267 O'Connor Street

Transportation Impact Assessment (TIA) Strategy Report

DRAFT

February 2025

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Transportation Impact Assessment (TIA) Strategy Report

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TIA STRATEGY REPORT

Parsons has been retained by Taggart Realty Management to prepare a TIA Report in support of a Zoning By-Law Amendment (ZBLA) and Official Plan Amendment (OPA) Application for the proposed residential buildings development at 267 O'Connor Street. This document follows the TIA process as outlined in the City of Ottawa Transportation Impact Assessment (TIA) Guidelines (2017) and Revisions (2023). The following report represents Step 3 – Strategy Report, which is a revised version of the previously submitted Strategy Report in August 2020. Responses to City of Ottawa staff comments on the 2020 Strategy Report have been included in this report.

1.0 SCREENING FORM

The Trip Generation Trigger was met based on the development size, and the Safety Trigger was met based on the proposed site driveway's proximity to the signalized O'Connor/MacLaren intersection. The Location Trigger was not met. The Screening Form and City comment responses are provided in **Appendix A**.

2.0 SCOPING REPORT

2.1. Existing and Planned Conditions

2.1.1. Proposed Development

The site is located at 267 O'Connor Street and currently zoned as R4UD[479]. The site is currently occupied by a 6-storey commercial building and a surface parking lot. The existing building uses are illustrated in **Figure 1**, which currently consists mostly of an office use, with additional uses such as a physiotherapy centre, a medical supply store and a restaurant on the first floor.

Figure 1: Existing Building Land Uses

The local site context is illustrated in **Figure 2**, while the proposed site concept plan is illustrated in **Figure 3** (high quality plan in **Appendix A**). The proposed development will replace the existing building and surface parking with two high-rise residential apartment buildings with a total of approximately 510 units (27 and 25-storey). The development consists of two phases, with development of the first phase to occur within the next 5 years. For the purposes of the analysis within this TIA, full buildout has been assumed for the 2032 horizon.

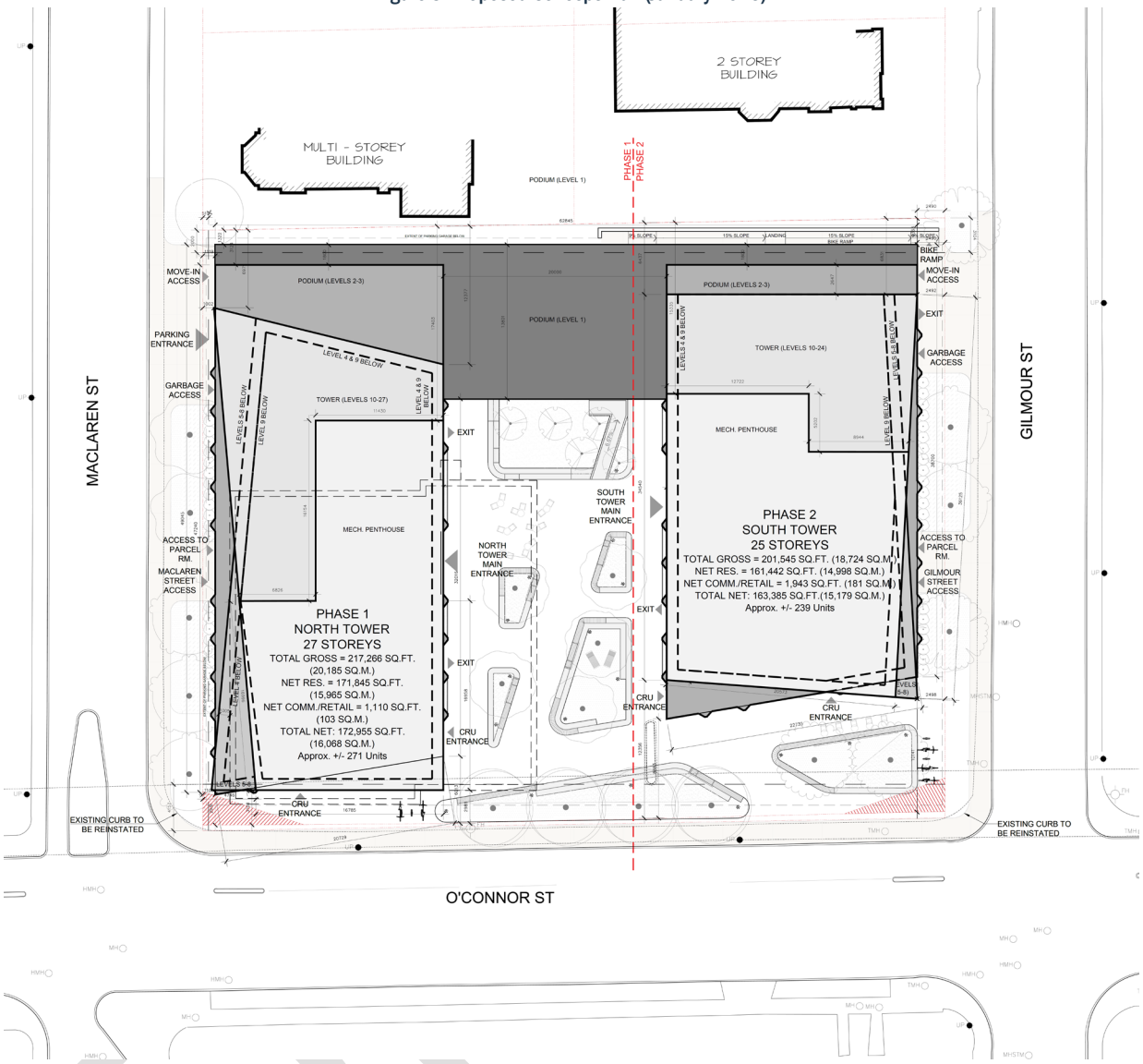
Phase 1 will include the 27-storey building in the north portion of the site with approximately 279 residential units and 1,110 ft^2 of ground-floor commercial space. Phase 2 will include the 25-storey building in the south

portion of the site with approximately 231 residential units and an additional 1,943 ft^2 ground-floor commercial space. The two buildings will be connected by a 3-storey podium.

A total of 326 parking spaces (274 residential and 52 visitor spaces) are proposed in a 4-level underground parking garage with at least 255 bicycle parking spaces underground and at ground level. Access to the underground parking will be provided via a two-way ramp access on MacLaren Street.

Figure 2: Local Context

Figure 3: Proposed Concept Plan (January 2025)



2.1.2. Existing Conditions

Area Road Network

A description for each road within the study area included in the TIA has been provided below.

O'Connor Street is a one-way southbound arterial roadway, which extends from Wellington Street in the north to Isabella Street in the south. South of Isabella Street, O'Connor Street continues as a local roadway to Fifth Avenue. Within the study area, O'Connor Street has a two-lane cross section with on-street parking provided along the west side of the roadway with a 2-hour limit from 8am to 5:30pm. There is a bi-directional cycle track along the east side of the roadway. The speed limit is assumed to be 50 km/h.

Metcalfe Street is a one-way northbound arterial roadway which extends from Wellington Street in the north to Isabella Street in the south. South of Isabella Street, Metcalfe Street continues as a local roadway to Monkland Avenue. Within the study area, Metcalfe Street has a three-lane cross section with on-street parking provided along the east side of the roadway with a 2-hour limit from 9:00am to 3:30pm. The speed limit is assumed to be 50 km/h.

Somerset Street is an east-west arterial roadway which extends from Queen Elizabeth Driveway in the east to Garland Street in the west where it continues as Wellington Street W. Within the study area, Somerset Street has a two-lane cross section. The speed limit is assumed to be 50 km/h.

Gladstone Avenue is an east-west major collector roadway which extends from Parkdale Avenue in the west to Elgin Street in the east. East of Elgin Street, Gladstone Avenue continues as a local roadway to Cartier Street. Within the study area, Gladstone Avenue has a two-lane cross section with parking/loading bays provided on the north and south side of the roadway and a 2-hour parking limit between 7am and 7pm. The speed limit is assumed to be 50 km/h.

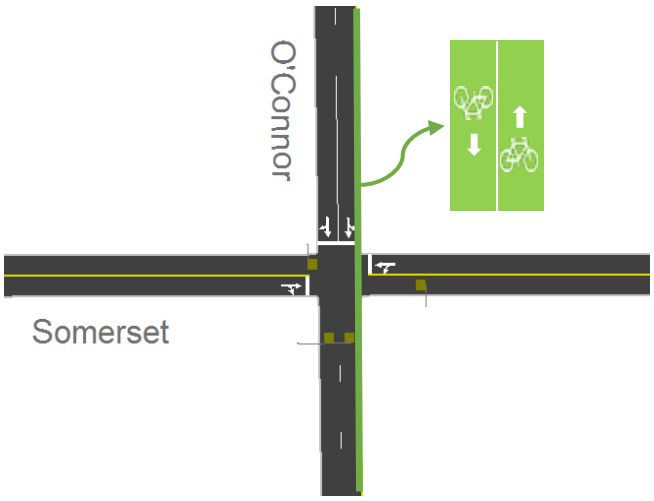
MacLaren Street is a one-way westbound local roadway that extends from MacDonald Street in the east to Bronson Avenue in the west. Within the study area, MacLaren Street has a two-lane cross section with parking provided on the north side of the roadway, with 2-hour limit between 7am and 7pm. The posted speed limit is 30 km/h.

Gilmour Street is a one-way eastbound local roadway that extends from Queen Elizabeth Driveway in the east to Bronson Avenue in the west. Within the study area, Gilmour Street has a two-lane cross section with parking provided on the north side of the roadway and a 2-hour parking limit between 7am and 7pm. The posted speed limit is 30 km/h.

Existing Study Area Intersections

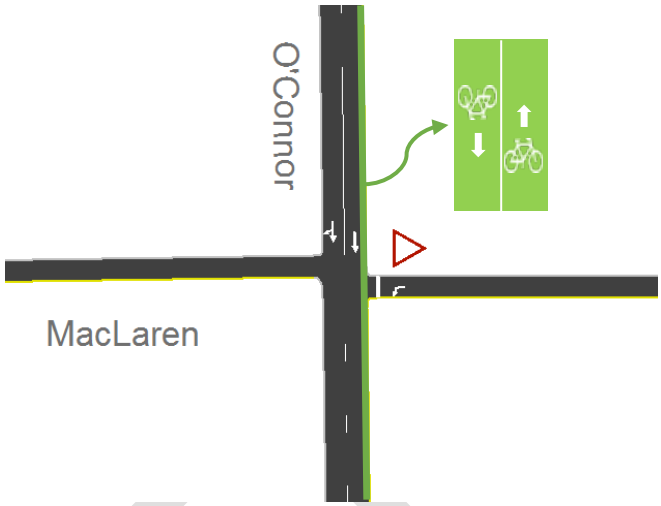
Somerset/O'Connor

The Somerset/O'Connor intersection is a signalized four-legged intersection. Northbound movements are prohibited at this location as O'Connor Street operates as a one-way in the southbound direction. The eastbound approach consists of a shared through/right-turn lane. The westbound approach consists of a shared through/left-turn lane. The southbound approach consists of a shared through/right-turn lane and a shared though/left-turn lane. Signalized two-way bike lanes are available on the east side of O'Connor Street.



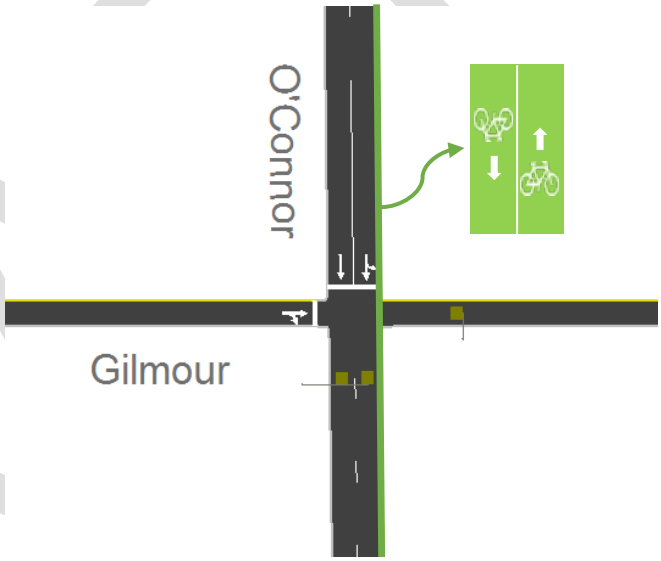
MacLaren/O'Connor

The MacLaren/O'Connor intersection is an unsignalized four-legged intersection with STOP control on the minor approach (MacLaren Street). Westbound through movements are prohibited for vehicles along with northbound and eastbound as O'Connor Street operates as a one-way in the southbound direction and MacLaren Street operates as a one-way in the westbound direction. The southbound approach consists of a through lane and a shared through/right-turn lane. The westbound approach consists of a left-turn lane and a dedicated westbound through lane for bicycles only. Two-way bike lanes are provided on the east side of O'Connor Street.



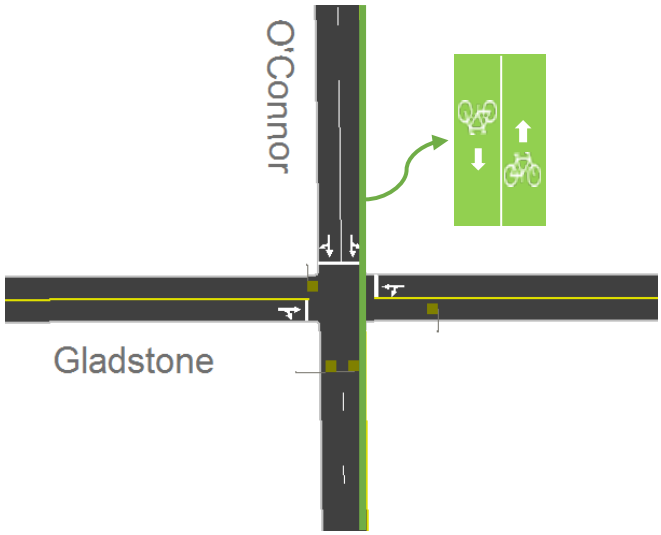
Gilmour/O'Connor

The Gilmour/O'Connor intersection is a signalized four-legged intersection. Northbound and westbound movements are prohibited at this location as O'Connor Street operates as a one-way in the southbound direction and Gilmour Street operates as a one-way in the eastbound direction. The eastbound approach consists of a shared through/right-turn lane. The southbound approach consists of a shared through/left-turn lane and a through lane. Signalized two-way bike lanes are available on the east side of O'Connor Street.



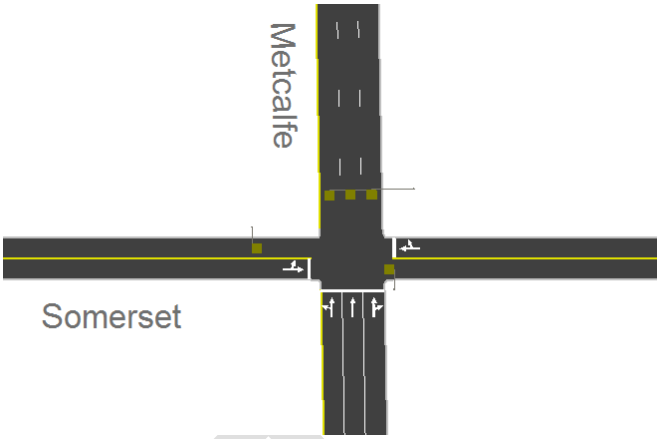
Gladstone/O'Connor

The Gladstone/O'Connor intersection is a signalized four-legged intersection. Northbound movements are prohibited at this location as O'Connor Street operates as a one-way in the southbound direction. The eastbound approach consists of a shared through/right-turn lane. The westbound approach consists of a shared through/left-turn lane. The southbound approach consists of a shared through/right-turn lane and a shared though/left-turn lane. Signalized two-way bike lanes are available on the east side of O'Connor Street.



Somerset/Metcalfe

The Somerset/Metcalfe intersection is a signalized four-legged intersection. Southbound movements are prohibited at this location as Metcalfe Street operates as a one-way in the northbound direction. The eastbound approach consists of a shared through/left-turn lane. The westbound approach consists of a shared through/right-turn lane. The northbound approach consists of a shared through/right-turn lane, a through lane and a shared though/left-turn lane.

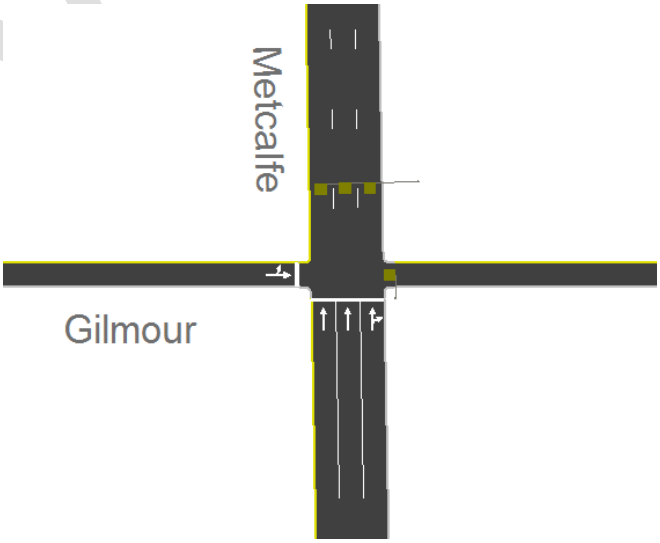


MacLaren/Metcalfe

The MacLaren/Metcalfe intersection is a signalized four-legged intersection. Southbound and eastbound movements are prohibited at this location as Metcalfe Street operates as a one-way in the northbound direction and MacLaren Street operates as a one-way in the westbound direction. The westbound approach consists of a through lane and a right-turn lane. The northbound approach consists of a shared through/left-turn lane and two through lanes.

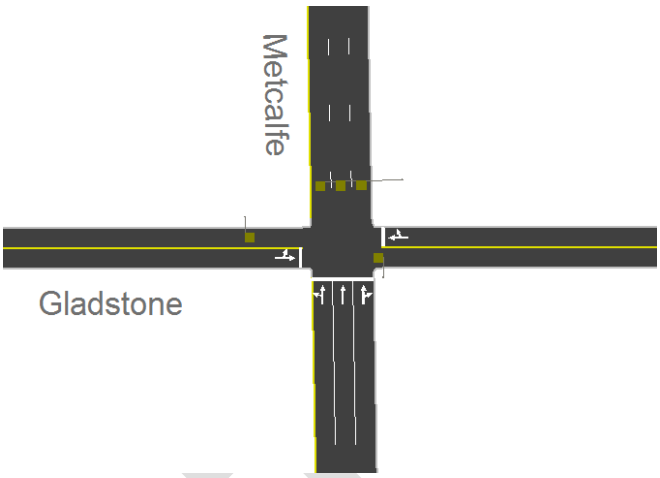
Gilmour/Metcalfe

The Gilmour/O'Connor intersection is a signalized four-legged intersection. Southbound and westbound movements are prohibited at this location as Metcalfe Street operates as a one-way in the southbound direction and Gilmour Street operates as a one-way in the eastbound direction. The eastbound approach consists of a shared through/left-turn lane. The northbound approach consists of a shared through/right-turn lane and two through lanes.



Gladstone/Metcalfe

The Gladstone/Metcalfe intersection is a signalized four-legged intersection. Southbound movements are prohibited at this location as Metcalfe Street operates as a one-way in the northbound direction. The eastbound approach consists of a shared through/left-turn lane. The westbound approach consists of a shared through/right-turn lane. The northbound approach consists of a shared through/right-turn lane, a through lane and a shared though/left-turn lane.



Existing Driveways to Adjacent Developments

On the north side of MacLaren Street, between O'Connor Street and Metcalfe Street, there are seven existing driveways to adjacent residential developments. On the south side, there are three accesses, where one is for a residential development, one is for a commercial surface parking lot and one is for an office building.

Existing Area Traffic Management Measures

Existing area traffic management measures within the study area includes the following:

- An existing separated bi-directional bike-lane on the east side of O'Connor Street, with bike crossings at intersections and bike signals at signalized intersections.
- Zebra crosswalks on all legs of most signalized intersections within the study area, except O'Connor/ Gladstone where standard traverse lines are used. Textured unit paver crossings are also provided on west and east sides of O'Connor/Somerset intersection.
- Westbound through restriction on MacLaren Street at the O'Connor Street intersection, with bikes excepted via a dedicated westbound bike lane.
- On-street parking on at least one side of most study area roads.
- One-way traffic operations on most roads in the study area.
- Reduced 30km/h speed limit on MacLaren Street and Gilmour Street.
- Speed humps at a number of locations along Gilmour Street, including two between O'Connor Street and Metcalfe Street.
- Intersection narrowing using curb extensions at the west leg of O'Connor/MacLaren and Metcalfe/Gilmour, and the west and east legs of Metcalfe/Maclaren.

Existing Pedestrian/Cycling Network

With respect to pedestrians, sidewalk facilities in the vicinity of the site are provided along both sides of Gilmour Street, O'Connor Street, Metcalfe Street, MacLaren Street, Somerset Street, and Gladstone Avenue.

With respect to cycling, a bi-directional cycle track is provided on the east side of O'Connor Street. The City of Ottawa TMP classifies O'Connor Street as a Cross-Town Bikeway within the study area. Somerset Street, Gladstone Avenue, Bank Street (west of O'Connor Street) and Elgin Street (east of Metcalfe Street) are classified as suggested cycling routes.

Transit Network

Figure 4 below illustrates bus routes operating in the surrounding road network, while **Figure 5** illustrates the locations of nearby bus stops. The latest transit route maps from OC Transpo website are provided in **Appendix**

B. Currently no bus routes operate along O'Connor Street, Metcalfe Street, MacLaren Street, Gilmour Street, or Somerset Street (east of Bank Street). Several bus routes along Bank Street, Elgin Street, Gladstone Avenue and Somerset Street (west of Bank Street). Bus routes in the study area include the following six routes:

- **Local Route #5 (Billings Bridge <-> Rideau):** operates along Elgin Street, with nearest bus stop at the intersection of Elgin/Gilmour within approximately 320m walking distance of the site.
- **Frequent Routes #6 (Greenboro <-> Rockcliffe) and #7 (Carleton <-> St. Laurent):** operate along Bank Street, with nearest bus stop at Bank/Somerset within approximately 270m walking distance of site.
- **Frequent Route #11 (Parliament <-> Bayshore):** operates along Bank Street and Somerset Street, with nearest bus stop at Bank/Somerset within approximately 270m walking distance of site.
- **Frequent Route #14 (St. Laurent <-> Tunney's Pasture) and Local Route #114 (Rideau <-> Carlington):** operate along Gladstone Avenue and Elgin Street, with nearest bus stop at O'Connor/Gladstone intersection within approximately 270m walking distance of site.

In addition to the bus routes described above, the LRT Line 1 (Tunney's Pasture <-> Blair) operates to the north, outside of the study area. The nearest LRT station is Parliament Station within an approximately 850m walking distance from the site.

Figure 4: Area Transit Network

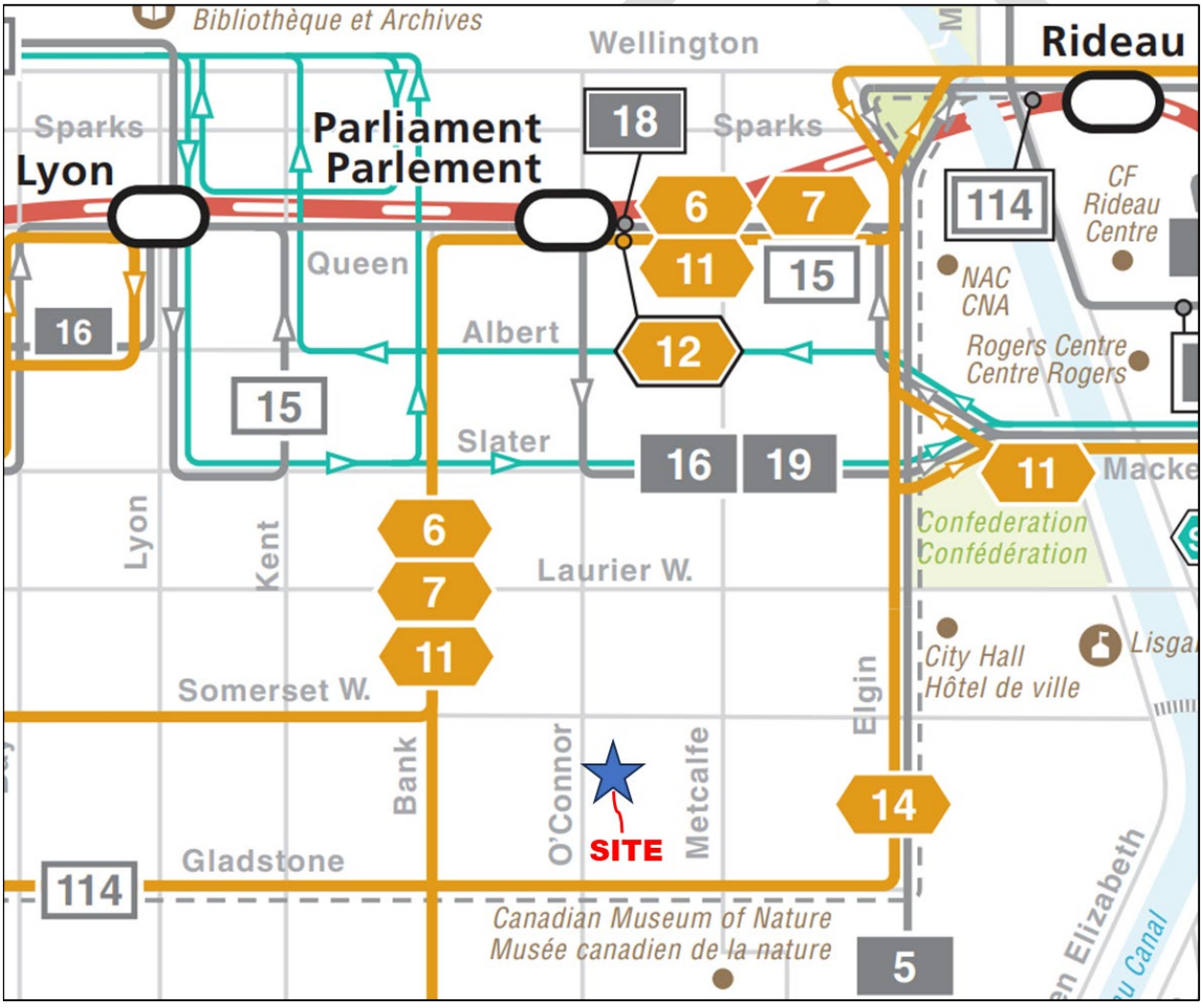
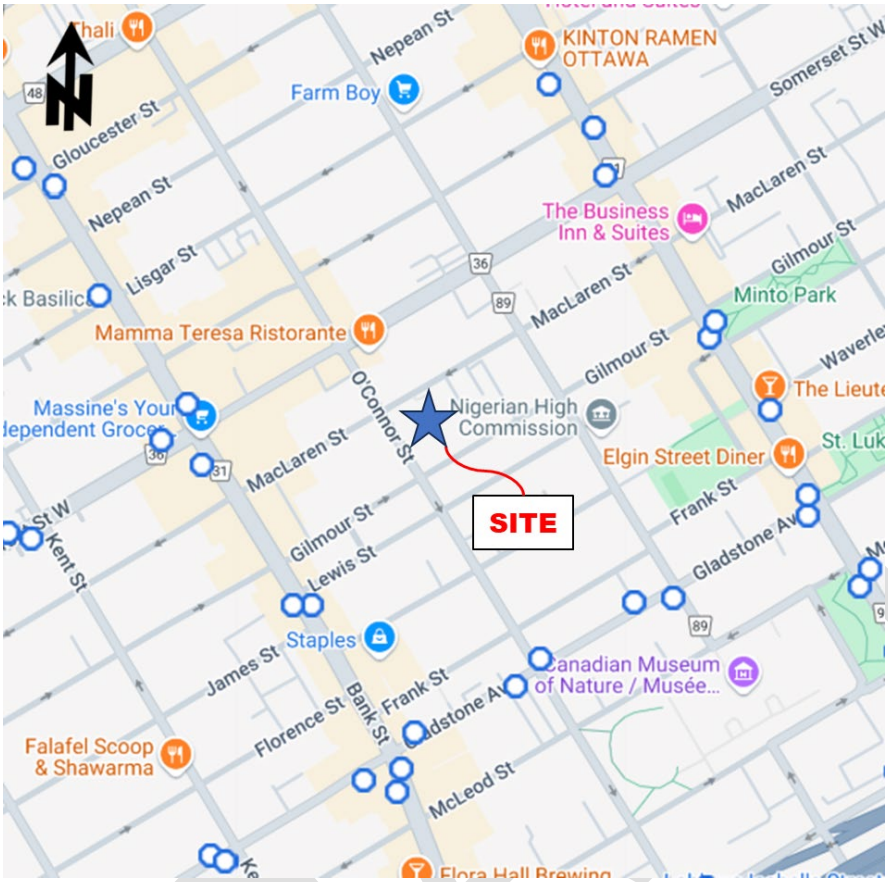


Figure 5: Bus Stop Locations



Peak Hour Travel Demands

Traffic counts were obtained from the City of Ottawa for major study area intersections. Traffic counts were also collected manually at the existing site access to determine volumes currently generated by the site. **Figure 6** illustrates vehicle traffic volumes, with the original traffic data sources provided in **Appendix C.** Intersection traffic data includes the following:

- O'Connor/Somerset – conducted by City of Ottawa on Tuesday, March 21, 2017
- O'Connor/MacLaren – conducted by City of Ottawa on Thursday, March 21, 2019
- O'Connor/Existing Site Access – conducted by City of Ottawa on Tuesday, July 09, 2019
- O'Connor/Gilmour – conducted by City of Ottawa on Tuesday, March 21, 2017
- O'Connor/Gladstone – conducted by City of Ottawa on Tuesday, March 21, 2017
- Metcalfe/Somerset – conducted by City of Ottawa on Thursday, May 02, 2019
- Metcalfe/MacLaren – conducted by City of Ottawa on Tuesday, April 04, 2017
- Metcalfe/Gilmour – conducted by City of Ottawa on Tuesday, April 04, 2017
- Metcalfe/Gladstone – conducted by City of Ottawa on Tuesday, April 04, 2017

While turning movement studies were taken several years ago, the nature of the downtown area typically results in negligible changes in traffic volumes. The above counts are considered to remain suitable for the purposes of this analysis, and can be further refined at the time of Site Plan Control.

