# Manor Park Management Inc.

Transportation Impact Assessment

# Manor Park Management 263 Greensway Ave







### **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
- I am either a licensed<sup>1</sup> or registered<sup>2</sup> professional in good standing, whose field of expertise [check √ appropriate field(s)] is either transportation engineering □ or transportation planning □.

<sup>1,2</sup> 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.

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Dated at	Ottawa	this	8	day of	February	, 201 <u>9</u>
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# Manor Park Management 263 Greenway Avenue

**Transportation Impact Assessment** 

prepared for: Manor Park Management Inc. 150 Montreal Road Vanier, ON K1L 8H2



February 8, 2019

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# **Transportation Impact Assessment**

# **1. SCREENING FORM**

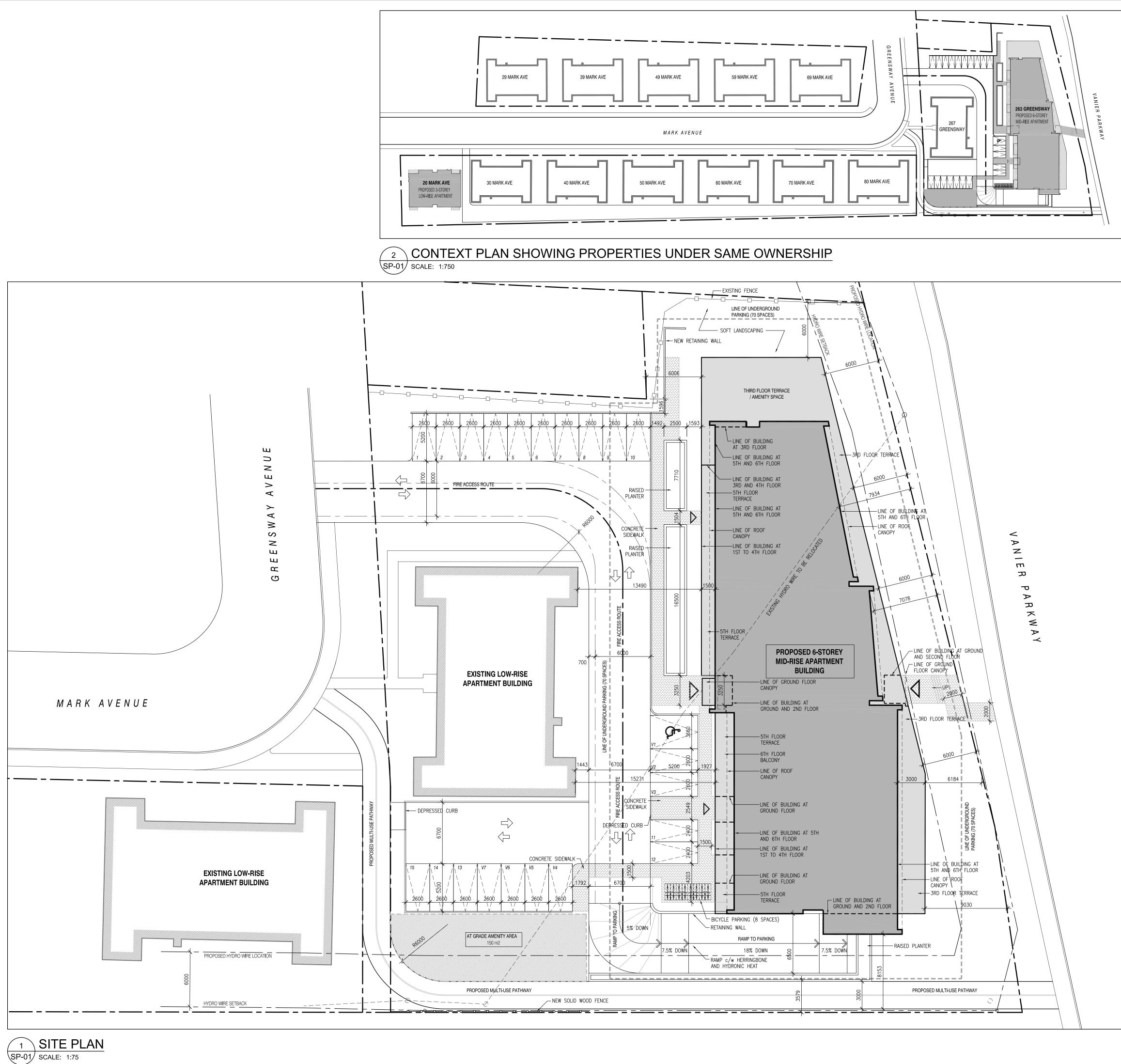
The screening form was prepared for the subject development and included as part of the subsequent report. The screening form confirmed the need for a Transportation Impact Assessment (TIA) based on the Location and Safety triggers, given that the site is located within the Montreal Road Design Priority Area and due to the proximity of the proposed cycling connection to the Montreal Road/Vanier Parkway intersection.

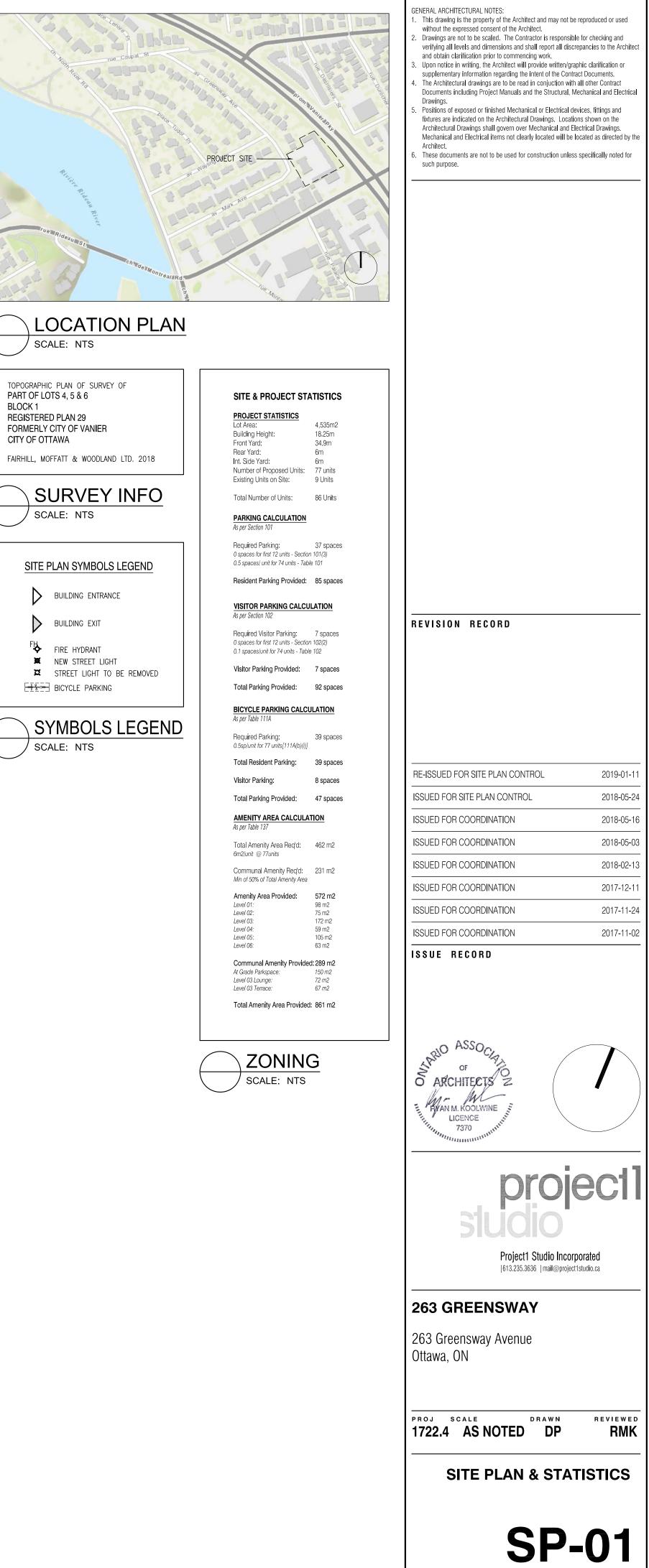
The screening form is provided in Appendix A.

### 2. DESCRIPTION OF PROPOSED DEVELOPMENT

From the information provided, it is our understanding that the proponent is proposing to construct a residential development located at 263 Greensway Avenue. The development will consist of a new 6-storey building consisting of 77 new residential apartment units. The site is currently occupied by 9-unit two storey apartment building with an all-movement private access to Greensway Avenue. Existing dwellings will be maintained, for a total of 86 units in the site. A total of 92 parking spaces are proposed (22 surface, 70 underground). Pedestrian access will be provided via a connection to the sidewalk on the west side of Vanier Parkway and a multi-use pathway along the southern extent of the development that would link Mark Avenue to the Vanier Parkway. The local context of the site is provided as Figure 1 and the proposed Site Plan is provided as Figure 2. As the site is currently zoned as Residential Fourth Density (e.g. 4 storey apartment), a Zoning By-Law Amendment will need to be completed. A single-phase project with complete build-out and full occupancy in the year 2019 is assumed.







# **3. EXISTING CONDITIONS**

### **3.1. AREA ROAD NETWORK**

*Vanier Parkway* is a north-south arterial roadway, which extends from the Highway 417 in the south to Beechwood Avenue in the north and continues as Crichton Street. The cross section is divided roadway with two travel lanes in each direction with auxiliary left-turn and right-turn lanes at main intersections. It is designated as a Scenic Entry Route in the Official Plan. The posted speed limit within the study area is 60 km/h.

*Montreal Road* is an east-west arterial roadway designated as a transit priority road, which extends from St Joseph Blvd in the east to the Rideau River in the west. Although the cross section varies, within the study area it consists of two lanes in each direction with no median, parking mainly in the north side, one bus preferential lane per direction at peak hours and an auxiliary left-turn lane at Montreal Road/Vanier Parkway. It is designated as Traditional Mainstreet in the Official Plan. The unposted speed limit is assumed to be 50 km/h.

*North River Road* is a north-south local roadway extending north of Montreal Road. The cross section consists of a single travel lane in each direction with a multi-use pathway on the west side. The unposted speed limit assumed to be 40 km/h.

*Greensway Avenue* is a north-south neighbourhood local road extending north of Mark Avenue to Coupal Street. The cross section consists of a single travel lane in each direction. The unposted speed limit assumed to be 40 km/h. Vehicular access to the subject site is proposed on this roadway via private driveway, as it is the current condition. All movements are permitted for this access.

*Mark Avenue* is an east-west neighbourhood local road extending west of Greensway Avenue to North River road. The cross section consists of a single travel lane in each direction and one parking lane on both sides. There are sidewalks on the north and south sides and the unposted speed limit assumed to be 40 km/h.

### **3.2. PEDESTRIAN/CYCLING NETWORK**

With respect to pedestrians, sidewalk facilities in the vicinity of the site are provided along both sides of Mark Avenue, the east side of N River Road, both sides of Montreal road and both sides Vanier Parkway. A north-south multi-use pathway is located along the west side of N River Road extending north to Rideau Falls Park and south to the Rideau River MUP Adàwe Crossing. The multi-use pathway continues along the east side of Rideau River, south of highway 417.

With respect to cyclists, according to the Ottawa Cycling Plan ultimate network, Montreal Road and Vanier Parkway are classified as "spine" cycling routes. However, there is no current specific cycling infrastructure on these roads within the area of study and are not included in the affordable 2031 cycling project list. An eastbound cycle track and a shared cycle lane are identified on the Cummings Bridge that connect to Rideau Street. The remaining cycling facilities are provided along the Rideau River eastern multi-use pathway, which extends north along the west side of N River Road connecting with the east-west Beechwood Avenue and Sussex Drive cycle-tracks. It also extends south and links to the east-west Rideau Street Cycle Track and the east-west MUP Adàwe crossing. The multi-use pathway continues along the east side of Rideau River, south of Highway 417.

### **3.3. TRANSIT NETWORK**

Transit service within the vicinity of the site is currently provided by OC Transpo Routes #12 and #9. Bus stops for route #12 are located along Montreal Road on the far side of the Vanier Parkway/Montreal Road intersection for westbound route services and on the near-side for east-bound route services. Bus stops for route #9 are located along Vanier Parkway on the far sides of the Vanier Parkway/Montreal Road intersection. The nearest eastbound stop is approximately 100m from the proposed site access and the nearest westbound stop is approximately 80m from the proposed site access. The

nearest northbound stop is approximately 150m from the proposed site access and the nearest southbound stop is approximately 120m from the proposed site access. Route 12 runs all day at approximately 15 to 30-minute intervals. Route 9 runs all day at approximately 15 to 20-minute intervals

### 3.4. EXISTING STUDY AREA INTERSECTIONS

### Vanier Parkway/Montreal Road

The Vanier Parkway/Montreal Road intersection is a signalized four-legged intersection. The east and westbound approaches consist of a left turn lane and two through lanes, the south and northbound approaches consist of one left turn lane, two through lanes and a channelized right turn lane. All movements are permitted at this location.

### Montreal Road/North River Road

The Montreal Road/North River Road intersection is a fourlegged signalized intersection. The southbound approach consists of a single all-movement lane and the Rideau River eastern pathway. The northbound approach consists of a left turn lane, one through lane and one right turn lane. The eastbound approach consists of one shared through/left turn lane which is also a bike shared lane and one shared through/right turn lane. Red-light right turns are not permitted and left turns are prohibited on peak hours. The westbound approach consists of one through lane and one shared through/right turn lane. Left turns are not permitted from the westbound approach.

# Montreal River Montreal N Rivel Mark

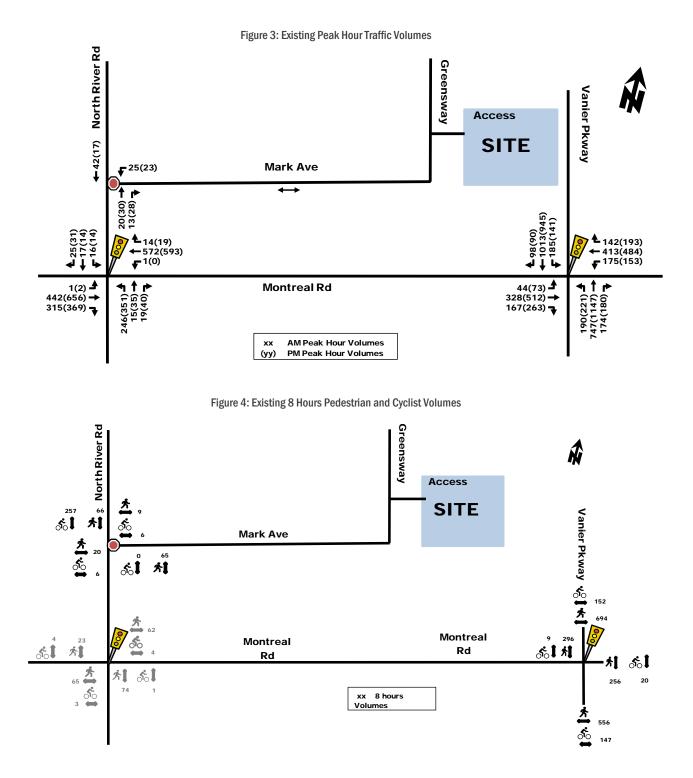
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### Mark Avenue/North River Road

The Mark Avenue/North River Road intersection is a 'T' intersection with a stop sign on the minor approach. The north and southbound approaches consist of one all-movement lane. The westbound approach is the minor approach and consists of a single all-movement lane. All movements are permitted on this intersection.

### 3.5. EXISTING INTERSECTION VOLUMES

Illustrated as Figure 3, are the most recent weekday morning and afternoon peak hour traffic volumes at the study area intersections. The data for the two signalized intersections were obtain from the City of Ottawa, whereas the data for the unsignalized Mark/North River intersection was collected by Parsons in Fall 2018 to specifically support this study. Figure 4 shows the existing eight hours pedestrian and cyclist volumes for relevant intersections. It should be noted that the activity at the Montreal/North River intersection reflects winter conditions, and therefore are not considered representative of peak conditions for cyclists and pedestrians. The full traffic counts are provided in Appendix B.



### 3.6. EXISTING ROAD SAFETY CONDITIONS

Collision history for the Montreal Road/Vanier Parkway, Montreal Road/North River Road, and mid-block on Montreal Road between Palace Street and Vanier Parkway (2012 to 2016, inclusive) was obtained from the City of Ottawa. Most collisions (82%) involved only property damage, indicating low impact speeds, and 18% involved personal injuries. No fatalities were noted at the area of study. The primary causes of collisions cited by police include; rear ends (36% or 66 collisions), turning movement (24% or 45 collisions), sideswipe (18% or 34 collisions), single vehicle/other (11% or 19 collisions), angle (10% or 19 collisions) and approaching (1% or 1 collision).

A standard unit of measure for assessing collisions at an intersection is based on the number collisions per million entering vehicles (MEV). At intersections and road segments within the study area, reported collisions have historically taken place at a rate of:

- 1.17 collisions/MEV at the Montreal Road and Vanier Parkway intersection.
- 0.62 collisions/MEV along Montreal Road and North River Road intersection.
- 0.41 collisions/MEV at the Montreal Road and Montgomery Street intersection.

Based on the available data, there does not appear to be any prevailing safety issues along Montreal Road, between North River Road and Palace Street. For the segment on Montreal Road between Palace Street to Vanier Parkway, the prevailing cause of collision is the turning movement (50 collisions in 5 years).

The Montreal Road/Vanier Parkway intersection is noted to have a high level of collisions (106) during the history review period. Rear end collisions (48) are the primary collision type observed at the intersection. Rear end collisions were broken down according to information for the last three years (2014-2016) of analysis (79 collisions, 34 rear end):

- Southbound approach: 9 collisions; Northbound approach: 14 collisions
- Westbound approach: 6 collisions; Eastbound approach: 5 collisions

Going ahead and slowing/stopping maneuvers accounted for 20 rear end collisions out of the 34 total collisions at the intersection that happened during the last three years of analysis. The north and southbound approaches to the intersection are relatively flat and straight, with approximately 220m and 200m of clear sight lines respectively. It is recommended that the City consider increased speed limit enforcements along Vanier Parkway between Deschamps Avenue and McArthur Avenue.

The Montreal/North River Road intersection is noted to have a moderate level of collisions (30) during the history review period. Of these thirty (30), twenty-one (21) were property damage-only and nine (9) were non-fatal-injury collisions; one of which involved a pedestrian. There were no collisions involving cyclists. Rear end collisions (14) are the primary collision type observed at the intersection. Based on the information for the last three years only (2014-2016), rear end collisions were broken down as follows:

- Southbound approach: 0 collisions; Northbound approach: 1 collision
- Westbound approach: 1 collision; Eastbound approach: 6 collisions

The Montreal/North River Rd intersection has a potential geometric issue as eastbound vehicles on Cummings Bridge approach the intersection at an angle after a straight 220m-long segment with posted speed limits of 50km/h. It is suggested that the City explores eastbound advanced traffic signal signage on Cummings Bridge, as well as speed enforcement measures to mitigate these issues.

The source collision data as provided by the City of Ottawa and related analysis is provided as Appendix C.

# 4. PLANNED CONDITIONS

### 4.1. PLANNED STUDY AREA TRANSPORTATION NETWORK CHANGES

Figure 5 depicts the 2017-2021 Rideau-Vanier Planned Construction Program. The scheduled projects within the area of study include:

- Vanier Parkway road resurfacing between Beechwood and Coventry Road
- Montreal Road watermain renewal, road resurfacing and transit priority between N River Road and Alfred Street
- Montreal Road sidewalk and curb renewal between Vanier Parkway and Park Street
- Cycling routes on McArthur Avenue



Figure 5: Rideau-Vanier Ward Planned Construction Program

Along these lines, in summer of 2017, the City of Ottawa completed the Montreal Road Functional Planning Study which outlined a vision for the 2km section of Montreal Road between North River Road and St. Laurent Boulevard. The City is now proceeding with the next phase of the project, which focuses on designing and refining the improvements proposed in the planning study. Once the detailed design is complete, the project will move forward into construction. The following aboveground and underground improvements are proposed:

- Construct a three-lane cross section between Vanier Parkway and St. Laurent Boulevard that includes two westbound lanes, one eastbound lane and cycling tracks/lanes in both directions;
- Implement streetscaping features along Montreal Road including but not limited to new street furniture, streetlights, trees, concrete sidewalks and paver stones;
- Review and improve bus stop and bus shelter locations;
- Replace the existing watermain between North River Road and St. Laurent Boulevard; and
- Replace sanitary and storm sewers along certain sections of Montreal Road.
- Replacement of the watermain, sanitary sewers and road drainage along the 560m long section of North River Road (north of Montreal Road).

Figure 6 depicts the scope of works within the Montreal Road Revitalization.

### Figure 6: Montreal Road Revitalization Keyplan



The anticipated project schedule follows:

- Project start: November 2017
- Conceptual design completed and public open house # 1: Winter/Spring 2018
- Preliminary design completed and public open house # 2: Summer 2018
- Detailed design completed and public open house # 3: Winter 2019
- Full construction start: Spring 2019 (some work possible in late 2018)
- Construction completion: Fall 2021

### 4.2. OTHER AREA DEVELOPMENT

According to the City's development application search tool, the following developments are planned within the vicinity of the subject site.

### 244 Fountain Place

A planned unit development consisting of two low-rise apartment buildings with 22 one-bedroom units is proposed. The site is located where Fountain Place branches off Rideau Street just before the Cummings Bridge. Vehicular access is provided from Fountain Place way of a 3m driveway on the south side of the site. A shared cycle lane is identified on the Cummings Bridge. Given the size and number of units proposed, it is expected that impacts will be negligible on the subject study area.

### 112 Montreal Road and 314 Gardner Street

1147310 Ontario Inc is proposing 6 new buildings ranging from 3 to 18 storeys, with a total of 607 residential dwellings and 300 m<sup>2</sup> of retail gross area. Access to site will be provided via an all-movements access driveway on Montreal Road and a right-in/right-out only access driveway on Vanier Parkway. The access driveway on Montreal Road is located approximately 78 m west of Vanier Parkway. The right-in/right-out access on Vanier Parkway is located approximately 175 m south of Montreal Road. The proposed development is expected to generate approximately 250 morning peak hour and 310 afternoon peak hour vehicle-trips. Given most of the traffic (50%) will be directed south on the Vanier Parkway towards Highway 417, the Vanier Parkway/Montreal Road intersection is expected to operate within City standards. 63 and 78 sitegenerated additional vehicles are expected to go west on Montreal Road, with negligible impacts on Montreal Road/ North River Road intersection. The corresponding transportation study suggests the removal of 2 parking spaces on the north

side of Montreal Road, west of Tim Hortons driveway, to provide space for westbound through vehicles to pass left-turning vehicles on the right.

