3745 St. Joseph Boulevard

TIA Design Report

DRAFT

May 2023

3745 St. Joseph Boulevard

TIA Design Report

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DESIGN REPORT

Parsons has been retained by 13890767 CANADA INC. to prepare a TIA in support of a Zoning By-Law Amendment (ZBLA) and Site Plan Control Application for a six-storey mixed-use building. This document follows the TIA process as outlined in the City of Ottawa Transportation Impact Assessment (TIA) Guidelines (2017). The following report represents Step 4 – Design Report. The Screening Form has been provided in **Appendix A**.

1.0 SCREENING FORM

The Screening Form confirmed the need for a TIA Report based on the Trip Generation and Safety triggers. The Trip Generation trigger was met as the development is anticipated to generate more than 60 person trips during peak hours. The Safety trigger was met following a review of collisions history in the study area.

2.0 SCOPING REPORT

2.1. Existing and Planned Conditions

2.1.1. Proposed Development

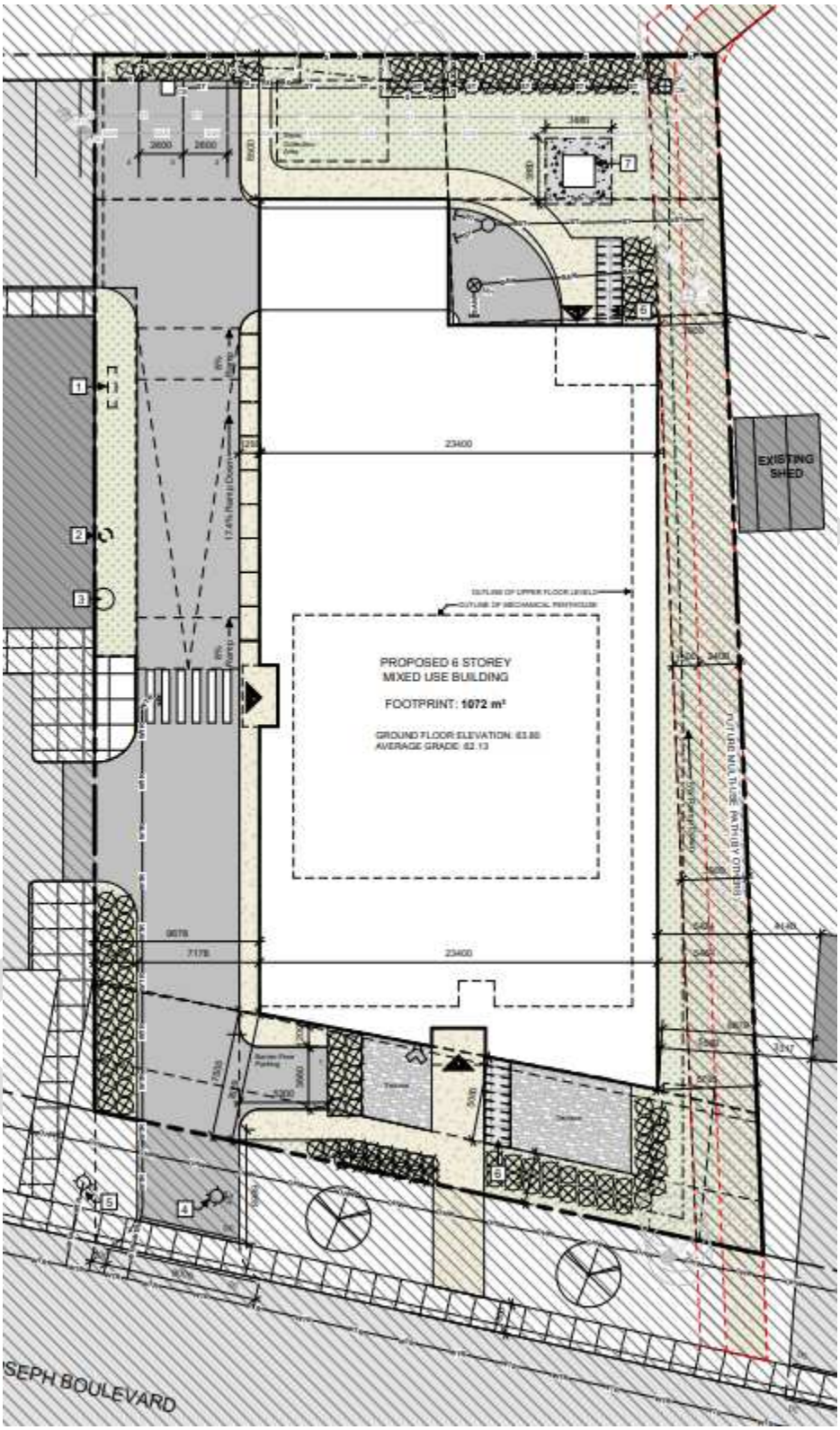
The proposed development is located at the municipal address of 3745 St. Joseph Blvd. Currently, there are no existing buildings on the site, however there is temporary fencing along the perimeter and the site topography slopes down from St. Joseph Boulevard.