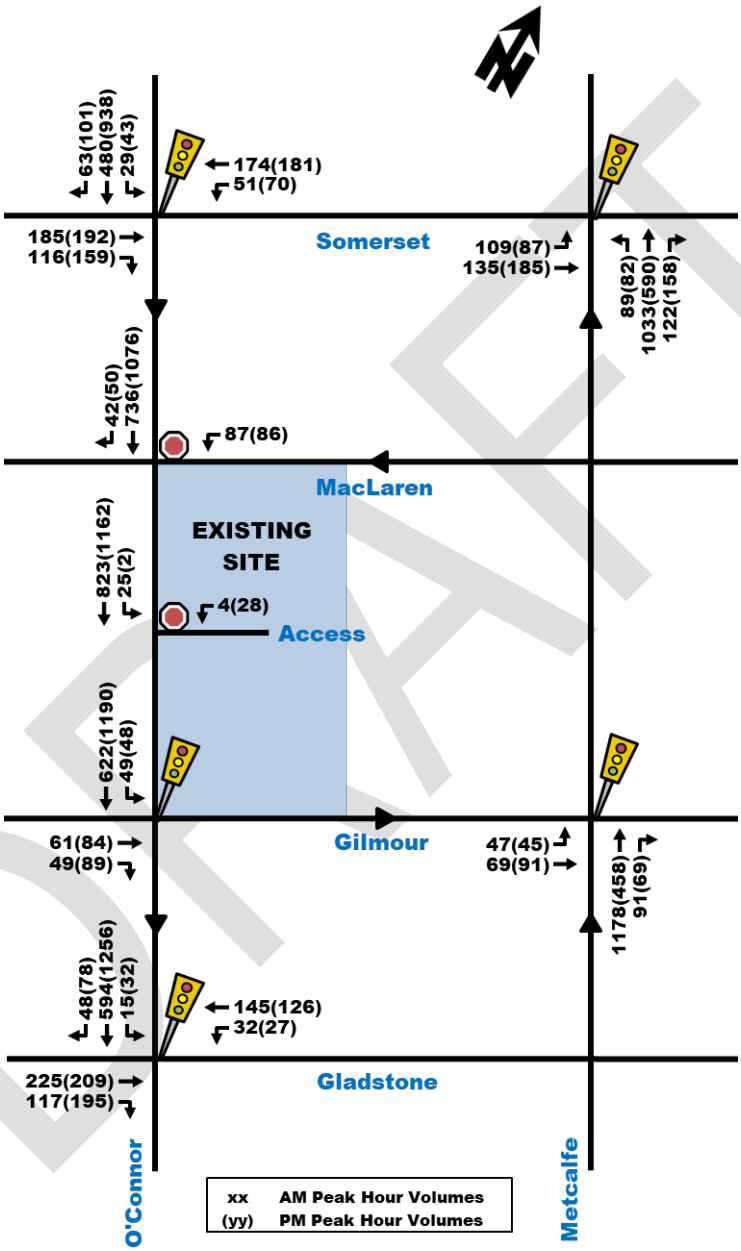
Active transport volumes are noted as follows:

- O'Connor St bike lanes: Based on the latest traffic data collected at O'Connor/Existing Site Access intersection during summer months, up to 240 bike volume was recorded in the northbound direction

during the morning peak hour and 165 bike were recorded in the southbound direction during the afternoon peak hour.

- Pedestrian volumes are found to be highest on the east and west intersection crosswalks in most cases (i.e. travelling northbound/southbound on O'Connor St and Metcalfe St). The highest volumes are recorded at the Somerset St intersections, where up to 267 and 350 pedestrians crossed on one side of the intersection during the morning and afternoon peak hours, respectively.

Figure 6: Existing Peak Hour Vehicle Traffic Volumes



Existing Road Safety Conditions

The latest five-year collision history data at study area intersections and roads (2018 to 2022, inclusive) was obtained from the City of Ottawa's Open Data website. Based on the results, a total of 164 collisions have occurred over the five-year period, where the majority (83%) resulted in property damage only and 17% resulting in non-fatal injuries. The collision types are broken down as 49 (30%) sideswipes, 43 (26%) turning movement,

23 (14%) angled, 19 (12%) rear ends, 17 (10%) single unattended vehicle, 11 (7%) single vehicle (other), and 2 (1%) 'other'.

The City of Ottawa classifies more than 6 collisions of the same impact type at a given movement within the 5-year period to be a collision pattern. A detailed breakdown of collision data is provided in **Appendix D**. Below is a summary of collision quantity at each location:

Intersections

- Metcalfe/Somerset: 16 (including 1 pedestrian and 1 bicycle)
- Metcalfe/Gilmour: 4
- Metcalfe/Waverley: 3
- Metcalfe/Lewis: 10
- Metcalfe/Frank: 6
- Metcalfe/MacLaren: 6
- Metcalfe/Gladstone: 15 (including 1 pedestrian and 1 bicycle)
- O'Connor/Gilmour: 21 (including 5 bicycles)
- O'Connor/Waverley: 10 (including 3 bicycles)
- O'Connor/Gladstone: 16
- O'Connor/Somerset: 20 (including 5 pedestrian and 1 bicycle)
- O'Connor/Frank: 3 (including 1 bicycle)
- O'Connor/Lewis: 1

Mid-Block

- Metcalfe St, Waverley St to Frank St: 2
- Metcalfe St, Gilmour St to Lewis St: 3
- Metcalfe St, MacLaren St to Gilmour St: 2
- Metcalfe St, Lewis St to Waverley St: 1
- Metcalfe St, Somerset St to MacLaren St: 1
- Metcalfe St, Frank St to Gladstone Ave: 2
- O'Connor St, Gilmour St to Leweis St: 2
- O'Connor St, Frank St to Gladstone Ave: 3
- O'Connor St, Somerset St to MacLaren St: 3
- O'Connor St, Waverley St to Frank St: 3
- O'Connor St, Lewis St to Waverley St: 3
- O'Connor St, MacLaren St to Gilmour St: 4 (including 1 bicycle)
- Gilmour St, O'Connor St to Metcalfe St: 3
- MacLaren St, O'Connor St to Metcalfe St: 1

Based on the above collisions and the analyzed impact types, a collision pattern was found to have occurred at only one location, the O'Connor/Gilmour intersection, where 8 sideswipe collisions have occurred mostly between two vehicles travelling in the southbound direction. Sideswipes occur mainly as a result of lane changes. In this case, the cause of the collisions is likely vehicles in the right lane trying to switch to the left lane to go around vehicles attempting to make a left turn onto Gilmour St, resulting in sideswipe collisions with vehicles already in the left lane.

In addition to vehicle collisions and as noted in the summary lists above, the following pedestrian and bicycle collisions have occurred in the study area, all of which resulted in non-fatal injuries:

- Seven total pedestrian collisions, with five of the collisions occurring at the O'Connor/Somerset intersection.
- Thirteen total bicycle collisions, with most collisions occurring along O'Connor St intersections, particularly at the O'Connor/Gilmour and O'Connor/Waverley intersections, where traffic on O'Connor St can cross over the bike lanes while turning left. The bike collisions seem to have occurred mostly during summer and spring months, when bike volumes are at their highest.

2.1.3. Planned Conditions

Future Transportation Network Changes

Transportation Master Plan

Based on the City of Ottawa's Transportation Master Plan (TMP), O'Connor St is classified as a Cross-Town Bikeway between Fifth Ave in the south and Laurier Ave in the north. Future active transportation (AT) projects are also identified by the TMP, which indicates the following:

- Separated cycling facilities on O'Connor St are expected to be extended further north from Laurier Ave to Wellington St. Construction is expected to start by spring 2025 and end by summer 2026.

- The TMP indicates future westbound bike lanes may be provided on Gilmour St, between Cartier St and Percy St as an "Infrastructure Project Type". No further information regarding this project is available at this time.

Central and East Downtown Core Secondary Plan

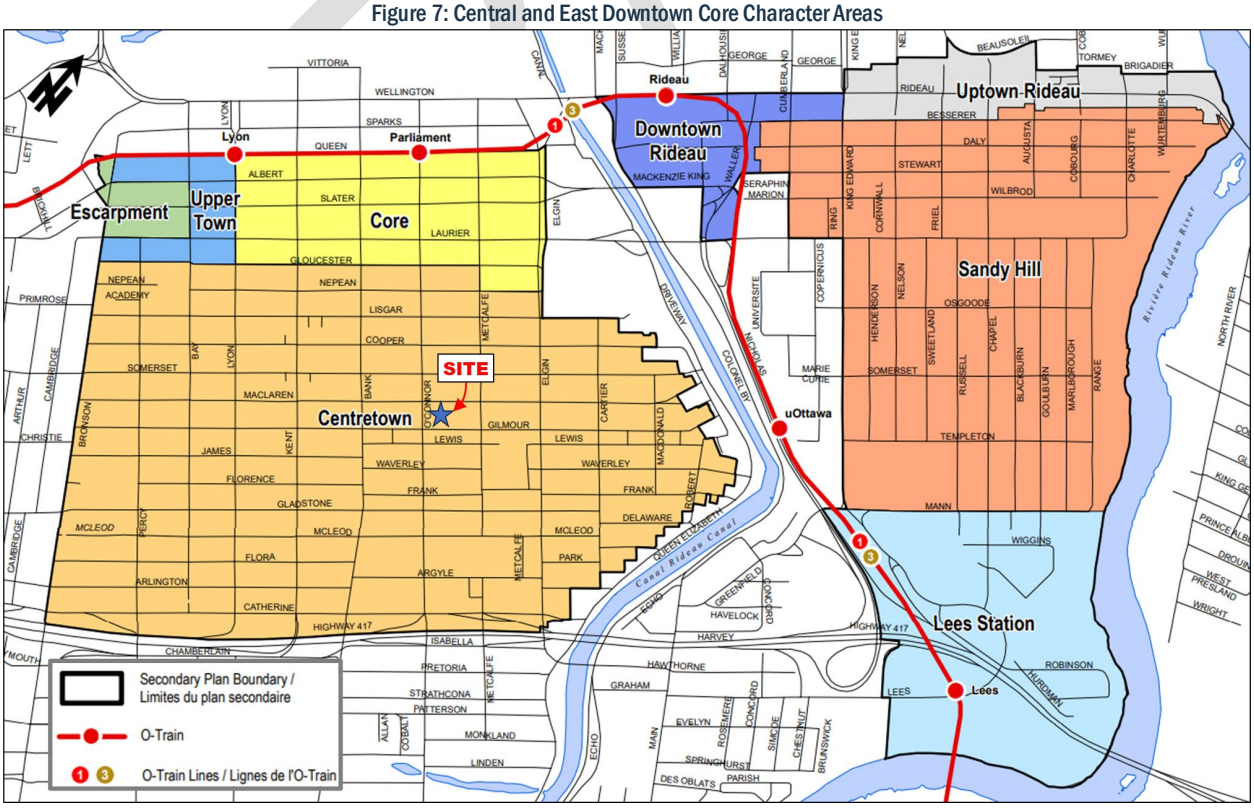
The City of Ottawa Official Plan includes urban Secondary Plans that establish and guide future development and infrastructure needs in respective areas, including general mobility suggestions and requirements. As shown in **Figure 7**, the Central and East Downtown Core Secondary Plan identifies a vision for different areas of the downtown core, including the Centretown, where the development is located. The Secondary Plan also establishes general objectives or principles that apply to all areas. Below are two relevant general mobility related objectives.

- Setting the posted speed limits on streets to 30km/h or less, which has already been implemented on both MacLaren St and Gilmour St.
- Development will locate loading in a manner that does not compromise or negatively impact sustainable modes. Where possible, they should be accessed from within the building envelope and not the public right of way. For this development, loading spaces for move-in vehicles are located within the building envelopes.

In addition to the above general policies, the Secondary Plan has established broad policies more specific to the Centretown area and the subject development site. Some of the key policies are identified as follows:

- The City intends to conduct a study pertaining to the conversion of one-way streets to two-way streets, including both Metcalfe St and O'Connor St. The idea is that this conversion may result in improved safety and comfort for sustainable modes, as well as improve wayfinding in the downtown area.
- The City shall undertake streetscape improvements along each of O'Connor St, Metcalfe St, Somerset St and Gladstone Ave, which will be guided by the Centretown Community Design Plan.
- A policy specific to the 267 O'Connor St site is noted, which mainly addresses the site's potential for redevelopment given its strategic location.

Figure 7: Central and East Downtown Core Character Areas



Other Area Developments

Based on the City of Ottawa DevApps webpage, the following two future developments are expected within the study area in the next several years:

1. 234 and 236 O'Connor St, and 311 Somerset St: A residential development consisting of an 18-storey building with 156 apartment units. It is expected to generate minimal traffic with up to 21 vehicle trips during peak hours.
2. 322 Waverley St: a residential development consisting of a 6-storey building with 27 apartment units. The development is expected to generate negligible trips during peak hour.

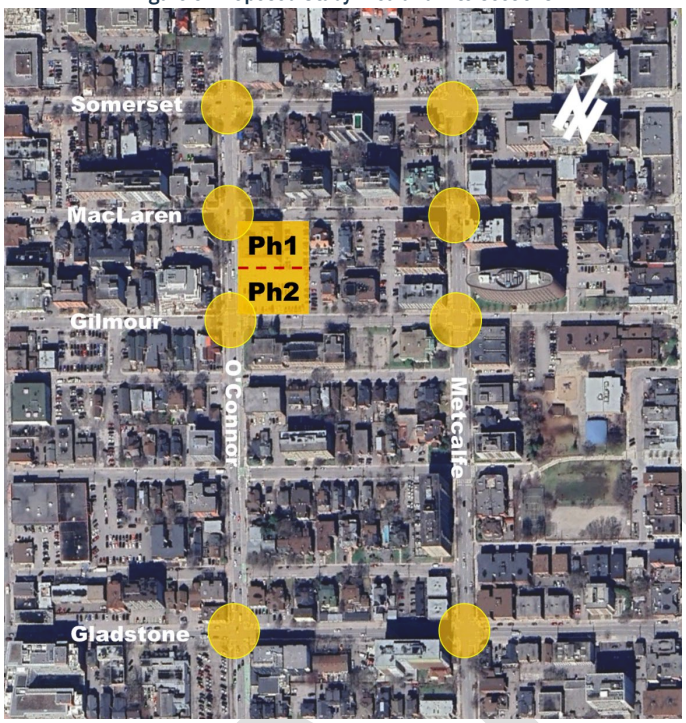
Figure 8: Adjacent Future Developments

2.2. Study Area and Time Periods

The proposed study area consists of intersections listed below and highlighted in **Figure 9**. Given the trips expected to be generated by this development will be residential trips, the time periods to be assessed are the weekday morning and afternoon commuter peak hours.

- Somerset/O'Connor
- MacLaren/O'Connor
- Gilmour/O'Connor
- Gladstone/O'Connor
- Somerset/Metcalfe
- MacLaren/Metcalfe
- Gilmour/Metcalfe
- Gladstone/Metcalfe

Figure 9: Proposed Study Area and Intersections



2.3. Exemption Review

The following modules/elements of the TIA process provided in **Table 1** are recommended to be exempt in the subsequent steps of the TIA process, based on the City's TIA guidelines and the site context:

Table 1: Exemptions Review Summary

Module	Element	Exemption Consideration
3.2 Background Network Traffic	All	Only required if one or more of modules 4.6 to 4.9 are triggered, as per 2023 TIA Guidelines update.
3.3 Demand Rationalization	All	Only required if one or more of modules 4.6 to 4.9 are triggered, as per 2023 TIA Guidelines update.
4.1 Development Design	4.1.3 New Street Networks	Only required for applications involving plans of subdivision.
4.3 Boundary Street Design	All elements	MMLOS analysis to be conducted at future SPA.
4.6 Neighbourhood Traffic Calming	All elements	Development generates less than 75 site generated auto trips (see section 3.1.1). This section is exempt as per TIA Guidelines 2023 update.
4.7 Transit	4.7.1 Transit Route Capacity	Development generates less than 75 site generated transit trips (see section 3.1.1). This section is exempt as per TIA Guidelines 2023 update.
4.8 Network Concept	All	Development generates less than 200 new site generated person trips (see section 3.1.1).
4.9 Intersection Design	All	Development generates less than 75 site generated auto trips (see section 3.1.1). This section is exempt as per TIA Guidelines 2023 update.

3.0 FORECASTING

3.1. Development Generated Travel Demand

3.1.1. Trip Generation and Mode Shares

The proposed development will consist of two high-rise residential buildings consisting of 510 apartment units and approximately 3,053 ft² of first floor retail space. The ground-floor commercial space is considered nominal in size and to have negligible regional trip generation potential due to its attraction to local residents. Commercial trips were not included in the analysis below.

The appropriate trip generation rates for high-rise apartment land uses were obtained from the 2020 TRANS Trip Generation Manual. The Manual provides person-trip rates during the peak AM and PM periods (7:00am - 9:30am and 3:30pm - 6:00pm). The trip rates are summarized in **Table 2** below.

Table 2: High-Rise Residential Trip Rates

Land Use	Dwelling Units	Data Source	Trip Rates	
			AM Peak Period (7-9:30am)	PM Peak Period (3:30-6pm)
Multi-Use (High-Rise)	510 units	TRANS	T = 0.80(du);	T = 0.90(du);
Note: T = Average Vehicle Trip Ends; du = dwelling unit				

Using the respective trip rates in **Table 2**, the total number of two-way peak period person trips generated by the proposed land use are shown below in **Table 3**.

Table 3: High-Rise Residential Peak Period Person Trip Generation – Two Way

Land Use	Dwelling Units	AM Peak Period Person Trips	PM Peak Period Person Trips
Multi-Use (High-Rise)	510	408	459

The proposed development is anticipated to generate a total of approximately 408 and 459 person trips during the morning and afternoon peak periods, respectively. The total peak period person trips in **Table 3** are then divided into different travel modes in **Table 4**, using mode share percentages obtained from the 2020 TRANS Manual for the "Ottawa Inner Area" district. Note that the Walking mode share was rounded up to result in a sum of 100% for the mode share.

Table 4: High-Rise Residential Mode Shares Breakdown

Travel Mode	Mode Share	AM Peak Period Person Trip	Mode Share	PM Peak Period Person Trips
Auto Driver	26%	106	25%	115
Auto Passenger	6%	25	8%	37
Transit	28%	114	21%	96
Cycling	5%	20	6%	28
Walking	35%	143	40%	183
Total Person Trips	**100%**	**408**	**100%**	**459**

Given the development is a residential building, its commuting patterns are expected to following typical commuting patterns contributing towards the morning and afternoon peak hours of travel demand. The morning and afternoon peak hours represent a typical worst-case scenario for vehicle traffic. The 2020 TRANS Manual indicates conversion rates from peak period to AM and PM peak hours for different mode shares, as shown in **Table 5** below.

Table 5: Peak Period to Peak Hour Conversion Factors (2020 TRANS Manual)

Travel Mode	Peak Period to Peak Hour Conversion Factors	
	AM	PM
Auto Driver & Auto Passenger	0.48	0.44
Transit	0.55	0.47
Cycling	0.58	0.48

Walking	0.58	0.52

Using the conversion rates in **Table 5** and the peak period person trips for different travel modes in **Table 4**, the peak hour trips for different travel modes can be calculated as shown below in **Table 6**.

Table 6: High-Rise Residential Peak Hour Trip Generation

Travel Mode	AM Peak (Person Trips/hr)			PM Peak (Person Trips/hr)		
	In (31%)	Out (69%)	Total	In (58%)	Out (42%)	Total
Auto Driver	16	35	51	30	22	52
Auto Passenger	4	8	12	10	7	17
Transit	19	44	63	27	19	46
Cycling	4	9	13	7	5	12
Walking	25	56	81	54	40	94
Total Person Trips	**68**	**152**	**220**	**128**	**93**	**221**

As shown in **Table 6**, the proposed development is anticipated to generate a total of approximately 220 person trips during the peak hours. Active transportation mode shares (cycling and walking) are expected to generate the most trips with up to 106 trips per hour while the transit mode share is expected to generate up to 63 trips. This is considered typical of residential buildings in the downtown core and given the distance to rapid transit.

Vehicle trips are forecast to be approximately 50 two-way vehicles during the peak hours, representing approximately a vehicle every 2 minutes in the peak direction. This is considered to be a nominal impact on the surrounding transportation network.

Net New Vehicle Trips

The existing site currently generates a number of vehicle trips during peak hours. These trips should be accounted for as a reduction to total future site-generated vehicle trips, since they are technically already part of the study area traffic volumes. **Table 7** provides the difference between future and existing vehicle trips generated by the site. A negative number indicates that a reduction in net traffic generated by the site is expected. Total two-way trips indicate a minimal net increase of approximately 22 vehicles in the study area during peak hours as a result of the proposed development.

Table 7: Net New Site-Generated Vehicle Trips

Site-Generated Vehicle Trips	AM Peak (Person Trips/hr)			PM Peak (Person Trips/hr)		
	In	Out	Total	In	Out	Total
Existing Vehicle Trips	25	4	29	2	28	30
Future Vehicle Trips	16	35	51	30	22	52
Net 'New' Vehicle Trips *(Future minus Existing)*	**-9**	**31**	**22**	**28**	**-6**	**22**

3.1.2. Trip Distribution and Assignment

Based on the 2011 OD Survey (Ottawa Inner Area) and the location of adjacent arterial roadways and neighbourhoods, the distribution of site-generated traffic volumes was estimated as follows:

- 5% to/from the south via O'Connor St, Metcalfe St, Bank St and Elgin St;
- 25% to/from the north via Metcalfe St, O'Connor St, Bank St and Elgin St;
- 60% to/from the east via Hwy 417; and,
- 10% to/from the west via Hwy 417 and Somerset St.

The expected site-generated vehicle trips for the development, based on anticipated volumes in **Table 6**, are assigned to the study area as shown in **Figure 10**. As indicated by **Table 7**, the existing site traffic volumes can be accounted for as a reduction to future site-generated traffic at study area intersections, as illustrated by the assumed traffic distribution of the existing site shown in **Figure 11**. By subtracting the existing site trips from the

anticipated vehicle trips of the proposed development, the 'net' new vehicle trips in the study area are determined as shown in **Figure 12** .

Figure 10: Proposed Development Site-Generated Vehicle Trips – AM (PM) Peak Hour

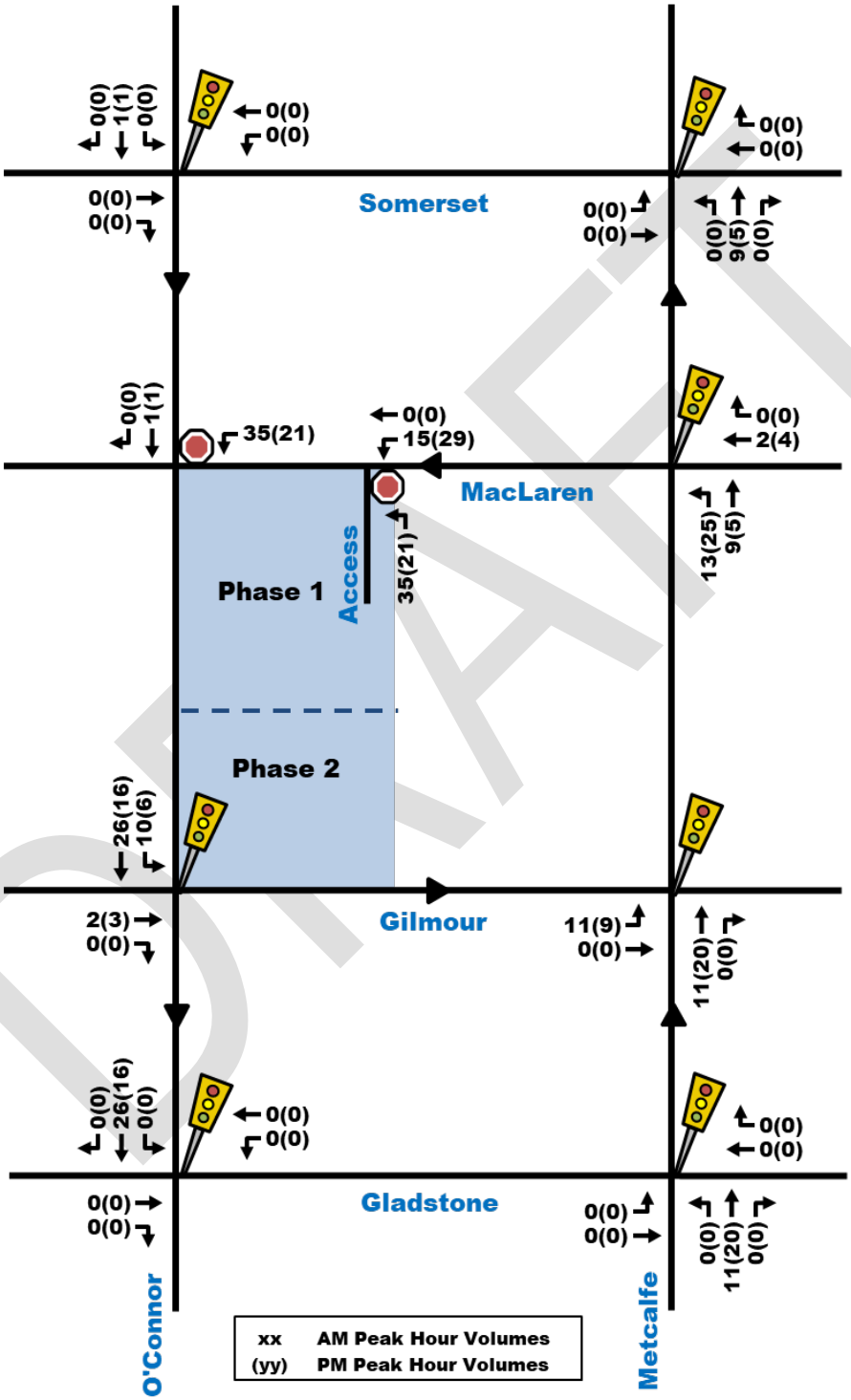


Figure 11: Existing Development Site-Generated Vehicle Trips – AM (PM) Peak Hour

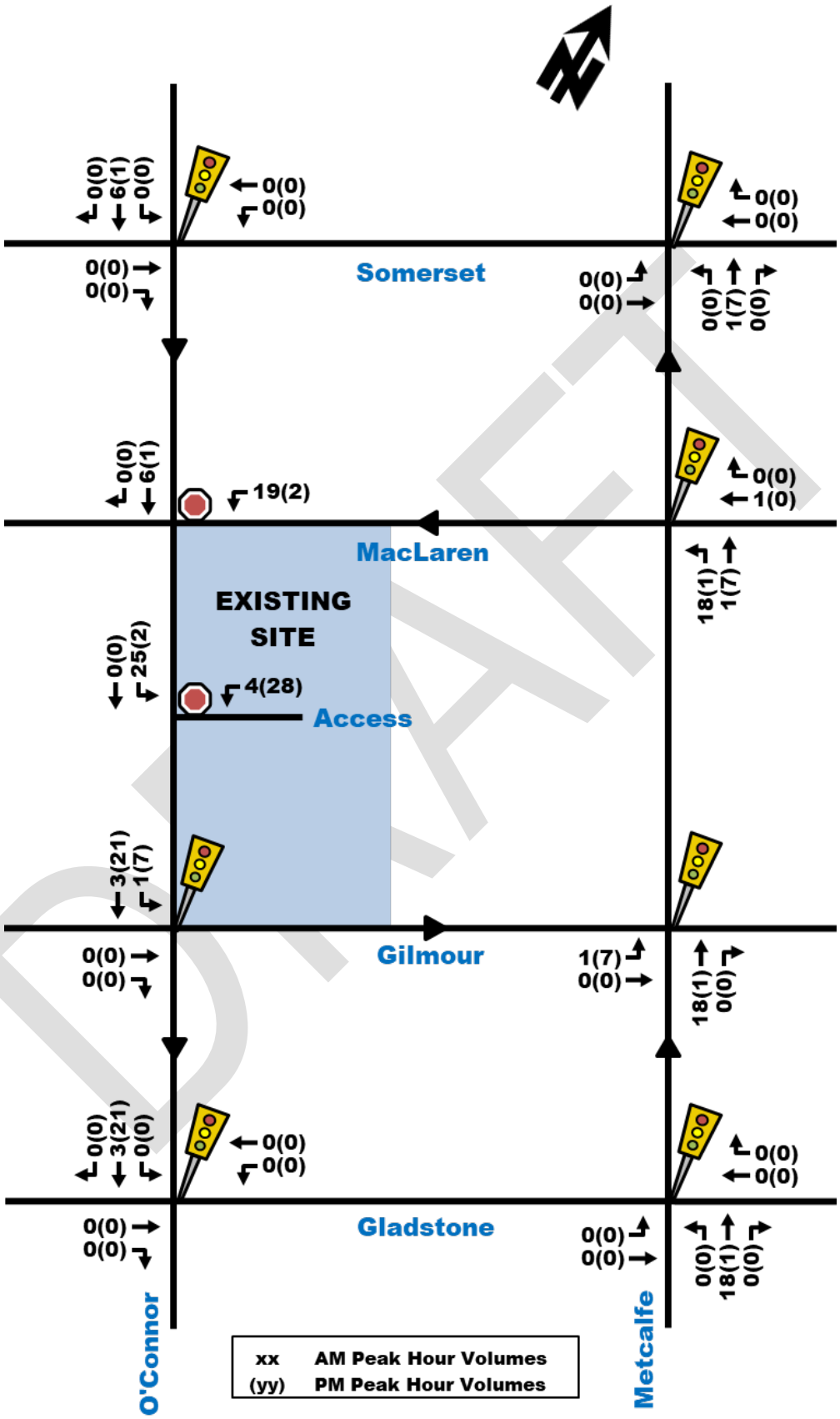
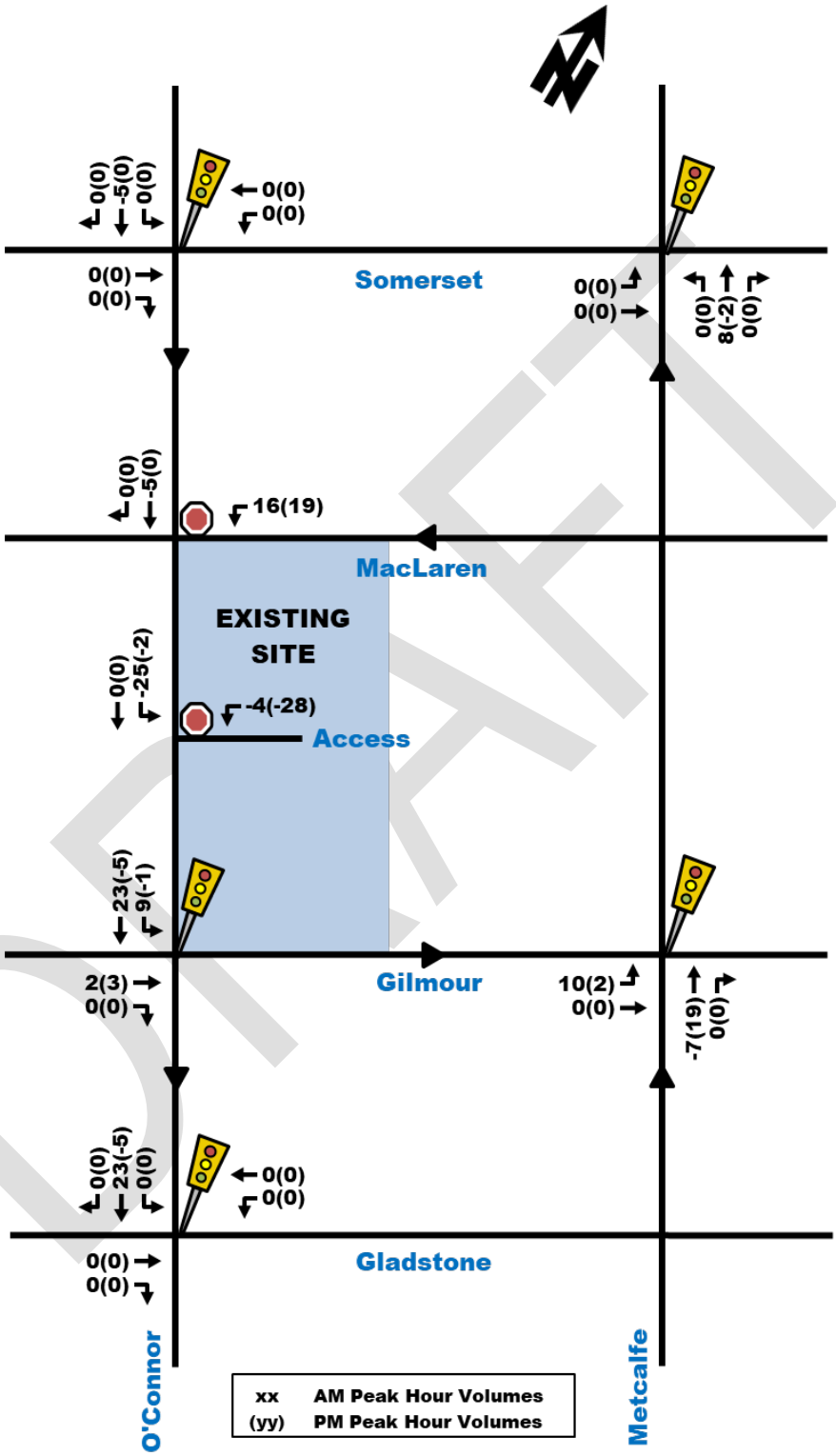


Figure 12: 'Net' Site-Generated Vehicle Trips – AM (PM) Peak Hour



3.2. Background Network Traffic

Exempt – see **Table 1**.

