



Allanburg Area

Transportation Study

Draft Final

October 27, 2023

Prepared for:



Allanburg Area

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Prepared for:



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RVA 215701

October 27, 2023

The Corporation of the City of Thorold
Engineering Department
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Attention: Sean Dunsmore, P.Eng.
Manager of Engineering, City of Thorold

Dear Mr. Dunsmore:

Re: Allanburg Area
Draft Transportation Study

R. V. Anderson Associates Limited (RVA) is pleased to submit our report for Transportation Planning Study of the Allanburg area in the City of Thorold (City) to understand the existing and future transportation needs related to planned growth in the greater area.

Thank you for providing us with the opportunity to undertake this study. If there is any query related to this report, please feel free to contact the undersigned at 905-685-5049 ext. 4237 or by email at MDiMaria@rvanderson.com.

Yours very truly,

R.V. ANDERSON ASSOCIATES LIMITED

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Encls.: Allanburg Transportation Planning Study



Allanburg Transportation Study

Draft Final

The Corporation of the City of Thorold



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RVA 215701

October 27, 2023

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TRANSPORTATION STUDY
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EXECUTIVE SUMMARY

RVA was retained by the City of Thorold (City) to complete a Transportation Planning Study for the Allanburg area in the City of Thorold, Ontario, to understand the existing 2021 and future 2041 transportation needs related to planned growth in the greater area.

The study area for this assignment extends along the transportation network within a radius of approximately one (1) kilometre to the east side of the Allanburg bridge over the Welland canal. Key features within the limits of the study area include the roadway corridors of Lundy's Lane (RR / Hwy 20), Davis Road (Hwy 58), Allanport Road (RR 82), local roads, Allanburg Lift Bridge over the Welland Canal, and the CN rail tracks intersecting the study area roadway corridors at five (5) at-grade public crossings. At the Lundy's Lane rail crossing, additional active warning and control devices like gated crossings should be implemented.

At the onset of the study a Public Information Centre (PIC) was held on May 10, 2022, from 6:00pm to 8:00pm to receive input from the public on key issues within the study area. Based on the sign-in sheet, there were 48 attendees. Trends within attendee comments included concern about the increase in traffic that cause delays at the intersection of Centre Street and Lundy's Lane, concern about pedestrian safety, interest in implementing traffic calming measures as a response to speeding concerns along City roadways, and concerns about railway safety.

Bridge Closures

The Welland Canal is a key waterway link between Lake Ontario and Lake Erie. The Allanburg Lift Bridge provides connection to the other side of the Welland Canal along Lundy's Lane. The bridge could be closed to traffic operations due to either: accommodating ship operations (short 15-minute closure), or for bridge maintenance (long multi-day closure). Bridge status notifications at the intersection of Lundy's Lane and Allanport Road / Davis Road are not currently provided and should be considered.

For short term closures, long queues were observed along Lundy's Lane. As a result of the two-way stop-controlled intersection, southbound and westbound left turning movements at the intersection of Centre Street were made difficult by the lack of gaps from the eastbound dispersing traffic and queued vehicles stopped within the intersection. This can also result in difficulty for emergency vehicles to access the Allanburg North community as this is only access. The City should explore the implementation of intersection pavement marking and signage at the Centre Street intersection. Two key modifications are recommended: The first is to cross hatch paint the intersection area and add supporting signage to inform westbound vehicles on Lundy's Lane (RR 20) to not block the hatched intersection area. The second option is to introduce a new bridge traffic signal head at the

west side of the Centre Street intersection and a stop bar and signage on the east side directing traffic to stop at that point when bridge signal display is red. By bringing a signal display closer to the intersection it should generate higher compliance to stopping short of the side street. These alternatives are presented in **Figure 4.1**.

In addition to intersection treatments the City should explore with the Region of Niagara the implementation of a second point of access to the North Community. This could be achieved by providing a gated emergency access via Lundy's Lane at the Centre Street cul-de-sac as presented in **Figure 4.3**

Also impacted by the traffic queues generated by the bridge events is the Welland Canal Trail crossing on the west side of the Bridge and also the future canal trail crossing on the east side of the bridge. Currently traffic stopping for a bridge event encroaches into the trail crossing area on the west side sometimes require trail users to walk between stopped vehicle. It is recommended that the roadway stop bars be located 3 to 5m back from the trail crossing area and that "stop here on red" signs be implement adjacent to the stop bars. In addition, given the close proximity of the trail crossings to the lift bridge structure, it is recommended that trail crossing warning signs are installed in both directions along Lundy Lane (RR 20) to advise approaching vehicle to expect pedestrians or cyclist crossing the road. **Figure 4.1** and **Figure 4.2** illustrate these alternatives for the east and west side of the bridge, respectively.

During many bridge events, traffic queues along Lundy's Lane from were observed extending easterly past the CN railway at grade crossing up to the intersection with Davis Road / Allnport Road (Hwy 58 / RR 82). The queues extending beyond the at-grade crossing is not ideal, and although no vehicles were observed stopping on the tracks during this study's survey days it is recommended that the City refer this issue to the Region of Niagara to study and determine where any modifications are required within the Lundy's Lane (RR 20) corridor.

For long term closures, a detour for vehicles is required. The nearest crossing is the Thorold Tunnel, which is located 6km to the north of the Allanburg Lift Bridge. The next closest crossing is the Townline Tunnel, which is located 18km to the south. Consideration should be given towards planning the closure of the bridge and tunnels at different times to always provide alternate east-west routes. Additionally, consideration should be given towards planning tunnel and bridge closures at night, as there are reduced roadway traffic demands and a reduced number of bridge events at this time.

Intersection Operations Analysis

Key performance measures such as Level of Service (LOS), volume-to-capacity ratio (v/c ratio), and 95th percentile queuing was used to analyze the capacity of study intersections using Synchro/SimTraffic software and HCM methodology.

All the study intersections operate satisfactorily with ample reserve capacity under the Existing 2021 traffic conditions except for the northbound approach at the intersection of Lundy's Lane with Centre Street, is operating at LOS E under the weekday PM peak hour due to the delay in finding gaps in east-west through traffic along Lundy's Lane (RR20).

With the forecasted annual traffic growth and the planned future Allanburg development traffic to the year 2041, all the study intersections were determined to continue to operate at a satisfactory level of service with ample reserve capacity. Similar to existing conditions analysis the northbound approach still has reserve capacity with a v/c ratio is 0.51 but does continue to experience high delay for the left turn vehicles during the PM peak hour only. The forecast level of service under the 2041 Horizon year is projected to be LOS F. This increase in delay is primarily a function of increased traffic along Lundys Lane (RR 20/HWY20) and reduce gaps in traffic during the PM peak hour only. As the South community as two points of access, there is an alternative route choice to this intersection which is to utilize Allanport Road (RR 82) during the PM peak hour. Given Center Street intersection close proximity to the Allanburg lift bridge the introduction of a traffic signal at the intersection is not feasible.

Operating Speeds

Daily weekday and weekend 85th percentile operating speeds were measure and Henderson Street, Gainer Street, and Centre Street north of Lundy's Lane (RR20) were determined to have 85th percentile speeds lower than the posted speed limit for most of the weekdays and weekends. The speeds along these roadways are considered acceptable and no traffic calming measures are recommended.

The measured 85th percentile operating speeds along Centre Street south of Lundy's Lane (RR 20) and along Barron Road to Allanport Road (RR82) were determined to be greater than 10 kph over posted speed limit. These roadways are candidate for the introduction of traffic calming in the form of speed humps or speed cushions. Preliminary locations for these devices have been recommended in **Figure 8.19**

Active Transportation

Based on the City of Thorold's Transportation Master Plan, there are planned cycling network expansions of the trail network along the east side of the Welland ship canal and roadway cycling

network along Lundy's Lane (RR 20/Hwy 20), both east (painted bike lanes) and west (multi use path) of the Allanburg lift bridge. Along City streets Centre Street and Barron Road are identified as part of the network with cyclist to be accommodated on paved shoulders.

The existing pedestrian/sidewalk facilities within the Allanburg study area are limited and discontinuous. To support the existing community and forecasted growth proposed extensions are recommended to the sidewalk system to cover the entire length of Centre Street and Barron Road. Also, connections are required between the Allanburg Bridge and Centre Street along both sides of Lundy's Lane (RR 20) and at the east end of the Lundy's Lane (RR20) sidewalks with Clifton Street as shown in **Figure 3.6**.

As all these elements all overlap and must fit into the available right-of- way for Centre Street and Barron Road, a design study to review how to best to accommodate the need for traffic calming, cycling and sidewalks recommendations should be undertaken by the City. This will explore where the sidewalks should go, should they be combined with cycling and how should the speed humps/cushions be placed to work with drainage and cyclists. This study should also have a public engagement component to solicit feedback on proposed alternatives developed.

1.0 Introduction

R.V. Anderson Associates Limited (RVA) was retained by the City of Thorold (City) to complete a Transportation Study for the Allanburg Community Area in the City of Thorold, Ontario. The purpose of the study is to understand the existing and future transportation needs related to planned growth in the greater area and to assess the current traffic operations. RVA reviewed the capacity of the study area intersections under both the existing and 2041 future horizon years. RVA also reviewed data to understand and provide recommendations related to travel speeds along the community's local roadways and identify mitigation measures for operational interruptions caused by various durations of St Lawrence Seaway bridge (Allanburg Bridge) closures.

An assessment of the area transportation network under the 2021 base year and future 20-year horizon (2041) period was completed to identify transportation needs to accommodate the future growth.

2.0 Study Area

The study area consists of the Allanburg Community in the City of Thorold. This community is located south of the City's downtown, east of the City of Niagara Falls, and north of the City of Welland. The community is bisected in the east west direction by Niagara Regional Road 20/Hwy 20 (Lundy's Lane) resulting to two distinct community areas connected by Centre Street. The east-west limits of the study area are between Allanport Road (RR 82) and the Welland Canal.

The area intersections considered for this study are:

- Two-Way-Stop-Controlled (TWSC) intersection of Lundy's Lane (RR 20/Hwy 20) with Centre Street
- All way stop control (AWSC) intersection of Centre Street with Barron Road
- TWSC intersection of Centre Street with Henderson Street
- AWSC intersection of Barron Road with Gainer Street
- TWSC intersection of Allanport Road (RR 82) with Barron Road
- Signalized intersection of Davis Road (Hwy 58) / Allanport Road (RR 82) with Centre Street

Additionally, the intersections formed due to the future developments and listed below were also analyzed as part of this study:

- Addition of a west leg to the AWSC intersection of Centre Street with Barron Road
- TWSC intersection of Barron Road with Allanburg Estates Driveway
- TWSC intersection of Barron Road with Barron Road Development Driveway

The study area, intersections and rail crossings area presented in **Figure 2.1**.



Figure 2.1: Study Area for Allanburg Area Transportation Planning Study

2.1 Traffic Data

Niagara Region and the Ministry of Transportation Ontario (MTO) provided Automatic Traffic Recorder (ATR) data from June, August and October 2018, June and August 2019 and March 2020. Traffic signal timings for the study area signalized intersections were also provided.

The remaining data collection was completed by Ontario Traffic Inc. (OTI). Speed and classification counts were completed in June 2021. Turning Movement Counts (TMC) were completed in October 2021. Four (4) days of 24-hour video recording were conducted in June and October 2021. Information from Niagara Region's open data and information from Transportation Tomorrow Survey (TTS) database was also used for this analysis.

All received and collected traffic data is provided in **Appendix 1**.

3.0 Existing and Future Transportation System Network

3.1 Existing Road Network

Lundy's Lane (RR / Hwy 20) – Within the study area, Lundy's Lane (RR 20/Hwy 20) is an east-west, two-lane cross-section roadway with a posted speed limit of 50 km/h. Lundy's Lane to the west of the CN railway is classified as an arterial roadway under Schedule D of the Thorold Official Plan and falls under the jurisdiction of the Niagara Region. To the east of the CN railway, Lundy's Lane (RR 20/Hwy 20) is classified as a provincial highway and falls under the jurisdiction of the MTO. This roadway provides Allanburg residents connection to the City of Niagara Falls and provides an east-west passage across the Welland Canal.

The roadway features auxiliary eastbound and westbound left-turn lanes at its intersections with Centre Street and Davis Road (Hwy 58) / Allanport Road (RR 82). Additionally, a westbound auxiliary right-turn lane is located at the intersection with Davis Road (Hwy 58) / Allanport Road (RR 82).

Davis Road (Hwy 58) – Within the study area, Davis Road is a north-south, two-lane cross-section roadway with a posted speed limit of 80 km/h. North of Lundy's Lane (RR / Hwy 20), Davis Road is classified as a Provincial Controlled Access Highway and falls under the jurisdiction of the MTO. It provides Allanburg residents connection to the City of Thorold's downtown and to the City of St. Catharines via the Highway 58 Tunnel and Highway 406.

The roadway has auxiliary left and right turn lanes on the southbound approach at its intersection with Lundy's Lane (RR / Hwy 20).

Allanport Road (RR 82) – Within the limits of the study area, Allanport Road is a north-south, two-lane cross-section roadway with a posted speed of 80km/h. Allanport Road begins south of Lundy’s Lane (RR / Hwy 20) and is classified as a regional arterial and falls under the jurisdiction of Niagara Region. It provides a north-south connection for the Allanburg area residents to Port Robinson and areas further south. The roadway includes an auxiliary left turn lane on the northbound approach to the Lundy’s Lane (RR / Hwy 20) intersection.

Local Community Roads – Centre Street, Clifton Street and Gainer Street are classified as north-south local roadways under the jurisdiction of the City of Thorold. Barron Road, Falls Street and Henderson Street are classified as east-west local roadways under the jurisdiction of the City of Thorold. All study area local roads have a two-lane cross section and have a posted speed limit of 50 km/h.

3.2 Existing Rail Network

The Canadian National (CN) railway track crosses five (5) roadways within the study area limits, as described below:

- An at-grade public crossing on Lundy’s Lane with flashing lights, bell, and crossbucks,
- An at-grade public crossing on Henderson Street with a stop sign and crossbucks,
- An at-grade public crossing on Barron Road, west of Gainer Street, with flashing lights, bell and crossbucks,
- An at-grade public crossing on Barron Road, east of Allanport Road, with flashing lights, gates and crossbucks, and
- An at-grade public crossing on Allanport Road, south of Barron Street, with flashing lights, gates and crossbucks.

The CN railroad network within the study area, as shown in the Railway Association of Canada website, is shown in **Figure 3.1** and all active public at-grade railroad crossings are shown in **Table 3.1**.

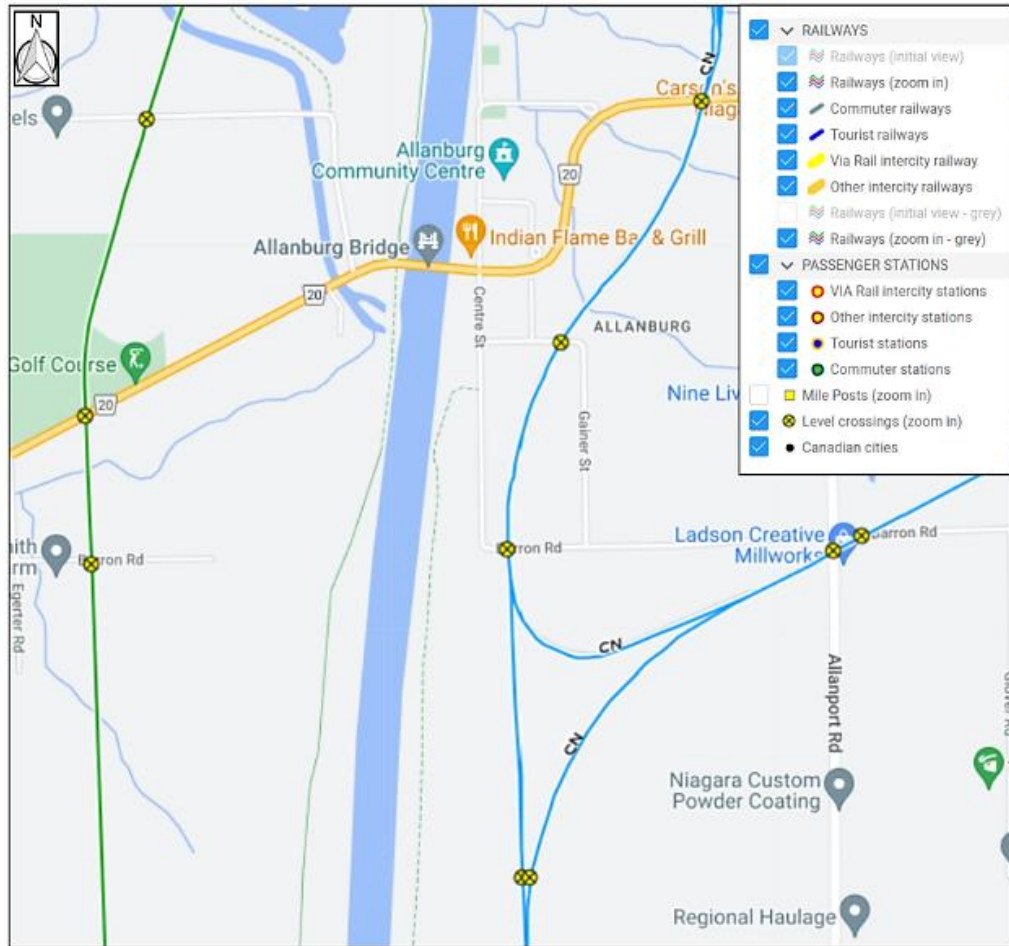


Figure 3.1: CN Railway Network in the Study Area (Courtesy: Railway Association of Canada)

Table 3.1: All Active Public At-grade Railroad Crossings Within Allanburg Study Area.

CN level railroad crossing on Lundy's Lane with flashing lights and bell (Looking east)



CN level railroad crossing on Henderson Street with stop sign (Looking east)



CN level railroad crossing on Barron Road, west of Gainer Street, with flashing lights and bell (Looking east)



CN level railroad crossing on Barron Road, east of Allanport Road, with flashing lights and gates (Looking east)



CN level railroad crossing on Allanport Road, south of Barron Street, with flashing lights and gates (Looking south)



3.3 Existing and Future Development

Development within Allanburg will occur in two areas. Allanburg North (Area 1) is located north of Lundy's Lane. This area has a single roadway access point to the community at the Lundy's Lane and Centre Street intersection. This segment of the community has 34 existing homes and one potential additional dwelling unit which would occur through lot severance.

Allanburg South (Area 2) is located south of Lundy's Lane with two roadway accesses to the community located at the Lundy's Lane and Centre Street and the Barron Road and Allanport Road intersections. The community currently has 83 existing homes. East of the CN Railway, there are planned to be 102 additional dwelling units through lot severance and the construction of the Barron Road Development which is proposed to the south of Barron Road. West of the CN Railway, there are planned to be 26 additional dwelling units through lot severance and the construction of Allanburg Estates subdivision which is proposed for the southwest quadrant of the intersection with Centre Street and Barron Road. With the completion of the Allanburg Estates Development, the intersection of Centre Street and Barron Road will become a T-intersection under all way stop control.

The Allanburg community and future developments are shown in **Figure 3.2**.



Figure 3.2: Proposed Changes to Land Uses Within Study Area Within the Analysis Period

Source: The City of Thorold

3.4 EMS and Fire Services

There are four (4) fire stations including one (1) emergency service in the City of Thorold as shown in **Figure 3.3**.

- **Thorold Fire Station 1** located on 16 Towpath Street is approximately 5 km to the north. The study area can be serviced by this fire station via Davis Road (Hwy 58).
- **Thorold Fire Station 2 and Emergency Services** located on 701 Allanburg Road is approximately 1 km to the north. This location has Emergency Services as well. The study area can be serviced by this fire station and the emergency services via Davis Road (Hwy 58).
- **Thorold Fire Station 3** located on 7 River Street in Port Robinson is approximately 4 km to the south. The study area can be serviced by this fire station via Allanport Road.
- **Thorold Fire Station 4** located on 2189 RR 20 in Welland is approximately 3 km to the west. The study area can be serviced by this fire station via Lundy's Lane.

Thorold Fire Station 2 and Emergency Services is the closest to the Allanburg Community

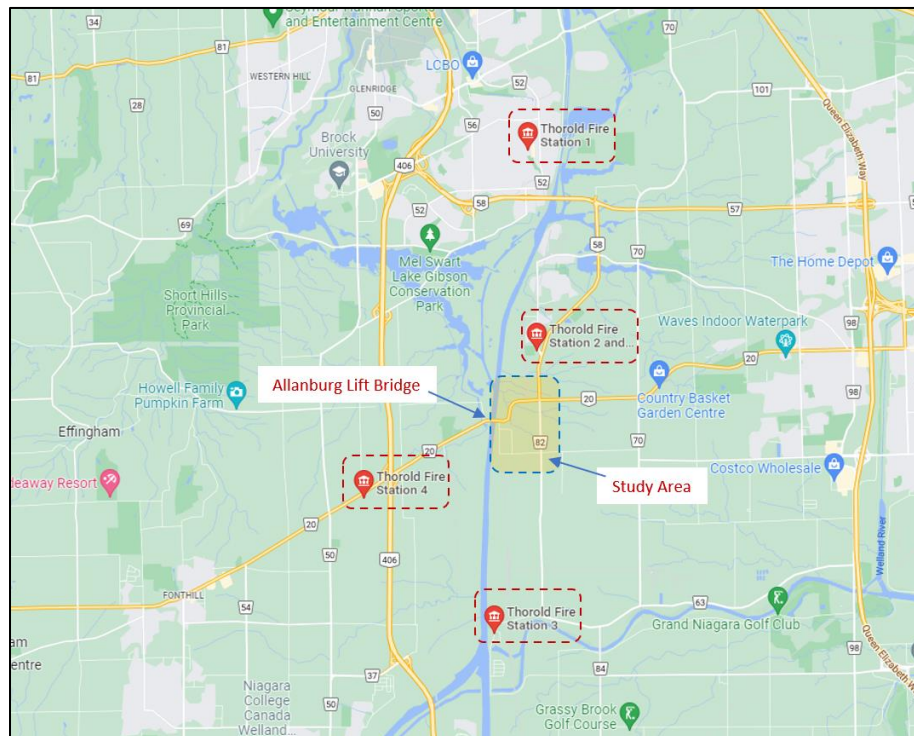


Figure 3.3: Location of Fire Stations and Emergency Services Within the City of Thorold

3.5 Allanburg Bridge

The Welland Canal forms the western boundary of the Allanburg study area and is a key waterway link between Lake Ontario and Lake Erie to the north and south of the study area, respectively. The Welland Canal has eight ship locks along its length.

The Allanburg Lift Bridge provides connection to the other side of the Welland Canal along Lundy's Lane. This bridge raises and lowers to accommodate ship passage through the canal. Operation of this bridge is managed by the St. Lawrence Seaway Management Corporation.

As per information provided by the St. Lawrence Seaway Management Corporation, the Allanburg Lift Bridge is typically closed to traffic operations due to either accommodating ship operations via the Welland Canal, or for bridge maintenance.

3.5.1 Ship Operation (Short-Term) Closures

Bridge closures to accommodate ship navigation occur from March to December as the canal is closed during the winter months. The duration of the bridge closure is approximately 15 minutes for a single ship crossing the bridge. To accommodate two ships during the same closure, the bridge is typically closed for approximately 30 minutes.

Ship frequency, displayed live on marine traffic map for Welland Canal and the Seaway Bridge Status Online Map, shows the bridge closure information for all five (5) vertical lift bridges along the Welland Canal. An average of 13 to 15 ships travel through the Allanburg Bridge within a 24-hour period. A maximum of 25 ships could travel through this area during a 24-hour period, however this is rare.

3.5.2 Maintenance (Long-Term) Closures

Bridge maintenance is typically scheduled from January to March during off shipping season. The Allanburg Bridge closures may last for multiple days at a time. Full day closures are preferred over half day closures and the maintenance is typically completed from 9:00 a.m. to 4:30 p.m. The bridge is usually closed for three (3) days during the winter months.

The bridge may be fully closed or partially closed during maintenance. During the full closure, all the travel lanes are closed. During the partial closure, a single travel lane is kept open.

3.6 Existing and Active Transportation Network

The City of Thorold Transportation Master Map C and D are presented in **Figure 3.4** and **Figure 3.5**. Map C presents the ultimate cycling network facility types, while Map D presents the priority cycling network within the City of Thorold and the Allanburg study area.

As shown in **Figure 3.4**, there is only one existing facility in the Allanburg area, and it is a north south trail (Welland Canal Trail) along the west side of the Welland Ship canal. The graphic does present future expansion to cycling facilities which include another north south trail along the east side of the canal and other facilities that utilize both Regional, MTO and City roadways. Specifically, there is a planned creation of an east-west connection along Lundy's Lane (RR 20/Hwy 20) from west of the Allanburg lift bridge to Thorold Townline Road. The portion of this connection west of the Allanburg bridge is planned to be a multi use trail (MUP) while the section east of the bridge is proposed as painted bike lanes.

Additionally, the proposed network expansion includes a number of City roadway sections in which cycling accommodation is proposed through the addition/expansion of paved shoulders. These sections include Holland Road from Kottmeier Road to Lundy's Lane (RR 20/Hwy 20) on the west side of the canal and Centre Street from Lundy's Lane (RR 20/Hwy 20) to Barron Road on the east side. The final connection is planned along Barron Road from Centre Street to Thorold Townline Road.

There is one additional section that is not identified but should be considered as it would enhance the connectivity of the cycling network in the study area. This is the section of Centre Street north of Lundy's Lane (RR 20/Hwy 20) to Falls Street. This would provide connection to the Community Centre and park.

Currently the sidewalk system within the north and south community areas is very limited and discontinuous. Currently the only areas serviced by sidewalk are:

- East side of Centre Street from Lundy's Lane (RR 20) to Henderson Street
- North side of Henderson Street from Centre Street to Clifton Street
- North and south side of Lundy's Lane (RR 20/Hwy 20) from Centre Street east to limit of existing homes.
- East side of Centre Street from Lundy's Lane (RR20/Hwy 20) to south of Allanburg Community Centre
- Lundy's Lane (RR 20) from Centre Street easterly where there are informal connections to Clifton Street on both sides of the roadway.

In reviewing future growth areas, it is recommended that sidewalk extensions be considered along Centre Street from Henderson Street to Barron Road and along Barron Road from Centre Street to Allanport Road. This will provide connectivity to the boundary roadways. Given the low traffic volumes and speeds on Gainer Street, Falls Street and Clifton Street no sidewalks are being recommended. There is a missing pedestrian linkage from the Allanburg Bridge to Centre Street on the north side of Lundy's Lane (RR 20) that should be added to the network. Also, on the south side of Lundy's Lane (RR 20) a linkage should be provided for the same section that can accommodate both pedestrians and cyclist destined to/from the future Centre Street cycling facility. The final enhancement includes formalizing a hard surface connection between the east end of the Lundys Lane (RR 20) sidewalks and Clifton Street on both the north and south sides of the road. The existing and proposed sidewalks are presented in **Figure 3.6**.

The need to plan and protect for these cycling and pedestrian accommodations should be part of future roadway cross-section development and intersection reconfigurations along Lundy's Lane (RR 20/Hwy 20), Centre Street and Barron Road within the Allanburg Community. Although the cycling accommodation was presented in the transportation master plan as paved shoulders along Centre Street and Barron Road, there is also a need to accommodate a walking network expansion in these corridors. The City should consider in their future roadway cross-section design review the alternative of using a MUP to accommodate both the walking and cycling as this may require a smaller right of way.

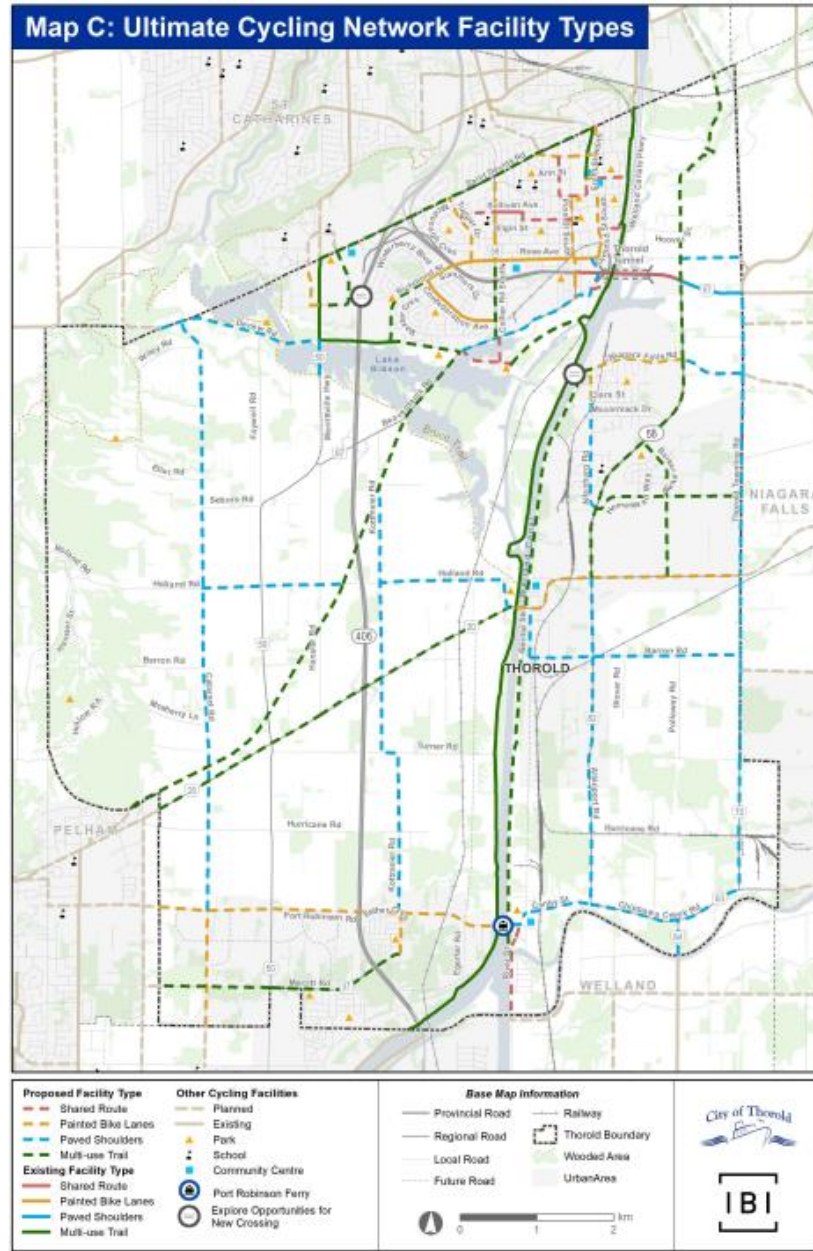


Figure 3.4: Existing & Future Proposed Bicycle Network Facility Types Within the Study Area (City of Thorold Transportation Master Plan)

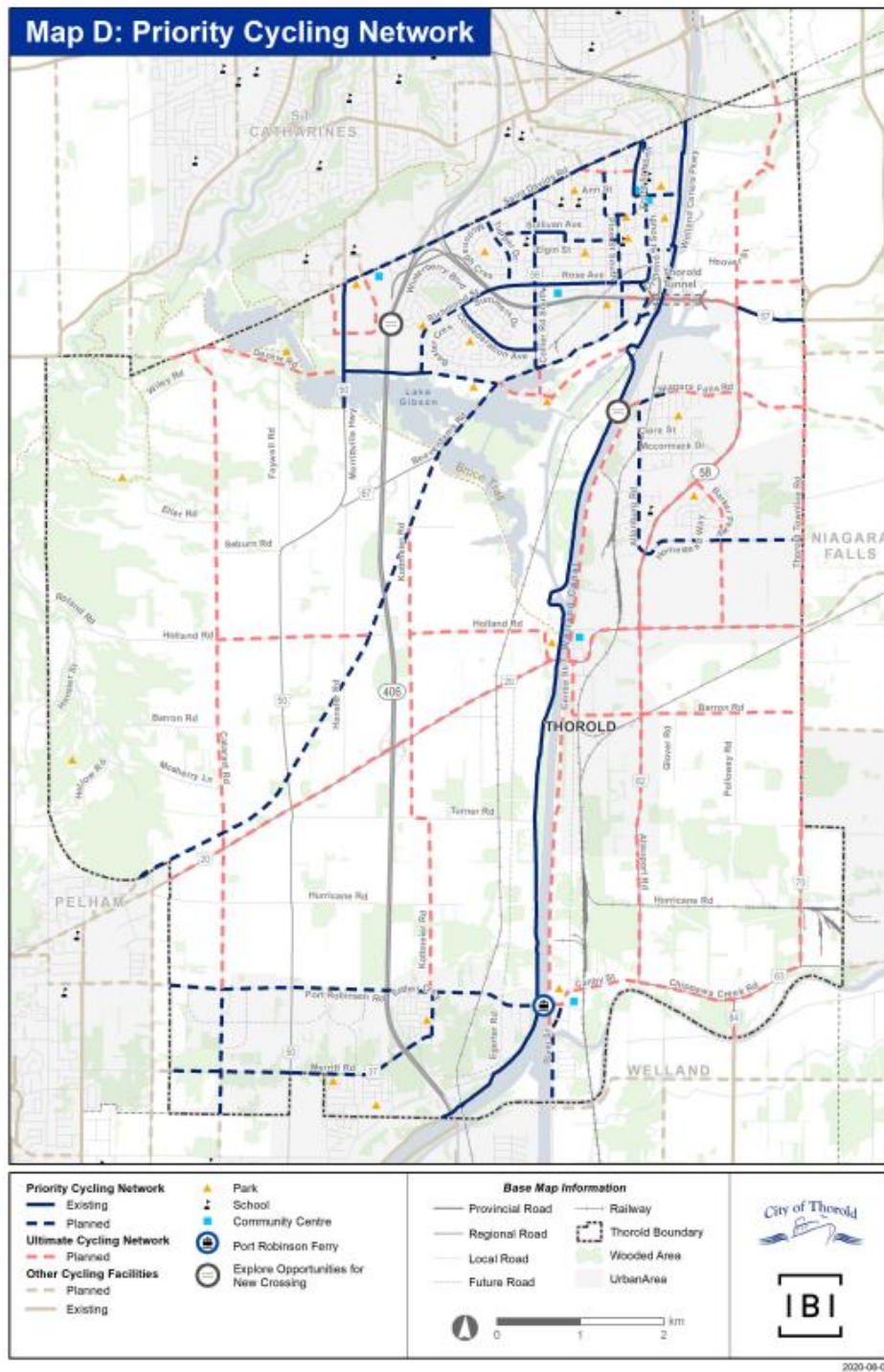


Figure 3.5: Existing and Future Proposed Bicycle Network Within the Study Area (City of Thorold Transportation Master Plan)

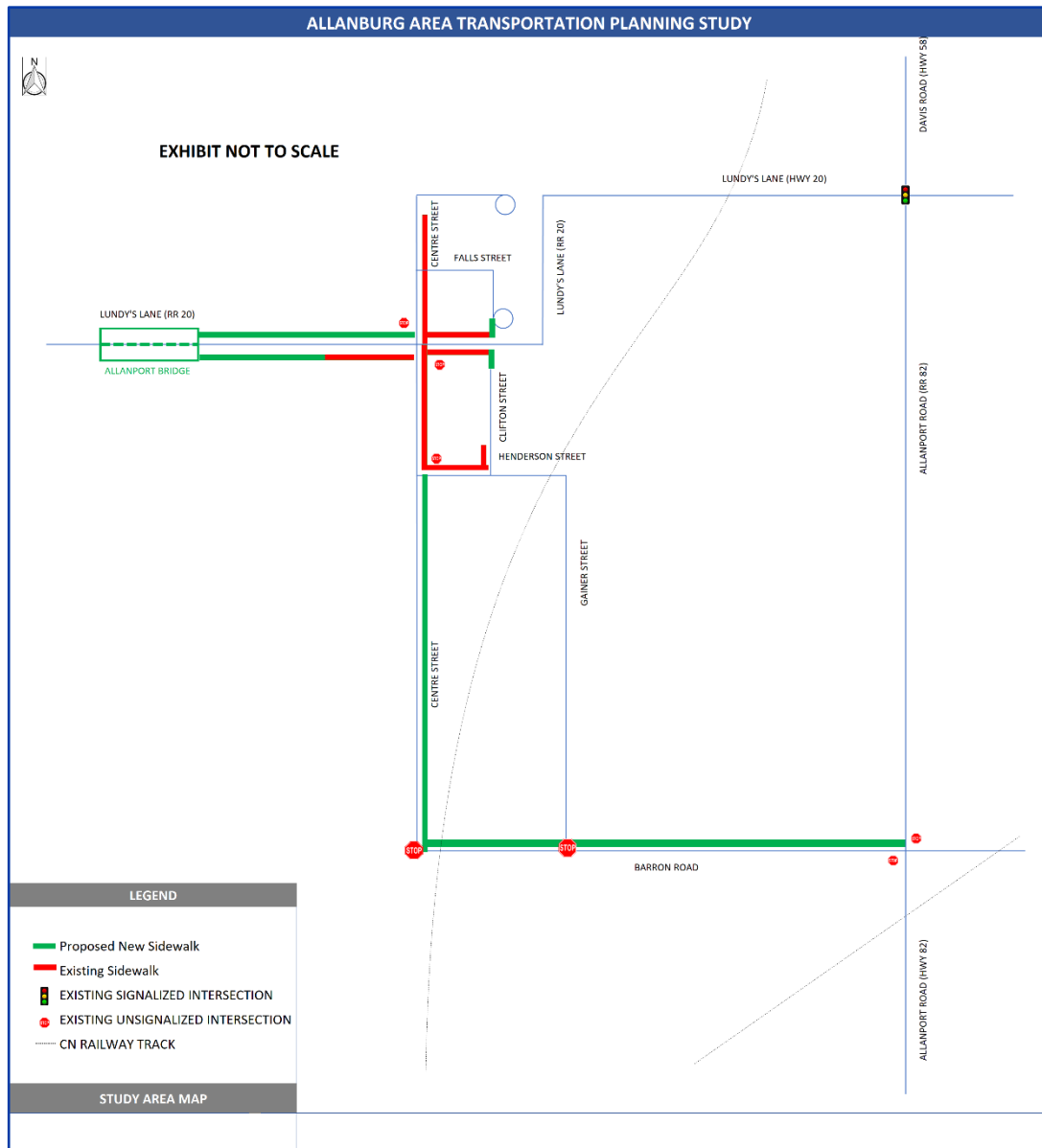


Figure 3.6: Existing and Future Proposed Sidewalks

4.0 Impacts from Bridge Events

4.1 Ship (Short-Term) Closures

4.1.1 Observed Roadway Operations

As part of the transportation study 24-hour video recordings of Allanburg Lift Bridge operations and its impact on traffic operations along adjacent roadway network on the east side of the canal were captured from Sunday, October 10, 2021, to Thursday, October 14, 2021. A summary of observations is listed below:

- Two (2) to six (6) bridge closures were observed per day. No bridge events were observed past 7:00 pm.
- The bridge was closed for approximately 9 - 10 minutes before the arrival of the ship. It took approximately 2.5 minutes for the vertical lift bridge to be lowered once the ship had passed.
- Only one ship was observed to be crossing during each of these bridge closures.
- The bridge was closed for an average time of approximately 12 – 15 minutes per closure.
- Long queues were observed along each direction on Lundy's Lane due to each bridge closure.
- westbound queues along Lundy's Lane ranged from 13 to 183 vehicles (97.5 m to 1.37 km), during each bridge closures.
- Vehicles waiting to make left turn from Lundy's Lane on to Centre Street experienced significant delay in finding gaps in through traffic on Lundy's Lane due to intersection blockages.
- The westbound left-turning vehicles at Centre Street created long queues of approximately 135 m in length (i.e., around 18 vehicles) due to vehicles waiting to find gaps in the flushing eastbound traffic once the bridge has re-opened. This queue length exceeded the existing left-turning storage bay length of 50 m.
- One (1) to two (2) vehicles were observed making a left-turn from westbound Lundy's Lane on to Centre Street during each bridge closure.
- Five (5) to six (6) vehicles were observed making U-turns on westbound Lundy's lane during each bridge closure.

- One (1) vehicle waiting to make a right-turn from westbound Lundy's Lane onto Centre Street was observed squeezing along curb side of the through lane to make the right turn so as to bypass the long queue and waiting time, during two (2) bridge closure events.

4.1.2 Impact of Bridge Closure on Roadway Operations

East of the Allanburg Bridge, the bridge signals which control vehicles during bridge events are located to the west of the Centre Street and Lundy's Lane (RR 20/Hwy 20) intersection. Vehicles along the approach roadway are stopped during short-term bridge events and queue easterly along Lundy's Lane (RR 20/Hwy 20), through the Centre Street intersection despite the placement of do not block intersection signage. These queues stop any traffic from entering or exiting the north leg of Centre Street and all, but the north right turns from the south leg of Centre Street. The blockage of the intersection continues while the queue clears after the bridge has been raised. This is particularly problematic for the community portion north of Lundy's Lane (RR 20/Hwy 20) as the Centre Street intersection is the only access to this north part of the Community.

The study reviewed options for additional signage, pavement marking enhancements, signalization of the intersection of Centre Street and also modification to the existing bridge signals. As the intersection of Centre Street is within 40 metres of the stop bars associated with the bridge signals, introducing another fully signalized intersection at Center Street was determined not to be feasible or safe. The close proximity of the two signal system would create confusion with westbound Lundy's Lane (RR 20/Hwy 20) traffic as both sets of signals could be seen by approaching drivers and they would show conflicting displays as the intersection signal changes from Lundy's Lane (RR 20/Hwy 20) green to Centre Street green. Additionally, for eastbound traffic the introduction of a traffic signal at Centre Street could potentially have sightline/visibility challenges from the truss structure of the Lift bridge and would result in traffic queues extending back onto the lift bridge.

After a review of alternatives, two solutions are recommended for further assessment:

- The first is to implement cross hatched pavement markings within the Centre Street intersection and replace and upgrade the 'Do Not Block Intersection' signage to advise westbound traffic on Lundy's Lane to not block the Centre Street intersection. Also, the consideration of placing a second stop bar immediately east of the Centre Street intersection with supporting signage informing traffic to stop here when the bridge is up.

- The second alternative would implement an auxiliary traffic signal head on the west side of Centre Street Intersection with a stop bar and “Stop Here on Red” signage on the east side of the intersection to advise westbound traffic to stop prior to the intersection during a bridge event/red signal display. This signal display would be an extension of the existing bridge signals. It is noted that a signalized display with a stop bar should generate higher compliance than with signage and pavement markings only. Both of these alternatives need to be reviewed and approved by the Region of Niagara and St. Lawrence Seaway. Discussions with the Region of Niagara have occurred, and their preference was the addition of a set back auxiliary signal display at Centre Street. Future meetings will need to be held with the St. Lawrence Seaway. **Figure 4.1** presents the two proposed improvements.



Figure 4.1: Proposed Improvements to Hwy 20 and Centre St. Intersection

A similar issue has been noted on the west side of the bridge at the Welland Canals Trail, where vehicles do not respect the existing stop line and signage and block the Welland Canal Trail crossing. This creates an unsafe situation where active transportation users must cross between stopped vehicles.

The current stop bar and stop here on red signage is immediately adjacent to the trail crossing with virtually no separation. At this location, consideration should be given to moving the painted stop bar and signage about 3 metres to 5 metres to the west and creating a separation in case there is some vehicle encroachment beyond the stop bar.

Also, this would simplify signage by separating the bridge load information from the other signage which currently all share one post.

Generally, regulatory signage such as “stop here on red” should be placed on their own post. Also, advance warning signage of the trail crossing should be installed both east and west of the bridge.



TRAIL WARNING
SIGNAGE

This will inform approaching drivers of the crossing and the potential to encounter a crossing pedestrian or cyclist on the roadway. This is important given the approaching roadway geometry and also the sightline obstruction created by the lift bridge structure.



LUNDY LANE (RR20) LOOKING EAST AT WELLDAN CANAL TRAIL

In future, when the east side canal trail crossing is formally implemented it will experience similar challenges given its close proximity to the lift bridge and close stop bar locations. It is recommended that west side warning sign and stop bar placement recommendations also be applied on the east side. **Figure 4.1** presents the east side trail recommendations and **Figure 4.2** presents the west side trail.



Figure 4.2: Proposed Improvements to Trail Crossing west of Allanburg Bridge

4.1.3 Short Cutting of Traffic Through Centre Street

Based on the observations from a field visit, and findings from the 24-hour video data collected over four (4) days, one to two vehicles were observed making a left-turn from westbound Lundy's Lane (RR 20/Hwy 20) on to Centre Street during each bridge closure. This is in line with the reviews of Existing 2021 TMC data at the intersection of Lundy's Lane (RR 20/Hwy 20) and Centre Street during weekday AM and PM peak hours, without the bridge closure events.

Additionally, daily commuters who are familiar with the area roadway network of the study area would only be aware that Centre Street provides internal connectivity to Allanport Road via Barron Road. Moreover, real time information about status of lift bridge (i.e., availability) is displayed on the variable message sign for westbound traffic on Lundy's Lane at its intersection with Davis Road / Allanport Road to facilitate decision making in advance of joining the queue. Our analysis did not confirm any notable pattern of short cutting of queued vehicles through Centre Street during bridge closures during our periods of study. There was an observed pattern of a small number of westbound Lundy's Lane (RR 20/Hwy 20) vehicles making U-turns on Lundy's Lane (RR 20/Hwy 20) when the bridge first becomes unavailable and returning easterly along Lundy's Lane (RR 20/Hwy 20).

4.1.4 Impact of Bridge Closure on Rail on EMS and Fire Services

Access Allanburg community for fire and EMS differs for the north and south portions of the community. The section south of Lundy's Lane (RR 20/Hwy 20) (South Community) there two points of roadway access. The first is via the intersection of Allanport Road and Barron Road, which is generally outside the influence area of traffic queuing resulting from the Allanburg bridge being unavailable. The second is the intersection of Lundy's Lane (RR 20/Hwy 20) and Centre Street which is blocked during the bridge events. For this community there is a reductant point of access which fire and EMS can utilized both during bridge events and if any other incident was to occur at the Centre Street intersection.

The Allanburg North community area is currently limited to one point of roadway access via the Lundy's Lane (RR 20/Hwy 20) and Centre Street intersection which as previously mentioned is blocked during periods when the lift bridge is unavailable. For this direction fire and EMS vehicles can approach along Lundy's Lane (RR 20/Hwy 20) from the east and queued vehicles would move as far off the road onto the limited shoulder as possible allowing emergency vehicles to pass. This would still require the emergency vehicle to straddle the roadway centre line.

Observations from the video showed that five (5) to six (6) westbound vehicles made U-turns when faced with bridge queues to head easterly along Lundy's Lane (RR 20/Hwy 20) during every short-term bridge closure. These vehicles could conflict or impede the movement of the fire and EMS vehicles resulting in delay in their response time. Additionally, at the intersection of Lundy's Lane (RR 20/Hwy 20) and Centre Street, queued vehicles during a bridge closure event block the intersection and would prevent and/or delay the response time for fire and EMS vehicles responding the Allanburg North. As noted previously, consideration could also be given to implement either revised pavement markings and signage or auxiliary bridge signal displays to stop traffic from blocking the intersection.

An alternate access route to Allanburg North via Lundy's Lane (RR 20) for emergency vehicles should also be considered to provide a second point of access. Although it would be off of Lundy's Lane (RR 20) and impacted by traffic queues when the bridge is not available, it would still provide emergency services a second point of access under all other event scenarios. This access can be provided at the cul-de-sac at the east end of Centre Street. This access would be normally gated to prioritize emergency access approaching from the east only. The access should have an 8-metre driveway in advance of the gated access to allow emergency vehicles to exit the roadway as the gate is unlocked. The location of the new intersection should consider sightline requirements for the horizontal curve along Lundy's Lane (RR 20/Hwy 20) and the location of the at-grade railroad crossing on Lundy's Lane (RR 20/Hwy 20). The location of the new intersection should also consider the elevation difference surrounding the cul-de sac on Centre Street. **Figure 4.3** illustrates the conceptual location of the access.

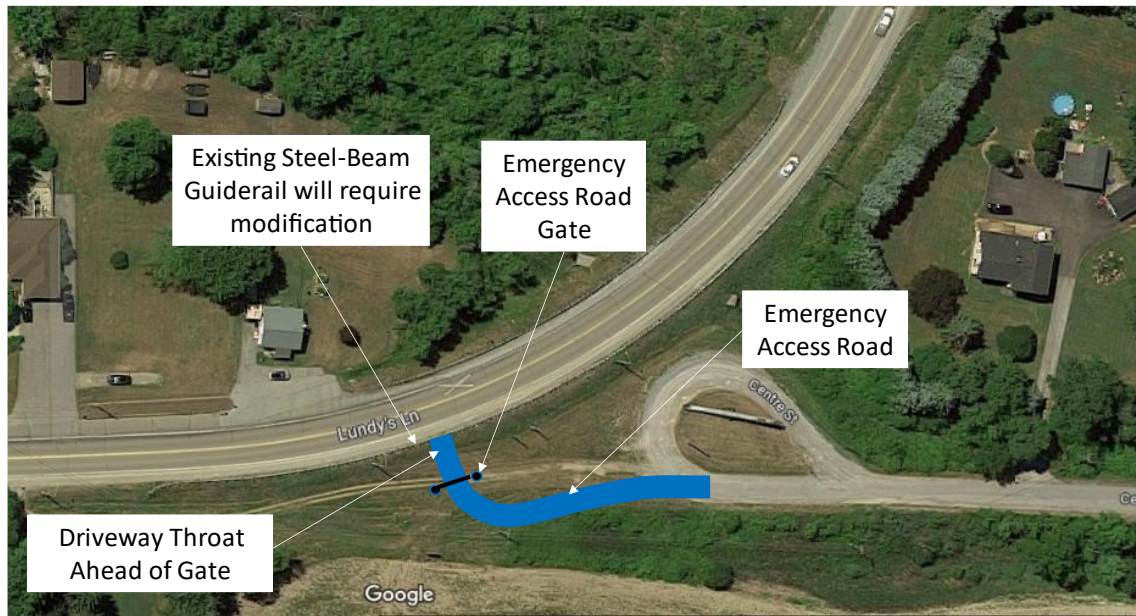


Figure 4.3: Proposed Emergency Access Connection

4.1.5 Impact of Bridge Closure on Rail Operations

Based on field studies, long queues were observed along Lundy's Lane (RR 20/Hwy 20) extending easterly when the Allanburg bridge was closed for ship operations. During midday and evening peak hours, queue lengths for westbound traffic on Lundy's Lane (RR 20/Hwy 20) extended beyond the at-grade CN railroad crossing, up to the intersection with Davis Road. The CN railroad crossing at Lundy's Lane (RR 20/Hwy 20) is an active at-grade crossing with an active warning device (i.e., flashing lights, crossbucks and bell). There were no observations of vehicles stopping on the railway tracks during the study periods, but some vehicles did stop ahead of the stop lines at the crossing. As this is a public at grade crossing, it is recommended that the Region of Niagara consider reviewing the roadway operation in this area and determine if any modifications to the crossing signage or pavement markings are required.

4.2 Maintenance (Long-Term) Closures

4.2.1 Long-Term Detour and Alternate Routes

Long-term bridge closures for maintenance require the detour of traffic to alternate roadways. Partial bridge closures for maintenance may also require detour of traffic to mitigate queuing and delay.

The two closest alternative east-west crossings of the Welland Canal are shown in **Figure 4.4**. The nearest crossing is the Thorold Tunnel (Hwy 58), which is located approximately 6

km to the north of the Allanburg Lift Bridge along Highway 58. The next closest crossing is the Townline Tunnel, which is located about 18 km to the south.

