (veh)		0								0	1	

Intersection: 6: Wilson Ave & Fairway Rd

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	TR	L	T	T	R	L	T	R	L	T
Maximum Queue (m)	33.4	61.8	58.7	64.3	51.6	51.4	32.2	48.7	71.4	29.2	53.9	58.7
Average Queue (m)	13.6	36.5	30.2	27.7	20.7	24.2	6.7	17.7	32.9	11.7	28.0	20.3
95th Queue (m)	26.9	56.8	52.4	50.8	41.0	45.4	19.7	38.1	60.5	24.1	48.2	41.9
Link Distance (m)		436.6	436.6		251.1	251.1			283.3	283.3		306.3
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	120.0			160.0			30.0	95.0			45.0	
Storage Blk Time (%)						6	0		0		4	0
Queuing Penalty (veh)						4	0		0		10	1

Intersection: 6: Wilson Ave & Fairway Rd

Movement	SB
Directions Served	R
Maximum Queue (m)	31.8
Average Queue (m)	8.8
95th Queue (m)	20.2
Link Distance (m)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	45.0
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 10: River Rd & Hwy 8 NB Ramp/Stonegate Dr

Movement	EB	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB	
Directions Served	L	LT	R	L	TR	L	T	TR	L	T	TR	
Maximum Queue (m)	11.6	30.1	19.1	9.7	16.2	29.4	18.6	21.2	10.0	33.1	49.5	
Average Queue (m)	3.4	13.0	7.7	1.1	5.7	9.1	4.1	5.4	2.0	12.3	19.7	
95th Queue (m)	11.0	22.5	15.4	5.7	13.6	20.2	12.5	15.2	8.1	25.2	37.3	
Link Distance (m)		217.2			139.9		199.5	199.5		185.1	185.1	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	140.0		140.0	15.0		90.0			45.0			
Storage Blk Time (%)				0	1							
Queuing Penalty (veh)				0	0							

Zone Summary

Zone wide Queuing Penalty: 20

Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	6:40	6:40	6:40	6:40	6:40	6:40
End Time	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	80	80	80	80	80	80
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1
Vehs Entered	7964	7647	7792	7997	7999	7876
Vehs Exited	7983	7647	7777	8013	8034	7888
Starting Vehs	282	279	263	294	317	285
Ending Vehs	263	279	278	278	282	276
Travel Distance (km)	10643	10203	10368	10631	10728	10515
Travel Time (hr)	292.2	279.1	282.2	291.0	296.8	288.3
Total Delay (hr)	84.6	81.0	79.7	83.6	87.7	83.3
Total Stops	8356	7938	7996	8247	8406	8190
Fuel Used (l)	927.7	892.6	897.5	926.7	932.1	915.3

Interval #0 Information Seeding

Start Time	6:40
End Time	7:00
Total Time (min)	20

Volumes adjusted by Growth Factors.

No data recorded this interval.

Interval #1 Information Recording

Start Time	7:00
End Time	8:00
Total Time (min)	60

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	Avg
Vehs Entered	7964	7647	7792	7997	7999	7876
Vehs Exited	7983	7647	7777	8013	8034	7888
Starting Vehs	282	279	263	294	317	285
Ending Vehs	263	279	278	278	282	276
Travel Distance (km)	10643	10203	10368	10631	10728	10515
Travel Time (hr)	292.2	279.1	282.2	291.0	296.8	288.3
Total Delay (hr)	84.6	81.0	79.7	83.6	87.7	83.3
Total Stops	8356	7938	7996	8247	8406	8190
Fuel Used (l)	927.7	892.6	897.5	926.7	932.1	915.3

Intersection: 2: Stonegate Dr & King St

Movement
Directions Served
Maximum Queue (m)
Average Queue (m)
95th Queue (m)
Link Distance (m)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (m)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 4: Wabanaki Dr & Fairway Rd

Movement	WB	NB
Directions Served	T	R
Maximum Queue (m)	1.2	40.5
Average Queue (m)	0.0	18.4
95th Queue (m)	0.8	33.6
Link Distance (m)	274.9	236.0
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 9: Wilson Ave & Wabanaki Dr

Movement	EB	EB	WB	NB	SB	SB
Directions Served	L	TR	LT	LTR	LT	R
Maximum Queue (m)	21.6	4.2	12.7	13.2	18.3	1.5
Average Queue (m)	5.7	0.2	1.2	2.5	7.6	0.0
95th Queue (m)	16.0	2.5	7.0	9.6	16.1	1.0
Link Distance (m)	638.8	638.8	1016.3	120.7	264.2	264.2
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (m)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 11: Hidden Valley Rd & River Rd

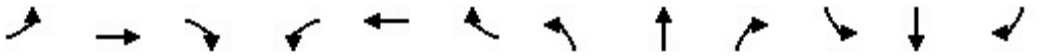
Movement	NB
Directions Served	R
Maximum Queue (m)	12.8
Average Queue (m)	5.4
95th Queue (m)	12.9
Link Distance (m)	192.8
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 19: River Rd & Hwy 8 SB Ramp

Movement	EB	WB
Directions Served	L	TR
Maximum Queue (m)	21.8	6.7
Average Queue (m)	9.6	0.7
95th Queue (m)	18.6	3.9
Link Distance (m)		293.2
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)	90.0	
Storage Blk Time (%)		
Queuing Penalty (veh)		

Zone Summary

Zone wide Queuing Penalty: 0

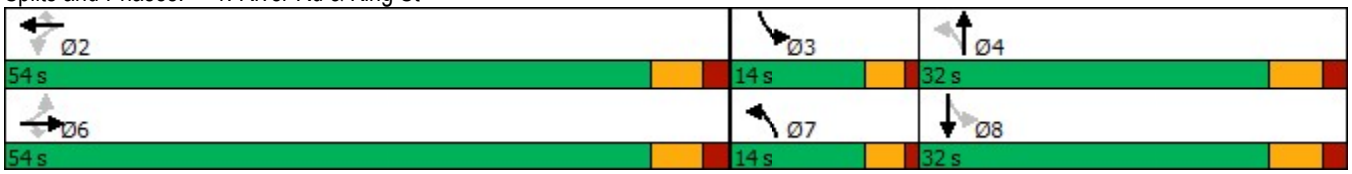


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	138	347	128	204	413	231	98	91	204	182	178	113
Future Volume (vph)	138	347	128	204	413	231	98	91	204	182	178	113
Ideal Flow (vphpl)	1775	1650	1000	1775	1900	1750	1000	1550	1000	1000	1650	1750
Storage Length (m)	45.0		45.0	50.0		50.0	75.0		0.0	45.0		0.0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (m)	60.0			70.0			40.0			60.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	1.00		0.99	1.00		0.99	1.00	0.98		1.00	0.99	
Frt			0.850			0.850		0.896			0.942	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1686	1618	726	1686	1863	1488	872	2526	0	941	2910	0
Flt Permitted	0.400			0.463			0.563			0.476		
Satd. Flow (perm)	710	1618	716	821	1863	1469	514	2526	0	469	2910	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			128			231		204			113	
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		1100.5			425.6			212.4			178.4	
Travel Time (s)		66.0			25.5			12.7			10.7	
Confl. Peds. (#/hr)	1		4	4		1	4		4	4		4
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	2%	17%	0%	2%	0%	9%	8%	0%	1%	0%	1%
Adj. Flow (vph)	138	347	128	204	413	231	98	91	204	182	178	113
Shared Lane Traffic (%)												
Lane Group Flow (vph)	138	347	128	204	413	231	98	295	0	182	291	0
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		6			2		7	4		3	8	
Permitted Phases	6		6	2		2	4			8		
Detector Phase	6	6	6	2	2	2	7	4		3	8	
Switch Phase												
Minimum Initial (s)	48.0	48.0	48.0	48.0	48.0	48.0	5.0	26.0		5.0	26.0	
Minimum Split (s)	54.0	54.0	54.0	54.0	54.0	54.0	11.0	32.0		11.0	32.0	
Total Split (s)	54.0	54.0	54.0	54.0	54.0	54.0	14.0	32.0		14.0	32.0	
Total Split (%)	54.0%	54.0%	54.0%	54.0%	54.0%	54.0%	14.0%	32.0%		14.0%	32.0%	
Maximum Green (s)	48.0	48.0	48.0	48.0	48.0	48.0	10.0	26.0		10.0	26.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	3.0	4.0		3.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	1.0	2.0		1.0	2.0	
Lost Time Adjust (s)	0.0	-2.0	0.0	-2.0	-2.0	-2.0	0.0	-2.0		0.0	-2.0	
Total Lost Time (s)	6.0	4.0	6.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	Min	Min	Min	Min	Min	Min	None	None		None	None	
Walk Time (s)	35.0	35.0	35.0	35.0	35.0	35.0		15.0			15.0	
Flash Dont Walk (s)	16.0	16.0	16.0	16.0	16.0	16.0		11.0			11.0	
Pedestrian Calls (#/hr)	0	0	0	0	0	0		0			0	
Act Effct Green (s)	48.0	50.0	48.0	50.0	50.0	50.0	37.4	28.0		38.8	30.8	
Actuated g/C Ratio	0.48	0.50	0.48	0.50	0.50	0.50	0.37	0.28		0.39	0.31	
v/c Ratio	0.41	0.43	0.31	0.50	0.44	0.27	0.43	0.35		0.79	0.30	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay	21.4	18.0	4.9	21.9	18.0	2.7	26.3	10.5		50.4	17.7	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	21.4	18.0	4.9	21.9	18.0	2.7	26.3	10.5		50.4	17.7	
LOS	C	B	A	C	B	A	C	B		D	B	
Approach Delay		16.0			14.8			14.4			30.3	
Approach LOS		B			B			B			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Natural Cycle: 100			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.79			
Intersection Signal Delay: 18.2		Intersection LOS: B	
Intersection Capacity Utilization 134.6%		ICU Level of Service H	
Analysis Period (min) 15			

Splits and Phases: 1: River Rd & King St

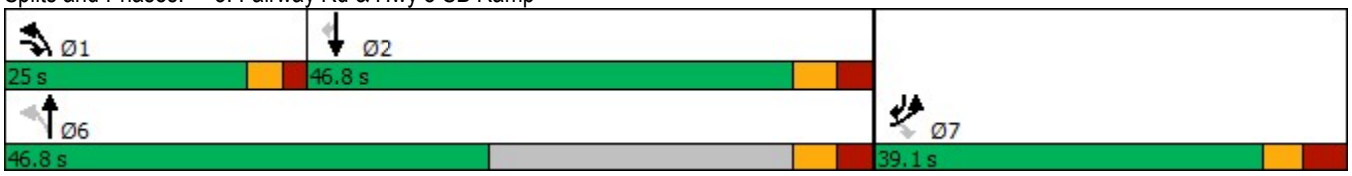


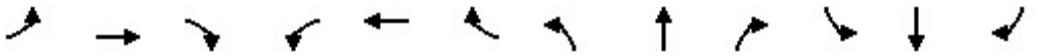
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	731	614	249	1236	1236	147
Future Volume (vph)	731	614	249	1236	1236	147
Ideal Flow (vphpl)	1775	1750	1775	1900	1900	1750
Lane Width (m)	3.5	3.5	3.5	3.5	3.5	3.5
Storage Length (m)	75.0	50.0	85.0			75.0
Storage Lanes	1	1	1			1
Taper Length (m)	60.0		75.0			
Lane Util. Factor	0.97	0.88	1.00	0.95	0.91	1.00
Ped Bike Factor		0.98	1.00			0.94
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	3141	2538	1588	3466	4932	1428
Flt Permitted	0.950		0.115			
Satd. Flow (perm)	3141	2484	191	3466	4932	1339
Right Turn on Red		No				Yes
Satd. Flow (RTOR)						147
Link Speed (k/h)	60			60	60	
Link Distance (m)	404.4			302.0	498.0	
Travel Time (s)	24.3			18.1	29.9	
Confl. Peds. (#/hr)		9	25			25
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	3%	2%	5%	3%	4%	3%
Adj. Flow (vph)	731	614	249	1236	1236	147
Shared Lane Traffic (%)						
Lane Group Flow (vph)	731	614	249	1236	1236	147
Turn Type	Prot	pm+ov	pm+pt	NA	NA	pm+ov
Protected Phases	7	1	1	6	2	7
Permitted Phases		7	6			2
Detector Phase	7	1	1	6	2	7
Switch Phase						
Minimum Initial (s)	10.0	8.0	8.0	40.0	40.0	10.0
Minimum Split (s)	17.1	13.0	13.0	46.8	46.8	17.1
Total Split (s)	39.1	25.0	25.0	46.8	46.8	39.1
Total Split (%)	35.3%	22.5%	22.5%	42.2%	42.2%	35.3%
Maximum Green (s)	32.0	20.0	20.0	40.0	40.0	32.0
Yellow Time (s)	3.3	3.0	3.0	3.7	3.7	3.3
All-Red Time (s)	3.8	2.0	2.0	3.1	3.1	3.8
Lost Time Adjust (s)	-3.1	-1.0	-1.0	-2.8	-2.8	-3.1
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag		Lead	Lead		Lag	
Lead-Lag Optimize?						
Vehicle Extension (s)	4.0	4.0	4.0	3.0	3.0	4.0
Recall Mode	None	None	None	Max	Max	None
Walk Time (s)	9.0			10.0	10.0	9.0
Flash Dont Walk (s)	23.0			30.0	30.0	23.0
Pedestrian Calls (#/hr)	0			0	0	0
Act Effct Green (s)	32.4	50.4	65.1	65.1	43.0	75.4
Actuated g/C Ratio	0.31	0.48	0.62	0.62	0.41	0.71

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
v/c Ratio	0.76	0.51	0.70	0.58	0.61	0.14
Control Delay	39.2	18.0	30.1	13.7	27.2	1.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	39.2	18.0	30.1	13.7	27.2	1.0
LOS	D	B	C	B	C	A
Approach Delay	29.5			16.4	24.5	
Approach LOS	C			B	C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110.9			
Actuated Cycle Length: 105.5			
Natural Cycle: 90			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.76			
Intersection Signal Delay: 23.2		Intersection LOS: C	
Intersection Capacity Utilization 81.5%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 3: Fairway Rd & Hwy 8 SB Ramp



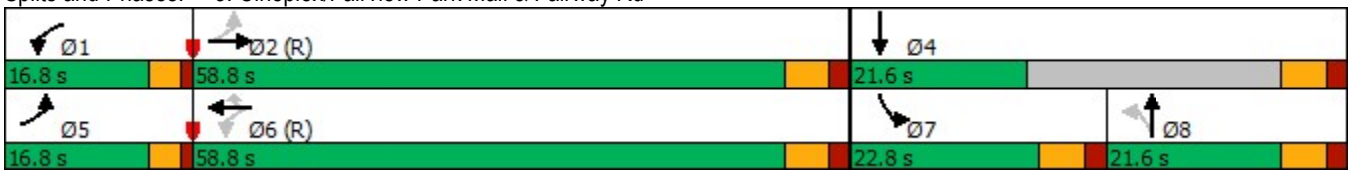


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	185	986	58	234	1217	214	67	67	124	285	47	170
Future Volume (vph)	185	986	58	234	1217	214	67	67	124	285	47	170
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	40.0		0.0	130.0		0.0	0.0		0.0	40.0		0.0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (m)	45.0			40.0			7.5			15.0		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	0.97	1.00	1.00
Frt		0.992				0.850		0.903			0.882	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3515	0	1787	3438	1482	1770	1716	0	3213	1618	0
Flt Permitted	0.121			0.168			0.622			0.950		
Satd. Flow (perm)	230	3515	0	316	3438	1482	1159	1716	0	3213	1618	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7				203		65			164	
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		276.4			205.3			142.3			155.5	
Travel Time (s)		16.6			12.3			10.2			11.2	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	2%	0%	1%	5%	9%	2%	0%	0%	9%	2%	4%
Adj. Flow (vph)	185	986	58	234	1217	214	67	67	124	285	47	170
Shared Lane Traffic (%)												
Lane Group Flow (vph)	185	1044	0	234	1217	214	67	191	0	285	217	0
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Perm	NA		Prot	NA	
Protected Phases	5	2		1	6			8		7	4	
Permitted Phases	2			6		6	8					
Detector Phase	5	2		1	6	6	8	8		7	4	
Switch Phase												
Minimum Initial (s)	5.0	52.8		5.0	52.8	52.8	8.0	8.0		5.0	8.0	
Minimum Split (s)	9.0	58.8		9.0	58.8	58.8	14.0	14.0		11.0	14.0	
Total Split (s)	16.8	58.8		16.8	58.8	58.8	21.6	21.6		22.8	21.6	
Total Split (%)	14.0%	49.0%		14.0%	49.0%	49.0%	18.0%	18.0%		19.0%	18.0%	
Maximum Green (s)	12.8	52.8		12.8	52.8	52.8	15.6	15.6		16.8	15.6	
Yellow Time (s)	3.0	4.0		3.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	2.0		1.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	-2.0		0.0	-2.0	-2.0	-2.0	-2.0		-2.0	-2.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lag	Lag		Lead		
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	C-Max		None	C-Max	C-Max	None	None		None	None	
Walk Time (s)		31.8			31.8	31.8	12.0	12.0			12.0	
Flash Dont Walk (s)		21.0			21.0	21.0	15.0	15.0			15.0	
Pedestrian Calls (#/hr)		0			0	0	0	0			0	
Act Effct Green (s)	71.3	60.4		72.7	61.1	61.1	15.0	15.0		17.0	36.0	
Actuated g/C Ratio	0.59	0.50		0.61	0.51	0.51	0.12	0.12		0.14	0.30	
v/c Ratio	0.66	0.59		0.70	0.70	0.25	0.46	0.70		0.63	0.36	
Control Delay	36.8	16.3		24.2	26.4	3.9	58.6	46.8		54.8	10.1	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay	36.8	16.3		24.2	26.4	3.9	58.6	46.8		54.8	10.1	
LOS	D	B		C	C	A	E	D		D	B	
Approach Delay		19.4			23.2			49.9			35.5	
Approach LOS		B			C			D			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 27.6 (23%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 95			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.70			
Intersection Signal Delay: 25.5		Intersection LOS: C	
Intersection Capacity Utilization 89.9%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 5: Cineplex/Fairview Park Mall & Fairway Rd

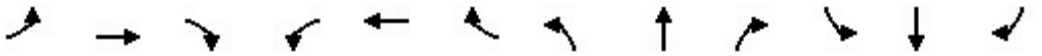


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	210	737	59	287	916	153	149	322	241	216	167	146
Future Volume (vph)	210	737	59	287	916	153	149	322	241	216	167	146
Ideal Flow (vphpl)	1775	1775	1000	1775	1900	1750	1775	1900	1750	1775	1775	1000
Lane Width (m)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Storage Length (m)	120.0		0.0	160.0		30.0	95.0		0.0	45.0		45.0
Storage Lanes	1		0	1		1	1		1	1		1
Taper Length (m)	60.0			40.0			7.5			10.0		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.99	1.00		0.99		0.91	0.96		0.94	0.98		0.94
Frt		0.989				0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1619	3225	0	1544	3500	1362	1635	1807	1401	1668	1755	832
Flt Permitted	0.168			0.176			0.651			0.188		
Satd. Flow (perm)	283	3225	0	284	3500	1246	1074	1807	1313	322	1755	780
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7				136			100			146
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		450.5			276.4			297.0			324.1	
Travel Time (s)		27.0			16.6			21.4			23.3	
Confl. Peds. (#/hr)	40		35	35		40	46		46	46		46
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	3%	2%	1%	8%	2%	8%	2%	4%	5%	0%	0%	1%
Adj. Flow (vph)	210	737	59	287	916	153	149	322	241	216	167	146
Shared Lane Traffic (%)												
Lane Group Flow (vph)	210	796	0	287	916	153	149	322	241	216	167	146
Turn Type	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	pm+ov	pm+pt	NA	Perm
Protected Phases	1	6		5	2		7	4	5	3	8	
Permitted Phases	6			2		2	4		4	8		8
Detector Phase	1	6		5	2	2	7	4	5	3	8	8
Switch Phase												
Minimum Initial (s)	5.0	36.0		5.0	36.0	36.0	5.0	8.0	5.0	5.0	8.0	8.0
Minimum Split (s)	9.0	42.0		9.0	42.0	42.0	9.0	14.0	9.0	9.0	14.0	14.0
Total Split (s)	22.0	43.0		22.0	43.0	43.0	11.0	38.0	22.0	17.0	38.0	38.0
Total Split (%)	18.3%	35.8%		18.3%	35.8%	35.8%	9.2%	31.7%	18.3%	14.2%	31.7%	31.7%
Maximum Green (s)	18.0	37.0		18.0	37.0	37.0	7.0	32.0	18.0	13.0	32.0	32.0
Yellow Time (s)	3.0	4.0		3.0	4.0	4.0	3.0	4.0	3.0	3.0	4.0	4.0
All-Red Time (s)	1.0	2.0		1.0	2.0	2.0	1.0	2.0	1.0	1.0	2.0	2.0
Lost Time Adjust (s)	0.0	-2.0		0.0	-2.0	-2.0	0.0	-2.0	0.0	0.0	-2.0	-2.0
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	3.0		4.0	3.0	3.0	3.0	3.0	4.0	3.0	3.0	3.0
Recall Mode	None	C-Max		None	C-Max	C-Max	None	None	None	None	None	None
Walk Time (s)		19.0			19.0	19.0		7.0			7.0	7.0
Flash Dont Walk (s)		17.0			17.0	17.0		25.0			25.0	25.0
Pedestrian Calls (#/hr)		0			0	0		0			0	0
Act Effct Green (s)	59.8	43.8		65.7	47.3	47.3	35.0	28.0	47.4	44.7	33.7	33.7
Actuated g/C Ratio	0.50	0.36		0.55	0.39	0.39	0.29	0.23	0.40	0.37	0.28	0.28

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.66	0.67		0.80	0.66	0.27	0.43	0.76	0.41	0.82	0.34	0.45
Control Delay	27.6	36.5		54.9	28.9	9.4	30.9	54.9	14.5	51.8	35.1	9.5
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	27.6	36.5		54.9	28.9	9.4	30.9	54.9	14.5	51.8	35.1	9.5
LOS	C	D		D	C	A	C	D	B	D	D	A
Approach Delay		34.6			32.2			36.2			34.9	
Approach LOS		C			C			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 31.2 (26%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.82			
Intersection Signal Delay: 34.1		Intersection LOS: C	
Intersection Capacity Utilization 97.7%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 6: Wilson Ave & Fairway Rd

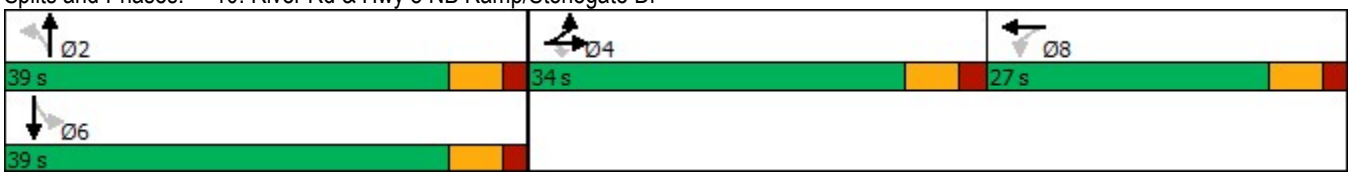


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	218	6	84	4	6	23	47	152	1	55	264	196
Future Volume (vph)	218	6	84	4	6	23	47	152	1	55	264	196
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	140.0		140.0	15.0		0.0	90.0		0.0	45.0		0.0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (m)	70.0			15.0			70.0			30.0		
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850		0.881			0.999			0.936	
Flt Protected	0.950	0.955		0.950			0.950			0.950		
Satd. Flow (prot)	1681	1690	1583	1770	1641	0	1770	3536	0	1770	3313	0
Flt Permitted	0.950	0.955		0.741			0.474			0.655		
Satd. Flow (perm)	1681	1690	1583	1380	1641	0	883	3536	0	1220	3313	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			98		23			1			196	
Link Speed (k/h)		50			40			60			60	
Link Distance (m)		231.4			154.4			218.6			212.4	
Travel Time (s)		16.7			13.9			13.1			12.7	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	218	6	84	4	6	23	47	152	1	55	264	196
Shared Lane Traffic (%)	49%											
Lane Group Flow (vph)	111	113	84	4	29	0	47	153	0	55	460	0
Turn Type	Split	NA	Perm	Perm	NA		Perm	NA		Perm	NA	
Protected Phases	4	4			8			2			6	
Permitted Phases			4	8			2			6		
Detector Phase	4	4	4	8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0		20.0	20.0		20.0	20.0	
Minimum Split (s)	24.0	24.0	24.0	24.0	24.0		26.0	26.0		26.0	26.0	
Total Split (s)	34.0	34.0	34.0	27.0	27.0		39.0	39.0		39.0	39.0	
Total Split (%)	34.0%	34.0%	34.0%	27.0%	27.0%		39.0%	39.0%		39.0%	39.0%	
Maximum Green (s)	28.0	28.0	28.0	21.0	21.0		33.0	33.0		33.0	33.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0		-2.0	-2.0		-2.0	-2.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None		Min	Min		Min	Min	
Walk Time (s)	7.0	7.0	7.0	7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0	0	0	0		0	0		0	0	
Act Effct Green (s)	12.6	12.6	12.6	12.3	12.3		23.8	23.8		23.8	23.8	
Actuated g/C Ratio	0.25	0.25	0.25	0.25	0.25		0.48	0.48		0.48	0.48	
v/c Ratio	0.26	0.26	0.18	0.01	0.07		0.11	0.09		0.09	0.27	
Control Delay	18.8	18.9	5.3	18.5	11.0		11.7	9.9		11.2	6.4	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	18.8	18.9	5.3	18.5	11.0		11.7	9.9		11.2	6.4	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	B	B	A	B	B		B	A		B	A	
Approach Delay		15.2			11.9			10.3			6.9	
Approach LOS		B			B			B			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 50			
Natural Cycle: 75			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.27			
Intersection Signal Delay: 10.1		Intersection LOS: B	
Intersection Capacity Utilization 56.2%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 10: River Rd & Hwy 8 NB Ramp/Stonegate Dr



Intersection	
Int Delay, s/veh	2.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1304	132	0	1717	0	246
Future Vol, veh/h	1304	132	0	1717	0	246
Conflicting Peds, #/hr	0	2	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	4	8	0	5	0	3
Mvmt Flow	1304	132	0	1717	0	246

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	720
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.96
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.33
Pot Cap-1 Maneuver	-	-	0	-	0	368
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	367
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	32.6
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	367	-	-	-
HCM Lane V/C Ratio	0.67	-	-	-
HCM Control Delay (s)	32.6	-	-	-
HCM Lane LOS	D	-	-	-
HCM 95th %tile Q(veh)	4.7	-	-	-

Intersection	
Int Delay, s/veh	19.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	377	320	16	4	144	6	39	18	21	2	11	538
Future Vol, veh/h	377	320	16	4	144	6	39	18	21	2	11	538
Conflicting Peds, #/hr	2	0	0	0	0	2	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	0	-	-	-	-	45	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	4	4	0	0	8	0	3	0	0	0	10	5
Mvmt Flow	377	320	16	4	144	6	39	18	21	2	11	538

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	152	0	0	336	0	0	1243	1242	328	1256	1244	146
Stage 1	-	-	-	-	-	-	1082	1082	-	154	154	-
Stage 2	-	-	-	-	-	-	161	160	-	1102	1090	-
Critical Hdwy	4.14	-	-	4.1	-	-	7.13	6.5	6.2	7.1	6.6	6.25
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.5	-	6.1	5.6	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.5	-	6.1	5.6	-
Follow-up Hdwy	2.236	-	-	2.2	-	-	3.527	4	3.3	3.5	4.09	3.345
Pot Cap-1 Maneuver	1417	-	-	1235	-	-	151	176	718	150	168	893
Stage 1	-	-	-	-	-	-	262	296	-	853	755	-
Stage 2	-	-	-	-	-	-	839	769	-	259	282	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1414	-	-	1235	-	-	44	128	718	103	122	891
Mov Cap-2 Maneuver	-	-	-	-	-	-	44	128	-	103	122	-
Stage 1	-	-	-	-	-	-	192	217	-	624	750	-
Stage 2	-	-	-	-	-	-	326	764	-	169	207	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	4.5	0.2	218.2	15.6
HCM LOS			F	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	74	1414	-	-	1235	-	-	119	891
HCM Lane V/C Ratio	1.054	0.267	-	-	0.003	-	-	0.109	0.604
HCM Control Delay (s)	218.2	8.5	-	-	7.9	0	-	38.9	15
HCM Lane LOS	F	A	-	-	A	A	-	E	C
HCM 95th %tile Q(veh)	5.7	1.1	-	-	0	-	-	0.4	4.2

Intersection	
Int Delay, s/veh	0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	184	9	0	353	0	16
Future Vol, veh/h	184	9	0	353	0	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	184	9	0	353	0	16

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	97
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	-	-	0	-	0	940
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	940
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	8.9
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	940	-	-	-
HCM Lane V/C Ratio	0.017	-	-	-
HCM Control Delay (s)	8.9	-	-	-
HCM Lane LOS	A	-	-	-
HCM 95th %tile Q(veh)	0.1	-	-	-

Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	3:40	3:40	3:40	3:40	3:40	3:40
End Time	5:00	5:00	5:00	5:00	5:00	5:00
Total Time (min)	80	80	80	80	80	80
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1
Vehs Entered	11620	11817	11559	11593	11770	11676
Vehs Exited	11525	11880	11584	11589	11767	11668
Starting Vehs	494	569	539	502	544	527
Ending Vehs	589	506	514	506	547	534
Travel Distance (km)	15545	15930	15422	15470	15754	15624
Travel Time (hr)	516.5	570.7	499.2	521.3	544.9	530.5
Total Delay (hr)	216.7	264.3	201.7	223.7	240.1	229.3
Total Stops	15766	18270	15080	16169	16898	16441
Fuel Used (l)	1444.1	1506.6	1422.9	1447.8	1482.4	1460.7

Interval #0 Information Seeding

Start Time	3:40
End Time	4:00
Total Time (min)	20

Volumes adjusted by Growth Factors.

No data recorded this interval.

Interval #1 Information Recording

Start Time	4:00
End Time	5:00
Total Time (min)	60

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	Avg
Vehs Entered	11620	11817	11559	11593	11770	11676
Vehs Exited	11525	11880	11584	11589	11767	11668
Starting Vehs	494	569	539	502	544	527
Ending Vehs	589	506	514	506	547	534
Travel Distance (km)	15545	15930	15422	15470	15754	15624
Travel Time (hr)	516.5	570.7	499.2	521.3	544.9	530.5
Total Delay (hr)	216.7	264.3	201.7	223.7	240.1	229.3
Total Stops	15766	18270	15080	16169	16898	16441
Fuel Used (l)	1444.1	1506.6	1422.9	1447.8	1482.4	1460.7

Intersection: 1: River Rd & King St

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	T	R	L	T	TR	L	T	TR
Maximum Queue (m)	58.0	74.2	29.4	59.7	80.8	31.0	40.7	31.9	54.6	54.2	40.6	52.6
Average Queue (m)	26.6	36.4	12.4	33.2	45.1	13.2	16.6	8.6	23.4	25.2	12.9	22.3
95th Queue (m)	47.2	61.9	22.9	56.2	72.1	23.1	33.1	22.3	43.0	45.9	29.0	43.5
Link Distance (m)		1068.8			402.4			185.1	185.1		162.1	162.1
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	45.0		45.0	50.0		50.0	75.0			45.0		
Storage Blk Time (%)	3	5	0	3	5					2	0	
Queuing Penalty (veh)	12	12	0	18	23					2	0	

Intersection: 3: Fairway Rd & Hwy 8 SB Ramp

Movement	EB	EB	EB	EB	NB	NB	NB	SB	SB	SB	SB	
Directions Served	L	L	R	R	L	T	T	T	T	T	R	
Maximum Queue (m)	119.6	187.4	127.8	75.1	83.4	99.4	101.3	100.3	99.7	89.5	40.2	
Average Queue (m)	73.9	86.0	55.3	36.8	39.5	56.6	58.0	66.5	66.6	55.5	12.2	
95th Queue (m)	112.8	142.6	123.7	66.2	71.2	91.0	94.3	96.7	94.5	83.7	29.3	
Link Distance (m)		382.8	382.8			274.9	274.9	474.0	474.0	474.0		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	75.0			50.0	85.0						75.0	
Storage Blk Time (%)	10	17	7	1	1	1				1		
Queuing Penalty (veh)	35	64	20	2	4	2				1		

Intersection: 5: Cineplex/Fairview Park Mall & Fairway Rd

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	T	R	L	TR	L	L	TR
Maximum Queue (m)	62.7	81.6	82.9	104.7	146.8	152.0	67.9	39.2	79.5	54.9	96.0	79.6
Average Queue (m)	32.3	52.1	53.5	37.5	82.6	84.9	18.4	14.5	32.6	32.9	45.4	29.4
95th Queue (m)	53.9	74.5	78.5	81.6	138.3	140.2	42.2	31.2	65.9	61.2	81.5	57.8
Link Distance (m)		251.1	251.1		183.4	183.4	183.4	128.5	128.5		136.6	136.6
Upstream Blk Time (%)					0	0					0	
Queuing Penalty (veh)					0	0					0	
Storage Bay Dist (m)	40.0			130.0						40.0		
Storage Blk Time (%)	6	22		0	2					4	24	
Queuing Penalty (veh)	30	41		0	4					6	34	

Intersection: 6: Wilson Ave & Fairway Rd

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	TR	L	T	T	R	L	T	R	L	T
Maximum Queue (m)	77.2	138.9	122.8	108.8	108.7	118.1	55.0	93.1	109.5	56.7	54.1	88.0
Average Queue (m)	41.1	80.4	76.5	71.1	65.8	72.0	36.1	27.1	59.6	23.8	36.0	29.6
95th Queue (m)	67.1	122.6	118.3	117.9	99.2	108.0	69.3	58.7	93.9	44.1	58.0	69.9
Link Distance (m)		436.6	436.6		251.1	251.1			283.3	283.3		306.3
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	120.0			160.0			30.0	95.0			45.0	
Storage Blk Time (%)		2				51	3	0	1		9	1
Queuing Penalty (veh)		4				78	12	0	2		29	4

Intersection: 6: Wilson Ave & Fairway Rd

Movement	SB
Directions Served	R
Maximum Queue (m)	59.3
Average Queue (m)	16.3
95th Queue (m)	40.0
Link Distance (m)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	45.0
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 10: River Rd & Hwy 8 NB Ramp/Stonegate Dr

Movement	EB	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB	
Directions Served	L	LT	R	L	TR	L	T	TR	L	T	TR	
Maximum Queue (m)	31.9	42.5	20.6	8.6	14.9	19.4	19.3	17.4	21.4	32.4	36.7	
Average Queue (m)	10.1	18.2	9.2	1.2	5.8	6.7	6.8	6.3	7.4	12.7	18.4	
95th Queue (m)	22.1	32.7	16.2	5.9	13.0	16.0	16.7	14.3	18.1	25.8	31.8	
Link Distance (m)		217.2			139.9		199.5	199.5		185.1	185.1	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	140.0		140.0	15.0		90.0			45.0			
Storage Blk Time (%)					0					0		
Queuing Penalty (veh)					0					0		

Zone Summary

Zone wide Queuing Penalty: 441

Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	3:40	3:40	3:40	3:40	3:40	3:40
End Time	5:00	5:00	5:00	5:00	5:00	5:00
Total Time (min)	80	80	80	80	80	80
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1
Vehs Entered	11620	11817	11559	11593	11770	11676
Vehs Exited	11525	11880	11584	11589	11767	11668
Starting Vehs	494	569	539	502	544	527
Ending Vehs	589	506	514	506	547	534
Travel Distance (km)	15545	15930	15422	15470	15754	15624
Travel Time (hr)	516.5	570.7	499.2	521.3	544.9	530.5
Total Delay (hr)	216.7	264.3	201.7	223.7	240.1	229.3
Total Stops	15766	18270	15080	16169	16898	16441
Fuel Used (l)	1444.1	1506.6	1422.9	1447.8	1482.4	1460.7

Interval #0 Information Seeding

Start Time	3:40
End Time	4:00
Total Time (min)	20

Volumes adjusted by Growth Factors.

No data recorded this interval.