# 5. STUDY AREA

### 5.1. TRANSIT

As mentioned previously, transit is served within the area with bus stops for Routes #9 and Routes #12 located within 200 m from the site along Montreal Road on the far side of the Vanier Parkway/Montreal Road intersection for westbound route services, on the near-side for east-bound route services and along Vanier Parkway on the far sides of the Vanier Parkway/Montreal Road intersection for north and southbound services.

### 5.2. NETWORK CONCEPT

No screenline is present in close proximity to the subject site. Given the low unit count for the development, is unlikely to impact the closest screenlines (SL32, SL33, SL 36, SL37 and SL38).

### 5.3. INTERSECTION DESIGN

Due to the low unit count of the subject development, vehicular impacts to nearby arterial intersections are expected to be negligible, reducing the requirements for analysis and design of study area intersections. Given the proximity of the Rideau River Eastern Multi-Use Pathway and the proposed cycling and pedestrian connections to the Vanier Parkway, analysis will focus on active modes connectivity to and on the Mark Avenue/North River Road intersection and on the Vanier Parkway/Montreal Road intersection.

### 6. TIME PERIODS

Given the majority of trips expected to be generated by this development will be residential trips, the time periods to be assessed are the weekday morning and afternoon commuter peak hours.

### 7. HORIZON YEARS

The expected build-out date for the proposed development is assumed to be 2019. Depending on the growth rate of the study area, the horizon year 2024 will be assessed for 5-years beyond site build out.

### 8. EXEMPTION REVIEW

Based on the City's TIA guidelines and the subject site, the following modules/elements of the TIA process, summarized in Table 1, are recommended to be exempt in the subsequent steps of the TIA process:

Module	Element	Exemption Consideration		
4.1 Development Design	4.1.3 New Street Networks	Not required for applications involving site plans.		
4.2 Parking 4.2.2 Spillover Parking		The site's residential parking rate is noted to meet the City's minimum By-Law for residential parking (45 stalls). As such, parking is not expected to spill out of the site.		
4.5 Transportation Demand Management	All elements	Residential development with less than 60 auto trips.		
4.8 Review of Network Concept	All elements	This development is not expected to generate 200-person trips more than the permitted zoning for the site.		

In addition to the above recommendations of the Exemptions Review, the following exemptions are also proposed for both Step 3 – Forecasting and Step 4 – Analysis and are summarized in Table 2.

Module	Element	Exemption Consideration				
3.1 Development-	3.1.2 Trip	Minimal auto share anticipated given only 78 residential units on site, and				
generated Travel	Distribution	negligible impact anticipated on road network.				
Demand	3.1.3 Trip	Minimal auto share anticipated given only 78 residential units on site, and				
Demanu	Assignment	negligible impact anticipated on road network.				
3.2 Background Network Travel Demand	All Elements	Minimal auto share anticipated given only 78 residential units on site, and negligible impact anticipated on road network.				
3.3 Demand Rationalization	All Elements	Minimal auto share anticipated given only 78 residential units on site, and negligible impact anticipated on road network.				
4.2 Parking 4.2.1 Parking Supply		Auto and Bicycle parking requirements have been met.				
4.3 Boundary Street Design		Frontage is restricted to the site access which will operate as a private approach. Only an MUP proposed on-site, no concept or street design required.				
44 Access	4.4.2 Intersection Control	Site access will operate at a private approach and will not require an intersection screening for a signal or roundabout.				
Intersection Design	4.4.3 Intersection Design	Site access will operate at a private approach and will not require an intersection screening for a signal or roundabout.				
4.7 Transit 4.7.2 Transit Priority		Site access will operate at a private approach and will not require an intersection screening for a signal or roundabout.				
4.9 Intersection Design 4.91. Intersection Control		Site access will operate at a private approach and will not require an intersection screening for a signal or roundabout.				

Table 2: Additional Recommended Exemptions Summary

# 9. DEVELOPMENT GENERATED TRAVEL DEMAND

### 9.1. TRIP GENERATION AND MODE SHARES

### 9.1.1. TRIP GENERATION

Appropriate trip generation rates for the proposed development were obtained from the City's TRANS Trip Generation – Residential Trip Rates (Table 3.16 of the TRANS Trip Generation Study) and are summarized in Table 3.

Table 3: TRANS Blended Trip Generation Rate

Land Use	Data Source	Trip Rate		
	Data Source	AM Peak	PM Peak	
Apartments	TRANS	0.24	0.28	

Using the TRANS Trip Generation rate, the total amount of vehicle trips generated by the proposed townhome units were projected and the results are summarized in Table 4.

Table 4: TRANS Vehicle Trip Generation

Land lies	Units	A	/I Peak (veh/	′h)	PM Peak (veh/h)		
Land Use		In	Out	Total	In	Out	Total
Apartments	86 du	5	16	21	14	10	24
Total		5	16	21	14	10	24

### 9.1.2. MODE SHARES

Using the TRANS Auto Trips projected in Table 4 and the modal share percentages from the 2011 NCR Household Origin – Destination Survey and Table 3.6 of the TRANS Trip Generation Study (urban apartments), the modal share for the proposed development is summarized in Table 5.

Traval Mada	AM Mode	AM Peak (persons/h)			PM Mode	PM Peak (persons/h)		
Travel Mode	Share	In	Out	Total	Share	In	Out	Total
Auto Driver	40%	5	16	21	49%	14	10	24
Auto Passenger	4%	1	1	2	11%	4	1	5
Transit	42%	5	17	22	36%	11	7	18
Non-motorized	14%	1	6	7	4%	1	1	2
Total People Trips	100%	12	40	53	100%	30	19	49

Table 5: Total Site Trip Generation

As shown in Table 5, based on the TRANS Trip Generation method, the proposed site is projected to generate approximately 53 two-way person-trips per hour during the weekday peak hours. The increase in two-way transit trips is estimated to be approximately 18 to 22 passengers per hour, and the increase in bike/walk trips is approximately 7 persons per hour.

### **10.DEVELOPMENT DESIGN**

### **10.1. DESIGN FOR SUSTAINABLE MODES**

The minimum parking requirements for this development are 43 car spaces for the residents (0.5 spaces per unit on any lot within 100 m of a main street. As per section 101(1)(a)(iii)), 8 car spaces for visitor parking (0.1 spaces per unit, 0 spaces for first 12 units), and 43 bike spaces (0.5 spaces per unit). The site provides 92 parking spaces, and 47 interior bike parking spaces. Small modifications to the planned provision of parking spaces are required to comply with minimum Zoning requirements of bicycle parking spaces. The proposal is consistent with City of Ottawa TDM's principles by providing interior bicycle parking spaces in the underground garage

A pedestrian access from the subject development to the Vanier Parkway west sidewalk and a multi-use pathway on the southern edge of the site that links Mark Avenue with the Vanier Parkway are proposed. Also, a brick paving pathway extends along the western face of the new residential units and connects to a concrete pedestrian pathway that leads to

the existing building and to Mark Avenue. Given the proposed pedestrian access to the Vanier Parkway, all units within the subject site are within 200 m from the nearest transit stops.

Using the Pedestrian Crossing Decision Support Tool, it was determined that a mid-block pedestrian crossing control is not required at intersections of N River Rd with Mark Ave and Wayling Ave due to the low pedestrian/cyclist crossing volumes, low vehicle volumes, low posted speed on N River Rd and the proximity to a protected crossing located at N River Rd and Montreal Rd.

The proposed bicycle pathway improves cycling connectivity to Montreal Road and has the potential to increase the walking and access to transit. The multi-use pathway is complimentary to the Montreal Road Revitalization Plan (construction estimated to start in spring 2019), by connecting to the southbound buffered cycle lane on Vanier Parkway, as shown in Figure 7.

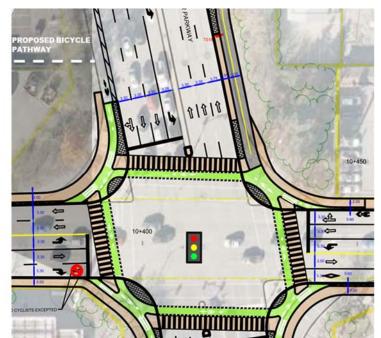


Figure 7: Conceptual Design Plan for the Montreal Road / Vanier Parkway Intersection

Source: Montreal Road Transportation Planning and Functional Design Study

Given the development's location within a general urban area, the target levels of service for pedestrians and cyclists are both LoS 'C'. The multi-modal level of service analysis for the road segment along Vanier Parkway adjacent to the site is summarized in Table 6, with detailed analyses provided in Appendix D.

		Level of Service										
Road Segment	Pedestr	ian (PLoS)	Bicycle (BLoS)									
	PLoS	Target	BLoS	Target								
Existing Conditions												
Vanier Parkway	F	С	F	С								
Proposed Montreal Road Revitalizat	ion											
Vanier Parkway	E	С	D	С								

The MMLOS analysis shows that the existing Vanier Parkway and the improvements as part of the Montreal Road Revitalization are both below the general urban targets for pedestrian LoS and bicycle LoS. The proposed 1.8 m sidewalk

and a 2.0 m curbside cycle track with a 1.0 m buffer along the west side of Vanier Parkway southbound roadway, will result in an incremental improvement from LoS 'F' to a PLoS 'E" and BLoS 'D'.

To potentially meet the target LoS of 'C' for Vanier Parkway, the City can consider the following changes to the proposed work on Vanier parkway, north of Montreal Road:

- Pedestrians a PLoS 'C' can be achieved if a 2.0 m sidewalk and a boulevard greater than 2.0 m are provided and the vehicle speeds are reduced to 50 km/h along Vanier Parkway;
- Bicyclists a BLoS 'C' can be achieved along this road segment if a physically separated bicycle lane is implemented, or the number of vehicle lanes are reduced along Vanier Parkway; and
- Providing a 3.0 m MUP with a 0.5 m to 2.0 m boulevard and reducing vehicle speeds on Vanier Parkway to 40 km/h would result in a PLoS 'C' and BLoS 'A', achieving the established MMLOS targets for the area (Option 'MUP').

### **10.2. CIRCULATION AND ACCESS**

The proposal includes a two-way 6.7 m wide access route with turning radius at corners of 6.0 to 8.0 m. Given the fire access route is approximately 85 m long, no hammer heads or turn-around facilities for emergency vehicles are required as part of the design. However, to ensure adequate operations of municipal services vehicles, the location of garbage storage will have to be provided within the throat of the proposed driveway.

### **11.ACCESS INTERSECTIONS DESIGN**

### **11.1. LOCATION AND DESIGN OF ACCESS**

As mentioned before, site access will be provided via a two-way private driveway that connects to the Greensway Avenue. The proposed driveway width of 6.7 metres and 10.5 metres of clear throat length are sufficient to accommodate the subject development vehicle demand. There is an adjacent single-detached dwelling driveway approximately 18 m to the north and a multi-dwelling private driveway across Greensway Avenue. The access is recommended to have a minor stop-control. A minimum curb radius of 8.0 m will be required to accommodate the municipal services design vehicle.

### **12.NEIGHBOURHOOD TRAFFIC MANAGEMENT**

### **12.1. ADJACENT NEIGBOURHOODS**

The subject development relies on local streets for access. Given the peak hour traffic generated by the development will be approximately 24 vehicles, local streets are expected to continue operating within ATM thresholds.

### **13.TRANSIT**

### **13.1. ROUTE CAPACITY**

Figure 8 depicts the location of nearby eastbound, westbound, northbound and southbound transit stops and Table 7 summarizes the average available seats on-vehicle for the corresponding transit routes.

Figure 8: Nearby Transit Stops Locations



Table 7: Transit Capacity at Adjacent Transit Stops

Intersection	Stop	Direction	Ro	ute	Average Boarding and Alighting	Average Load at Departure	Available Seats (%)
	7052	Northbound	0	AM	2	14	63%
	7052	Northbound	5	PM	4	9	76%
	7095	Southbound	0	AM	4	13	66%
Vanier 7085 S	Southbound	ຶ່ງ	PM	5	20	47%	
Parkway/Montreal	0700	Weethound	10	AM	5	46	13%
	0103	westbound	12	PM	4	29	24%
	7052	Footbound	10	AM	2	26	32%
	1055	Alighting         at Departure         Seats           7052         Northbound         9         AM         2         14         639           7052         PM         4         9         769           7085         Southbound         9         AM         4         13         669           7085         Southbound         9         AM         4         13         669           7083         Westbound         12         AM         5         20         479           8783         Westbound         12         AM         5         46         139           7053         Eastbound         12         AM         2         26         329	23%				

As outlined within Section 9, the forecasted 'new' two-way transit trips are estimated to be 22 trips (5 in, 17 out) during the AM peak and 18 trips (11 in, 7 out) during the PM peak. During the AM peak, the outbound trips represent approximately 31% of a single bus (55 passengers) or approximately 23% of an articulated bus (75 passengers).

The average load for transit vehicles is typically 25 passengers during the AM and PM peak periods, and as such, the additional forecasted transit trips can be accommodated on the existing Route 9 and 12 services. Transit information was provided by the City of Ottawa and is included in Appendix E.

# **14.INTERSECTION DESIGN**

### 14.1. INTERSECTION DESIGN

The MMLOS analysis for the Montreal Road/Vanier Parkway signalized intersection is summarized in Table 8. The existing detailed MMLoS analysis is provided as Appendix D.

Table 8: MMLOS -	Signalized Study Area Intersection
------------------	------------------------------------

		Level o	of Service	
Intersection	Pedestri	an (PLoS)	Bicyc	le (BLoS)
	PLoS	Target	BLoS	Target
Existing Conditions	·			
Montreal Road / Vanier Parkway	F	В	F	С
Proposed Montreal Road Revitalization				
Montreal Road / Vanier Parkway	F	В	А	С

The MMLOS analysis shows that the existing Montreal Road/Vanier Parkway intersection is currently below the general urban targets for pedestrian LoS and bicycle LoS. The proposed improvements as part of the Montreal Road Revitalization will increase the bicycle to a LoS 'A' but the pedestrian LoS will remain as a 'F'.

To potentially meet the target LoS for the Montreal Road/Vanier Parkway intersection, the City can consider the following changes to the proposed work in the Montreal Road Revitalization:

 Pedestrian – In general, high pedestrian level of service is difficult to achieve at signalized intersections larger than 2-lane roads. At this signalized intersection, pedestrians must cross 6 or more lanes of traffic if they wish to cross Vanier parkway, and 5 or more lanes to cross Montreal Road. With restrictions on both left and right-turns, and pedestrian leading intervals, the PLoS would only be improved to a LoS 'E' on Vanier Parkway and LoS 'C' on Montreal Road. Given the nature of the two corridors, it is unlikely that turn restrictions are feasible for this intersection.

### **15.SUMMARY OF IMPROVEMENTS INDICATED AND MODIFICATION OPTIONS**

Based on the results summarized herein the following conclusions are offered:

### **Proposed Site**

- The proposed site will consist of 86 residential units, a private driveway located on Greensway Avenue, a Pedestrian access to the Vanier Parkway and bicycle pathway linking Mark Avenue to the Vanier Parkway,
- In total, the development is anticipated to generate approximately 53 and 49 two-way person trips during the AM and PM peak hours, respectively and split into the following modal shares:
  - 23 auto trips (6 in, 17 out) during the AM peak and 29 auto trips (18 in, 11 out) during the PM peak;
  - 22 transit trips (5 in, 17 out) during the AM peak and 18 transit trips (11 in, 7 out) during the PM peak; and
  - 7 active mode trips (1 in, 6 out) during the AM peak and 2 active mode trips (1 in, 1 out) during the PM peak.
- The proposed site is contained within 100 m of Montreal Road, which is a designated main street;
- A total of 92 parking spaces will be provided within the development (7 are designated as visitor parking and the remaining for residents), which satisfies the City's Zoning By-Law requirements; and
- A total of 47 interior bicycle parking spaces will be provided, which satisfies the City's Zoning By-Law requirements.

### Site Plan, Access and Circulation

- The proposal includes a two-way 6.7 m wide access route with turning radius at corners of 6.0 to 8.0 m. The proposed driveway width of 6.7 metres and 10.5 metres of clear throat length are sufficient to accommodate the subject development vehicle demand;
- To ensure adequate operations of municipal services vehicles, the location of garbage storage will have to be provided within the throat of the proposed driveway; and
- The proposed on-site multi-use pathway provides a desirable connection to the future spine bicycle routes along the Vanier Parkway and Montreal Road:

If the multi-use pathway is implemented prior to the Montreal Road Revitalization, the multi-use pathway can connect as an interim solution to the existing sidewalk along Vanier Parkway.

### Transit

- Given the proposed pedestrian access to the Vanier Parkway, all units within the subject site are within 200 m from the nearest transit stops; and
- Existing capacity exists on the current transit service in the area (Routes 9 and 12) to accommodate the forecasted transit trips.

### **Boundary Streets and Intersection Design**

- No local improvements are required for the proposed vehicular access configuration as it will operate within the Private Approach By-Law;
- The Montreal Road and Vanier Parkway intersection was noted to experience a significant number of rear end collisions (48), with approximately 40% of these involving going ahead, slowing and stopping vehicles. It is recommended that the City consider increased speed limit enforcements along Vanier Parkway between Deschamps Avenue and McArthur Avenue;
- Beyond the scope of the proposed site, the following improvements should be considered by the City during the Montreal Road Revitalization project to improve the Vanier Parkway and the intersection with Montreal Road:
  - Provide a 3.0 m MUP with a 0.5 m to 2.0 m boulevard (such as shown in Figure 7 for the east sidewalk along Vanier Parkway) and potential options to reduce vehicle speeds on Vanier Parkway to 50 km/h or below to meet the MMLOS targets for PLOS and BLOS; and
- The measures proposed within the planned City intervention to the Montreal Road/ Vanier Parkway intersection, which is part of the Montreal Road Revitalization project, would result in PLoS 'F' and BLoS 'A'. It is noted that high pedestrian level of service is difficult to achieve at signalized intersections. The best PLoS achievable at these intersections, without narrowing Vanier Parkway, is PLoS 'E'.

Based on the foregoing conclusions, this report satisfies the TIA requirements for Manor Park Management Inc. 263 Greensway Avenue development and is recommended to proceed from a transportation perspective.



Senior Transportation Project Manager





City of Ottawa 2017 TIA Guidelines	Date	7-Mar-18						
TIA Screening Form	Project	M. P. Mangement, 263 Greensway						
	Project Number	476653						
Results of Screening Yes/No								
Development Satisfies the Trip Generation Trigger		No						
Development Satisfies the Location Trigger		Yes						
Development Satisfies the Safety Trigger		Yes						

Module 1.1 - Description of Proposed Development	
Municipal Address	263 Greensway
Description of location	Existing 3 storey Apartment building with parking lot. Adjacent but without access to Vanier Parkway. Only access on Greensway Ave. K1L 7V3
Land Use	Proposed Residential
Development Size	86 Apartments
Number of Accesses and Locations	Existing access to Greensway
Development Phasing	Single Phase
Buildout Year	2019
Sketch Plan / Site Plan	See attached

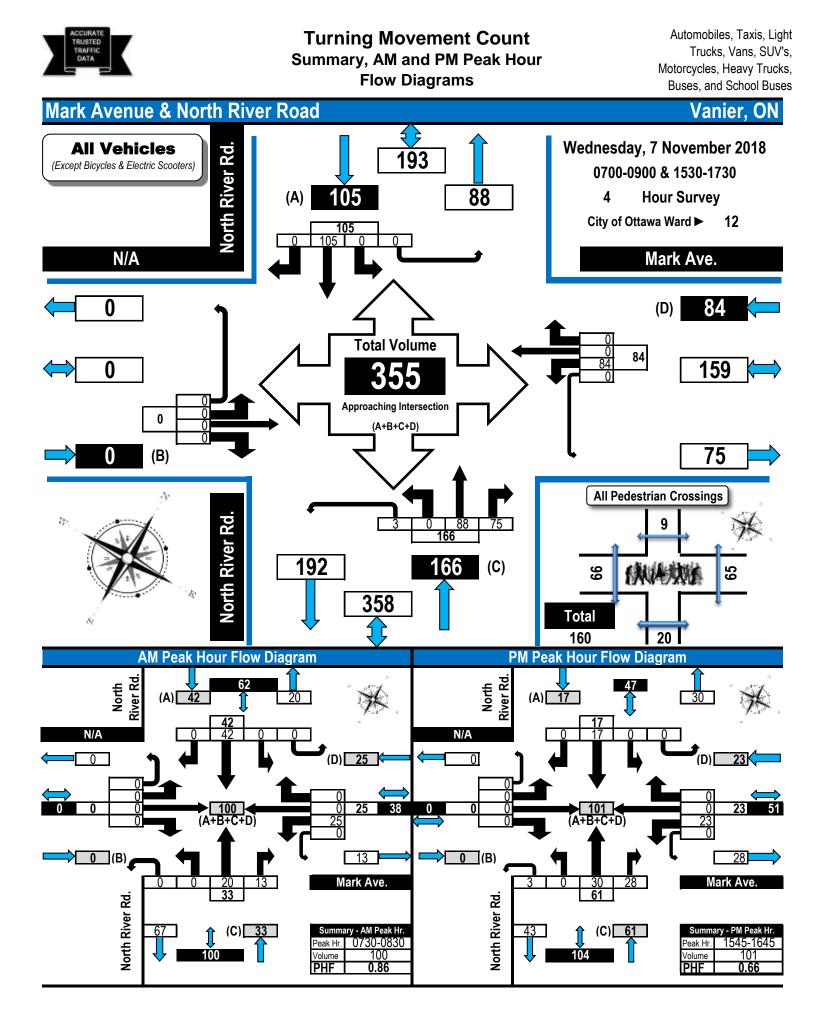
Module 1.2 - Trip Generation Trigger		
Land Use Type	Townhomes or Apartments	
Development Size	86	Units
Trip Generation Trigger Met?	No	