According to Schedule B8 of the City of Ottawa's Official Plan, the site is designated as "Mixed Industrial". The subject land is currently zoned as a Light Industrial Zone IL H(21) and will need to be rezoned to Light Industrial Exception Zone to permit the use of the proposed hotel. The proposed development is expected to be completed in one-phase, with a buildout year of 2025.

The development is anticipated to consist of a six-storey mixed-use building with approximately 61 hotel units, 5,400m^2 of first-floor commercial area, and a 475m^2 rooftop amenity area. The proposed uses will primarily consist of a hotel that will occupy the top four-storeys; varying types of amenities such as a café, gym, co-working space etc. for the first two-storeys; and a three-storey underground parking garage with 72 parking spaces. The parking garage access point will be located on the north side of the building.

Figure 1: Local Context

Figure 2: Proposed Site Plan



2.1.2. Existing Conditions

Area Road Network

The following roads were included in the TIA. Description for each road within the study area has been provided below.

St. Joseph Boulevard is an east-west municipal arterial road that extends from Trim Road in the east as a continuation of Old Montreal Road to Ottawa Road 174 in the west and forms the southern site boundary. The roadway consists of a two-way four-lane divided urban cross-section and a posted speed limit of 60 km/h.

Trim Road is a north-south municipal arterial road that extends from Ottawa Road 174 in the north to Smith Rd/Colonial Rd in the south. The roadway typically operates as a two-way four-lane divided urban cross-section with a posted speed limit of 60 km/h.

Taylor Creek Drive is a municipal collector road that extends from St. Joseph Blvd in the south to Trim Rd in the east. The roadway operates as a two-way two-lane cross-section with an assumed speed limit of 50km/h.

Dairy Drive is a municipal local road that extends from Trim Rd in the west to Old Montreal in the east. The roadway operates as a two-way two-lane undivided cross-section with an assumed speed limit of 50km/h.

Existing Study Area Intersections

Taylor Creek/St. Joseph

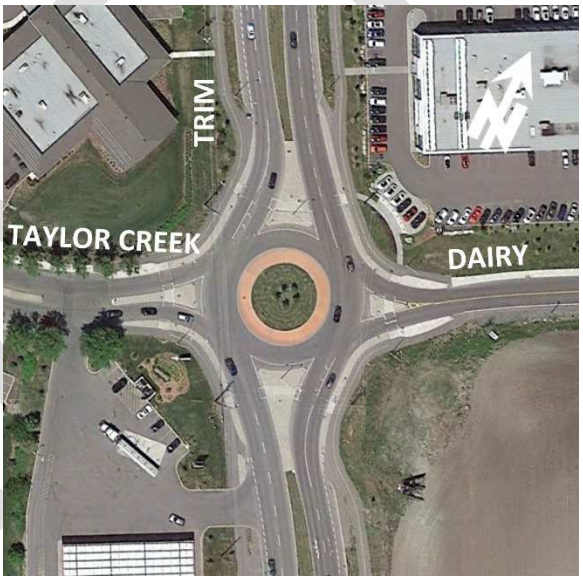
The Taylor Creek/St. Joseph intersection is a three-legged "T" intersection with STOP-control on the southbound approach. The eastbound approach consists of two through-lanes and a dedicated left-turn lane, while the westbound approach consists of two through-lanes. Along St. Joseph there are sidewalks on both sides of the road that are accompanied by curb-side bike lanes. Along Taylor Creek there is one sidewalk located on the east side of the street.