Interval #1 Information Recording

Start Time	4:00
End Time	5:00
Total Time (min)	60

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	Avg
Vehs Entered	11620	11817	11559	11593	11770	11676
Vehs Exited	11525	11880	11584	11589	11767	11668
Starting Vehs	494	569	539	502	544	527
Ending Vehs	589	506	514	506	547	534
Travel Distance (km)	15545	15930	15422	15470	15754	15624
Travel Time (hr)	516.5	570.7	499.2	521.3	544.9	530.5
Total Delay (hr)	216.7	264.3	201.7	223.7	240.1	229.3
Total Stops	15766	18270	15080	16169	16898	16441
Fuel Used (l)	1444.1	1506.6	1422.9	1447.8	1482.4	1460.7

Intersection: 2: Stonegate Dr & King St

Movement
Directions Served
Maximum Queue (m)
Average Queue (m)
95th Queue (m)
Link Distance (m)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (m)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 4: Wabanaki Dr & Fairway Rd

Movement	EB	EB	WB	WB	WB	NB
Directions Served	T	TR	T	T	T	R
Maximum Queue (m)	5.8	8.0	67.6	81.0	77.6	59.0
Average Queue (m)	0.4	0.4	3.0	3.9	3.3	26.0
95th Queue (m)	4.2	3.8	36.7	46.6	43.4	49.0
Link Distance (m)	183.4	183.4	274.9	274.9	274.9	236.0
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (m)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 9: Wilson Ave & Wabanaki Dr

Movement	EB	EB	WB	NB	SB	SB
Directions Served	L	TR	LT	LTR	LT	R
Maximum Queue (m)	25.7	5.3	1.6	26.2	13.6	1.4
Average Queue (m)	9.6	0.2	0.1	10.0	3.4	0.0
95th Queue (m)	20.1	3.7	1.6	19.9	11.4	1.0
Link Distance (m)	638.8	638.8	1016.3	120.7	264.2	264.2
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (m)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 11: Hidden Valley Rd & River Rd

Movement	NB
Directions Served	R
Maximum Queue (m)	8.3
Average Queue (m)	3.8
95th Queue (m)	10.5
Link Distance (m)	192.8
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 19: River Rd & Hwy 8 SB Ramp

Movement	EB
Directions Served	L
Maximum Queue (m)	20.6
Average Queue (m)	7.5
95th Queue (m)	16.0
Link Distance (m)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	90.0
Storage Blk Time (%)	
Queuing Penalty (veh)	

Zone Summary

Zone wide Queuing Penalty: 0

Capacity Analysis
2043 Total Traffic Conditions

Synchro Analysis Summary
2043 Total Traffic Conditions

Intersection	Approach - Movement	Storage Length (m)	AM Peak				PM Peak			
			LOS	V/C	Delay (s)	Queue (m)	LOS	V/C	Delay (s)	Queue (m)
King St & River Rd	**Intersection**	-	**B**	-	**16.2**	-	**B**	-	**17.3**	-
	EB - L	45	B	0.14	15.4	22	C	0.38	20.3	42
	EB - T	-	B	0.20	14.7	33	B	0.39	17.4	61
	EB - R	45	A	0.54	7.9	36	A	0.40	5.4	26
	WB - L	50	B	0.37	17.7	**53**	C	0.54	22.9	**75**
	WB - T	-	B	0.18	14.4	38	B	0.40	17.3	85
	WB - R	50	A	0.14	3.2	17	A	0.27	2.7	22
	NB - L	75	B	0.16	19.8	14	C	0.43	26.3	30
	NB - TR	-	B	0.30	10.6	38	B	0.37	10.4	44
	SB - L	45	C	0.62	34.7	34	D	0.74	45.3	37
	SB - TR	-	C	0.30	22.5	42	B	0.30	18.5	37
King St & Stonegate Dr	**Intersection**	-	-	-	-	-	-	-	-	-
	EB - TR*	-	-	-	-	0	-	-	-	0
	WB - T*	-	-	-	-	0	-	-	-	0
Fairway Rd Highway 8 Ramps	**Intersection**	-	**B**	-	**13.6**	-	**C**	-	**23.2**	-
	EB - L	75**	C	0.48	32.1	52	D	0.76	39.1	**202**
	EB - R	50**	B	0.39	20.0	47	B	0.53	18.4	**192**
	NB - L	85	A	0.41	8.4	42	C	0.70	29.8	61
	NB - T	-	A	0.35	6.5	54	B	0.59	14.0	104
	SB - T	-	B	0.34	14.6	64	C	0.61	27.2	97
	SB - R	75	A	0.17	0.9	24	A	0.14	1.0	37
Fairway Rd & Wabanaki Dr	**Intersection**	-	**A**	-	**2.2**	-	**A**	-	**3.6**	-
	EB - TR*	-	-	-	-	1	-	-	-	6
	WB - T*	-	-	-	-	50	-	-	-	3
	NB - R	-	C	0.48	17.1	36	E	0.79	43.7	65
Fairway Rd & Fairview Park Mall / Cineplex	**Intersection**	-	**B**	-	**11.8**	-	**C**	-	**25.9**	-
	EB - L	40	A	0.14	5.4	20	D	0.68	39.6	**54**
	EB - TR	-	A	0.34	8.4	32	B	0.59	16.2	80
	WB - L	130	A	0.16	6.4	22	C	0.70	24.1	70
	WB - T	-	B	0.39	11.7	60	C	0.71	27.1	138
	WB - R	-	A	0.08	0.2	18	A	0.25	4.1	40
	NB - L	-	D	0.04	41.5	8	E	0.47	58.7	33
	NB - TR	-	C	0.13	25.3	14	D	0.70	46.7	64
	SB - L	40	D	0.35	43.8	**42**	E	0.64	55.1	**74**
	SB - TR	-	B	0.09	14.9	14	B	0.36	10.1	54
Fairway Rd & Wilson Ave	**Intersection**	-	**B**	-	**18.6**	-	**D**	-	**35.8**	-
	EB - L	120	A	0.19	6.9	27	C	0.66	27.0	64
	EB - TR	-	B	0.35	14.4	64	D	0.74	40.1	117
	WB - L	160	B	0.46	15.6	51	E	0.84	62.1	148
	WB - T	-	A	0.28	7.6	42	C	0.66	29.6	130
	WB - R	30	A	0.10	1.4	19	A	0.27	9.9	**67**
	NB - L	95	D	0.55	46.5	46	C	0.50	33.2	78
	NB - T	-	D	0.51	39.5	55	D	0.76	54.9	136
	NB - R	-	A	0.23	4.2	25	B	0.40	14.1	58
	SB - L	45	E	0.74	61.4	43	D	0.82	51.8	**58**
	SB - T	-	D	0.41	36.6	40	D	0.34	35.1	71
	SB - R	45	B	0.45	11.6	18	A	0.45	9.5	43
Wilson Ave & Wabanaki Dr	**Intersection**	-	**A**	-	**5.9**	-	**C**	-	**21.1**	-
	EB - L	-	A	0.18	8.1	19	A	0.27	8.5	22
	EB - TR*	-	-	-	-	5	-	-	-	2
	WB - LT	-	A	0.01	8.1	8	A	0.00	8.0	2
	WB - R*	45	-	-	-	0	-	-	-	0
	NB - LTR	-	D	0.06	30.7	9	**F**	**1.15**	262.4	19
	SB - LT	-	D	0.19	30.5	16	E	0.12	41.3	11
	SB - R	-	B	0.34	10.9	1	C	0.62	15.5	1
River Rd Ex & Highway 8 NB Ramps / Stonegate Dr	**Intersection**	-	**A**	-	**9.0**	-	**B**	-	**10.9**	-
	EB - L	140*	B	0.13	19.5	11	B	0.25	18.7	19
	EB - T		B	0.13	19.6	23	B	0.26	18.7	34
	EB - R	140	A	0.14	3.9	16	A	0.24	6.1	18
	WB - L	15	B	0.01	20.0	4	B	0.01	18.5	4
	WB - TR	-	B	0.06	13.6	13	B	0.07	11.0	12
	NB - L	90	B	0.29	13.5	24	B	0.18	12.7	18
	NB - TR	-	A	0.08	9.1	15	B	0.11	10.0	17
	ed used for LOS	45	A	0.02	10.0	9	B	0.10	11.3	18
	SB - TR	-	A	0.32	6.6	35	A	0.33	8.7	36
River Rd Ex & Hidden Valley Dr	**Intersection**	-	**A**	-	**0.6**	-	**A**	-	**0.3**	-
	EB - TR*	-	-	-	-	0	-	-	-	0
	WB - T*	-	-	-	-	0	-	-	-	0
	NB - R	-	A	0.05	9.1	13	A	0.03	9.1	13
River Rd Ex & Highway 8 SB Ramp	**Intersection**	-	**A**	-	**2.1**	-	**A**	-	**1.6**	-
	EB - L	90	A	0.17	8.9	21	A	0.14	8.8	18
	EB - T*	-	-	-	-	0	-	-	-	0
	Bold Red used fo	-	-	-	-	6	-	-	-	0

Notes: * = movement operates under free-flow movement

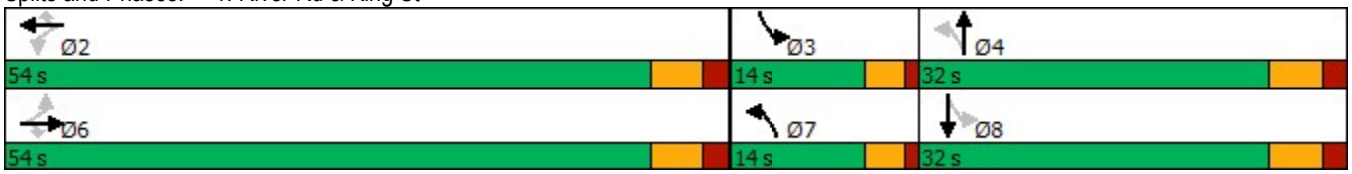
** = Storage applies to one of two lanes used for this movement while the second lane has no associated storage length

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	72	160	216	213	165	105	35	81	174	143	232	84
Future Volume (vph)	72	160	216	213	165	105	35	81	174	143	232	84
Ideal Flow (vphpl)	1775	1650	1000	1775	1900	1750	1000	1550	1000	1000	1650	1750
Storage Length (m)	45.0		45.0	50.0		50.0	75.0		0.0	45.0		0.0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (m)	60.0			70.0			40.0			60.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	1.00					0.99	1.00	0.98		1.00	0.99	
Frt			0.850			0.850		0.898			0.960	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1637	1587	594	1686	1792	1390	888	2551	0	922	2980	0
Flt Permitted	0.637			0.642			0.560			0.485		
Satd. Flow (perm)	1097	1587	594	1140	1792	1373	521	2551	0	470	2980	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			216			105		174			51	
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		1100.5			425.6			212.4			178.4	
Travel Time (s)		66.0			25.5			12.7			10.7	
Confl. Peds. (#/hr)	1					1	4		2	2		4
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	3%	4%	43%	0%	6%	7%	7%	2%	2%	3%	0%	1%
Adj. Flow (vph)	72	160	216	213	165	105	35	81	174	143	232	84
Shared Lane Traffic (%)												
Lane Group Flow (vph)	72	160	216	213	165	105	35	255	0	143	316	0
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		6			2		7	4		3	8	
Permitted Phases	6		6	2		2	4			8		
Detector Phase	6	6	6	2	2	2	7	4		3	8	
Switch Phase												
Minimum Initial (s)	48.0	48.0	48.0	48.0	48.0	48.0	5.0	26.0		5.0	26.0	
Minimum Split (s)	54.0	54.0	54.0	54.0	54.0	54.0	11.0	32.0		11.0	32.0	
Total Split (s)	54.0	54.0	54.0	54.0	54.0	54.0	14.0	32.0		14.0	32.0	
Total Split (%)	54.0%	54.0%	54.0%	54.0%	54.0%	54.0%	14.0%	32.0%		14.0%	32.0%	
Maximum Green (s)	48.0	48.0	48.0	48.0	48.0	48.0	10.0	26.0		10.0	26.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	3.0	4.0		3.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	1.0	2.0		1.0	2.0	
Lost Time Adjust (s)	0.0	-2.0	0.0	-2.0	-2.0	-2.0	0.0	-2.0		0.0	-2.0	
Total Lost Time (s)	6.0	4.0	6.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	Min	Min	Min	Min	Min	Min	None	None		None	None	
Walk Time (s)	35.0	35.0	35.0	35.0	35.0	35.0		15.0			15.0	
Flash Dont Walk (s)	16.0	16.0	16.0	16.0	16.0	16.0		11.0			11.0	
Pedestrian Calls (#/hr)	0	0	0	0	0	0		0			0	
Act Effct Green (s)	48.0	50.0	48.0	50.0	50.0	50.0	35.8	28.0		40.0	34.0	
Actuated g/C Ratio	0.48	0.50	0.48	0.50	0.50	0.50	0.36	0.28		0.40	0.34	
v/c Ratio	0.14	0.20	0.54	0.37	0.18	0.14	0.16	0.30		0.62	0.30	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay	15.4	14.7	7.9	17.7	14.4	3.2	19.8	10.6		34.7	22.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	15.4	14.7	7.9	17.7	14.4	3.2	19.8	10.6		34.7	22.5	
LOS	B	B	A	B	B	A	B	B		C	C	
Approach Delay		11.6			13.4			11.7			26.3	
Approach LOS		B			B			B			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 99.8			
Natural Cycle: 100			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.62			
Intersection Signal Delay: 16.2		Intersection LOS: B	
Intersection Capacity Utilization 130.1%		ICU Level of Service H	
Analysis Period (min) 15			

Splits and Phases: 1: River Rd & King St

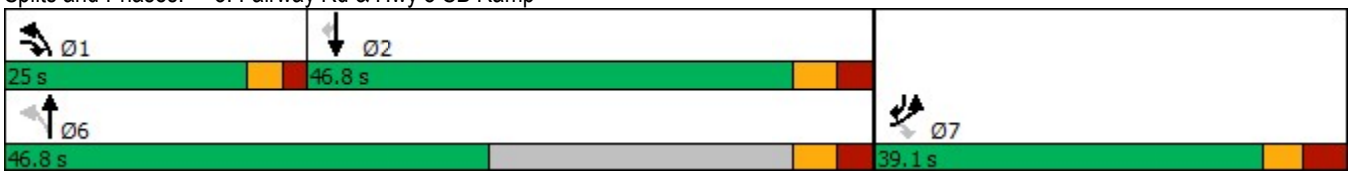


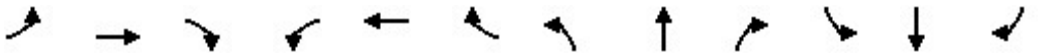
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	325	295	181	767	808	174
Future Volume (vph)	325	295	181	767	808	174
Ideal Flow (vphpl)	1775	1750	1775	1900	1900	1750
Lane Width (m)	3.5	3.5	3.5	3.5	3.5	3.5
Storage Length (m)	75.0	50.0	85.0			75.0
Storage Lanes	1	1	1			1
Taper Length (m)	60.0		75.0			
Lane Util. Factor	0.97	0.88	1.00	0.95	0.91	1.00
Ped Bike Factor		0.99	1.00			0.97
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	3052	2442	1476	3216	4706	1401
Flt Permitted	0.950		0.272			
Satd. Flow (perm)	3052	2408	422	3216	4706	1363
Right Turn on Red		No				Yes
Satd. Flow (RTOR)						174
Link Speed (k/h)	60			60	60	
Link Distance (m)	404.4			302.0	498.0	
Travel Time (s)	24.3			18.1	29.9	
Confl. Peds. (#/hr)		2	4			4
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	6%	6%	13%	11%	9%	5%
Adj. Flow (vph)	325	295	181	767	808	174
Shared Lane Traffic (%)						
Lane Group Flow (vph)	325	295	181	767	808	174
Turn Type	Prot	pm+ov	pm+pt	NA	NA	pm+ov
Protected Phases	7	1	1	6	2	7
Permitted Phases		7	6			2
Detector Phase	7	1	1	6	2	7
Switch Phase						
Minimum Initial (s)	10.0	8.0	8.0	40.0	40.0	10.0
Minimum Split (s)	17.1	13.0	13.0	46.8	46.8	17.1
Total Split (s)	39.1	25.0	25.0	46.8	46.8	39.1
Total Split (%)	35.3%	22.5%	22.5%	42.2%	42.2%	35.3%
Maximum Green (s)	32.0	20.0	20.0	40.0	40.0	32.0
Yellow Time (s)	3.3	3.0	3.0	3.7	3.7	3.3
All-Red Time (s)	3.8	2.0	2.0	3.1	3.1	3.8
Lost Time Adjust (s)	-3.1	1.0	-1.0	-2.8	-2.8	-3.1
Total Lost Time (s)	4.0	6.0	4.0	4.0	4.0	4.0
Lead/Lag		Lead	Lead		Lag	
Lead-Lag Optimize?						
Vehicle Extension (s)	4.0	4.0	4.0	3.0	3.0	4.0
Recall Mode	None	None	None	Max	Max	None
Walk Time (s)	9.0			10.0	10.0	9.0
Flash Dont Walk (s)	23.0			30.0	30.0	23.0
Pedestrian Calls (#/hr)	0			0	0	0
Act Effct Green (s)	19.1	27.2	59.3	59.3	43.1	62.2
Actuated g/C Ratio	0.22	0.31	0.69	0.69	0.50	0.72

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
v/c Ratio	0.48	0.39	0.41	0.35	0.34	0.17
Control Delay	32.1	20.0	8.4	6.5	14.6	0.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	32.1	20.0	8.4	6.5	14.6	0.9
LOS	C	B	A	A	B	A
Approach Delay	26.3			6.9	12.2	
Approach LOS	C			A	B	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110.9			
Actuated Cycle Length: 86.4			
Natural Cycle: 80			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.48			
Intersection Signal Delay: 13.6		Intersection LOS: B	
Intersection Capacity Utilization 65.1%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 3: Fairway Rd & Hwy 8 SB Ramp



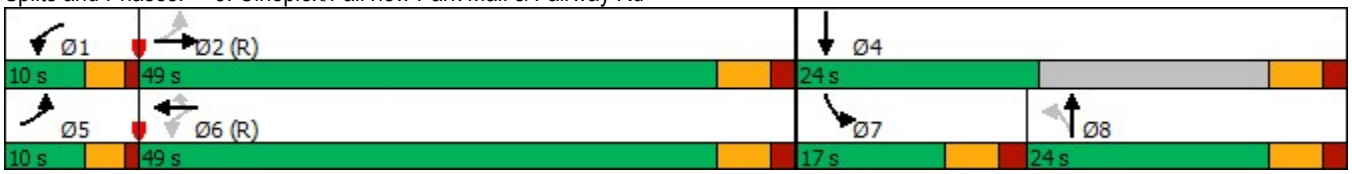


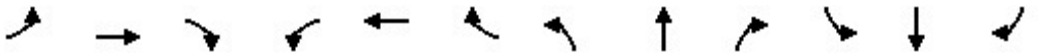
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	61	707	11	80	828	71	6	8	16	112	6	19
Future Volume (vph)	61	707	11	80	828	71	6	8	16	112	6	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	40.0		0.0	130.0		0.0	0.0		0.0	40.0		0.0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (m)	45.0			40.0			7.5			15.0		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	0.97	1.00	1.00
Frt		0.998				0.850		0.900			0.886	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1703	3370	0	1787	3312	1302	1805	1634	0	2779	1388	0
Flt Permitted	0.290			0.333			0.741			0.950		
Satd. Flow (perm)	520	3370	0	626	3312	1302	1408	1634	0	2779	1388	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		2				142		16			19	
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		276.4			205.3			142.3			155.5	
Travel Time (s)		16.6			12.3			10.2			11.2	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	6%	7%	0%	1%	9%	24%	0%	0%	7%	26%	0%	28%
Adj. Flow (vph)	61	707	11	80	828	71	6	8	16	112	6	19
Shared Lane Traffic (%)												
Lane Group Flow (vph)	61	718	0	80	828	71	6	24	0	112	25	0
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Perm	NA		Prot	NA	
Protected Phases	5	2		1	6			8		7	4	
Permitted Phases	2			6		6	8					
Detector Phase	5	2		1	6	6	8	8		7	4	
Switch Phase												
Minimum Initial (s)	5.0	43.0		5.0	43.0	43.0	8.0	8.0		5.0	8.0	
Minimum Split (s)	9.0	49.0		9.0	49.0	49.0	14.0	14.0		11.0	14.0	
Total Split (s)	10.0	49.0		10.0	49.0	49.0	24.0	24.0		17.0	24.0	
Total Split (%)	10.0%	49.0%		10.0%	49.0%	49.0%	24.0%	24.0%		17.0%	24.0%	
Maximum Green (s)	6.0	43.0		6.0	43.0	43.0	18.0	18.0		11.0	18.0	
Yellow Time (s)	3.0	4.0		3.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	2.0		1.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	-2.0		0.0	-2.0	-2.0	-2.0	-2.0		-2.0	-2.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lag	Lag		Lead		
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	C-Max		None	C-Max	C-Max	None	None		None	None	
Walk Time (s)		22.0			22.0	22.0	12.0	12.0			12.0	
Flash Dont Walk (s)		21.0			21.0	21.0	15.0	15.0			15.0	
Pedestrian Calls (#/hr)		0			0	0	0	0			0	
Act Effct Green (s)	68.6	63.1		69.2	63.4	63.4	10.0	10.0		11.4	19.9	
Actuated g/C Ratio	0.69	0.63		0.69	0.63	0.63	0.10	0.10		0.11	0.20	
v/c Ratio	0.14	0.34		0.16	0.39	0.08	0.04	0.13		0.35	0.09	
Control Delay	5.4	8.4		6.4	11.7	0.2	41.5	25.3		43.8	14.9	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay	5.4	8.4		6.4	11.7	0.2	41.5	25.3		43.8	14.9	
LOS	A	A		A	B	A	D	C		D	B	
Approach Delay		8.2			10.4			28.5			38.6	
Approach LOS		A			B			C			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 26 (26%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 85			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.39			
Intersection Signal Delay: 11.8		Intersection LOS: B	
Intersection Capacity Utilization 60.1%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 5: Cineplex/Fairview Park Mall & Fairway Rd



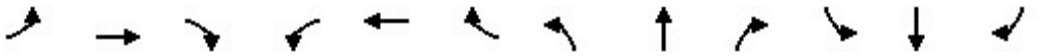


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	99	513	77	236	571	80	96	176	105	128	137	113
Future Volume (vph)	99	513	77	236	571	80	96	176	105	128	137	113
Ideal Flow (vphpl)	1775	1775	1000	1775	1900	1750	1775	1900	1750	1775	1775	1000
Lane Width (m)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Storage Length (m)	120.0		0.0	160.0		30.0	95.0		0.0	45.0		45.0
Storage Lanes	1		0	1		1	1		1	1		1
Taper Length (m)	60.0			40.0			7.5			10.0		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00	1.00		1.00		0.97	1.00		0.98	1.00		0.98
Frt		0.980				0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1516	3064	0	1489	3368	1302	1401	1693	1196	1635	1672	816
Flt Permitted	0.437			0.360			0.584			0.497		
Satd. Flow (perm)	695	3064	0	564	3368	1268	857	1693	1177	853	1672	802
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		20				78			105			113
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		450.5			276.4			297.0			324.1	
Travel Time (s)		27.0			16.6			21.4			23.3	
Confl. Peds. (#/hr)	5		3	3		5	6		4	4		6
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	10%	7%	3%	12%	6%	13%	19%	11%	23%	2%	5%	3%
Adj. Flow (vph)	99	513	77	236	571	80	96	176	105	128	137	113
Shared Lane Traffic (%)												
Lane Group Flow (vph)	99	590	0	236	571	80	96	176	105	128	137	113
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Perm	NA	pm+ov	Perm	NA	Perm
Protected Phases	1	6		5	2			4	5		8	
Permitted Phases	6			2		2	4		4	8		8
Detector Phase	1	6		5	2	2	4	4	5	8	8	8
Switch Phase												
Minimum Initial (s)	5.0	39.0		5.0	39.0	39.0	8.0	8.0	5.0	8.0	8.0	8.0
Minimum Split (s)	9.0	45.0		9.0	45.0	45.0	14.0	14.0	9.0	14.0	14.0	14.0
Total Split (s)	15.0	45.0		16.0	45.0	45.0	39.0	39.0	16.0	39.0	39.0	39.0
Total Split (%)	15.0%	45.0%		16.0%	45.0%	45.0%	39.0%	39.0%	16.0%	39.0%	39.0%	39.0%
Maximum Green (s)	11.0	39.0		12.0	39.0	39.0	33.0	33.0	12.0	33.0	33.0	33.0
Yellow Time (s)	3.0	4.0		3.0	4.0	4.0	4.0	4.0	3.0	4.0	4.0	4.0
All-Red Time (s)	1.0	2.0		1.0	2.0	2.0	2.0	2.0	1.0	2.0	2.0	2.0
Lost Time Adjust (s)	0.0	-2.0		0.0	-2.0	-2.0	-2.0	-2.0	0.0	-2.0	-2.0	-2.0
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag		Lead	Lag	Lag			Lead			
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	3.0		4.0	3.0	3.0	3.0	3.0	4.0	3.0	3.0	3.0
Recall Mode	None	C-Max		None	C-Max	C-Max	None	None	None	None	None	None
Walk Time (s)		22.0			22.0	22.0	7.0	7.0		7.0	7.0	7.0
Flash Dont Walk (s)		17.0			17.0	17.0	25.0	25.0		25.0	25.0	25.0
Pedestrian Calls (#/hr)		0			0	0	0	0		0	0	0
Act Effct Green (s)	64.2	55.5		71.3	61.2	61.2	20.2	20.2	32.5	20.2	20.2	20.2
Actuated g/C Ratio	0.64	0.56		0.71	0.61	0.61	0.20	0.20	0.32	0.20	0.20	0.20

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.19	0.35		0.46	0.28	0.10	0.55	0.51	0.23	0.74	0.41	0.45
Control Delay	6.9	14.4		15.6	7.6	1.4	46.5	39.5	4.2	61.4	36.6	11.6
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	6.9	14.4		15.6	7.6	1.4	46.5	39.5	4.2	61.4	36.6	11.6
LOS	A	B		B	A	A	D	D	A	E	D	B
Approach Delay		13.3			9.1			31.4			37.5	
Approach LOS		B			A			C			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Offset: 25 (25%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green			
Natural Cycle: 70			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.74			
Intersection Signal Delay: 18.6		Intersection LOS: B	
Intersection Capacity Utilization 78.9%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 6: Wilson Ave & Fairway Rd

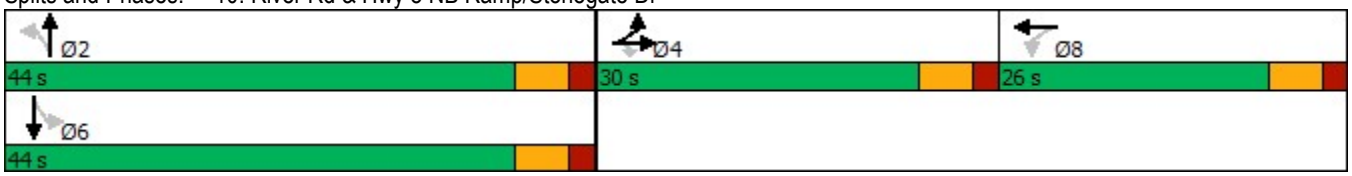


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	111	1	67	4	10	17	114	160	2	14	373	275
Future Volume (vph)	111	1	67	4	10	17	114	160	2	14	373	275
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	140.0		140.0	15.0		0.0	90.0		0.0	45.0		0.0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (m)	70.0			15.0			70.0			30.0		
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850		0.906			0.998			0.936	
Flt Protected	0.950	0.953		0.950			0.950			0.950		
Satd. Flow (prot)	1681	1686	1583	1770	1688	0	1770	3532	0	1770	3313	0
Flt Permitted	0.950	0.953		0.769			0.371			0.649		
Satd. Flow (perm)	1681	1686	1583	1432	1688	0	691	3532	0	1209	3313	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			98		17			1			223	
Link Speed (k/h)		50			40			60			60	
Link Distance (m)		231.4			154.4			218.6			212.4	
Travel Time (s)		16.7			13.9			13.1			12.7	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	111	1	67	4	10	17	114	160	2	14	373	275
Shared Lane Traffic (%)	50%											
Lane Group Flow (vph)	55	57	67	4	27	0	114	162	0	14	648	0
Turn Type	Split	NA	Perm	Perm	NA		Perm	NA		Perm	NA	
Protected Phases	4	4			8			2			6	
Permitted Phases			4	8			2			6		
Detector Phase	4	4	4	8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0		20.0	20.0		20.0	20.0	
Minimum Split (s)	24.0	24.0	24.0	24.0	24.0		26.0	26.0		26.0	26.0	
Total Split (s)	30.0	30.0	30.0	26.0	26.0		44.0	44.0		44.0	44.0	
Total Split (%)	30.0%	30.0%	30.0%	26.0%	26.0%		44.0%	44.0%		44.0%	44.0%	
Maximum Green (s)	24.0	24.0	24.0	20.0	20.0		38.0	38.0		38.0	38.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0		-2.0	-2.0		-2.0	-2.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None		Min	Min		Min	Min	
Walk Time (s)	7.0	7.0	7.0	7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0	0	0	0		0	0		0	0	
Act Effct Green (s)	12.6	12.6	12.6	12.5	12.5		28.6	28.6		28.6	28.6	
Actuated g/C Ratio	0.25	0.25	0.25	0.25	0.25		0.57	0.57		0.57	0.57	
v/c Ratio	0.13	0.13	0.14	0.01	0.06		0.29	0.08		0.02	0.32	
Control Delay	19.5	19.6	3.9	20.0	13.6		13.5	9.1		10.0	6.6	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	19.5	19.6	3.9	20.0	13.6		13.5	9.1		10.0	6.6	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	B	B	A	B	B		B	A		A	A	
Approach Delay		13.7			14.4			10.9			6.7	
Approach LOS		B			B			B			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 49.8			
Natural Cycle: 75			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.32			
Intersection Signal Delay: 9.0		Intersection LOS: A	
Intersection Capacity Utilization 55.6%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 10: River Rd & Hwy 8 NB Ramp/Stonegate Dr



Intersection	
Int Delay, s/veh	2.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	687	147	0	1048	0	273
Future Vol, veh/h	687	147	0	1048	0	273
Conflicting Peds, #/hr	0	1	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	11	5	0	9	0	8
Mvmt Flow	687	147	0	1048	0	273

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	418
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.06
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.38
Pot Cap-1 Maneuver	-	-	0	-	0	567
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	566
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	17.1
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	566	-	-	-
HCM Lane V/C Ratio	0.482	-	-	-
HCM Control Delay (s)	17.1	-	-	-
HCM Lane LOS	C	-	-	-
HCM 95th %tile Q(veh)	2.6	-	-	-

Intersection	
Int Delay, s/veh	5.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	256	359	38	11	117	22	4	3	2	1	32	312
Future Vol, veh/h	256	359	38	11	117	22	4	3	2	1	32	312
Conflicting Peds, #/hr	1	0	4	4	0	1	0	0	3	3	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	0	-	-	-	-	45	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	7	3	11	0	14	10	0	0	50	0	13	6
Mvmt Flow	256	359	38	11	117	22	4	3	2	1	32	312

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	140	0	0	401	0	0	1060	1056	385	1036	1053	118
Stage 1	-	-	-	-	-	-	894	894	-	140	140	-
Stage 2	-	-	-	-	-	-	166	162	-	896	913	-
Critical Hdwy	4.17	-	-	4.1	-	-	7.1	6.5	6.7	7.1	6.63	6.26
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.63	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.63	-
Follow-up Hdwy	2.263	-	-	2.2	-	-	3.5	4	3.75	3.5	4.117	3.354
Pot Cap-1 Maneuver	1413	-	-	1169	-	-	204	227	569	212	216	923
Stage 1	-	-	-	-	-	-	338	362	-	868	760	-
Stage 2	-	-	-	-	-	-	841	768	-	338	338	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1412	-	-	1165	-	-	99	183	565	178	174	922
Mov Cap-2 Maneuver	-	-	-	-	-	-	99	183	-	178	174	-
Stage 1	-	-	-	-	-	-	276	295	-	710	752	-
Stage 2	-	-	-	-	-	-	527	760	-	272	276	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	3.2	0.6	30.7	12.8
HCM LOS			D	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	149	1412	-	-	1165	-	-	174	922
HCM Lane V/C Ratio	0.06	0.181	-	-	0.009	-	-	0.19	0.338
HCM Control Delay (s)	30.7	8.1	-	-	8.1	0	-	30.5	10.9
HCM Lane LOS	D	A	-	-	A	A	-	D	B
HCM 95th %tile Q(veh)	0.2	0.7	-	-	0	-	-	0.7	1.5

Intersection	
Int Delay, s/veh	0.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	228	1	0	444	0	48
Future Vol, veh/h	228	1	0	444	0	48
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	228	1	0	444	0	48

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	115
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	-	-	0	-	0	916
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	916
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	9.1
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	916	-	-	-
HCM Lane V/C Ratio	0.052	-	-	-
HCM Control Delay (s)	9.1	-	-	-
HCM Lane LOS	A	-	-	-
HCM 95th %tile Q(veh)	0.2	-	-	-

Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	6:40	6:40	6:40	6:40	6:40	6:40
End Time	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	80	80	80	80	80	80
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1
Vehs Entered	8363	8249	8192	8468	8250	8301
Vehs Exited	8368	8275	8173	8457	8237	8300
Starting Vehs	327	292	293	311	311	305
Ending Vehs	322	266	312	322	324	300
Travel Distance (km)	11100	10954	10905	11296	10999	11051
Travel Time (hr)	305.4	298.8	295.2	310.5	300.4	302.0
Total Delay (hr)	88.5	84.7	82.1	90.0	85.3	86.1
Total Stops	8784	8440	8280	9043	8523	8609
Fuel Used (l)	971.8	952.1	948.0	992.7	958.2	964.6

Interval #0 Information Seeding

Start Time	6:40
End Time	7:00
Total Time (min)	20

Volumes adjusted by Growth Factors.

No data recorded this interval.

Interval #1 Information Recording

Start Time	7:00
End Time	8:00
Total Time (min)	60

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	Avg
Vehs Entered	8363	8249	8192	8468	8250	8301
Vehs Exited	8368	8275	8173	8457	8237	8300
Starting Vehs	327	292	293	311	311	305
Ending Vehs	322	266	312	322	324	300
Travel Distance (km)	11100	10954	10905	11296	10999	11051
Travel Time (hr)	305.4	298.8	295.2	310.5	300.4	302.0
Total Delay (hr)	88.5	84.7	82.1	90.0	85.3	86.1
Total Stops	8784	8440	8280	9043	8523	8609
Fuel Used (l)	971.8	952.1	948.0	992.7	958.2	964.6

Intersection: 1: River Rd & King St

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	T	R	L	T	TR	L	T	TR
Maximum Queue (m)	27.3	41.7	47.5	67.1	45.4	21.9	17.2	28.5	52.6	40.7	41.4	47.5
Average Queue (m)	10.4	16.6	21.7	29.9	18.8	8.2	5.7	6.2	18.8	18.2	14.2	22.1
95th Queue (m)	22.2	33.3	36.3	52.5	37.9	17.3	14.1	17.2	38.1	33.9	30.3	41.9
Link Distance (m)		1068.8			402.4			185.1	185.1		162.1	162.1
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	45.0		45.0	50.0		50.0	75.0			45.0		
Storage Blk Time (%)		0	0	1	0					0	0	
Queuing Penalty (veh)		1	1	4	0					0	0	

Intersection: 3: Fairway Rd & Hwy 8 SB Ramp

Movement	EB	EB	EB	EB	NB	NB	NB	SB	SB	SB	SB	
Directions Served	L	L	R	R	L	T	T	T	T	T	R	
Maximum Queue (m)	50.6	59.6	57.8	46.1	51.1	61.9	57.4	70.3	68.9	59.9	30.2	
Average Queue (m)	23.4	33.7	26.4	11.3	23.9	31.6	30.6	36.6	37.3	29.3	11.3	
95th Queue (m)	43.8	51.5	46.5	30.7	42.0	53.8	52.5	63.8	64.2	53.2	23.7	
Link Distance (m)		382.8	382.8			274.9	274.9	474.0	474.0	474.0		
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	75.0			50.0	85.0						75.0	
Storage Blk Time (%)			1	0		0				0		
Queuing Penalty (veh)			1	0		0				0		

Intersection: 5: Cineplex/Fairview Park Mall & Fairway Rd

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	T	R	L	TR	L	L	TR
Maximum Queue (m)	23.4	35.5	41.9	28.2	73.1	74.6	23.5	12.7	17.7	38.0	46.3	21.0
Average Queue (m)	9.4	16.5	15.4	10.2	23.5	26.9	6.1	2.0	5.5	9.7	21.9	4.4
95th Queue (m)	19.5	31.4	32.1	22.3	57.5	59.8	18.1	8.4	14.4	27.2	41.7	13.7
Link Distance (m)		251.1	251.1		183.4	183.4	183.4	128.5	128.5		136.6	136.6
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	40.0			130.0						40.0		
Storage Blk Time (%)		0								0	2	
Queuing Penalty (veh)		0								0	1	

Intersection: 6: Wilson Ave & Fairway Rd

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	TR	L	T	T	R	L	T	R	L	T
Maximum Queue (m)	33.0	70.1	68.2	60.5	51.9	49.4	34.3	55.9	64.5	31.0	51.2	51.3
Average Queue (m)	13.9	39.1	34.0	27.9	17.1	20.5	5.5	24.1	30.5	12.1	25.1	20.5
95th Queue (m)	26.6	64.0	60.1	50.9	39.1	41.7	19.0	46.3	54.6	24.8	43.4	39.5
Link Distance (m)		436.6	436.6		251.1	251.1			283.3	283.3		306.3
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	120.0			160.0			30.0	95.0			45.0	
Storage Blk Time (%)						4	0		0		2	0
Queuing Penalty (veh)						3	0		0		4	1

Intersection: 6: Wilson Ave & Fairway Rd

Movement	SB
Directions Served	R
Maximum Queue (m)	23.5
Average Queue (m)	8.3
95th Queue (m)	17.6
Link Distance (m)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	45.0
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 10: River Rd & Hwy 8 NB Ramp/Stonegate Dr

Movement	EB	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB	
Directions Served	L	LT	R	L	TR	L	T	TR	L	T	TR	
Maximum Queue (m)	13.8	25.1	20.9	6.8	14.0	29.4	15.4	17.7	11.3	27.7	46.5	
Average Queue (m)	3.4	12.9	8.1	0.5	5.7	13.3	3.5	5.7	2.1	14.1	19.6	
95th Queue (m)	11.2	22.9	15.8	3.8	13.1	24.4	11.0	14.6	8.6	25.2	35.2	
Link Distance (m)		217.2			139.9		199.5	199.5		185.1	185.1	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	140.0		140.0	15.0		90.0			45.0			
Storage Blk Time (%)					1							
Queuing Penalty (veh)					0							

Zone Summary

Zone wide Queuing Penalty: 16

Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	6:40	6:40	6:40	6:40	6:40	6:40
End Time	8:00	8:00	8:00	8:00	8:00	8:00
Total Time (min)	80	80	80	80	80	80
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1
Vehs Entered	8363	8249	8192	8468	8250	8301
Vehs Exited	8368	8275	8173	8457	8237	8300
Starting Vehs	327	292	293	311	311	305
Ending Vehs	322	266	312	322	324	300
Travel Distance (km)	11100	10954	10905	11296	10999	11051
Travel Time (hr)	305.4	298.8	295.2	310.5	300.4	302.0
Total Delay (hr)	88.5	84.7	82.1	90.0	85.3	86.1
Total Stops	8784	8440	8280	9043	8523	8609
Fuel Used (l)	971.8	952.1	948.0	992.7	958.2	964.6

Interval #0 Information Seeding

Start Time	6:40
End Time	7:00
Total Time (min)	20

Volumes adjusted by Growth Factors.