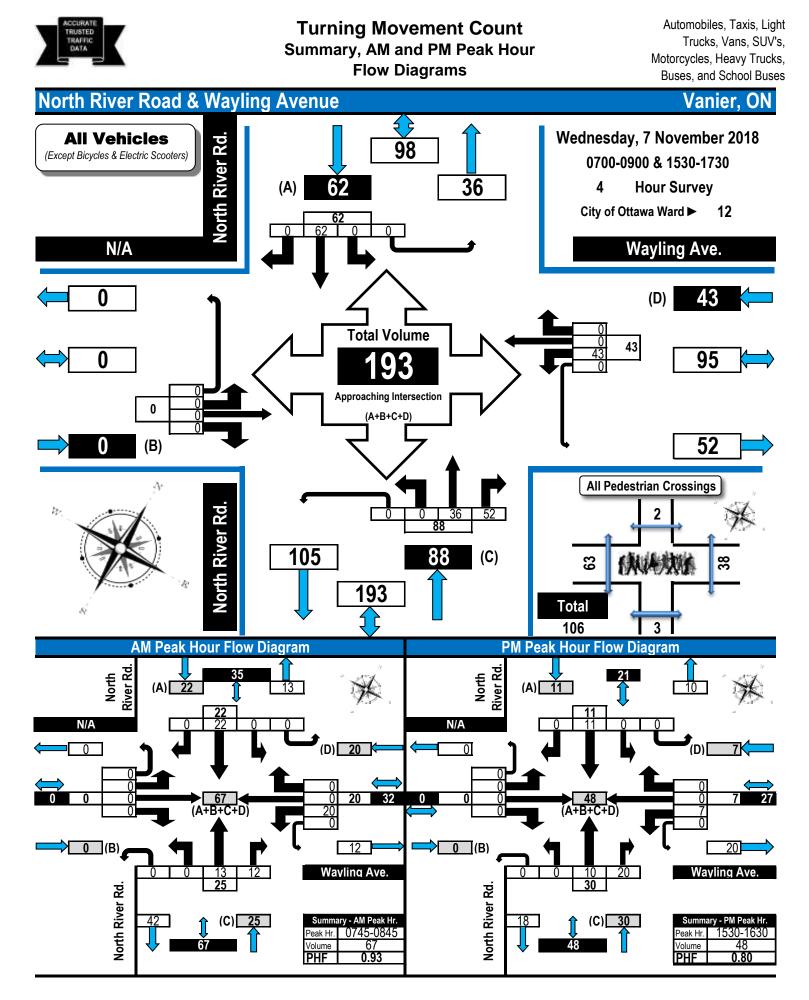
Module 1.3 - Location Triggers		
Development Proposes a new driveway to a boundary street		
that is designated as part of the City's Transit Priority, Rapid Transit, or Spine Bicycle Networks (See Sheet 3)	Yes	Vanier Pkway Spine Bicycle Network according to TMP Map1
Development is in a Design Priority Area (DPA) or Transit- oriented Development (TOD) zone. (See Sheet 3)	Yes	Property parcel partially within Montreal Rd Design Priority Area
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;	No	No driveway within the area of influence of an adjacent traffic signal.
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	Yes	Montreal Rd/Vanier Pkway intersections reports 106 collisions with 22 injured between 2012 - 2016
The development includes a drive-thru facility	No	
Safety Trigger Met?	Yes	

Parsons PLUS envision more









**Turning Movement Count - 15 Minute Summary Report** 

# MONTREAL RD @ NORTH RIVER RD

Sur	vey D	ate:	Т	uesd	ay, Jai	nuary	19, 20	016		orthboui astbour	nd: (	)	So	U-Turr outhbour estboun	id: (					
			N			- P P I	h		E	asibuu	id: (	-		REAL		)				
		No	orthbou	-			<b>,</b> uthbour	nd			Fa	stbound				stbound	1			
Time F	Period	LT	ST	RT	N TOT	LT	ST	RT	S TOT	STR TOT	LT	ST	RT	Е ТОТ	LT	ST	RT	w тот	STR TOT	Grand Total
07:00	07:15	30	2	7	39	5	4	0	9	48	0	98	68	166	0	81	3	84	250	298
)7:15	07:30	38	0	3	41	2	2	4	8	49	1	79	76	156	0	75	1	76	232	281
07:30	07:45	45	2	9	56	6	3	2	11	67	1	109	71	181	1	115	1	117	298	365
)7:45	08:00	45	0	6	51	4	0	0	4	55	0	122	69	191	0	141	1	142	333	388
00:80	08:15	59	4	8	71	5	6	4	15	86	0	115	70	185	1	126	2	129	314	400
08:15	08:30	64	3	3	70	4	5	8	17	87	0	84	80	164	0	149	6	155	319	406
08:30	08:45	62	5	4	71	2	5	11	18	89	0	117	83	200	0	161	4	165	365	454
)8:45	09:00	61	3	4	68	5	1	2	8	76	1	126	82	209	0	136	2	138	347	423
09:00	09:15	43	4	7	54	4	5	0	9	63	1	102	62	165	0	112	4	116	281	344
)9:15	09:30	47	0	7	54	1	4	1	6	60	1	94	64	159	1	79	0	80	239	299
)9:30	09:45	46	4	3	53	4	3	0	7	60	1	110	49	160	1	90	6	97	257	317
)9:45	10:00	52	4	9	65	3	6	1	10	75	2	113	70	185	0	80	0	80	265	340
1:30	11:45	61	0	8	69	2	6	2	10	79	1	98	68	167	0	106	1	107	274	353
11:45	12:00	45	3	12	60	6	7	4	17	77	2	128	54	184	0	98	7	105	289	366
12:00	12:15	59	6	10	75	5	8	2	15	90	3	116	72	191	1	87	2	90	281	371
2:15	12:30	62	2	10	74	3	1	2	6	80	1	113	52	166	2	89	5	96	262	342
12:30	12:45	55	2	9	66	6	3	2	11	77	3	117	51	171	0	94	4	98	269	346
2:45	13:00	66	4	9	79	4	4	5	13	92	4	128	65	197	0	100	2	102	299	391
13:00	13:15	52	3	14	69	2	3	4	9	78	1	130	67	198	0	92	5	97	295	373
13:15	13:30	52	3	10	65	2	4	2	8	73	2	119	55	176	0	82	2	84	260	333
15:00	15:15	88	4	11	103	6	7	6	19	122	6	125	80	211	0	118	3	121	332	454
15:15	15:30	77	11	4	92	5	5	5	15	107	4	171	100	275	1	141	2	144	419	526
15:30	15:45	76	6	9	91	5	8	4	17	108	0	154	94	248	1	178	7	186	434	542
15:45	16:00	100	7	11	118	5	4	8	17	135	0	117	100	217	0	133	12	145	362	497
16:00	16:15	82	10	17	109	6	2	8	16	125	0	170	78	248	0	149	3	152	400	525
16:15	16:30	93	14	7	114	5	5	12	22	136	2	142	83	227	0	162	7	169	396	532
16:30	16:45	99	6	12	117	2	0	5	7	124	0	140	99	239	0	168	2	170	409	533
16:45	17:00	84	9	11	104	3	6	9	18	122	0	185	90	275	0	128	4	132	407	529
7:00	17:15	75	6	10	91	4	4	5	13	104	0	189	97	286	0	135	6	141	427	531
17:15	17:30	68	6	14	88	4	2	7	13	101	0	167	80	247	0	145	7	152	399	500
17:30	17:45	84	5	11	100	2	6	7	15	115	0	120	68	188	0	114	3	117	305	420
7:45	18:00	74	8	8	90	5	4	7	16	106	7	149	89	245	0	98	6	104	349	455
OTAL	.: 2	044	146	277	2467	127	133	139	399	2866	44	4047	2386	6477	9	3762	12	0 389	91 10368	1323



# Turning Movement Count - Cyclist Volume Report

Work Order

35162

# MONTREAL RD @ NORTH RIVER RD

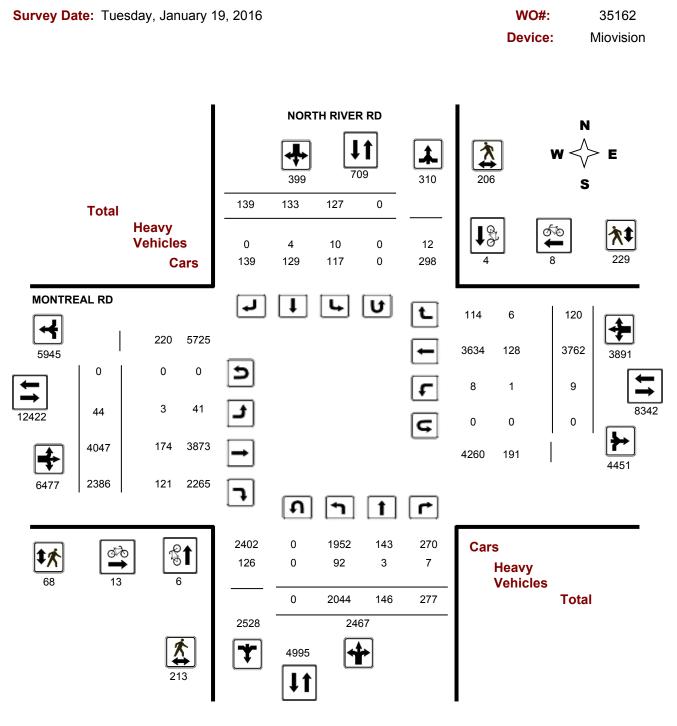
Count Dat	<b>te:</b> Tuesday, J	lanuary 19, 201	6		07:00					
	07:00       08:00       0       3       3         08:00       09:00       0       1       1         09:00       10:00       0       0       0				MONTREAL RI	MONTREAL RD				
Time Period	Northbound	Southbound	Street Total	Eastbound	Westbound	Street Total	Grand Total			
07:00 08:00	0	3	3	0	0	0	3			
08:00 09:00	0	1	1	1	1	2	3			
09:00 10:00	0	0	0	1	3	4	4			
11:30 12:30	2	0	2	1	0	1	3			
12:30 13:30	0	0	0	1	0	1	1			
15:00 16:00	0	0	0	4	0	4	4			
16:00 17:00	3	0	3	4	2	6	9			
17:00 18:00	1	0	1	1	2	3	4			
Total	6	4	10	13	8	21	31			

Comment:

Note: These volumes consists of bicycles only (no mopeds or motorcycles) and ARE NOT included in the Turning Movement Count Summary.



## MONTREAL RD @ NORTH RIVER RD





# **Turning Movement Count - Heavy Vehicle Report**

# MONTREAL RD @ NORTH RIVER RD

### Survey Date: Tuesday, January 19, 2016

			NOR	TH R	IVER I	RD						MC	NTR	EAL R	D					
		Northb	ound		ę	Southb	ound				Eastb	ound		١	Nestbo	ound	_			
Time I	Period	LT	ST	RT	N TOT	LT	ST	RT			Grano Total									
07:00	08:00	12	0	0	12	1	0	0	1	13	1	15	17	33	0	24	0	24	57	70
08:00	09:00	16	2	0	18	3	0	0	3	21	0	31	16	47	0	23	2	25	72	93
09:00	10:00	13	1	2	16	2	1	0	3	19	0	25	13	38	0	15	0	15	53	72
11:30	12:30	12	0	2	14	3	1	0	4	18	1	23	12	36	1	17	1	19	55	73
12:30	13:30	12	0	1	13	0	0	0	0	13	1	30	13	44	0	11	0	11	55	68
15:00	16:00	9	0	0	9	1	1	0	2	11	0	22	18	40	0	18	2	20	60	71
16:00	17:00	11	0	0	11	0	1	0	1	12	0	17	21	38	0	13	1	14	52	64
17:00	18:00	7	0	2	9	0	0	0	0	9	0	11	11	22	0	7	0	7	29	38
Sub	Total	92	3	7	102	10	4	0	14	116	3	174	121	298	1	128	6	135	433	549
J-Turn	ıs (Heav	vy Veh	icles)		0				0	0				0				0	0	0
То	tal	92	3	7	0	10	4	0	14	116	3	174	121	298	1	128	6	135	433	549



Work Order

35162

# **Turning Movement Count - Pedestrian Volume Report**

# MONTREAL RD @ NORTH RIVER RD

Count Date	: Tuesday, Jar	Start Time:	07:00				
Time Period(	NB Approach E or W Crossing)	SB Approach (E or W Crossing)	Total	EB Approach (N or S Crossing)	WB Approach (N or S Crossing)	Total	Grand Total
07:00 07:15	5	4	9	0	3	3	12
07:15 07:30	3	6	9	0	0	0	9
07:30 07:45	6	4	10	2	3	5	15
07:45 08:00	8	5	13	0	11	11	24
07:00 08:00	22	19	41	2	17	19	60
08:00 08:15	8	6	14	1	16	17	31
08:15 08:30	9	9	18	5	11	16	34
08:30 08:45	5	6	11	2	7	9	20
08:45 09:00	4	7	11	1	8	9	20
08:00 09:00	26	28	54	9	42	51	105
9:00 09:15	3	5	8	2	6	8	16
09:15 09:30	4	4	8	1	4	5	13
9:30 09:45	5	3	8	1	5	6	14
9:45 10:00	6	2	8	1	2	3	11
9:00 10:00	18	14	32	5	17	22	54
1:30 11:45	1	7	8	3	11	14	22
1:45 12:00	4	6	10	1	12	13	23
2:00 12:15	4	6	10	1	7	8	18
2:15 12:30	4	5	9	0	5	5	14
1:30 12:30	13	24	37	5	35	40	77
2:30 12:45	10	3	13	0	5	5	18
2:45 13:00	6	4	10	2	4	6	16
3:00 13:15	2	5	7	1	5	6	13
3:15 13:30	3	2	5	2	5	7	12
2:30 13:30	21	14	35	5	19	24	59
5:00 15:15	6	10	16	3	5	8	24
5:15 15:30	9	9	18	3	10	13	31
5:30 15:45	12	7	19	1	11	12	31
5:45 16:00	13	4	17	1	7	8	25
5:00 16:00	40	30	70	8	33	41	111
6:00 16:15	4	9	13	5	11	16	29
6:15 16:30	5	9	14	3	7	10	24
6:30 16:45	9	10	19	3	9	12	31
6:45 17:00	14	8	22	7	9	16	38
6:00 17:00	32	36	68	18	36	54	122
7:00 17:15	11	7	18	1	7	8	26
7:15 17:30	8	16	24	5	8	13	37
7:30 17:45	12	8	20	5	8	13	33
7:45 18:00	10	10	20	5	7	12	32
7:00 18:00	41	41	82	16	30	46	128
Fotal	213	206	419	68	229	297	716

Comment:



### 35162

# **Turning Movement Count - Full Study Summary Report**

# MONTREAL RD @ NORTH RIVER RD

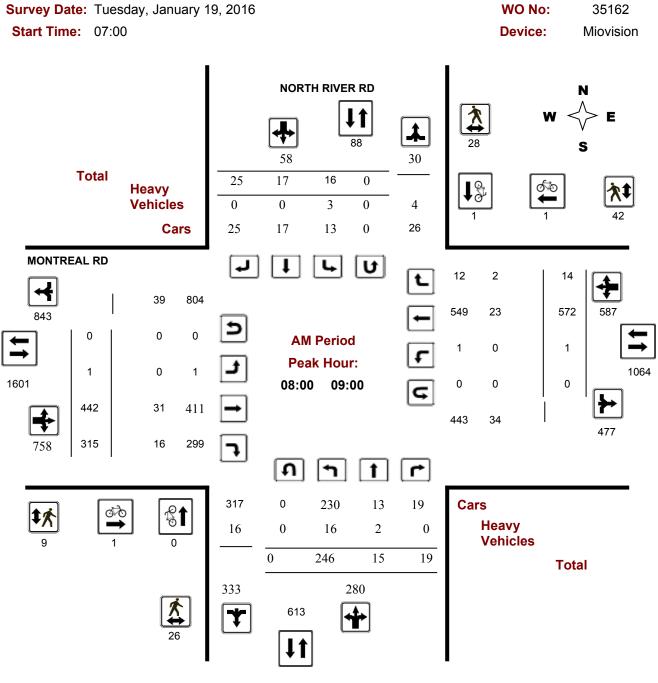
Survey Date: Tuesday, January 19, 2016						Total Observed U-Turns										AADT Factor			
							1	Northbou	ind: 0		Sout	hbound	l: 0				1.10		
								Eastbou	nd: 0		Wes	tbound	: 0						
								F	ull Stu	ıdy									
	NORTH RIVER RD								MONTREAL RD										
-	Northbound Southbo			ound			Eastbound					Westbound							
Period	LT	ST	RT	NB TOT	LT	ST	RT	SB TOT	STR TOT	LT	ST	RT	EB TOT	LT	ST	RT	WB TOT	STR TOT	Gran Tota
07:00 08:00	158	4	25	187	17	9	6	32	219	2	408	284	694	1	412	6	419	1113	1332
08:00 09:00	246	15	19	280	16	17	25	58	338	1	442	315	758	1	572	14	587	1345	1683
09:00 10:00	188	12	26	226	12	18	2	32	258	5	419	245	669	2	361	10	373	1042	1300
11:30 12:30	227	11	40	278	16	22	10	48	326	7	455	246	708	3	380	15	398	1106	1432
12:30 13:30	225	12	42	279	14	14	13	41	320	10	494	238	742	0	368	13	381	1123	1443
15:00 16:00	341	28	35	404	21	24	23	68	472	10	567	374	951	2	570	24	596	1547	2019
16:00 17:00	358	39	47	444	16	13	34	63	507	2	637	350	989	0	607	16	623	1612	2119
17:00 18:00	301	25	43	369	15	16	26	57	426	7	625	334	966	0	492	22	514	1480	1906
Sub Total	2044	146	277	2467	127	133	139	399	2866	44	4047	2386	6477	9	3762	120	3891	10368	13234
U Turns				0				0	0				0				0	0	0
Total	2044	146	277	2467	127	133	139	399	2866	44	4047	2386	6477	9	3762	120	3891	10368	13234
EQ 12Hr	2841	203	385	3429	177	185	193	555	3984	61	5625	3317	9003	13	5229	167	5408	14411	18395
Note: These	values ar	re calcul	lated by	y multiply	/ing the	totals b	y the ap	opropriate	e expansi	on fact	tor.			1.39					
AVG 12Hr	3125	223	424	3772	194	203	213	610	4382	67	6188	3648	9903	14	5752	183	5949	15852	20234
Note: These	volumes	are calc	culated	by multi	olying th	ne Equiv	alent 12	2 hr. tota	Is by the A	AADT	factor.			1.10					
AVG 24Hr	4094	292	555	4941	254	266	278	799	5740	88	8106	4779	12973	18	7535	240	7794	20767	26507
Note: These	volumes	are calc	culated	by multi	olying th	e Avera	ige Dail	y 12 hr. t	totals by 1	12 to 24	4 expan	sion fac	ctor.	1.31					

### Comments:

Note: U-Turns provided for approach totals. Refer to 'U-Turn' Report for specific breakdown.

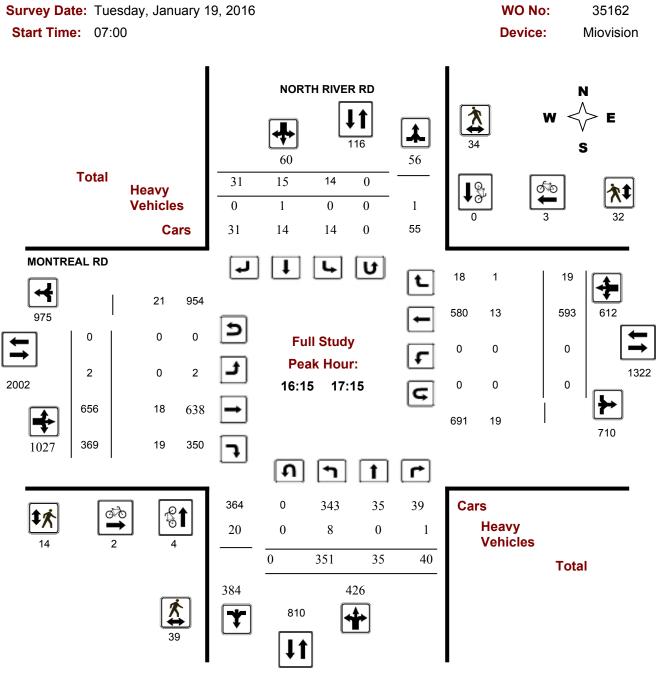


Turning Movement Count - Full Study Peak Hour Diagram MONTREAL RD @ NORTH RIVER RD



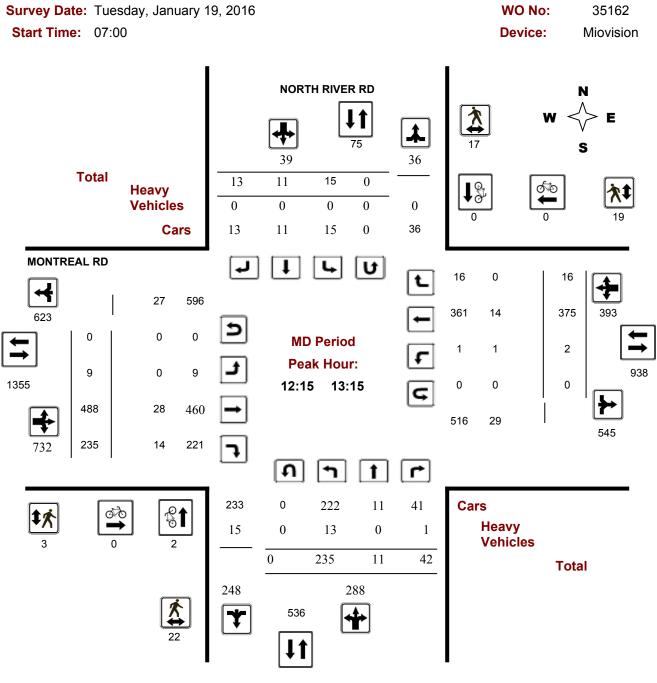


Turning Movement Count - Full Study Peak Hour Diagram MONTREAL RD @ NORTH RIVER RD