3.3. Demand Rationalization

Exempt – see **Table 1**.

4.0 ANALYSIS

4.1. Development Design

4.1.1. Design for Sustainable Modes

The City of Ottawa's TDM-supportive Development Design and Infrastructure checklist has been provided in **Appendix E** and discussed in more detail in Section 4.5.3.

Auto and Bicycle Parking

Vehicle parking is proposed to be provided in a four-level underground parking garage, accessed via a ramp along MacLaren St. Visitor parking will be on parking level 1, while resident parking will be on all levels. Bike parking will also be located underground on different levels, as well as on the ground floor. Underground bike parking can be accessed via elevators, as well as a bike ramp along Gilmour St, at the east end of the site.

Pedestrian Facilities

The proposed development will provide sidewalks along the perimeter facing the public ROWs of O'Connor, MacIren and Gilmour. Sidewalks are expected to be 2.0m wide, representing a widening of the existing sidewalk on MacLaren and Gilmour. The location of the curbs is to remain the same.

Transit Amenities

There are no bus routes that currently operate at the site frontages. The nearest bus stops to the site are along Bank St and Elgin St, within 270-320m walking distance of the site, as detailed by the existing transit network description in Section 2.1.2. The LRT Line 1 is also located to the north, with Parliament Station within an 850m walking distance.

4.1.2. Circulation and Access

The buildings are expected to be accessible to various types of vehicles, including bikes, passenger cars, municipal vehicles and move-in trucks. Access is summarized as follows:

- A bike ramp will be provided along Gilmour St, at the east end of the site, which bikes can use to access the first level of underground parking.
- The proposed underground parking garage access will be located along MacLaren St, near the east end of the property, where passenger cars will be able to utilize it.
- A loading bay for move-in trucks will be provided for each building along MacLaren St for Phase 1 and Gilmour St for Phase 2 (at the east end of the site). Truck swept path analysis will be provided at Site Plan Control (SPC) Application for the site.
- Garbage rooms for each building will also be located along MacLaren St for Phase 1 and Gilmour St for Phase 2. Municipal garbage trucks are assumed to serve the proposed development in the future.
- Firetruck access to the building would be via the surrounding public roads, where building entrances are located.

4.1.3. New Street Networks

Exempt – see **Table 1**.

4.2. Parking

The development is proposing to provide a total of 510 dwelling units (279 in Phase 1 and 231 in Phase 2) and approximately 3,053 ft^2 total first-floor retail space, within two high-rise residential buildings. Based on the City of Ottawa Parking Provisions under Zoning By-Law, the proposed development is located in "Area X" on Schedule 1A, which consists of the following parking requirements:

- A minimum parking space rate of 0.5 spaces per dwelling unit for the high-rise residential buildings, excluding the first twelve units of each building. Since all parking spaces are provided below grade, the number of spaces required can be further reduced by 20 spaces. This equates to at least 229 total vehicle spaces required.
- No off-street motor vehicle parking is required for first-floor non-residential uses with an area less than 200 m^2. Note that the development proposes several retail spaces, none of which are larger than 200 m^2.
- Visitor parking is required at a rate of 0.1 per dwelling unit, up to a maximum of 30 spaces per building and excluding the first twelve units of each building. This equates to 28 spaces for Phase 1 building and 24 spaces for Phase 2 building, resulting in a total requirement of 52 visitor spaces.
- Bicycle parking is required at a rate of 0.50 per dwelling unit, for a total of approximately 255 required spaces.

The development is proposing to provide a total of 274 residential parking spaces, 52 visitor parking spaces and at least 255 bicycle parking spaces. Therefore, the parking requirements outlined above are expected to be met. All vehicle parking spaces will be provided in the underground parking garage, while bike parking spaces will be provided underground and on the ground floor.

4.3. Boundary Street Design

Exempt – see **Table 1**.

4.4. Access Intersection Design

The access design will be discussed in detail as part of the Site Plan Control (SPC) Application. Nonetheless, the current access design is expected to adhere to the requirements of the City of Ottawa Private Approach By-Law and Zoning By-Law Aisle and Driveway Provisions (Section 107), as detailed below:

Private Approach By-Law Requirements

- The maximum width of the proposed private approach is 9m.
- The distance between the private approach and an intersecting street line must not be less than 6m.
- The grade of the private approach is not to exceed 2% within the private property for a distance of 9m to the curb line.
- A 3.0m minimum buffer is required between the limit of the site access and the property line.

Zoning By-Law Requirements

- The parking garage ramp driveway width will be at least 6.0m wide, with maximum permitted width of 6.7m.
- The underground garage's parking aisles will be at least 6.0m wide.

4.5. Transportation Demand Management

4.5.1. Context for TDM

Based on the type of development as a residential land use, it is expected that most trips generated by the proposed site will be from residents leaving the site in the AM peak to go to work and returning to the site in the PM peak. **Sections 3.1.1** and **3.1.2** describe how many trips are anticipated per travel mode.

The development is proposing 510 apartment units in two high-rise residential building. The north building (i.e. Phase 1), will consist of 35 studio units, 145 one-bedroom units, and 91 two-bedroom units. The south building (i.e. Phase 2), will consist of 22 studio units, 153 one-bedroom units, and 64 two-bedroom units.

4.5.2. Need and Opportunity

Transit usage is expected to be typical for residential buildings within the downtown area. Rapid transit is not available in the immediate vicinity. The availability of reliable transit routes within an approximate 300m walking distance, along with the LRT Line 1 within an approximate 850m walking distance help to incentivize more transit usage. Additionally, active transport connections via pedestrian sidewalk facilities and bike lanes for cyclists also contribute to a significant active transport mode share. In particular, the existing O'Connor St bike facility creates a strong north-south cycling link for residents.

Further, the proposed development is expected to utilize some Transportation Demand Management (TDM) measures to maintain sustainable transit and active mode shares, as described in more detail in the following sections.

4.5.3. TDM Program

The TDM Infrastructure and TDM Measures Checklists have been provided in **Appendix E**. The proposed measures in each respective checklist are identified below.

<u>Proposed measures identified in the TDM-supportive Development Design and Infrastructure Checklist are:</u>

- All ten (10) Required measures related to Walking and Cycling (facilities and bicycle parking) and Vehicle Parking have been satisfied
- Five (5) out of fourteen (14) basic measures related to Walking and Cycling have been satisfied, namely:
    - Locating building close to the street.
    - Locating building entrances to minimize walk distance to sidewalks and transit.
    - Locating building doors and windows to ensure visibility of pedestrians.
    - Providing lighting, landscaping and benches along walking and cycling routes.
    - Providing wayfinding signage for site access.
- One (1) out of seven (7) better measures related to Carsharing have been satisfied, namely:
    - Provide up to three carshare spaces.

<u>Proposed measures identified in the TDM Measures Checklist are:</u>

- Display walking and cycling information at major entrances.
- Display transit information at major entrances.
- Provide on-site carshare vehicles.
- Unbundle parking costs from monthly rent.
- Provide multi-modal travel information package to new residents.

4.6. Neighbourhood Traffic Management

Exempt – see **Table 1**.

4.7. Transit

Exempt – see **Table 1**.

4.8. Review of Network Concept

Exempt – see **Table 1**.

4.9. Intersection Design

Exempt – see **Table 1**.

5.0 FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

Based on the results summarized herein the following findings and recommendations are provided:

Proposed Development

- Taggart is proposing a residential buildings development comprised of 2 high-rise apartment towers (27 and 25-storey) totaling 510 units, with 3,053 ft^2 first-floor commercial space. The site is currently occupied by a 6-storey commercial building and a surface parking lot, both of which will be replaced.
- Full build-out of the proposed development is expected by horizon year 2032 for the purposes of the analysis undertaken within this Transportation Impact Assessment Report.
- A total of 274 residential parking spaces, 52 visitor parking spaces and at least 255 bicycle parking spaces are proposed, which meet the minimum requirements of Zoning By-Law.
- The development is expected to generate a total of approximately 220 person trips during the peak hours, consisting of up to 52 vehicle trips, up to 106 active transport trips and up to 63 transit trips. The existing site generates approximately 30 two-way vehicle trips during both peak hours, which results in a reduction to the net new trips expected to be generated by the proposed development.
- A suite of TDM Measures are proposed to help support future trips by sustainable travel modes, including key measures such as providing on-site carshare vehicles, unbundle parking costs from monthly rent, and providing multi-modal travel information package to new residents.

Future Design and Vehicle Circulation

- Sidewalk facilities surrounding the site are expected to be at least 2.0m wide, with continuous and depressed sidewalk crossing at the proposed site access, as per City standard drawing SC7.1.
- Private Approach By-Law and Zoning By-Law requirements for site access and driveway designs are expected to be met by the site.
- Vehicle parking will be provided in a four-level underground parking garage, while bike parking will be provided in the underground garage and on the ground floor.
- Vehicle access to the development underground parking is proposed via a single two-way ramp connection to MacLaren St. A bike ramp to the underground parking lot's first level is also provided and will be located along Gilmour St.
- Move-in trucks are expected to access the two buildings via proposed internal loading bays in each building, while garbage collection will occur on-street along MacLaren St and Gilmour St. Firetrucks would also be able to access all building entrances via the surrounding public streets.
- Boundary street design will be further reviewed using the City of Ottawa MMLOS Analysis Guidelines, as part of future Site Plan Control Application.

Planned Study Area Modifications

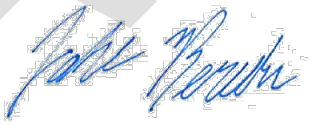
- The City of Ottawa TMP indicates two future active transport modification in the study area, which includes the following:
  - Extending the existing O'Connor St bike lanes north from Laurier Ave to Wellington St, expected to be constructed by summer 2026.
  - Providing westbound bike lanes on Gilmour St, between Cartier St and Percy St.
- The Central and East Downtown Core Secondary Plan identifies objectives and broad policies for the study area, which includes key mobility measures such as potentially converting both O'Connor St and Metcalfe St to two-way streets to improve safety and comfort of sustainable modes and allow more efficient wayfinding for vehicles. It also includes streetscape improvements along each of O'Connor St, Metcalfe St, Somerset St and Gladstone Ave, which will be guided by the Centretown Community Design Plan.
- Adjacent future developments include new residential developments at the locations below. Both developments are expected to generate minimal trips in the study area during peak hours.
  - 234 and 236 O'Connor St, and 311 Somerset St
  - 322 Waverley St

Based on the foregoing, the proposed residential development fits well into the context of the surrounding area, and its location and design serve to promote use of walking, cycling, and transit modes, thus supporting City of Ottawa policies, goals and objectives with respect to redevelopment, intensification and modal share. Therefore, the proposed development is recommended to proceed from a transportation perspective.

Prepared By:

Basel Ansari, P. Eng.
Transportation Engineer

Reviewed By:



Jake Berube, P.Eng. RSP1
Transportation Engineer

Appendix A:

TIA Screening Form, Site Plan and Comment Responses

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City of Ottawa 2017 TIA Guidelines

TIA Screening Form

Date	8-Jan-24
Project	267 O'Connor Street TIA
Project Number	477191-01000

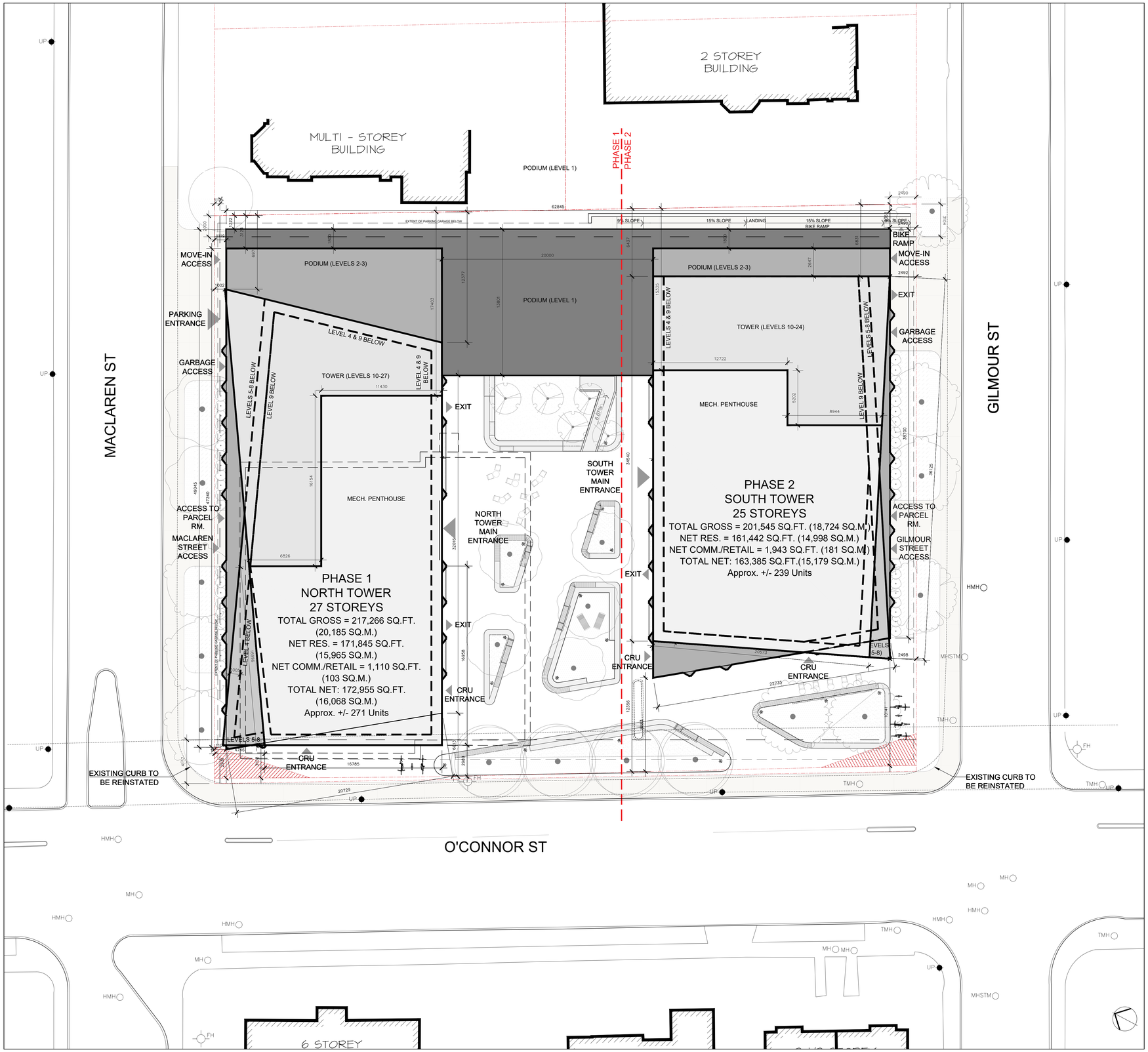
Results of Screening	Yes/No
Development Satisfies the Trip Generation Trigger	Yes
Development Satisfies the Location Trigger	No
Development Satisfies the Safety Trigger	Yes

Module 1.1 - Description of Proposed Development	
Municipal Address	267 O'Connor St, Ottawa, ON K2P 1V3, Canada
Description of location	East side of O'Connor Street between MacLaren and Gilmour
Land Use	Residential High-Rise Buildings
Development Size	27 and 25 Storey buildings with total of 500 units
Number of Accesses and Locations	One access on MacLaren Street at east site limit
Development Phasing	2 phases
Buildout Year	assumed 2029 full buildout
Sketch Plan / Site Plan	See attached

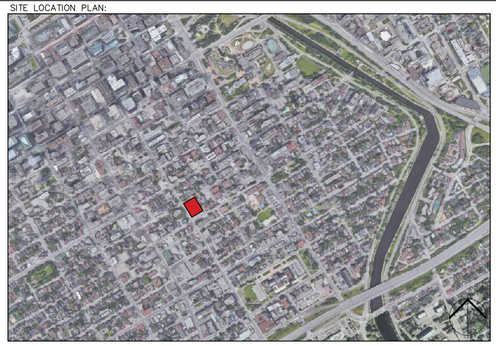
Module 1.2 - Trip Generation Trigger		
Land Use Type	Multi-High Rise Res (3+ Storeys)	
Development Size	500	Units
Trip Generation Trigger Met?	Yes	

Module 1.3 - Location Triggers	
Does the development propose a new driveway to a boundary street that is designated as part of the City's Transit Priority Network, Rapid Transit network or Cross-Town Bikeways?	No
Is the development in a Hub, a Protected Major Transit Station Area (PMTSA), or a Design Priority Area (DPA)?	No
Location Trigger Met?	No

Module 1.4 - Safety Triggers		
Posted Speed Limit on any boundary road	<80	km/h
Are there any horizontal/vertical curvatures on a boundary street limits sight lines at a proposed driveway?	No	
A proposed driveway is within the area of influence of an adjacent traffic signal or roundabout (i.e. within 300 m of intersection in rural conditions, or within 150 m of intersection in urban/ suburban conditions) or within auxiliary lanes of an intersection?	Yes	
Does the proposed driveway make use of an existing median break that serves an existing site?	No	
Is there is a documented history of traffic operations or safety concerns on the boundary streets within 500 m of the development?	No	
Does the development include a drive-thru facility?	No	
Safety Trigger Met?	Yes	



SITE LOCATION PLAN:



ZONING NOTES

CURRENT ZONING: NORTH PARCEL

LOT AREA : 3,538 m²

DEVELOPMENT STATS	REQUIRED	EXISTING BLDG.	PROPOSED
LOT WIDTH			66.4m
LOT DEPTH			53.7m
UNITS			
TOTAL UNITS			510
O'CONNOR SETBACK	MIN. 2.4m		VARIES, MIN. 1.5m
MACLAREN SETBACK	MIN. 0.5m		VARIES, MIN 1.0m
REAR YARD SETBACK	MIN. 2.0m		VARIES, MIN. 1.3m
GILMOUR SETBACK	MIN. 2.49m		VARIES, MIN. 2.49m
BUILDING HEIGHTS			
3 STOREY PODIUM			+/- 15 m
27 STOREY TOWER			+/- 96 m
25 STOREY TOWER			+/- 90 m
BUILDING AREA			
TOTAL GROSS			+/- 418,811 sq.ft.(38,909 sq.m.)
TOTAL NET (RESIDENTIAL + COMMERCIAL/RETAIL)			+/- 336,340 sq.ft.(31,247 sq.m.)
GROSS FLOOR AREA (city def.)			+/- 336,340 sq.ft.(31,247 sq.m.)

NOTE: ALL EXISTING SITE INFORMATION AS PER SITE SURVEY PLAN DATED MAY 26, 2020 AND PREPARED BY STANTEC GEOMATICS LTD

UNIT RATIOS	PROPOSED	
PHASE 1 – NORTH BUILDING		
TOTAL UNIT COUNT		271
STUDIOS	35	13%
1 BEDROOM	142	52%
1 BEDROOM + DEN	3	1%
2 BEDROOM	89	33%
2 BEDROOM + DEN	2	1%
PHASE 2 – SOUTH BUILDING		
TOTAL UNIT COUNT		239
STUDIOS	22	9%
1 BEDROOM	144	60%
1 BEDROOM + DEN	9	4%
2 BEDROOM	54	23%
2 BEDROOM + DEN	10	4%

AMENITY SPACE REQUIREMENTS: 6 m² REQUIRED PER UNIT

PHASE 1 (NORTH BUILDING)
(271 X 6 SQ.M. = 1,626 SQ.M. REQUIRED AMENITY SPACE)
(813 SQ.M. REQUIRED TO BE COMMON AMENITY SPACE)

PHASE 2 (SOUTH BUILDING)
(239 X 6 SQ.M. = 1,434 SQ.M. REQUIRED AMENITY SPACE)
(717 SQ.M. REQUIRED TO BE COMMON AMENITY SPACE)

PHASE 1&2 COMBINED (NORTH & SOUTH BUILDINGS)
(510 X 6 SQ.M. = 3,060 SQ.M. REQUIRED AMENITY SPACE)
(1,530 SQ.M. REQUIRED TO BE COMMON AMENITY SPACE)

PROVIDED AMENITY SPACE
PHASE 1 (NORTH BUILDING): 2,079 SQ.M. PROVIDED AMENITY SPACE 1,381 SQ.M. PROVIDED TO BE COMMON AMENITY SPACE
PHASE 2 (SOUTH BUILDING) 1,880 SQ.M. PROVIDED AMENITY SPACE 1,370 SQ.M. PROVIDED TO BE COMMON AMENITY SPACE
PHASE 1 & 2 COMBINED (NORTH & SOUTH BUILDINGS) 3,959 SQ.M. PROVIDED AMENITY SPACE 2,751 SQ.M. PROVIDED TO BE COMMON AMENITY SPACE

PARKING REQUIREMENTS:

PROVIDED RESIDENTIAL PARKING
PHASE 1 (NORTH BUILDING): 164 RESIDENTIAL PARKING SPACES PROVIDED FOR 271 UNITS (0.61 /UNIT) (PARKING LEVELS P1–P4)
PHASE 2 (SOUTH BUILDING): 110 RESIDENTIAL PARKING SPACES PROVIDED FOR 239 UNITS (0.46 /UNIT) (PARKING LEVELS P1–P4)
PHASE 1 & 2 COMBINED (NORTH & SOUTH BUILDINGS): 274 RESIDENTIAL PARKING SPACES PROVIDED FOR 510 UNITS (0.54 /UNIT) (PARKING LEVELS P1–P4)

PROVIDED VISITOR PARKING
PHASE 1 (NORTH BUILDING): 28 VISITOR PARKING SPACES PROVIDED FOR 271 UNITS (0.1 /UNIT) (PARKING LEVEL P1)
PHASE 2 (SOUTH BUILDING): 24 VISITOR PARKING SPACES PROVIDED FOR 239 UNITS (0.1 /UNIT) (PARKING LEVEL P1)
PHASE 1 & 2 COMBINED (NORTH & SOUTH BUILDINGS): 52 VISITOR PARKING SPACES PROVIDED FOR 510 UNITS (0.1 /UNIT) (PARKING LEVEL P1)

BICYCLE PARKING REQUIREMENTS: 510 * 0.5 = 255

PROVIDED BICYCLE PARKING
435 (165 VERTICAL + 260 HORIZONTAL) BICYCLE PARKING SPACES PROVIDED FOR 510 UNITS (0.85/UNIT) * LOCATED IN UNDERGROUND PARKING GARAGE, AT GROUND LEVEL (INT.), AND AT GRADE (EXT.)

LEGEND:

EXISTING BUILDING
FIRE ROUTE
BUILDING TO BE DEMOLISHED
CURB TO BE REMOVED AND REINSTATED
PROPERTY BOUNDARY
SETBACK
PARKING GARAGE BELOW
MH EXISTING MAN HOLE
TSP EXISTING TRAFFIC LIGHT
FH CONC. CURB DETAIL TO CITY OF OTTAWA STANDARDS — EXISTING FIRE HYDRANT
BIKE PARKING SPACE
BL EXISTING BOLLARD
TSL EXISTING TRAFFIC SIGNAL LIGHT
UP EXISTING UTILITY POLE
CB EXISTING CATCH BASIN
CB PROPOSED CATCH BASIN
AS SIGNAGE FOR ACCESSIBLE PARKING SPACE
FRS SIGNAGE FOR FIRE ROUTE ACCESS
EXISTING SIGN
EXISTING LIGHT POLE
NEW LIGHT POLE
PROPOSED WALL MOUNTED LIGHT
SL EXISTING STREET LIGHTING BOX
TB EXISTING TRAFFIC SIGNAL BOX

TAGGART REALTY MANAGEMENT

no.	date	revision
1	25-01-31	ISSUED FOR REZONING

It is the responsibility of the appropriate contractor to check and verify all dimensions on site and report all errors and/or omissions to the architect.

All contractors must comply with all pertinent codes and by-laws.

Do not scale drawings.

This drawing may not be used for construction until signed.

Hobin Architecture Incorporated
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Ottawa, Ontario
Canada K1S 3K7
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HOBIN ARCHITECTURE

PROJECT/LOCATION:
267 O'CONNOR
OTTAWA, ON.

DRAWING TITLE:
SITE PLAN

DRAWN BY:	DATE:	SCALE:
PB	24-12-04	1:150

PROJECT: 1938

DRAWING NO.: A100

REVISION NO.:

ONTARIO ASSOCIATION OF ARCHITECTS — ROBERT HOBIN LICENCE 3049

None
2400

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20 January 2025

City of Ottawa
Development Review Services
110 Laurier Avenue West
Ottawa, ON K1P 1J1

Attention: Wally Dubyk

Dear Wally:

Re: 267 O'Connor St TIA

Step 3 – Response to City Comments

The following response has been prepared in response to City of Ottawa TIA Strategy Report comments received on February 26, 2021. These responses have been incorporated into the Revised Step 3 Strategy Report (January, 2025). City comments are presented in black with the corresponding responses from Parsons in Green.

1. The site plan depicts the additional protected ROW limits as an easement. This is not an easement, this additional parcel of land is to be conveyed to the City.

   Proponent notified, site plan has been updated.

2. Also, the A 5.0 metres x 5.0 metres sight triangle required at the intersection of MacLaren Street and O'Connor Street has not been dimensioned on the drawing.

   Proponent notified. A 3m (local) by 9m (arterial) sight triangle has been provided per the latest City policy.

3. A 5.0 metres x 5.0 metres sight triangle would be required at the intersection of Gilmour Street and O'Connor Street and is to be shown on all drawings. The traffic signals would need to be relocated into the sight triangle when O'Connor Street is widened.

   Proponent notified. A 3m (local) by 9m (arterial) sight triangle has been provided per the latest City policy.

General

4. O'Connor Street is designated as an Arterial road within the City's Official Plan with a ROW protection of 20.0 metres. The ROW limits are to be shown on all the drawings and the offset distance (10.0 metres) to be dimensioned from the existing centerline of pavement.

   Proponent notified, site plan has been updated.

5. Land for a road widening will be taken equally from both sides of a road, measured from the centreline in existence at the time of the widening if required by the City. The centreline is a line running down the middle of a road surface, equidistant from both edges of the pavement. In determining the centreline, paved shoulders, bus lay-bys, auxiliary lanes, turning lanes and other special circumstances are not included in the road surface.

   Proponent notified.

6. A 5.0 metres x 5.0 metres sight triangle would be required at the intersection of MacLaren Street and O'Connor Street and is to be shown on all drawings. The traffic signals would need to be relocated into the sight triangle when O'Connor Street is widened.

   Proponent notified. A 3m (local) by 9m (arterial) sight triangle has been provided.

7. A 5.0 metres x 5.0 metres sight triangle would be required at the intersection of Gilmour Street and O'Connor Street and is to be shown on all drawings. The traffic signals would need to be relocated into the sight triangle when O'Connor Street is widened.

   Proponent notified. A 3m (local) by 9m (arterial) sight triangle has been provided.

8. Existing pavement marking and signing plan is required (prior to start of construction) adjacent to the site to ensure signing and curb side control is reinstated following construction.