No data recorded this interval.

Interval #1 Information Recording

Start Time	7:00
End Time	8:00
Total Time (min)	60

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	Avg
Vehs Entered	8363	8249	8192	8468	8250	8301
Vehs Exited	8368	8275	8173	8457	8237	8300
Starting Vehs	327	292	293	311	311	305
Ending Vehs	322	266	312	322	324	300
Travel Distance (km)	11100	10954	10905	11296	10999	11051
Travel Time (hr)	305.4	298.8	295.2	310.5	300.4	302.0
Total Delay (hr)	88.5	84.7	82.1	90.0	85.3	86.1
Total Stops	8784	8440	8280	9043	8523	8609
Fuel Used (l)	971.8	952.1	948.0	992.7	958.2	964.6

Intersection: 2: Stonegate Dr & King St

Movement
Directions Served
Maximum Queue (m)
Average Queue (m)
95th Queue (m)
Link Distance (m)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (m)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 4: Wabanaki Dr & Fairway Rd

Movement	EB	EB	WB	WB	WB	NB
Directions Served	T	TR	T	T	T	R
Maximum Queue (m)	1.3	1.3	57.3	63.6	51.3	45.6
Average Queue (m)	0.0	0.1	2.7	3.6	1.7	20.0
95th Queue (m)	0.9	1.2	42.3	49.5	36.2	35.5
Link Distance (m)	183.4	183.4	274.9	274.9	274.9	236.0
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (m)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 9: Wilson Ave & Wabanaki Dr

Movement	EB	EB	WB	NB	SB	SB
Directions Served	L	TR	LT	LTR	LT	R
Maximum Queue (m)	27.7	11.9	16.4	11.4	20.7	1.2
Average Queue (m)	7.1	0.4	1.3	2.5	6.5	0.0
95th Queue (m)	19.2	5.0	7.6	9.1	15.6	0.8
Link Distance (m)	638.8	638.8	1016.3	120.7	264.2	264.2
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (m)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 11: Hidden Valley Rd & River Rd

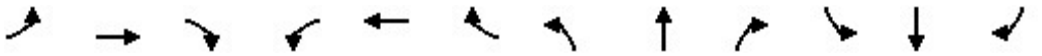
Movement	NB
Directions Served	R
Maximum Queue (m)	13.9
Average Queue (m)	7.1
95th Queue (m)	13.2
Link Distance (m)	192.8
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 19: River Rd & Hwy 8 SB Ramp

Movement	EB	WB
Directions Served	L	TR
Maximum Queue (m)	24.6	9.0
Average Queue (m)	11.5	1.0
95th Queue (m)	21.3	5.5
Link Distance (m)		293.2
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (m)	90.0	
Storage Blk Time (%)		
Queuing Penalty (veh)		

Zone Summary

Zone wide Queuing Penalty: 0

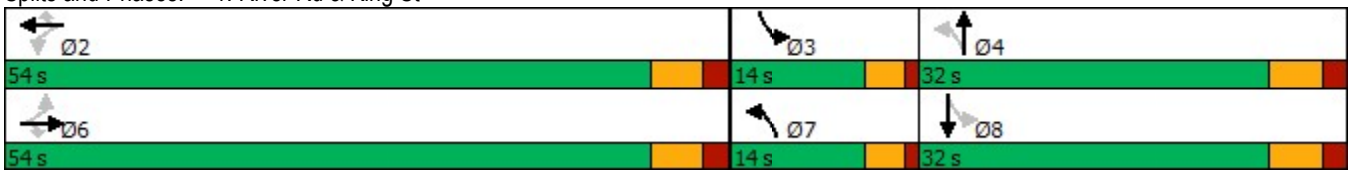


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	138	317	172	234	377	230	98	97	221	166	184	103
Future Volume (vph)	138	317	172	234	377	230	98	97	221	166	184	103
Ideal Flow (vphpl)	1775	1650	1000	1775	1900	1750	1000	1550	1000	1000	1650	1750
Storage Length (m)	45.0		45.0	50.0		50.0	75.0		0.0	45.0		0.0
Storage Lanes	1		1	1		1	1		0	1		0
Taper Length (m)	60.0			70.0			40.0			60.0		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Ped Bike Factor	1.00		0.99	1.00		0.99	1.00	0.98		1.00	0.99	
Frt			0.850			0.850		0.896			0.946	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1686	1618	726	1686	1863	1488	872	2527	0	941	2926	0
Flt Permitted	0.432			0.490			0.567			0.455		
Satd. Flow (perm)	767	1618	716	869	1863	1469	518	2527	0	448	2926	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			172			230		221			103	
Link Speed (k/h)		60			60			60			60	
Link Distance (m)		1100.5			425.6			212.4			178.4	
Travel Time (s)		66.0			25.5			12.7			10.7	
Confl. Peds. (#/hr)	1		4	4		1	4		4	4		4
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	2%	17%	0%	2%	0%	9%	8%	0%	1%	0%	1%
Adj. Flow (vph)	138	317	172	234	377	230	98	97	221	166	184	103
Shared Lane Traffic (%)												
Lane Group Flow (vph)	138	317	172	234	377	230	98	318	0	166	287	0
Turn Type	Perm	NA	Perm	Perm	NA	Perm	pm+pt	NA		pm+pt	NA	
Protected Phases		6			2		7	4		3	8	
Permitted Phases	6		6	2		2	4			8		
Detector Phase	6	6	6	2	2	2	7	4		3	8	
Switch Phase												
Minimum Initial (s)	48.0	48.0	48.0	48.0	48.0	48.0	5.0	26.0		5.0	26.0	
Minimum Split (s)	54.0	54.0	54.0	54.0	54.0	54.0	11.0	32.0		11.0	32.0	
Total Split (s)	54.0	54.0	54.0	54.0	54.0	54.0	14.0	32.0		14.0	32.0	
Total Split (%)	54.0%	54.0%	54.0%	54.0%	54.0%	54.0%	14.0%	32.0%		14.0%	32.0%	
Maximum Green (s)	48.0	48.0	48.0	48.0	48.0	48.0	10.0	26.0		10.0	26.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	3.0	4.0		3.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0	2.0	1.0	2.0		1.0	2.0	
Lost Time Adjust (s)	0.0	-2.0	0.0	-2.0	-2.0	-2.0	0.0	-2.0		0.0	-2.0	
Total Lost Time (s)	6.0	4.0	6.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag							Lead	Lag		Lead	Lag	
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	Min	Min	Min	Min	Min	Min	None	None		None	None	
Walk Time (s)	35.0	35.0	35.0	35.0	35.0	35.0		15.0			15.0	
Flash Dont Walk (s)	16.0	16.0	16.0	16.0	16.0	16.0		11.0			11.0	
Pedestrian Calls (#/hr)	0	0	0	0	0	0		0			0	
Act Effct Green (s)	48.0	50.0	48.0	50.0	50.0	50.0	37.4	28.0		38.8	30.8	
Actuated g/C Ratio	0.48	0.50	0.48	0.50	0.50	0.50	0.37	0.28		0.39	0.31	
v/c Ratio	0.38	0.39	0.40	0.54	0.40	0.27	0.43	0.37		0.74	0.30	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay	20.3	17.4	5.4	22.9	17.3	2.7	26.3	10.4		45.3	18.5	
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	
Total Delay	20.3	17.4	5.4	22.9	17.3	2.7	26.3	10.4		45.3	18.5	
LOS	C	B	A	C	B	A	C	B		D	B	
Approach Delay		14.7			14.9			14.2			28.3	
Approach LOS		B			B			B			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 100			
Natural Cycle: 100			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.74			
Intersection Signal Delay: 17.3		Intersection LOS: B	
Intersection Capacity Utilization 132.9%		ICU Level of Service H	
Analysis Period (min) 15			

Splits and Phases: 1: River Rd & King St

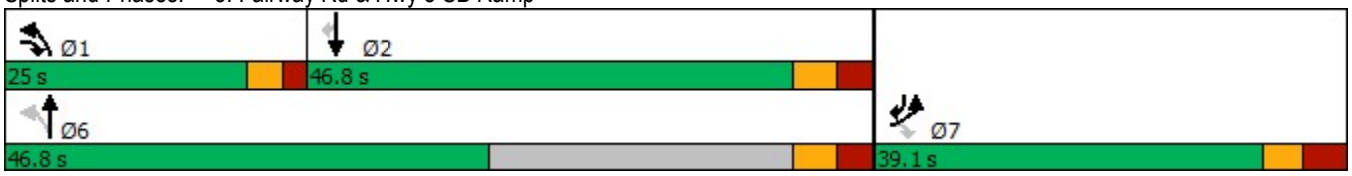


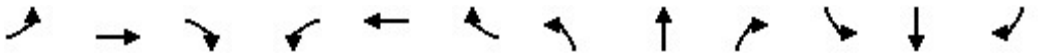
Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (vph)	730	639	249	1272	1234	147
Future Volume (vph)	730	639	249	1272	1234	147
Ideal Flow (vphpl)	1775	1750	1775	1900	1900	1750
Lane Width (m)	3.5	3.5	3.5	3.5	3.5	3.5
Storage Length (m)	75.0	50.0	85.0			75.0
Storage Lanes	1	1	1			1
Taper Length (m)	60.0		75.0			
Lane Util. Factor	0.97	0.88	1.00	0.95	0.91	1.00
Ped Bike Factor		0.98	1.00			0.94
Frt		0.850				0.850
Flt Protected	0.950		0.950			
Satd. Flow (prot)	3141	2538	1588	3466	4932	1428
Flt Permitted	0.950		0.116			
Satd. Flow (perm)	3141	2484	193	3466	4932	1339
Right Turn on Red		No				Yes
Satd. Flow (RTOR)						147
Link Speed (k/h)	60			60	60	
Link Distance (m)	404.4			302.0	498.0	
Travel Time (s)	24.3			18.1	29.9	
Confl. Peds. (#/hr)		9	25			25
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	3%	2%	5%	3%	4%	3%
Adj. Flow (vph)	730	639	249	1272	1234	147
Shared Lane Traffic (%)						
Lane Group Flow (vph)	730	639	249	1272	1234	147
Turn Type	Prot	pm+ov	pm+pt	NA	NA	pm+ov
Protected Phases	7	1	1	6	2	7
Permitted Phases		7	6			2
Detector Phase	7	1	1	6	2	7
Switch Phase						
Minimum Initial (s)	10.0	8.0	8.0	40.0	40.0	10.0
Minimum Split (s)	17.1	13.0	13.0	46.8	46.8	17.1
Total Split (s)	39.1	25.0	25.0	46.8	46.8	39.1
Total Split (%)	35.3%	22.5%	22.5%	42.2%	42.2%	35.3%
Maximum Green (s)	32.0	20.0	20.0	40.0	40.0	32.0
Yellow Time (s)	3.3	3.0	3.0	3.7	3.7	3.3
All-Red Time (s)	3.8	2.0	2.0	3.1	3.1	3.8
Lost Time Adjust (s)	-3.1	-1.0	-1.0	-2.8	-2.8	-3.1
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag		Lead	Lead		Lag	
Lead-Lag Optimize?						
Vehicle Extension (s)	4.0	4.0	4.0	3.0	3.0	4.0
Recall Mode	None	None	None	Max	Max	None
Walk Time (s)	9.0			10.0	10.0	9.0
Flash Dont Walk (s)	23.0			30.0	30.0	23.0
Pedestrian Calls (#/hr)	0			0	0	0
Act Effct Green (s)	32.4	50.4	65.1	65.1	43.0	75.4
Actuated g/C Ratio	0.31	0.48	0.62	0.62	0.41	0.71

Lane Group	EBL	EBR	NBL	NBT	SBT	SBR
v/c Ratio	0.76	0.53	0.70	0.59	0.61	0.14
Control Delay	39.1	18.4	29.8	14.0	27.2	1.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	39.1	18.4	29.8	14.0	27.2	1.0
LOS	D	B	C	B	C	A
Approach Delay	29.4			16.6	24.4	
Approach LOS	C			B	C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 110.9			
Actuated Cycle Length: 105.5			
Natural Cycle: 90			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.76			
Intersection Signal Delay: 23.2		Intersection LOS: C	
Intersection Capacity Utilization 81.5%		ICU Level of Service D	
Analysis Period (min) 15			

Splits and Phases: 3: Fairway Rd & Hwy 8 SB Ramp



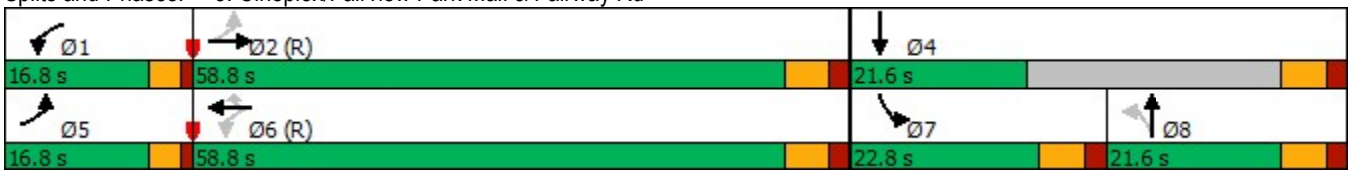


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	185	984	58	234	1241	214	67	67	123	295	47	170
Future Volume (vph)	185	984	58	234	1241	214	67	67	123	295	47	170
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	40.0		0.0	130.0		0.0	0.0		0.0	40.0		0.0
Storage Lanes	1		0	1		1	1		0	1		0
Taper Length (m)	45.0			40.0			7.5			15.0		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	0.97	1.00	1.00
Frt		0.992				0.850		0.903			0.882	
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1805	3515	0	1787	3438	1482	1770	1716	0	3213	1618	0
Flt Permitted	0.112			0.169			0.622			0.950		
Satd. Flow (perm)	213	3515	0	318	3438	1482	1159	1716	0	3213	1618	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7				199		65			164	
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		276.4			205.3			142.3			155.5	
Travel Time (s)		16.6			12.3			10.2			11.2	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	0%	2%	0%	1%	5%	9%	2%	0%	0%	9%	2%	4%
Adj. Flow (vph)	185	984	58	234	1241	214	67	67	123	295	47	170
Shared Lane Traffic (%)												
Lane Group Flow (vph)	185	1042	0	234	1241	214	67	190	0	295	217	0
Turn Type	pm+pt	NA		pm+pt	NA	Perm	Perm	NA		Prot	NA	
Protected Phases	5	2		1	6			8		7	4	
Permitted Phases	2			6		6	8					
Detector Phase	5	2		1	6	6	8	8		7	4	
Switch Phase												
Minimum Initial (s)	5.0	52.8		5.0	52.8	52.8	8.0	8.0		5.0	8.0	
Minimum Split (s)	9.0	58.8		9.0	58.8	58.8	14.0	14.0		11.0	14.0	
Total Split (s)	16.8	58.8		16.8	58.8	58.8	21.6	21.6		22.8	21.6	
Total Split (%)	14.0%	49.0%		14.0%	49.0%	49.0%	18.0%	18.0%		19.0%	18.0%	
Maximum Green (s)	12.8	52.8		12.8	52.8	52.8	15.6	15.6		16.8	15.6	
Yellow Time (s)	3.0	4.0		3.0	4.0	4.0	4.0	4.0		4.0	4.0	
All-Red Time (s)	1.0	2.0		1.0	2.0	2.0	2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	0.0	-2.0		0.0	-2.0	-2.0	-2.0	-2.0		-2.0	-2.0	
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lag	Lag		Lead		
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	
Recall Mode	None	C-Max		None	C-Max	C-Max	None	None		None	None	
Walk Time (s)		31.8			31.8	31.8	12.0	12.0			12.0	
Flash Dont Walk (s)		21.0			21.0	21.0	15.0	15.0			15.0	
Pedestrian Calls (#/hr)		0			0	0	0	0			0	
Act Effct Green (s)	71.3	60.2		72.3	60.7	60.7	15.0	15.0		17.2	36.2	
Actuated g/C Ratio	0.59	0.50		0.60	0.51	0.51	0.12	0.12		0.14	0.30	
v/c Ratio	0.68	0.59		0.70	0.71	0.25	0.47	0.70		0.64	0.36	
Control Delay	39.6	16.2		24.1	27.1	4.1	58.7	46.7		55.1	10.1	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Total Delay	39.6	16.2		24.1	27.1	4.1	58.7	46.7		55.1	10.1	
LOS	D	B		C	C	A	E	D		E	B	
Approach Delay		19.7			23.8			49.8			36.0	
Approach LOS		B			C			D			D	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 27.6 (23%), Referenced to phase 2:EBTL and 6:WBTL, Start of Green			
Natural Cycle: 95			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.71			
Intersection Signal Delay: 25.9		Intersection LOS: C	
Intersection Capacity Utilization 89.9%		ICU Level of Service E	
Analysis Period (min) 15			

Splits and Phases: 5: Cineplex/Fairview Park Mall & Fairway Rd

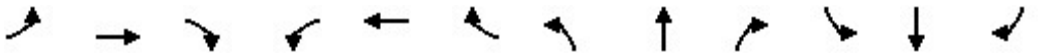


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	210	754	59	312	915	153	171	322	248	216	167	146
Future Volume (vph)	210	754	59	312	915	153	171	322	248	216	167	146
Ideal Flow (vphpl)	1775	1775	1000	1775	1900	1750	1775	1900	1750	1775	1775	1000
Lane Width (m)	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
Storage Length (m)	120.0		0.0	160.0		30.0	95.0		0.0	45.0		45.0
Storage Lanes	1		0	1		1	1		1	1		1
Taper Length (m)	60.0			40.0			7.5			10.0		
Lane Util. Factor	1.00	0.95	0.95	1.00	0.95	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	0.99	1.00		0.99		0.91	0.96		0.94	0.98		0.94
Frt		0.989				0.850			0.850			0.850
Flt Protected	0.950			0.950			0.950			0.950		
Satd. Flow (prot)	1619	3225	0	1544	3500	1362	1635	1807	1401	1668	1755	832
Flt Permitted	0.183			0.144			0.651			0.188		
Satd. Flow (perm)	308	3225	0	232	3500	1246	1074	1807	1313	322	1755	780
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		7				136			100			146
Link Speed (k/h)		60			60			50			50	
Link Distance (m)		450.5			276.4			297.0			324.1	
Travel Time (s)		27.0			16.6			21.4			23.3	
Confl. Peds. (#/hr)	40		35	35		40	46		46	46		46
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	3%	2%	1%	8%	2%	8%	2%	4%	5%	0%	0%	1%
Adj. Flow (vph)	210	754	59	312	915	153	171	322	248	216	167	146
Shared Lane Traffic (%)												
Lane Group Flow (vph)	210	813	0	312	915	153	171	322	248	216	167	146
Turn Type	pm+pt	NA		pm+pt	NA	Perm	pm+pt	NA	pm+ov	pm+pt	NA	Perm
Protected Phases	1	6		5	2		7	4	5	3	8	
Permitted Phases	6			2		2	4		4	8		8
Detector Phase	1	6		5	2	2	7	4	5	3	8	8
Switch Phase												
Minimum Initial (s)	5.0	36.0		5.0	36.0	36.0	5.0	8.0	5.0	5.0	8.0	8.0
Minimum Split (s)	9.0	42.0		9.0	42.0	42.0	9.0	14.0	9.0	9.0	14.0	14.0
Total Split (s)	22.0	43.0		22.0	43.0	43.0	11.0	38.0	22.0	17.0	38.0	38.0
Total Split (%)	18.3%	35.8%		18.3%	35.8%	35.8%	9.2%	31.7%	18.3%	14.2%	31.7%	31.7%
Maximum Green (s)	18.0	37.0		18.0	37.0	37.0	7.0	32.0	18.0	13.0	32.0	32.0
Yellow Time (s)	3.0	4.0		3.0	4.0	4.0	3.0	4.0	3.0	3.0	4.0	4.0
All-Red Time (s)	1.0	2.0		1.0	2.0	2.0	1.0	2.0	1.0	1.0	2.0	2.0
Lost Time Adjust (s)	0.0	-2.0		0.0	-2.0	-2.0	0.0	-2.0	0.0	0.0	-2.0	-2.0
Total Lost Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lead/Lag	Lead	Lag		Lead	Lag	Lag	Lead	Lag	Lead	Lead	Lag	Lag
Lead-Lag Optimize?												
Vehicle Extension (s)	4.0	3.0		4.0	3.0	3.0	3.0	3.0	4.0	3.0	3.0	3.0
Recall Mode	None	C-Max		None	C-Max	C-Max	None	None	None	None	None	None
Walk Time (s)		19.0			19.0	19.0		7.0			7.0	7.0
Flash Dont Walk (s)		17.0			17.0	17.0		25.0			25.0	25.0
Pedestrian Calls (#/hr)		0			0	0		0			0	0
Act Effct Green (s)	56.7	40.7		65.7	47.3	47.3	35.0	28.0	50.5	44.7	33.7	33.7
Actuated g/C Ratio	0.47	0.34		0.55	0.39	0.39	0.29	0.23	0.42	0.37	0.28	0.28

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
v/c Ratio	0.66	0.74		0.84	0.66	0.27	0.50	0.76	0.40	0.82	0.34	0.45
Control Delay	27.0	40.1		62.1	29.6	9.9	33.2	54.9	14.1	51.8	35.1	9.5
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	27.0	40.1		62.1	29.6	9.9	33.2	54.9	14.1	51.8	35.1	9.5
LOS	C	D		E	C	A	C	D	B	D	D	A
Approach Delay		37.4			34.7			36.2			34.9	
Approach LOS		D			C			D			C	

Intersection Summary			
Area Type:	Other		
Cycle Length: 120			
Actuated Cycle Length: 120			
Offset: 31.2 (26%), Referenced to phase 2:WBTL and 6:EBTL, Start of Green			
Natural Cycle: 90			
Control Type: Actuated-Coordinated			
Maximum v/c Ratio: 0.84			
Intersection Signal Delay: 35.8		Intersection LOS: D	
Intersection Capacity Utilization 99.2%		ICU Level of Service F	
Analysis Period (min) 15			

Splits and Phases: 6: Wilson Ave & Fairway Rd

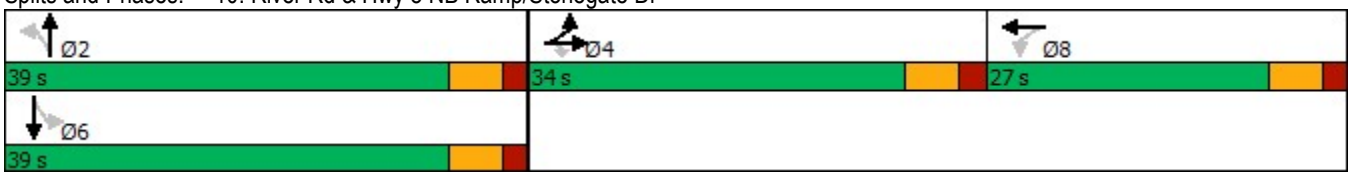


Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	218	6	122	4	6	23	64	176	1	55	344	195
Future Volume (vph)	218	6	122	4	6	23	64	176	1	55	344	195
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Storage Length (m)	140.0		140.0	15.0		0.0	90.0		0.0	45.0		0.0
Storage Lanes	1		1	1		0	1		0	1		0
Taper Length (m)	70.0			15.0			70.0			30.0		
Lane Util. Factor	0.95	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95	1.00	0.95	0.95
Frt			0.850		0.881			0.999			0.946	
Flt Protected	0.950	0.955		0.950			0.950			0.950		
Satd. Flow (prot)	1681	1690	1583	1770	1641	0	1770	3536	0	1770	3348	0
Flt Permitted	0.950	0.955		0.755			0.419			0.640		
Satd. Flow (perm)	1681	1690	1583	1406	1641	0	780	3536	0	1192	3348	0
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)			122		23			1			121	
Link Speed (k/h)		50			40			60			60	
Link Distance (m)		231.4			154.4			218.6			212.4	
Travel Time (s)		16.7			13.9			13.1			12.7	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj. Flow (vph)	218	6	122	4	6	23	64	176	1	55	344	195
Shared Lane Traffic (%)	49%											
Lane Group Flow (vph)	111	113	122	4	29	0	64	177	0	55	539	0
Turn Type	Split	NA	Perm	Perm	NA		Perm	NA		Perm	NA	
Protected Phases	4	4			8			2			6	
Permitted Phases			4	8			2			6		
Detector Phase	4	4	4	8	8		2	2		6	6	
Switch Phase												
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0		20.0	20.0		20.0	20.0	
Minimum Split (s)	24.0	24.0	24.0	24.0	24.0		26.0	26.0		26.0	26.0	
Total Split (s)	34.0	34.0	34.0	27.0	27.0		39.0	39.0		39.0	39.0	
Total Split (%)	34.0%	34.0%	34.0%	27.0%	27.0%		39.0%	39.0%		39.0%	39.0%	
Maximum Green (s)	28.0	28.0	28.0	21.0	21.0		33.0	33.0		33.0	33.0	
Yellow Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
All-Red Time (s)	2.0	2.0	2.0	2.0	2.0		2.0	2.0		2.0	2.0	
Lost Time Adjust (s)	-2.0	-2.0	-2.0	-2.0	-2.0		-2.0	-2.0		-2.0	-2.0	
Total Lost Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Recall Mode	None	None	None	None	None		Min	Min		Min	Min	
Walk Time (s)	7.0	7.0	7.0	7.0	7.0		7.0	7.0		7.0	7.0	
Flash Dont Walk (s)	11.0	11.0	11.0	11.0	11.0		11.0	11.0		11.0	11.0	
Pedestrian Calls (#/hr)	0	0	0	0	0		0	0		0	0	
Act Effct Green (s)	12.8	12.8	12.8	12.3	12.3		22.6	22.6		22.6	22.6	
Actuated g/C Ratio	0.26	0.26	0.26	0.25	0.25		0.46	0.46		0.46	0.46	
v/c Ratio	0.25	0.26	0.24	0.01	0.07		0.18	0.11		0.10	0.33	
Control Delay	18.7	18.7	6.1	18.5	11.0		12.7	10.0		11.3	8.7	
Queue Delay	0.0	0.0	0.0	0.0	0.0		0.0	0.0		0.0	0.0	
Total Delay	18.7	18.7	6.1	18.5	11.0		12.7	10.0		11.3	8.7	

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
LOS	B	B	A	B	B		B	B		B	A	
Approach Delay		14.3			11.9			10.7			8.9	
Approach LOS		B			B			B			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 100			
Actuated Cycle Length: 48.9			
Natural Cycle: 75			
Control Type: Actuated-Uncoordinated			
Maximum v/c Ratio: 0.33			
Intersection Signal Delay: 10.9		Intersection LOS: B	
Intersection Capacity Utilization 56.2%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 10: River Rd & Hwy 8 NB Ramp/Stonegate Dr



Intersection	
Int Delay, s/veh	3.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1302	160	0	1741	0	284
Future Vol, veh/h	1302	160	0	1741	0	284
Conflicting Peds, #/hr	0	2	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	4	8	0	5	0	3
Mvmt Flow	1302	160	0	1741	0	284

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	733
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.96
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.33
Pot Cap-1 Maneuver	-	-	0	-	0	361
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	360
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	43.7
HCM LOS			E

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	360	-	-	-
HCM Lane V/C Ratio	0.789	-	-	-
HCM Control Delay (s)	43.7	-	-	-
HCM Lane LOS	E	-	-	-
HCM 95th %tile Q(veh)	6.6	-	-	-

Intersection	
Int Delay, s/veh	21.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	376	343	16	4	162	6	39	17	21	2	11	537
Future Vol, veh/h	376	343	16	4	162	6	39	17	21	2	11	537
Conflicting Peds, #/hr	2	0	0	0	0	2	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	Yield
Storage Length	0	-	-	-	-	45	-	-	-	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	100	100	100	100	100	100	100	100	100	100	100	100
Heavy Vehicles, %	4	4	0	0	8	0	3	0	0	0	10	5
Mvmt Flow	376	343	16	4	162	6	39	17	21	2	11	537

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	170	0	0	359	0	0	1282	1281	351	1294	1283	164
Stage 1	-	-	-	-	-	-	1103	1103	-	172	172	-
Stage 2	-	-	-	-	-	-	179	178	-	1122	1111	-
Critical Hdwy	4.14	-	-	4.1	-	-	7.13	6.5	6.2	7.1	6.6	6.25
Critical Hdwy Stg 1	-	-	-	-	-	-	6.13	5.5	-	6.1	5.6	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.13	5.5	-	6.1	5.6	-
Follow-up Hdwy	2.236	-	-	2.2	-	-	3.527	4	3.3	3.5	4.09	3.345
Pot Cap-1 Maneuver	1395	-	-	1211	-	-	141	167	697	141	159	873
Stage 1	-	-	-	-	-	-	255	290	-	835	742	-
Stage 2	-	-	-	-	-	-	820	756	-	252	275	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1392	-	-	1211	-	-	40	121	697	97	115	871
Mov Cap-2 Maneuver	-	-	-	-	-	-	40	121	-	97	115	-
Stage 1	-	-	-	-	-	-	186	212	-	609	738	-
Stage 2	-	-	-	-	-	-	309	751	-	164	201	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	4.4	0.2	262.4	16.1
HCM LOS			F	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	67	1392	-	-	1211	-	-	112	871
HCM Lane V/C Ratio	1.149	0.27	-	-	0.003	-	-	0.116	0.617
HCM Control Delay (s)	262.4	8.5	-	-	8	0	-	41.3	15.5
HCM Lane LOS	F	A	-	-	A	A	-	E	C
HCM 95th %tile Q(veh)	6	1.1	-	-	0	-	-	0.4	4.4

Intersection	
Int Delay, s/veh	0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	214	17	0	471	0	26
Future Vol, veh/h	214	17	0	471	0	26
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	100	100	100	100	100	100
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	214	17	0	471	0	26

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	116
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.32
Pot Cap-1 Maneuver	-	-	0	-	0	914
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	914
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0	9.1
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	914	-	-	-
HCM Lane V/C Ratio	0.028	-	-	-
HCM Control Delay (s)	9.1	-	-	-
HCM Lane LOS	A	-	-	-
HCM 95th %tile Q(veh)	0.1	-	-	-

Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	3:40	3:40	3:40	3:40	3:40	3:40
End Time	5:00	5:00	5:00	5:00	5:00	5:00
Total Time (min)	80	80	80	80	80	80
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1
Vehs Entered	12084	12253	12130	12312	12061	12166
Vehs Exited	12006	12267	12102	12296	12039	12141
Starting Vehs	522	530	509	533	552	524
Ending Vehs	600	516	537	549	574	548
Travel Distance (km)	16130	16458	16025	16419	16041	16215
Travel Time (hr)	564.1	612.0	528.7	550.5	540.3	559.1
Total Delay (hr)	251.9	294.5	218.6	232.7	229.1	245.4
Total Stops	17448	19823	16191	16600	16560	17322
Fuel Used (l)	1524.5	1581.9	1486.3	1539.3	1496.2	1525.6

Interval #0 Information Seeding

Start Time	3:40
End Time	4:00
Total Time (min)	20

Volumes adjusted by Growth Factors.

No data recorded this interval.

Interval #1 Information Recording

Start Time	4:00
End Time	5:00
Total Time (min)	60

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	Avg
Vehs Entered	12084	12253	12130	12312	12061	12166
Vehs Exited	12006	12267	12102	12296	12039	12141
Starting Vehs	522	530	509	533	552	524
Ending Vehs	600	516	537	549	574	548
Travel Distance (km)	16130	16458	16025	16419	16041	16215
Travel Time (hr)	564.1	612.0	528.7	550.5	540.3	559.1
Total Delay (hr)	251.9	294.5	218.6	232.7	229.1	245.4
Total Stops	17448	19823	16191	16600	16560	17322
Fuel Used (l)	1524.5	1581.9	1486.3	1539.3	1496.2	1525.6

Intersection: 1: River Rd & King St

Movement	EB	EB	EB	WB	WB	WB	NB	NB	NB	SB	SB	SB
Directions Served	L	T	R	L	T	R	L	T	TR	L	T	TR
Maximum Queue (m)	48.7	73.7	31.4	86.5	110.6	25.6	39.2	35.7	53.7	46.9	35.5	45.6
Average Queue (m)	23.6	36.4	14.4	42.6	45.2	13.0	15.2	9.5	24.9	20.8	14.0	18.6
95th Queue (m)	42.0	61.1	26.3	75.2	84.6	22.0	30.4	24.4	44.3	36.6	28.1	36.7
Link Distance (m)		1068.8			402.4			185.1	185.1		162.1	162.1
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	45.0		45.0	50.0		50.0	75.0			45.0		
Storage Blk Time (%)	1	3		13	4					0		
Queuing Penalty (veh)	5	10		77	19					0		

Intersection: 3: Fairway Rd & Hwy 8 SB Ramp

Movement	EB	EB	EB	EB	NB	NB	NB	SB	SB	SB	SB	
Directions Served	L	L	R	R	L	T	T	T	T	T	R	
Maximum Queue (m)	120.5	223.1	205.8	80.6	72.3	112.7	107.5	98.1	99.0	99.1	59.4	
Average Queue (m)	78.7	99.9	73.3	42.2	36.8	62.2	61.6	65.6	66.7	55.6	13.4	
95th Queue (m)	123.9	202.1	191.9	78.8	60.8	104.2	102.0	93.7	96.6	87.4	37.4	
Link Distance (m)		382.8	382.8			274.9	274.9	474.0	474.0	474.0		
Upstream Blk Time (%)		0	0									
Queuing Penalty (veh)		0	0									
Storage Bay Dist (m)	75.0			50.0	85.0						75.0	
Storage Blk Time (%)	12	21	10	1	0	2				2		
Queuing Penalty (veh)	42	76	31	4	0	5				2		

Intersection: 5: Cineplex/Fairview Park Mall & Fairway Rd

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	SB	SB	SB
Directions Served	L	T	TR	L	T	T	R	L	TR	L	L	TR
Maximum Queue (m)	68.5	86.7	86.9	95.4	151.8	151.3	67.2	38.2	75.7	55.0	88.3	62.1
Average Queue (m)	32.3	53.2	56.0	37.2	81.0	82.0	17.5	15.4	34.5	34.8	46.3	28.7
95th Queue (m)	54.2	76.4	79.5	69.7	137.1	137.8	40.4	33.4	64.3	61.2	74.2	53.7
Link Distance (m)		251.1	251.1		183.4	183.4	183.4	128.5	128.5		136.6	136.6
Upstream Blk Time (%)					0	0						
Queuing Penalty (veh)					0	0						
Storage Bay Dist (m)	40.0			130.0						40.0		
Storage Blk Time (%)	5	22			1					3	22	
Queuing Penalty (veh)	24	41			3					5	33	

Intersection: 6: Wilson Ave & Fairway Rd

Movement	EB	EB	EB	WB	WB	WB	WB	NB	NB	NB	SB	SB
Directions Served	L	T	TR	L	T	T	R	L	T	R	L	T
Maximum Queue (m)	71.5	127.2	124.9	146.7	128.1	134.9	55.0	102.3	170.3	85.4	54.7	98.9
Average Queue (m)	38.6	81.6	76.8	88.5	73.3	75.9	33.8	34.6	75.2	25.4	36.1	32.3
95th Queue (m)	63.5	116.6	112.4	148.4	130.3	128.1	66.6	77.6	136.4	57.9	58.2	70.5
Link Distance (m)		436.6	436.6		251.1	251.1			283.3	283.3		306.3
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	120.0			160.0			30.0	95.0			45.0	
Storage Blk Time (%)		1		4	1	50	2	0	6		10	2
Queuing Penalty (veh)		2		17	2	76	7	0	10		31	7

Intersection: 6: Wilson Ave & Fairway Rd

Movement	SB
Directions Served	R
Maximum Queue (m)	65.0
Average Queue (m)	17.0
95th Queue (m)	42.6
Link Distance (m)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	45.0
Storage Blk Time (%)	0
Queuing Penalty (veh)	0

Intersection: 10: River Rd & Hwy 8 NB Ramp/Stonegate Dr

Movement	EB	EB	EB	WB	WB	NB	NB	NB	SB	SB	SB	
Directions Served	L	LT	R	L	TR	L	T	TR	L	T	TR	
Maximum Queue (m)	23.0	42.4	22.0	6.9	13.3	20.6	21.7	21.2	22.7	33.1	43.0	
Average Queue (m)	8.5	18.9	9.9	0.6	5.1	9.5	6.2	7.1	7.7	14.9	20.8	
95th Queue (m)	18.5	33.6	17.5	4.1	12.4	18.2	15.9	16.6	17.6	27.4	36.2	
Link Distance (m)		217.2			139.9		199.5	199.5		185.1	185.1	
Upstream Blk Time (%)												
Queuing Penalty (veh)												
Storage Bay Dist (m)	140.0		140.0	15.0		90.0			45.0			
Storage Blk Time (%)					0					0		
Queuing Penalty (veh)					0					0		

Zone Summary

Zone wide Queuing Penalty: 532

Summary of All Intervals

Run Number	1	2	3	4	5	Avg
Start Time	3:40	3:40	3:40	3:40	3:40	3:40
End Time	5:00	5:00	5:00	5:00	5:00	5:00
Total Time (min)	80	80	80	80	80	80
Time Recorded (min)	60	60	60	60	60	60
# of Intervals	2	2	2	2	2	2
# of Recorded Intervals	1	1	1	1	1	1
Vehs Entered	12084	12253	12130	12312	12061	12166
Vehs Exited	12006	12267	12102	12296	12039	12141
Starting Vehs	522	530	509	533	552	524
Ending Vehs	600	516	537	549	574	548
Travel Distance (km)	16130	16458	16025	16419	16041	16215
Travel Time (hr)	564.1	612.0	528.7	550.5	540.3	559.1
Total Delay (hr)	251.9	294.5	218.6	232.7	229.1	245.4
Total Stops	17448	19823	16191	16600	16560	17322
Fuel Used (l)	1524.5	1581.9	1486.3	1539.3	1496.2	1525.6

Interval #0 Information Seeding

Start Time	3:40
End Time	4:00
Total Time (min)	20

Volumes adjusted by Growth Factors.