The closure of any one of the Welland Canal crossings will result in traffic detouring on to the other parallel crossing points. As such, where possible full closures or extended lane restrictions on adjacent crossings at the same time should be avoided. This can be achieved through proactive coordination of roadway and bridge maintenance programs between the various roadway authorities (Province and Region) and St. Lawrence Seaway Management Corporation and communication of these events with the City and roadway users.

The review of the data from the 24-hour period studied along the Lundy's Lane (RR 20/Hwy 20) corridor determined that no bridge events occurred past 7:00pm at night. From a roadway operations standpoint, consideration should be given to planning complete tunnel closures at night, as traffic demands along Lundy's Lane (RR 20/Hwy 20) corridor are considerably lower providing more capacity to accommodate detoured vehicles. Also, with reduced bridge events in the evening, overall impacts in the form of delay and congestion on the adjacent community would be minimized.

A key element of a successful roadway detour is strong communication of the event both in advance and during the closure/restriction. The roadway system within the Allanburg area has notable signage infrastructure which is used to provide drivers advance notice and real-time information on closures or lane restrictions. This is generally achieved through messaging on the permanent and temporary variable message signs along roads/highways on either side of the Allanburg Bridge and through the use of roadside static signs and the various roadway authorities and St. Lawrence Seaway websites.

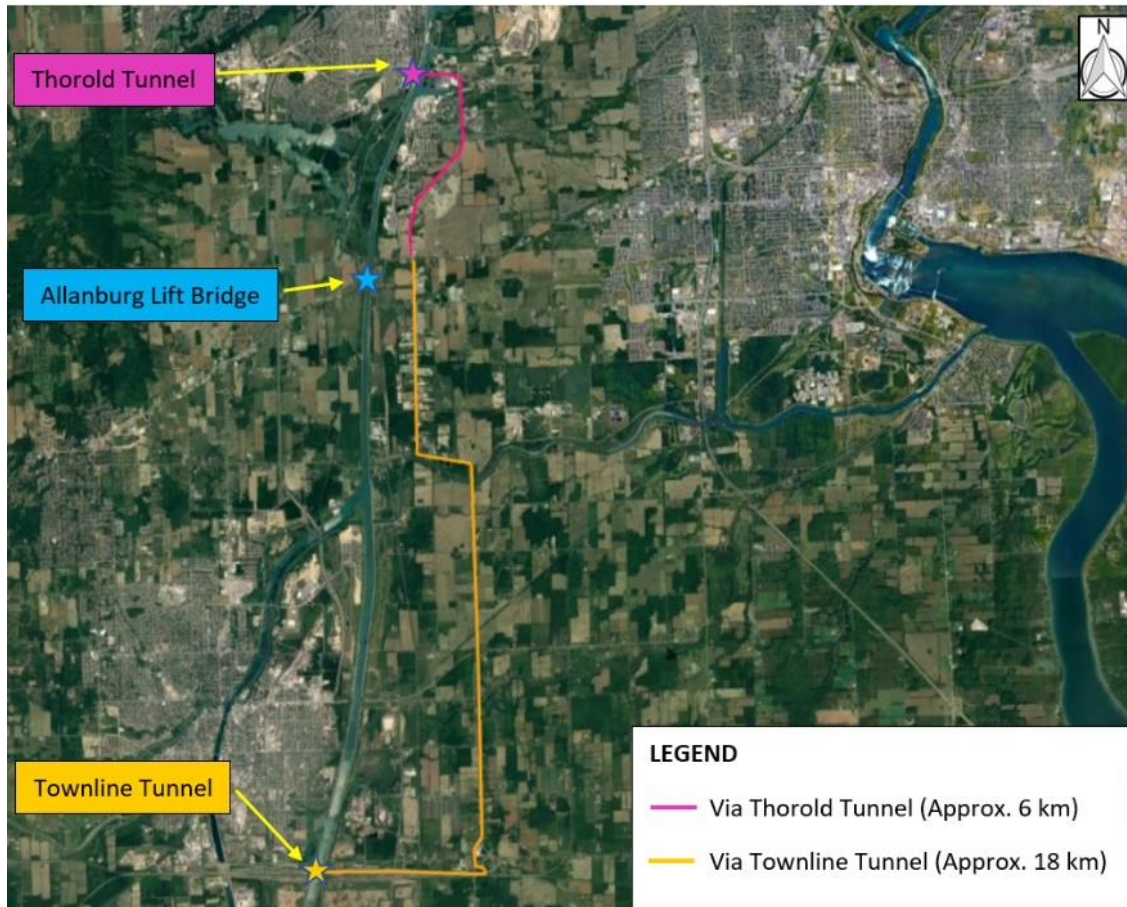


Figure 4.4: Alternate Routes for Detoured Westbound Vehicles to Cross Welland Canal

5.0 Existing Traffic Volumes

5.1 Existing Volumes and Configuration

The lane configuration and traffic control at the study intersections under the Existing 2021 traffic conditions is shown in **Figure 5.1**, and the Existing 2021 Weekday AM, and PM peak hour traffic volumes are shown in **Figures 5.2**, and **5.3**, respectively.

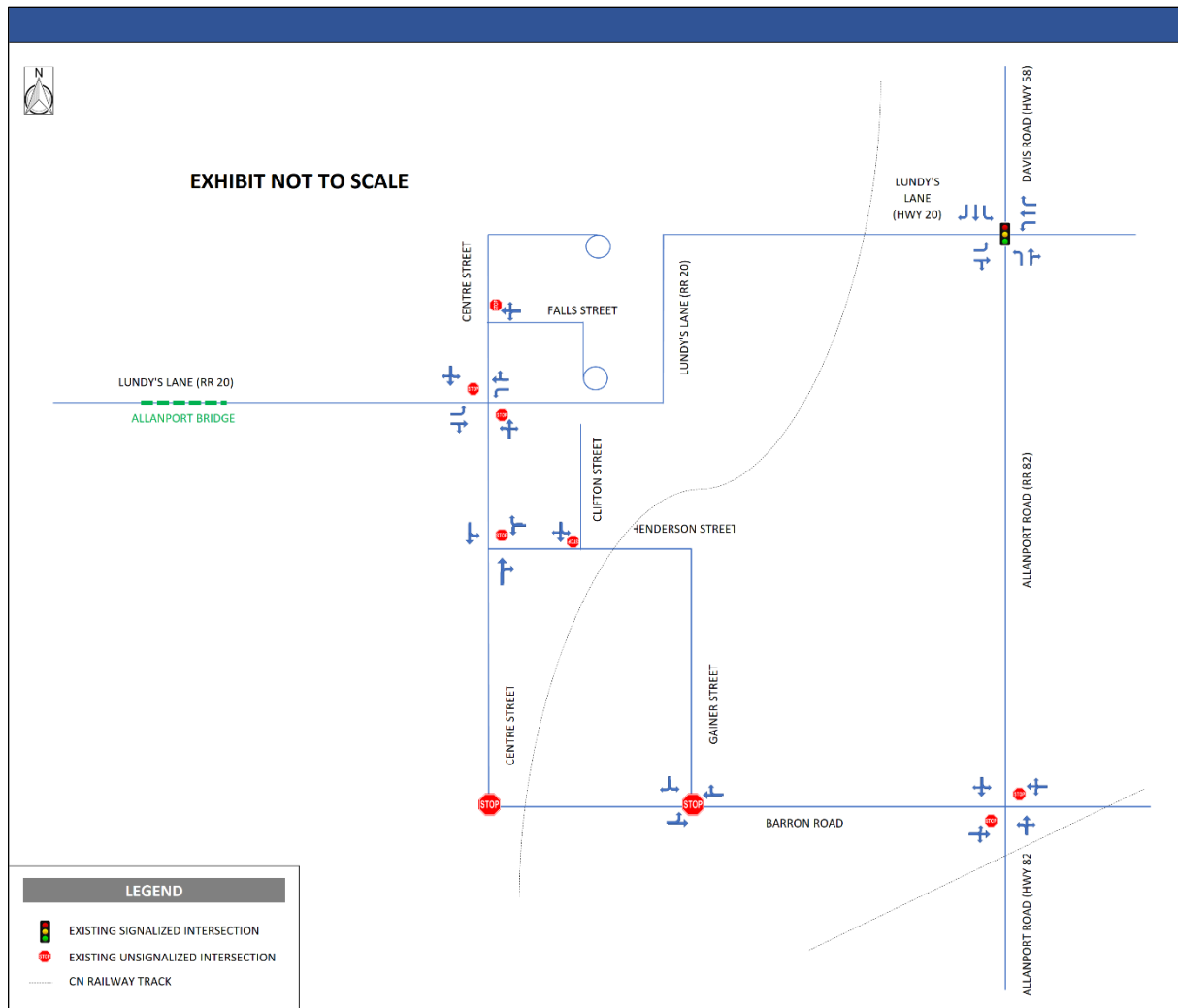


Figure 5.1: Existing 2021 Lane Configuration and Traffic Control

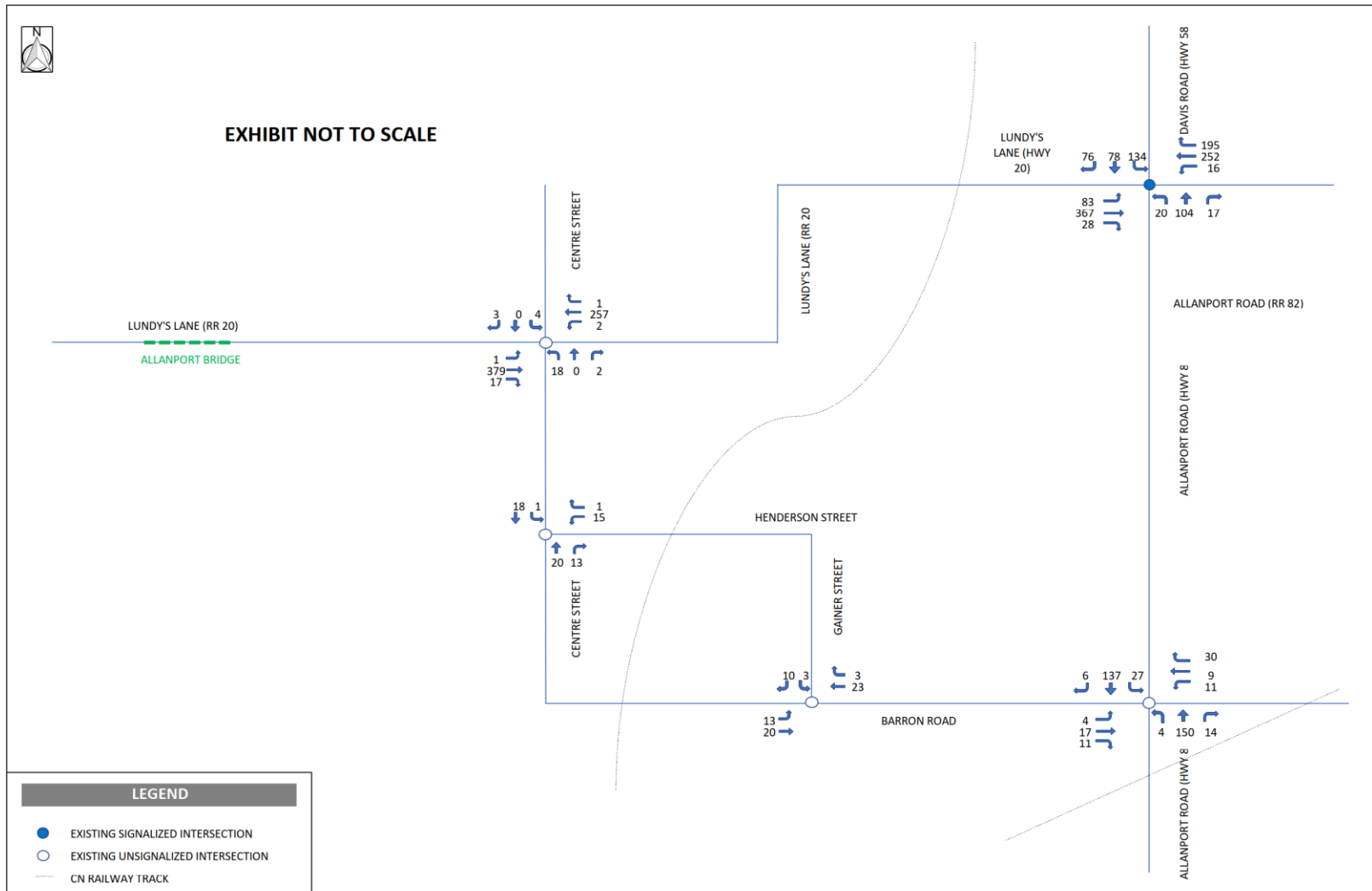


Figure 5.2 – Existing 2021 Weekday AM Peak Hour Traffic Volumes

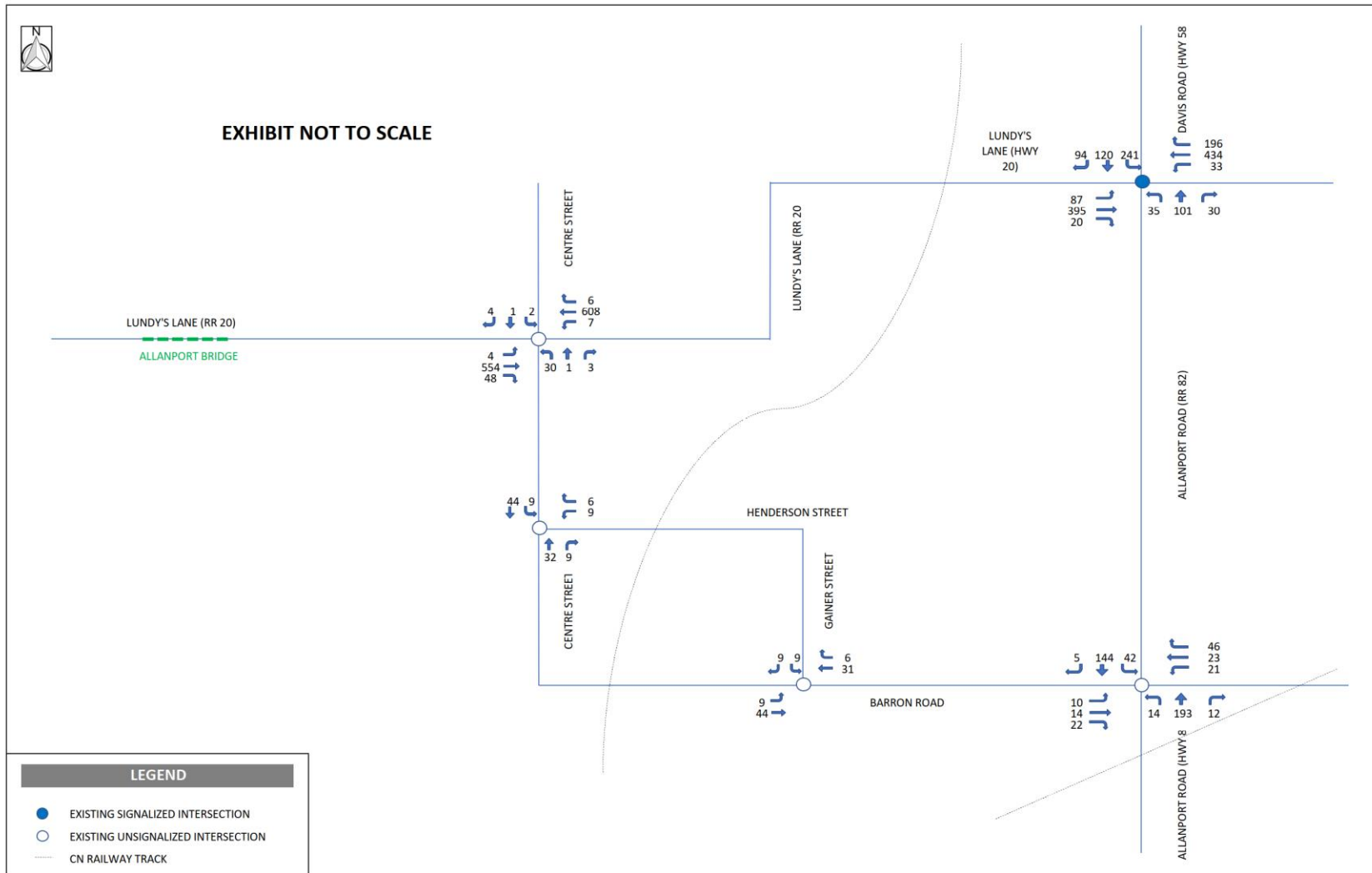


Figure 5.3: Existing 2021 Weekday PM Peak Hour Traffic Volume

6.0 Future Traffic Volumes

6.1 Regional & MTO Roads

Niagara Region’s open data source and traffic growth information from other area Traffic Impact Studies (i.e., Rolling Meadows TIS) were taken into consideration for determining the traffic growth along roadway corridors for this study. Based on the opening years of the phases for Rolling Meadows development, Phases 1 and 2 is in place and the trips generated from these phases has been captured in the existing traffic volumes collected. Additionally, trips generated from modified Phase 3, and Phases 4 & 5 of the Rolling Meadows development has been considered for this study.

Based on the above information, a traffic growth of 1% per annum was considered along Lundy’s Lane and a growth of 0.5% per annum was considered along Davis Road /Allanport Road, during the analysis period of this study.

6.2 Local Roads

Traffic growth was not applied on internal local roads, instead the intensity of projected land uses within the horizon year, in Area 1 and Area 2 of this study, was taken into consideration for traffic forecasting along the local roads.

Trip Generation was determined during peak period of adjacent street traffic using the *ITE’s Trip Generation Manual (11th edition)* methodology for determining the trip ends from LUC 210 – Single-Family Detached Housing.

Table 6.1 provides summary of trips generated from Area 1 and Area 2 through severance and new developments, during the design hours:

Table 6.1: Trips Generation from Area 1 and Area 2 During the Design Hour

| LAND USE CHANGE AND INTENSITY | WEEKDAY AM PEAK | | | WEEKDAY PM PEAK | | |
|---|-----------------|----|-----|-----------------|----|-----|
| | TOTAL | IN | OUT | TOTAL | IN | OUT |
| AREA 1 – NORTH OF LUNDY’S LANE | | | | | | |
| <i>LUC 210 – Single-Family Detached Housing</i> | | | | | | |
| Through severance 1 Unit | 1 | 0 | 1 | 1 | 1 | 0 |
| Total from Area 1 | 1 | 0 | 1 | 1 | 1 | 0 |
| AREA 2 – SOUTH OF LUNDY’S LANE | | | | | | |
| <i>LUC 210 – Single-Family Detached Housing</i> | | | | | | |
| Through severance west of rail track – 4 Units | 4 | 1 | 3 | 5 | 3 | 2 |

| | | | | | | |
|---|-----|----|----|-----|----|----|
| Through severance east of rail track – 10 Units | 9 | 2 | 7 | 11 | 7 | 4 |
| Allanburg Estates subdivision – 22 Units | 19 | 5 | 14 | 24 | 15 | 9 |
| Barron Road Development – 93 Units | 70 | 18 | 52 | 93 | 58 | 35 |
| Total from Area 2 | 102 | 26 | 76 | 133 | 83 | 50 |

Trips were distributed based on the information gathered from Rolling Meadows TIS and is provided in **Table 6.2**. Trips generated through severance, west of the railway tracks were assigned to Centre Street and east of the tracks were assigned to Gainer Street.

Table 6.2: Trips Generation from Area 1 and Area 2 During the Design Hour

| Travel Direction | % Distribution |
|------------------|----------------|
| To/From north | 51% |
| To/From west | 12% |
| To/From south | 4% |
| To/From east | 33% |

6.3 Future 2041 Volumes and Configuration

Under the existing 2021 traffic conditions, there is no traffic control at the node of Centre Street and Barron Road as the west approach is a gravel roadway. Allanburg Estate subdivision is proposed on the west side of this node. To mitigate speeding along Centre Street and Barron Road, stop control is proposed for the southbound movement of Centre Street at the newly formed intersection of Centre Street with Barron Road, which provides access to the proposed Allanburg Estate subdivision development. Additionally, stop control is proposed for the site driveways of the proposed Allanburg Estate subdivision and Barron Road developments.

The three (3) new intersections that were formed along Barron Road due to the proposed developments within the analysis period of this study are listed below:

- AWSC intersection of Centre Street with Barron Road
- TWSC intersection of Barron Road with Allanburg Estates Driveway
- TWSC intersection of Barron Road with Barron Road Development Driveway

Based on the locations of the proposed developments and assumed locations of future driveways, the proposed lane configuration and traffic control for the study intersections and site driveways under the horizon year 2041 traffic conditions are as shown in **Figure 6.1**.

The projected horizon year 2041 traffic volumes, inclusive of traffic growth and the proposed developments, during the weekday AM and PM peak hours are presented in Figures 6.2, and 6.3, respectively.

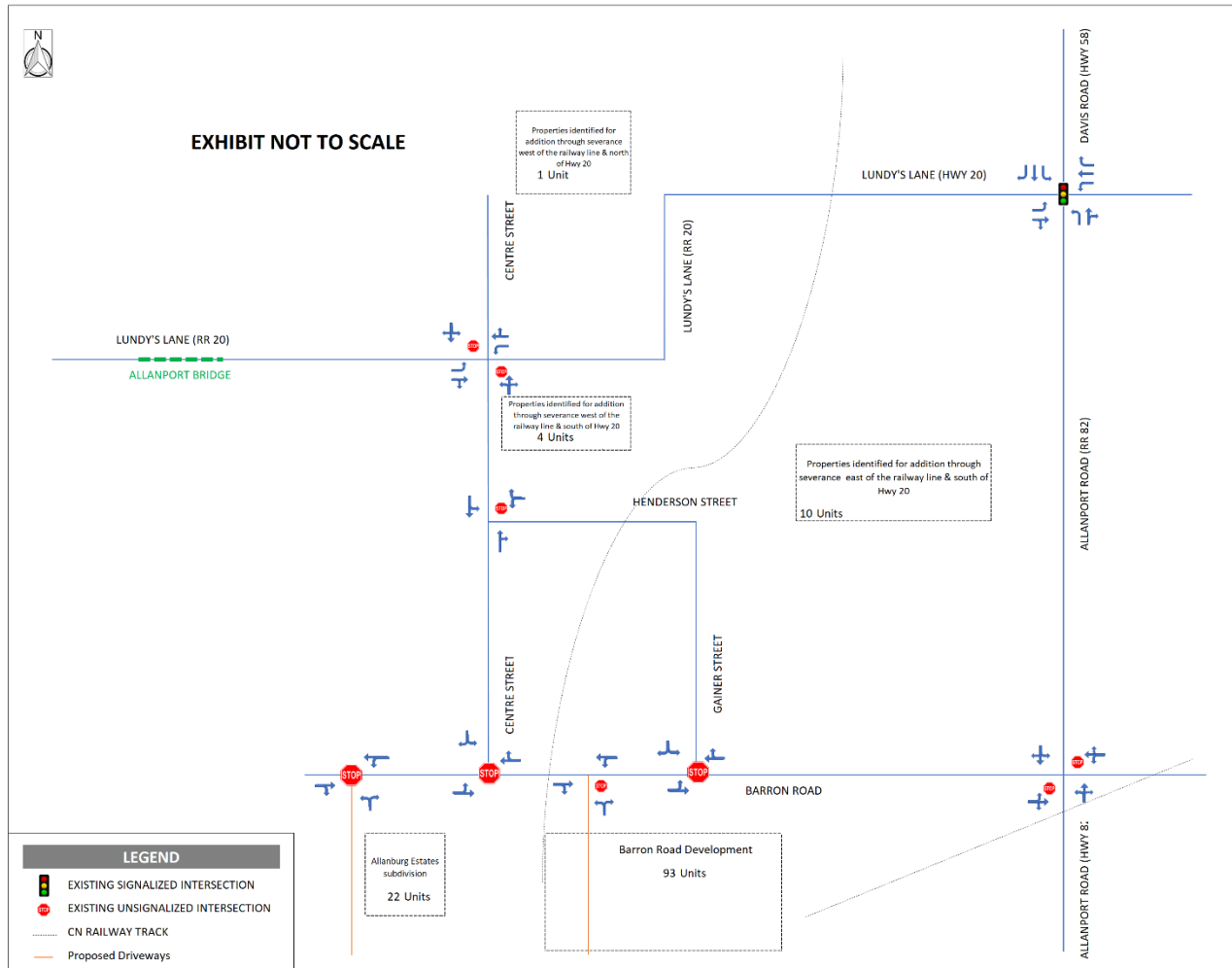


Figure 6.1: Horizon Year 2041 Lane Configuration and Traffic Control with the Proposed Development

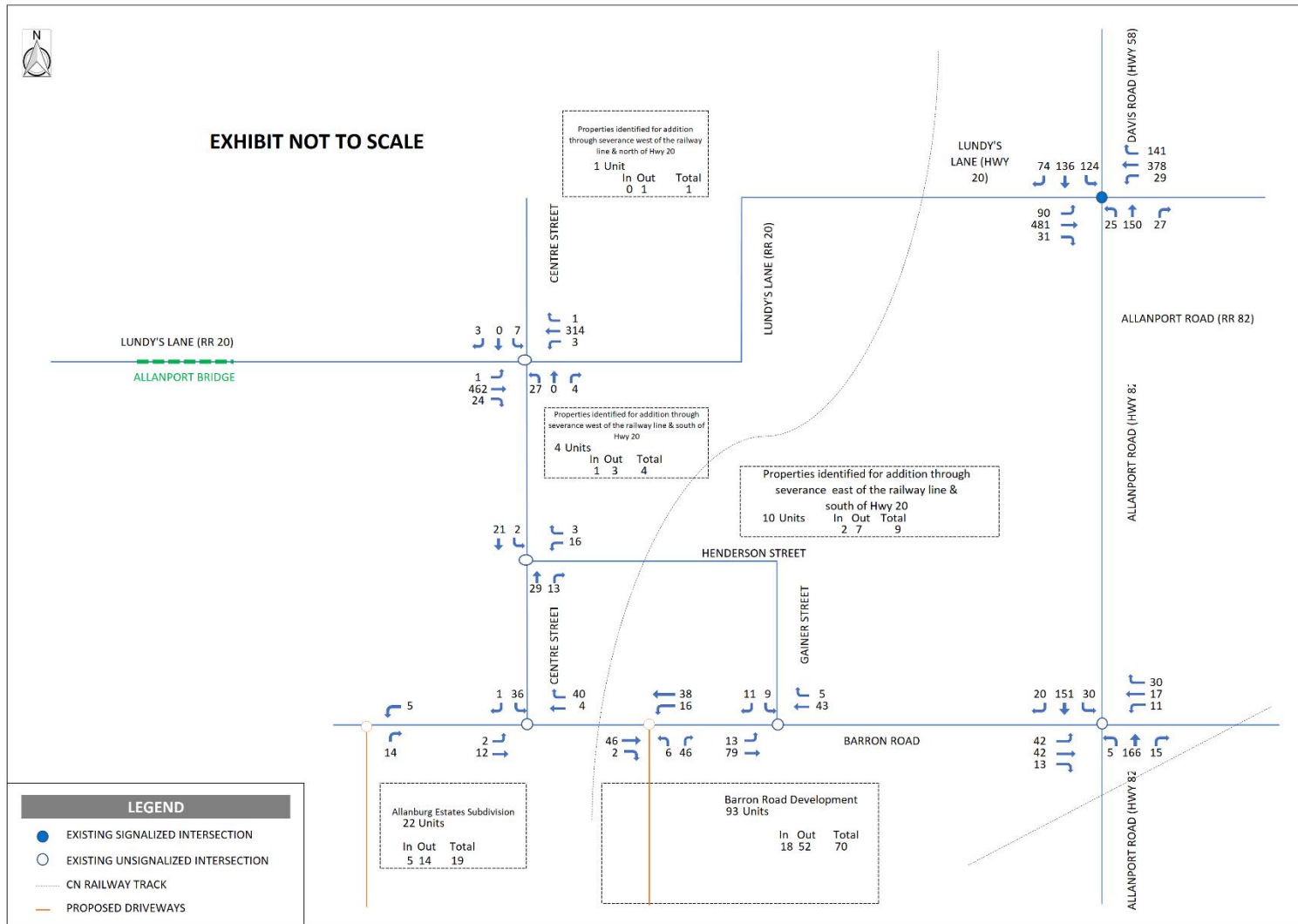


Figure 6.2: Horizon Year 2041 Weekday AM Peak Hour Traffic Volume with the Proposed Development

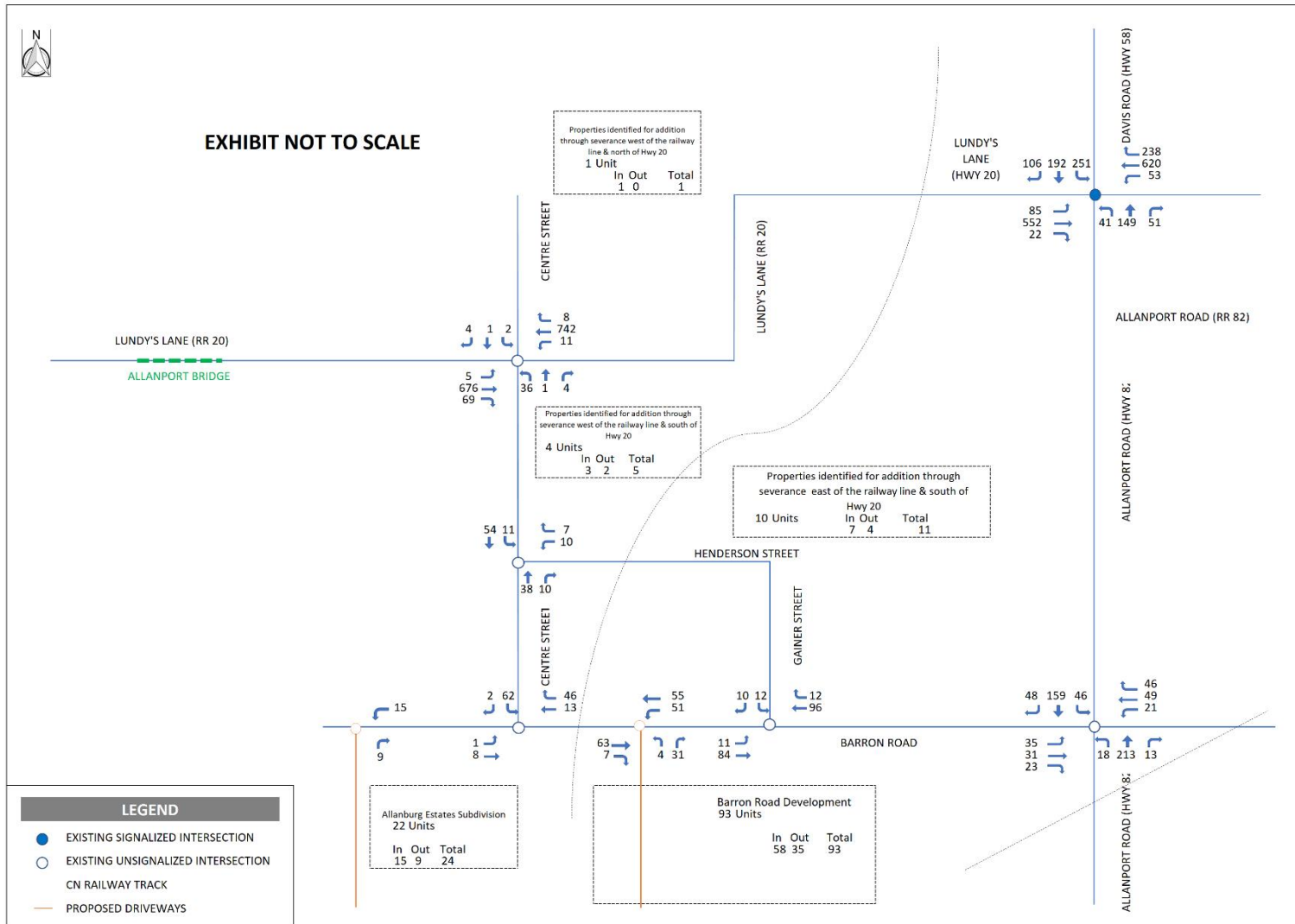


Figure 6.3: Horizon Year 2041 Weekday PM Peak Hour Traffic Volume with the Proposed Development

7.0 Future Traffic Volumes

The industry standard Synchro macroscopic traffic analysis software was utilized to analyze the intersections for the various horizon years, as per the latest edition of the MTO Traffic Impact Study Guidelines. Key performance measures such as Level of Service (LOS), volume-to-capacity ratio (v/c ratio), and 95th percentile queuing was reported, and are defined below:

- **Average vehicle control delay** is used to characterize LOS for the entire intersection, an approach, or movement. Delay quantifies the variations in travel time and is also a surrogate measure of driver discomfort and fuel consumption.
- **V/c ratio** quantifies the degree to which the capacity is utilized by a defined lane group.
- **95th percentile queue** is the queue length which is expected to be exceeded only 5% of the time; it is common practice to identify preferred storage length requirements for auxiliary turn lanes based on estimated peak hour 95th percentile queuing.

Table 7.1 identifies the control delay thresholds (seconds of delay per vehicle) for each LOS based on Highway Capacity Manual (HCM) methodology.

Table 7.1: Characteristics of Level of Service

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

Detailed Highway Capacity Manual (HCM) output reports from the capacity analysis are provided in **Appendix 2**.

7.1 Existing 2021 Intersection Operations Analysis Results

Table 7.2: Operational Performance of Study Intersection Under Existing 2021 Traffic Conditions

| INTERSECTION (TRAFFIC CONTROL) | MOVEMENT | WEEKDAY AM PEAK HOUR | | | WEEKDAY PM PEAK HOUR | | | STORAGE LENGTH (M) |
|--|----------|----------------------|-----|-----------------------------------|----------------------|-----|-----------------------------------|--------------------|
| | | V/C | LOS | 95 TH % QUEUE (Veh) | V/C | LOS | 95 TH % QUEUE (Veh) | |
| CENTRE ST @ LUNDY'S LANE (RR 20) (Unsignalized) | EBL | 0.001 | A | <1 veh | 0.005 | A | <1 veh | 15 |
| | EBTR | | | | | | | |
| | WBL | 0.002 | A | <1 veh | 0.008 | A | <1 veh | 40 |
| | WBTR | | | | | | | |
| | NBLTR | 0.06 | C | <1 veh | 0.262 | E | 1 | |
| | SBLTR | 0.017 | B | <1 veh | 0.033 | C | <1 veh | |
| CENTRE ST @ HENDERSON ST (Unsignalized) | WBLR | 0.018 | A | <1 veh | 0.0017 | A | <1 veh | |
| | NBTR | | | | | | | |
| | SBTL | 0.001 | A | <1 veh | 0.006 | A | <1 veh | |
| BARRON RD @ GAINER ST (Unsignalized) | EBTL | 0.041 | A | <1 veh | 0.065 | A | <1 veh | |
| | WBTR | 0.031 | A | <1 veh | 0.044 | A | <1 veh | |
| | SBLR | 0.014 | A | <1 veh | 0.022 | A | <1 veh | |
| ALLANPORT RD (RR 82) @ BARRON RD (Unsignalized) | EBLTR | 0.057 | B | <1 veh | 0.089 | B | <1 veh | |
| | WBLTR | 0.079 | B | <1 veh | 0.17 | B | <1 veh | |
| | NBLTR | 0.003 | A | <1 veh | 0.011 | A | <1 veh | |
| | SBLTR | 0.021 | A | <1 veh | 0.034 | A | <1 veh | |
| | | | | (m) | | | (m) | |
| ALLANPORT ROAD (RR 82)/DAVIS ROAD (HWY 58) @ LUNDY'S LANE (HWY 20) (Signalized) | EBL | 0.20 | B | 12.7 | 0.34 | C | 21.3 | 80 |
| | EBTR | 0.54 | B | 51.4 | 0.60 | B | 80.3 | |
| | WBL | 0.04 | B | <1 veh | 0.11 | B | 9.2 | 60 |
| | WBT | 0.34 | B | 31.5 | 0.62 | B | 85.4 | |
| | WBR | 0.31 | A | 9.1 | 0.33 | B | 11.8 | 80 |
| | NBL | 0.05 | B | <1 veh | 0.08 | B | 9.4 | 55 |
| | NBTR | 0.24 | B | 20.9 | 0.23 | B | 24.0 | |
| | SBL | 0.33 | B | 26.0 | 0.54 | B | 53.2 | 90 |
| | SBT | 0.16 | B | 15.3 | 0.20 | B | 24.0 | |
| | SBR | 0.18 | B | 8.0 | 0.19 | B | 8.8 | 95 |
| OVERALL | | B | | | B | | | |

Using the existing 2021 traffic volumes, intersection operations analysis was performed for the study intersections to determine existing base conditions and identify any operational issues which currently exist at the study intersections.

The results of the Existing 2021 Capacity Analysis completed for the study intersections are presented in **Table 7.2**. All the existing study intersections are operating satisfactorily under the Existing 2021 design hour traffic conditions, except for the intersection of Lundy’s Lane with Centre Street. This intersection currently with all movements operating at delays of LOS C or better, except for the northbound movement, which operates at an LOS E during the p.m. peak hour. This is due to the difficulty in finding gaps in east-west through traffic along Lundy’s Lane.

7.2 Horizon Year 2041 Intersection Operations Analysis Results

Table 7.3: Operational Performance of Study Intersections Under Horizon Year 2041 Traffic Conditions

| INTERSECTION (TRAFFIC CONTROL) | MOVEMENT | WEEKDAY AM PEAK HOUR | | | WEEKDAY PM PEAK HOUR | | | STORAGE LENGTH (M) |
|---|----------|----------------------|-----|--------------------------------|----------------------|-----|--------------------------------|--------------------|
| | | V/C | LOS | 95 TH % QUEUE (Veh) | V/C | LOS | 95 TH % QUEUE (Veh) | |
| CENTRE ST @ LUNDY'S LANE (RR 20) (Unsignalized) | EBL | 0.001 | A | <1 veh | 0.007 | A | <1 veh | 15 |
| | EBTR | | | | | | | |
| | WBL | 0.003 | A | <1 veh | 0.015 | A | <1 veh | 40 |
| | WBTR | | | | | | | |
| | NBLTR | 0.116 | C | <1 veh | 0.512 | F | 2.2 | |
| | SBLTR | 0.033 | C | <1 veh | 0.05 | D | <1 veh | |
| CENTRE ST @ HENDERSON ST (Unsignalized) | WBLR | 0.022 | A | <1 veh | 0.02 | A | <1 veh | |
| | NBTR | | | | | | | |
| | SBTL | 0.001 | A | <1 veh | 0.008 | A | <1 veh | |
| BARRON RD @ GAINER ST (Unsignalized) | EBTL | 0.113 | A | <1 veh | 0.118 | A | <1 veh | |
| | WBTR | 0.058 | A | <1 veh | 0.130 | A | <1 veh | |
| | SBLR | 0.025 | A | <1 veh | 0.028 | A | <1 veh | |
| ALLANPORT RD (HWY 82) @ BARRON RD (Unsignalized) | EBLTR | 0.208 | B | <1 veh | 0.089 | B | <1 veh | |
| | WBLTR | 0.103 | B | <1 veh | 0.17 | B | <1 veh | |
| | NBLTR | 0.004 | A | <1 veh | 0.011 | A | <1 veh | |
| | SBLTR | 0.024 | A | <1 veh | 0.034 | A | <1 veh | |
| | | | | (m) | | | (m) | |
| ALLANPORT ROAD (HWY 82)/DAVIS ROAD (HWY 58) @ | EBL | 0.26 | B | 15.00 | 0.47 | D | 30.00 | 80 |
| | EBTR | 0.68 | B | 76.60 | 0.70 | B | 131.30 | |
| | WBL | 0.10 | B | <1 veh | 0.23 | C | 15.90 | 60 |

| INTERSECTION (TRAFFIC CONTROL) | MOVEMENT | WEEKDAY AM PEAK HOUR | | | WEEKDAY PM PEAK HOUR | | | STORAGE LENGTH (M) |
|--|----------|----------------------|-----|--------------------------|----------------------|-----|--------------------------|--------------------|
| | | V/C | LOS | 95 TH % QUEUE | V/C | LOS | 95 TH % QUEUE | |
| LUNDY'S LANE (HWY 20) (Signalized) | WBT | 0.50 | B | 51.50 | 0.75 | C | 147.50 | |
| | WBR | 0.22 | A | 7.80 | 0.34 | B | 12.70 | 80 |
| | NBL | 0.07 | B | 8.00 | 0.12 | C | 13.20 | 55 |
| | NBTR | 0.37 | B | 34.80 | 0.34 | C | 44.30 | |
| | SBL | 0.36 | B | 28.80 | 0.69 | D | 71.20 | 90 |
| | SBT | 0.28 | B | 28.50 | 0.31 | C | 45.60 | |
| | SBR | 0.18 | B | 8.80 | 0.20 | B | 10.90 | 95 |
| | OVERALL | | B | | | C | | |
| | | | | (Veh) | | | (Veh) | |
| BARRON RD @ CENTRE ST (Unsignalized) | EBLT | 0.017 | A | <1 veh | 0.012 | A | <1 veh | |
| | WBTR | 0.047 | A | <1 veh | 0.065 | A | <1 veh | |
| | SBLR | 0.047 | A | <1 veh | 0.083 | A | <1 veh | |
| BARRON RD @ ALLANBURG EST DRIVEWAY (Unsignalized) | EBTR | | | | | | | |
| | WBTL | 0.003 | A | <1 veh | 0.01 | A | <1 veh | |
| | NBLR | 0.014 | A | <1 veh | 0.009 | A | <1 veh | |
| BARRON RD @ BARRON RD DEV DRIVEWAY (Unsignalized) | EBTR | | | | | | | |
| | WBTL | 0.011 | A | <1 veh | 0.01 | A | <1 veh | |
| | NBLR | 0.057 | A | <1 veh | 0.009 | A | <1 veh | |

The results of the horizon year 2041 operations analysis completed for the study intersections are presented in **Table 7.3**. All the existing and new study intersections are operating satisfactorily under the horizon year 2041 design hour traffic conditions except for the intersection of Lundy's Lane/RR 20 with Centre Street. This intersection is forecast to operate with all movements having delays of LOS C or better during the a.m. peak hour and most movements having delays of LOS D or better during the p.m. peak hour. The northbound movement is forecast to operate with a v/c ratio of 0.51 and a LOS F. The intersection has substantial reserve capacity, but vehicle delays are projected to increase by 2041 as a result of the continued traffic growth along the Lundy's Lane/RR 20 corridor. This delay is limited to the PM peak hour only and the Centre Street traffic volumes exiting are minor. As this approach services the south part of the community, vehicles also have the ability to utilize the Allanport Road(RR82) and Barron road intersection. No improvements are recommended.

8.0 Speeding on Internal Roads

As part of this study, six (6) days of speed data was collected and reviewed for key internal roadways within the Allanburg community to determine if there are any speeding issues present. Any gaps in the line graphs below are a result of no vehicles passing through a segment of roadway within the respective hours.

8.1 Centre Street North of Lundy’s Lane (RR 20)

The speed limit along Centre Street (between Lundy’s Lane and Falls Street) is 50km/hr. Using traffic counters, the speeds of each vehicle traveling through this segment over a duration of 6 days was recorded. The 85th percentile speeds were observed to be approximately 46km/h. As shown in **Figure 8.1**, 86% of vehicles along this segment drove less than the speed limit and the remaining 14% of vehicles drove less than 10 km/h over the speed limit.

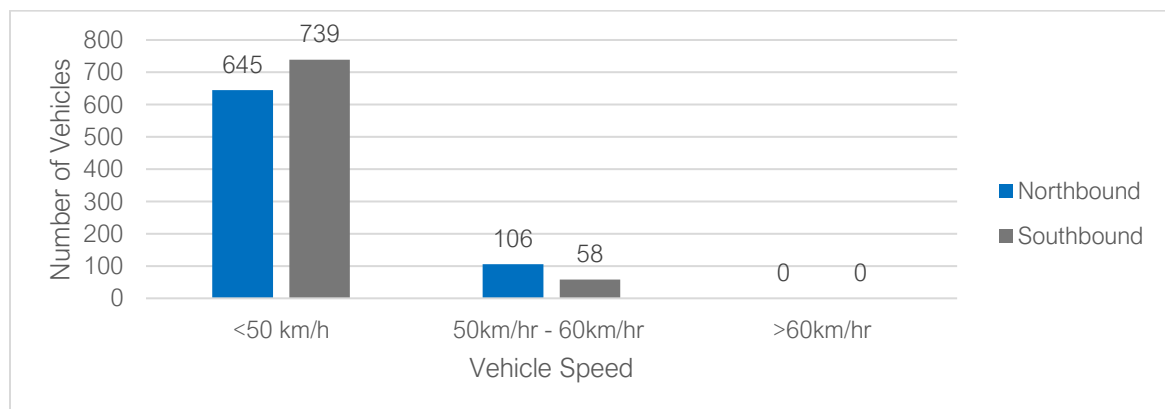


Figure 8.1: Vehicle Speeds – Centre Street North of Lundy’s Lane

The weekday and weekend hourly 85th percentile speeds were averaged over multiple days and plotted as shown in **Figures 8.2 and 8.3** to determine any daily trends in 85th percentile speeds.

During the weekday, all of the 85th percentile speeds were determined to be less than the speed limit. Generally, the southbound direction had slightly higher 85th percentile speeds during the a.m. peak hour, while the northbound direction had slightly higher speeds during the p.m. peak hour. During the weekday, it was found that the highest 85th percentile speed was 48km/hr at 5:00pm in the northbound direction.

Most of the weekend 85th percentile speeds were found to be less than the speed limit, with 85th percentile speeds found to be slightly higher than the speed limit during the evening.

The highest 85th percentile speed was 56km/hr at both 8:00pm and 10:00pm in the northbound and southbound directions, respectively.

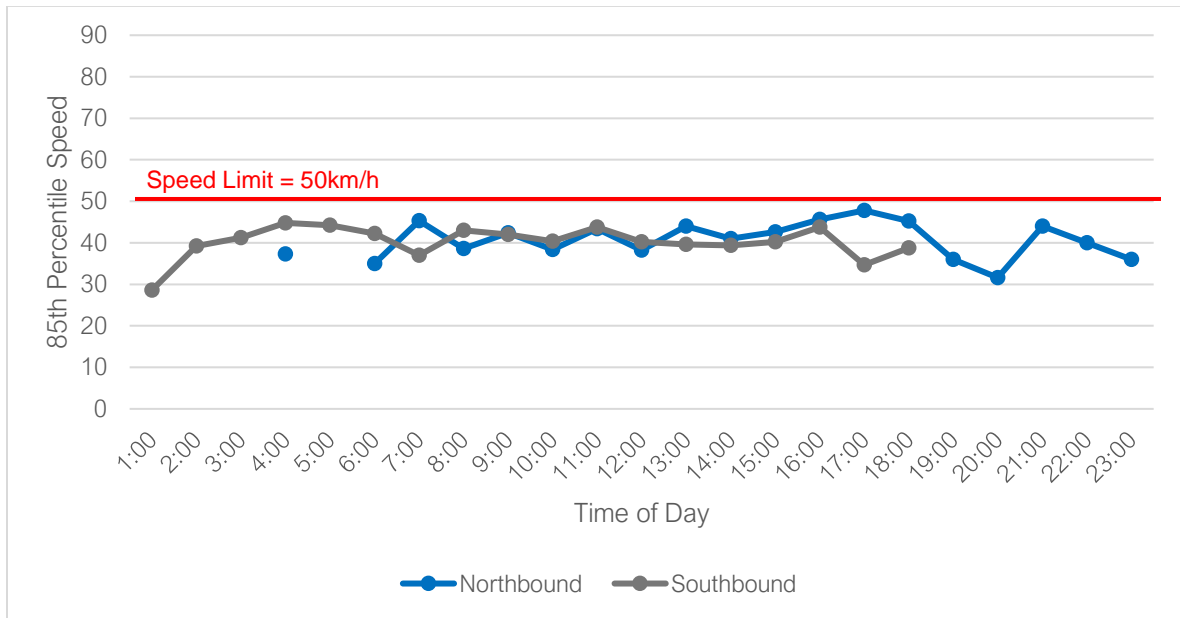


Figure 8.2: Weekday 85th Percentile Vehicle Speeds – Centre Street North of Lundy's Lane

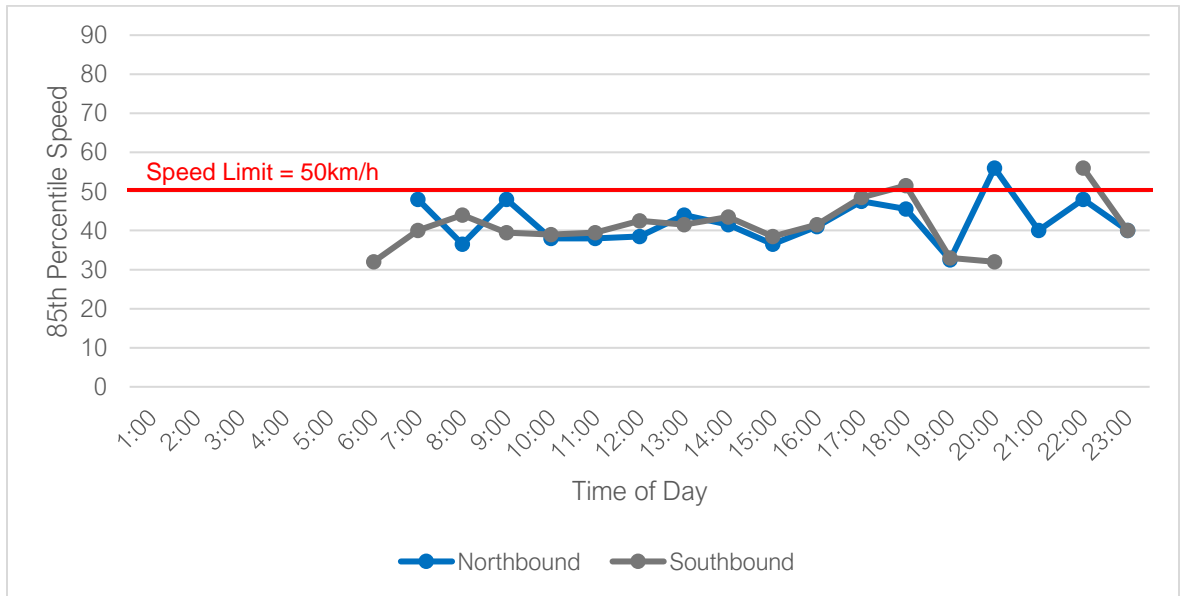


Figure 8.3: Weekend 85th Percentile Vehicle Speeds – Centre Street North of Lundy's Lane

8.2 Centre Street South of Lundy’s Lane (RR 20)

The speed limit along Centre Street (between Lundy’s Lane and Henderson Street) is 50km/hr. Using the tube count data, the speeds of each vehicle traveling through this segment over a duration of 6 days was recorded.

The 85th percentile speeds were observed to be approximately 59km/h. As shown in **Figure 8.4**, 50% of vehicles along this segment drove less than the speed limit and another 46% of vehicles drove less than 10 km/h over the speed limit. The remaining 4% of vehicles were recorded driving greater than 10km/h over the speed limit.