   Proponent notified.

9. Site planning and streetscape will need to address pedestrian environment to ensure a 2.0 m wide clear ped zone and a street tree canopy to contribute to the quality of the ped environment and mitigate micro climate conditions.

   2.0m wide sidewalks will be provided on all site frontages.

10. Parking garage access/egress needs to have the proper transitions and sight lines at the sidewalk approach.

    Noted. No concerns anticipated. Additional details can be refined at SPC.

11. The concrete sidewalks should be 2.0 metres in width and be continuous and depressed through the proposed access (please refer to the City's sidewalk and curb standard drawing SC7.1).

    2.0m wide sidewalks will be provided on all site frontages. Standard drawing SC7.1 has been shared with proponent.

12. The TIA report is to address the parking situation for the existing building during the Phase I construction period, and for both the commercial & residential component.

    The existing building will be demolished during Phase 1 of the project.

13. The closure of an existing private approach shall reinstate the sidewalk, shoulder, curb and boulevard to City standards.

    Noted. Proponent notified.

14. No person shall construct a private approach serving any parking area with a grade exceeding 2% and the grade on the private approach shall descend in the direction of the roadway.

    Noted. Proponent notified.

15. Ensure that the driveway grade does not exceed 2-6% within the private property for a distance of 9.0 metres from the highway line; see Section 25 (t) of the Private Approach By-Law #2003-447. Any grade exceeding 6% will require a subsurface melting device.

    Noted. Proponent notified.

16. For the precast concrete pavers on City's road right-of-way, the developer shall sign a "Maintenance and Liability Agreement" with the City to cover any claims.

    Noted. Proponent notified.

17. For any planter boxes/trees on the City's road right-of-way, an Encroachment Agreement along with a Maintenance Agreement will be required.

    Noted. Proponent notified.

18. Bicycle parking spaces are required as per Section 111 of the Ottawa Comprehensive Zoning By-law. Bicycle parking spaces should be located in safe, secure places near main entrances and preferably protected from the weather.

    Bicycle parking will meet the minimum requirements of Section 111 of the Zoning By-Law. The exact number of spaces will be confirmed at Site Plan Application. It is recognized that the development bicycle parking should reflect its proximity to the O'Connor Street bikeway.

19. A construction Traffic Management Plan is to be provided for approval by the Senior Engineer, Traffic Management, Transportation Services Dept.

    Noted.

Transportation Engineering Services

Section 2.1.1 Proposed Development:

20. Upon re-submitting the TIA, update the proposed development description (preliminary unit and parking count) based on the latest information available. Forecasting and traffic analysis may not require updating if the change in unit count is minor. However, in this case a written rationale that explains why these elements have not been updated would be required within the TIA.

    As the TIA Strategy Report was last submitted in 2020, the report has been updated to follow the requirements of the latest City of Ottawa TIA Guidelines update (2023). Rationale has been provided for the background traffic counts and traffic analysis provided in the updated Step 3 TIA.

Section 2.1.2 Existing Conditions:

21. In the description of O'Connor Street, it is stated that on-street parking is provided "along the west side of the roadway from 8am to 5:30pm". Parking is provided along the west side of the roadway at all times, but 8am to 5:30pm (Monday-Friday) is the time period in which a 2-hour time limit applies. The description of parking regulations/restrictions on Metcalfe Street is similarly inaccurate and incomplete.

    Description updated.

22. In the description of Somerset Street, "Garland Street in the east" should be changed to "Garland Street in the west".

    Description updated.

23. In the description of the MacLaren Street and O'Connor Street intersection, the westbound approach should be described as consisting of a left-turn lane (not a right-turn lane).

    Description updated.

24. In the description of the MacLaren Street and O'Connor Street intersection, please note that a dedicated bicycle-only westbound through lane is provided.

    Description updated.

25. In the description of the Somerset Street and Metcalfe Street intersection, the northbound approach should be described as consisting of a shared through/right-turn lane, a through lane, and a shared through/left-turn lane.

    Description updated.

26. Within the "Pedestrian/Cycling Network" heading, it should be noted that Bank Street is classified as a Local Route in the Ottawa Cycling Plan.

    Description updated.

27. Within the "Existing Area Traffic Management Measures" heading, highlight the physical restriction of westbound through motor vehicle traffic at the MacLaren Street and O'Connor Street intersection.

    Description updated.

28. Figure 4 has a southbound right-turn arrow at the intersection of Gilmour Street and O'Connor Street. This should be a southbound left-turn arrow.

    Figure updated.

29. Figure 4 and all other traffic volume figures show the intersection of MacLaren Street and O'Connor Street as signalized. This intersection is unsignalized with westbound stop control.

    Volume figures updated.

30. Within the "Existing Road Safety Conditions" it is stated that between 2013 and 2017 and within the study area there were eight (8) collisions involving a pedestrian and two (2) collisions involving a cyclist. The collision review should provide additional detail on collisions with vulnerable road users and identify any potential patterns or problem areas. From a review of Appendix C, it is noted that all of the recorded pedestrian/cycling collisions occurred directly adjacent to the site: six (6) pedestrian collisions and two (2) cyclist collisions occurred at the intersection of O'Connor Street and MacLaren Street, one (1) pedestrian collision occurred on the O'Connor Street segment between MacLaren Street and Gilmour Street, and one (1) pedestrian collision occurred at the intersection of Gilmour Street and O'Connor Street. A review of 2018 collision data revealed one (1) additional cyclist collision on the O'Connor Street segment between MacLaren Street and Gilmour Street, and an additional three (3) cyclist collisions at the intersection of Gilmour Street and O'Connor Street. In total, fourteen (14) collisions with vulnerable road users have been recorded on O'Connor Street directly adjacent to the site between 2013 and 2018.

    An updated detailed review of collisions has been provided using the latest collision data available on Open Ottawa webpage, combined with City of Ottawa data for the intersections of O'Connor/Gilmour and O'Connor/MacLaren, and the segment in between (2018-2022, inclusive). The 2018 cyclist collisions referenced above have been capture, with additional cyclist collision occurring in 2019.

    No collisions have occurred at O'Connor/MacLaren in the last 5 years. 21 incidents have been recorded at O'Connor/Gilmour, while 4 incidents have been recorded mid-block. Of these 25 collisions, 5 collisions involved VRU's (All cyclists), all of which involved a left-turning vehicle conflicting with the SB bike, with 4 of them occurring at the O'Connor/Gilmour intersection. All of the O'Connor/Gilmour incidents occurred in the afternoon peak hour with clear conditions. 4 of 5 collisions resulted in a non-fatal injury, with the remainder being PDO.

Section 3.1.1 Trip Generation:

31. The values in Table 9 are correct, but the paragraph above Table 9 should reference Table 3.13 of the TRANS Trip Generation Study, not Table 3.6. The same comment applies to the paragraph above Table 12.

    Trip generation was updated to latest standard City methodology.

Section 3.1.4 Trip Assignment (and Section 4.4 Access Intersection Design):

32. A figure should be provided that shows the observed (existing) site access auto trips assigned throughout the study area. The existing auto trips should then be subtracted from the existing volumes prior to adding the anticipated site generated vehicle volumes. Provide this new figure and amend Figure 10 and Figure 11.

    See Figure 11 in the report.

33. Due to the one-way street grid surrounding the development, and as a result of the single proposed access location on Gilmour Street, the 55% of total site generated traffic that is distributed to/from the south must circulate around the block and perform three (3) left-turn maneuvers at study area intersections. This high number of left-turn maneuvers is undesirable given the aforementioned history of collisions involving pedestrians and cyclists at the O'Connor Street intersections. It is therefore recommended that a second access to/from the development be provided on MacLaren Street. This second access on MacLaren Street would reduce the impact of site generated traffic as follows:
    - The number of vehicles turning eastbound left at the intersection of Gilmour Street and Metcalfe Street as well as northbound left at the intersection of MacLaren Street and Metcalfe Street would be reduced by 51 during the AM peak hour and 29 during the PM peak hour;
    - The number of vehicles turning westbound left at the intersection of MacLaren Street and O'Connor Street as well as southbound left at the intersection of Gilmour Street and O'Connor Street would be reduced by 16 during the AM peak hour and 45 during the PM peak hour.

    Note that the proposed access location has been shifted from Gilmour St to MacLaren St. Refer to Figure 10 in the report for site-generate traffic volumes. It is recognized that this configuration results in vehicles destined east of the site to use the O'Connor/Gilmour SBLT. The left-turn volumes are expected to be minimal during peak hours.

Section 4.3 Boundary Street Design:

34. Note that per Policy 7 of Section 4.3 of the Official Plan, the development must consider upgrading the adjacent O'Connor Street Bikeway (Cross-Town Bikeway 5) to City standards.

    The City of Ottawa Official Plan has been updated. Referenced policy was not found. The existing bike infrastructure on O'Connor St is expected to be maintained as existing by the proposed development. The proposed development will result in one less access from O'Connor Street, between MacLaren and Gilmour. Once removed, the pinned curb would be continuous between these two intersections.

35. As noted under the TIA's existing conditions review, there are road safety concerns regarding collisions with vulnerable road users. A fulsome review of boundary street road safety and potential mitigation measures will be required to support boundary street transportation improvements. Further details on potential mitigation measures are discussed in the comments on Section 4.6.

    The collision analysis was updated in the report. It is recognised that there are

Section 4.5 Transportation Demand Management:

36. Expand upon the TDM context, need, and opportunity per Element 4.5.1 and Element 4.5.2 of the TIA Guidelines. If any required information is unknown at this stage of the development, then it can be deferred until submission of the TIA supporting the Site Plan Application. The SPA submission should also provide an implementation plan for post-occupancy TDM program measures.

    Section 4.5 has been updated. TDM will be refined at SPC.

Section 4.6 Neighbourhood Traffic Management (NTM):

37. MacLaren Street should also be assessed for potential NTM measures given the significant site generated traffic volumes that are assigned to this street.

    Section 4.6 no longer triggered as per updated TIA Guidelines. Overall, the forecast vehicle trips are expected to be negligible.

38. One of the potential NTM measures that are proposed for consideration on Gilmour Street is speed humps, but Gilmour Street already has speed humps.

    Section 4.6 no longer triggered as per updated TIA Guidelines.

39. Section 4.6 states "it should be noted that [the NTM measures to be considered] would require monitoring and a comprehensive study completed by the City prior to implementation". Note that the City has already completed a comprehensive study of the O'Connor Street corridor – the O'Connor Street Safety Review, Phase 1 (2018). This study provides a number of improvements and conceptual designs for the intersection of O'Connor Street and MacLaren Street, and the intersection of O'Connor Street and Gilmour Street. These recommendations can be used as part of the development's NTM strategy without a further comprehensive study. The following specific measures are recommended and should be further evaluated during NTM and boundary street review:

At the intersection of O'Connor Street and MacLaren Street:

- Increase crossride off-set (bend-out), if feasible.
- Raised crosswalk/crossride, if feasible.
- Improved sight lines for westbound vehicles to see northbound cyclists and pedestrians on the east crosswalk. Existing building corner and retaining wall restricts sight lines, which may contribute to the history of collisions with cyclists and pedestrians at this intersection.
- Note that, at minimum, a 3m by 3m corner triangle (per Annex 1 of the OP) is required on the southeast corner of the O'Connor Street and MacLaren Street intersection to provide adequate sight lines and to provide space for the potential bend-out of the O'Connor Street bikeway (either at the time of development, or at a future date). A larger corner triangle may be required depending on sight line analysis.

At the intersection of O'Connor Street and Gilmour Street:

- Increase crossride off-set (bend-out), if feasible.
- Raised crosswalk/crossride, if feasible.
- Intersection narrowing.
- Note that, at minimum, a 3m by 3m corner triangle (per Annex 1 of the OP) is required on the northeast corner of the O'Connor Street and Gilmour Street intersection to provide space for the potential bend-out of the O'Connor Street bikeway (either at the time of development, or at a future date).

Section 4.6 no longer triggered as per updated TIA Guidelines. The study referenced by the comment was not found on City website. Nonetheless, these recommended modifications may be reviewed at SPC.

Section 4.9 Intersection Design:

40. Existing conditions intersection analysis should use a PHF of 0.90 per Appendix C of the TIA Guidelines.

    Section 4.9 no longer triggered as per updated TIA Guidelines.

41. Future conditions intersection analysis should use a PHF of 1.00 per Appendix C of the TIA Guidelines.

    Section 4.9 no longer triggered as per updated TIA Guidelines.

42. TLOS targets are based on a road's transit priority designation within the Transportation Master Plan. Even if there are no existing transit priority measures on Gladstone Avenue, it is still designated as a transit priority corridor – isolated measures in the 2031 affordable network, and therefore the signalized intersections on Gladstone Avenue should have a TLOS target of "D".

    Section 4.9 no longer triggered as per updated TIA Guidelines.

43. Re-evaluate existing BLOS. Many of the analyzed intersections on O'Connor Street provide for all left-turns maneuvers with two-stage left-turn bike boxes, and there are no right-turn lanes for cyclists to navigate around on the side street approaches. It is expected that these intersections should receive a BLOS of A or B.

    Section 4.9 no longer triggered as per updated TIA Guidelines.

44. The phrase "the TkLOS on the remaining north legs of these intersections are TkLOS 'D' which meets the target" should replace "north legs" with "west legs" (the eastbound right-turn movement is evaluated as TkLOS D).

    Section 4.9 no longer triggered as per updated TIA Guidelines.

45. Within Table 20 and Table 21, assume the "O'Connor/Site" row should be labelled as "Gilmour/Site". Please confirm and revise as required.

    Section 4.9 no longer triggered as per updated TIA Guidelines.

46. Future MMLOS may differ from existing MMLOS. Even if PLOS and BLOS at the intersection of O'Connor Street and Gilmour Street do not change due to intersection narrowing or other NTM / safety improvements, the VLOS of area intersections may change due to the additional site generated traffic. Comparing Table 18 and Table 21, the VLOS of Gilmour/O'Connor degrades from A to B, and the VLOS of Gladstone/O'Connor degrades from C to D.

    Section 4.9 no longer triggered as per updated TIA Guidelines.

47. The last sentence of the TIA states "the Site Plan Application will include updating this report to include Modules 4.1 to 4.2 and assess the design review component of the proposed development". Note that the TIA submission in support of the SPA should include Modules 4.1 to 4.4 (which is the design review component).

    Noted.

Traffic Signal Design

48. There is existing underground and above ground traffic plant in the area of proposed construction (NE quadrant of O'Connor/Gilmour).

    Noted.

49. Underground traffic plant and traffic signal hardware is to be maintained and protected at all times during construction.

    Noted.

50. Before excavating please call 01CALL (1-800-400-2255) for underground locates.

    Noted.

51. The proponent of the project and its contractor are liable for all potential outages and fully responsible for reinstatement of all damages to existing underground traffic infrastructure including all the costs associated with it.

    Noted.

52. Provide a Traffic Control Plan in advance if site works impact a signalized intersection. The TCP is to be provided to Transportation Services Department Traffic Management Unit.

    Noted.

53. No protective hording is to encroach on existing traffic signals infrastructure that is to be accessible 24/7/365.

    Noted.

Street Lighting

54. Street Lighting Plant is located at this location. Locates required. Please contact Ontario One Call for locates prior to excavation.

    Noted.

55. Please maintain a minimum of 1.0 m horizontal and 0.3 m vertical clearance from existing street light plant. The applicant is 100% responsible for all costs of any required Street Sight Plant alterations and/or repairs.

    Noted.

56. No protective hording is to encroach on existing street lighting infrastructure.

    Noted.

57. If there are changes to the existing roadway geometry or impacts to Traffic Plant that may impact the Street Lighting Plant a detailed design may be required (contact the below)..

    Noted.

58. Should a conflict arise or if you have any questions please contact Barrie Forrester at 613-580-2424 ext 23332 or 613-223-8917 cell.

    Noted.

Transit Services

59. Section 2.1.2 Existing Conditions does not accurately capture the existing transit network in the vicinity of the site. Routes 6 and 11 were not discussed - please include information on these routes. Please include a map showing bus stop locations within the study area. The closest stops are on Bank at Somerset or at Lewis/Gilmour, both about 270m away. The next closest stops are on Gladstone at O'Connor, about 300m away. Elgin Street stops are further away, about 400m to the stops at Lewis/Gilmour.

    Existing conditions transit information has been updated to January 2025 conditions.

60. Section 4.5 TDM: given that the application proposed a mixed-use development, the TDM Measures Checklist for Non-Residential Developments should also be completed.

    The proposed development is mainly residential. The first-floor commercial space is considered minimal (less the 400 m² in total) and expected to generate negligible trips. Therefore, the non-residential checklists were not completed for the ZBLA.

61. Per item 3.2 of the TDM Measures Checklist for Residential Developments, a transit fare incentive is required for this development. Recent residential tower developments have included a one-year transit fare requirement per residential unit, provided on first move-in. Further, per item 3.2 of the TDM Measures Checklist for Non-residential Developments, the City should also consider requiring the property manager of the future commercial space to subsidize or reimburse employee transit fare.

    The TDM Measures Checklist has been updated. Transit fare incentive is not anticipated to be provided at this time. This option may be reviewed again at Site Plan Application.

Appendix B:

Traffic Count Data

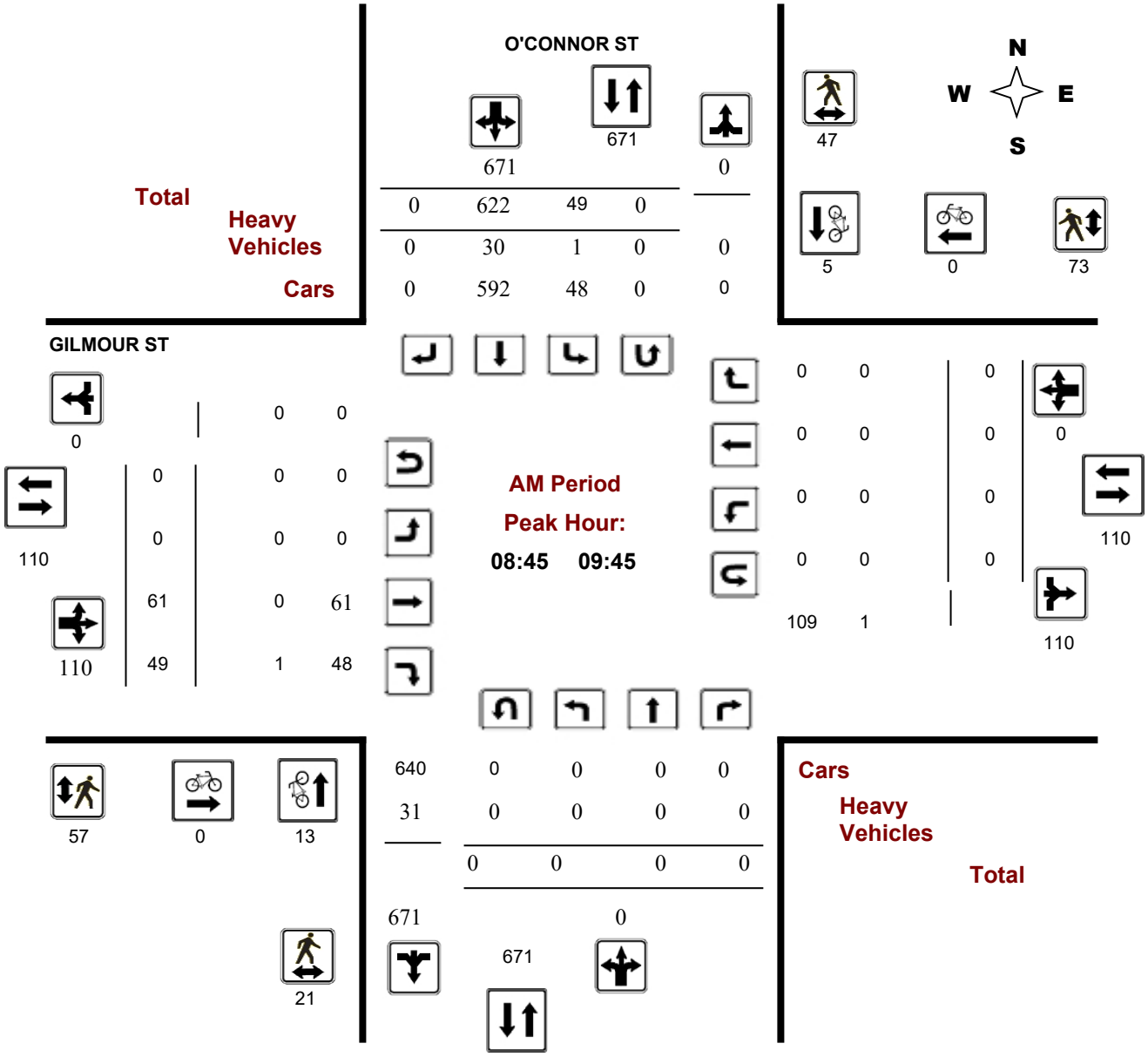
Transportation Services - Traffic Services

Turning Movement Count - Full Study Peak Hour Diagram

GILMOUR ST @ O'CONNOR ST

Survey Date: Tuesday, March 21, 2017
Start Time: 07:00

WO No: 36785
Device: Miovision



Comments

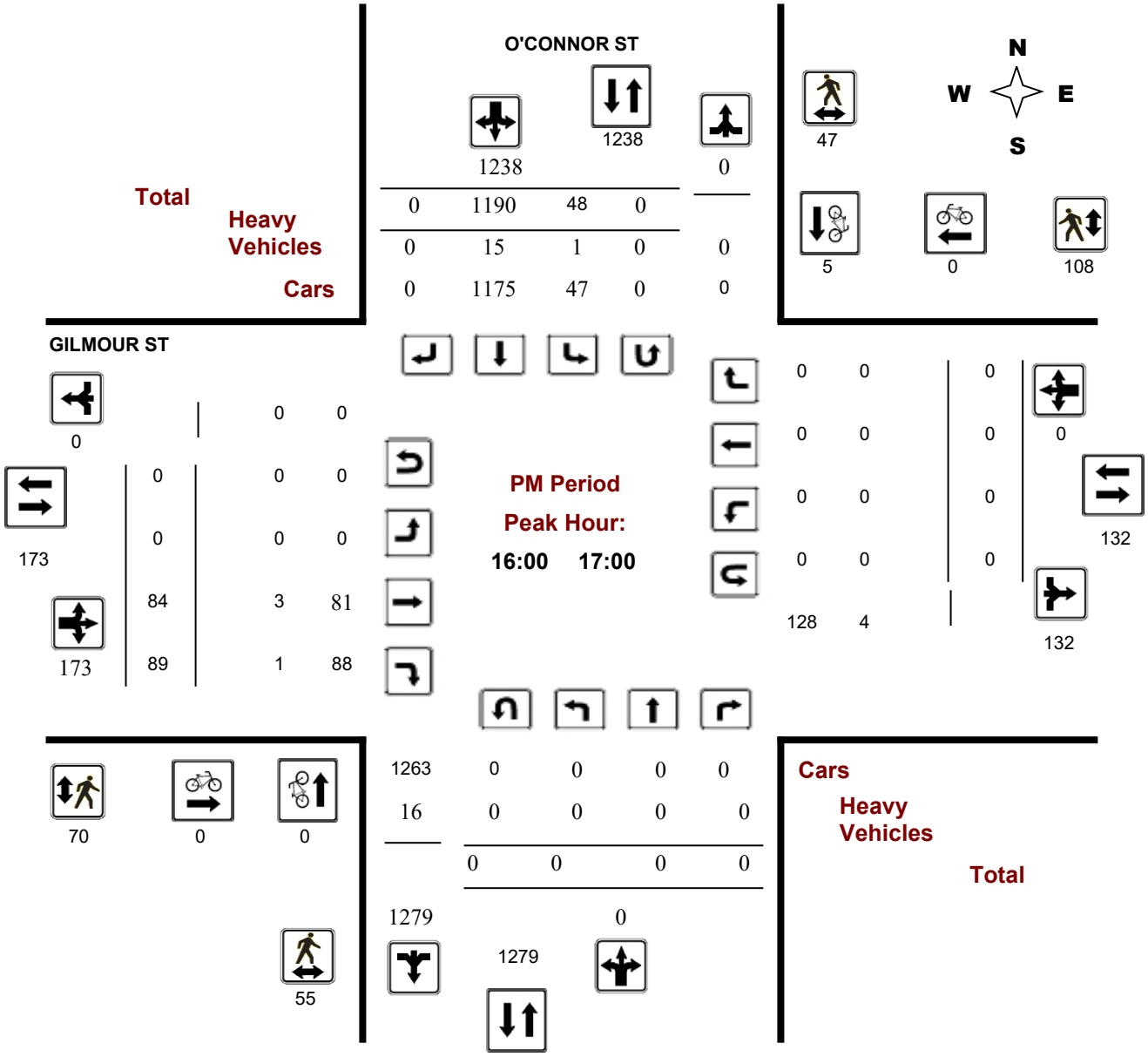
Transportation Services - Traffic Services

Turning Movement Count - Full Study Peak Hour Diagram

GILMOUR ST @ O'CONNOR ST

Survey Date: Tuesday, March 21, 2017 **WO No:** 36785

Start Time: 07:00 **Device:** Miovision



Comments

5299373 - Metcalfe and Gladstone - Apr - 4th - TMC

Tue Apr 4, 2017
AM Peak (8AM - 9AM) - Overall Peak Hour
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Road)
All Movements
ID: 397175, Location: 45.413818, -75.689574, Site Code: 36833103

Provided by: City of Ottawa
100 Constellation Dr, Nepean, ON, K2G 5J9, CA

Leg	West						East						South						North						
Direction	Eastbound						Westbound						Northbound						Southbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2017-04-04 8:00AM	30	39	0	0	**69**	19	0	26	6	0	**32**	23	10	277	2	0	**289**	14	0	0	0	0	**0**	11	**390**
8:15AM	21	34	0	0	**55**	13	0	36	2	0	**38**	11	12	326	4	0	**342**	16	0	0	0	0	**0**	19	**435**
8:30AM	21	37	0	0	**58**	19	0	28	0	0	**28**	6	9	261	4	0	**274**	9	0	0	0	0	**0**	10	**360**
8:45AM	18	30	0	0	**48**	15	0	32	5	0	**37**	20	11	287	4	1	**303**	13	0	0	0	0	**0**	18	**388**
Total	90	140	0	0	**230**	66	0	122	13	0	**135**	60	42	1151	14	1	**1208**	52	0	0	0	0	**0**	58	**1573**
% Approach	39.1%	60.9%	0%	0%	**-**	-	0%	90.4%	9.6%	0%	**-**	-	3.5%	95.3%	1.2%	0.1%	**-**	-	0%	0%	0%	0%	**-**	-	**-**
% Total	5.7%	8.9%	0%	0%	**14.6%**	-	0%	7.8%	0.8%	0%	**8.6%**	-	2.7%	73.2%	0.9%	0.1%	**76.8%**	-	0%	0%	0%	0%	**0%**	-	**-**
PHF	0.750	0.897	-	-	**0.833**	-	-	0.847	0.542	-	**0.888**	-	0.875	0.883	0.875	0.250	**0.883**	-	-	-	-	-	**-**	-	0.904
Lights and Motorcycles	86	128	0	0	**214**	-	0	114	13	0	**127**	-	41	1145	14	1	**1201**	-	0	0	0	0	**0**	-	1542
% Lights and Motorcycles	95.6%	91.4%	0%	0%	**93.0%**	-	0%	93.4%	100%	0%	**94.1%**	-	97.6%	99.5%	100%	100%	**99.4%**	-	0%	0%	0%	0%	**-**	-	98.0%
Heavy	4	9	0	0	**13**	-	0	7	0	0	**7**	-	0	5	0	0	**5**	-	0	0	0	0	**0**	-	25
% Heavy	4.4%	6.4%	0%	0%	**5.7%**	-	0%	5.7%	0%	0%	**5.2%**	-	0%	0.4%	0%	0%	**0.4%**	-	0%	0%	0%	0%	**-**	-	1.6%
Bicycles on Road	0	3	0	0	**3**	-	0	1	0	0	**1**	-	1	1	0	0	**2**	-	0	0	0	0	**0**	-	6
% Bicycles on Road	0%	2.1%	0%	0%	**1.3%**	-	0%	0.8%	0%	0%	**0.7%**	-	2.4%	0.1%	0%	0%	**0.2%**	-	0%	0%	0%	0%	**-**	-	0.4%
Pedestrians	-	-	-	-	-	66	-	-	-	-	-	60	-	-	-	-	-	52	-	-	-	-	-	58	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

5299373 - Metcalfe and Gladstone - Apr - 4th - TMC

Tue Apr 4, 2017
PM Peak (4:15PM - 5:15PM)
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Road)
All Movements
ID: 397175, Location: 45.413818, -75.689574, Site Code: 36833103

Provided by: City of Ottawa
100 Constellation Dr, Nepean, ON, K2G 5J9, CA

Leg Direction	West Eastbound						East Westbound						South Northbound						North Southbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2017-04-04 4:15PM	27	49	0	0	**76**	12	0	38	4	0	**42**	10	8	99	10	0	**117**	9	0	0	0	0	**0**	14	**235**
4:30PM	22	73	0	0	**95**	15	0	41	3	0	**44**	6	11	86	2	0	**99**	7	0	0	0	0	**0**	12	**238**
4:45PM	31	47	0	0	**78**	15	0	25	3	0	**28**	13	20	79	4	0	**103**	20	0	0	0	0	**0**	13	**209**
5:00PM	27	46	0	0	**73**	20	0	33	7	0	**40**	14	20	86	1	0	**107**	14	0	0	0	0	**0**	12	**220**
Total	107	215	0	0	**322**	62	0	137	17	0	**154**	43	59	350	17	0	**426**	50	0	0	0	0	**0**	51	**902**
% Approach	33.2%	66.8%	0%	0%	**-**	-	0%	89.0%	11.0%	0%	**-**	-	13.8%	82.2%	4.0%	0%	**-**	-	0%	0%	0%	0%	**-**	-	-
% Total	11.9%	23.8%	0%	0%	**35.7%**	-	0%	15.2%	1.9%	0%	**17.1%**	-	6.5%	38.8%	1.9%	0%	**47.2%**	-	0%	0%	0%	0%	**0%**	-	-
PHF	0.863	0.736	-	-	**0.847**	-	-	0.835	0.607	-	**0.875**	-	0.738	0.884	0.425	-	**0.910**	-	-	-	-	-	**-**	-	0.947
Lights and Motorcycles	106	207	0	0	**313**	-	0	127	16	0	**143**	-	59	346	17	0	**422**	-	0	0	0	0	**0**	-	878
% Lights and Motorcycles	99.1%	96.3%	0%	0%	**97.2%**	-	0%	92.7%	94.1%	0%	**92.9%**	-	100%	98.9%	100%	0%	**99.1%**	-	0%	0%	0%	0%	**-**	-	97.3%
Heavy	1	7	0	0	**8**	-	0	6	1	0	**7**	-	0	4	0	0	**4**	-	0	0	0	0	**0**	-	19
% Heavy	0.9%	3.3%	0%	0%	**2.5%**	-	0%	4.4%	5.9%	0%	**4.5%**	-	0%	1.1%	0%	0%	**0.9%**	-	0%	0%	0%	0%	**-**	-	2.1%
Bicycles on Road	0	1	0	0	**1**	-	0	4	0	0	**4**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	5
% Bicycles on Road	0%	0.5%	0%	0%	**0.3%**	-	0%	2.9%	0%	0%	**2.6%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**-**	-	0.6%
Pedestrians	-	-	-	-	-	62	-	-	-	-	-	43	-	-	-	-	-	50	-	-	-	-	-	51	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

