77 Metcalfe St

TIA Step 3 – Strategy Report

Draft

August 2025

TIA Plan Reports

On 14 June 2017, the Council of the City of Ottawa adopted new Transportation Impact Assessment (TIA) Guidelines. In adopting the guidelines, Council established a requirement for those preparing and delivering transportation impact assessments and reports to sign a letter of certification.

Individuals submitting TIA reports will be responsible for all aspects of development-related transportation assessment and reporting, and undertaking such work, in accordance and compliance with the City of Ottawa's Official Plan, the Transportation Master Plan and the Transportation Impact Assessment (2017) Guidelines.

By submitting the attached TIA report (and any associated documents) and signing this document, the individual acknowledges that s/he meets the four criteria listed below.

CERTIFICATION

1. I have reviewed and have a sound understanding of the objectives, needs and requirements of the City of Ottawa's Official Plan, Transportation Master Plan and the Transportation Impact Assessment (2017) Guidelines;
2. I have a sound knowledge of industry standard practice with respect to the preparation of transportation impact assessment reports, including multi modal level of service review;
3. I have substantial experience (more than 5 years) in undertaking and delivering transportation impact studies (analysis, reporting and geometric design) with strong background knowledge in transportation planning, engineering or traffic operations; and
4. I am either a licensed[1] or registered[2] professional in good standing, whose field of expertise [check √ appropriate field(s)] is either transportation engineering ☑ or transportation planning ☐.

[1,2] **License of registration body that oversees the profession is required to have a code of conduct and ethics guidelines that will ensure appropriate conduct and representation for transportation planning and/or transportation engineering works.**

City Of Ottawa
Infrastructure Services and Community Sustainability
Planning and Growth Management
110 Laurier Avenue West, 4th fl.
Ottawa, ON K1P 1J1
Tel. : 613-580-2424
Fax: 613-560-6006

Ville d'Ottawa
Services d 'infrastructure et Viabilité des collectivités
Urbanisme et Gestion de la croissance
110, avenue Laurier Ouest
Ottawa (Ontario) K1P 1J1
Tél. : 613-580-2424
Télécopieur: 613-560-6006

Dated at Ottawa this 1 day of August, 2025 .
(City)

Name: Austin Shih, M.A.Sc., P.Eng
(Please Print)

Professional Title: Senior Transportation Engineer

Signature of Individual certifier that s/he meets the above four criteria

Office Contact Information (Please Print)
Address: 1223 Michael Street North, Suite 100
City / Postal Code: Ottawa, Ontario, K1J 7T2
Telephone / Extension: 613-691-1569
E-Mail Address: austin.shih@parsons.com

77 Metcalfe St

TIA Step 3 – Strategy Report

prepared for:

Edifice 77 Metcalfe Inc. (Mach)

630 Rue St-Paul Ouest

Montreal, QC

H3C 1L9

prepared by:

1223 Michael Street North

Suite 100

Ottawa, ON K1J 7T2

August 1, 2025

479510–01000

DOCUMENT CONTROL PAGE

CLIENT:	Edifice 77 Metcalfe Inc. (Mach)
PROJECT NAME:	77 Metcalfe St
REPORT TITLE:	TIA Step 3 – Strategy Report
PARSONS PROJECT NO:	479510 - 01000
VERSION:	Site Plan Application (SPA)
DIGITAL MASTER:	https://parsons365can.sharepoint.com/sites/OttawaHub/Projects/Projects/479510 - 77 Metcalfe (MACH)/4. 01000 - WBS NAME/Documents/Step 3 - Strategy Report/77 Metcalfe - Step 3 Strategy.docx
ORIGINATOR	Juan Lavin, P.Eng.
AUTHORIZATION:	Austin Shih, M.A.Sc., P.Eng.
CIRCULATION LIST:	Wally Dubyk, P.Eng.
HISTORY:	• TIA Step 1 Screening Form – July 5, 2024 • TIA Step 2 Scoping & Forecasting Report – July 4, 2025 • TIA Step 3 Strategy Report – August 1, 2025

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

LIST OF APPENDICES

TIA STEP 3 – STRATEGY REPORT

Parsons has been retained by Edifice 77 Metcalfe Inc. (Mach) to prepare a TIA in support of a Site Plan Control Application for a proposed mixed-use residential development with ground floor retail located at the municipal address of 77 Metcalfe St. This document follows the TIA process as outlined in the City of Ottawa Transportation Impact Assessment (TIA) Guidelines (2017). The following report represents Step 3 – Strategy Report.

1.0 SCREENING FORM

The Screening Form confirmed the need for a TIA Report based on all the triggers: the Trip Generation Trigger was met as the development is anticipated to generate more than 60 person trips during peak hours; the Location Trigger was met as the development is located within a design priority area and transit oriented development; and, the Safety Trigger was met as the development is located near the influence of a traffic signal. The Screening Form and Site Plan have been provided in **Appendix A**.

2.0 SCOPING REPORT

2.1. Existing and Planned Conditions

2.1.1. Proposed Development

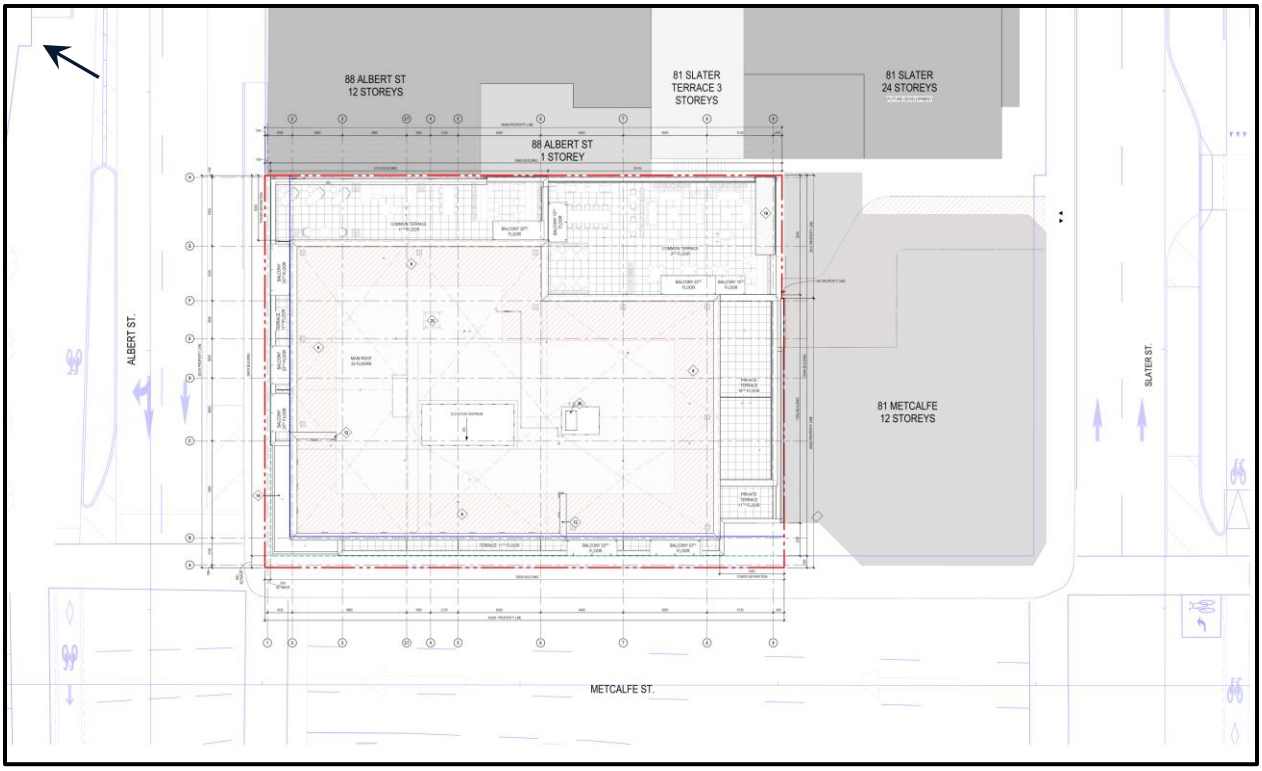
The proposed development is bound by Slater St to the south, Elgin St to the east and fronting Albert St to the north and Metcalfe St to the west. The site is currently occupied by a 12-storey office building which is proposed to be replaced by a 24-storey mixed-use building. The site is currently zoned as mixed-use downtown, MD S46. The site context is illustrated in **Figure 1**.

The development will consist of approximately 241 residential units and 5,050 ft^2 (469 m^2) ground floor retail. The development will provide what is understood to be 17 vehicle parking spaces located within the existing two-level underground parking garage which is proposed to be maintained and the new structure built on top. The quantity of bike parking is still being revised but anticipated to be close to 1:1 ratio, located indoors in a secure room within the underground parking garage.

The development intends to continue using the existing parking garage easement via 81 Metcalfe St, accessed from Slater St. A moving and garbage collection truck bay is also proposed on the northeast quadrant of the site, accessed via Albert St. The proposed development is anticipated to be constructed in a single phase tentatively by 2026. The site plan has been illustrated in **Figure 1** with a high-quality image in **Appendix A.**

Figure 1: Local Context

Figure 2: Proposed Site Plan



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.

Metcalfe St is a north-south arterial road that extends from Wellington St in the north to Monkland Ave in the south. Within the study area, the road operates with northbound only vehicular traffic. On-street parking is available on the east side of the road. The roadway consists of an undivided three-lane urban cross-section with an unposted speed limit assumed as 50km/h. The Official Plan identifies a 20m right-of-way, subject to easement policy with maximum land requirement of 0.9m.

Elgin St is a north-south arterial road that extends from Wellington St in the north to Queen Elizabeth Dr in the south. Within the study area, the roadway typically operates as a two-way two to three-lane per direction divided urban cross-section with an unposted speed limit assumed as 50km/h. On-street parking is not permitted, and the outside travel lanes are delineated with "sharrows" or share the road with cyclists. The Official Plan identifies a 20m right-of-way.

Albert St is an east-west arterial road that extends from the Mackenzie King Bridge in the east to Bayview Station Rd in the west, where it continues as Scott St. Within the study area, the roadway typically operates as a westbound only one-way three-lane undivided urban cross-section, including a bus/taxi only lane during peak hours with an unposted speed limit assumed as 50km/h. On-street parking and loading areas are provided on both sides of the road during off-peak hours. The Official Plan identifies a "variable right-of-way".

Slater St is an east-west arterial road that extends from the Mackenzie King Bridge in the east to Empress Ave in the west, where it continues as Albert St. Within the study area, the roadway typically operates as an eastbound only one-way three-lane undivided urban cross-section, including a bus/taxi only lane during peak hours with an unposted speed limit assumed as 50km/h. On-street parking and loading areas are provided on both sides of the road during off-peak hours. The Official Plan identifies a "variable right-of-way", subject to easement policy with maximum land requirement of 1.25m.

Laurier Ave is an east-west arterial road that extends from the Charlotte St in the east to Cambridge St in the west. Within the study area, the roadway typically operates as a two-way two-lane undivided urban cross-section with an unposted speed limit assumed as 50km/h. Uni-directional cycle-tracks are provided on both sides of the road. The Official Plan identifies a 20m right-of-way.

Existing Study Area Intersections

Note that the figures below illustrate general vehicle travel lanes available during the AM and PM peak hours. It is acknowledged that from aerial views some road corridors such as Albert St, Slater St and O'Connor St may appear to have more lanes, but some are dedicated bus/taxi only lanes or provide parking during peak hours and were therefore not considered within general vehicle capacity for the Synchro model.

Albert St/Metcalfe St

The Albert/Metcalfe intersection is a four-legged signalized intersection, where the east-west movements are limited to westbound only and north-south movements limited to northbound only. The northbound approach consists of a triple through lane and a left-turn lane (note that one of the lanes becomes an underground garage ramp beyond the intersection that forms parallel to the through lanes). On-street parking is allowed from 17:30 until 7:00 on weekdays on the easternmost lane. The westbound approach consists of a dual general vehicle through lane, plus a bus/taxi only through lane from 6:00 to 18:00. Westbound right-turns are only allowed outside of 6:00 to 18:00 time period.

Slater St/Metcalfe St

The Slater/Metcalfe intersection is a four-legged signalized intersection, where the east-west movements are limited to eastbound only and north-south movements limited to northbound only. The northbound approach consists of a double through lane and a shared through-right lane On-street parking is allowed from 17:30 until 7:00 on weekdays on the easternmost lane and at all time periods except 7:00 to 9:00 and 15:30 to 17:30 on the westernmost lane. The eastbound approach consists of a left-turn lane, a single general vehicle through lane and a bus/taxi only through lane from 6:00 to 18:00.

Laurier Ave/Metcalfe St

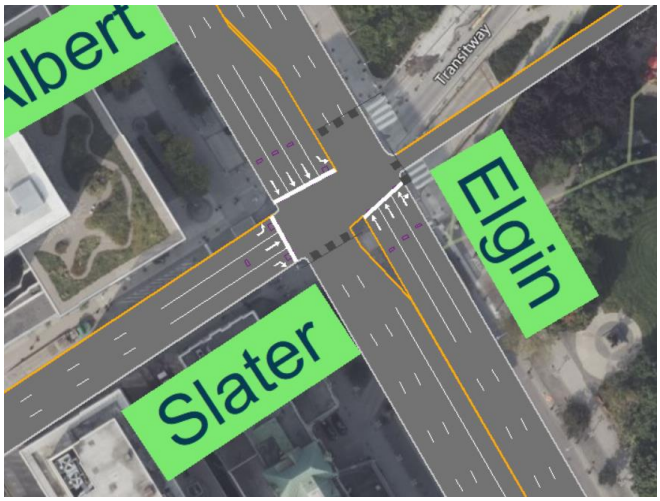
The Laurier/Metcalfe intersection is a four-legged signalized intersection, where the north-south movement is limited to northbound only. The northbound approach consists of a through lane, a left-turn lane and a right-turn lane. The eastbound movement consists of a though lane with left-turns permitted outside of the 7:00 to 9:00 and 15:30 to 17:30 time period. The westbound approach consists of a single through lane and a shared through-right turn lane. All right-turns have a no-right-turn-on-red restriction. Bike signals are provided for east-west movements at this intersection.

Albert St/Elgin St

The Albert/Elgin intersection is a four-legged signalized intersection, where the east-west movements are limited to westbound only. The southbound approach consists of a double through lane and a shared through-right lane. The northbound movement consists of a double through lane and a double left-turn lane. The westbound approach consists of a single through lane, a right-turn lane and a left-turn lane that is restricted to buses only between 6:00 to 18:00. On-street parking is not permitted.

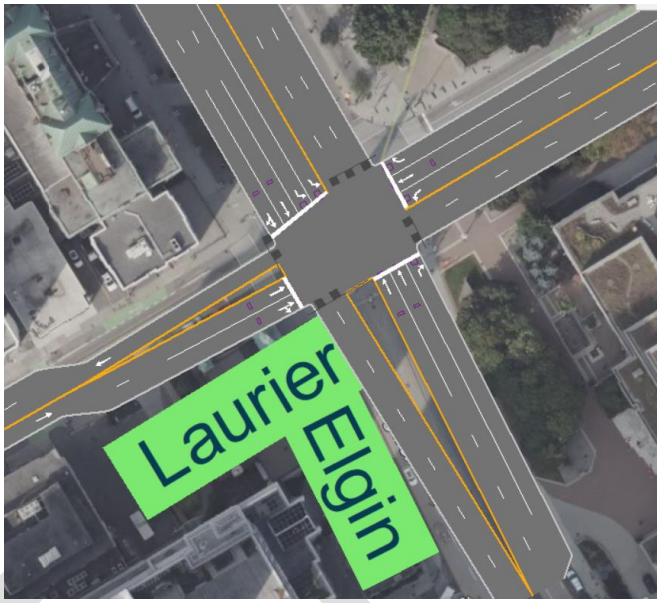
Slater St/Elgin St

The Slater/Elgin intersection is a four-legged signalized intersection, where the east-west movements are limited to eastbound only. The southbound approach consists of a triple through lane and a left-turn lane. The northbound movement consists of a double through lane and a shared through-right lane. The eastbound approach consists of a single through lane, a right-turn lane and a left-turn lane. On-street parking is not permitted.



Laurier Ave/Elgin St

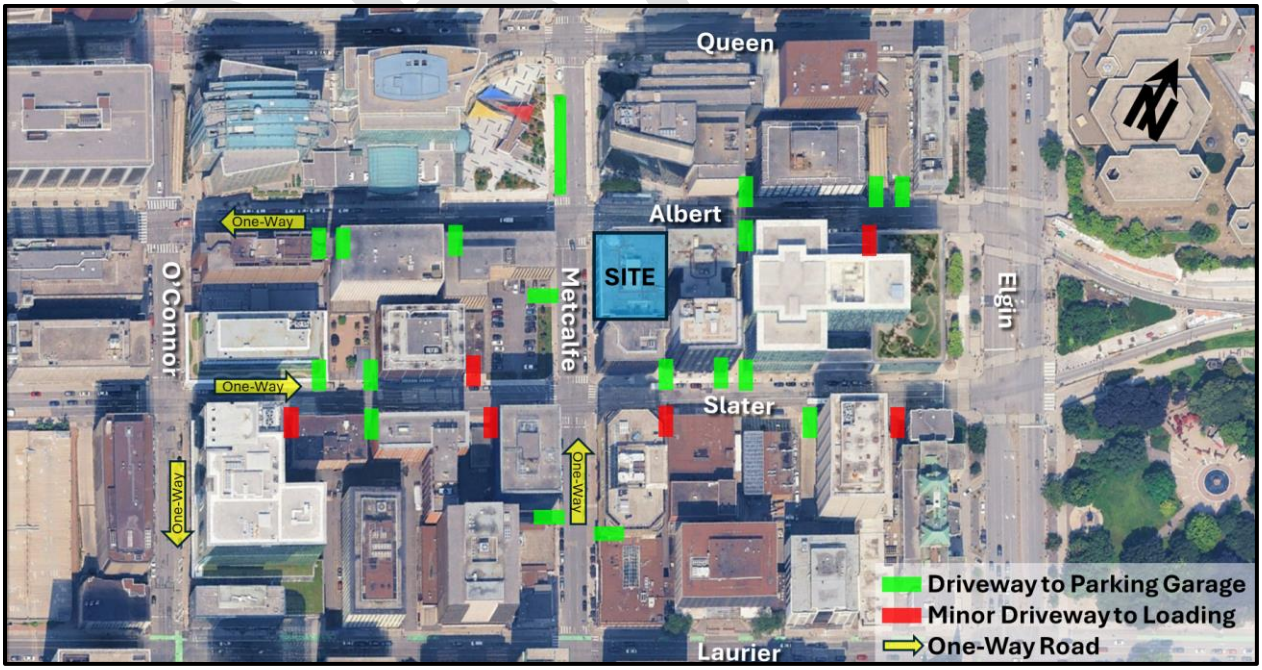
The Laurier/Elgin intersection is a four-legged signalized intersection. The southbound approach consists of a through lane, a shared through-right lane and a double left-turn lane. The northbound approach consists of a double through lane and a right-turn lane. Northbound left-turns are prohibited and right turns have no-right-turn-on-red restrictions. The eastbound approach consists of a single through lane and a shared through-right turn lane. Eastbound left-turns are prohibited. The westbound movement consists of a single though lane, a right-turn lane and a left-turn lane. Bike signals are provided for east-west movements at this intersection.



Existing Driveways to Adjacent Developments

Only driveways along Albert St, Metcalfe St and Slater St were considered as the site only fronts the first two streets and provides a driveway via an easement to Slater St, as shown in **Figure 3**. Eight driveways were identified on Albert St, but none of them were located within the area of influence of the proposed building. The site proposes a new minor driveway for loading operations only on the northeast quadrant of the site. On Metcalfe St, four driveways were identified. One is located across the street from the proposed development; however, the new development does not propose any new driveways on Metcalfe St. Slater St has twelve driveways identified, with the one originating from 81 Metcalfe St proposed as the access point via an easement to the parking garage for 77 Metcalfe St (this site).

Figure 3: Adjacent Driveways within 200m of Site Access



Existing Area Traffic Management Measures

Existing area traffic management measures within the study area include:

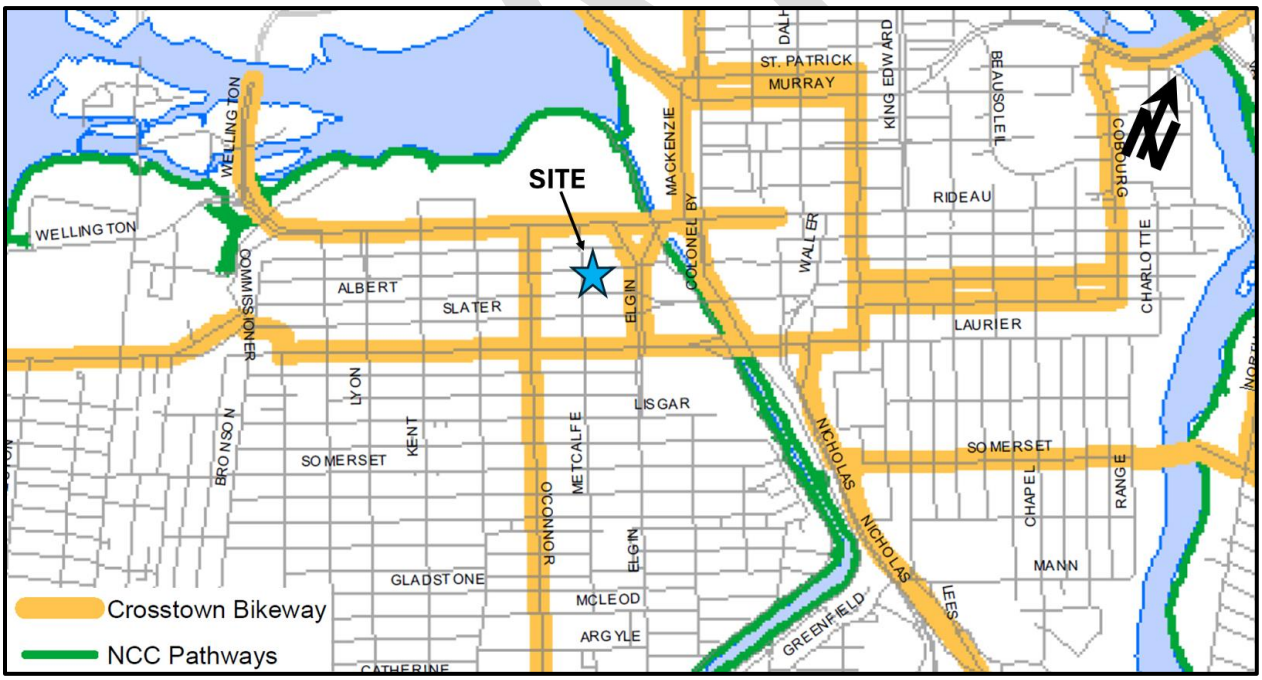
- Red light camera at Slater/Elgin
- At least one turn restriction per intersection (or more than one movement at some)
- No-right-on-red at intersections with Laurier Ave
- Leading signal intervals at intersections with Laurier Ave
- Bike boxes and cycling infrastructure on Laurier Ave

Existing Pedestrian/Cycling Network

Sidewalks are provided on both sides of all study area roads.

The Crosstown Bikeway Network (March 1, 2023)[1] from the new Transportation Master Plan classifies Elgin St and Laurier Ave as crosstown bikeways as shown in **Figure 4**. Wellington St and O'Connor St are also located within a short biking distance and are also part of the Crosstown Bikeway Network. Elgin St does not provide any separated cycling facilities. Laurier Ave provides uni-directional cycle-tracks from Bronson Ave to Elgin St, where they continue as a mixture of painted bike lanes with occasional cycle-track treatment. O'Connor St provides a bi-directional cycletrack from Laurier Ave to south of Highway 417. Wellington St provides curbside bike lanes from Elgin St to the west. The Rideau Canal Pathways and Ottawa River Pathway nearby provide mostly grade separated cycling facilities. Within the previous City of Ottawa's 2013 Cycling Plan, nearby O'Connor St (provides bi-directional cycling facilities), Elgin St and Laurier Ave are identified as Crosstown Bikeways and spine routes, while Slater St and Albert St are identified as spine routes.

Figure 4: 2023 TMP Crosstown Bikeway Network



Transit Network

The following description of OC Transpo routes within the study area reflect the current transit operations:

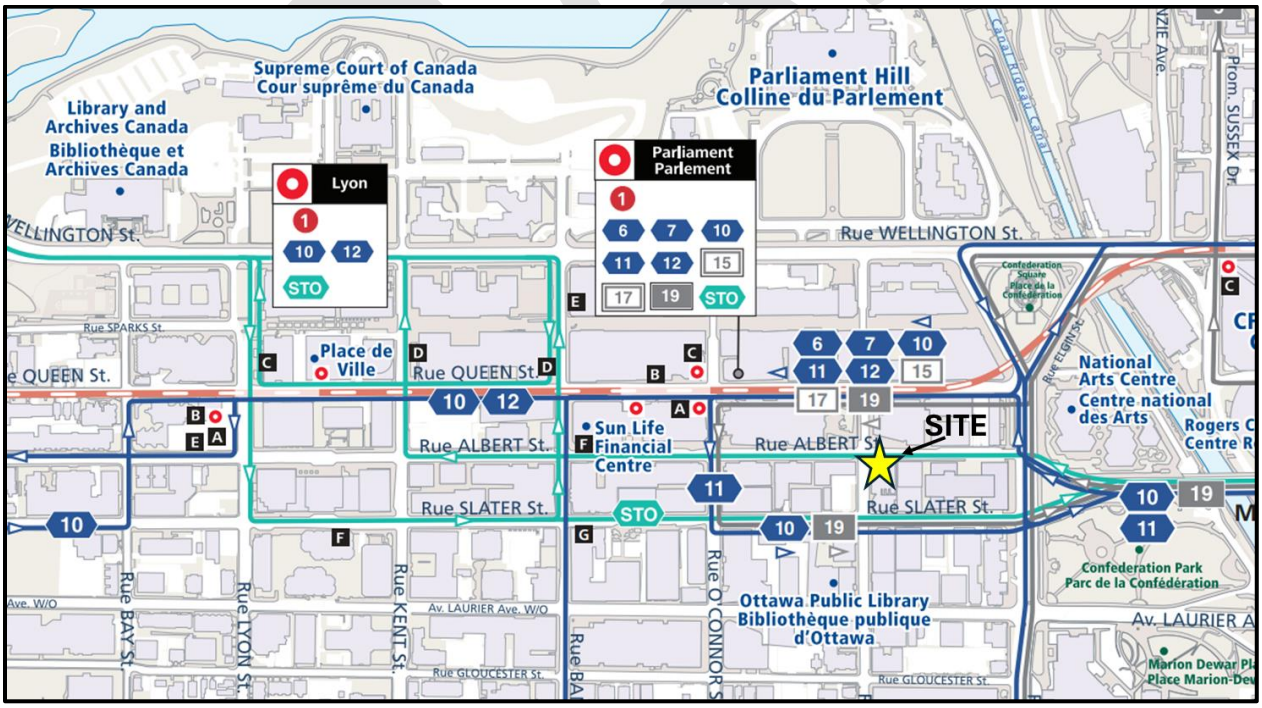
- **Confederation LRT Line (Blair <-> Tunney's Pasture:** LRT providing grade-separated rapid transit operating 7 days a week at all time periods. The nearest LRT Station is located approximately 300m walk from the site on Queen St and O'Connor St, at Parliament Station.

[1] Crosstown Bikeway Network, March 1, 2023

- **Various Frequent Routes Within 200m Walk:** OC Transpo identifies "Frequent Routes" as those operating every 15 minutes or less on weekdays and operate 7 days a week. Within a 200m walk, routes #10 and 11 operate with bus stops located on Slater St or Queen St for eastbound and westbound respectively, plus routes #6, 7 and 12 on Queen St. Additionally, Elgin St has frequent routes #5 and 18. These routes operate on major corridors such as via Montreal Rd, down St. Laurent Blvd, Sommerset St, Richmond Rd, Bank St, and connect major destinations such as Byward Market, Carleton University, and various shopping centers.
- **Local Routes:** there are various local routes near to the site, including routes #15, 17, 18 and 19 which operate on average every 30 minutes during weekdays. Destinations for these routes include Place du Portage (Gatineau), Montfort Hospital, Main St, Rideau, Vanier, St. Laurent, among others. All these routes have bus stops within 200m walking distance from the site, either on Slater St, Queen St or Elgin St.
- **STO (Quebec) Routes:** The Gatineau bus network has a major eastbound bus stop on Slater St, less than 50m from the site and major westbound bus stop located across the street from the site. These stops provides service to STO bus routes #32, 34, 36, 37, 38, 55, 59, 67, 85, 87, 371 and rapi-bus 400 which has high frequency routing. Destinations for these routes include Rideau Mall and various destinations in Gatineau including Plateau, Les Promenades, Des Trembles, De La Gappe, CEGEP Gabrielle Roy, Freeman, Greber, Labrosse, Aylmer, etc.

The transit network for the study area is illustrated in **Figure 5** with **Figure 6** illustrating the bus and LRT stop locations near to the site for both OC Transpo[2] and STO[3].

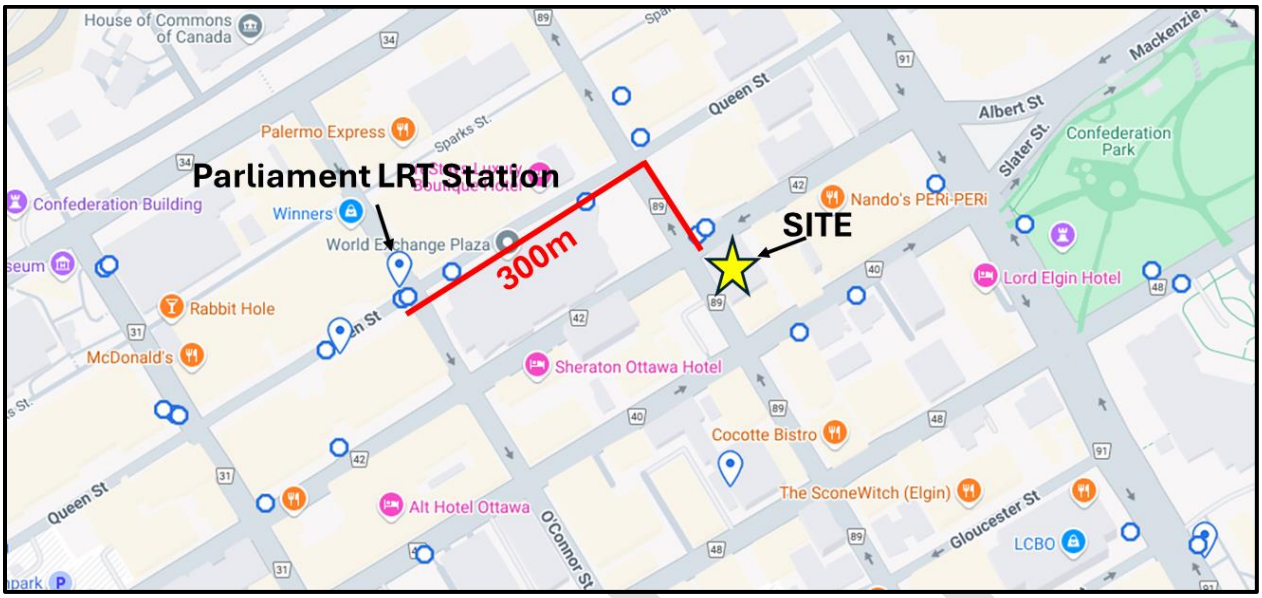
Figure 5: Area Transit Network



[2] https://www.octranspo.com/en/plan-your-trip/schedules-maps/network-map/

[3] https://www.sto.ca/en/schedules-and-routes/system-map/

Figure 6: LRT & Bus Stop Locations



Peak Hour Travel Demands

Traffic count data was obtained from the City of Ottawa. The traffic volumes at study area intersections are illustrated in **Figure 7**, with raw traffic count data provided in **Appendix B**. Existing active transportations volumes have been provided in **Figure 8**, however note that some were conducted in winter when active users, especially cyclists are expected to be lower than summer months.