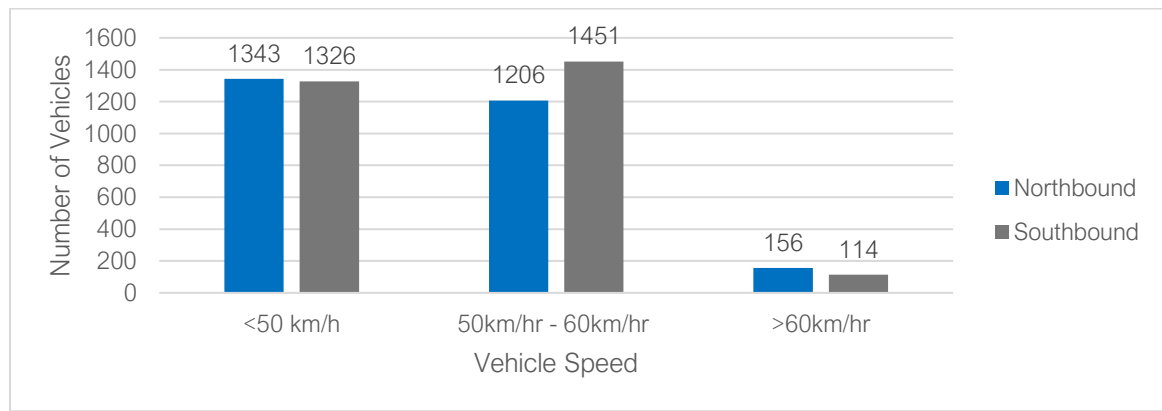


Figure 8.4: Vehicle Speeds – Centre Street South of Lundy’s Lane

The weekday and weekend hourly 85th percentile speeds were averaged over multiple days and plotted as shown in **Figures 8.5 and 8.6** to determine any daily trends in 85th percentile speeds.

During the weekday, most of the 85th percentile speeds during weekday were determined to be above than the speed limit, but most remained less than 60km/hr. Generally, this segment of roadway had slightly elevated 85th percentile speeds during the a.m. peak hour in both the northbound and southbound directions. The highest 85th percentile speed was 62km/hr at 7:00am in the northbound direction.

During the weekend, most of the 85th percentile speeds during weekend were determined to be above than the speed limit, but most remained less than 60km/hr. Both directions were found to peak during the morning hours prior to the a.m. peak hours. The highest 85th percentile speed was 64km/hr at 2:00am in the northbound direction.

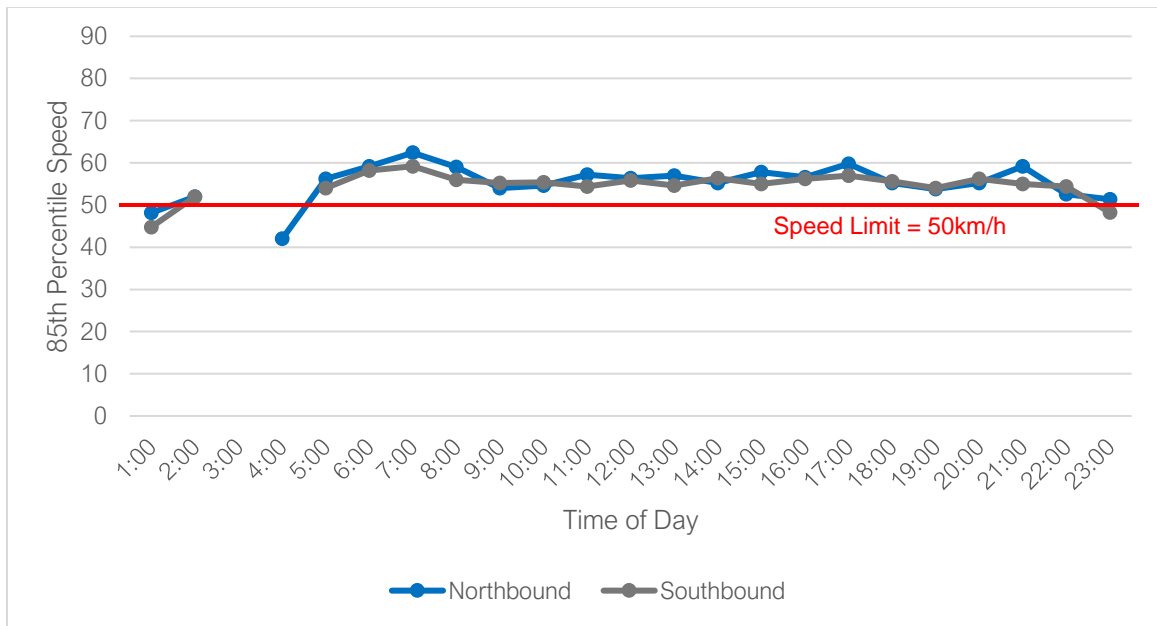


Figure 8.5: Weekday 85th Percentile Vehicle Speeds – Centre Street South of Lundy's Lane

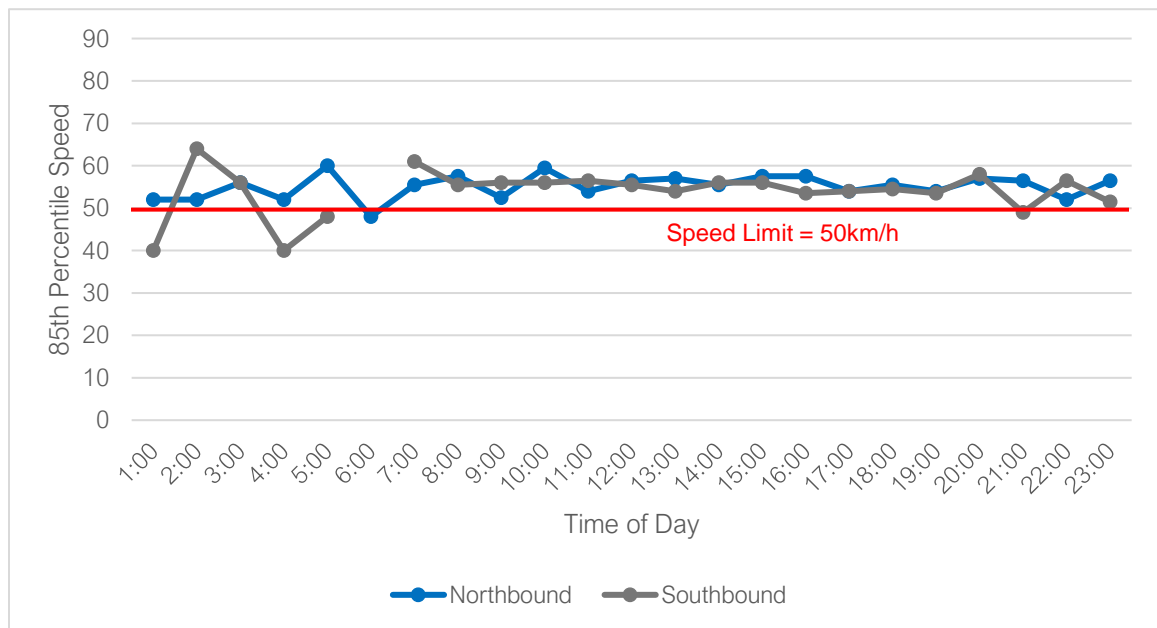


Figure 8.6: Weekend 85th Percentile Vehicle Speeds – Centre Street South of Lundy's Lane

8.3 Centre Street South of Henderson Street

The speed limit along Centre Street (between Henderson Street and Barron Road) is 50km/hr. Using the tube count data, the speeds of each vehicle traveling through this segment over a duration of 6 days was recorded.

The 85th percentile speeds were observed to be approximately 69km/h. As shown in **Figure 8.7**, 14% of vehicles along this segment drove less than the speed limit and another 57% of vehicles drove less than 10 km/h over the speed limit. The remaining 29% of vehicles were recorded driving greater than 10km/h over the speed limit.

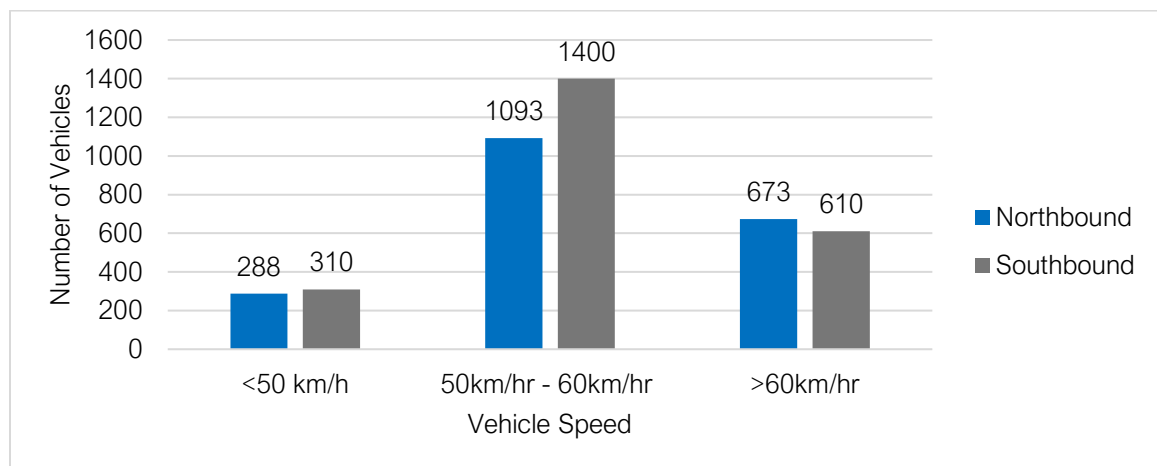


Figure 8.7: Vehicle Speeds – Centre Street South of Henderson Street

The weekday and weekend hourly 85th percentile speeds were averaged over multiple days and plotted as shown in **Figures 8.8 and 8.9**.

During the weekday, all of the 85th percentile speeds during weekday were determined to be consistently between 10km/h and 20km/h above than the speed limit. During the a.m. peak hour, it was found that there was little to no difference in 85th percentile speeds in the northbound and southbound directions. It was determined that the northbound 85th percentile peaked at 4:00pm, while the southbound remained consistent with the surrounding hours. The highest 85th percentile speed was 76km/h at 4:00pm in the northbound direction.

During the weekend, all of the 85th percentile speeds were determined to be consistently between 10km/h and 20km/h above than the speed limit. The southbound direction 85th percentile speeds were found to peak once mid-day, while the northbound direction speeds were found to peak several times during the p.m. peak hours and the evening. The highest 85th percentile speed was 79km/h at 11:00 am southbound direction.

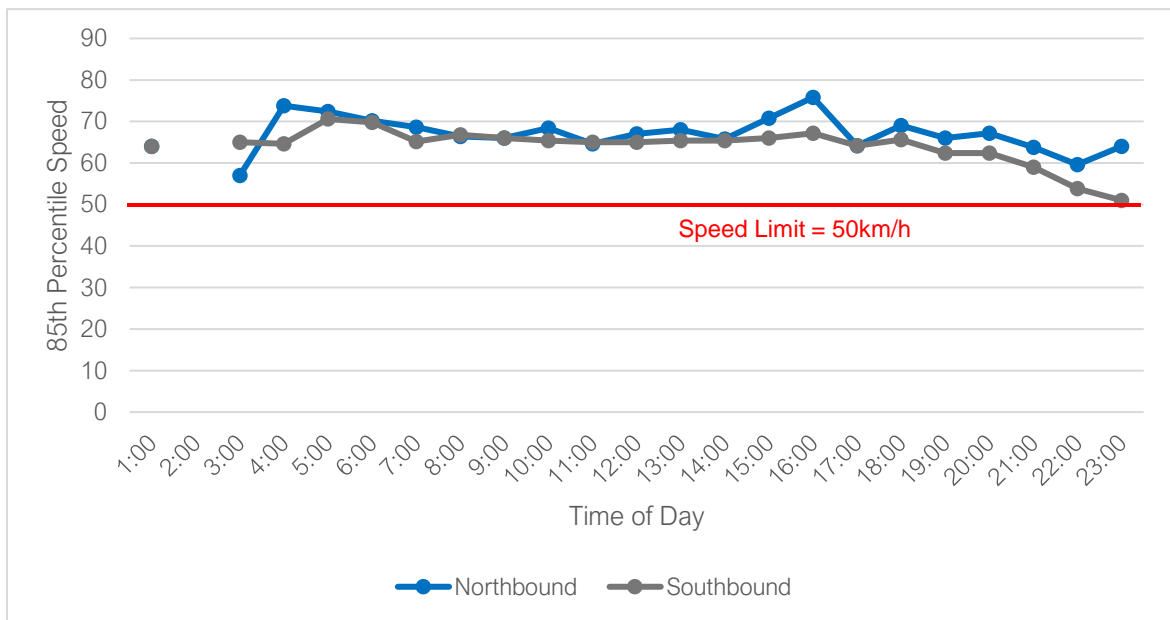


Figure 8.8: Weekday 85th Percentile Vehicle Speeds – Centre Street South of Henderson Street

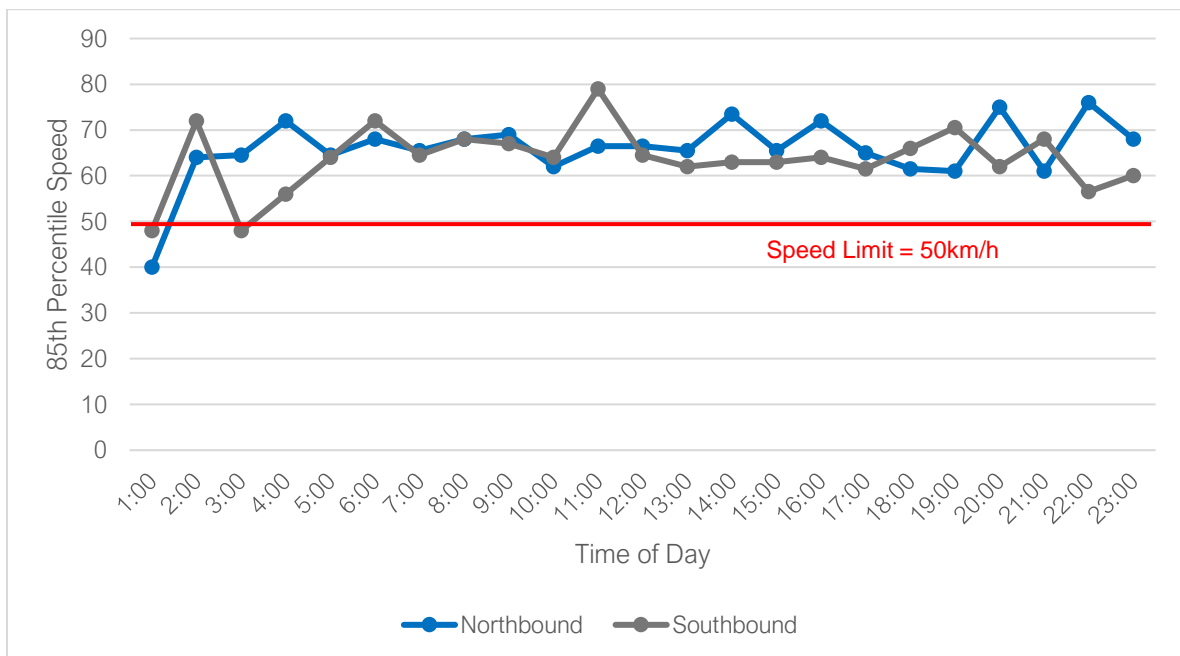


Figure 8.9: Weekend 85th Percentile Vehicle Speeds – Centre Street South of Henderson Street

8.4 Henderson Street East of Centre Street

The speed limit along Henderson Street (between Centre Street and Gainer Street) is 50km/hr. Using the tube count data, the speeds of each vehicle traveling through this segment over a duration of 6 days was recorded.

The 85th percentile speeds were observed to be approximately 42 km/h. As shown in **Figure 8.10**, 97% of vehicles along this segment drove less than the speed limit and the remaining 3% of vehicles drove less than 10 km/h over the speed limit.

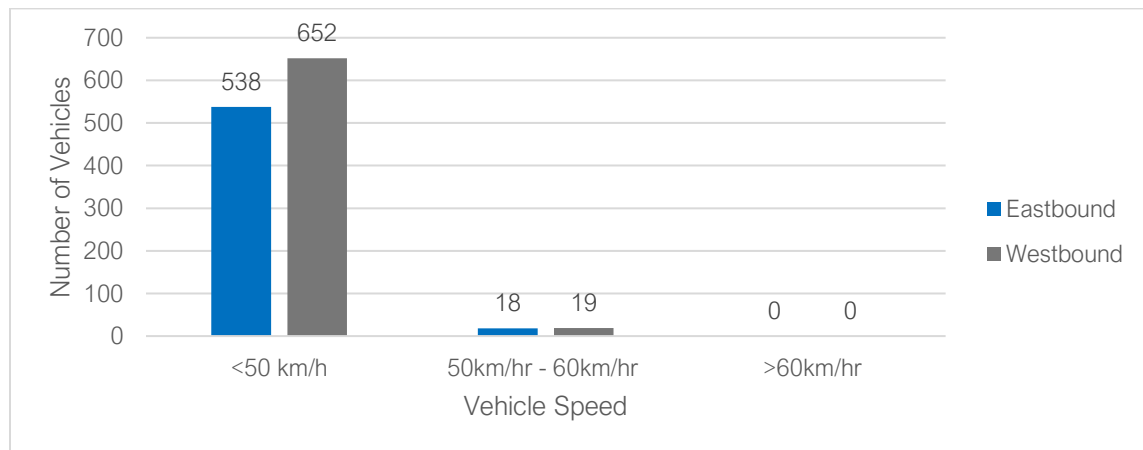


Figure 8.10: Vehicle Speeds – Henderson Street East of Centre Street

The weekday and weekend hourly 85th percentile speeds were averaged and plotted as shown in **Figures 8.12 and 8.13**.

During the weekday, all of the 85th percentile speeds during weekday are consistently below the speed limit, with speeds reducing slightly during the evening hours. The highest 85th percentile speed was 40km/hr at 5:00 a.m. and 2:00pm in the westbound direction.

During the weekend, all of the 85th percentile speeds during the weekend were found to be consistently slower the speed limit throughout the weekend, with speeds reducing slightly during the evening hours. The highest 85th percentile speed was 43km/hr at 2:00pm in the westbound direction.

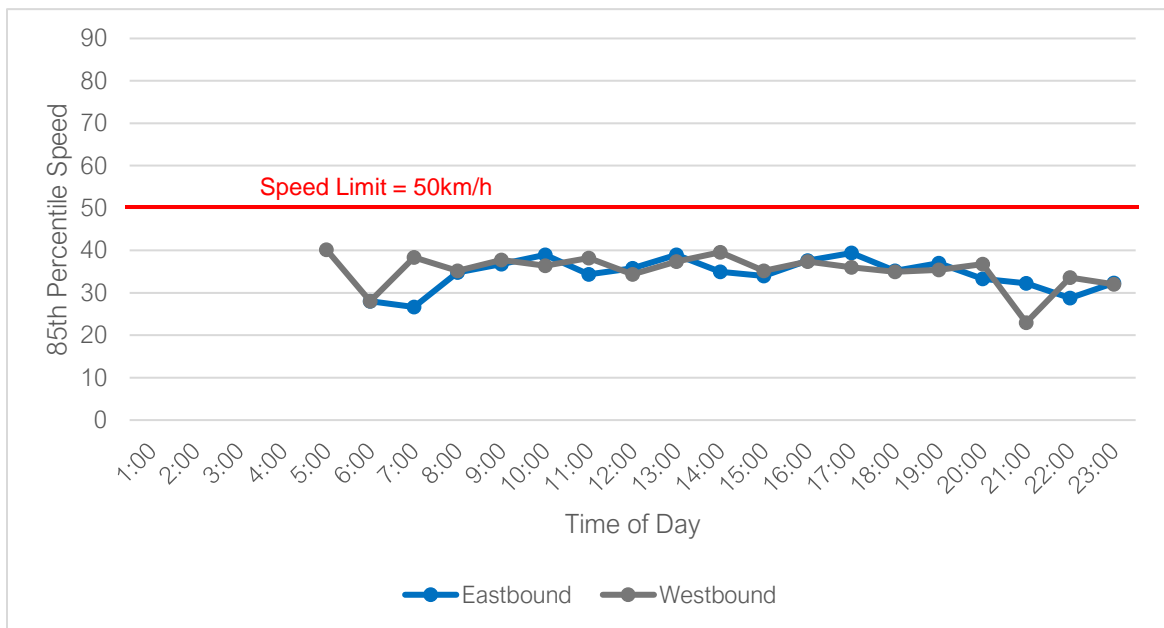


Figure 8.11: Weekday 85th Percentile Vehicle Speeds – Henderson Street East of Centre Street

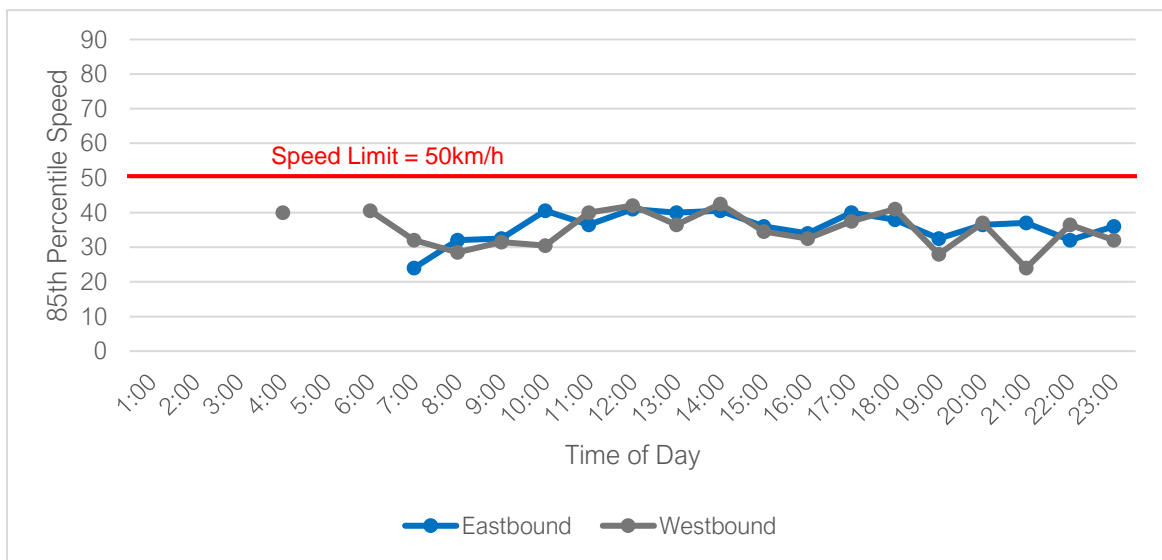


Figure 8.12: Weekend 85th Percentile Vehicle Speeds – Henderson Street East of Centre Street

8.5 Gainer Street South of Henderson Street

The speed limit along Gainer Street (between Henderson Street and Barron Road) is 50km/hr. Using the tube count data, the speeds of each vehicle traveling through this segment over a duration of 6 days was recorded.

The 85th percentile speeds were observed to be approximately 48km/h. As shown in **Figure 8.13**, 83% of vehicles along this segment drove less than the speed limit and another 16% of vehicles drove less than 10 km/h over the speed limit. The remaining 1% of vehicles were recorded driving greater than 10km/h over the speed limit.

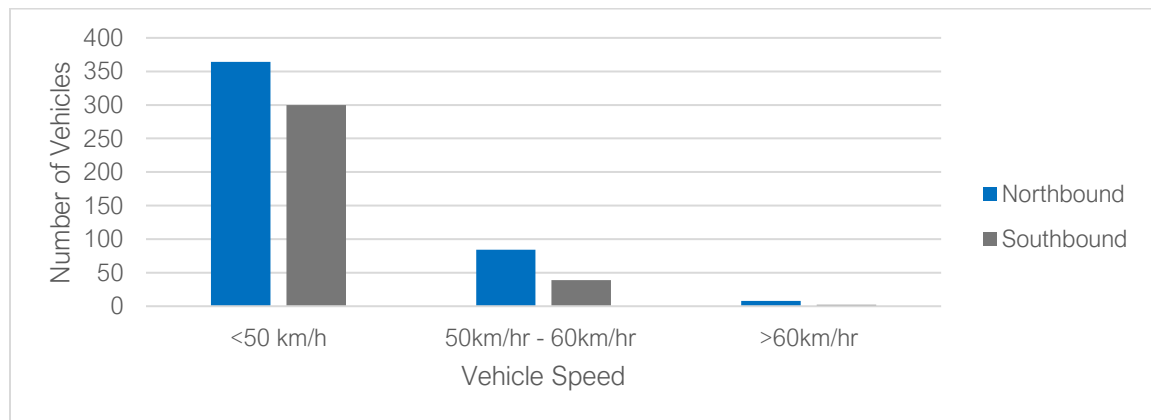


Figure 8.13: Vehicle Speeds – Gainer Street South of Henderson Street

The weekday and weekend hourly 85th percentile speeds were averaged over multiple days and plotted as shown in **Figures 8.14 and 8.15**.

During the weekday, most of the 85th percentile speeds during weekday were consistently lower than the speed limit. The 85th percentile speeds were generally consistent throughout the day, with reduced southbound speeds during 11:00 a.m. and 2:00 p.m. The highest 85th percentile speed was 51km/hr at 8:00 p.m. in the northbound direction.

During the weekend, most of the 85th percentile speeds during the weekend were found to be less than the speed limit. It was found that the northbound direction had consistently higher speeds than the southbound before 1:00 p.m. The northbound direction speeds peaked at several times throughout the day. The highest 85th percentile speed was 57km/hr at both 8:00 a.m. in the northbound direction.

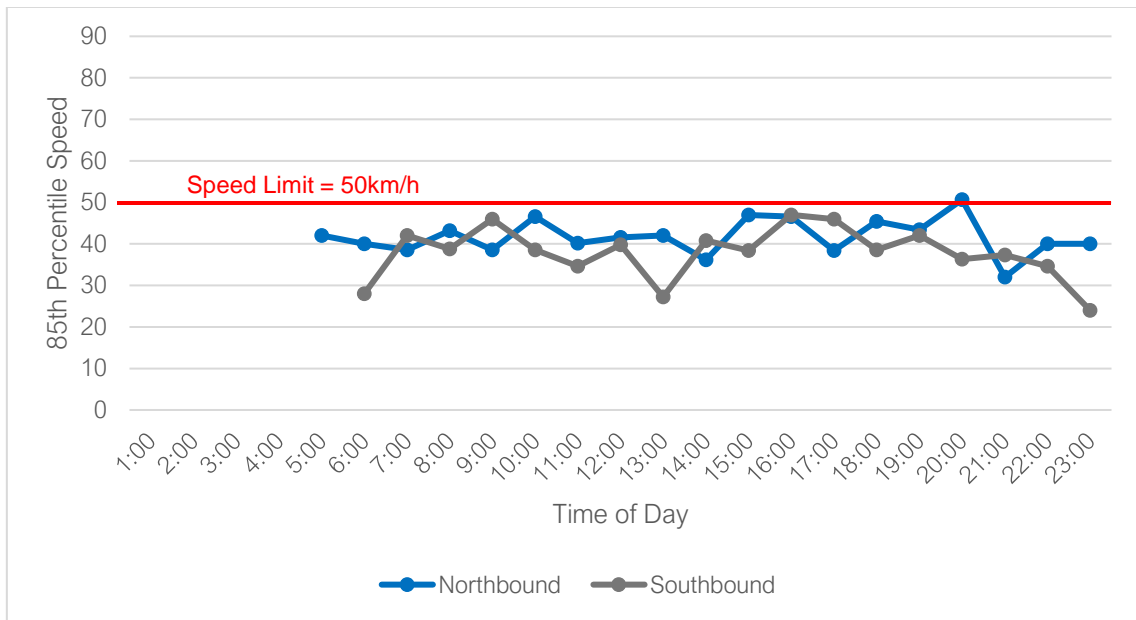


Figure 8.14: Weekday 85th Percentile Vehicle Speeds – Gainer Street South of Henderson Street

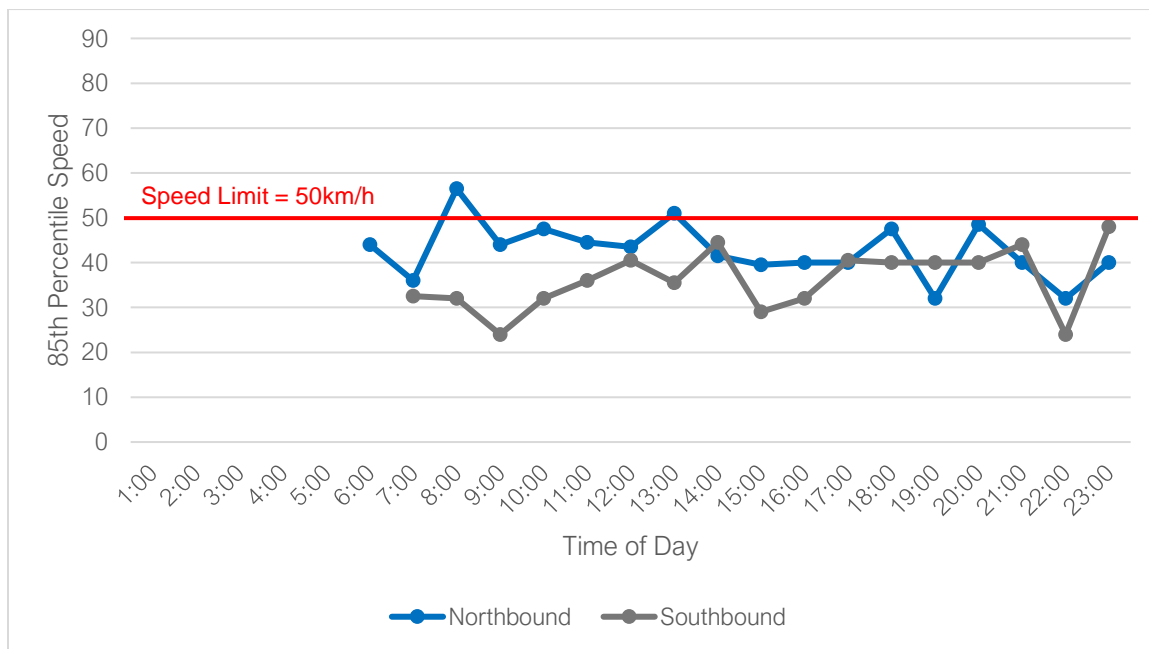


Figure 8.15: Weekend 85th Percentile Vehicle Speeds – Gainer Street South of Henderson Street

8.6 Barron Road East of Gainer Street

The speed limit along Barron Road (between Gainer Street and Airport Road) is 50km/hr. Using the tube count data, the speeds of each vehicle traveling through this segment over a duration of 6 days was recorded.

The 85th percentile speeds were observed to be approximately 65km/h. As shown in **Figure 8.16**, 22% of vehicles along this segment drove less than the speed limit and another 61% of vehicles drove less than 10 km/h over the speed limit. The remaining 17% of vehicles were recorded driving greater than 10km/h over the speed limit.

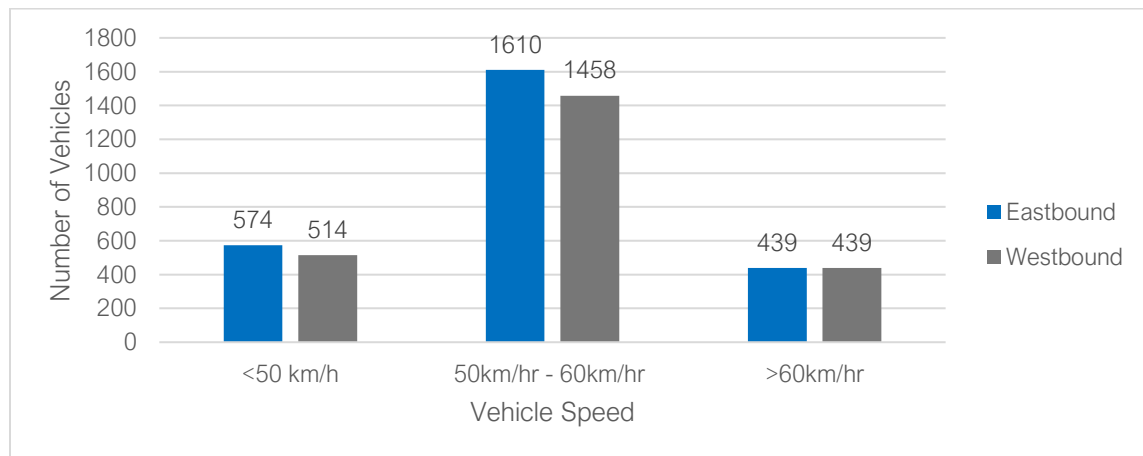


Figure 8.16: Vehicle Speeds – Barron Road East of Gainer Street

The weekday and weekend hourly 85th percentile speeds were averaged over multiple days and plotted as shown in **Figures 8.17 and 8.18**.

During the weekday, most of the 85th percentile speeds were found to be higher than the speed limit throughout the weekday. The 85th percentile speeds were relatively consistent in both directions for the majority of the day, with no major peaks. The highest 85th percentile speed was 68km/h at 6:00 a.m. in both directions.

During the weekend, most of the 85th percentile speeds were found to be higher than the speed limit throughout the weekend. The 85th percentile speeds were relatively consistent in both directions for the majority of the day, with no major peaks. The highest 85th percentile speed was 79km/h at 2:00 am in the northbound direction.

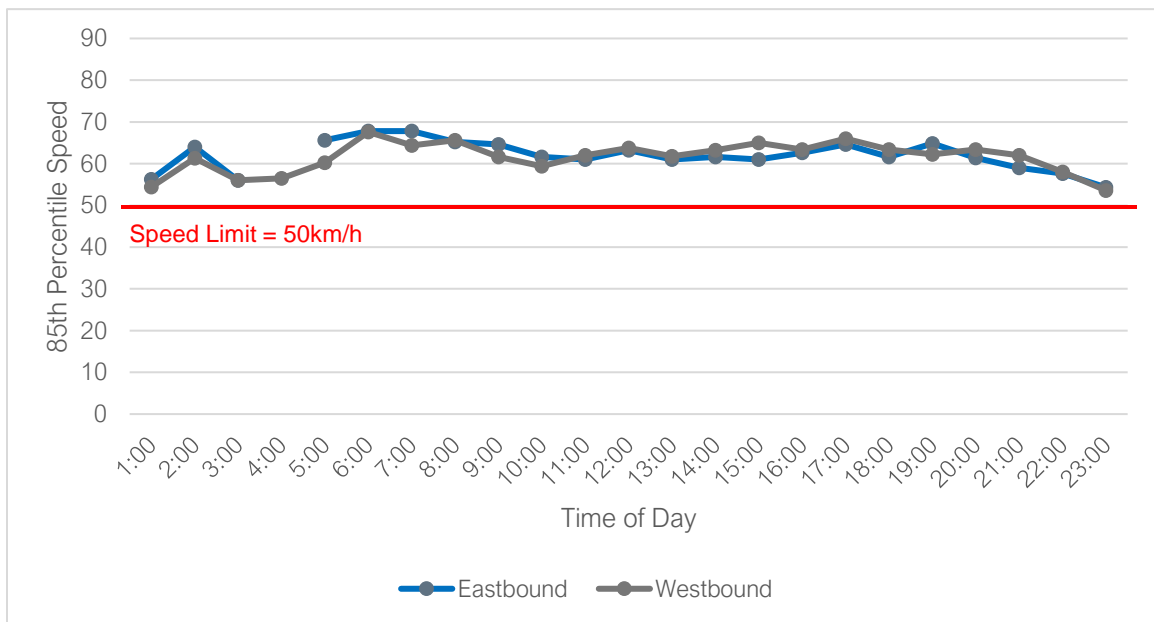


Figure 8.17: Weekday 85th Percentile Vehicle Speeds – Barron Road East of Gainer Street

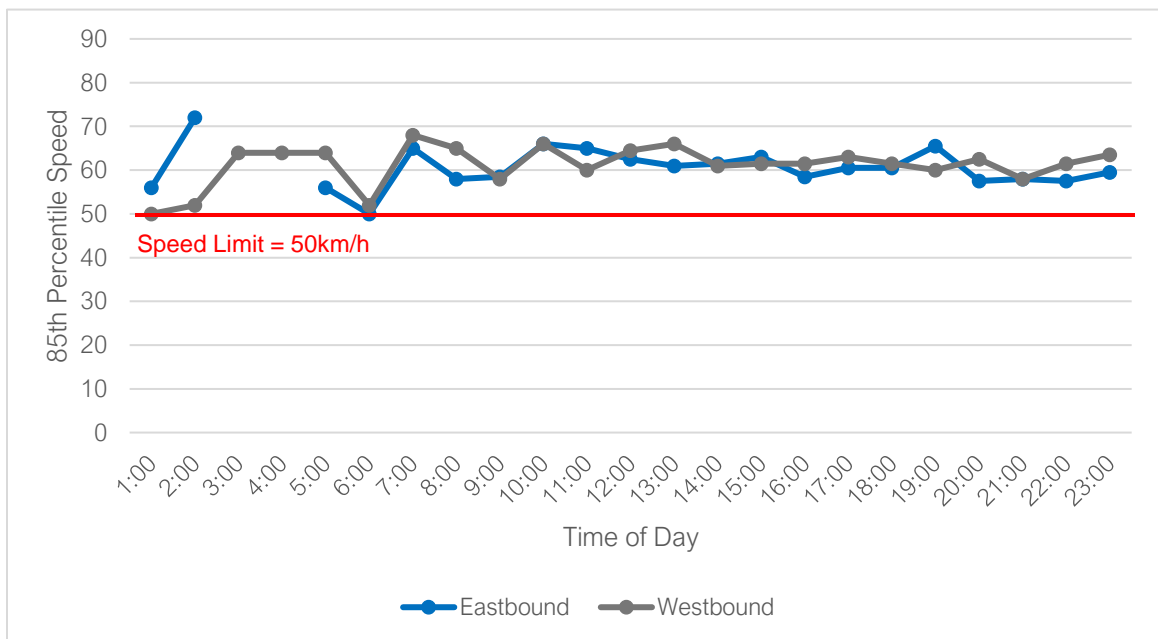


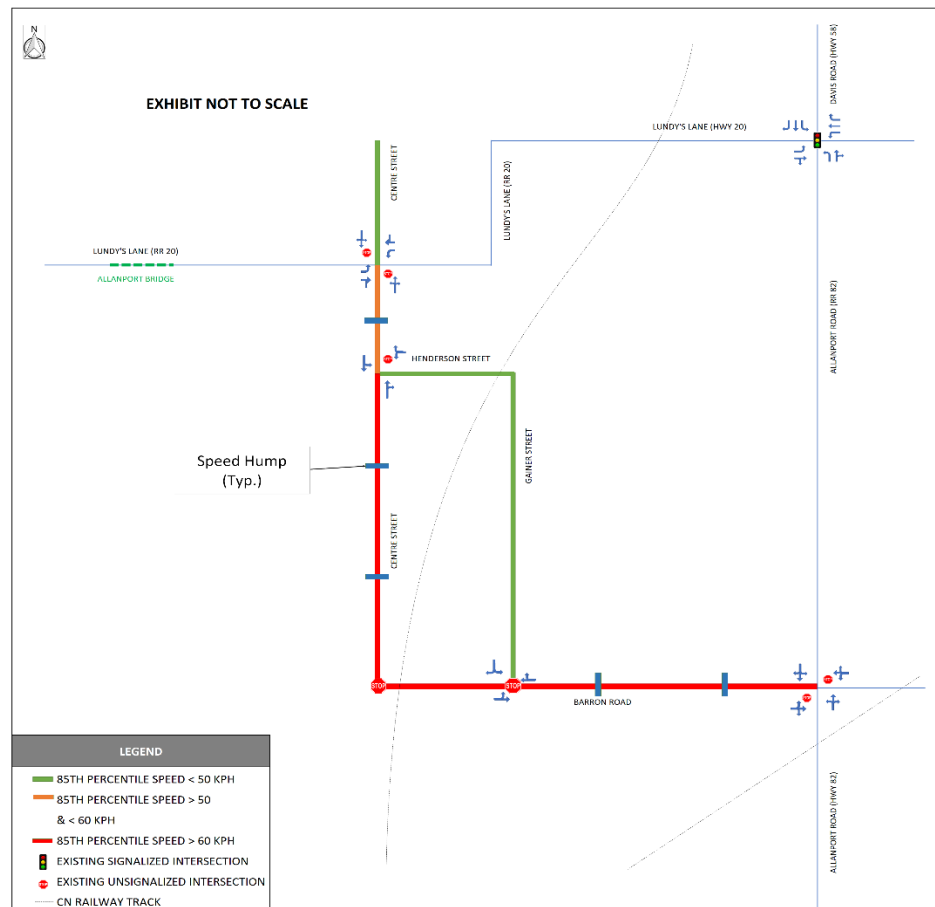
Figure 8.18: Weekend 85th Percentile Vehicle Speeds – Barron Road East of Gainer Street

8.7 Speed Data Summary

Henderson Street, Gainer Street, and Centre Street north of Lundy's Lane (RR20/Hwy 20) have 85th percentile speeds lower than the speed limit for most of the weekdays and weekends. The speeds along these roadways are considered acceptable and as such, no traffic calming measures are recommended.

Centre Street south of Lundy's Lane (RR20/Hwy 20) and Barron Road east of Gainer Street have recorded 85th percentile speeds greater than the speed limit for the majority of weekdays and weekends study hours. It is assumed that the segment of Barron between Centre Street and Gainer Street would also demonstrate high 85th percentile speeds as it provides connection from Centre Street to Barron Road. The 85th percentile speeds along these roadways are considered high and as such, consideration could be given to add traffic calming measures. Speed humps or speed cushions should be placed along the roadways at locations shown in **Figure 8.19**, such that no driveway operations are impacted.

Figure 8.19: Locations of Proposed Speed Humps or Cushions



9.0 Public Information Centres

A Public Information Centre (PIC) was held on May 10, 2022, from 6:00pm to 8:00pm. The purpose of the PIC was to receive input from the public on the key issues and constraints within the study area. The format of the Public Information Centre (PIC) was an informal “Open House” with materials pertaining to the study on display for the public to review. Several members of the project team were available to discuss the project with attendees and to answer questions.

All members of the public were encouraged to provide comments and feedback on the material presented and the study in general. Comment forms were provided for attendees to complete. Attendees were also encouraged to submit additional comments by email or mail. A summary of comments and Public Information materials is included in **Appendix 3**.

Based on the sign-in sheet, there were 48 attendees. Comments on various topics were provided and the following trends were found among the comments received:

1. Concerned with the increased in traffic due to the additional developments being constructed, notably from the Rolling Meadows and Port Robinson developments.
2. Concerned about the traffic data used in study may have been impact by COVID.
3. Concerns about the intersection of Centre Street and Lundy’s Lane (RR 20) being blocked for emergency vehicle access.
4. Concern that high approach speeds for traffic on Lundy’s Lane(RR20), and limited sightlines due to the S curve in the roadway make exiting the intersection of Lundy’s Lane(RR20) at Centre Street difficult.
5. Pedestrian crossing was noted as a concern at the intersection of Centre Street at Lundy’s Lane due to the volume of traffic and lack of crossing facilities.
6. Due to the high delays for vehicles exiting the community at the intersection of Lundy’s Lane at Centre Street, attendees noted interest in the signalization of this intersection.
7. Attendees expressed interest in having traffic calming measures implemented within the Allanburg South Area due to speeding (i.e., speed bumps, additional signage, intersection controls and no-through routes).
8. Attendees noted interest in implementing sidewalks along all internal roadways within the Allanburg community.
9. Attendees are concerned about the safety of the railway track.

10.0 Conclusions and Recommendations

Based on the results of our capacity analysis, operations, and speed review the following recommendations could be considered:

Traffic Operations

- The Allanburg Community is forecast to grow by a total of 130 new residential units by the year 2041. The majority of this growth is planned for the south portion of the community.
- Under existing 2021 and future 2041 traffic conditions, all study area intersections analyzed are forecast to operate satisfactorily. Under future 2041 traffic conditions, the northbound left turn movement only at the intersection of Centre Street and Lundy's Lane (RR20) is forecast to operate at a Level of Service 'F' with a v/c ratio of 0.51 during the p.m. peak hour only. This is mainly due to the growth in east-west traffic along Lundy's Lane (RR20/Hwy 20) and decreasing gaps in traffic. This movement has a minor volumes and exiting traffic also has ability to use the Allanport Rod (RR82) and Barron Road intersection as an alternate.

Active Transportation

- Based on the City of Thorold's Transportation Master Plan, there are planned cycling network expansions both along the east side of the Welland ship canal (Trail) and along Lundy's Lane (RR 20/Hwy 20) east and west of the canal as an MUP and painted bike lane, respectively. Along City streets Centre Street and Barron Road are recommended for paved shoulders respectively.
- There are limited and discontinuous pedestrian/sidewalk facilities within the Allanburg study area. To support the existing community and forecast growth proposed extensions are recommended to cover the entire length of Centre Street and Barron Road. Also, connections are required between the Allanburg Bridge and Centre Street along both sides of Lundy's Lane (RR 20) and at the east end of the Lundy's Lane (RR20) sidewalks with Clift Street.

Traffic Calming

- Henderson Street, Gainer Street, and Centre Street north of Lundy's Lane (RR20) have 85th percentile speeds lower than the posted speed limit for most of the weekdays and weekends. The speeds along these roadways are considered acceptable and no traffic calming measures are recommended.
- Centre Street south of Lundy's Lane (RR20) and Barron Road have 85th percentile speeds greater than the posted speed limit. Centre Street between Lundy's Lane

(RR 20) and Henderson Street has an 85th percentile speed is less than 10 kph over posted speed limit while the remainder of roadway sections have speeds in excess of 10kph and are candidates for traffic calming.

- The addition of traffic calming measures, in the form of speed humps or speed cushions are recommended for installation, along Centre Street and Barron Road in locations as shown in *Figure 8.19*.

As all these elements all overlap and must fit into the available right-of- way for Centre Street and Barron Road, a design study to review how to best to accommodate the need for traffic calming, cycling and sidewalks recommendations should be undertaken by the City. The study would explore opportunities to combine facilities like pedestrians and cyclist and assess where best to place traffic calming to not affect drainage or residential driveways. Finally, this study should have a public engagement component to solicit feedback on proposed alternatives developed.

Alternate EMS Access along Lundy's Lane (RR 20)

- An alternate access route connection to the Allanburg North community for emergency vehicles should be explored along Lundy's Lane (RR 20) at the Centre Street cul-de-sac with an 8-metre driveway throat in advance of the gated access.

Lundy's Lane (RR 20) at Centre Street Intersection

To mitigate the blockage of this intersection by traffic queues when there is a Bridge event two options should be explored with the Region of Niagara and St Lawrence Seaway:

- Introduce a cross hatched pavement markings in the intersection and reposition 'Do Not Block Intersection' signage easterly. Also consider painting a secondary stop bar on the east leg of Centre street intersection, or;
- Add an auxiliary bridge traffic signal heads along Lundy's Lane on the west side of Centre Street with a stop bar and "Stop Here on Red" signage on the east side of the intersection.

Lundy's Lane (RR 20) at Welland Canal Trail

- At the existing Welland Canal Trail crossing, the separation between the trail crossing and the painted stop bar should be increase by 3 to 5m to minimize/avoid vehicle encroachment into the trail crossing area. A " stop here on red" sign should be installed on its own post adjacent to new stop bar location and all other pavement markings should be refreshed. As a new trail along the east side of the canal is implemented, similar considerations about signage and stop bar placement should be adhered to.

- Given the close proximity of the existing and future trail crossings to the Allanburg lift Bridge, visibility of the crossing locations is somewhat restricted. The addition of advance trail crossing warning signs in each direction along Lundys Lane (RR 20) should be implement as per the requirements of OTM Book 6.

Lundy's Lane (RR 20/Hwy 20) Rail Crossing

- As part of this study traffic queuing from bridge events were observed to extend across the existing CN at grade rail crossing on Lundys Lane (RR20/HWY 20). Although no traffic was observed stopped on the tracks during the days in which data collection was completed for this study, it is recommended that the City request the Region of Niagara to review the traffic queuing along Highway 20 and assess where a modifications to the approach roadway or rail crossing are required.

Allanburg Bridge Closures

The closure of any one of the Welland Canal crossings will result in traffic detouring on to the other parallel crossing points. As such, where possible full closures or extended lane restrictions on adjacent crossings at the same time should be avoided. This can be achieved through proactive coordination of roadway and bridge maintenance programs between the various roadway authorities (Province and Region) and St. Lawrence Seaway Management Corporation and communication of these events with the City and roadway users.

The review of the data from the 24-hour period studied along the Lundy's Lane (RR 20/Hwy 20) corridor determined that no bridge events occurred past 7:00pm at night. Where possible limiting full closures of the Allanburg Bridge or Thorold Tunnel to nighttime when there is less roadway volume and fewer bridge events would result in less overall impacts in the form of delay and congestion on the adjacent community.