5299374 - Gladstone Ave and O'Connor St - TMC

Tue Mar 21, 2017
AM Peak (8AM - 9AM)
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Road)
All Movements
ID: 393991, Location: 45.413048, -75.691547, Site Code: 36793103

Provided by: City of Ottawa
100 Constellation Dr, Nepean, ON, K2G 5J9, CA

Leg	West						East						South						North						
Direction	Eastbound						Westbound						Northbound						Southbound						
Time	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	L	T	R	U	App	Ped*	Int
2017-03-21 8:00AM	0	57	28	0	**85**	17	12	25	0	0	**37**	19	0	4	0	0	**4**	17	4	162	17	0	**183**	13	**309**
8:15AM	0	62	27	0	**89**	17	7	41	0	0	**48**	17	0	8	0	0	**8**	15	3	125	7	0	**135**	9	**280**
8:30AM	0	45	38	0	**83**	20	8	38	0	0	**46**	29	0	7	0	0	**7**	21	4	163	7	0	**174**	19	**310**
8:45AM	0	61	24	0	**85**	24	5	41	0	0	**46**	27	0	6	0	0	**6**	19	4	144	17	0	**165**	12	**302**
Total	0	225	117	0	**342**	78	32	145	0	0	**177**	92	0	25	0	0	**25**	72	15	594	48	0	**657**	53	**1201**
% Approach	0%	65.8%	34.2%	0%	**-**	-	18.1%	81.9%	0%	0%	**-**	-	0%	100%	0%	0%	**-**	-	2.3%	90.4%	7.3%	0%	**-**	-	-
% Total	0%	18.7%	9.7%	0%	**28.5%**	-	2.7%	12.1%	0%	0%	**14.7%**	-	0%	2.1%	0%	0%	**2.1%**	-	1.2%	49.5%	4.0%	0%	**54.7%**	-	-
PHF	-	0.907	0.770	-	**0.961**	-	0.667	0.884	-	-	**0.922**	-	-	0.781	-	-	**0.781**	-	0.938	0.911	0.706	-	**0.898**	-	0.969
Lights and Motorcycles	0	212	116	0	**328**	-	30	133	0	0	**163**	-	0	0	0	0	**0**	-	15	578	45	0	**638**	-	1129
% Lights and Motorcycles	0%	94.2%	99.1%	0%	**95.9%**	-	93.8%	91.7%	0%	0%	**92.1%**	-	0%	0%	0%	0%	**0%**	-	100%	97.3%	93.8%	0%	**97.1%**	-	94.0%
Heavy	0	10	1	0	**11**	-	2	7	0	0	**9**	-	0	0	0	0	**0**	-	0	16	3	0	**19**	-	39
% Heavy	0%	4.4%	0.9%	0%	**3.2%**	-	6.3%	4.8%	0%	0%	**5.1%**	-	0%	0%	0%	0%	**0%**	-	0%	2.7%	6.3%	0%	**2.9%**	-	3.2%
Bicycles on Road	0	3	0	0	**3**	-	0	5	0	0	**5**	-	0	25	0	0	**25**	-	0	0	0	0	**0**	-	33
% Bicycles on Road	0%	1.3%	0%	0%	**0.9%**	-	0%	3.4%	0%	0%	**2.8%**	-	0%	100%	0%	0%	**100%**	-	0%	0%	0%	0%	**0%**	-	2.7%
Pedestrians	-	-	-	-	-	78	-	-	-	-	-	92	-	-	-	-	-	72	-	-	-	-	-	53	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

5299374 - Gladstone Ave and O'Connor St - TMC

Tue Mar 21, 2017
PM Peak (3:45PM - 4:45PM) - Overall Peak Hour
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Road)
All Movements
ID: 393991, Location: 45.413048, -75.691547, Site Code: 36793103

Provided by: City of Ottawa
100 Constellation Dr, Nepean, ON, K2G 5J9, CA

Leg Direction	West Eastbound						East Westbound						South Northbound						North Southbound						
Time	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	L	T	R	U	**App**	Ped*	**Int**
2017-03-21 3:45PM	0	53	52	0	**105**	14	8	28	0	0	**36**	14	0	0	0	0	**0**	15	5	317	19	0	**341**	15	**482**
4:00PM	0	54	55	0	**109**	17	6	35	0	0	**41**	31	0	1	0	0	**1**	13	9	316	19	0	**344**	22	**495**
4:15PM	0	50	43	0	**93**	16	5	28	0	0	**33**	11	0	0	0	0	**0**	22	8	321	21	0	**350**	21	**476**
4:30PM	0	52	45	0	**97**	11	8	35	0	0	**43**	15	0	0	0	0	**0**	23	10	302	19	0	**331**	13	**471**
Total	0	209	195	0	**404**	58	27	126	0	0	**153**	71	0	1	0	0	**1**	73	32	1256	78	0	**1366**	71	**1924**
% Approach	0%	51.7%	48.3%	0%	**-**	-	17.6%	82.4%	0%	0%	**-**	-	0%	100%	0%	0%	**-**	-	2.3%	91.9%	5.7%	0%	**-**	-	-
% Total	0%	10.9%	10.1%	0%	**21.0%**	-	1.4%	6.5%	0%	0%	**8.0%**	-	0%	0.1%	0%	0%	**0.1%**	-	1.7%	65.3%	4.1%	0%	**71.0%**	-	-
PHF	-	0.968	0.886	-	**0.927**	-	0.844	0.900	-	-	**0.890**	-	-	0.250	-	-	**0.250**	-	0.800	0.978	0.929	-	**0.976**	-	0.972
Lights and Motorcycles	0	204	190	0	**394**	-	27	118	0	0	**145**	-	0	0	0	0	**0**	-	31	1238	78	0	**1347**	-	1886
% Lights and Motorcycles	0%	97.6%	97.4%	0%	**97.5%**	-	100%	93.7%	0%	0%	**94.8%**	-	0%	0%	0%	0%	**0%**	-	96.9%	98.6%	100%	0%	**98.6%**	-	98.0%
Heavy	0	5	5	0	**10**	-	0	7	0	0	**7**	-	0	0	0	0	**0**	-	0	18	0	0	**18**	-	35
% Heavy	0%	2.4%	2.6%	0%	**2.5%**	-	0%	5.6%	0%	0%	**4.6%**	-	0%	0%	0%	0%	**0%**	-	0%	1.4%	0%	0%	**1.3%**	-	1.8%
Bicycles on Road	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	1	0	0	**1**	-	1	0	0	0	**1**	-	3
% Bicycles on Road	0%	0%	0%	0%	**0%**	-	0%	0.8%	0%	0%	**0.7%**	-	0%	100%	0%	0%	**100%**	-	3.1%	0%	0%	0%	**0.1%**	-	0.2%
Pedestrians	-	-	-	-	-	58	-	-	-	-	-	71	-	-	-	-	-	73	-	-	-	-	-	71	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	100%	-

*Pedestrians and Bicycles on Crosswalk. L: Left, R: Right, T: Thru, U: U-Turn

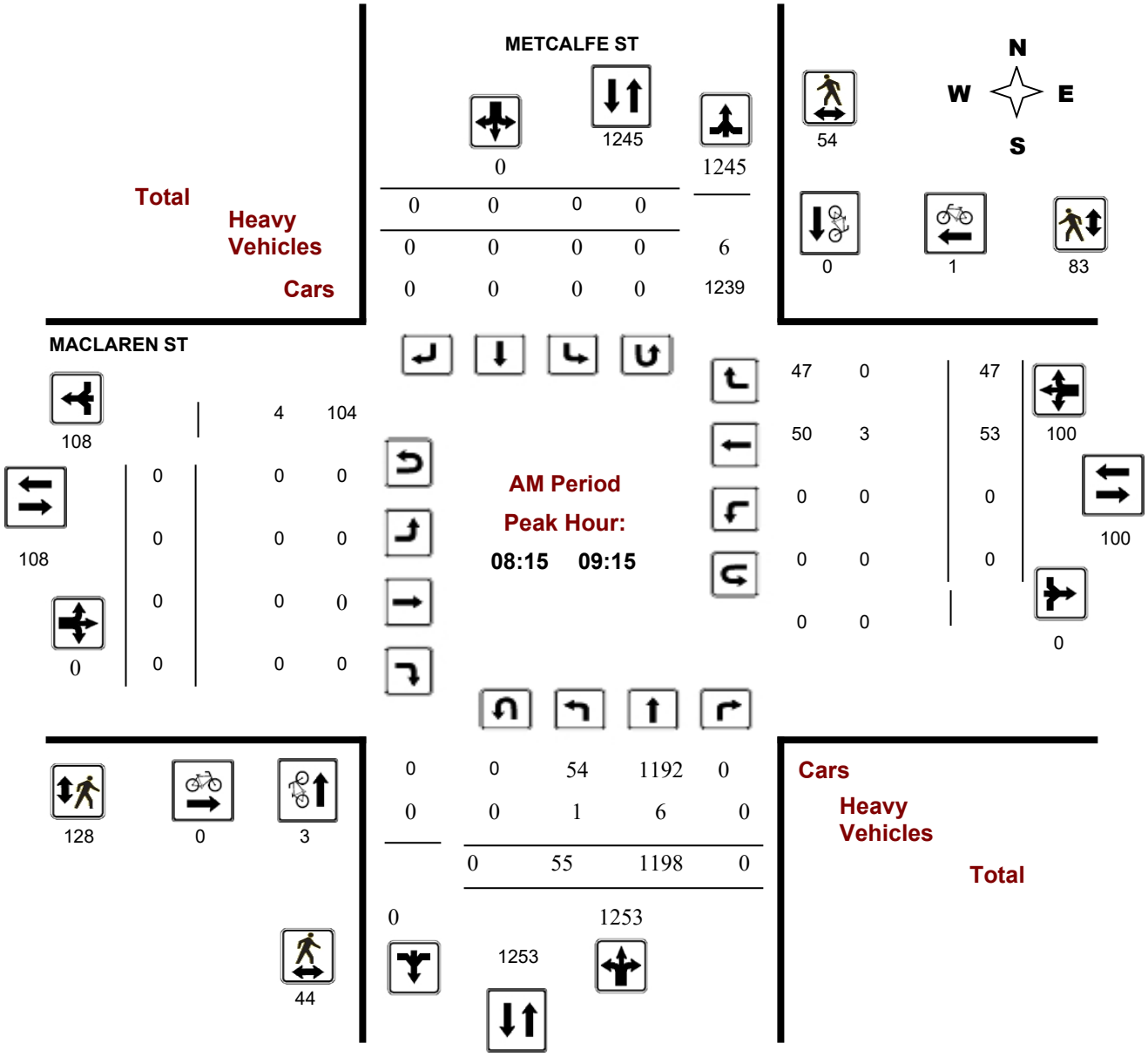
Transportation Services - Traffic Services

Turning Movement Count - Full Study Peak Hour Diagram

MACLAREN ST @ METCALFE ST

Survey Date: Tuesday, April 04, 2017
Start Time: 07:00

WO No: 36835
Device: Miovision



Comments

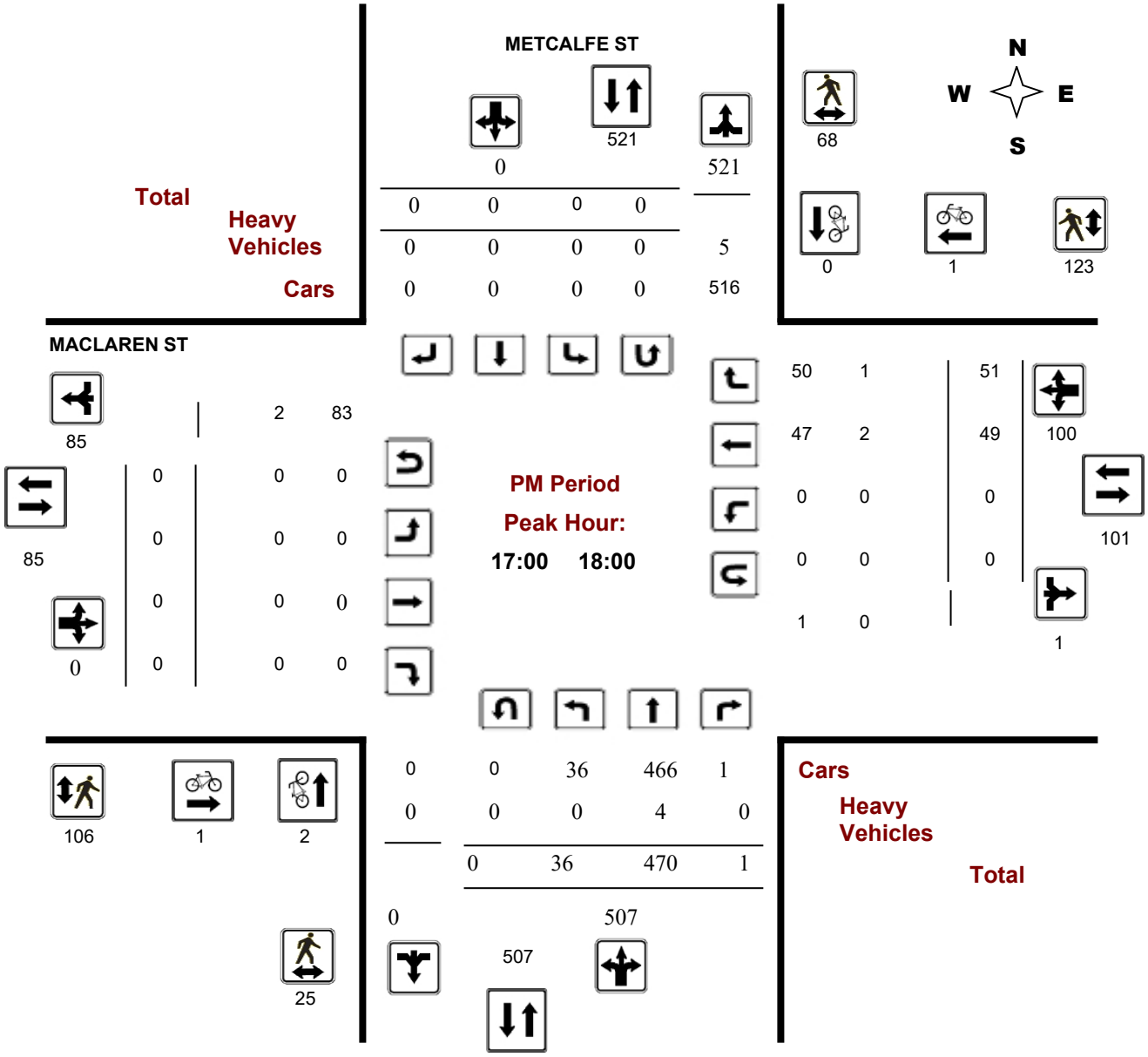
Transportation Services - Traffic Services

Turning Movement Count - Full Study Peak Hour Diagram

MACLAREN ST @ METCALFE ST

Survey Date: Tuesday, April 04, 2017
Start Time: 07:00

WO No: 36835
Device: Miovision



Comments

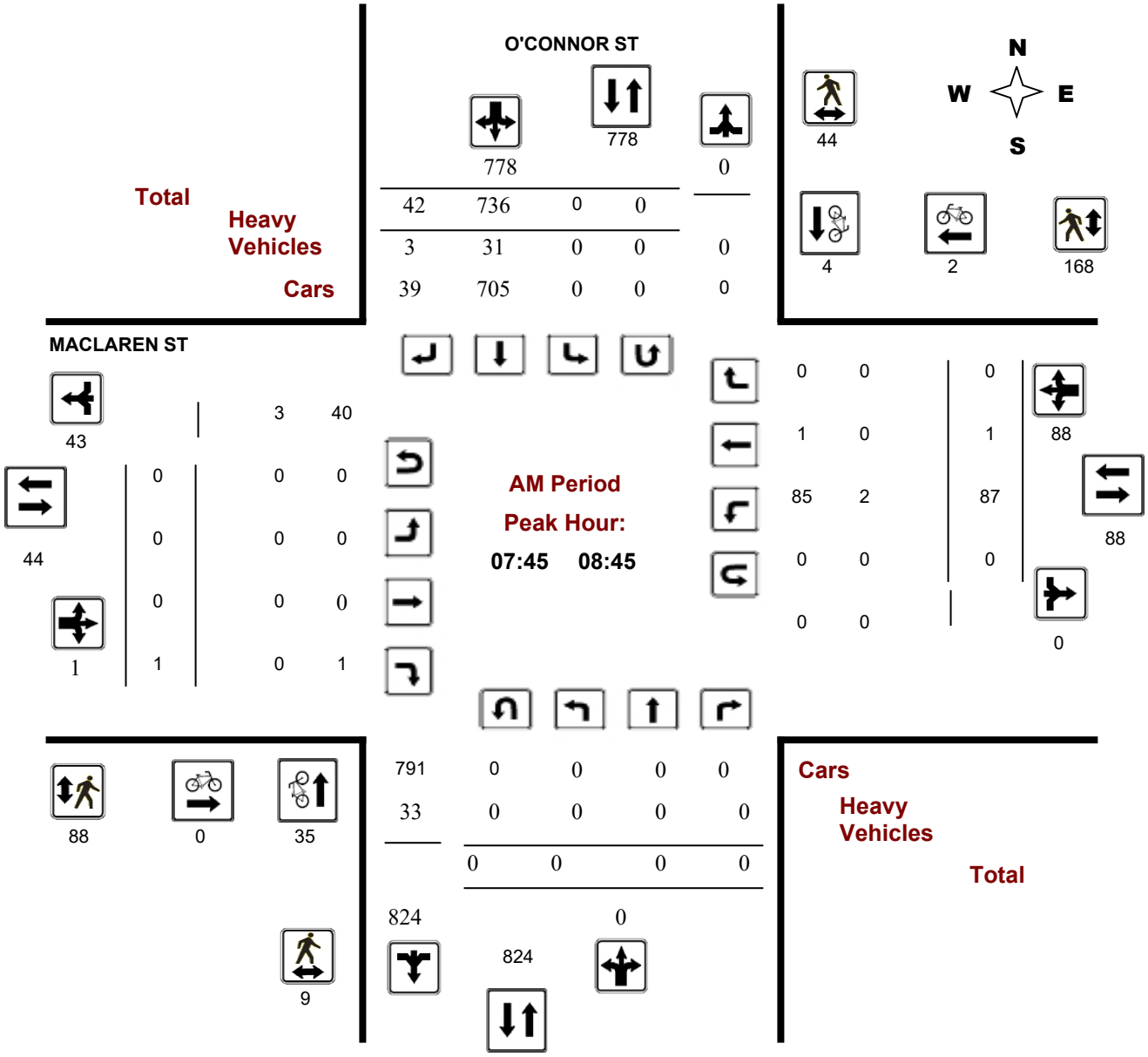
Transportation Services - Traffic Services

Turning Movement Count - Full Study Peak Hour Diagram

MACLAREN ST @ O'CONNOR ST

Survey Date: Thursday, March 21, 2019 **WO No:** 38457

Start Time: 07:00 **Device:** Miovision



Comments

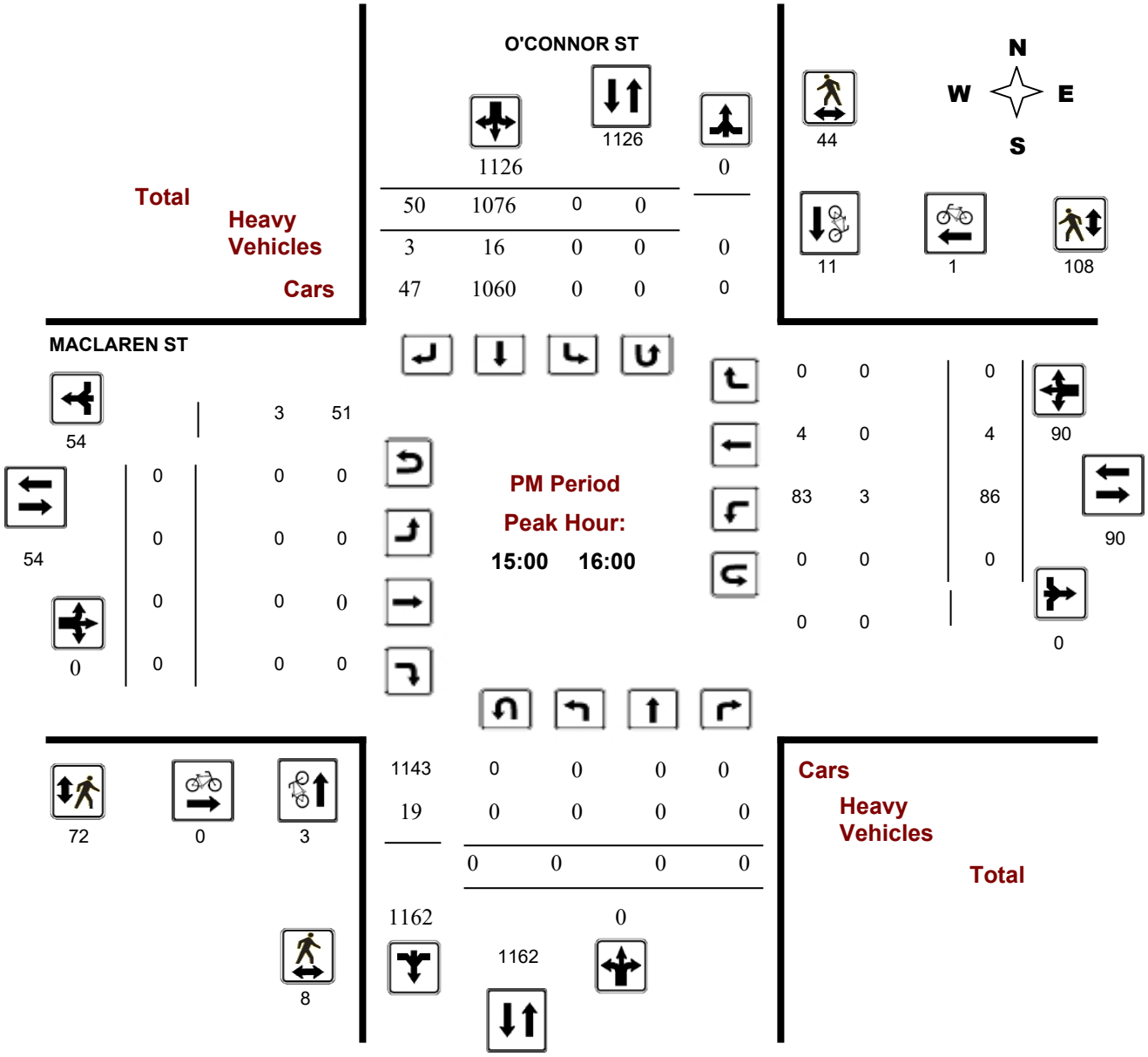
Transportation Services - Traffic Services

Turning Movement Count - Full Study Peak Hour Diagram

MACLAREN ST @ O'CONNOR ST

Survey Date: Thursday, March 21, 2019 **WO No:** 38457

Start Time: 07:00 **Device:** Miovision



Comments

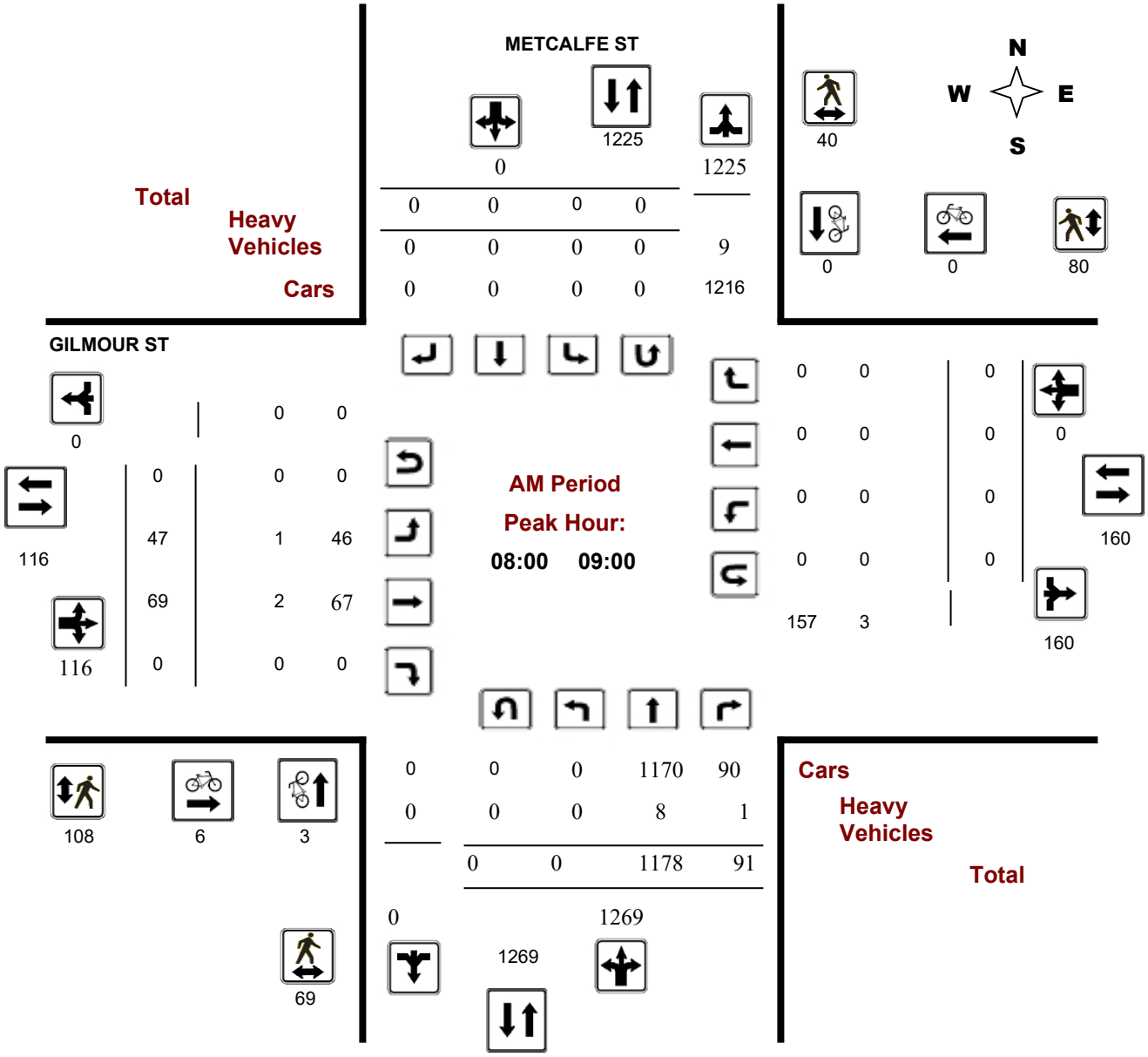
Transportation Services - Traffic Services

Turning Movement Count - Full Study Peak Hour Diagram

METCALFE ST @ GILMOUR ST

Survey Date: Tuesday, April 04, 2017
Start Time: 07:00

WO No: 36834
Device: Miovision



Comments

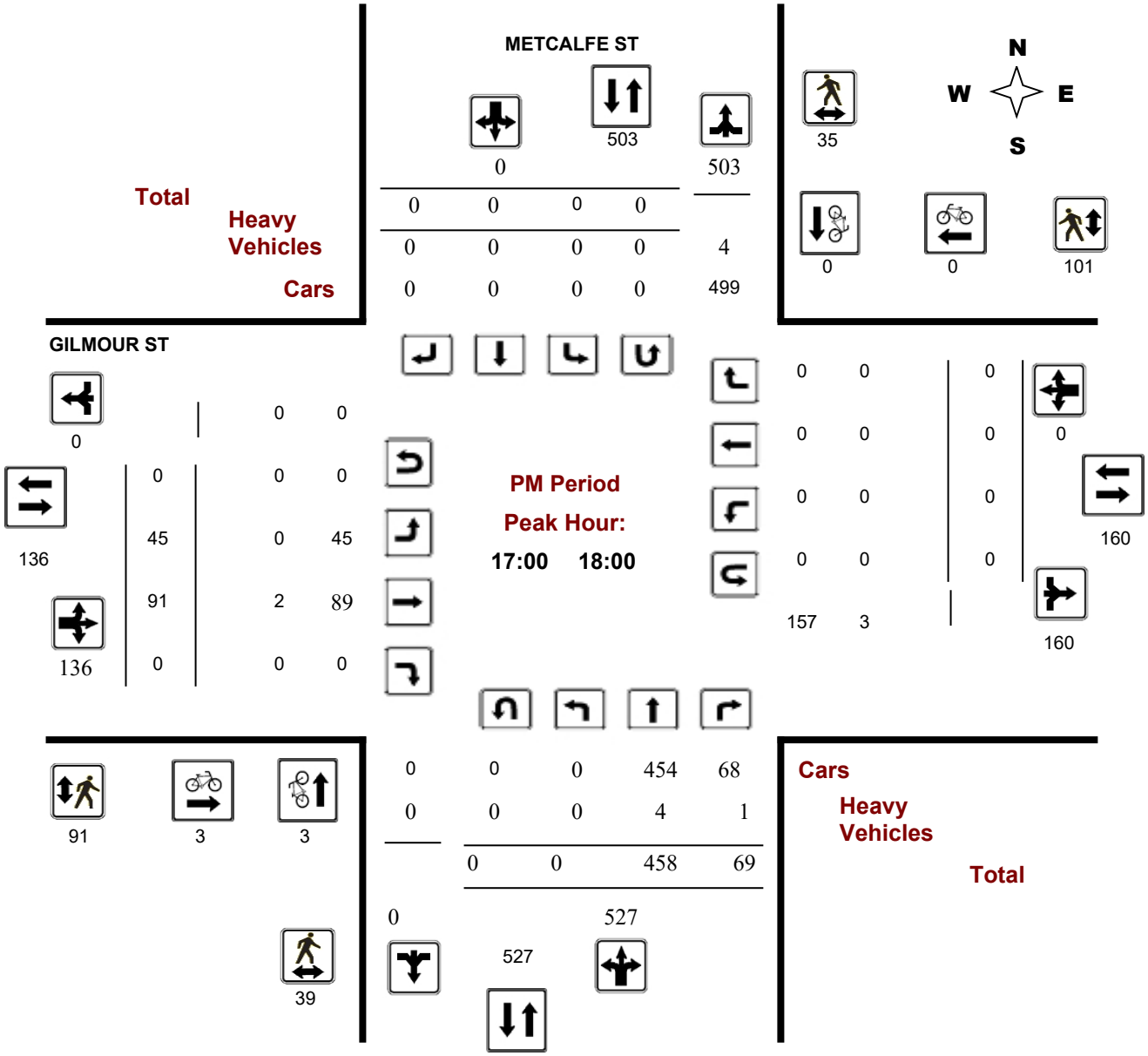
Transportation Services - Traffic Services