Figure 7: Existing Peak Hour Vehicle Traffic Volumes

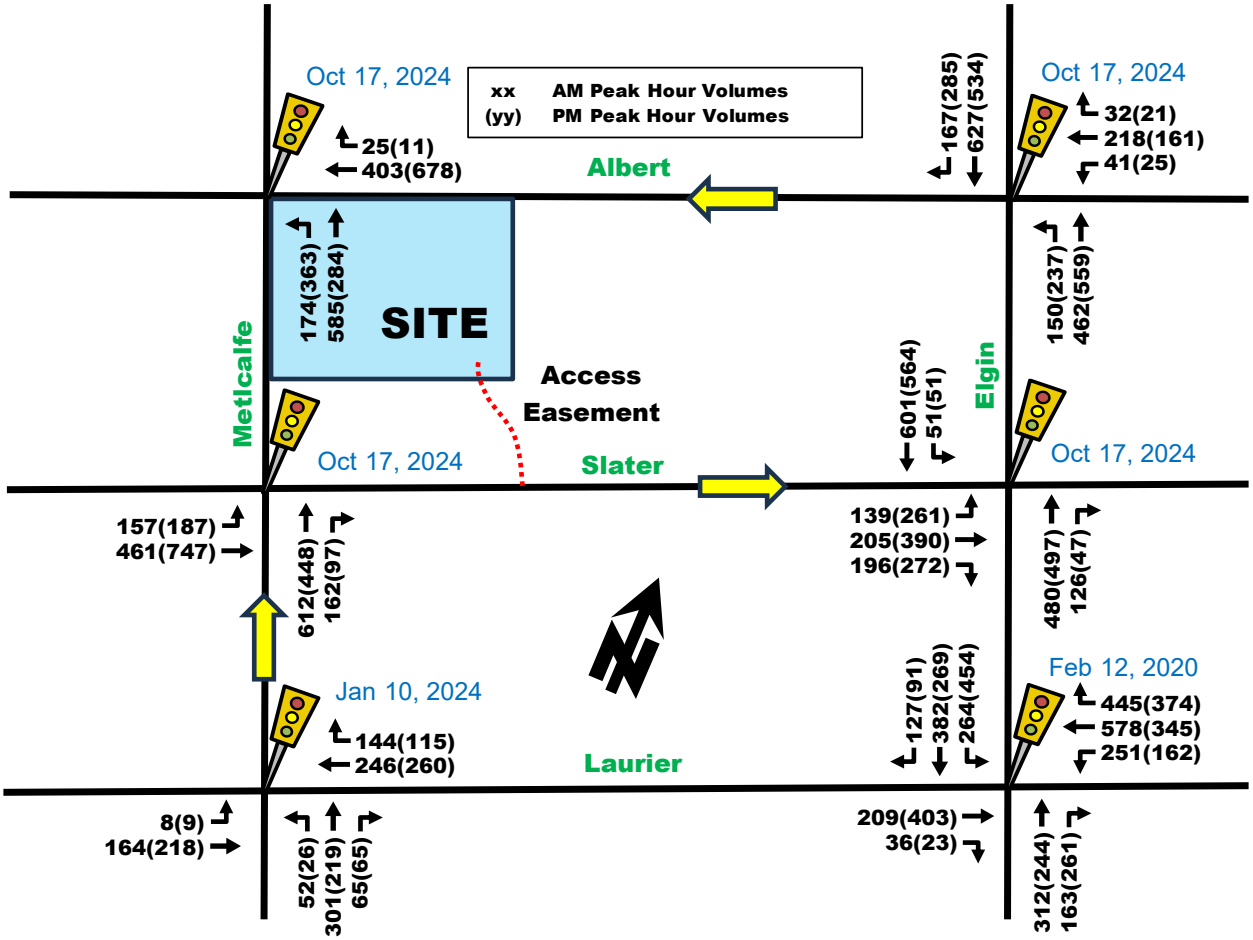
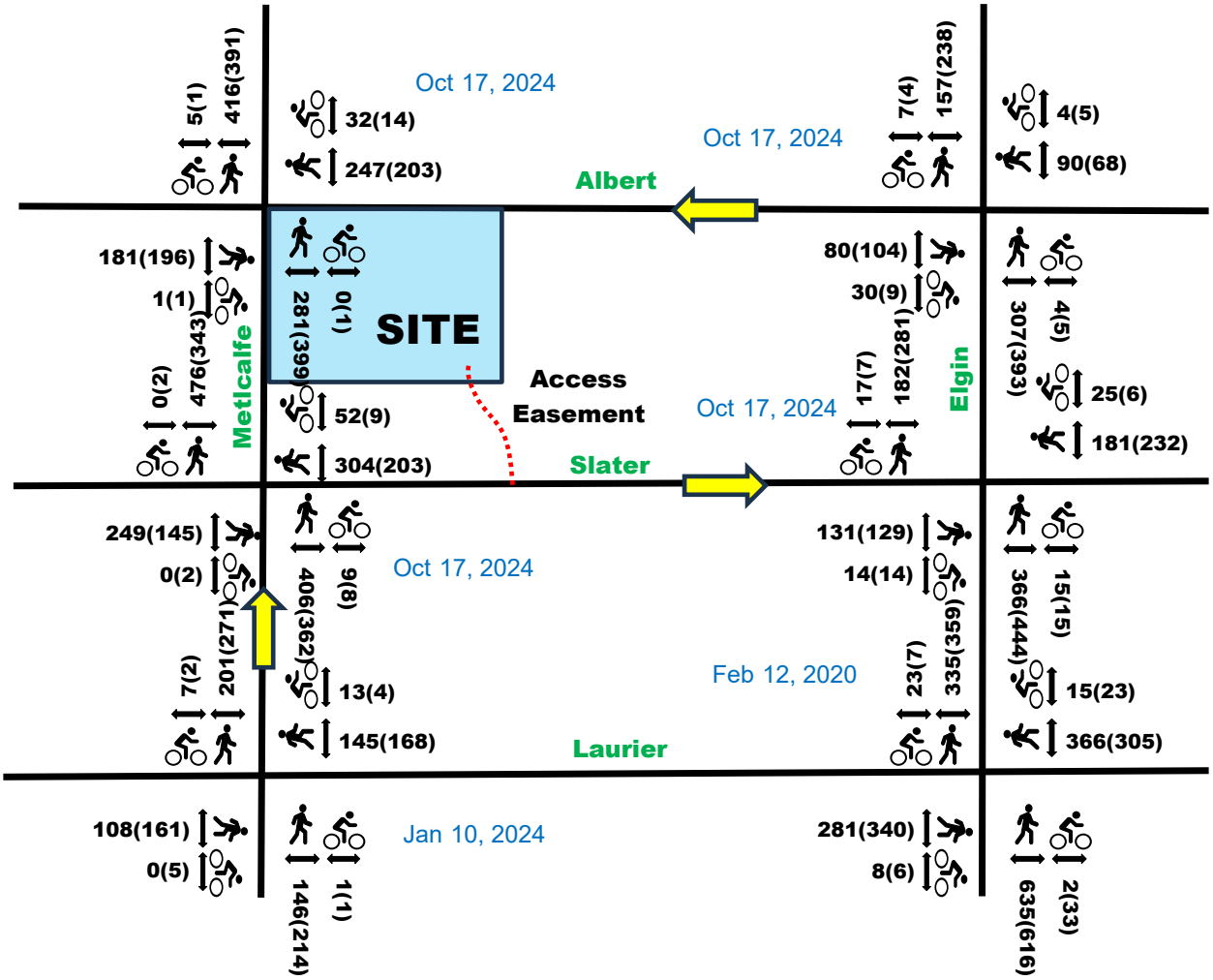


Figure 8: Existing Pedestrian and Cyclists Peak Hour Volumes



Existing Road Safety Conditions

A five-year collision history data (2018-2022, inclusive) was obtained from the City of Ottawa Open Data for the study area intersections, as well as road segments within the study area. Detailed collision analysis has been provided in **Appendix C**.

Upon analyzing the collision data, the total number of collisions observed within the study area was determined to be 191 collisions within the past five-years.

Table 1: Summary of Type, Quantity and Injury Producing Collisions

Classification of Accident	Rear End	Turning Move-ment	Side-swipe	Angle	Approa-ching	SMV Other	SMV Unatten ded	Other	Total
P.D. only	39	21	56	20	0	10	8	8	162 (85%)
Non-fatal injury	3	9	2	7	0	8	0	0	29 (15%)
Non-reportable	0	0	0	0	0	0	0	0	0 (0%)
Total	42 (22%)	30 (16%)	58 (30%)	27 (14%)	0 (0%)	18 (9%)	8 (4%)	8 (4%)	191 (100%)

Within the study area, the quantity of collisions plus collisions with pedestrians (peds) and bikes, and distance of mid-block at each location has occurred at a rate as shown in **Table 2**.

Table 2: Summary of Collision Location and Injury Causing Collisions

Location	# Collision 2018-2022	% Causing Injury	Midblock Distance	Collisions with AT	Most Frequent Type
Albert/Metcalfe	9	33%	-	1 bike	Sideswipe (44%)
Slater/Metcalfe	11	55%	-	4 peds	SMV/Angle (36%)
Laurier/Metcalfe	27	7%	-	0	Rear End (41%)
Albert/Elgin	25	12%	-	0	Turning (40%)
Slater/Elgin	35	11%	-	1 bike 1 ped	Sideswipe (34%)
Laurier/Elgin	54	15%	-	5 bikes 1 ped	Sideswipe (31%)
Metcalfe from Albert to Slater	0	-	55m	0	-
Metcalfe from Slater to Laurier	5	0%	90m	0	SMV/Sideswipe (40%)
Elgin from Albert to Slater	0	-	50m	0	-
Elgin from Slater to Laurier	1	0%	85m	0	Rear End (100%)
Albert from Metcalfe to Elgin	10	20%	165m	2 peds	SMV/Sideswipe (30%)
Slater from Metcalfe to Elgin	5	0%	150m	0	Sideswipe (60%)
Laurier from Metcalfe to Elgin	9	11%	165m	1 bike	SMV (33%)

In general, most intersections and mid-block collisions resulted in low injury causing rate, with the exception of Albert/Metcalfe and Slater/Metcalfe which had rates exceeding 30% of all collisions resulting in injury. The intersection of Slater/Metcalfe specifically had 4 of 11 (36%) of collisions involving a pedestrian, all which resulted in injury. Based on the timing plan that was present during the collision study time period, the intersection did not have a leading pedestrian interval and processed more than 1,000 pedestrians within the peak hours. The city could consider adding leading pedestrian intervals (if not already) and prohibiting right-turns on red. The collisions at Albert/Metcalfe resulting in injury are less clear to determine a pattern as only 3 of 9 collisions resulted in injury and their collision types were different.

The intersection of Laurier/Elgin exhibited the largest quantity of collisions; however, it is also the intersection that processed the greatest number of vehicles by far, having over 18,000 vehicles within the 8-hour count compared to other intersections which normally processed 9,000 or less vehicles along Metcalfe St or 13,000 or less along Elgin St. Of note, the Laurier/Elgin intersection exhibited 5 collisions with cyclists and 1 with pedestrians. Based on traffic counts, it appears that most cyclists travel east-west along the unidirectional cycle tracks on Laurier Ave. All the collisions with cyclists involved turning movements. The city could consider making left and right turns fully protected to reduce this type of collision with vulnerable users.

In total, there were 8 collisions with cyclists (4%) and 8 collisions with pedestrians (8%). The chances of a collision with pedestrians at the study area intersections and segments are increased compared to other intersections within the city which have lesser pedestrian activity due to increased exposure by numbers and probability per event of conflicting movements. Upon further inspection, all but one collision with active transportation resulted in minimal to minor injury type, meaning that collisions likely involved slow moving vehicles. The one exception was a collision with a pedestrian on Albert St between Metcalfe St and Elgin St which resulted in a major injury; however, it can be argued that pedestrians should only be crossing at signalized intersections and should not be crossing midblock such as where this collision occurred. The majority of cyclist collisions (75%) resulted from turning movement conflicts. Fully protected cycling phases could be considered.

To further prioritize active transportation, the City of Ottawa could consider lengthening the pedestrian/cyclist leading interval and should consider implementing them at downtown intersections that do not currently provide leading intervals, where applicable and appropriate.

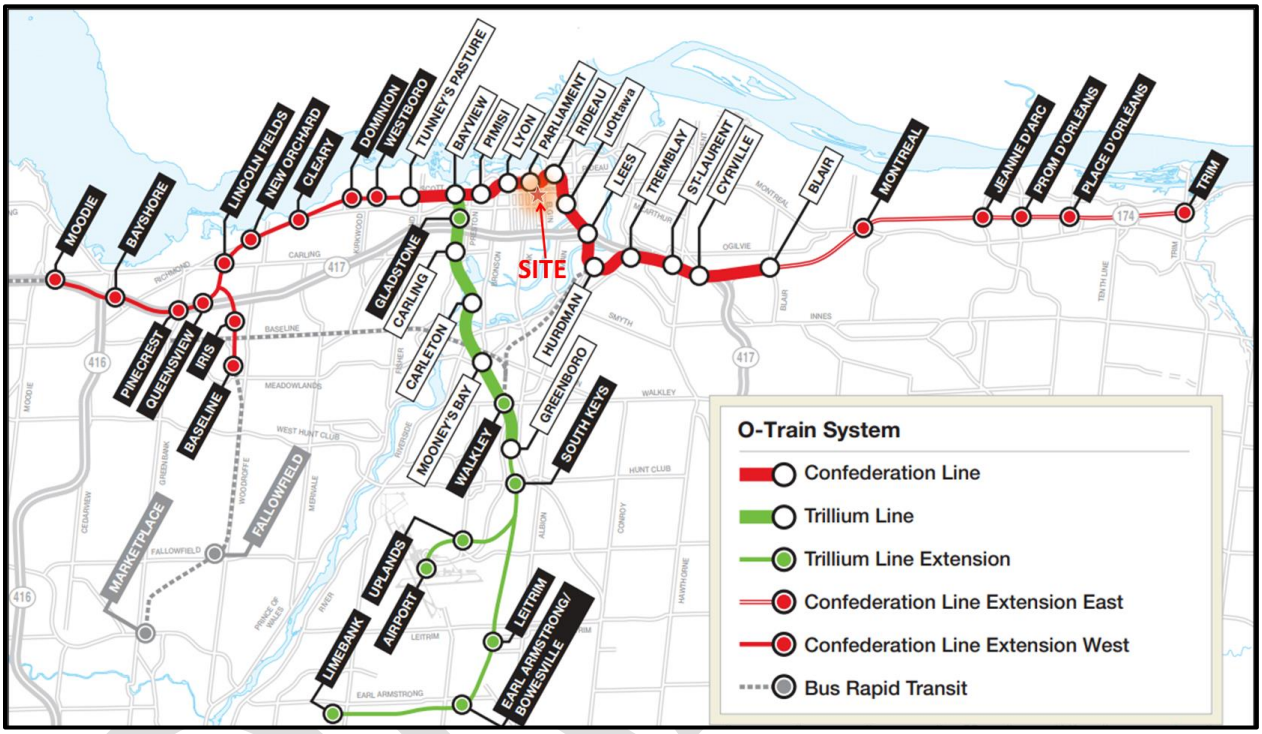
2.1.3. Planned Conditions

Future Transportation Network Changes

Ottawa LRT Stage 2 (Began Construction 2019)

Stage 2 of the City of Ottawa LRT system is currently under construction. Stage 2, as shown in **Figure 9,** is a package of three extensions – south, east and west – totaling 44 km of new rail and 24 new LRT stations. The site is located within 200m walking distance to already built and operational Parliament Station. Once this extension is complete, the site will have various new destinations using rapid grade-separated transit.

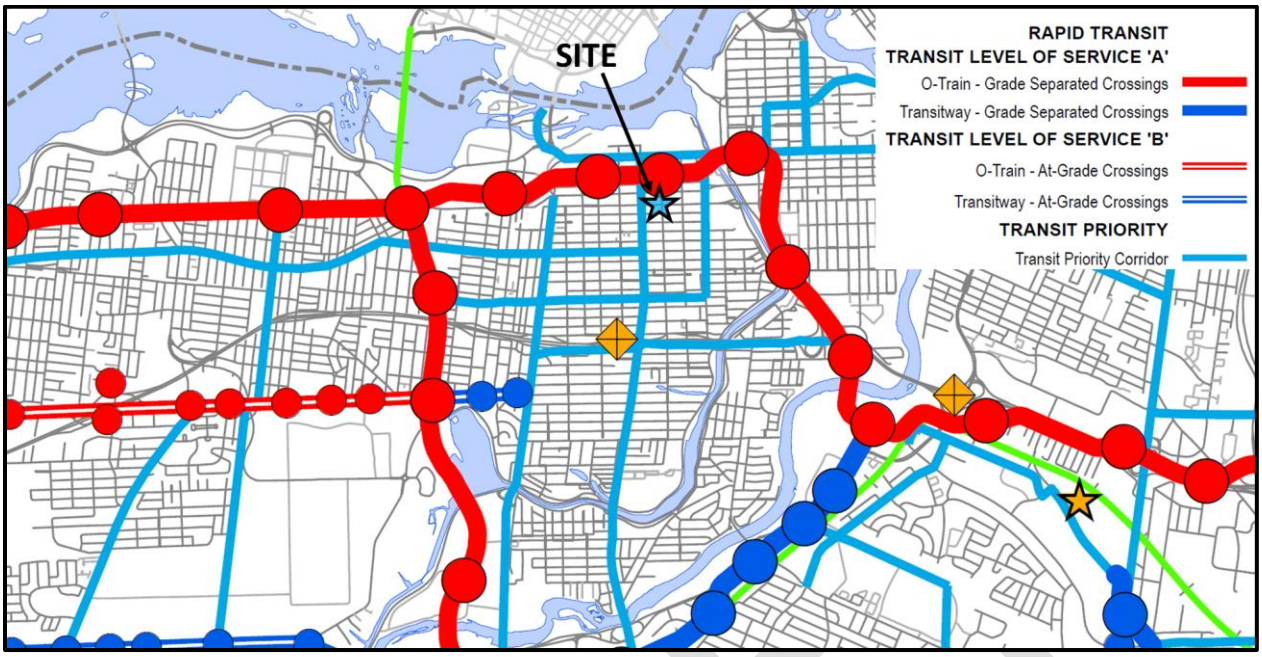
Figure 9: Stage 2 LRT System Map



Official Plan (2021)

According to the Official Plan, transit priority corridors are proposed on Elgin St, Bank St, Bronson Ave, Wellington St, Somerset St and Gladstone Ave within a relatively accessible radius from the site. Currently, there are no active studies for any of these transit priority corridors.

Figure 10: Official Plan – Ultimate Transit Network



Transportation Master Plan Update – Phase 1 (2023) & Phase 2 (July 2025)

As shown previously on **Figure 4** Elgin St, Laurier Ave, Wellington St and O'Connor St belong to the Crosstown Bikeway Network based on the 2023 TMP. Within the active transportation project list, two infrastructure projects and one feasibility study have been noted within the reasonable distance from the proposed development. Additionally, the recently approved Cycling Projects Proposed Priorities (July 2025) highlight their estimated priorities, namely:

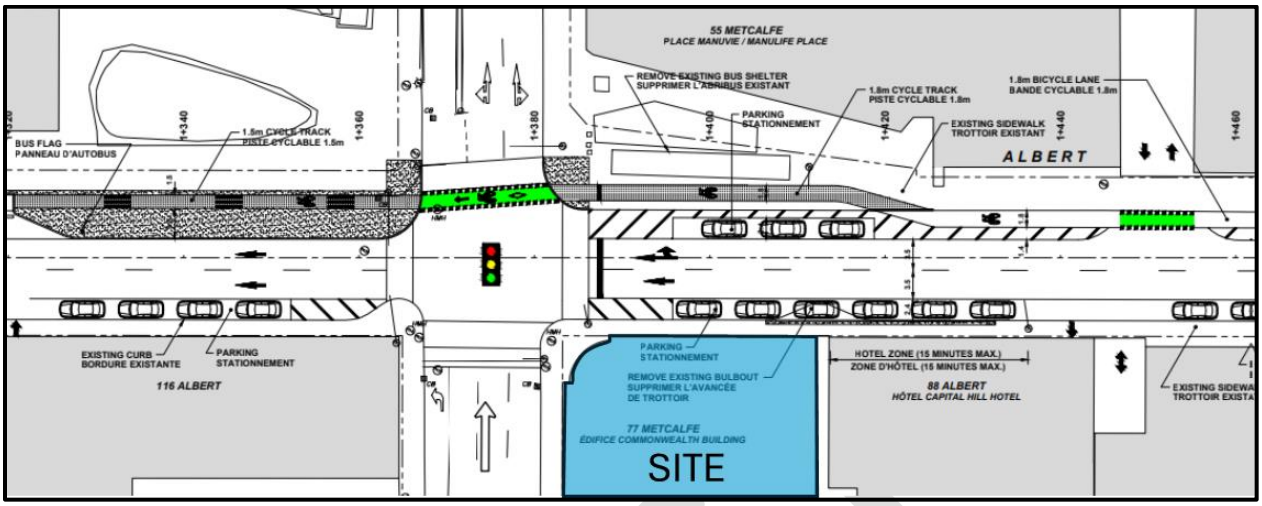
- O'Connor St (infrastructure): proposed separated cycling facilities on O'Connor St from Laurier Ave to Wellington St and resurfacing sidewalks (March 2019 Functional Design provided in **Appendix D**). This project was listed as "first phase" priority.
- Wellington St (infrastructure): proposed separated cycling facilities on Wellington St from Sussex Dr to the Portage Bridge. Proposed shared project between the City of Ottawa and the National Capital Commission (March 2019 Functional Design provided in **Appendix D**). This project was listed as "later phase" priority.
- Elgin St Cycling (feasibility study): feasibility study of adding cycling facilities on Elgin St from Laurier Ave to Wellington St. This project was listed as "first phase" priority.

Furthermore, the July 2025 update of the TMP highlighted Elgin St as a transit priority corridor within the "Needs Based Transit Network" and the "Priority Transit Network". There were no road widening or new roads identified within the study area.

Albert & Slater St Improvement Project (ongoing)

The City of Ottawa has prepared a study following the completion of Stage 1 LRT regarding Albert St and Slater St. Prior to the underground segment of LRT through the downtown core, buses used to operate on exclusive bus-only lanes, westbound on Albert St and eastbound on Slater St. Since the completion of the LRT, many of these buses have been removed from both of these roads and offer an opportunity to reallocate this space to other modes of transportation. In addition, both roads require watermain replacements which would present an opportunity to renew the road with contemporary designs. Such improvements to the streetscape could include addition of cycle tracks, on-street parking and/or widened sidewalks. A concept plan is illustrated in **Figure 11**, with detail on other study area intersections provided in **Appendix D**. Based on communication with the city, the anticipated construction is anticipated between 2025 to 2027.

Figure 11: Albert and Slater Streets Improvement Project Concept Plan



Wellington St project

A study is currently ongoing to analyze the impacts of keeping Wellington St closed to vehicular traffic. The plan also includes the addition of cycle tracks on Wellington St. At this time, a recommended plan has not been agreed upon.

Other Area Developments

The following section outlines adjacent developments in the general area that were considered in the TIA. **Figure 12** illustrates the site context for other area developments near the subject site with a description of each development below:

Figure 12: Other Area Developments

1 – 152 Bank St

An 18-storey office building is proposed with ground floor retail. The file was last updated in 2010 and no TIA was found.

2 – 208 Slater St

A 22-storey mixed-use building is proposed consisting of approximately 162 dwelling units and ground floor retail. The anticipated buildout year of the development was 2022, however it has not been built yet. Based on the TIA prepared by Novatech on May, 2019, the development is expected to generate a net increase of 18 and 9 veh/h during the morning and afternoon peak hours, respectively, which will be added to background volumes.

3 – 170 Slater St

A 25- and 26-storey mixed-use building is proposed to replace a multi-storey parking garage consisting of approximately 586 dwelling units and ground floor retail. The anticipated buildout year of the development is 2028. Based on the TIA prepared by CGH on July 2023, the development is expected to generate 46 and 51 veh/h during the morning and afternoon peak hours, respectively, but will also reduce some vehicle trips formerly using the parking garage. The net vehicle volumes will be layered to background volumes.

4 – 110 O'Connor St

A 14-storey mixed-use building is proposed consisting of approximately 413 dwelling units and ground floor retail. The anticipated buildout year of the development is 2026. Based on the TIA prepared by Parsons on November, 2024, the development is expected to generate a net increase of 27 veh/h during the morning and afternoon peak hours, respectively, which will be added to background volumes.

5 – 150 Laurier Ave

A 27-storey mixed-use building is proposed consisting of approximately 407 dwelling units and ground floor retail. The anticipated buildout year of the development is 2027. Based on the TIA prepared by CGH in August 2023, the development is expected to generate a net increase of 36 and 36 veh/h during the morning and afternoon peak hours, respectively, which will be added to background volumes.

6 – 100 Gloucester St

A 27-storey mixed-use building is proposed consisting of approximately 315 dwelling units and ground floor retail. The anticipated buildout year of the development is 2025. Based on the TIA prepared by Novatech on July, 2023, the development is expected to generate a net decrease of -30 and -38 veh/h during the morning and afternoon peak hours respectively as it is replacing a parking garage and other land uses. The forecasted net volumes will not be subtracted from background volumes for a more conservative approach.

7 – 96 Nepean St

A 27-storey residential building is proposed consisting of approximately 201 dwelling units. The anticipated buildout year of the development was 2013, however it has not been built yet. Based on the TIA prepared by Novatech in November 2011, the development is expected to generate a net increase of 59 and 57 veh/h during the morning and afternoon peak hours, respectively, which will be added to background volumes.

8 – 178 Nepean St

A 9-storey mixed-use building is proposed consisting of approximately 297 dwelling units and ground floor retail. The anticipated buildout year of the development is 2025. Based on the TIA prepared by CGH in June 2023, the development is expected to generate a net increase of 11 and 11 veh/h during the morning and afternoon peak hours, respectively, which will be added to background volumes.

9 – 234 O'Connor St

A 16-storey mixed-use building is proposed consisting of approximately 140 dwelling units and ground floor retail. The anticipated buildout year of the development is 2024. Based on the TIA prepared by CGH in June 2022, the

development is expected to generate a net increase of 18 and 21 veh/h during the morning and afternoon peak hours, respectively, which will not be added to background volumes given its distance.

10 – 267 O'Connor St

A 30 and 28-storey mixed-use buildings are proposed consisting of approximately 541 dwelling units and ground floor retail. The anticipated buildout year of the development is 2025. Based on the TIA prepared by Parsons in August 2020, the development is expected to generate a net increase of 92 and 104 veh/h during the morning and afternoon peak hours, respectively, which will not be added to background volumes given its distance.

11 – 339 Gloucester St

A 21-storey residential building is proposed consisting of approximately 116 dwelling units. The anticipated buildout year of the development was 2021, however it has not been built yet. Based on the TIA prepared by Parsons in July 2019, the development is expected to generate a net increase of 12 and 12 veh/h during the morning and afternoon peak hours, respectively. Given the distance and low trip generation by this development, trip generation will not be added to background volumes.

12 – 300 Sparks St

A 19-storey office building is proposed with ground floor retail. The file was last updated in 2009 and no TIA was found (a transportation brief was prepared exempting the development from a formal TIA).

13 – 350 Sparks St

A 27-storey hotel and 23-storey mixed-use buildings are proposed consisting of approximately 250 dwelling units, 303 hotel rooms and ground floor retail. The anticipated buildout year of the development is 2025. Based on the TIA prepared by BA Group in October 2015, the development is expected to generate a net increase of 35 and 35 veh/h during the morning and afternoon peak hours, respectively. Given the distance and low trip generation by this development, trip generation will not be added to background volumes.

14 – 360 Laurier Ave

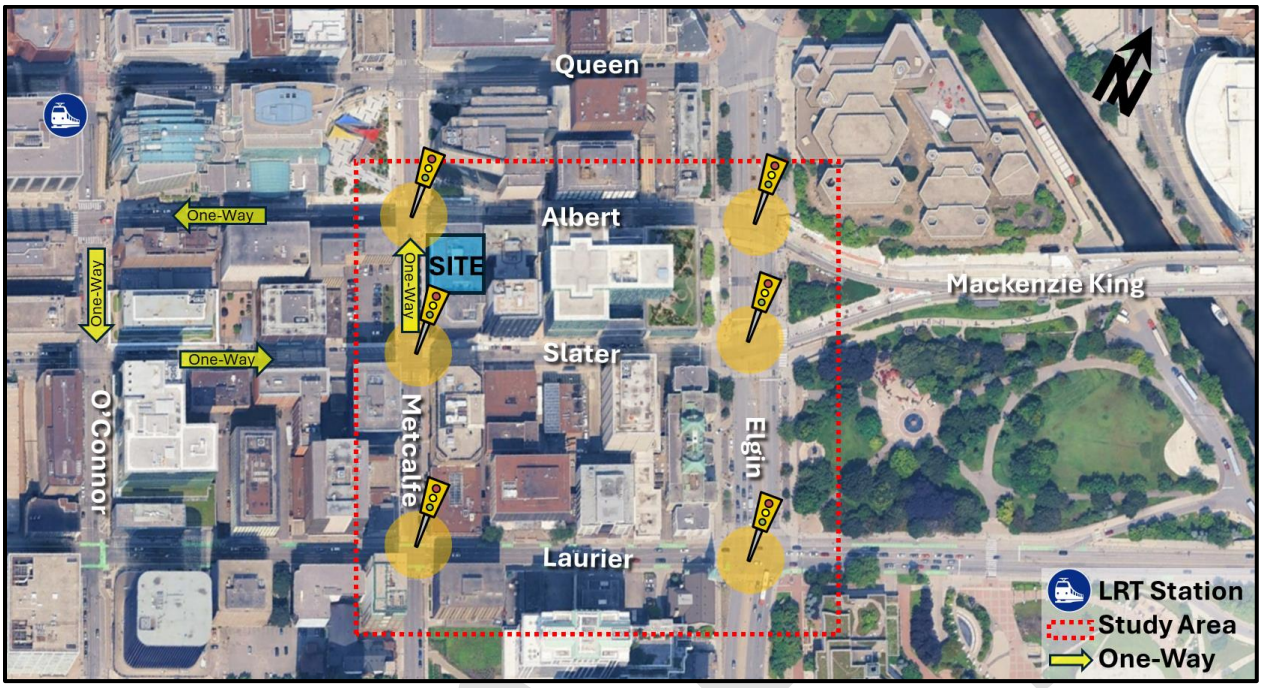
A mixed-use building is proposed consisting of 139 residential units with ground floor retail. A memo by CGH was prepared in April 2023 which forecasted a net reduction in vehicle trips of 132 and 147 two-way vehicles for the AM and PM peaks respectively. To provide a more conservative approach and account for other smaller developments without TIAs, no reductions in background volumes will be conducted for this development.

2.2. Study Area and Time Periods

For the purposes of this report, the proposed development is assumed to be fully constructed by 2026. The full buildout scenario and five-years after development buildout will be analyzed, 2026 and 2031. The future horizon years analyzed will use the weekday morning and afternoon peak hour traffic volumes. Proposed study area intersections are listed below and illustrated in **Figure 13**.

- Albert/Metcalfe
- Slater/Metcalfe
- Laurier/Metcalfe
- Site Access
- Albert/Elgin
- Slater/Elgin
- Laurier/Elgin

Figure 13: Study Area and Intersections to be Analyzed



2.3. Exemption Review

The following modules/elements of the TIA process provided in **Table 3** are recommended to be exempt in the subsequent steps of the TIA process, based on the City's TIA guidelines and the subject site:

Table 3: Exemptions Review Summary

Module	Element	Exemption Consideration
4.1 Development Design	4.1.3 New Street Network	Only required for plans of subdivision
4.6 Neighborhood Traffic Calming	All	Development does not rely on local or collector roads for access
4.7 Transit	All	The development is forecasted to generate less than 75 transit trips.
4.8 Network Concept	All	Only required for ZBLA applications.
4.9 Intersection Design	Synchro Analysis	The development is forecasted to generate less than 75 vehicle trips.

3.0 FORECASTING

3.1. Development Generated Travel Demand

3.1.1. Trip Generation and Mode Shares

The existing 12-storey office building has been vacant since the Covid-19 Pandemic (2020) and was bought by Groupe Mach thereafter. Given that the office uses have been vacant since 2020, then a trip generation to reduce existing land uses will not be completed as those trips are not accounted for in recent traffic counts which were generally conducted in 2023 or 2024. The retail space is small, will replace existing retail and will likely provide ancillary uses for the high-density residential and office uses, intended for local active trips only (not anticipated to generate new trips).

Trip Generation Rates

The proposed development will consist of 241 residential units within a 24-storey building. The appropriate trip generation rates for high-rise residential units were obtained from the 2020 TRANS Trip Generation Manual. The Manual provides person-trip rates during the peak AM and PM periods (i.e. 7am-9:30am and 3:30pm-6pm). The trip rates are summarized in **Table 4** below.

Table 4: Proposed Development Trip Rates

Land Use	ITE/TRANS Designation	Data Source	Trip Rates	
			AM Peak	PM Peak
Residential	"High-Rise Residential"	TRANS	T = 0.80(du);	T = 0.90(du);
Note: T = Average Vehicle Trip Ends; du = Dwelling unit				

Using the TRANS Trip Generation rates from **Table 4**, the total amount of person trips generated by the proposed 241 residential units was calculated by multiplying the rate by the number of units, for the morning and afternoon peak periods, as shown in **Table 5**.

Table 5: Residential Units Peak Period Person Trip Generation

Land Use	Dwelling Units	AM Peak Period Person Trips	PM Peak Period Person Trips
High-Rise Residential	241	193	217

The proposed residential units are anticipated to generate approximately 330 and 375 total person trips during the morning and afternoon peak hours respectively. The total peak period person trips in **Table 5** are then divided into different travel modes using mode share percentages obtained from the 2020 TRANS Manual for the "Ottawa Centre" district. **Table 6** provides the travel mode breakdown for the proposed high-rise apartments.

Table 6: High-Rise Apartments Peak Period Trips Mode Shares Breakdown

Travel Mode	Mode Share	AM Peak Period Person Trip	Mode Share	PM Peak Period Person Trips
Auto Driver	18%	34	17%	38
Auto Passenger	2%	5	9%	20
Transit	26%	50	21%	45
Cycling	1%	3	1%	1
Walking	52%	101	52%	113
Total Person Trips	**100%**	**193**	**100%**	**217**

Standard traffic analysis is usually conducted using the morning and afternoon peak hour trips as they represent a worst-case scenario. In the 2020 TRANS Manual, Table 4 provides conversions rates from peak period to peak hours for different mode shares. The conversion rates are provided in **Table 7** below.

Table 7: Peak Period to Peak Hour Conversion Factors (2020 TRANS Manual)

Travel Mode	Peak Period to Peak Hour Conversion Factors	
	AM	PM
Auto Driver and Passenger	0.48	0.44
Transit	0.55	0.47
Bike	0.58	0.48
Walk	0.58	0.52

Using the conversion rates in **Table 7** and the peak period person trips for different travel modes in **Table 6**, the peak hour trips for different travel modes can be calculated as shown in **Table 8**.

Table 8: Peak Hour Trips Generated - TRANS Mode Share

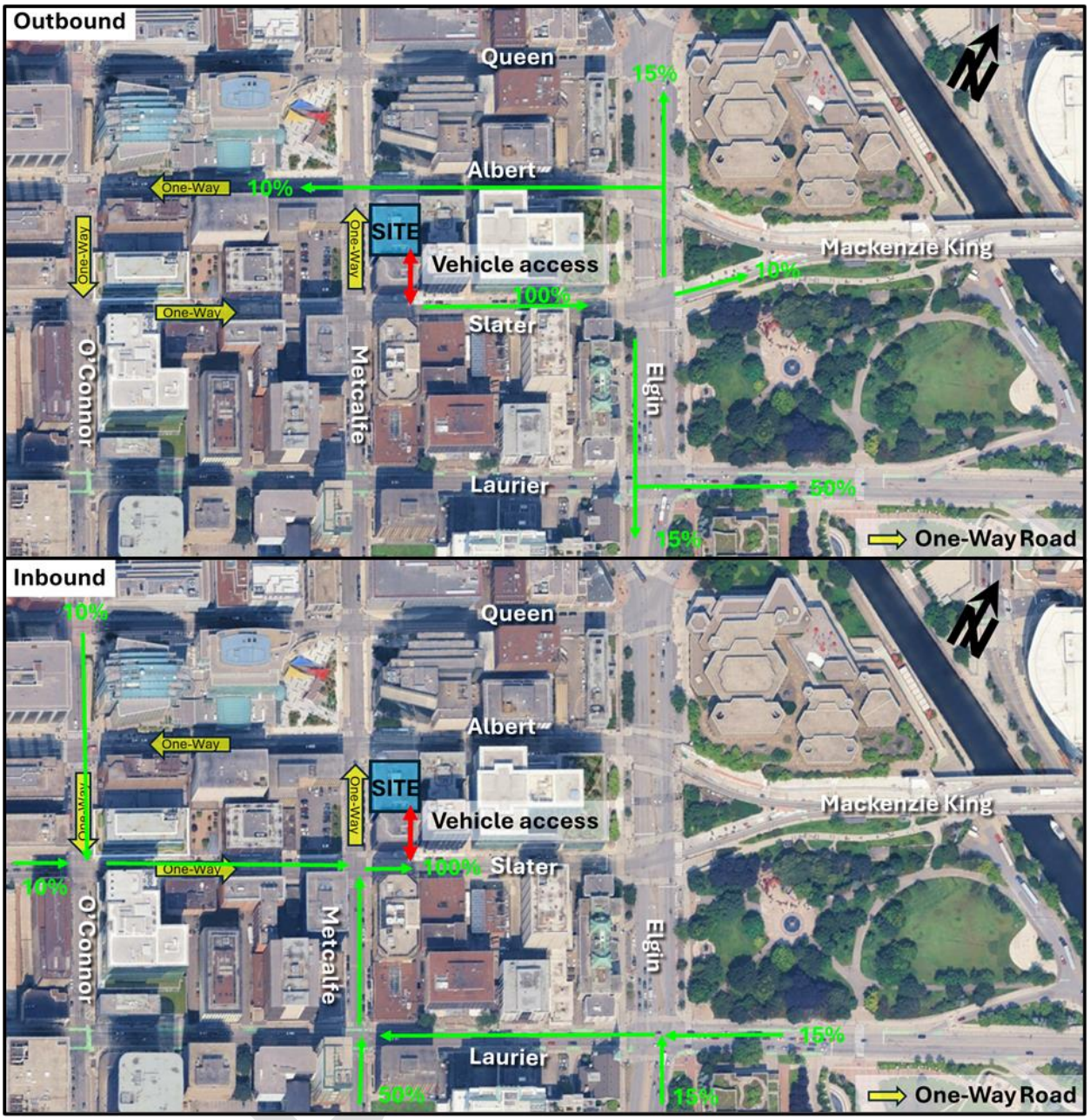
Travel Mode	Mode Share	AM Peak Hour (Trips/h)			Mode Share	PM Peak Hour (Trips/h)		
		In	Out	Total		In	Out	Total
Auto Driver	18%	5	11	16	17%	10	7	17
Auto Passenger	2%	1	2	2	9%	5	4	9
Transit	26%	9	19	28	21%	12	9	21
Cycling	1%	0	1	2	1%	0	0	1
Walking	52%	18	40	59	52%	34	25	59
Total Person Trips	100%	33	73	106	100%	61	44	106

As shown above, the proposed development is anticipated to generate approximately 105 total person trips, 15 vehicle trips, 30 to 20 total transit trips, 60 walking trips and less than 5 cycling trips during the AM and PM peak hours respectively. The mode shares from TRANS seem appropriate and no further mode share modifications are proposed.