APPENDIX 1

Raw Traffic Data



Ontario Traffic, Inc.
 17705 Leslie St., Unit 6
 Newmarket, Ontario L3Y 3E3
 Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 1
 Station ID: U145
 Centre St south of Falls St

Date Start: 26-May-21
 Date End: 01-Jun-21
 Date Start: 26-May-21

| NB | Start Time | 1 | 16 | 24 | 32 | 40 | 48 | 56 | 64 | 72 | 80 | 89 | 97 | 105 | 113 | 121 | Total | Average (Mean) | 85th Percent | |
|---------|--------------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|-------|----------------|--------------|----|
| 06/01/2 | | | | | | | | | | | | | | | | | | | | |
| | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 56 | 56 |
| | 01:00 | 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 | * | * |
| | 03:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * | * |
| | 04:00 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 32 | 32 |
| | 05:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * | * |
| | 06:00 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 32 | 32 |
| | 07:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * | * |
| | 08:00 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 33 | 34 |
| | 09:00 | 0 | 1 | 0 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 35 | 40 |
| | 10:00 | 0 | 1 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 30 | 33 |
| | 11:00 | 0 | 0 | 0 | 2 | 4 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 44 | 55 |
| | 12 PM | 0 | 0 | 3 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 33 | 40 |
| | 13:00 | 1 | 1 | 1 | 4 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 33 | 40 |
| | 14:00 | 2 | 2 | 0 | 1 | 3 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 31 | 42 |
| | 15:00 | 0 | 3 | 1 | 4 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 35 | 43 |
| | 16:00 | 0 | 1 | 2 | 5 | 3 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 40 | 50 |
| | 17:00 | 3 | 1 | 2 | 4 | 2 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 31 | 48 |
| | 18:00 | 0 | 0 | 0 | 3 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 41 | 48 |
| | 19:00 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 12 | 24 |
| | 20:00 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 40 | 40 |
| | 21:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * | * |
| | 22:00 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 40 | 40 |
| | 23:00 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 32 | 32 |
| | Total | 7 | 10 | 10 | 36 | 29 | 11 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 107 | | |
| | Percent | 6.5% | 9.3% | 9.3% | 33.6% | 27.1% | 10.3% | 3.7% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | | | |
| | AM Peak Vol. | | 09:00 | | 08:00 | 11:00 | 11:00 | 00:00 | | | | | | | | | | | | |
| | PM Peak Vol. | 17:00 | 15:00 | 12:00 | 16:00 | 15:00 | 16:00 | 14:00 | | | | | | | | | | | | |
| | Total | 23 | 72 | 91 | 253 | 206 | 85 | 21 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 751 | | |

15th Percentile : 25 KPH
 50th Percentile : 37 KPH
 85th Percentile : 47 KPH
 95th Percentile : 54 KPH

Stats
 10 KPH Pace Speed : 32-41 KPH
 Number in Pace : 305
 Percent in Pace : 40.6%
 Number of Vehicles > 60 KPH : 6
 Percent of Vehicles > 60 KPH : 0.8%
 Mean Speed(Average) : 37 KPH

Ontario Traffic, Inc.
 17705 Leslie St., Unit 6
 Newmarket, Ontario L3Y 3E3
 Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 1
 Station ID: U145
 Centre St south of Falls St

Date Start: 26-May-21
 Date End: 01-Jun-21
 Date Start: 26-May-21

SB

| Start Time | 1 | 16 | 24 | 32 | 40 | 48 | 56 | 64 | 72 | 80 | 89 | 97 | 105 | 113 | 121 | Total | Average (Mean) | 85th Percent | |
|--------------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|-------|----------------|--------------|---|
| 06/01/2 | | | | | | | | | | | | | | | | | | | |
| 1 | 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 | * | * |
| 02:00 | 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 | * | * |
| 04:00 | 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 | * | * |
| 06:00 | 0 | 1 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 26 | 26 | |
| 07:00 | 0 | 0 | 0 | 5 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 37 | 41 | |
| 08:00 | 0 | 0 | 0 | 10 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 37 | 40 | |
| 09:00 | 0 | 0 | 0 | 1 | 8 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 44 | 46 | |
| 10:00 | 0 | 0 | 0 | 2 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 40 | 42 | |
| 11:00 | 0 | 0 | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 35 | 34 | |
| 12 PM | 2 | 1 | 1 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 27 | 35 | |
| 13:00 | 0 | 0 | 3 | 2 | 2 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 39 | 48 | |
| 14:00 | 0 | 2 | 2 | 2 | 1 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 37 | 48 | |
| 15:00 | 0 | 1 | 2 | 4 | 6 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 38 | 44 | |
| 16:00 | 1 | 1 | 0 | 4 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 35 | 41 | |
| 17:00 | 1 | 0 | 1 | 1 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 37 | 44 | |
| 18:00 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 35 | 40 | |
| 19:00 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 33 | 34 | |
| 20:00 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 48 | 48 | |
| 21:00 | 0 | 0 | 0 | 1 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 40 | 41 | |
| 22:00 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 40 | 40 | |
| 23:00 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 32 | 32 | |
| Total | 4 | 6 | 12 | 46 | 42 | 11 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 122 | | | |
| Percent | 3.3% | 4.9% | 9.8% | 37.7% | 34.4% | 9.0% | 0.8% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | | | | |
| AM Peak Vol. | | 06:00 | 06:00 | 08:00 | 09:00 | 07:00 | | | | | | | | | | | | | |
| PM Peak Vol. | 12:00 | 14:00 | 13:00 | 12:00 | 15:00 | 13:00 | 14:00 | | | | | | | | | | | | |
| Total | 38 | 54 | 108 | 288 | 251 | 49 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 797 | | | |

15th Percentile : 26 KPH
 50th Percentile : 37 KPH
 85th Percentile : 45 KPH
 95th Percentile : 50 KPH

Stats
 10 KPH Pace Speed : 32-41 KPH
 Number in Pace : 352
 Percent in Pace : 44.2%
 Number of Vehicles > 60 KPH : 3
 Percent of Vehicles > 60 KPH : 0.4%
 Mean Speed(Average) : 36 KPH

Ontario Traffic, Inc.
 17705 Leslie St., Unit 6
 Newmarket, Ontario L3Y 3E3
 Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 1
 Station ID: U145
 Centre St south of Falls St

Date Start: 26-May-21
 Date End: 01-Jun-21
 Date Start: 26-May-21

| NB, SB | 1 | 16 | 24 | 32 | 40 | 48 | 56 | 64 | 72 | 80 | 89 | 97 | 105 | 113 | 121 | Total | Average (Mean) | 85th Percent |
|---------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|-------|----------------|--------------|
| 06/01/2 | 15 | 23 | 31 | 39 | 47 | 55 | 63 | 71 | 79 | 88 | 96 | 104 | 112 | 120 | 9999 | | | |
| 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 56 | 56 |
| 01:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * | * |
| 02:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * | * |
| 03:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * | * |
| 04:00 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 32 | 32 |
| 05:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * | * |
| 06:00 | 0 | 1 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 27 | 32 |
| 07:00 | 0 | 0 | 0 | 5 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 37 | 41 |
| 08:00 | 0 | 0 | 0 | 13 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 36 | 40 |
| 09:00 | 0 | 1 | 0 | 3 | 10 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 40 | 46 |
| 10:00 | 0 | 1 | 0 | 4 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 38 | 42 |
| 11:00 | 0 | 0 | 0 | 5 | 5 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 42 | 44 |
| 12 PM | 2 | 1 | 4 | 6 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 30 | 40 |
| 13:00 | 1 | 1 | 4 | 6 | 4 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 37 | 48 |
| 14:00 | 2 | 4 | 2 | 3 | 4 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 | 35 | 54 |
| 15:00 | 0 | 4 | 3 | 8 | 12 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 28 | 36 | 44 |
| 16:00 | 1 | 2 | 2 | 9 | 7 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 26 | 38 | 48 |
| 17:00 | 4 | 1 | 3 | 5 | 7 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 | 34 | 46 |
| 18:00 | 0 | 0 | 0 | 5 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 39 | 42 |
| 19:00 | 1 | 0 | 1 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 26 | 33 |
| 20:00 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 45 | 48 |
| 21:00 | 0 | 0 | 0 | 1 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 40 | 41 |
| 22:00 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 40 | 41 |
| 23:00 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 32 | 33 |
| Total | 11 | 16 | 22 | 82 | 71 | 22 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 229 | | |
| Percent | 4.8% | 7.0% | 9.6% | 35.8% | 31.0% | 9.6% | 2.2% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | | | |
| AM Peak | | 06:00 | 06:00 | 08:00 | 09:00 | 07:00 | 00:00 | | | | | | | | | | | |
| Vol. | | 1 | 3 | 13 | 10 | 1 | 1 | | | | | | | | | | | |
| PM Peak | 17:00 | 14:00 | 12:00 | 16:00 | 15:00 | 13:00 | 14:00 | | | | | | | | | | | |
| Vol. | 4 | 4 | 4 | 9 | 12 | 4 | 2 | | | | | | | | | | | |
| Total | 61 | 126 | 199 | 541 | 457 | 134 | 30 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1548 | | |

15th Percentile : 25 KPH
 50th Percentile : 37 KPH
 85th Percentile : 46 KPH
 95th Percentile : 53 KPH

Stats
 10 KPH Pace Speed : 32-41 KPH
 Number in Pace : 656
 Percent in Pace : 42.4%
 Number of Vehicles > 60 KPH : 10
 Percent of Vehicles > 60 KPH : 0.6%
 Mean Speed(Average) : 36 KPH

Ontario Traffic, Inc.
 17705 Leslie St., Unit 6
 Newmarket, Ontario L3Y 3E3
 Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 2
 Station ID: U238
 Centre St south of RR 20

Date Start: 26-May-21
 Date End: 01-Jun-21
 Date Start: 26-May-21

| NB | Start Time | 1 | 16 | 24 | 32 | 40 | 48 | 56 | 64 | 72 | 80 | 89 | 97 | 105 | 113 | 121 | Total | Average (Mean) | 85th Percent | |
|---------|------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|------|-------|----------------|--------------|---|
| 06/01/2 | | | | | | | | | | | | | | | | | | | | |
| | 1 | 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 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 56 | 57 | |
| | 02:00 | 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 | * | * |
| | 04:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * | * |
| | 05:00 | 0 | 0 | 0 | 0 | 2 | 1 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 51 | 57 | |
| | 06:00 | 0 | 0 | 1 | 0 | 7 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 46 | 57 | |
| | 07:00 | 0 | 0 | 1 | 3 | 2 | 6 | 8 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22 | 52 | 62 | |
| | 08:00 | 2 | 0 | 6 | 4 | 12 | 10 | 7 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 43 | 44 | 58 | |
| | 09:00 | 1 | 2 | 4 | 8 | 6 | 5 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 31 | 41 | 52 | |
| | 10:00 | 1 | 1 | 0 | 2 | 5 | 6 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 46 | 57 | |
| | 11:00 | 0 | 0 | 0 | 6 | 6 | 3 | 5 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 23 | 49 | 60 | |
| | 12 PM | 0 | 0 | 1 | 1 | 9 | 8 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 26 | 49 | 58 | |
| | 13:00 | 0 | 0 | 0 | 5 | 8 | 1 | 4 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 19 | 47 | 57 | |
| | 14:00 | 1 | 1 | 2 | 6 | 5 | 8 | 6 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 32 | 47 | 59 | |
| | 15:00 | 1 | 0 | 2 | 9 | 9 | 6 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 33 | 43 | 56 | |
| | 16:00 | 1 | 1 | 2 | 4 | 7 | 16 | 7 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 41 | 49 | 59 | |
| | 17:00 | 0 | 0 | 2 | 4 | 5 | 11 | 13 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 39 | 52 | 61 | |
| | 18:00 | 0 | 0 | 1 | 2 | 9 | 9 | 5 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 28 | 49 | 58 | |
| | 19:00 | 0 | 1 | 0 | 5 | 5 | 9 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 21 | 45 | 53 | |
| | 20:00 | 0 | 0 | 0 | 5 | 1 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 43 | 50 | |
| | 21:00 | 0 | 0 | 1 | 1 | 0 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 45 | 49 | |
| | 22:00 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 32 | 32 | |
| | 23:00 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 32 | 32 | |
| | Total | 7 | 6 | 23 | 67 | 98 | 104 | 87 | 20 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 416 | | | |
| | Percent | 1.7% | 1.4% | 5.5% | 16.1% | 23.6% | 25.0% | 20.9% | 4.8% | 1.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | | | | |
| | AM Peak | 08:00 | 09:00 | 08:00 | 09:00 | 08:00 | 08:00 | 07:00 | 07:00 | 11:00 | | | | | | | | | | |
| | Vol. | 2 | 2 | 6 | 8 | 12 | 10 | 8 | 2 | 1 | | | | | | | | | | |
| | PM Peak | 14:00 | 14:00 | 14:00 | 15:00 | 12:00 | 16:00 | 17:00 | 16:00 | 13:00 | | | | | | | | | | |
| | Vol. | 1 | 1 | 2 | 9 | 9 | 16 | 13 | 3 | 1 | | | | | | | | | | |
| | Total | 16 | 41 | 147 | 475 | 664 | 726 | 480 | 127 | 27 | 2 | 0 | 0 | 0 | 0 | 0 | 2705 | | | |

15th Percentile : 35 KPH
 50th Percentile : 48 KPH
 85th Percentile : 59 KPH
 95th Percentile : 65 KPH

Stats
 10 KPH Pace Speed : 46-55 KPH
 Number in Pace : 892
 Percent in Pace : 33.0%
 Number of Vehicles > 60 KPH : 336
 Percent of Vehicles > 60 KPH : 12.4%
 Mean Speed(Average) : 47 KPH

Ontario Traffic, Inc.
 17705 Leslie St., Unit 6
 Newmarket, Ontario L3Y 3E3
 Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 2
 Station ID: U238
 Centre St south of RR 20

Date Start: 26-May-21
 Date End: 01-Jun-21
 Date Start: 26-May-21

SB

| Start Time | 1 | 16 | 24 | 32 | 40 | 48 | 56 | 64 | 72 | 80 | 89 | 97 | 105 | 113 | 121 | Total | Average (Mean) | 85th Percent |
|------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|-------|----------------|--------------|
| 06/01/2 | | | | | | | | | | | | | | | | | | |
| 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 32 | 32 |
| 01:00 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 40 | 40 |
| 02:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * | * |
| 03:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * | * |
| 04:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * | * |
| 05:00 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 56 | 56 |
| 06:00 | 0 | 0 | 0 | 0 | 4 | 2 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 52 | 65 |
| 07:00 | 0 | 0 | 1 | 0 | 3 | 7 | 5 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 52 | 59 |
| 08:00 | 0 | 1 | 1 | 2 | 7 | 9 | 1 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 | 48 | 55 |
| 09:00 | 0 | 0 | 1 | 4 | 7 | 6 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 21 | 46 | 53 |
| 10:00 | 0 | 0 | 1 | 2 | 8 | 10 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 | 47 | 54 |
| 11:00 | 1 | 0 | 1 | 2 | 11 | 10 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 27 | 45 | 53 |
| 12 PM | 0 | 0 | 0 | 3 | 5 | 10 | 3 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 22 | 50 | 56 |
| 13:00 | 0 | 0 | 1 | 6 | 9 | 7 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 26 | 45 | 53 |
| 14:00 | 1 | 0 | 0 | 5 | 11 | 13 | 7 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 38 | 48 | 57 |
| 15:00 | 0 | 1 | 0 | 4 | 7 | 17 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 35 | 49 | 56 |
| 16:00 | 2 | 0 | 1 | 7 | 13 | 14 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 44 | 45 | 55 |
| 17:00 | 1 | 0 | 0 | 11 | 20 | 16 | 7 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 58 | 46 | 56 |
| 18:00 | 0 | 0 | 1 | 3 | 16 | 10 | 6 | 3 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 41 | 50 | 60 |
| 19:00 | 0 | 0 | 0 | 4 | 3 | 7 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 47 | 54 |
| 20:00 | 0 | 0 | 0 | 4 | 3 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 44 | 55 |
| 21:00 | 0 | 0 | 0 | 1 | 1 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 48 | 49 |
| 22:00 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 48 | 49 |
| 23:00 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 40 | 40 |
| Total | 5 | 2 | 8 | 60 | 131 | 145 | 56 | 18 | 3 | 0 | 1 | 0 | 0 | 0 | 0 | 429 | | |
| Percent | 1.2% | 0.5% | 1.9% | 14.0% | 30.5% | 33.8% | 13.1% | 4.2% | 0.7% | 0.0% | 0.2% | 0.0% | 0.0% | 0.0% | 0.0% | | | |
| AM Peak | 11:00 | 08:00 | 07:00 | 09:00 | 11:00 | 10:00 | 07:00 | 08:00 | 06:00 | | | | | | | | | |
| Vol. | 1 | 1 | 1 | 4 | 11 | 10 | 5 | 3 | 1 | | | | | | | | | |
| PM Peak | 16:00 | 15:00 | 13:00 | 17:00 | 17:00 | 15:00 | 14:00 | 17:00 | 12:00 | 18:00 | | | | | | | | |
| Vol. | 2 | 1 | 1 | 11 | 20 | 17 | 7 | 3 | 1 | 1 | | | | | | | | |
| Total | 11 | 24 | 67 | 389 | 835 | 996 | 455 | 91 | 17 | 5 | 1 | 0 | 0 | 0 | 0 | 2891 | | |

15th Percentile : 38 KPH
 50th Percentile : 48 KPH
 85th Percentile : 58 KPH
 95th Percentile : 63 KPH

Stats
 10 KPH Pace Speed : 46-55 KPH
 Number in Pace : 1206
 Percent in Pace : 41.7%
 Number of Vehicles > 60 KPH : 284
 Percent of Vehicles > 60 KPH : 9.8%
 Mean Speed(Average) : 48 KPH

Ontario Traffic, Inc.
 17705 Leslie St., Unit 6
 Newmarket, Ontario L3Y 3E3
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Site Code: 2
 Station ID: U238
 Centre St south of RR 20

Date Start: 26-May-21
 Date End: 01-Jun-21
 Date Start: 26-May-21

| NB, SB | 1 | 16 | 24 | 32 | 40 | 48 | 56 | 64 | 72 | 80 | 89 | 97 | 105 | 113 | 121 | Total | Average (Mean) | 85th Percent |
|------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|-------|----------------|--------------|
| Start Time | 15 | 23 | 31 | 39 | 47 | 55 | 63 | 71 | 79 | 88 | 96 | 104 | 112 | 120 | 9999 | | | |
| 06/01/2 | | | | | | | | | | | | | | | | | | |
| 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 32 | 32 |
| 01:00 | 0 | 0 | 0 | 1 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 48 | 56 |
| 02:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * | * |
| 03:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * | * |
| 04:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * | * |
| 05:00 | 0 | 0 | 0 | 0 | 2 | 2 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 54 | 58 |
| 06:00 | 0 | 0 | 1 | 0 | 11 | 2 | 4 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 21 | 49 | 59 |
| 07:00 | 0 | 0 | 2 | 3 | 5 | 13 | 13 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 40 | 53 | 61 |
| 08:00 | 2 | 1 | 7 | 6 | 19 | 19 | 8 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 67 | 45 | 58 |
| 09:00 | 1 | 2 | 5 | 12 | 13 | 11 | 6 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 52 | 43 | 55 |
| 10:00 | 1 | 1 | 1 | 4 | 13 | 16 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 44 | 48 | 56 |
| 11:00 | 1 | 0 | 1 | 8 | 17 | 13 | 6 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 50 | 47 | 57 |
| 12 PM | 0 | 0 | 1 | 4 | 14 | 18 | 10 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 48 | 50 | 57 |
| 13:00 | 0 | 0 | 1 | 11 | 17 | 8 | 7 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 45 | 46 | 56 |
| 14:00 | 2 | 1 | 2 | 11 | 16 | 21 | 13 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 70 | 47 | 58 |
| 15:00 | 1 | 1 | 2 | 13 | 16 | 23 | 9 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 68 | 47 | 56 |
| 16:00 | 3 | 1 | 3 | 11 | 20 | 30 | 14 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 85 | 47 | 57 |
| 17:00 | 1 | 0 | 2 | 15 | 25 | 27 | 20 | 6 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 97 | 49 | 59 |
| 18:00 | 0 | 0 | 2 | 5 | 25 | 19 | 11 | 5 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 69 | 50 | 60 |
| 19:00 | 0 | 1 | 0 | 9 | 8 | 16 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 38 | 46 | 54 |
| 20:00 | 0 | 0 | 0 | 9 | 4 | 5 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22 | 44 | 56 |
| 21:00 | 0 | 0 | 1 | 2 | 1 | 4 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 47 | 51 |
| 22:00 | 0 | 0 | 0 | 1 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 46 | 48 |
| 23:00 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 40 | 40 |
| Total | 12 | 8 | 31 | 127 | 229 | 249 | 143 | 38 | 7 | 0 | 1 | 0 | 0 | 0 | 0 | 845 | | |
| Percent | 1.4% | 0.9% | 3.7% | 15.0% | 27.1% | 29.5% | 16.9% | 4.5% | 0.8% | 0.0% | 0.1% | 0.0% | 0.0% | 0.0% | 0.0% | | | |
| AM Peak | 08:00 | 09:00 | 08:00 | 09:00 | 08:00 | 08:00 | 07:00 | 08:00 | 06:00 | | | | | | | | | |
| Vol. | 2 | 2 | 7 | 12 | 19 | 19 | 13 | 5 | 1 | | | | | | | | | |
| PM Peak | 16:00 | 14:00 | 16:00 | 17:00 | 17:00 | 16:00 | 17:00 | 17:00 | 12:00 | 18:00 | | | | | | | | |
| Vol. | 3 | 1 | 3 | 15 | 25 | 30 | 20 | 6 | 1 | 1 | | | | | | | | |
| Total | 27 | 65 | 214 | 864 | 1499 | 1722 | 935 | 218 | 44 | 7 | 1 | 0 | 0 | 0 | 0 | 5596 | | |

15th Percentile : 36 KPH
 50th Percentile : 48 KPH
 85th Percentile : 59 KPH
 95th Percentile : 63 KPH

Stats
 10 KPH Pace Speed : 46-55 KPH
 Number in Pace : 2098
 Percent in Pace : 37.5%
 Number of Vehicles > 60 KPH : 620
 Percent of Vehicles > 60 KPH : 11.1%
 Mean Speed(Average) : 48 KPH

Ontario Traffic, Inc.
 17705 Leslie St., Unit 6
 Newmarket, Ontario L3Y 3E3
 Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 3
 Station ID: U236
 Centre St south of Henderson St

Date Start: 26-May-21
 Date End: 01-Jun-21
 Date Start: 26-May-21

| NB | Start Time | 1 | 16 | 24 | 32 | 40 | 48 | 56 | 64 | 72 | 80 | 89 | 97 | 105 | 113 | 121 | Total | Average (Mean) | 85th Percent |
|---------|------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|-------|----------------|--------------|
| 05/28/2 | | | | | | | | | | | | | | | | | | | |
| | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 64 | 65 |
| | 01:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * | * |
| | 02:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * | * |
| | 03:00 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 48 | 49 |
| | 04:00 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 2 | 68 | 80 |
| | 05:00 | 0 | 0 | 0 | 1 | 0 | 2 | 2 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 59 | 72 |
| | 06:00 | 0 | 0 | 0 | 0 | 1 | 2 | 8 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 60 | 64 |
| | 07:00 | 0 | 0 | 0 | 1 | 1 | 6 | 5 | 6 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 21 | 59 | 68 |
| | 08:00 | 0 | 0 | 0 | 0 | 4 | 3 | 3 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 57 | 67 |
| | 09:00 | 0 | 0 | 0 | 0 | 0 | 3 | 6 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 61 | 71 |
| | 10:00 | 0 | 0 | 0 | 0 | 2 | 6 | 7 | 4 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 22 | 59 | 67 |
| | 11:00 | 0 | 1 | 0 | 1 | 1 | 3 | 7 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 55 | 64 |
| | 12 PM | 0 | 0 | 0 | 1 | 2 | 7 | 4 | 2 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 19 | 57 | 71 |
| | 13:00 | 0 | 0 | 0 | 0 | 5 | 5 | 4 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 19 | 55 | 65 |
| | 14:00 | 0 | 0 | 0 | 0 | 0 | 2 | 14 | 6 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 24 | 62 | 67 |
| | 15:00 | 1 | 0 | 2 | 0 | 0 | 2 | 5 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 54 | 67 |
| | 16:00 | 0 | 0 | 0 | 0 | 1 | 5 | 2 | 5 | 5 | 0 | 1 | 0 | 0 | 0 | 0 | 19 | 65 | 74 |
| | 17:00 | 0 | 0 | 0 | 1 | 0 | 0 | 4 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 58 | 65 |
| | 18:00 | 0 | 0 | 0 | 0 | 2 | 5 | 1 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 55 | 64 |
| | 19:00 | 0 | 0 | 0 | 1 | 0 | 2 | 3 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 57 | 65 |
| | 20:00 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 56 | 56 |
| | 21:00 | 0 | 0 | 0 | 1 | 0 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 51 | 63 |
| | 22:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 64 | 65 |
| | 23:00 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 70 | 72 |
| | Total | 1 | 1 | 2 | 7 | 19 | 57 | 79 | 56 | 29 | 1 | 1 | 0 | 0 | 0 | 0 | 253 | | |
| | Percent | 0.4% | 0.4% | 0.8% | 2.8% | 7.5% | 22.5% | 31.2% | 22.1% | 11.5% | 0.4% | 0.4% | 0.0% | 0.0% | 0.0% | 0.0% | | | |
| | AM Peak | | 11:00 | | 05:00 | 08:00 | 07:00 | 06:00 | 07:00 | 10:00 | 04:00 | | | | | | | | |
| | Vol. | | 1 | | 1 | 4 | 6 | 8 | 6 | 3 | 1 | | | | | | | | |
| | PM Peak | 15:00 | | 15:00 | 12:00 | 13:00 | 12:00 | 14:00 | 14:00 | 16:00 | | 16:00 | | | | | | | |
| | Vol. | 1 | | 2 | 1 | 5 | 7 | 14 | 6 | 5 | | 1 | | | | | | | |

Ontario Traffic, Inc.
 17705 Leslie St., Unit 6
 Newmarket, Ontario L3Y 3E3
 Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 3
 Station ID: U236
 Centre St south of Henderson St

Date Start: 26-May-21
 Date End: 01-Jun-21
 Date Start: 26-May-21

| NB | | | | | | | | | | | | | | | | | | |
|--------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|-------|----------------|--------------|
| Start Time | 1 | 16 | 24 | 32 | 40 | 48 | 56 | 64 | 72 | 80 | 89 | 97 | 105 | 113 | 121 | Total | Average (Mean) | 85th Percent |
| | 15 | 23 | 31 | 39 | 47 | 55 | 63 | 71 | 79 | 88 | 96 | 104 | 112 | 120 | 9999 | | | |
| 05/30/2 | | | | | | | | | | | | | | | | | | |
| 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 40 | 40 |
| 01:00 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 40 | 40 |
| 02:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 64 | 64 |
| 03:00 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 56 | 57 |
| 04:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 80 | 80 |
| 05:00 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 60 | 57 |
| 06:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 72 | 72 |
| 07:00 | 0 | 0 | 0 | 0 | 0 | 1 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 58 | 59 |
| 08:00 | 0 | 0 | 0 | 1 | 2 | 4 | 5 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 15 | 57 | 72 |
| 09:00 | 1 | 0 | 3 | 2 | 1 | 0 | 0 | 5 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 47 | 68 |
| 10:00 | 0 | 0 | 2 | 2 | 2 | 9 | 3 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 23 | 53 | 65 |
| 11:00 | 0 | 1 | 2 | 0 | 2 | 4 | 8 | 6 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 25 | 57 | 67 |
| 12 PM | 0 | 2 | 2 | 2 | 3 | 9 | 8 | 6 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 34 | 53 | 66 |
| 13:00 | 0 | 1 | 0 | 0 | 5 | 19 | 8 | 6 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 41 | 55 | 65 |
| 14:00 | 0 | 0 | 1 | 1 | 2 | 2 | 3 | 2 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 15 | 60 | 79 |
| 15:00 | 1 | 0 | 2 | 1 | 3 | 15 | 10 | 8 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 41 | 54 | 66 |
| 16:00 | 0 | 0 | 0 | 1 | 1 | 7 | 1 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 55 | 65 |
| 17:00 | 0 | 0 | 1 | 0 | 4 | 7 | 3 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 52 | 57 |
| 18:00 | 0 | 0 | 0 | 0 | 1 | 4 | 2 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 57 | 65 |
| 19:00 | 0 | 0 | 0 | 0 | 1 | 2 | 4 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 61 | 66 |
| 20:00 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 60 | 71 |
| 21:00 | 0 | 0 | 0 | 0 | 1 | 2 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 55 | 58 |
| 22:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 72 | 72 |
| 23:00 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 44 | 56 |
| Total | 2 | 4 | 13 | 11 | 30 | 88 | 68 | 52 | 19 | 5 | 1 | 0 | 0 | 0 | 0 | 293 | | |
| Percent | 0.7% | 1.4% | 4.4% | 3.8% | 10.2% | 30.0% | 23.2% | 17.7% | 6.5% | 1.7% | 0.3% | 0.0% | 0.0% | 0.0% | 0.0% | | | |
| AM Peak Vol. | 1 | 1 | 3 | 2 | 2 | 9 | 8 | 6 | 2 | 1 | | | | | | | | |
| PM Peak Vol. | 15:00 | 12:00 | 12:00 | 12:00 | 13:00 | 13:00 | 15:00 | 15:00 | 12:00 | 14:00 | 13:00 | | | | | | | |

Ontario Traffic, Inc.
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 Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 3
 Station ID: U236
 Centre St south of Henderson St

Date Start: 26-May-21
 Date End: 01-Jun-21
 Date Start: 26-May-21

| NB | Start Time | 1 | 16 | 24 | 32 | 40 | 48 | 56 | 64 | 72 | 80 | 89 | 97 | 105 | 113 | 121 | Total | Average (Mean) | 85th Percent |
|---------|------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|-------|----------------|--------------|
| 05/31/2 | | | | | | | | | | | | | | | | | | | |
| | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 72 | 72 |
| | 01:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * | * |
| | 02:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * | * |
| | 03:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * | * |
| | 04:00 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 4 | 64 | 64 |
| | 05:00 | 0 | 0 | 0 | 1 | 0 | 2 | 3 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 59 | 65 |
| | 06:00 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 6 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 14 | 68 | 73 |
| | 07:00 | 0 | 0 | 0 | 1 | 2 | 2 | 10 | 11 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 28 | 62 | 69 |
| | 08:00 | 0 | 0 | 0 | 0 | 0 | 6 | 10 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 19 | 59 | 63 |
| | 09:00 | 0 | 1 | 1 | 2 | 2 | 4 | 6 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 | 52 | 61 |
| | 10:00 | 1 | 0 | 3 | 0 | 0 | 3 | 11 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 51 | 62 |
| | 11:00 | 1 | 1 | 0 | 2 | 4 | 3 | 9 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 52 | 64 |
| | 12 PM | 1 | 0 | 1 | 2 | 6 | 4 | 7 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 24 | 50 | 61 |
| | 13:00 | 0 | 0 | 1 | 0 | 3 | 4 | 4 | 3 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 19 | 59 | 78 |
| | 14:00 | 0 | 0 | 2 | 2 | 1 | 8 | 9 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 28 | 54 | 65 |
| | 15:00 | 0 | 1 | 2 | 1 | 2 | 11 | 7 | 6 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 36 | 57 | 77 |
| | 16:00 | 0 | 0 | 0 | 0 | 0 | 2 | 7 | 5 | 2 | 2 | 1 | 0 | 0 | 0 | 0 | 19 | 66 | 79 |
| | 17:00 | 0 | 0 | 0 | 1 | 2 | 3 | 7 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 57 | 64 |
| | 18:00 | 0 | 0 | 0 | 1 | 1 | 0 | 3 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 9 | 60 | 79 |
| | 19:00 | 0 | 0 | 0 | 1 | 0 | 2 | 3 | 2 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 11 | 62 | 72 |
| | 20:00 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 5 | 67 | 65 |
| | 21:00 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 44 | 56 |
| | 22:00 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 56 | 56 |
| | 23:00 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 64 | 64 |
| | Total | 3 | 3 | 10 | 15 | 23 | 56 | 105 | 60 | 22 | 13 | 2 | 0 | 0 | 0 | 0 | 312 | | |
| | Percent | 1.0% | 1.0% | 3.2% | 4.8% | 7.4% | 17.9% | 33.7% | 19.2% | 7.1% | 4.2% | 0.6% | 0.0% | 0.0% | 0.0% | 0.0% | | | |
| | AM Peak | 10:00 | 09:00 | 10:00 | 09:00 | 11:00 | 08:00 | 10:00 | 07:00 | 06:00 | 04:00 | 06:00 | | | | | | | |
| | Vol. | 1 | 1 | 3 | 2 | 4 | 6 | 11 | 11 | 2 | 1 | 1 | | | | | | | |
| | PM Peak | 12:00 | 15:00 | 14:00 | 12:00 | 12:00 | 15:00 | 14:00 | 15:00 | 15:00 | 15:00 | 16:00 | | | | | | | |
| | Vol. | 1 | 1 | 2 | 2 | 6 | 11 | 9 | 6 | 3 | 3 | 1 | | | | | | | |

Ontario Traffic, Inc.
 17705 Leslie St., Unit 6
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 Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 3
 Station ID: U236
 Centre St south of Henderson St

Date Start: 26-May-21
 Date End: 01-Jun-21
 Date Start: 26-May-21

| NB | Start Time | 1 | 16 | 24 | 32 | 40 | 48 | 56 | 64 | 72 | 80 | 89 | 97 | 105 | 113 | 121 | Total | Average (Mean) | 85th Percent | |
|---------|------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|-------|----------------|--------------|----|
| 06/01/2 | | | | | | | | | | | | | | | | | | | | |
| | 1 | 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 | * | * |
| | 02:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * | * |
| | 03:00 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 56 | 64 |
| | 04:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 67 | 72 |
| | 05:00 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 3 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 65 | 79 |
| | 06:00 | 0 | 0 | 0 | 0 | 0 | 4 | 3 | 8 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 62 | 70 |
| | 07:00 | 0 | 0 | 2 | 0 | 3 | 10 | 8 | 6 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 33 | 57 | 68 |
| | 08:00 | 1 | 1 | 1 | 0 | 3 | 1 | 3 | 2 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 53 | 73 |
| | 09:00 | 0 | 0 | 0 | 0 | 2 | 5 | 3 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 58 | 66 |
| | 10:00 | 0 | 0 | 0 | 0 | 3 | 4 | 3 | 5 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 59 | 67 |
| | 11:00 | 0 | 0 | 0 | 0 | 1 | 7 | 7 | 5 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 23 | 61 | 68 |
| | 12 PM | 1 | 1 | 0 | 3 | 1 | 2 | 9 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23 | 53 | 66 |
| | 13:00 | 0 | 0 | 1 | 3 | 4 | 5 | 8 | 5 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 28 | 56 | 66 |
| | 14:00 | 0 | 1 | 1 | 3 | 3 | 5 | 9 | 5 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 29 | 54 | 66 |
| | 15:00 | 0 | 0 | 0 | 1 | 1 | 3 | 15 | 11 | 7 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 40 | 64 | 74 |
| | 16:00 | 0 | 0 | 1 | 0 | 0 | 2 | 9 | 7 | 3 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 27 | 66 | 80 |
| | 17:00 | 0 | 0 | 0 | 0 | 2 | 5 | 8 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 21 | 59 | 66 |
| | 18:00 | 0 | 0 | 0 | 1 | 1 | 8 | 5 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 54 | 59 |
| | 19:00 | 0 | 0 | 0 | 1 | 0 | 1 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 54 | 58 |
| | 20:00 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 53 | 72 |
| | 21:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * | * |
| | 22:00 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 48 | 48 |
| | 23:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 64 | 64 |
| | Total | 2 | 3 | 6 | 13 | 25 | 65 | 97 | 78 | 27 | 13 | 1 | 1 | 0 | 0 | 0 | 331 | | | |
| | Percent | 0.6% | 0.9% | 1.8% | 3.9% | 7.6% | 19.6% | 29.3% | 23.6% | 8.2% | 3.9% | 0.3% | 0.3% | 0.0% | 0.0% | 0.0% | | | | |
| | AM Peak | 08:00 | 08:00 | 07:00 | | 07:00 | 07:00 | 07:00 | 06:00 | 07:00 | 11:00 | | | | | | | | | |
| | Vol. | 1 | 1 | 2 | | 3 | 10 | 8 | 8 | 3 | 3 | | | | | | | | | |
| | PM Peak | 12:00 | 12:00 | 13:00 | 12:00 | 13:00 | 18:00 | 15:00 | 15:00 | 15:00 | 16:00 | 16:00 | 13:00 | | | | | | | |
| | Vol. | 1 | 1 | 1 | 3 | 4 | 8 | 15 | 11 | 7 | 4 | 1 | 1 | | | | | | | |
| | Total | 9 | 15 | 45 | 72 | 147 | 450 | 643 | 434 | 164 | 65 | 9 | 1 | 0 | 0 | 0 | 2054 | | | |

15th Percentile : 48 KPH
 50th Percentile : 59 KPH
 85th Percentile : 70 KPH
 95th Percentile : 78 KPH

Stats
 10 KPH Pace Speed : 54-63 KPH
 Number in Pace : 757
 Percent in Pace : 36.9%
 Number of Vehicles > 60 KPH : 913
 Percent of Vehicles > 60 KPH : 44.4%
 Mean Speed(Average) : 58 KPH

Ontario Traffic, Inc.
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Site Code: 3
 Station ID: U236
 Centre St south of Henderson St

Date Start: 26-May-21
 Date End: 01-Jun-21
 Date Start: 26-May-21

| SB | Start Time | 1 | 16 | 24 | 32 | 40 | 48 | 56 | 64 | 72 | 80 | 89 | 97 | 105 | 113 | 121 | Total | Average (Mean) | 85th Percent |
|---------|------------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|-------|----------------|--------------|
| 05/28/2 | | | | | | | | | | | | | | | | | | | |
| | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 53 | 64 |
| | 01:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 80 | 80 |
| | 02:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * | * |
| | 03:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * | * |
| | 04:00 | 0 | 0 | 0 | 0 | 0 | 3 | 2 | 3 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 9 | 61 | 66 |
| | 05:00 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 2 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 11 | 68 | 75 |
| | 06:00 | 0 | 0 | 1 | 1 | 2 | 1 | 6 | 6 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 19 | 59 | 68 |
| | 07:00 | 0 | 0 | 0 | 0 | 1 | 13 | 9 | 4 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 29 | 57 | 65 |
| | 08:00 | 0 | 0 | 0 | 1 | 0 | 1 | 3 | 8 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 63 | 70 |
| | 09:00 | 0 | 0 | 0 | 0 | 1 | 8 | 4 | 2 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 58 | 71 |
| | 10:00 | 0 | 0 | 0 | 1 | 0 | 6 | 7 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 | 57 | 65 |
| | 11:00 | 0 | 0 | 2 | 0 | 3 | 7 | 7 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23 | 53 | 64 |
| | 12 PM | 0 | 0 | 0 | 1 | 3 | 12 | 6 | 11 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 37 | 60 | 69 |
| | 13:00 | 0 | 0 | 0 | 0 | 0 | 3 | 12 | 6 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 24 | 62 | 68 |
| | 14:00 | 0 | 0 | 0 | 0 | 1 | 6 | 9 | 3 | 3 | 0 | 1 | 0 | 0 | 0 | 0 | 23 | 61 | 72 |
| | 15:00 | 0 | 0 | 0 | 6 | 2 | 13 | 8 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 32 | 52 | 61 |
| | 16:00 | 0 | 0 | 1 | 1 | 2 | 5 | 9 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 24 | 57 | 65 |
| | 17:00 | 0 | 0 | 0 | 0 | 2 | 1 | 7 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 56 | 62 |
| | 18:00 | 0 | 0 | 0 | 0 | 0 | 3 | 5 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 60 | 60 |
| | 19:00 | 0 | 0 | 0 | 0 | 2 | 3 | 2 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 56 | 64 |
| | 20:00 | 0 | 0 | 0 | 0 | 1 | 1 | 3 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 8 | 61 | 65 |
| | 21:00 | 0 | 0 | 0 | 0 | 2 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 52 | 63 |
| | 22:00 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 48 | 48 |
| | 23:00 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 64 | 64 |
| | Total | 0 | 0 | 4 | 11 | 23 | 90 | 102 | 71 | 23 | 7 | 2 | 0 | 0 | 0 | 0 | 333 | | |
| | Percent | 0.0% | 0.0% | 1.2% | 3.3% | 6.9% | 27.0% | 30.6% | 21.3% | 6.9% | 2.1% | 0.6% | 0.0% | 0.0% | 0.0% | 0.0% | | | |
| | AM Peak | | | 11:00 | 06:00 | 11:00 | 07:00 | 07:00 | 08:00 | 05:00 | 01:00 | | | | | | | | |
| | Vol. | | | 2 | 1 | 3 | 13 | 9 | 8 | 5 | 1 | | | | | | | | |
| | PM Peak | | | 16:00 | 15:00 | 12:00 | 15:00 | 13:00 | 12:00 | 14:00 | 12:00 | 14:00 | | | | | | | |
| | Vol. | | | 1 | 6 | 3 | 13 | 12 | 11 | 3 | 2 | 1 | | | | | | | |

Ontario Traffic, Inc.
 17705 Leslie St., Unit 6
 Newmarket, Ontario L3Y 3E3
 Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 3
 Station ID: U236
 Centre St south of Henderson St

Date Start: 26-May-21
 Date End: 01-Jun-21
 Date Start: 26-May-21

| SB | Start Time | 1 | 16 | 24 | 32 | 40 | 48 | 56 | 64 | 72 | 80 | 89 | 97 | 105 | 113 | 121 | Total | Average (Mean) | 85th Percent | |
|---------|------------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|-------|----------------|--------------|---|
| 05/31/2 | | | | | | | | | | | | | | | | | | | | |
| | 1 | 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 | * | * |
| | 02:00 | 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 | * | * |
| | 04:00 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 56 | 56 | |
| | 05:00 | 0 | 0 | 0 | 0 | 0 | 5 | 1 | 4 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 61 | 72 | |
| | 06:00 | 0 | 0 | 0 | 1 | 2 | 4 | 11 | 2 | 3 | 1 | 1 | 0 | 0 | 0 | 0 | 25 | 61 | 72 | |
| | 07:00 | 0 | 0 | 0 | 1 | 2 | 4 | 9 | 5 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 23 | 59 | 67 | |
| | 08:00 | 0 | 0 | 0 | 1 | 1 | 3 | 11 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 57 | 62 | |
| | 09:00 | 0 | 0 | 1 | 3 | 0 | 3 | 8 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 55 | 63 | |
| | 10:00 | 0 | 0 | 0 | 0 | 1 | 4 | 6 | 3 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 15 | 59 | 65 | |
| | 11:00 | 0 | 0 | 0 | 2 | 3 | 8 | 5 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 22 | 54 | 64 | |
| | 12 PM | 0 | 0 | 1 | 2 | 4 | 4 | 11 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 27 | 55 | 64 | |
| | 13:00 | 0 | 0 | 0 | 0 | 2 | 10 | 5 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 19 | 54 | 59 | |
| | 14:00 | 0 | 0 | 3 | 0 | 3 | 12 | 15 | 3 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 39 | 55 | 63 | |
| | 15:00 | 1 | 0 | 1 | 2 | 2 | 11 | 13 | 7 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 43 | 57 | 70 | |
| | 16:00 | 0 | 0 | 0 | 0 | 3 | 8 | 14 | 9 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 37 | 60 | 68 | |
| | 17:00 | 0 | 0 | 0 | 0 | 2 | 3 | 5 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 13 | 59 | 64 | |
| | 18:00 | 0 | 0 | 1 | 0 | 0 | 3 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 54 | 60 | |
| | 19:00 | 0 | 0 | 0 | 0 | 2 | 2 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 55 | 59 | |
| | 20:00 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 62 | 64 | |
| | 21:00 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 52 | 64 | |
| | 22:00 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 56 | 56 | |
| | 23:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * | * | |
| | Total | 1 | 0 | 7 | 12 | 28 | 85 | 129 | 51 | 18 | 7 | 2 | 1 | 0 | 0 | 0 | 341 | | | |
| | Percent | 0.3% | 0.0% | 2.1% | 3.5% | 8.2% | 24.9% | 37.8% | 15.0% | 5.3% | 2.1% | 0.6% | 0.3% | 0.0% | 0.0% | 0.0% | | | | |
| | AM Peak | | | 09:00 | 09:00 | 11:00 | 11:00 | 06:00 | 07:00 | 05:00 | 06:00 | 06:00 | | | | | | | | |
| | Vol. | | | 1 | 3 | 3 | 8 | 11 | 5 | 3 | 1 | 1 | | | | | | | | |
| | PM Peak | 15:00 | | 14:00 | 12:00 | 12:00 | 14:00 | 14:00 | 16:00 | 15:00 | 15:00 | 16:00 | 17:00 | | | | | | | |
| | Vol. | 1 | | 3 | 2 | 4 | 12 | 15 | 9 | 4 | 2 | 1 | 1 | | | | | | | |

Ontario Traffic, Inc.
 17705 Leslie St., Unit 6
 Newmarket, Ontario L3Y 3E3
 Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 3
 Station ID: U236
 Centre St south of Henderson St

Date Start: 26-May-21
 Date End: 01-Jun-21
 Date Start: 26-May-21

SB

| Start Time | 1 | 16 | 24 | 32 | 40 | 48 | 56 | 64 | 72 | 80 | 89 | 97 | 105 | 113 | 121 | Total | Average (Mean) | 85th Percent |
|------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|-------|----------------|--------------|
| 06/01/2 | | | | | | | | | | | | | | | | | | |
| 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 32 | 32 |
| 01:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * | * |
| 02:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * | * |
| 03:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 64 | 65 |
| 04:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 64 | 64 |
| 05:00 | 0 | 0 | 0 | 0 | 0 | 3 | 2 | 2 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 11 | 67 | 73 |
| 06:00 | 0 | 0 | 0 | 2 | 0 | 4 | 6 | 6 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 21 | 60 | 69 |
| 07:00 | 0 | 0 | 0 | 2 | 1 | 9 | 6 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 22 | 54 | 64 |
| 08:00 | 0 | 0 | 0 | 0 | 0 | 5 | 4 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 60 | 68 |
| 09:00 | 1 | 0 | 0 | 0 | 1 | 3 | 4 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 56 | 66 |
| 10:00 | 0 | 0 | 0 | 0 | 3 | 7 | 8 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 22 | 58 | 64 |
| 11:00 | 0 | 0 | 0 | 0 | 0 | 3 | 8 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 60 | 66 |
| 12 PM | 0 | 0 | 1 | 0 | 2 | 10 | 9 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 26 | 55 | 63 |
| 13:00 | 0 | 0 | 0 | 1 | 1 | 10 | 11 | 5 | 3 | 0 | 1 | 0 | 0 | 0 | 0 | 32 | 59 | 67 |
| 14:00 | 0 | 1 | 0 | 0 | 4 | 11 | 13 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 34 | 55 | 63 |
| 15:00 | 0 | 0 | 0 | 0 | 1 | 6 | 11 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 26 | 60 | 67 |
| 16:00 | 0 | 0 | 0 | 1 | 4 | 14 | 13 | 12 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 47 | 58 | 67 |
| 17:00 | 0 | 0 | 0 | 0 | 4 | 10 | 11 | 3 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 31 | 58 | 64 |
| 18:00 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 64 | 72 |
| 19:00 | 0 | 0 | 0 | 1 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 50 | 56 |
| 20:00 | 0 | 0 | 0 | 0 | 1 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 51 | 56 |
| 21:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * | * |
| 22:00 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 40 | 41 |
| 23:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * | * |
| Total | 1 | 1 | 1 | 8 | 25 | 101 | 111 | 68 | 19 | 4 | 3 | 0 | 0 | 0 | 0 | 342 | | |
| Percent | 0.3% | 0.3% | 0.3% | 2.3% | 7.3% | 29.5% | 32.5% | 19.9% | 5.6% | 1.2% | 0.9% | 0.0% | 0.0% | 0.0% | 0.0% | | | |
| AM Peak | 09:00 | | | 06:00 | 10:00 | 07:00 | 10:00 | 08:00 | 06:00 | 05:00 | 05:00 | | | | | | | |
| Vol. | 1 | | | 2 | 3 | 9 | 8 | 7 | 3 | 1 | 1 | | | | | | | |
| PM Peak | | 14:00 | 12:00 | 13:00 | 14:00 | 16:00 | 14:00 | 16:00 | 13:00 | 16:00 | 13:00 | | | | | | | |
| Vol. | | 1 | 1 | 1 | 4 | 14 | 13 | 12 | 3 | 1 | 1 | | | | | | | |
| Total | 5 | 5 | 23 | 77 | 200 | 609 | 791 | 434 | 133 | 33 | 8 | 2 | 0 | 0 | 0 | 2320 | | |

15th Percentile : 48 KPH
 50th Percentile : 58 KPH
 85th Percentile : 68 KPH
 95th Percentile : 75 KPH

Stats
 10 KPH Pace Speed : 54-63 KPH
 Number in Pace : 944
 Percent in Pace : 40.7%
 Number of Vehicles > 60 KPH : 906
 Percent of Vehicles > 60 KPH : 39.1%
 Mean Speed(Average) : 58 KPH

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Site Code: 3
 Station ID: U236
 Centre St south of Henderson St

Date Start: 26-May-21
 Date End: 01-Jun-21
 Date Start: 26-May-21

| NB, SB | 1 | 16 | 24 | 32 | 40 | 48 | 56 | 64 | 72 | 80 | 89 | 97 | 105 | 113 | 121 | Total | Average (Mean) | 85th Percent |
|------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|-------|----------------|--------------|
| Start Time | 15 | 23 | 31 | 39 | 47 | 55 | 63 | 71 | 79 | 88 | 96 | 104 | 112 | 120 | 9999 | | | |
| 05/28/2 | | | | | | | | | | | | | | | | | | |
| 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 58 | 65 |
| 01:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 80 | 80 |
| 02:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * | * |
| 03:00 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 48 | 49 |
| 04:00 | 0 | 0 | 0 | 0 | 0 | 3 | 3 | 3 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 11 | 64 | 66 |
| 05:00 | 0 | 0 | 0 | 1 | 0 | 4 | 3 | 3 | 7 | 1 | 0 | 0 | 0 | 0 | 0 | 19 | 65 | 76 |
| 06:00 | 0 | 0 | 1 | 1 | 3 | 3 | 14 | 8 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 33 | 59 | 69 |
| 07:00 | 0 | 0 | 0 | 1 | 2 | 19 | 14 | 10 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 50 | 58 | 67 |
| 08:00 | 0 | 0 | 0 | 1 | 4 | 4 | 6 | 13 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 30 | 60 | 68 |
| 09:00 | 0 | 0 | 0 | 0 | 1 | 11 | 10 | 4 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 31 | 59 | 71 |
| 10:00 | 0 | 0 | 0 | 1 | 2 | 12 | 14 | 9 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 41 | 59 | 68 |
| 11:00 | 0 | 1 | 2 | 1 | 4 | 10 | 14 | 6 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 39 | 54 | 64 |
| 12 PM | 0 | 0 | 0 | 2 | 5 | 19 | 10 | 13 | 5 | 2 | 0 | 0 | 0 | 0 | 0 | 56 | 58 | 70 |
| 13:00 | 0 | 0 | 0 | 0 | 5 | 8 | 16 | 9 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 43 | 60 | 70 |
| 14:00 | 0 | 0 | 0 | 0 | 1 | 8 | 23 | 9 | 5 | 0 | 1 | 0 | 0 | 0 | 0 | 47 | 61 | 70 |
| 15:00 | 1 | 0 | 2 | 6 | 2 | 15 | 13 | 7 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 48 | 52 | 65 |
| 16:00 | 0 | 0 | 1 | 1 | 3 | 10 | 11 | 10 | 6 | 0 | 1 | 0 | 0 | 0 | 0 | 43 | 60 | 72 |
| 17:00 | 0 | 0 | 0 | 1 | 2 | 1 | 11 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 58 | 65 |
| 18:00 | 0 | 0 | 0 | 0 | 2 | 8 | 6 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 21 | 57 | 65 |
| 19:00 | 0 | 0 | 0 | 1 | 2 | 5 | 5 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 19 | 58 | 66 |
| 20:00 | 0 | 0 | 0 | 0 | 1 | 1 | 4 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 9 | 61 | 65 |
| 21:00 | 0 | 0 | 0 | 1 | 2 | 2 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 55 | 64 |
| 22:00 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 59 | 65 |
| 23:00 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 68 | 72 |
| Total | 1 | 1 | 6 | 18 | 42 | 147 | 181 | 127 | 52 | 8 | 3 | 0 | 0 | 0 | 0 | 586 | | |
| Percent | 0.2% | 0.2% | 1.0% | 3.1% | 7.2% | 25.1% | 30.9% | 21.7% | 8.9% | 1.4% | 0.5% | 0.0% | 0.0% | 0.0% | 0.0% | | | |
| AM Peak | | 11:00 | 11:00 | 05:00 | 08:00 | 07:00 | 06:00 | 08:00 | 05:00 | 04:00 | | | | | | | | |
| Vol. | | 1 | 2 | 1 | 4 | 19 | 14 | 13 | 7 | 2 | | | | | | | | |
| PM Peak | 15:00 | | 15:00 | 15:00 | 12:00 | 12:00 | 14:00 | 12:00 | 16:00 | 12:00 | 14:00 | | | | | | | |
| Vol. | 1 | | 2 | 6 | 5 | 19 | 23 | 13 | 6 | 2 | 1 | | | | | | | |

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Site Code: 3
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 Centre St south of Henderson St