No data recorded this interval.

Interval #1 Information Recording

Start Time	4:00
End Time	5:00
Total Time (min)	60

Volumes adjusted by Growth Factors.

Run Number	1	2	3	4	5	Avg
Vehs Entered	12084	12253	12130	12312	12061	12166
Vehs Exited	12006	12267	12102	12296	12039	12141
Starting Vehs	522	530	509	533	552	524
Ending Vehs	600	516	537	549	574	548
Travel Distance (km)	16130	16458	16025	16419	16041	16215
Travel Time (hr)	564.1	612.0	528.7	550.5	540.3	559.1
Total Delay (hr)	251.9	294.5	218.6	232.7	229.1	245.4
Total Stops	17448	19823	16191	16600	16560	17322
Fuel Used (l)	1524.5	1581.9	1486.3	1539.3	1496.2	1525.6

Intersection: 2: Stonegate Dr & King St

Movement
Directions Served
Maximum Queue (m)
Average Queue (m)
95th Queue (m)
Link Distance (m)
Upstream Blk Time (%)
Queuing Penalty (veh)
Storage Bay Dist (m)
Storage Blk Time (%)
Queuing Penalty (veh)

Intersection: 4: Wabanaki Dr & Fairway Rd

Movement	EB	EB	WB	WB	NB
Directions Served	T	TR	T	T	R
Maximum Queue (m)	10.2	12.0	2.7	4.9	73.0
Average Queue (m)	0.5	0.7	0.1	0.2	35.0
95th Queue (m)	4.4	5.7	1.4	2.5	64.8
Link Distance (m)	183.4	183.4	274.9	274.9	236.0
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (m)					
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 9: Wilson Ave & Wabanaki Dr

Movement	EB	EB	WB	NB	SB	SB
Directions Served	L	TR	LT	LTR	LT	R
Maximum Queue (m)	28.6	3.2	3.2	26.1	12.7	1.3
Average Queue (m)	10.6	0.1	0.1	9.8	3.2	0.0
95th Queue (m)	21.9	2.2	1.6	18.9	10.7	0.9
Link Distance (m)	638.8	638.8	1016.3	120.7	264.2	264.2
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (m)						
Storage Blk Time (%)						
Queuing Penalty (veh)						

Intersection: 11: Hidden Valley Rd & River Rd

Movement	NB
Directions Served	R
Maximum Queue (m)	14.5
Average Queue (m)	5.6
95th Queue (m)	12.8
Link Distance (m)	192.8
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 19: River Rd & Hwy 8 SB Ramp

Movement	EB
Directions Served	L
Maximum Queue (m)	21.5
Average Queue (m)	9.1
95th Queue (m)	17.9
Link Distance (m)	
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (m)	90.0
Storage Blk Time (%)	
Queuing Penalty (veh)	

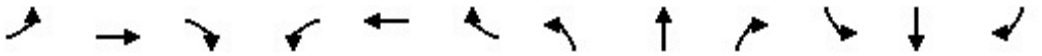
Zone Summary

Zone wide Queuing Penalty: 0

Capacity Analysis
Wabanaki Drive and Wilson Drive Signalization
2043 Total Traffic Conditions

Synchro Analysis Summary
Wabanaki Drive and Wilson Drive Signalization
2043 Total Traffic Conditions

Intersection	Approach - Movement	Storage Length (m)	AM Peak				PM Peak			
			LOS	V/C	Delay (s)	Queue (m)	LOS	V/C	Delay (s)	Queue (m)
Wilson Ave & Wabanaki Dr	**Intersection**	**-**	**A**	**-**	**7.7**	**-**	**A**	**-**	**9.4**	**-**
	EB - L	-	A	0.43	9.5	37	B	0.64	14.6	51
	EB - TR*	-	A	0.48	8.9	37	A	0.43	8.9	34
	WB - LT	-	A	0.17	6.3	18	A	0.21	7.1	20
	WB - R*	45	A	0.03	0.8	3	A	0.01	0.0	4
	NB - LTR	-	B	0.03	10.8	9	B	0.20	11.6	17
	SB - LT	-	B	0.08	12.2	17	B	0.03	12.8	10
	SB - R	-	A	0.50	5.2	4	A	0.67	6.6	0



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	256	355	38	11	112	22	4	3	2	1	32	312
Future Volume (vph)	256	355	38	11	112	22	4	3	2	1	32	312
Ideal Flow (vphpl)	1775	1650	1000	1000	1650	1750	1000	1550	1000	1000	1650	1750
Storage Length (m)	0.0		0.0	0.0		45.0	0.0		0.0	0.0		0.0
Storage Lanes	1		0	0		1	0		0	0		1
Taper Length (m)	7.5			7.5			7.5			7.5		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00	1.00			1.00	0.99		0.99			1.00	
Frt		0.985				0.850		0.970				0.850
Flt Protected	0.950				0.996			0.978			0.998	
Satd. Flow (prot)	1576	1563	0	0	1458	1352	0	1316	0	0	1462	1403
Flt Permitted	0.678				0.960			0.908			0.994	
Satd. Flow (perm)	1124	1563	0	0	1404	1335	0	1222	0	0	1456	1403
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		13				55		2				312
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		409.6			536.5			134.0			276.5	
Travel Time (s)		29.5			38.6			9.6			19.9	
Confl. Peds. (#/hr)	1		4	4		1			3	3		
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	7%	3%	11%	0%	14%	10%	0%	0%	50%	0%	13%	6%
Adj. Flow (vph)	256	355	38	11	112	22	4	3	2	1	32	312
Shared Lane Traffic (%)												
Lane Group Flow (vph)	256	393	0	0	123	22	0	9	0	0	33	312
Turn Type	Perm	NA		Perm	NA	Perm	Perm	NA		Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6		6	8			4		4
Detector Phase	2	2		6	6	6	8	8		4	4	4
Switch Phase												
Minimum Initial (s)	20.0	20.0		20.0	20.0	20.0	10.0	10.0		10.0	10.0	10.0
Minimum Split (s)	26.0	26.0		26.0	26.0	26.0	24.0	24.0		24.0	24.0	24.0
Total Split (s)	35.0	35.0		35.0	35.0	35.0	25.0	25.0		25.0	25.0	25.0
Total Split (%)	58.3%	58.3%		58.3%	58.3%	58.3%	41.7%	41.7%		41.7%	41.7%	41.7%
Maximum Green (s)	29.0	29.0		29.0	29.0	29.0	19.0	19.0		19.0	19.0	19.0
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	-2.0	-2.0			-2.0	-2.0		-2.0			-2.0	-2.0
Total Lost Time (s)	4.0	4.0			4.0	4.0		4.0			4.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	Min	Min		Min	Min	Min	None	None		None	None	None
Walk Time (s)				7.0	7.0	7.0	7.0	7.0				
Flash Dont Walk (s)				11.0	11.0	11.0	11.0	11.0				
Pedestrian Calls (#/hr)				0	0	0	0	0				
Act Effct Green (s)	22.8	22.8			22.8	22.8		12.6			12.6	12.6
Actuated g/C Ratio	0.52	0.52			0.52	0.52		0.29			0.29	0.29
v/c Ratio	0.43	0.48			0.17	0.03		0.03			0.08	0.50

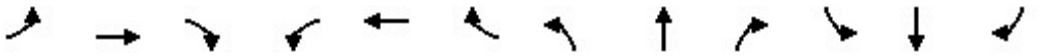
Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay	9.5	8.9			6.3	0.8		10.8			12.2	5.2
Queue Delay	0.0	0.0			0.0	0.0		0.0			0.0	0.0
Total Delay	9.5	8.9			6.3	0.8		10.8			12.2	5.2
LOS	A	A			A	A		B			B	A
Approach Delay		9.1			5.5			10.8			5.9	
Approach LOS		A			A			B			A	

Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 43.5			
Natural Cycle: 50			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.50			
Intersection Signal Delay: 7.7		Intersection LOS: A	
Intersection Capacity Utilization 59.8%		ICU Level of Service B	
Analysis Period (min) 15			

Splits and Phases: 9: Wilson Ave & Wabanaki Dr

Intersection: 9: Wilson Ave & Wabanaki Dr

Movement	EB	EB	WB	WB	NB	SB	SB
Directions Served	L	TR	LT	R	LTR	LT	R
Maximum Queue (m)	50.9	46.3	25.5	6.1	12.7	20.5	6.0
Average Queue (m)	17.3	15.3	5.9	0.4	2.1	7.3	0.2
95th Queue (m)	37.4	37.0	17.7	3.3	8.5	16.8	4.2
Link Distance (m)	398.7	398.7	524.4		120.1	264.2	264.2
Upstream Blk Time (%)							
Queuing Penalty (veh)							
Storage Bay Dist (m)				45.0			
Storage Blk Time (%)			0				
Queuing Penalty (veh)			0				



Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	376	341	16	4	162	6	39	17	21	2	11	537
Future Volume (vph)	376	341	16	4	162	6	39	17	21	2	11	537
Ideal Flow (vphpl)	1775	1650	1000	1000	1650	1750	1000	1550	1000	1000	1650	1750
Storage Length (m)	0.0		0.0	0.0		45.0	0.0		0.0	0.0		0.0
Storage Lanes	1		0	0		1	0		0	0		1
Taper Length (m)	7.5			7.5			7.5			7.5		
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped Bike Factor	1.00					0.99						
Frt		0.993				0.850		0.963				0.850
Flt Protected	0.950				0.999			0.975			0.992	
Satd. Flow (prot)	1621	1578	0	0	1529	1488	0	1434	0	0	1509	1417
Flt Permitted	0.652				0.992			0.866			0.964	
Satd. Flow (perm)	1111	1578	0	0	1518	1467	0	1273	0	0	1467	1417
Right Turn on Red			Yes			Yes			Yes			Yes
Satd. Flow (RTOR)		6				55		21				537
Link Speed (k/h)		50			50			50			50	
Link Distance (m)		409.6			536.5			134.0			276.5	
Travel Time (s)		29.5			38.6			9.6			19.9	
Confl. Peds. (#/hr)	2					2						
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Heavy Vehicles (%)	4%	4%	0%	0%	8%	0%	3%	0%	0%	0%	10%	5%
Adj. Flow (vph)	376	341	16	4	162	6	39	17	21	2	11	537
Shared Lane Traffic (%)												
Lane Group Flow (vph)	376	357	0	0	166	6	0	77	0	0	13	537
Turn Type	Perm	NA		Perm	NA	Perm	Perm	NA		Perm	NA	Perm
Protected Phases		2			6			8			4	
Permitted Phases	2			6		6	8			4		4
Detector Phase	2	2		6	6	6	8	8		4	4	4
Switch Phase												
Minimum Initial (s)	20.0	20.0		20.0	20.0	20.0	10.0	10.0		10.0	10.0	10.0
Minimum Split (s)	26.0	26.0		26.0	26.0	26.0	24.0	24.0		24.0	24.0	24.0
Total Split (s)	35.0	35.0		35.0	35.0	35.0	25.0	25.0		25.0	25.0	25.0
Total Split (%)	58.3%	58.3%		58.3%	58.3%	58.3%	41.7%	41.7%		41.7%	41.7%	41.7%
Maximum Green (s)	29.0	29.0		29.0	29.0	29.0	19.0	19.0		19.0	19.0	19.0
Yellow Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
All-Red Time (s)	2.0	2.0		2.0	2.0	2.0	2.0	2.0		2.0	2.0	2.0
Lost Time Adjust (s)	-2.0	-2.0			-2.0	-2.0		-2.0			-2.0	-2.0
Total Lost Time (s)	4.0	4.0			4.0	4.0		4.0			4.0	4.0
Lead/Lag												
Lead-Lag Optimize?												
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Recall Mode	Min	Min		Min	Min	Min	None	None		None	None	None
Walk Time (s)				7.0	7.0	7.0	7.0	7.0				
Flash Dont Walk (s)				11.0	11.0	11.0	11.0	11.0				
Pedestrian Calls (#/hr)				0	0	0	0	0				
Act Effct Green (s)	24.6	24.6			24.6	24.6		13.8			13.8	13.8
Actuated g/C Ratio	0.53	0.53			0.53	0.53		0.30			0.30	0.30
v/c Ratio	0.64	0.43			0.21	0.01		0.20			0.03	0.67

Lane Group	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Control Delay	14.6	8.9			7.1	0.0		11.6			12.8	6.6
Queue Delay	0.0	0.0			0.0	0.0		0.0			0.0	0.0
Total Delay	14.6	8.9			7.1	0.0		11.6			12.8	6.6
LOS	B	A			A	A		B			B	A
Approach Delay		11.9			6.9			11.6			6.7	
Approach LOS		B			A			B			A	

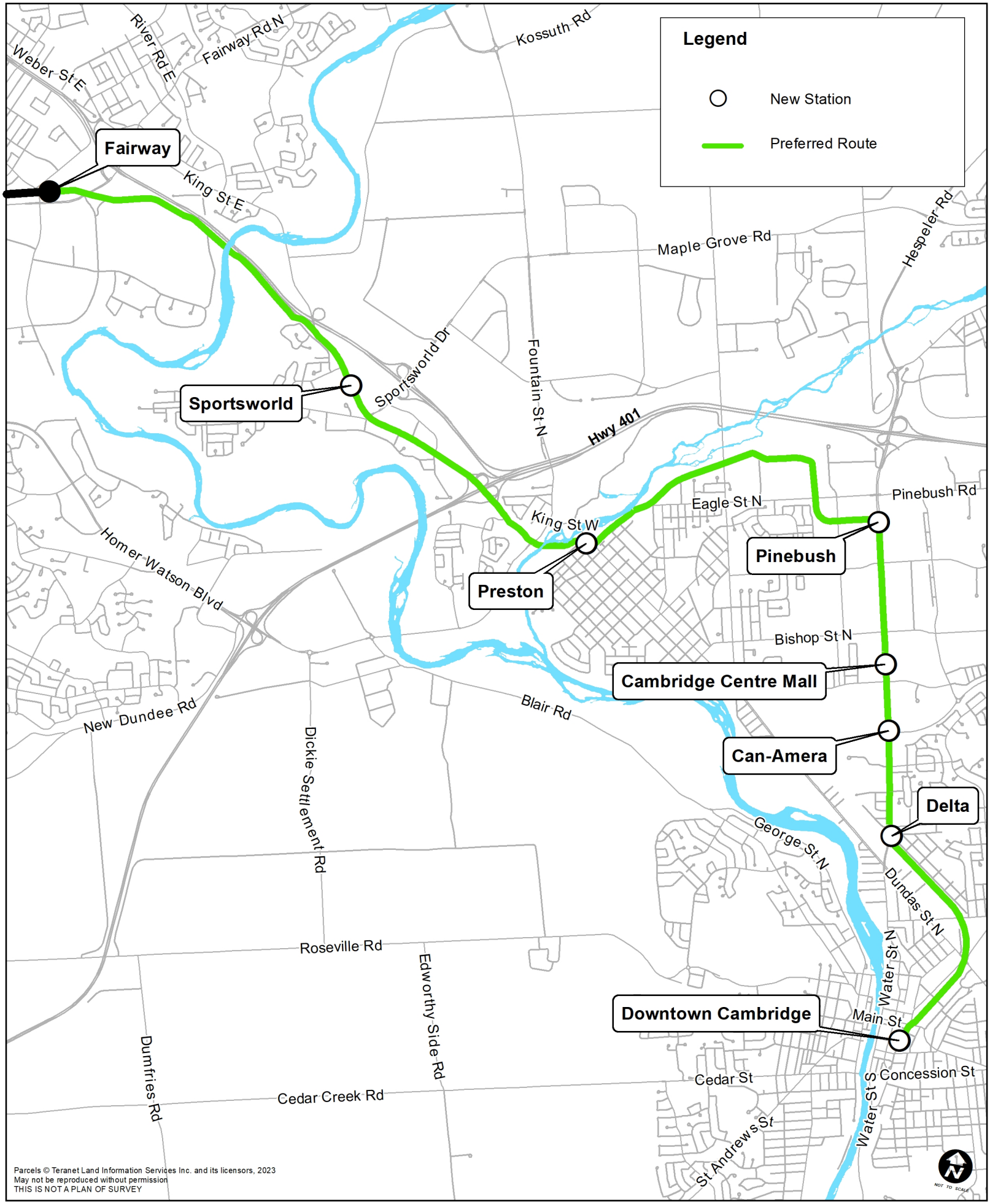
Intersection Summary			
Area Type:	Other		
Cycle Length: 60			
Actuated Cycle Length: 46.5			
Natural Cycle: 60			
Control Type: Semi Act-Uncoord			
Maximum v/c Ratio: 0.67			
Intersection Signal Delay: 9.4		Intersection LOS: A	
Intersection Capacity Utilization 71.1%		ICU Level of Service C	
Analysis Period (min) 15			

Splits and Phases: 9: Wilson Ave & Wabanaki Dr

Intersection: 9: Wilson Ave & Wabanaki Dr

Movement	EB	EB	WB	WB	NB	SB
Directions Served	L	TR	LT	R	LTR	LT
Maximum Queue (m)	64.8	39.6	30.0	7.7	20.1	12.2
Average Queue (m)	27.1	17.4	8.3	0.5	9.1	2.8
95th Queue (m)	51.0	33.7	20.4	3.6	17.1	9.9
Link Distance (m)	398.7	398.7	524.4		120.1	264.2
Upstream Blk Time (%)						
Queuing Penalty (veh)						
Storage Bay Dist (m)				45.0		
Storage Blk Time (%)			0			
Queuing Penalty (veh)			0			

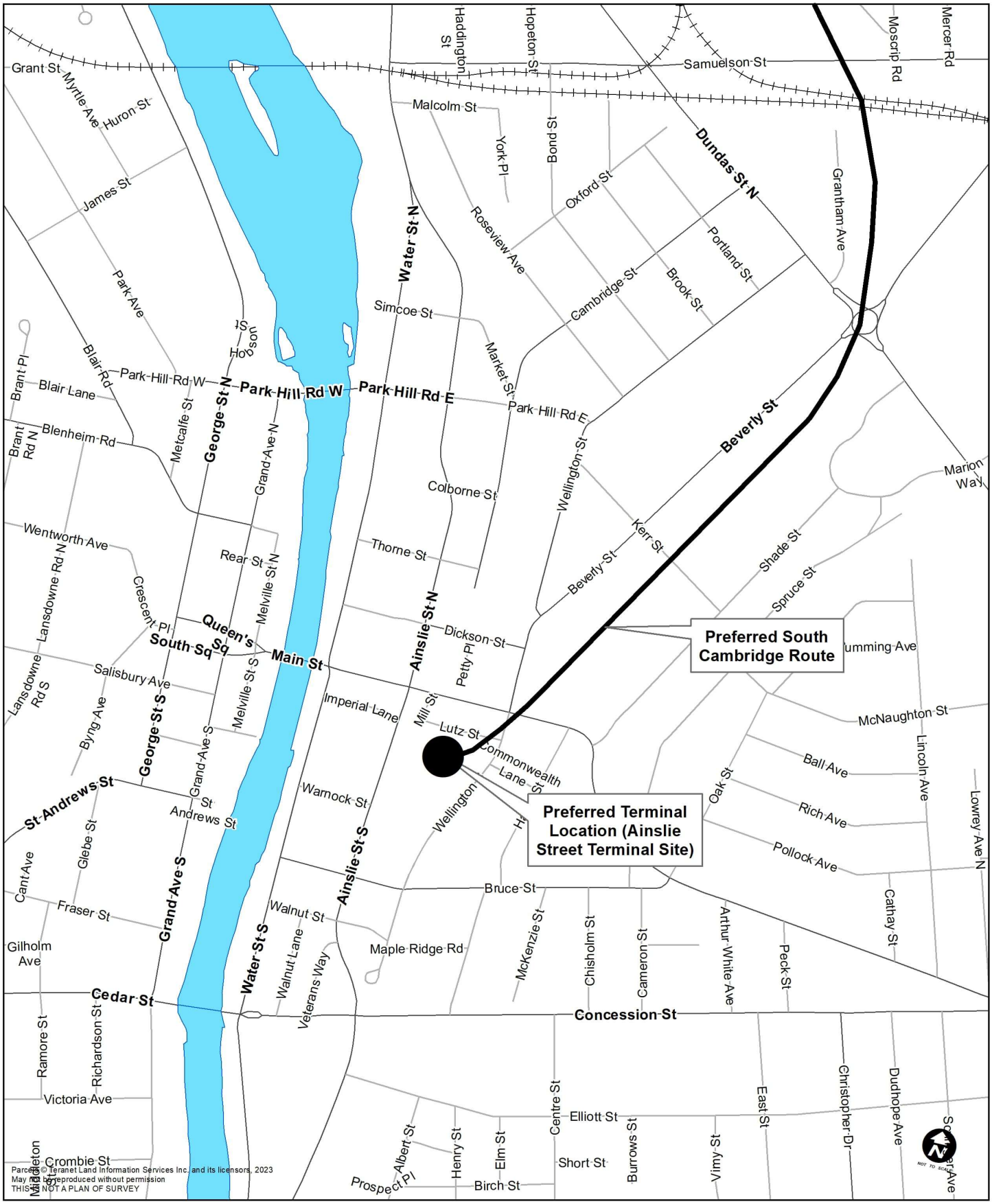
APPENDIX L – ION STAGE 2 PREFERRED ROUTE AND STATION LOCATIONS



Produced by:
Information and Technology Services - GIS
150 Frederick Street
Kitchener, Ontario N2G 4J3
© Regional Municipality of Waterloo, 2023
Author: E.Siddorn

Stage 2 ION Route

Region of Waterloo



Produced by:
Information and Technology Services - GIS
150 Frederick Street
Kitchener, Ontario N2G 4J3
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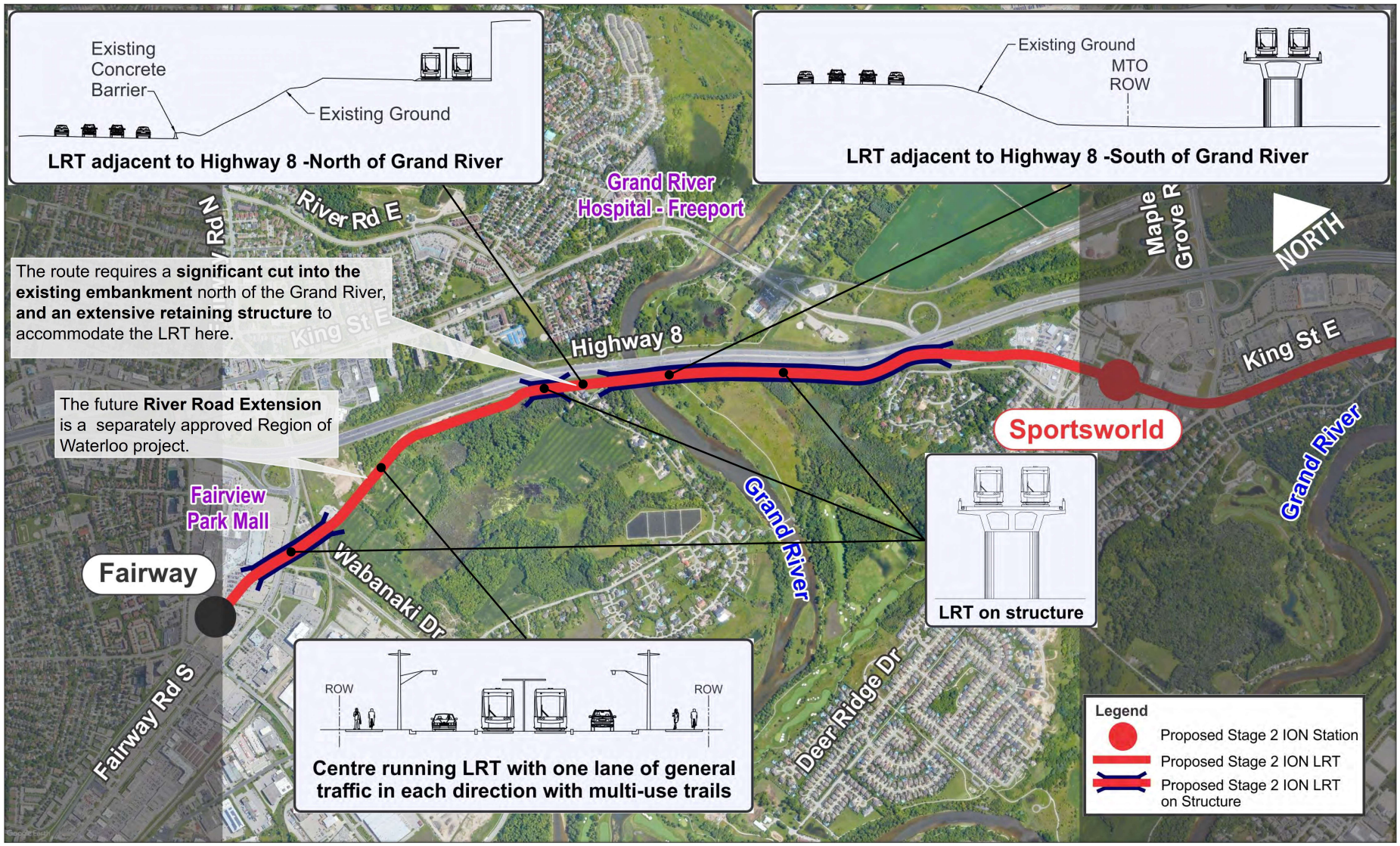
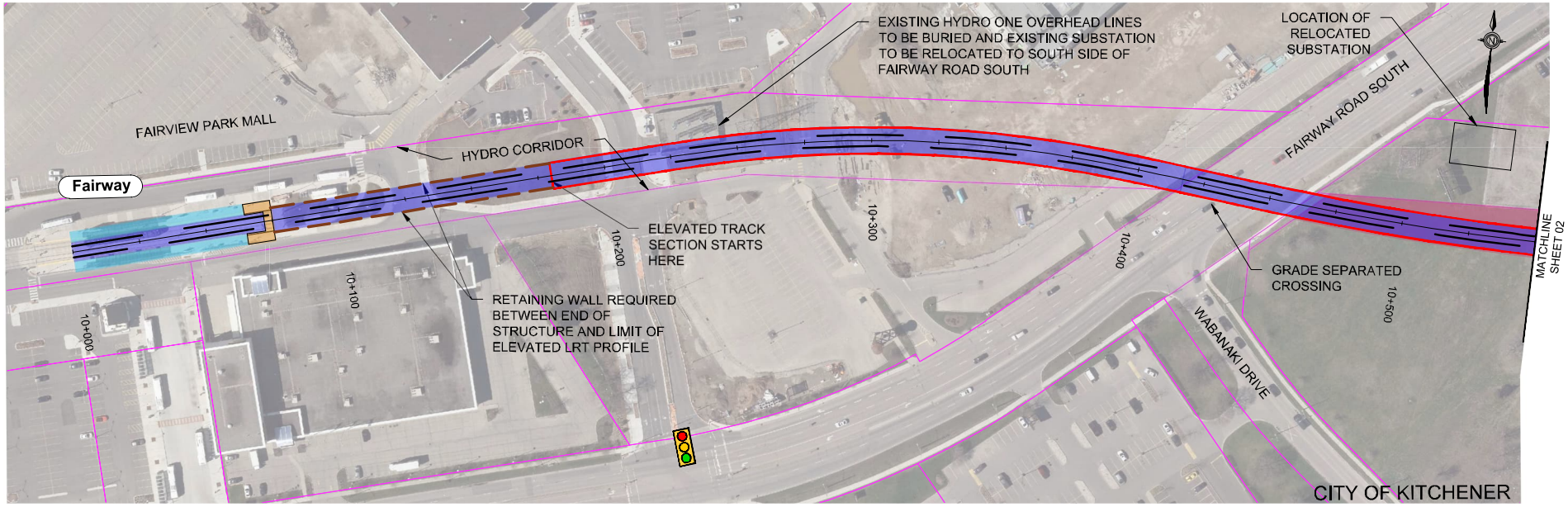
Author: E.Siddorn

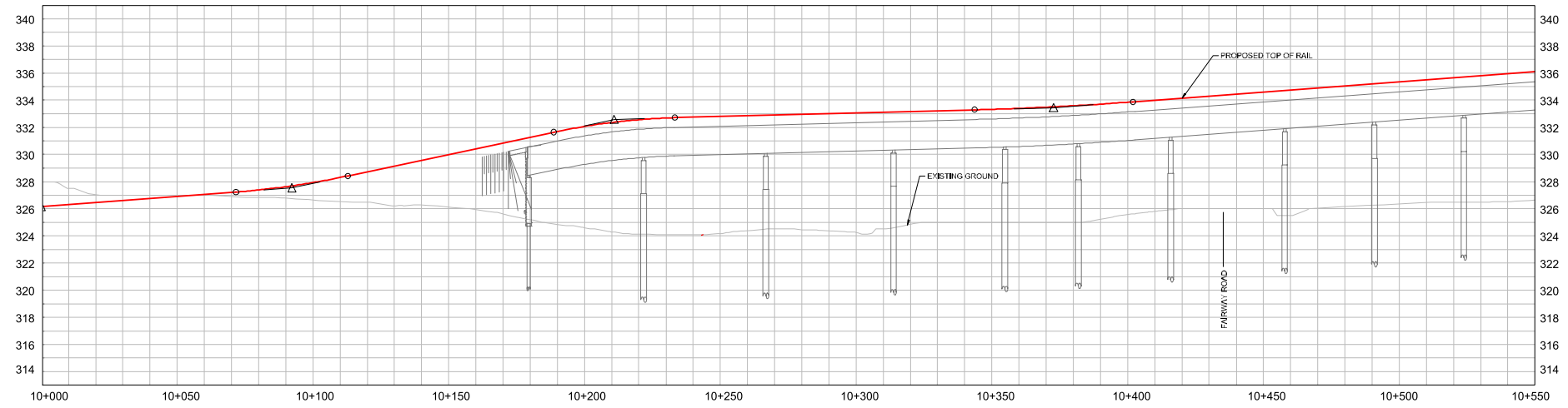
Map of Preferred Terminal Location and Preferred South Cambridge Route

Region of Waterloo

EPR Section 6: Project Description







LEGEND

- PROPOSED LRT CORRIDOR
- PROPOSED LRT STATION
- PROPOSED TRAFFIC LANES
- PROPOSED BIKE LANE
- PROPOSED SIDEWALK
- PROPOSED GRT BUS STOP
- PROPOSED STRUCTURE
- PROPOSED RETAINING WALL
- EXISTING PROPERTY LINE
- FUTURE/PLANNED ROAD
- PROPOSED FULL PROPERTY ACQUISITION
- PROPOSED PARTIAL PROPERTY ACQUISITION
- TRACTION POWER SUBSTATION

Region of Waterloo GRT GRAND RIVER TRANSIT

iON wsp

SCALE: HOR: 0m 10m 20m 40m; VER: 0m 2m 4m 8m

DATE: November 2020

DRAWN BY: SR / PM

FILE No. 161-07859-01

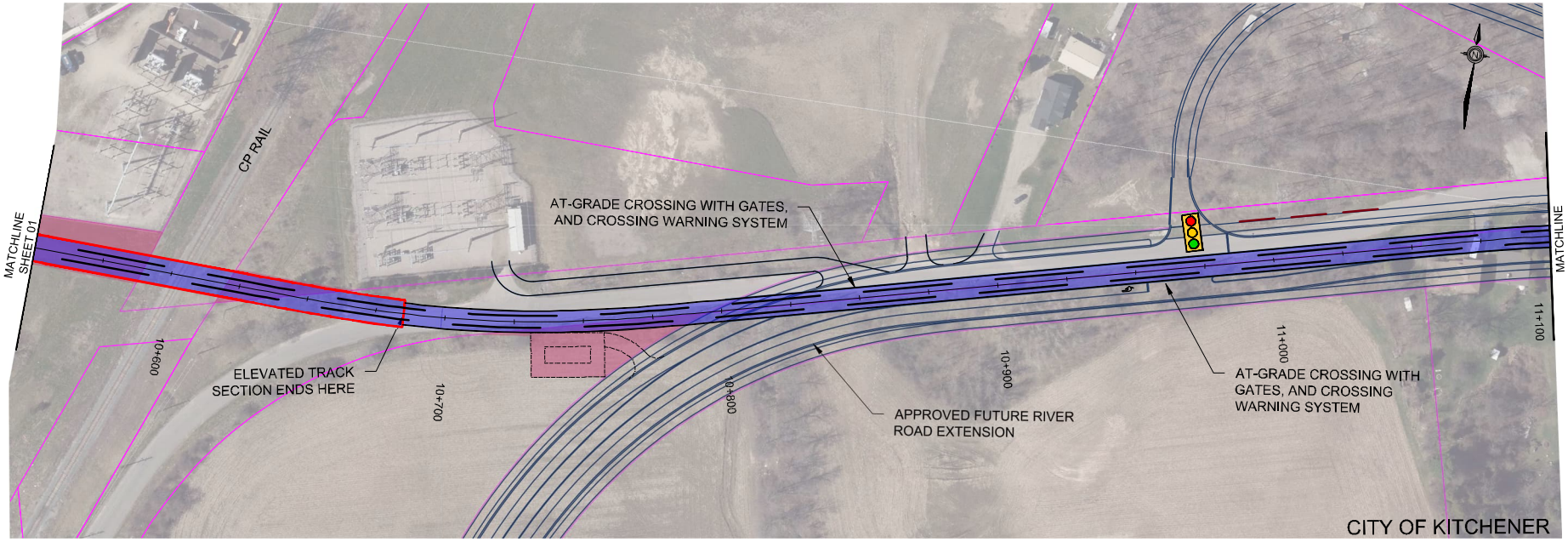
STAGE 2 ION LRT
TRANSIT PROJECT ASSESSMENT
FUNCTIONAL DESIGN

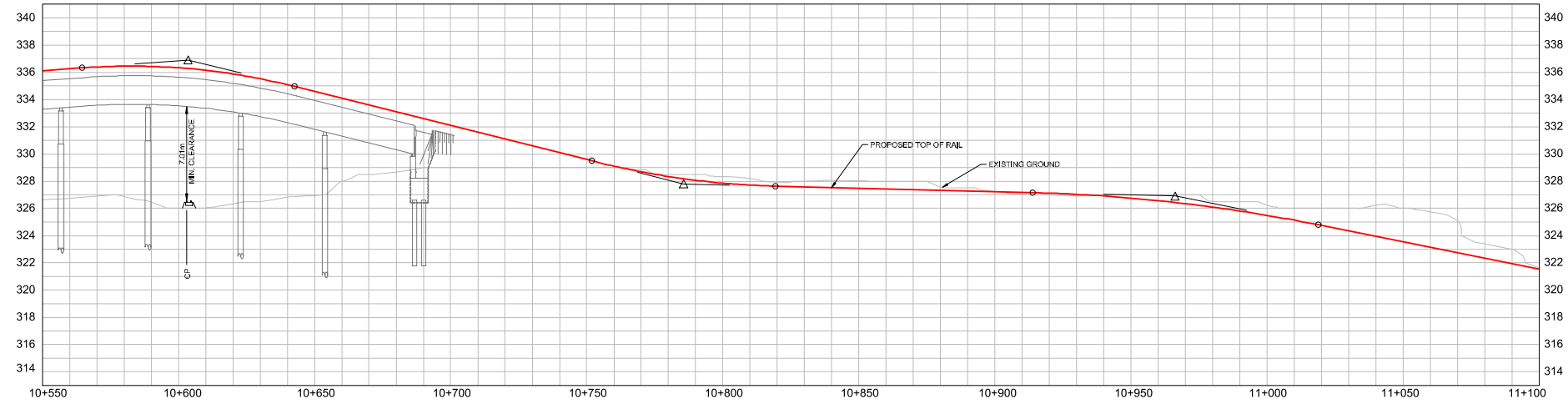
SHEET 01

ROW 2010

REGION OF WATERLOO ORTHOIMAGERY (2020)