3.1.2. Trip Distribution and Assignment

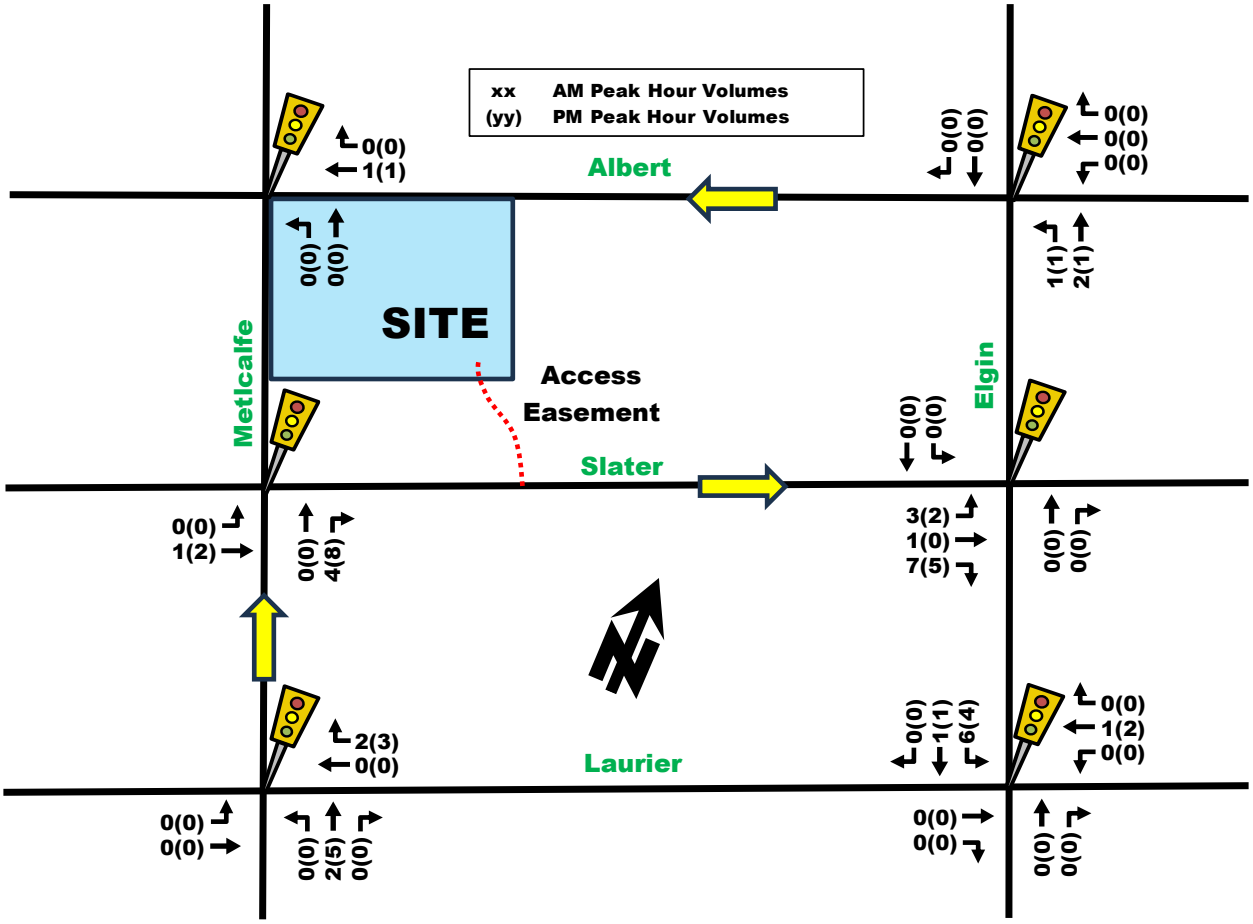
Based on the 2011 OD Survey (Ottawa Center), the location of adjacent arterial roadways, turning restrictions during peak hours and destinations, the distribution of site-generated traffic volumes was estimated as shown in **Figure 14**.

Figure 14: Site Generated Vehicle Traffic Percent Distribution



The anticipated 'new' auto trips for the proposed development from **Table 8** were then assigned to the road network with the distribution shown above, as shown in **Figure 15**, for the total site-generated traffic.

Figure 15: Site-Generated Traffic



3.2. Background Network Traffic

3.2.1. Transportation Network Plans

Refer to Section 2.1.3: Planned Conditions.

3.2.2. Background Growth and Other Area Developments

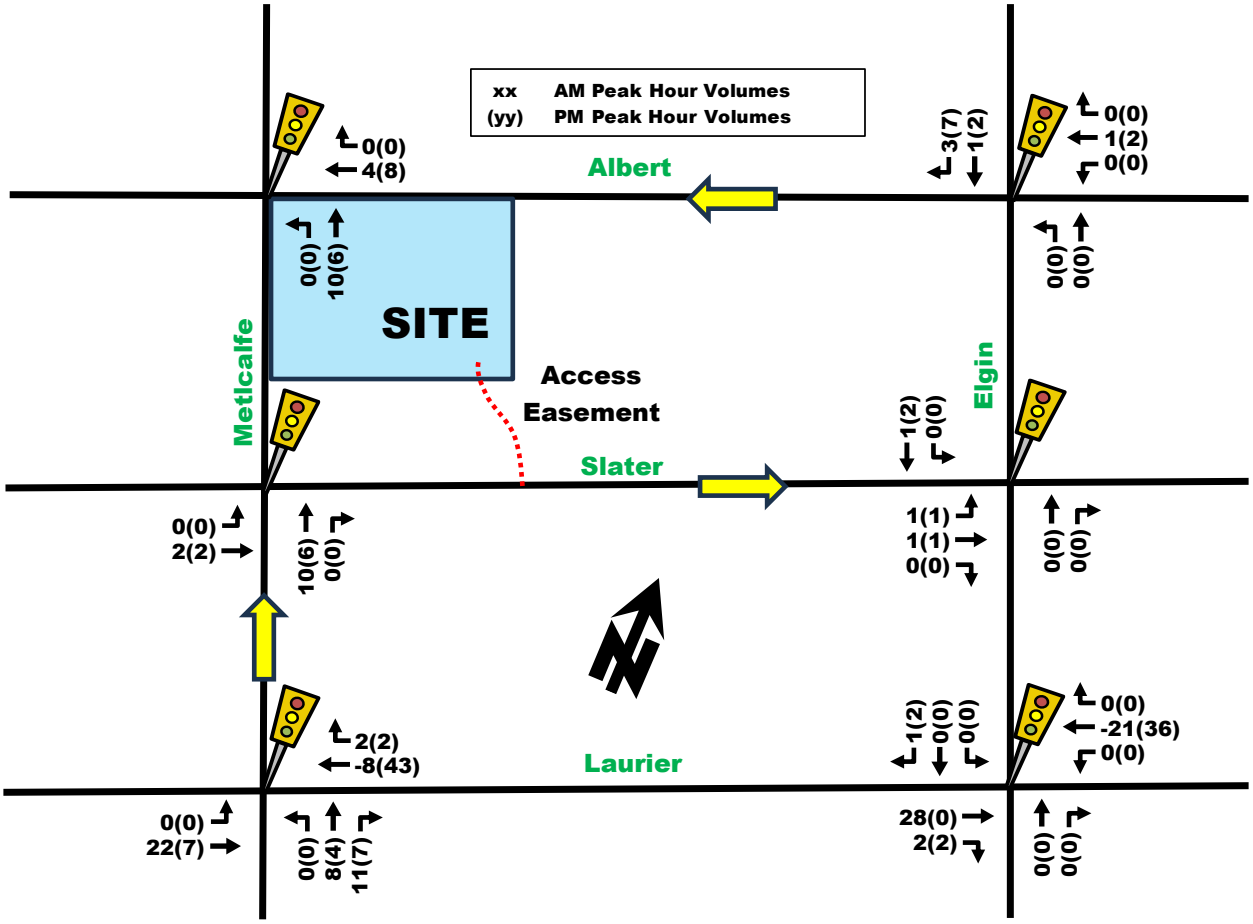
As described in Section 2.1.3, there are various new developments proposed within a 500m radius which will be layered on individually to existing traffic volumes.

Keeping consistent with the big moves and priorities listed on the Official Plan and new Transportation Master Plan (Part 1) being developed, future and existing trips in the area are expected to continue shifting towards active transportation modes including biking, walking and transit over driving. The city is currently investing in further cycling and pedestrian facilities within the core and is extending the reach of LRT for those coming from outside of the core. Historic counts collaborate this shift in mode share with zero to negative annual growth rates within the downtown core. For this reason, a 0% annual growth rate is considered appropriate.

3.2.3. Future Background Volumes

The total number of new other area development vehicle trips projected to use study area intersections have been illustrated in Figure 16.

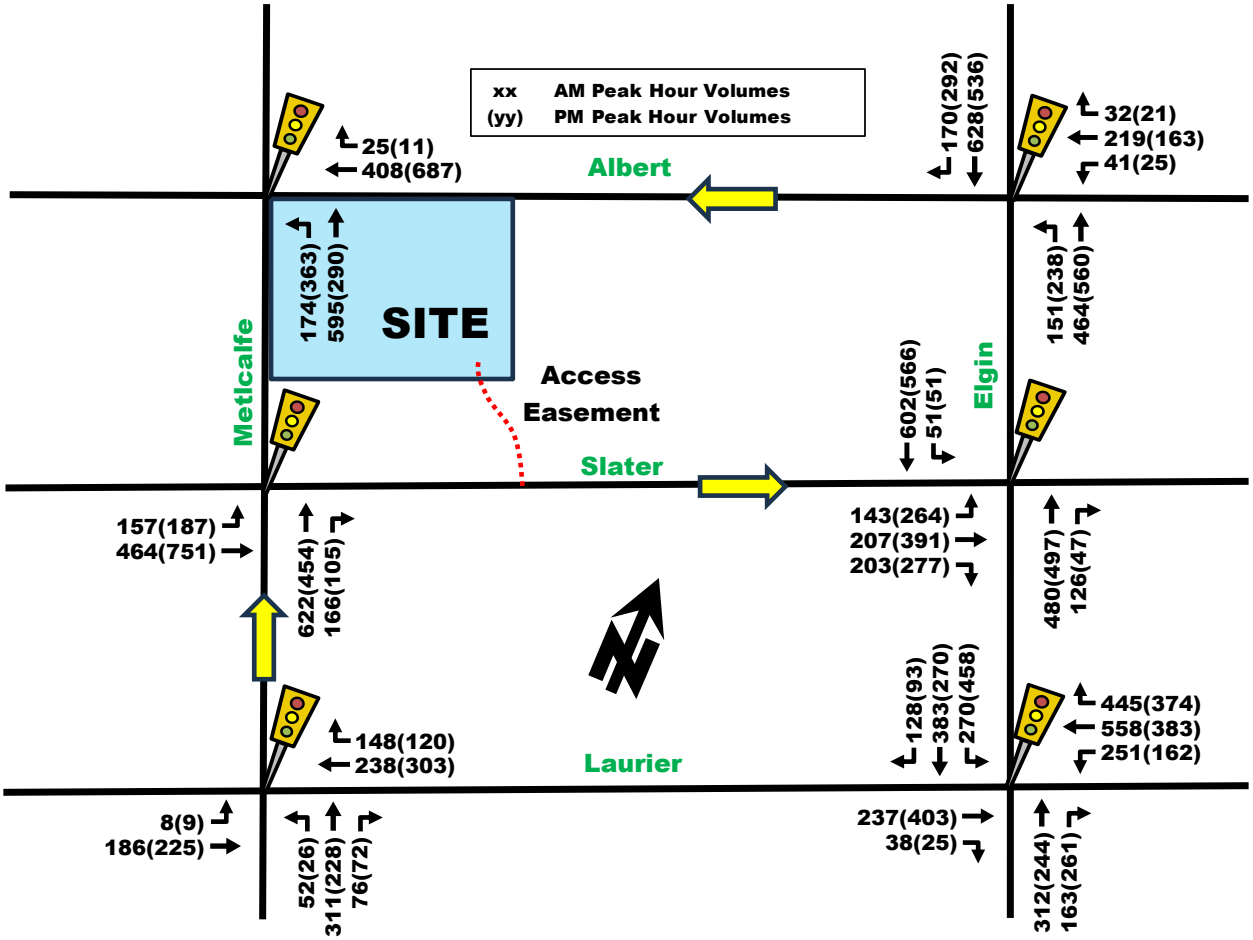
Figure 16: Other Area Development Trip Generation



Note: Negative volumes reflect a net reduction in trip generation for some developments.

These other area development volumes were then layered on to existing volumes. Since no yearly background growth is anticipated, then the 2026 and 2031 background volumes will be the same. The resultant future traffic volumes have been provided in **Figure 17.**

Figure 17: Future Traffic Volumes



3.3. Demand Rationalization

The following section is exempt as less than 75 vehicle trips are anticipated (refer to Section 3.1).

4.0 ANALYSIS

4.1. Development Design

4.1.1. Design for Sustainable Modes

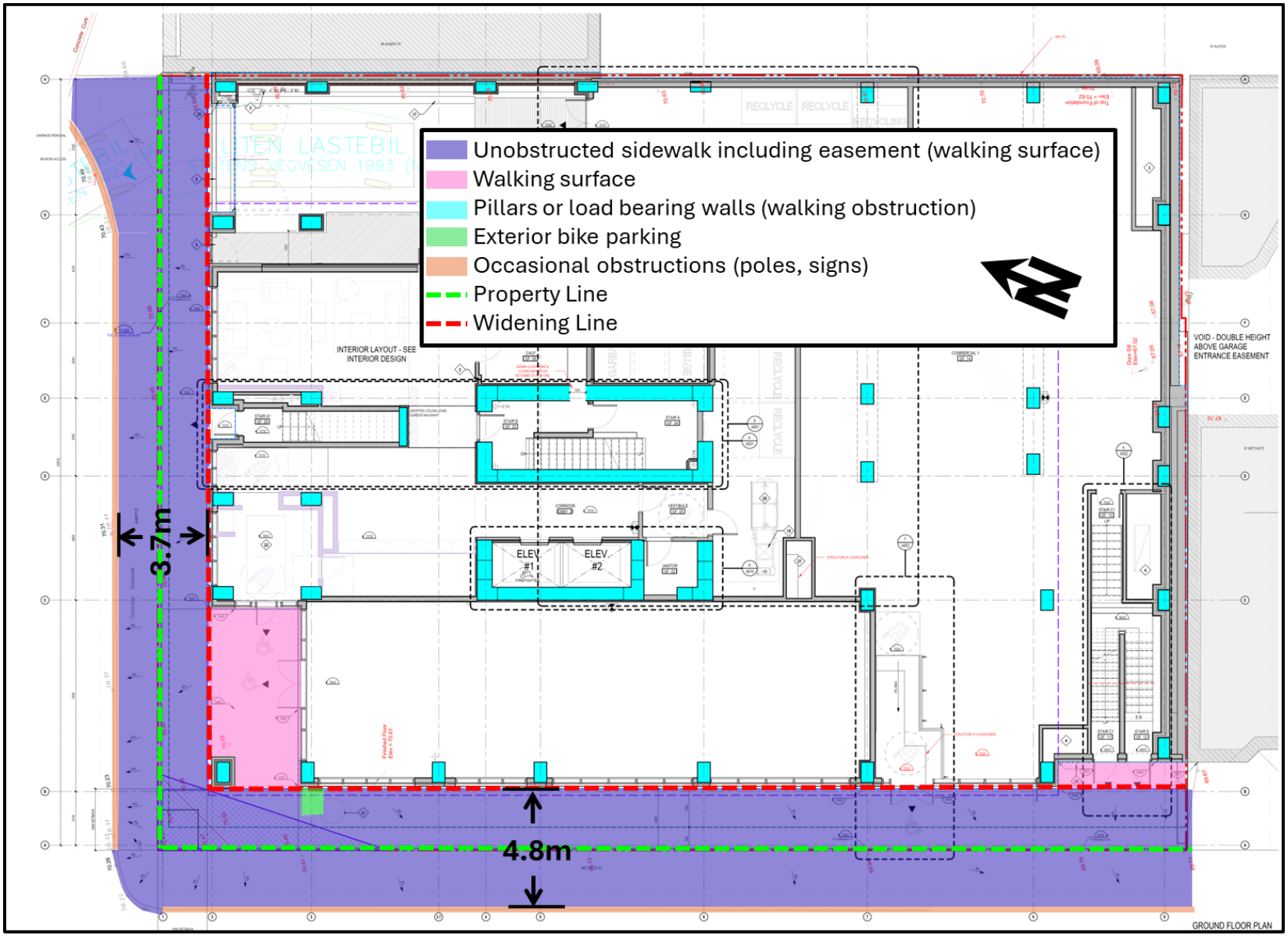
Pedestrian/Cycling Routes and Facilities

As per the Official Plan – Schedule C16, there is a right-of-way widening easement policy that applies to Metcalfe St and Albert St. As per the Official Plan, Metcalfe St has a 0.9m road widening and Albert St a 1.25m road widening, of which is land to be transferred to the City of Ottawa. This widening is in addition to the required road right-of-way protection limits; it is to be "an unobstructed surface easement" that is intended "for the use of pedestrians, or other forms of active transportation…along the full length of property frontages." In this context, as per Table 1 in Schedule C16 of the Official Plan, both Metcalfe St and Albert St require a 1.5m unobstructed easement. Finally, an overlapping 5x15m corner triangle must be transferred to the city at the Albert/Metcalfe intersection fronting the site.

Figure 18 illustrates the proposed allocation of space along the two development frontages. The existing property line is shown as a green dashed line, with the new widening protected line shown in dashed red. Existing city infrastructure obstructions (such as streetlights and signs) are located on a narrow strip along the curb, in **orange**. The proposed unobstructed sidewalk facilities are shown in **purple**, with the Metcalfe St providing approximately 4.8m of unobstructed path and the Albert St providing at least 3.7m wide unobstructed walking surface. Near to the front door, there is a proposed column as shown in **light blue** which creates a partially obstructed walking area as shown in **pink**.

The latest site plan would result in improved pedestrian facilities for both Albert St and Metcalfe St. The Albert St frontage is currently about 2.5m wide and is proposed to be widened to approximately 3.5m wide with minimal obstructions such occasional street signage near the edge of the road. Along Metcalfe St, the existing 2.5m sidewalk is proposed to be widened to approximately 4.6m wide, with minimal obstructions such as occasional street signage near the edge of the road, and a new 2 bike parking rack located against the building to reduce the impacts of narrowing a clear walking path.

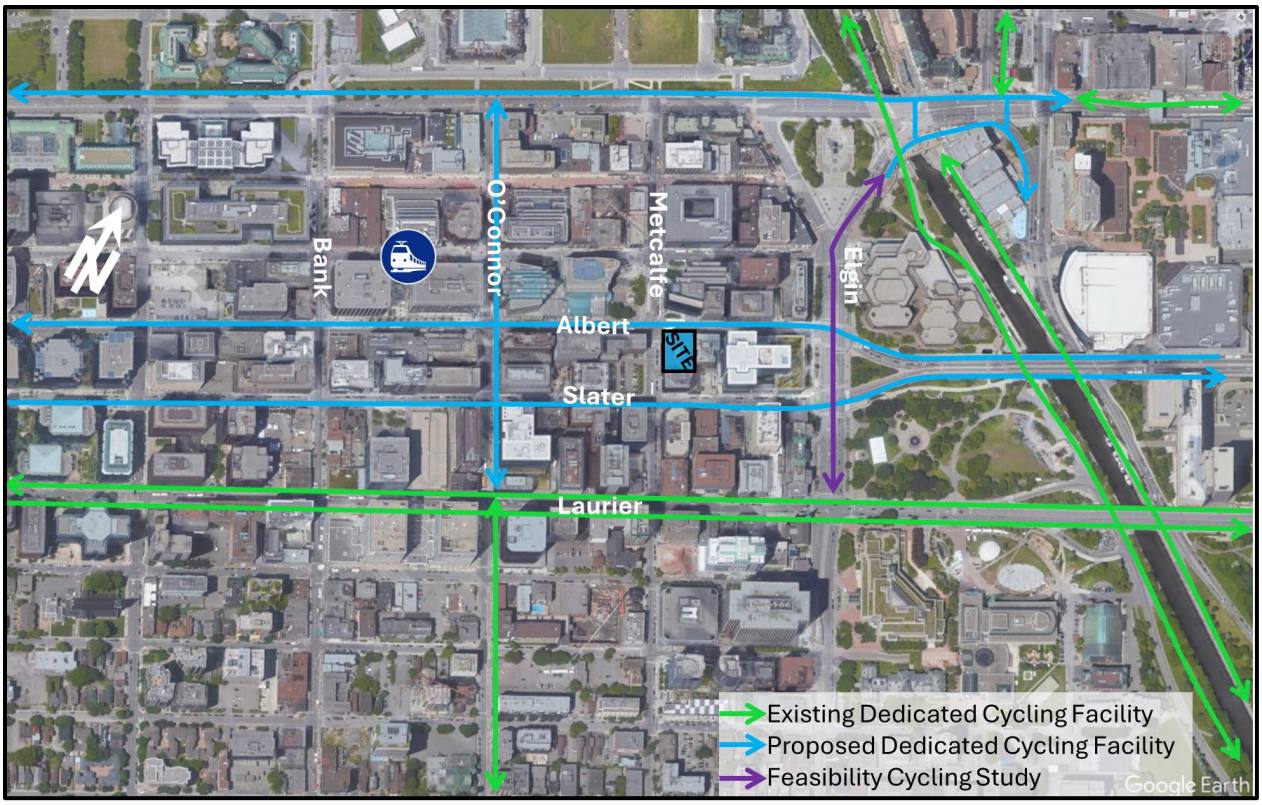
Figure 18: Proposed Walking Facilities on O'Connor St and Slater St



Cycling facilities currently exist on Laurier Ave as uni-directional cycle tracks travelling east-west approximately 140m south of the site. Wellington St also provides uni-directional painted bike lanes travelling east-west approximately 250m north of the site. O'Connor St provides bi-directional cycle tracks travelling north-south, located south of Laurier Ave, approximately 300m southwest of the site. To the east, the Rideau Canal Eastern and Western Pathways provide mostly grade separated multi-use facilities that travel north-south.

As described in **Section 2.1.3**, new cycle tracks are proposed on O'Connor St which would extend from the existing cycle tracks south of Laurier Ave to Wellington St. These cycling facilities will connect to proposed uni-directional east-west facilities on Albert St and Slater St, as well as upgraded bike lanes to cycle tracks on Wellington St and a feasibility study for bike lanes on Elgin St, providing a well-connected network of cycling infrastructure adjacent to the site as shown in **Figure 19**. The site will provide secured bike parking spaces in the 1st and 2nd underground parking garage level. Access from the parking garage to the ground floor will be available using elevators. An additional 2 outdoor visitor bike parking spaces will be provided near the front entrance on Metcalfe St.

Figure 19: Future and Existing Off-Road Cycling Facilities



This development and adjacent road projects on Albert St will require coordination and a construction management plan to reduce throw away costs and impacts to the area during construction. Vehicle parking is proposed in a 2-storey underground parking lot, with the 2nd underground level being reserved for lockers and bike parking only, and limited vehicle parking provided on the 1st underground parking level.

Location of Transit Facilities

The site is approximately 300m walking distance to the Parliament LRT Station, making the site located within a transit-oriented development area. Continuous sidewalks are provided from the front entrance of the proposed building to the LRT Station. In addition to the LRT Station, there are various bus stops located within 200m walk from the site, including routes on Slater St, Queen St, and Elgin St. STO (Quebec) routes also operate on Albert St and Slater St.

4.1.2. Circulation and Access

The site proposes an underground parking garage which is accessed via an easement provided by the adjacent site, 81 Metcalfe St, which is accessed via Slater St only as a left-in-left-out (note: Slater St is a one-way street). **Section 4.4** will provide further details regarding the driveway access and connectivity to the adjacent road network. The easement is already built and was operational when 77 Metcalfe was operational as an office building. The client intends to retain the existing parking garage structure and the easement, providing only minor modifications internal to the parking garage to provide further bike parking spaces and lockers for residents. The internal driveway widths within the parking garage are proposed at 6.0m wide, which is compliant with the minimum 6.0m wide required aisle width (Zoning By-Law Section 107 1c ii) considered adequate for two-way travel and 90-degree parking stalls. The parking garage ramp is proposed at a maximum 5.0% incline, all located indoors. Melting devices are only required for outdoor ramps with grades between 6% to 12% which is not applicable at this location.

Garbage pick-up will occur from a separate loading bay internal to the site, accessed by Albert St on the northeastern quadrant of the site. This loading bay may also be used by tenants moving in/out of the building. Truck turning templates have been provided in **Appendix E**.

4.1.3. New Streets Network

Exempt, only required for Plans of Subdivision.

4.2. Parking

The following parking analysis reflects the minimum number of parking rates and spaces required based on the City of Ottawa Zoning By-Law for developments located in Area Z: near major LRT Station on Schedule 1A. **Table 9** summarizes the minimum vehicle and bicycle parking rates from Part 4, Parking, Queueing and Loading Provisions parking by-law, referenced from Tables 101, 102, and 111A.

Table 9: Required Vehicle and Bicycle Parking Spaces

Land Use	Size (unit or m²)	Minimum Vehicle Parking Rates				Bicycles		
		Base Rate	Visitor Rate	Min Required Spaces	Proposed Spaces	Base Rate	Min Required Spaces	Proposed Spaces[2]
Dwelling, Mid-High-Rise Apartments (R12)	241 units	0	See Note[1]	23	**17**	0.5/unit	121	**243**
Commercial	469 m²	0	0	0		1/250m²	2	
			Total	**23**		**Total**	**123**	

1 – Area Z has a minimum visitor parking rate of 0.1 spaces per unit excluding the first 12 units to a maximum of 30 visitor parking spaces per building.
2 – Maximum allowed of 1.5/unit or 362 parking spaces which has not been exceeded.

As shown above in **Table 9**, the site requires a minimum of 23 visitor parking spaces, no minimum residential parking spaces, and a maximum allowed 362 parking spaces. The site proposes 17 residential parking spaces located in the first of two-level underground garage structure which would equate to a parking ratio of approximately 0.07 spaces per unit. This very low rate of vehicle parking spaces per units is consistent with the Official Plan and Transportation Master Plan in their principles to reduce car parking and car dependency in areas close to higher order transit facilities and transit priority routes.

The site does not offer any visitor parking spaces given the very low number of vehicle car parking proposed. Generally, visitors will be encouraged to use alternative modes of transportation such as taking transit (LRT Station within 200m walk), cycling (cycle-tracks available on O'Connor St, Laurier Ave, Rideau River Pathways

and Wellington St plus future proposed Albert St, Slater St, and Wellington St improvements), ride hauling services (taxi, Uber, etc.), or walking. Should visitors decide to drive to the site, there are ample locations near the subject site to park using public and private parking spaces. **Figure 20** illustrates available off-street parking garages, with many of them being located within less than a 200m radius from the site. On-street parking is also available on various streets surrounding the site, including Metcalfe St adjacent to the site. Additional on-street parking locations are available, with many becoming free during the evenings and overnight, which tends to match times when residential visitor parking demand is the highest. The existing on-street parking locations have been illustrated in **Figure 21**. It is worth noting that off-site parking is not typically free during peak periods, which functions as an effective TDM measure to dissuade visitors from driving to the site during the busiest times. The proposed vehicle parking rates proposed are considered adequate.

Figure 20: Location of Visitor Parking Facilities Nearby – Off-Street

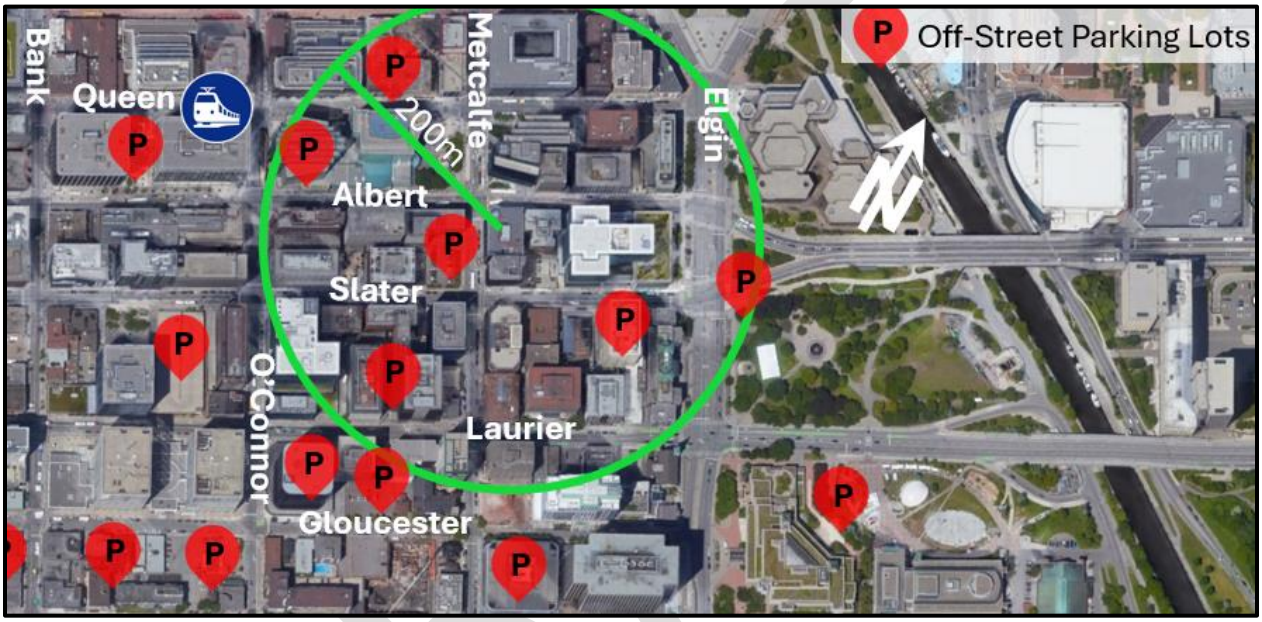
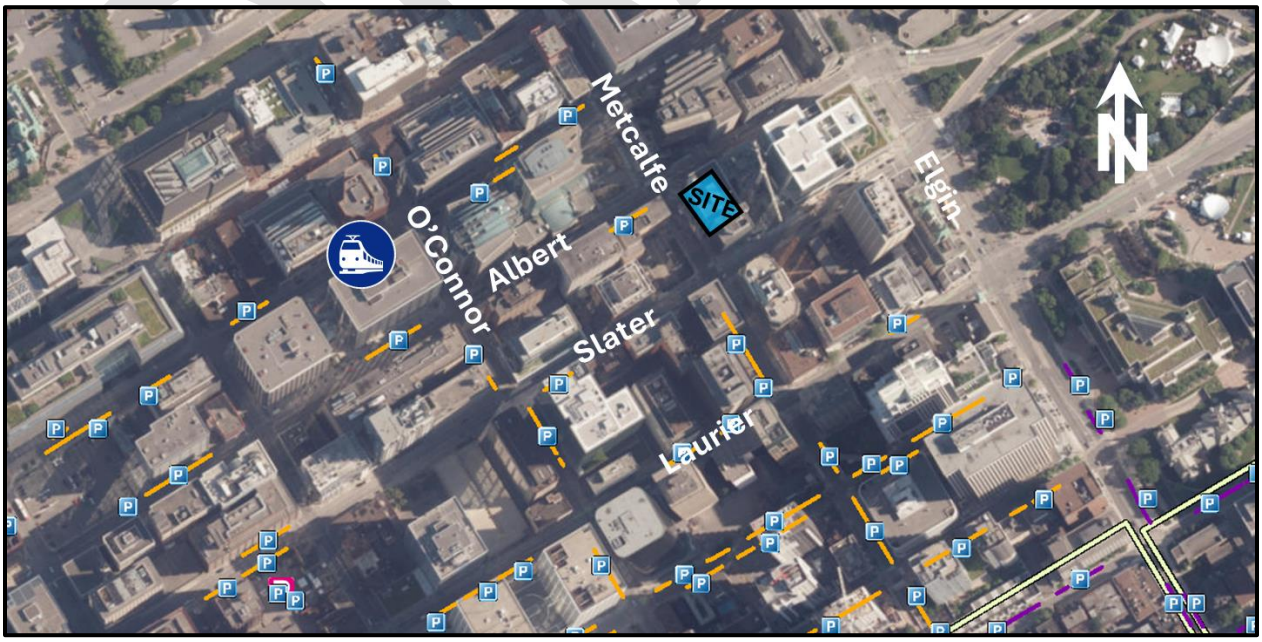


Figure 21: Location of Visitor Parking Facilities Nearby – On-Street



The minimum required bicycle spaces are 123. The site proposes 243 bike parking spaces which exceeds the minimum bike space requirements and equates to 1 bike parking space per unit (note that 2 spaces are proposed outdoors for visitor commercial parking). The bike parking spaces are proposed within the 1st and 2nd underground levels of the underground parking garage. Access from the parking garage to the ground floor will be available using elevators.