Date Start: 26-May-21
 Date End: 01-Jun-21
 Date Start: 26-May-21

| NB, SB | 1 | 16 | 24 | 32 | 40 | 48 | 56 | 64 | 72 | 80 | 89 | 97 | 105 | 113 | 121 | Total | Average (Mean) | 85th Percent |
|------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|-------|-------------------|-----------------|
| Start Time | 15 | 23 | 31 | 39 | 47 | 55 | 63 | 71 | 79 | 88 | 96 | 104 | 112 | 120 | 9999 | | | |
| 05/30/2 | | | | | | | | | | | | | | | | | | |
| 1 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 40 | 41 |
| 01:00 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 40 | 40 |
| 02:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 72 | 72 |
| 03:00 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 56 | 57 |
| 04:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 80 | 80 |
| 05:00 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 62 | 71 |
| 06:00 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 1 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 65 | 73 |
| 07:00 | 0 | 0 | 0 | 2 | 2 | 2 | 8 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 56 | 64 |
| 08:00 | 0 | 0 | 0 | 1 | 3 | 5 | 7 | 1 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 22 | 59 | 73 |
| 09:00 | 1 | 0 | 3 | 3 | 2 | 2 | 6 | 10 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 31 | 55 | 70 |
| 10:00 | 0 | 0 | 2 | 3 | 9 | 13 | 12 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 45 | 52 | 62 |
| 11:00 | 0 | 1 | 3 | 1 | 3 | 9 | 10 | 8 | 1 | 2 | 1 | 1 | 0 | 0 | 0 | 40 | 58 | 70 |
| 12 PM | 0 | 2 | 2 | 5 | 7 | 26 | 14 | 11 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 71 | 53 | 65 |
| 13:00 | 1 | 1 | 0 | 0 | 8 | 24 | 19 | 7 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 63 | 55 | 64 |
| 14:00 | 0 | 0 | 1 | 2 | 4 | 13 | 16 | 4 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 45 | 57 | 65 |
| 15:00 | 2 | 0 | 3 | 3 | 8 | 25 | 20 | 11 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 74 | 53 | 64 |
| 16:00 | 0 | 0 | 0 | 2 | 3 | 11 | 12 | 7 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 36 | 57 | 66 |
| 17:00 | 0 | 0 | 2 | 1 | 5 | 15 | 9 | 5 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 39 | 54 | 64 |
| 18:00 | 0 | 0 | 1 | 0 | 1 | 5 | 6 | 10 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 24 | 60 | 68 |
| 19:00 | 0 | 0 | 0 | 0 | 2 | 6 | 12 | 6 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 29 | 60 | 68 |
| 20:00 | 0 | 0 | 0 | 0 | 3 | 3 | 2 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 12 | 58 | 65 |
| 21:00 | 0 | 0 | 0 | 0 | 1 | 4 | 4 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 56 | 58 |
| 22:00 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 65 | 71 |
| 23:00 | 0 | 0 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 48 | 56 |
| Total | 4 | 4 | 17 | 24 | 64 | 167 | 167 | 95 | 35 | 8 | 2 | 1 | 0 | 0 | 0 | 588 | | |
| Percent | 0.7% | 0.7% | 2.9% | 4.1% | 10.9% | 28.4% | 28.4% | 16.2% | 6.0% | 1.4% | 0.3% | 0.2% | 0.0% | 0.0% | 0.0% | | | |
| AM Peak | 09:00 | 11:00 | 09:00 | 09:00 | 10:00 | 10:00 | 10:00 | 09:00 | 08:00 | 11:00 | 11:00 | 11:00 | | | | | | |
| Vol. | 1 | 1 | 3 | 3 | 9 | 13 | 12 | 10 | 4 | 2 | 1 | 1 | | | | | | |
| PM Peak | 15:00 | 12:00 | 15:00 | 12:00 | 13:00 | 12:00 | 15:00 | 12:00 | 12:00 | 14:00 | 13:00 | | | | | | | |
| Vol. | 2 | 2 | 3 | 5 | 8 | 26 | 20 | 11 | 3 | 2 | 1 | | | | | | | |

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Site Code: 3
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 Centre St south of Henderson St

Date Start: 26-May-21
 Date End: 01-Jun-21
 Date Start: 26-May-21

| NB, SB | 1 | 16 | 24 | 32 | 40 | 48 | 56 | 64 | 72 | 80 | 89 | 97 | 105 | 113 | 121 | Total | Average (Mean) | 85th Percent |
|------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|-------|-------------------|-----------------|
| Start Time | 15 | 23 | 31 | 39 | 47 | 55 | 63 | 71 | 79 | 88 | 96 | 104 | 112 | 120 | 9999 | | | |
| 05/31/2 | | | | | | | | | | | | | | | | | | |
| 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 72 | 72 |
| 01:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * | * |
| 02:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * | * |
| 03:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * | * |
| 04:00 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 5 | 63 | 64 |
| 05:00 | 0 | 0 | 0 | 1 | 0 | 7 | 4 | 7 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 23 | 61 | 72 |
| 06:00 | 0 | 0 | 0 | 1 | 2 | 6 | 13 | 8 | 5 | 2 | 2 | 0 | 0 | 0 | 0 | 39 | 64 | 74 |
| 07:00 | 0 | 0 | 0 | 2 | 4 | 6 | 19 | 16 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 51 | 60 | 69 |
| 08:00 | 0 | 0 | 0 | 1 | 1 | 9 | 21 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 37 | 58 | 63 |
| 09:00 | 0 | 1 | 2 | 5 | 2 | 7 | 14 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 37 | 53 | 63 |
| 10:00 | 1 | 0 | 3 | 0 | 1 | 7 | 17 | 5 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 35 | 54 | 64 |
| 11:00 | 1 | 1 | 0 | 4 | 7 | 11 | 14 | 6 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 47 | 53 | 65 |
| 12 PM | 1 | 0 | 2 | 4 | 10 | 8 | 18 | 7 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 51 | 52 | 63 |
| 13:00 | 0 | 0 | 1 | 0 | 5 | 14 | 9 | 4 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 38 | 56 | 66 |
| 14:00 | 0 | 0 | 5 | 2 | 4 | 20 | 24 | 8 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 67 | 55 | 65 |
| 15:00 | 1 | 1 | 3 | 3 | 4 | 22 | 20 | 13 | 7 | 5 | 0 | 0 | 0 | 0 | 0 | 79 | 57 | 71 |
| 16:00 | 0 | 0 | 0 | 0 | 3 | 10 | 21 | 14 | 2 | 4 | 2 | 0 | 0 | 0 | 0 | 56 | 63 | 71 |
| 17:00 | 0 | 0 | 0 | 1 | 4 | 6 | 12 | 4 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 29 | 58 | 65 |
| 18:00 | 0 | 0 | 1 | 1 | 1 | 3 | 10 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 20 | 58 | 64 |
| 19:00 | 0 | 0 | 0 | 1 | 2 | 4 | 7 | 3 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 20 | 59 | 66 |
| 20:00 | 0 | 0 | 0 | 0 | 0 | 1 | 4 | 4 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 10 | 64 | 66 |
| 21:00 | 0 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 52 | 63 |
| 22:00 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 56 | 57 |
| 23:00 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 64 | 64 |
| Total | 4 | 3 | 17 | 27 | 51 | 141 | 234 | 111 | 40 | 20 | 4 | 1 | 0 | 0 | 0 | 653 | | |
| Percent | 0.6% | 0.5% | 2.6% | 4.1% | 7.8% | 21.6% | 35.8% | 17.0% | 6.1% | 3.1% | 0.6% | 0.2% | 0.0% | 0.0% | 0.0% | | | |
| AM Peak | 10:00 | 09:00 | 10:00 | 09:00 | 11:00 | 11:00 | 08:00 | 07:00 | 06:00 | 06:00 | 06:00 | | | | | | | |
| Vol. | 1 | 1 | 3 | 5 | 7 | 11 | 21 | 16 | 5 | 2 | 2 | | | | | | | |
| PM Peak | 12:00 | 15:00 | 14:00 | 12:00 | 12:00 | 15:00 | 14:00 | 16:00 | 15:00 | 15:00 | 16:00 | 17:00 | | | | | | |
| Vol. | 1 | 1 | 5 | 4 | 10 | 22 | 24 | 14 | 7 | 5 | 2 | 1 | | | | | | |

Ontario Traffic, Inc.
 17705 Leslie St., Unit 6
 Newmarket, Ontario L3Y 3E3
 Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 3
 Station ID: U236
 Centre St south of Henderson St

Date Start: 26-May-21
 Date End: 01-Jun-21
 Date Start: 26-May-21

| NB, SB | 1 | 16 | 24 | 32 | 40 | 48 | 56 | 64 | 72 | 80 | 89 | 97 | 105 | 113 | 121 | Total | Average (Mean) | 85th Percent |
|------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|-------|----------------|--------------|
| Start Time | 15 | 23 | 31 | 39 | 47 | 55 | 63 | 71 | 79 | 88 | 96 | 104 | 112 | 120 | 9999 | | | |
| 06/01/2 | | | | | | | | | | | | | | | | | | |
| 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 32 | 32 |
| 01:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * | * |
| 02:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * | * |
| 03:00 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 60 | 65 |
| 04:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 67 | 66 |
| 05:00 | 0 | 0 | 0 | 0 | 0 | 5 | 4 | 5 | 3 | 2 | 1 | 0 | 0 | 0 | 0 | 20 | 65 | 74 |
| 06:00 | 0 | 0 | 0 | 2 | 0 | 8 | 9 | 14 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 37 | 61 | 69 |
| 07:00 | 0 | 0 | 2 | 2 | 4 | 19 | 14 | 9 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 55 | 56 | 68 |
| 08:00 | 1 | 1 | 1 | 0 | 3 | 6 | 7 | 9 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 32 | 57 | 70 |
| 09:00 | 1 | 0 | 0 | 0 | 3 | 8 | 7 | 7 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 29 | 57 | 69 |
| 10:00 | 0 | 0 | 0 | 0 | 6 | 11 | 11 | 7 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 39 | 58 | 68 |
| 11:00 | 0 | 0 | 0 | 0 | 1 | 10 | 15 | 10 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 39 | 61 | 68 |
| 12 PM | 1 | 1 | 1 | 3 | 3 | 12 | 18 | 8 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 49 | 55 | 66 |
| 13:00 | 0 | 0 | 1 | 4 | 5 | 15 | 19 | 10 | 4 | 0 | 1 | 1 | 0 | 0 | 0 | 60 | 58 | 68 |
| 14:00 | 0 | 2 | 1 | 3 | 7 | 16 | 22 | 9 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 63 | 55 | 65 |
| 15:00 | 0 | 0 | 0 | 1 | 2 | 9 | 26 | 19 | 7 | 2 | 0 | 0 | 0 | 0 | 0 | 66 | 62 | 71 |
| 16:00 | 0 | 0 | 1 | 1 | 4 | 16 | 22 | 19 | 5 | 5 | 1 | 0 | 0 | 0 | 0 | 74 | 61 | 71 |
| 17:00 | 0 | 0 | 0 | 0 | 6 | 15 | 19 | 8 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 52 | 58 | 67 |
| 18:00 | 0 | 0 | 0 | 1 | 2 | 9 | 6 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 24 | 56 | 65 |
| 19:00 | 0 | 0 | 0 | 2 | 0 | 2 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 53 | 59 |
| 20:00 | 0 | 0 | 0 | 1 | 1 | 4 | 3 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 53 | 57 |
| 21:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * | * |
| 22:00 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 43 | 48 |
| 23:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 64 | 64 |
| Total | 3 | 4 | 7 | 21 | 50 | 166 | 208 | 146 | 46 | 17 | 4 | 1 | 0 | 0 | 0 | 673 | | |
| Percent | 0.4% | 0.6% | 1.0% | 3.1% | 7.4% | 24.7% | 30.9% | 21.7% | 6.8% | 2.5% | 0.6% | 0.1% | 0.0% | 0.0% | 0.0% | | | |
| AM Peak | 08:00 | 08:00 | 07:00 | 06:00 | 10:00 | 07:00 | 11:00 | 06:00 | 06:00 | 11:00 | 05:00 | | | | | | | |
| Vol. | 1 | 1 | 2 | 2 | 6 | 19 | 15 | 14 | 4 | 3 | 1 | | | | | | | |
| PM Peak | 12:00 | 14:00 | 12:00 | 13:00 | 14:00 | 14:00 | 15:00 | 15:00 | 15:00 | 16:00 | 13:00 | 13:00 | | | | | | |
| Vol. | 1 | 2 | 1 | 4 | 7 | 16 | 26 | 19 | 7 | 5 | 1 | 1 | | | | | | |
| Total | 14 | 20 | 68 | 149 | 347 | 1059 | 1434 | 868 | 297 | 98 | 17 | 3 | 0 | 0 | 0 | 4374 | | |

15th Percentile : 48 KPH
 50th Percentile : 58 KPH
 85th Percentile : 69 KPH
 95th Percentile : 77 KPH

Stats
 10 KPH Pace Speed : 54-63 KPH
 Number in Pace : 1700
 Percent in Pace : 38.9%
 Number of Vehicles > 60 KPH : 1820
 Percent of Vehicles > 60 KPH : 41.6%
 Mean Speed(Average) : 58 KPH

Ontario Traffic, Inc.
 17705 Leslie St., Unit 6
 Newmarket, Ontario L3Y 3E3
 Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 4
 Station ID: U286
 Henderson St east of Centre St

Date Start: 26-May-21
 Date End: 01-Jun-21
 Date Start: 26-May-21

| EB | Start Time | 1 | 16 | 24 | 32 | 40 | 48 | 56 | 64 | 72 | 80 | 89 | 97 | 105 | 113 | 121 | Total | Average (Mean) | 85th Percent | |
|---------|------------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|------|-------|----------------|--------------|----|
| 06/01/2 | | | | | | | | | | | | | | | | | | | | |
| | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 32 | 32 |
| | 01:00 | 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 | * | * |
| | 03:00 | 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 | * | * |
| | 05:00 | 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 | 0 | 0 | 0 | 0 | 0 | 0 | * | * |
| | 07:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * | * |
| | 08:00 | 0 | 0 | 1 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 38 | 40 |
| | 09:00 | 0 | 0 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 33 | 34 |
| | 10:00 | 0 | 1 | 0 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 36 | 41 |
| | 11:00 | 0 | 0 | 1 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 32 | 33 |
| | 12 PM | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 24 | 25 |
| | 13:00 | 1 | 0 | 3 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 30 | 40 |
| | 14:00 | 0 | 0 | 1 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 34 | 36 |
| | 15:00 | 0 | 0 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 28 | 32 |
| | 16:00 | 0 | 1 | 2 | 3 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 37 | 41 |
| | 17:00 | 1 | 3 | 4 | 6 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 31 | 37 |
| | 18:00 | 0 | 1 | 3 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 33 | 47 |
| | 19:00 | 0 | 0 | 0 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 40 | 41 |
| | 20:00 | 0 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 32 | 33 |
| | 21:00 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 32 | 32 |
| | 22:00 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 32 | 32 |
| | 23:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * | * |
| | Total | 2 | 6 | 21 | 39 | 18 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 88 | | |
| | Percent | 2.3% | 6.8% | 23.9% | 44.3% | 20.5% | 2.3% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | | | |
| | AM Peak | | 10:00 | 08:00 | 09:00 | 10:00 | | | | | | | | | | | | | | |
| | Vol. | | 1 | 1 | 3 | 3 | | | | | | | | | | | | | | |
| | PM Peak | 13:00 | 17:00 | 17:00 | 17:00 | 16:00 | 16:00 | | | | | | | | | | | | | |
| | Vol. | 1 | 3 | 4 | 6 | 3 | 1 | | | | | | | | | | | | | |
| | Total | 23 | 40 | 141 | 234 | 100 | 17 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 556 | | |

15th Percentile : 25 KPH
 50th Percentile : 34 KPH
 85th Percentile : 42 KPH
 95th Percentile : 47 KPH

Stats
 10 KPH Pace Speed : 30-39 KPH
 Number in Pace : 270
 Percent in Pace : 48.6%
 Number of Vehicles > 60 KPH : 0
 Percent of Vehicles > 60 KPH : 0.0%
 Mean Speed(Average) : 33 KPH

Ontario Traffic, Inc.
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 Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 4
 Station ID: U286
 Henderson St east of Centre St

Date Start: 26-May-21
 Date End: 01-Jun-21
 Date Start: 26-May-21

| WB | Start Time | 1 | 16 | 24 | 32 | 40 | 48 | 56 | 64 | 72 | 80 | 89 | 97 | 105 | 113 | 121 | Total | Average (Mean) | 85th Percent | |
|---------|------------|-------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|------|------|-------|----------------|--------------|----|
| 06/01/2 | | | | | | | | | | | | | | | | | | | | |
| | 1 | 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 | * | * |
| | 02:00 | 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 | * | * |
| | 04:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * | * |
| | 05:00 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 40 | 40 |
| | 06:00 | 1 | 1 | 2 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 30 | 40 |
| | 07:00 | 0 | 1 | 1 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 35 | 40 |
| | 08:00 | 0 | 1 | 3 | 5 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 36 | 42 |
| | 09:00 | 0 | 0 | 3 | 1 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 35 | 41 |
| | 10:00 | 0 | 0 | 1 | 1 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 40 | 41 |
| | 11:00 | 0 | 0 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 32 | 39 |
| | 12 PM | 0 | 0 | 4 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 31 | 33 |
| | 13:00 | 1 | 0 | 1 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 32 | 40 |
| | 14:00 | 0 | 1 | 0 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 32 | 35 |
| | 15:00 | 0 | 2 | 1 | 2 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 34 | 42 |
| | 16:00 | 0 | 1 | 0 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 29 | 33 |
| | 17:00 | 0 | 1 | 0 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 35 | 47 |
| | 18:00 | 1 | 0 | 2 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 28 | 40 |
| | 19:00 | 0 | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 27 | 26 |
| | 20:00 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 32 | 32 |
| | 21:00 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 12 | 24 |
| | 22:00 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 32 | 32 |
| | 23:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * | * |
| | Total | 4 | 8 | 24 | 30 | 24 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 95 | | |
| | Percent | 4.2% | 8.4% | 25.3% | 31.6% | 25.3% | 5.3% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | | | |
| AM Peak | 06:00 | 06:00 | 08:00 | 08:00 | 08:00 | 08:00 | | | | | | | | | | | | | | |
| Vol. | 1 | 1 | 3 | 5 | 4 | 1 | | | | | | | | | | | | | | |
| PM Peak | 13:00 | 15:00 | 12:00 | 14:00 | 15:00 | 12:00 | | | | | | | | | | | | | | |
| Vol. | 1 | 2 | 4 | 4 | 4 | 1 | | | | | | | | | | | | | | |
| Total | 32 | 64 | 196 | 245 | 115 | 19 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 671 | | |

15th Percentile : 24 KPH
 50th Percentile : 33 KPH
 85th Percentile : 42 KPH
 95th Percentile : 46 KPH

Stats
 10 KPH Pace Speed : 30-39 KPH
 Number in Pace : 295
 Percent in Pace : 44.0%
 Number of Vehicles > 60 KPH : 0
 Percent of Vehicles > 60 KPH : 0.0%
 Mean Speed(Average) : 32 KPH

Ontario Traffic, Inc.
 17705 Leslie St., Unit 6
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 Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 4
 Station ID: U286
 Henderson St east of Centre St

Date Start: 26-May-21
 Date End: 01-Jun-21
 Date Start: 26-May-21

| EB, WB | 1 | 16 | 24 | 32 | 40 | 48 | 56 | 64 | 72 | 80 | 89 | 97 | 105 | 113 | 121 | Total | Average (Mean) | 85th Percent |
|------------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|------|-------|----------------|--------------|
| Start Time | 15 | 23 | 31 | 39 | 47 | 55 | 63 | 71 | 79 | 88 | 96 | 104 | 112 | 120 | 9999 | | | |
| 06/01/2 | | | | | | | | | | | | | | | | | | |
| 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 32 | 32 |
| 01:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * | * |
| 02:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * | * |
| 03:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * | * |
| 04:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * | * |
| 05:00 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 40 | 40 |
| 06:00 | 1 | 1 | 2 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 30 | 40 |
| 07:00 | 0 | 1 | 1 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 35 | 40 |
| 08:00 | 0 | 1 | 4 | 7 | 6 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 | 36 | 43 |
| 09:00 | 0 | 0 | 3 | 4 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 35 | 40 |
| 10:00 | 0 | 1 | 1 | 4 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 38 | 43 |
| 11:00 | 0 | 0 | 3 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 33 | 35 |
| 12 PM | 0 | 0 | 6 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 30 | 33 |
| 13:00 | 2 | 0 | 4 | 5 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 30 | 41 |
| 14:00 | 0 | 1 | 1 | 9 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 35 | 39 |
| 15:00 | 0 | 2 | 4 | 4 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 34 | 41 |
| 16:00 | 0 | 2 | 2 | 6 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 35 | 41 |
| 17:00 | 1 | 4 | 4 | 8 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 22 | 33 | 41 |
| 18:00 | 1 | 1 | 5 | 2 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 32 | 41 |
| 19:00 | 0 | 0 | 3 | 4 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 35 | 40 |
| 20:00 | 0 | 0 | 1 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 32 | 33 |
| 21:00 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 21 | 32 |
| 22:00 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 32 | 33 |
| 23:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * | * |
| Total | 6 | 14 | 45 | 69 | 42 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 183 | | |
| Percent | 3.3% | 7.7% | 24.6% | 37.7% | 23.0% | 3.8% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | | | |
| AM Peak | 06:00 | 06:00 | 08:00 | 08:00 | 08:00 | 08:00 | | | | | | | | | | | | |
| Vol. | 1 | 1 | 4 | 7 | 6 | 1 | | | | | | | | | | | | |
| PM Peak | 13:00 | 17:00 | 12:00 | 14:00 | 13:00 | 12:00 | | | | | | | | | | | | |
| Vol. | 2 | 4 | 6 | 9 | 4 | 1 | | | | | | | | | | | | |
| Total | 55 | 104 | 337 | 479 | 215 | 36 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1227 | | |

15th Percentile : 24 KPH
 50th Percentile : 33 KPH
 85th Percentile : 42 KPH
 95th Percentile : 47 KPH

Stats
 10 KPH Pace Speed : 30-39 KPH
 Number in Pace : 564
 Percent in Pace : 46.0%
 Number of Vehicles > 60 KPH : 0
 Percent of Vehicles > 60 KPH : 0.0%
 Mean Speed(Average) : 33 KPH

Ontario Traffic, Inc.
 17705 Leslie St., Unit 6
 Newmarket, Ontario L3Y 3E3
 Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 5
 Station ID: U58
 Gainer St south of Henderson St

Date Start: 26-May-21
 Date End: 01-Jun-21
 Date Start: 26-May-21

| NB | Start Time | 1 | 16 | 24 | 32 | 40 | 48 | 56 | 64 | 72 | 80 | 89 | 97 | 105 | 113 | 121 | Total | Average (Mean) | 85th Percent | |
|---------|------------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|------|------|-------|----------------|--------------|---|
| 06/01/2 | | | | | | | | | | | | | | | | | | | | |
| | 1 | 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 | * | * |
| | 02:00 | 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 | * | * |
| | 04:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * | * |
| | 05:00 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 40 | 40 | |
| | 06:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * | * |
| | 07:00 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 40 | 41 | |
| | 08:00 | 0 | 0 | 2 | 2 | 6 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 43 | 45 | |
| | 09:00 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 24 | 24 | |
| | 10:00 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 53 | 56 | |
| | 11:00 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 40 | 41 | |
| | 12 PM | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 35 | 40 | |
| | 13:00 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 45 | 48 | |
| | 14:00 | 0 | 1 | 2 | 3 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 37 | 48 | |
| | 15:00 | 0 | 2 | 0 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 32 | 47 | |
| | 16:00 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 40 | 40 | |
| | 17:00 | 1 | 0 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 30 | 47 | |
| | 18:00 | 0 | 0 | 1 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 42 | 48 | |
| | 19:00 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 24 | 25 | |
| | 20:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * | * |
| | 21:00 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 32 | 32 | |
| | 22:00 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 48 | 48 | |
| | 23:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * | * |
| | Total | 1 | 3 | 9 | 12 | 18 | 8 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 55 | | | |
| | Percent | 1.8% | 5.5% | 16.4% | 21.8% | 32.7% | 14.5% | 3.6% | 3.6% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | | | | |
| | AM Peak | | | 08:00 | 08:00 | 08:00 | 10:00 | 08:00 | 08:00 | | | | | | | | | | | |
| | Vol. | | | 2 | 2 | 6 | 1 | 1 | 1 | | | | | | | | | | | |
| | PM Peak | 17:00 | 15:00 | 14:00 | 14:00 | 12:00 | 18:00 | | 14:00 | | | | | | | | | | | |
| | Vol. | 1 | 2 | 2 | 3 | 1 | 2 | | 1 | | | | | | | | | | | |
| | Total | 19 | 37 | 67 | 105 | 136 | 67 | 17 | 5 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 456 | | | |

15th Percentile : 25 KPH
 50th Percentile : 39 KPH
 85th Percentile : 50 KPH
 95th Percentile : 56 KPH

Stats
 10 KPH Pace Speed : 38-47 KPH
 Number in Pace : 163
 Percent in Pace : 35.7%
 Number of Vehicles > 60 KPH : 14
 Percent of Vehicles > 60 KPH : 3.1%
 Mean Speed(Average) : 38 KPH

Ontario Traffic, Inc.
 17705 Leslie St., Unit 6
 Newmarket, Ontario L3Y 3E3
 Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 5
 Station ID: U58
 Gainer St south of Henderson St

Date Start: 26-May-21
 Date End: 01-Jun-21
 Date Start: 26-May-21

SB

| Start Time | 1 | 16 | 24 | 32 | 40 | 48 | 56 | 64 | 72 | 80 | 89 | 97 | 105 | 113 | 121 | Total | Average (Mean) | 85th Percent | |
|------------|------|-------|-------|-------|-------|-------|------|------|------|------|------|------|------|------|------|-------|----------------|--------------|---|
| 06/01/2 | | | | | | | | | | | | | | | | | | | |
| 1 | 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 | * | * |
| 02:00 | 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 | * | * |
| 04:00 | 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 | * | * |
| 06:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * | * |
| 07:00 | 0 | 0 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 35 | 41 | |
| 08:00 | 0 | 1 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 34 | 40 | |
| 09:00 | 0 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 28 | 40 | |
| 10:00 | 0 | 0 | 1 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 38 | 40 | |
| 11:00 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 40 | 41 | |
| 12 PM | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 48 | 48 | |
| 13:00 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 24 | 24 | |
| 14:00 | 0 | 2 | 0 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 31 | 40 | |
| 15:00 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 37 | 40 | |
| 16:00 | 0 | 0 | 0 | 1 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 46 | 48 | |
| 17:00 | 0 | 2 | 1 | 2 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 34 | 41 | |
| 18:00 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 32 | 32 | |
| 19:00 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 37 | 40 | |
| 20:00 | 0 | 0 | 1 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 34 | 34 | |
| 21:00 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 40 | 40 | |
| 22:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * | * | |
| 23:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * | * | |
| Total | 0 | 6 | 8 | 12 | 19 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 49 | | | |
| Percent | 0.0% | 12.2% | 16.3% | 24.5% | 38.8% | 8.2% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | | | | |
| AM Peak | | 08:00 | 07:00 | 08:00 | 07:00 | | | | | | | | | | | | | | |
| Vol. | | 1 | 1 | 1 | 2 | | | | | | | | | | | | | | |
| PM Peak | | 14:00 | 13:00 | 20:00 | 14:00 | 16:00 | | | | | | | | | | | | | |
| Vol. | | 2 | 1 | 3 | 2 | 2 | | | | | | | | | | | | | |
| Total | 26 | 38 | 48 | 86 | 102 | 31 | 8 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 341 | | | |

15th Percentile : 21 KPH
 50th Percentile : 37 KPH
 85th Percentile : 47 KPH
 95th Percentile : 53 KPH

Stats
 10 KPH Pace Speed : 38-47 KPH
 Number in Pace : 124
 Percent in Pace : 36.4%
 Number of Vehicles > 60 KPH : 5
 Percent of Vehicles > 60 KPH : 1.5%
 Mean Speed(Average) : 35 KPH

Ontario Traffic, Inc.
 17705 Leslie St., Unit 6
 Newmarket, Ontario L3Y 3E3
 Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 5
 Station ID: U58
 Gainer St south of Henderson St

Date Start: 26-May-21
 Date End: 01-Jun-21
 Date Start: 26-May-21

| NB, SB | 1 | 16 | 24 | 32 | 40 | 48 | 56 | 64 | 72 | 80 | 89 | 97 | 105 | 113 | 121 | Total | Average (Mean) | 85th Percent | |
|---------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|------|------|-------|----------------|--------------|---|
| 06/01/2 | | | | | | | | | | | | | | | | | | | |
| 1 | 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 | * | * |
| 02:00 | 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 | * | * |
| 04:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * | * |
| 05:00 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 40 | 40 | |
| 06:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * | * |
| 07:00 | 0 | 0 | 1 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 38 | 42 | |
| 08:00 | 0 | 1 | 2 | 3 | 8 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 42 | 47 | |
| 09:00 | 0 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 29 | 40 | |
| 10:00 | 0 | 0 | 1 | 1 | 3 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 43 | 55 | |
| 11:00 | 0 | 0 | 0 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 42 | 42 | |
| 12 PM | 0 | 0 | 0 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 40 | 47 | |
| 13:00 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 41 | 47 | |
| 14:00 | 0 | 3 | 2 | 4 | 2 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 34 | 41 | |
| 15:00 | 0 | 2 | 1 | 3 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 32 | 41 | |
| 16:00 | 0 | 0 | 0 | 1 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 43 | 48 | |
| 17:00 | 1 | 2 | 2 | 2 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 35 | 42 | |
| 18:00 | 0 | 0 | 2 | 1 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 39 | 48 | |
| 19:00 | 0 | 0 | 3 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 31 | 39 | |
| 20:00 | 0 | 0 | 1 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 34 | 34 | |
| 21:00 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 40 | 40 | |
| 22:00 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 48 | 48 | |
| 23:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * | * | |
| Total | 1 | 9 | 17 | 24 | 37 | 12 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 104 | | | |
| Percent | 1.0% | 8.7% | 16.3% | 23.1% | 35.6% | 11.5% | 1.9% | 1.9% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | | | | |
| AM Peak | | 08:00 | 08:00 | 08:00 | 08:00 | 10:00 | 08:00 | 08:00 | | | | | | | | | | | |
| Vol. | | 1 | 2 | 3 | 8 | 1 | 1 | 1 | | | | | | | | | | | |
| PM Peak | 17:00 | 14:00 | 19:00 | 14:00 | 16:00 | 16:00 | | 14:00 | | | | | | | | | | | |
| Vol. | 1 | 3 | 3 | 4 | 3 | 2 | | 1 | | | | | | | | | | | |
| Total | 45 | 75 | 115 | 191 | 238 | 98 | 25 | 7 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 797 | | | |

15th Percentile : 23 KPH
 50th Percentile : 38 KPH
 85th Percentile : 48 KPH
 95th Percentile : 55 KPH

Stats
 10 KPH Pace Speed : 38-47 KPH
 Number in Pace : 286
 Percent in Pace : 35.9%
 Number of Vehicles > 60 KPH : 19
 Percent of Vehicles > 60 KPH : 2.4%
 Mean Speed(Average) : 37 KPH

Ontario Traffic, Inc.
 17705 Leslie St., Unit 6
 Newmarket, Ontario L3Y 3E3
 Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 6
 Station ID: U241
 Barron Rd east of Gainer St

Date Start: 26-May-21
 Date End: 01-Jun-21
 Date Start: 26-May-21

| EB | Start Time | 1 | 16 | 24 | 32 | 40 | 48 | 56 | 64 | 72 | 80 | 89 | 97 | 105 | 113 | 121 | Total | Average (Mean) | 85th Percent | |
|---------|--------------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|-------|----------------|--------------|----|
| 05/28/2 | | | | | | | | | | | | | | | | | | | | |
| | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 48 | 48 |
| | 01:00 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 3 | 56 | 89 |
| | 02:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 64 | 64 |
| | 03:00 | 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 | * | * |
| | 05:00 | 0 | 0 | 0 | 0 | 0 | 4 | 3 | 1 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 10 | 60 | 71 |
| | 06:00 | 0 | 0 | 0 | 2 | 0 | 3 | 4 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 56 | 65 |
| | 07:00 | 0 | 0 | 0 | 0 | 1 | 4 | 7 | 4 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 61 | 66 |
| | 08:00 | 0 | 0 | 0 | 1 | 6 | 7 | 10 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 29 | 55 | 64 |
| | 09:00 | 0 | 0 | 0 | 0 | 3 | 10 | 7 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23 | 55 | 62 |
| | 10:00 | 0 | 0 | 1 | 2 | 3 | 8 | 4 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 | 54 | 65 |
| | 11:00 | 0 | 0 | 3 | 3 | 6 | 11 | 2 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 28 | 48 | 62 |
| | 12 PM | 0 | 0 | 0 | 1 | 4 | 6 | 9 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23 | 55 | 63 |
| | 13:00 | 0 | 0 | 0 | 2 | 3 | 15 | 9 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 31 | 53 | 60 |
| | 14:00 | 0 | 0 | 0 | 1 | 2 | 7 | 10 | 5 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 27 | 58 | 66 |
| | 15:00 | 0 | 0 | 0 | 3 | 4 | 14 | 12 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 36 | 54 | 61 |
| | 16:00 | 0 | 0 | 1 | 2 | 5 | 7 | 6 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 52 | 61 |
| | 17:00 | 0 | 0 | 0 | 0 | 4 | 9 | 6 | 4 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 24 | 57 | 64 |
| | 18:00 | 0 | 0 | 0 | 0 | 2 | 5 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 55 | 59 |
| | 19:00 | 0 | 0 | 0 | 0 | 1 | 3 | 4 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 60 | 65 |
| | 20:00 | 0 | 0 | 1 | 0 | 2 | 3 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 53 | 59 |
| | 21:00 | 0 | 0 | 0 | 1 | 2 | 5 | 2 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 55 | 64 |
| | 22:00 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 49 | 55 |
| | 23:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * | * |
| | Total | 0 | 0 | 6 | 20 | 50 | 123 | 106 | 49 | 10 | 2 | 2 | 1 | 1 | 0 | 0 | 0 | 370 | | |
| | Percent | 0.0% | 0.0% | 1.6% | 5.4% | 13.5% | 33.2% | 28.6% | 13.2% | 2.7% | 0.5% | 0.5% | 0.3% | 0.3% | 0.0% | 0.0% | | | | |
| | AM Peak Vol. | | | 11:00 | 11:00 | 08:00 | 11:00 | 08:00 | 10:00 | 08:00 | 07:00 | 01:00 | | | | | | | | |
| | PM Peak Vol. | | | 16:00 | 15:00 | 16:00 | 13:00 | 15:00 | 14:00 | 14:00 | 21:00 | | 15:00 | 17:00 | | | | | | |

Ontario Traffic, Inc.
 17705 Leslie St., Unit 6
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 Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 6
 Station ID: U241
 Barron Rd east of Gainer St

Date Start: 26-May-21
 Date End: 01-Jun-21
 Date Start: 26-May-21

EB

| Start Time | 1 | 16 | 24 | 32 | 40 | 48 | 56 | 64 | 72 | 80 | 89 | 97 | 105 | 113 | 121 | Total | Average (Mean) | 85th Percent |
|--------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|-------|----------------|--------------|
| 06/01/2 | | | | | | | | | | | | | | | | | | |
| 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * | * |
| 01:00 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 40 | 40 |
| 02:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * | * |
| 03:00 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 56 | 56 |
| 04:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * | * |
| 05:00 | 0 | 0 | 0 | 0 | 1 | 0 | 2 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 5 | 59 | 64 |
| 06:00 | 0 | 0 | 0 | 0 | 1 | 4 | 1 | 3 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 12 | 63 | 79 |
| 07:00 | 0 | 0 | 1 | 0 | 2 | 6 | 8 | 5 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 24 | 58 | 66 |
| 08:00 | 0 | 0 | 0 | 1 | 6 | 7 | 6 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 24 | 53 | 61 |
| 09:00 | 0 | 0 | 1 | 1 | 2 | 5 | 6 | 5 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 21 | 57 | 66 |
| 10:00 | 0 | 0 | 0 | 1 | 1 | 10 | 6 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 22 | 55 | 64 |
| 11:00 | 0 | 0 | 0 | 0 | 5 | 8 | 8 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 27 | 56 | 65 |
| 12 PM | 0 | 0 | 0 | 1 | 3 | 12 | 8 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 26 | 54 | 61 |
| 13:00 | 2 | 0 | 1 | 5 | 4 | 9 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 | 43 | 54 |
| 14:00 | 0 | 1 | 0 | 2 | 4 | 13 | 7 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 31 | 52 | 61 |
| 15:00 | 0 | 0 | 0 | 1 | 3 | 12 | 12 | 4 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 33 | 56 | 63 |
| 16:00 | 0 | 1 | 0 | 0 | 4 | 9 | 14 | 6 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 35 | 56 | 65 |
| 17:00 | 0 | 0 | 0 | 1 | 5 | 11 | 14 | 5 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 40 | 57 | 66 |
| 18:00 | 0 | 0 | 1 | 1 | 10 | 13 | 9 | 3 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 40 | 53 | 63 |
| 19:00 | 0 | 1 | 0 | 1 | 2 | 1 | 4 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 51 | 64 |
| 20:00 | 0 | 0 | 1 | 0 | 1 | 4 | 4 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 11 | 53 | 58 |
| 21:00 | 0 | 0 | 0 | 0 | 2 | 5 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 51 | 56 |
| 22:00 | 0 | 0 | 1 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 44 | 49 |
| 23:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * | * |
| Total | 2 | 3 | 6 | 15 | 57 | 131 | 116 | 52 | 13 | 7 | 1 | 0 | 0 | 0 | 0 | 403 | | |
| Percent | 0.5% | 0.7% | 1.5% | 3.7% | 14.1% | 32.5% | 28.8% | 12.9% | 3.2% | 1.7% | 0.2% | 0.0% | 0.0% | 0.0% | 0.0% | | | |
| AM Peak Vol. | | | | 07:00 | 08:00 | 08:00 | 10:00 | 07:00 | 11:00 | 07:00 | 05:00 | 06:00 | | | | | | |
| PM Peak Vol. | 13:00 | 14:00 | 13:00 | 13:00 | 18:00 | 14:00 | 16:00 | 16:00 | 17:00 | 12:00 | | | | | | | | |
| Total | 6 | 25 | 51 | 121 | 371 | 827 | 783 | 328 | 80 | 25 | 4 | 1 | 1 | 0 | 0 | 2623 | | |

15th Percentile : 44 KPH
 50th Percentile : 55 KPH
 85th Percentile : 65 KPH
 95th Percentile : 71 KPH

Stats
 10 KPH Pace Speed : 48-57 KPH
 Number in Pace : 1023
 Percent in Pace : 39.0%
 Number of Vehicles > 60 KPH : 732
 Percent of Vehicles > 60 KPH : 27.9%
 Mean Speed(Average) : 54 KPH

Ontario Traffic, Inc.
 17705 Leslie St., Unit 6
 Newmarket, Ontario L3Y 3E3
 Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 6
 Station ID: U241
 Barron Rd east of Gainer St

Date Start: 26-May-21
 Date End: 01-Jun-21
 Date Start: 26-May-21

| WB | Start Time | 1 | 16 | 24 | 32 | 40 | 48 | 56 | 64 | 72 | 80 | 89 | 97 | 105 | 113 | 121 | Total | Average (Mean) | 85th Percent |
|---------|--------------|-------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|-------|----------------|--------------|
| 05/29/2 | | | | | | | | | | | | | | | | | | | |
| | 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 61 | 64 |
| | 01:00 | 0 | 0 | 0 | 0 | 0 | 4 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 52 | 51 |
| | 02:00 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 56 | 56 |
| | 03:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * | * |
| | 04:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 72 | 72 |
| | 05:00 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 61 | 64 |
| | 06:00 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 48 | 48 |
| | 07:00 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 56 | 72 |
| | 08:00 | 0 | 0 | 0 | 1 | 0 | 1 | 3 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 8 | 59 | 72 |
| | 09:00 | 0 | 0 | 0 | 1 | 2 | 6 | 5 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 17 | 54 | 60 |
| | 10:00 | 0 | 0 | 0 | 0 | 2 | 3 | 12 | 5 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 23 | 60 | 66 |
| | 11:00 | 0 | 0 | 0 | 1 | 3 | 9 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 | 52 | 58 |
| | 12 PM | 0 | 0 | 0 | 1 | 9 | 6 | 9 | 7 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 33 | 55 | 66 |
| | 13:00 | 1 | 0 | 0 | 2 | 5 | 7 | 9 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 27 | 52 | 62 |
| | 14:00 | 0 | 0 | 0 | 2 | 0 | 9 | 12 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 27 | 56 | 63 |
| | 15:00 | 0 | 0 | 1 | 0 | 8 | 5 | 4 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 21 | 50 | 59 |
| | 16:00 | 0 | 0 | 1 | 1 | 0 | 7 | 13 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 24 | 56 | 61 |
| | 17:00 | 1 | 0 | 1 | 0 | 1 | 5 | 7 | 1 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 18 | 55 | 62 |
| | 18:00 | 0 | 0 | 0 | 0 | 5 | 7 | 8 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 23 | 55 | 63 |
| | 19:00 | 0 | 0 | 0 | 0 | 1 | 2 | 5 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 59 | 60 |
| | 20:00 | 0 | 0 | 0 | 0 | 2 | 0 | 8 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 56 | 61 |
| | 21:00 | 0 | 0 | 1 | 0 | 1 | 0 | 2 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 55 | 65 |
| | 22:00 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 65 | 67 |
| | 23:00 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 62 | 71 |
| | Total | 2 | 0 | 4 | 9 | 42 | 77 | 106 | 42 | 12 | 2 | 1 | 0 | 0 | 0 | 0 | 297 | | |
| | Percent | 0.7% | 0.0% | 1.3% | 3.0% | 14.1% | 25.9% | 35.7% | 14.1% | 4.0% | 0.7% | 0.3% | 0.0% | 0.0% | 0.0% | 0.0% | | | |
| | AM Peak Vol. | | | | 08:00 | 11:00 | 11:00 | 10:00 | 10:00 | 08:00 | 10:00 | | | | | | | | |
| | PM Peak Vol. | 13:00 | | 15:00 | 13:00 | 12:00 | 14:00 | 16:00 | 12:00 | 19:00 | 17:00 | 17:00 | | | | | | | |

Ontario Traffic, Inc.
 17705 Leslie St., Unit 6
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 Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 6
 Station ID: U241
 Barron Rd east of Gainer St

Date Start: 26-May-21
 Date End: 01-Jun-21
 Date Start: 26-May-21

| WB | Start Time | 1 | 16 | 24 | 32 | 40 | 48 | 56 | 64 | 72 | 80 | 89 | 97 | 105 | 113 | 121 | Total | Average (Mean) | 85th Percent |
|---------|------------|----------|----------|----------|----------|-----------|-----------|-----------|----------|----------|----------|----------|------|------|------|------|-------|----------------|--------------|
| 05/31/2 | 1 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 48 | 48 |
| | 01:00 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 56 | 56 |
| | 02:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 64 | 64 |
| | 03:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * | * |
| | 04:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * | * |
| | 05:00 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 48 | 56 |
| | 06:00 | 0 | 0 | 0 | 0 | 2 | 1 | 1 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 59 | 72 |
| | 07:00 | 0 | 0 | 0 | 0 | 1 | 5 | 4 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 56 | 59 |
| | 08:00 | 0 | 0 | 0 | 2 | 6 | 3 | 7 | 5 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 26 | 56 | 67 |
| | 09:00 | 0 | 0 | 1 | 0 | 10 | 8 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 23 | 48 | 56 |
| | 10:00 | 0 | 1 | 2 | 2 | 3 | 5 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 | 48 | 58 |
| | 11:00 | 0 | 1 | 0 | 1 | 3 | 17 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 26 | 50 | 55 |
| | 12 PM | 1 | 1 | 0 | 1 | 3 | 13 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 25 | 49 | 57 |
| | 13:00 | 0 | 2 | 1 | 2 | 4 | 6 | 9 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 27 | 51 | 62 |
| | 14:00 | 0 | 1 | 1 | 1 | 5 | 7 | 3 | 3 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 24 | 54 | 65 |
| | 15:00 | 0 | 0 | 1 | 2 | 4 | 9 | 7 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 28 | 53 | 64 |
| | 16:00 | 0 | 0 | 2 | 2 | 8 | 15 | 10 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 40 | 52 | 60 |
| | 17:00 | 0 | 0 | 0 | 2 | 8 | 12 | 14 | 4 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 42 | 55 | 63 |
| | 18:00 | 0 | 1 | 0 | 4 | 2 | 6 | 8 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 23 | 51 | 62 |
| | 19:00 | 0 | 0 | 0 | 0 | 4 | 6 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 52 | 58 |
| | 20:00 | 1 | 0 | 0 | 1 | 2 | 2 | 2 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 54 | 66 |
| | 21:00 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 4 | 68 | 88 |
| | 22:00 | 0 | 0 | 0 | 0 | 3 | 3 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 54 | 57 |
| | 23:00 | 0 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 48 | 56 |
| | Total | 2 | 7 | 8 | 20 | 72 | 120 | 92 | 35 | 12 | 4 | 1 | 0 | 0 | 0 | 0 | 373 | | |
| | Percent | 0.5% | 1.9% | 2.1% | 5.4% | 19.3% | 32.2% | 24.7% | 9.4% | 3.2% | 1.1% | 0.3% | 0.0% | 0.0% | 0.0% | 0.0% | | | |
| | AM Peak | | 10:00 | 10:00 | 08:00 | 09:00 | 11:00 | 08:00 | 08:00 | 08:00 | | | | | | | | | |
| | Vol. | | 1 | 2 | 2 | 10 | 17 | 7 | 5 | 3 | | | | | | | | | |
| | PM Peak | 12:00 | 13:00 | 16:00 | 18:00 | 16:00 | 16:00 | 17:00 | 15:00 | 16:00 | 14:00 | 21:00 | | | | | | | |
| | Vol. | 1 | 2 | 2 | 4 | 8 | 15 | 14 | 5 | 2 | 2 | 1 | | | | | | | |

Ontario Traffic, Inc.
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 Newmarket, Ontario L3Y 3E3
 Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 6
 Station ID: U241
 Barron Rd east of Gainer St

Date Start: 26-May-21
 Date End: 01-Jun-21
 Date Start: 26-May-21

| WB | Start Time | 1 | 16 | 24 | 32 | 40 | 48 | 56 | 64 | 72 | 80 | 89 | 97 | 105 | 113 | 121 | Total | Average (Mean) | 85th Percent | |
|---------|------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|-------|----------------|--------------|----|
| 06/01/2 | | | | | | | | | | | | | | | | | | | | |
| | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * | * |
| | 01:00 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 56 | 56 |
| | 02:00 | 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 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 56 | 56 |
| | 04:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * | * |
| | 05:00 | 0 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 58 | 56 |
| | 06:00 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 60 | 66 |
| | 07:00 | 0 | 0 | 0 | 0 | 0 | 2 | 6 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 14 | 62 | 67 |
| | 08:00 | 0 | 0 | 2 | 0 | 2 | 8 | 11 | 2 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 28 | 56 | 70 |
| | 09:00 | 0 | 1 | 0 | 0 | 1 | 7 | 4 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 55 | 65 |
| | 10:00 | 0 | 0 | 0 | 2 | 3 | 5 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 52 | 59 |
| | 11:00 | 0 | 0 | 0 | 1 | 0 | 6 | 8 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 16 | 55 | 62 |
| | 12 PM | 1 | 0 | 0 | 0 | 3 | 10 | 11 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 29 | 54 | 63 |
| | 13:00 | 1 | 1 | 0 | 2 | 5 | 8 | 6 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 24 | 49 | 58 |
| | 14:00 | 0 | 0 | 2 | 0 | 1 | 6 | 8 | 5 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 24 | 57 | 66 |
| | 15:00 | 0 | 0 | 1 | 3 | 5 | 4 | 11 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 28 | 54 | 63 |
| | 16:00 | 1 | 0 | 2 | 2 | 8 | 18 | 11 | 7 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 51 | 52 | 64 |
| | 17:00 | 0 | 0 | 0 | 1 | 2 | 6 | 11 | 15 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 37 | 62 | 69 |
| | 18:00 | 0 | 0 | 2 | 4 | 4 | 6 | 13 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 34 | 53 | 63 |
| | 19:00 | 0 | 1 | 0 | 0 | 5 | 6 | 4 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 53 | 64 |
| | 20:00 | 0 | 0 | 1 | 0 | 1 | 2 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 53 | 59 |
| | 21:00 | 0 | 0 | 1 | 2 | 2 | 3 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 10 | 48 | 50 |
| | 22:00 | 0 | 0 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 40 | 48 |
| | 23:00 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 40 | 40 |
| | Total | 3 | 3 | 11 | 18 | 44 | 102 | 116 | 59 | 14 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 374 | | |
| | Percent | 0.8% | 0.8% | 2.9% | 4.8% | 11.8% | 27.3% | 31.0% | 15.8% | 3.7% | 1.1% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | | | |
| | AM Peak | | 09:00 | 08:00 | 10:00 | 10:00 | 08:00 | 08:00 | 07:00 | 08:00 | 05:00 | | | | | | | | | |
| | Vol. | | 1 | 2 | 2 | 3 | 8 | 11 | 5 | 2 | 1 | | | | | | | | | |
| | PM Peak | 12:00 | 13:00 | 14:00 | 18:00 | 16:00 | 16:00 | 18:00 | 17:00 | 14:00 | 13:00 | | | | | | | | | |
| | Vol. | 1 | 1 | 2 | 4 | 8 | 18 | 13 | 15 | 2 | 1 | | | | | | | | | |
| | Total | 12 | 21 | 46 | 101 | 334 | 703 | 755 | 337 | 86 | 14 | 2 | 0 | 0 | 0 | 0 | 2411 | | | |

15th Percentile : 44 KPH
 50th Percentile : 55 KPH
 85th Percentile : 65 KPH
 95th Percentile : 71 KPH

Stats
 10 KPH Pace Speed : 54-63 KPH
 Number in Pace : 931
 Percent in Pace : 38.6%
 Number of Vehicles > 60 KPH : 721
 Percent of Vehicles > 60 KPH : 29.9%
 Mean Speed(Average) : 55 KPH

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Site Code: 6
 Station ID: U241
 Barron Rd east of Gainer St