Trim/St. Joseph

The Trim/St. Joseph intersection is a four-legged two-lane roundabout. The eastbound and westbound approaches consist of one through lane, one through/left-turn lane and one channelized right-turn lane. The northbound and southbound approaches consist of one through/left-turn lane and one through/right-turn lane. All approaches contain MUP's that later split into combinations of sidewalks and dedicated bike lanes.

Trim/Dairy

The Trim/Dairy-Taylor Creek intersection is a four-legged roundabout. The eastbound and westbound approach consists of a single shared-movement lane. The northbound and southbound approaches consist of one through/right-turn lane and one through/left-turn lane. Eastbound egress has been recently modified to provide two lanes.



Existing Driveways to Adjacent Developments

One new access is proposed for the development and will be located along St. Joseph Blvd. Within 200m of the proposed site access, there are 14 adjacent driveways as shown in **Figure 3**. Eight of the driveways are located on the north side of St. Joseph Blvd, where six are located east of the site and two immediately to the west. These driveways are for several small businesses consisting primarily of single commercial units and a small business plaza. The other six driveways are located on the south side of St. Joseph Blvd, all of which are located to the west of the proposed development and are for four residential units.

Figure 3: Adjacent Driveways within 200m of Site Access

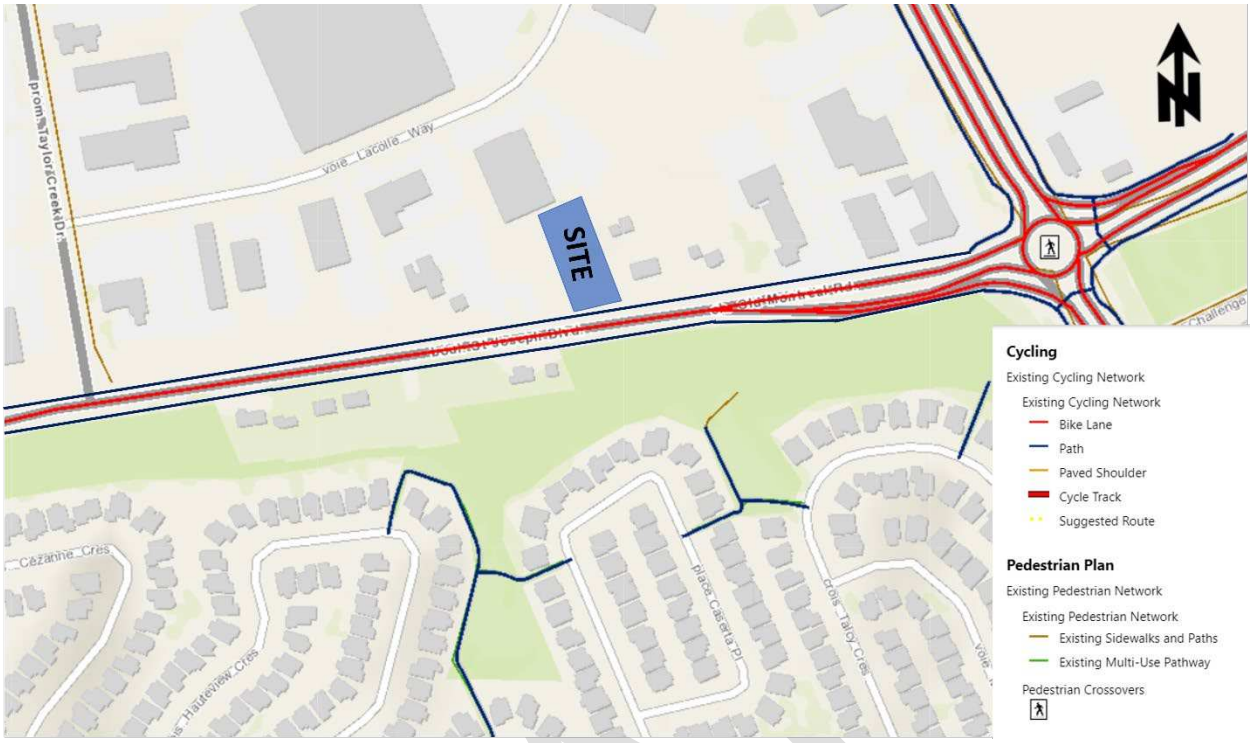
Existing Area Traffic Management Measures