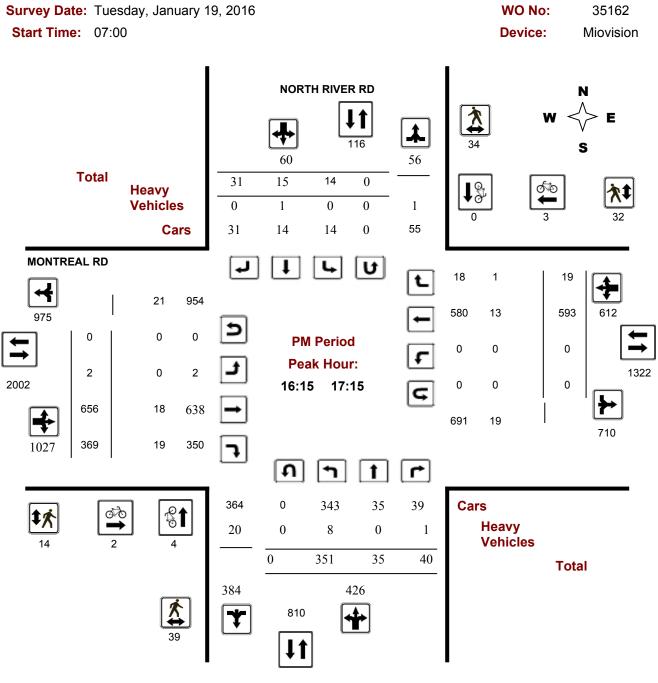
Turning Movement Count - Full Study Peak Hour Diagram MONTREAL RD @ NORTH RIVER RD





## **Transportation Services - Traffic Services**

Turning Movement Count - Full Study Peak Hour Diagram MONTREAL RD @ NORTH RIVER RD





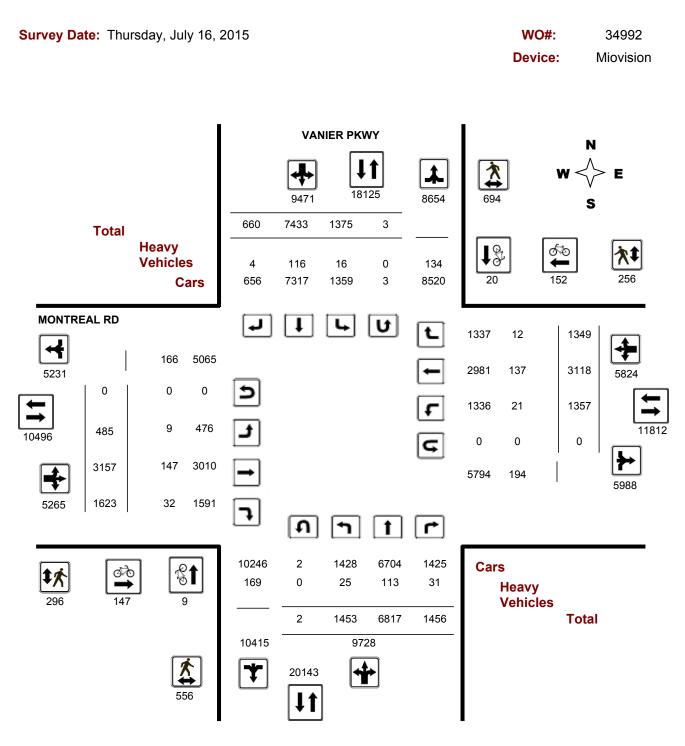
**Turning Movement Count - 15 Min U-Turn Total Report** 

## MONTREAL RD @ NORTH RIVER RD

Survey Date:	Tu	esday, January 19	9, 2016			
Time Pe	riod	Northbound U-Turn Total	Southbound U-Turn Total	Eastbound U-Turn Total	Westbound U-Turn Total	Total
07:00	07:15	0	0	0	0	0
07:15	07:30	0	0	0	0	0
07:30	07:45	0	0	0	0	0
07:45	08:00	0	0	0	0	0
08:00	08:15	0	0	0	0	0
08:15	08:30	0	0	0	0	0
08:30	08:45	0	0	0	0	0
08:45	09:00	0	0	0	0	0
09:00	09:15	0	0	0	0	0
09:15	09:30	0	0	0	0	0
09:30	09:45	0	0	0	0	0
09:45	10:00	0	0	0	0	0
11:30	11:45	0	0	0	0	0
11:45	12:00	0	0	0	0	0
12:00	12:15	0	0	0	0	0
12:15	12:30	0	0	0	0	0
12:30	12:45	0	0	0	0	0
12:45	13:00	0	0	0	0	0
13:00	13:15	0	0	0	0	0
13:15	13:30	0	0	0	0	0
15:00	15:15	0	0	0	0	0
15:15	15:30	0	0	0	0	0
15:30	15:45	0	0	0	0	0
15:45	16:00	0	0	0	0	0
16:00	16:15	0	0	0	0	0
16:15	16:30	0	0	0	0	0
16:30	16:45	0	0	0	0	0
16:45	17:00	0	0	0	0	0
17:00	17:15	0	0	0	0	0
17:15	17:30	0	0	0	0	0
17:30	17:45	0	0	0	0	0
17:45	18:00	0	0	0	0	0
Tota	1	0	0	0	0	0

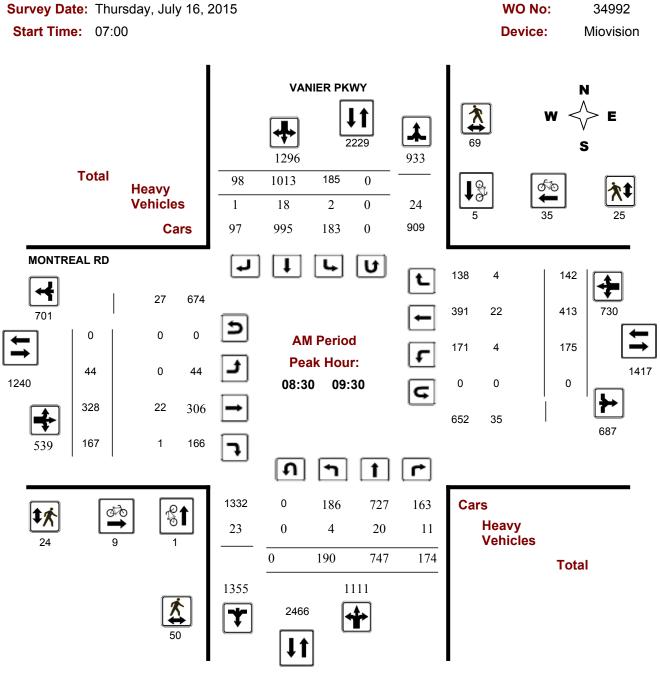


## **MONTREAL RD @ VANIER PKWY**



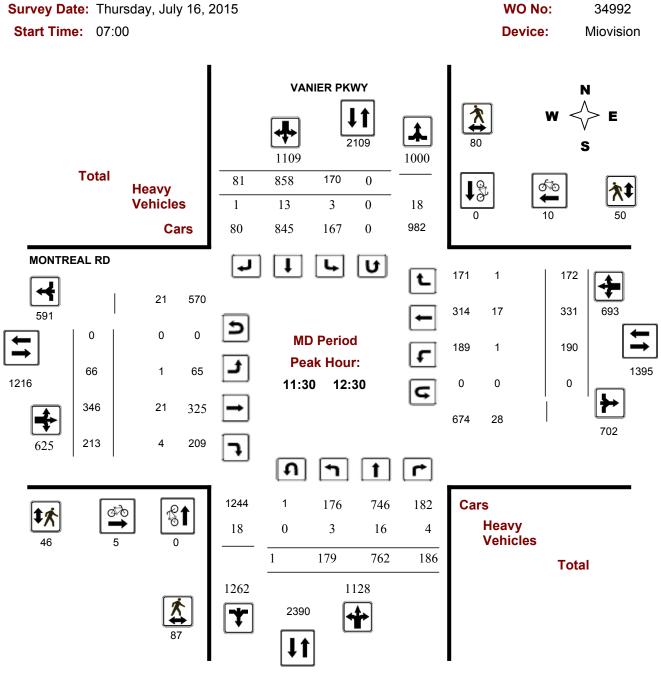


## Turning Movement Count - Full Study Peak Hour Diagram MONTREAL RD @ VANIER PKWY



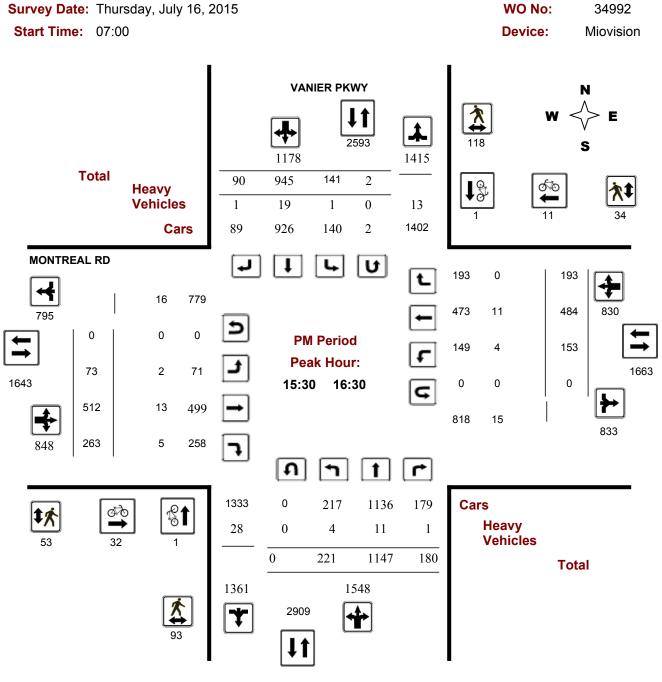


## Turning Movement Count - Full Study Peak Hour Diagram MONTREAL RD @ VANIER PKWY





## Turning Movement Count - Full Study Peak Hour Diagram MONTREAL RD @ VANIER PKWY





### 34992

# **Turning Movement Count - Full Study Summary Report**

## MONTREAL RD @ VANIER PKWY

Survey Da	ate:	Thurso	day, J	uly 16,	2015				Total (	Obser	ved U	-Turns	5				AAD	T Fact	or
								Northbo	und: 2		Sout	hbound:	3				.90		
								Eastbou	ind: 0		Wes	stbound:	0						
								F	ull St	udy									
			VA	ANIER	PKW	Y						MC	ONTRE	EAL R	D				
-		Northb	ound			Southb	ound		-		Eastb	ound			Westb	ound			
Period	LT	ST	RT	NB TOT	LT	ST	RT	SB TOT	STR TOT	LT	ST	RT	EB TOT	LT	ST	RT	WB TOT	STR TOT	Grano Tota
07:00 08:00	124	523	133	780	208	1129	99	1436	2216	30	272	213	515	142	359	137	638	1153	3369
08:00 09:00	165	756	152	1073	189	994	93	1276	2349	53	344	155	552	147	451	148	746	1298	3647
09:00 10:00	162	697	175	1034	176	913	94	1183	2217	44	318	168	530	190	357	132	679	1209	3426
11:30 12:30	179	762	186	1127	170	858	81	1109	2236	66	346	213	625	190	331	172	693	1318	3554
12:30 13:30	177	765	181	1123	158	793	65	1016	2139	71	382	156	609	200	334	165	699	1308	3447
15:00 16:00	226	1142	213	1581	160	903	74	1137	2718	83	488	273	844	161	411	216	788	1632	4350
16:00 17:00	225	1120	192	1537	146	929	92	1167	2704	62	520	233	815	159	484	191	834	1649	4353
17:00 18:00	195	1052	224	1471	168	914	62	1144	2615	76	487	212	775	168	391	188	747	1522	4137
Sub Total	1453	6817	1456	9726	1375	7433	660	9468	19194	485	3157	1623	5265	1357	3118	1349	5824	11089	30283
U Turns				2				3	5				0				0	0	5
Total	1453	6817	1456	9728	1375	7433	660	9471	19199	485	3157	1623	5265	1357	3118	1349	5824	11089	30288
EQ 12Hr	2020	9476	2024	13522	1911	10332	917	13165	26687	674	4388	2256	7318	1886	4334	1875	8095	15413	42100
Note: These	values a	are calcu	lated b	y multipl	ying the	e totals b	by the a	ppropriat	te expans	sion fac	tor.			1.39					
AVG 12Hr	1818	8528	1821	12170	1720	9299	826	11848	24018	607	3949	2030	6587	1698	3901	1688	7286	13873	37891
Note: These	volumes	are cal	culated	by mult	plying t	he Equiv	alent 1	2 hr. tota	als by the	AADT	factor.			.90					
AVG 24Hr	2381	11172	2386	15942	2253	12181	1082	15521	31463	795	5174	2660	8628	2224	5110	2211	9544	18172	49635
Note: These	volumes	are cal	culated	by multi	iplying t	he Avera	age Da	ily 12 hr.	totals by	12 to 2	4 expan	ision fac	tor.	1.31					

#### Comments:

Note: U-Turns provided for approach totals. Refer to 'U-Turn' Report for specific breakdown.



## **Public Works - Traffic Services**

**W.O**. 34992

**Turning Movement Count - 15 Minute Summary Report** 

Sur	vey Da	ate:		Thur	sday,	July 1	6, 201	5		1	otal	Obser	ved L	J-Turr	IS					
						,			No	orthbour				uthbour						
									E	astboun	d: (			estboun	Ŭ					
					IER PI								IONT	REAL						
		Ν	orthbou	und	N	So	uthboun	d	~	OTD	Eas	stbound		-	Wes	stbound		14/	OTD	Cuend
Time I	Period	LT	ST	RT	N TOT	LT	ST	RT	S TOT	STR TOT	LT	ST	RT	E TOT	LT	ST	RT	W TOT	STR TOT	Grand Total
07:00	07:15	31	80	25	136	53	264	20	337	473	11	64	52	127	40	65	32	137	264	737
07:15	07:30	19	112	27	159	48	291	25	364	523	3	53	58	114	28	112	32	172	286	809
07:30	07:45	36	153	41	230	55	308	31	394	624	6	77	50	133	42	93	36	171	304	928
07:45	08:00	38	178	40	256	52	266	23	341	597	10	78	53	141	32	89	37	158	299	896
08:00	08:15	34	174	35	243	48	251	27	326	569	12	83	40	135	43	117	37	197	332	901
08:15	08:30	40	190	29	259	43	232	21	296	555	14	90	40	144	29	106	37	172	316	871
08:30	08:45	43	206	41	290	52	257	18	327	617	11	97	42	150	37	113	35	185	335	952
08:45	09:00	48	186	47	281	46	254	27	327	608	16	74	33	123	38	115	39	192	315	923
09:00	09:15	42	187	37	266	46	257	29	332	598	7	90	41	138	50	97	42	189	327	925
09:15	09:30	57	168	49	274	41	245	24	310	584	10	67	51	128	50	88	26	164	292	876
09:30	09:45	41	182	38	261	48	192	18	258	519	15	81	33	129	46	74	40	160	289	808
09:45	10:00	22	160	51	233	41	219	23	283	516	12	80	43	135	44	98	24	166	301	817
11:30	11:45	37	167	45	249	46	224	19	289	538	15	93	49	157	44	77	43	164	321	859
11:45	12:00	53	196	49	299	51	202	21	274	573	13	71	44	128	54	84	41	179	307	880
12:00	12:15	48	210	45	303	37	213	24	274	577	26	86	61	173	43	90	37	170	343	920
12:15	12:30	41	189	47	277	36	219	17	272	549	12	96	59	167	49	80	51	180	347	896
12:30	12:45	40	191	49	280	48	177	20	245	525	18	87	23	128	46	77	42	165	293	818
12:45	13:00	46	198	58	302	37	198	17	252	554	20	91	35	146	49	101	49	199	345	899
13:00	13:15	49	179	36	264	35	205	15	256	520	16	106	52	174	54	74	45	173	347	867
13:15	13:30	42	197	38	277	38	213	13	264	541	17	98	46	161	51	82	29	162	323	864
15:00	15:15	50	286	54	390	45	220	20	285	675	21	118	66	205	45	88	55	188	393	1068
15:15	15:30	59	284	66	409	42	228	18	288	697	24	111	69	204	39	106	62	207	411	1108
15:30	15:45	54	286	49	389	39	260	15	316	705	18	125	83	226	34	108	61	203	429	1134
15:45	16:00	63	286	44	393	34	195	21	250	643	20	134	55	209	43	109	38	190	399	1042
16:00	16:15	52	302	45	399	36	245	26	307	706	16	130	57	203	43	123	45	211	414	1120
16:15	16:30	52	273	42	367	32	245	28	305	672	19	123	68	210	33	144	49	226	436	1108
16:30	16:45	61	276	54	391	38	216	16	270	661	15	129	57	201	46	106	44	196	397	1058
16:45	17:00	60	269	51	380	40	223	22	285	665	12	138	51	201	37	111	53	201	402	1067
17:00	17:15	59	263	62	384	45	247	16	308	692	20	147	56	223	34	99	43	176	399	1091
17:15	17:30	52	261	57	370	42	244	18	304	674	19	118	57	194	43	116	53	212	406	1080
17:30	17:45	46	283	45	374	45	193	13	251	625	21	122	47	190	39	95	45	179	369	994
17:45	18:00	38	245	60	343	36	230	15	281	624	16	100	52	168	52	81	47	180	348	972
ΓΟΤΑΙ	.: 1	453	6817	1456	9728	1375	7433	660	9471	19199	485	3157	1623	5265	1357	3118	134	9 582	24 11089	3028



## **Turning Movement Count - 15 Min U-Turn Total Report**

## MONTREAL RD @ VANIER PKWY

Survey Date	<b>):</b> T	hursday, July 16,	2015			
Time P	eriod	Northbound U-Turn Total	Southbound U-Turn Total	Eastbound U-Turn Total	Westbound U-Turn Total	Total
07:00	07:15	0	0	0	0	0
07:15	07:30	1	0	0	0	1
07:30	07:45	0	0	0	0	0
07:45	08:00	0	0	0	0	0
08:00	08:15	0	0	0	0	0
08:15	08:30	0	0	0	0	0
08:30	08:45	0	0	0	0	0
08:45	09:00	0	0	0	0	0
09:00	09:15	0	0	0	0	0
09:15	09:30	0	0	0	0	0
09:30	09:45	0	0	0	0	0
09:45	10:00	0	0	0	0	0
11:30	11:45	0	0	0	0	0
11:45	12:00	1	0	0	0	1
12:00	12:15	0	0	0	0	0
12:15	12:30	0	0	0	0	0
12:30	12:45	0	0	0	0	0
12:45	13:00	0	0	0	0	0
13:00	13:15	0	1	0	0	1
13:15	13:30	0	0	0	0	0
15:00	15:15	0	0	0	0	0
15:15	15:30	0	0	0	0	0
15:30	15:45	0	2	0	0	2
15:45	16:00	0	0	0	0	0
16:00	16:15	0	0	0	0	0
16:15	16:30	0	0	0	0	0
16:30	16:45	0	0	0	0	0
16:45	17:00	0	0	0	0	0
17:00	17:15	0	0	0	0	0
17:15	17:30	0	0	0	0	0
17:30	17:45	0	0	0	0	0
17:45	18:00	0	0	0	0	0
To	tal	2	3	0	0	5



### 34992

## **Turning Movement Count - Heavy Vehicle Report**

## **MONTREAL RD @ VANIER PKWY**

### Survey Date:

### Thursday, July 16, 2015

			VA	NIER	PKW	Y						MO	NTR	EAL R	D					
		Northb	ound		(	Southb	ound	_			Eastb	ound		١	Nestbo	ound	_			
Time	Period	LT	ST	RT	N TOT	LT	ST	RT	S TOT	STR TOT	LT	ST	RT	E TOT	LT	ST	RT	W тот	STR TOT	Granc Total
07:00	08:00	3	11	3	17	4	7	0	11	28	0	16	5	21	1	17	0	18	39	67
00:80	09:00	2	21	7	30	2	17	1	20	50	0	32	1	33	1	19	5	25	58	108
09:00	10:00	8	18	8	34	2	19	1	22	56	1	16	2	19	4	23	2	29	48	104
11:30	12:30	3	16	4	23	3	13	1	17	40	1	21	4	26	1	17	1	19	45	85
12:30	13:30	4	16	2	22	1	11	0	12	34	4	20	7	31	3	23	2	28	59	93
15:00	16:00	2	16	3	21	2	20	0	22	43	0	17	6	23	5	10	1	16	39	82
16:00	17:00	3	9	1	13	1	14	1	16	29	2	15	1	18	2	15	0	17	35	64
17:00	18:00	0	6	3	9	1	15	0	16	25	1	10	6	17	4	13	1	18	35	60
Sub	Total	25	113	31	169	16	116	4	136	305	9	147	32	188	21	137	12	170	358	663
J-Turn	is (Heav	/y Vel	nicles)		0				0	0				0				0	0	0
То	tal	25	113	31	0	16	116	4	136	305	9	147	32	188	21	137	12	170	358	663

school and inter-city buses. Further, they ARE included in the Turning Movement Count Summary.



## Public Works - Traffic Services

## **Turning Movement Count - Cyclist Volume Report**

Work Order

34992

## MONTREAL RD @ VANIER PKWY

Count Dat	<b>te:</b> Thursday,	July 16, 2015				Start Time:	07:00
	,	VANIER PKWY			MONTREAL RI	C	
Time Period	Northbound	Southbound	Street Total	Eastbound	Westbound	Street Total	Grand Total
07:00 08:00	0	7	7	13	26	39	46
08:00 09:00	0	5	5	17	43	60	65
09:00 10:00	1	3	4	5	18	23	27
11:30 12:30	0	0	0	5	10	15	15
12:30 13:30	2	0	2	12	14	26	28
15:00 16:00	2	0	2	24	12	36	38
16:00 17:00	0	3	3	39	11	50	53
17:00 18:00	4	2	6	32	18	50	56
Total	9	20	29	147	152	299	328

Comment:

Note: These volumes consists of bicycles only (no mopeds or motorcycles) and ARE NOT included in the Turning Movement Count Summary.