4.3. Boundary Street Design

Multi-Modal Level of Service (MMLOS) analysis was conducted for the site frontages, Albert St and Metcalfe St, based on the new revised City of Ottawa's MMLOS Analysis Guidelines. Note that the truck level of service is no longer calculated, but rather confirmed as part of the geometrics checks and truck turning templates.

The existing and future roadway geometries consist of the following features:

- *Albert St:*
  - 3 vehicle travel lanes (one-way) and a parking lane on the south side of road
  - 2.5 and 3m sidewalks on the south and north side of the road respectively. Assumed the first 0.5m are boulevard separation as space reserved for street signage
  - No cycling facilities provided today. Note: only westbound travel considered given one-way
  - More than 3,000 vehicles per day
  - Unposted speed limit assumed 50km/h
  - Located within 600m of rapid transit station
  - Not part of a transit priority corridor. Existing continuous bus lane to be removed in future
  - Not part of the Crosstown Bikeway Network
  - Future assumed 1.8m wide uni-directional cycle track with a 1.0m buffer and a reduced 2-vehicle travel lane. Sidewalk adjacent to site widened to approximately 3.5m with the edge of the road and signage space treated as a buffer space
- *Metcalfe St:*
  - 4 vehicle travel lanes (one-way) with one of them being a left-turn lane
  - 2.5 and 2.8m sidewalks on the east and west side of the road respectively. Assumed the first 0.5m are boulevard separation as space reserved for street signage
  - No cycling facilities provided. Note: only northbound travel considered given one-way
  - More than 3,000 vehicles per day
  - Unposted speed limit assumed 50km/h
  - Located within 600m of rapid transit station
  - Not part of a transit priority corridor
  - Not part of the Crosstown Bikeway Network
  - Future sidewalk adjacent to site widened to approximately 4.6m with the edge of the road and signage space treated as a buffer space

The multi-modal level of service analysis for adjacent site roadways is summarized in **Table 10**, with detailed analysis provided in **Appendix F.**

Table 10: MMLOS - Boundary Road Analysis

Road Segment	Multi-Modal Level of Service							
	Pedestrian		Bicycle		Transit		Public Realm	
	PLoS	Target	BLoS[1]	Target	TLoS[2]	Target	PR	Target
Albert St (north side – Existing)	B	A	E	B	B	B	C	N/A
Albert St (south side – Existing)	A	A	-	-	-	-	C	N/A
Metcalfe St (west side – Existing and Future)	B	A	-	-	-	-	C	N/A
Metcalfe St (east side – Existing)	B	A	E	B	-	-	C	N/A
Albert St (north side – Future)	A	A	A	B	D	D	B	N/A
Albert St (south side – Future)	A	A	-	B	-	-	B	N/A
Metcalfe St (east side – Future)	A	A	E	B	-	-	C	N/A

1. Cycling on Albert St and Metcalfe St assumed to be a single direction only to mimic cycling behavior (unlikely to have contraflow cyclists).
2. Only the direction of driving was considered for bus travel. No bus routes on Metcalfe St.

Pedestrian

- The pedestrian level of service (PLoS) was only met on the south side of Albert St given the separation from vehicle travel lanes (influence of on-street parking). With the addition of a new cycle track on the north side of Albert St and the widened sidewalk facilities on the east side of Metcalfe St, then those segments will also meet the PLoS in the future.

Bicycle

- The bicycle level of service (BLoS) was not met on any of the existing road segments. Once a cycle track is added to Albert St, then it will meet the desired BLoS for that segment.

Transit

- Only Albert St has active transit routes, with the desired level of service met for existing and future conditions.

Public Realm

- The general "health" of the street was scored "C" for both existing road segments. The improvements proposed, including wider sidewalks and cycling facilities improves this score to a "B'.

4.4. Access Intersection Design

Note, former sections 4.4.2 (Access Control) and 4.4.3 (Access Design) have been moved to Section 4.9.1 and 4.9.2 as per the revised TIA Guidelines, June 2023.

4.4.1. Location and Design of Access

Vehicle Access and Circulation

The site plan proposes two vehicle accesses; one located on the northeastern quadrant of the site off Albert St approximately 30m east of the Albert/Metcalfe intersection and proposed as a single loading bay space for garbage pick-up and move-in/out operations; the second access is located on the adjacent property, 81 Metcalfe St and provides an easement through its property to serve the parking garage under this development (77 Metcalfe St). The easement via 81 Metcalfe St is accessed via Slater St, approximately 30m east of the Slater/Metcalfe intersection. The underground parking garage has space for only 17 vehicles and is therefore anticipated to produce very limited vehicle trips in and out of the site. The Slater St easement access is existing and no changes are proposed. Should the development at 81 Metcalfe St undergo future reconstruction, an easement should be maintained to continue providing access to the underground parking garage.

The tenant loading and garbage pick-up access off Albert St is proposed at approximately 4.5m wide which accommodates an MSU sized vehicles to reserve in and then drive out forward as shown in **Appendix E**. Note that an MSU truck is likely conservative in size as units are small and a smaller truck may be more common on move-in/out. This access is not meant to accommodate two-way traffic and is meant as a temporary loading bay only.

Throat Length

The Transportation Association of Canada (TAC) Geometric Design Guide for Canadian Roads, Chapter 8 (Access) provides guidelines for clear throat length. Clear throat lengths are only recommended for arterial and collector roads. Per TAC Table 8.9.3, the suggested minimum clear throat length to an arterial road for apartments (>200 units) is 40m for a development abutting an arterial road, which is not met at either access. However, the parking garage access via Slater St is anticipated to have very limited vehicle trips given that it only provides parking to 17 vehicles and the loading bay only has space for a single vehicle. The risk of the risk of spillback is very minimal, and the accesses are therefore considered acceptable.

Private Approach By-law

Additionally, the Private Approach By-Law requirements for the City of Ottawa were reviewed, with the following observations:

- As required, the width of the proposed development drive aisles do not exceed 9m.
- The site has two frontages (approximately 30m and 40m long) which permits having at least one private approach per frontage.
- Part m section ii of the bylaw is exempt as neither the Albert St nor Slater St accesses provide 20 or more parking spaces. Nonetheless, both accesses are located further away than 18m away from the nearest intersection street (if assuming that at least 20 or more parking spaces were provided).
- The distance between the proposed loading bay and the adjacent property lines does not meet the desired 3m separation but does meet and exceed the bare minimum of 0.3m separation. The adjacent property does not have a driveway adjacent to this development's loading bay access that is proposed. The Albert St loading bay access will have very low use as it will only provide access to a move-in bay and garbage pick-up. The access on Slater St is already existing and will access very few parking spaces (17). The proposed location of the loading bay and existing site access is therefore considered acceptable.
- The grade of the private approach is to not exceed 2% within the private property for a distance of 9.0m to the curb line. The loading bay off Albert St is proposed at grade and the Slater St access is already built.

The access designs are in conformance with the City of Ottawa Private Approach By-law 2003-447 or have been justified based on their intended purpose. The accesses are to be constructed as per City of Ottawa Standard Detail SC7.1.

4.5. Transportation Demand Management

4.5.1. Context for TDM

Based on the type of development, it is assumed that most trips generated by the proposed site will be residents leaving the site in the AM peak hour to go to work and returning from work to the proposed site in the PM peak hour. Sections 3.1.1 and 3.1.2 describe how many trips are anticipated per travel mode. The site is located within 600m of existing rapid transit (Parliament LRT Station) and various bus routes.

4.5.2. TDM Program

The TDM infrastructure checklist and TDM Measures are attached as **Appendix G**. Non-residential TDM measures and infrastructure checklist have also been provided. The summary below reflects residential TDM.

TDM Supportive Development Design and Infrastructure Checklist:

- Ten (10) out of the ten (10) "required" measures have been satisfied or rationalized.
- At least twelve (12) of fourteen (14) "basic" measures related to walking, cycling, transit and parking have been satisfied or are not applicable.
- Three (3) of the of the seven (7) candidate "better" measures are also proposed or are non-applicable.

TDM Measures Checklist:

- Six (6) out of seven (7) "basic" measures related to walking, cycling, transit, parking and TDM marketing have been satisfied or are not applicable. Three (3) of those, which have been designated by an asterisk (*), are considered by the TDM Measures to be some of the most dependably effective tools to encourage sustainable travel modes. This includes:
    - Display walking and cycling information at major entrances.
    - Display transit information at major entrances (once transit becomes available).
    - *Designate an internal coordinator or contract with external coordinator
    - * Unbundle parking costs from monthly rent/condo purchase price.
    - * Provide multi-modal travel information package to new residents.
- None out of eleven (11) "better" measures related to walking, cycling, transit, parking and TDM marketing have been considered at this time or are not applicable to this site.

4.5.3. Need and Opportunity

Since the development is located within 600m radius of Parliament LRT Station and various bus routes, as well as adjacent to cycle tracks and various destinations by walking, measures to provide sustainable active mode shares are encouraged. Such measures are described in more detail in Section 4.5.3 below, but include more aggressive Multi-Modal Levels of Service (MMLOS) such as exceeding the minimum desired 2m wide sidewalks as described in Section 4.3 and 4.9 and safe and efficient connectivity to public transit as described in Section 4.1 and 4.7, to name a few.

4.6. Neighbourhood Traffic Management

This section is exempt as it does not meet all criteria outlined in the June 14, 2023 TIA Guideline revision and is therefore exempt.

4.7. Transit

4.7.1. Route Capacity

Based on the TIA Guidelines Update, June 2023, this section is exempt as less than 75 transit trips are forecasted.

4.7.2. Transit Priority

Based on the TIA Guidelines Update, June 2023, this section is exempt as less than 75 vehicle trips are forecasted.

4.8. Review of Network Concept

This section is only required for Zoning By-Law Amendment applications (ZBLA). This report is in support of a Site Plan Application (SPA); therefore, this section is exempt.

4.9. Intersection Design

This section is exempt as the development is forecasted to generate less than 75 auto trips and therefore does not trigger the need for this section as outlined in the June 14, 2023 TIA Guideline revision.

5.0 FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

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

Existing Conditions

- Groupe Mach is proposing a mixed-use development at the municipal address of 77 Metcalfe St. The site is currently occupied by a vacant office tower which would be replaced by a new 24-storey building.
- The site is located within 600m walk to Parliament LRT Station and various bus routes.
- The site is well served by pedestrian and cycling infrastructure near the site.

Proposed Development

- The development will consist of approximately 5,050 ft^2 of ground floor retail and 241 residential units. The development is assumed to be fully constructed by the year 2026.
- Road improvements are proposed on Albert St, and Slater St within the study area. Such improvements generally consist of new cycling infrastructure and improved protected intersection designs. The latest information available for these projects suggest Albert St and Slater St would have new uni-directional cycling facilities following the direction of vehicular travel. An east-west cycling facility is also proposed on Wellington St and the O'Connor St bi-directional cycling facilities are proposed to be extended from Laurier Ave to Wellington St. A feasibility study for bike lanes on Elgin St is also ongoing.
- Given the site's downtown context near major employment areas, well serviced cycling facilities and low vehicle parking rates proposed, a driver and passenger mode share consistent with TOD mode shares was used. The transit, walking and cycling mode shares were derived from TRANS mode share for downtown core and local conditions. Using these mode shares, it was forecasted approximately 15 'new' two-way vehicle trips, 20 to 30 'new' two-way transit trips, less than 5 'new' two-way cycling trips and 60 'new' two-way walking trips.
- The site exceeds the minimum bike parking rate of 0.5 spaces per unit and proposes a rate of 1 bike parking space per unit plus 2 spaces for commercial visitors. A rate of 0.07 residential vehicle parking spaces per unit are proposed which is consistent with the OP and TMP policies and is proposed for residents only. Visitors who choose to drive will need to park on-street or at off-street public parking lots.
- The site proposes two accesses, one from Albert St and the other from Slater St via a neighbouring site easement.
    - The access from Albert St will only be accessible for infrequent loading operations such as a resident move-in/move-out and garbage operations. No concerns were noted at this access given the very limited vehicular movements expected (resident loading only).
    - The Slater St driveway will provide access to the underground parking garage via an easement agreement with the adjacent building located at 81 Metcalfe St. This access is existing and will provide connectivity to the existing two-level parking garage which is proposed to be maintained. The parking garage will provide 17 vehicular spaces and will therefore have very little use frequency also. Given the existing operations and low quantity of vehicular parking, no concerns were noted.
- TDM measures are highly encouraged for the site given the site context. A strong TDM plan will encourage sustainable living and will reduce demands on the adjacent road network.

Future Conditions

- Other area developments were acknowledged within this report.
- The MMLOS road segment analysis showed that pedestrian and cycling targets were generally not met for existing conditions, but the addition of a new uni-directional cycling facility on Albert St and the proposed sidewalk widenings on Albert St and Metcalfe St fronting the site improved the levels of service to be met in future conditions. The overall health of the street was also improved from a level of service "C" to "B" based on the public realm score.
- Generally speaking, the active transportation facilities along the site boundary will be improved, with a 2-space outdoor bike rack, a protected easement and areas with wider walking surfaces than existing.
- Given the low number of vehicle and transit trips forecasted (less than 75), no major impacts to the study area network are anticipated. Future conditions are forecasted to operate similarly to today.

Based on the preceding report, the proposed development located at 77 Metcalfe St is recommended from a transportation perspective.

Prepared By:

Juan Lavin, P. Eng.

Transportation Engineer

Reviewed By:

Austin Shih, M.A.Sc., P.Eng.

Senior Transportation Engineer

Appendix A:

TIA Screening Form

PARSONS

Office: +1 613.738.4160
1223 Michael Street, Suite 100|Ottawa, ON K1J 7T2

City of Ottawa 2017 TIA Guidelines

TIA Screening Form

Date	7-May-24
Project	77 Metcalfe St
Project Number	910537 - 10016

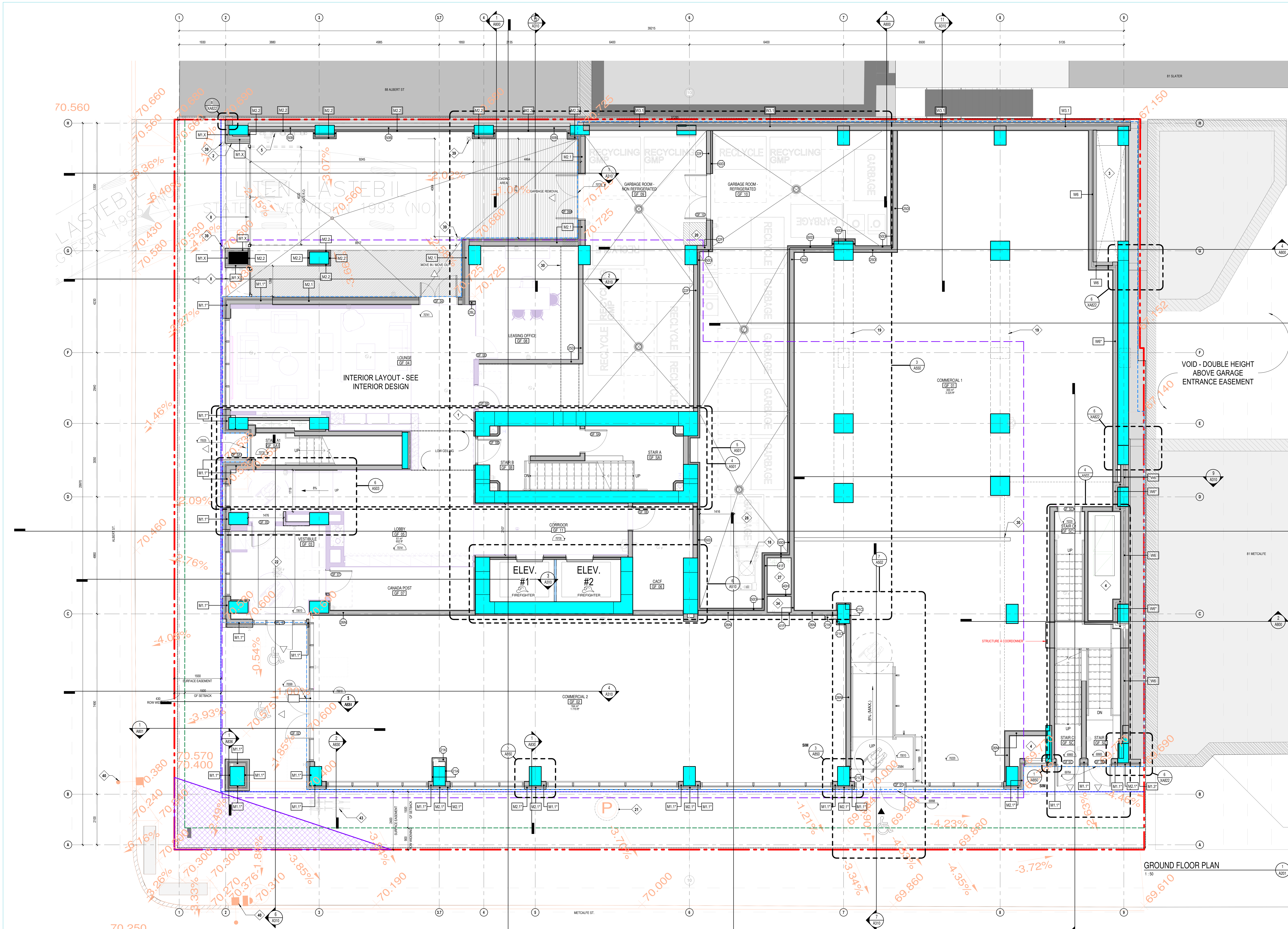
Results of Screening	Yes/No
Development Satisfies the Trip Generation Trigger	Yes
Development Satisfies the Location Trigger	Yes
Development Satisfies the Safety Trigger	Yes

Module 1.1 - Description of Proposed Development	
Municipal Address	77 Metcalfe St
Description of location	The site is bound by Slater St to the south, Elgin St to the east and fronting Albert St to the north and Metcalfe St to the west. The site is currently occupied by a 12-storey office building.
Land Use	Proposed conversion to residential building with approximately 250 units. Currently zoned MD S46.
Development Size	Approximately 250 residential units.
Number of Accesses and Locations	Assumed to be kept as existing via a right of way from Slater St (81 Slater) to an underground parking lot.
Development Phasing	Single-Phased Development
Buildout Year	Assumed 2026
Sketch Plan / Site Plan	See attached

Module 1.2 - Trip Generation Trigger		
Land Use Type	Townhomes or Apartments	
Development Size	250	Units
Trip Generation Trigger Met?	Yes	

Module 1.3 - Location Triggers		
Development Proposes a new driveway to a boundary street that is designated as part of the City's Transit Priority, Rapid Transit, or Spine Bicycle Networks (See Sheet 3)	Yes	Metcalfe St is part of the spine route network in 2013 TMP.
Development is in a Design Priority Area (DPA) or Transit-oriented Development (TOD) zone. (See Sheet 3)	Yes	Site is within a DPA area and TOD area (Parliament LRT Station)
Location Trigger Met?	Yes	

Module 1.4 - Safety Triggers		
Posted Speed Limit on any boundary road	<80	km/h
Horizontal / Vertical Curvature 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	Building fronts the signalized intersection of Metcalfe/Albert
A proposed driveway makes use of an existing median break that serves an existing site	No	
There is a documented history of traffic operations or safety concerns on the boundary streets within 500 m of the development	No	
The development includes a drive-thru facility	No	
Safety Trigger Met?	Yes	



GENERAL NOTES

NOTE	DESCRIPTION
1	FIRE DEPT. PHONE LINE
2	FIRE DEPT. CONNECTION
3	AIR INTAKE, SEE MECH. ENG.
4	AIR EXHAUST, SEE MECH. ENG.
5	EXISTING GAS ENTRY
6	CLEAR ZONE - FACADE MAINTENANCE ACCESS (SEE CONSULTANT)
8	PRIVACY GATE
9	TOWER FOOTPRINT
11	OIL CONTAINER
12	SCREEN WALL
14	ENTRANCE MARQUISE
15	SOFIT ABOVE
16	LOUVERS AIR INTAKE (SEE MECH.)
18	GARBAGE CHUTE
19	TRANSFER BEAM ABOVE (SEE STRUCTURE)
20	ELECTRIC CART 3'X3' - SEE ELEC. ENG.
21	RETENTION BASIN ACCESS
22	ENTRANCE FLOOR GRILLE
23	ROOF ACCESS HATCH
24	LINEAR DRAIN - SEE MECH. ENG.
25	VENTILATION GRILLE 2200X2600
26	GARBAGE CHUTE VENT
27	MECHANICAL SHAFT

GENERAL NOTES

NOTE	DESCRIPTION
28	GARBAGE COMPACTOR
29	SCUPPER
30	DUCT FOR STAIR PRESSURIZATION IN FIRE-RATED CEILING BULKHEAD
31	ACCESS LADDER FOR MAINTENANCE OF SAFETY CABLES
32	CONSTRUCTION JOINT, SEE STRUCTURAL ENG.
33	ACCESS METAL STAIR
34	COMMERCIAL KITCHEN VENT
35	ELEVATOR DRAINAGE PIT - 900X900, SEE MECH. ENG.
36	SANITARY DRAINAGE PIT - 900X900, SEE MECH. ENG.
37	STORMWATER DRAINAGE PIT, SEE MECH. ENG.
38	WIRE MESH PARTITION FOR MECHANICAL EQUIPEMENT SECURITY
39	BOLLARD (SEE STR. AND CIVIL ENG.)
40	EXISTING LIGHT POLE
41	BARRIER FREE TACTILE PAVERS (SEE CIVIL ENG.)
42	DEPRESSED SIDEWALK (SEE CIVIL ENG.)
43	BYCICLE RACK
44	BASE FOR MAINTENANCE OF THE FACADE

Autodesk Docs://13466_METCALFE_R24/77MTC_13466_ARC_R24.rvt

BICYCLE RACK LEGEND

- HORIZONTAL STACKED 2000mm x 400mm
- HORIZONTAL 2000mm x 400mm
- VERTICAL 1200mm x 400mm
- COMMERCIAL BYCICLE RACK

LEGEND

- EXITS
- ACCESS TO BUILDING
- VEHICULAR ENTRY
- BARRIER-FREE
- PUSH BUTTON
- LOADING ZONE
- PEDESTRIAN TRAFFIC
- TRIANGULAR SURFACE EASEMENT
- EXISTING EASEMENT - N326906
  FROM SLATER TO THE PARKING BELOW GRADE
- HYDRO OTTAWA MIN HEIGHT CLEARANCE 2,3M
- PROPERTY LINE
- GROUND SETBACK
- PODIUM LIMIT AND ROW WIDENING
- TOWER FOOTPRINT
- UNDERGROUND PROFILE

PROPOSED STREET | STRUCTURE | VENTILATION | ELECTRICITY | PLUMBING | FIRE PROTECTION | INTERIOR DESIGN | Civil

PROPOSED STREET DRAWING RECEIVED FROM GROUPE MACH : *24-11-28_CP000317-proposed.dwg*

0 1 2 3 4 5
GRAPHIC SCALE: 1:50

NOTES GÉNÉRALES General Notes

1. Ces documents d'architecture sont la propriété exclusive de NEUF architect(e)s et ne pourront être utilisés, reproduits ou copiés sans autorisation écrite préalable. / These architectural documents are the exclusive property of NEUF architect(e)s and cannot be used, copied or reproduced without written pre-authorisation
2. Les dimensions apparaissant aux documents devront être vérifiées par l'entrepreneur avant le début des travaux. / All dimensions which appear on the documents must be verify by the contractor before to start the work.
3. Veuillez aviser l'architecte de toute dimension erreur et/ou divergences entre ces documents et ceux des autres professionnels. / The architect must be notified of all errors, omissions and discrepancies between these documents and those of the others professionnals.
4. Les dimensions sur ces documents doivent être lues et non mesurées. / The dimensions on these documents must be read and not measured.

SURVEYOR
ANNIS, O'SULLIVAN, VOLLEBEKK LTD.
14 Concourse Gate, Suite 500, Nepean, Ont. K2E 7S6
T 613 727-0850 nepean@aovltd.com

INTERIOR DESIGN
GAUVREAU DESIGN
2015 Gilford, Montréal, QC H2H 1H2
T 514 596 0005 gauvreaudesign.com

CIVIL
ÉQUIPE LAURENCE
117, avenue Lépine, local 202, Gatineau, QC J8L 3G1
T 819 303 2700 equipelaurence.ca

STRUCTURE Structure
L2C Experts
4710 rue St-Ambroise, Suite 103, Montréal, QC H4C 2C7
T 514 379 4999 L2Cexperts.com

MÉCANIQUE ET ÉLECTRIQUE Mechanical and electrical
MEP EXPERTS CONSEIL
1920 Bourassa, Saint-Hyacinthe, QC J2S 1R6
T 514 795 1257

URBANISTE Urban Planning
FOTENN
420 O'Connor Street, Ottawa, ON K2P 1W4
T 613 730 5709 fotenn.com

ARCHITECTES Architect
NEUF architect(e)s inc.
630, boul. René-Lévesque O. 32e étages, Montréal QC H3B 1S6
T 514 847 1117 NEUFarchitectes.com

SCEAU / Seal

NEUF
ARCHITECT(E)S

CLIENT Client

PROMOTEUR Developer
GROUPE MACH

OUVRAGE Project
77 METCALFE

EMPLACEMENT Location
OTTAWA, ONTARIO

NO PROJET No.
13466

NO	RÉVISION	DATE (aa-mm-jj)
A	FOR COORDINATION 30%	2025-04-17
B	FOR COORDINATION 60%	2025-05-30
C	FOR INTERNAL REVIEW	2025-06-02
1	ISSUED FOR SITE PLAN APPROVAL	2025-07-08
2A	COORDINATION FOR PERMIT	2025-07-06
D	FOR INTERNAL REVIEW	2025-07-18

DO NOT USE FOR CONSTRUCTION

Lot 52 and Part of Lot 53 (South Albert Street) and Part of Lots 52 and 53 (North Slater Street) Registered Plan 3922, City of Ottawa.
PIN 04115-0061

DESSINÉ PAR Drawn by: AT
VÉRIFIÉ PAR Checked by: MM KP
DATE (aa.mm.jj): 2025 04 17
ÉCHELLE Scale: Comme indiqué

TITRE DU DESSIN Drawing Title
FLOOR PLAN - GROUND FLOOR

RÉVISION Revision: D
NO. DESSIN Dwg Number: A201

Appendix B:

Existing Peak Hour Volumes

5681223 - Albert Street at Metcalfe Street -... - TMC

Thu Oct 17, 2024
AM Peak (8:15 AM - 9:15 AM)
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1238980, Location: 45.421628, -75.696434, Site Code: 42063103

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

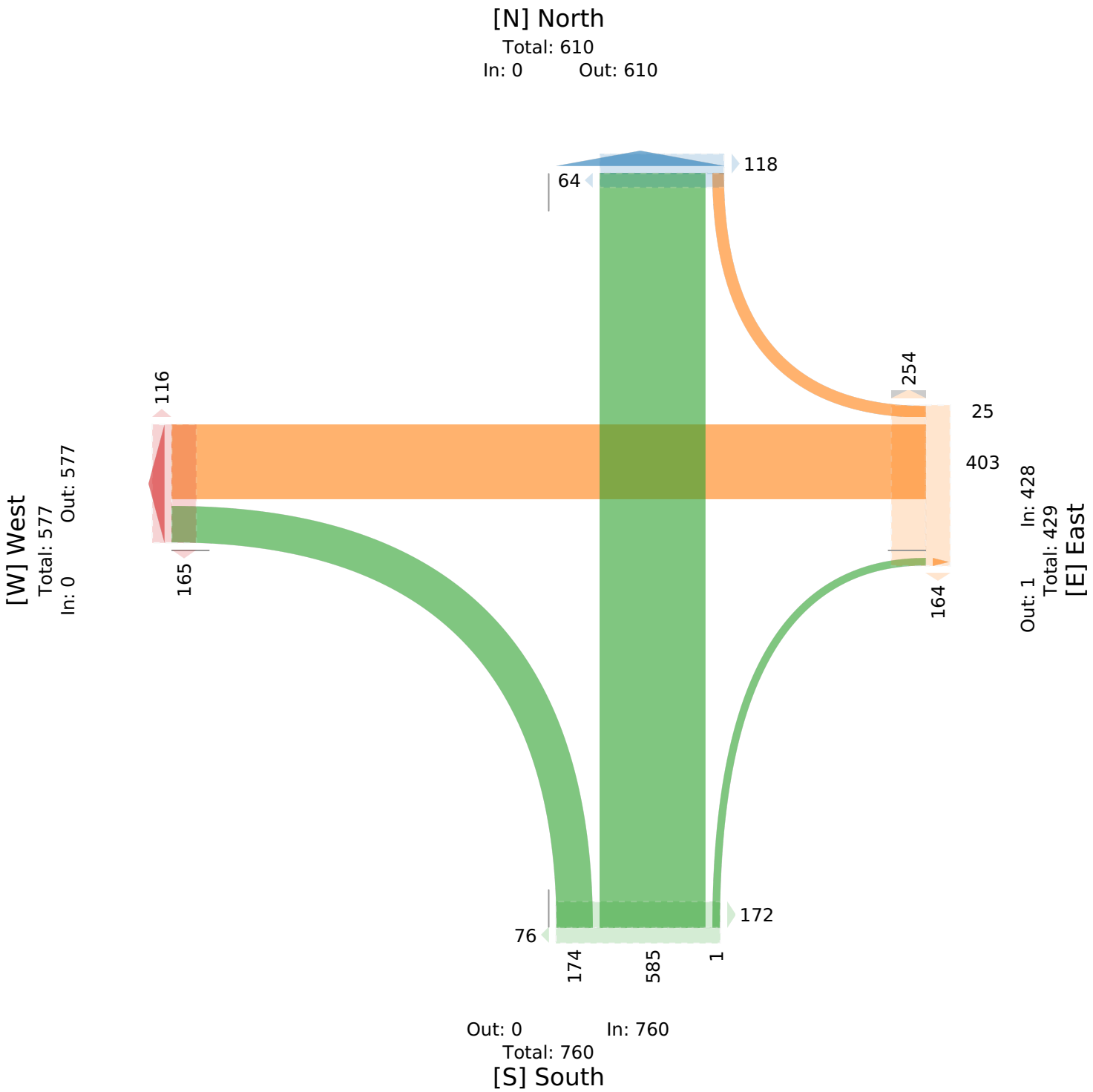
Leg / Direction	North Southbound						East Westbound						South Northbound						West Eastbound						
Time	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	**Int**
2024-10-17 8:15AM	0	0	0	0	**0**	36	6	107	0	0	**113**	85	0	135	39	0	**174**	52	0	0	0	0	**0**	62	**287**
8:30AM	0	0	0	0	**0**	40	6	96	0	0	**102**	105	0	133	47	0	**180**	61	0	0	0	0	**0**	78	**282**
8:45AM	0	0	0	0	**0**	57	8	86	0	0	**94**	134	0	164	48	0	**212**	74	0	0	0	0	**0**	69	**306**
9:00AM	0	0	0	0	**0**	49	5	114	0	0	**119**	94	1	153	40	0	**194**	61	0	0	0	0	**0**	72	**313**
Total	0	0	0	0	**0**	182	25	403	0	0	**428**	418	1	585	174	0	**760**	248	0	0	0	0	**0**	281	**1188**
% Approach	0%	0%	0%	0%	**-**	-	5.8%	94.2%	0%	0%	**-**	-	0.1%	77.0%	22.9%	0%	**-**	-	0%	0%	0%	0%	**-**	-	-
% Total	0%	0%	0%	0%	**0%**	-	2.1%	33.9%	0%	0%	**36.0%**	-	0.1%	49.2%	14.6%	0%	**64.0%**	-	0%	0%	0%	0%	**0%**	-	-
PHF	-	-	-	-	**-**	-	0.750	0.879	-	-	**0.893**	-	-	0.884	0.906	-	**0.889**	-	-	-	-	-	**-**	-	0.952
Lights and Motorcycles	0	0	0	0	**0**	-	24	348	0	0	**372**	-	0	547	169	0	**716**	-	0	0	0	0	**0**	-	1088
% Lights and Motorcycles	0%	0%	0%	0%	**-**	-	96.0%	86.4%	0%	0%	**86.9%**	-	0%	93.5%	97.1%	0%	**94.2%**	-	0%	0%	0%	0%	**-**	-	91.6%
Heavy	0	0	0	0	**0**	-	0	53	0	0	**53**	-	0	8	5	0	**13**	-	0	0	0	0	**0**	-	66
% Heavy	0%	0%	0%	0%	**-**	-	0%	13.2%	0%	0%	**12.4%**	-	0%	1.4%	2.9%	0%	**1.7%**	-	0%	0%	0%	0%	**-**	-	5.6%
Bicycles on Road	0	0	0	0	**0**	-	1	2	0	0	**3**	-	1	30	0	0	**31**	-	0	0	0	0	**0**	-	34
% Bicycles on Road	0%	0%	0%	0%	**-**	-	4.0%	0.5%	0%	0%	**0.7%**	-	100%	5.1%	0%	0%	**4.1%**	-	0%	0%	0%	0%	**-**	-	2.9%
Pedestrians	-	-	-	-	-	181	-	-	-	-	-	416	-	-	-	-	-	247	-	-	-	-	-	281	
% Pedestrians	-	-	-	-	-	99.5%	-	-	-	-	-	99.5%	-	-	-	-	-	99.6%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	2	-	-	-	-	-	1	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0.5%	-	-	-	-	-	0.5%	-	-	-	-	-	0.4%	-	-	-	-	-	0%	-

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

5681223 - Albert Street at Metcalfe Street -... - TMC

Thu Oct 17, 2024
AM Peak (8:15 AM - 9:15 AM)
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1238980, Location: 45.421628, -75.696434, Site Code: 42063103

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



5681223 - Albert Street at Metcalfe Street -... - TMC

Thu Oct 17, 2024
PM Peak (3:30 PM - 4:30 PM) - Overall Peak Hour
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1238980, Location: 45.421628, -75.696434, Site Code: 42063103