Existing area traffic management measures within the study area include zebra crosswalks at Trim/St. Joseph intersection and curb-side bike lanes along both St. Joseph Blvd and Trim Rd.

Pedestrian/Cycling Network

The active transportation network facilities for pedestrians and cyclists are illustrated in **Figure 4.** As shown, sidewalk facilities are provided throughout the study area, including both sides of St. Joseph Blvd and Trim Rd. Curbside bike lanes are provided for St. Joseph Blvd and Trim Rd in both directions but merge into Multi-use Pathways (MUP) upon nearing the St. Joseph/Trim intersection. It should be noted that the eastbound and westbound approaches merge into MUPs significantly further away, approximately 80m from the intersection. According to the 2013 City of Ottawa Transportation Master Plan (TMP), both St. Joseph Blvd and Trim Rd are designated as cycling spine routes.

Figure 4: Study Area Active Transportation Facilities



Transit Network

Due to the current circumstances regarding COVID-19, some bus services may have been altered by OC Transpo to operate on a different schedule. The following description of OC Transpo routes within the study area reflect the current bus operations (April 2023):

- **Route #39 (Blair & N Rideau <-> Millennium):** identified by OC Transpo as a "Rapid Route", this route operates all day, 7 days a week. The nearest bus stops to the site are at the intersections of St. Joseph/ Taylor Creek and St. Joseph/Trim.
- **Route #221 (Blair <-> Cumberland):** identified by OC Transpo as a "Connexion Route", this route operates during weekday peak-periods exclusively. The nearest bus stops to the site are at the intersections of Old Montreal/Trim.

The transit network for the study area is illustrated in **Figure 5** and the transit route maps are provided in **Appendix B**. See **Figure 6** for an illustration of the bus stop locations near the proposed development.

Figure 5: Area Transit Network

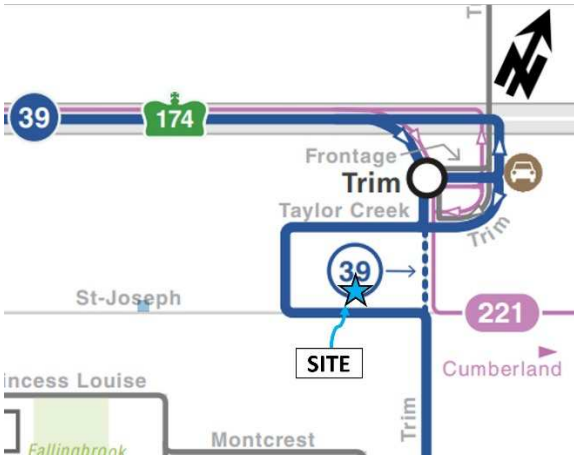
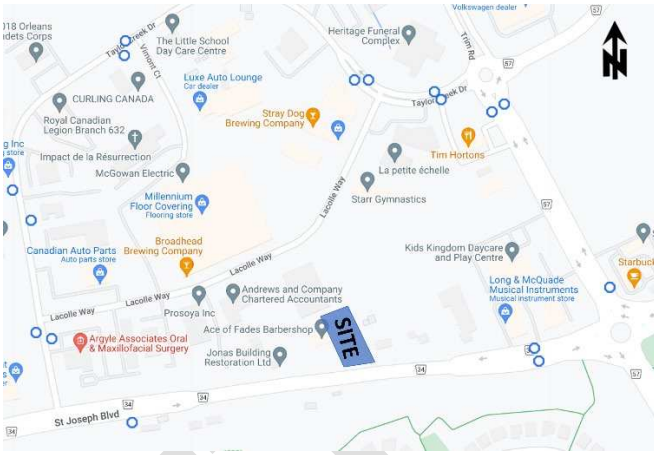