## **Public Works - Traffic Services**

34992

## **Turning Movement Count - Pedestrian Volume Report**

## MONTREAL RD @ VANIER PKWY

Count Dat	e: Thursday, Ju	ıly 16, 2015				Start Time:	07:00
Time Period	NB Approach (E or W Crossing)	SB Approach (E or W Crossing)	Total	EB Approach (N or S Crossing)	WB Approach (N or S Crossing)	Total	Grand Total
07:00 07:15	4	4	8	7	1	8	16
07:15 07:30	16	8	24	6	1	7	31
07:30 07:45	11	16	27	2	5	7	34
07:45 08:00	13	17	30	6	9	15	45
07:00 08:00	44	45	89	21	16	37	126
08:00 08:15	9	14	23	2	9	11	34
08:15 08:30	17	21	38	7	6	13	51
08:30 08:45	13	23	36	4	5	9	45
08:45 09:00	11	10	21	4	5	9	30
08:00 09:00	50	68	118	17	25	42	160
09:00 09:15	19	26	45	10	10	20	65
09:15 09:30	7	10	17	6	5	11	28
09:30 09:45	14	18	32	3	5	8	40
09:45 10:00	6	16	22	1	7	8	30
09:00 10:00	46	70	116	20	27	47	163
11:30 11:45	22	13	35	8	6	14	49
11:45 12:00	24	22	46	11	8	19	65
12:00 12:15	22	22	44	6	25	31	75
12:15 12:30	19	23	42	21	11	32	74
11:30 12:30	87	80	167	46	50	96	263
12:30 12:45	21	29	50	8	8	16	66
12:45 13:00	20	18	38	4	14	18	56
13:00 13:15	19	25	44	12	5	17	61
13:15 13:30	16	29	45	8	6	14	59
12:30 13:30	76	101	177	32	33	65	242
15:00 15:15	15	42	57	11	7	18	75
15:15 15:30	17	13	30	13	7	20	50
15:30 15:45	25	25	50	7	6	13	63
15:45 16:00	19	30	49	19	3	22	71
15:00 16:00	76	110	186	50	23	73	259
16:00 16:15	17	31	48	9	9	18	66
16:15 16:30	32	32	64	18	16	34	98
16:30 16:45	24	29	53	15	13	28	81
16:45 17:00	26	32	58	18	15	33	91
16:00 17:00	99	124	223	60	53	113	336
17:00 17:15	22	25	47	22	5	27	74
17:15 17:30	23	19	42	7	8	15	57
17:30 17:45	19	26	45	8	7	15	60
17:45 18:00	14	26	40	13	9	22	62
17:00 18:00	78	96	174	50	29	79	253
Total	556	694	1250	296	256	552	1802

Comment:



#### Total Area

Classification of Accident	Rear End	Turning Movement	Sideswipe	Angle	Approaching	Single Vehicle (other)	Single vehicle (Unattended vehicle)	Other	Total	
P.D. only	66	47	39	15	3	2	9	2	183	80%
Non-fatal injury	13	14	4	4	1	8	1	0	45	20%
Non reportable	0	0	2	0	0	0	0	0	2	1%
Total	79	61	45	19	4	10	10	2	230	100%
	#1 or 34%	#2 or 27%	#3 or 20%	#4 or 8%	#7 or 2%	#5 or 4%	#5 or 4%	#8 or 1%		-

#### MONTREAL RD/MONTGOMERY ST

Years	Total # Collisions	24 Hr AADT Veh Volume	Days	Collisions/MEV
2012-2016	12	18,210	1825	0.36

Classification of Accident	Rear End	Turning Movement	Sideswipe	Angle	Approaching	Single Vehicle (other)	Single vehicle (Unattended vehicle)	Other	Total	
P.D. only	3	2	2	1	0	0	0	0	8	67%
Non-fatal injury	0	0	0	0	0	4	0	0	4	33%
Non reportable	0	0	0	0	0	0	0	0	0	0%
Total	3	2	2	1	0	4	0	0	12	100%
	25%	17%	17%	8%	0%	33%	0%	0%		_

### MONTREAL RD/VANIER PKWY

Years	Total # Collisions	24 Hr AADT Veh Volume	Days	Collisions/MEV
2012-2016	88	49,640	1825	0.97

Classification of Accident	Rear End	Turning Movement	Sideswipe	Angle	Approaching	Single Vehicle (other)	Single vehicle (Unattended vehicle)	Other	Total	
P.D. only	41	12	18	0	0	0	0	0	71	81%
Non-fatal injury	7	6	2	0	0	1	0	0	16	18%
Non reportable	0	0	1	0	0	0	0	0	1	1%
Total	48	18	21	0	0	1	0	0	88	100%
	55%	20%	24%	0%	0%	1%	0%	0%		-

### MONTREAL RD, PALACE ST to VANIER PKWY

Years	Lotal # Collisions	24 Hr AADT Veh Volume	Days	Collisions/MEV
2012-2016	50	17,200	1825	1.59

Classification of Accident	Rear End	Turning Movement	Sideswipe	Angle	Approaching	Single Vehicle (other)	Single vehicle (Unattended vehicle)	Other	Total	
P.D. only	4	22	9	4	1	0	6	1	47	94%
Non-fatal injury	0	1	0	1	0	0	0	0	2	4%
Non reportable	0	0	1	0	0	0	0	0	1	2%
Total	4	23	10	5	1	0	6	1	50	100%
	8%	46%	20%	10%	2%	0%	12%	2%		_

#### MONTREAL RD, MONTGOMERY ST to PALACE ST

Years	lotal # Collisions	24 Hr AADT Veh Volume	Days	Collisions/MEV	
2012-2016	21	16,700	1825	0.69	

Classification of Accident	Rear End	Turning Movement	Sideswipe	Angle	Approaching	Single Vehicle (other)	Single vehicle (Unattended vehicle)	Other	Total	
P.D. only	4	2	2	3	1	0	3	1	16	76%
Non-fatal injury	1	2	0	0	0	1	1	0	5	24%
Non reportable	0	0	0	0	0	0	0	0	0	0%
Total	5	4	2	3	1	1	4	1	21	100%
	24%	19%	10%	14%	5%	5%	19%	5%		-

#### NORTH RIVER RD/WAYLING AVE

Years	Total # Collisions	24 Hr AADT Veh Volume	Days	Collisions/MEV
2012-2016	1	6,500	1825	0.08

Classification of Accident	Rear End	Turning Movement	Sideswipe	Angle	Approaching	Single Vehicle (other)	Single vehicle (Unattended vehicle)	Other	Total	
P.D. only	0	0	0	1	0	0	0	0	1	100%
Non-fatal injury	0	0	0	0	0	0	0	0	0	0%
Non reportable	0	0	0	0	0	0	0	0	0	0%
Total	0	0	0	1	0	0	0	0	1	100%
	0%	0%	0%	100%	0%	0%	0%	0%		

#### MARK AVE/NORTH RIVER RD

Years         Total ≠ Collisions         24 Hr AADT Veh Volume         Days         Collisions/MEV           2012-2016         1         6,500         1825         0.08	WARK AVE/IN	OKTH KIVER	RD		
2012-2016 1 6,500 1825 0.08	Years			Days	Collisions/MEV
	2012-2016	1	6,500	1825	0.08

Classification of Accident	Rear End	Turning Movement	Sideswipe	Angle	Approaching	Single Vehicle (other)	Single vehicle (Unattended vehicle)	Other	Total	
P.D. only	0	0	0	1	0	0	0	0	1	100%
Non-fatal injury	0	0	0	0	0	0	0	0	0	0%
Non reportable	0	0	0	0	0	0	0	0	0	0%
Total	0	0	0	1	0	0	0	0	1	100%
	0%	0%	0%	100%	0%	0%	0%	0%		_

#### MONTREAL RD/NORTH RIVER RD

Years	Total # Collisions	24 Hr AADT Veh Volume	Days	Collisions/MEV
2012-2016	30	26,510	1825	0.62

Classification of Accident	Rear End	Turning Movement	Sideswipe	Angle	Approaching	Single Vehicle (other)	Single vehicle (Unattended vehicle)	Other	Total	
P.D. only	11	2	3	2	1	2	0	0	21	70%
Non-fatal injury	3	2	0	3	0	1	0	0	9	30%
Non reportable	0	0	0	0	0	0	0	0	0	0%
Total	14	4	3	5	1	3	0	0	30	100%
	47%	13%	10%	17%	3%	10%	0%	0%		-

### MONTREAL RD/PALACE ST

MONTREAL RD/ PALACE ST									
Years	Total #	24 Hr AADT	Davs	Collisions/MEV					
ieais	Collisions	Veh Volume	Days	COMISIONS/IVIE V					
2012-2016	14	18,000	1825	0.43					

Classification of Accident	Rear End	Turning Movement	Sideswipe	Angle	Approaching	Single Vehicle (other)	Single vehicle (Unattended vehicle)	Other	Total	
P.D. only	3	5	0	1	0	0	0	0	9	64%
Non-fatal injury	1	3	0	0	1	0	0	0	5	36%
Non reportable	0	0	0	0	0	0	0	0	0	0%
Total	4	8	0	1	1	0	0	0	14	100%
	29%	57%	0%	7%	7%	0%	0%	0%		_

#### MONTREAL RD, NORTH RIVER RD to MONTGOMERY ST

Years	Total # Collisions	24 Hr AADT Veh Volume	Days	Collisions/MEV
2012-2016	6	16,710	1825	0.20

Classification of Accident	Rear End	Turning Movement	Sideswipe	Angle	Approaching	Single Vehicle (other)	Single vehicle (Unattended vehicle)	Other	Total	
P.D. only	0	2	1	2	0	0	0	0	5	83%
Non-fatal injury	0	0	1	0	0	0	0	0	1	17%
Non reportable	0	0	0	0	0	0	0	0	0	0%
Total	0	2	2	2	0	0	0	0	6	100%
	0%	33%	33%	33%	0%	0%	0%	0%		_

## MONTREAL RD, RIDEAU ST to NORTH RIVER RD

MONTREAL	MONTREAL RD, RIDEAU ST 10 NORTH RIVER RD										
Years	Total #	24 Hr AADT	Davs	Collisions/MEV							
Tears	Collisions	Veh Volume	Days	COMISIONS/IVIEV							
2012-2016	7	24,890	1825	0.15							

Classification of Accident	Rear End	Turning Movement	Sideswipe	Angle	Approaching	Single Vehicle (other)	Single vehicle (Unattended vehicle)	Other	Total	
P.D. only	0	0	4	0	0	0	0	0	4	57%
Non-fatal injury	1	0	1	0	0	1	0	0	3	43%
Non reportable	0	0	0	0	0	0	0	0	0	0%
Total	1	0	5	0	0	1	0	0	7	100%
	14%	0%	71%	0%	0%	14%	0%	0%		-

OnTRAC Reporting System

### MARK AVE & NORTH RIVER RD

Former Munic	cipality: Vanier		Traffic Control: Stop s	ign		Numbe	er of Collisions: 1			
	DATE DAY	Y TIME ENV	IMPACT LIGHT TYPE	CLASS	DIR	SURFACE COND'N	VEHICLE MANOEUVRE	VEHICLE TYPE	FIRST EVENT	No. PED
1	2012-03-30 Fri	18:30 Clear	Dusk Angle	P.D. only	V1 W V2 N	Dry Dry	Going ahead Going ahead	Automobile, station Automobile, station	Other motor vehicle Other motor vehicle	0
MONTGOM	ERY ST & MONT	FREAL RD								
Former Munic	cipality: Vanier		Traffic Control: Traffic	signal		Numbe	er of Collisions: 4			
	DATE DAY	Y TIME ENV	IMPACT LIGHT TYPE	CLASS	DIR	SURFACE COND'N	VEHICLE MANOEUVRE	VEHICLE TYPE	FIRST EVENT	No. PED
2	2012-04-30 Mo	16:35 Clear	Daylight Single vehicle	Non-fatal	V1 N	Dry	Turning left	Automobile, station	Pedestrian	1
3	2012-06-22 Fri	09:08 Clear	Daylight Sideswipe	P.D. only	V1 W V2 W	Dry Dry	Changing lanes Going ahead	Passenger van Delivery van	Other motor vehicle Other motor vehicle	0
4	2012-06-29 Fri	14:00 Clear	Daylight Rear end	P.D. only	V1 E V2 E	Dry Dry	Slowing or Going ahead	Automobile, station Motorcycle	Other motor vehicle Other motor vehicle	0
5	2013-06-28 Fri	11:54 Clear	Daylight Turning	P.D. only	V1 W V2 E	Dry Dry	Turning left Going ahead	Automobile, station Automobile, station	Other motor vehicle Other motor vehicle	0
MONTREA	L RD, MONTGON	IERY ST to P	ALACE ST							

Former Municip	ality: Vanie	•		Traffic Co	ontrol: No cont	trol		Numbe	er of Collisions: 9			
	DATE	DAY	TIME ENV	LIGHT	IMPACT TYPE	CLASS	DIR	SURFACE COND'N	VEHICLE MANOEUVRE	VEHICLE TYPE	FIRST EVENT	No. PED
6	2012-02-0	2 Thu	16:10 Clear	Daylight	Angle	P.D. only	V1 N V2 E	Wet Wet	Turning left Going ahead	Delivery van Pick-up truck	Other motor vehicle Other motor vehicle	0
7	2012-02-0	3 Fri	18:15 Snow	Dusk	Single vehicle	Non-fatal	V1 E	Loose snow	Slowing or	Municipal transit bus	Pedestrian	1
8	2012-02-1	5 We	20:30 Clear	Dark	Sideswipe	P.D. only	V1 W V2 W	Dry Dry	Going ahead Stopped	Automobile, station Automobile, station	Other motor vehicle Other motor vehicle	0
9	2012-05-0	7 Mo	15:28 Clear	Daylight	Rear end	P.D. only	V1 E V2 E	Dry Dry	Slowing or Stopped	Passenger van Automobile, station	Other motor vehicle Other motor vehicle	0

(Note: Time of Day = "00:00" represents unknown collision time Wednesday, March 07, 2018

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### FROM: 2012-01-01 TO: 2014-01-01

10	2012-07-12 Thu 15:50 Clear	Daylight Rear end	Non-fatal V1 E V2 E	Dry Dry	Going ahead Stopped	Pick-up truck Automobile, station	Other motor vehicle Other motor vehicle	0
11	2012-09-11 Tue 17:03 Clear	Daylight Sideswipe	P.D. only V1 E V2 E	Dry Dry	Changing lanes Going ahead	Automobile, station Municipal transit bus	Other motor vehicle Other motor vehicle	0
12	2013-05-01 We 12:42 Clear	Daylight Single vehicle	P.D. only V1 W	Dry	Pulling onto	Truck - closed	Unattended vehicle	0
13 14	2013-08-29 Thu 15:16 Clear 2013-11-19 Tue 09:49 Clear		P.D. only V1 W V2 E P.D. only V1 E	Dry Dry Dry	Turning left Stopped Going ahead	Automobile, station Automobile, station Automobile, station	Other motor vehicle Other motor vehicle Other motor vehicle	0 0
	AL RD, MONTGOMERY ST to Non	ORTH RIVER RD Traffic Control: No contro	V2 E	Dry Numbe	Turning right er of Collisions: 2	Automobile, station	Other motor vehicle	
		IMPACT		SURFACE	VEHICLE			No.
	DATE DAY TIME ENV		CLASS DIR	COND'N	MANOEUVRE	VEHICLE TYPE	FIRST EVENT	PED
15	2013-02-16 Sat 15:25 Clear	Daylight Sideswipe	P.D. only V1 E V2 E	Dry Dry	Changing lanes Going ahead	Automobile, station Pick-up truck	Other motor vehicle Other motor vehicle	0
16	2013-08-03 Sat 13:20 Clear	Daylight Angle	P.D. only V1 E V2 S	Dry Dry	Going ahead Turning left	Passenger van Automobile, station	Other motor vehicle Other motor vehicle	0
MONTRE	AL RD & NORTH RIVER RD							
-	nicipality: Vanier	Traffic Control: Traffic sig	ignal	Numbe	er of Collisions: 11			
	DATE DAY TIME ENV	IMPACT LIGHT TYPE	CLASS DIR	SURFACE COND'N	VEHICLE MANOEUVRE	VEHICLE TYPE	FIRST EVENT	No. PED
17	2012-02-24 Fri 19:50 Snow	Dark Sideswipe F	P.D. only V1 W	Loose snow	Changing lanes	Automobile, station	Other motor vehicle	0
18	2012-06-01 Fri 17:20 Rain	Daylight Rear end	V2 W P.D. only V1 N V2 N	Loose snow Wet Wet	Going ahead Changing lanes Stopped	Automobile, station Truck - closed Automobile, station	Other motor vehicle Other motor vehicle Other motor vehicle	0

		indino o o interne o ignai				
	DATE DAY TIME ENV	IMPACT LIGHT TYPE CLASS	SURFACE DIR COND'N	VEHICLE MANOEUVRE VEHICLE TYPE	FIRST EVENT	No. PED
17	2012-02-24 Fri 19:50 Snow	Dark Sideswipe P.D. only	y V1 W Loose snow V2 W Loose snow	Changing lanes Automobile, station Going ahead Automobile, station		0
18	2012-06-01 Fri 17:20 Rain	Daylight Rear end P.D. only	y V1 N Wet V2 N Wet	Changing lanes Truck - closed Stopped Automobile, station	Other motor vehicle Other motor vehicle	0
19	2012-06-28 Thu 00:04 Clear	Dark Turning Non-fata	I V1 W Dry V2 E Dry	Turning leftAutomobile, stationGoing aheadMotorcycle	Other motor vehicle Other motor vehicle	0
20	2012-07-12 Thu 16:00 Clear	Daylight Angle Non-fata	l V1 W Dry V2 S Dry	Turning leftAutomobile, stationGoing aheadBicycle	Cyclist Other motor vehicle	0

(Note: Time of Day = "00:00" represents unknown collision time Wednesday, March 07, 2018

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### FROM: 2012-01-01 TO: 2014-01-01

21	2013-02-06 We 13:42 Clear	Daylight Turning	P.D. only V1 E Dry V2 E Dry	Turning right Going ahead	Truck and trailer Automobile, station	Other motor vehicle Other motor vehicle	0
22	2013-02-16 Sat 08:43 Clear	Daylight Rear end	Non-fatal V1 E Dry V2 E Dry	Going ahead Stopped	Automobile, station Automobile, station	Other motor vehicle Other motor vehicle	0
23	2013-03-20 We 14:01 Clear	Daylight Rear end	P.D. only V1 W Wet V2 W Wet	Slowing or Stopped	Automobile, station Automobile, station	Other motor vehicle Other motor vehicle	0
24	2013-04-02 Tue 11:35 Clear	Daylight Rear end	P.D. only V1 N Dry V2 N Dry	Going ahead Stopped	Truck - closed Automobile, station	Other motor vehicle Other motor vehicle	0
25	2013-06-21 Fri 12:52 Clear	Daylight Angle	Non-fatal V1 N Dry V2 E Dry	Going ahead Going ahead	Bicycle Automobile, station	Other motor vehicle Cyclist	0
26	2013-06-29 Sat 13:04 Clear	Daylight Rear end	P.D. only V1 E Dry V2 E Dry	Turning right Turning right	Automobile, station Pick-up truck	Other motor vehicle Other motor vehicle	0
27	2013-10-02 We 18:45 Clear	Dusk Rear end	P.D. only V1 N Dry V2 N Dry	Going ahead Stopped	Pick-up truck Automobile, station	Other motor vehicle Other motor vehicle	0

#### MONTREAL RD, NORTH RIVER RD to RIDEAU ST

Former Municip	ality: Vanier			T	raffic Co	ntrol: No cont	rol		Numb	er of Collisions: 3			
	DATE	DAY	TIME	ENV I	LIGHT	IMPACT TYPE	CLASS	DIR	SURFACE COND'N	VEHICLE MANOEUVRE	VEHICLE TYPE	FIRST EVENT	No. PED
28	2012-05-08	Tue	21:39(	Clear [	Dark	Single vehicle	Non-fatal	V1 E	Dry	Going ahead	Bicycle	Pedestrian	1
29	2012-10-14	Sun	01:40 I	Rain [	Dark	Rear end	Non-fatal	V1 E V2 E	Wet Wet	Going ahead Going ahead	Unknown Bicycle	Cyclist Other motor vehicle	0
30	2012-10-25	Thu	15:00 (	Clear [	Daylight	Sideswipe	P.D. only	V1 W V2 W	,	Going ahead Going ahead	Automobile, station Automobile, station	Other motor vehicle Other motor vehicle	0

### MONTREAL RD & PALACE ST

Former Municipality: Vanier		Traffic Con	trol: No cor	ntrol		Numb	per of Collisions: 5			
			IMPACT			SURFACE	VEHICLE			No.
DATE	DAY TIME ENV	LIGHT	TYPE	CLASS	DIR	COND'N	MANOEUVRE	VEHICLE TYPE	FIRST EVENT	PED

(Note: Time of Day = "00:00" represents unknown collision time Wednesday, March 07, 2018

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### FROM: 2012-01-01 TO: 2014-01-01

31	2012-09-13 Thu 15:15 Clear	Daylight Rear end	Non-fatal V1 E Dr V2 E Dr	· · · · · · · · · · · · · · · · · · ·	Pick-up truck Automobile, station	Other motor vehicle Other motor vehicle	0
32	2012-10-26 Fri 16:56 Clear	Dusk Turning	P.D. only V1 W Dr V2 E Dr	, , , , , , , , , , , , , , , , , , , ,	Pick-up truck Automobile, station	Other motor vehicle Other motor vehicle	0
33	2013-02-05 Tue 17:45 Clear	Dark Rear end	P.D. only V1 E W V2 E W	et Going ahead et Turning right	Automobile, station Automobile, station	Other motor vehicle Other motor vehicle	0
34	2013-11-10 Sun 12:10 Clear	Daylight Angle	- /	et Turning right et Going ahead	Police vehicle Automobile, station	Other motor vehicle Other motor vehicle	0
35	2013-12-17 Tue 19:49 Snow	Dark Approaching		bose snow Going ahead Going ahead	Pick-up truck Automobile, station	Other motor vehicle Other motor vehicle	0

#### MONTREAL RD, PALACE ST to VANIER PKWY

Forme	er Municipality: Vanier	Traffic Control: No control		Numb	er of Collisions: 15	;		
	DATE DAY TIME ENV	IMPACT LIGHT TYPE CLASS	DIR	SURFACE COND'N	VEHICLE MANOEUVRE	VEHICLE TYPE	FIRST EVENT	No. PED
36	2012-01-11 We 08:41 Clear	Daylight Sideswipe P.D. on	y V1 W V2 W	Dry Dry	Unknown Stopped	Truck and trailer Municipal transit bus	Other motor vehicle Other motor vehicle	0
37	2012-01-16 Mo 11:40 Clear	Daylight Turning P.D. on	y V1 E V2 E	Packed snow Packed snow	Turning right Going ahead	Pick-up truck Passenger van	Other motor vehicle Other motor vehicle	0
38	2012-01-22 Sun 12:49 Clear	Daylight Angle P.D. on	V1 N V2 E	Wet Wet	Slowing or Going ahead	Pick-up truck Passenger van	Other motor vehicle Other motor vehicle	0
39	2012-03-31 Sat 10:34 Clear	Daylight Turning P.D. on	y V1 W V2 E	Dry Dry	Turning left Going ahead	Automobile, station Pick-up truck	Other motor vehicle Other motor vehicle	0
40	2012-05-09 We 17:35 Clear	Daylight Turning P.D. on	y V1 W V2 E	Dry Dry	Turning left Going ahead	Automobile, station Automobile, station	Other motor vehicle Other motor vehicle	0
41	2012-05-22 Tue 11:50 Clear	Daylight Turning P.D. on	y V1 W V2 E	Wet Wet	Turning left Going ahead	Automobile, station Automobile, station	Other motor vehicle Other motor vehicle	0
42	2012-07-11 We 07:39 Clear	Daylight Other P.D. on	y V1 N V2 E	Dry Dry	Reversing Stopped	Pick-up truck Automobile, station	Other motor vehicle Other motor vehicle	0