Turning Movement Count - Full Study Peak Hour Diagram

METCALFE ST @ GILMOUR ST

Survey Date: Tuesday, April 04, 2017
Start Time: 07:00

WO No: 36834
Device: Miovision



Comments

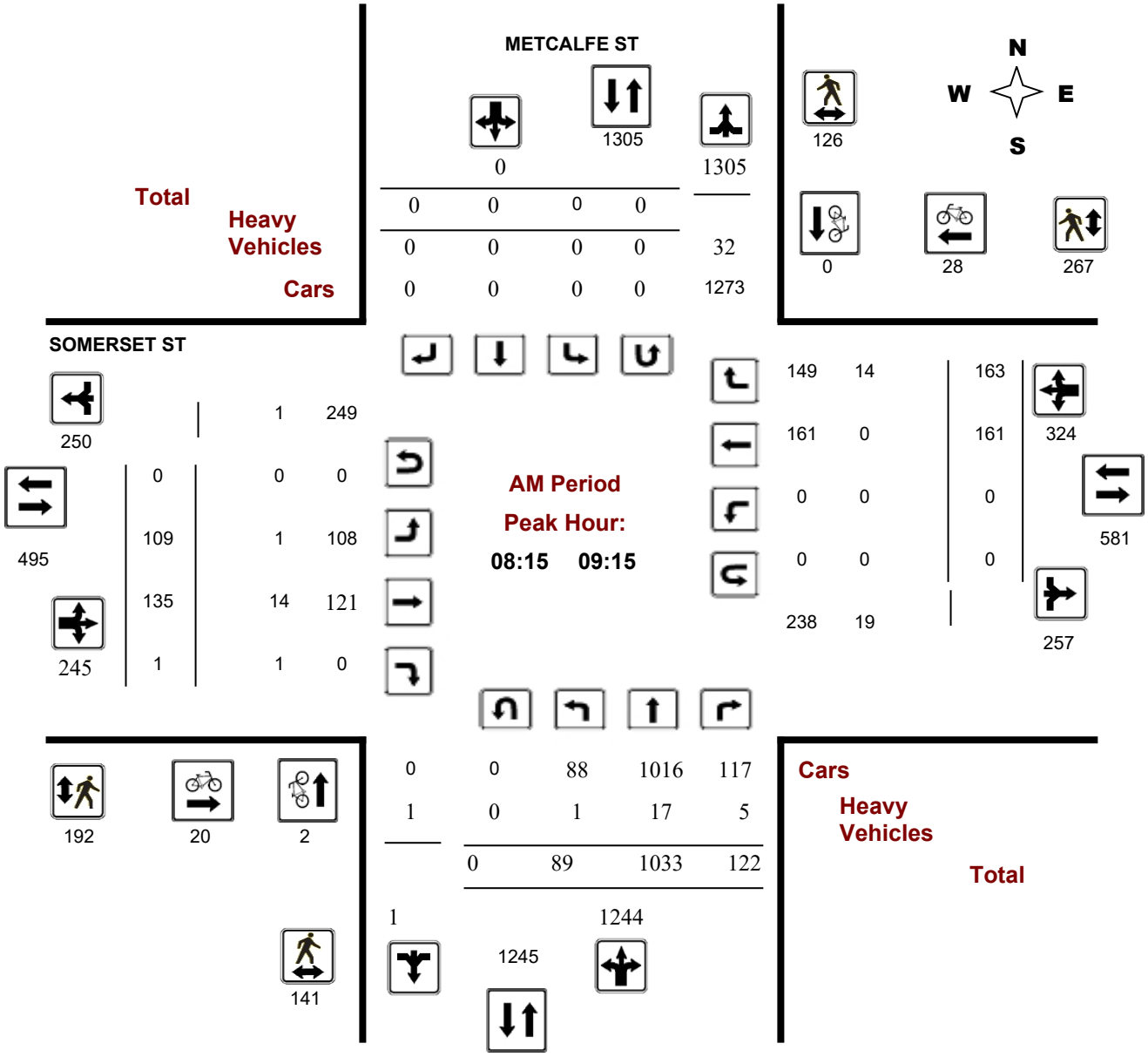
Transportation Services - Traffic Services

Turning Movement Count - Full Study Peak Hour Diagram

METCALFE ST @ SOMERSET ST

Survey Date: Thursday, May 02, 2019 **WO No:** 38599

Start Time: 07:00 **Device:** Miovision



Comments

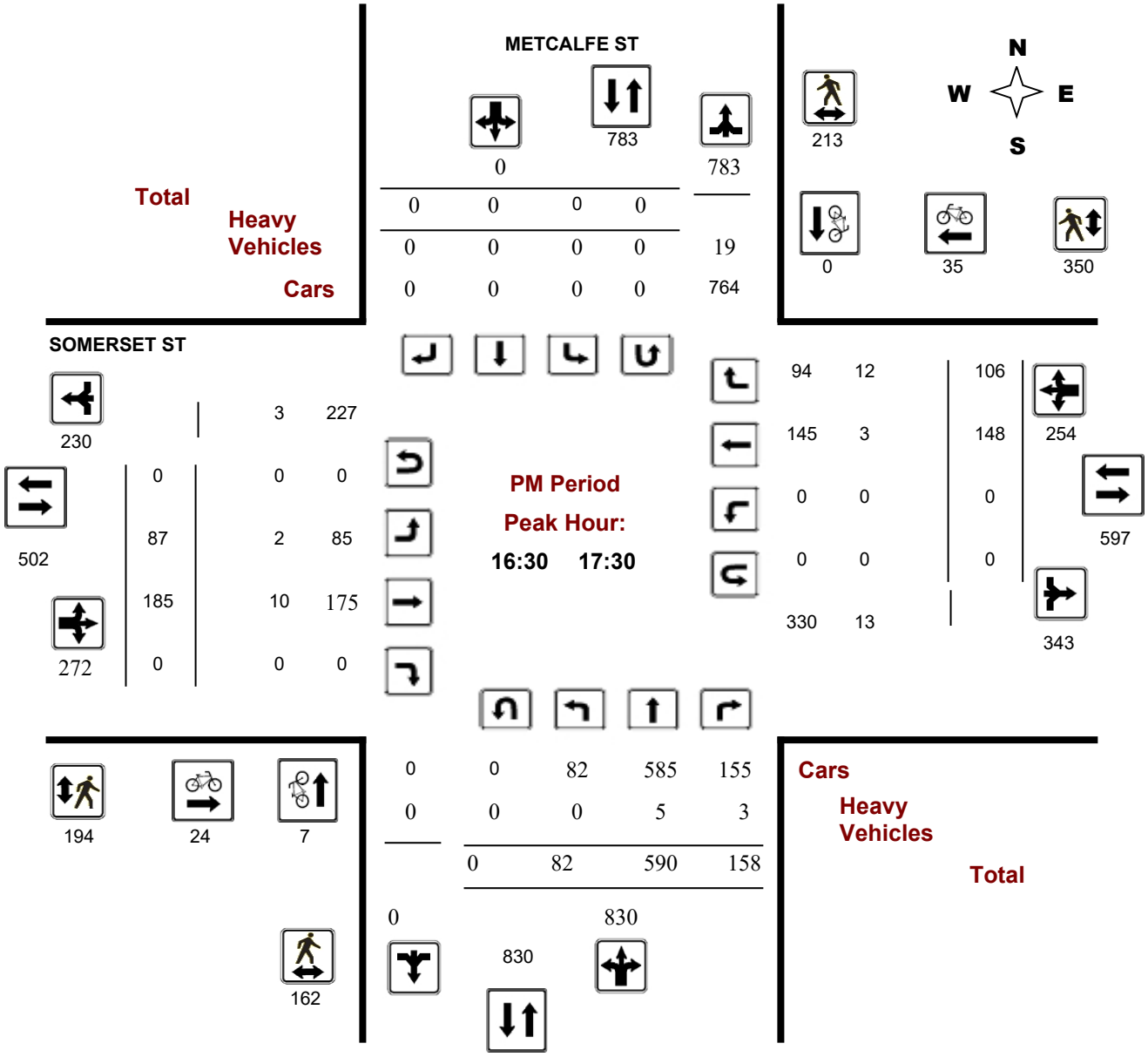
Transportation Services - Traffic Services

Turning Movement Count - Full Study Peak Hour Diagram

METCALFE ST @ SOMERSET ST

Survey Date: Thursday, May 02, 2019 **WO No:** 38599

Start Time: 07:00 **Device:** Miovision



Comments

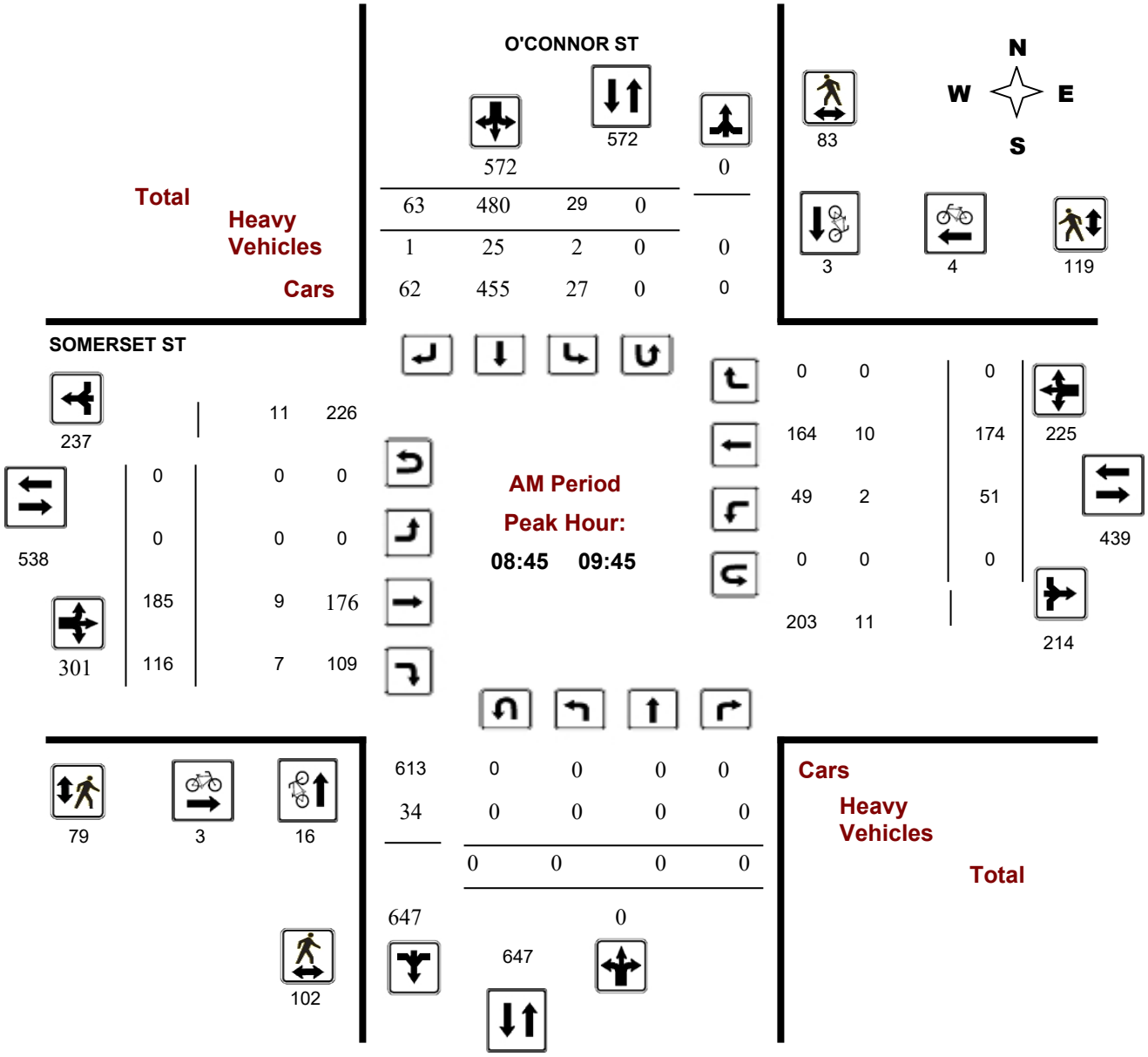
Transportation Services - Traffic Services

Turning Movement Count - Full Study Peak Hour Diagram

O'CONNOR ST @ SOMERSET ST

Survey Date: Tuesday, March 21, 2017 **WO No:** 36787

Start Time: 07:00 **Device:** Miovision



Comments

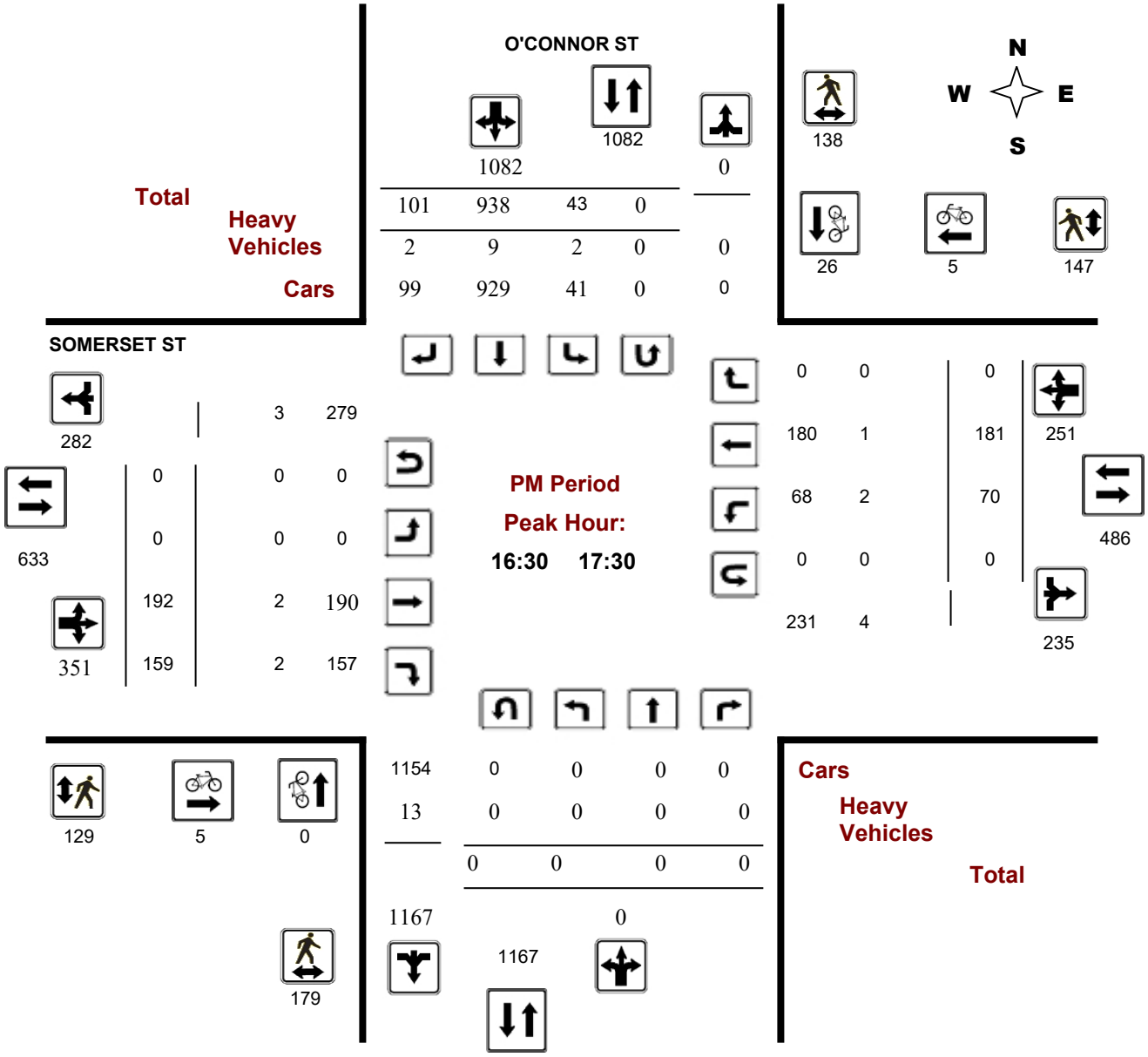
Transportation Services - Traffic Services

Turning Movement Count - Full Study Peak Hour Diagram

O'CONNOR ST @ SOMERSET ST

Survey Date: Tuesday, March 21, 2017 **WO No:** 36787

Start Time: 07:00 **Device:** Miovision



Comments

Parsons
1223 Michael St
Ottawa , ON,

Turn Count Summary

Location: **O'Connor St. at Existing Access. , Ottawa**
GPS Coordinates:
Date: **2019-07-09**
Day of week: **Tuesday**
Weather: **Sunny**
Analyst: **Juan Lavin**

Total vehicle traffic

Interval starts	SouthBound			Westbound			Northbound			Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
07:44	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45	8	7	0	1	0	0	0	47	0	0	0	0	63
08:00	7	7	0	0	0	0	0	51	0	0	0	0	65
08:15	2	8	0	2	0	0	0	71	0	0	0	0	83
08:30	8	7	0	1	0	0	0	72	0	0	0	0	88

Car traffic

Interval starts	SouthBound			Westbound			Northbound			Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
07:44	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45	8	0	0	1	0	0	0	0	0	0	0	0	9
08:00	7	0	0	0	0	0	0	0	0	0	0	0	7
08:15	2	0	0	2	0	0	0	0	0	0	0	0	4
08:30	8	0	0	1	0	0	0	1	0	0	0	0	10

Truck traffic

Interval starts	SouthBound			Westbound			Northbound			Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
07:44	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45	0	0	0	0	0	0	0	0	0	0	0	0	0
08:00	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycle traffic

Interval starts	SouthBound			Westbound			Northbound			Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
07:44	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45	0	7	0	0	0	0	0	47	0	0	0	0	54
08:00	0	7	0	0	0	0	0	51	0	0	0	0	58
08:15	0	8	0	0	0	0	0	71	0	0	0	0	79
08:30	0	7	0	0	0	0	0	71	0	0	0	0	78

Pedestrian volumes

Interval starts	NE			NW			SW			SE			Total
	Left	Right	Total	Left	Right	Total	Left	Right	Total	Left	Right	Total	
07:44	0	0	0	0	0	0	0	0	0	0	3	3	3
07:45	5	0	5	0	0	0	0	0	0	0	35	35	40
08:00	15	0	15	0	0	0	0	0	0	0	22	22	37
08:15	10	0	10	0	0	0	0	0	0	0	36	36	46
08:30	8	0	8	0	0	0	0	0	0	0	43	43	51

Intersection Peak Hour

07:45 - 08:45

	SouthBound			Westbound			Northbound			Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Vehicle Total	25	29	0	4	0	0	0	241	0	0	0	0	299
Factor	0.78	0.91	0.00	0.50	0.00	0.00	0.00	0.84	0.00	0.00	0.00	0.00	0.85
Approach Factor	0.90			0.50			0.84			0.00			

Peak Hour Vehicle Summary

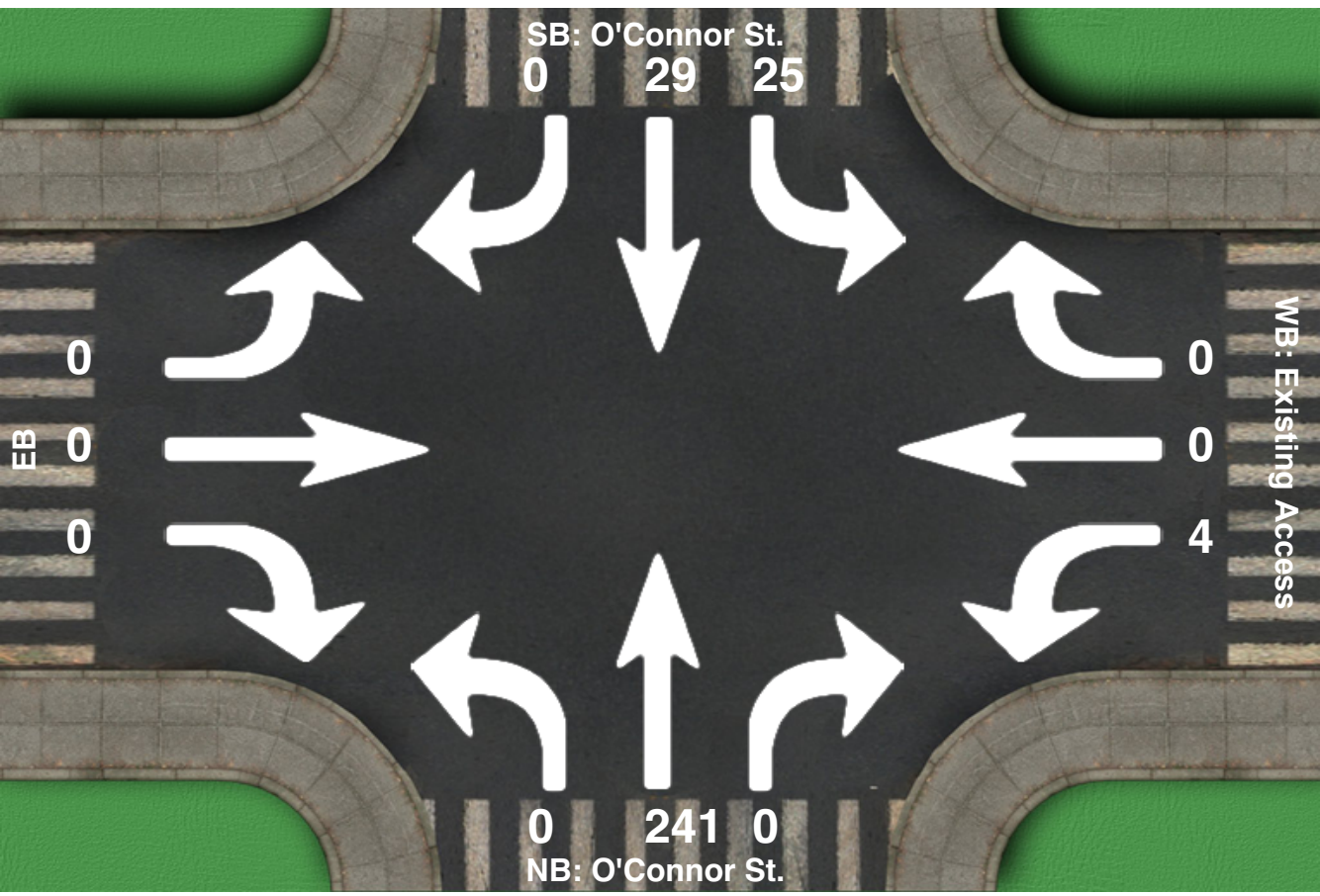
Vehicle	SouthBound			Westbound			Northbound			Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Car	25	0	0	4	0	0	0	1	0	0	0	0	30
Truck	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicycle	0	29	0	0	0	0	0	240	0	0	0	0	269

Peak Hour Pedestrians

	NE			NW			SW			SE			Total
	Left	Right	Total	Left	Right	Total	Left	Right	Total	Left	Right	Total	
Pedestrians	38	0	38	0	0	0	0	0	0	0	136	136	174

Intersection Peak Hour

Location: O'Connor St. at Existing Access , Ottawa
GPS Coordinates:
Date: 2019-07-09
Day of week: Tuesday
Weather: Sunny
Analyst: Juan Lavin



Intersection Peak Hour

07:45 - 08:45

	SouthBound			Westbound			Northbound			Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Vehicle Total	25	29	0	4	0	0	0	241	0	0	0	0	299
Factor	0.78	0.91	0.00	0.50	0.00	0.00	0.00	0.84	0.00	0.00	0.00	0.00	0.85
Approach Factor	0.90			0.50			0.84			0.00			

Parsons
1223 Michael St
Ottawa , ON,

Turn Count Summary

Location: **O'Connor St. at Existing Access , Ottawa**
GPS Coordinates:
Date: **2019-07-09**
Day of week: **Tuesday**
Weather: **Sunny**
Analyst: **Juan Lavin**

Total vehicle traffic

Interval starts	SouthBound			Westbound			Northbound			Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
16:00	0	31	0	10	0	0	0	11	0	0	0	0	52
16:15	1	39	0	4	0	0	0	10	0	0	0	0	54
16:30	1	48	0	6	0	0	0	5	0	0	0	0	60
16:45	0	47	0	8	0	0	0	14	0	0	0	0	69
17:00	0	2	0	0	0	0	0	1	0	0	0	0	3

Car traffic

Interval starts	SouthBound			Westbound			Northbound			Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
16:00	0	0	0	10	0	0	0	0	0	0	0	0	10
16:15	1	0	0	4	0	0	0	0	0	0	0	0	5
16:30	1	0	0	6	0	0	0	0	0	0	0	0	7
16:45	0	0	0	8	0	0	0	0	0	0	0	0	8
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0

Truck traffic

Interval starts	SouthBound			Westbound			Northbound			Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
16:00	0	0	0	0	0	0	0	0	0	0	0	0	0
16:15	0	0	0	0	0	0	0	0	0	0	0	0	0
16:30	0	0	0	0	0	0	0	0	0	0	0	0	0
16:45	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0

Bicycle traffic

Interval starts	SouthBound			Westbound			Northbound			Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
16:00	0	31	0	0	0	0	0	11	0	0	0	0	42
16:15	0	39	0	0	0	0	0	10	0	0	0	0	49
16:30	0	48	0	0	0	0	0	5	0	0	0	0	53
16:45	0	47	0	0	0	0	0	14	0	0	0	0	61
17:00	0	2	0	0	0	0	0	1	0	0	0	0	3

Pedestrian volumes

Interval starts	NE			NW			SW			SE			Total
	Left	Right	Total	Left	Right	Total	Left	Right	Total	Left	Right	Total	
16:00	28	0	28	0	0	0	0	0	0	0	6	6	34
16:15	27	0	27	0	0	0	0	0	0	0	6	6	33
16:30	28	0	28	0	0	0	0	0	0	0	15	15	43
16:45	19	0	19	0	0	0	0	0	0	0	9	9	28
17:00	0	0	0	0	0	0	0	0	0	0	0	0	0

Intersection Peak Hour

16:00 - 17:00

	SouthBound			Westbound			Northbound			Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Vehicle Total	2	165	0	28	0	0	0	40	0	0	0	0	235
Factor	0.50	0.86	0.00	0.70	0.00	0.00	0.00	0.71	0.00	0.00	0.00	0.00	0.85
Approach Factor	0.85			0.70			0.71			0.00			

Peak Hour Vehicle Summary

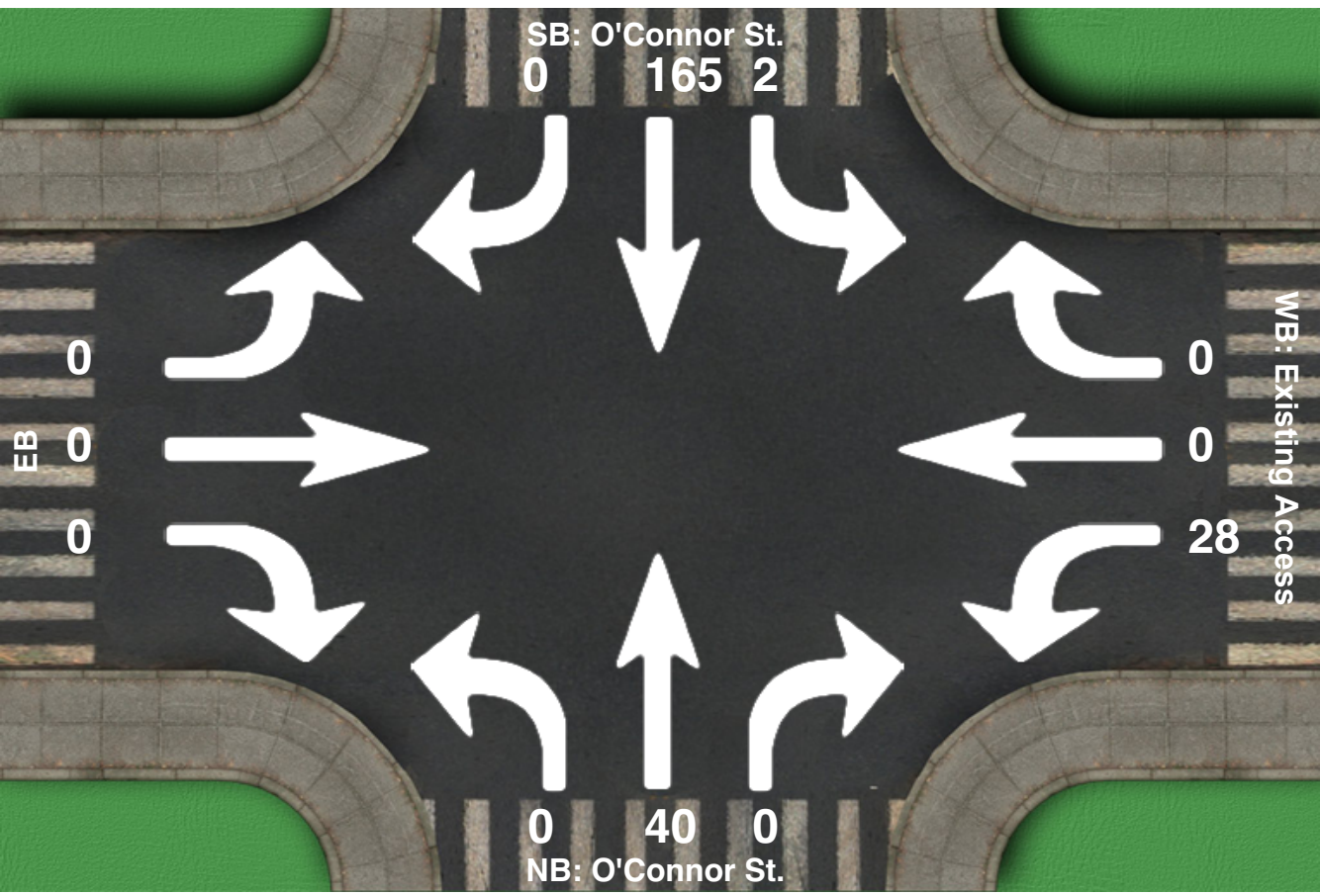
Vehicle	SouthBound			Westbound			Northbound			Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Car	2	0	0	28	0	0	0	0	0	0	0	0	30
Truck	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicycle	0	165	0	0	0	0	0	40	0	0	0	0	205