Date Start: 26-May-21
 Date End: 01-Jun-21
 Date Start: 26-May-21

| EB, WB | 1 | 16 | 24 | 32 | 40 | 48 | 56 | 64 | 72 | 80 | 89 | 97 | 105 | 113 | 121 | Total | Average (Mean) | 85th Percent |
|--------------|------|------|------|------|-------|-------|-------|-------|------|------|------|------|------|------|------|-------|-------------------|-----------------|
| Start Time | 15 | 23 | 31 | 39 | 47 | 55 | 63 | 71 | 79 | 88 | 96 | 104 | 112 | 120 | 9999 | | | |
| 05/28/2 | | | | | | | | | | | | | | | | | | |
| 1 | 0 | 0 | 0 | 0 | 0 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 56 | 56 |
| 01:00 | 0 | 0 | 0 | 1 | 2 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 5 | 53 | 56 |
| 02:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 64 | 64 |
| 03:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * | * |
| 04:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * | * |
| 05:00 | 0 | 0 | 0 | 0 | 1 | 4 | 4 | 1 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 13 | 61 | 72 |
| 06:00 | 0 | 0 | 0 | 2 | 1 | 5 | 5 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 18 | 56 | 65 |
| 07:00 | 0 | 0 | 0 | 4 | 7 | 11 | 8 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 32 | 59 | 68 |
| 08:00 | 0 | 0 | 0 | 2 | 10 | 8 | 13 | 8 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 43 | 55 | 67 |
| 09:00 | 0 | 0 | 0 | 1 | 9 | 16 | 11 | 6 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 45 | 54 | 64 |
| 10:00 | 0 | 0 | 1 | 3 | 3 | 10 | 13 | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 39 | 56 | 65 |
| 11:00 | 0 | 0 | 3 | 5 | 11 | 22 | 4 | 5 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 53 | 51 | 63 |
| 12 PM | 0 | 0 | 1 | 1 | 6 | 14 | 16 | 5 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 45 | 55 | 63 |
| 13:00 | 0 | 0 | 0 | 2 | 9 | 20 | 11 | 7 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 50 | 54 | 63 |
| 14:00 | 0 | 0 | 0 | 2 | 3 | 18 | 16 | 7 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 48 | 56 | 65 |
| 15:00 | 0 | 0 | 1 | 3 | 7 | 26 | 26 | 7 | 1 | 0 | 0 | 1 | 0 | 0 | 0 | 72 | 55 | 63 |
| 16:00 | 0 | 0 | 2 | 4 | 10 | 15 | 15 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 53 | 53 | 62 |
| 17:00 | 0 | 0 | 0 | 0 | 6 | 16 | 12 | 9 | 2 | 0 | 0 | 0 | 1 | 0 | 0 | 46 | 58 | 67 |
| 18:00 | 0 | 0 | 0 | 0 | 6 | 12 | 14 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 35 | 55 | 61 |
| 19:00 | 0 | 0 | 0 | 2 | 3 | 10 | 5 | 6 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 26 | 55 | 65 |
| 20:00 | 0 | 0 | 1 | 0 | 3 | 7 | 5 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 | 53 | 60 |
| 21:00 | 0 | 0 | 0 | 3 | 3 | 10 | 3 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 23 | 53 | 64 |
| 22:00 | 0 | 0 | 0 | 4 | 2 | 1 | 4 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 12 | 47 | 58 |
| 23:00 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 56 | 56 |
| Total | 0 | 0 | 9 | 35 | 99 | 222 | 191 | 99 | 20 | 2 | 2 | 1 | 1 | 0 | 0 | 681 | | |
| Percent | 0.0% | 0.0% | 1.3% | 5.1% | 14.5% | 32.6% | 28.0% | 14.5% | 2.9% | 0.3% | 0.3% | 0.1% | 0.1% | 0.0% | 0.0% | | | |
| AM Peak Vol. | | | 3 | 5 | 11 | 22 | 13 | 9 | 3 | 1 | 1 | | | | | | | |
| PM Peak Vol. | | | 2 | 4 | 10 | 26 | 26 | 9 | 2 | 1 | | 1 | 1 | | | | | |

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Site Code: 6
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 Barron Rd east of Gainer St

Date Start: 26-May-21
 Date End: 01-Jun-21
 Date Start: 26-May-21

| EB, WB | 1 | 16 | 24 | 32 | 40 | 48 | 56 | 64 | 72 | 80 | 89 | 97 | 105 | 113 | 121 | Total | Average (Mean) | 85th Percent |
|--------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|-------|-------------------|-----------------|
| Start Time | 15 | 23 | 31 | 39 | 47 | 55 | 63 | 71 | 79 | 88 | 96 | 104 | 112 | 120 | 9999 | | | |
| 05/29/2 | | | | | | | | | | | | | | | | | | |
| 1 | 0 | 0 | 0 | 0 | 0 | 2 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 57 | 58 |
| 01:00 | 0 | 0 | 0 | 0 | 0 | 5 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 54 | 63 |
| 02:00 | 0 | 0 | 0 | 0 | 0 | 1 | 2 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 60 | 57 |
| 03:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * | * |
| 04:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 72 | 72 |
| 05:00 | 0 | 0 | 0 | 1 | 0 | 2 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 7 | 54 | 58 |
| 06:00 | 0 | 0 | 0 | 0 | 1 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 5 | 49 | 50 |
| 07:00 | 0 | 0 | 1 | 0 | 2 | 2 | 1 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 10 | 56 | 65 |
| 08:00 | 0 | 0 | 1 | 2 | 1 | 3 | 8 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 56 | 65 |
| 09:00 | 0 | 0 | 0 | 1 | 4 | 9 | 9 | 3 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 28 | 56 | 64 |
| 10:00 | 0 | 0 | 0 | 2 | 5 | 12 | 22 | 7 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 49 | 57 | 64 |
| 11:00 | 0 | 0 | 0 | 1 | 10 | 14 | 7 | 6 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 41 | 55 | 66 |
| 12 PM | 0 | 0 | 0 | 2 | 14 | 18 | 17 | 10 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 62 | 54 | 64 |
| 13:00 | 1 | 0 | 0 | 4 | 11 | 18 | 14 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 52 | 51 | 60 |
| 14:00 | 0 | 0 | 1 | 2 | 1 | 22 | 19 | 5 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 52 | 55 | 63 |
| 15:00 | 0 | 0 | 2 | 5 | 12 | 18 | 8 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 52 | 51 | 62 |
| 16:00 | 0 | 0 | 2 | 1 | 6 | 12 | 18 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 43 | 54 | 62 |
| 17:00 | 1 | 0 | 1 | 1 | 5 | 15 | 15 | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 42 | 54 | 62 |
| 18:00 | 0 | 1 | 1 | 1 | 6 | 16 | 12 | 2 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 41 | 53 | 61 |
| 19:00 | 0 | 0 | 0 | 1 | 1 | 6 | 10 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 23 | 58 | 65 |
| 20:00 | 0 | 0 | 0 | 0 | 4 | 4 | 11 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 55 | 61 |
| 21:00 | 0 | 0 | 1 | 0 | 1 | 2 | 6 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 56 | 64 |
| 22:00 | 0 | 0 | 1 | 0 | 0 | 2 | 4 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 13 | 60 | 67 |
| 23:00 | 0 | 1 | 0 | 0 | 2 | 2 | 2 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 9 | 53 | 71 |
| Total | 2 | 2 | 11 | 24 | 86 | 189 | 192 | 68 | 18 | 6 | 2 | 0 | 0 | 0 | 0 | 600 | | |
| Percent | 0.3% | 0.3% | 1.8% | 4.0% | 14.3% | 31.5% | 32.0% | 11.3% | 3.0% | 1.0% | 0.3% | 0.0% | 0.0% | 0.0% | 0.0% | | | |
| AM Peak Vol. | | | 07:00 | 08:00 | 11:00 | 11:00 | 10:00 | 10:00 | 08:00 | 11:00 | 09:00 | | | | | | | |
| PM Peak Vol. | 13:00 | 18:00 | 15:00 | 15:00 | 12:00 | 14:00 | 14:00 | 12:00 | 16:00 | 14:00 | 17:00 | | | | | | | |

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 Barron Rd east of Gainer St

Date Start: 26-May-21
 Date End: 01-Jun-21
 Date Start: 26-May-21

| EB, WB | 1 | 16 | 24 | 32 | 40 | 48 | 56 | 64 | 72 | 80 | 89 | 97 | 105 | 113 | 121 | Total | Average (Mean) | 85th Percent |
|------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|-------|-------------------|-----------------|
| Start Time | 15 | 23 | 31 | 39 | 47 | 55 | 63 | 71 | 79 | 88 | 96 | 104 | 112 | 120 | 9999 | | | |
| 05/31/2 | | | | | | | | | | | | | | | | | | |
| 1 | 0 | 0 | 0 | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 43 | 48 |
| 01:00 | 0 | 0 | 0 | 0 | 1 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 50 | 49 |
| 02:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 64 | 64 |
| 03:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * | * |
| 04:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * | * |
| 05:00 | 0 | 0 | 0 | 0 | 2 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 4 | 48 | 56 |
| 06:00 | 0 | 1 | 0 | 0 | 3 | 5 | 4 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 19 | 56 | 71 |
| 07:00 | 0 | 0 | 0 | 1 | 3 | 13 | 11 | 3 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 36 | 58 | 71 |
| 08:00 | 0 | 0 | 0 | 4 | 9 | 12 | 22 | 8 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 62 | 57 | 69 |
| 09:00 | 0 | 0 | 1 | 2 | 14 | 15 | 5 | 3 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 41 | 50 | 58 |
| 10:00 | 0 | 1 | 3 | 4 | 7 | 9 | 11 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 39 | 50 | 61 |
| 11:00 | 0 | 1 | 2 | 6 | 8 | 21 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 45 | 48 | 55 |
| 12 PM | 2 | 1 | 0 | 1 | 11 | 24 | 14 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 57 | 50 | 60 |
| 13:00 | 0 | 4 | 3 | 4 | 8 | 17 | 16 | 6 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 59 | 50 | 62 |
| 14:00 | 0 | 1 | 2 | 3 | 10 | 15 | 6 | 5 | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 45 | 52 | 64 |
| 15:00 | 0 | 0 | 1 | 4 | 16 | 26 | 10 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 64 | 51 | 60 |
| 16:00 | 0 | 0 | 2 | 5 | 15 | 31 | 27 | 5 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 91 | 54 | 62 |
| 17:00 | 0 | 0 | 0 | 4 | 10 | 21 | 32 | 13 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 82 | 56 | 65 |
| 18:00 | 0 | 1 | 0 | 4 | 6 | 11 | 14 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 38 | 52 | 60 |
| 19:00 | 0 | 1 | 0 | 1 | 5 | 10 | 10 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 31 | 53 | 62 |
| 20:00 | 2 | 0 | 0 | 1 | 4 | 4 | 3 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 50 | 66 |
| 21:00 | 0 | 0 | 1 | 0 | 2 | 0 | 4 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 10 | 59 | 79 |
| 22:00 | 0 | 0 | 0 | 0 | 3 | 3 | 5 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 57 | 65 |
| 23:00 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 53 | 56 |
| Total | 4 | 11 | 15 | 44 | 140 | 241 | 205 | 73 | 27 | 8 | 1 | 0 | 0 | 0 | 0 | 769 | | |
| Percent | 0.5% | 1.4% | 2.0% | 5.7% | 18.2% | 31.3% | 26.7% | 9.5% | 3.5% | 1.0% | 0.1% | 0.0% | 0.0% | 0.0% | 0.0% | | | |
| AM Peak | | 06:00 | 10:00 | 11:00 | 09:00 | 11:00 | 08:00 | 08:00 | 08:00 | 07:00 | | | | | | | | |
| Vol. | | 1 | 3 | 6 | 14 | 21 | 22 | 8 | 7 | 2 | | | | | | | | |
| PM Peak | 12:00 | 13:00 | 13:00 | 16:00 | 15:00 | 16:00 | 17:00 | 17:00 | 16:00 | 14:00 | 21:00 | | | | | | | |
| Vol. | 2 | 4 | 3 | 5 | 16 | 31 | 32 | 13 | 5 | 2 | 1 | | | | | | | |

Ontario Traffic, Inc.
 17705 Leslie St., Unit 6
 Newmarket, Ontario L3Y 3E3
 Tel: (905) 898-7711 Fax: (905) 898-3664

Site Code: 6
 Station ID: U241
 Barron Rd east of Gainer St

Date Start: 26-May-21
 Date End: 01-Jun-21
 Date Start: 26-May-21

| EB, WB | 1 | 16 | 24 | 32 | 40 | 48 | 56 | 64 | 72 | 80 | 89 | 97 | 105 | 113 | 121 | Total | Average (Mean) | 85th Percent |
|------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|-------|----------------|--------------|
| Start Time | 15 | 23 | 31 | 39 | 47 | 55 | 63 | 71 | 79 | 88 | 96 | 104 | 112 | 120 | 9999 | | | |
| 06/01/2 | | | | | | | | | | | | | | | | | | |
| 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * | * |
| 01:00 | 0 | 0 | 0 | 0 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 53 | 56 |
| 02:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * | * |
| 03:00 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 | 56 | 57 |
| 04:00 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | * | * |
| 05:00 | 0 | 0 | 0 | 0 | 1 | 2 | 3 | 1 | 0 | 2 | 0 | 0 | 0 | 0 | 0 | 9 | 61 | 80 |
| 06:00 | 0 | 0 | 0 | 0 | 2 | 5 | 1 | 7 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 18 | 63 | 70 |
| 07:00 | 0 | 0 | 1 | 0 | 2 | 8 | 14 | 10 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 38 | 59 | 68 |
| 08:00 | 0 | 0 | 2 | 1 | 8 | 15 | 17 | 5 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 52 | 55 | 64 |
| 09:00 | 0 | 1 | 1 | 1 | 3 | 12 | 10 | 8 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 39 | 56 | 68 |
| 10:00 | 0 | 0 | 0 | 3 | 4 | 15 | 10 | 5 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 38 | 54 | 63 |
| 11:00 | 0 | 0 | 0 | 1 | 5 | 14 | 16 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 43 | 56 | 64 |
| 12 PM | 1 | 0 | 0 | 1 | 6 | 22 | 19 | 4 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 55 | 54 | 62 |
| 13:00 | 3 | 1 | 1 | 7 | 9 | 17 | 8 | 1 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 48 | 46 | 58 |
| 14:00 | 0 | 1 | 2 | 2 | 5 | 19 | 15 | 8 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 55 | 55 | 66 |
| 15:00 | 0 | 0 | 1 | 4 | 8 | 16 | 23 | 6 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 61 | 55 | 63 |
| 16:00 | 1 | 1 | 2 | 2 | 12 | 27 | 25 | 13 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 86 | 54 | 65 |
| 17:00 | 0 | 0 | 0 | 2 | 7 | 17 | 25 | 20 | 4 | 2 | 0 | 0 | 0 | 0 | 0 | 77 | 59 | 68 |
| 18:00 | 0 | 0 | 3 | 5 | 14 | 19 | 22 | 8 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 74 | 53 | 63 |
| 19:00 | 0 | 2 | 0 | 1 | 7 | 7 | 8 | 7 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 32 | 53 | 65 |
| 20:00 | 0 | 0 | 2 | 0 | 2 | 6 | 8 | 1 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 54 | 62 |
| 21:00 | 0 | 0 | 1 | 2 | 4 | 8 | 4 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | 50 | 57 |
| 22:00 | 0 | 0 | 1 | 1 | 0 | 3 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 44 | 50 |
| 23:00 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 40 | 40 |
| Total | 5 | 6 | 17 | 33 | 101 | 233 | 232 | 111 | 27 | 11 | 1 | 0 | 0 | 0 | 0 | 777 | | |
| Percent | 0.6% | 0.8% | 2.2% | 4.2% | 13.0% | 30.0% | 29.9% | 14.3% | 3.5% | 1.4% | 0.1% | 0.0% | 0.0% | 0.0% | 0.0% | | | |
| AM Peak | | 09:00 | 08:00 | 10:00 | 08:00 | 08:00 | 08:00 | 07:00 | 07:00 | 05:00 | 06:00 | | | | | | | |
| Vol. | | 1 | 2 | 3 | 8 | 15 | 17 | 10 | 3 | 2 | 1 | | | | | | | |
| PM Peak | 13:00 | 19:00 | 18:00 | 13:00 | 18:00 | 16:00 | 16:00 | 17:00 | 17:00 | 17:00 | | | | | | | | |
| Vol. | 3 | 2 | 3 | 7 | 14 | 27 | 25 | 20 | 4 | 2 | | | | | | | | |
| Total | 18 | 46 | 97 | 222 | 705 | 1530 | 1538 | 665 | 166 | 39 | 6 | 1 | 1 | 0 | 0 | 5034 | | |

15th Percentile : 44 KPH
 50th Percentile : 55 KPH
 85th Percentile : 65 KPH
 95th Percentile : 71 KPH

Stats
 10 KPH Pace Speed : 54-63 KPH
 Number in Pace : 1922
 Percent in Pace : 38.2%
 Number of Vehicles > 60 KPH : 1454
 Percent of Vehicles > 60 KPH : 28.9%
 Mean Speed(Average) : 54 KPH




















APPENDIX 2

Highway Capacity Manual Output Reports



Lanes, Volumes, Timings
1: Centre Street & Lundy's Lane (Hwy 20)

04-18-2022

| |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  | |  |  | | |  | | |  |  |
| Traffic Volume (vph) | 1 | 379 | 17 | 2 | 257 | 1 | 18 | 0 | 2 | 4 | 0 | 3 |
| Future Volume (vph) | 1 | 379 | 17 | 2 | 257 | 1 | 18 | 0 | 2 | 4 | 0 | 3 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (m) | 15.0 | | 0.0 | 40.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 0 | | 0 | 0 | | 0 |
| 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 |
| Frt | | 0.994 | | | 0.999 | | | 0.988 | | | 0.942 | |
| Flt Protected | 0.950 | | | 0.950 | | | | 0.957 | | | 0.972 | |
| Satd. Flow (prot) | 1770 | 1852 | 0 | 1770 | 1861 | 0 | 0 | 1761 | 0 | 0 | 1706 | 0 |
| Flt Permitted | 0.950 | | | 0.950 | | | | 0.957 | | | 0.972 | |
| Satd. Flow (perm) | 1770 | 1852 | 0 | 1770 | 1861 | 0 | 0 | 1761 | 0 | 0 | 1706 | 0 |
| Link Speed (k/h) | | 50 | | | 50 | | | 50 | | | 50 | |
| Link Distance (m) | | 236.9 | | | 146.2 | | | 165.6 | | | 369.7 | |
| Travel Time (s) | | 17.1 | | | 10.5 | | | 11.9 | | | 26.6 | |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 1 | 412 | 18 | 2 | 279 | 1 | 20 | 0 | 2 | 4 | 0 | 3 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 1 | 430 | 0 | 2 | 280 | 0 | 0 | 22 | 0 | 0 | 7 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(m) | | 3.6 | | | 3.6 | | | 0.0 | | | 0.0 | |
| Link Offset(m) | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |
| Crosswalk Width(m) | | 4.8 | | | 4.8 | | | 4.8 | | | 4.8 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (k/h) | 25 | | 15 | 25 | | 15 | 25 | | 15 | 25 | | 15 |
| Sign Control | | Free | | | Free | | | Stop | | | Stop | |

Intersection Summary

| | |
|-----------------------------------|------------------------|
| Area Type: | Other |
| Control Type: | Unsignalized |
| Intersection Capacity Utilization | 31.0% |
| Analysis Period (min) | 15 |
| | ICU Level of Service A |

HCM 2010 TWSC
 1: Centre Street & Lundy's Lane (Hwy 20)

04-18-2022

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 0.6 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | ↖ | ↗ | | ↖ | ↗ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 1 | 379 | 17 | 2 | 257 | 1 | 18 | 0 | 2 | 4 | 0 | 3 |
| Future Vol, veh/h | 1 | 379 | 17 | 2 | 257 | 1 | 18 | 0 | 2 | 4 | 0 | 3 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | 15 | - | - | 40 | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 1 | 412 | 18 | 2 | 279 | 1 | 20 | 0 | 2 | 4 | 0 | 3 |

| Major/Minor | Major1 | | Major2 | | Minor1 | | | Minor2 | | | | |
|----------------------|--------|---|--------|-------|--------|---|-------|--------|-------|-------|-------|-------|
| Conflicting Flow All | 280 | 0 | 0 | 430 | 0 | 0 | 708 | 707 | 421 | 708 | 716 | 280 |
| Stage 1 | - | - | - | - | - | - | 423 | 423 | - | 284 | 284 | - |
| Stage 2 | - | - | - | - | - | - | 285 | 284 | - | 424 | 432 | - |
| Critical Hdwy | 4.12 | - | - | 4.12 | - | - | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.12 | 5.52 | - | 6.12 | 5.52 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.12 | 5.52 | - | 6.12 | 5.52 | - |
| Follow-up Hdwy | 2.218 | - | - | 2.218 | - | - | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.318 |
| Pot Cap-1 Maneuver | 1283 | - | - | 1129 | - | - | 350 | 360 | 632 | 350 | 356 | 759 |
| Stage 1 | - | - | - | - | - | - | 609 | 588 | - | 723 | 676 | - |
| Stage 2 | - | - | - | - | - | - | 722 | 676 | - | 608 | 582 | - |
| Platoon blocked, % | - | - | - | - | - | - | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | 1283 | - | - | 1129 | - | - | 348 | 359 | 632 | 348 | 355 | 759 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 348 | 359 | - | 348 | 355 | - |
| Stage 1 | - | - | - | - | - | - | 608 | 587 | - | 722 | 675 | - |
| Stage 2 | - | - | - | - | - | - | 718 | 675 | - | 605 | 581 | - |

| Approach | EB | WB | NB | SB |
|----------------------|----|-----|------|------|
| HCM Control Delay, s | 0 | 0.1 | 15.5 | 13.1 |
| HCM LOS | | | C | B |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|-----------------------|-------|-------|-----|-----|-------|-----|-----|-------|
| Capacity (veh/h) | 364 | 1283 | - | - | 1129 | - | - | 453 |
| HCM Lane V/C Ratio | 0.06 | 0.001 | - | - | 0.002 | - | - | 0.017 |
| HCM Control Delay (s) | 15.5 | 7.8 | - | - | 8.2 | - | - | 13.1 |
| HCM Lane LOS | C | A | - | - | A | - | - | B |
| HCM 95th %tile Q(veh) | 0.2 | 0 | - | - | 0 | - | - | 0.1 |

Lanes, Volumes, Timings
2: Centre Street & Henderson Street

04-18-2022



| Lane Group | WBL | WBR | NBT | NBR | SBL | SBT |
|----------------------------|-------|-------|-------|-------|------|-------|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 15 | 1 | 20 | 13 | 1 | 18 |
| Future Volume (vph) | 15 | 1 | 20 | 13 | 1 | 18 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt | 0.992 | | 0.947 | | | |
| Flt Protected | 0.955 | | | | | 0.998 |
| Satd. Flow (prot) | 1765 | 0 | 1764 | 0 | 0 | 1859 |
| Flt Permitted | 0.955 | | | | | 0.998 |
| Satd. Flow (perm) | 1765 | 0 | 1764 | 0 | 0 | 1859 |
| Link Speed (k/h) | 50 | | 50 | | | 50 |
| Link Distance (m) | 235.3 | | 493.2 | | | 165.6 |
| Travel Time (s) | 16.9 | | 35.5 | | | 11.9 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 16 | 1 | 22 | 14 | 1 | 20 |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 17 | 0 | 36 | 0 | 0 | 21 |
| Enter Blocked Intersection | No | No | No | No | No | No |
| Lane Alignment | Left | Right | Left | Right | Left | Left |
| Median Width(m) | 3.6 | | 0.0 | | | 0.0 |
| Link Offset(m) | 0.0 | | 0.0 | | | 0.0 |
| Crosswalk Width(m) | 4.8 | | 4.8 | | | 4.8 |
| Two way Left Turn Lane | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (k/h) | 25 | 15 | | 15 | 25 | |
| Sign Control | Stop | | Free | | | Free |

Intersection Summary

| | |
|-----------------------------------|------------------------|
| Area Type: | Other |
| Control Type: | Unsignalized |
| Intersection Capacity Utilization | 13.3% |
| Analysis Period (min) | 15 |
| | ICU Level of Service A |

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 2.2 | | | | | |
| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations | W | | T | | | T |
| Traffic Vol, veh/h | 15 | 1 | 20 | 13 | 1 | 18 |
| Future Vol, veh/h | 15 | 1 | 20 | 13 | 1 | 18 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 16 | 1 | 22 | 14 | 1 | 20 |

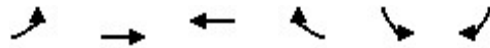
| Major/Minor | Minor1 | Major1 | Major2 | | |
|----------------------|--------|--------|--------|---|-------|
| Conflicting Flow All | 51 | 29 | 0 | 0 | 36 |
| Stage 1 | 29 | - | - | - | - |
| Stage 2 | 22 | - | - | - | - |
| Critical Hdwy | 6.42 | 6.22 | - | - | 4.12 |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - |
| Follow-up Hdwy | 3.518 | 3.318 | - | - | 2.218 |
| Pot Cap-1 Maneuver | 958 | 1046 | - | - | 1575 |
| Stage 1 | 994 | - | - | - | - |
| Stage 2 | 1001 | - | - | - | - |
| Platoon blocked, % | | | - | - | - |
| Mov Cap-1 Maneuver | 957 | 1046 | - | - | 1575 |
| Mov Cap-2 Maneuver | 957 | - | - | - | - |
| Stage 1 | 994 | - | - | - | - |
| Stage 2 | 1000 | - | - | - | - |

| Approach | WB | NB | SB |
|----------------------|-----|----|-----|
| HCM Control Delay, s | 8.8 | 0 | 0.4 |
| HCM LOS | A | | |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBL | SBT |
|-----------------------|-----|----------|-------|-------|
| Capacity (veh/h) | - | - | 962 | 1575 |
| HCM Lane V/C Ratio | - | - | 0.018 | 0.001 |
| HCM Control Delay (s) | - | - | 8.8 | 7.3 |
| HCM Lane LOS | - | - | A | A |
| HCM 95th %tile Q(veh) | - | - | 0.1 | 0 |

Lanes, Volumes, Timings
 3: Centre Street/Barron Road & Gainer Street

04-18-2022



| Lane Group | EBL | EBT | WBT | WBR | SBL | SBR |
|----------------------------|------|-------|-------|-------|-------|-------|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 13 | 20 | 23 | 3 | 3 | 10 |
| Future Volume (vph) | 13 | 20 | 23 | 3 | 3 | 10 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt | | | 0.986 | | 0.894 | |
| Flt Protected | | 0.981 | | | 0.989 | |
| Satd. Flow (prot) | 0 | 1827 | 1837 | 0 | 1647 | 0 |
| Flt Permitted | | 0.981 | | | 0.989 | |
| Satd. Flow (perm) | 0 | 1827 | 1837 | 0 | 1647 | 0 |
| Link Speed (k/h) | | 50 | 50 | | 50 | |
| Link Distance (m) | | 240.7 | 590.0 | | 474.3 | |
| Travel Time (s) | | 17.3 | 42.5 | | 34.1 | |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 14 | 22 | 25 | 3 | 3 | 11 |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 0 | 36 | 28 | 0 | 14 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Left | Right | Left | Right |
| Median Width(m) | | 0.0 | 0.0 | | 3.6 | |
| Link Offset(m) | | 0.0 | 0.0 | | 0.0 | |
| Crosswalk Width(m) | | 4.8 | 4.8 | | 4.8 | |
| Two way Left Turn Lane | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (k/h) | 25 | | | 15 | 25 | 15 |
| Sign Control | | Free | Free | | Stop | |

Intersection Summary

| | |
|-----------------------------------|------------------------|
| Area Type: | Other |
| Control Type: | Unsignalized |
| Intersection Capacity Utilization | 18.4% |
| Analysis Period (min) | 15 |
| | ICU Level of Service A |

Intersection

Int Delay, s/veh 2.9

| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
|--------------------------|------|------|------|------|------|------|
| Lane Configurations | | 4 | 1 | | 3 | |
| Traffic Vol, veh/h | 13 | 20 | 23 | 3 | 3 | 10 |
| Future Vol, veh/h | 13 | 20 | 23 | 3 | 3 | 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 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 14 | 22 | 25 | 3 | 3 | 11 |

Major/Minor

| | Major1 | Major2 | Minor2 | | |
|----------------------|--------|--------|--------|-------|-------|
| Conflicting Flow All | 28 | 0 | 0 | 77 | 27 |
| Stage 1 | - | - | - | 27 | - |
| Stage 2 | - | - | - | 50 | - |
| 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 | 1585 | - | - | 926 | 1048 |
| Stage 1 | - | - | - | 996 | - |
| Stage 2 | - | - | - | 972 | - |
| Platoon blocked, % | - | - | - | - | - |
| Mov Cap-1 Maneuver | 1585 | - | - | 918 | 1048 |
| Mov Cap-2 Maneuver | - | - | - | 918 | - |
| Stage 1 | - | - | - | 987 | - |
| Stage 2 | - | - | - | 972 | - |

Approach

| | EB | WB | SB |
|----------------------|-----|----|-----|
| HCM Control Delay, s | 2.9 | 0 | 8.6 |
| HCM LOS | | | A |

Minor Lane/Major Mvmt

| | EBL | EBT | WBT | WBR | SBLn1 |
|-----------------------|-------|-----|-----|-----|-------|
| Capacity (veh/h) | 1585 | - | - | - | 1015 |
| HCM Lane V/C Ratio | 0.009 | - | - | - | 0.014 |
| HCM Control Delay (s) | 7.3 | 0 | - | - | 8.6 |
| HCM Lane LOS | A | A | - | - | A |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 0 |

Lanes, Volumes, Timings
 4: Allanport Road (Hwy 82) & Barron Road

04-18-2022



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|----------------------------|------|-------|-------|------|-------|-------|------|-------|-------|------|--------|-------|
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Volume (vph) | 4 | 17 | 11 | 11 | 9 | 30 | 4 | 150 | 14 | 27 | 137 | 6 |
| Future Volume (vph) | 4 | 17 | 11 | 11 | 9 | 30 | 4 | 150 | 14 | 27 | 137 | 6 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| 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 |
| Frt | | 0.952 | | | 0.919 | | | 0.989 | | | 0.995 | |
| Flt Protected | | 0.994 | | | 0.989 | | | 0.999 | | | 0.992 | |
| Satd. Flow (prot) | 0 | 1763 | 0 | 0 | 1693 | 0 | 0 | 1840 | 0 | 0 | 1839 | 0 |
| Flt Permitted | | 0.994 | | | 0.989 | | | 0.999 | | | 0.992 | |
| Satd. Flow (perm) | 0 | 1763 | 0 | 0 | 1693 | 0 | 0 | 1840 | 0 | 0 | 1839 | 0 |
| Link Speed (k/h) | | 50 | | | 50 | | | 50 | | | 50 | |
| Link Distance (m) | | 590.0 | | | 416.2 | | | 221.4 | | | 1042.0 | |
| Travel Time (s) | | 42.5 | | | 30.0 | | | 15.9 | | | 75.0 | |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 4 | 18 | 12 | 12 | 10 | 33 | 4 | 163 | 15 | 29 | 149 | 7 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 34 | 0 | 0 | 55 | 0 | 0 | 182 | 0 | 0 | 185 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(m) | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |
| Link Offset(m) | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |
| Crosswalk Width(m) | | 4.8 | | | 4.8 | | | 4.8 | | | 4.8 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (k/h) | 25 | | 15 | 25 | | 15 | 25 | | 15 | 25 | | 15 |
| Sign Control | | Stop | | | Stop | | | Free | | | Free | |

Intersection Summary

| | |
|-----------------------------------|--------------|
| Area Type: | Other |
| Control Type: | Unsignalized |
| Intersection Capacity Utilization | 32.9% |
| ICU Level of Service | A |
| Analysis Period (min) | 15 |

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 2.7 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 4 | 17 | 11 | 11 | 9 | 30 | 4 | 150 | 14 | 27 | 137 | 6 |
| Future Vol, veh/h | 4 | 17 | 11 | 11 | 9 | 30 | 4 | 150 | 14 | 27 | 137 | 6 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 4 | 18 | 12 | 12 | 10 | 33 | 4 | 163 | 15 | 29 | 149 | 7 |

| Major/Minor | Minor2 | | Minor1 | | Major1 | | Major2 | | | | | |
|----------------------|--------|-------|--------|-------|--------|-------|--------|---|---|-------|---|---|
| Conflicting Flow All | 411 | 397 | 153 | 405 | 393 | 171 | 156 | 0 | 0 | 178 | 0 | 0 |
| Stage 1 | 211 | 211 | - | 179 | 179 | - | - | - | - | - | - | - |
| Stage 2 | 200 | 186 | - | 226 | 214 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.22 | 4.12 | - | - | 4.12 | - | - |
| Critical Hdwy Stg 1 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.318 | 2.218 | - | - | 2.218 | - | - |
| Pot Cap-1 Maneuver | 551 | 540 | 893 | 556 | 543 | 873 | 1424 | - | - | 1398 | - | - |
| Stage 1 | 791 | 728 | - | 823 | 751 | - | - | - | - | - | - | - |
| Stage 2 | 802 | 746 | - | 777 | 725 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | - | - | - |
| Mov Cap-1 Maneuver | 512 | 526 | 893 | 523 | 529 | 873 | 1424 | - | - | 1398 | - | - |
| Mov Cap-2 Maneuver | 512 | 526 | - | 523 | 529 | - | - | - | - | - | - | - |
| Stage 1 | 789 | 711 | - | 821 | 749 | - | - | - | - | - | - | - |
| Stage 2 | 760 | 744 | - | 729 | 708 | - | - | - | - | - | - | - |

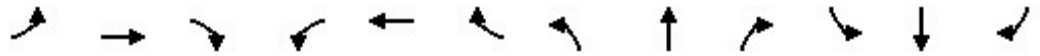
| Approach | EB | | WB | | NB | | SB | | | |
|----------------------|------|--|------|--|-----|--|-----|--|--|--|
| HCM Control Delay, s | 11.3 | | 10.7 | | 0.2 | | 1.2 | | | |
| HCM LOS | B | | B | | | | | | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
|-----------------------|-------|-----|-----|-------|-------|-------|-----|-----|
| Capacity (veh/h) | 1424 | - | - | 610 | 691 | 1398 | - | - |
| HCM Lane V/C Ratio | 0.003 | - | - | 0.057 | 0.079 | 0.021 | - | - |
| HCM Control Delay (s) | 7.5 | 0 | - | 11.3 | 10.7 | 7.6 | 0 | - |
| HCM Lane LOS | A | A | - | B | B | A | A | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 0.2 | 0.3 | 0.1 | - | - |

Lanes, Volumes, Timings

5: Allanport Road (Hwy 82)/Davis Road (Hwy 58) & Lundy's Lane (Hwy 20)

04-18-2022

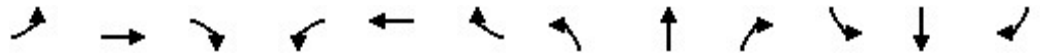


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|--------|-------|-------|-------|-------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 83 | 367 | 28 | 16 | 252 | 195 | 20 | 104 | 17 | 134 | 78 | 76 |
| Future Volume (vph) | 83 | 367 | 28 | 16 | 252 | 195 | 20 | 104 | 17 | 134 | 78 | 76 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (m) | 80.0 | | 0.0 | 60.0 | | 80.0 | 55.0 | | 0.0 | 90.0 | | 95.0 |
| Storage Lanes | 1 | | 0 | 1 | | 1 | 1 | | 0 | 1 | | 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 |
| Frt | | 0.990 | | | | 0.850 | | 0.979 | | | | 0.850 |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1770 | 1844 | 0 | 1770 | 1863 | 1583 | 1770 | 1824 | 0 | 1770 | 1863 | 1583 |
| Flt Permitted | 0.591 | | | 0.464 | | | 0.702 | | | 0.673 | | |
| Satd. Flow (perm) | 1101 | 1844 | 0 | 864 | 1863 | 1583 | 1308 | 1824 | 0 | 1254 | 1863 | 1583 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 6 | | | | 212 | | 10 | | | | 83 |
| Link Speed (k/h) | | 50 | | | 50 | | | 50 | | | | 50 |
| Link Distance (m) | | 498.1 | | | 533.8 | | | 1042.0 | | | | 403.5 |
| Travel Time (s) | | 35.9 | | | 38.4 | | | 75.0 | | | | 29.1 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 90 | 399 | 30 | 17 | 274 | 212 | 22 | 113 | 18 | 146 | 85 | 83 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 90 | 429 | 0 | 17 | 274 | 212 | 22 | 131 | 0 | 146 | 85 | 83 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(m) | | 3.6 | | | 3.6 | | | 3.6 | | | | 3.6 |
| Link Offset(m) | | 0.0 | | | 0.0 | | | 0.0 | | | | 0.0 |
| Crosswalk Width(m) | | 4.8 | | | 4.8 | | | 4.8 | | | | 4.8 |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (k/h) | 25 | | 15 | 25 | | 15 | 25 | | 15 | 25 | | 15 |
| Number of Detectors | 1 | 2 | | 1 | 2 | 1 | 1 | 2 | | 1 | 2 | 1 |
| Detector Template | Left | Thru | | Left | Thru | Right | Left | Thru | | Left | Thru | Right |
| Leading Detector (m) | 2.0 | 10.0 | | 2.0 | 10.0 | 2.0 | 2.0 | 10.0 | | 2.0 | 10.0 | 2.0 |
| Trailing Detector (m) | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 |
| Detector 1 Position(m) | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 |
| Detector 1 Size(m) | 2.0 | 0.6 | | 2.0 | 0.6 | 2.0 | 2.0 | 0.6 | | 2.0 | 0.6 | 2.0 |
| Detector 1 Type | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | Cl+Ex |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 |
| Detector 1 Queue (s) | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 |
| Detector 1 Delay (s) | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 |
| Detector 2 Position(m) | | 9.4 | | | 9.4 | | | 9.4 | | | | 9.4 |
| Detector 2 Size(m) | | 0.6 | | | 0.6 | | | 0.6 | | | | 0.6 |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | | Cl+Ex |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | | 0.0 |
| Turn Type | Perm | NA | | Perm | NA | Perm | Perm | NA | | Perm | NA | Perm |
| Protected Phases | | 4 | | | 8 | | | 2 | | | 6 | |
| Permitted Phases | 4 | | | 8 | | 8 | 2 | | | 6 | | 6 |

Lanes, Volumes, Timings

5: Allanport Road (Hwy 82)/Davis Road (Hwy 58) & Lundy's Lane (Hwy 20)

04-18-2022

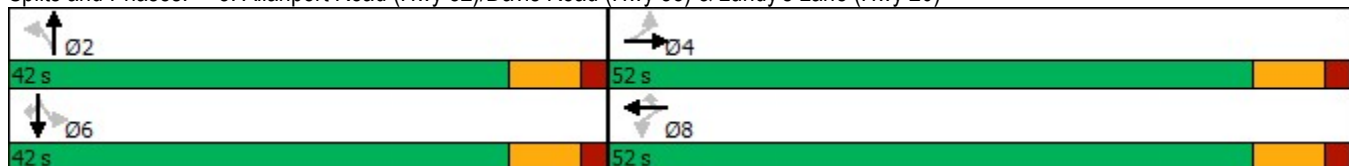


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|-----|-------|-------|-------|-------|-------|-----|-------|-------|-------|
| Detector Phase | 4 | 4 | | 8 | 8 | 8 | 2 | 2 | | 6 | 6 | 6 |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 22.0 | 22.0 | | 22.0 | 22.0 | 22.0 | 15.0 | 15.0 | | 15.0 | 15.0 | 15.0 |
| Minimum Split (s) | 36.0 | 36.0 | | 36.0 | 36.0 | 36.0 | 32.0 | 32.0 | | 32.0 | 32.0 | 32.0 |
| Total Split (s) | 52.0 | 52.0 | | 52.0 | 52.0 | 52.0 | 42.0 | 42.0 | | 42.0 | 42.0 | 42.0 |
| Total Split (%) | 55.3% | 55.3% | | 55.3% | 55.3% | 55.3% | 44.7% | 44.7% | | 44.7% | 44.7% | 44.7% |
| Maximum Green (s) | 45.0 | 45.0 | | 45.0 | 45.0 | 45.0 | 35.0 | 35.0 | | 35.0 | 35.0 | 35.0 |
| Yellow Time (s) | 5.0 | 5.0 | | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | | 5.0 | 5.0 | 5.0 |
| 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) | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 |
| Total Lost Time (s) | 7.0 | 7.0 | | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | | 7.0 | 7.0 | 7.0 |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Vehicle Extension (s) | 4.0 | 4.0 | | 4.0 | 4.0 | 4.0 | 2.0 | 2.0 | | 2.0 | 2.0 | 2.0 |
| Recall Mode | None | None | | None | None | None | Min | Min | | Min | Min | Min |
| Walk Time (s) | 11.0 | 11.0 | | 11.0 | 11.0 | 11.0 | 10.0 | 10.0 | | 10.0 | 10.0 | 10.0 |
| Flash Dont Walk (s) | 18.0 | 18.0 | | 18.0 | 18.0 | 18.0 | 15.0 | 15.0 | | 15.0 | 15.0 | 15.0 |
| Pedestrian Calls (#/hr) | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 |
| Act Effct Green (s) | 22.6 | 22.6 | | 22.6 | 22.6 | 22.6 | 15.2 | 15.2 | | 15.2 | 15.2 | 15.2 |
| Actuated g/C Ratio | 0.44 | 0.44 | | 0.44 | 0.44 | 0.44 | 0.29 | 0.29 | | 0.29 | 0.29 | 0.29 |
| v/c Ratio | 0.19 | 0.53 | | 0.05 | 0.34 | 0.26 | 0.06 | 0.24 | | 0.40 | 0.16 | 0.16 |
| Control Delay | 10.3 | 13.6 | | 8.9 | 11.1 | 2.6 | 14.2 | 14.6 | | 18.9 | 14.8 | 5.1 |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 |
| Total Delay | 10.3 | 13.6 | | 8.9 | 11.1 | 2.6 | 14.2 | 14.6 | | 18.9 | 14.8 | 5.1 |
| LOS | B | B | | A | B | A | B | B | | B | B | A |
| Approach Delay | | 13.0 | | | 7.5 | | | 14.5 | | | 14.1 | |
| Approach LOS | | B | | | A | | | B | | | B | |

Intersection Summary

| | |
|------------------------------------|------------------------|
| Area Type: | Other |
| Cycle Length: | 94 |
| Actuated Cycle Length: | 51.9 |
| Natural Cycle: | 70 |
| Control Type: | Actuated-Uncoordinated |
| Maximum v/c Ratio: | 0.53 |
| Intersection Signal Delay: | 11.5 |
| Intersection LOS: | B |
| Intersection Capacity Utilization: | 87.7% |
| ICU Level of Service: | E |
| Analysis Period (min): | 15 |

Splits and Phases: 5: Allanport Road (Hwy 82)/Davis Road (Hwy 58) & Lundy's Lane (Hwy 20)



Queues

5: Allanport Road (Hwy 82)/Davis Road (Hwy 58) & Lundy's Lane (Hwy 20)

04-18-2022

























| Lane Group | EBL | EBT | WBL | WBT | WBR | NBL | NBT | SBL | SBT | SBR |
|------------------------|------|-------|------|-------|------|------|--------|------|-------|------|
| Lane Group Flow (vph) | 90 | 429 | 17 | 274 | 212 | 22 | 131 | 146 | 85 | 83 |
| v/c Ratio | 0.19 | 0.53 | 0.05 | 0.34 | 0.26 | 0.06 | 0.24 | 0.40 | 0.16 | 0.16 |
| Control Delay | 10.3 | 13.6 | 8.9 | 11.1 | 2.6 | 14.2 | 14.6 | 18.9 | 14.8 | 5.1 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 10.3 | 13.6 | 8.9 | 11.1 | 2.6 | 14.2 | 14.6 | 18.9 | 14.8 | 5.1 |
| Queue Length 50th (m) | 5.0 | 28.1 | 0.9 | 16.5 | 0.0 | 1.5 | 8.7 | 11.0 | 5.9 | 0.0 |
| Queue Length 95th (m) | 12.7 | 51.4 | 3.8 | 31.5 | 9.1 | 6.0 | 20.9 | 26.0 | 15.3 | 8.0 |
| Internal Link Dist (m) | | 474.1 | | 509.8 | | | 1018.0 | | 379.5 | |
| Turn Bay Length (m) | 80.0 | | 60.0 | | 80.0 | 55.0 | | 90.0 | | 95.0 |
| Base Capacity (vph) | 956 | 1601 | 750 | 1617 | 1402 | 883 | 1234 | 846 | 1258 | 1096 |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.09 | 0.27 | 0.02 | 0.17 | 0.15 | 0.02 | 0.11 | 0.17 | 0.07 | 0.08 |

Intersection Summary

HCM 2010 Signalized Intersection Summary




















5: Allanport Road (Hwy 82)/Davis Road (Hwy 58) & Lundy's Lane (Hwy 20)

04-18-2022

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  | |  |  |  |  |  | |  |  |  |
| Traffic Volume (veh/h) | 83 | 367 | 28 | 16 | 252 | 195 | 20 | 104 | 17 | 134 | 78 | 76 |
| Future Volume (veh/h) | 83 | 367 | 28 | 16 | 252 | 195 | 20 | 104 | 17 | 134 | 78 | 76 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 90 | 399 | 30 | 17 | 274 | 212 | 22 | 113 | 18 | 146 | 85 | 83 |
| Adj No. of Lanes | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 443 | 738 | 56 | 388 | 804 | 683 | 457 | 461 | 73 | 441 | 548 | 466 |
| Arrive On Green | 0.43 | 0.43 | 0.43 | 0.43 | 0.43 | 0.43 | 0.29 | 0.29 | 0.29 | 0.29 | 0.29 | 0.29 |
| Sat Flow, veh/h | 906 | 1711 | 129 | 955 | 1863 | 1583 | 1212 | 1569 | 250 | 1254 | 1863 | 1583 |
| Grp Volume(v), veh/h | 90 | 0 | 429 | 17 | 274 | 212 | 22 | 0 | 131 | 146 | 85 | 83 |
| Grp Sat Flow(s),veh/h/ln | 906 | 0 | 1840 | 955 | 1863 | 1583 | 1212 | 0 | 1819 | 1254 | 1863 | 1583 |
| Q Serve(g_s), s | 3.7 | 0.0 | 8.8 | 0.7 | 5.0 | 4.5 | 0.7 | 0.0 | 2.8 | 5.1 | 1.7 | 2.0 |
| Cycle Q Clear(g_c), s | 8.8 | 0.0 | 8.8 | 9.5 | 5.0 | 4.5 | 2.4 | 0.0 | 2.8 | 7.9 | 1.7 | 2.0 |
| Prop In Lane | 1.00 | | 0.07 | 1.00 | | 1.00 | 1.00 | | 0.14 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 443 | 0 | 794 | 388 | 804 | 683 | 457 | 0 | 535 | 441 | 548 | 466 |
| V/C Ratio(X) | 0.20 | 0.00 | 0.54 | 0.04 | 0.34 | 0.31 | 0.05 | 0.00 | 0.24 | 0.33 | 0.16 | 0.18 |
| Avail Cap(c_a), veh/h | 852 | 0 | 1624 | 819 | 1644 | 1397 | 932 | 0 | 1248 | 933 | 1278 | 1087 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 12.6 | 0.0 | 10.8 | 14.3 | 9.7 | 9.5 | 14.2 | 0.0 | 13.7 | 16.7 | 13.3 | 13.4 |
| Incr Delay (d2), s/veh | 0.3 | 0.0 | 0.8 | 0.1 | 0.4 | 0.4 | 0.0 | 0.0 | 0.1 | 0.2 | 0.0 | 0.1 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 1.0 | 0.0 | 4.6 | 0.2 | 2.6 | 2.0 | 0.2 | 0.0 | 1.4 | 1.8 | 0.9 | 0.9 |
| LnGrp Delay(d),s/veh | 12.9 | 0.0 | 11.6 | 14.3 | 10.0 | 9.9 | 14.2 | 0.0 | 13.8 | 16.9 | 13.4 | 13.5 |
| LnGrp LOS | B | | B | B | B | A | B | | B | B | B | B |
| Approach Vol, veh/h | | 519 | | | 503 | | | 153 | | | 314 | |
| Approach Delay, s/veh | | 11.8 | | | 10.1 | | | 13.8 | | | 15.0 | |
| Approach LOS | | B | | | B | | | B | | | B | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | | 2 | | 4 | | 6 | | 8 | | | | |
| Phs Duration (G+Y+Rc), s | | 22.0 | | 29.0 | | 22.0 | | 29.0 | | | | |
| Change Period (Y+Rc), s | | 7.0 | | 7.0 | | 7.0 | | 7.0 | | | | |
| Max Green Setting (Gmax), s | | 35.0 | | 45.0 | | 35.0 | | 45.0 | | | | |
| Max Q Clear Time (g_c+I1), s | | 4.8 | | 10.8 | | 9.9 | | 11.5 | | | | |
| Green Ext Time (p_c), s | | 0.7 | | 6.2 | | 1.0 | | 4.9 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | 12.1 | | | | | | | | | |
| HCM 2010 LOS | | | B | | | | | | | | | |

Lanes, Volumes, Timings
1: Centre Street & Lundy's Lane (Hwy 20)

04-18-2022

| |  |  |  |  |  |  |  |  |  |  |  |  |
|----------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  | |  |  | | |  | | |  |  |
| Traffic Volume (vph) | 4 | 554 | 48 | 7 | 608 | 6 | 30 | 1 | 3 | 2 | 1 | 4 |
| Future Volume (vph) | 4 | 554 | 48 | 7 | 608 | 6 | 30 | 1 | 3 | 2 | 1 | 4 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (m) | 15.0 | | 0.0 | 40.0 | | 0.0 | 0.0 | | 0.0 | 0.0 | | 0.0 |
| Storage Lanes | 1 | | 0 | 1 | | 0 | 0 | | 0 | 0 | | 0 |
| 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 |
| Frt | | 0.988 | | | 0.998 | | | 0.989 | | | 0.923 | |
| Flt Protected | 0.950 | | | 0.950 | | | | 0.957 | | | 0.986 | |
| Satd. Flow (prot) | 1770 | 1840 | 0 | 1770 | 1859 | 0 | 0 | 1763 | 0 | 0 | 1695 | 0 |
| Flt Permitted | 0.950 | | | 0.950 | | | | 0.957 | | | 0.986 | |
| Satd. Flow (perm) | 1770 | 1840 | 0 | 1770 | 1859 | 0 | 0 | 1763 | 0 | 0 | 1695 | 0 |
| Link Speed (k/h) | | 50 | | | 50 | | | 50 | | | 50 | |
| Link Distance (m) | | 236.9 | | | 146.2 | | | 165.6 | | | 369.7 | |
| Travel Time (s) | | 17.1 | | | 10.5 | | | 11.9 | | | 26.6 | |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 4 | 602 | 52 | 8 | 661 | 7 | 33 | 1 | 3 | 2 | 1 | 4 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 4 | 654 | 0 | 8 | 668 | 0 | 0 | 37 | 0 | 0 | 7 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(m) | | 3.6 | | | 3.6 | | | 0.0 | | | 0.0 | |
| Link Offset(m) | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |
| Crosswalk Width(m) | | 4.8 | | | 4.8 | | | 4.8 | | | 4.8 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (k/h) | 25 | | 15 | 25 | | 15 | 25 | | 15 | 25 | | 15 |
| Sign Control | | Free | | | Free | | | Stop | | | Stop | |

Intersection Summary

| | |
|-----------------------------------|--------------|
| Area Type: | Other |
| Control Type: | Unsignalized |
| Intersection Capacity Utilization | 43.9% |
| ICU Level of Service | A |
| Analysis Period (min) | 15 |

HCM 2010 TWSC
 1: Centre Street & Lundy's Lane (Hwy 20)