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### FROM: 2012-01-01 TO: 2014-01-01

	1 0 7							
43	2012-07-12 Thu 13:44 Clear	Daylight Turning	P.D. only V1 V2		Turning left Going ahead	Automobile, station Automobile, station	Other motor vehicle Other motor vehicle	0
44	2012-08-23 Thu 12:30 Clear	Daylight Turning	P.D. only V1 V2		Turning left Going ahead	Pick-up truck Passenger van	Other motor vehicle Other motor vehicle	0
45	2012-09-13 Thu 16:03 Clear	Daylight Turning	P.D. only V1 V2		Turning left Going ahead	Automobile, station Automobile, station	Other motor vehicle Other motor vehicle	0
46	2012-12-04 Tue 16:52 Rain	Dark Sideswipe	Non V1	,	Unknown	Passenger van	Other motor vehicle	0
47	2013-01-06 Sun 05:28 Snow	Dark Single vehicle	V2 P.D. only V1	,	Changing lanes Going ahead	Municipal transit bus Automobile, station	Other motor vehicle Unattended vehicle	0
48	2013-01-31 Thu 17:46 Clear	Dark Rear end	P.D. only V1 V2	W Dry	Slowing or Stopped	Pick-up truck Automobile, station	Other motor vehicle Other motor vehicle	0
49	2013-09-10 Tue 09:27 Rain	Daylight Turning	V3 P.D. only V1 V2	E Wet	Slowing or Turning left Going ahead	Police vehicle Automobile, station Pick-up truck	Other motor vehicle Other motor vehicle Other motor vehicle	0
50	2013-10-04 Fri 11:30 Clear	Daylight Turning	P.D. only V1 V2		Turning left Going ahead	Unknown Automobile, station	Other motor vehicle Other motor vehicle	0
-	AL RD & VANIER PKWY							
Former Mu	nicipality: Vanier	Traffic Control: Traffic	signal	Numb	er of Collisions: 27			
	DATE DAY TIME ENV	IMPACT LIGHT TYPE	CLASS DIR	SURFACE R COND'N	VEHICLE MANOEUVRE	VEHICLE TYPE	FIRST EVENT	No. PED
51	2012-01-12 Thu 10:10 Snow	Daylight Sideswipe	Non V1 V2		Changing lanes Stopped	Pick-up truck Police vehicle	Other motor vehicle Other motor vehicle	0
52	2012-02-04 Sat 21:08 Clear	Dark Single vehicle	Non-fatal V1	W Dry	Turning left	Automobile, station	Pedestrian	1
53	2012-03-19 Mo 11:33 Clear	Daylight Rear end	P.D. only V1 V2		Going ahead Slowing or	Pick-up truck Automobile, station	Other motor vehicle Other motor vehicle	0
54	2012-03-24 Sat 09:45 Clear	Daylight Rear end	P.D. only V1 V2	,	Turning right Turning right	Automobile, station Automobile, station	Other motor vehicle Other motor vehicle	0

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#### FROM: 2012-01-01 TO:2014-01-01

55	2012-04-10 Tue 7	15:19 Clear	Daylight	Sideswipe	P.D. only	V1 E V2 E	Dry Dry	Overtaking Going ahead	Delivery van Automobile, station	Other motor vehicle Other motor vehicle	0
56	2012-05-18 Fri 🥤	15:29 Clear	Daylight	Rear end	P.D. only	V1 N V2 N	Dry Dry	Going ahead Going ahead	Pick-up truck Automobile, station	Other motor vehicle Other motor vehicle	0
57	2012-05-23 We (	08:30 Clear	Daylight	Rear end	P.D. only		Dry Dry Dry	Slowing or Stopped	Automobile, station Automobile, station	Other motor vehicle Other motor vehicle	0
58	2012-06-23 Sat 2	23:42 Clear	Dark	Rear end	P.D. only	V1 W V2 W V3 W	Dry Dry Dry	Going ahead Stopped Stopped	Automobile, station Automobile, station Pick-up truck	Other motor vehicle Other motor vehicle Other motor vehicle	0
59	2012-07-11 We	10:30 Clear	Daylight	Sideswipe	P.D. only		Dry Dry	Turning right	Automobile, station Automobile, station	Other motor vehicle Other motor vehicle	0
60	2012-08-23 Thu 7	14:55 Clear	Daylight	Rear end	P.D. only	V1 S V2 S	Dry Dry	Going ahead Stopped	Delivery van Automobile, station	Other motor vehicle Other motor vehicle	0
61	2012-10-12 Fri (	09:23 Clear	Daylight <sup>·</sup>	Turning	Non-fatal		Dry Dry Dry	Turning right Going ahead	Automobile, station Municipal transit bus	Other motor vehicle Other motor vehicle	0
62	2012-11-14 We	18:22 Clear	Dark	Turning	P.D. only	V1 W V2 E	Dry Dry	Turning left Going ahead	Automobile, station Passenger van	Other motor vehicle Other motor vehicle	0
63	2012-11-24 Sat 2	23:00 Clear	Dark	Turning	P.D. only	V1 E V2 W	Dry Dry	Turning left Going ahead	Pick-up truck Automobile, station	Other motor vehicle Other motor vehicle	0
64	2012-12-25 Tue 2	22:45 Clear	Dark	Sideswipe	P.D. only	V1 W V2 W	lce Packed snow	Slowing or Slowing or	Pick-up truck Automobile, station	Other motor vehicle Skidding/Sliding	0
65	2013-05-02 Thu 2	22:24 Clear	Dark	Turning	P.D. only		Dry Dry	Going ahead Turning left	Automobile, station Automobile, station	Other motor vehicle Other motor vehicle	0
66	2013-06-27 Thu 7	16:54 Clear	Daylight <sup>·</sup>	Turning	P.D. only	V1 W V2 E	Dry Dry	Turning left Going ahead	Automobile, station Motorcycle	Other motor vehicle Other motor vehicle	0
67	2013-07-19 Fri	15:34 Rain	Daylight	Rear end	P.D. only	V1 N V2 N	Wet Wet	Changing lanes Stopped	Automobile, station Pick-up truck	Other motor vehicle Other motor vehicle	0
68	2013-07-25 Thu '	16:30 Clear	Daylight	Rear end	Non-fatal	V1 S V2 S	Dry Dry	Turning left Turning left	Pick-up truck Automobile, station	Other motor vehicle Other motor vehicle	0

(Note: Time of Day = "00:00" represents unknown collision time Wednesday, March 07, 2018

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### FROM: 2012-01-01 TO: 2014-01-01

692013-08-15 Thu 09:05 ClearDaylight Rear endP.D. onlyV1 N V2 NDry DryTurning right Turning right Automobile, station Automobile, station Automobile, station702013-09-19 Thu 18:51 ClearDaylight TurningNon-fatalV1 E V2 WDry DryTurning left Going aheadAutomobile, station Motorcycle712013-09-26 Thu 16:15 ClearDaylight Rear endP.D. onlyV1 E V2 E V3 EDry DrySlowing or StoppedAutomobile, station Automobile, station722013-10-28 Mo 20:05 Clear 2013-11-17 Sun 10:00 Rain Daylight SideswipeP.D. onlyV1 N V1 E V1 EDry WetOvertaking Changing lanes Automobile, station Automobile, station Automobile, station	Other motor vehicle Other motor vehicle Other motor vehicle Other motor vehicle Other motor vehicle Other motor vehicle Other motor vehicle	0 0 0
V2       W       Dry       Going ahead       Motorcycle         71       2013-09-26 Thu 16:15 Clear       Daylight Rear end       P.D. only       V1 E       Dry       Slowing or Stopped       Automobile, station Automobile, station Automobile, station         72       2013-10-28 Mo       20:05 Clear       Dark       Sideswipe       P.D. only       V1 N       Dry V3 E       Overtaking Going ahead       Unknown Automobile, station	Other motor vehicle Other motor vehicle Other motor vehicle Other motor vehicle	
V2 E Dry Stopped Automobile, station V3 E Dry Stopped Automobile, station 72 2013-10-28 Mo 20:05 Clear Dark Sideswipe P.D. only V1 N Dry Overtaking Unknown V2 N Dry Going ahead Automobile, station	Other motor vehicle Other motor vehicle Other motor vehicle	0
V2 N Dry Going ahead Automobile, station		
	Other motor vehicle	0
V2 E Wet Turning left Automobile, station	Other motor vehicle Other motor vehicle	0
74 2013-12-08 Sun 10:09 Clear Daylight Rear end P.D. only V1 N Dry Going ahead Pick-up truck V2 N Dry Stopped Pick-up truck	Other motor vehicle Other motor vehicle	0
75 2013-12-11 We 07:00 Clear Dawn Rear end P.D. only V1 S Dry Going ahead Passenger van V2 S Dry Slowing or Automobile, station	Other motor vehicle Other motor vehicle	0
76 2013-12-16 Mo 10:00 Clear Daylight Rear end P.D. only V1 S Loose snow Slowing or Passenger van V2 S Loose snow Stopped Pick-up truck	Other motor vehicle Other motor vehicle	0
77 2013-12-30 Mo 19:15 Clear Dark Rear end P.D. only V1 S Wet Turning right Automobile, station	Other motor vehicle Other motor vehicle	0
V2 S Wet Turning right Pick-up truck		
NORTH RIVER RD & WAYLING AVE		
NORTH RIVER RD & WAYLING AVE	FIRST EVENT	No. PED
NORTH RIVER RD & WAYLING AVE       Traffic Control: Stop sign       Number of Collisions: 1         Former Municipality: Vanier       Traffic Control: Stop sign       Number of Collisions: 1         IMPACT       SURFACE       VEHICLE		
NORTH RIVER RD & WAYLING AVE         Former Municipality: Vanier       Traffic Control: Stop sign       Number of Collisions: 1         NUMBER of Collisions: 1         DATE       DAY TIME ENV       LIGHT       TYPE       CLASS       DIR       SURFACE       VEHICLE         78       2012-04-11 We 16:09 Clear       Daylight Angle       P.D. only       V1 W       Dry       Turning left       Automobile, station         78       2012-04-11 We 16:09 Clear       Daylight Angle       P.D. only       V1 W       Dry       Turning left       Automobile, station	FIRST EVENT Other motor vehicle	PED
NORTH RIVER RD & WAYLING AVE         Former Municipality: Vanier       Traffic Control:       Stop sign       Number of Collisions:       1         DATE       DAY TIME ENV       LIGHT       TYPE       CLASS       DIR       COND'N       MANOEUVRE       VEHICLE TYPE         78       2012-04-11       We 16:09       Clear       Daylight Angle       P.D. only       V1       W       Dry       Turning left       Automobile, station	FIRST EVENT Other motor vehicle	PED
NORTH RIVER RD & WAYLING AVE         Former Municipality: Vanier       Traffic Control:       Stop sign       Number of Collisions:       1         DATE       DAY       TIME       ENV       LIGHT       TYPE       CLASS       DIR       SURFACE       VEHICLE         78       2012-04-11       We       16:09       Clear       Daylight       Angle       P.D. only       V1       W       Dry       Turning left       Automobile, station         RIDEAU ST, MONTREAL RD to RIDEAU PL         Former Municipality:       Ottawa       Traffic Control:       No control       Number of Collisions:       1	FIRST EVENT Other motor vehicle	<b>PED</b> 0
NORTH RIVER RD & WAYLING AVE         Former Municipality: Vanier       Traffic Control: Stop sign       Number of Collisions: 1         Number of Collisions: 1         DATE DAY TIME ENV       LIGHT       TYPE       CLASS       DIR       SURFACE       VEHICLE         78       2012-04-11       We 16:09       Clear       Daylight Angle       P.D. only       V1       W       Dry       Turning left Going ahead       Automobile, station School bus         RIDEAU ST, MONTREAL RD to RIDEAU PL	FIRST EVENT Other motor vehicle	PED

(Note: Time of Day = "00:00" represents unknown collision time Wednesday, March 07, 2018

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### RIDEAU ST, RIDEAU PL to WURTEMBURG ST

Former Munici	pality: Ottawa	Traffic Control: No con	trol	Numbe	er of Collisions: 6			
	DATE DAY TIME EN	IMPACT V LIGHT TYPE	CLASS DIR	SURFACE COND'N	VEHICLE MANOEUVRE	VEHICLE TYPE	FIRST EVENT	No. PED
80	2012-03-04 Sun 20:00 Clea	r Dark Sideswipe	P.D. only V1 W V2 W	Dry Dry	Changing lanes Going ahead	Automobile, station Automobile, station	Other motor vehicle Other motor vehicle	0
81	2012-03-17 Sat 22:22 Clea	r Dark Single vehicle		Dry	Going ahead	Automobile, station	Ran off road	0
82	2013-01-16 We 03:13 Clea	r Dark Single vehicle	P.D. only V1 W	Dry	Going ahead	Pick-up truck	Pole (utility, tower)	0
83	2013-01-26 Sat 01:10 Clea	r Dark Rear end	P.D. only V1 W V2 W	Dry Dry	Going ahead Going ahead	Automobile, station Automobile, station	Other motor vehicle Other motor vehicle	0
84	2013-02-09 Sat 16:04 Clea	r Daylight Approaching	Non-fatal V1 E V2 W	Slush Slush	Going ahead Going ahead	Automobile, station Automobile, station	Other motor vehicle Other motor vehicle	0
85	2013-09-26 Thu 16:50 Clea	r Daylight Rear end	P.D. only V1 W V2 W	Dry Unknown	Changing lanes Going ahead	Automobile, station Truck - dump	Other motor vehicle Other motor vehicle	0
RIDEAU ST	& WURTEMBURG ST							

Former Municip	ality: Ottaw	а			Traffic Co	ntrol: Traffic s	signal			Numbe	r of Collisions: 6			
	DATE	DAY	TIME	ENV	LIGHT	IMPACT TYPE	CLASS	DIR	L	SURFACE COND'N	VEHICLE MANOEUVRE	VEHICLE TYPE	FIRST EVENT	No. PED
86	2012-07-2	0 Fri	20:55	Clear	Dusk	Single vehicle	Non-fatal	V1	E	Dry	Going ahead	Automobile, station	Pedestrian	1
87	2012-12-2	8 Fri	12:27	Snow	Daylight	Rear end	P.D. only	V1 V2		Wet Slush	Slowing or Stopped	Automobile, station Automobile, station	Other motor vehicle Other motor vehicle	0
88	2013-08-1	5 Thu	11:47	Clear	Daylight	Single vehicle	Non-fatal	V1	S	Dry	Turning left	Automobile, station	Pedestrian	1
89	2013-09-2	6 Thu	08:40	Clear	Daylight	Sideswipe	P.D. only	V1 V2		Dry Unknown	Changing lanes Going ahead	Truck - dump Automobile, station	Other motor vehicle Other motor vehicle	0
90	2013-11-0	5 Tue	13:51	Clear	Daylight	Rear end	Non-fatal	V1 V2		Dry Dry	Slowing or Stopped	Automobile, station Automobile, station	Other motor vehicle Other motor vehicle	0

OnTRAC Reporting System

### FROM: 2012-01-01 TO: 2014-01-01

91	2013-12-13 Fri 12:45 Clear	Daylight Angle	P.D. only V1 E V2 S	Dry Dry	Going ahead Turning left	Automobile, station Automobile, station	Other motor vehicle Other motor vehicle	0
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Traffic Control: Tra	ffic signal						Total C	Traffic Control:       Traffic signal         Traffic Control:       Total Collisions:       8												
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuve	er Vehicle type	First Event	No. Ped											
2014-Jan-28, Tue,18:33	Clear	SMV other	Non-fatal injury	Dry	West	Turning left	Automobile, station wagon	Pedestrian	1											
2014-Apr-17, Thu,12:04	Clear	SMV other	Non-fatal injury	Dry	West	Going ahead	Automobile, station wagon	Pedestrian	1											
2015-Jan-10, Sat,11:05	Clear	Rear end	P.D. only	Slush	West	Slowing or stoppin	g Pick-up truck	Other motor vehicle												
					West	Stopped	Automobile, station wagon	Other motor vehicle												
2015-Feb-17, Tue,16:56	Clear	Turning movement	P.D. only	Wet	West	Turning left	Pick-up truck	Other motor vehicle												
					East	Going ahead	Automobile, station wagon	Other motor vehicle												
2015-Aug-19, Wed,15:37	Clear	Angle	P.D. only	Dry	North	Turning left	Automobile, station wagon	Other motor vehicle												
					West	Turning left	Automobile, station wagon	Other motor vehicle												
2015-Dec-23, Wed,17:41	Rain	SMV other	Non-fatal injury	Wet	West	Turning left	Automobile, station wagon	Pedestrian	1											
2016-May-18, Wed,12:41	Clear	Rear end	P.D. only	Dry	West	Going ahead	Automobile, station wagon	Other motor vehicle												

				West	Going ahead	Pick-up truck	Other motor vehicle
2016-Jun-01, Wed,16:00 Clear	Sideswipe	P.D. only	Dry	East	Changing lanes	Pick-up truck	Other motor vehicle
				East	Going ahead	Automobile, station wagon	Other motor vehicle



Traffic Control: Tra	ffic signal						Total Co	ollisions: 19	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuve	er Vehicle type	First Event	No. Ped
2014-Aug-05, Tue,15:04	Clear	Rear end	Non-fatal injury	Dry	West	Slowing or stoppin	ng Passenger van	Other motor vehicle	
					West	Going ahead	Automobile, station wagon	Other motor vehicle	
2014-Oct-29, Wed,18:24	Clear	Rear end	P.D. only	Dry	East	Going ahead	Automobile, station wagon	Other motor vehicle	
					East	Stopped	Pick-up truck	Other motor vehicle	
					East	Stopped	Automobile, station wagon	Other motor vehicle	
					East	Stopped	Automobile, station wagon	Other motor vehicle	
					East	Stopped	Automobile, station wagon	Other motor vehicle	
					East	Stopped	Automobile, station wagon	Other motor vehicle	
2014-Nov-03, Mon,11:52	Clear	Angle	P.D. only	Dry	West	Going ahead	Automobile, station wagon	Other motor vehicle	
					South	Going ahead	Automobile, station wagon	Other motor vehicle	
2014-Nov-17, Mon,17:50	Rain	Rear end	P.D. only	Slush	North	Turning left	Automobile, station wagon	Other motor vehicle	
					North	Turning left	Automobile, station wagon	Other motor vehicle	

2015-Apr-04, Sat,19:54	Clear	Turning movement	Non-fatal injury	Dry	South	Turning left	Automobile, station wagon	Other motor vehicle
					North	Going ahead	Automobile, station wagon	Other motor vehicle
2015-Jul-20, Mon,11:40	Clear	Sideswipe	P.D. only	Dry	East	Going ahead	Truck - closed	Other motor vehicle
					East	Going ahead	Automobile, station wagon	Other motor vehicle
2015-Aug-23, Sun,05:20	Clear	SMV other	P.D. only	Dry	East	Going ahead	Automobile, station wagon	Curb
2015-Sep-19, Sat,18:03	Clear	Turning movement	P.D. only	Dry	East	Turning right	Delivery van	Other motor vehicle
					East	Going ahead	Pick-up truck	Other motor vehicle
2016-Feb-27, Sat,23:21	Clear	Angle	Non-fatal injury	Wet	West	Going ahead	Pick-up truck	Other motor vehicle
					North	Turning left	Automobile, station wagon	Other motor vehicle
2016-Mar-11, Fri,21:33	Clear	Rear end	P.D. only	Dry	East	Going ahead	Automobile, station wagon	Other motor vehicle
					East	Stopped	Pick-up truck	Other motor vehicle
2016-Apr-06, Wed,18:58	Snow	Rear end	Non-fatal injury	Packed snow	East	Going ahead	Passenger van	Other motor vehicle
					East	Stopped	Automobile, station wagon	Other motor vehicle
					East	Stopped	Automobile, station wagon	Other motor vehicle
					East	Going ahead	Automobile, station wagon	Other motor vehicle

2016-Apr-06, Wed, 19:20	Snow	Rear end	P.D. only	Loose snow	East	Slowing or stopping	Automobile, station wagon	Other motor vehicle	
					East		Pick-up truck	Other motor vehicle	
2016-Apr-19, Tue,06:13	Clear	Sideswipe	P.D. only	Dry	East		Construction equipment	Other motor vehicle	
					East	Slowing or stopping	Pick-up truck	Other motor vehicle	
2016-May-20, Fri,00:55	Clear	SMV other	P.D. only	Dry	East		Automobile, station wagon	Pole (utility, power)	
2016-Aug-01, Mon,04:33	Clear	Approaching	P.D. only	Dry	West	Going ahead	Pick-up truck	Other motor vehicle	
					East		Automobile, station wagon	Other motor vehicle	
2016-Oct-14, Fri,21:54	Clear	Rear end	P.D. only	Dry	East		Automobile, station wagon	Other motor vehicle	
					East	•	Automobile, station wagon	Other motor vehicle	
2016-Oct-19, Wed,10:53	Clear	SMV other	Non-fatal injury	Dry	South	Turning right	Unknown	Pedestrian	1
2016-Nov-20, Sun,15:00	Snow	Rear end	P.D. only	Loose snow	East	Slowing or stopping	Automobile, station wagon	Other motor vehicle	
					East	Slowing or stopping	Automobile, station wagon	Other motor vehicle	
2016-Dec-19, Mon,17:49	Clear	Angle	P.D. only	Wet	East		Automobile, station wagon	Other motor vehicle	
					North		Automobile, station wagon	Other motor vehicle	