Figure 6: Bus Stop Locations



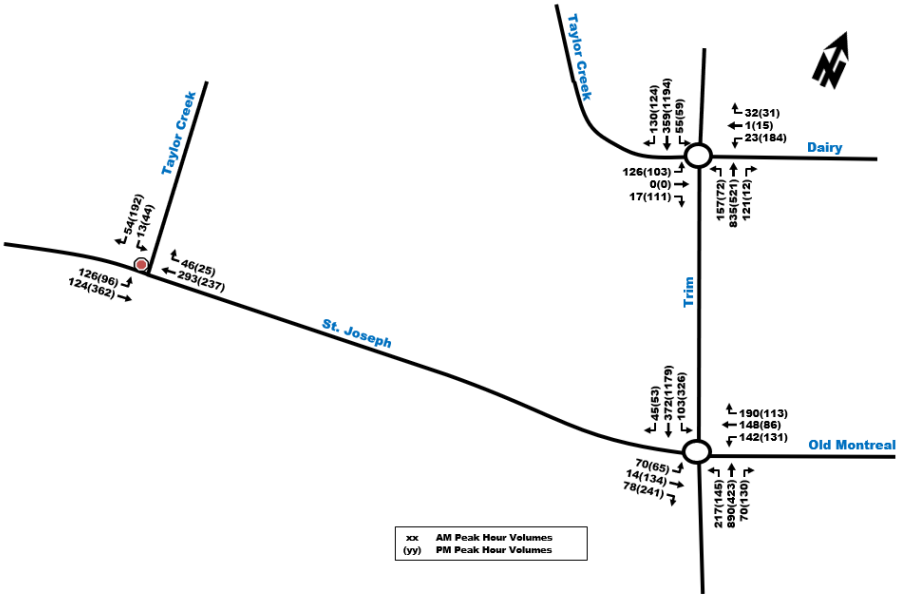
Peak Hour Travel Demands

The existing peak hour traffic volumes at the intersections within the study area were obtained from the City of Ottawa for the following intersections:

- St. Joseph/Old Montreal/Trim – Conducted Thursday, May 16, 2019
- St. Joseph/Taylor Creek – Conducted Wednesday, August 28, 2019
- Trim/Dairy/Taylor Creek – Conducted Wednesday, October 09, 2019

The traffic volumes at study area intersections are illustrated in **Figure 7**, with raw traffic count data provided in **Appendix C**. No adjustments such as traffic growth have been applied to the traffic volumes given the study area context in a well-established neighborhood and since there has been an insignificant growth over the previous years. Existing active transportations (pedestrian and cyclist) volumes at study area intersections have not been provided due to the high passenger vehicle mode share of the study area.

Figure 7: Existing Peak Hour Traffic Volumes



Existing Road Safety Conditions

A five-year collision history data (2017-2021, inclusive) was requested and obtained from the City of Ottawa for all intersections and road segments within the study area. It was determined that a total of 152 collisions have occurred between St. Joseph/Taylor Creek and St. Joseph/Old Montreal/Trim, while there were no reported collisions at the intersection of Dairy/Taylor Creek/Trim. Of the 152 collisions, 25 resulted from rear ends, 1 from turning movements, 59 from sideswipes, 55 from angled collisions, 1 from approaching, 8 from Single Vehicle (Other) and 3 from "other". Furthermore, 134 (88%) collisions representing the majority of collisions, resulted in property damage only, while 18 (12%) resulted in non-fatal injuries. The source collision data provided by the City of Ottawa and detailed analysis results are provided in **Appendix D**.