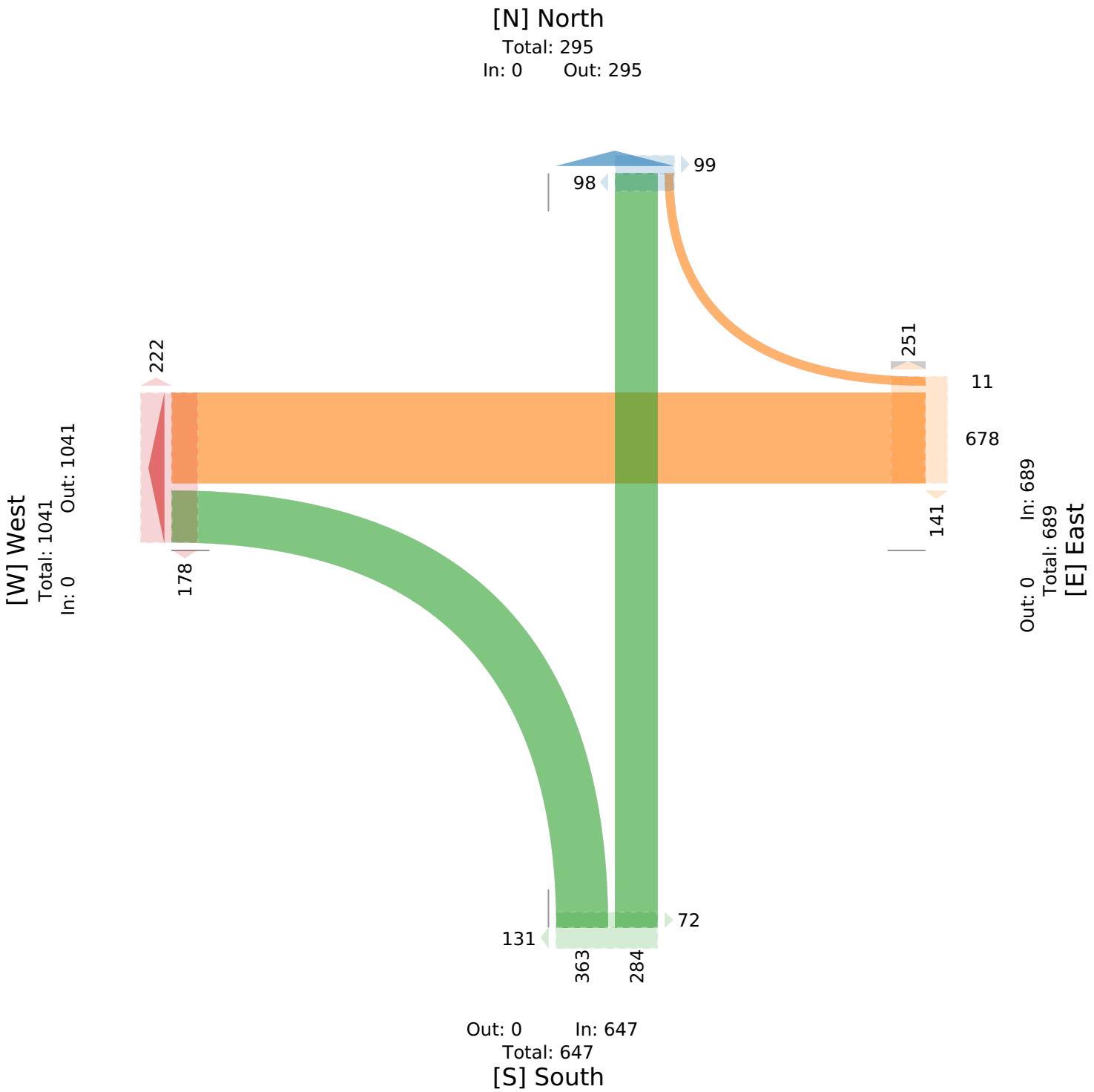
Provided by: City of Ottawa
100 Constellation Dr,
Nepean, ON, K2G 5J9, CA

Leg Direction	North Southbound						East Westbound						South Northbound						West Eastbound						
Time	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	**Int**
2024-10-17 3:30PM	0	0	0	0	**0**	42	2	181	0	0	**183**	81	0	58	95	0	**153**	40	0	0	0	0	**0**	89	**336**
3:45PM	0	0	0	0	**0**	39	2	169	0	0	**171**	83	0	74	80	0	**154**	40	0	0	0	0	**0**	81	**325**
4:00PM	0	0	0	0	**0**	60	3	159	0	0	**162**	120	0	77	105	0	**182**	53	0	0	0	0	**0**	132	**344**
4:15PM	0	0	0	0	**0**	56	4	169	0	0	**173**	108	0	75	83	0	**158**	70	0	0	0	0	**0**	98	**331**
Total	0	0	0	0	**0**	197	11	678	0	0	**689**	392	0	284	363	0	**647**	203	0	0	0	0	**0**	400	**1336**
% Approach	0%	0%	0%	0%	**-**	-	1.6%	98.4%	0%	0%	**-**	-	0%	43.9%	56.1%	0%	**-**	-	0%	0%	0%	0%	**-**	-	-
% Total	0%	0%	0%	0%	**0%**	-	0.8%	50.7%	0%	0%	**51.6%**	-	0%	21.3%	27.2%	0%	**48.4%**	-	0%	0%	0%	0%	**0%**	-	-
PHF	-	-	-	-	**-**	-	0.688	0.936	-	-	**0.941**	-	-	0.951	0.864	-	**0.899**	-	-	-	-	-	**-**	-	0.978
Lights and Motorcycles	0	0	0	0	**0**	-	10	614	0	0	**624**	-	0	266	360	0	**626**	-	0	0	0	0	**0**	-	1250
% Lights and Motorcycles	0%	0%	0%	0%	**-**	-	90.9%	90.6%	0%	0%	**90.6%**	-	0%	93.7%	99.2%	0%	**96.8%**	-	0%	0%	0%	0%	**-**	-	93.6%
Heavy	0	0	0	0	**0**	-	1	64	0	0	**65**	-	0	4	3	0	**7**	-	0	0	0	0	**0**	-	72
% Heavy	0%	0%	0%	0%	**-**	-	9.1%	9.4%	0%	0%	**9.4%**	-	0%	1.4%	0.8%	0%	**1.1%**	-	0%	0%	0%	0%	**-**	-	5.4%
Bicycles on Road	0	0	0	0	**0**	-	0	0	0	0	**0**	-	0	14	0	0	**14**	-	0	0	0	0	**0**	-	14
% Bicycles on Road	0%	0%	0%	0%	**-**	-	0%	0%	0%	0%	**0%**	-	0%	4.9%	0%	0%	**2.2%**	-	0%	0%	0%	0%	**-**	-	1.0%
Pedestrians	-	-	-	-	-	196	-	-	-	-	-	391	-	-	-	-	-	203	-	-	-	-	-	399	
% Pedestrians	-	-	-	-	-	99.5%	-	-	-	-	-	99.7%	-	-	-	-	-	100%	-	-	-	-	-	99.8%	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	1	
% Bicycles on Crosswalk	-	-	-	-	-	0.5%	-	-	-	-	-	0.3%	-	-	-	-	-	0%	-	-	-	-	-	0.3%	-

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

5681223 - Albert Street at Metcalfe Street -... - TMC
Thu Oct 17, 2024
PM Peak (3:30 PM - 4:30 PM) - Overall Peak Hour
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1238980, Location: 45.421628, -75.696434, Site Code: 42063103

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



5681223 - Elgin Street at Albert Street - OC... - TMC

Thu Oct 17, 2024
AM Peak (8:15 AM - 9:15 AM)
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1239016, Location: 45.422523, -75.694194, Site Code: 42070103

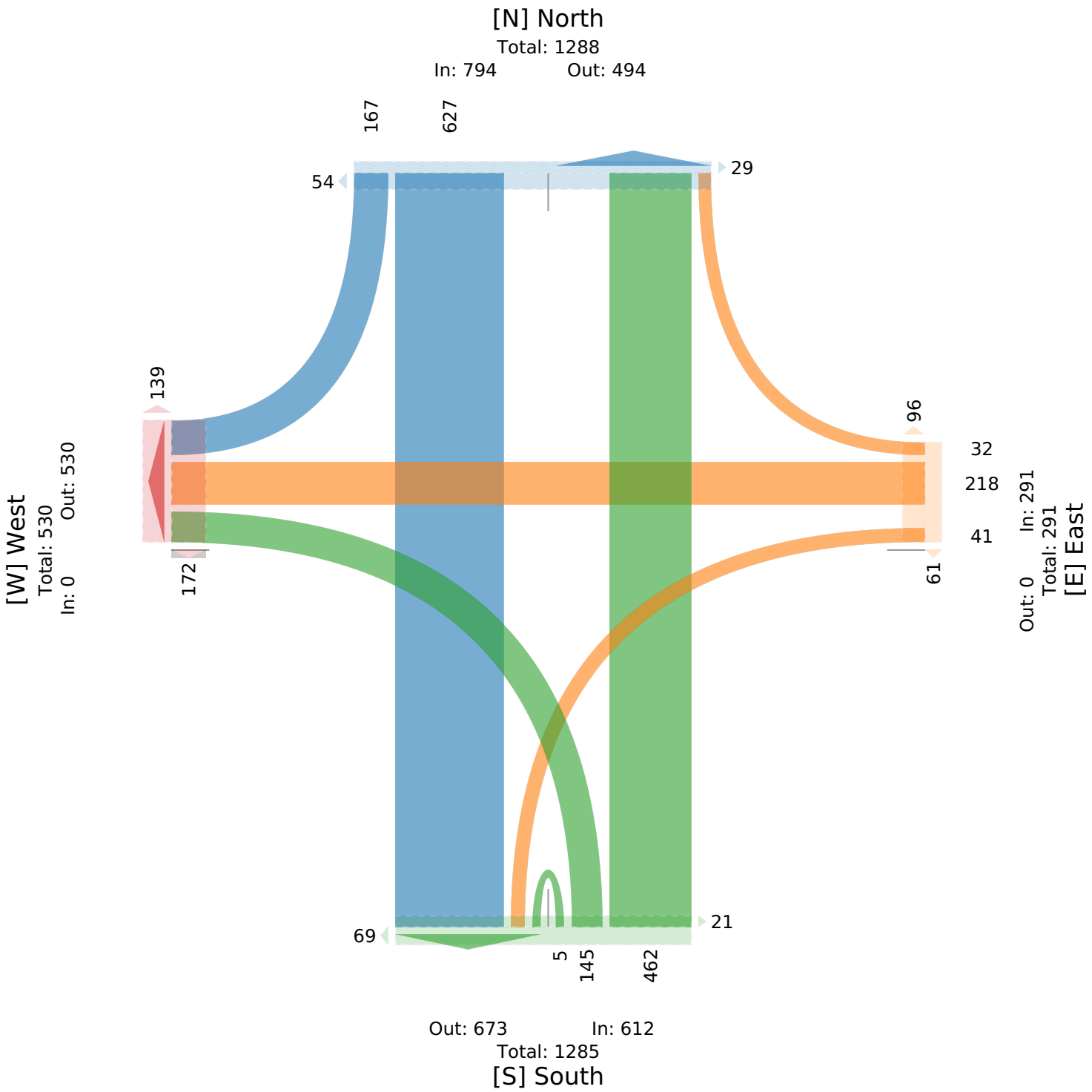
Provided by: City of Ottawa
100 Constellation Dr,
Nepean, ON, K2G 5J9, CA

Leg / Direction	North Southbound						East Westbound						South Northbound						West Eastbound						
Time	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	Int
2024-10-17 8:15AM	50	158	0	0	**208**	22	7	47	8	0	**62**	35	0	101	38	2	**141**	21	0	0	0	0	**0**	68	**411**
8:30AM	41	187	0	0	**228**	26	4	50	11	0	**65**	42	0	105	34	1	**140**	21	0	0	0	0	**0**	91	**433**
8:45AM	44	155	0	0	**199**	25	11	63	12	0	**86**	38	0	122	40	1	**163**	22	0	0	0	0	**0**	78	**448**
9:00AM	32	127	0	0	**159**	10	10	58	10	0	**78**	42	0	134	33	1	**168**	26	0	0	0	0	**0**	74	**405**
Total	167	627	0	0	**794**	83	32	218	41	0	**291**	157	0	462	145	5	**612**	90	0	0	0	0	**0**	311	**1697**
% Approach	21.0%	79.0%	0%	0%	**-**	-	11.0%	74.9%	14.1%	0%	**-**	-	0%	75.5%	23.7%	0.8%	**-**	-	0%	0%	0%	0%	**-**	-	**-**
% Total	9.8%	36.9%	0%	0%	**46.8%**	-	1.9%	12.8%	2.4%	0%	**17.1%**	-	0%	27.2%	8.5%	0.3%	**36.1%**	-	0%	0%	0%	0%	**0%**	-	**-**
PHF	0.815	0.848	-	-	**0.880**	-	0.682	0.877	0.833	-	**0.845**	-	-	0.867	0.906	0.625	**0.916**	-	-	-	-	-	**-**	-	0.945
Lights and Motorcycles	159	586	0	0	**745**	-	22	169	37	0	**228**	-	0	432	140	5	**577**	-	0	0	0	0	**0**	-	1550
% Lights and Motorcycles	95.2%	93.5%	0%	0%	**93.8%**	-	68.8%	77.5%	90.2%	0%	**78.4%**	-	0%	93.5%	96.6%	100%	**94.3%**	-	0%	0%	0%	0%	**-**	-	91.3%
Heavy	4	18	0	0	**22**	-	8	45	3	0	**56**	-	0	26	5	0	**31**	-	0	0	0	0	**0**	-	109
% Heavy	2.4%	2.9%	0%	0%	**2.8%**	-	25.0%	20.6%	7.3%	0%	**19.2%**	-	0%	5.6%	3.4%	0%	**5.1%**	-	0%	0%	0%	0%	**-**	-	6.4%
Bicycles on Road	4	23	0	0	**27**	-	2	4	1	0	**7**	-	0	4	0	0	**4**	-	0	0	0	0	**0**	-	38
% Bicycles on Road	2.4%	3.7%	0%	0%	**3.4%**	-	6.3%	1.8%	2.4%	0%	**2.4%**	-	0%	0.9%	0%	0%	**0.7%**	-	0%	0%	0%	0%	**-**	-	2.2%
Pedestrians	-	-	-	-	-	80	-	-	-	-	-	157	-	-	-	-	-	90	-	-	-	-	-	307	
% Pedestrians	-	-	-	-	-	96.4%	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	98.7%	-
Bicycles on Crosswalk	-	-	-	-	-	3	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	4	
% Bicycles on Crosswalk	-	-	-	-	-	3.6%	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	1.3%	-

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

5681223 - Elgin Street at Albert Street - OC... - TMC
Thu Oct 17, 2024
AM Peak (8:15 AM - 9:15 AM)
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1239016, Location: 45.422523, -75.694194, Site Code: 42070103

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



5681223 - Elgin Street at Albert Street - OC... - TMC

Thu Oct 17, 2024
PM Peak (3:30 PM - 4:30 PM) - Overall Peak Hour
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1239016, Location: 45.422523, -75.694194, Site Code: 42070103

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

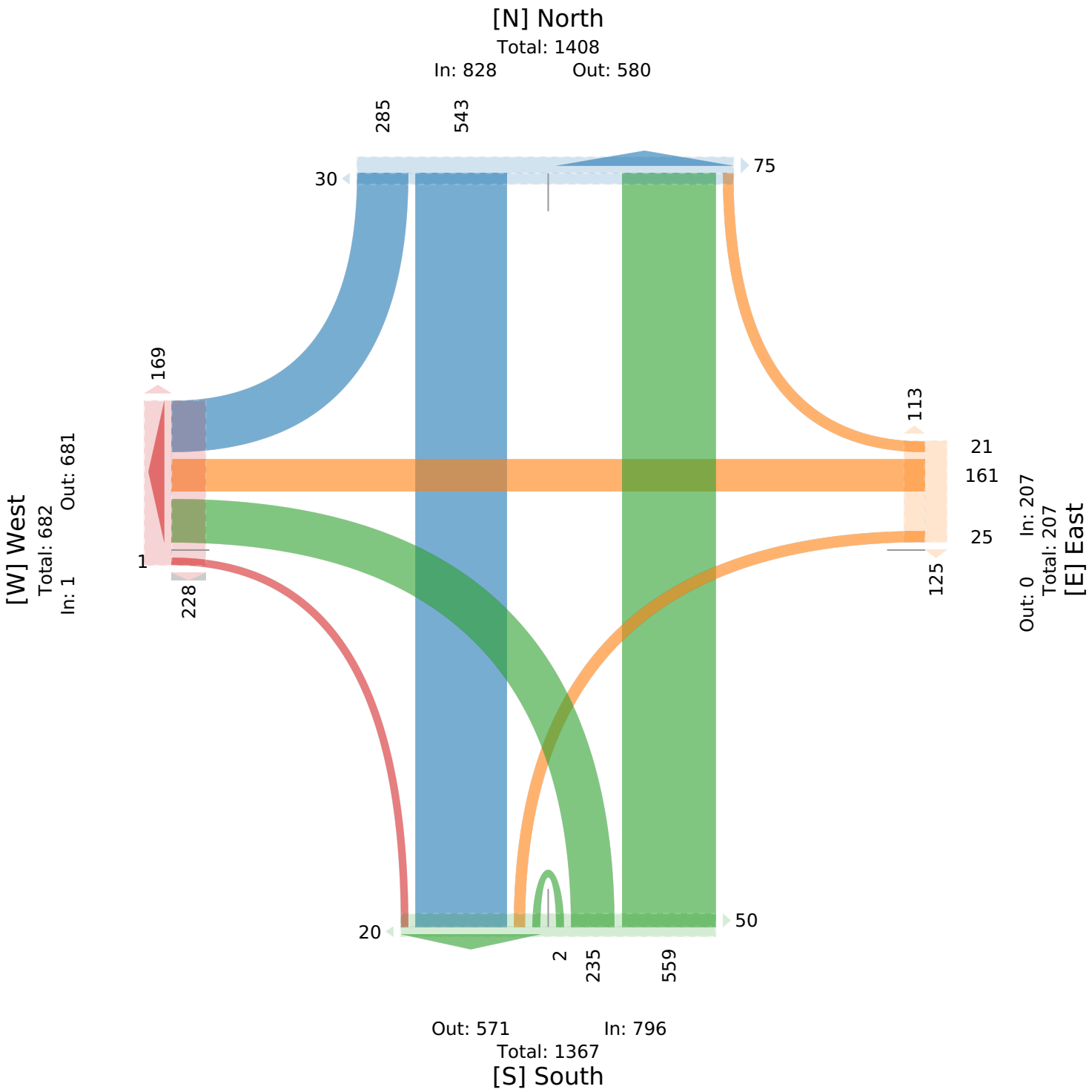
Leg	North						East						South						West						
Direction	Southbound						Westbound						Northbound						Eastbound						
Time	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	**Int**
2024-10-17 3:30PM	80	133	0	0	**213**	22	5	34	7	0	**46**	64	0	129	56	0	**185**	21	0	0	0	0	**0**	86	**444**
3:45PM	67	130	0	0	**197**	19	5	47	4	0	**56**	53	0	133	68	1	**202**	18	0	0	0	0	**0**	95	**455**
4:00PM	69	134	0	0	**203**	43	6	42	7	0	**55**	62	0	142	54	0	**196**	18	0	0	0	0	**0**	120	**454**
4:15PM	69	146	0	0	**215**	21	5	38	7	0	**50**	59	0	155	57	1	**213**	13	1	0	0	0	**1**	96	**479**
Total	285	543	0	0	**828**	105	21	161	25	0	**207**	238	0	559	235	2	**796**	70	1	0	0	0	**1**	397	**1832**
% Approach	34.4%	65.6%	0%	0%	**-**	-	10.1%	77.8%	12.1%	0%	**-**	-	0%	70.2%	29.5%	0.3%	**-**	-	100%	0%	0%	0%	**-**	-	**-**
% Total	15.6%	29.6%	0%	0%	**45.2%**	-	1.1%	8.8%	1.4%	0%	**11.3%**	-	0%	30.5%	12.8%	0.1%	**43.4%**	-	0.1%	0%	0%	0%	**0.1%**	-	**-**
PHF	0.888	0.937	-	-	**0.967**	-	0.792	0.851	0.857	-	**0.906**	-	-	0.898	0.873	0.500	**0.931**	-	-	-	-	-	**-**	-	0.956
Lights and Motorcycles	276	525	0	0	**801**	-	12	106	24	0	**142**	-	0	547	229	2	**778**	-	0	0	0	0	**0**	-	1721
% Lights and Motorcycles	96.8%	96.7%	0%	0%	**96.7%**	-	57.1%	65.8%	96.0%	0%	**68.6%**	-	0%	97.9%	97.4%	100%	**97.7%**	-	0%	0%	0%	0%	**0%**	-	93.9%
Heavy	8	11	0	0	**19**	-	7	54	0	0	**61**	-	0	10	5	0	**15**	-	0	0	0	0	**0**	-	95
% Heavy	2.8%	2.0%	0%	0%	**2.3%**	-	33.3%	33.5%	0%	0%	**29.5%**	-	0%	1.8%	2.1%	0%	**1.9%**	-	0%	0%	0%	0%	**0%**	-	5.2%
Bicycles on Road	1	7	0	0	**8**	-	2	1	1	0	**4**	-	0	2	1	0	**3**	-	1	0	0	0	**1**	-	16
% Bicycles on Road	0.4%	1.3%	0%	0%	**1.0%**	-	9.5%	0.6%	4.0%	0%	**1.9%**	-	0%	0.4%	0.4%	0%	**0.4%**	-	100%	0%	0%	0%	**100%**	-	0.9%
Pedestrians	-	-	-	-	-	104	-	-	-	-	-	238	-	-	-	-	-	68	-	-	-	-	-	393	
% Pedestrians	-	-	-	-	-	99.0%	-	-	-	-	-	100%	-	-	-	-	-	97.1%	-	-	-	-	-	99.0%	-
Bicycles on Crosswalk	-	-	-	-	-	1	-	-	-	-	-	0	-	-	-	-	-	2	-	-	-	-	-	4	
% Bicycles on Crosswalk	-	-	-	-	-	1.0%	-	-	-	-	-	0%	-	-	-	-	-	2.9%	-	-	-	-	-	1.0%	-

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

5681223 - Elgin Street at Albert Street - OC... - TMC

Thu Oct 17, 2024
PM Peak (3:30 PM - 4:30 PM) - Overall Peak Hour
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1239016, Location: 45.422523, -75.694194, Site Code: 42070103

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



5474764 - ELGIN ST @ LAURIER AVE - FEB 12 20... - TMC

Wed Feb 12, 2020
AM Peak (8:15 AM - 9:15 AM) - Overall Peak Hour
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 751558, Location: 45.421091, -75.69296, Site Code: 39473103

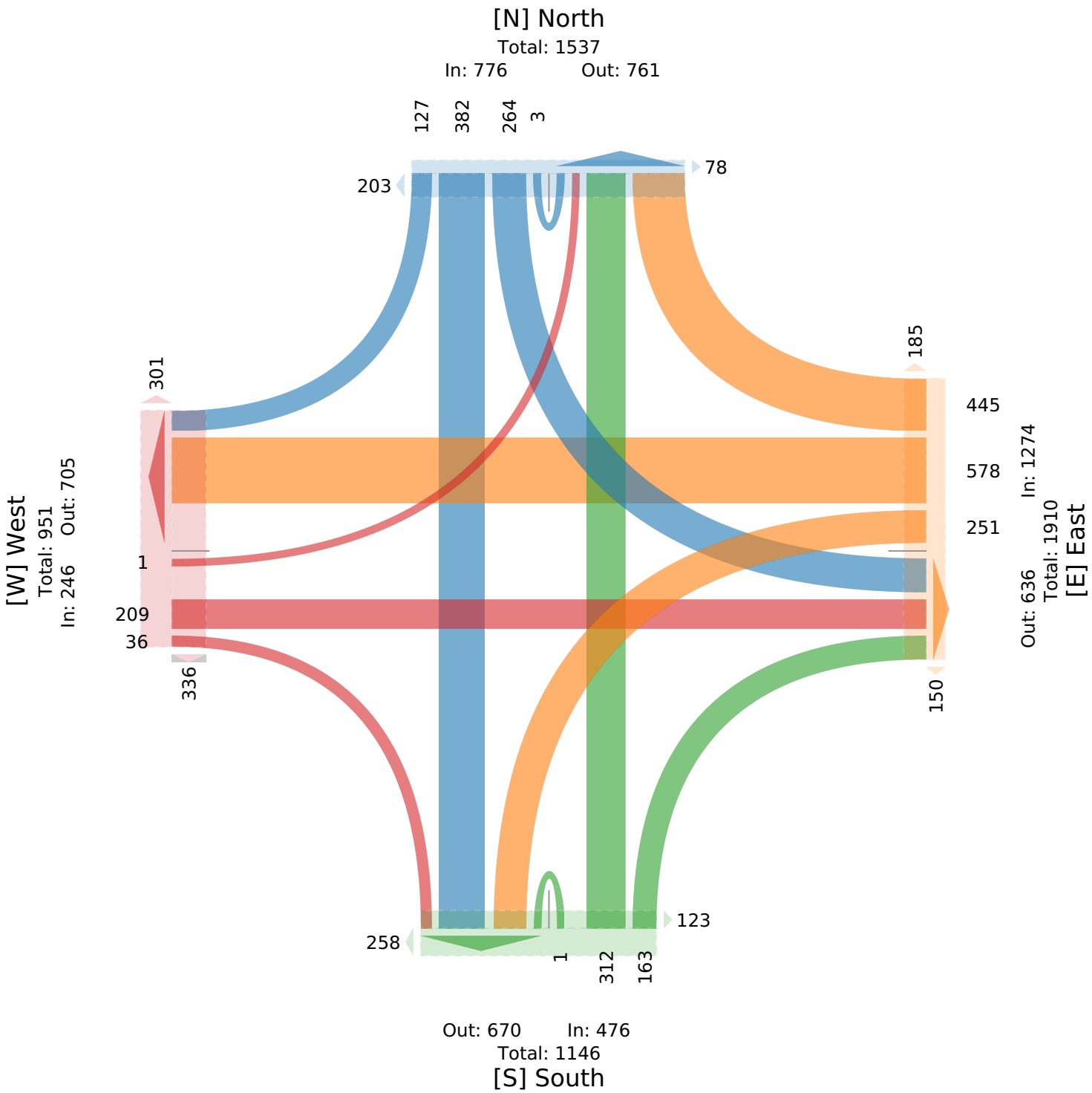
Provided by: City of Ottawa
100 Constellation Dr,
Nepean, ON, K2G 5J9, CA

Leg	North						East						South						West						
Direction	Southbound						Westbound						Northbound						Eastbound						
Time	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	**Int**
2020-02-12 8:15AM	21	91	68	0	**180**	75	118	143	60	0	**321**	75	48	72	0	0	**120**	84	5	59	0	0	**64**	137	**685**
8:30AM	42	94	69	1	**206**	61	106	155	57	0	**318**	97	39	98	0	1	**138**	105	12	55	0	0	**67**	155	**729**
8:45AM	31	97	58	2	**188**	89	112	150	63	0	**325**	97	40	80	0	0	**120**	105	9	49	0	0	**58**	212	**691**
9:00AM	33	100	69	0	**202**	56	109	130	71	0	**310**	66	36	62	0	0	**98**	87	10	46	1	0	**57**	133	**667**
Total	127	382	264	3	**776**	281	445	578	251	0	**1274**	335	163	312	0	1	**476**	381	36	209	1	0	**246**	637	**2772**
% Approach	16.4%	49.2%	34.0%	0.4%	**-**	-	34.9%	45.4%	19.7%	0%	**-**	-	34.2%	65.5%	0%	0.2%	**-**	-	14.6%	85.0%	0.4%	0%	**-**	-	-
% Total	4.6%	13.8%	9.5%	0.1%	**28.0%**	-	16.1%	20.9%	9.1%	0%	**46.0%**	-	5.9%	11.3%	0%	0%	**17.2%**	-	1.3%	7.5%	0%	0%	**8.9%**	-	-
PHF	0.762	0.959	0.957	0.375	**0.941**	-	0.943	0.944	0.884	-	**0.971**	-	0.849	0.796	-	0.250	**0.862**	-	0.750	0.886	0.250	-	**0.918**	-	0.953
Lights and Motorcycles	123	365	247	3	**738**	-	425	540	245	0	**1210**	-	156	299	0	1	**456**	-	33	205	1	0	**239**	-	2643
% Lights and Motorcycles	96.9%	95.5%	93.6%	100%	**95.1%**	-	95.5%	93.4%	97.6%	0%	**95.0%**	-	95.7%	95.8%	0%	100%	**95.8%**	-	91.7%	98.1%	100%	0%	**97.2%**	-	95.3%
Heavy	2	11	17	0	**30**	-	20	15	6	0	**41**	-	7	13	0	0	**20**	-	3	4	0	0	**7**	-	98
% Heavy	1.6%	2.9%	6.4%	0%	**3.9%**	-	4.5%	2.6%	2.4%	0%	**3.2%**	-	4.3%	4.2%	0%	0%	**4.2%**	-	8.3%	1.9%	0%	0%	**2.8%**	-	3.5%
Bicycles on Road	2	6	0	0	**8**	-	0	23	0	0	**23**	-	0	0	0	0	**0**	-	0	0	0	0	**0**	-	31
% Bicycles on Road	1.6%	1.6%	0%	0%	**1.0%**	-	0%	4.0%	0%	0%	**1.8%**	-	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	1.1%
Pedestrians	-	-	-	-	-	281	-	-	-	-	-	335	-	-	-	-	-	366	-	-	-	-	-	635	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	96.1%	-	-	-	-	-	99.7%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	15	-	-	-	-	-	2	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	3.9%	-	-	-	-	-	0.3%	-

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

5474764 - ELGIN ST @ LAURIER AVE - FEB 12 20... - TMC
Wed Feb 12, 2020
AM Peak (8:15 AM - 9:15 AM) - Overall Peak Hour
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 751558, Location: 45.421091, -75.69296, Site Code: 39473103

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



5474764 - ELGIN ST @ LAURIER AVE - FEB 12 20... - TMC

Wed Feb 12, 2020
PM Peak (4:15 PM - 5:15 PM)
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 751558, Location: 45.421091, -75.69296, Site Code: 39473103

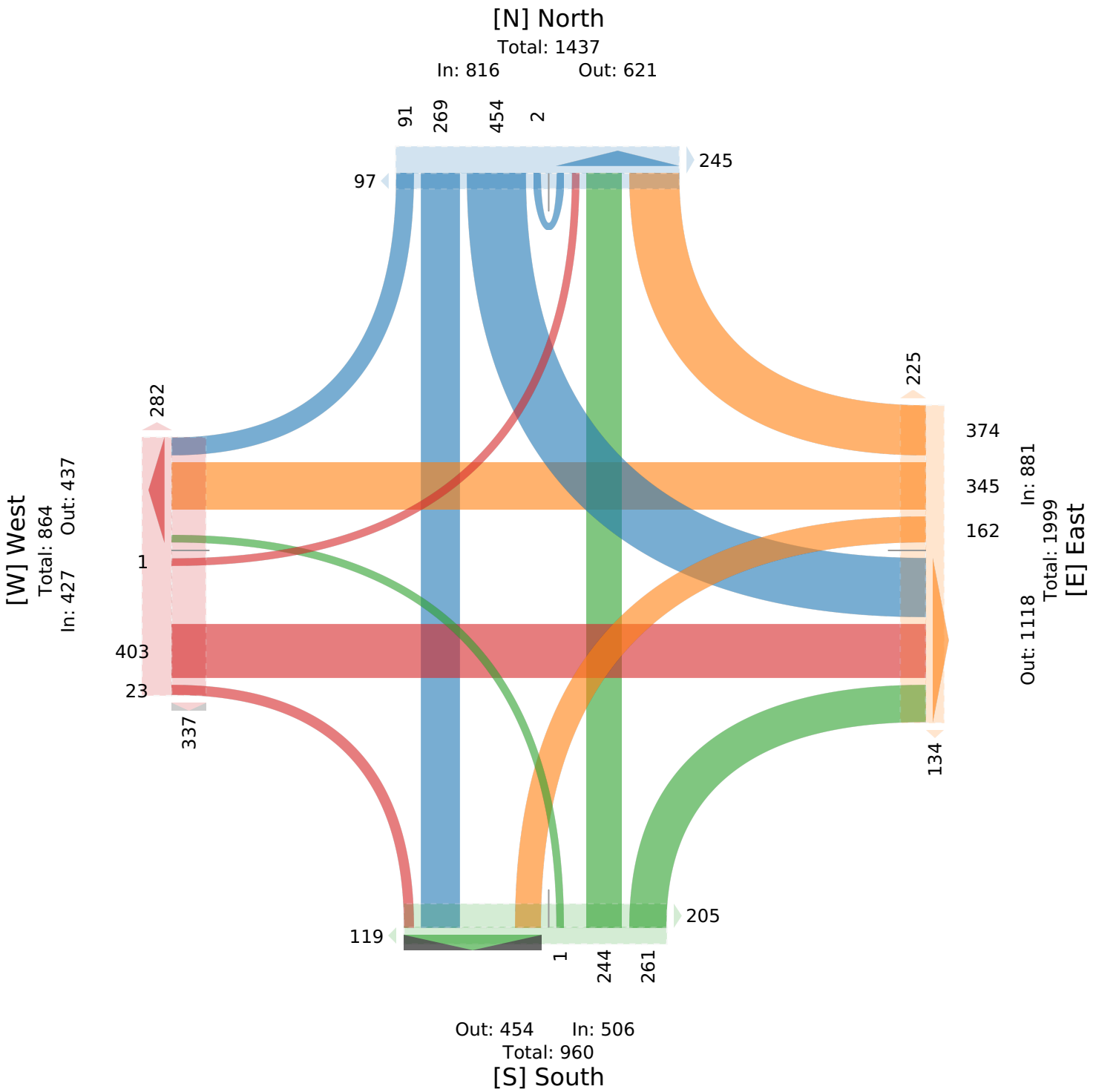
Provided by: City of Ottawa
100 Constellation Dr,
Nepean, ON, K2G 5J9, CA