04-18-2022

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 1.3 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | ↖ | ↗ | | ↖ | ↗ | | | ↕ | | | ↕ | |
| Traffic Vol, veh/h | 4 | 554 | 48 | 7 | 608 | 6 | 30 | 1 | 3 | 2 | 1 | 4 |
| Future Vol, veh/h | 4 | 554 | 48 | 7 | 608 | 6 | 30 | 1 | 3 | 2 | 1 | 4 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Free | Free | Stop | Stop | Stop | Stop | Stop | Stop |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | 15 | - | - | 40 | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 4 | 602 | 52 | 8 | 661 | 7 | 33 | 1 | 3 | 2 | 1 | 4 |

| Major/Minor | Major1 | | | Major2 | | | Minor1 | | | Minor2 | | |
|----------------------|--------|---|---|--------|---|---|--------|-------|-------|--------|-------|-------|
| Conflicting Flow All | 668 | 0 | 0 | 654 | 0 | 0 | 1319 | 1320 | 628 | 1319 | 1343 | 665 |
| Stage 1 | - | - | - | - | - | - | 636 | 636 | - | 681 | 681 | - |
| Stage 2 | - | - | - | - | - | - | 683 | 684 | - | 638 | 662 | - |
| Critical Hdwy | 4.12 | - | - | 4.12 | - | - | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.22 |
| Critical Hdwy Stg 1 | - | - | - | - | - | - | 6.12 | 5.52 | - | 6.12 | 5.52 | - |
| Critical Hdwy Stg 2 | - | - | - | - | - | - | 6.12 | 5.52 | - | 6.12 | 5.52 | - |
| Follow-up Hdwy | 2.218 | - | - | 2.218 | - | - | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.318 |
| Pot Cap-1 Maneuver | 922 | - | - | 933 | - | - | 134 | 157 | 483 | 134 | 152 | 460 |
| Stage 1 | - | - | - | - | - | - | 466 | 472 | - | 440 | 450 | - |
| Stage 2 | - | - | - | - | - | - | 439 | 449 | - | 465 | 459 | - |
| Platoon blocked, % | - | - | - | - | - | - | - | - | - | - | - | - |
| Mov Cap-1 Maneuver | 922 | - | - | 933 | - | - | 131 | 155 | 483 | 131 | 150 | 460 |
| Mov Cap-2 Maneuver | - | - | - | - | - | - | 131 | 155 | - | 131 | 150 | - |
| Stage 1 | - | - | - | - | - | - | 464 | 470 | - | 438 | 446 | - |
| Stage 2 | - | - | - | - | - | - | 430 | 445 | - | 459 | 457 | - |

| Approach | EB | | | WB | | | NB | | | SB | | |
|----------------------|-----|--|--|-----|--|--|------|--|--|------|--|--|
| HCM Control Delay, s | 0.1 | | | 0.1 | | | 39.4 | | | 21.3 | | |
| HCM LOS | | | | | | | E | | | C | | |

| Minor Lane/Major Mvmt | NBLn1 | EBL | EBT | EBR | WBL | WBT | WBR | SBLn1 |
|-----------------------|-------|-------|-----|-----|-------|-----|-----|-------|
| Capacity (veh/h) | 141 | 922 | - | - | 933 | - | - | 229 |
| HCM Lane V/C Ratio | 0.262 | 0.005 | - | - | 0.008 | - | - | 0.033 |
| HCM Control Delay (s) | 39.4 | 8.9 | - | - | 8.9 | - | - | 21.3 |
| HCM Lane LOS | | E | A | - | - | A | - | C |
| HCM 95th %tile Q(veh) | 1 | 0 | - | - | 0 | - | - | 0.1 |

Lanes, Volumes, Timings
2: Centre Street & Henderson Street

04-18-2022



| Lane Group | WBL | WBR | NBT | NBR | SBL | SBT |
|----------------------------|-------|-------|-------|-------|------|-------|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 9 | 6 | 32 | 9 | 9 | 44 |
| Future Volume (vph) | 9 | 6 | 32 | 9 | 9 | 44 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Frt | 0.944 | | 0.970 | | | |
| Flt Protected | 0.971 | | | | | 0.991 |
| Satd. Flow (prot) | 1707 | 0 | 1807 | 0 | 0 | 1846 |
| Flt Permitted | 0.971 | | | | | 0.991 |
| Satd. Flow (perm) | 1707 | 0 | 1807 | 0 | 0 | 1846 |
| Link Speed (k/h) | 50 | | 50 | | | 50 |
| Link Distance (m) | 235.3 | | 493.2 | | | 165.6 |
| Travel Time (s) | 16.9 | | 35.5 | | | 11.9 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 10 | 7 | 35 | 10 | 10 | 48 |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 17 | 0 | 45 | 0 | 0 | 58 |
| Enter Blocked Intersection | No | No | No | No | No | No |
| Lane Alignment | Left | Right | Left | Right | Left | Left |
| Median Width(m) | 3.6 | | 0.0 | | | 0.0 |
| Link Offset(m) | 0.0 | | 0.0 | | | 0.0 |
| Crosswalk Width(m) | 4.8 | | 4.8 | | | 4.8 |
| Two way Left Turn Lane | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (k/h) | 25 | 15 | | 15 | 25 | |
| Sign Control | Stop | | Free | | | Free |

Intersection Summary

| | |
|-----------------------------------|------------------------|
| Area Type: | Other |
| Control Type: | Unsignalized |
| Intersection Capacity Utilization | 19.5% |
| Analysis Period (min) | 15 |
| | ICU Level of Service A |

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 1.8 | | | | | |
| Movement | WBL | WBR | NBT | NBR | SBL | SBT |
| Lane Configurations | W | | T | | | T |
| Traffic Vol, veh/h | 9 | 6 | 32 | 9 | 9 | 44 |
| Future Vol, veh/h | 9 | 6 | 32 | 9 | 9 | 44 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Free | Free | Free | Free |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | 0 | - | - | - | - | - |
| Veh in Median Storage, # | 0 | - | 0 | - | - | 0 |
| Grade, % | 0 | - | 0 | - | - | 0 |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 10 | 7 | 35 | 10 | 10 | 48 |

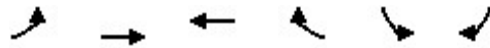
| Major/Minor | Minor1 | Major1 | Major2 | | |
|----------------------|--------|--------|--------|---|-------|
| Conflicting Flow All | 108 | 40 | 0 | 0 | 45 |
| Stage 1 | 40 | - | - | - | - |
| Stage 2 | 68 | - | - | - | - |
| Critical Hdwy | 6.42 | 6.22 | - | - | 4.12 |
| Critical Hdwy Stg 1 | 5.42 | - | - | - | - |
| Critical Hdwy Stg 2 | 5.42 | - | - | - | - |
| Follow-up Hdwy | 3.518 | 3.318 | - | - | 2.218 |
| Pot Cap-1 Maneuver | 889 | 1031 | - | - | 1563 |
| Stage 1 | 982 | - | - | - | - |
| Stage 2 | 955 | - | - | - | - |
| Platoon blocked, % | | | - | - | - |
| Mov Cap-1 Maneuver | 883 | 1031 | - | - | 1563 |
| Mov Cap-2 Maneuver | 883 | - | - | - | - |
| Stage 1 | 982 | - | - | - | - |
| Stage 2 | 948 | - | - | - | - |

| Approach | WB | NB | SB |
|----------------------|-----|----|-----|
| HCM Control Delay, s | 8.9 | 0 | 1.2 |
| HCM LOS | A | | |

| Minor Lane/Major Mvmt | NBT | NBRWBLn1 | SBL | SBT |
|-----------------------|-----|----------|-------|-------|
| Capacity (veh/h) | - | - | 937 | 1563 |
| HCM Lane V/C Ratio | - | - | 0.017 | 0.006 |
| HCM Control Delay (s) | - | - | 8.9 | 7.3 |
| HCM Lane LOS | - | - | A | A |
| HCM 95th %tile Q(veh) | - | - | 0.1 | 0 |

Lanes, Volumes, Timings
 3: Centre Street/Barron Road & Gainer Street

04-18-2022



| Lane Group | EBL | EBT | WBT | WBR | SBL | SBR |
|----------------------------|------|-------|-------|-------|-------|-------|
| Lane Configurations | | | | | | |
| Traffic Volume (vph) | 9 | 44 | 31 | 6 | 9 | 9 |
| Future Volume (vph) | 9 | 44 | 31 | 6 | 9 | 9 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Lane Util. Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Fr _t | | | 0.977 | | 0.932 | |
| Fl _t Protected | | 0.991 | | | 0.976 | |
| Satd. Flow (prot) | 0 | 1846 | 1820 | 0 | 1694 | 0 |
| Fl _t Permitted | | 0.991 | | | 0.976 | |
| Satd. Flow (perm) | 0 | 1846 | 1820 | 0 | 1694 | 0 |
| Link Speed (k/h) | | 50 | 50 | | 50 | |
| Link Distance (m) | | 240.7 | 590.0 | | 474.3 | |
| Travel Time (s) | | 17.3 | 42.5 | | 34.1 | |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 10 | 48 | 34 | 7 | 10 | 10 |
| Shared Lane Traffic (%) | | | | | | |
| Lane Group Flow (vph) | 0 | 58 | 41 | 0 | 20 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Left | Right | Left | Right |
| Median Width(m) | | 0.0 | 0.0 | | 3.6 | |
| Link Offset(m) | | 0.0 | 0.0 | | 0.0 | |
| Crosswalk Width(m) | | 4.8 | 4.8 | | 4.8 | |
| Two way Left Turn Lane | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (k/h) | 25 | | | 15 | 25 | 15 |
| Sign Control | | Free | Free | | Stop | |

Intersection Summary

| | |
|-----------------------------------|------------------------|
| Area Type: | Other |
| Control Type: | Unsignalized |
| Intersection Capacity Utilization | 19.5% |
| Analysis Period (min) | 15 |
| | ICU Level of Service A |

| Intersection | | | | | | |
|--------------------------|------|------|------|------|------|------|
| Int Delay, s/veh | 2.1 | | | | | |
| Movement | EBL | EBT | WBT | WBR | SBL | SBR |
| Lane Configurations | | ↔ | ↔ | | ↔ | |
| Traffic Vol, veh/h | 9 | 44 | 31 | 6 | 9 | 9 |
| Future Vol, veh/h | 9 | 44 | 31 | 6 | 9 | 9 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Free | Free | Free | Free | Stop | Stop |
| RT Channelized | - | None | - | None | - | None |
| Storage Length | - | - | - | - | 0 | - |
| Veh in Median Storage, # | - | 0 | 0 | - | 0 | - |
| Grade, % | - | 0 | 0 | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 10 | 48 | 34 | 7 | 10 | 10 |

| Major/Minor | Major1 | Major2 | Minor2 | | |
|----------------------|--------|--------|--------|---|-------------|
| Conflicting Flow All | 41 | 0 | - | 0 | 106 38 |
| Stage 1 | - | - | - | - | 38 - |
| Stage 2 | - | - | - | - | 68 - |
| 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 | 1568 | - | - | - | 892 1034 |
| Stage 1 | - | - | - | - | 984 - |
| Stage 2 | - | - | - | - | 955 - |
| Platoon blocked, % | | - | - | - | |
| Mov Cap-1 Maneuver | 1568 | - | - | - | 886 1034 |
| Mov Cap-2 Maneuver | - | - | - | - | 886 - |
| Stage 1 | - | - | - | - | 977 - |
| Stage 2 | - | - | - | - | 955 - |

| Approach | EB | WB | SB |
|----------------------|-----|----|-----|
| HCM Control Delay, s | 1.2 | 0 | 8.9 |
| HCM LOS | | | A |

| Minor Lane/Major Mvmt | EBL | EBT | WBT | WBR | SBLn1 |
|-----------------------|-------|-----|-----|-----|-------|
| Capacity (veh/h) | 1568 | - | - | - | 954 |
| HCM Lane V/C Ratio | 0.006 | - | - | - | 0.021 |
| HCM Control Delay (s) | 7.3 | 0 | - | - | 8.9 |
| HCM Lane LOS | A | A | - | - | A |
| HCM 95th %tile Q(veh) | 0 | - | - | - | 0.1 |

Lanes, Volumes, Timings
 4: Allanport Road (Hwy 82) & Barron Road

04-18-2022



| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|----------------------------|------|-------|-------|------|-------|-------|------|-------|-------|------|--------|-------|
| Lane Configurations | | ↕ | | | ↕ | | | ↕ | | | ↕ | |
| Traffic Volume (vph) | 10 | 14 | 22 | 21 | 23 | 46 | 14 | 193 | 12 | 42 | 144 | 5 |
| Future Volume (vph) | 10 | 14 | 22 | 21 | 23 | 46 | 14 | 193 | 12 | 42 | 144 | 5 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| 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 |
| Fr _t | | 0.935 | | | 0.931 | | | 0.993 | | | 0.997 | |
| Fl _t Protected | | 0.989 | | | 0.988 | | | 0.997 | | | 0.989 | |
| Satd. Flow (prot) | 0 | 1723 | 0 | 0 | 1713 | 0 | 0 | 1844 | 0 | 0 | 1837 | 0 |
| Fl _t Permitted | | 0.989 | | | 0.988 | | | 0.997 | | | 0.989 | |
| Satd. Flow (perm) | 0 | 1723 | 0 | 0 | 1713 | 0 | 0 | 1844 | 0 | 0 | 1837 | 0 |
| Link Speed (k/h) | | 50 | | | 50 | | | 50 | | | 50 | |
| Link Distance (m) | | 590.0 | | | 416.2 | | | 221.4 | | | 1042.0 | |
| Travel Time (s) | | 42.5 | | | 30.0 | | | 15.9 | | | 75.0 | |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 11 | 15 | 24 | 23 | 25 | 50 | 15 | 210 | 13 | 46 | 157 | 5 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 0 | 50 | 0 | 0 | 98 | 0 | 0 | 238 | 0 | 0 | 208 | 0 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(m) | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |
| Link Offset(m) | | 0.0 | | | 0.0 | | | 0.0 | | | 0.0 | |
| Crosswalk Width(m) | | 4.8 | | | 4.8 | | | 4.8 | | | 4.8 | |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (k/h) | 25 | | 15 | 25 | | 15 | 25 | | 15 | 25 | | 15 |
| Sign Control | | Stop | | | Stop | | | Free | | | Free | |

Intersection Summary

| | |
|-----------------------------------|--------------|
| Area Type: | Other |
| Control Type: | Unsignalized |
| Intersection Capacity Utilization | 35.9% |
| ICU Level of Service | A |
| Analysis Period (min) | 15 |

| Intersection | | | | | | | | | | | | |
|--------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| Int Delay, s/veh | 3.9 | | | | | | | | | | | |
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations | | ↔ | | | ↔ | | | ↔ | | | ↔ | |
| Traffic Vol, veh/h | 10 | 14 | 22 | 21 | 23 | 46 | 14 | 193 | 12 | 42 | 144 | 5 |
| Future Vol, veh/h | 10 | 14 | 22 | 21 | 23 | 46 | 14 | 193 | 12 | 42 | 144 | 5 |
| Conflicting Peds, #/hr | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Sign Control | Stop | Stop | Stop | Stop | Stop | Stop | Free | Free | Free | Free | Free | Free |
| RT Channelized | - | - | None | - | - | None | - | - | None | - | - | None |
| Storage Length | - | - | - | - | - | - | - | - | - | - | - | - |
| Veh in Median Storage, # | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Grade, % | - | 0 | - | - | 0 | - | - | 0 | - | - | 0 | - |
| Peak Hour Factor | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 | 92 |
| Heavy Vehicles, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Mvmt Flow | 11 | 15 | 24 | 23 | 25 | 50 | 15 | 210 | 13 | 46 | 157 | 5 |

| Major/Minor | Minor2 | | Minor1 | | Major1 | | Major2 | | | | | |
|----------------------|--------|-------|--------|-------|--------|-------|--------|---|---|-------|---|---|
| Conflicting Flow All | 536 | 505 | 160 | 518 | 501 | 217 | 162 | 0 | 0 | 223 | 0 | 0 |
| Stage 1 | 252 | 252 | - | 247 | 247 | - | - | - | - | - | - | - |
| Stage 2 | 284 | 253 | - | 271 | 254 | - | - | - | - | - | - | - |
| Critical Hdwy | 7.12 | 6.52 | 6.22 | 7.12 | 6.52 | 6.22 | 4.12 | - | - | 4.12 | - | - |
| Critical Hdwy Stg 1 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Critical Hdwy Stg 2 | 6.12 | 5.52 | - | 6.12 | 5.52 | - | - | - | - | - | - | - |
| Follow-up Hdwy | 3.518 | 4.018 | 3.318 | 3.518 | 4.018 | 3.318 | 2.218 | - | - | 2.218 | - | - |
| Pot Cap-1 Maneuver | 455 | 470 | 885 | 468 | 472 | 823 | 1417 | - | - | 1346 | - | - |
| Stage 1 | 752 | 698 | - | 757 | 702 | - | - | - | - | - | - | - |
| Stage 2 | 723 | 698 | - | 735 | 697 | - | - | - | - | - | - | - |
| Platoon blocked, % | | | | | | | | - | - | - | - | - |
| Mov Cap-1 Maneuver | 394 | 447 | 885 | 427 | 448 | 823 | 1417 | - | - | 1346 | - | - |
| Mov Cap-2 Maneuver | 394 | 447 | - | 427 | 448 | - | - | - | - | - | - | - |
| Stage 1 | 743 | 671 | - | 748 | 694 | - | - | - | - | - | - | - |
| Stage 2 | 647 | 690 | - | 672 | 671 | - | - | - | - | - | - | - |

| Approach | EB | WB | NB | SB |
|----------------------|----|------|-----|-----|
| HCM Control Delay, s | 12 | 12.5 | 0.5 | 1.7 |
| HCM LOS | B | B | | |

| Minor Lane/Major Mvmt | NBL | NBT | NBR | EBLn1 | WBLn1 | SBL | SBT | SBR |
|-----------------------|-------|-----|-----|-------|-------|-------|-----|-----|
| Capacity (veh/h) | 1417 | - | - | 564 | 575 | 1346 | - | - |
| HCM Lane V/C Ratio | 0.011 | - | - | 0.089 | 0.17 | 0.034 | - | - |
| HCM Control Delay (s) | 7.6 | 0 | - | 12 | 12.5 | 7.8 | 0 | - |
| HCM Lane LOS | A | A | - | B | B | A | A | - |
| HCM 95th %tile Q(veh) | 0 | - | - | 0.3 | 0.6 | 0.1 | - | - |

Lanes, Volumes, Timings

5: Allanport Road (Hwy 82)/Davis Road (Hwy 58) & Lundy's Lane (Hwy 20)

04-18-2022

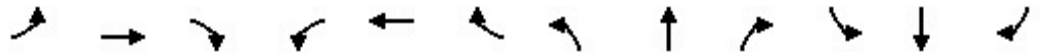


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|----------------------------|-------|-------|-------|-------|-------|-------|-------|--------|-------|-------|-------|-------|
| Lane Configurations | | | | | | | | | | | | |
| Traffic Volume (vph) | 87 | 395 | 20 | 33 | 434 | 196 | 35 | 101 | 30 | 241 | 120 | 94 |
| Future Volume (vph) | 87 | 395 | 20 | 33 | 434 | 196 | 35 | 101 | 30 | 241 | 120 | 94 |
| Ideal Flow (vphpl) | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 | 1900 |
| Storage Length (m) | 80.0 | | 0.0 | 60.0 | | 80.0 | 55.0 | | 0.0 | 90.0 | | 95.0 |
| Storage Lanes | 1 | | 0 | 1 | | 1 | 1 | | 0 | 1 | | 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 |
| Frt | | 0.993 | | | | 0.850 | | 0.965 | | | | 0.850 |
| Flt Protected | 0.950 | | | 0.950 | | | 0.950 | | | 0.950 | | |
| Satd. Flow (prot) | 1770 | 1850 | 0 | 1770 | 1863 | 1583 | 1770 | 1798 | 0 | 1770 | 1863 | 1583 |
| Flt Permitted | 0.393 | | | 0.416 | | | 0.674 | | | 0.666 | | |
| Satd. Flow (perm) | 732 | 1850 | 0 | 775 | 1863 | 1583 | 1255 | 1798 | 0 | 1241 | 1863 | 1583 |
| Right Turn on Red | | | Yes | | | Yes | | | Yes | | | Yes |
| Satd. Flow (RTOR) | | 4 | | | | 213 | | 18 | | | | 102 |
| Link Speed (k/h) | | 50 | | | 50 | | | 50 | | | | 50 |
| Link Distance (m) | | 498.1 | | | 533.8 | | | 1042.0 | | | | 403.5 |
| Travel Time (s) | | 35.9 | | | 38.4 | | | 75.0 | | | | 29.1 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Adj. Flow (vph) | 95 | 429 | 22 | 36 | 472 | 213 | 38 | 110 | 33 | 262 | 130 | 102 |
| Shared Lane Traffic (%) | | | | | | | | | | | | |
| Lane Group Flow (vph) | 95 | 451 | 0 | 36 | 472 | 213 | 38 | 143 | 0 | 262 | 130 | 102 |
| Enter Blocked Intersection | No | No | No | No | No | No | No | No | No | No | No | No |
| Lane Alignment | Left | Left | Right | Left | Left | Right | Left | Left | Right | Left | Left | Right |
| Median Width(m) | | 3.6 | | | 3.6 | | | 3.6 | | | | 3.6 |
| Link Offset(m) | | 0.0 | | | 0.0 | | | 0.0 | | | | 0.0 |
| Crosswalk Width(m) | | 4.8 | | | 4.8 | | | 4.8 | | | | 4.8 |
| Two way Left Turn Lane | | | | | | | | | | | | |
| Headway Factor | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Turning Speed (k/h) | 25 | | 15 | 25 | | 15 | 25 | | 15 | 25 | | 15 |
| Number of Detectors | 1 | 2 | | 1 | 2 | 1 | 1 | 2 | | 1 | 2 | 1 |
| Detector Template | Left | Thru | | Left | Thru | Right | Left | Thru | | Left | Thru | Right |
| Leading Detector (m) | 2.0 | 10.0 | | 2.0 | 10.0 | 2.0 | 2.0 | 10.0 | | 2.0 | 10.0 | 2.0 |
| Trailing Detector (m) | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 |
| Detector 1 Position(m) | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 |
| Detector 1 Size(m) | 2.0 | 0.6 | | 2.0 | 0.6 | 2.0 | 2.0 | 0.6 | | 2.0 | 0.6 | 2.0 |
| Detector 1 Type | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | Cl+Ex | | Cl+Ex | Cl+Ex | Cl+Ex |
| Detector 1 Channel | | | | | | | | | | | | |
| Detector 1 Extend (s) | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 |
| Detector 1 Queue (s) | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 |
| Detector 1 Delay (s) | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 |
| Detector 2 Position(m) | | 9.4 | | | 9.4 | | | 9.4 | | | | 9.4 |
| Detector 2 Size(m) | | 0.6 | | | 0.6 | | | 0.6 | | | | 0.6 |
| Detector 2 Type | | Cl+Ex | | | Cl+Ex | | | Cl+Ex | | | | Cl+Ex |
| Detector 2 Channel | | | | | | | | | | | | |
| Detector 2 Extend (s) | | 0.0 | | | 0.0 | | | 0.0 | | | | 0.0 |
| Turn Type | Perm | NA | | Perm | NA | Perm | Perm | NA | | Perm | NA | Perm |
| Protected Phases | | 4 | | | 8 | | | 2 | | | | 6 |
| Permitted Phases | 4 | | | 8 | | 8 | 2 | | | 6 | | 6 |

Lanes, Volumes, Timings

5: Allanport Road (Hwy 82)/Davis Road (Hwy 58) & Lundy's Lane (Hwy 20)

04-18-2022

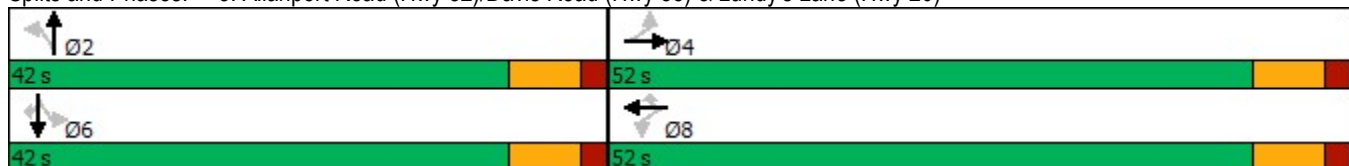


| Lane Group | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
|-------------------------|-------|-------|-----|-------|-------|-------|-------|-------|-----|-------|-------|-------|
| Detector Phase | 4 | 4 | | 8 | 8 | 8 | 2 | 2 | | 6 | 6 | 6 |
| Switch Phase | | | | | | | | | | | | |
| Minimum Initial (s) | 22.0 | 22.0 | | 22.0 | 22.0 | 22.0 | 15.0 | 15.0 | | 15.0 | 15.0 | 15.0 |
| Minimum Split (s) | 36.0 | 36.0 | | 36.0 | 36.0 | 36.0 | 32.0 | 32.0 | | 32.0 | 32.0 | 32.0 |
| Total Split (s) | 52.0 | 52.0 | | 52.0 | 52.0 | 52.0 | 42.0 | 42.0 | | 42.0 | 42.0 | 42.0 |
| Total Split (%) | 55.3% | 55.3% | | 55.3% | 55.3% | 55.3% | 44.7% | 44.7% | | 44.7% | 44.7% | 44.7% |
| Maximum Green (s) | 45.0 | 45.0 | | 45.0 | 45.0 | 45.0 | 35.0 | 35.0 | | 35.0 | 35.0 | 35.0 |
| Yellow Time (s) | 5.0 | 5.0 | | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | | 5.0 | 5.0 | 5.0 |
| 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) | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 |
| Total Lost Time (s) | 7.0 | 7.0 | | 7.0 | 7.0 | 7.0 | 7.0 | 7.0 | | 7.0 | 7.0 | 7.0 |
| Lead/Lag | | | | | | | | | | | | |
| Lead-Lag Optimize? | | | | | | | | | | | | |
| Vehicle Extension (s) | 2.0 | 2.0 | | 2.0 | 2.0 | 2.0 | 4.0 | 4.0 | | 4.0 | 4.0 | 4.0 |
| Recall Mode | None | None | | None | None | None | Min | Min | | Min | Min | Min |
| Walk Time (s) | 11.0 | 11.0 | | 11.0 | 11.0 | 11.0 | 10.0 | 10.0 | | 10.0 | 10.0 | 10.0 |
| Flash Dont Walk (s) | 18.0 | 18.0 | | 18.0 | 18.0 | 18.0 | 15.0 | 15.0 | | 15.0 | 15.0 | 15.0 |
| Pedestrian Calls (#/hr) | 0 | 0 | | 0 | 0 | 0 | 0 | 0 | | 0 | 0 | 0 |
| Act Effct Green (s) | 24.3 | 24.3 | | 24.3 | 24.3 | 24.3 | 19.5 | 19.5 | | 19.5 | 19.5 | 19.5 |
| Actuated g/C Ratio | 0.42 | 0.42 | | 0.42 | 0.42 | 0.42 | 0.34 | 0.34 | | 0.34 | 0.34 | 0.34 |
| v/c Ratio | 0.31 | 0.58 | | 0.11 | 0.61 | 0.27 | 0.09 | 0.23 | | 0.63 | 0.21 | 0.17 |
| Control Delay | 16.4 | 17.5 | | 13.2 | 18.2 | 3.3 | 14.1 | 13.3 | | 24.1 | 14.9 | 4.3 |
| Queue Delay | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | | 0.0 | 0.0 | 0.0 |
| Total Delay | 16.4 | 17.5 | | 13.2 | 18.2 | 3.3 | 14.1 | 13.3 | | 24.1 | 14.9 | 4.3 |
| LOS | B | B | | B | B | A | B | B | | C | B | A |
| Approach Delay | | 17.3 | | | 13.5 | | | 13.5 | | | 17.6 | |
| Approach LOS | | B | | | B | | | B | | | B | |

Intersection Summary

| | |
|------------------------------------|------------------------|
| Area Type: | Other |
| Cycle Length: | 94 |
| Actuated Cycle Length: | 58.2 |
| Natural Cycle: | 70 |
| Control Type: | Actuated-Uncoordinated |
| Maximum v/c Ratio: | 0.63 |
| Intersection Signal Delay: | 15.6 |
| Intersection LOS: | B |
| Intersection Capacity Utilization: | 90.4% |
| ICU Level of Service: | E |
| Analysis Period (min): | 15 |

Splits and Phases: 5: Allanport Road (Hwy 82)/Davis Road (Hwy 58) & Lundy's Lane (Hwy 20)



Queues

5: Allanport Road (Hwy 82)/Davis Road (Hwy 58) & Lundy's Lane (Hwy 20)

04-18-2022

























| Lane Group | EBL | EBT | WBL | WBT | WBR | NBL | NBT | SBL | SBT | SBR |
|------------------------|------|-------|------|-------|------|------|--------|------|-------|------|
| Lane Group Flow (vph) | 95 | 451 | 36 | 472 | 213 | 38 | 143 | 262 | 130 | 102 |
| v/c Ratio | 0.31 | 0.58 | 0.11 | 0.61 | 0.27 | 0.09 | 0.23 | 0.63 | 0.21 | 0.17 |
| Control Delay | 16.4 | 17.5 | 13.2 | 18.2 | 3.3 | 14.1 | 13.3 | 24.1 | 14.9 | 4.3 |
| Queue Delay | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Delay | 16.4 | 17.5 | 13.2 | 18.2 | 3.3 | 14.1 | 13.3 | 24.1 | 14.9 | 4.3 |
| Queue Length 50th (m) | 6.0 | 32.6 | 2.1 | 34.9 | 0.0 | 2.6 | 9.0 | 22.2 | 9.4 | 0.0 |
| Queue Length 95th (m) | 21.3 | 80.3 | 9.2 | 85.4 | 11.8 | 9.4 | 24.0 | 53.2 | 24.0 | 8.8 |
| Internal Link Dist (m) | | 474.1 | | 509.8 | | | 1018.0 | | 379.5 | |
| Turn Bay Length (m) | 80.0 | | 60.0 | | 80.0 | 55.0 | | 90.0 | | 95.0 |
| Base Capacity (vph) | 579 | 1467 | 614 | 1476 | 1298 | 773 | 1115 | 764 | 1148 | 1015 |
| Starvation Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Spillback Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Storage Cap Reductn | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Reduced v/c Ratio | 0.16 | 0.31 | 0.06 | 0.32 | 0.16 | 0.05 | 0.13 | 0.34 | 0.11 | 0.10 |

Intersection Summary

HCM 2010 Signalized Intersection Summary

5: Allanport Road (Hwy 82)/Davis Road (Hwy 58) & Lundy's Lane (Hwy 20)

04-18-2022

| |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|---|---|---|---|---|---|--|---|---|---|---|---|
| Movement | EBL | EBT | EBR | WBL | WBT | WBR | NBL | NBT | NBR | SBL | SBT | SBR |
| Lane Configurations |  |  | |  |  |  |  |  | |  |  |  |
| Traffic Volume (veh/h) | 87 | 395 | 20 | 33 | 434 | 196 | 35 | 101 | 30 | 241 | 120 | 94 |
| Future Volume (veh/h) | 87 | 395 | 20 | 33 | 434 | 196 | 35 | 101 | 30 | 241 | 120 | 94 |
| Number | 7 | 4 | 14 | 3 | 8 | 18 | 5 | 2 | 12 | 1 | 6 | 16 |
| Initial Q (Qb), veh | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Ped-Bike Adj(A_pbT) | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 | 1.00 | | 1.00 |
| Parking Bus, Adj | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Adj Sat Flow, veh/h/ln | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 | 1863 | 1863 | 1900 | 1863 | 1863 | 1863 |
| Adj Flow Rate, veh/h | 95 | 429 | 22 | 36 | 472 | 213 | 38 | 110 | 33 | 262 | 130 | 102 |
| Adj No. of Lanes | 1 | 1 | 0 | 1 | 1 | 1 | 1 | 1 | 0 | 1 | 1 | 1 |
| Peak Hour Factor | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 | 0.92 |
| Percent Heavy Veh, % | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| Cap, veh/h | 281 | 714 | 37 | 327 | 757 | 643 | 468 | 478 | 143 | 487 | 647 | 550 |
| Arrive On Green | 0.41 | 0.41 | 0.41 | 0.41 | 0.41 | 0.41 | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 | 0.35 |
| Sat Flow, veh/h | 754 | 1757 | 90 | 936 | 1863 | 1583 | 1144 | 1377 | 413 | 1240 | 1863 | 1583 |
| Grp Volume(v), veh/h | 95 | 0 | 451 | 36 | 472 | 213 | 38 | 0 | 143 | 262 | 130 | 102 |
| Grp Sat Flow(s),veh/h/ln | 754 | 0 | 1847 | 936 | 1863 | 1583 | 1144 | 0 | 1790 | 1240 | 1863 | 1583 |
| Q Serve(g_s), s | 6.5 | 0.0 | 10.9 | 1.8 | 11.4 | 5.2 | 1.4 | 0.0 | 3.2 | 10.8 | 2.8 | 2.6 |
| Cycle Q Clear(g_c), s | 18.0 | 0.0 | 10.9 | 12.7 | 11.4 | 5.2 | 4.1 | 0.0 | 3.2 | 14.0 | 2.8 | 2.6 |
| Prop In Lane | 1.00 | | 0.05 | 1.00 | | 1.00 | 1.00 | | 0.23 | 1.00 | | 1.00 |
| Lane Grp Cap(c), veh/h | 281 | 0 | 750 | 327 | 757 | 643 | 468 | 0 | 621 | 487 | 647 | 550 |
| V/C Ratio(X) | 0.34 | 0.00 | 0.60 | 0.11 | 0.62 | 0.33 | 0.08 | 0.00 | 0.23 | 0.54 | 0.20 | 0.19 |
| Avail Cap(c_a), veh/h | 572 | 0 | 1464 | 689 | 1477 | 1255 | 776 | 0 | 1104 | 821 | 1149 | 976 |
| HCM Platoon Ratio | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Upstream Filter(I) | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| Uniform Delay (d), s/veh | 20.5 | 0.0 | 13.2 | 18.2 | 13.4 | 11.6 | 14.5 | 0.0 | 13.1 | 18.1 | 13.0 | 12.9 |
| Incr Delay (d2), s/veh | 0.3 | 0.0 | 0.3 | 0.1 | 0.3 | 0.1 | 0.1 | 0.0 | 0.3 | 1.3 | 0.2 | 0.2 |
| Initial Q Delay(d3),s/veh | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| %ile BackOfQ(50%),veh/ln | 1.4 | 0.0 | 5.6 | 0.5 | 5.8 | 2.3 | 0.4 | 0.0 | 1.6 | 3.8 | 1.4 | 1.1 |
| LnGrp Delay(d),s/veh | 20.8 | 0.0 | 13.5 | 18.3 | 13.7 | 11.7 | 14.6 | 0.0 | 13.4 | 19.4 | 13.2 | 13.2 |
| LnGrp LOS | C | | B | B | B | B | B | | B | B | B | B |
| Approach Vol, veh/h | | 546 | | | 721 | | | 181 | | | 494 | |
| Approach Delay, s/veh | | 14.8 | | | 13.3 | | | 13.7 | | | 16.5 | |
| Approach LOS | | B | | | B | | | B | | | B | |
| Timer | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | | | |
| Assigned Phs | | 2 | | 4 | | 6 | | 8 | | | | |
| Phs Duration (G+Y+Rc), s | | 26.7 | | 30.1 | | 26.7 | | 30.1 | | | | |
| Change Period (Y+Rc), s | | 7.0 | | 7.0 | | 7.0 | | 7.0 | | | | |
| Max Green Setting (Gmax), s | | 35.0 | | 45.0 | | 35.0 | | 45.0 | | | | |
| Max Q Clear Time (g_c+I1), s | | 6.1 | | 20.0 | | 16.0 | | 14.7 | | | | |
| Green Ext Time (p_c), s | | 1.7 | | 3.1 | | 3.7 | | 3.5 | | | | |
| Intersection Summary | | | | | | | | | | | | |
| HCM 2010 Ctrl Delay | | | 14.6 | | | | | | | | | |
| HCM 2010 LOS | | | B | | | | | | | | | |

APPENDIX 3
Public Comments



ALLANBURG COMMUNITY TRANSPORTATION STUDY

WELCOME PUBLIC INFORMATION CENTRE

May 10, 2022
6:00pm to 8:00pm

**Please review the materials and provide
your comments on the sheets available.
Your feedback is important to us.**

**Staff are available to answer your
questions.**

PLEASE SIGN IN



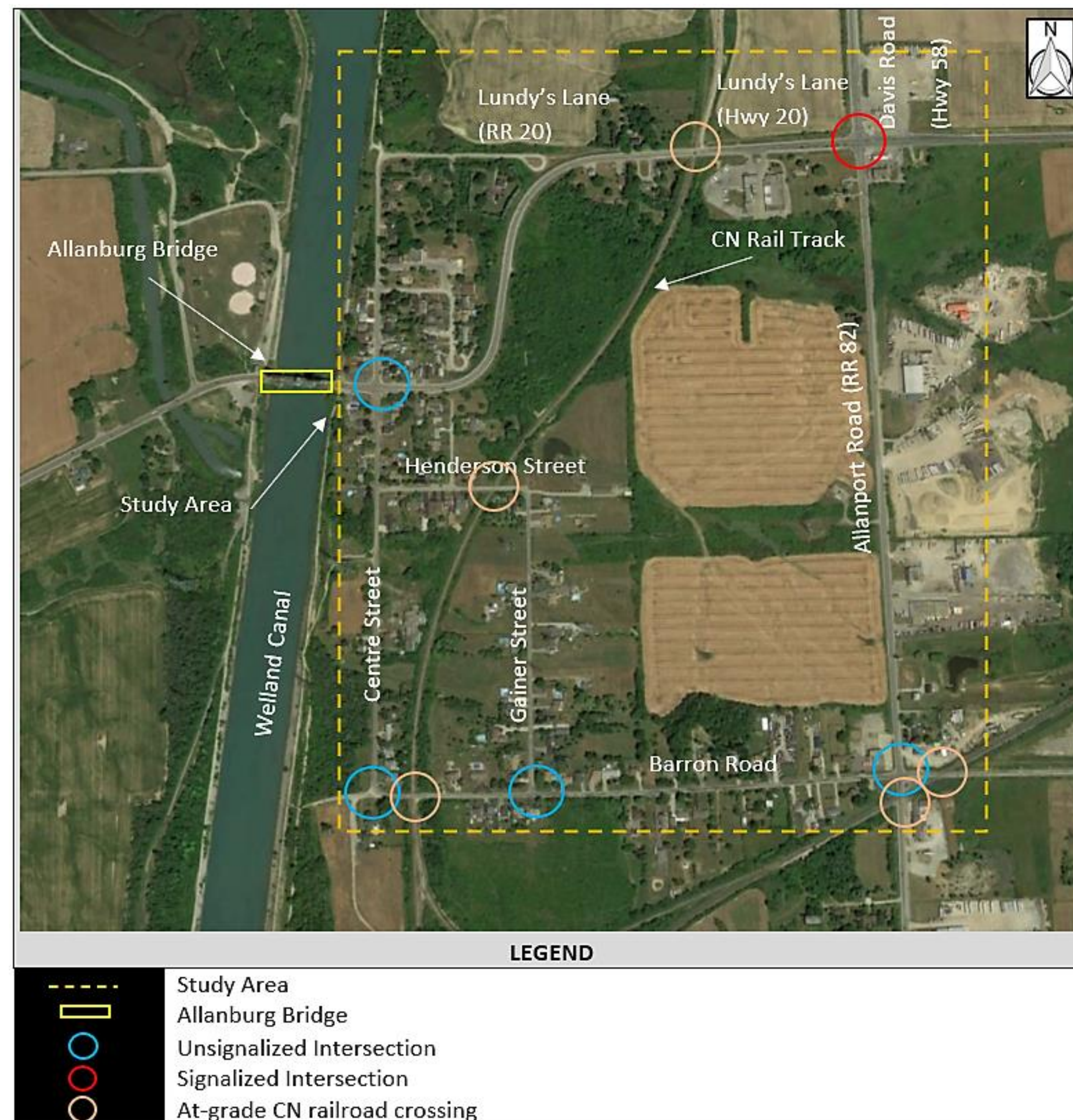
PURPOSE OF TRANSPORTATION STUDY

The purpose of the transportation study is to assess the existing and future transportation needs of the Allanburg Community with the planned build out over the next 20 years.

Study Area:

The study area is presented on the Graphic and highlights the community roadways and intersections that are being studied.

In addition, the area traffic impact of the raising of the Allanburg Bridge 11 during shipping season and closures/restrictions during the winter maintenance period will also be considered in this study.



PURPOSE OF THE PUBLIC INFORMATION CENTRE

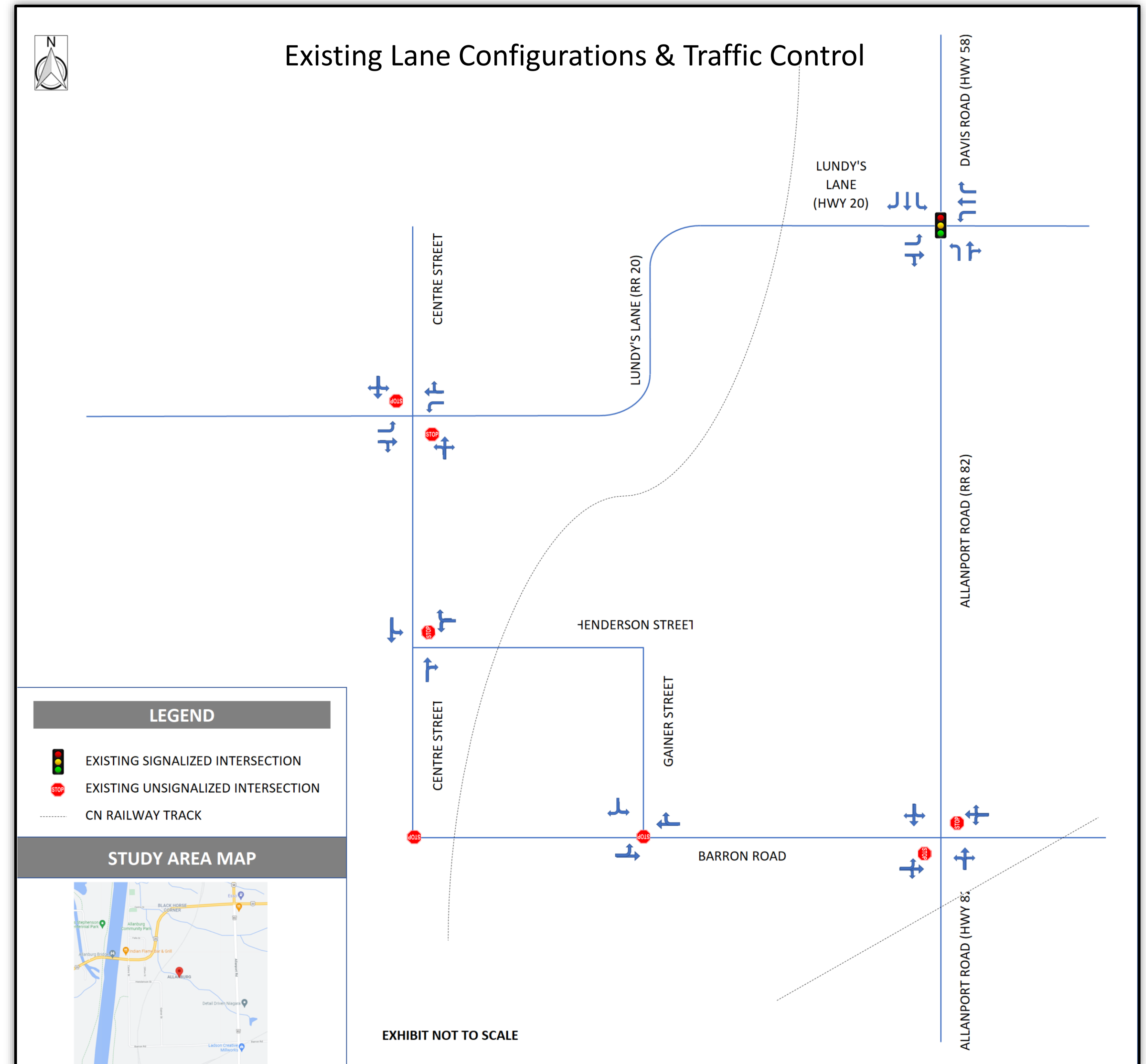
- The Project Team has undertaken initial work including:
 - Multiple site visits
 - Traffic volume and speed data collection
 - Assessing existing traffic operations at area intersections
 - Measuring existing roadway section speed
 - Review of “bridge event” traffic disruptions
- An initial list of transportation issues have been identified through the works above and also through input from the City of Thorold.
- Today's meeting is focused on supplementing this initial information with local perspective from the residents and area stakeholders and to identify additional issues, challenges or possible solutions that you may have.

We encourage you to discuss your concerns and opinions with the Project Team members and to provide your comments in writing.

EXISTING TRANSPORTATION CONDITIONS

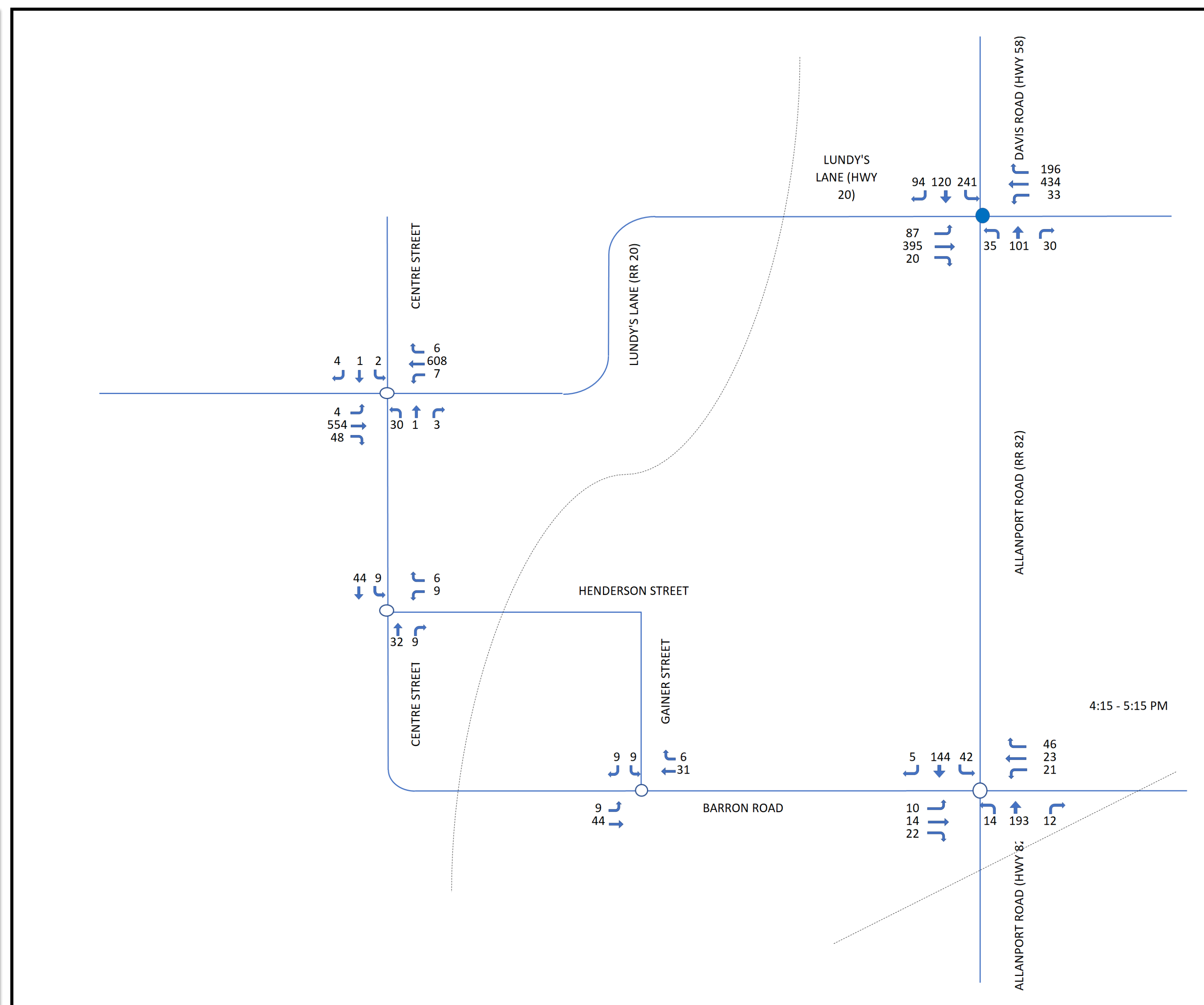
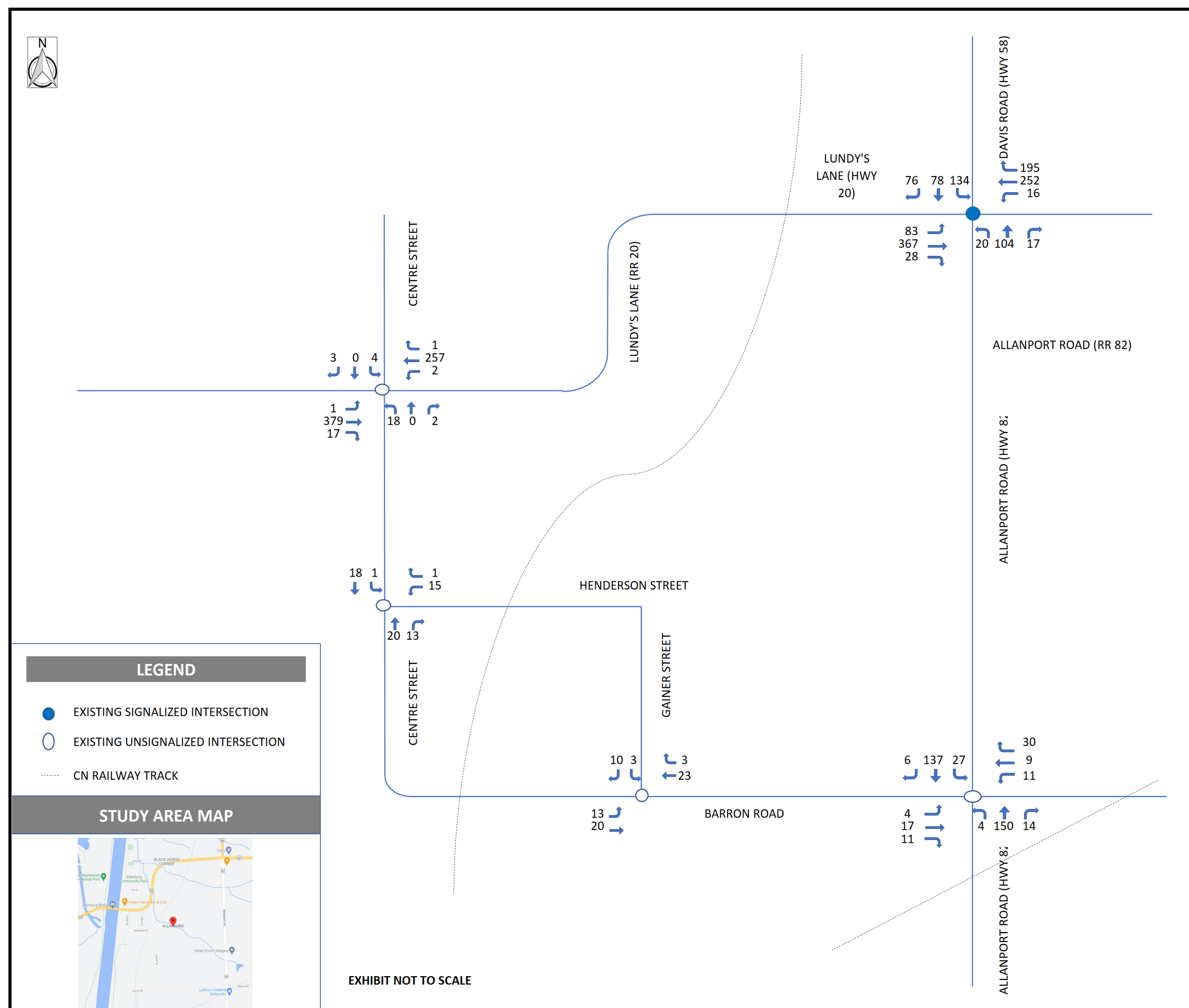
Existing Traffic Information

- Existing and historical traffic volume data from 2018 to 2020 was provided by roadway authorities.
- RVA undertook new data collection in August and October of 2021 over 11 days.
- Speed and classification data for local roadways within the Allanburg area was collected in 2021 over 7 days.
- 24-hour video recordings of traffic conditions in the vicinity of the lift bridge were also collected in 2021.