P:\IUM\2015\161-07859-00 (ION STAGE 2 TPAP)\6.1 DRAWINGS (CADD)\SHEETS\EPR - PLATES\EPR PLATES.DWG





LEGEND

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- PROPOSED LRT STATION
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Region of Waterloo GRT GRAND RIVER TRANSIT

iON wsp

SCALE: HOR: 0m 10m 20m 40m; VER: 0m 2m 4m 8m

DATE: November 2020

DRAWN BY: SR / PM

FILE No. 161-07859-01

STAGE 2 ION LRT
TRANSIT PROJECT ASSESSMENT
FUNCTIONAL DESIGN

SHEET 02

ROW 2010

REGION OF WATERLOO ORTHOIMAGERY (2020)

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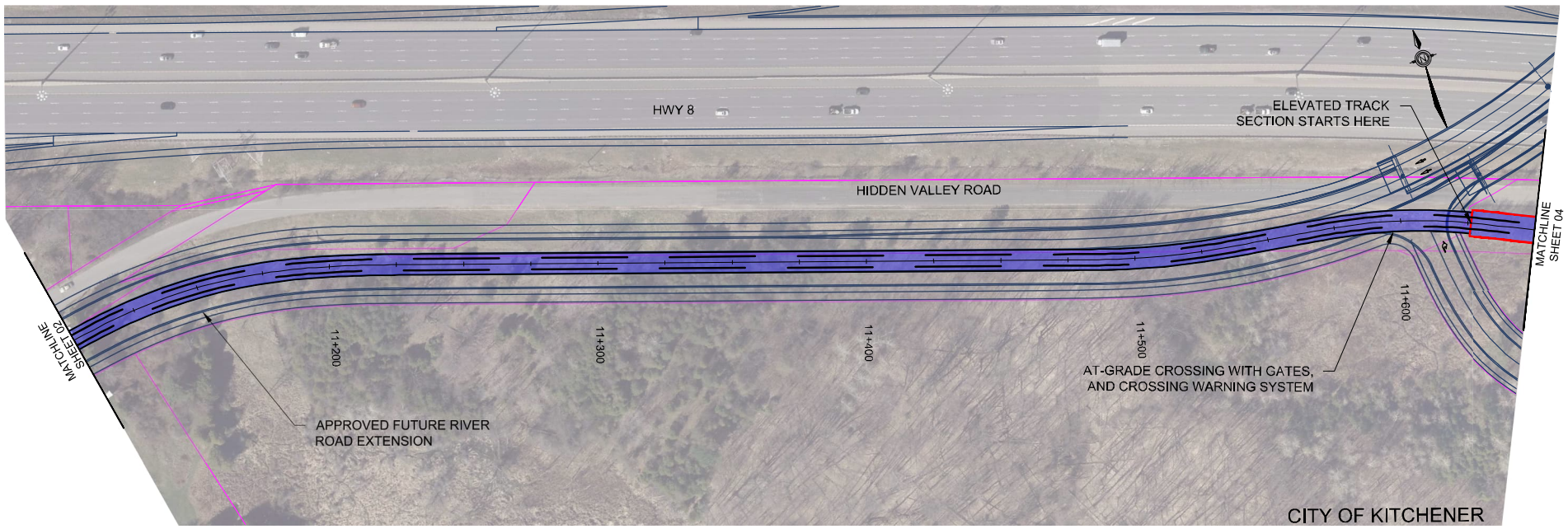

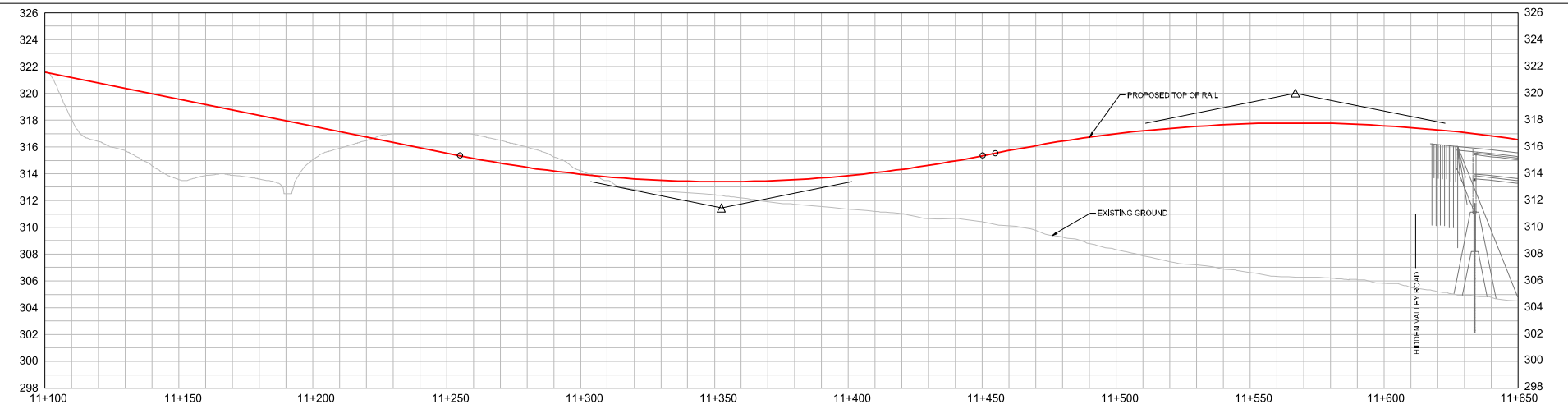

LEGEND

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- PROPOSED LRT STATION
- PROPOSED TRAFFIC LANES
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Region of Waterloo GRT GRAND RIVER TRANSIT

ion wsp

SCALE:
HOR: 0m 10m 20m 40m
VER: 0m 2m 4m 8m

DATE: November 2020

DRAWN BY: SR / PM

FILE No. 161-07859-01

STAGE 2 ION LRT
TRANSIT PROJECT ASSESSMENT
FUNCTIONAL DESIGN

SHEET 03

ROW 2010

REGION OF WATERLOO ORTHOIMAGERY (2020)

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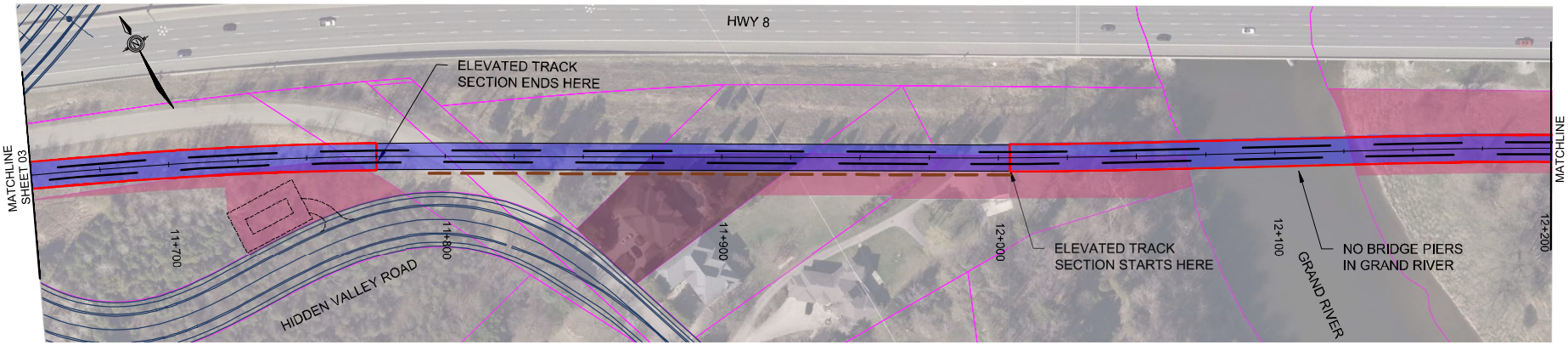

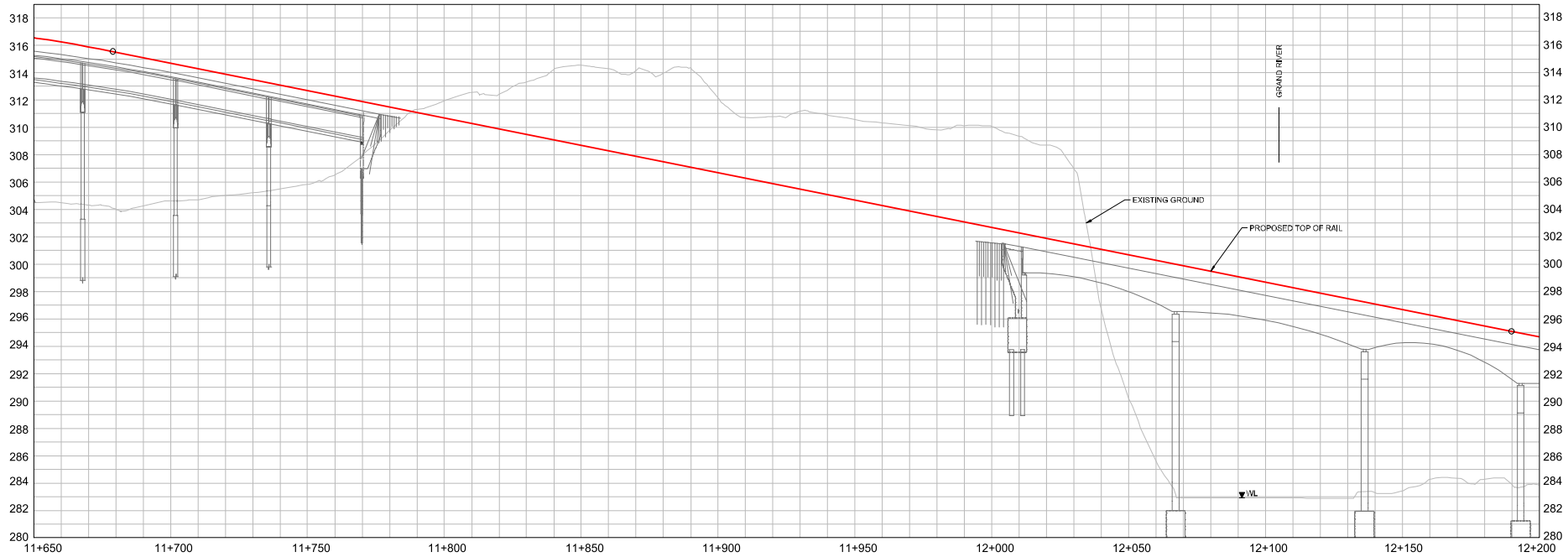

LEGEND

- PROPOSED LRT CORRIDOR
- PROPOSED LRT STATION
- PROPOSED TRAFFIC LANES
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- TRACTION POWER SUBSTATION

ROW 2010

REGION OF WATERLOO ORTHOIMAGERY (2020)

Region of Waterloo GRT GRAND RIVER TRANSIT iON WSP

SCALE:
HOR: 0m 10m 20m 40m
VER: 0m 2m 4m 8m

DATE: November 2020

DRAWN BY: SR / PM

FILE No. 161-07859-01

STAGE 2 ION LRT
TRANSIT PROJECT ASSESSMENT
FUNCTIONAL DESIGN

SHEET 04

P:\IUM\2015\151-07859-00 (ION STAGE 2 TPAP)\6.1 DRAWINGS (CADD)\SHEETS\EPR - PLATES\EPR PLATES.DWG

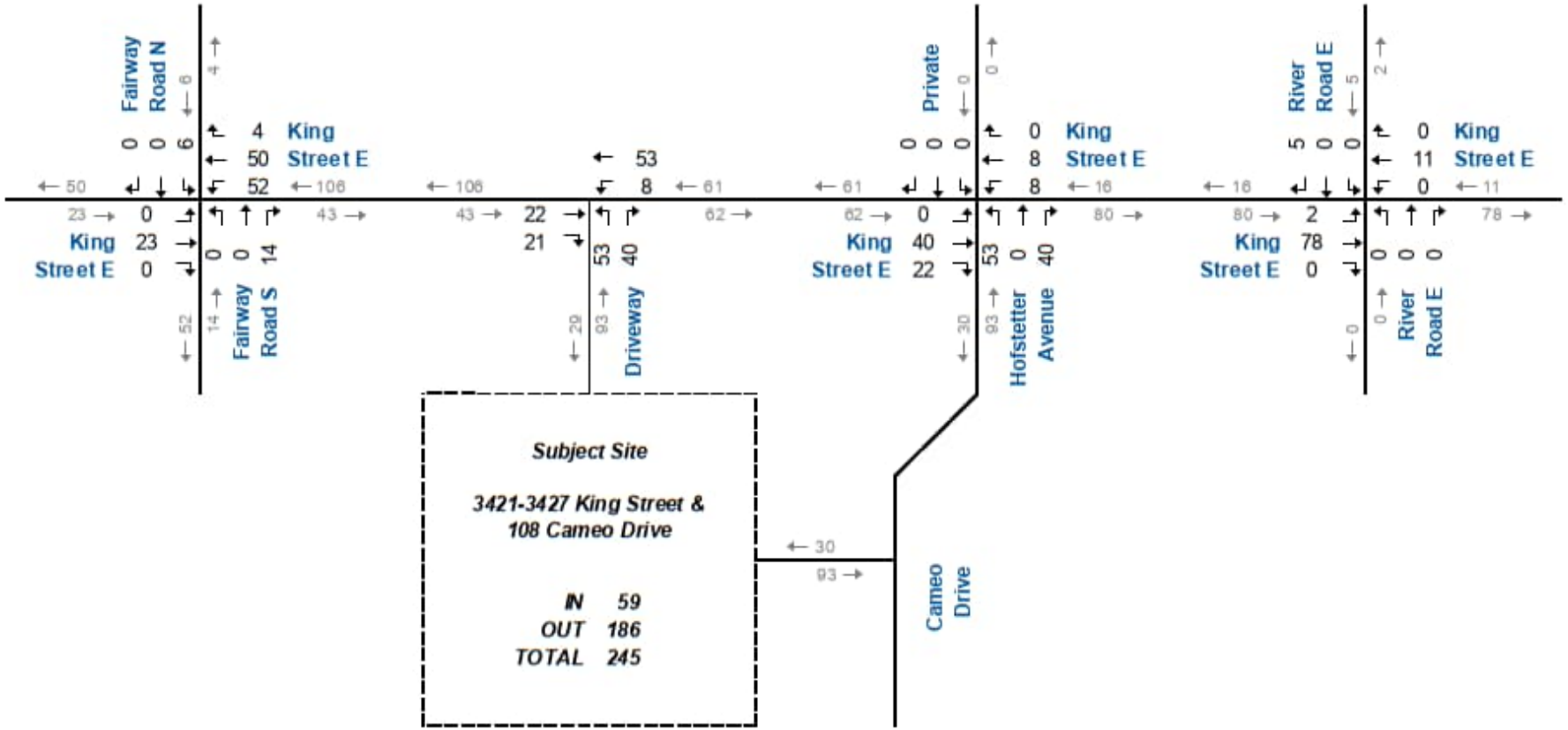
APPENDIX M – BACKGROUND DEVELOPMENT TRAFFIC VOLUME FIGURES

3241-3247 King Street East and 108 Cameo Drive Transportation Impact Study, Parking Study, and Access and Circulation Review

Paradigm Transportation Solutions Limited

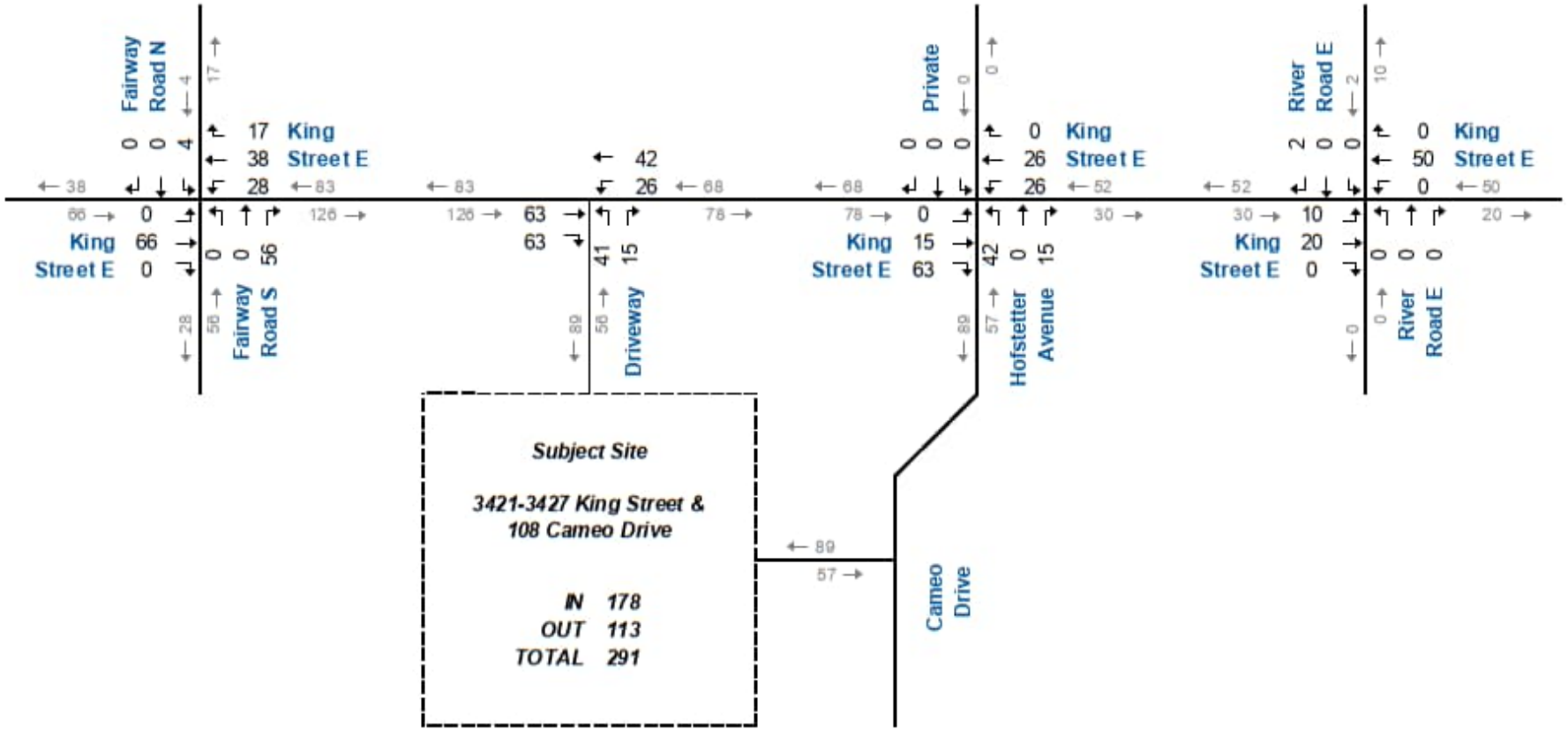
September 2021
210422

ptsl.com



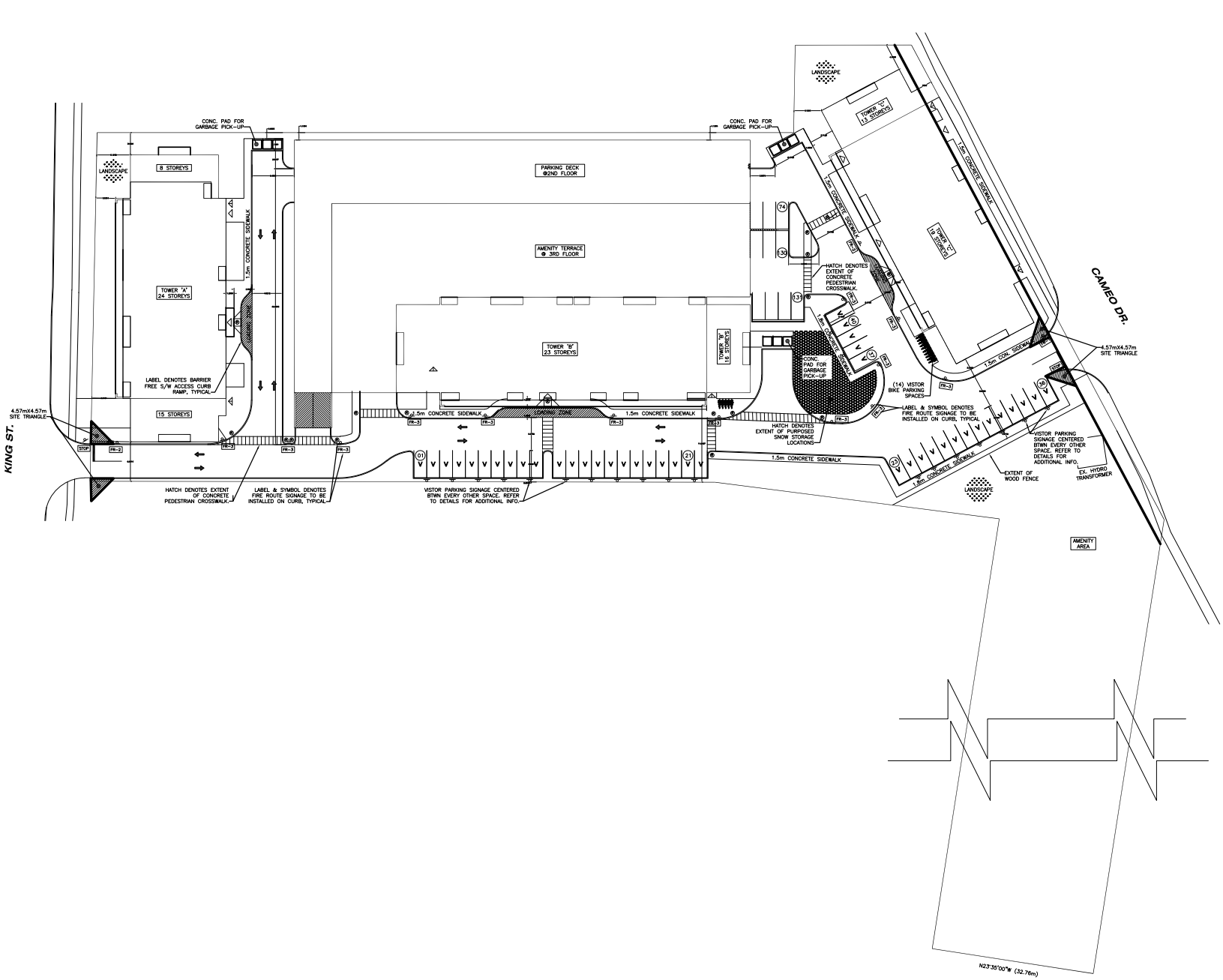
Not to Scale

Site Generated Traffic Volumes
AM Peak Hour



Not to Scale

Site Generated Traffic Volumes
PM Peak Hour



SITE STATISTICS

Zoning- Residential 9 Zone (R-9) with
Special Regulation Provision 169
C of A Application- A2022-039
Lot Area- 19,405 m²
Building Coverage- 7,068.1m² (36.4%)
Landscaped Area- 9,054.3 m² (46.7%)
Asphalt / Hard Surface Area- 6,779.8 m² (34.9%)

Parking Required-
0.93 X 948 =882 Spaces
Parking Provided- 882 Spaces - (0.93)
Includes 26 Barrier Free,
85 Visitor and 204 Future Electric Vehicle (FEV) Spaces
Parking Space Minimum Dimensions- 2.6m x 5.5m

Bicycle Parking:
Required: 474 Class A spaces (0.5 spaces per dwelling unit)
Provided: 599 spaces

MULTI-RESIDENTIAL

Number of Units- 946 UNITS
Number of Visitor Spaces- 85 SPACES
Floor Space Ratio- 4.0

NOTE: ALL ASPHALT AREAS TO BE DEFINED WITH 0.15M HIGH POURED CONCRETE CURBING

SITE PLAN

DAY NOMINEE CORPORATION
3241-3247 KING STREET EAST AND
108 CAMEO DRIVE, KITCHENER

0 5 10 15 20 25

SCALE 1: 1,200

DATE: FEBRUARY 22, 2022

REVISED: PER CITY COMMENTS

SITE PLAN APPLICATION : SP21/107/K/ES

LT 16 PL 986 KITCHENER EXCEPT PT 1, 58R8451; KITCHENER
LT 17 PL 986 KITCHENER ; KITCHENER LT 43 PL 986 KITCHENER ; S/T B33267 ; CITY OF KITCHENER

City of Kitchener
DEVELOPMENT SERVICES DEPARTMENT

CAD FILE: SP21107KES.dwg

APPENDIX N – INTERNAL TRIP GENERATION CALCULATION TABLES

Table N:1: Maximum Available Internal Trip Capture – AM Peak Hour – Outbound

Origin (from)	Person Trips (Out)	Internal Trip Capture Rate				Internal Trips				
		Destination (to)				Destination (to)				
		Residential	Mixed Use	Business Park	Commercial	Residential	Mixed Use	Business Park	Commercial	Total
Residential	466		0.5%	2%	1%		2	9	5	**16**
Mixed Use	181	7%	8%	16%	6%	13	14	28	10	**65**
Business Park	12	1%	15%		28%	0	2		3	**5**
Commercial	121	14%	12%	29%	10%	17	15	35	12	**79**
Total	780									

Table N:2: Maximum Available Internal Trip Capture – AM Peak Hour – Inbound

Destination (to)	Person Trips (In)	Internal Trip Capture Rate				Internal Trips				
		Origin (from)				Origin (from)				
		Residential	Mixed Use	Business Park	Commercial	Residential	Mixed Use	Business Park	Commercial	Total
Residential	155		1%	0%	2%		2	0	3	**5**
Mixed Use	55	9%	10%	16%	6%	5	5	9	3	**22**
Business Park	63	3%	4%		4%	2	2		3	**7**
Commercial	198	17%	14%	32%	10%	34	27	63	20	**144**
Total	471									

Table N:3: Internal Trip Capture – AM Peak Hour

Origin (from)	Internal Trips				
	Residential	Mixed Use	Business Park	Commercial	Total
Residential		2	2	5	**9**
Mixed Use	2	5	2	10	**19**
Business Park	0	2		3	**5**
Commercial	3	3	3	12	**21**
Total	**5**	**12**	**7**	**30**	**54**

Table N:4: Maximum Available Internal Trip Capture – PM Peak Hour – Outbound

Origin (from)	Person Trips (Out)	Internal Trip Capture Rate				Internal Trips				
		Destination (to)				Destination (to)				
		Residential	Mixed Use	Business Park	Commercial	Residential	Mixed Use	Business Park	Commercial	Total
Residential	309		21%	4%	42%		65	12	130	**207**
Mixed Use	60	13%	**34%**	3%	26%	8	20	2	16	**46**
Business Park	51	2%	11%		20%	1	6		10	**17**
Commercial	587	26%	18%	2%	**10%**	153	106	12	59	**330**
Total	1007									

Table N:5: Maximum Available Internal Trip Capture – PM Peak Hour – Inbound

Destination (to)	Person Trips (In)	Internal Trip Capture Rate				Internal Trips				
		Origin (from)				Origin (from)				
		Residential	Mixed Use	Business Park	Commercial	Residential	Mixed Use	Business Park	Commercial	Total
Residential	472		23%	4%	46%		109	19	217	**345**
Mixed Use	143	5%	**28%**	6%	28%	7	40	9	40	**96**
Business Park	18	57%	44%		31%	10	8		6	**24**
Commercial	565	10%	10%	8%	**10%**	57	57	45	57	**216**
Total	1198									

Table N:6: Internal Trip Capture – PM Peak Hour

Origin (from)	Destination (to)				
	Residential	Mixed Use	Business Park	Commercial	Total
Residential		7	10	57	**74**
Mixed Use	8	20	2	16	**46**
Business Park	1	6		10	**17**
Commercial	153	40	6	57	**256**
Total	**162**	**73**	**18**	**140**	**393**

APPENDIX O – ARCADY CAPACITY ANALYSIS REPORTS

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.5.0.6896

For sales and distribution information, program advice and maintenance, contact TRL:
+44 (0)1344 379777 software@trl.co.uk www.trlsoftware.co.uk

Filename: Wabanaki & River Rd Ex Roundabout - Bkg.j9
Path: C:\Users\m.loni\Desktop\Info\Hidden Valley TIS\Arcady
Report generation date: 2024-03-28 2:08:54 PM

Summary of intersection performance

	AM							PM						
	Queue (Veh)	95% Queue (Veh)	Delay (s)	V/C Ratio	LOS	Intersection Delay (s)	Intersection LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	V/C Ratio	LOS	Intersection Delay (s)	Intersection LOS
	2028 Background													
Leg NE	0.1	0.5	1.82	0.07	A	1.84	A	0.1	0.5	1.84	0.06	A	1.85	A
Leg NW	0.1	0.5	2.01	0.07	A			0.1	0.5	2.04	0.08	A		
Leg SW	0.2	0.5	1.79	0.17	A			0.3	0.5	1.80	0.20	A		
	2033 Background													
Leg NE	0.1	0.5	1.83	0.07	A	1.85	A	0.1	0.5	1.84	0.06	A	1.87	A
Leg NW	0.1	0.5	2.02	0.07	A			0.1	0.5	2.04	0.09	A		
Leg SW	0.2	0.5	1.80	0.18	A			0.3	0.6	1.81	0.21	A		
	2043 Background													
Leg NE	0.1	0.5	1.83	0.07	A	1.85	A	0.1	0.5	1.84	0.06	A	1.87	A
Leg NW	0.1	0.5	2.01	0.07	A			0.1	0.5	2.04	0.09	A		
Leg SW	0.2	0.5	1.80	0.18	A			0.3	0.6	1.81	0.21	A		

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Intersection LOS and Intersection Delay are demand-weighted averages.

File summary

File Description

Title	
Location	
Site number	
Date	2024-03-13
Version	
Status	(new file)
Identifier	
Client	

Jobnumber	
Analyst	MCINTOSHPERRY1\m.loni
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	V/C Ratio Threshold	Average Delay threshold (s)	Queue threshold (PCE)
✓		0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2028 Background	AM	ONE HOUR	08:00	09:30	15
D2	2028 Background	PM	ONE HOUR	17:00	18:30	15
D3	2033 Background	AM	ONE HOUR	08:00	09:30	15
D4	2033 Background	PM	ONE HOUR	17:00	18:30	15
D5	2043 Background	AM	ONE HOUR	08:00	09:30	15
D6	2043 Background	PM	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2028 Background, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Intersection Network

Intersections

Intersection	Name	Intersection type	Use circulating lanes	Leg order	Intersection Delay (s)	Intersection LOS
1	untitled	Standard Roundabout		NE, NW, SW	1.84	A

Intersection Network Options

Driving side	Lighting
Right	Normal/unknown

Legs

Legs

Leg	Name	Description
NE	River Road Extension	
NW	Wabanaki Drive North Leg	
SW	Wabanaki Drive South Leg	

Roundabout Geometry

Leg	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
NE	7.00	8.82	6.6	27.0	56.0	52.0	
NW	5.76	9.07	9.1	25.0	56.0	47.0	
SW	7.00	9.28	14.7	30.0	56.0	33.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Leg	Final slope	Final intercept (PCE/hr)
NE	0.663	2260
NW	0.638	2100
SW	0.742	2598

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2028 Background	AM	ONE HOUR	08:00	09:30	15

Vehicle mix source	PCE Factor for a Truck (PCE)
Truck Percentages	2.00

Demand overview (Traffic)

Leg	Linked leg	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
NE		✓	126	100.000
NW		✓	120	100.000
SW		✓	381	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		NE	NW	SW
From	NE	0	4	122
	NW	27	0	93
	SW	211	170	0

Vehicle Mix

Truck Percentages

		To		
		NE	NW	SW
From	NE	0	14	0
	NW	0	0	6
	SW	0	13	0

Results

Results Summary for whole modelled period

Leg	Max V/C Ratio	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
NE	0.07	1.82	0.1	0.5	A
NW	0.07	2.01	0.1	0.5	A
SW	0.17	1.79	0.2	0.5	A

Main Results for each time segment

08:00 - 08:15

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
NE	95	128	2155	0.044	95	0.0	1.746	A
NW	90	92	1951	0.046	90	0.0	1.934	A
SW	287	20	2441	0.118	286	0.1	1.670	A

08:15 - 08:30

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
NE	113	153	2136	0.053	113	0.1	1.778	A
NW	108	110	1940	0.056	108	0.1	1.964	A
SW	343	24	2438	0.140	342	0.2	1.716	A

08:30 - 08:45

Leg	Total Demand	Circulating flow	Capacity	V/C Ratio	Throughput	End queue	Delay (s)	Unsignalised

	(Veh/hr)	(Veh/hr)	(Veh/hr)		(Veh/hr)	(Veh)		level of service
NE	139	187	2111	0.066	139	0.1	1.824	A
NW	132	134	1925	0.069	132	0.1	2.007	A
SW	419	30	2435	0.172	419	0.2	1.785	A

08:45 - 09:00

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
NE	139	187	2111	0.066	139	0.1	1.824	A
NW	132	134	1925	0.069	132	0.1	2.007	A
SW	419	30	2435	0.172	419	0.2	1.785	A

09:00 - 09:15

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
NE	113	153	2136	0.053	113	0.1	1.781	A
NW	108	110	1940	0.056	108	0.1	1.966	A
SW	343	24	2438	0.140	343	0.2	1.719	A

09:15 - 09:30

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
NE	95	128	2155	0.044	95	0.0	1.749	A
NW	90	92	1951	0.046	90	0.0	1.936	A
SW	287	20	2441	0.118	287	0.1	1.670	A

Queue Variation Results for each time segment

08:00 - 08:15

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
NE	0.05	0.00	0.00	0.05	0.05			N/A	N/A
NW	0.05	0.00	0.00	0.05	0.05			N/A	N/A
SW	0.13	0.00	0.00	0.13	0.13			N/A	N/A

08:15 - 08:30

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
NE	0.06	0.03	0.25	0.45	0.48			N/A	N/A
NW	0.06	0.03	0.25	0.45	0.48			N/A	N/A
SW	0.16	0.00	0.00	0.16	0.16			N/A	N/A

08:30 - 08:45

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
NE	0.07	0.03	0.26	0.47	0.49			N/A	N/A
NW	0.07	0.03	0.26	0.47	0.49			N/A	N/A
SW	0.21	0.03	0.25	0.45	0.48			N/A	N/A

08:45 - 09:00

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
NE	0.07	0.00	0.00	0.07	0.07			N/A	N/A
NW	0.07	0.00	0.00	0.07	0.07			N/A	N/A
SW	0.21	0.03	0.25	0.45	0.48			N/A	N/A

09:00 - 09:15

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
NE	0.06	0.00	0.00	0.06	0.06			N/A	N/A

NW	0.06	0.00	0.00	0.06	0.06			N/A	N/A
SW	0.16	0.00	0.00	0.16	0.16			N/A	N/A

09:15 - 09:30

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
NE	0.05	0.00	0.00	0.05	0.05			N/A	N/A
NW	0.05	0.00	0.00	0.05	0.05			N/A	N/A
SW	0.13	0.00	0.00	0.13	0.13			N/A	N/A

2028 Background, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Intersection Network

Intersections

Intersection	Name	Intersection type	Use circulating lanes	Leg order	Intersection Delay (s)	Intersection LOS
1	untitled	Standard Roundabout		NE, NW, SW	1.85	A

Intersection Network Options

Driving side	Lighting
Right	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2028 Background	PM	ONE HOUR	17:00	18:30	15

Vehicle mix source	PCE Factor for a Truck (PCE)
Truck Percentages	2.00

Demand overview (Traffic)

Leg	Linked leg	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
NE		✓	117	100.000
NW		✓	145	100.000
SW		✓	467	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		NE	NW	SW
From	NE	0	3	114
	NW	44	0	101
	SW	239	228	0

Vehicle Mix

Truck Percentages

		To		
		NE	NW	SW
From	NE	0	0	0
	NW	0	0	7
	SW	0	4	0

Results

Results Summary for whole modelled period

Leg	Max V/C Ratio	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
NE	0.06	1.84	0.1	0.5	A
NW	0.08	2.04	0.1	0.5	A
SW	0.20	1.80	0.3	0.5	A

Main Results for each time segment

17:00 - 17:15

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
NE	88	171	2142	0.041	88	0.0	1.751	A
NW	109	86	1950	0.056	109	0.1	1.955	A
SW	352	33	2524	0.139	351	0.2	1.656	A

17:15 - 17:30

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
NE	105	205	2119	0.050	105	0.1	1.786	A
NW	130	102	1940	0.067	130	0.1	1.988	A
SW	420	40	2519	0.167	420	0.2	1.713	A

17:30 - 17:45

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
NE	129	251	2087	0.062	129	0.1	1.837	A
NW	160	125	1926	0.083	160	0.1	2.037	A
SW	514	48	2513	0.205	514	0.3	1.800	A

17:45 - 18:00

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
NE	129	251	2087	0.062	129	0.1	1.837	A
NW	160	126	1926	0.083	160	0.1	2.037	A
SW	514	48	2513	0.205	514	0.3	1.800	A

18:00 - 18:15

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
NE	105	205	2119	0.050	105	0.1	1.786	A
NW	130	103	1940	0.067	130	0.1	1.989	A
SW	420	40	2519	0.167	420	0.2	1.714	A

18:15 - 18:30

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
NE	88	172	2142	0.041	88	0.0	1.754	A
NW	109	86	1950	0.056	109	0.1	1.955	A
SW	352	33	2524	0.139	352	0.2	1.656	A

Queue Variation Results for each time segment

17:00 - 17:15

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
NE	0.04	0.00	0.00	0.04	0.04			N/A	N/A
NW	0.06	0.00	0.00	0.06	0.06			N/A	N/A
SW	0.16	0.00	0.00	0.16	0.16			N/A	N/A