A standard unit of measure for assessing collisions at an intersection is based on the number of collisions per million entering vehicles (MEV). Intersections with a ratio of 1.0 Collisions/MEV or greater are considered to be at a higher risk for collisions. Based on the City of Ottawa TIA Guidelines (2017), a collision pattern is characterized as a sequence of more than six collisions of the same impact type occurring for a specific movement within a five-year period. At signalized intersections within the study area, reported collisions have historically taken place at a rate of:

- 0.17 Collisions/MEV at the intersection of St. Joseph Blvd/Taylor Creek Dr. Only 3 collisions occurred at this intersection in the five-year period and no collision patterns were observed.
- 2.80 Collisions/MEV at the intersection of St. Joseph Blvd-Old/Montreal Rd/Trim Rd. A total of 149 collisions occurred at this intersection in the five-year period. It is noted that 49% (29) of the sideswipe collisions occurred in the northbound direction.
- There were 0 collisions along St. Joseph Blvd between Taylor Creek Dr and Trim Rd where the proposed development is located.

With regards to active transportation (i.e. walking and biking) related collisions, the following collisions are documented out of the total 152 collisions in the study area:

- Only 1 collision involved between pedestrians and bicycles in the study area which resulted in a non-fatal injury.

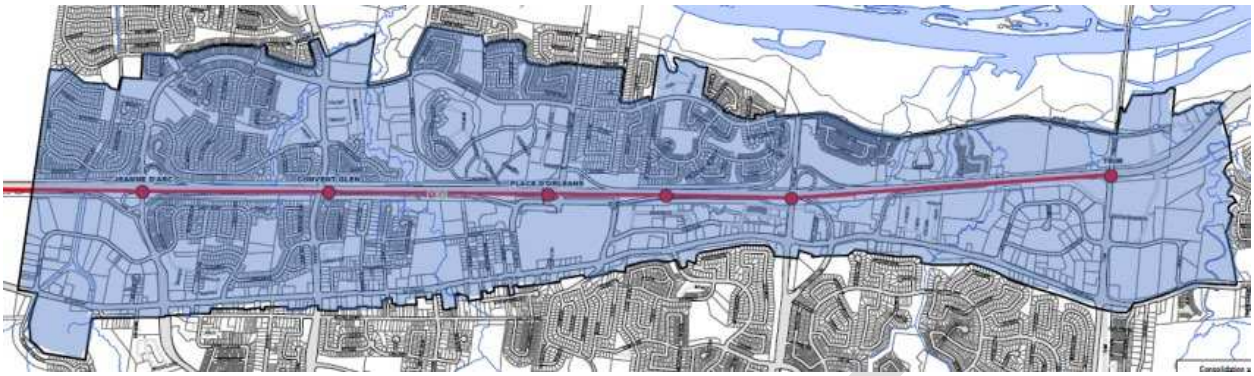
2.1.3. Planned Conditions

2.1.3.1. Future Transportation Network Changes

The Orléans Corridor Secondary Plan Study

The Orleans Corridor Secondary Plan study was completed in July 2022 with the goal of accommodating the growth of a diverse population with varying needs, many of whom will be located near the new LRT O-Train system. The plan looks to create a mixed-use, pedestrian-oriented, and complete livable community. As shown in **Figure 8**, the OCSP spans a wide area along the Queensway Corridor bounded by Jeanne-d'Arc Blvd in the east, Trim Rd in the west, Jeanne-d'Arc Blvd in the north, and St. Joseph Blvd in the south.

Figure 8: Orléans Corridor Secondary Plan



According to the OCSP, the St. Joseph Blvd Concept Plan will guide the transformation of the road right-of-way into a pedestrian-oriented main street that will primarily contain buildings with commercial uses at-grade level and residential or office uses above. The plan includes interim measures for shorter-term and relatively low-cost improvements.