EXISTING TRANSPORTATION CONDITIONS - INTERSECTION VOLUMES

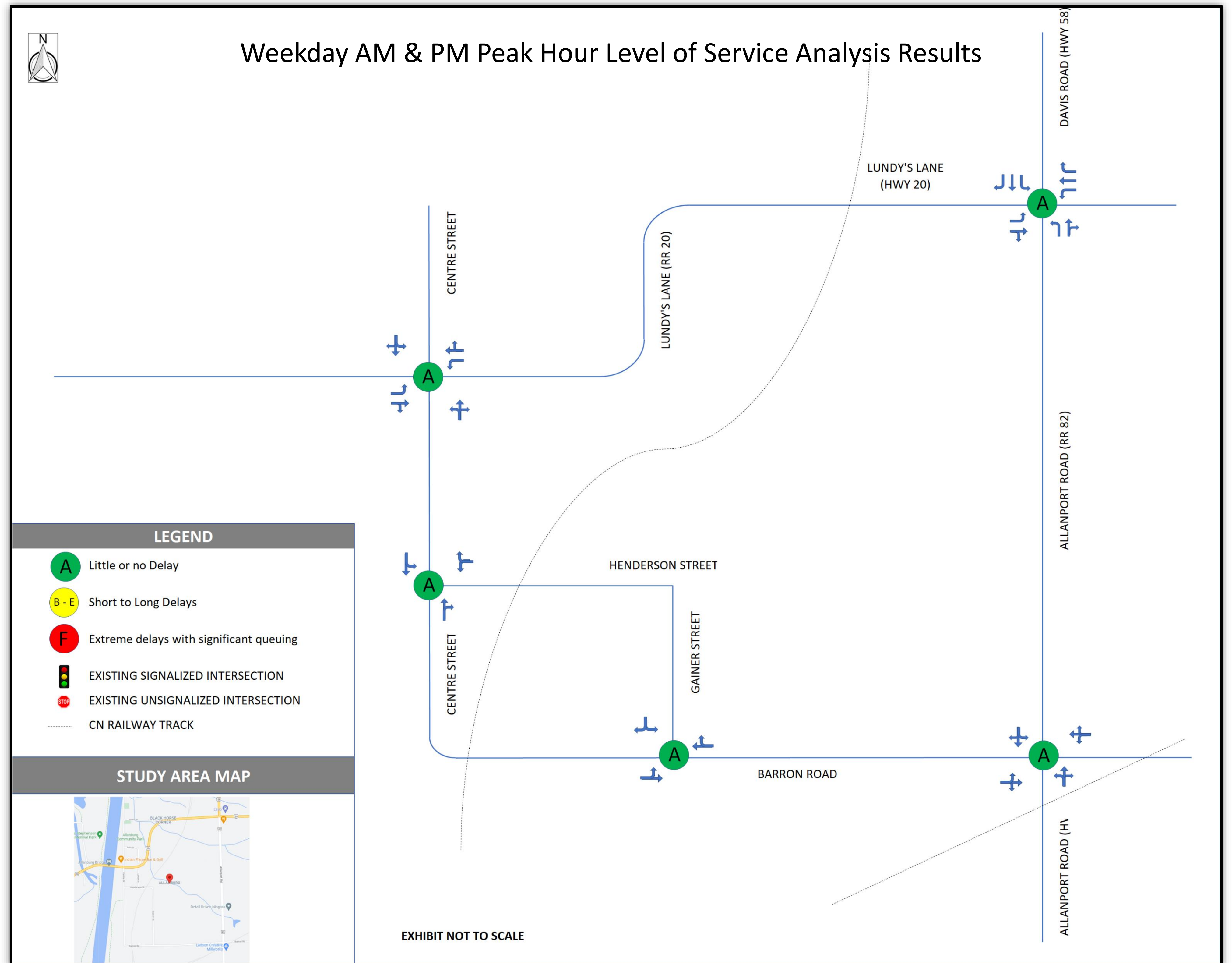
These volumes represent a typical weekday with the Canal Bridge in down position



EXISTING TRANSPORTATION CONDITIONS - INTERSECTION LEVEL OF SERVICE

Existing intersection capacity analysis was completed for the study area intersections for the weekday AM and PM peak hours.

- All existing intersections are currently operating at a good level of service under existing traffic conditions.
- No critical movements, delay or queuing are present during either peak hour.
- The existing roadway lane geometry and traffic control (e.g., stop signs/traffic signals) are adequate for the existing traffic demands.



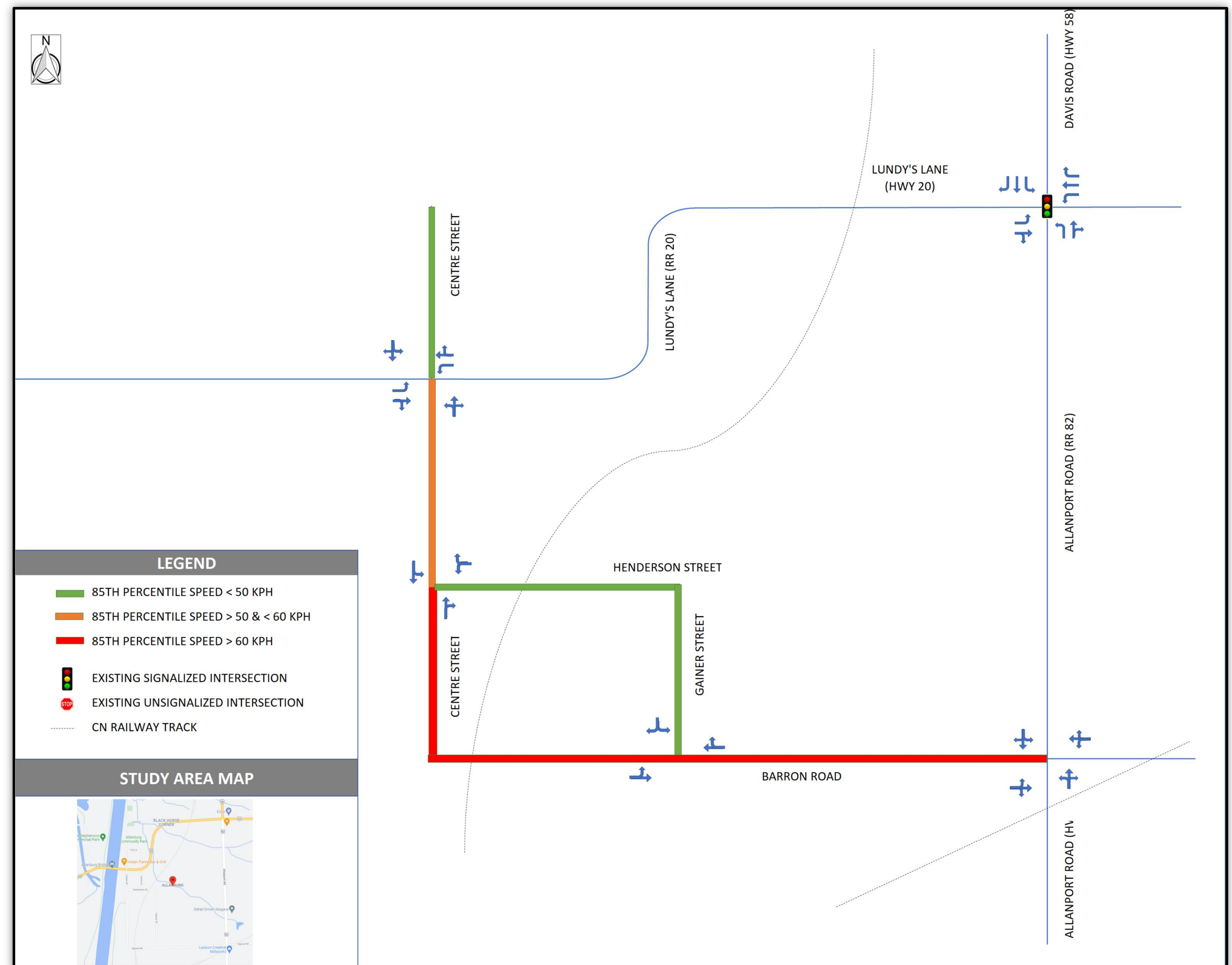
EXISTING TRANSPORTATION CONDITIONS – VEHICLE SPEED INFORMATION

Roadway speed studies were conducted for a 7-day period on area roads

- Data was collected at midblock sections to avoid influence of intersections.
- Roadways have a posted speed of 50 km/hr.

The 85th Percentile speed result identified 3 areas of speeding:

- Centre Street between Lundy's Lane (RR/Hwy 20) and Henderson St.
 - 59 km/hr. (9 km/hr. > posted)
- Centre St. between Henderson St. and Barron Rd.
 - 69 km/hr. (19 km/hr. > posted)
- Barron Rd. between Gainer St. and Allanport Rd. (RR 82)
 - 65 km/hr. (15 km/hr. > posted)

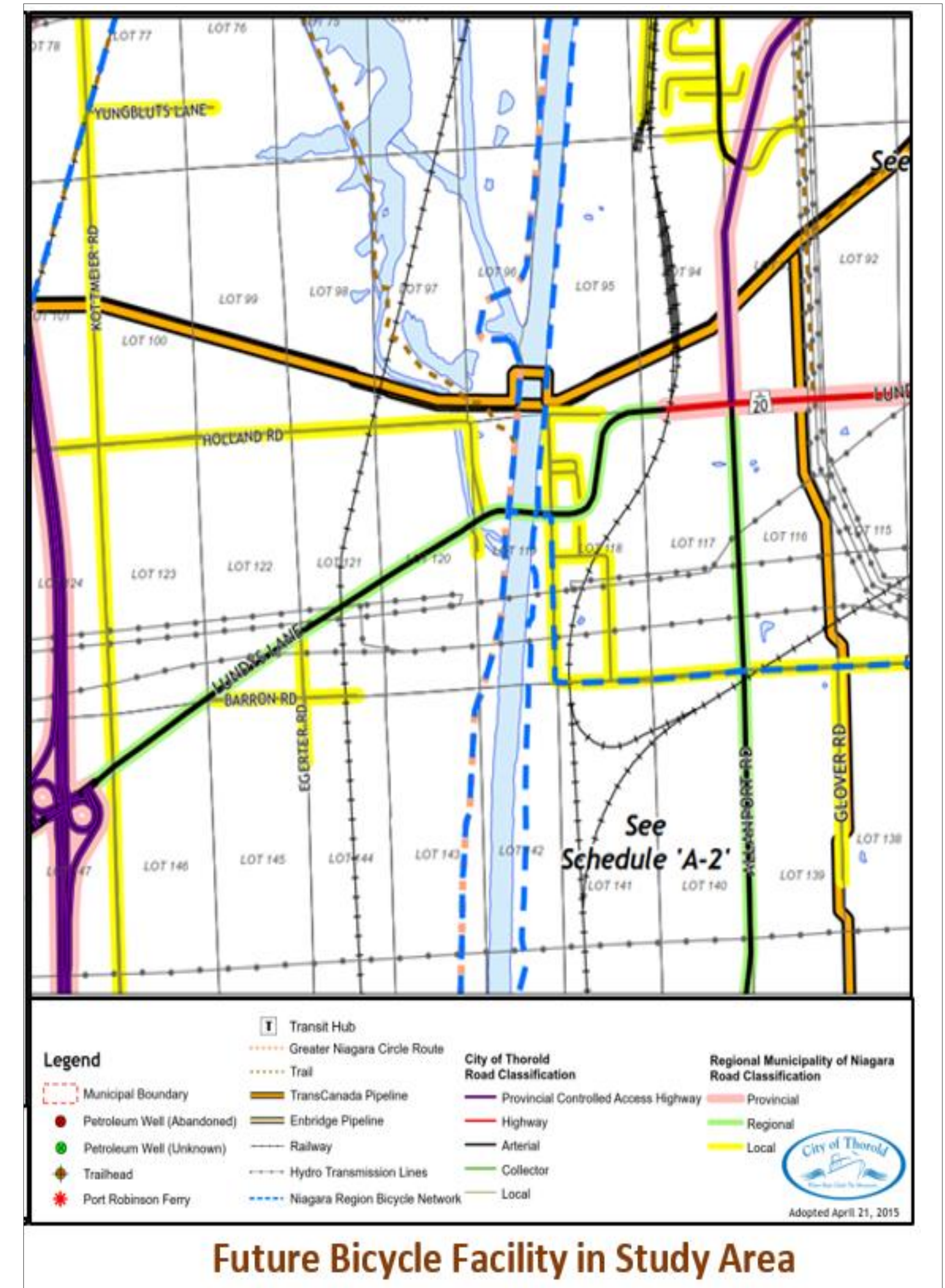


EXISTING TRANSPORTATION CONDITIONS - CYCLING FACILITIES

The City of Thorold's Official Plan Schedule D and the Region of Niagara cycling network both identify future cycling facilities within the Study Area.

These include:

- A proposed link southerly along Centre Street from Lundy's Lane (RR20) and then easterly along Barron Road to Thorold Townline Road.
- The Centre Street section would also connect to Service Road W future trail adjacent to the canal.
- A proposed facility along Regional Road 20 from Bridge 11 to Thorold Townline Road.



EXISTING TRANSPORTATION CONDITIONS – PEDESTRIAN FACILITIES

The community has a discontinuous system of formal and informal walking facilities:

South of Regional Road 20

- Sidewalk along both sides of Centre Street from RR20 to Henderson Street
- Sidewalk along north side of Henderson Street to Clifton Street

North of Regional Road 20

- Sidewalk along east side of Centre Street to 40m before curve in road
- Informal connection from Centre Street cul-de-sac to RR 20 connecting near property at 13252 RR 20

Along Regional Road 20

- Sidewalk both sides from Centre Street to 100m east
- Informal connections at Clifton Street cul-de-sac to RR 20 sidewalk
- Asphalt path from Bridge 11 to Centre Street on north side
- Discontinuous sidewalk from Bridge 11 to Centre Street on south side



EXISTING TRANSPORTATION CONDITIONS (ALLANBURG BRIDGE)

Observations from 4-day study video recordings:

- Bridge closures ranged from 2 to 6 events per day. No bridge events were observed in the night past 7:00 pm.
- Average length of bridge closure was 12 to 15 minutes per event.
- Westbound Lundy's Lane (RR20) traffic queue length ranged from 13 to 180 vehicles (100 m to >1 km), depending on time of day.
- One to two vehicles were observed making a left-turn from westbound Lundy's Lane (RR 20) on to Centre St. during each closure.
- Five to six vehicles were observed making U-turns on westbound Lundy's lane (RR 20) during each closure.
- One vehicle observed using right hand shoulder to bypass westbound queues to access Centre St.
- Immediately after bridge event, westbound left turn movements onto Centre St. experienced significant delay waiting for suitable gaps in oncoming eastbound traffic.

EXISTING TRANSPORTATION CONDITIONS (ALLANBURG BRIDGE)

Information received from the St. Lawrence Seaway Management Corporation related to the Allanburg Lift Bridge 11:

Bridge closures occur for the following reasons:

- 1) To accommodate ship operations, or
- 2) For bridge maintenance

Seaway Traffic

- Bridge closures to accommodate ship navigation occurs from March to December.
- On a typical day on average of 13 – 15 ships could cross.
- Ship frequency is displayed live on marine traffic map for Welland Canal and the Seaway Bridge Status app shows the bridge closure information for all five (5) vertical lift bridges over the Welland Canal.
- There are two variable message signs along Regional Road 20 (1 east and 1 west of Bridge 11) which display bridge status information.
- The duration of bridge closure for one ship crossing is approximately 15 minutes; and to accommodate continuously two (2) ship crossings, it is approximately 30 minutes.

Bridge closure for Maintenance

- Bridge maintenance is primarily scheduled during winter season from January to March.
- Bridge may be closed for couple of days for maintenance during navigation season, if required.
- Depending on the type of maintenance required – the average closure duration in the winter is 3 days.
- Bridge closures are usually scheduled between 9:00 am – 4:30 pm.

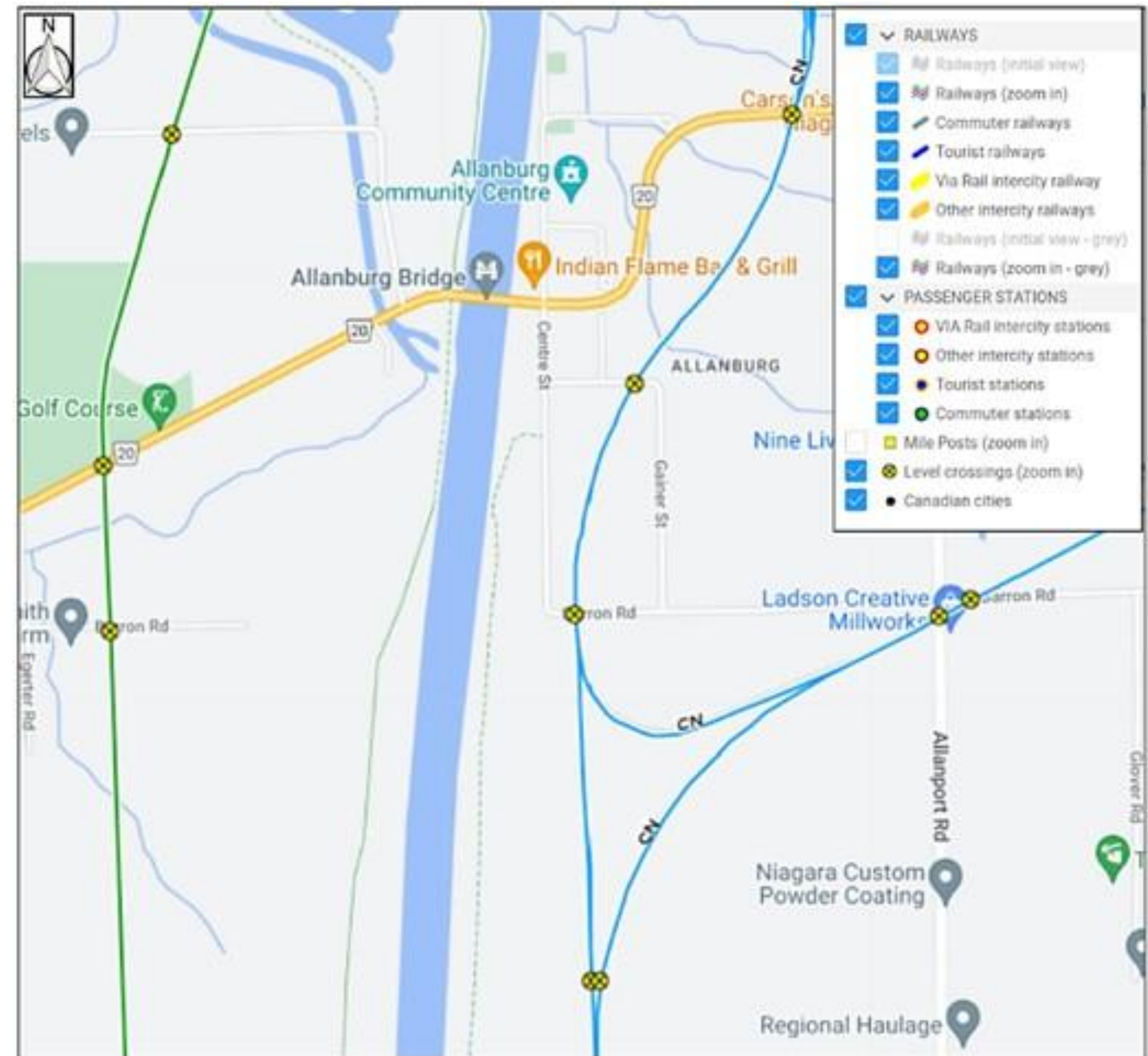
Types of Closures

- Full closure which includes all traffic lanes closed.
- Partial closure which leaves one traffic lane is open to accommodate alternating traffic.

EXISTING TRANSPORTATION CONDITIONS – RAIL FACILITIES

The Canadian National (CN) railway track bisects the Allanburg study area and crosses the roadway network at multiple locations.

- Five at-grade rail-road crossings are located within the limits of the study area:
 - Lundy's Lane (RR / Hwy 20) with flashing lights, bell and crossbucks,
 - Henderson Street with stop sign and crossbucks,
 - Barron Road, west of Gainer Street, with flashing lights, bell and crossbucks,
 - Barron Road, east of Allanport Road (RR82), with flashing lights, crossbucks, and gates
 - Allanport Road (RR82), south of Barron Street, with flashing lights, crossbucks and gates.



STUDY AREA TRANSPORTATION ISSUES

The following issues have been identified through the preliminary work completed to date. The project team looks forward to your input on these and any other issues or concerns you may have that you would like reviewed as part of this study.

- There is only one road access to the area north of Regional Road 20.
- The existing pedestrian system is discontinuous.
- Existing community roadways south of Regional Road 20 are experiencing speeds in excess of 10 km/hr. over the posted limit.
- The CN railway line has multiple at-grade crossings which can generate delays.
- When Bridge 11 is raised, significant delays to Regional Road 20 traffic and reduced access to Centre St. both north and south.
- Maintenance and construction activities at Bridge 11, Regional Road 20 and Thorold Stone Road Tunnel all can influence traffic and travel times within the greater Allanburg area.

FUTURE GROWTH TO YEAR 2041

Area 1 – North of Lundy's Lane

- 34 existing homes
- One (1) potential additional dwelling unit is proposed to be added through severance.

Area 2 – South of Lundy's Lane

- 83 existing homes
- 14 potential additional dwelling units are proposed to be added through severance.

Allanburg Estates Subdivision

- 22 dwelling units proposed in southwest quadrant of Centre Street with Barron Road.

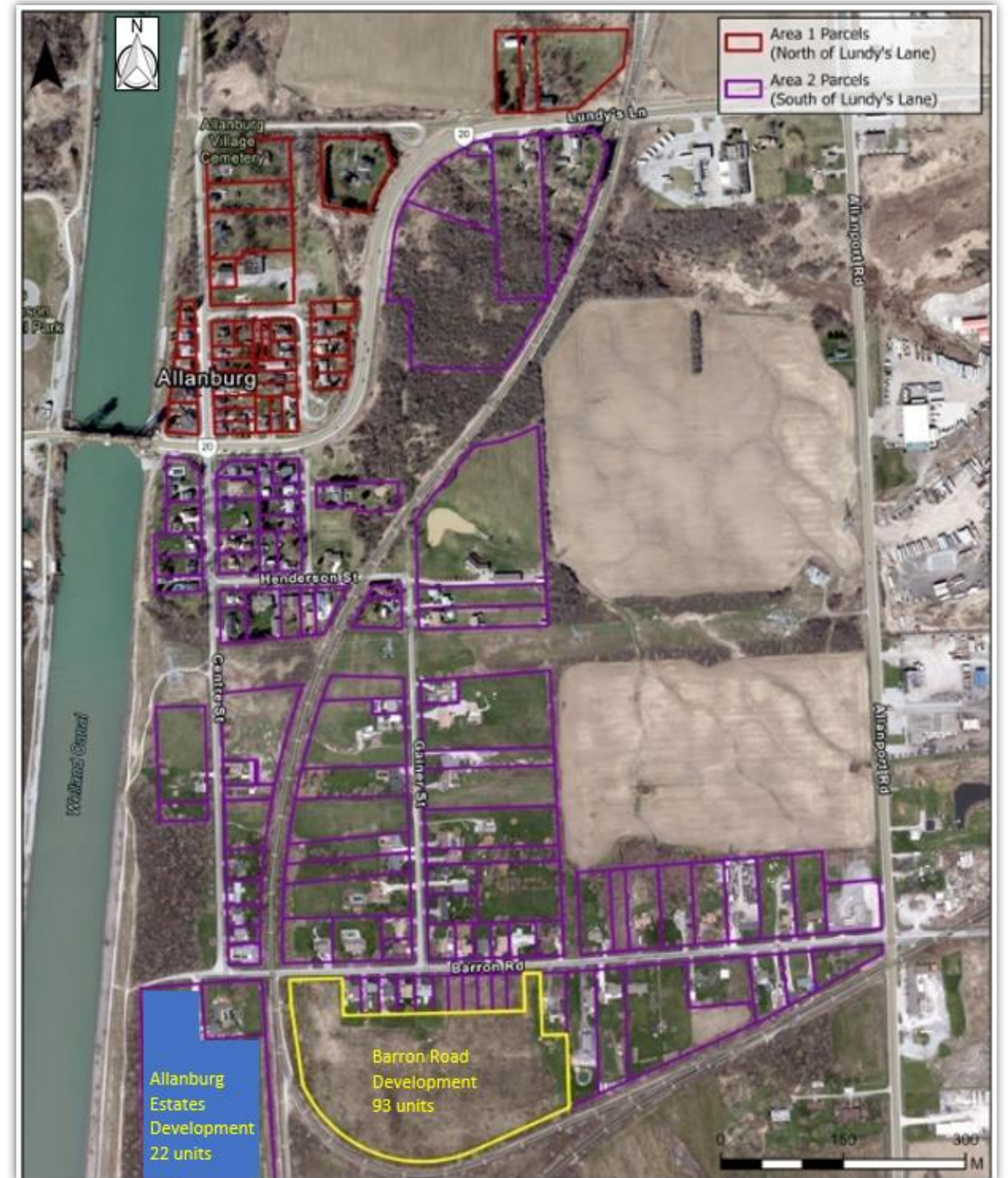
Barron Road Development

- 93 dwelling units proposed south of Barron Road, east side of CN rail tracks

Overall Projected Peak Hour Traffic Volumes:

Weekday AM Peak – 103 trips (26 inbound/77 outbound)

Weekday PM Peak – 134 trips (84 inbound/50 outbound)



ALLANBURG COMMUNITY TRANSPORTATION STUDY

COMMENT FORM

1. Please check the box that applies to you:

- A Study Area Resident
- A Study Area Property Owner living outside of Allanburg
- From a Study Area Business
- Interest Group Representative (Please Identify - _____)
- Other (Please Identify - _____)

2. Please provide your comments related to the project and the Allanburg Study Area.

- ① Centre St. and Barron Rd. are now part of a "THRU" route to and from the Allanburg Bridge
- ② Speeds are often excessive and stop signs are ignored
- ③ Henderson and Gainer, ~~in use~~ particularly where they meet at the site of the skating facility, have seen an increase in use. No warning signs are present to indicate a sharp turn.
- ④ Stop signs should be placed in all directions at Centre and Barron, and at Henderson and Gainer where they meet.
- ⑤ A stop sign should be placed on Centre St. at Henderson.
- ⑥ Warning signs should indicate no sidewalks, narrow shoulders, watch for pedestrians, children at play and so on . . .

- ⑦ Consider speed bumps, painted lines, reduced speeds, enhanced stop signs - a community safety zone

The list goes on because there are so many obvious options with few if any steps taken as yet.

- ⑧ May not be your emphasis, but for the City reroute traffic at Allouport Rd. and Highway 58 BEFORE the intersection at Black Horse Corner with warning signs.

Please provide comments by May 26, 2022 to:

By Email: mdimaria@rvanderson.com

By Mail: Matthew DiMaria
c/o R.V. Anderson Associates Limited
43 Church Street, Suite 104
St. Catharines, ON L2R 7E1

Please use additional paper if required to complete your comments.

With the exception of personal information, all comments will become part of the public record of study.

THANK YOU FOR YOUR TIME AND EFFORT!

ALLANBURG COMMUNITY TRANSPORTATION STUDY

COMMENT FORM

1. Please check the box that applies to you:

- A Study Area Resident - Northside Allanburg
- A Study Area Property Owner living outside of Allanburg
- From a Study Area Business
- Interest Group Representative (Please Identify - _____)
- Other (Please Identify - _____)

2. Please provide your comments related to the project and the Allanburg Study Area.

Firstly I'd like to say a 7-day study is an inaccurate picture of current traffic conditions in our neighborhood. The lift bridge and highway 20 are much busier during summer and fall months - with tourism to Niagara Region and as the shipping season with the Seaway comes close to an end. There are more ships than just 2-6 per day, and ships at night.

"A good level of service" for the ~~highway~~ ^{Highway 20} intersections is inaccurate. As someone who walks the neighborhood daily - crossing Highway 20 has become very dangerous. People speed over the bridge when it is open for boats in excess of 65km/hr - I've almost been hit on numerous occasions.

I truly believe this area cannot handle a booming increase in population - the roadways will clog - and pose a greater risk to pedestrian safety.

The "S" bend on Hwy 20 continues to be a dangerous roadway, where pedestrians crossing cannot see oncoming traffic from Niagara Falls direction clearly - very unsafe to cross. There have, and continue to be numerous car accidents here.



The train tracks on either side of the bridge on Hwy 20, and along Barton Rd are terrible, and also the train tracks near Fox's Run Golf course are in terrible condition forcing cars to slow down and risking being rear-ended.

The roads in Allanburg - especially across from the community center are in terrible condition.

Please provide comments by May 26, 2022 to:

By Email: mdimaria@rvanderson.com
By Mail: Matthew DiMaria
c/o R.V. Anderson Associates Limited
43 Church Street, Suite 104
St. Catharines, ON L2R 7E1

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ALLANBURG COMMUNITY TRANSPORTATION STUDY

COMMENT FORM

1. Please check the box that applies to you:

- A Study Area Resident
- A Study Area Property Owner living outside of Allanburg
- From a Study Area Business
- Interest Group Representative (Please Identify - _____)
- Other (Please Identify - _____)

2. Please provide your comments related to the project and the Allanburg Study Area.

AS we live on the north side we only have 1 exit/entrance - NO SECONDARY ROUTE IN CASE OF EMERGENCY - THE "DO NOT BLOCK" SIGN S/B ON THE NE CORNER BEFORE THE INTERSECTION

IDEALLY A STOPLIGHT!!

Your Studies ~~DO~~ NOT INCLUDE THE 2000+ homes coming from EMPIRE / ROLLING MEADOWS
 THE TRAFFIC HAS INCREASED OVER THE 11 YEARS we have been here & it is not going to get any better. IT IS DANGEROUS TRYING TO CROSS when out for a walk. There are families on the south side & THE PARK IS ON THE NORTH!
 WE HAVE ALSO SEEN the delay to emergency services because the intersection was blocked by traffic waiting for the bridge.

SIDE WALKS ARE NEEDED! SOONER RATHER THAN LATER!

THIS INFOSSESSION SHOULD ~~HAVE~~ INCLUDED question answer so residents could discuss together

ALLANBURG COMMUNITY TRANSPORTATION STUDY

COMMENT FORM

1. Please check the box that applies to you:

- A Study Area Resident
- A Study Area Property Owner living outside of Allanburg
- From a Study Area Business
- Interest Group Representative (Please Identify - _____)
- Other (Please Identify - _____)

2. Please provide your comments related to the project and the Allanburg Study Area.

- Stop sign needs to be added on Barron Rd at Bampton + centre st.
- Roads are not large enough to add sidewalks? ~~They are the size they should be~~ then they are not large enough for more traffic.
- Bridge traffic will be extreme with more houses.
- The families in the area should feel safe ~~pass~~ on their streets

ALLANBURG COMMUNITY TRANSPORTATION STUDY

COMMENT FORM

1. Please check the box that applies to you:

- A Study Area Resident
- A Study Area Property Owner living outside of Allanburg
- From a Study Area Business
- Interest Group Representative (Please Identify - _____)
- Other (Please Identify - _____)

2. Please provide your comments related to the project and the Allanburg Study Area.

My husband was born & raised in
Allanburg.

We have lived here (on Clifton St)
52 years.

We love it the way it is.

Leave us alone!

No more building homes -

traffic on hwy 20 to get
out of Centre St. is horrific.

Do something about this -
please.

ALLANBURG COMMUNITY TRANSPORTATION STUDY

COMMENT FORM

1. Please check the box that applies to you:

- A Study Area Resident
 A Study Area Property Owner living outside of Allanburg
 From a Study Area Business
 Interest Group Representative (Please Identify - _____)
 Other (Please Identify - _____)

2. Please provide your comments related to the project and the Allanburg Study Area.

As a resident of Allanburg, we have noticed that the traffic has increased since Rolling Meadows was built, and do not look forward to more traffic. My husband drives a truck and trailer and some days he can't even get out because of the constant traffic (upwards of 10-12 mins). There has been an increase of vehicles passing ~~into~~ into the oncoming traffic and ~~almost~~ almost causing collisions (this happens multiple times a day). Vehicles are constantly blocking the intersection.

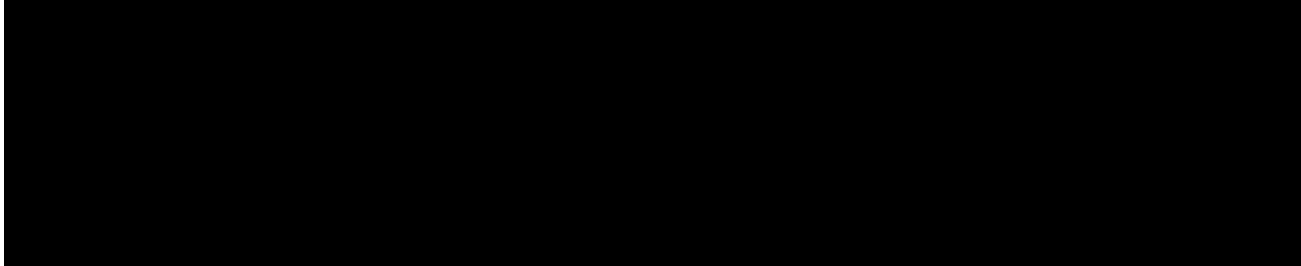
What if someone in our neighborhood needs medical emergency help, they can't get through. The vehicles are backed up to Country Basket multiple times a day.

Whether the bridge is up or not, the traffic has increased, as well as the multiple accidents.

What happens when the bridge is closed for ~~the~~ whatever reason and the tunnel is closed, we have no way around.

ALLANBURG COMMUNITY TRANSPORTATION STUDY

COMMENT FORM



1. Please check the box that applies to you:

- A Study Area Resident
- A Study Area Property Owner living outside of Allanburg
- From a Study Area Business
- Interest Group Representative (Please Identify - _____)
- Other (Please Identify - _____)

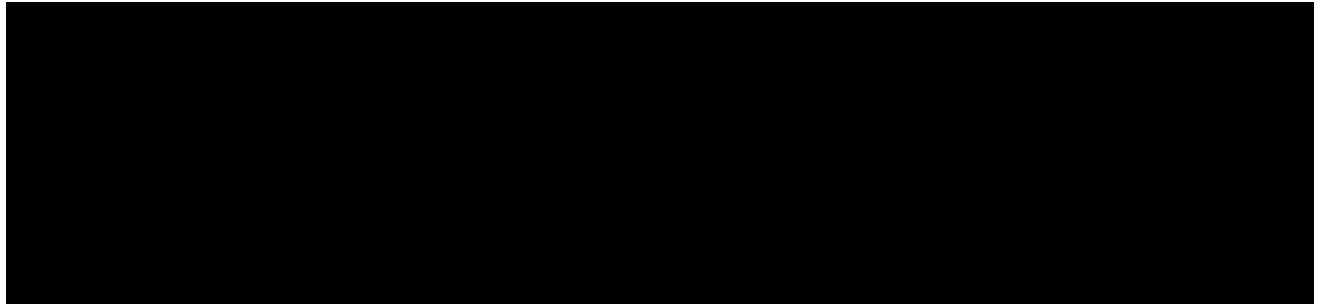
2. Please provide your comments related to the project and the Allanburg Study Area.

Information collected was during ~~the~~ pandemic.
Even with pre-pandemic info being used, it would not be accurate due to the major development in outlying areas (Forkhill/Thorold South) which has taken place in just the last few years.

Speeding information included does not address issue of non-licensed ATVs at Dirt Dikes speeding down Centre St (sometimes on sidewalk)

ALLANBURG COMMUNITY TRANSPORTATION STUDY

COMMENT FORM



1. Please check the box that applies to you:

- A Study Area Resident
- A Study Area Property Owner living outside of Allanburg
- From a Study Area Business
- Interest Group Representative (Please Identify - _____)
- Other (Please Identify - _____)

2. Please provide your comments related to the project and the Allanburg Study Area.

Problems ~~are~~ need to be addressed on the north side Centre St. exiting delays on turning left can be time consuming, drivers are going well over 60 km/h over the bridge and through S bend. All sets of train tracks need to be addressed properly. Streets ~~in~~ need to be widened and paved for the amount of traffic including Gainer St.

Side walks would be beneficial for all streets as the build up of family's with kids is climbing. A proper park perhaps a splash pad considering we are the only township within Thorold that does not have one.

The round about on hwy 20 will be come a hazard once the development is complete and filled up. There will be to much traffic for the lack of capacity these streets can hold.

ALLANBURG COMMUNITY TRANSPORTATION STUDY

COMMENT FORM

1. Please check the box that applies to you:

- A Study Area Resident
- A Study Area Property Owner living outside of Allanburg
- From a Study Area Business
- Interest Group Representative (Please Identify - _____)
- Other (Please Identify - Resident on Barron Road)

2. Please provide your comments related to the project and the Allanburg Study Area.

No residents in Allanburg want anymore houses built in the area. Ever since Castro was built in Niagara Falls more traffic has been present on Barron Road and Centre Street. People are speeding down Barron Road to the point that when they turn right down Centre Street they are almost rolling over. The roads need to be wider and there needs to be sidewalks put in so our elderly and children feel safe. When the Allanburg bridge is up, and there is a train at the same time, no emergency vehicles are able to ~~assist~~ assist anyone in a timely manner. Mr. Weins who wants to build the 22 house subdivision has no respect for the residents of Allanburg as most of the residents are elderly and cannot use a computer in order to help fight that build. He has torn down trees without permits, has torn down a building without locates, and tore down a building with Barn Swallows in it which are on the endangered species list. Hydro One has declined his build with good reason, it is not worth all the money for 22 houses just so Mr. Weins can get rich and destroy all the wild life out there.

There have also been rumours that the trail along the canal has had barbed wire put across it to stop the ATU's and dirtbikes. The traffic is horrible and Allanburg should be left alone as it is one of the last small towns left that has peace and quiet which we as tax paying residents are entitled to and deserve. All residents in Allanburg moved here for a reason, It is a quiet and friendly town that is becoming hectic and too modern. Humans, deer, foxes, birds of all species, reptiles of all species, bee's, you name it need to be left alone! Fixing traffic problems and allowing more houses to be built does NOT Fix the problems, it adds problems!

Please provide comments by May 26, 2022 to:

By Email: mdimaria@rvanderson.com
By Mail: Matthew DiMaria
c/o R.V. Anderson Associates Limited
43 Church Street, Suite 104
St. Catharines, ON L2R 7E1

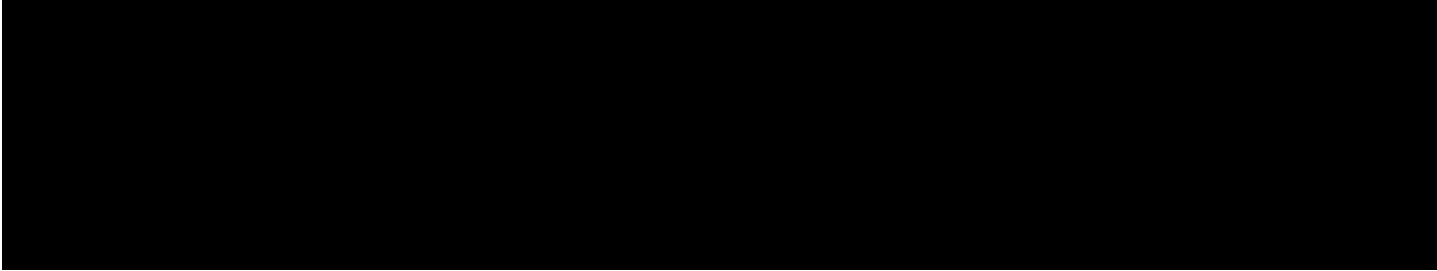
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THANK YOU FOR YOUR TIME AND EFFORT!

ALLANBURG COMMUNITY TRANSPORTATION STUDY

COMMENT FORM



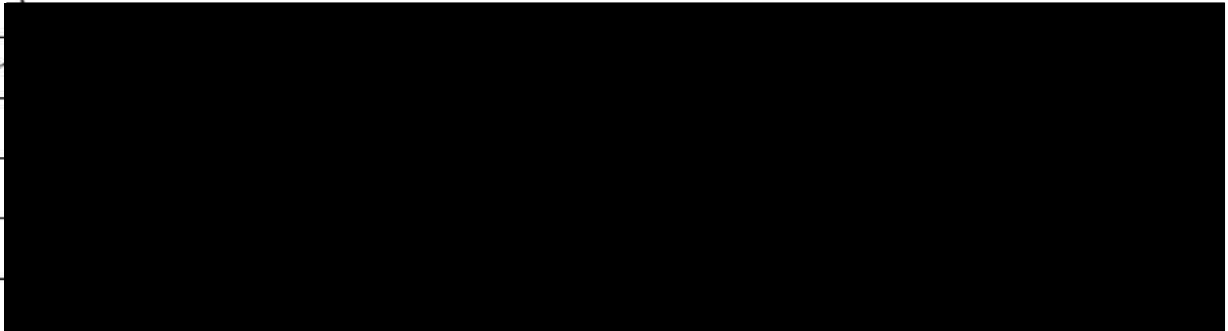
1. Please check the box that applies to you:

- A Study Area Resident
- A Study Area Property Owner living outside of Allanburg
- From a Study Area Business
- Interest Group Representative (Please Identify - _____)
- Other (Please Identify - ~~owner~~ on Barton RD, Owner)

2. Please provide your comments related to the project and the Allanburg Study Area.

No Resident Want's ~~this~~ this to happen We are happy the way things are and would like to keep it that way but it seem's that no one from the City cares about the future of our kids and families you need to realize that alot of use have lived here are entire lives ~~to~~ really like about this Because you are about to destroy it

pls Call me if needed



ALLANBURG COMMUNITY TRANSPORTATION STUDY

COMMENT FORM

1. Please check the box that applies to you:

- A Study Area Resident
 A Study Area Property Owner living outside of Allanburg
 From a Study Area Business
 Interest Group Representative (Please Identify - Boile Niagara + Niagara Freewheelers)
 Other (Please Identify - _____)

2. Please provide your comments related to the project and the Allanburg Study Area.

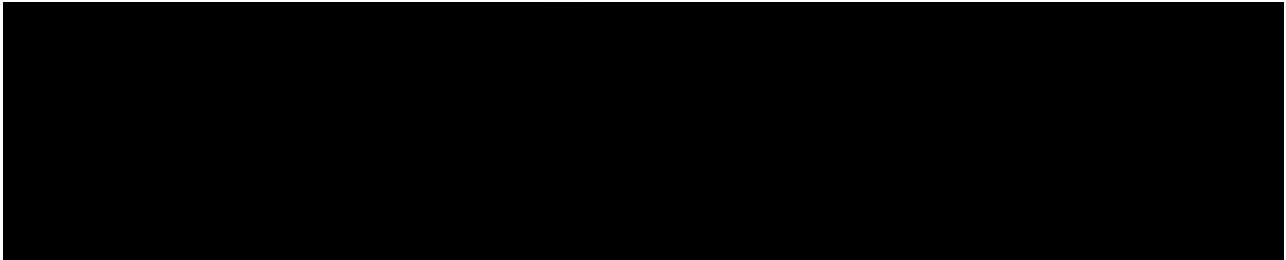
- Major Safety Concern for cyclists + pedestrians using Welland Canal Recreational Trail, crossing Hwy 20.
- Traffic Volumes + Speed + poor sight lines to the east towards the bridge make for a very difficult crossing
- There are long wait times (often over 10min) when the bridge comes down after a ship(s) have passed. This increases risk taking; Very unsafe
- Please investigate better visibility of the crossing through colored (eg green) cross area, better signage and the possibility of a signal for cyclists to stop traffic.
 - check out Book 10 TAC-2021
 - " " Toronto Trail Guide

Thank you

ALLANBURG COMMUNITY TRANSPORTATION STUDY

COMMENT FORM

①



1. Please check the box that applies to you:

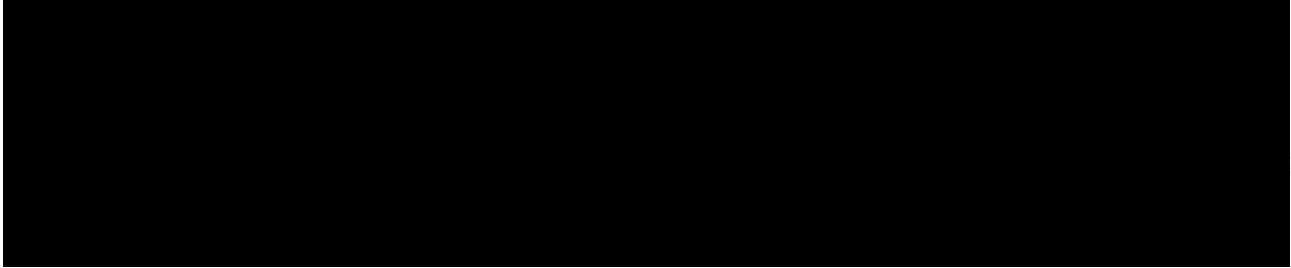
- A Study Area Resident
- A Study Area Property Owner living outside of Allanburg
- From a Study Area Business
- Interest Group Representative (Please Identify - _____)
- Other (Please Identify - _____)

2. Please provide your comments related to the project and the Allanburg Study Area.

- o All of this info should be emailed to all attendees of this meeting.
- o Same problem for past 20 years, cars drive to fast. Creating new homes won't solve this.
- o What about the ORV trails? Do you plan to fully pave and create trail on the Allanburg side of canal?
- o Does this meeting matter or are you going to do what you want regardless of opinion?
- o Who pays?

ALLANBURG COMMUNITY TRANSPORTATION STUDY

COMMENT FORM



1. Please check the box that applies to you:

- A Study Area Resident
- A Study Area Property Owner living outside of Allanburg
- From a Study Area Business
- Interest Group Representative (Please Identify - _____)
- Other (Please Identify - _____)

2. Please provide your comments related to the project and the Allanburg Study Area.

MY BIGGEST CONCERN IS THE EXCESSIVE SPEEDS ON REG RD #20 TRYING TO TURN EITHER WAY ON TO #20 FROM CENTRE ST. HAS BECOME DANGEROUS. THE SIGHT LINES ARE LIMITED AND THERE IS NO TIME TO JUDGE VEHICLE SPEEDS. WHEN WE MOVED HERE 20 YEARS AGO THERE WERE REGULAR SPEED ENFORCEMENT PATROLS AND THE SPEEDS WERE RESONABLE.. THOSE STOPPED SEVERAL YEARS AGO AND THE SPEEDS ON #20 HAVE STEADILY RISEN. THIS IS A REAL DANGER IN WINTER WHEN THE ROADS ARE SLIPPERY.

ALLANBURG COMMUNITY TRANSPORTATION STUDY

COMMENT FORM

1. Please check the box that applies to you:

- A Study Area Resident
 A Study Area Property Owner living outside of Allanburg
 From a Study Area Business
 Interest Group Representative (Please Identify - _____)
 Other (Please Identify - _____)

2. Please provide your comments related to the project and the Allanburg Study Area.

1. lights instead of stop sign @ Centre St + Hwy 20.
- study done when bridge down. traffic is
terrible when bridge comes down and sometimes
a 15 min wait to get out of Centre St.

2. Hwy 58 + Hwy - Black Horse Corners - There should
be a sign facing 58 stating status of bridge (up or down)
not just facing Hwy 20/Lundy's Lane.

3. Railway tracks on Hwy 20/Lundy's Lane need
fixing.

4. Study should have Reg. Rd included - study
not accurate without it, due to speeds

5. With the new housing coming, what effect
will this have on our sewers?

6. Not impressed with meeting - should have
had a proper meeting where we could
voice our opinions there. Allanburg has a lot
of elderly people with no computers. Everyone
has busy lives & if we took the time to come
out then you should take the time to do
things properly. It feels like decisions have been

Matthew Di Maria

From: [REDACTED]
Sent: May 22, 2022 4:28 PM
To: Matthew Di Maria
Subject: Re: Allanburg Community Transportation Study Public Meeting - Information Boards
Attachments: Allanburg Traffic Safety Study Suggestions .pdf; Allanburg Traffic Map.pdf

[CAUTION EXTERNAL EMAIL] Make Sure that it is legitimate before Replying or Clicking on any links

Hi Matthew,
Thanks for the file with the information boards.
I have drawn up a letter with my suggestions (attached) as well as a map (attached).
The map can be used in conjunction with my letter.
Please pass on this letter and map to those responsible for the Allanburg Traffic Safety Study.



On Fri, May 13, 2022 at 2:49 PM Matthew Di Maria <MDiMaria@rvanderson.com> wrote:

Dear Attendee,

You are receiving this email as you attended the May 10, 2022, Public Information Meeting that was held for the Allanburg Community Transportation Study. At the meeting, the Project Team advised that they would be emailing out the information boards which were presented at the meeting for your reference. In addition, these information boards will also be posted on the City of Thorold 's website. If you have not already submitted your comments, please do so by Thursday May 26th, 2022 by replying to this email.

We would like to thank you for attending the Public Meeting and for the input and commentary which you provided. The information gathered will assist the Project Team in moving the project forward.

Regards,



Matthew Di Maria, C. Tech., CAPM
TRANSPORTATION PLANNER

t 905 685 5049 ext. 4237 |

a 43 Church Street, Suite 104, St. Catharines, ON L2R 7E1



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Matthew Di Maria

From: Nick Palomba
Sent: May 27, 2022 5:04 PM
To: Matthew Di Maria
Subject: FW: Allanburg Traffic Study
Attachments: 20220514_185848.jpg

Nick Palomba, P. Eng.

T 905 685 5049 x 4204

From: Sean Dunsmore <Sean.Dunsmore@thorold.ca>
Sent: May 26, 2022 3:16 PM
To: Nick Palomba <NPalomba@rvanderson.com>
Subject: FW: Allanburg Traffic Study

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Sean Dunsmore (he, his, him)
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Please consider our environment before printing this email.

Sent: May 26, 2022 2:47 PM

To: mdimaria@rvanderson.com

Cc: Terry Ugulini <Terry.Ugulini@thorold.ca>; Carmen DeRose <Carmen.DeRose@thorold.ca>; Anthony Longo <Anthony.Longo@thorold.ca>; Fred Neale <Fred.Neale@thorold.ca>; Nella Dekker <Nella.Dekker@thorold.ca>; Victoria Wilson <Victoria.Wilson@thorold.ca>; Ken Sentance <Ken.Sentance@thorold.ca>; John Kenny <John.Kenny@thorold.ca>; Jim Handley <Jim.Handley@thorold.ca>; Sean Dunsmore <Sean.Dunsmore@thorold.ca>

Subject: Allanburg Traffic Study

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Good Afternoon

I attended the information session and did leave a comment sheet then. After taking more time to look at the information given I do have additional comments.

1) The traffic study was completed during the pandemic. The numbers presented are certainly not a clear picture of the traffic now.

The Community Centre was closed and just recently reopened.

School buses were not running.

People were working from home (and still are).

2) The Empire side of Rolling Meadows was not started and now there are many homes occupied. That certainly has increased traffic on Highway 20.

3) What the study does not show is the safety issue when the bridge is raised. Traffic consistently blocks the intersection of Centre St (North) and Highway 20. What are we supposed to do if we need Emergency Services?

I have attached a picture that shows a situation that is becoming more and more common. Also check out the white car that is on the wrong side of the road.

4) Site lines are terrible when trying to turn onto Highway 20 from either side of Centre St.

5) What the study also doesn't address is pedestrian safety while trying to cross Highway 20. There are more families living on the South side of Highway 20 and both new housing plans will add to that total. How are kids suppose cross Highway 20 safely to use the playground located on the North side of the Highway?

Thank you