17:15 - 17:30

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
NE	0.05	0.03	0.25	0.45	0.48			N/A	N/A
NW	0.07	0.03	0.25	0.45	0.48			N/A	N/A
SW	0.20	0.00	0.00	0.20	0.20			N/A	N/A

17:30 - 17:45

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
NE	0.07	0.03	0.26	0.47	0.49			N/A	N/A
NW	0.09	0.03	0.26	0.47	0.49			N/A	N/A
SW	0.26	0.03	0.25	0.45	0.48			N/A	N/A

17:45 - 18:00

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
NE	0.07	0.00	0.00	0.07	0.07			N/A	N/A
NW	0.09	0.00	0.00	0.09	0.09			N/A	N/A
SW	0.26	0.03	0.26	0.47	0.49			N/A	N/A

18:00 - 18:15

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
NE	0.05	0.00	0.00	0.05	0.05			N/A	N/A
NW	0.07	0.00	0.00	0.07	0.07			N/A	N/A
SW	0.20	0.00	0.00	0.20	0.20			N/A	N/A

18:15 - 18:30

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
NE	0.04	0.00	0.00	0.04	0.04			N/A	N/A
NW	0.06	0.00	0.00	0.06	0.06			N/A	N/A
SW	0.16	0.00	0.00	0.16	0.16			N/A	N/A

2033 Background, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Intersection Network

Intersections

Intersection	Name	Intersection type	Use circulating lanes	Leg order	Intersection Delay (s)	Intersection LOS
1	untitled	Standard Roundabout		NE, NW, SW	1.85	A

Intersection Network Options

Driving side	Lighting
Right	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2033 Background	AM	ONE HOUR	08:00	09:30	15

Vehicle mix source	PCE Factor for a Truck (PCE)
Truck Percentages	2.00

Demand overview (Traffic)

Leg	Linked leg	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
NE		✓	130	100.000
NW		✓	124	100.000
SW		✓	392	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		NE	NW	SW
From	NE	0	4	126
	NW	28	0	96
	SW	217	175	0

Vehicle Mix

Truck Percentages

		To		
		NE	NW	SW
From	NE	0	14	0
	NW	0	0	6
	SW	0	13	0

Results

Results Summary for whole modelled period

Leg	Max V/C Ratio	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
NE	0.07	1.83	0.1	0.5	A
NW	0.07	2.02	0.1	0.5	A
SW	0.18	1.80	0.2	0.5	A

Main Results for each time segment

08:00 - 08:15

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
NE	98	132	2153	0.045	98	0.0	1.751	A
NW	93	95	1949	0.048	93	0.1	1.939	A
SW	295	21	2441	0.121	295	0.1	1.677	A

08:15 - 08:30

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
NE	117	157	2133	0.055	117	0.1	1.784	A
NW	111	113	1938	0.058	111	0.1	1.970	A
SW	352	25	2438	0.145	352	0.2	1.725	A

08:30 - 08:45

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
NE	143	193	2107	0.068	143	0.1	1.832	A
NW	137	139	1922	0.071	136	0.1	2.015	A
SW	432	31	2434	0.177	431	0.2	1.797	A

08:45 - 09:00

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
NE	143	193	2107	0.068	143	0.1	1.832	A
NW	137	139	1922	0.071	137	0.1	2.015	A
SW	432	31	2434	0.177	432	0.2	1.797	A

09:00 - 09:15

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
NE	117	157	2133	0.055	117	0.1	1.784	A
NW	111	113	1938	0.058	112	0.1	1.971	A
SW	352	25	2438	0.145	353	0.2	1.725	A

09:15 - 09:30

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
NE	98	132	2152	0.045	98	0.0	1.754	A
NW	93	95	1949	0.048	93	0.1	1.941	A
SW	295	21	2441	0.121	295	0.1	1.679	A

Queue Variation Results for each time segment

08:00 - 08:15

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
NE	0.05	0.00	0.00	0.05	0.05			N/A	N/A
NW	0.05	0.00	0.00	0.05	0.05			N/A	N/A
SW	0.14	0.00	0.00	0.14	0.14			N/A	N/A

08:15 - 08:30

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
NE	0.06	0.03	0.25	0.45	0.48			N/A	N/A
NW	0.06	0.03	0.25	0.45	0.48			N/A	N/A
SW	0.17	0.00	0.00	0.17	0.17			N/A	N/A

08:30 - 08:45

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
NE	0.07	0.03	0.26	0.47	0.49			N/A	N/A
NW	0.08	0.03	0.26	0.47	0.49			N/A	N/A
SW	0.22	0.03	0.25	0.45	0.48			N/A	N/A

08:45 - 09:00

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
NE	0.07	0.00	0.00	0.07	0.07			N/A	N/A
NW	0.08	0.00	0.00	0.08	0.08			N/A	N/A
SW	0.22	0.03	0.25	0.45	0.48			N/A	N/A

09:00 - 09:15

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
NE	0.06	0.00	0.00	0.06	0.06			N/A	N/A
NW	0.06	0.00	0.00	0.06	0.06			N/A	N/A
SW	0.17	0.00	0.00	0.17	0.17			N/A	N/A

09:15 - 09:30

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
NE	0.05	0.00	0.00	0.05	0.05			N/A	N/A
NW	0.05	0.00	0.00	0.05	0.05			N/A	N/A
SW	0.14	0.00	0.00	0.14	0.14			N/A	N/A

2033 Background, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Intersection Network

Intersections

Intersection	Name	Intersection type	Use circulating lanes	Leg order	Intersection Delay (s)	Intersection LOS
1	untitled	Standard Roundabout		NE, NW, SW	1.87	A

Intersection Network Options

Driving side	Lighting
Right	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2033 Background	PM	ONE HOUR	17:00	18:30	15

Vehicle mix source	PCE Factor for a Truck (PCE)
Truck Percentages	2.00

Demand overview (Traffic)

Leg	Linked leg	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
NE		✓	120	100.000
NW		✓	149	100.000
SW		✓	481	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		NE	NW	SW
From	NE	0	3	117
	NW	45	0	104
	SW	246	235	0

Vehicle Mix

Truck Percentages

		To		
		NE	NW	SW
From	NE	0	0	0
	NW	0	0	7
	SW	0	4	0

Results

Results Summary for whole modelled period

Leg	Max V/C Ratio	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
NE	0.06	1.84	0.1	0.5	A
NW	0.09	2.04	0.1	0.5	A
SW	0.21	1.81	0.3	0.6	A

Main Results for each time segment

17:00 - 17:15

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
NE	90	177	2139	0.042	90	0.0	1.756	A
NW	112	88	1949	0.058	112	0.1	1.959	A
SW	362	34	2523	0.144	361	0.2	1.664	A

17:15 - 17:30

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
NE	108	211	2115	0.051	108	0.1	1.792	A
NW	134	105	1938	0.069	134	0.1	1.994	A
SW	432	40	2519	0.172	432	0.2	1.724	A

17:30 - 17:45

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
NE	132	259	2082	0.063	132	0.1	1.845	A
NW	164	129	1924	0.085	164	0.1	2.045	A
SW	530	50	2512	0.211	529	0.3	1.815	A

17:45 - 18:00

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
NE	132	259	2082	0.063	132	0.1	1.845	A
NW	164	129	1924	0.085	164	0.1	2.045	A
SW	530	50	2512	0.211	530	0.3	1.815	A

18:00 - 18:15

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
NE	108	211	2115	0.051	108	0.1	1.795	A
NW	134	105	1938	0.069	134	0.1	1.996	A
SW	432	40	2519	0.172	433	0.2	1.725	A

18:15 - 18:30

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
NE	90	177	2138	0.042	90	0.0	1.757	A
NW	112	88	1949	0.058	112	0.1	1.960	A
SW	362	34	2523	0.144	362	0.2	1.667	A

Queue Variation Results for each time segment

17:00 - 17:15

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
NE	0.04	0.00	0.00	0.04	0.04			N/A	N/A
NW	0.06	0.00	0.00	0.06	0.06			N/A	N/A
SW	0.17	0.00	0.00	0.17	0.17			N/A	N/A

17:15 - 17:30

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
NE	0.05	0.03	0.25	0.45	0.48			N/A	N/A
NW	0.07	0.03	0.25	0.45	0.48			N/A	N/A
SW	0.21	0.00	0.00	0.21	0.21			N/A	N/A

17:30 - 17:45

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
NE	0.07	0.03	0.26	0.47	0.49			N/A	N/A
NW	0.09	0.03	0.26	0.47	0.49			N/A	N/A
SW	0.27	0.03	0.25	0.45	0.48			N/A	N/A

17:45 - 18:00

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
NE	0.07	0.00	0.00	0.07	0.07			N/A	N/A
NW	0.09	0.00	0.00	0.09	0.09			N/A	N/A
SW	0.27	0.03	0.27	0.48	0.63			N/A	N/A

18:00 - 18:15

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
NE	0.05	0.00	0.00	0.05	0.05			N/A	N/A
NW	0.07	0.00	0.00	0.07	0.07			N/A	N/A
SW	0.21	0.00	0.00	0.21	0.21			N/A	N/A

18:15 - 18:30

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
NE	0.04	0.00	0.00	0.04	0.04			N/A	N/A
NW	0.06	0.00	0.00	0.06	0.06			N/A	N/A
SW	0.17	0.00	0.00	0.17	0.17			N/A	N/A

2043 Background, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Intersection Network

Intersections

Intersection	Name	Intersection type	Use circulating lanes	Leg order	Intersection Delay (s)	Intersection LOS
1	untitled	Standard Roundabout		NE, NW, SW	1.85	A

Intersection Network Options

Driving side	Lighting
Right	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2043 Background	AM	ONE HOUR	08:00	09:30	15

Vehicle mix source	PCE Factor for a Truck (PCE)
Truck Percentages	2.00

Demand overview (Traffic)

Leg	Linked leg	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
NE		✓	129	100.000
NW		✓	124	100.000
SW		✓	392	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		NE	NW	SW
From	NE	0	4	125
	NW	28	0	96
	SW	217	175	0

Vehicle Mix

Truck Percentages

		To		
		NE	NW	SW
From	NE	0	14	0
	NW	0	0	6
	SW	0	13	0

Results

Results Summary for whole modelled period

Leg	Max V/C Ratio	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
NE	0.07	1.83	0.1	0.5	A
NW	0.07	2.01	0.1	0.5	A
SW	0.18	1.80	0.2	0.5	A

Main Results for each time segment

08:00 - 08:15

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
NE	97	132	2152	0.045	97	0.0	1.750	A
NW	93	94	1950	0.048	93	0.1	1.939	A
SW	295	21	2441	0.121	295	0.1	1.677	A

08:15 - 08:30

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
NE	116	157	2133	0.054	116	0.1	1.783	A
NW	111	112	1938	0.058	111	0.1	1.970	A
SW	352	25	2438	0.145	352	0.2	1.725	A

08:30 - 08:45

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
NE	142	193	2107	0.067	142	0.1	1.831	A
NW	137	138	1923	0.071	136	0.1	2.014	A
SW	432	31	2434	0.177	431	0.2	1.797	A

08:45 - 09:00

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
NE	142	193	2107	0.067	142	0.1	1.831	A
NW	137	138	1923	0.071	137	0.1	2.014	A
SW	432	31	2434	0.177	432	0.2	1.797	A

09:00 - 09:15

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
NE	116	157	2133	0.054	116	0.1	1.783	A
NW	111	112	1938	0.058	112	0.1	1.972	A
SW	352	25	2438	0.145	353	0.2	1.728	A

09:15 - 09:30

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
NE	97	132	2152	0.045	97	0.0	1.750	A
NW	93	94	1949	0.048	93	0.1	1.940	A
SW	295	21	2441	0.121	295	0.1	1.677	A

Queue Variation Results for each time segment

08:00 - 08:15

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
NE	0.05	0.00	0.00	0.05	0.05			N/A	N/A
NW	0.05	0.00	0.00	0.05	0.05			N/A	N/A
SW	0.14	0.00	0.00	0.14	0.14			N/A	N/A

08:15 - 08:30

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
NE	0.06	0.03	0.25	0.45	0.48			N/A	N/A
NW	0.06	0.03	0.25	0.45	0.48			N/A	N/A
SW	0.17	0.00	0.00	0.17	0.17			N/A	N/A

08:30 - 08:45

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
NE	0.07	0.03	0.26	0.47	0.49			N/A	N/A
NW	0.08	0.03	0.26	0.47	0.49			N/A	N/A
SW	0.22	0.03	0.25	0.45	0.48			N/A	N/A

08:45 - 09:00

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
NE	0.07	0.00	0.00	0.07	0.07			N/A	N/A
NW	0.08	0.00	0.00	0.08	0.08			N/A	N/A
SW	0.22	0.03	0.25	0.45	0.48			N/A	N/A

09:00 - 09:15

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
NE	0.06	0.00	0.00	0.06	0.06			N/A	N/A
NW	0.06	0.00	0.00	0.06	0.06			N/A	N/A
SW	0.17	0.00	0.00	0.17	0.17			N/A	N/A

09:15 - 09:30

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
NE	0.05	0.00	0.00	0.05	0.05			N/A	N/A
NW	0.05	0.00	0.00	0.05	0.05			N/A	N/A
SW	0.14	0.00	0.00	0.14	0.14			N/A	N/A

2043 Background, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Intersection Network

Intersections

Intersection	Name	Intersection type	Use circulating lanes	Leg order	Intersection Delay (s)	Intersection LOS
1	untitled	Standard Roundabout		NE, NW, SW	1.87	A

Intersection Network Options

Driving side	Lighting
Right	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2043 Background	PM	ONE HOUR	17:00	18:30	15

Vehicle mix source	PCE Factor for a Truck (PCE)
Truck Percentages	2.00

Demand overview (Traffic)

Leg	Linked leg	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
NE		✓	120	100.000
NW		✓	149	100.000
SW		✓	481	100.000

Origin-Destination Data

Demand (Veh/hr)

		To		
		NE	NW	SW
From	NE	0	3	117
	NW	45	0	104
	SW	246	235	0

Vehicle Mix

Truck Percentages

		To		
		NE	NW	SW
From	NE	0	0	0
	NW	0	0	7
	SW	0	4	0

Results

Results Summary for whole modelled period

Leg	Max V/C Ratio	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
NE	0.06	1.84	0.1	0.5	A
NW	0.09	2.04	0.1	0.5	A
SW	0.21	1.81	0.3	0.6	A

Main Results for each time segment

17:00 - 17:15

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
NE	90	177	2139	0.042	90	0.0	1.756	A
NW	112	88	1949	0.058	112	0.1	1.959	A
SW	362	34	2523	0.144	361	0.2	1.664	A

17:15 - 17:30

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
NE	108	211	2115	0.051	108	0.1	1.792	A
NW	134	105	1938	0.069	134	0.1	1.994	A
SW	432	40	2519	0.172	432	0.2	1.724	A

17:30 - 17:45

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
NE	132	259	2082	0.063	132	0.1	1.845	A
NW	164	129	1924	0.085	164	0.1	2.045	A
SW	530	50	2512	0.211	529	0.3	1.815	A

17:45 - 18:00

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
NE	132	259	2082	0.063	132	0.1	1.845	A
NW	164	129	1924	0.085	164	0.1	2.045	A
SW	530	50	2512	0.211	530	0.3	1.815	A

18:00 - 18:15

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
NE	108	211	2115	0.051	108	0.1	1.795	A
NW	134	105	1938	0.069	134	0.1	1.996	A
SW	432	40	2519	0.172	433	0.2	1.725	A

18:15 - 18:30

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
NE	90	177	2138	0.042	90	0.0	1.757	A
NW	112	88	1949	0.058	112	0.1	1.960	A
SW	362	34	2523	0.144	362	0.2	1.667	A

Queue Variation Results for each time segment

17:00 - 17:15

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
NE	0.04	0.00	0.00	0.04	0.04			N/A	N/A
NW	0.06	0.00	0.00	0.06	0.06			N/A	N/A
SW	0.17	0.00	0.00	0.17	0.17			N/A	N/A

17:15 - 17:30

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
NE	0.05	0.03	0.25	0.45	0.48			N/A	N/A
NW	0.07	0.03	0.25	0.45	0.48			N/A	N/A
SW	0.21	0.00	0.00	0.21	0.21			N/A	N/A

17:30 - 17:45

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
NE	0.07	0.03	0.26	0.47	0.49			N/A	N/A
NW	0.09	0.03	0.26	0.47	0.49			N/A	N/A
SW	0.27	0.03	0.25	0.45	0.48			N/A	N/A

17:45 - 18:00

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
NE	0.07	0.00	0.00	0.07	0.07			N/A	N/A
NW	0.09	0.00	0.00	0.09	0.09			N/A	N/A
SW	0.27	0.03	0.27	0.48	0.63			N/A	N/A

18:00 - 18:15

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
NE	0.05	0.00	0.00	0.05	0.05			N/A	N/A
NW	0.07	0.00	0.00	0.07	0.07			N/A	N/A
SW	0.21	0.00	0.00	0.21	0.21			N/A	N/A

18:15 - 18:30

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
NE	0.04	0.00	0.00	0.04	0.04			N/A	N/A
NW	0.06	0.00	0.00	0.06	0.06			N/A	N/A
SW	0.17	0.00	0.00	0.17	0.17			N/A	N/A

Junctions 9

ARCADY 9 - Roundabout Module

Version: 9.5.0.6896

Filename: Wabanaki & River Rd Ex Roundabout - Tot.j9
Path: C:\Users\m.loni\Desktop\Info\Hidden Valley TIS\Arcady
Report generation date: 2024-05-27 6:45:14 PM

Summary of intersection performance

	AM							PM						
	Queue (Veh)	95% Queue (Veh)	Delay (s)	V/C Ratio	LOS	Intersection Delay (s)	Intersection LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	V/C Ratio	LOS	Intersection Delay (s)	Intersection LOS
	2028 Total													
Leg East	0.0	0.5	2.10	0.04	A	1.91	A	0.0	0.5	2.13	0.02	A	1.95	A
Leg North	0.1	0.5	1.90	0.09	A			0.1	0.5	1.94	0.10	A		
Leg West	0.1	0.5	2.06	0.08	A			0.1	0.5	2.12	0.09	A		
Leg South	0.2	0.5	1.83	0.19	A			0.3	1.1	1.88	0.23	A		
	2033 Total													
Leg East	0.1	0.5	2.25	0.09	A	2.00	A	0.0	0.5	2.21	0.04	A	2.06	A
Leg North	0.1	0.5	1.99	0.11	A			0.2	0.5	2.07	0.14	A		
Leg West	0.1	0.5	2.13	0.09	A			0.1	0.5	2.22	0.11	A		
Leg South	0.3	0.5	1.88	0.21	A			0.3	1.4	1.99	0.26	A		
	2043 Total													
Leg East	0.2	0.5	2.57	0.19	A	2.19	A	0.1	0.5	2.36	0.08	A	2.28	A
Leg North	0.2	0.5	2.17	0.15	A			0.3	1.2	2.33	0.23	A		
Leg West	0.1	0.5	2.25	0.10	A			0.2	0.5	2.41	0.13	A		
Leg South	0.3	1.2	1.98	0.24	A			0.4	1.6	2.18	0.30	A		

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Intersection LOS and Intersection Delay are demand-weighted averages.

File summary

File Description

Title	
Location	
Site number	
Date	2024-03-28
Version	
Status	(new file)

Identifier	
Client	
Jobnumber	
Analyst	MCINTOSHPERRY1\m.loni
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	V/C Ratio Threshold	Average Delay threshold (s)	Queue threshold (PCE)
✓		0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2028 Total	AM	ONE HOUR	08:00	09:30	15
D2	2028 Total	PM	ONE HOUR	17:00	18:30	15
D3	2033 Total	AM	ONE HOUR	08:00	09:30	15
D4	2033 Total	PM	ONE HOUR	17:00	18:30	15
D5	2043 Total	AM	ONE HOUR	08:00	09:30	15
D6	2043 Total	PM	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Network flow scaling factor (%)
A1	100.000

2028 Total, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Intersection Network

Intersections

Intersection	Name	Intersection type	Use circulating lanes	Leg order	Intersection Delay (s)	Intersection LOS
1	untitled	Standard Roundabout		East, North, West, South	1.91	A

Intersection Network Options

Driving side	Lighting
Right	Normal/unknown

Legs

Legs

Leg	Name	Description
East	untitled	
North	River Road Extension	
West	Wabanaki Drive North Leg	
South	Wabanaki Drive South Leg	

Roundabout Geometry

Leg	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
East	5.76	9.06	10.1	27.0	56.0	44.0	
North	7.00	8.82	6.6	27.0	56.0	52.0	
West	5.76	9.07	9.1	25.0	56.0	47.0	
South	7.00	9.28	14.7	30.0	56.0	33.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Leg	Final slope	Final intercept (PCE/hr)
East	0.651	2154
North	0.663	2260
West	0.638	2100
South	0.742	2598

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2028 Total	AM	ONE HOUR	08:00	09:30	15

Vehicle mix source	PCE Factor for a Truck (PCE)
Truck Percentages	2.00

Demand overview (Traffic)

Leg	Linked leg	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
East		✓	73	100.000
North		✓	163	100.000
West		✓	131	100.000
South		✓	411	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		East	North	West	South
From	East	0	37	17	19
	North	13	0	6	144
	West	3	30	0	98
	South	7	226	178	0

Vehicle Mix

Truck Percentages

		To			
		East	North	West	South
From	East	0	2	2	2
	North	2	0	14	0
	West	2	0	0	6
	South	2	0	13	0

Results

Results Summary for whole modelled period

Leg	Max V/C Ratio	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
East	0.04	2.10	0.0	0.5	A
North	0.09	1.90	0.1	0.5	A
West	0.08	2.06	0.1	0.5	A
South	0.19	1.83	0.2	0.5	A

Main Results for each time segment

08:00 - 08:15

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	55	326	1892	0.029	55	0.0	1.958	A
North	123	161	2127	0.058	122	0.1	1.794	A
West	99	132	1928	0.051	98	0.1	1.967	A
South	309	35	2434	0.127	309	0.1	1.693	A

08:15 - 08:30

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	66	390	1849	0.035	66	0.0	2.017	A
North	147	192	2104	0.070	146	0.1	1.837	A
West	118	158	1912	0.062	118	0.1	2.005	A
South	369	41	2429	0.152	369	0.2	1.746	A

08:30 - 08:45

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	80	478	1791	0.045	80	0.0	2.104	A
North	179	236	2073	0.087	179	0.1	1.900	A
West	144	194	1890	0.076	144	0.1	2.061	A
South	453	51	2423	0.187	452	0.2	1.826	A

08:45 - 09:00

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	80	478	1790	0.045	80	0.0	2.104	A
North	179	236	2073	0.087	179	0.1	1.900	A
West	144	194	1890	0.076	144	0.1	2.061	A
South	453	51	2423	0.187	453	0.2	1.826	A

09:00 - 09:15

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	66	390	1849	0.035	66	0.0	2.019	A
North	147	192	2104	0.070	147	0.1	1.838	A
West	118	158	1912	0.062	118	0.1	2.007	A
South	369	41	2429	0.152	370	0.2	1.747	A

09:15 - 09:30

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	55	327	1892	0.029	55	0.0	1.959	A
North	123	161	2127	0.058	123	0.1	1.795	A
West	99	133	1928	0.051	99	0.1	1.967	A
South	309	35	2434	0.127	310	0.1	1.696	A

Queue Variation Results for each time segment

08:00 - 08:15

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.03	0.00	0.00	0.03	0.03			N/A	N/A
North	0.06	0.00	0.00	0.06	0.06			N/A	N/A
West	0.05	0.00	0.00	0.05	0.05			N/A	N/A
South	0.15	0.00	0.00	0.15	0.15			N/A	N/A

08:15 - 08:30

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.04	0.03	0.25	0.45	0.48			N/A	N/A
North	0.07	0.03	0.25	0.45	0.48			N/A	N/A
West	0.07	0.03	0.25	0.45	0.48			N/A	N/A
South	0.18	0.00	0.00	0.18	0.18			N/A	N/A

08:30 - 08:45

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker

East	0.05	0.03	0.25	0.45	0.48			N/A	N/A
North	0.09	0.03	0.26	0.47	0.49			N/A	N/A
West	0.08	0.03	0.26	0.47	0.49			N/A	N/A
South	0.23	0.03	0.25	0.45	0.48			N/A	N/A

08:45 - 09:00

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.05	0.00	0.00	0.05	0.05			N/A	N/A
North	0.09	0.00	0.00	0.09	0.09			N/A	N/A
West	0.08	0.00	0.00	0.08	0.08			N/A	N/A
South	0.23	0.03	0.25	0.45	0.48			N/A	N/A

09:00 - 09:15

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.04	0.00	0.00	0.04	0.04			N/A	N/A
North	0.08	0.00	0.00	0.08	0.08			N/A	N/A
West	0.07	0.00	0.00	0.07	0.07			N/A	N/A
South	0.18	0.00	0.00	0.18	0.18			N/A	N/A

09:15 - 09:30

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.03	0.00	0.00	0.03	0.03			N/A	N/A
North	0.06	0.00	0.00	0.06	0.06			N/A	N/A
West	0.05	0.00	0.00	0.05	0.05			N/A	N/A
South	0.15	0.00	0.00	0.15	0.15			N/A	N/A

2028 Total, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Intersection Network

Intersections

Intersection	Name	Intersection type	Use circulating lanes	Leg order	Intersection Delay (s)	Intersection LOS
1	untitled	Standard Roundabout		East, North, West, South	1.95	A

Intersection Network Options

Driving side	Lighting
Right	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2028 Total	PM	ONE HOUR	17:00	18:30	15

Vehicle mix source	PCE Factor for a Truck (PCE)
Truck Percentages	2.00

Demand overview (Traffic)

Leg	Linked leg	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
East		✓	31	100.000
North		✓	189	100.000
West		✓	160	100.000
South		✓	513	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		East	North	West	South
From	East	0	12	6	13
	North	36	0	7	146
	West	6	48	0	106
	South	20	257	236	0

Vehicle Mix

Truck Percentages

		To			
		East	North	West	South
From	East	0	2	2	2
	North	2	0	0	0

	West	2	0	0	7
	South	2	0	4	0

Results

Results Summary for whole modelled period

Leg	Max V/C Ratio	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
East	0.02	2.13	0.0	0.5	A
North	0.10	1.94	0.1	0.5	A
West	0.09	2.12	0.1	0.5	A
South	0.23	1.88	0.3	1.1	A

Main Results for each time segment

17:00 - 17:15

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	23	407	1848	0.013	23	0.0	1.973	A
North	142	192	2120	0.067	142	0.1	1.819	A
West	120	147	1916	0.063	120	0.1	2.004	A
South	386	68	2499	0.155	385	0.2	1.702	A

17:15 - 17:30

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	28	486	1796	0.016	28	0.0	2.035	A
North	170	229	2095	0.081	170	0.1	1.869	A
West	144	175	1898	0.076	144	0.1	2.051	A
South	461	81	2490	0.185	461	0.2	1.773	A

17:30 - 17:45

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	34	595	1725	0.020	34	0.0	2.128	A
North	208	281	2059	0.101	208	0.1	1.944	A
West	176	215	1874	0.094	176	0.1	2.119	A
South	565	99	2476	0.228	565	0.3	1.882	A

17:45 - 18:00

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	34	596	1725	0.020	34	0.0	2.128	A
North	208	281	2059	0.101	208	0.1	1.944	A
West	176	215	1874	0.094	176	0.1	2.119	A
South	565	99	2476	0.228	565	0.3	1.882	A

18:00 - 18:15

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	28	487	1796	0.016	28	0.0	2.037	A
North	170	229	2094	0.081	170	0.1	1.869	A
West	144	175	1898	0.076	144	0.1	2.051	A
South	461	81	2489	0.185	461	0.2	1.777	A

18:15 - 18:30

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	23	407	1847	0.013	23	0.0	1.975	A
North	142	192	2120	0.067	142	0.1	1.819	A
West	120	147	1916	0.063	121	0.1	2.005	A
South	386	68	2499	0.155	386	0.2	1.705	A

Queue Variation Results for each time segment

17:00 - 17:15

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.01	0.00	0.00	0.01	0.01			N/A	N/A
North	0.07	0.00	0.00	0.07	0.07			N/A	N/A
West	0.07	0.00	0.00	0.07	0.07			N/A	N/A
South	0.18	0.00	0.00	0.18	0.18			N/A	N/A

17:15 - 17:30

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.02	0.02	0.25	0.45	0.48			N/A	N/A
North	0.09	0.03	0.26	0.47	0.49			N/A	N/A
West	0.08	0.03	0.25	0.45	0.48			N/A	N/A
South	0.23	0.00	0.00	0.23	0.23			N/A	N/A

17:30 - 17:45

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.02	0.02	0.25	0.45	0.48			N/A	N/A
North	0.11	0.03	0.26	0.46	0.49			N/A	N/A
West	0.10	0.03	0.26	0.46	0.49			N/A	N/A
South	0.29	0.03	0.25	0.45	0.48			N/A	N/A

17:45 - 18:00

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.02	0.00	0.00	0.02	0.02			N/A	N/A
North	0.11	0.00	0.00	0.11	0.11			N/A	N/A
West	0.10	0.00	0.00	0.10	0.10			N/A	N/A
South	0.30	0.03	0.29	0.79	1.15			N/A	N/A

18:00 - 18:15

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.02	0.00	0.00	0.02	0.02			N/A	N/A
North	0.09	0.00	0.00	0.09	0.09			N/A	N/A
West	0.08	0.00	0.00	0.08	0.08			N/A	N/A
South	0.23	0.00	0.00	0.23	0.23			N/A	N/A

18:15 - 18:30

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.01	0.00	0.00	0.01	0.01			N/A	N/A
North	0.07	0.00	0.00	0.07	0.07			N/A	N/A
West	0.07	0.00	0.00	0.07	0.07			N/A	N/A
South	0.18	0.00	0.00	0.18	0.18			N/A	N/A

2033 Total, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Intersection Network

Intersections

Intersection	Name	Intersection type	Use circulating lanes	Leg order	Intersection Delay (s)	Intersection LOS
1	untitled	Standard Roundabout		East, North, West, South	2.00	A

Intersection Network Options

Driving side	Lighting
Right	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2033 Total	AM	ONE HOUR	08:00	09:30	15

Vehicle mix source	PCE Factor for a Truck (PCE)
Truck Percentages	2.00

Demand overview (Traffic)

Leg	Linked leg	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
East		✓	148	100.000
North		✓	203	100.000
West		✓	146	100.000
South		✓	452	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		East	North	West	South
From	East	0	74	33	41
	North	25	0	9	169
	West	7	33	0	106
	South	13	247	192	0

Vehicle Mix

Truck Percentages

		To			
		East	North	West	South
From	East	0	2	2	2
	North	2	0	14	0

	West	2	0	0	6
	South	2	0	13	0

Results

Results Summary for whole modelled period

Leg	Max V/C Ratio	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
East	0.09	2.25	0.1	0.5	A
North	0.11	1.99	0.1	0.5	A
West	0.09	2.13	0.1	0.5	A
South	0.21	1.88	0.3	0.5	A

Main Results for each time segment

08:00 - 08:15

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	111	355	1873	0.059	111	0.1	2.042	A
North	153	200	2097	0.073	153	0.1	1.851	A
West	110	177	1902	0.058	110	0.1	2.008	A
South	340	49	2426	0.140	340	0.2	1.725	A

08:15 - 08:30

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	133	424	1827	0.073	133	0.1	2.125	A
North	182	239	2068	0.088	182	0.1	1.908	A
West	131	211	1881	0.070	131	0.1	2.057	A
South	406	58	2419	0.168	406	0.2	1.787	A

08:30 - 08:45

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	163	519	1763	0.092	163	0.1	2.250	A
North	224	293	2029	0.110	223	0.1	1.993	A
West	161	259	1852	0.087	161	0.1	2.128	A
South	498	72	2410	0.207	497	0.3	1.881	A

08:45 - 09:00

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	163	520	1762	0.092	163	0.1	2.250	A
North	224	293	2029	0.110	224	0.1	1.993	A
West	161	259	1852	0.087	161	0.1	2.128	A
South	498	72	2410	0.207	498	0.3	1.881	A

09:00 - 09:15

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	133	425	1826	0.073	133	0.1	2.127	A
North	182	239	2068	0.088	183	0.1	1.911	A
West	131	211	1881	0.070	131	0.1	2.059	A
South	406	58	2419	0.168	407	0.2	1.788	A

09:15 - 09:30

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	111	356	1873	0.060	111	0.1	2.045	A
North	153	200	2096	0.073	153	0.1	1.851	A
West	110	177	1902	0.058	110	0.1	2.008	A
South	340	49	2426	0.140	340	0.2	1.728	A

Queue Variation Results for each time segment

08:00 - 08:15

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.06	0.00	0.00	0.06	0.06			N/A	N/A
North	0.08	0.00	0.00	0.08	0.08			N/A	N/A
West	0.06	0.00	0.00	0.06	0.06			N/A	N/A
South	0.16	0.00	0.00	0.16	0.16			N/A	N/A

08:15 - 08:30

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.08	0.03	0.25	0.45	0.48			N/A	N/A
North	0.10	0.03	0.25	0.45	0.48			N/A	N/A
West	0.07	0.03	0.25	0.45	0.48			N/A	N/A
South	0.20	0.00	0.00	0.20	0.20			N/A	N/A

08:30 - 08:45

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.10	0.03	0.26	0.47	0.49			N/A	N/A
North	0.12	0.03	0.26	0.46	0.49			N/A	N/A
West	0.09	0.03	0.26	0.47	0.49			N/A	N/A
South	0.26	0.03	0.25	0.45	0.48			N/A	N/A

08:45 - 09:00

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.10	0.00	0.00	0.10	0.10			N/A	N/A
North	0.12	0.00	0.00	0.12	0.12			N/A	N/A
West	0.09	0.00	0.00	0.09	0.09			N/A	N/A
South	0.26	0.03	0.26	0.47	0.50			N/A	N/A

09:00 - 09:15

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.08	0.00	0.00	0.08	0.08			N/A	N/A
North	0.10	0.00	0.00	0.10	0.10			N/A	N/A
West	0.08	0.00	0.00	0.08	0.08			N/A	N/A
South	0.20	0.00	0.00	0.20	0.20			N/A	N/A

09:15 - 09:30

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.06	0.00	0.00	0.06	0.06			N/A	N/A
North	0.08	0.00	0.00	0.08	0.08			N/A	N/A
West	0.06	0.00	0.00	0.06	0.06			N/A	N/A
South	0.16	0.00	0.00	0.16	0.16			N/A	N/A

2033 Total, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Intersection Network

Intersections

Intersection	Name	Intersection type	Use circulating lanes	Leg order	Intersection Delay (s)	Intersection LOS
1	untitled	Standard Roundabout		East, North, West, South	2.06	A

Intersection Network Options

Driving side	Lighting
Right	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2033 Total	PM	ONE HOUR	17:00	18:30	15

Vehicle mix source	PCE Factor for a Truck (PCE)
Truck Percentages	2.00

Demand overview (Traffic)

Leg	Linked leg	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
East		✓	61	100.000
North		✓	267	100.000
West		✓	177	100.000
South		✓	572	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		East	North	West	South
From	East	0	24	11	26
	North	71	0	14	182
	West	12	51	0	114
	South	40	281	251	0

Vehicle Mix

Truck Percentages

		To			
		East	North	West	South
From	East	0	2	2	2
	North	2	0	0	0

	West	2	0	0	7
	South	2	0	4	0

Results

Results Summary for whole modelled period

Leg	Max V/C Ratio	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
East	0.04	2.21	0.0	0.5	A
North	0.14	2.07	0.2	0.5	A
West	0.11	2.22	0.1	0.5	A
South	0.26	1.99	0.3	1.4	A

Main Results for each time segment

17:00 - 17:15

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	46	438	1827	0.025	46	0.0	2.020	A
North	201	216	2100	0.096	201	0.1	1.894	A
West	133	210	1878	0.071	133	0.1	2.062	A
South	431	101	2475	0.174	430	0.2	1.759	A

17:15 - 17:30

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	55	524	1772	0.031	55	0.0	2.096	A
North	240	259	2071	0.116	240	0.1	1.965	A
West	159	251	1853	0.086	159	0.1	2.124	A
South	514	120	2461	0.209	514	0.3	1.848	A

17:30 - 17:45

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	67	642	1695	0.040	67	0.0	2.210	A
North	294	317	2032	0.145	294	0.2	2.071	A
West	195	307	1818	0.107	195	0.1	2.216	A
South	630	147	2441	0.258	629	0.3	1.987	A

17:45 - 18:00

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	67	642	1695	0.040	67	0.0	2.211	A
North	294	317	2032	0.145	294	0.2	2.071	A
West	195	307	1818	0.107	195	0.1	2.217	A
South	630	148	2441	0.258	630	0.3	1.987	A

18:00 - 18:15

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	55	524	1771	0.031	55	0.0	2.097	A
North	240	259	2071	0.116	240	0.1	1.967	A
West	159	251	1853	0.086	159	0.1	2.125	A
South	514	121	2461	0.209	515	0.3	1.849	A

18:15 - 18:30

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	46	439	1827	0.025	46	0.0	2.021	A
North	201	217	2100	0.096	201	0.1	1.897	A
West	133	210	1878	0.071	133	0.1	2.063	A
South	431	101	2475	0.174	431	0.2	1.760	A