Peak Hour Pedestrians

	NE			NW			SW			SE			Total
	Left	Right	Total	Left	Right	Total	Left	Right	Total	Left	Right	Total	
Pedestrians	102	0	102	0	0	0	0	0	0	0	36	36	138

Intersection Peak Hour

Location: O'Connor St. at Existing Access, Ottawa
GPS Coordinates:
Date: 2019-07-09
Day of week: Tuesday
Weather: Sunny
Analyst: Juan Lavin



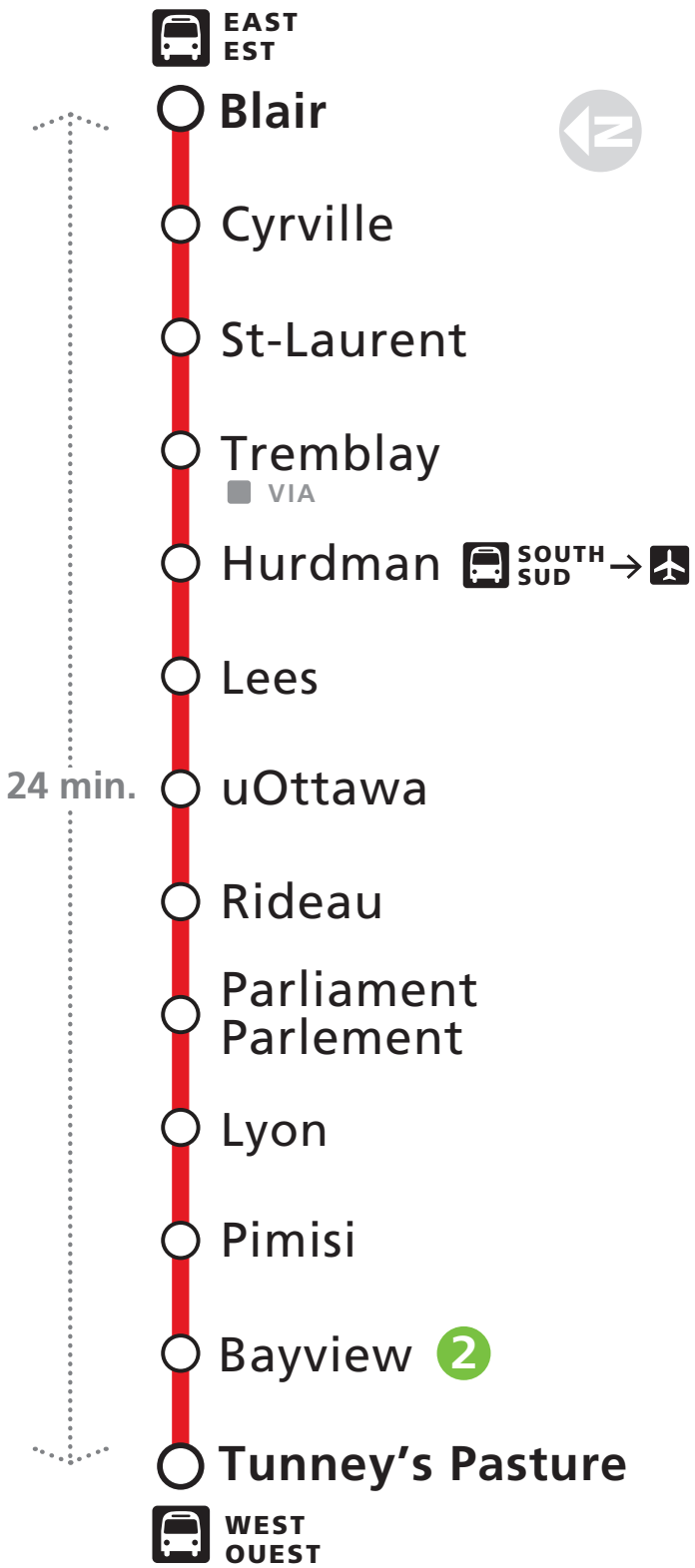
Intersection Peak Hour

16:00 - 17:00

	SouthBound			Westbound			Northbound			Eastbound			Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
Vehicle Total	2	165	0	28	0	0	0	40	0	0	0	0	235
Factor	0.50	0.86	0.00	0.70	0.00	0.00	0.00	0.71	0.00	0.00	0.00	0.00	0.85
Approach Factor	0.85			0.70			0.71			0.00			

Appendix C:

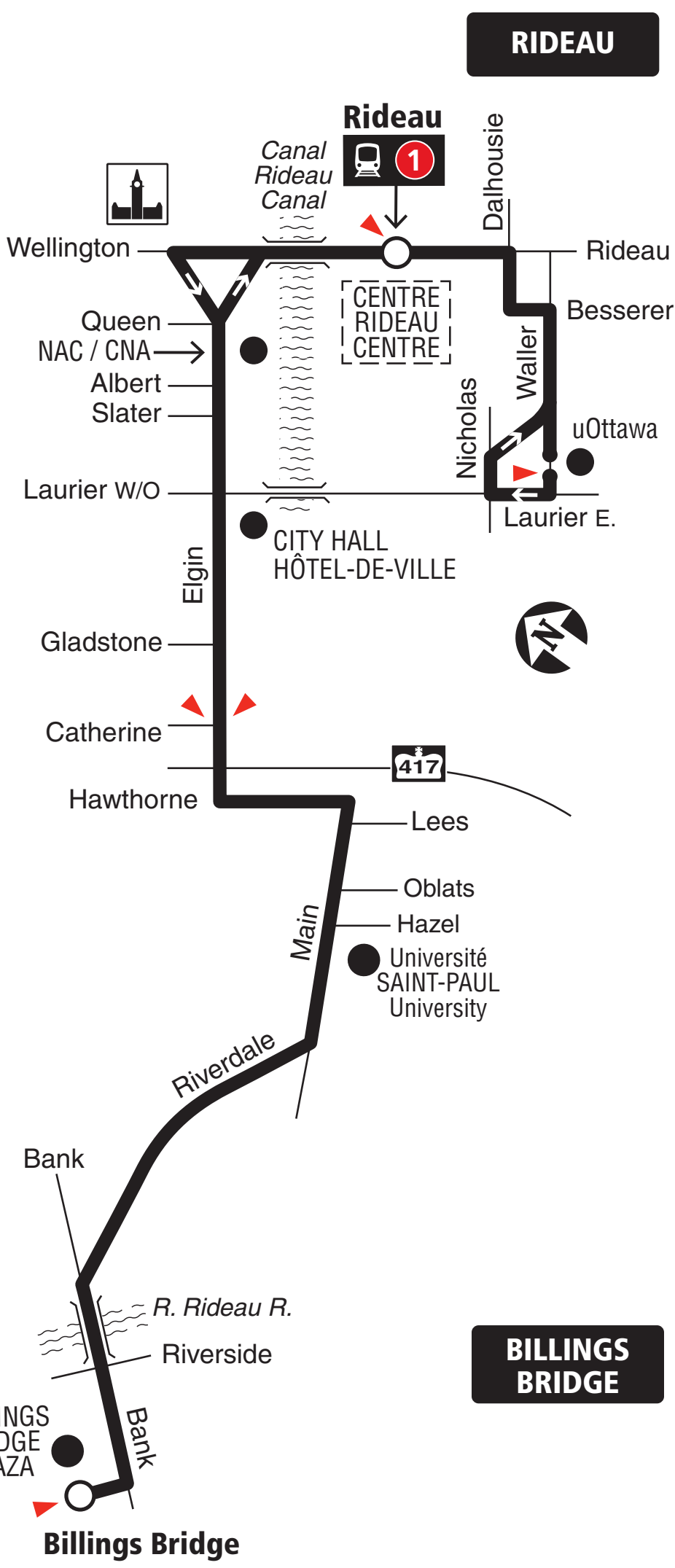
Bus Route Maps


EAST
EST
Blair
Cyrville
St-Laurent
Tremblay
VIA
Hurdman
SOUTH
SUD
Lees
24 min.
uOttawa
Rideau
Parliament
Parlement
Lyon
Pimisi
Bayview
2
Tunney's Pasture
WEST
OUEST

5 BILLINGS BRIDGE / RIDEAU

Local

7 days a week / 7 jours par semaine
All day service
Service toute la journée



○ Station

▲ Timepoint / Heures de passage

08.2020

Schedule / Horaire 613-560-1000
Text / Texto* 560560
plus your four digit bus stop number / *plus* votre numéro d'arrêt à quatre chiffres
*Standard message rates may apply / Les tarifs réguliers de messagerie texte peuvent s'appliquer

Customer Service
Service à la clientèle **613-560-5000**

Lost and Found / Objets perdus..... **613-563-4011**

Security / Sécurité **613-741-2478**

Effective April 26, 2020
En vigueur 26 avril 2020

OC Transpo

INFO 613-560-5000
octranspo.com

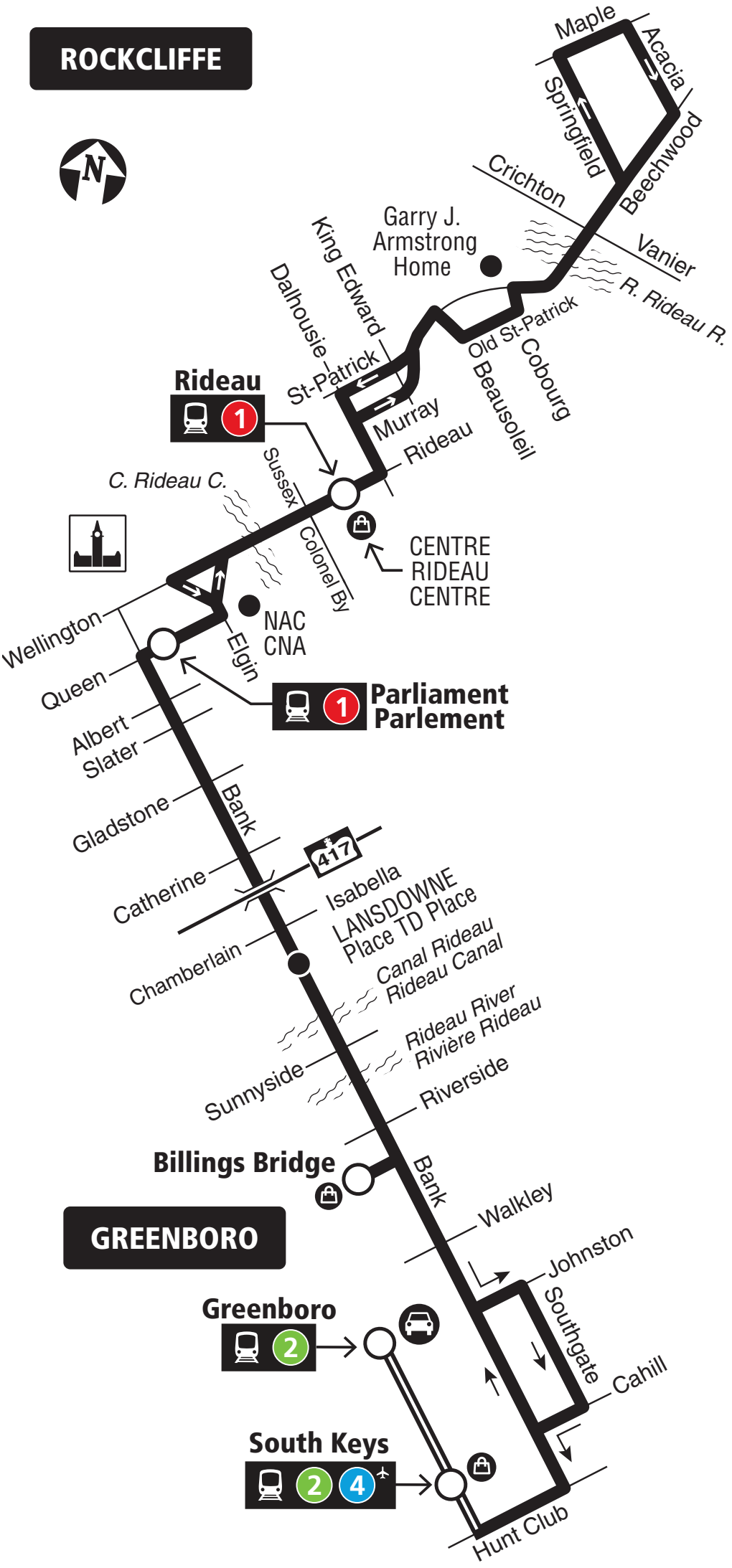
6 ROCKCLIFFE / GREENBORO

Fréquent

7 days a week / 7 jours par semaine

All day service

Service toute la journée



2024.12

Transitway & Station

Park & Ride / Parc relais

Shopping Centre / Centre commercial

2025.01

Schedule / Horaire ……613-560-1000

Text / Texto* ……560560

plus your four digit bus stop number / *plus* votre numéro d'arrêt à quatre chiffres

*Standard message rates may apply / Les tarifs réguliers de messagerie texte peuvent s'appliquer

Customer Service / Service à la clientèle…..**613-560-5000**

Security / Sécurité……**613-741-2478**

Lost and Found……**octranspo.com/lostandfound**

Objets perdus……**octranspo.com/objetsperdus**

Effective January 6, 2025

En vigueur 6 janvier 2025

OC Transpo

INFO 613-560-5000

octranspo.com

7

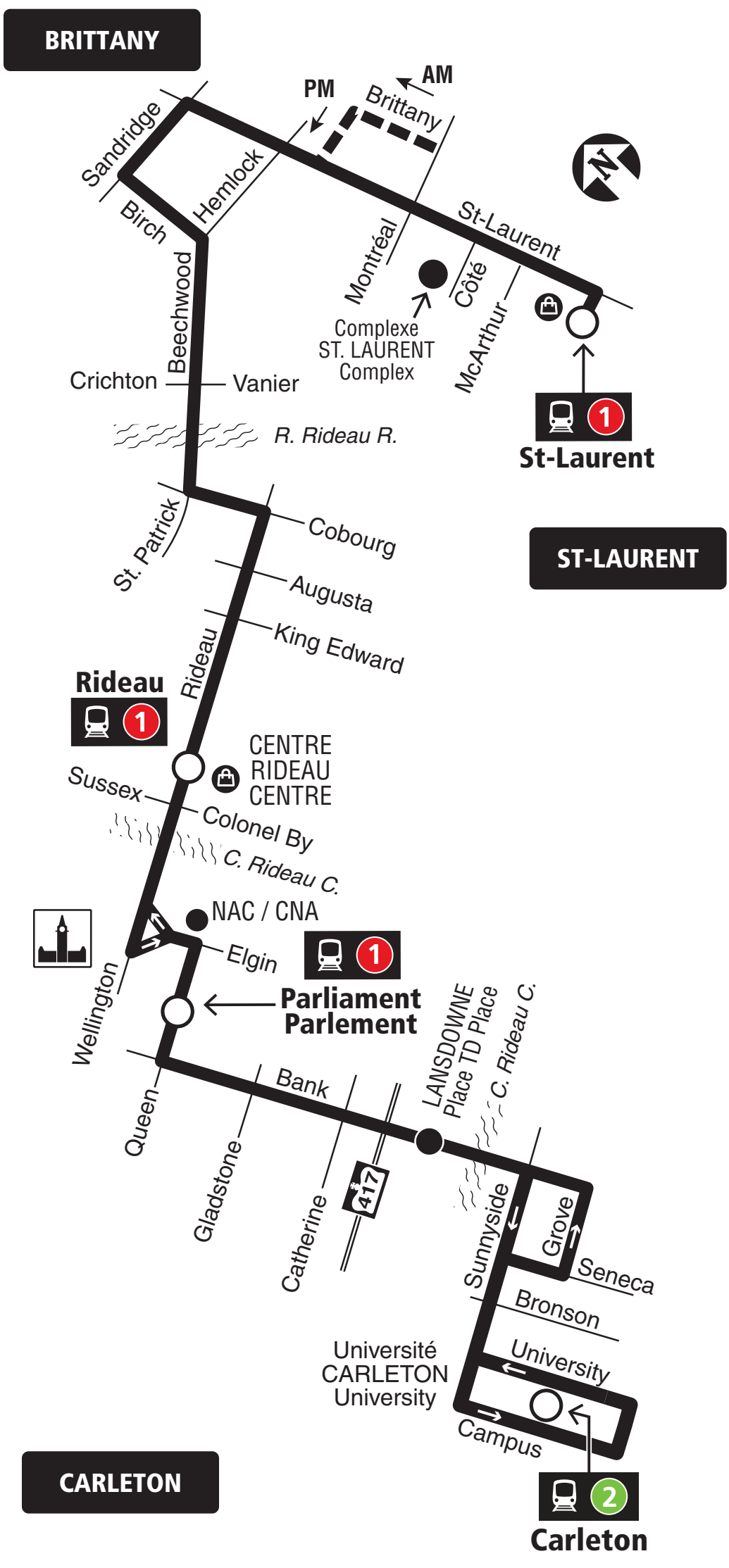
CARLETON
ST-LAURENT

Fréquent

7 days a week / 7 jours par semaine

All day service

Service toute la journée



2024.12

- Station
- Peak periods only / Périodes de pointe seulement
- Shopping Centre / Centre commercial

2025.01

Schedule / Horaire 613-560-1000

Text / Texto* 560560

plus your four digit bus stop number / *plus* votre numéro d'arrêt à quatre chiffres

*Standard message rates may apply / Les tarifs réguliers de messagerie texte peuvent s'appliquer

Customer Service / Service à la clientèle..... **613-560-5000**

Security / Sécurité..... **613-741-2478**

Lost and Found..... **octranspo.com/lostandfound**

Objets perdus..... **octranspo.com/objetsperdus**

Effective January 6, 2025

En vigueur 6 janvier 2025

OC Transpo

INFO 613-560-5000

octranspo.com

11

LINCOLN FIELDS
BAYSHORE

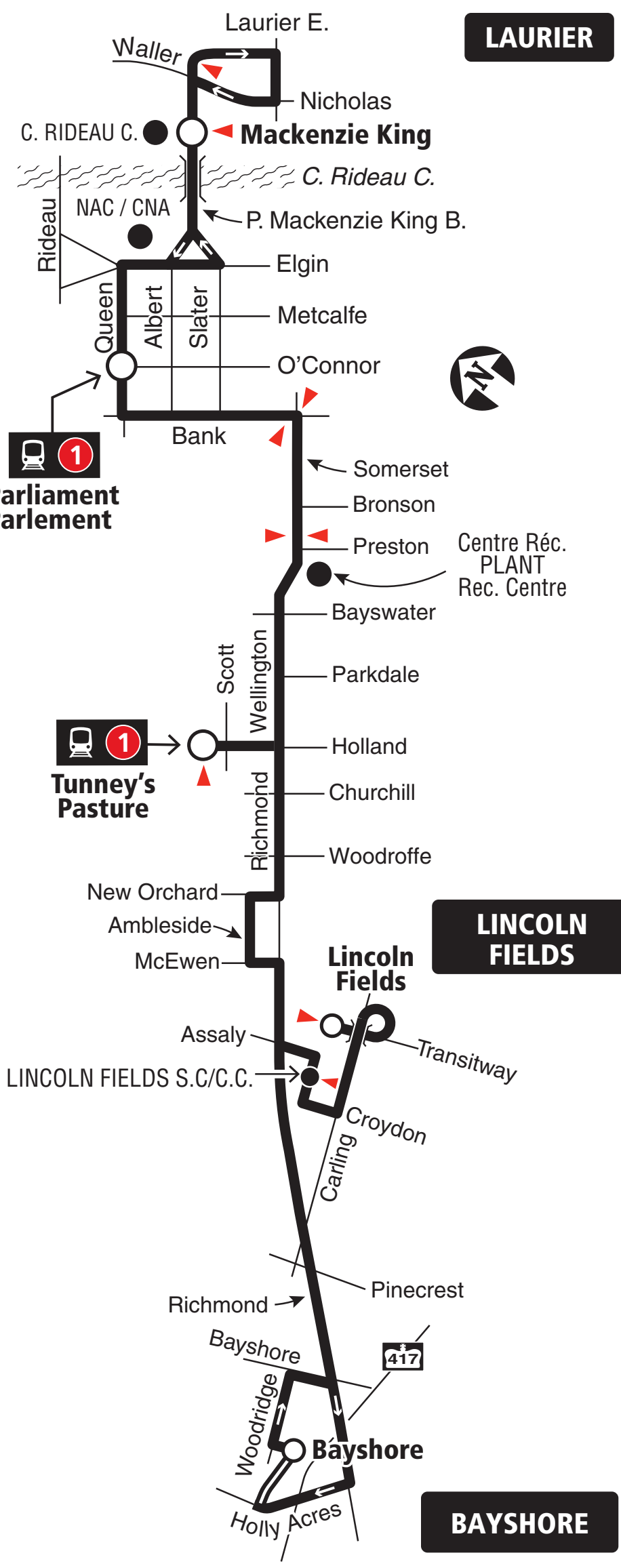
LAURIER

Fréquent

7 days a week / 7 jours par semaine

All day service

Service toute la journée



12.2023

Transitway & Station

Timepoint / Heures de passage

12.2023

Schedule / Horaire 613-560-1000

Text / Texto* 560560

plus your four digit bus stop number / *plus* votre numéro d'arrêt à quatre chiffres

*Standard message rates may apply / Les tarifs réguliers de messagerie texte peuvent s'appliquer

Customer Service
Service à la clientèle **613-560-5000**

Lost and Found / Objets perdus..... **613-563-4011**

Security / Sécurité **613-741-2478**

Effective December 24, 2023

En vigueur 24 décembre 2023

OC Transpo

INFO 613-560-5000
octranspo.com

14

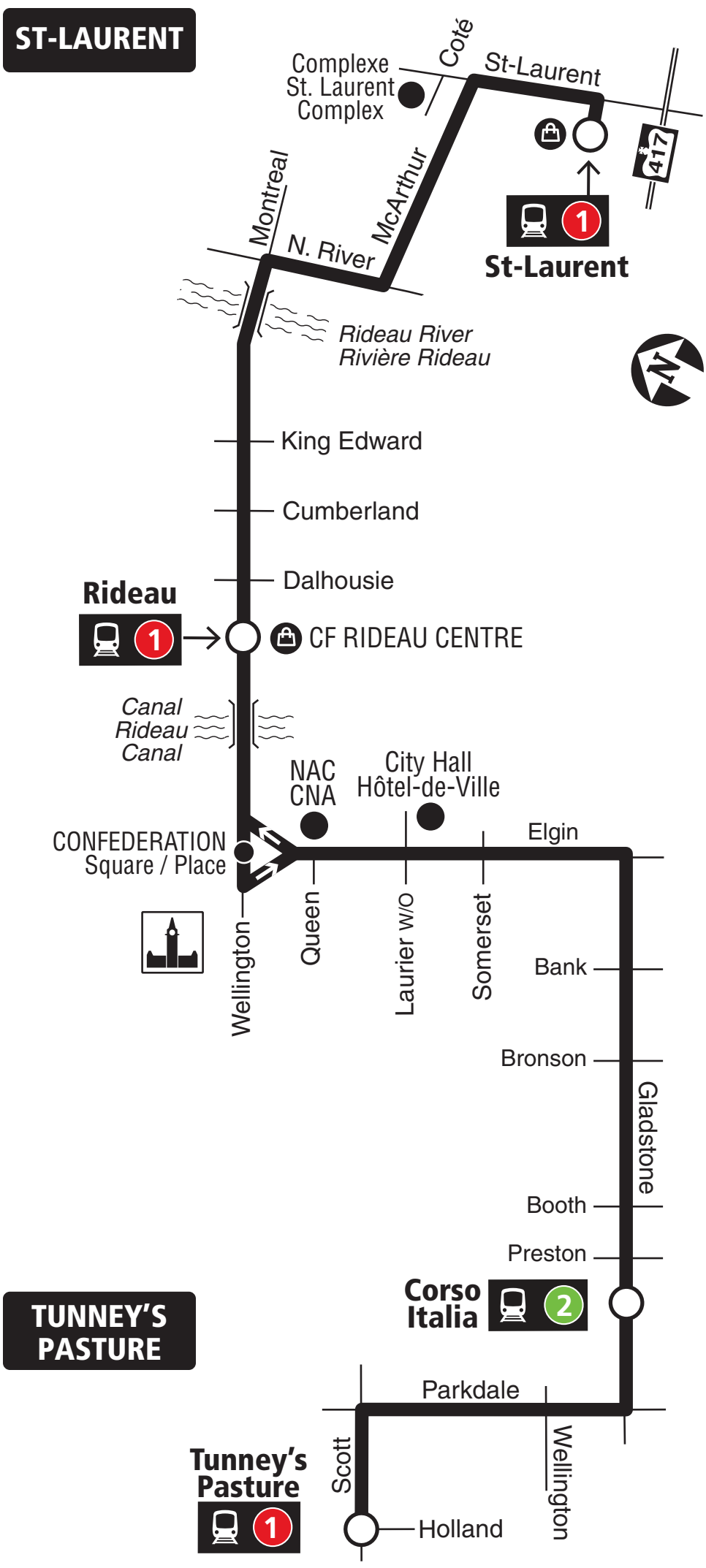
ST-LAURENT
TUNNEY'S PASTURE

Fréquent

7 days a week / 7 jours par semaine

All day service

Service toute la journée



Station

Shopping Centre / Centre commercial

2024.12

2025.01

Schedule / Horaire 613-560-1000

Text / Texto*.....560560

plus your four digit bus stop number / *plus* votre numéro d'arrêt à quatre chiffres

*Standard message rates may apply / Les tarifs réguliers de messagerie texte peuvent s'appliquer

Customer Service / Service à la clientèle.....**613-560-5000**

Security / Sécurité.....**613-741-2478**

Lost and Found.....**octranspo.com/lostandfound**

Objets perdus.....**octranspo.com/objetsperdus**

Effective January 6, 2025

En vigueur 6 janvier 2025

OC Transpo

INFO 613-560-5000

octranspo.com

114

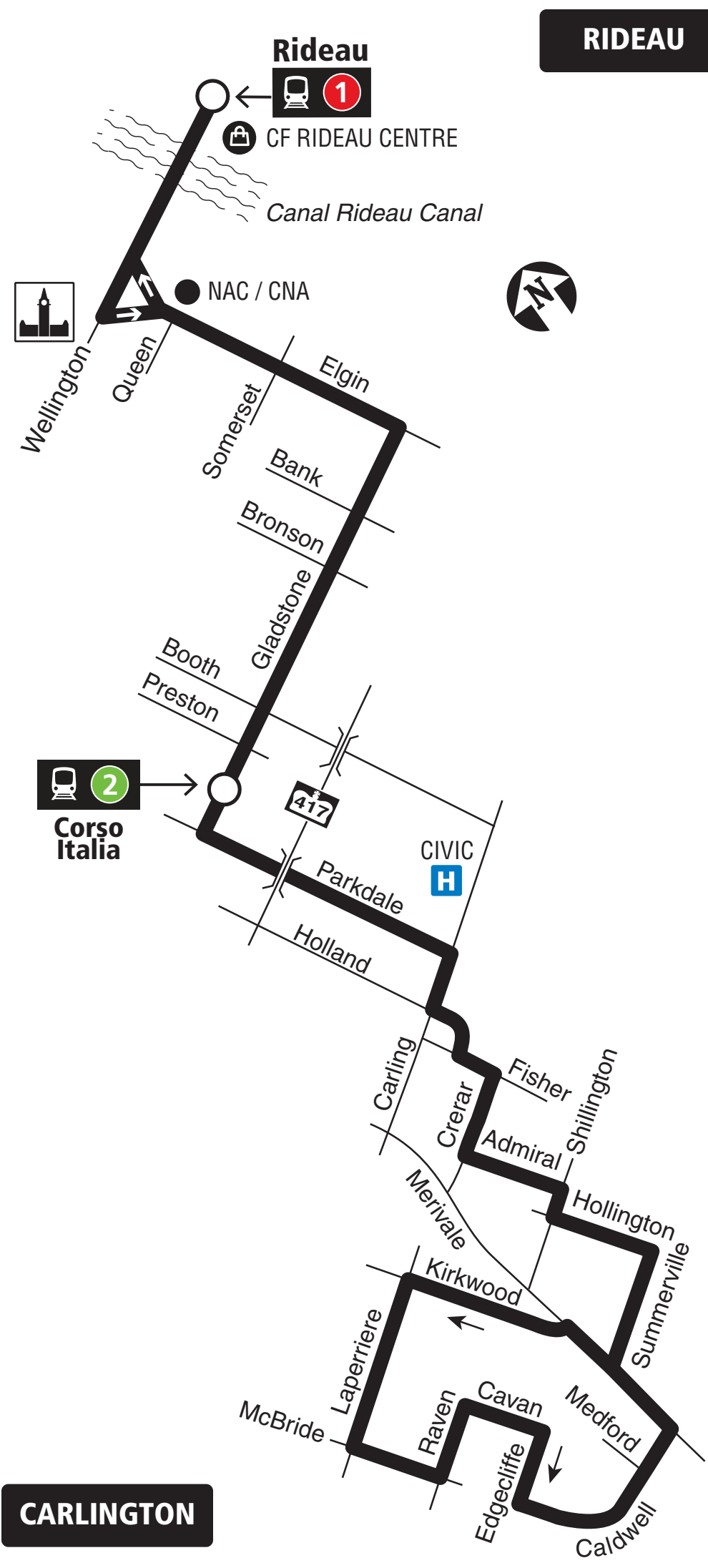
CARLINGTON
RIDEAU

Local

Monday to Friday / Lundi au vendredi

Selected trips only

Trajets sélectionnés seulement



Station

Shopping Centre / Centre commercial

2025.01

Schedule / Horaire 613-560-1000

Text / Texto* 560560

plus your four digit bus stop number / *plus* votre numéro d'arrêt à quatre chiffres