Leg	North						East						South						West						
Direction	Southbound						Westbound						Northbound						Eastbound						
Time	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	**Int**
2020-02-12 4:15PM	23	77	114	0	**214**	72	105	86	30	0	**221**	78	61	66	0	0	**127**	75	8	89	1	0	**98**	154	**660**
4:30PM	20	64	129	0	**213**	86	88	93	50	0	**231**	99	73	70	1	0	**144**	82	6	103	0	0	**109**	156	**697**
4:45PM	18	63	112	1	**194**	83	94	85	39	0	**218**	75	61	54	0	0	**115**	102	5	104	0	0	**109**	135	**636**
5:00PM	30	65	99	1	**195**	101	87	81	43	0	**211**	107	66	54	0	0	**120**	65	4	107	0	0	**111**	174	**637**
Total	91	269	454	2	**816**	342	374	345	162	0	**881**	359	261	244	1	0	**506**	324	23	403	1	0	**427**	619	**2630**
% Approach	11.2%	33.0%	55.6%	0.2%	**-**	-	42.5%	39.2%	18.4%	0%	**-**	-	51.6%	48.2%	0.2%	0%	**-**	-	5.4%	94.4%	0.2%	0%	**-**	-	-
% Total	3.5%	10.2%	17.3%	0.1%	**31.0%**	-	14.2%	13.1%	6.2%	0%	**33.5%**	-	9.9%	9.3%	0%	0%	**19.2%**	-	0.9%	15.3%	0%	0%	**16.2%**	-	-
PHF	0.750	0.875	0.880	0.500	**0.958**	-	0.890	0.929	0.810	-	**0.954**	-	0.894	0.870	0.250	-	**0.878**	-	0.625	0.931	0.250	-	**0.964**	-	0.942
Lights and Motorcycles	87	254	451	2	**794**	-	370	336	159	0	**865**	-	259	230	1	0	**490**	-	20	374	1	0	**395**	-	2544
% Lights and Motorcycles	95.6%	94.4%	99.3%	100%	**97.3%**	-	98.9%	97.4%	98.1%	0%	**98.2%**	-	99.2%	94.3%	100%	0%	**96.8%**	-	87.0%	92.8%	100%	0%	**92.5%**	-	96.7%
Heavy	3	12	3	0	**18**	-	4	2	3	0	**9**	-	2	10	0	0	**12**	-	0	2	0	0	**2**	-	41
% Heavy	3.3%	4.5%	0.7%	0%	**2.2%**	-	1.1%	0.6%	1.9%	0%	**1.0%**	-	0.8%	4.1%	0%	0%	**2.4%**	-	0%	0.5%	0%	0%	**0.5%**	-	1.6%
Bicycles on Road	1	3	0	0	**4**	-	0	7	0	0	**7**	-	0	4	0	0	**4**	-	3	27	0	0	**30**	-	45
% Bicycles on Road	1.1%	1.1%	0%	0%	**0.5%**	-	0%	2.0%	0%	0%	**0.8%**	-	0%	1.6%	0%	0%	**0.8%**	-	13.0%	6.7%	0%	0%	**7.0%**	-	1.7%
Pedestrians	-	-	-	-	-	340	-	-	-	-	-	359	-	-	-	-	-	305	-	-	-	-	-	616	
% Pedestrians	-	-	-	-	-	99.4%	-	-	-	-	-	100%	-	-	-	-	-	94.1%	-	-	-	-	-	99.5%	-
Bicycles on Crosswalk	-	-	-	-	-	2	-	-	-	-	-	0	-	-	-	-	-	19	-	-	-	-	-	3	
% Bicycles on Crosswalk	-	-	-	-	-	0.6%	-	-	-	-	-	0%	-	-	-	-	-	5.9%	-	-	-	-	-	0.5%	-

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

5474764 - ELGIN ST @ LAURIER AVE - FEB 12 20... - TMC
Wed Feb 12, 2020
PM Peak (4:15 PM - 5:15 PM)
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 751558, Location: 45.421091, -75.69296, Site Code: 39473103

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



5681223 - Elgin Street at Slater Street - OC... - TMC

Thu Oct 17, 2024
AM Peak (8:15 AM - 9:15 AM)
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1239018, Location: 45.421991, -75.693713, Site Code: 42071103

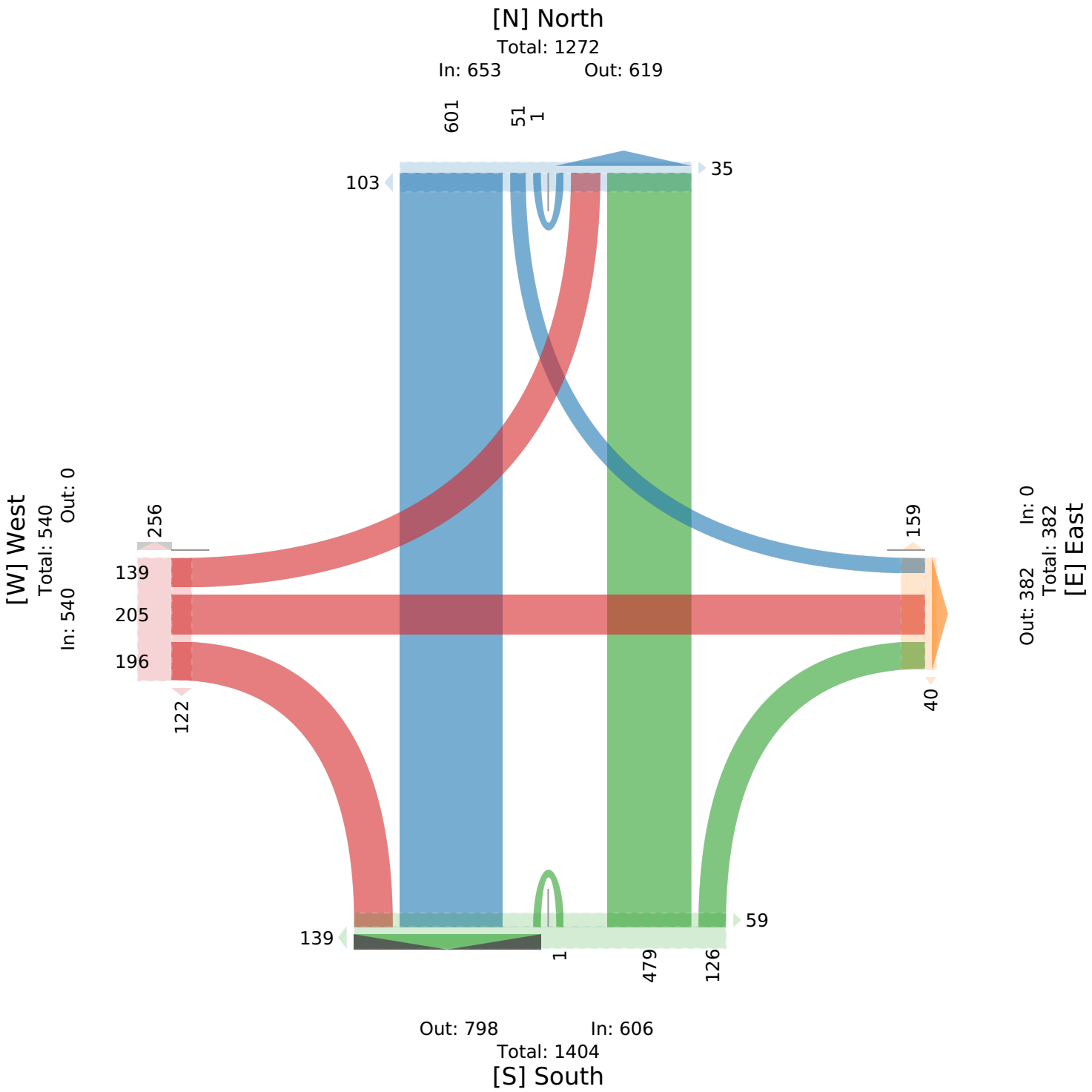
Provided by: City of Ottawa
100 Constellation Dr,
Nepean, ON, K2G 5J9, CA

Leg	North						East						South						West						
Direction	Southbound						Westbound						Northbound						Eastbound						
Time	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	Int
2024-10-17 8:15AM	0	155	12	0	**167**	23	0	0	0	0	**0**	59	41	112	0	0	**153**	52	44	53	33	0	**130**	98	**450**
8:30AM	0	174	18	0	**192**	48	0	0	0	0	**0**	45	34	115	0	1	**150**	68	56	64	31	0	**151**	96	**493**
8:45AM	0	143	13	0	**156**	37	0	0	0	0	**0**	43	33	132	0	0	**165**	43	57	41	36	0	**134**	113	**455**
9:00AM	0	129	8	1	**138**	30	0	0	0	0	**0**	52	18	120	0	0	**138**	35	39	47	39	0	**125**	71	**401**
Total	0	601	51	1	**653**	138	0	0	0	0	**0**	199	126	479	0	1	**606**	198	196	205	139	0	**540**	378	**1799**
% Approach	0%	92.0%	7.8%	0.2%	**-**	-	0%	0%	0%	0%	**-**	-	20.8%	79.0%	0%	0.2%	**-**	-	36.3%	38.0%	25.7%	0%	**-**	-	**-**
% Total	0%	33.4%	2.8%	0.1%	**36.3%**	-	0%	0%	0%	0%	**0%**	-	7.0%	26.6%	0%	0.1%	**33.7%**	-	10.9%	11.4%	7.7%	0%	**30.0%**	-	-
PHF	-	0.865	0.694	0.250	**0.850**	-	-	-	-	-	**-**	-	0.756	0.903	-	0.250	**0.917**	-	0.871	0.797	0.908	-	**0.889**	-	0.911
Lights and Motorcycles	0	581	43	1	**625**	-	0	0	0	0	**0**	-	124	451	0	1	**576**	-	178	145	132	0	**455**	-	1656
% Lights and Motorcycles	0%	96.7%	84.3%	100%	**95.7%**	-	0%	0%	0%	0%	**-**	-	98.4%	94.2%	0%	100%	**95.0%**	-	90.8%	70.7%	95.0%	0%	**84.3%**	-	92.1%
Heavy	0	14	7	0	**21**	-	0	0	0	0	**0**	-	0	22	0	0	**22**	-	17	59	6	0	**82**	-	125
% Heavy	0%	2.3%	13.7%	0%	**3.2%**	-	0%	0%	0%	0%	**-**	-	0%	4.6%	0%	0%	**3.6%**	-	8.7%	28.8%	4.3%	0%	**15.2%**	-	6.9%
Bicycles on Road	0	6	1	0	**7**	-	0	0	0	0	**0**	-	2	6	0	0	**8**	-	1	1	1	0	**3**	-	18
% Bicycles on Road	0%	1.0%	2.0%	0%	**1.1%**	-	0%	0%	0%	0%	**-**	-	1.6%	1.3%	0%	0%	**1.3%**	-	0.5%	0.5%	0.7%	0%	**0.6%**	-	1.0%
Pedestrians	-	-	-	-	-	131	-	-	-	-	-	182	-	-	-	-	-	181	-	-	-	-	-	366	
% Pedestrians	-	-	-	-	-	94.9%	-	-	-	-	-	91.5%	-	-	-	-	-	91.4%	-	-	-	-	-	96.8%	-
Bicycles on Crosswalk	-	-	-	-	-	7	-	-	-	-	-	17	-	-	-	-	-	17	-	-	-	-	-	12	
% Bicycles on Crosswalk	-	-	-	-	-	5.1%	-	-	-	-	-	8.5%	-	-	-	-	-	8.6%	-	-	-	-	-	3.2%	-

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

5681223 - Elgin Street at Slater Street - OC... - TMC
Thu Oct 17, 2024
AM Peak (8:15 AM - 9:15 AM)
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1239018, Location: 45.421991, -75.693713, Site Code: 42071103

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



5681223 - Elgin Street at Slater Street - OC... - TMC

Thu Oct 17, 2024
PM Peak (4 PM - 5 PM) - Overall Peak Hour
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1239018, Location: 45.421991, -75.693713, Site Code: 42071103

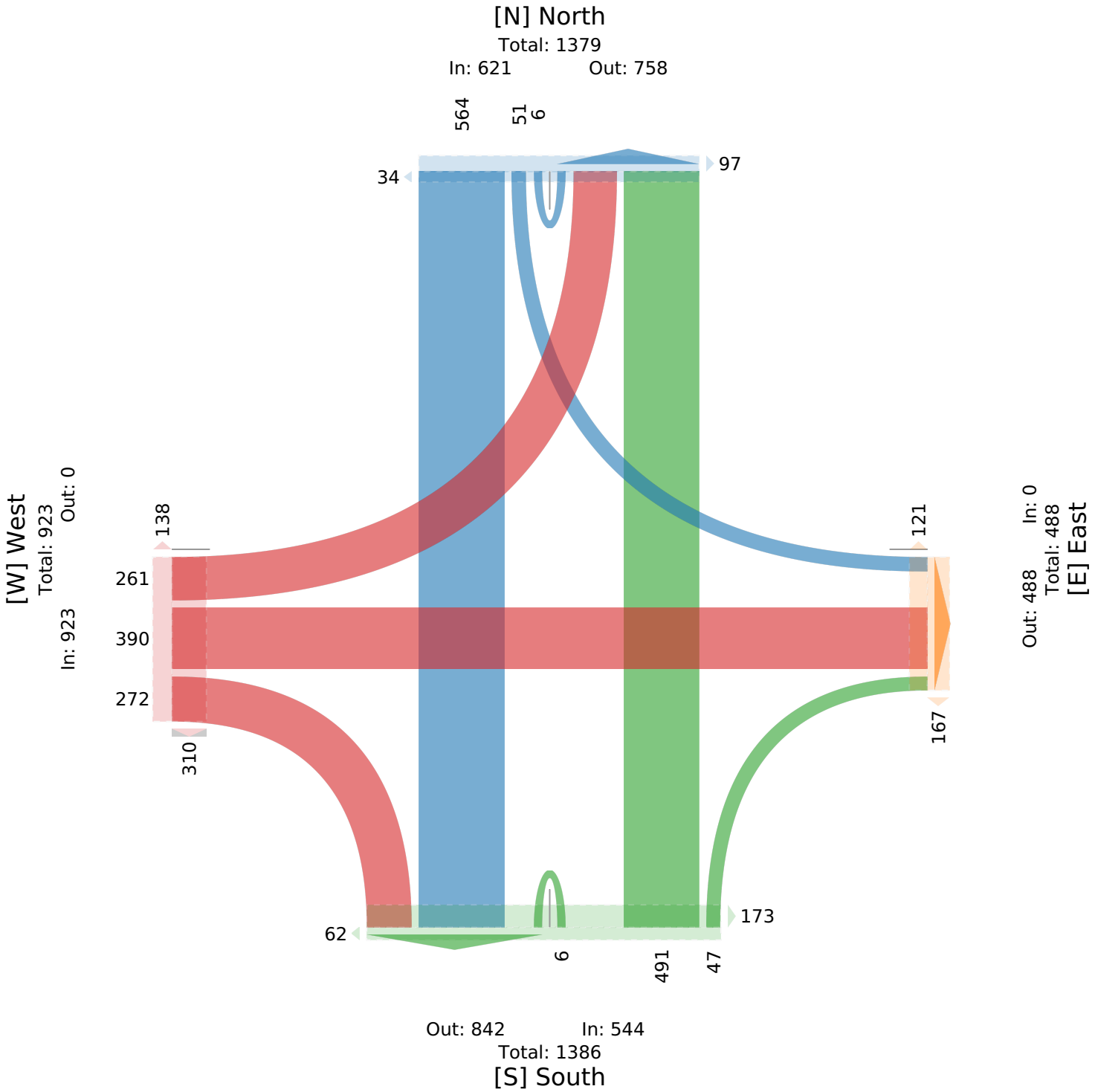
Provided by: City of Ottawa
100 Constellation Dr,
Nepean, ON, K2G 5J9, CA

Leg Direction	North Southbound						East Westbound						South Northbound						West Eastbound						
Time	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	**Int**
2024-10-17 4:00PM	0	140	12	1	**153**	41	0	0	0	0	**0**	75	14	119	0	2	**135**	56	63	102	76	0	**241**	115	**529**
4:15PM	0	141	12	3	**156**	29	0	0	0	0	**0**	65	10	126	0	2	**138**	64	74	98	57	0	**229**	106	**523**
4:30PM	0	144	18	2	**164**	24	0	0	0	0	**0**	66	11	108	0	0	**119**	62	71	100	66	0	**237**	91	**520**
4:45PM	0	139	9	0	**148**	37	0	0	0	0	**0**	82	12	138	0	2	**152**	53	64	90	62	0	**216**	136	**516**
Total	0	564	51	6	**621**	131	0	0	0	0	**0**	288	47	491	0	6	**544**	235	272	390	261	0	**923**	448	**2088**
% Approach	0%	90.8%	8.2%	1.0%	**-**	-	0%	0%	0%	0%	**-**	-	8.6%	90.3%	0%	1.1%	**-**	-	29.5%	42.3%	28.3%	0%	**-**	-	**-**
% Total	0%	27.0%	2.4%	0.3%	**29.7%**	-	0%	0%	0%	0%	**0%**	-	2.3%	23.5%	0%	0.3%	**26.1%**	-	13.0%	18.7%	12.5%	0%	**44.2%**	-	-
PHF	-	0.993	0.708	0.500	**0.958**	-	-	-	-	-	**-**	-	0.821	0.886	-	0.750	**0.896**	-	0.925	0.946	0.853	-	**0.950**	-	0.984
Lights and Motorcycles	0	541	48	6	**595**	-	0	0	0	0	**0**	-	45	481	0	6	**532**	-	267	357	252	0	**876**	-	2003
% Lights and Motorcycles	0%	95.9%	94.1%	100%	**95.8%**	-	0%	0%	0%	0%	**-**	-	95.7%	98.0%	0%	100%	**97.8%**	-	98.2%	91.5%	96.6%	0%	**94.9%**	-	95.9%
Heavy	0	11	3	0	**14**	-	0	0	0	0	**0**	-	1	8	0	0	**9**	-	3	29	4	0	**36**	-	59
% Heavy	0%	2.0%	5.9%	0%	**2.3%**	-	0%	0%	0%	0%	**-**	-	2.1%	1.6%	0%	0%	**1.7%**	-	1.1%	7.4%	1.5%	0%	**3.9%**	-	2.8%
Bicycles on Road	0	12	0	0	**12**	-	0	0	0	0	**0**	-	1	2	0	0	**3**	-	2	4	5	0	**11**	-	26
% Bicycles on Road	0%	2.1%	0%	0%	**1.9%**	-	0%	0%	0%	0%	**-**	-	2.1%	0.4%	0%	0%	**0.6%**	-	0.7%	1.0%	1.9%	0%	**1.2%**	-	1.2%
Pedestrians	-	-	-	-	-	129	-	-	-	-	-	281	-	-	-	-	-	232	-	-	-	-	-	444	
% Pedestrians	-	-	-	-	-	98.5%	-	-	-	-	-	97.6%	-	-	-	-	-	98.7%	-	-	-	-	-	99.1%	-
Bicycles on Crosswalk	-	-	-	-	-	2	-	-	-	-	-	7	-	-	-	-	-	3	-	-	-	-	-	4	
% Bicycles on Crosswalk	-	-	-	-	-	1.5%	-	-	-	-	-	2.4%	-	-	-	-	-	1.3%	-	-	-	-	-	0.9%	-

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

5681223 - Elgin Street at Slater Street - OC... - TMC
Thu Oct 17, 2024
PM Peak (4 PM - 5 PM) - Overall Peak Hour
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1239018, Location: 45.421991, -75.693713, Site Code: 42071103

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



5600432 - LAURIER AVE @ METCALFE ST - JAN 10... - TMC

Wed Jan 10, 2024
AM Peak (8 AM - 9 AM) - Overall Peak Hour
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1149525, Location: 45.420165, -75.695165

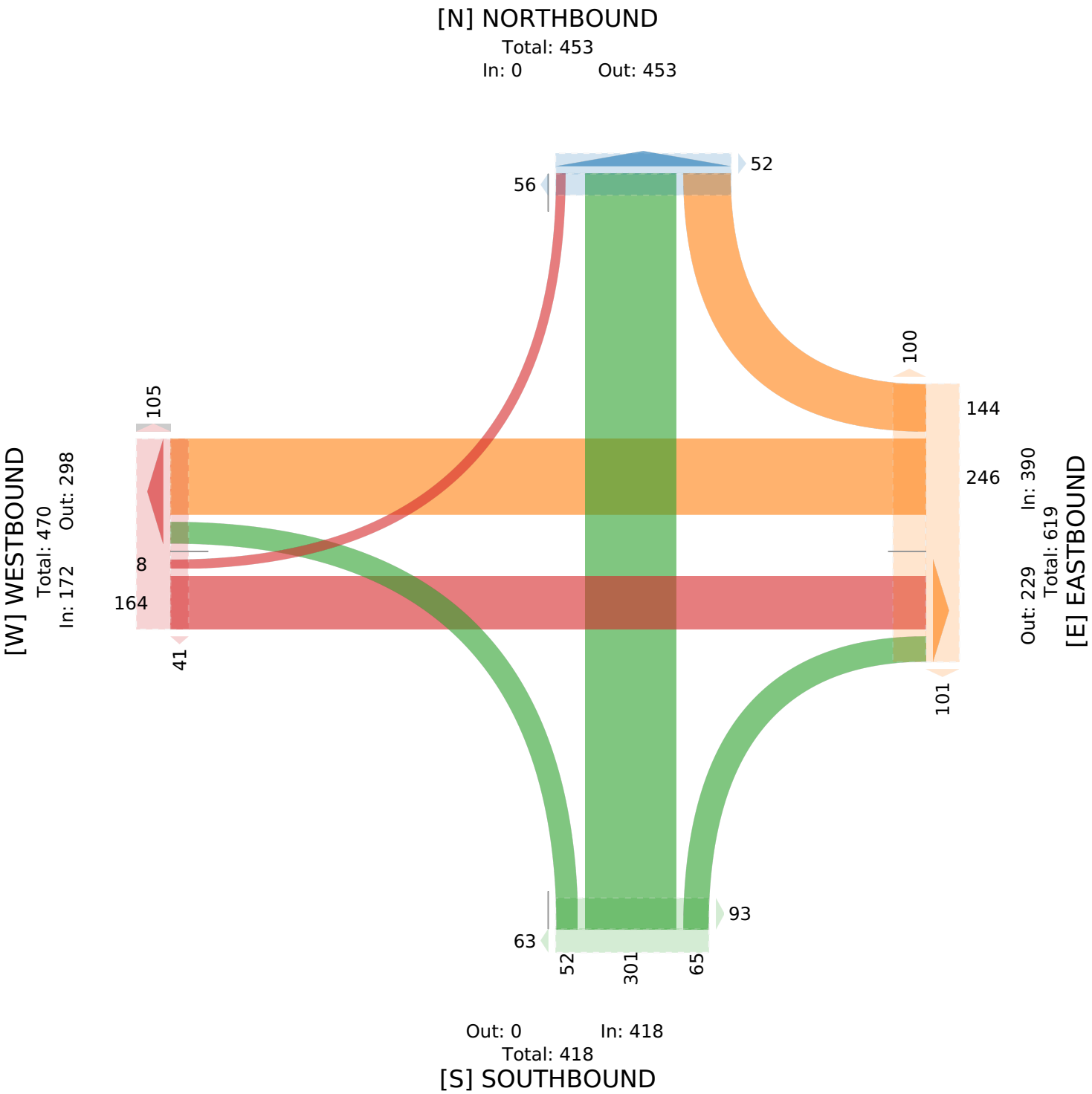
Provided by: City of Ottawa
100 Constellation Dr,
Nepean, ON, K2G 5J9, CA

Leg / Direction	NORTHBOUND Southbound						EASTBOUND Westbound						SOUTHBOUND Northbound						WESTBOUND Eastbound						
Time	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	**Int**
2024-01-10 8:00AM	0	0	0	0	**0**	23	35	58	0	0	**93**	42	17	75	12	0	**104**	28	0	44	1	0	**45**	26	**242**
8:15AM	0	0	0	0	**0**	13	36	68	0	0	**104**	54	16	81	13	0	**110**	41	0	35	1	0	**36**	36	**250**
8:30AM	0	0	0	0	**0**	34	40	62	0	0	**102**	50	15	71	16	0	**102**	38	0	43	4	0	**47**	38	**251**
8:45AM	0	0	0	0	**0**	38	33	58	0	0	**91**	55	17	74	11	0	**102**	49	0	42	2	0	**44**	46	**237**
Total	0	0	0	0	**0**	108	144	246	0	0	**390**	201	65	301	52	0	**418**	156	0	164	8	0	**172**	146	**980**
% Approach	0%	0%	0%	0%	**-**	-	36.9%	63.1%	0%	0%	**-**	-	15.6%	72.0%	12.4%	0%	**-**	-	0%	95.3%	4.7%	0%	**-**	-	-
% Total	0%	0%	0%	0%	**0%**	-	14.7%	25.1%	0%	0%	**39.8%**	-	6.6%	30.7%	5.3%	0%	**42.7%**	-	0%	16.7%	0.8%	0%	**17.6%**	-	-
PHF	-	-	-	-	**-**	-	0.917	0.909	-	-	**0.939**	-	0.956	0.926	0.813	-	**0.948**	-	-	0.932	0.438	-	**0.910**	-	0.979
Lights and Motorcycles	0	0	0	0	**0**	-	137	231	0	0	**368**	-	64	293	52	0	**409**	-	0	163	7	0	**170**	-	947
% Lights and Motorcycles	0%	0%	0%	0%	**-**	-	95.1%	93.9%	0%	0%	**94.4%**	-	98.5%	97.3%	100%	0%	**97.8%**	-	0%	99.4%	87.5%	0%	**98.8%**	-	96.6%
Heavy	0	0	0	0	**0**	-	6	9	0	0	**15**	-	1	7	0	0	**8**	-	0	1	0	0	**1**	-	24
% Heavy	0%	0%	0%	0%	**-**	-	4.2%	3.7%	0%	0%	**3.8%**	-	1.5%	2.3%	0%	0%	**1.9%**	-	0%	0.6%	0%	0%	**0.6%**	-	2.4%
Bicycles on Road	0	0	0	0	**0**	-	1	6	0	0	**7**	-	0	1	0	0	**1**	-	0	0	1	0	**1**	-	9
% Bicycles on Road	0%	0%	0%	0%	**-**	-	0.7%	2.4%	0%	0%	**1.8%**	-	0%	0.3%	0%	0%	**0.2%**	-	0%	0%	12.5%	0%	**0.6%**	-	0.9%
Pedestrians	-	-	-	-	-	108	-	-	-	-	-	201	-	-	-	-	-	145	-	-	-	-	-	146	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	92.9%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	11	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	7.1%	-	-	-	-	-	0%	-

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

5600432 - LAURIER AVE @ METCALFE ST - JAN 10... - TMC
Wed Jan 10, 2024
AM Peak (8 AM - 9 AM) - Overall Peak Hour
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1149525, Location: 45.420165, -75.695165

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



5600432 - LAURIER AVE @ METCALFE ST - JAN 10... - TMC

Wed Jan 10, 2024
PM Peak (4:15 PM - 5:15 PM)
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1149525, Location: 45.420165, -75.695165

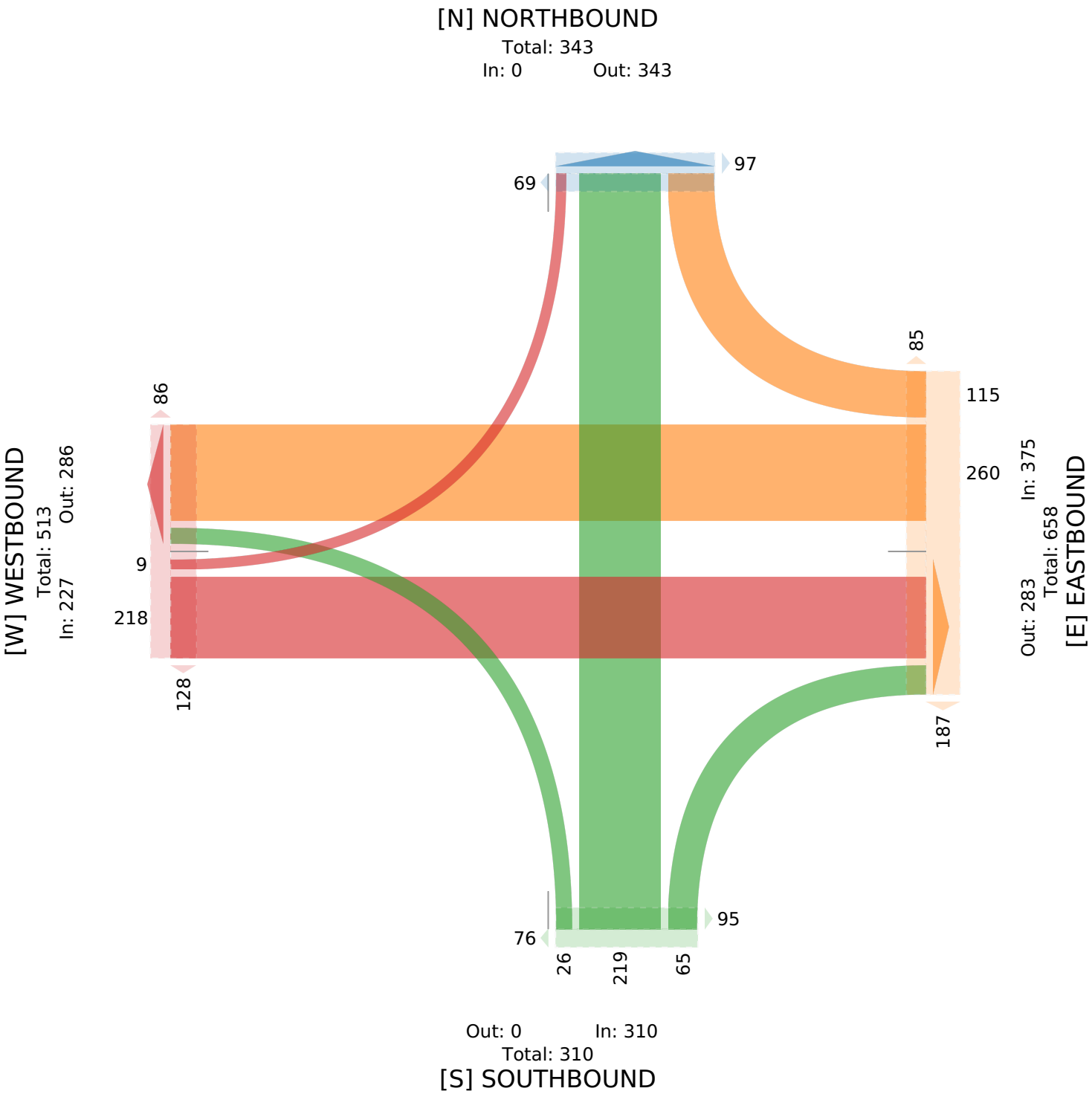
Provided by: City of Ottawa
100 Constellation Dr,
Nepean, ON, K2G 5J9, CA

Leg	NORTHBOUND						EASTBOUND						SOUTHBOUND						WESTBOUND						
Direction	Southbound						Westbound						Northbound						Eastbound						
Time	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	**Int**
2024-01-10 4:15PM	0	0	0	0	**0**	38	18	66	0	0	**84**	68	22	49	8	0	**79**	39	0	55	2	0	**57**	55	**220**
4:30PM	0	0	0	0	**0**	44	24	61	0	0	**85**	69	16	49	6	0	**71**	47	0	54	2	0	**56**	53	**212**
4:45PM	0	0	0	0	**0**	36	41	70	0	0	**111**	73	12	54	9	0	**75**	44	0	50	3	0	**53**	47	**239**
5:00PM	0	0	0	0	**0**	48	32	63	0	0	**95**	62	15	67	3	0	**85**	41	0	59	2	0	**61**	59	**241**
Total	0	0	0	0	**0**	166	115	260	0	0	**375**	272	65	219	26	0	**310**	171	0	218	9	0	**227**	214	**912**
% Approach	0%	0%	0%	0%	**-**	-	30.7%	69.3%	0%	0%	**-**	-	21.0%	70.6%	8.4%	0%	**-**	-	0%	96.0%	4.0%	0%	**-**	-	-
% Total	0%	0%	0%	0%	**0%**	-	12.6%	28.5%	0%	0%	**41.1%**	-	7.1%	24.0%	2.9%	0%	**34.0%**	-	0%	23.9%	1.0%	0%	**24.9%**	-	-
PHF	-	-	-	-	**-**	-	0.701	0.925	-	-	**0.842**	-	0.739	0.817	0.694	-	**0.920**	-	-	0.924	0.667	-	**0.942**	-	0.951
Lights and Motorcycles	0	0	0	0	**0**	-	113	257	0	0	**370**	-	64	218	25	0	**307**	-	0	217	8	0	**225**	-	902
% Lights and Motorcycles	0%	0%	0%	0%	**-**	-	98.3%	98.8%	0%	0%	**98.7%**	-	98.5%	99.5%	96.2%	0%	**99.0%**	-	0%	99.5%	88.9%	0%	**99.1%**	-	98.9%
Heavy	0	0	0	0	**0**	-	2	2	0	0	**4**	-	1	1	0	0	**2**	-	0	1	0	0	**1**	-	7
% Heavy	0%	0%	0%	0%	**-**	-	1.7%	0.8%	0%	0%	**1.1%**	-	1.5%	0.5%	0%	0%	**0.6%**	-	0%	0.5%	0%	0%	**0.4%**	-	0.8%
Bicycles on Road	0	0	0	0	**0**	-	0	1	0	0	**1**	-	0	0	1	0	**1**	-	0	0	1	0	**1**	-	3
% Bicycles on Road	0%	0%	0%	0%	**-**	-	0%	0.4%	0%	0%	**0.3%**	-	0%	0%	3.8%	0%	**0.3%**	-	0%	0%	11.1%	0%	**0.4%**	-	0.3%
Pedestrians	-	-	-	-	-	161	-	-	-	-	-	271	-	-	-	-	-	168	-	-	-	-	-	214	
% Pedestrians	-	-	-	-	-	97.0%	-	-	-	-	-	99.6%	-	-	-	-	-	98.2%	-	-	-	-	-	100%	-
Bicycles on Crosswalk	-	-	-	-	-	5	-	-	-	-	-	1	-	-	-	-	-	3	-	-	-	-	-	0	
% Bicycles on Crosswalk	-	-	-	-	-	3.0%	-	-	-	-	-	0.4%	-	-	-	-	-	1.8%	-	-	-	-	-	0%	-

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

5600432 - LAURIER AVE @ METCALFE ST - JAN 10... - TMC
Wed Jan 10, 2024
PM Peak (4:15 PM - 5:15 PM)
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1149525, Location: 45.420165, -75.695165

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



5681223 - Slater Street at Metcalfe Street -... - TMC

Thu Oct 17, 2024
AM Peak (8:15 AM - 9:15 AM)
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1238990, Location: 45.421042, -75.695943, Site Code: 42064103