Queue Variation Results for each time segment

17:00 - 17:15

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.03	0.00	0.00	0.03	0.03			N/A	N/A
North	0.11	0.00	0.00	0.11	0.11			N/A	N/A
West	0.08	0.00	0.00	0.08	0.08			N/A	N/A
South	0.21	0.00	0.00	0.21	0.21			N/A	N/A

17:15 - 17:30

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.03	0.03	0.25	0.45	0.48			N/A	N/A
North	0.13	0.00	0.00	0.13	0.13			N/A	N/A
West	0.09	0.03	0.26	0.46	0.49			N/A	N/A
South	0.26	0.00	0.00	0.26	0.26			N/A	N/A

17:30 - 17:45

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.04	0.03	0.25	0.45	0.48			N/A	N/A
North	0.17	0.03	0.25	0.46	0.48			N/A	N/A
West	0.12	0.03	0.26	0.46	0.49			N/A	N/A
South	0.35	0.03	0.25	0.45	0.48			N/A	N/A

17:45 - 18:00

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.04	0.00	0.00	0.04	0.04			N/A	N/A
North	0.17	0.00	0.00	0.17	0.17			N/A	N/A
West	0.12	0.00	0.00	0.12	0.12			N/A	N/A
South	0.35	0.03	0.33	1.13	1.35			N/A	N/A

18:00 - 18:15

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.03	0.00	0.00	0.03	0.03			N/A	N/A
North	0.13	0.00	0.00	0.13	0.13			N/A	N/A
West	0.09	0.00	0.00	0.09	0.09			N/A	N/A
South	0.26	0.00	0.00	0.26	0.26			N/A	N/A

18:15 - 18:30

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.03	0.00	0.00	0.03	0.03			N/A	N/A
North	0.11	0.00	0.00	0.11	0.11			N/A	N/A
West	0.08	0.00	0.00	0.08	0.08			N/A	N/A
South	0.21	0.00	0.00	0.21	0.21			N/A	N/A

2043 Total, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Intersection Network

Intersections

Intersection	Name	Intersection type	Use circulating lanes	Leg order	Intersection Delay (s)	Intersection LOS
1	untitled	Standard Roundabout		East, North, West, South	2.19	A

Intersection Network Options

Driving side	Lighting
Right	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2043 Total	AM	ONE HOUR	08:00	09:30	15

Vehicle mix source	PCE Factor for a Truck (PCE)
Truck Percentages	2.00

Demand overview (Traffic)

Leg	Linked leg	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
East		✓	294	100.000
North		✓	274	100.000
West		✓	168	100.000
South		✓	510	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		East	North	West	South
From	East	0	147	66	81
	North	51	0	13	210
	West	14	39	0	115
	South	26	276	208	0

Vehicle Mix

Truck Percentages

		To			
		East	North	West	South
From	East	0	2	2	2
	North	2	0	14	0

	West	2	0	0	6
	South	2	0	13	0

Results

Results Summary for whole modelled period

Leg	Max V/C Ratio	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
East	0.19	2.57	0.2	0.5	A
North	0.15	2.17	0.2	0.5	A
West	0.10	2.25	0.1	0.5	A
South	0.24	1.98	0.3	1.2	A

Main Results for each time segment

08:00 - 08:15

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	221	393	1848	0.120	221	0.1	2.212	A
North	206	267	2047	0.101	206	0.1	1.955	A
West	126	257	1856	0.068	126	0.1	2.081	A
South	384	78	2409	0.159	383	0.2	1.776	A

08:15 - 08:30

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	264	470	1796	0.147	264	0.2	2.349	A
North	246	319	2010	0.123	246	0.1	2.040	A
West	151	307	1825	0.083	151	0.1	2.150	A
South	458	93	2398	0.191	458	0.2	1.855	A

08:30 - 08:45

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	324	576	1725	0.188	323	0.2	2.567	A
North	302	391	1959	0.154	302	0.2	2.171	A
West	185	376	1782	0.104	185	0.1	2.253	A
South	562	114	2383	0.236	561	0.3	1.976	A

08:45 - 09:00

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	324	576	1725	0.188	324	0.2	2.568	A
North	302	391	1959	0.154	302	0.2	2.171	A
West	185	377	1782	0.104	185	0.1	2.253	A
South	562	115	2383	0.236	562	0.3	1.976	A

09:00 - 09:15

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	264	470	1796	0.147	265	0.2	2.350	A
North	246	319	2010	0.123	246	0.1	2.041	A
West	151	308	1824	0.083	151	0.1	2.152	A
South	458	94	2398	0.191	459	0.2	1.855	A

09:15 - 09:30

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	221	394	1847	0.120	221	0.1	2.214	A
North	206	267	2047	0.101	206	0.1	1.955	A
West	126	258	1855	0.068	127	0.1	2.082	A
South	384	78	2409	0.159	384	0.2	1.780	A

Queue Variation Results for each time segment

08:00 - 08:15

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.14	0.00	0.00	0.14	0.14			N/A	N/A
North	0.11	0.00	0.00	0.11	0.11			N/A	N/A
West	0.07	0.00	0.00	0.07	0.07			N/A	N/A
South	0.19	0.00	0.00	0.19	0.19			N/A	N/A

08:15 - 08:30

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.17	0.00	0.00	0.17	0.17			N/A	N/A
North	0.14	0.00	0.00	0.14	0.14			N/A	N/A
West	0.09	0.03	0.26	0.47	0.50			N/A	N/A
South	0.24	0.00	0.00	0.24	0.24			N/A	N/A

08:30 - 08:45

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.23	0.03	0.25	0.46	0.48			N/A	N/A
North	0.18	0.03	0.25	0.46	0.48			N/A	N/A
West	0.12	0.03	0.26	0.46	0.49			N/A	N/A
South	0.31	0.03	0.25	0.45	0.48			N/A	N/A

08:45 - 09:00

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.23	0.03	0.25	0.46	0.48			N/A	N/A
North	0.18	0.03	0.25	0.45	0.48			N/A	N/A
West	0.12	0.00	0.00	0.12	0.12			N/A	N/A
South	0.31	0.03	0.30	0.94	1.23			N/A	N/A

09:00 - 09:15

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.17	0.00	0.00	0.17	0.17			N/A	N/A
North	0.14	0.00	0.00	0.14	0.14			N/A	N/A
West	0.09	0.00	0.00	0.09	0.09			N/A	N/A
South	0.24	0.00	0.00	0.24	0.24			N/A	N/A

09:15 - 09:30

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.14	0.00	0.00	0.14	0.14			N/A	N/A
North	0.11	0.00	0.00	0.11	0.11			N/A	N/A
West	0.07	0.00	0.00	0.07	0.07			N/A	N/A
South	0.19	0.00	0.00	0.19	0.19			N/A	N/A

2043 Total, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Intersection Network

Intersections

Intersection	Name	Intersection type	Use circulating lanes	Leg order	Intersection Delay (s)	Intersection LOS
1	untitled	Standard Roundabout		East, North, West, South	2.28	A

Intersection Network Options

Driving side	Lighting
Right	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2043 Total	PM	ONE HOUR	17:00	18:30	15

Vehicle mix source	PCE Factor for a Truck (PCE)
Truck Percentages	2.00

Demand overview (Traffic)

Leg	Linked leg	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
East		✓	119	100.000
North		✓	407	100.000
West		✓	205	100.000
South		✓	656	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		East	North	West	South
From	East	0	47	23	49
	North	138	0	24	245
	West	24	57	0	124
	South	76	313	267	0

Vehicle Mix

Truck Percentages

		To			
		East	North	West	South
From	East	0	2	2	2
	North	2	0	0	0

	West	2	0	0	7
	South	2	0	4	0

Results

Results Summary for whole modelled period

Leg	Max V/C Ratio	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
East	0.08	2.36	0.1	0.5	A
North	0.23	2.33	0.3	1.2	A
West	0.13	2.41	0.2	0.5	A
South	0.30	2.18	0.4	1.6	A

Main Results for each time segment

17:00 - 17:15

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	90	479	1801	0.050	89	0.1	2.103	A
North	306	255	2071	0.148	306	0.2	2.037	A
West	154	324	1810	0.085	154	0.1	2.173	A
South	494	164	2429	0.203	493	0.3	1.859	A

17:15 - 17:30

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	107	572	1740	0.061	107	0.1	2.203	A
North	366	305	2037	0.180	366	0.2	2.153	A
West	184	388	1771	0.104	184	0.1	2.268	A
South	590	197	2405	0.245	589	0.3	1.982	A

17:30 - 17:45

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	131	701	1657	0.079	131	0.1	2.359	A
North	448	373	1991	0.225	448	0.3	2.333	A
West	226	475	1718	0.131	226	0.2	2.412	A
South	722	241	2372	0.304	722	0.4	2.181	A

17:45 - 18:00

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	131	701	1657	0.079	131	0.1	2.359	A
North	448	373	1991	0.225	448	0.3	2.333	A
West	226	476	1717	0.131	226	0.2	2.412	A
South	722	241	2372	0.304	722	0.4	2.181	A

18:00 - 18:15

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	107	573	1740	0.061	107	0.1	2.206	A
North	366	305	2037	0.180	366	0.2	2.156	A
West	184	389	1771	0.104	184	0.1	2.270	A
South	590	197	2405	0.245	590	0.3	1.985	A

18:15 - 18:30

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	90	480	1800	0.050	90	0.1	2.104	A
North	306	255	2071	0.148	307	0.2	2.040	A
West	154	325	1810	0.085	154	0.1	2.176	A
South	494	165	2428	0.203	494	0.3	1.860	A

Queue Variation Results for each time segment

17:00 - 17:15

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.05	0.00	0.00	0.05	0.05			N/A	N/A
North	0.17	0.00	0.00	0.17	0.17			N/A	N/A
West	0.09	0.00	0.00	0.09	0.09			N/A	N/A
South	0.25	0.00	0.00	0.25	0.25			N/A	N/A

17:15 - 17:30

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.07	0.03	0.25	0.45	0.48			N/A	N/A
North	0.22	0.00	0.00	0.22	0.22			N/A	N/A
West	0.12	0.00	0.00	0.12	0.12			N/A	N/A
South	0.32	0.00	0.00	0.32	0.32			N/A	N/A

17:30 - 17:45

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.09	0.03	0.26	0.47	0.49			N/A	N/A
North	0.29	0.03	0.25	0.45	0.48			N/A	N/A
West	0.15	0.03	0.26	0.46	0.48			N/A	N/A
South	0.44	0.03	0.25	0.45	0.48			N/A	N/A

17:45 - 18:00

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.09	0.00	0.00	0.09	0.09			N/A	N/A
North	0.29	0.03	0.29	0.82	1.16			N/A	N/A
West	0.15	0.00	0.00	0.15	0.15			N/A	N/A
South	0.44	0.03	0.33	1.37	1.63			N/A	N/A

18:00 - 18:15

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.07	0.00	0.00	0.07	0.07			N/A	N/A
North	0.22	0.00	0.00	0.22	0.22			N/A	N/A
West	0.12	0.00	0.00	0.12	0.12			N/A	N/A
South	0.33	0.00	0.00	0.33	0.33			N/A	N/A

18:15 - 18:30

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.05	0.00	0.00	0.05	0.05			N/A	N/A
North	0.17	0.00	0.00	0.17	0.17			N/A	N/A
West	0.09	0.00	0.00	0.09	0.09			N/A	N/A
South	0.26	0.00	0.00	0.26	0.26			N/A	N/A

Junctions 9

ARCADY 9 - Roundabout Module

Filename: Wabanaki & HV SJ_Goodrich Roundabout.j9
Path: C:\Users\m.loni\Desktop\Info\Hidden Valley TIS\Arcady
Report generation date: 2024-05-27 6:35:29 PM

Summary of intersection performance

	AM							PM						
	Queue (Veh)	95% Queue (Veh)	Delay (s)	V/C Ratio	LOS	Intersection Delay (s)	Intersection LOS	Queue (Veh)	95% Queue (Veh)	Delay (s)	V/C Ratio	LOS	Intersection Delay (s)	Intersection LOS
	Future Roundabout - 2028 Background													
Leg East	0.0	0.5	1.64	0.03	A	1.93	A	0.0	0.5	1.74	0.02	A	1.88	A
Leg North	0.1	0.5	1.94	0.11	A			0.1	0.5	1.88	0.11	A		
Leg West	0.1	0.5	2.13	0.05	A			0.1	0.5	1.84	0.11	A		
Leg South	0.2	0.5	1.91	0.16	A			0.2	0.5	1.92	0.14	A		
	Future Roundabout - 2033 Background													
Leg East	0.0	0.5	1.65	0.03	A	1.94	A	0.0	0.5	1.75	0.02	A	1.89	A
Leg North	0.1	0.5	1.95	0.11	A			0.1	0.5	1.89	0.11	A		
Leg West	0.1	0.5	2.13	0.05	A			0.1	0.5	1.85	0.11	A		
Leg South	0.2	0.5	1.92	0.16	A			0.2	0.5	1.93	0.15	A		
	Future Roundabout - 2043 Background													
Leg East	0.0	0.5	1.65	0.03	A	1.94	A	0.0	0.5	1.75	0.02	A	1.89	A
Leg North	0.1	0.5	1.95	0.11	A			0.1	0.5	1.89	0.11	A		
Leg West	0.1	0.5	2.13	0.05	A			0.1	0.5	1.85	0.11	A		
Leg South	0.2	0.5	1.92	0.16	A			0.2	0.5	1.93	0.15	A		
	Future Roundabout - 2028 Total													
Leg East	0.0	0.5	1.67	0.04	A	1.96	A	0.0	0.5	1.80	0.04	A	1.93	A
Leg North	0.2	0.5	2.00	0.13	A			0.2	0.5	1.95	0.14	A		
Leg West	0.1	0.5	2.17	0.06	A			0.1	0.5	1.90	0.12	A		
Leg South	0.2	0.5	1.95	0.16	A			0.2	0.5	1.97	0.15	A		
	Future Roundabout - 2033 Total													
Leg East	0.1	0.5	1.72	0.06	A			0.1	0.5	1.87	0.05	A		
Leg North	0.2	0.5	2.06	0.16	A			0.2	0.5	2.02	0.16	A		

Leg West	0.1	0.5	2.22	0.07	A	2.02	A	0.2	0.5	1.96	0.13	A	2.00	A
Leg South	0.2	0.5	2.00	0.17	A			0.2	0.5	2.04	0.17	A		
	Future Roundabout - 2043 Total													
Leg East	0.1	0.5	1.79	0.09	A	2.11	A	0.1	0.5	1.97	0.09	A	2.12	A
Leg North	0.3	0.7	2.19	0.21	A			0.3	1.0	2.16	0.21	A		
Leg West	0.1	0.5	2.31	0.08	A			0.2	0.5	2.09	0.15	A		
Leg South	0.2	0.5	2.08	0.19	A			0.2	0.5	2.17	0.19	A		

There are warnings associated with one or more model runs - see the 'Data Errors and Warnings' tables for each Analysis or Demand Set.

Values shown are the highest values encountered over all time segments. Delay is the maximum value of average delay per arriving vehicle. Intersection LOS and Intersection Delay are demand-weighted averages.

File summary

File Description

Title	
Location	
Site number	
Date	2024-03-13
Version	
Status	(new file)
Identifier	
Client	
Jobnumber	
Analyst	MCINTOSHPERRY1\m.loni
Description	

Units

Distance units	Speed units	Traffic units input	Traffic units results	Flow units	Average delay units	Total delay units	Rate of delay units
m	kph	Veh	Veh	perHour	s	-Min	perMin

Analysis Options

Calculate Queue Percentiles	Calculate residual capacity	V/C Ratio Threshold	Average Delay threshold (s)	Queue threshold (PCE)
✓		0.85	36.00	20.00

Demand Set Summary

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2028 Background	AM	ONE HOUR	08:00	09:30	15
D2	2028 Background	PM	ONE HOUR	17:00	18:30	15
D3	2033 Background	AM	ONE HOUR	08:00	09:30	15
D4	2033 Background	PM	ONE HOUR	17:00	18:30	15
D5	2043 Background	AM	ONE HOUR	08:00	09:30	15
D6	2043 Background	PM	ONE HOUR	17:00	18:30	15
D7	2028 Total	AM	ONE HOUR	08:00	09:30	15
D8	2028 Total	PM	ONE HOUR	17:00	18:30	15
D9	2033 Total	AM	ONE HOUR	08:00	09:30	15
D10	2033 Total	PM	ONE HOUR	17:00	18:30	15
D11	2043 Total	AM	ONE HOUR	08:00	09:30	15
D12	2043 Total	PM	ONE HOUR	17:00	18:30	15

Analysis Set Details

ID	Name	Network flow scaling factor (%)
A1	Future Roundabout	100.000

Future Roundabout - 2028 Background, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Intersection Network

Intersections

Intersection	Name	Intersection type	Use circulating lanes	Leg order	Intersection Delay (s)	Intersection LOS
1	untitled	Standard Roundabout		East, North, West, South	1.93	A

Intersection Network Options

Driving side	Lighting
Right	Normal/unknown

Legs

Legs

Leg	Name	Description
East	Hidden Valley Drive East Approach	
North	Wabanaki Drive North Approach	
West	Goodrich Drive West Approach	
South	Wabanaki Drive South Approach	

Roundabout Geometry

Leg	V - Approach road half-width (m)	E - Entry width (m)	l' - Effective flare length (m)	R - Entry radius (m)	D - Inscribed circle diameter (m)	PHI - Conflict (entry) angle (deg)	Exit only
East	7.00	8.86	14.2	27.0	54.6	6.0	
North	7.00	8.07	10.3	28.0	54.6	50.0	
West	7.00	8.39	23.4	22.0	54.6	35.0	
South	7.00	8.37	12.2	35.0	54.6	34.0	

Slope / Intercept / Capacity

Roundabout Slope and Intercept used in model

Leg	Final slope	Final intercept (PCE/hr)
East	0.806	2760
North	0.668	2233
West	0.718	2443
South	0.724	2444

The slope and intercept shown above include any corrections and adjustments.

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D1	2028 Background	AM	ONE HOUR	08:00	09:30	15

Vehicle mix source	PCE Factor for a Truck (PCE)
Truck Percentages	2.00

Demand overview (Traffic)

Leg	Linked leg	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
East		✓	61	100.000
North		✓	207	100.000
West		✓	81	100.000
South		✓	318	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		East	North	West	South
From	East	0	30	16	15
	North	16	0	148	43
	West	9	56	0	16
	South	11	288	19	0

Vehicle Mix

Truck Percentages

		To			
		East	North	West	South
From	East	0	6	13	0
	North	0	0	4	12
	West	33	38	0	19
	South	10	4	26	0

Results

Results Summary for whole modelled period

Leg	Max V/C Ratio	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
East	0.03	1.64	0.0	0.5	A
North	0.11	1.94	0.1	0.5	A
West	0.05	2.13	0.1	0.5	A
South	0.16	1.91	0.2	0.5	A

Main Results for each time segment

08:00 - 08:15

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	46	273	2366	0.019	46	0.0	1.550	A
North	156	38	2093	0.074	156	0.1	1.857	A
West	61	56	1795	0.034	61	0.0	2.075	A
South	239	61	2261	0.106	239	0.1	1.779	A

08:15 - 08:30

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	55	326	2322	0.024	55	0.0	1.587	A
North	186	45	2087	0.089	186	0.1	1.892	A
West	73	67	1789	0.041	73	0.0	2.097	A
South	286	73	2251	0.127	286	0.1	1.831	A

08:30 - 08:45

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	67	399	2260	0.030	67	0.0	1.640	A
North	228	55	2080	0.110	228	0.1	1.943	A
West	89	81	1781	0.050	89	0.1	2.128	A
South	350	89	2236	0.157	350	0.2	1.907	A

08:45 - 09:00

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	67	400	2260	0.030	67	0.0	1.640	A
North	228	55	2080	0.110	228	0.1	1.943	A
West	89	81	1780	0.050	89	0.1	2.128	A
South	350	89	2236	0.157	350	0.2	1.907	A

09:00 - 09:15

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	55	327	2321	0.024	55	0.0	1.590	A
North	186	45	2087	0.089	186	0.1	1.895	A
West	73	67	1789	0.041	73	0.0	2.099	A
South	286	73	2251	0.127	286	0.1	1.831	A

09:15 - 09:30

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	46	273	2366	0.019	46	0.0	1.553	A
North	156	38	2093	0.074	156	0.1	1.858	A
West	61	56	1795	0.034	61	0.0	2.077	A
South	239	61	2261	0.106	240	0.1	1.782	A

Queue Variation Results for each time segment

08:00 - 08:15

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.02	0.00	0.00	0.02	0.02			N/A	N/A
North	0.08	0.00	0.00	0.08	0.08			N/A	N/A
West	0.04	0.00	0.00	0.04	0.04			N/A	N/A
South	0.12	0.00	0.00	0.12	0.12			N/A	N/A

08:15 - 08:30

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.02	0.02	0.25	0.45	0.48			N/A	N/A
North	0.10	0.03	0.25	0.45	0.48			N/A	N/A
West	0.04	0.03	0.25	0.45	0.48			N/A	N/A
South	0.15	0.00	0.00	0.15	0.15			N/A	N/A

08:30 - 08:45

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker

East	0.03	0.00	0.00	0.03	0.03			N/A	N/A
North	0.12	0.03	0.26	0.46	0.49			N/A	N/A
West	0.05	0.03	0.26	0.46	0.49			N/A	N/A
South	0.19	0.03	0.25	0.46	0.48			N/A	N/A

08:45 - 09:00

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.03	0.00	0.00	0.03	0.03			N/A	N/A
North	0.12	0.00	0.00	0.12	0.12			N/A	N/A
West	0.05	0.00	0.00	0.05	0.05			N/A	N/A
South	0.19	0.03	0.25	0.45	0.48			N/A	N/A

09:00 - 09:15

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.02	0.00	0.00	0.02	0.02			N/A	N/A
North	0.10	0.00	0.00	0.10	0.10			N/A	N/A
West	0.04	0.00	0.00	0.04	0.04			N/A	N/A
South	0.15	0.00	0.00	0.15	0.15			N/A	N/A

09:15 - 09:30

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.02	0.00	0.00	0.02	0.02			N/A	N/A
North	0.08	0.00	0.00	0.08	0.08			N/A	N/A
West	0.04	0.00	0.00	0.04	0.04			N/A	N/A
South	0.12	0.00	0.00	0.12	0.12			N/A	N/A

Future Roundabout - 2028 Background, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Intersection Network

Intersections

Intersection	Name	Intersection type	Use circulating lanes	Leg order	Intersection Delay (s)	Intersection LOS
1	untitled	Standard Roundabout		East, North, West, South	1.88	A

Intersection Network Options

Driving side	Lighting
Right	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D2	2028 Background	PM	ONE HOUR	17:00	18:30	15

Vehicle mix source	PCE Factor for a Truck (PCE)
Truck Percentages	2.00

Demand overview (Traffic)

Leg	Linked leg	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
East		✓	30	100.000
North		✓	215	100.000
West		✓	215	100.000
South		✓	289	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		East	North	West	South
From	East	0	14	5	11
	North	29	0	112	74
	West	9	163	0	43
	South	14	267	8	0

Vehicle Mix

Truck Percentages

		To			
		East	North	West	South
From	East	0	18	0	10
	North	3	0	0	8

	West	33	6	0	5
	South	0	3	25	0

Results

Results Summary for whole modelled period

Leg	Max V/C Ratio	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
East	0.02	1.74	0.0	0.5	A
North	0.11	1.88	0.1	0.5	A
West	0.11	1.84	0.1	0.5	A
South	0.14	1.92	0.2	0.5	A

Main Results for each time segment

17:00 - 17:15

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	23	329	2215	0.010	23	0.0	1.641	A
North	162	18	2152	0.075	162	0.1	1.808	A
West	162	86	2223	0.073	162	0.1	1.745	A
South	218	151	2249	0.097	217	0.1	1.771	A

17:15 - 17:30

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	27	394	2167	0.012	27	0.0	1.681	A
North	193	22	2149	0.090	193	0.1	1.839	A
West	193	102	2211	0.087	193	0.1	1.783	A
South	260	181	2227	0.117	260	0.1	1.829	A

17:30 - 17:45

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	33	482	2100	0.016	33	0.0	1.740	A
North	237	26	2146	0.110	237	0.1	1.884	A
West	237	125	2195	0.108	237	0.1	1.837	A
South	318	221	2196	0.145	318	0.2	1.915	A

17:45 - 18:00

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	33	482	2100	0.016	33	0.0	1.740	A
North	237	26	2146	0.110	237	0.1	1.884	A
West	237	126	2194	0.108	237	0.1	1.837	A
South	318	221	2196	0.145	318	0.2	1.915	A

18:00 - 18:15

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	27	394	2166	0.012	27	0.0	1.681	A
North	193	22	2149	0.090	193	0.1	1.839	A
West	193	103	2211	0.087	193	0.1	1.783	A
South	260	181	2227	0.117	260	0.1	1.829	A

18:15 - 18:30

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	23	330	2215	0.010	23	0.0	1.641	A
North	162	18	2152	0.075	162	0.1	1.808	A
West	162	86	2223	0.073	162	0.1	1.748	A
South	218	151	2249	0.097	218	0.1	1.774	A

Queue Variation Results for each time segment

17:00 - 17:15

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.01	0.00	0.00	0.01	0.01			N/A	N/A
North	0.08	0.00	0.00	0.08	0.08			N/A	N/A
West	0.08	0.00	0.00	0.08	0.08			N/A	N/A
South	0.11	0.00	0.00	0.11	0.11			N/A	N/A

17:15 - 17:30

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.01	0.01	0.25	0.45	0.48			N/A	N/A
North	0.10	0.03	0.25	0.45	0.48			N/A	N/A
West	0.10	0.03	0.25	0.46	0.48			N/A	N/A
South	0.13	0.00	0.00	0.13	0.13			N/A	N/A

17:30 - 17:45

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.02	0.02	0.25	0.46	0.48			N/A	N/A
North	0.12	0.03	0.26	0.46	0.49			N/A	N/A
West	0.12	0.03	0.26	0.46	0.49			N/A	N/A
South	0.17	0.03	0.25	0.46	0.48			N/A	N/A

17:45 - 18:00

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.02	0.00	0.00	0.02	0.02			N/A	N/A
North	0.12	0.00	0.00	0.12	0.12			N/A	N/A
West	0.12	0.00	0.00	0.12	0.12			N/A	N/A
South	0.17	0.00	0.00	0.17	0.17			N/A	N/A

18:00 - 18:15

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.01	0.00	0.00	0.01	0.01			N/A	N/A
North	0.10	0.00	0.00	0.10	0.10			N/A	N/A
West	0.10	0.00	0.00	0.10	0.10			N/A	N/A
South	0.13	0.00	0.00	0.13	0.13			N/A	N/A

18:15 - 18:30

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.01	0.00	0.00	0.01	0.01			N/A	N/A
North	0.08	0.00	0.00	0.08	0.08			N/A	N/A
West	0.08	0.00	0.00	0.08	0.08			N/A	N/A
South	0.11	0.00	0.00	0.11	0.11			N/A	N/A

Future Roundabout - 2033 Background, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Intersection Network

Intersections

Intersection	Name	Intersection type	Use circulating lanes	Leg order	Intersection Delay (s)	Intersection LOS
1	untitled	Standard Roundabout		East, North, West, South	1.94	A

Intersection Network Options

Driving side	Lighting
Right	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D3	2033 Background	AM	ONE HOUR	08:00	09:30	15

Vehicle mix source	PCE Factor for a Truck (PCE)
Truck Percentages	2.00

Demand overview (Traffic)

Leg	Linked leg	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
East		✓	62	100.000
North		✓	212	100.000
West		✓	83	100.000
South		✓	328	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		East	North	West	South
From	East	0	31	16	15
	North	16	0	152	44
	West	9	58	0	16
	South	11	297	20	0

Vehicle Mix

Truck Percentages

		To			
		East	North	West	South
From	East	0	6	13	0
	North	0	0	4	12

	West	33	38	0	19
	South	10	4	26	0

Results

Results Summary for whole modelled period

Leg	Max V/C Ratio	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
East	0.03	1.65	0.0	0.5	A
North	0.11	1.95	0.1	0.5	A
West	0.05	2.13	0.1	0.5	A
South	0.16	1.92	0.2	0.5	A

Main Results for each time segment

08:00 - 08:15

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	47	282	2359	0.020	47	0.0	1.556	A
North	160	38	2092	0.076	159	0.1	1.862	A
West	62	56	1794	0.035	62	0.0	2.079	A
South	247	62	2260	0.109	246	0.1	1.787	A

08:15 - 08:30

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	56	337	2313	0.024	56	0.0	1.594	A
North	191	46	2086	0.091	191	0.1	1.897	A
West	75	67	1787	0.042	75	0.0	2.101	A
South	295	75	2249	0.131	295	0.2	1.841	A

08:30 - 08:45

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	68	413	2249	0.030	68	0.0	1.649	A
North	233	56	2079	0.112	233	0.1	1.950	A
West	91	83	1778	0.051	91	0.1	2.133	A
South	361	91	2234	0.162	361	0.2	1.922	A

08:45 - 09:00

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	68	413	2249	0.030	68	0.0	1.649	A
North	233	56	2079	0.112	233	0.1	1.950	A
West	91	83	1778	0.051	91	0.1	2.133	A
South	361	91	2234	0.162	361	0.2	1.922	A

09:00 - 09:15

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	56	337	2312	0.024	56	0.0	1.594	A
North	191	46	2086	0.091	191	0.1	1.898	A
West	75	67	1787	0.042	75	0.0	2.103	A
South	295	75	2249	0.131	295	0.2	1.842	A

09:15 - 09:30

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	47	282	2358	0.020	47	0.0	1.559	A
North	160	38	2092	0.076	160	0.1	1.862	A
West	62	56	1793	0.035	63	0.0	2.081	A
South	247	63	2259	0.109	247	0.1	1.790	A

Queue Variation Results for each time segment

08:00 - 08:15

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.02	0.00	0.00	0.02	0.02			N/A	N/A
North	0.08	0.00	0.00	0.08	0.08			N/A	N/A
West	0.04	0.00	0.00	0.04	0.04			N/A	N/A
South	0.12	0.00	0.00	0.12	0.12			N/A	N/A

08:15 - 08:30

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.02	0.02	0.25	0.45	0.48			N/A	N/A
North	0.10	0.03	0.25	0.45	0.48			N/A	N/A
West	0.04	0.03	0.25	0.45	0.48			N/A	N/A
South	0.15	0.00	0.00	0.15	0.15			N/A	N/A

08:30 - 08:45

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.03	0.00	0.00	0.03	0.03			N/A	N/A
North	0.13	0.03	0.26	0.46	0.49			N/A	N/A
West	0.05	0.03	0.26	0.46	0.49			N/A	N/A
South	0.19	0.03	0.25	0.46	0.48			N/A	N/A

08:45 - 09:00

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.03	0.00	0.00	0.03	0.03			N/A	N/A
North	0.13	0.00	0.00	0.13	0.13			N/A	N/A
West	0.05	0.00	0.00	0.05	0.05			N/A	N/A
South	0.19	0.03	0.25	0.45	0.48			N/A	N/A

09:00 - 09:15

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.02	0.00	0.00	0.02	0.02			N/A	N/A
North	0.10	0.00	0.00	0.10	0.10			N/A	N/A
West	0.04	0.00	0.00	0.04	0.04			N/A	N/A
South	0.15	0.00	0.00	0.15	0.15			N/A	N/A

09:15 - 09:30

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.02	0.00	0.00	0.02	0.02			N/A	N/A
North	0.08	0.00	0.00	0.08	0.08			N/A	N/A
West	0.04	0.00	0.00	0.04	0.04			N/A	N/A
South	0.12	0.00	0.00	0.12	0.12			N/A	N/A

Future Roundabout - 2033 Background, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Intersection Network

Intersections

Intersection	Name	Intersection type	Use circulating lanes	Leg order	Intersection Delay (s)	Intersection LOS
1	untitled	Standard Roundabout		East, North, West, South	1.89	A

Intersection Network Options

Driving side	Lighting
Right	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D4	2033 Background	PM	ONE HOUR	17:00	18:30	15

Vehicle mix source	PCE Factor for a Truck (PCE)
Truck Percentages	2.00

Demand overview (Traffic)

Leg	Linked leg	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
East		✓	30	100.000
North		✓	221	100.000
West		✓	221	100.000
South		✓	297	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		East	North	West	South
From	East	0	14	5	11
	North	30	0	115	76
	West	9	168	0	44
	South	14	275	8	0

Vehicle Mix

Truck Percentages

		To			
		East	North	West	South
From	East	0	18	0	10
	North	3	0	0	8

	West	33	6	0	5
	South	0	3	25	0

Results

Results Summary for whole modelled period

Leg	Max V/C Ratio	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
East	0.02	1.75	0.0	0.5	A
North	0.11	1.89	0.1	0.5	A
West	0.11	1.85	0.1	0.5	A
South	0.15	1.93	0.2	0.5	A

Main Results for each time segment

17:00 - 17:15

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	23	339	2208	0.010	23	0.0	1.646	A
North	166	18	2152	0.077	166	0.1	1.812	A
West	166	88	2222	0.075	166	0.1	1.750	A
South	224	156	2246	0.100	223	0.1	1.779	A

17:15 - 17:30

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	27	405	2158	0.013	27	0.0	1.688	A
North	199	22	2149	0.092	199	0.1	1.844	A
West	199	105	2210	0.090	199	0.1	1.789	A
South	267	186	2223	0.120	267	0.1	1.839	A

17:30 - 17:45

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	33	496	2089	0.016	33	0.0	1.749	A
North	243	26	2146	0.113	243	0.1	1.891	A
West	243	129	2193	0.111	243	0.1	1.845	A
South	327	228	2192	0.149	327	0.2	1.930	A

17:45 - 18:00

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	33	497	2089	0.016	33	0.0	1.749	A
North	243	26	2146	0.113	243	0.1	1.891	A
West	243	129	2193	0.111	243	0.1	1.845	A
South	327	228	2192	0.149	327	0.2	1.930	A

18:00 - 18:15

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	27	406	2158	0.013	27	0.0	1.691	A
North	199	22	2149	0.092	199	0.1	1.845	A
West	199	105	2210	0.090	199	0.1	1.789	A
South	267	186	2223	0.120	267	0.1	1.839	A

18:15 - 18:30

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	23	340	2207	0.010	23	0.0	1.647	A
North	166	18	2152	0.077	166	0.1	1.815	A
West	166	88	2222	0.075	166	0.1	1.750	A
South	224	156	2246	0.100	224	0.1	1.779	A

Queue Variation Results for each time segment

17:00 - 17:15

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.01	0.00	0.00	0.01	0.01			N/A	N/A
North	0.08	0.00	0.00	0.08	0.08			N/A	N/A
West	0.08	0.00	0.00	0.08	0.08			N/A	N/A
South	0.11	0.00	0.00	0.11	0.11			N/A	N/A

17:15 - 17:30

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.01	0.01	0.25	0.45	0.48			N/A	N/A
North	0.10	0.03	0.25	0.45	0.48			N/A	N/A
West	0.10	0.03	0.25	0.45	0.48			N/A	N/A
South	0.14	0.00	0.00	0.14	0.14			N/A	N/A

17:30 - 17:45

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.02	0.02	0.25	0.46	0.48			N/A	N/A
North	0.13	0.03	0.26	0.46	0.49			N/A	N/A
West	0.12	0.03	0.26	0.46	0.49			N/A	N/A
South	0.17	0.03	0.25	0.46	0.48			N/A	N/A

17:45 - 18:00

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.02	0.00	0.00	0.02	0.02			N/A	N/A
North	0.13	0.00	0.00	0.13	0.13			N/A	N/A
West	0.12	0.00	0.00	0.12	0.12			N/A	N/A
South	0.18	0.00	0.00	0.18	0.18			N/A	N/A

18:00 - 18:15

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.01	0.00	0.00	0.01	0.01			N/A	N/A
North	0.10	0.00	0.00	0.10	0.10			N/A	N/A
West	0.10	0.00	0.00	0.10	0.10			N/A	N/A
South	0.14	0.00	0.00	0.14	0.14			N/A	N/A

18:15 - 18:30

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.01	0.00	0.00	0.01	0.01			N/A	N/A
North	0.08	0.00	0.00	0.08	0.08			N/A	N/A
West	0.08	0.00	0.00	0.08	0.08			N/A	N/A
South	0.11	0.00	0.00	0.11	0.11			N/A	N/A

Future Roundabout - 2043 Background, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Intersection Network

Intersections

Intersection	Name	Intersection type	Use circulating lanes	Leg order	Intersection Delay (s)	Intersection LOS
1	untitled	Standard Roundabout		East, North, West, South	1.94	A

Intersection Network Options

Driving side	Lighting
Right	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D5	2043 Background	AM	ONE HOUR	08:00	09:30	15

Vehicle mix source	PCE Factor for a Truck (PCE)
Truck Percentages	2.00

Demand overview (Traffic)

Leg	Linked leg	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
East		✓	62	100.000
North		✓	212	100.000
West		✓	83	100.000
South		✓	327	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		East	North	West	South
From	East	0	31	16	15
	North	16	0	152	44
	West	9	58	0	16
	South	11	296	20	0

Vehicle Mix

Truck Percentages

		To			
		East	North	West	South
From	East	0	6	13	0
	North	0	0	4	12

	West	33	38	0	19
	South	10	4	26	0

Results

Results Summary for whole modelled period

Leg	Max V/C Ratio	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
East	0.03	1.65	0.0	0.5	A
North	0.11	1.95	0.1	0.5	A
West	0.05	2.13	0.1	0.5	A
South	0.16	1.92	0.2	0.5	A