*Standard message rates may apply / Les tarifs réguliers de messagerie texte peuvent s'appliquer

Customer Service / Service à la clientèle..... **613-560-5000**

Security / Sécurité..... **613-741-2478**

Lost and Found..... **octranspo.com/lostandfound**

Objets perdus..... **octranspo.com/objetsperdus**

Effective January 6, 2025

En vigueur 6 janvier 2025

OC Transpo

INFO 613-560-5000

octranspo.com

Appendix D:

Collision Analysis

Total Area

Classification of Accident	Rear End	Turning Movement	Sideswipe	Angle	Approaching	SMV other	SMV unattended vehicle	Other	Total	
P.D. only	19	35	46	14	0	4	17	1	136	83%
Non-fatal injury	0	8	3	9	0	7	0	1	28	17%
Non-reportable	0	0	0	0	0	0	0	0	0	0%
Total	**19**	**43**	**49**	**23**	**0**	**11**	**17**	**2**	**164**	100%
	#4 or 12%	#2 or 26%	#1 or 30%	#3 or 14%	#8 or 0%	#6 or 7%	#5 or 10%	#7 or 1%		

METCALFE ST/SOMERSET ST

Years	Total # Collisions	24 Hr AADT Veh Volume	Days
2018-2022	16	n/a	1825

Classification of Accident	Rear End	Turning Movement	Sideswipe	Angle	Approaching	SMV other	SMV unattended vehicle	Other	Total	
P.D. only	0	6	4	2	0	0	0	1	13	81%
Non-fatal injury	0	0	0	2	0	1	0	0	3	19%
Non-reportable	0	0	0	0	0	0	0	0	0	0%
Total	**0**	**6**	**4**	**4**	**0**	**1**	**0**	**1**	**16**	100%
	0%	38%	25%	25%	0%	6%	0%	6%		

METCALFE ST/GILMOUR ST

Years	Total # Collisions	24 Hr AADT Veh Volume	Days
2018-2022	4	n/a	1825

Classification of Accident	Rear End	Turning Movement	Sideswipe	Angle	Approaching	SMV other	SMV unattended vehicle	Other	Total	
P.D. only	1	1	1	1	0	0	0	0	4	100%
Non-fatal injury	0	0	0	0	0	0	0	0	0	0%
Non-reportable	0	0	0	0	0	0	0	0	0	0%
Total	**1**	**1**	**1**	**1**	**0**	**0**	**0**	**0**	**4**	100%
	25%	25%	25%	25%	0%	0%	0%	0%		

METCALFE ST/WAVERLEY ST

Years	Total # Collisions	24 Hr AADT Veh Volume	Days
2018-2022	3	n/a	1825

Classification of Accident	Rear End	Turning Movement	Sideswipe	Angle	Approaching	SMV other	SMV unattended vehicle	Other	Total	
P.D. only	1	1	0	1	0	0	0	0	3	100%
Non-fatal injury	0	0	0	0	0	0	0	0	0	0%
Non-reportable	0	0	0	0	0	0	0	0	0	0%
Total	**1**	**1**	**0**	**1**	**0**	**0**	**0**	**0**	**3**	100%
	33%	33%	0%	33%	0%	0%	0%	0%		

LEWIS ST/METCALFE ST

Years	Total # Collisions	24 Hr AADT Veh Volume	Days
2018-2022	10	n/a	1825

Classification of Accident	Rear End	Turning Movement	Sideswipe	Angle	Approaching	SMV other	SMV unattended vehicle	Other	Total	
P.D. only	3	5	2	0	0	0	0	0	10	100%
Non-fatal injury	0	0	0	0	0	0	0	0	0	0%
Non-reportable	0	0	0	0	0	0	0	0	0	0%
Total	**3**	**5**	**2**	**0**	**0**	**0**	**0**	**0**	**10**	100%
	30%	50%	20%	0%	0%	0%	0%	0%		

FRANK ST/METCALFE ST

Years	Total # Collisions	24 Hr AADT Veh Volume	Days
2018-2022	6	n/a	1825

Classification of Accident	Rear End	Turning Movement	Sideswipe	Angle	Approaching	SMV other	SMV unattended vehicle	Other	Total	
P.D. only	0	2	1	1	0	0	0	0	4	67%
Non-fatal injury	0	1	1	0	0	0	0	0	2	33%
Non-reportable	0	0	0	0	0	0	0	0	0	0%
Total	**0**	**3**	**2**	**1**	**0**	**0**	**0**	**0**	**6**	100%
	0%	50%	33%	17%	0%	0%	0%	0%		

MACLAREN ST/METCALFE ST

Years	Total # Collisions	24 Hr AADT Veh Volume	Days
2018-2022	6	n/a	1825

Classification of Accident	Rear End	Turning Movement	Sideswipe	Angle	Approaching	SMV other	SMV unattended vehicle	Other	Total	
P.D. only	0	3	2	0	0	1	0	0	6	100%
Non-fatal injury	0	0	0	0	0	0	0	0	0	0%
Non-reportable	0	0	0	0	0	0	0	0	0	0%
Total	**0**	**3**	**2**	**0**	**0**	**1**	**0**	**0**	**6**	100%
	0%	50%	33%	0%	0%	17%	0%	0%		

GLADSTONE AVE/METCALFE ST

Years	Total # Collisions	24 Hr AADT Veh Volume	Days
2018-2022	15	n/a	1825

Classification of Accident	Rear End	Turning Movement	Sideswipe	Angle	Approaching	SMV other	SMV unattended vehicle	Other	Total	
P.D. only	2	3	3	1	0	0	0	0	9	60%
Non-fatal injury	0	3	1	1	0	1	0	0	6	40%
Non-reportable	0	0	0	0	0	0	0	0	0	0%
Total	**2**	**6**	**4**	**2**	**0**	**1**	**0**	**0**	**15**	100%
	13%	40%	27%	13%	0%	7%	0%	0%		

GILMOUR ST/O'CONNOR ST

Years	Total # Collisions	24 Hr AADT Veh Volume	Days
2018-2022	21	n/a	1825

Classification of Accident	Rear End	Turning Movement	Sideswipe	Angle	Approaching	SMV other	SMV unattended vehicle	Other	Total	
P.D. only	3	3	8	2	0	1	0	0	17	81%
Non-fatal injury	0	2	0	2	0	0	0	0	4	19%
Non-reportable	0	0	0	0	0	0	0	0	0	0%
Total	**3**	**5**	**8**	**4**	**0**	**1**	**0**	**0**	**21**	100%
	14%	24%	38%	19%	0%	5%	0%	0%		

WAVERLEY ST/O'CONNOR ST

Years	Total # Collisions	24 Hr AADT Veh Volume	Days
2018-2022	10	n/a	1825

Classification of Accident	Rear End	Turning Movement	Sideswipe	Angle	Approaching	SMV other	SMV unattended vehicle	Other	Total	
P.D. only	1	1	1	2	0	1	0	0	6	60%
Non-fatal injury	0	0	1	3	0	0	0	0	4	40%
Non-reportable	0	0	0	0	0	0	0	0	0	0%
Total	**1**	**1**	**2**	**5**	**0**	**1**	**0**	**0**	**10**	100%
	10%	10%	20%	50%	0%	10%	0%	0%		

GLADSTONE AVE/O'CONNOR ST

Years	Total # Collisions	24 Hr AADT Veh Volume	Days
2018-2022	16	n/a	1825

Classification of Accident	Rear End	Turning Movement	Sideswipe	Angle	Approaching	SMV other	SMV unattended vehicle	Other	Total	
P.D. only	4	5	4	2	0	0	1	0	16	100%
Non-fatal injury	0	0	0	0	0	0	0	0	0	0%
Non-reportable	0	0	0	0	0	0	0	0	0	0%
Total	**4**	**5**	**4**	**2**	**0**	**0**	**1**	**0**	**16**	100%
	25%	31%	25%	13%	0%	0%	6%	0%		

O'CONNOR ST/SOMERSET ST

Years	Total # Collisions	24 Hr AADT Veh Volume	Days
2018-2022	20	n/a	1825

Classification of Accident	Rear End	Turning Movement	Sideswipe	Angle	Approaching	SMV other	SMV unattended vehicle	Other	Total	
P.D. only	2	5	5	1	0	1	0	0	14	70%
Non-fatal injury	0	1	0	0	0	5	0	0	6	30%
Non-reportable	0	0	0	0	0	0	0	0	0	0%
Total	**2**	**6**	**5**	**1**	**0**	**6**	**0**	**0**	**20**	100%
	10%	30%	25%	5%	0%	30%	0%	0%		

FRANK ST/O'CONNOR ST

Years	Total # Collisions	24 Hr AADT Veh Volume	Days
2018-2022	3	n/a	1825

Classification of Accident	Rear End	Turning Movement	Sideswipe	Angle	Approaching	SMV other	SMV unattended vehicle	Other	Total	
P.D. only	0	0	2	0	0	0	0	0	2	67%
Non-fatal injury	0	0	0	1	0	0	0	0	1	33%
Non-reportable	0	0	0	0	0	0	0	0	0	0%
Total	**0**	**0**	**2**	**1**	**0**	**0**	**0**	**0**	**3**	100%
	0%	0%	67%	33%	0%	0%	0%	0%		

LEWIS ST/O'CONNOR ST

Years	Total # Collisions	24 Hr AADT Veh Volume	Days
2018-2022	1	n/a	1825

Classification of Accident	Rear End	Turning Movement	Sideswipe	Angle	Approaching	SMV other	SMV unattended vehicle	Other	Total	
P.D. only	0	0	0	1	0	0	0	0	1	100%
Non-fatal injury	0	0	0	0	0	0	0	0	0	0%
Non-reportable	0	0	0	0	0	0	0	0	0	0%
Total	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**1**	100%
	0%	0%	0%	100%	0%	0%	0%	0%		

METCALFE ST, WAVERLEY ST to FRANK ST

Years	Total # Collisions	24 Hr AADT Veh Volume	Days
2018-2022	2	n/a	1825

Classification of Accident	Rear End	Turning Movement	Sideswipe	Angle	Approaching	SMV other	SMV unattended vehicle	Other	Total	
P.D. only	0	0	1	0	0	0	1	0	2	100%
Non-fatal injury	0	0	0	0	0	0	0	0	0	0%
Non-reportable	0	0	0	0	0	0	0	0	0	0%
Total	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**2**	100%
	0%	0%	50%	0%	0%	0%	50%	0%		

METCALFE ST, GILMOUR ST to LEWIS ST

Years	Total # Collisions	24 Hr AADT Veh Volume	Days
2018-2022	3	n/a	1825

Classification of Accident	Rear End	Turning Movement	Sideswipe	Angle	Approaching	SMV other	SMV unattended vehicle	Other	Total	
P.D. only	0	0	2	0	0	0	0	0	2	67%
Non-fatal injury	0	0	0	0	0	0	0	1	1	33%
Non-reportable	0	0	0	0	0	0	0	0	0	0%
Total	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**1**	**3**	100%
	0%	0%	67%	0%	0%	0%	0%	33%		

METCALFE ST, MACLAREN ST to GILMOUR ST

Years	Total # Collisions	24 Hr AADT Veh Volume	Days
2018-2022	2	n/a	1825

Classification of Accident	Rear End	Turning Movement	Sideswipe	Angle	Approaching	SMV other	SMV unattended vehicle	Other	Total	
P.D. only	0	0	2	0	0	0	0	0	2	100%
Non-fatal injury	0	0	0	0	0	0	0	0	0	0%
Non-reportable	0	0	0	0	0	0	0	0	0	0%
Total	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**2**	100%
	0%	0%	100%	0%	0%	0%	0%	0%		

O'CONNOR ST, GILMOUR ST to LEWIS ST

Years	Total # Collisions	24 Hr AADT Veh Volume	Days
2018-2022	2	n/a	1825

Classification of Accident	Rear End	Turning Movement	Sideswipe	Angle	Approaching	SMV other	SMV unattended vehicle	Other	Total	
P.D. only	0	0	1	0	0	0	1	0	2	100%
Non-fatal injury	0	0	0	0	0	0	0	0	0	0%
Non-reportable	0	0	0	0	0	0	0	0	0	0%
Total	**0**	**0**	**1**	**0**	**0**	**0**	**1**	**0**	**2**	100%
	0%	0%	50%	0%	0%	0%	50%	0%		

O'CONNOR ST, FRANK ST to GLADSTONE AVE

Years	Total # Collisions	24 Hr AADT Veh Volume	Days
2018-2022	3	n/a	1825

Classification of Accident	Rear End	Turning Movement	Sideswipe	Angle	Approaching	SMV other	SMV unattended vehicle	Other	Total	
P.D. only	0	0	0	0	0	0	3	0	3	100%
Non-fatal injury	0	0	0	0	0	0	0	0	0	0%
Non-reportable	0	0	0	0	0	0	0	0	0	0%
Total	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**0**	**3**	100%
	0%	0%	0%	0%	0%	0%	100%	0%		

O'CONNOR ST, SOMERSET ST to MACLAREN ST

Years	Total # Collisions	24 Hr AADT Veh Volume	Days
2018-2022	3	n/a	1825

Classification of Accident	Rear End	Turning Movement	Sideswipe	Angle	Approaching	SMV other	SMV unattended vehicle	Other	Total	
P.D. only	0	0	1	0	0	0	2	0	3	100%
Non-fatal injury	0	0	0	0	0	0	0	0	0	0%
Non-reportable	0	0	0	0	0	0	0	0	0	0%
Total	**0**	**0**	**1**	**0**	**0**	**0**	**2**	**0**	**3**	100%
	0%	0%	33%	0%	0%	0%	67%	0%		

O'CONNOR ST, WAVERLEY ST to FRANK ST

Years	Total # Collisions	24 Hr AADT Veh Volume	Days
2018-2022	3	n/a	1825

Classification of Accident	Rear End	Turning Movement	Sideswipe	Angle	Approaching	SMV other	SMV unattended vehicle	Other	Total	
P.D. only	0	0	1	0	0	0	2	0	3	100%
Non-fatal injury	0	0	0	0	0	0	0	0	0	0%
Non-reportable	0	0	0	0	0	0	0	0	0	0%
Total	**0**	**0**	**1**	**0**	**0**	**0**	**2**	**0**	**3**	100%
	0%	0%	33%	0%	0%	0%	67%	0%		

O'CONNOR ST, LEWIS ST to WAVERLEY ST

Years	Total # Collisions	24 Hr AADT Veh Volume	Days
2018-2022	3	n/a	1825

Classification of Accident	Rear End	Turning Movement	Sideswipe	Angle	Approaching	SMV other	SMV unattended vehicle	Other	Total	
P.D. only	2	0	1	0	0	0	0	0	3	100%
Non-fatal injury	0	0	0	0	0	0	0	0	0	0%
Non-reportable	0	0	0	0	0	0	0	0	0	0%
Total	**2**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**3**	100%
	67%	0%	33%	0%	0%	0%	0%	0%		

O'CONNOR ST, MACLAREN ST to GILMOUR ST

Years	Total # Collisions	24 Hr AADT Veh Volume	Days
2018-2022	4	n/a	1825

Classification of Accident	Rear End	Turning Movement	Sideswipe	Angle	Approaching	SMV other	SMV unattended vehicle	Other	Total	
P.D. only	0	0	2	0	0	0	1	0	3	75%
Non-fatal injury	0	1	0	0	0	0	0	0	1	25%
Non-reportable	0	0	0	0	0	0	0	0	0	0%
Total	**0**	**1**	**2**	**0**	**0**	**0**	**1**	**0**	**4**	100%
	0%	25%	50%	0%	0%	0%	25%	0%		

METCALFE ST, LEWIS ST to WAVERLEY ST

Years	Total # Collisions	24 Hr AADT Veh Volume	Days
2018-2022	1	n/a	1825

Classification of Accident	Rear End	Turning Movement	Sideswipe	Angle	Approaching	SMV other	SMV unattended vehicle	Other	Total	
P.D. only	0	0	0	0	0	0	1	0	1	100%
Non-fatal injury	0	0	0	0	0	0	0	0	0	0%
Non-reportable	0	0	0	0	0	0	0	0	0	0%
Total	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	100%
	0%	0%	0%	0%	0%	0%	100%	0%		

METCALFE ST, SOMERSET ST to MACLAREN ST

Years	Total # Collisions	24 Hr AADT Veh Volume	Days
2018-2022	1	n/a	1825

Classification of Accident	Rear End	Turning Movement	Sideswipe	Angle	Approaching	SMV other	SMV unattended vehicle	Other	Total	
P.D. only	0	0	1	0	0	0	0	0	1	100%
Non-fatal injury	0	0	0	0	0	0	0	0	0	0%
Non-reportable	0	0	0	0	0	0	0	0	0	0%
Total	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**1**	100%
	0%	0%	100%	0%	0%	0%	0%	0%		

METCALFE ST, FRANK ST to GLADSTONE AVE

Years	Total # Collisions	24 Hr AADT Veh Volume	Days
2018-2022	2	n/a	1825

Classification of Accident	Rear End	Turning Movement	Sideswipe	Angle	Approaching	SMV other	SMV unattended vehicle	Other	Total	
P.D. only	0	0	0	0	0	0	2	0	2	100%
Non-fatal injury	0	0	0	0	0	0	0	0	0	0%
Non-reportable	0	0	0	0	0	0	0	0	0	0%
Total	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**0**	**2**	100%
	0%	0%	0%	0%	0%	0%	100%	0%		

GILMOUR ST, O'CONNOR ST to METCALFE ST

Years	Total # Collisions	24 Hr AADT Veh Volume	Days
2018-2022	3	n/a	1825

Classification of Accident	Rear End	Turning Movement	Sideswipe	Angle	Approaching	SMV other	SMV unattended vehicle	Other	Total	
P.D. only	0	0	1	0	0	0	2	0	3	100%
Non-fatal injury	0	0	0	0	0	0	0	0	0	0%
Non-reportable	0	0	0	0	0	0	0	0	0	0%
Total	**0**	**0**	**1**	**0**	**0**	**0**	**2**	**0**	**3**	100%
	0%	0%	33%	0%	0%	0%	67%	0%		

MACLAREN ST, O'CONNOR ST to METCALFE ST

Years	Total # Collisions	24 Hr AADT Veh Volume	Days
2018-2022	1	n/a	1825

Classification of Accident	Rear End	Turning Movement	Sideswipe	Angle	Approaching	SMV other	SMV unattended vehicle	Other	Total	
P.D. only	0	0	0	0	0	0	1	0	1	100%
Non-fatal injury	0	0	0	0	0	0	0	0	0	0%
Non-reportable	0	0	0	0	0	0	0	0	0	0%
Total	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**0**	**1**	100%
	0%	0%	0%	0%	0%	0%	100%	0%		

Appendix E:

TDM Checklists

TDM-Supportive Development Design and Infrastructure Checklist:
Residential Developments (multi-family or condominium)

Legend

REQUIRED	The Official Plan or Zoning By-law provides related guidance that must be followed
BASIC	The measure is generally feasible and effective, and in most cases would benefit the development and its users
BETTER	The measure could maximize support for users of sustainable modes, and optimize development performance

		TDM-supportive design & infrastructure measures: *Residential developments*	Check if completed & add descriptions, explanations or plan/drawing references
	1.	**WALKING & CYCLING: ROUTES**	
	1.1	**Building location & access points**	
BASIC	1.1.1	Locate building close to the street, and do not locate parking areas between the street and building entrances	☑
BASIC	1.1.2	Locate building entrances in order to minimize walking distances to sidewalks and transit stops/stations	☑
BASIC	1.1.3	Locate building doors and windows to ensure visibility of pedestrians from the building, for their security and comfort	☑
	1.2	**Facilities for walking & cycling**	
REQUIRED	1.2.1	Provide convenient, direct access to stations or major stops along rapid transit routes within 600 metres; minimize walking distances from buildings to rapid transit; provide pedestrian-friendly, weather-protected (where possible) environment between rapid transit accesses and building entrances; ensure quality linkages from sidewalks through building entrances to integrated stops/stations *(see Official Plan policy 4.3.3)*	☐ No transit stations or major stops within 600m
REQUIRED	1.2.2	Provide safe, direct and attractive pedestrian access from public sidewalks to building entrances through such measures as: reducing distances between public sidewalks and major building entrances; providing walkways from public streets to major building entrances; within a site, providing walkways along the front of adjoining buildings, between adjacent buildings, and connecting areas where people may congregate, such as courtyards and transit stops; and providing weather protection through canopies, colonnades, and other design elements wherever possible *(see Official Plan policy 4.3.12)*	☑

		TDM-supportive design & infrastructure measures: *Residential developments*	Check if completed & add descriptions, explanations or plan/drawing references
REQUIRED	1.2.3	Provide sidewalks of smooth, well-drained walking surfaces of contrasting materials or treatments to differentiate pedestrian areas from vehicle areas, and provide marked pedestrian crosswalks at intersection sidewalks *(see Official Plan policy 4.3.10)*	☑
REQUIRED	1.2.4	Make sidewalks and open space areas easily accessible through features such as gradual grade transition, depressed curbs at street corners and convenient access to extra-wide parking spaces and ramps *(see Official Plan policy 4.3.10)*	☑
REQUIRED	1.2.5	Include adequately spaced inter-block/street cycling and pedestrian connections to facilitate travel by active transportation. Provide links to the existing or planned network of public sidewalks, multi-use pathways and on-road cycle routes. Where public sidewalks and multi-use pathways intersect with roads, consider providing traffic control devices to give priority to cyclists and pedestrians *(see Official Plan policy 4.3.11)*	☑
BASIC	1.2.6	Provide safe, direct and attractive walking routes from building entrances to nearby transit stops	☐
BASIC	1.2.7	Ensure that walking routes to transit stops are secure, visible, lighted, shaded and wind-protected wherever possible	☐
BASIC	1.2.8	Design roads used for access or circulation by cyclists using a target operating speed of no more than 30 km/h, or provide a separated cycling facility	☐
	1.3	**Amenities for walking & cycling**	
BASIC	1.3.1	Provide lighting, landscaping and benches along walking and cycling routes between building entrances and streets, sidewalks and trails	☑
BASIC	1.3.2	Provide wayfinding signage for site access (where required, e.g. when multiple buildings or entrances exist) and egress (where warranted, such as when directions to reach transit stops/stations, trails or other common destinations are not obvious)	☑

	TDM-supportive design & infrastructure measures: *Residential developments*		Check if completed & add descriptions, explanations or plan/drawing references
	2.	**WALKING & CYCLING: END-OF-TRIP FACILITIES**	
	2.1	**Bicycle parking**	
REQUIRED	2.1.1	Provide bicycle parking in highly visible and lighted areas, sheltered from the weather wherever possible *(see Official Plan policy 4.3.6)*	☑
REQUIRED	2.1.2	Provide the number of bicycle parking spaces specified for various land uses in different parts of Ottawa; provide convenient access to main entrances or well-used areas *(see Zoning By-law Section 111)*	☑
REQUIRED	2.1.3	Ensure that bicycle parking spaces and access aisles meet minimum dimensions; that no more than 50% of spaces are vertical spaces; and that parking racks are securely anchored *(see Zoning By-law Section 111)*	☑
BASIC	2.1.4	Provide bicycle parking spaces equivalent to the expected number of resident-owned bicycles, plus the expected peak number of visitor cyclists	☐
	2.2	**Secure bicycle parking**	
REQUIRED	2.2.1	Where more than 50 bicycle parking spaces are provided for a single residential building, locate at least 25% of spaces within a building/structure, a secure area (e.g. supervised parking lot or enclosure) or bicycle lockers *(see Zoning By-law Section 111)*	☑
BETTER	2.2.2	Provide secure bicycle parking spaces equivalent to at least the number of units at condominiums or multi-family residential developments	☐
	2.3	**Bicycle repair station**	
BETTER	2.3.1	Provide a permanent bike repair station, with commonly used tools and an air pump, adjacent to the main bicycle parking area (or secure bicycle parking area, if provided)	☐
	3.	**TRANSIT**	
	3.1	**Customer amenities**	
BASIC	3.1.1	Provide shelters, lighting and benches at any on-site transit stops	☐ No on-site transit stops
BASIC	3.1.2	Where the site abuts an off-site transit stop and insufficient space exists for a transit shelter in the public right-of-way, protect land for a shelter and/or install a shelter	☐ No off-site transit stops
BETTER	3.1.3	Provide a secure and comfortable interior waiting area by integrating any on-site transit stops into the building	☐

		TDM-supportive design & infrastructure measures: *Residential developments*	Check if completed & add descriptions, explanations or plan/drawing references
	4.	**RIDESHARING**	
	4.1	**Pick-up & drop-off facilities**	
BASIC	4.1.1	Provide a designated area for carpool drivers (plus taxis and ride-hailing services) to drop off or pick up passengers without using fire lanes or other no-stopping zones	☐
	5.	**CARSHARING & BIKESHARING**	
	5.1	**Carshare parking spaces**	
BETTER	5.1.1	Provide up to three carshare parking spaces in an R3, R4 or R5 Zone for specified residential uses *(see Zoning By-law Section 94)*	☑
	5.2	**Bikeshare station location**	
BETTER	5.2.1	Provide a designated bikeshare station area near a major building entrance, preferably lighted and sheltered with a direct walkway connection	☐
	6.	**PARKING**	
	6.1	**Number of parking spaces**	
REQUIRED	6.1.1	Do not provide more parking than permitted by zoning, nor less than required by zoning, unless a variance is being applied for	☑
BASIC	6.1.2	Provide parking for long-term and short-term users that is consistent with mode share targets, considering the potential for visitors to use off-site public parking	☐
BASIC	6.1.3	Where a site features more than one use, provide shared parking and reduce the cumulative number of parking spaces accordingly *(see Zoning By-law Section 104)*	☐
BETTER	6.1.4	Reduce the minimum number of parking spaces required by zoning by one space for each 13 square metres of gross floor area provided as shower rooms, change rooms, locker rooms and other facilities for cyclists in conjunction with bicycle parking *(see Zoning By-law Section 111)*	☐
	6.2	**Separate long-term & short-term parking areas**	
BETTER	6.2.1	Provide separate areas for short-term and long-term parking (using signage or physical barriers) to permit access controls and simplify enforcement (i.e. to discourage residents from parking in visitor spaces, and vice versa)	☐

TDM Measures Checklist:
Residential Developments (multi-family, condominium or subdivision)

Legend

BASIC — The measure is generally feasible and effective, and in most cases would benefit the development and its users

BETTER — The measure could maximize support for users of sustainable modes, and optimize development performance

★ — The measure is one of the most dependably effective tools to encourage the use of sustainable modes

		TDM measures: *Residential developments*	Check if proposed & add descriptions
	1.	**TDM PROGRAM MANAGEMENT**	
	1.1	**Program coordinator**	
BASIC ★	1.1.1	Designate an internal coordinator, or contract with an external coordinator	☐
	1.2	**Travel surveys**	
BETTER	1.2.1	Conduct periodic surveys to identify travel-related behaviours, attitudes, challenges and solutions, and to track progress	☐
	2.	**WALKING AND CYCLING**	
	2.1	**Information on walking/cycling routes & destinations**	
BASIC	2.1.1	Display local area maps with walking/cycling access routes and key destinations at major entrances *(multi-family, condominium)*	☑
	2.2	**Bicycle skills training**	
BETTER	2.2.1	Offer on-site cycling courses for residents, or subsidize off-site courses	☐

			TDM measures: *Residential developments*	Check if proposed & add descriptions
		3.	**TRANSIT**	
		3.1	**Transit information**	
BASIC		3.1.1	Display relevant transit schedules and route maps at entrances *(multi-family, condominium)*	☑
BETTER		3.1.2	Provide real-time arrival information display at entrances *(multi-family, condominium)*	☐
		3.2	**Transit fare incentives**	
BASIC	★	3.2.1	Offer PRESTO cards preloaded with one monthly transit pass on residence purchase/move-in, to encourage residents to use transit	☐
BETTER		3.2.2	Offer at least one year of free monthly transit passes on residence purchase/move-in	☐
		3.3	**Enhanced public transit service**	
BETTER	★	3.3.1	Contract with OC Transpo to provide early transit services until regular services are warranted by occupancy levels *(subdivision)*	☐
		3.4	**Private transit service**	
BETTER		3.4.1	Provide shuttle service for seniors homes or lifestyle communities (e.g. scheduled mall or supermarket runs)	☐
		4.	**CARSHARING & BIKESHARING**	
		4.1	**Bikeshare stations & memberships**	
BETTER		4.1.1	Contract with provider to install on-site bikeshare station (*multi-family)*	☐
BETTER		4.1.2	Provide residents with bikeshare memberships, either free or subsidized *(multi-family)*	☐
		4.2	**Carshare vehicles & memberships**	
BETTER		4.2.1	Contract with provider to install on-site carshare vehicles and promote their use by residents	☑
BETTER		4.2.2	Provide residents with carshare memberships, either free or subsidized	☐
		5.	**PARKING**	
		5.1	**Priced parking**	
BASIC	★	5.1.1	Unbundle parking cost from purchase price *(condominium)*	☐
BASIC	★	5.1.2	Unbundle parking cost from monthly rent *(multi-family)*	☑

			TDM measures: *Residential developments*	Check if proposed & add descriptions
		6.	**TDM MARKETING & COMMUNICATIONS**	
		6.1	**Multimodal travel information**	
BASIC	★	6.1.1	Provide a multimodal travel option information package to new residents	☑
		6.2	**Personalized trip planning**	
BETTER	★	6.2.1	Offer personalized trip planning to new residents	☐