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

Leg / Direction	North Southbound						East Westbound						South Northbound						West Eastbound						
Time	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	R	T	L	U	**App**	Ped*	**Int**
2024-10-17 8:15AM	0	0	0	0	**0**	56	0	0	0	0	**0**	100	34	148	0	0	**182**	59	0	110	34	0	**144**	70	**326**
8:30AM	0	0	0	0	**0**	74	0	0	0	0	**0**	139	43	157	0	0	**200**	101	0	125	29	0	**154**	122	**354**
8:45AM	0	0	0	0	**0**	69	0	0	0	0	**0**	127	41	159	0	0	**200**	89	0	113	51	0	**164**	123	**364**
9:00AM	0	0	0	0	**0**	50	0	0	0	0	**0**	110	44	148	0	0	**192**	58	0	113	43	0	**156**	92	**348**
Total	0	0	0	0	**0**	249	0	0	0	0	**0**	476	162	612	0	0	**774**	307	0	461	157	0	**618**	407	**1392**
% Approach	0%	0%	0%	0%	**-**	-	0%	0%	0%	0%	**-**	-	20.9%	79.1%	0%	0%	**-**	-	0%	74.6%	25.4%	0%	**-**	-	**-**
% Total	0%	0%	0%	0%	**0%**	-	0%	0%	0%	0%	**0%**	-	11.6%	44.0%	0%	0%	**55.6%**	-	0%	33.1%	11.3%	0%	**44.4%**	-	**-**
PHF	-	-	-	-	**-**	-	-	-	-	-	**-**	-	0.921	0.950	-	-	**0.954**	-	-	0.915	0.765	-	**0.953**	-	0.956
Lights and Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	146	566	0	0	**712**	-	0	379	150	0	**529**	-	1241
% Lights and Motorcycles	0%	0%	0%	0%	**-**	-	0%	0%	0%	0%	**-**	-	90.1%	92.5%	0%	0%	**92.0%**	-	0%	82.2%	95.5%	0%	**85.6%**	-	89.2%
Heavy	0	0	0	0	**0**	-	0	0	0	0	**0**	-	5	8	0	0	**13**	-	0	75	6	0	**81**	-	94
% Heavy	0%	0%	0%	0%	**-**	-	0%	0%	0%	0%	**-**	-	3.1%	1.3%	0%	0%	**1.7%**	-	0%	16.3%	3.8%	0%	**13.1%**	-	6.8%
Bicycles on Road	0	0	0	0	**0**	-	0	0	0	0	**0**	-	11	38	0	0	**49**	-	0	7	1	0	**8**	-	57
% Bicycles on Road	0%	0%	0%	0%	**-**	-	0%	0%	0%	0%	**-**	-	6.8%	6.2%	0%	0%	**6.3%**	-	0%	1.5%	0.6%	0%	**1.3%**	-	4.1%
Pedestrians	-	-	-	-	-	249	-	-	-	-	-	476	-	-	-	-	-	304	-	-	-	-	-	406	
% Pedestrians	-	-	-	-	-	100%	-	-	-	-	-	100%	-	-	-	-	-	99.0%	-	-	-	-	-	99.8%	-
Bicycles on Crosswalk	-	-	-	-	-	0	-	-	-	-	-	0	-	-	-	-	-	3	-	-	-	-	-	1	
% Bicycles on Crosswalk	-	-	-	-	-	0%	-	-	-	-	-	0%	-	-	-	-	-	1.0%	-	-	-	-	-	0.2%	-

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

5681223 - Slater Street at Metcalfe Street -... - TMC

Thu Oct 17, 2024

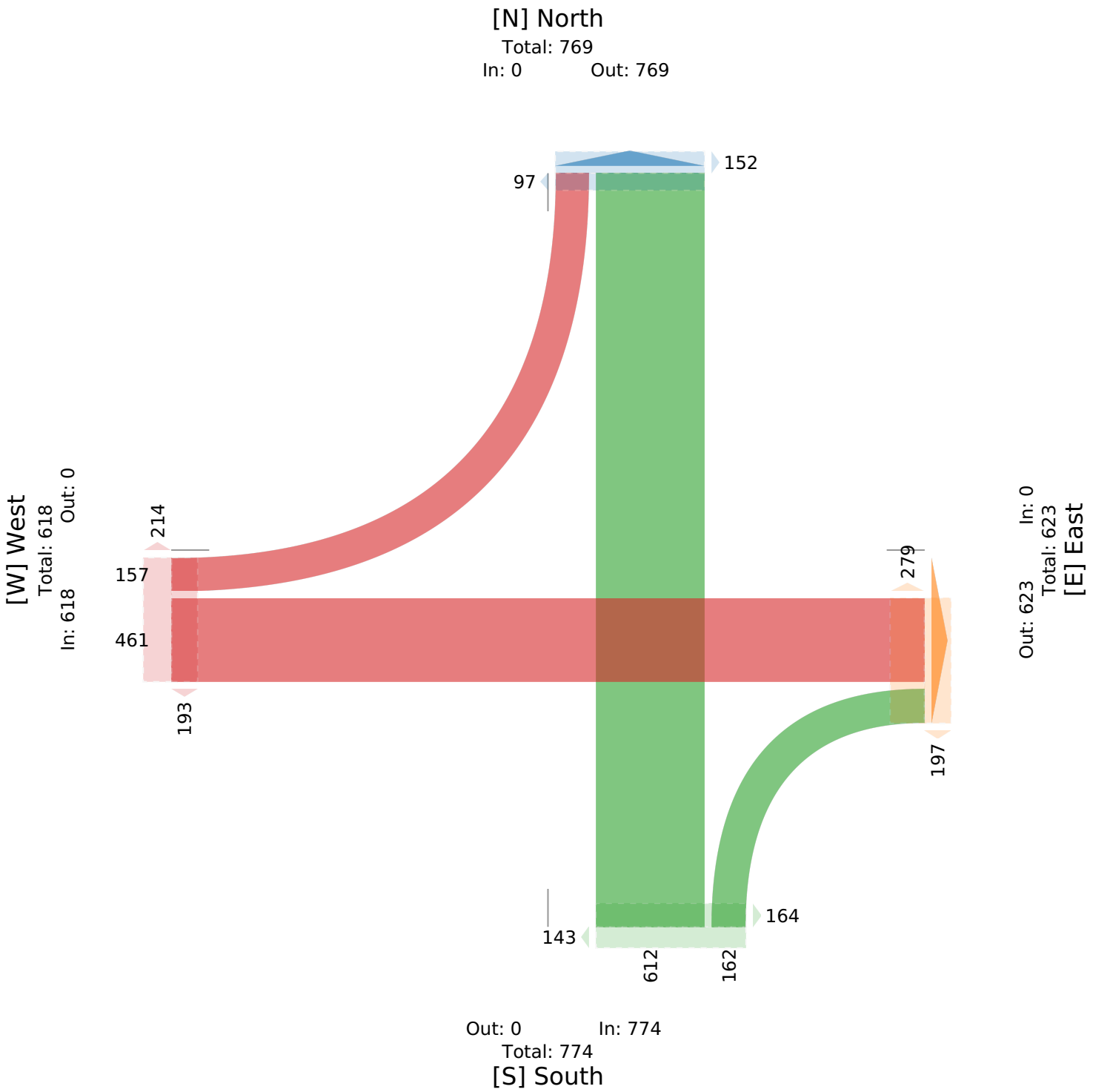
AM Peak (8:15 AM - 9:15 AM)

All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)

All Movements

ID: 1238990, Location: 45.421042, -75.695943, Site Code: 42064103

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



5681223 - Slater Street at Metcalfe Street -... - TMC

Thu Oct 17, 2024
PM Peak (3:15 PM - 4:15 PM) - Overall Peak Hour
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1238990, Location: 45.421042, -75.695943, Site Code: 42064103

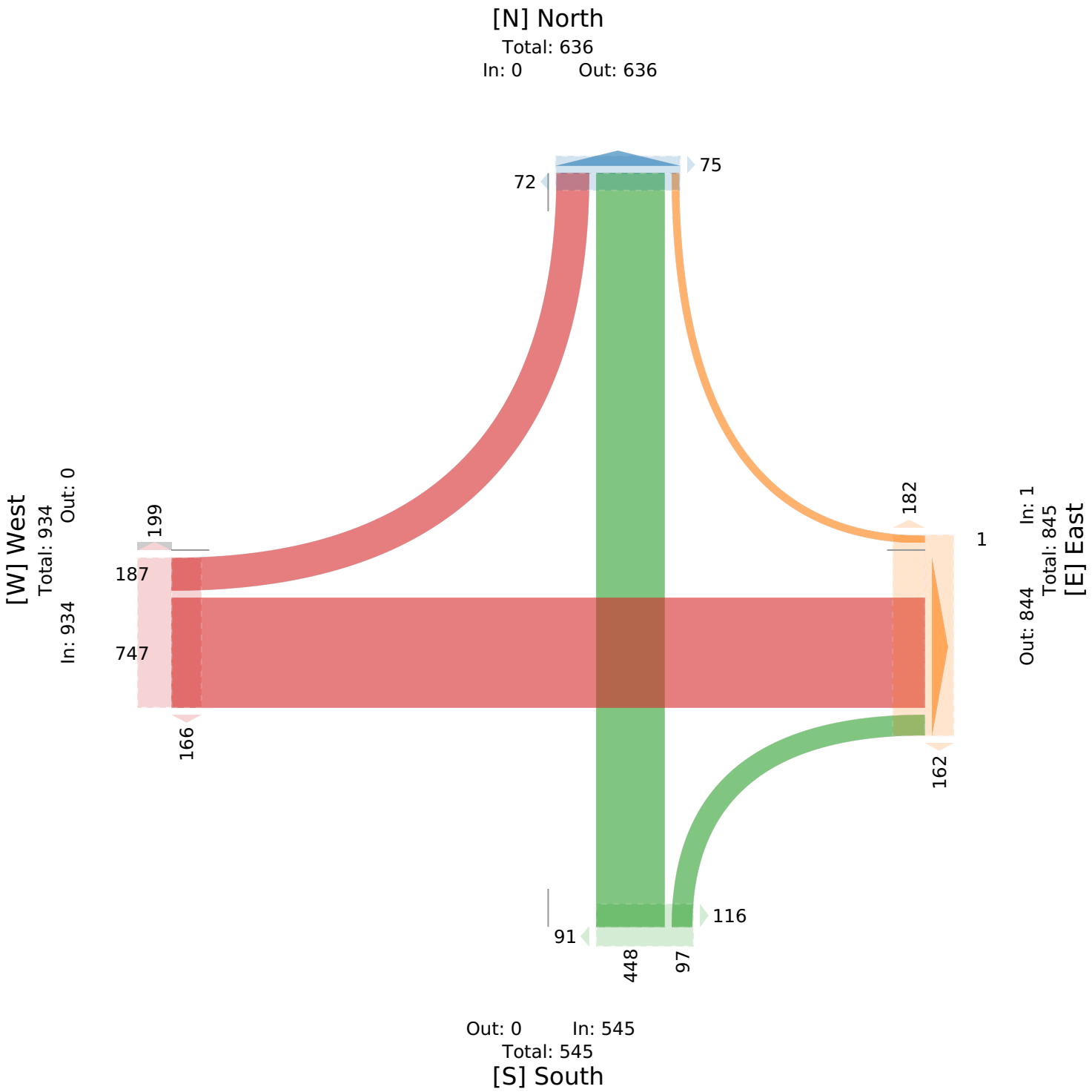
Provided by: City of Ottawa
100 Constellation Dr,
Nepean, ON, K2G 5J9, CA

Leg Direction	North Southbound						East Westbound						South Northbound						West Eastbound						
Time	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	R	T	L	U	App	Ped*	Int
2024-10-17 3:15PM	0	0	0	0	**0**	34	0	0	0	0	**0**	83	19	105	0	0	**124**	45	0	204	44	0	**248**	84	**372**
3:30PM	0	0	0	0	**0**	35	0	0	0	0	**0**	75	30	115	0	0	**145**	43	0	188	40	0	**228**	86	**373**
3:45PM	0	0	0	0	**0**	36	0	0	0	0	**0**	77	19	102	0	0	**121**	59	0	175	49	0	**224**	77	**345**
4:00PM	0	0	0	0	**0**	42	1	0	0	0	**1**	109	29	126	0	0	**155**	60	0	180	54	0	**234**	118	**390**
Total	0	0	0	0	**0**	147	1	0	0	0	**1**	344	97	448	0	0	**545**	207	0	747	187	0	**934**	365	**1480**
% Approach	0%	0%	0%	0%	**-**	-	100%	0%	0%	0%	**-**	-	17.8%	82.2%	0%	0%	**-**	-	0%	80.0%	20.0%	0%	**-**	-	-
% Total	0%	0%	0%	0%	**0%**	-	0.1%	0%	0%	0%	**0.1%**	-	6.6%	30.3%	0%	0%	**36.8%**	-	0%	50.5%	12.6%	0%	**63.1%**	-	-
PHF	-	-	-	-	**-**	-	-	-	-	-	**-**	-	0.808	0.893	-	-	**0.882**	-	-	0.915	0.858	-	**0.944**	-	0.951
Lights and Motorcycles	0	0	0	0	**0**	-	0	0	0	0	**0**	-	96	437	0	0	**533**	-	0	701	178	0	**879**	-	1412
% Lights and Motorcycles	0%	0%	0%	0%	**-**	-	0%	0%	0%	0%	**0%**	-	99.0%	97.5%	0%	0%	**97.8%**	-	0%	93.8%	95.2%	0%	**94.1%**	-	95.4%
Heavy	0	0	0	0	**0**	-	0	0	0	0	**0**	-	1	6	0	0	**7**	-	0	46	4	0	**50**	-	57
% Heavy	0%	0%	0%	0%	**-**	-	0%	0%	0%	0%	**0%**	-	1.0%	1.3%	0%	0%	**1.3%**	-	0%	6.2%	2.1%	0%	**5.4%**	-	3.9%
Bicycles on Road	0	0	0	0	**0**	-	1	0	0	0	**1**	-	0	5	0	0	**5**	-	0	0	5	0	**5**	-	11
% Bicycles on Road	0%	0%	0%	0%	**-**	-	100%	0%	0%	0%	**100%**	-	0%	1.1%	0%	0%	**0.9%**	-	0%	0%	2.7%	0%	**0.5%**	-	0.7%
Pedestrians	-	-	-	-	-	145	-	-	-	-	-	343	-	-	-	-	-	203	-	-	-	-	-	362	
% Pedestrians	-	-	-	-	-	98.6%	-	-	-	-	-	99.7%	-	-	-	-	-	98.1%	-	-	-	-	-	99.2%	-
Bicycles on Crosswalk	-	-	-	-	-	2	-	-	-	-	-	1	-	-	-	-	-	4	-	-	-	-	-	3	
% Bicycles on Crosswalk	-	-	-	-	-	1.4%	-	-	-	-	-	0.3%	-	-	-	-	-	1.9%	-	-	-	-	-	0.8%	-

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

5681223 - Slater Street at Metcalfe Street -... - TMC
Thu Oct 17, 2024
PM Peak (3:15 PM - 4:15 PM) - Overall Peak Hour
All Classes (Lights and Motorcycles, Heavy, Pedestrians, Bicycles on Road, Bicycles on Crosswalk)
All Movements
ID: 1238990, Location: 45.421042, -75.695943, Site Code: 42064103

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



Appendix C:

Historic Collision Data

Total Area

Classification of Accident	Rear End	Turning Movement	Sideswipe	Angle	Approaching	SMV other	SMV unattended vehicle	Other	Total	
P.D. only	39	21	56	20	0	10	8	8	162	85%
Non-fatal injury	3	9	2	7	0	8	0	0	29	15%
Non-reportable	0	0	0	0	0	0	0	0	0	0%
Total	**42**	**30**	**58**	**27**	**0**	**18**	**8**	**8**	**191**	100%
	#2 or 22%	#3 or 16%	#1 or 30%	#4 or 14%	#8 or 0%	#5 or 9%	#6 or 4%	#6 or 4%		

ALBERT ST/METCALFE ST

Years	Total # Collisions	24 Hr AADT Veh Volume	Days	Collisions/MEV
2018-2022	9	n/a	365	**n/a**

Peds	Cyclists
0	**1**

Classification of Accident	Rear End	Turning Movement	Sideswipe	Angle	Approaching	SMV other	SMV unattended vehicle	Other	Total	
P.D. only	1	0	4	1	0	0	0	0	6	67%
Non-fatal injury	1	0	0	2	0	0	0	0	3	33%
Non-reportable	0	0	0	0	0	0	0	0	0	0%
Total	**2**	**0**	**4**	**3**	**0**	**0**	**0**	**0**	**9**	100%
	22%	0%	44%	33%	0%	0%	0%	0%		

METCALFE ST/SLATER ST

Years	Total # Collisions	24 Hr AADT Veh Volume	Days	Collisions/MEV
2018-2022	11	n/a	365	**n/a**

Peds	Cyclists
4	**0**

Classification of Accident	Rear End	Turning Movement	Sideswipe	Angle	Approaching	SMV other	SMV unattended vehicle	Other	Total	
P.D. only	0	1	1	3	0	0	0	0	5	45%
Non-fatal injury	1	0	0	1	0	4	0	0	6	55%
Non-reportable	0	0	0	0	0	0	0	0	0	0%
Total	**1**	**1**	**1**	**4**	**0**	**4**	**0**	**0**	**11**	100%
	9%	9%	9%	36%	0%	36%	0%	0%		

METCALFE ST/LAURIER AVE

Years	Total # Collisions	24 Hr AADT Veh Volume	Days	Collisions/MEV
2018-2022	27	n/a	365	**n/a**

Peds	Cyclists
0	**0**

Classification of Accident	Rear End	Turning Movement	Sideswipe	Angle	Approaching	SMV other	SMV unattended vehicle	Other	Total	
P.D. only	10	2	7	4	0	1	0	1	25	93%
Non-fatal injury	1	0	0	1	0	0	0	0	2	7%
Non-reportable	0	0	0	0	0	0	0	0	0	0%
Total	**11**	**2**	**7**	**5**	**0**	**1**	**0**	**1**	**27**	100%
	41%	7%	26%	19%	0%	4%	0%	4%		

ALBERT ST/ELGIN ST/MACKENZIE KING BRIDGE

Years	Total # Collisions	24 Hr AADT Veh Volume	Days	Collisions/MEV
2018-2022	25	n/a	365	**n/a**

Peds	Cyclists
0	**0**

Classification of Accident	Rear End	Turning Movement	Sideswipe	Angle	Approaching	SMV other	SMV unattended vehicle	Other	Total	
P.D. only	2	8	7	1	0	3	0	1	22	88%
Non-fatal injury	0	2	0	0	0	1	0	0	3	12%
Non-reportable	0	0	0	0	0	0	0	0	0	0%
Total	**2**	**10**	**7**	**1**	**0**	**4**	**0**	**1**	**25**	100%
	8%	40%	28%	4%	0%	16%	0%	4%		

ELGIN ST/SLATER ST

Years	Total # Collisions	24 Hr AADT Veh Volume	Days	Collisions/MEV
2018-2022	35	n/a	365	**n/a**

Peds	Cyclists
1	**1**

Classification of Accident	Rear End	Turning Movement	Sideswipe	Angle	Approaching	SMV other	SMV unattended vehicle	Other	Total	
P.D. only	5	3	11	8	0	3	0	1	31	89%
Non-fatal injury	0	0	1	2	0	1	0	0	4	11%
Non-reportable	0	0	0	0	0	0	0	0	0	0%
Total	**5**	**3**	**12**	**10**	**0**	**4**	**0**	**1**	**35**	100%
	14%	9%	34%	29%	0%	11%	0%	3%		

ELGIN ST/LAURIER AVE

Years	Total # Collisions	24 Hr AADT Veh Volume	Days	Collisions/MEV
2018-2022	54	n/a	365	**n/a**

Peds	Cyclists
1	**5**

Classification of Accident	Rear End	Turning Movement	Sideswipe	Angle	Approaching	SMV other	SMV unattended vehicle	Other	Total	
P.D. only	16	7	17	2	0	2	0	2	46	85%
Non-fatal injury	0	6	0	1	0	1	0	0	8	15%
Non-reportable	0	0	0	0	0	0	0	0	0	0%

Total	**16**	**13**	**17**	**3**	**0**	**3**	**0**	**2**	**54**	100%
	30%	24%	31%	6%	0%	6%	0%	4%		

ROAD SEGMENTS

METCALFE ST, SLATER ST to LAURIER AVE

Years	*Total # Collisions*	*24 Hr AADT Veh Volume*	*Days*	*Collisions/MEV*
2018-2022	5	n/a	365	**n/a**

Peds	**Cyclists**
0	**0**

Classification of Accident	*Rear End*	*Turning Movement*	*Sideswipe*	*Angle*	*Approaching*	*SMV other*	*SMV unattended vehicle*	*Other*	*Total*	
P.D. only	1	0	2	0	0	0	2	0	5	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**	**0**	**2**	**0**	**0**	**0**	**2**	**0**	**5**	100%
	20%	0%	40%	0%	0%	0%	40%	0%		

ELGIN ST NB, SLATER ST to LAURIER AVE

Years	*Total # Collisions*	*24 Hr AADT Veh Volume*	*Days*	*Collisions/MEV*
2018-2022	1	n/a	365	**n/a**

Peds	**Cyclists**
0	**0**

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

ALBERT ST, METCALFE ST to ELGIN ST

Years	*Total # Collisions*	*24 Hr AADT Veh Volume*	*Days*	*Collisions/MEV*
2018-2022	10	n/a	365	**n/a**

Peds	**Cyclists**
2	**0**

Classification of Accident	*Rear End*	*Turning Movement*	*Sideswipe*	*Angle*	*Approaching*	*SMV other*	*SMV unattended vehicle*	*Other*	*Total*	
P.D. only	1	0	2	0	0	0	3	2	8	80%
Non-fatal injury	0	0	1	0	0	1	0	0	2	20%
Non-reportable	0	0	0	0	0	0	0	0	0	0%
Total	**1**	**0**	**3**	**0**	**0**	**1**	**3**	**2**	**10**	100%
	10%	0%	30%	0%	0%	10%	30%	20%		

SLATER ST, METCALFE ST to ELGIN ST

Years	*Total # Collisions*	*24 Hr AADT Veh Volume*	*Days*	*Collisions/MEV*
2018-2022	5	n/a	365	**n/a**

Peds	**Cyclists**
0	**0**

Classification of Accident	*Rear End*	*Turning Movement*	*Sideswipe*	*Angle*	*Approaching*	*SMV other*	*SMV unattended vehicle*	*Other*	*Total*	
P.D. only	0	0	3	0	0	1	0	1	5	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**	**3**	**0**	**0**	**1**	**0**	**1**	**5**	100%
	0%	0%	60%	0%	0%	20%	0%	20%		

LAURIER AVE, ELGIN ST to METCALFE ST

Years	*Total # Collisions*	*24 Hr AADT Veh Volume*	*Days*	*Collisions/MEV*
2018-2022	9	n/a	365	**n/a**

Peds	**Cyclists**
0	**1**

Classification of Accident	*Rear End*	*Turning Movement*	*Sideswipe*	*Angle*	*Approaching*	*SMV other*	*SMV unattended vehicle*	*Other*	*Total*	
P.D. only	2	0	2	1	0	0	3	0	8	89%
Non-fatal injury	0	1	0	0	0	0	0	0	1	11%
Non-reportable	0	0	0	0	0	0	0	0	0	0%
Total	**2**	**1**	**2**	**1**	**0**	**0**	**3**	**0**	**9**	100%
	22%	11%	22%	11%	0%	0%	33%	0%		

Appendix D:

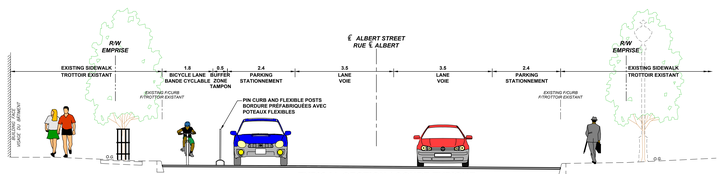
Functional Desing Plans O'Connor St, Wellington St & Slater St

STREET IMPROVEMENTS
ALBERT AND SLATER
BAY STREET TO ELGIN STREET

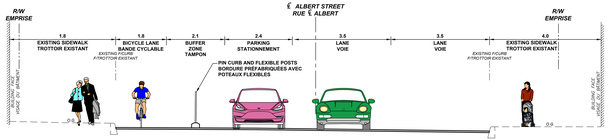
PROPOSED DESIGN

AMÉLIORATIONS DES RUES
ALBERT ET SLATER
DE LA RUE BAY À LA RUE ELGIN

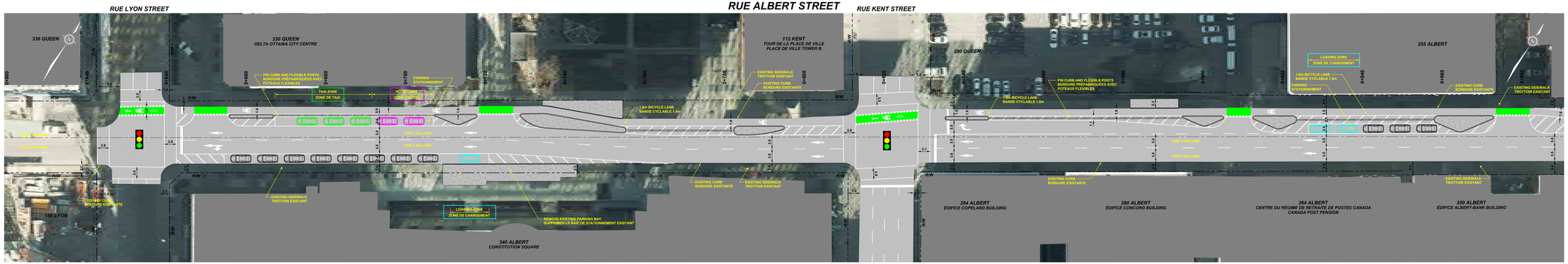
CONCEPTION PROPOSÉE



TYPICAL SECTION / COUPE TYPIQUE
STA. 0+700



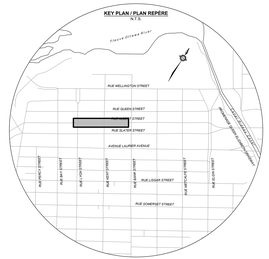
TYPICAL SECTION / COUPE TYPIQUE
STA. 0+940



LEGEND:
LÉGENDE:

- RW — EXISTING ROAD RIGHT-OF-WAY / EMPRISE ROUTIÈRE EXISTANTE
- DC — DEPRESSED CURB / BORDURE EN DÉPRESSION
- CONCRETE / BÉTON
- ASPHALT / ASPHALTE
- INTERLOCKING PAVING STONES / PAVÉS AUTOBLOQUANTS
- SOD / GAZON
- PAVEMENT THERMOPLASTIC - GREEN / REVÊTEMENT THERMOPLASTIQUE - VERT
- TRAFFIC SIGNAL / FEUX DE CIRCULATION

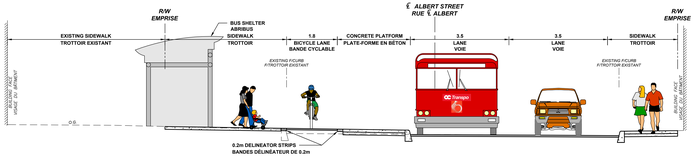
KEY PLAN / PLAN REPÈRE
N.T.S.



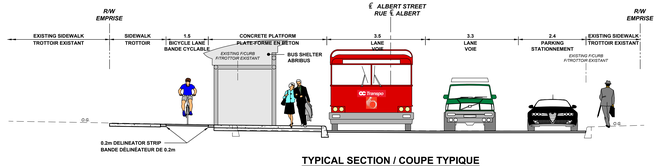
September 26, 2024

STREET IMPROVEMENTS
ALBERT AND SLATER
BAY STREET TO ELGIN STREET
PROPOSED DESIGN

AMÉLIORATIONS DES RUES
ALBERT ET SLATER
DE LA RUE BAY À LA RUE ELGIN
CONCEPTION PROPOSÉE



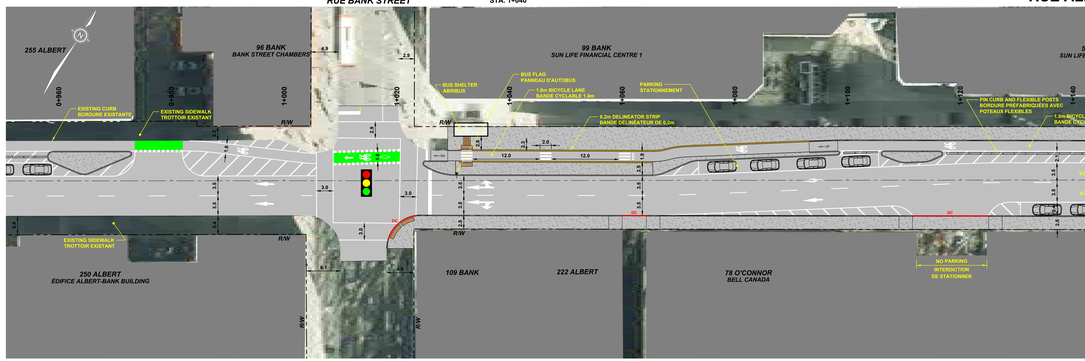
TYPICAL SECTION / COUPE TYPIQUE
STA. 1+040



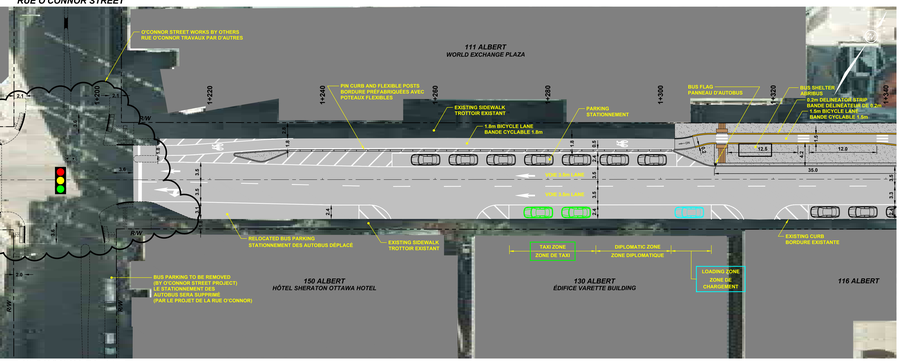
TYPICAL SECTION / COUPE TYPIQUE
STA. 1+330

RUE ALBERT STREET

RUE BANK STREET



RUE O'CONNOR STREET



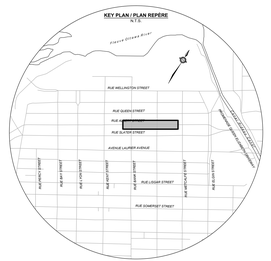
RUE BANK STREET

RUE O'CONNOR STREET

LEGEND:
LÉGENDE:

- R/W — EXISTING ROAD RIGHT-OF-WAY / EMPRISE ROUTIÈRE EXISTANTE
- DC — DEPRESSED CURB / BORDURE EN DÉPRESSION
- CONCRETE / BÉTON
- ASPHALT / ASPHALTE
- INTERLOCKING PAVING STONES / PAVÉS AUTOBLOQUANTS
- SOD / GAZON
- PAVEMENT THERMOPLASTIC - GREEN / REVÊTEMENT THERMOPLASTIQUE - VERT
- TRAFFIC SIGNAL / FEUX DE CIRCULATION

KEY PLAN / PLAN REPÈRE
N.T.S.



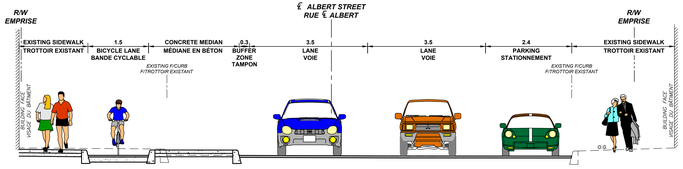
September 26, 2024

STREET IMPROVEMENTS
ALBERT AND SLATER
BAY STREET TO ELGIN STREET

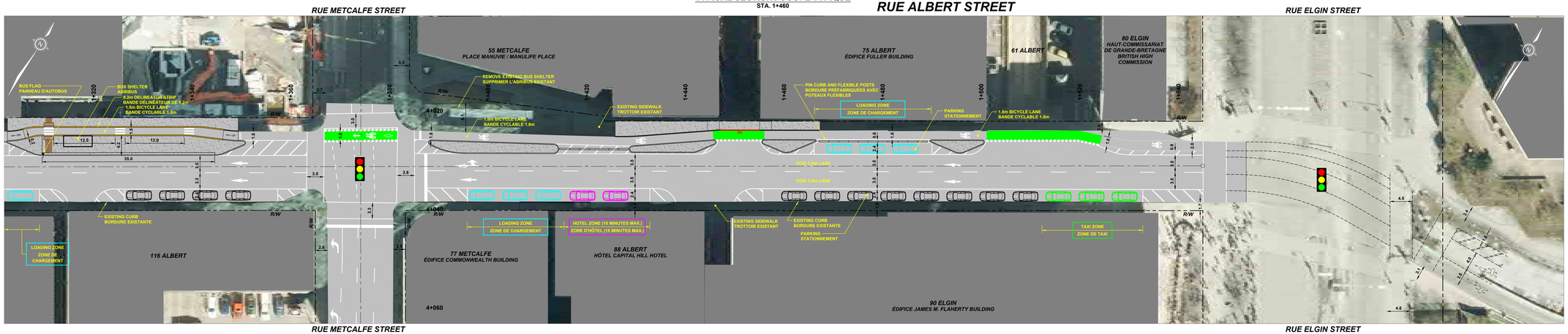
PROPOSED DESIGN

AMÉLIORATIONS DES RUES
ALBERT ET SLATER
DE LA RUE BAY À LA RUE ELGIN

CONCEPTION PROPOSÉE



TYPICAL SECTION / COUPE TYPIQUE
STA. 1+460



Stantec

Scale / Échelle 1:250
7.5m 3.75 0 2.5 5 10m

LEGEND:
LÉGENDE:

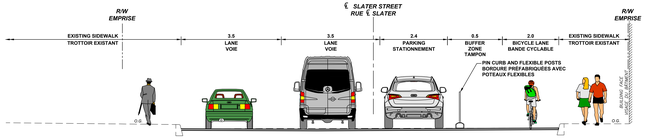
- R/W — EXISTING ROAD RIGHT-OF-WAY / EMPRISE ROUTIÈRE EXISTANTE
- DC — DEPRESSED CURB / BORDURE EN DÉPRESSION
- CONCRETE / BÉTON
- ASPHALT / ASPHALTE
- INTERLOCKING PAVING STONES / PAVÉS AUTOBLOQUANTS
- SOD / GAZON
- PAVEMENT THERMOPLASTIC - GREEN / REVÊTEMENT THERMOPLASTIQUE - VERT
- TRAFFIC SIGNAL / FEUX DE CIRCULATION

KEY PLAN / PLAN REPÈRE
N.T.S.