Location: MONTE	REAL RD @ P	ALACE ST								
Traffic Control: No control     Total Collisions: 9										
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuve	er Vehicle type	First Event	No. Ped	
2014-Jan-09, Thu,15:15	Clear	Rear end	P.D. only	Slush	East	Slowing or stoppir	ig Pick-up truck	Other motor vehicle		
					East	Stopped	Automobile, station wagon	Other motor vehicle		
2014-May-20, Tue,17:53	Clear	Turning movement	Non-fatal injury	Dry	West	Turning left	Automobile, station wagon	Other motor vehicle		
					East	Going ahead	Automobile, station wagon	Other motor vehicle		
2014-Nov-11, Tue,12:18	Clear	Turning movement	Non-fatal injury	Dry	West	Turning left	Automobile, station wagon	Cyclist		
					East	Going ahead	Bicycle	Other motor vehicle		
2015-Sep-18, Fri,16:45	Clear	Turning movement	P.D. only	Dry	West	Turning left	Automobile, station wagon	Other motor vehicle		
					East	Going ahead	Automobile, station wagon	Other motor vehicle		
2015-Oct-15, Thu,16:31	Clear	Turning movement	P.D. only	Dry	West	Turning left	Pick-up truck	Other motor vehicle		
					East	Going ahead	Automobile, station wagon	Other motor vehicle		
2015-Nov-30, Mon,18:51	Clear	Rear end	P.D. only	Dry	West	Going ahead	Automobile, station wagon	Other motor vehicle		

					West	Turning left	Automobile, station wagon	Other motor vehicle
2016-May-17, Tue,16:45	Clear	Turning movement	P.D. only	Dry	West	Turning left	Automobile, station wagon	Other motor vehicle
					East	Going ahead	Automobile, station wagon	Other motor vehicle
2016-May-25, Wed,07:00	Clear	Turning movement	Non-fatal injury	Dry	West	Turning left	Pick-up truck	Other motor vehicle
					East	Going ahead	Automobile, station wagon	Other motor vehicle
2016-Jul-14, Thu,17:15	Clear	Turning movement	P.D. only	Dry	West	Turning left	Automobile, station wagon	Other motor vehicle
					East	Going ahead	Automobile, station wagon	Other motor vehicle



Location: MONTE	REAL RD @ V	ANIER PKWY							
Traffic Control: Tra	ffic signal						Total Co	ollisions: 79	)
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
2014-Jan-17, Fri,20:40	Clear	Turning movement	P.D. only	Wet	East	Turning right	Delivery van	Other motor vehicle	
					East	Going ahead	Municipal transit bus	Other motor vehicle	
2014-Feb-06, Thu,14:12	Clear	Angle	P.D. only	Dry	North	Turning right	Pick-up truck	Other motor vehicle	
					East	Going ahead	Municipal transit bus	Other motor vehicle	
2014-Feb-25, Tue,07:23	Clear	Rear end	P.D. only	Dry	North	Going ahead	Automobile, station wagon	Other motor vehicle	
					North	Slowing or stopping	Automobile, station wagon	Other motor vehicle	
2014-Feb-26, Wed,08:33	Clear	Rear end	P.D. only	Dry	North	Changing lanes	Pick-up truck	Other motor vehicle	
					North	Slowing or stopping	Pick-up truck	Other motor vehicle	
2014-Mar-28, Fri,15:20	Clear	Rear end	P.D. only	Dry	South	Going ahead	Pick-up truck	Other motor vehicle	
					South	Stopped	Automobile, station wagon	Other motor vehicle	
2014-Apr-05, Sat,11:35	Clear	Rear end	P.D. only	Dry	East	Going ahead	Pick-up truck	Other motor vehicle	

					East	Turning right	Automobile, station wagon	Other motor vehicle
2014-May-12, Mon,14:45	Clear	Sideswipe	P.D. only	Dry	East	Changing lanes	Automobile, station wagon	Other motor vehicle
					East	Going ahead	Automobile, station wagon	Other motor vehicle
2014-Jun-05, Thu,08:47	Clear	Rear end	P.D. only	Dry	South	Turning right	Automobile, station wagon	Other motor vehicle
					South	Turning right	Pick-up truck	Other motor vehicle
2014-Jun-21, Sat,19:15	Clear	Rear end	P.D. only	Dry	East	Turning right	Pick-up truck	Other motor vehicle
					East	Turning right	Passenger van	Other motor vehicle
2014-Jun-24, Tue,15:00	Rain	Sideswipe	P.D. only	Wet	North	Changing lanes	Automobile, station wagon	Other motor vehicle
					North	Stopped	Automobile, station wagon	Other motor vehicle
2014-Jul-06, Sun,21:40	Clear	Turning movement	Non-fatal injury	Dry	West	Turning left	Automobile, station wagon	Cyclist
					East	Going ahead	Bicycle	Other motor vehicle
2014-Aug-19, Tue,00:56	Clear	Turning movement	P.D. only	Dry	North	Going ahead	Automobile, station wagon	Other motor vehicle
					South	Turning left	Pick-up truck	Other motor vehicle
2014-Aug-24, Sun,14:00	Clear	Angle	P.D. only	Dry	North	Turning right	Automobile, station wagon	Other motor vehicle

					East		Municipal transit bus	Other motor vehicle
2014-Sep-02, Tue,20:35	Rain	Rear end	Non-fatal injury	Wet	North	Slowing or stopping	Pick-up truck	Other motor vehicle
					North	Slowing or stopping	Automobile, station wagon	Other motor vehicle
2014-Sep-08, Mon,08:30	Clear	Rear end	Non-fatal injury	Dry	North		Automobile, station wagon	Other motor vehicle
					North		Automobile, station wagon	Other motor vehicle
					North		Automobile, station wagon	Other motor vehicle
2014-Sep-17, Wed,12:13	Clear	Rear end	Non-fatal injury	Dry	East	Slowing or stopping	Automobile, station wagon	Other motor vehicle
					East	Stopped	Pick-up truck	Other motor vehicle
2014-Oct-04, Sat,08:10	Rain	Sideswipe	P.D. only	Wet	East		Automobile, station wagon	Other motor vehicle
					East	v	Automobile, station wagon	Other motor vehicle
2014-Oct-17, Fri,11:27	Clear	Sideswipe	P.D. only	Dry	West	Changing lanes	Pick-up truck	Other motor vehicle
					West	Going ahead	Pick-up truck	Other motor vehicle
2014-Oct-18, Sat,10:41	Clear	Sideswipe	P.D. only	Dry	North		Automobile, station wagon	Other motor vehicle
					North		Automobile, station wagon	Other motor vehicle

2014-Nov-08, Sat,00:05	Clear	Turning movement	Non-fatal injury	Dry	West		Automobile, station wagon	Other motor vehicle
					East		Automobile, station wagon	Other motor vehicle
2014-Nov-11, Tue,20:00	Clear	Sideswipe	P.D. only	Dry	East		Automobile, station wagon	Other motor vehicle
					East		Automobile, station wagon	Other motor vehicle
2014-Nov-12, Wed,09:08	Clear	Rear end	P.D. only	Wet	South	Slowing or stopping	Automobile, station wagon	Other motor vehicle
					South	Slowing or stopping	Pick-up truck	Other motor vehicle
2014-Nov-24, Mon,14:54	Clear	Other	Non-fatal injury	Dry	South	Reversing	Unknown	Other motor vehicle
					North	Turning left	Passenger van	Other motor vehicle
2014-Nov-28, Fri,12:02	Clear	Rear end	P.D. only	Dry	North	Unknown	Pick-up truck	Other motor vehicle
					North	Unknown	Pick-up truck	Other motor vehicle
2014-Dec-21, Sun,19:31	Clear	Turning movement	P.D. only	Dry	East		Automobile, station wagon	Other motor vehicle
					West		Automobile, station wagon	Other motor vehicle
2014-Dec-27, Sat,03:15	Clear	Rear end	Non-fatal injury	Wet	South	Turning left	Pick-up truck	Other motor vehicle
					South	Turning left	Pick-up truck	Other motor vehicle

2015-Jan-05, Mon,19:29	Clear	Sideswipe	P.D. only	Dry	East	Changing lanes	Pick-up truck	Other motor vehicle
					East	Going ahead	Automobile, station wagon	Other motor vehicle
2015-Jan-08, Thu,13:30	Clear	Angle	P.D. only	Packed snow	North	Slowing or stopping	Automobile, station wagon	Other motor vehicle
					West	Going ahead	Automobile, station wagon	Other motor vehicle
2015-Jan-08, Thu,19:40	Snow	Rear end	P.D. only	Loose snow	North	Slowing or stopping	Passenger van	Other motor vehicle
					North	Stopped	Pick-up truck	Other motor vehicle
2015-Jan-14, Wed,07:40	Clear	Rear end	P.D. only	Ice	South	Slowing or stopping	Pick-up truck	Skidding/sliding
					South	Slowing or stopping	Automobile, station wagon	Skidding/sliding
2015-Jan-22, Thu,08:20	Clear	Turning movement	P.D. only	Dry	East	Turning right	Pick-up truck	Other motor vehicle
					East	Going ahead	Passenger van	Other motor vehicle
2015-Feb-14, Sat,16:45	Snow	Rear end	P.D. only	Slush	West	Turning left	Automobile, station wagon	Other motor vehicle
					West	Turning left	Automobile, station wagon	Other motor vehicle
2015-Mar-21, Sat,14:07	Snow	Rear end	P.D. only	Wet	North	Turning left	Automobile, station wagon	Other motor vehicle
					North	Turning left	Pick-up truck	Other motor vehicle
2015-Mar-24, Tue,15:46	Clear	SMV other	P.D. only	Dry	East	Going ahead	Passenger van	Ran off road

2015-Apr-10, Fri,00:08	Rain	Rear end	P.D. only	Wet	East East	Slowing or stopping Stopped	Pick-up truck Pick-up truck	Other motor vehicle Other motor	
								vehicle	
2015-Apr-19, Sun,00:00	Clear	SMV other	Non-fatal injury	Dry	West	Turning left	Pick-up truck	Pedestrian	1
2015-Apr-21, Tue,08:35	Rain	Rear end	P.D. only	Wet	North	Slowing or stopping	Automobile, station wagon	Other motor vehicle	
					North	Stopped	Pick-up truck	Other motor vehicle	
2015-Apr-24, Fri,12:30	Clear	Rear end	P.D. only	Dry	East	Slowing or stopping	Automobile, station wagon	Other motor vehicle	
					East	Stopped	Pick-up truck	Other motor vehicle	
2015-May-22, Fri,16:15	Clear	Sideswipe	P.D. only	Dry	East	Changing lanes	Delivery van	Other motor	
,, <b>,</b> ,,				,				vehicle	
					East		Automobile, station wagon	Other motor vehicle	
2015-Jun-06, Sat,10:21	Clear	Rear end	P.D. only	Dry	South	Going ahead	Pick-up truck	Other motor vehicle	
					South	Slowing or stopping	Automobile, station wagon	Other motor vehicle	
2015-Jun-10, Wed,21:20	Rain	Angle	P.D. only	Wet	West	Turning right	Automobile,	Other motor	
							station wagon	vehicle	
					North		Municipal transit bus	Other motor vehicle	
2015-Jun-11, Thu,11:07	Clear	Sideswipe	P.D. only	Dry	North		Automobile, station wagon	Other motor vehicle	

					North	Changing lanes	Automobile, station wagon	Other motor vehicle
2015-Jul-09, Thu,21:17	Clear	Rear end	Non-fatal injury	Dry	West		Automobile, station wagon	Other motor vehicle
					West		Automobile, station wagon	Other motor vehicle
					West	Stopped	Automobile, station wagon	Other motor vehicle
					West	Stopped	Automobile, station wagon	Other motor vehicle
2015-Nov-10, Tue,07:00	Fog, mist, smoke, dust	, Rear end	P.D. only	Dry	South	Turning right	Pick-up truck	Other motor vehicle
					South	Turning right	Automobile, station wagon	Other motor vehicle
2015-Dec-09, Wed,00:18	Clear	Angle	P.D. only	Dry	North		Automobile, station wagon	Other motor vehicle
_					East	Going ahead	Automobile, station wagon	Other motor vehicle
2015-Dec-28, Mon,11:24	Clear	Rear end	P.D. only	Dry	West	Turning right	Pick-up truck	Other motor vehicle
					West		Automobile, station wagon	Other motor vehicle
2016-Jan-02, Sat,08:58	Snow	Rear end	P.D. only	Loose snow	North	Going ahead	Pick-up truck	Other motor vehicle
					North	Stopped	Automobile, station wagon	Other motor vehicle
					North	Slowing or stopping	Automobile, station wagon	Other motor vehicle
2016-Jan-04, Mon,07:25	Clear	Rear end	P.D. only	Dry	East	Going ahead	Automobile, station wagon	Other motor vehicle

					East	Slowing or stopping	Automobile, station wagon	Other motor vehicle
2016-Jan-14, Thu,17:19	Clear	Sideswipe	P.D. only	Wet	East	Going ahead	Construction equipment	Other motor vehicle
					East	Turning left	Pick-up truck	Other motor vehicle
2016-Jan-27, Wed,23:43	Clear	Turning movement	Non-fatal injury	Dry	North	Going ahead	Pick-up truck	Other motor vehicle
					South	Turning left	Pick-up truck	Other motor vehicle
2016-Feb-05, Fri,09:59	Clear	Sideswipe	P.D. only	Dry	South	Changing lanes	Pick-up truck	Other motor vehicle
					South		Automobile, station wagon	Other motor vehicle
					South	Stopped	Automobile, station wagon	Other motor vehicle
2016-Feb-17, Wed,20:56	Clear	Rear end	P.D. only	lce	North	Slowing or stopping	Automobile, station wagon	Other motor vehicle
_					North	Stopped	Automobile, station wagon	Other motor vehicle
2016-Feb-17, Wed,22:23	Clear	Other	P.D. only	lce	North	Turning right	Delivery van	Other motor vehicle
					North	Turning right	Automobile, station wagon	Other motor vehicle
2016-Feb-22, Mon,12:15	Clear	Angle	P.D. only	Dry	North	Turning left	Automobile, station wagon	Other motor vehicle
					West	Going ahead	Automobile, station wagon	Other motor vehicle

2016-Mar-24, Thu,18:51	Clear	Turning movement	P.D. only	Slush	North	Turning left	Unknown	Other motor vehicle	
					South	Going ahead	Automobile, station wagon	Other motor vehicle	
2016-Apr-02, Sat,10:00	Clear	Sideswipe	P.D. only	Dry	West	Changing lanes	Delivery van	Other motor vehicle	
					West	Going ahead	Automobile, station wagon	Other motor vehicle	
2016-Apr-08, Fri,03:00	Clear	Other	P.D. only	Wet	West	Reversing	Snow plow	Other motor vehicle	
					East	Stopped	Automobile, station wagon	Other motor vehicle	
2016-Apr-15, Fri,15:34	Clear	SMV other	Non-fatal injury	Dry	East	Turning left	Automobile, station wagon	Pedestrian	1
2016-Apr-23, Sat,20:43	Clear	Turning movement	P.D. only	Dry	West	Turning left	Automobile, station wagon	Other motor vehicle	
					East	Going ahead	Automobile, station wagon	Other motor vehicle	
2016-Apr-25, Mon,11:10	Clear	SMV other	Non-fatal injury	Dry	North	Turning left	Police vehicle	Pedestrian	1
2016-Apr-25, Mon,21:01	Clear	Turning movement	P.D. only	Dry	East	Turning left	Automobile, station wagon	Other motor vehicle	
					West	Going ahead	Automobile, station wagon	Other motor vehicle	
2016-May-30, Mon,13:27	Clear	Angle	P.D. only	Dry	South	Going ahead	Automobile, station wagon	Other motor vehicle	
					West	Turning left	Passenger van	Other motor vehicle	

2016-Jun-11, Sat,23:58	Clear	Turning movement	Non-fatal injury	Dry	South	Turning left	Automobile, station wagon	Other motor vehicle
					North	Going ahead	Automobile, station wagon	Other motor vehicle
2016-Jun-15, Wed,19:43	Clear	Sideswipe	P.D. only	Dry	East	Changing lanes	Automobile, station wagon	Other motor vehicle
					East	Going ahead	Automobile, station wagon	Other motor vehicle
2016-Jul-18, Mon,12:12	Clear	Rear end	P.D. only	Dry	South	Going ahead	Automobile, station wagon	Other motor vehicle
					South	Stopped	Automobile, station wagon	Other motor vehicle
2016-Aug-02, Tue,10:35	Clear	Rear end	Non-fatal injury	Dry	West	Slowing or stopping	Passenger van	Other motor vehicle
					West	Slowing or stopping	Automobile, station wagon	Other motor vehicle
2016-Aug-18, Thu,18:30	Clear	Rear end	P.D. only	Dry	West	Turning right	Automobile, station wagon	Other motor vehicle
					West	Turning right	Automobile, station wagon	Other motor vehicle
2016-Sep-04, Sun,03:25	Clear	Rear end	P.D. only	Dry	North	Turning left	Pick-up truck	Other motor vehicle
					North	Turning left	Pick-up truck	Other motor vehicle
2016-Sep-05, Mon, 12:32	Clear	Rear end	P.D. only	Dry	North	Going ahead	Passenger van	Other motor vehicle
					North	Stopped	Automobile, station wagon	Other motor vehicle

2016-Sep-28, Wed,08:52	Clear	Rear end	P.D. only	Dry	South	Turning right	Automobile, station wagon	Other motor vehicle	
					South	Turning right	Automobile, station wagon	Other motor vehicle	
2016-Oct-25, Tue,13:40	Clear	Turning movement	P.D. only	Dry	South	Turning left	Automobile, station wagon	Other motor vehicle	
					North	Going ahead	Pick-up truck	Other motor vehicle	
2016-Nov-06, Sun,08:43	Clear	Sideswipe	Non-fatal injury	Dry	South	Changing lanes	Automobile, station wagon	Other motor vehicle	2
					South	Going ahead	Pick-up truck	Other motor vehicle	
2016-Nov-23, Wed,16:34	Clear	Rear end	P.D. only	Dry	North	Turning left	Automobile, station wagon	Other motor vehicle	
					North	Turning left	Automobile, station wagon	Other motor vehicle	
2016-Nov-26, Sat,00:17	Clear	SMV other	Non-fatal injury	Wet	West	Turning right	Automobile, station wagon	Pedestrian	1
2016-Dec-02, Fri,19:05	Clear	Angle	P.D. only	Dry	South	Unknown	Unknown	Other motor vehicle	
					East	Going ahead	Automobile, station wagon	Other motor vehicle	
2016-Dec-08, Thu,16:59	Snow	SMV other	Non-fatal injury	Wet	East	Turning right	Unknown	Pedestrian	1
2016-Dec-17, Sat,15:03	Snow	Rear end	P.D. only	Slush	North	Turning left	Automobile, station wagon	Other motor vehicle	
					North	Turning left	Automobile, station wagon	Other motor vehicle	

2016-Dec-19, Mon,16:30	Snow	Sideswipe	Non-fatal injury	Slush	North North	Changing lanes Going ahead	Pick-up truck Delivery van	Other motor vehicle Other motor vehicle	1
2016-Dec-27, Tue,22:36	Clear	Angle	P.D. only	Dry	East	Going ahead	Police vehicle	Other motor vehicle	
					North	Stopped	Pick-up truck	Other motor vehicle	



Fraffic Control: No	control					Total Collisions: 12				
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuve	r Vehicle type	First Event	No. Ped	
2014-Jun-09, Mon,09:39	Clear	SMV unattended vehicle	P.D. only	Dry	West	Going ahead	Pick-up truck	Unattended vehicle		
2014-Jul-31, Thu,22:26	Clear	SMV unattended vehicle	Non-fatal injury	Dry	West	Going ahead	Bicycle	Unattended vehicle		
2014-Nov-23, Sun,14:59	Rain	Rear end	P.D. only	Wet	East	Going ahead	Automobile, station wagon	Other motor vehicle		
					East	Going ahead	Automobile, station wagon	Other motor vehicle		
2015-Jan-07, Wed,20:28	Clear	Angle	P.D. only	Loose snow	North	Turning left	Automobile, station wagon	Other motor vehicle		
					West	Going ahead	Automobile, station wagon	Other motor vehicle		
2015-Feb-05, Thu,19:51	Clear	Turning movement	P.D. only	Slush	West	Making "U" turn	Automobile, station wagon	Other motor vehicle		
					West	Going ahead	Automobile, station wagon	Other motor vehicle		
2015-Jul-08, Wed,15:40	Clear	Turning movement	Non-fatal injury	Dry	West	Turning left	Automobile, station wagon	Other motor vehicle		
					East	Going ahead	Pick-up truck	Other motor vehicle		

2015-Sep-10, Thu,17:43	Clear	Turning movement	Non-fatal injury	Dry	West	Turning left	Automobile, station wagon	Cyclist
					East	Going ahead	Bicycle	Other motor vehicle
2016-Apr-24, Sun,12:06	Clear	SMV unattended vehicle	P.D. only	Dry	North	Turning left	Pick-up truck	Unattended vehicle
2016-May-25, Wed,18:21	Clear	Approaching	P.D. only	Dry	West	Going ahead	Bicycle	Other motor vehicle
					East	Going ahead	Pick-up truck	Cyclist
				_	_			
2016-Jun-14, Tue,12:04	Clear	Rear end	P.D. only	Dry	East	Going ahead	Pick-up truck	Other motor vehicle
					East	Slowing or stopping	JPick-up truck	Other motor vehicle
					East	Stopped	Automobile, station wagon	Other motor vehicle
2016-Aug-19, Fri,11:44	Clear	Angle	P.D. only	Dry	North	Turning left	Automobile, station wagon	Other motor vehicle
					West	Going ahead	Pick-up truck	Other motor vehicle
2016-Sep-04, Sun,14:00	Clear	Other	P.D. only	Dry	West	Reversing	Automobile,	Other motor
		-	- ,	3			station wagon	vehicle
					East	Stopped	Automobile, station wagon	Other motor vehicle



Traffic Control: No	control					Total Collisions: 4					
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuve	er Vehicle type	First Event	No. Ped		
2014-Feb-09, Sun,22:00	Snow	Turning movement	P.D. only	Loose snow	West	Turning right	Pick-up truck	Other motor vehicle			
					West	Turning right	Automobile, station wagon	Other motor vehicle			
2015-Mar-12, Thu,16:07	Clear	Turning movement	P.D. only	Dry	West	Turning left	Pick-up truck	Other motor vehicle			
					East	Going ahead	Pick-up truck	Other motor vehicle			
2016-Mar-12, Sat,17:10	Clear	Sideswipe	Non-fatal injury	Dry	East	Stopped	Unknown	Cyclist			
					East	Going ahead	Bicycle	Other motor vehicle			
2016-Jun-03, Fri,17:45	Clear	Angle	P.D. only	Dry	South	Turning right	Pick-up truck	Other motor vehicle			
					West	Stopped	Pick-up truck	Other motor vehicle			