Main Results for each time segment

08:00 - 08:15

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	47	281	2360	0.020	47	0.0	1.555	A
North	160	38	2092	0.076	159	0.1	1.862	A
West	62	56	1794	0.035	62	0.0	2.079	A
South	246	62	2259	0.109	246	0.1	1.787	A

08:15 - 08:30

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	56	336	2313	0.024	56	0.0	1.593	A
North	191	46	2086	0.091	191	0.1	1.897	A
West	75	67	1787	0.042	75	0.0	2.101	A
South	294	75	2249	0.131	294	0.2	1.840	A

08:30 - 08:45

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	68	412	2250	0.030	68	0.0	1.649	A
North	233	56	2079	0.112	233	0.1	1.950	A
West	91	83	1778	0.051	91	0.1	2.133	A
South	360	91	2234	0.161	360	0.2	1.921	A

08:45 - 09:00

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	68	412	2250	0.030	68	0.0	1.649	A
North	233	56	2079	0.112	233	0.1	1.950	A
West	91	83	1778	0.051	91	0.1	2.133	A
South	360	91	2234	0.161	360	0.2	1.921	A

09:00 - 09:15

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	56	336	2313	0.024	56	0.0	1.596	A
North	191	46	2086	0.091	191	0.1	1.898	A
West	75	67	1787	0.042	75	0.0	2.103	A
South	294	75	2248	0.131	294	0.2	1.841	A

09:15 - 09:30

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	47	282	2359	0.020	47	0.0	1.558	A
North	160	38	2092	0.076	160	0.1	1.865	A
West	62	56	1793	0.035	63	0.0	2.079	A
South	246	63	2259	0.109	246	0.1	1.790	A

Queue Variation Results for each time segment

08:00 - 08:15

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.02	0.00	0.00	0.02	0.02			N/A	N/A
North	0.08	0.00	0.00	0.08	0.08			N/A	N/A
West	0.04	0.00	0.00	0.04	0.04			N/A	N/A
South	0.12	0.00	0.00	0.12	0.12			N/A	N/A

08:15 - 08:30

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.02	0.02	0.25	0.45	0.48			N/A	N/A
North	0.10	0.03	0.25	0.45	0.48			N/A	N/A
West	0.04	0.03	0.25	0.45	0.48			N/A	N/A
South	0.15	0.00	0.00	0.15	0.15			N/A	N/A

08:30 - 08:45

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.03	0.00	0.00	0.03	0.03			N/A	N/A
North	0.13	0.03	0.26	0.46	0.49			N/A	N/A
West	0.05	0.03	0.26	0.46	0.49			N/A	N/A
South	0.19	0.03	0.25	0.46	0.48			N/A	N/A

08:45 - 09:00

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.03	0.00	0.00	0.03	0.03			N/A	N/A
North	0.13	0.00	0.00	0.13	0.13			N/A	N/A
West	0.05	0.00	0.00	0.05	0.05			N/A	N/A
South	0.19	0.03	0.25	0.45	0.48			N/A	N/A

09:00 - 09:15

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.02	0.00	0.00	0.02	0.02			N/A	N/A
North	0.10	0.00	0.00	0.10	0.10			N/A	N/A
West	0.04	0.00	0.00	0.04	0.04			N/A	N/A
South	0.15	0.00	0.00	0.15	0.15			N/A	N/A

09:15 - 09:30

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.02	0.00	0.00	0.02	0.02			N/A	N/A
North	0.08	0.00	0.00	0.08	0.08			N/A	N/A
West	0.04	0.00	0.00	0.04	0.04			N/A	N/A
South	0.12	0.00	0.00	0.12	0.12			N/A	N/A

Future Roundabout - 2043 Background, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Intersection Network

Intersections

Intersection	Name	Intersection type	Use circulating lanes	Leg order	Intersection Delay (s)	Intersection LOS
1	untitled	Standard Roundabout		East, North, West, South	1.89	A

Intersection Network Options

Driving side	Lighting
Right	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D6	2043 Background	PM	ONE HOUR	17:00	18:30	15

Vehicle mix source	PCE Factor for a Truck (PCE)
Truck Percentages	2.00

Demand overview (Traffic)

Leg	Linked leg	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
East		✓	30	100.000
North		✓	221	100.000
West		✓	221	100.000
South		✓	297	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		East	North	West	South
From	East	0	14	5	11
	North	30	0	115	76
	West	9	168	0	44
	South	14	275	8	0

Vehicle Mix

Truck Percentages

		To			
		East	North	West	South
From	East	0	18	0	10
	North	3	0	0	8

	West	33	6	0	5
	South	0	3	25	0

Results

Results Summary for whole modelled period

Leg	Max V/C Ratio	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
East	0.02	1.75	0.0	0.5	A
North	0.11	1.89	0.1	0.5	A
West	0.11	1.85	0.1	0.5	A
South	0.15	1.93	0.2	0.5	A

Main Results for each time segment

17:00 - 17:15

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	23	339	2208	0.010	23	0.0	1.646	A
North	166	18	2152	0.077	166	0.1	1.812	A
West	166	88	2222	0.075	166	0.1	1.750	A
South	224	156	2246	0.100	223	0.1	1.779	A

17:15 - 17:30

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	27	405	2158	0.013	27	0.0	1.688	A
North	199	22	2149	0.092	199	0.1	1.844	A
West	199	105	2210	0.090	199	0.1	1.789	A
South	267	186	2223	0.120	267	0.1	1.839	A

17:30 - 17:45

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	33	496	2089	0.016	33	0.0	1.749	A
North	243	26	2146	0.113	243	0.1	1.891	A
West	243	129	2193	0.111	243	0.1	1.845	A
South	327	228	2192	0.149	327	0.2	1.930	A

17:45 - 18:00

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	33	497	2089	0.016	33	0.0	1.749	A
North	243	26	2146	0.113	243	0.1	1.891	A
West	243	129	2193	0.111	243	0.1	1.845	A
South	327	228	2192	0.149	327	0.2	1.930	A

18:00 - 18:15

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	27	406	2158	0.013	27	0.0	1.691	A
North	199	22	2149	0.092	199	0.1	1.845	A
West	199	105	2210	0.090	199	0.1	1.789	A
South	267	186	2223	0.120	267	0.1	1.839	A

18:15 - 18:30

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	23	340	2207	0.010	23	0.0	1.647	A
North	166	18	2152	0.077	166	0.1	1.815	A
West	166	88	2222	0.075	166	0.1	1.750	A
South	224	156	2246	0.100	224	0.1	1.779	A

Queue Variation Results for each time segment

17:00 - 17:15

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.01	0.00	0.00	0.01	0.01			N/A	N/A
North	0.08	0.00	0.00	0.08	0.08			N/A	N/A
West	0.08	0.00	0.00	0.08	0.08			N/A	N/A
South	0.11	0.00	0.00	0.11	0.11			N/A	N/A

17:15 - 17:30

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.01	0.01	0.25	0.45	0.48			N/A	N/A
North	0.10	0.03	0.25	0.45	0.48			N/A	N/A
West	0.10	0.03	0.25	0.45	0.48			N/A	N/A
South	0.14	0.00	0.00	0.14	0.14			N/A	N/A

17:30 - 17:45

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.02	0.02	0.25	0.46	0.48			N/A	N/A
North	0.13	0.03	0.26	0.46	0.49			N/A	N/A
West	0.12	0.03	0.26	0.46	0.49			N/A	N/A
South	0.17	0.03	0.25	0.46	0.48			N/A	N/A

17:45 - 18:00

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.02	0.00	0.00	0.02	0.02			N/A	N/A
North	0.13	0.00	0.00	0.13	0.13			N/A	N/A
West	0.12	0.00	0.00	0.12	0.12			N/A	N/A
South	0.18	0.00	0.00	0.18	0.18			N/A	N/A

18:00 - 18:15

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.01	0.00	0.00	0.01	0.01			N/A	N/A
North	0.10	0.00	0.00	0.10	0.10			N/A	N/A
West	0.10	0.00	0.00	0.10	0.10			N/A	N/A
South	0.14	0.00	0.00	0.14	0.14			N/A	N/A

18:15 - 18:30

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.01	0.00	0.00	0.01	0.01			N/A	N/A
North	0.08	0.00	0.00	0.08	0.08			N/A	N/A
West	0.08	0.00	0.00	0.08	0.08			N/A	N/A
South	0.11	0.00	0.00	0.11	0.11			N/A	N/A

Future Roundabout - 2028 Total, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Intersection Network

Intersections

Intersection	Name	Intersection type	Use circulating lanes	Leg order	Intersection Delay (s)	Intersection LOS
1	untitled	Standard Roundabout		East, North, West, South	1.96	A

Intersection Network Options

Driving side	Lighting
Right	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D7	2028 Total	AM	ONE HOUR	08:00	09:30	15

Vehicle mix source	PCE Factor for a Truck (PCE)
Truck Percentages	2.00

Demand overview (Traffic)

Leg	Linked leg	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
East		✓	90	100.000
North		✓	251	100.000
West		✓	91	100.000
South		✓	326	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		East	North	West	South
From	East	0	49	22	19
	North	38	0	163	50
	West	13	62	0	16
	South	14	293	19	0

Vehicle Mix

Truck Percentages

		To			
		East	North	West	South
From	East	0	6	13	0
	North	0	0	4	12

	West	33	38	0	19
	South	10	4	26	0

Results

Results Summary for whole modelled period

Leg	Max V/C Ratio	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
East	0.04	1.67	0.0	0.5	A
North	0.13	2.00	0.2	0.5	A
West	0.06	2.17	0.1	0.5	A
South	0.16	1.95	0.2	0.5	A

Main Results for each time segment

08:00 - 08:15

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	68	281	2357	0.029	68	0.0	1.571	A
North	189	45	2095	0.090	189	0.1	1.888	A
West	69	80	1778	0.039	68	0.0	2.105	A
South	245	85	2243	0.109	245	0.1	1.801	A

08:15 - 08:30

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	81	336	2311	0.035	81	0.0	1.613	A
North	226	54	2088	0.108	226	0.1	1.932	A
West	82	96	1769	0.046	82	0.0	2.132	A
South	293	102	2228	0.132	293	0.2	1.859	A

08:30 - 08:45

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	99	412	2247	0.044	99	0.0	1.674	A
North	276	66	2080	0.133	276	0.2	1.996	A
West	100	118	1757	0.057	100	0.1	2.172	A
South	359	124	2209	0.162	359	0.2	1.945	A

08:45 - 09:00

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	99	412	2247	0.044	99	0.0	1.675	A
North	276	66	2080	0.133	276	0.2	1.996	A
West	100	118	1757	0.057	100	0.1	2.172	A
South	359	124	2209	0.162	359	0.2	1.945	A

09:00 - 09:15

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	81	336	2310	0.035	81	0.0	1.613	A
North	226	54	2088	0.108	226	0.1	1.934	A
West	82	96	1769	0.046	82	0.0	2.134	A
South	293	102	2228	0.132	293	0.2	1.862	A

09:15 - 09:30

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	68	282	2356	0.029	68	0.0	1.572	A
North	189	45	2095	0.090	189	0.1	1.888	A
West	69	81	1778	0.039	69	0.0	2.107	A
South	245	85	2243	0.109	246	0.1	1.804	A

Queue Variation Results for each time segment

08:00 - 08:15

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.03	0.00	0.00	0.03	0.03			N/A	N/A
North	0.10	0.00	0.00	0.10	0.10			N/A	N/A
West	0.04	0.00	0.00	0.04	0.04			N/A	N/A
South	0.12	0.00	0.00	0.12	0.12			N/A	N/A

08:15 - 08:30

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.04	0.03	0.25	0.45	0.48			N/A	N/A
North	0.12	0.00	0.00	0.12	0.12			N/A	N/A
West	0.05	0.03	0.25	0.45	0.48			N/A	N/A
South	0.15	0.00	0.00	0.15	0.15			N/A	N/A

08:30 - 08:45

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.05	0.03	0.25	0.45	0.48			N/A	N/A
North	0.15	0.03	0.25	0.46	0.48			N/A	N/A
West	0.06	0.03	0.26	0.46	0.49			N/A	N/A
South	0.19	0.03	0.25	0.46	0.48			N/A	N/A

08:45 - 09:00

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.05	0.00	0.00	0.05	0.05			N/A	N/A
North	0.15	0.00	0.00	0.15	0.15			N/A	N/A
West	0.06	0.00	0.00	0.06	0.06			N/A	N/A
South	0.19	0.03	0.25	0.45	0.48			N/A	N/A

09:00 - 09:15

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.04	0.00	0.00	0.04	0.04			N/A	N/A
North	0.12	0.00	0.00	0.12	0.12			N/A	N/A
West	0.05	0.00	0.00	0.05	0.05			N/A	N/A
South	0.15	0.00	0.00	0.15	0.15			N/A	N/A

09:15 - 09:30

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.03	0.00	0.00	0.03	0.03			N/A	N/A
North	0.10	0.00	0.00	0.10	0.10			N/A	N/A
West	0.04	0.00	0.00	0.04	0.04			N/A	N/A
South	0.12	0.00	0.00	0.12	0.12			N/A	N/A

Future Roundabout - 2028 Total, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Intersection Network

Intersections

Intersection	Name	Intersection type	Use circulating lanes	Leg order	Intersection Delay (s)	Intersection LOS
1	untitled	Standard Roundabout		East, North, West, South	1.93	A

Intersection Network Options

Driving side	Lighting
Right	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D8	2028 Total	PM	ONE HOUR	17:00	18:30	15

Vehicle mix source	PCE Factor for a Truck (PCE)
Truck Percentages	2.00

Demand overview (Traffic)

Leg	Linked leg	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
East		✓	66	100.000
North		✓	264	100.000
West		✓	230	100.000
South		✓	301	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		East	North	West	South
From	East	0	39	12	15
	North	62	0	122	80
	West	14	173	0	43
	South	18	275	8	0

Vehicle Mix

Truck Percentages

		To			
		East	North	West	South
From	East	0	18	0	10
	North	3	0	0	8

	West	33	6	0	5
	South	0	3	25	0

Results

Results Summary for whole modelled period

Leg	Max V/C Ratio	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
East	0.04	1.80	0.0	0.5	A
North	0.14	1.95	0.2	0.5	A
West	0.12	1.90	0.1	0.5	A
South	0.15	1.97	0.2	0.5	A

Main Results for each time segment

17:00 - 17:15

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	50	343	2189	0.023	50	0.0	1.682	A
North	199	26	2147	0.093	198	0.1	1.847	A
West	173	118	2190	0.079	173	0.1	1.784	A
South	227	187	2223	0.102	226	0.1	1.802	A

17:15 - 17:30

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	59	410	2138	0.028	59	0.0	1.730	A
North	237	31	2143	0.111	237	0.1	1.888	A
West	207	141	2173	0.095	207	0.1	1.829	A
South	271	224	2196	0.123	270	0.1	1.868	A

17:30 - 17:45

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	73	502	2070	0.035	73	0.0	1.801	A
North	291	39	2138	0.136	291	0.2	1.948	A
West	253	173	2151	0.118	253	0.1	1.896	A
South	331	274	2158	0.154	331	0.2	1.970	A

17:45 - 18:00

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	73	502	2070	0.035	73	0.0	1.801	A
North	291	39	2138	0.136	291	0.2	1.948	A
West	253	173	2151	0.118	253	0.1	1.896	A
South	331	274	2158	0.154	331	0.2	1.970	A

18:00 - 18:15

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	59	410	2138	0.028	59	0.0	1.733	A
North	237	31	2143	0.111	237	0.1	1.888	A
West	207	141	2173	0.095	207	0.1	1.832	A
South	271	224	2196	0.123	271	0.1	1.869	A

18:15 - 18:30

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	50	343	2188	0.023	50	0.0	1.682	A
North	199	26	2147	0.093	199	0.1	1.850	A
West	173	118	2189	0.079	173	0.1	1.787	A
South	227	188	2223	0.102	227	0.1	1.802	A

Queue Variation Results for each time segment

17:00 - 17:15

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.02	0.00	0.00	0.02	0.02			N/A	N/A
North	0.10	0.00	0.00	0.10	0.10			N/A	N/A
West	0.09	0.00	0.00	0.09	0.09			N/A	N/A
South	0.11	0.00	0.00	0.11	0.11			N/A	N/A

17:15 - 17:30

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.03	0.03	0.25	0.45	0.48			N/A	N/A
North	0.12	0.00	0.00	0.12	0.12			N/A	N/A
West	0.10	0.03	0.25	0.45	0.48			N/A	N/A
South	0.14	0.00	0.00	0.14	0.14			N/A	N/A

17:30 - 17:45

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.04	0.00	0.00	0.04	0.04			N/A	N/A
North	0.16	0.03	0.25	0.46	0.48			N/A	N/A
West	0.13	0.03	0.26	0.46	0.49			N/A	N/A
South	0.18	0.03	0.25	0.46	0.48			N/A	N/A

17:45 - 18:00

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.04	0.00	0.00	0.04	0.04			N/A	N/A
North	0.16	0.00	0.00	0.16	0.16			N/A	N/A
West	0.13	0.00	0.00	0.13	0.13			N/A	N/A
South	0.18	0.00	0.00	0.18	0.18			N/A	N/A

18:00 - 18:15

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.03	0.00	0.00	0.03	0.03			N/A	N/A
North	0.12	0.00	0.00	0.12	0.12			N/A	N/A
West	0.11	0.00	0.00	0.11	0.11			N/A	N/A
South	0.14	0.00	0.00	0.14	0.14			N/A	N/A

18:15 - 18:30

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.02	0.00	0.00	0.02	0.02			N/A	N/A
North	0.10	0.00	0.00	0.10	0.10			N/A	N/A
West	0.09	0.00	0.00	0.09	0.09			N/A	N/A
South	0.11	0.00	0.00	0.11	0.11			N/A	N/A

Future Roundabout - 2033 Total, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Intersection Network

Intersections

Intersection	Name	Intersection type	Use circulating lanes	Leg order	Intersection Delay (s)	Intersection LOS
1	untitled	Standard Roundabout		East, North, West, South	2.02	A

Intersection Network Options

Driving side	Lighting
Right	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D9	2033 Total	AM	ONE HOUR	08:00	09:30	15

Vehicle mix source	PCE Factor for a Truck (PCE)
Truck Percentages	2.00

Demand overview (Traffic)

Leg	Linked leg	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
East		✓	117	100.000
North		✓	300	100.000
West		✓	103	100.000
South		✓	345	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		East	North	West	South
From	East	0	67	28	22
	North	59	0	183	58
	West	17	70	0	16
	South	18	307	20	0

Vehicle Mix

Truck Percentages

		To			
		East	North	West	South
From	East	0	6	13	0
	North	0	0	4	12

	West	33	38	0	19
	South	10	4	26	0

Results

Results Summary for whole modelled period

Leg	Max V/C Ratio	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
East	0.06	1.72	0.1	0.5	A
North	0.16	2.06	0.2	0.5	A
West	0.07	2.22	0.1	0.5	A
South	0.17	2.00	0.2	0.5	A

Main Results for each time segment

08:00 - 08:15

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	88	298	2339	0.038	88	0.0	1.598	A
North	226	53	2094	0.108	225	0.1	1.926	A
West	78	104	1761	0.044	77	0.0	2.137	A
South	260	110	2222	0.117	259	0.1	1.833	A

08:15 - 08:30

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	105	357	2290	0.046	105	0.0	1.646	A
North	270	63	2087	0.129	270	0.1	1.981	A
West	93	125	1750	0.053	93	0.1	2.171	A
South	310	131	2204	0.141	310	0.2	1.899	A

08:30 - 08:45

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	129	437	2223	0.058	129	0.1	1.718	A
North	330	77	2076	0.159	330	0.2	2.061	A
West	113	153	1734	0.065	113	0.1	2.220	A
South	380	161	2180	0.174	380	0.2	1.999	A

08:45 - 09:00

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	129	437	2223	0.058	129	0.1	1.718	A
North	330	77	2076	0.159	330	0.2	2.061	A
West	113	153	1734	0.065	113	0.1	2.220	A
South	380	161	2180	0.174	380	0.2	1.999	A

09:00 - 09:15

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	105	357	2290	0.046	105	0.0	1.649	A
North	270	63	2087	0.129	270	0.1	1.981	A
West	93	125	1750	0.053	93	0.1	2.173	A
South	310	131	2204	0.141	310	0.2	1.902	A

09:15 - 09:30

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	88	299	2339	0.038	88	0.0	1.598	A
North	226	53	2094	0.108	226	0.1	1.928	A
West	78	105	1761	0.044	78	0.0	2.139	A
South	260	110	2222	0.117	260	0.1	1.836	A

Queue Variation Results for each time segment

08:00 - 08:15

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.04	0.00	0.00	0.04	0.04			N/A	N/A
North	0.12	0.00	0.00	0.12	0.12			N/A	N/A
West	0.05	0.00	0.00	0.05	0.05			N/A	N/A
South	0.13	0.00	0.00	0.13	0.13			N/A	N/A

08:15 - 08:30

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.05	0.03	0.25	0.45	0.48			N/A	N/A
North	0.15	0.00	0.00	0.15	0.15			N/A	N/A
West	0.06	0.03	0.25	0.45	0.48			N/A	N/A
South	0.16	0.00	0.00	0.16	0.16			N/A	N/A

08:30 - 08:45

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.06	0.03	0.26	0.46	0.49			N/A	N/A
North	0.19	0.03	0.25	0.46	0.48			N/A	N/A
West	0.07	0.03	0.26	0.47	0.49			N/A	N/A
South	0.21	0.03	0.25	0.46	0.48			N/A	N/A

08:45 - 09:00

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.06	0.00	0.00	0.06	0.06			N/A	N/A
North	0.19	0.03	0.25	0.45	0.48			N/A	N/A
West	0.07	0.00	0.00	0.07	0.07			N/A	N/A
South	0.21	0.03	0.25	0.45	0.48			N/A	N/A

09:00 - 09:15

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.05	0.00	0.00	0.05	0.05			N/A	N/A
North	0.15	0.00	0.00	0.15	0.15			N/A	N/A
West	0.06	0.00	0.00	0.06	0.06			N/A	N/A
South	0.16	0.00	0.00	0.16	0.16			N/A	N/A

09:15 - 09:30

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.04	0.00	0.00	0.04	0.04			N/A	N/A
North	0.12	0.00	0.00	0.12	0.12			N/A	N/A
West	0.05	0.00	0.00	0.05	0.05			N/A	N/A
South	0.13	0.00	0.00	0.13	0.13			N/A	N/A

Future Roundabout - 2033 Total, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Intersection Network

Intersections

Intersection	Name	Intersection type	Use circulating lanes	Leg order	Intersection Delay (s)	Intersection LOS
1	untitled	Standard Roundabout		East, North, West, South	2.00	A

Intersection Network Options

Driving side	Lighting
Right	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D10	2033 Total	PM	ONE HOUR	17:00	18:30	15

Vehicle mix source	PCE Factor for a Truck (PCE)
Truck Percentages	2.00

Demand overview (Traffic)

Leg	Linked leg	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
East		✓	100	100.000
North		✓	319	100.000
West		✓	251	100.000
South		✓	321	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		East	North	West	South
From	East	0	64	18	18
	North	96	0	135	88
	West	19	188	0	44
	South	22	291	8	0

Vehicle Mix

Truck Percentages

		To			
		East	North	West	South
From	East	0	18	0	10
	North	3	0	0	8

	West	33	6	0	5
	South	0	3	25	0

Results

Results Summary for whole modelled period

Leg	Max V/C Ratio	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
East	0.05	1.87	0.1	0.5	A
North	0.16	2.02	0.2	0.5	A
West	0.13	1.96	0.2	0.5	A
South	0.17	2.04	0.2	0.5	A

Main Results for each time segment

17:00 - 17:15

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	75	366	2163	0.035	75	0.0	1.723	A
North	240	33	2143	0.112	240	0.1	1.891	A
West	189	152	2158	0.088	189	0.1	1.827	A
South	242	228	2194	0.110	241	0.1	1.842	A

17:15 - 17:30

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	90	438	2110	0.043	90	0.0	1.781	A
North	287	40	2138	0.134	287	0.2	1.944	A
West	226	182	2137	0.106	226	0.1	1.882	A
South	289	272	2161	0.134	288	0.2	1.922	A

17:30 - 17:45

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	110	536	2037	0.054	110	0.1	1.867	A
North	351	48	2132	0.165	351	0.2	2.021	A
West	276	222	2108	0.131	276	0.2	1.965	A
South	353	333	2115	0.167	353	0.2	2.043	A

17:45 - 18:00

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	110	536	2037	0.054	110	0.1	1.867	A
North	351	48	2132	0.165	351	0.2	2.021	A
West	276	222	2108	0.131	276	0.2	1.965	A
South	353	334	2115	0.167	353	0.2	2.043	A

18:00 - 18:15

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	90	438	2110	0.043	90	0.0	1.784	A
North	287	40	2138	0.134	287	0.2	1.946	A
West	226	182	2137	0.106	226	0.1	1.883	A
South	289	273	2161	0.134	289	0.2	1.923	A

18:15 - 18:30

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	75	367	2163	0.035	75	0.0	1.723	A
North	240	33	2143	0.112	240	0.1	1.894	A
West	189	152	2158	0.088	189	0.1	1.827	A
South	242	228	2194	0.110	242	0.1	1.843	A

Queue Variation Results for each time segment

17:00 - 17:15

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.04	0.00	0.00	0.04	0.04			N/A	N/A
North	0.13	0.00	0.00	0.13	0.13			N/A	N/A
West	0.10	0.00	0.00	0.10	0.10			N/A	N/A
South	0.12	0.00	0.00	0.12	0.12			N/A	N/A

17:15 - 17:30

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.04	0.03	0.25	0.45	0.48			N/A	N/A
North	0.15	0.00	0.00	0.15	0.15			N/A	N/A
West	0.12	0.00	0.00	0.12	0.12			N/A	N/A
South	0.15	0.00	0.00	0.15	0.15			N/A	N/A

17:30 - 17:45

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.06	0.03	0.26	0.46	0.49			N/A	N/A
North	0.20	0.03	0.25	0.46	0.48			N/A	N/A
West	0.15	0.03	0.25	0.46	0.48			N/A	N/A
South	0.20	0.03	0.25	0.46	0.48			N/A	N/A

17:45 - 18:00

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.06	0.00	0.00	0.06	0.06			N/A	N/A
North	0.20	0.03	0.25	0.45	0.48			N/A	N/A
West	0.15	0.00	0.00	0.15	0.15			N/A	N/A
South	0.20	0.03	0.25	0.45	0.48			N/A	N/A

18:00 - 18:15

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.04	0.00	0.00	0.04	0.04			N/A	N/A
North	0.16	0.00	0.00	0.16	0.16			N/A	N/A
West	0.12	0.00	0.00	0.12	0.12			N/A	N/A
South	0.15	0.00	0.00	0.15	0.15			N/A	N/A

18:15 - 18:30

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.04	0.00	0.00	0.04	0.04			N/A	N/A
North	0.13	0.00	0.00	0.13	0.13			N/A	N/A
West	0.10	0.00	0.00	0.10	0.10			N/A	N/A
South	0.12	0.00	0.00	0.12	0.12			N/A	N/A

Future Roundabout - 2043 Total, AM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Intersection Network

Intersections

Intersection	Name	Intersection type	Use circulating lanes	Leg order	Intersection Delay (s)	Intersection LOS
1	untitled	Standard Roundabout		East, North, West, South	2.11	A

Intersection Network Options

Driving side	Lighting
Right	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D11	2043 Total	AM	ONE HOUR	08:00	09:30	15

Vehicle mix source	PCE Factor for a Truck (PCE)
Truck Percentages	2.00

Demand overview (Traffic)

Leg	Linked leg	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
East		✓	172	100.000
North		✓	389	100.000
West		✓	123	100.000
South		✓	360	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		East	North	West	South
From	East	0	103	40	29
	North	103	0	214	72
	West	25	82	0	16
	South	25	315	20	0

Vehicle Mix

Truck Percentages

		To			
		East	North	West	South
From	East	0	6	13	0
	North	0	0	4	12

	West	33	38	0	19
	South	10	4	26	0

Results

Results Summary for whole modelled period

Leg	Max V/C Ratio	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
East	0.09	1.79	0.1	0.5	A
North	0.21	2.19	0.3	0.7	A
West	0.08	2.31	0.1	0.5	A
South	0.19	2.08	0.2	0.5	A

Main Results for each time segment

08:00 - 08:15

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	129	313	2324	0.056	129	0.1	1.639	A
North	293	67	2091	0.140	292	0.2	2.001	A
West	93	153	1731	0.054	92	0.1	2.197	A
South	271	158	2185	0.124	270	0.1	1.880	A

08:15 - 08:30

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	155	375	2272	0.068	155	0.1	1.699	A
North	350	80	2082	0.168	350	0.2	2.078	A
West	111	183	1714	0.065	111	0.1	2.244	A
South	324	189	2160	0.150	323	0.2	1.960	A

08:30 - 08:45

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	189	459	2201	0.086	189	0.1	1.788	A
North	428	98	2069	0.207	428	0.3	2.194	A
West	135	224	1691	0.080	135	0.1	2.313	A
South	396	231	2125	0.187	396	0.2	2.082	A

08:45 - 09:00

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	189	459	2201	0.086	189	0.1	1.789	A
North	428	98	2069	0.207	428	0.3	2.194	A
West	135	225	1691	0.080	135	0.1	2.313	A
South	396	231	2125	0.187	396	0.2	2.082	A

09:00 - 09:15

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	155	375	2272	0.068	155	0.1	1.699	A
North	350	80	2081	0.168	350	0.2	2.079	A
West	111	184	1714	0.065	111	0.1	2.246	A
South	324	189	2159	0.150	324	0.2	1.962	A

09:15 - 09:30

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	129	314	2323	0.056	130	0.1	1.643	A
North	293	67	2091	0.140	293	0.2	2.003	A
West	93	154	1731	0.054	93	0.1	2.199	A
South	271	158	2184	0.124	271	0.1	1.880	A

Queue Variation Results for each time segment

08:00 - 08:15

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.06	0.00	0.00	0.06	0.06			N/A	N/A
North	0.16	0.00	0.00	0.16	0.16			N/A	N/A
West	0.06	0.00	0.00	0.06	0.06			N/A	N/A
South	0.14	0.00	0.00	0.14	0.14			N/A	N/A

08:15 - 08:30

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.07	0.03	0.25	0.45	0.48			N/A	N/A
North	0.20	0.00	0.00	0.20	0.20			N/A	N/A
West	0.07	0.03	0.25	0.45	0.48			N/A	N/A
South	0.18	0.00	0.00	0.18	0.18			N/A	N/A

08:30 - 08:45

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.09	0.03	0.26	0.47	0.49			N/A	N/A
North	0.26	0.03	0.25	0.45	0.48			N/A	N/A
West	0.09	0.03	0.26	0.47	0.49			N/A	N/A
South	0.23	0.03	0.25	0.45	0.48			N/A	N/A

08:45 - 09:00

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.09	0.00	0.00	0.09	0.09			N/A	N/A
North	0.26	0.03	0.27	0.48	0.74			N/A	N/A
West	0.09	0.00	0.00	0.09	0.09			N/A	N/A
South	0.23	0.03	0.25	0.45	0.48			N/A	N/A

09:00 - 09:15

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.07	0.00	0.00	0.07	0.07			N/A	N/A
North	0.20	0.00	0.00	0.20	0.20			N/A	N/A
West	0.07	0.00	0.00	0.07	0.07			N/A	N/A
South	0.18	0.00	0.00	0.18	0.18			N/A	N/A

09:15 - 09:30

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.06	0.00	0.00	0.06	0.06			N/A	N/A
North	0.16	0.00	0.00	0.16	0.16			N/A	N/A
West	0.06	0.00	0.00	0.06	0.06			N/A	N/A
South	0.14	0.00	0.00	0.14	0.14			N/A	N/A

Future Roundabout - 2043 Total, PM

Data Errors and Warnings

Severity	Area	Item	Description
Warning	Queue variations	Analysis Options	Queue percentiles may be unreliable if the mean queue in any time segment is very low or very high.

Intersection Network

Intersections

Intersection	Name	Intersection type	Use circulating lanes	Leg order	Intersection Delay (s)	Intersection LOS
1	untitled	Standard Roundabout		East, North, West, South	2.12	A

Intersection Network Options

Driving side	Lighting
Right	Normal/unknown

Traffic Demand

Demand Set Details

ID	Scenario name	Time Period name	Traffic profile type	Start time (HH:mm)	Finish time (HH:mm)	Time segment length (min)
D12	2043 Total	PM	ONE HOUR	17:00	18:30	15

Vehicle mix source	PCE Factor for a Truck (PCE)
Truck Percentages	2.00

Demand overview (Traffic)

Leg	Linked leg	Use O-D data	Average Demand (Veh/hr)	Scaling Factor (%)
East		✓	165	100.000
North		✓	413	100.000
West		✓	281	100.000
South		✓	345	100.000

Origin-Destination Data

Demand (Veh/hr)

		To			
		East	North	West	South
From	East	0	108	31	26
	North	158	0	156	99
	West	29	208	0	44
	South	30	307	8	0

Vehicle Mix

Truck Percentages

		To			
		East	North	West	South
From	East	0	18	0	10
	North	3	0	0	8

	West	33	6	0	5
	South	0	3	25	0

Results

Results Summary for whole modelled period

Leg	Max V/C Ratio	Max Delay (s)	Max Queue (Veh)	Max 95th percentile Queue (Veh)	Max LOS
East	0.09	1.97	0.1	0.5	A
North	0.21	2.16	0.3	1.0	A
West	0.15	2.09	0.2	0.5	A
South	0.19	2.17	0.2	0.5	A

Main Results for each time segment

17:00 - 17:15

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	124	393	2142	0.058	124	0.1	1.782	A
North	311	49	2133	0.146	310	0.2	1.975	A
West	212	213	2101	0.101	211	0.1	1.904	A
South	260	297	2144	0.121	259	0.1	1.909	A

17:15 - 17:30

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	148	470	2085	0.071	148	0.1	1.857	A
North	371	58	2126	0.175	371	0.2	2.050	A
West	253	254	2072	0.122	253	0.1	1.978	A
South	310	355	2101	0.148	310	0.2	2.010	A

17:30 - 17:45

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	182	576	2007	0.091	182	0.1	1.972	A
North	455	72	2117	0.215	454	0.3	2.165	A
West	309	311	2032	0.152	309	0.2	2.089	A
South	380	435	2041	0.186	380	0.2	2.166	A

17:45 - 18:00

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	182	576	2006	0.091	182	0.1	1.972	A
North	455	72	2117	0.215	455	0.3	2.165	A
West	309	312	2032	0.152	309	0.2	2.089	A
South	380	435	2041	0.186	380	0.2	2.166	A

18:00 - 18:15

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	148	470	2085	0.071	148	0.1	1.861	A
North	371	58	2126	0.175	372	0.2	2.053	A
West	253	255	2071	0.122	253	0.1	1.979	A
South	310	355	2101	0.148	310	0.2	2.012	A

18:15 - 18:30

Leg	Total Demand (Veh/hr)	Circulating flow (Veh/hr)	Capacity (Veh/hr)	V/C Ratio	Throughput (Veh/hr)	End queue (Veh)	Delay (s)	Unsignalised level of service
East	124	394	2142	0.058	124	0.1	1.783	A
North	311	49	2133	0.146	311	0.2	1.976	A
West	212	213	2100	0.101	212	0.1	1.905	A
South	260	298	2144	0.121	260	0.1	1.909	A

Queue Variation Results for each time segment

17:00 - 17:15

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.06	0.00	0.00	0.06	0.06			N/A	N/A
North	0.17	0.00	0.00	0.17	0.17			N/A	N/A
West	0.11	0.00	0.00	0.11	0.11			N/A	N/A
South	0.14	0.00	0.00	0.14	0.14			N/A	N/A

17:15 - 17:30

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.08	0.03	0.25	0.45	0.48			N/A	N/A
North	0.21	0.00	0.00	0.21	0.21			N/A	N/A
West	0.14	0.00	0.00	0.14	0.14			N/A	N/A
South	0.17	0.00	0.00	0.17	0.17			N/A	N/A

17:30 - 17:45

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.10	0.03	0.26	0.47	0.49			N/A	N/A
North	0.27	0.03	0.25	0.45	0.48			N/A	N/A
West	0.18	0.03	0.25	0.46	0.48			N/A	N/A
South	0.23	0.03	0.25	0.45	0.48			N/A	N/A

17:45 - 18:00

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.10	0.00	0.00	0.10	0.10			N/A	N/A
North	0.27	0.03	0.28	0.50	1.00			N/A	N/A
West	0.18	0.00	0.00	0.18	0.18			N/A	N/A
South	0.23	0.03	0.25	0.45	0.48			N/A	N/A

18:00 - 18:15

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.08	0.00	0.00	0.08	0.08			N/A	N/A
North	0.21	0.00	0.00	0.21	0.21			N/A	N/A
West	0.14	0.00	0.00	0.14	0.14			N/A	N/A
South	0.17	0.00	0.00	0.17	0.17			N/A	N/A

18:15 - 18:30

Leg	Mean (Veh)	Q05 (Veh)	Q50 (Veh)	Q90 (Veh)	Q95 (Veh)	Percentile message	Marker message	Probability of reaching or exceeding marker	Probability of exactly reaching marker
East	0.06	0.00	0.00	0.06	0.06			N/A	N/A
North	0.17	0.00	0.00	0.17	0.17			N/A	N/A
West	0.11	0.00	0.00	0.11	0.11			N/A	N/A
South	0.14	0.00	0.00	0.14	0.14			N/A	N/A