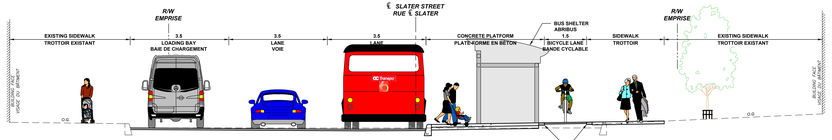
September 26, 2024

STREET IMPROVEMENTS ALBERT AND SLATER
BAY STREET TO ELGIN STREET
PROPOSED DESIGN

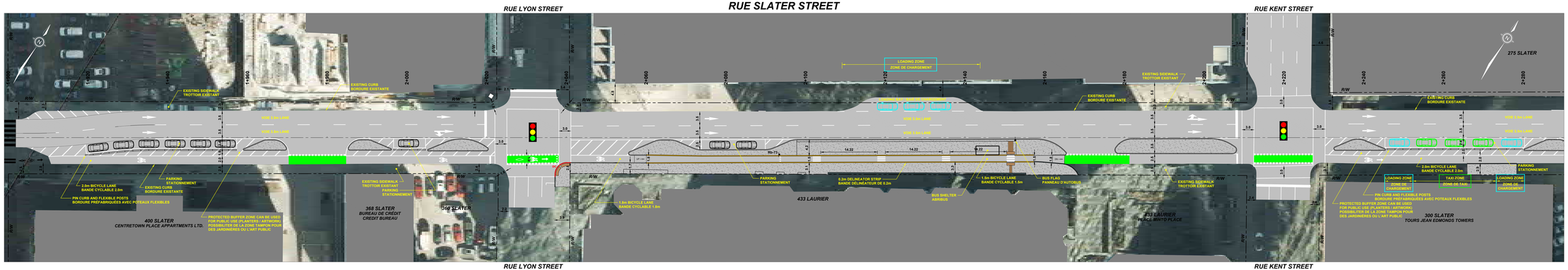
AMÉLIORATIONS DES RUES ALBERT ET SLATER
DE LA RUE BAY À LA RUE ELGIN
CONCEPTION PROPOSÉE



TYPICAL SECTION / COUPE TYPIQUE
STA. 2+000



TYPICAL SECTION / COUPE TYPIQUE
STA. 2+130

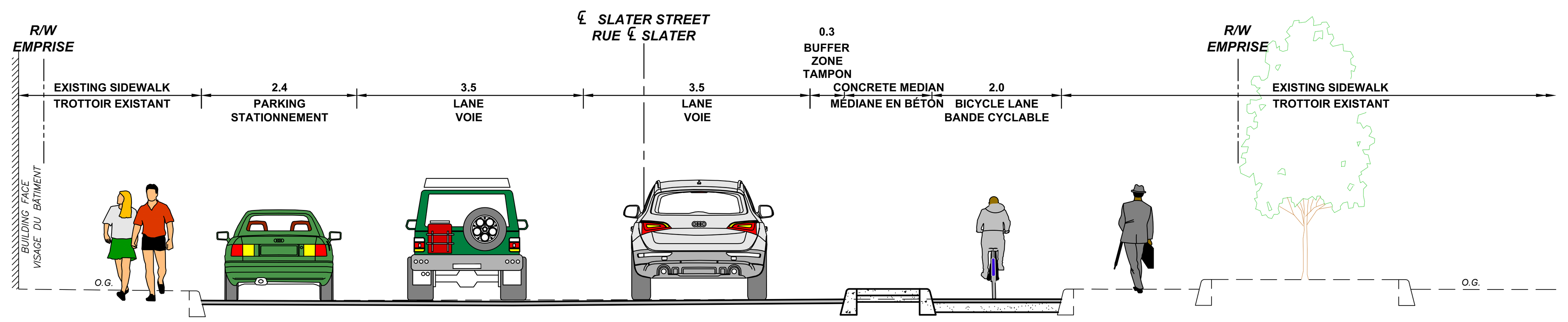


LEGEND:
LÉGENDE:

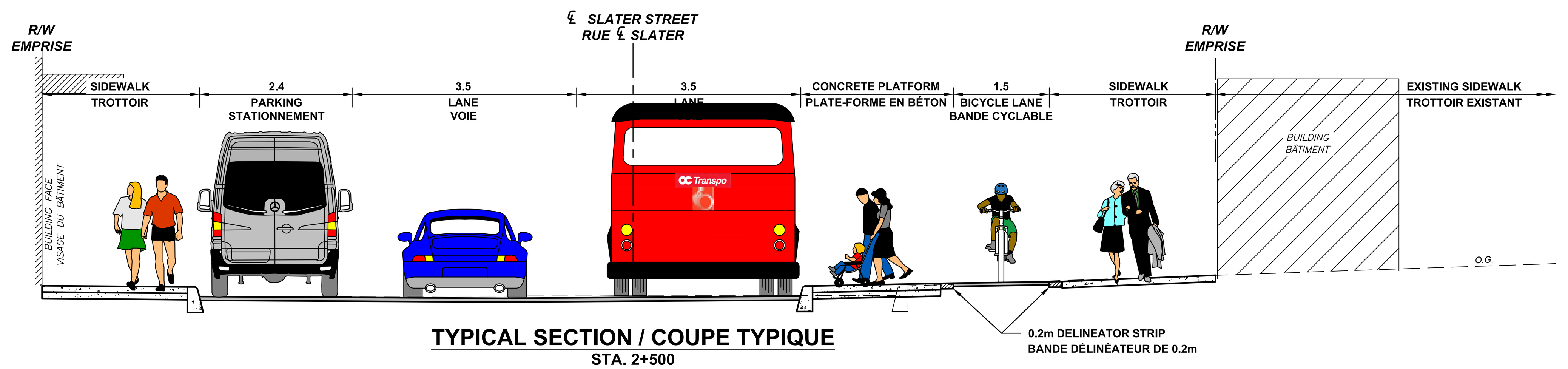
- R/W — EXISTING ROAD RIGHT-OF-WAY / EMPRISE ROUTIÈRE EXISTANTE
- DC — DEPRESSED CURB / BORDURE EN DÉPRESSION
- CONCRETE / BÉTON
- ASPHALT / ASPHALTE
- INTERLOCKING PAVING STONES / PAVÉS AUTOBLOQUANTS
- SOD / GAZON
- PAVEMENT THERMOPLASTIC - GREEN / REVÊTEMENT THERMOPLASTIQUE - VERT
- TRAFFIC SIGNAL / FEUX DE CIRCULATION

KEY PLAN / PLAN REPÈRE
N.T.S.

September 26, 2024



TYPICAL SECTION / COUPE TYPIQUE
STA. 2+360



TYPICAL SECTION / COUPE TYPIQUE
STA. 2+500

RUE SLATER STREET

Ottawa

STREET IMPROVEMENTS
ALBERT AND SLATER
BAY STREET TO ELGIN STREET

PROPOSED DESIGN

AMÉLIORATIONS DES RUES
ALBERT ET SLATER
DE LA RUE BAY À LA RUE ELGIN

CONCEPTION PROPOSÉE

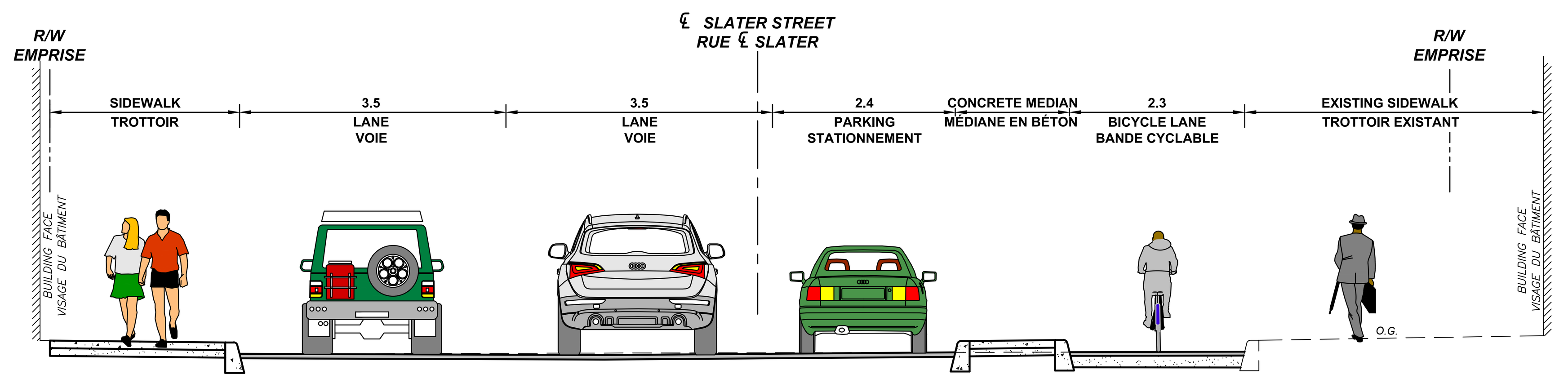
Stantec

LEGEND:
LÉGENDE:

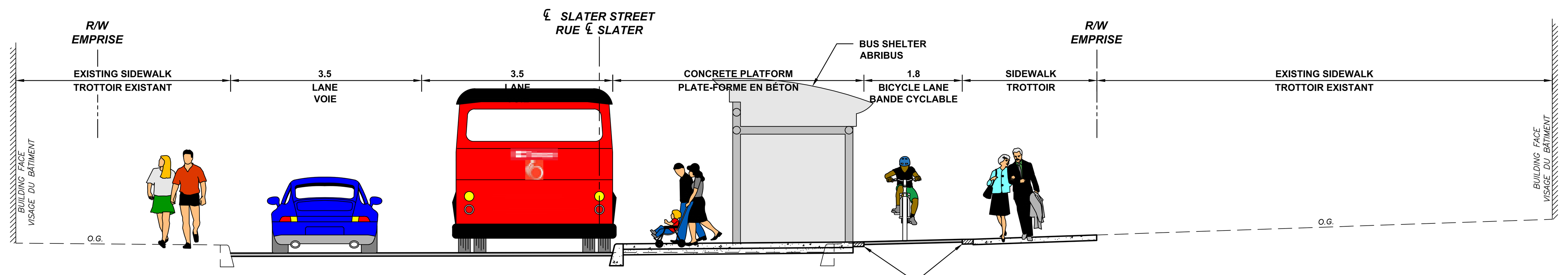
- R/W — EXISTING ROAD RIGHT-OF-WAY / EMPRISE ROUTIÈRE EXISTANTE
- DC — DEPRESSED CURB / BORDURE EN DÉPRESSION
- CONCRETE / BÉTON
- ASPHALT / ASPHALTE
- INTERLOCKING PAVING STONES / PAVÉS AUTOBLOQUANTS
- SOD / GAZON
- PAVEMENT THERMOPLASTIC - GREEN / REVÊTEMENT THERMOPLASTIQUE - VERT
- TRAFFIC SIGNAL / FEUX DE CIRCULATION

September 26, 2024

2024-09-17 1:05 PM w:\active\163601230\design\drawing\submissions\24-09-26_openhouse\01230-004-006-slater.dwg



TYPICAL SECTION / COUPE TYPIQUE
STA. 2+700



TYPICAL SECTION / COUPE TYPIQUE
STA. 2+850

RUE SLATER STREET

RUE METCALFE STREET

RUE ELGIN STREET

RUE METCALFE STREET

RUE ELGIN STREET

STREET IMPROVEMENTS ALBERT AND SLATER

BAY STREET TO ELGIN STREET

PROPOSED DESIGN

AMÉLIORATIONS DES RUES ALBERT ET SLATER

DE LA RUE BAY À LA RUE ELGIN

CONCEPTION PROPOSÉE

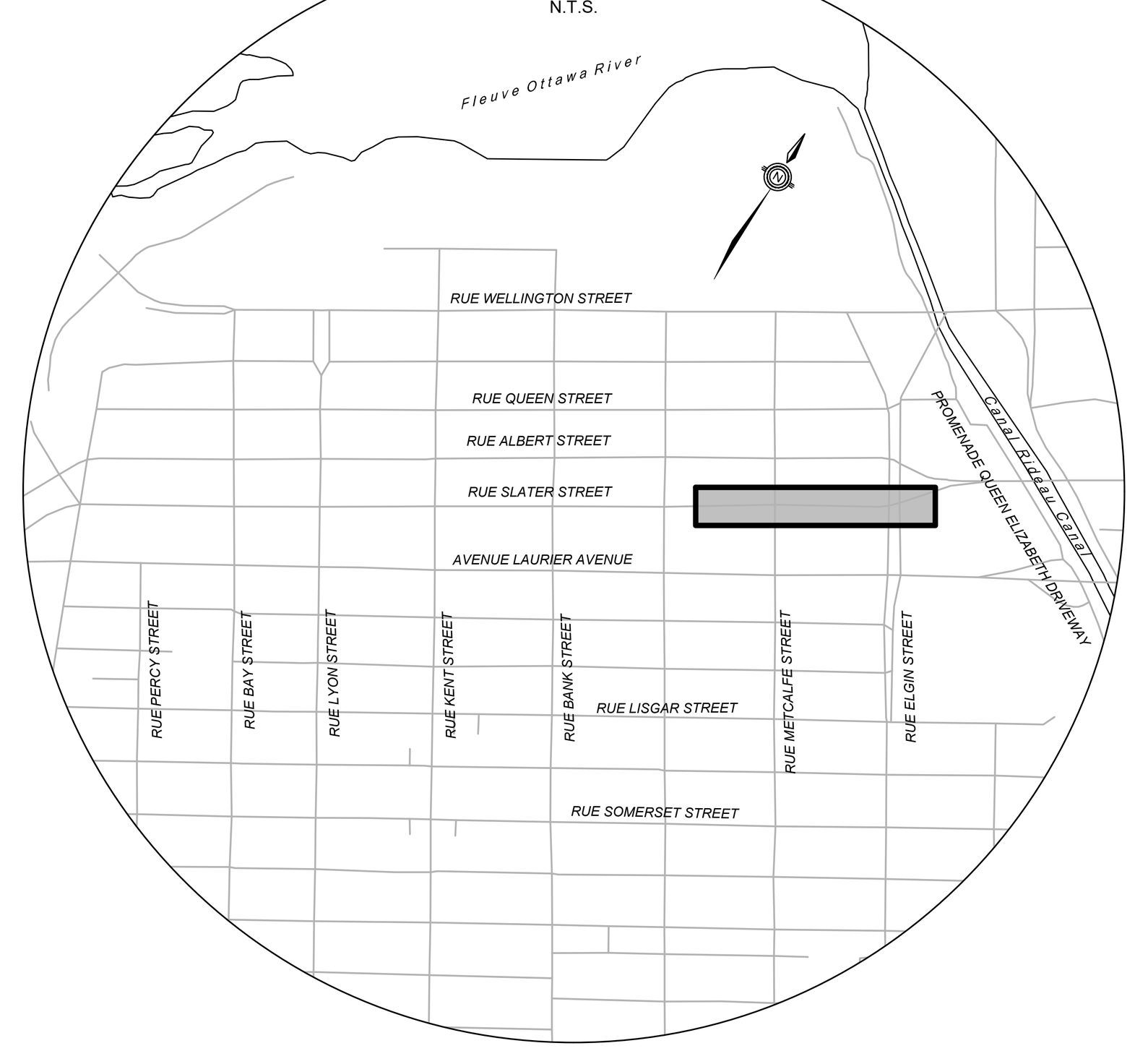
Stantec

Scale / Échelle 1:250

LEGEND:
LÉGENDE:

- R/W — EXISTING ROAD RIGHT-OF-WAY / EMPRISE ROUTIÈRE EXISTANTE
- DC — DEPRESSED CURB / BORDURE EN DÉPRESSION
- CONCRETE / BÉTON
- ASPHALT / ASPHALTE
- INTERLOCKING PAVING STONES / PAVÉS AUTOBLOQUANTS
- SOD / GAZON
- PAVEMENT THERMOPLASTIC - GREEN / REVÊTEMENT THERMOPLASTIQUE - VERT
- TRAFFIC SIGNAL / FEUX DE CIRCULATION

KEY PLAN / PLAN REPÈRE
N.T.S.



September 26, 2024

Appendix E:

Truck Turning Templates

PARSONS

Note: The location of utilities is approximate only, the exact location should be determined by consulting the municipal authorities and utility companies concerned. The contractor shall provide the location of utilities and shall be responsible for adequate protection from damage.

N

Legend

MSU

	mm
Width	: 2600
Track	: 2600
Lock to Lock Time	: 6.0
Steering Angle	: 40.2

Not to Scale

Drawing Description	77 Metcalfe Truck Turning Templates		
Client	Group Mach	Date 2025-08-01	Figure Number 1/1
Project Number	479510	Project Description	

BICYCLE I

HORIZONTAL STACKED 2000mm x 400mm

HORIZONTAL 2000mm x 400mm

Note: garage entrance one floor lower, columns as shown in this figure are not representative of where they are located one floor below. Garage access is existing, P-car turning for illustrative purposes only.

Appendix F:

MMLOS Analysis: Road Segments

Multi-Modal Level of Service - Segments Form

Project: 77 Metcalfe St
Consultant: Parsons
Date: Jul 18, 2025
Scenario: 479510

	Segment Name	Albert (Existing)				Albert (Future)				Metcalfe (Existing)				Metcalfe
	OP Transect / Policy Area	Within 600m of a rapid transit station				Within 600m of a rapid transit station				Within 600m of a rapid transit station				Within 600m of a ra
	Segment Component	Majority (>50%)		Critical		Majority (>50%)		Critical		Majority (>50%)		Critical		Majority (>50%)
	Side of Street	W or N	E or S	W or N	E or S	W or N	E or S	W or N	E or S	W or N	E or S	W or N	E or S	W or N	E or S
Pedestrian	PLOS Inputs														
	Posted Speed (km/h)	50 km/h		50 km/h		50 km/h		50 km/h		50 km/h		50 km/h		50 km/h	
	Two-Way ADT	6,000		6,000		6,000		6,000		7,500		7,500		7,500	
	Pedestrian Facility	Sidewalk	Sidewalk			Sidewalk	Sidewalk			Sidewalk	Sidewalk			Sidewalk	Sidewalk
	Does the facility meet the TMP Sidewalk or MUP Policy? If not, for MUPs, does the location have a low volume of peak daily users AND are pedestrian volumes likely less than 20% of total users?	Yes	Yes			Yes	Yes			Yes	Yes			Yes	Yes
	Facility Width (m)	2.50m	2.00m			2.50m	2.00m			2.30m	2.00m			2.30m	3.00m
	Offset from Motor Vehicle Travel Lanes (m)	0.5-1.49m	≥ 3.0m			≥ 3.0m	≥ 3.0m			0.5-1.49m	0.5-1.49m			0.5-1.49m	1.5-2.99m
	Presence of Adjacent Parking?	-	Yes			No	Yes			-	-			-	-
	General Purpose Curb Lane ADT	> 3000	> 3000			-	> 3000			> 3000	> 3000			> 3000	> 3000
	Max. Distance between Controlled Crossings (m)	≤ 200m	≤ 200m			≤ 200m	≤ 200m			≤ 200m	≤ 200m			≤ 200m	≤ 200m
	Score	**4.25**	**5.00**	-	-	**5.00**	**5.00**	-	-	**4.25**	**4.25**	-	-	**4.25**	**5.00**
	PLOS	**B**	**A**	**-**	**-**	**A**	**A**	**-**	**-**	**B**	**B**	**-**	**-**	**B**	**A**
	Target PLOS	**A**				**A**				**A**					**A**
Bicycle	BLOS Inputs														
	Cycling Route Classification	**Elsewhere**				**Elsewhere**				**Elsewhere**				**Elsew**	
	Cycling Facility	Shared Operating Space		Input PLOS First	Input PLOS First	Cycle Track		Input PLOS First	Input PLOS First		Shared Operating Space	Input PLOS First	Input PLOS First		Shared Operating Space
	Is the minimum level of separation provided according to OTM Book 18 Pre-Selection Nomograph - Rural Context (Figure 5.6)? (for paved shoulders)	-				-					-				-
	Facility Operation	-				Unidirectional					-				-
	Pedestrian/Cyclist Volume	-				-					-				-
	Facility Width	-				1.8m-2.09m					-				-
	Boulevard/Buffer Width (excluding curb)	-				≥ 1.0m					-				-
	Unsignalized Roadway Crossing Type (where cyclists are required to yield)	None				None					None				None
	Number of Travel Lanes at Crossing	-				-					-				-
	Crossing includes Median Refuge (≥ 2.7m)	-				-					-				-
	Cross-street Posted Speed (km/h)	-				-					-				-
	Cycling Path Blockages (e.g. bus stops and/or loading zones)	Frequent, Short Duration				-					Rare				Rare
	Score	**1.30**	-	-	-	**4.50**	-	-	-	-	**0.75**	-	-	-	**0.75**
	BLOS	**E**	**-**	**-**	**-**	**A**	**-**	**-**	**-**	**-**	**E**	**-**	**-**	**-**	**E**
	Target BLOS	**B**				**B**				**B**					**B**
Transit	TLOS Inputs														
	Transit Facility	**TP - Continuous Lanes**				**Mixed Traffic**									
	Facility Type	Continuous Curbside Bus Lane				Mixed Traffic									
	Expected Transit Running Time	-				Moderately Impeded									
	Transit Travel Speed (if available)	-				Enter Speed (if available)									
	TLOS	**B**	**-**			**D**	**-**			**-**	**-**			**-**	**-**
	Target TLOS	**B**				**E (D for frequent transit routes)**				**-**					**-**
Public Realm	PRLOS Inputs														
	Context	Mainstreet or active frontage street within a Hub, Special District, or Village	Input PLOS and BLOS First			Mainstreet or active frontage street within a Hub, Special District, or Village	Input PLOS and BLOS First			Input PLOS and BLOS First	Mainstreet or active frontage street within a Hub, Special District, or Village			Input PLOS and BLOS First	Mainstreet or active frontage street within a Hub, Special District, or Village
	Inner Boulevard Width	≤ 0.6m				0.6-1.19m					≤ 0.6m				≤ 0.6m
	Middle Boulevard Width	≤ 0.5m				Half-height curb serving as the boulevard					≤ 0.5m				≤ 0.5m
	Outer Boulevard (Frontage) Width	-				-					-				-
	Transit Route on Segment?	Yes				Yes					No				No
	Bus Stop Elements	Curbside landing zone with shelter behind sidewalk				Curbside landing zone with shelter behind sidewalk					-				-
	Number of Midblock Traffic Lanes (both travel directions)	4				4				4				4	
	Score	**17.70**	-			**21.60**	-			-	**18.30**			-	**19.80**
	PRLOS	**C**	**-**			**B**	**-**			**-**	**C**			**-**	**C**
		C				**B**				**C**					**C**

Multi-Modal Level of Service - Segments Form

Project: 77 Metcalfe St
Consultant: Parsons
Date: Jul 18, 2025
Scenario: 479510

Segment Name (Future)			
OP Transect / Policy Area		apid transit station	
	Segment Component	**Critical**	
	Side of Street	**W or N**	**E or S**
Pedestrian	**PLOS Inputs**		
	Posted Speed (km/h)	50 km/h	
	Two-Way ADT	7,500	
	Pedestrian Facility		
	Does the facility meet the TMP Sidewalk or MUP Policy? If not, for MUPs, does the location have a low volume of peak daily users AND are pedestrian volumes likely less than 20% of total users?		
	Facility Width (m)		
	Offset from Motor Vehicle Travel Lanes (m)		
	Presence of Adjacent Parking?		
	General Purpose Curb Lane ADT		
	Max. Distance between Controlled Crossings (m)		
	Score	-	-
	PLOS	-	-
	Target PLOS	A	
Bicycle	**BLOS Inputs**		
	Cycling Route Classification	where	
	Cycling Facility	Input PLOS First	Input PLOS First
	Is the minimum level of separation provided according to OTM Book 18 Pre-Selection Nomograph - Rural Context (Figure 5.6)? (for paved shoulders)		
	Facility Operation		
	Pedestrian/Cyclist Volume		
	Facility Width		
	Boulevard/Buffer Width (excluding curb)		
	Unsignalized Roadway Crossing Type (where cyclists are required to yield)		
	Number of Travel Lanes at Crossing		
	Crossing includes Median Refuge (≥ 2.7m)		
	Cross-street Posted Speed (km/h)		
	Cycling Path Blockages (e.g. bus stops and/or loading zones)		
	Score	-	-
	BLOS	-	-
	Target BLOS	B	
Transit	**TLOS Inputs**		
	Transit Facility		
	Facility Type		
	Expected Transit Running Time		
	Transit Travel Speed (if available)		
	TLOS		
	Target TLOS		
Public Realm	**PRLOS Inputs**		
	Context		
	Inner Boulevard Width		
	Middle Boulevard Width		
	Outer Boulevard (Frontage) Width		
	Transit Route on Segment?		
	Bus Stop Elements		
	Number of Midblock Traffic Lanes (both travel directions)		
	Score		
	PRLOS		

Appendix G:

TDM Checklists

TDM-Supportive Development Design and Infrastructure Checklist:
Non-Residential Developments (office, institutional, retail or industrial)

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: *Non-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	☑ Fronting street.
BASIC	1.1.2	Locate building entrances in order to minimize walking distances to sidewalks and transit stops/stations	☑ Entrance fronting street.
BASIC	1.1.3	Locate building doors and windows to ensure visibility of pedestrians from the building, for their security and comfort	☑ Modern design.
	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)*	☑ Sidewalks available from building to LRT portal.
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)*	☑ Refer to 1.2.1.

		TDM-supportive design & infrastructure measures: *Non-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)*	☑ Refer to 1.2.1.
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)*	☑ Built to meet specs.
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)*	☑ Provided.
BASIC	1.2.6	Provide safe, direct and attractive walking routes from building entrances to nearby transit stops	☑ Refer to 1.2.1.
BASIC	1.2.7	Ensure that walking routes to transit stops are secure, visible, lighted, shaded and wind-protected wherever possible	☑ Street lighting already exists.
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	☐ Cycle-tracks exist on O'Connor and Laurier Ave.
	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	☑ Street lighting already exists.
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)	☑ Route maps and locations proposed at front entrance.

		TDM-supportive design & infrastructure measures: *Non-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)*	☑ Secure bike parking provided indoors in P1 and P2.
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)*	☑ Site exceeds minimum bike parking.
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)*	☑ Will meet by-law.
BASIC	2.1.4	Provide bicycle parking spaces equivalent to the expected number of commuter cyclists (assuming the cycling mode share target is met), plus the expected peak number of customer/visitor cyclists	☑ 2 outdoor bike parking proposed for commercial uses. Bylaw requires 2.
BETTER	2.1.5	Provide bicycle parking spaces equivalent to the expected number of commuter and customer/visitor cyclists, plus an additional buffer (e.g. 25 percent extra) to encourage other cyclists and ensure adequate capacity in peak cycling season	☑ Outdoor visitor parking proposed plus 1:1 residential rate.
	2.2	**Secure bicycle parking**	
REQUIRED	2.2.1	Where more than 50 bicycle parking spaces are provided for a single office 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)*	☑ Only 2 spaces required for commercial uses.
BETTER	2.2.2	Provide secure bicycle parking spaces equivalent to the expected number of commuter cyclists (assuming the cycling mode share target is met)	☐
	2.3	**Shower & change facilities**	
BASIC	2.3.1	Provide shower and change facilities for the use of active commuters	☐
BETTER	2.3.2	In addition to shower and change facilities, provide dedicated lockers, grooming stations, drying racks and laundry facilities for the use of active commuters	☐
	2.4	**Bicycle repair station**	
BETTER	2.4.1	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)	☐

		TDM-supportive design & infrastructure measures: *Non-residential developments*	Check if completed & add descriptions, explanations or plan/drawing references
	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 on-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	☐ No on-site transit stops.
	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	☐ very few employees anticipated.
	4.2	**Carpool parking**	
BASIC	4.2.1	Provide signed parking spaces for carpools in a priority location close to a major building entrance, sufficient in number to accommodate the mode share target for carpools	☐ very few employees anticipated.
BETTER	4.2.2	At large developments, provide spaces for carpools in a separate, access-controlled parking area to simplify enforcement	☐ very few employees anticipated.
	5.	**CARSHARING & BIKESHARING**	
	5.1	**Carshare parking spaces**	
BETTER	5.1.1	Provide carshare parking spaces in permitted non-residential zones, occupying either required or provided parking spaces *(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	☐

		TDM-supportive design & infrastructure measures: *Non-residential developments*	Check if completed & add descriptions, explanations or plan/drawing references
	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	☑ Variance for not providing visitor parking included.
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	☑ short-term visitor proposed on 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)*	☑ limited vehicle parking provided to increase locker and bike parking space
	6.2	**Separate long-term & short-term parking areas**	
BETTER	6.2.1	Separate short-term and long-term parking areas using signage or physical barriers, to permit access controls and simplify enforcement (i.e. to discourage employees from parking in visitor spaces, and vice versa)	☑ short-term visitor proposed on off-site public parking.
	7.	**OTHER**	
	7.1	**On-site amenities to minimize off-site trips**	
BETTER	7.1.1	Provide on-site amenities to minimize mid-day or mid-commute errands	☐

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	☑ Fronting street.
BASIC	1.1.2	Locate building entrances in order to minimize walking distances to sidewalks and transit stops/stations	☑ Entrance fronting street.
BASIC	1.1.3	Locate building doors and windows to ensure visibility of pedestrians from the building, for their security and comfort	☑ Modern design.
	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)*	☑ Sidewalks available from building to LRT portal.
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)*	☑ Refer to 1.2.1.

		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)*	☑ Refer to 1.2.1.
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)*	☑ Built to meet specs.
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)*	☑ Provided.
BASIC	1.2.6	Provide safe, direct and attractive walking routes from building entrances to nearby transit stops	☑ Refer to 1.2.1.
BASIC	1.2.7	Ensure that walking routes to transit stops are secure, visible, lighted, shaded and wind-protected wherever possible	☑ Street lighting already exists.
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	☐ Cycle-tracks exist on O'Connor and Laurier Ave.
	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	☑ Street lighting already exists.
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)	☑ Route maps and locations proposed at front entrance.

		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)*	☑ Bike parking provided in secure parking in P1 and P2.
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)*	☑ Site exceeds minimum bike parking.
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)*	☑ Will meet by-law.
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	☑ Proposed rate 1/unit.
	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)*	☑ Will meet by-law.
BETTER	2.2.2	Provide secure bicycle parking spaces equivalent to at least the number of units at condominiums or multi-family residential developments	☑ Proposed rate 1/unit.
	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	☐ Not applicable.
BETTER	3.1.3	Provide a secure and comfortable interior waiting area by integrating any on-site transit stops into the building	☐ Not applicable.

		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	☑ Variance for not providing visitor parking included.
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	☑ short-term visitor proposed on 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)*	☐ Not applicable.
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)*	☑ limited vehicle parking provided to increase locker and bike parking space.
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)	☑ short-term visitor proposed on off-site public parking.

TDM Measures Checklist:
Non-Residential Developments (office, institutional, retail or industrial)

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: *Non-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	☑
		2.2 Bicycle skills training	
		Commuter travel	
BETTER	*	2.2.1 Offer on-site cycling courses for commuters, or subsidize off-site courses	☐
		2.3 Valet bike parking	
		Visitor travel	
BETTER		2.3.1 Offer secure valet bike parking during public events when demand exceeds fixed supply (e.g. for festivals, concerts, games)	☐

		TDM measures: *Non-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	☑
BASIC		3.1.2 Provide online links to OC Transpo and STO information	☑
BETTER		3.1.3 Provide real-time arrival information display at entrances	☐
		3.2 Transit fare incentives	
		Commuter travel	
BETTER		3.2.1 Offer preloaded PRESTO cards to encourage commuters to use transit	☐
BETTER	*	3.2.2 Subsidize or reimburse monthly transit pass purchases by employees	☐
		Visitor travel	
BETTER		3.2.3 Arrange inclusion of same-day transit fare in price of tickets (e.g. for festivals, concerts, games)	☐
		3.3 Enhanced public transit service	
		Commuter travel	
BETTER		3.3.1 Contract with OC Transpo to provide enhanced transit services (e.g. for shift changes, weekends)	☐
		Visitor travel	
BETTER		3.3.2 Contract with OC Transpo to provide enhanced transit services (e.g. for festivals, concerts, games)	☐
		3.4 Private transit service	
		Commuter travel	
BETTER		3.4.1 Provide shuttle service when OC Transpo cannot offer sufficient quality or capacity to serve demand (e.g. for shift changes, weekends)	☐
		Visitor travel	
BETTER		3.4.2 Provide shuttle service when OC Transpo cannot offer sufficient quality or capacity to serve demand (e.g. for festivals, concerts, games)	☐

		TDM measures: *Non-residential developments*	Check if proposed & add descriptions
		4. RIDESHARING	
		4.1 Ridematching service	
		Commuter travel	
BASIC	*	4.1.1 Provide a dedicated ridematching portal at OttawaRideMatch.com	☐
		4.2 Carpool parking price incentives	
		Commuter travel	
BETTER		4.2.1 Provide discounts on parking costs for registered carpools	☐ Very few employees anticipated.
		4.3 Vanpool service	
		Commuter travel	
BETTER		4.3.1 Provide a vanpooling service for long-distance commuters	☐
		5. CARSHARING & BIKESHARING	
		5.1 Bikeshare stations & memberships	
BETTER		5.1.1 Contract with provider to install on-site bikeshare station for use by commuters and visitors	☐
		Commuter travel	
BETTER		5.1.2 Provide employees with bikeshare memberships for local business travel	☐
		5.2 Carshare vehicles & memberships	
		Commuter travel	
BETTER		5.2.1 Contract with provider to install on-site carshare vehicles and promote their use by tenants	☐
BETTER		5.2.2 Provide employees with carshare memberships for local business travel	☐
		6. PARKING	
		6.1 Priced parking	
		Commuter travel	
BASIC	*	6.1.1 Charge for long-term parking (daily, weekly, monthly)	☑
BASIC		6.1.2 Unbundle parking cost from lease rates at multi-tenant sites	☐
		Visitor travel	
BETTER		6.1.3 Charge for short-term parking (hourly)	

		TDM measures: *Non-residential developments*	Check if proposed & add descriptions
		7. TDM MARKETING & COMMUNICATIONS	
		7.1 Multimodal travel information	
		Commuter travel	
BASIC	*	7.1.1 Provide a multimodal travel option information package to new/relocating employees and students	☑
		Visitor travel	
BETTER	*	7.1.2 Include multimodal travel option information in invitations or advertising that attract visitors or customers (e.g. for festivals, concerts, games)	☐
		7.2 Personalized trip planning	
		Commuter travel	
BETTER	*	7.2.1 Offer personalized trip planning to new/relocating employees	☐
		7.3 Promotions	
		Commuter travel	
BETTER		7.3.1 Deliver promotions and incentives to maintain awareness, build understanding, and encourage trial of sustainable modes	☐
		8. OTHER INCENTIVES & AMENITIES	
		8.1 Emergency ride home	
		Commuter travel	
BETTER	*	8.1.1 Provide emergency ride home service to non-driving commuters	☐
		8.2 Alternative work arrangements	
		Commuter travel	
BASIC	*	8.2.1 Encourage flexible work hours	☐
BETTER		8.2.2 Encourage compressed workweeks	☐
BETTER	*	8.2.3 Encourage telework	☐
		8.3 Local business travel options	
		Commuter travel	
BASIC	*	8.3.1 Provide local business travel options that minimize the need for employees to bring a personal car to work	☐
		8.4 Commuter incentives	
		Commuter travel	
BETTER		8.4.1 Offer employees a taxable, mode-neutral commuting allowance	☐
		8.5 On-site amenities	
		Commuter travel	
BETTER		8.5.1 Provide on-site amenities/services to minimize mid-day or mid-commute errands	☐

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)*	☐ not applicable to this site
		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)	☐ not applicable to this site
		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	☐