Traffic Control: No	control					Total Collisions: 35				
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped	
2014-Jan-03, Fri,14:49	Clear	Turning movement	P.D. only	Wet	West	Turning left	Automobile, station wagon	Other motor vehicle		
					East	Slowing or stopping	Automobile, station wagon	Other motor vehicle		
2014-Jan-24, Fri,13:38	Clear	Angle	P.D. only	Dry	South	Going ahead	Automobile, station wagon	Other motor vehicle		
					West	Going ahead	Automobile, station wagon	Other motor vehicle		
2014-Feb-04, Tue,12:51	Clear	Turning movement	P.D. only	Dry	West	Turning left	Automobile, station wagon	Other motor vehicle		
					East	Going ahead	Automobile, station wagon	Other motor vehicle		
2014-Feb-07, Fri,20:35	Fog, mist, smoke, dust	Angle	P.D. only	Wet	North	Turning right	Pick-up truck	Other motor vehicle		
					East	Going ahead	Automobile, station wagon	Other motor vehicle		
2014-Apr-09, Wed,17:16	Clear	Turning movement	Non-fatal injury	Dry	West	Turning left	Automobile, station wagon	Other motor vehicle		
					East	Going ahead	Automobile, station wagon	Other motor vehicle		
2014-May-06, Tue,16:01	Clear	Turning movement	P.D. only	Dry	West	Turning left	Pick-up truck	Other motor vehicle		

					East	Going ahead	Passenger van	Other motor vehicle
2014-May-16, Fri,07:32	Rain	Turning movement	P.D. only	Wet	West	Turning left	Automobile, station wagon	Other motor vehicle
_					East	Going ahead	Automobile, station wagon	Other motor vehicle
2014-May-27, Tue,15:53	Clear	SMV unattended vehicle	P.D. only	Dry	East	Reversing	Automobile, station wagon	Unattended vehicle
2014-Jul-09, Wed,15:00	Clear	Sideswipe	P.D. only	Dry	West	Changing lanes	Pick-up truck	Other motor vehicle
					West	Going ahead	Automobile, station wagon	Other motor vehicle
2014-Sep-23, Tue,21:43	Clear	SMV unattended vehicle	P.D. only	Dry	West	Going ahead	Automobile, station wagon	Unattended vehicle
2014-Oct-08, Wed,06:55	Rain	Rear end	P.D. only	Wet	West	Slowing or stopping	g Automobile, station wagon	Other motor vehicle
					West	Turning right	Pick-up truck	Other motor vehicle
2014-Oct-08, Wed,20:00	Clear	SMV unattended vehicle	P.D. only	Dry	Unknown	Unknown	Unknown	Unattended vehicle
2014-Oct-30, Thu,19:07	Clear	Sideswipe	P.D. only	Dry	West	Changing lanes	Pick-up truck	Other motor vehicle
					West	Going ahead	Automobile, station wagon	Other motor vehicle
2014-Dec-08, Mon,15:30	Clear	Turning movement	P.D. only	Dry	West	Turning left	Automobile, station wagon	Other motor vehicle

					East	Going ahead	Automobile, station wagon	Other motor vehicle
2015-Jan-07, Wed,15:46	Snow	Turning movement	P.D. only	Ice	West	Turning left	Automobile, station wagon	Other motor vehicle
					East	Going ahead	Automobile, station wagon	Other motor vehicle
2015-Jan-31, Sat,16:32	Clear	Turning movement	P.D. only	lce	West	Turning left	Passenger van	Other motor vehicle
					East	Going ahead	Pick-up truck	Other motor vehicle
2015-Feb-03, Tue,16:24	Snow	Sideswipe	P.D. only	Slush	West	Changing lanes	Unknown	Other motor vehicle
					West	Going ahead	Automobile, station wagon	Other motor vehicle
2015-Mar-20, Fri,14:11	Clear	Turning movement	P.D. only	Dry	West	Turning left	Automobile, station wagon	Other motor vehicle
					East	Going ahead	Pick-up truck	Other motor vehicle
2015-Jul-25, Sat,11:39	Clear	Sideswipe	P.D. only	Dry	West	Changing lanes	Pick-up truck	Other motor vehicle
					West	Going ahead	Passenger van	Other motor vehicle
2015-Jul-25, Sat,15:15	Clear	Sideswipe	P.D. only	Dry	West	Pulling away from shoulder or curb		Other motor vehicle
					West	Going ahead	Pick-up truck	Other motor vehicle
2015-Aug-06, Thu,11:33	Clear	SMV unattended vehicle	P.D. only	Dry	West	Unknown	Unknown	Unattended vehicle

2015-Aug-10, Mon,14:28	Clear	Rear end	P.D. only	Dry	West	Slowing or stopping	Automobile, station wagon	Other motor vehicle
					West	Slowing or stopping	Automobile, station wagon	Other motor vehicle
2015-Oct-07, Wed,18:30	Clear	Turning movement	P.D. only	Dry	West		Automobile, station wagon	Other motor vehicle
					East	•	Automobile, station wagon	Other motor vehicle
2016-Jan-17, Sun,00:36	Snow	SMV unattended vehicle	P.D. only	Loose snow	West	Slowing or stopping	Automobile, station wagon	Unattended vehicle
2016-Jan-20, Wed,13:53	Clear	Turning movement	P.D. only	Wet	West		Automobile, station wagon	Other motor vehicle
					East		Automobile, station wagon	Other motor vehicle
2016-Feb-03, Wed,16:50	Clear	Turning movement	P.D. only	Dry	West	•	Automobile, station wagon	Other motor vehicle
					East	Going ahead	Pick-up truck	Other motor vehicle
2016-Feb-05, Fri,13:00	Clear	Sideswipe	P.D. only	Dry	West		Automobile, station wagon	Other motor vehicle
					West		Automobile, station wagon	Other motor vehicle
2016-Mar-03, Thu,15:54	Clear	Sideswipe	P.D. only	Dry	West	Going ahead	Passenger van	Other motor vehicle
					West	Stopped	Pick-up truck	Other motor vehicle
2016-May-20, Fri,15:30	Clear	Angle	Non-fatal injury	Dry	South	Turning right	Unknown	Other motor vehicle

					East	Going ahead	Automobile, station wagon	Other motor vehicle
2016-May-27, Fri,22:14	Clear	Rear end	P.D. only	Dry	East	Going ahead	Automobile, station wagon	Other motor vehicle
					East	Slowing or stopping	a Automobile, station wagon	Other motor vehicle
2016-May-31, Tue,22:03	Clear	Turning movement	P.D. only	Dry	East	Overtaking	Automobile, station wagon	Other motor vehicle
					East	Turning left	Automobile, station wagon	Other motor vehicle
2016-Jul-30, Sat,14:15	Clear	Turning movement	P.D. only	Dry	East	Turning left	Pick-up truck	Other motor vehicle
					West	Going ahead	Automobile, station wagon	Other motor vehicle
2016-Jul-30, Sat,15:25	Clear	Sideswipe	P.D. only	Dry	East	Changing lanes	Automobile, station wagon	Other motor vehicle
					East	Going ahead	Automobile, station wagon	Other motor vehicle
2016-Aug-04, Thu,06:47	Clear	Angle	P.D. only	Dry	South	Turning left	Unknown	Other motor vehicle
					East	Going ahead	Pick-up truck	Other motor vehicle
2016-Nov-20, Sun,00:16	Rain	Approaching	P.D. only	Wet	East	Turning left	Unknown	Other motor vehicle
					West	Going ahead	Automobile, station wagon	Other motor vehicle



Traffic Control: No	control						Total C	ollisions: 4	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
2014-Sep-07, Sun,02:20	Clear	Sideswipe	P.D. only	Dry	East	Changing lanes	Automobile, station wagon	Other motor vehicle	
					East	Going ahead	Automobile, station wagon	Other motor vehicle	
2015-Apr-13, Mon,15:40	Clear	Sideswipe	Non-fatal injury	Dry	East	Slowing or stopping	Bicycle	Other motor vehicle	
					East	Slowing or stopping	Automobile, station wagon	Cyclist	
2015-May-05, Tue,18:03	Clear	Sideswipe	P.D. only	Dry	East	Changing lanes	Automobile, station wagon	Other motor vehicle	
					East	Going ahead	Unknown	Other motor vehicle	
2015-May-29, Fri,14:48	Clear	Sideswipe	P.D. only	Dry	West	Changing lanes	Automobile, station wagon	Other motor vehicle	
					West	Going ahead	Automobile, station wagon	Other motor vehicle	



Location: RIDEA	U PL @ RIDE#	AU ST							
Traffic Control: Stop sign       Total Collisions: 1									
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuve	er Vehicle type	First Event	No. Ped
2014-Aug-30, Sat,08:03	Clear	Turning movement	Non-fatal injury	Dry	West	Turning left	Pick-up truck	Cyclist	
					East	Going ahead	Bicycle	Other motor vehicle	



Location: RIDEAL Traffic Control: Traf	-	TEMBURG ST					Total C	ollisions: 10	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver		First Event	No. Ped
2014-Feb-19, Wed,00:11	Clear	Sideswipe	Non-reportable	Slush	West	Changing lanes	Automobile, station wagon	Other motor vehicle	
					West	Going ahead	Automobile, station wagon	Other motor vehicle	
2014-May-21, Wed,16:53	Clear	SMV other	Non-fatal injury	Dry	East	Going ahead	Pick-up truck	Pedestrian	1
2015-Apr-09, Thu,12:07	Clear	Rear end	P.D. only	Dry	West	Going ahead	Automobile, station wagon	Other motor vehicle	
					West	Stopped	Automobile, station wagon	Other motor vehicle	
2015-Jun-13, Sat,23:30	Clear	Rear end	P.D. only	Dry	East	Going ahead	Automobile, station wagon	Other motor vehicle	
					East	Stopped	Automobile, station wagon	Other motor vehicle	
2015-Jun-19, Fri,14:18	Clear	Turning movement	P.D. only	Dry	East	Turning left	Pick-up truck	Other motor vehicle	
					West	Going ahead	Automobile, station wagon	Other motor vehicle	
2015-Sep-29, Tue,21:34	Clear	Rear end	P.D. only	Dry	West	Going ahead	Automobile, station wagon	Other motor vehicle	
					West	Slowing or stopping	-	Other motor vehicle	

2015-Oct-07, Wed,20:41	Clear	Rear end	P.D. only	Dry	East	Going ahead	Passenger van	Other motor vehicle
					East	Turning left	Automobile, station wagon	Other motor vehicle
2015-Oct-12, Mon,15:31	Clear	Angle	P.D. only	Dry	East	Going ahead	Delivery van	Other motor vehicle
					South	Turning left	Automobile, station wagon	Other motor vehicle
					West	Stopped	Automobile, station wagon	Other motor vehicle
2016-Jul-30, Sat,22:55	Clear	Sideswipe	P.D. only	Dry	West	Changing lanes	Delivery van	Other motor vehicle
					West	Stopped	Automobile, station wagon	Other motor vehicle
2016-Aug-12, Fri,15:41	Clear	Rear end	P.D. only	Dry	East	Changing lanes	Automobile, station wagon	Other motor vehicle
					East	Stopped	Automobile, station wagon	Other motor vehicle



Date/Day/Time	Environment	Impact Type	Classification	Surface	Veh. Dir	Vehicle Manoeuve	r Vehicle type	First Event	No. Ped
2014-May-14, Wed,19:00	Clear	Other	P.D. only	Cond'n Dry	West	Stopped	Truck and trailer	Other motor vehicle	
					East	Reversing	Automobile, station wagon	Other motor vehicle	
2014-Sep-28, Sun,04:00	Clear	Rear end	Non-fatal injury	Dry	East	Going ahead	Unknown	Other motor vehicle	
					East	Going ahead	Motorcycle	Other motor vehicle	
2014-Nov-03, Mon,12:30	Clear	Sideswipe	P.D. only	Dry	East	Changing lanes	Automobile, station wagon	Other motor vehicle	
					East	Going ahead	Delivery van	Other motor vehicle	
2016-Feb-17, Wed,16:39	Drifting Snow	Approaching	P.D. only	Ice	East	Going ahead	Automobile, station wagon	Other motor vehicle	
					West	Going ahead	Automobile, station wagon	Other motor vehicle	
					East	Going ahead	Pick-up truck	Snowbank/drift	



Traffic Control: No	control						Total Co	ollisions: 7	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuve	r Vehicle type	First Event	No. Ped
2014-Mar-12, Wed,17:19	Snow	Sideswipe	P.D. only	Loose snow	East	Going ahead	Pick-up truck	Other motor vehicle	
					East	Going ahead	Automobile, station wagon	Other motor vehicle	
2014-Oct-17, Fri,14:40	Clear	Sideswipe	P.D. only	Dry	West	Going ahead	Ambulance	Other motor vehicle	
					West	Stopped	Automobile, station wagon	Other motor vehicle	
2014-Dec-16, Tue,13:09	Clear	SMV other	P.D. only	Wet	West	Going ahead	Passenger van	Curb	
2015-Jan-09, Fri,06:30	Snow	Approaching	P.D. only	Slush	East	Unknown	Unknown	Other motor vehicle	
					West	Going ahead	Automobile, station wagon	Other motor vehicle	
2015-Aug-17, Mon,16:34	Clear	Rear end	P.D. only	Dry	East	Going ahead	Automobile, station wagon	Other motor vehicle	
					East	Stopped	Automobile, station wagon	Other motor vehicle	
2015-Oct-26, Mon,10:10	Clear	Rear end	Non-fatal injury	Dry	East	Changing lanes	Pick-up truck	Other motor vehicle	
					East	Going ahead	Pick-up truck	Other motor vehicle	

2016-Feb-19, Fri,00:27	Clear	SMV other	P.D. only	Loose snow	South	Going ahead	Automobile,	Pole (utility,
							station wagon	power)

# Appendix D Multi-Modal Level of Service Analysis

## Multi-Modal Level of Service - Segments Form

Consultant	Andres Pena	Project	263 Greensway Ave
Scenario	Existing and future conditions at	Date	3/28/2018
Comments	Vanier Parkway southbound roadway		
	adjacent to site		
	-		

SEGMENTS		Street A	Existing	Buffered Cycle Lane	MUP
			1	2	3
	Sidewalk Width Boulevard Width		1.8 m < 0.5 m	1.8 m > 2 m	≥ 2 m 0.5 - 2 m
	Avg Daily Curb Lane Traffic Volume		> 3000	> 3000	> 3000
Pedestrian	Operating Speed On-Street Parking		> 60 km/h no	> 30 to 50 km/h no	> 30 to 50 km/h no
est	Exposure to Traffic PLoS	F	F	С	С
qe	Effective Sidewalk Width	-	1.5 m	1.5 m	2.0 m
Ре	Pedestrian Volume		250 ped/hr	250 ped/hr	250 ped/hr
	Crowding PLoS		В	В	В
	Level of Service		F	С	С
	Type of Cycling Facility		Mixed Traffic	Curbside Bike Lane	Physically Separated
	Number of Travel Lanes		≥ 6 lanes total	≥ 3 each direction	
	Operating Speed		≥ 60 km/h	≤ 50 km/h	
	# of Lanes & Operating Speed LoS		F	D	-
e	Bike Lane (+ Parking Lane) Width			≥ 1.8 m	
Bicycle	Bike Lane Width LoS	Α	-	А	-
Bio	Bike Lane Blockages			Rare	
	Blockage LoS		-	A	-
	Median Refuge Width (no median = < 1.8 m)				
	No. of Lanes at Unsignalized Crossing				
	Sidestreet Operating Speed				•
	Unsignalized Crossing - Lowest LoS		-	-	A
	Level of Service		-	-	Α

#### Multi-Modal Level of Service - Intersections Form

Consultant	Andres Pena	Project	263 Greensway Ave
Scenario	Existing and future conditions at	Date	3/28/2018
Comments	Montreal rd/ Vanier Parkway		

	INTERSECTIONS		Montreal Road @ Vanier Parkway Existing			Montreal Road @ Vanier Parkway Montreal Rd Revitalization			
Crossing Side			SOUTH	EAST	WEST	NORTH	SOUTH	EAST	WEST
	Lanes	9	9	7	6	7	7	5	5
	Median	No Median - 2.4 m	No Median - 2.4 m	No Median - 2.4 m	No Median - 2.4 m	No Median - 2.4 m	No Median - 2.4 m	No Median - 2.4 m	No Median - 2.4 m
	Conflicting Left Turns	Permissive	Protected	Protected	Protected	Permissive	Protected	Protected	Protected
	Conflicting Right Turns	Permissive or yield control	Permissive or yield control	Permissive or yield control	Permissive or yield control	Permissive or yield control	Permissive or yield control	Permissive or yield control	Permissive or yield control
	Right Turns on Red (RToR) ?	RTOR allowed	RTOR allowed	RTOR allowed	RTOR allowed	RTOR allowed	RTOR allowed	RTOR allowed	RTOR allowed
	Ped Signal Leading Interval?	No	No	No	No	No	No	No	No
ian	Right Turn Channel	Conv'tl without Receiving Lane	Conv'tl without Receiving Lane	Conventional with Receiving Lane	No Channel	No Channel	No Channel	No Channel	No Channel
str	Corner Radius	15-25m	15-25m	15-25m	15-25m	10-15m	10-15m	10-15m	10-15m
Pedestrian	Crosswalk Type	Zebra stripe hi-vis markings	Zebra stripe hi-vis markings	Zebra stripe hi-vis markings	Zebra stripe hi-vis markings	Textured/coloured pavement	Textured/coloured pavement	Textured/coloured pavement	Textured/coloured pavement
<u> </u>	PETSI Score	-24	-16	14	29	7	15	48	48
	Ped. Exposure to Traffic LoS	#N/A	#N/A	F	F	F	F	D	D
	Cycle Length	130	130	130	130				
	Effective Walk Time	23	7	26	26				
	Average Pedestrian Delay	44	58	42	42				
	Pedestrian Delay LoS	E	E	E	E	-	-	-	-
		#N/A	#N/A	F	F	F	F	D	D
	Level of Service	#N/A				F			
	Approach From		SOUTH	EAST	WEST	NORTH	SOUTH	EAST	WEST
	Bicycle Lane Arrangement on Approach	Mixed Traffic	Mixed Traffic	Mixed Traffic	Mixed Traffic	Curb Bike Lane, Cycletrack or MUP	Curb Bike Lane, Cycletrack or MUP	Curb Bike Lane, Cycletrack or MUP	Curb Bike Lane, Cycletrack or MUP
	Right Turn Lane Configuration	≤ 50 m	> 50 m	≤ 50 m	≤ 50 m				
ccle	Right Turning Speed	≤ 25 km/h	≤ 25 km/h	≤ 25 km/h	≤ 25 km/h				
	Cyclist relative to RT motorists	D	F	D	D	Not Applicable	Not Applicable	Not Applicable	Not Applicable
	Separated or Mixed Traffic	Mixed Traffic	Mixed Traffic	Mixed Traffic	Mixed Traffic	Separated	Separated	Separated	Separated
Bicycle	Left Turn Approach	≥ 2 lanes crossed	≥ 2 lanes crossed	≥ 2 lanes crossed	≥ 2 lanes crossed	2-stage, LT box	2-stage, LT box	2-stage, LT box	2-stage, LT box
	Operating Speed	≥ 60 km/h	≥ 60 km/h	> 50 to < 60 km/h	> 50 to < 60 km/h	≥ 60 km/h	≥ 60 km/h	> 50 to < 60 km/h	> 50 to < 60 km/h
	Left Turning Cyclist	F	F	F	F	А	Α	Α	А
	Level of Service	F	F	F	F	А	Α	Α	Α
		F				Α			





Hi Andres,

Please find below transit ridership data for the AM and PM peak periods (6-9am and 3-6pm, respectively) for Routes 9 and 12 in the Vanier Parkway/Montreal Road area. The data is from the September 2017 booking.

During the peak periods:

- Route 9 was planned to operate with primarily 40-foot buses.
- Route 12 was planned to operate with primarily articulated buses toward downtown in the morning and toward Blair Station in the afternoon; primarily 40-foot buses toward Blair in the morning; and a mix of 40-foot and articulated buses toward downtown in the afternoon.

Sept 2017 Data (weekday	AM PEAK			PM PEAK				
Intersection	STOP	Route	Average Boarding (6am- 9am)	Average Alighting (6am- 9am)	Average Load at Departure	Average Boarding (3pm- 6pm)	Average Alighting (3pm- 6pm)	Average Load at Departure
	7052	9	1	1	14	1	3	9
Vanier	7085	9	4	0	13	2	3	20
Parkway/Montreal	8783	12	3	2	46	3	1	29
	7053	12	1	1	26	2	2	41
Montreal/Montgomery	1575	12	1	3	26	3	4	41
Montreal/North River	8781	12	1	2	45	2	1	30

If you have any questions regarding the above information, please don't hesitate to contact me.

Best regards, Genya

Genya Stefanoff, MCIP, RPP Senior Transit Planner, Service Strategy

City of Ottawa | OC Transpo | Transportation Services Department 1500 St. Laurent Blvd., Ottawa, ON K1G 0Z8

tel: 613-580-2424 ext. 52294 genya.stefanoff@ottawa.ca



From: Pena-cabra, Andres [mailto:Andres.Pena-cabra@parsons.com]

Sent: Friday, March 09, 2018 11:08 AM

To: Stefanoff, Genya <genya.stefanoff@ottawa.ca>

Cc: Harte, Andrew <Andrew.Harte@parsons.com>

Subject: Transit Demand Volumes - Vanier Pkwy/ Montreal Rd & Montreal Rd/Montgomery & Montreal Rd/NorthRiver

Hi Genya,

I am preparing a Transportation Impact Assessment at the moment and was looking to get some transit demand information for the AM/PM weekday peaks (on and offs, frequencies, bus occupation and bus type). The peaks would be approximately 6-9am and 3-6pm, or as close as reasonably possible. The locations and stops are listed below:

Vanier Parkway / Montréal Rd

- ID 7052
  - Route #9
- ID 7085
  - Route #9
- ID 8783
  - Route #12
- ID 7053
  - Route #12

Montréal Rd / Montgomery

• ID 1575

• Route #12 Montréal Rd / North River

ID 8781

• Route #12

I was wondering if you would be able to provide those? Let me know if you need more information or have any questions.

Thanks in advance,

Andres Pena-Cabra Associate Engineer 1223 Michael St, Suite 100, Gloucester, ON K1J7T2 andres.pena-cabra@parsons.com +1 613.738.4160

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