These improvements will prioritize the utility of active transportation facilities and are outlined below:

- Vehicle travel lane reduction to accommodate more space for active transportation facilities, bus facilities, and other public realm improvements.
- Separated cycling facilities.
- Public realm improvements such as trees, pedestrian-scale lighting, transit shelters, bicycle racks, newspaper boxes, waste and recycling receptacles, and benches
- Work towards the elimination of bus bays

Trim Road LRT Station

The existing transit station located southeast of Trim Rd/Ottawa Regional Rd 174 is currently being converted to an LRT station as part of the O-Train East extension and is expected to be completed by early 2025. Additionally, there is a Park & Ride that will remain once the station is completed and is not expected to generate any additional trips. The station is approximately 750m away from the site.

In addition to the new LRT station, the City's TMP and OCSP outlines other active transportation improvements such as:

- Provide a MUP through 881 Taylor Creek Drive that will connect with the west sidewalk of Trim Rd to a future sidewalk along the northeast side of Taylor Creek Dr
- Provide a MUP linking Trim Rd and 3535/3545 St. Joseph Blvd with a further connection to Taylor Creek Dr

2.1.3.2. Other Area Developments

3277 St. Joseph Blvd

Hillside Commons Inc. is proposing two nine-storey residential buildings containing a total of 273 dwelling units and 186 vehicle parking spaces within a multi-level parking garage. The Transportation Impact Assessment (prepared by Novatech) projected an increase of 111 person trips during morning peak hours and 112 person trips during afternoon peak hour. The proposed development is expected to be completed in a single phase with a buildout year of 2024.

1015 Dairy Drive

LRL Associates Ltd. Is proposing the development of a restoration and storage facility with a gross floor area of 114,431 ft^2. It should be noted that the SPC application was submitted in 2013 and the development was anticipated to be built out by 2015. As of today, there are no recent updates. The Transportation Brief (prepared by D.J. Halpenny & Associates Ltd.) projected an increase of total person trips up to 50 during the morning and afternoon peak hours.

1296 & 1400 Old Montreal

Tamarack Corp. is proposing the development of a new subdivision containing 454 townhome unit and 304 single detached units. The Transportation Impact Assessment (prepared by CGH Inc.) projected an increase in vehicle traffic up to 340 veh/h with total person trips up to 1471 during the morning and afternoon peak hours. The proposed developments anticipated buildout year is 2027.

2.2. Study Area and Time Periods

For the purposes of this report, the proposed development has an expected buildout year of 2025. The development trip generation is not anticipated to exceed 60 person trips given its shared mixed-use nature. Therefore, a buildout analysis is considered suitable for this TIA with a proposed limited study area as illustrated in **Figure 9**.

- Taylor Creek/St. Joseph
- Trim/St. Joseph-Old Montreal
- Trim/Dairy-Taylor Creek

Figure 9: Study Area

2.3. Exemption Review

The following modules/elements of the TIA process are recommended to be exempt based on the City's TIA guidelines, the current ZBLA/OPA process, and the current site plan arrangement. Module 4.5 has been included due to the proposed parking strategy.

Table 1: Exemptions Review Summary

Module	Element	Exemption Consideration
4.6 Neighbourhood Traffic Management	All	Typically only required for when the development relies on local or collector road for access and total volumes exceed ATM capacity thresholds.
4.8 Network Concept	All	Only required when the development exceeds the 60 person trips
4.8 Intersection Design	All	Only required when the development exceeds the 60 person trips

3.0 FORECASTING REPORT

3.1. Development Generated Travel Demand

3.1.1. Trip Generation and mode shares

Note that this development does meet the trip generation, however given the site context, is anticipated to have a negligible impact on the surrounding transportation network. This section has been included to reaffirm the limited vehicle traffic increase to the local area transportation network.

As previously mentioned in **Section 2.1**, the anticipated land uses for the development will primarily consist of a hotel, while the other uses are likely to include a pharmacy, café, gym, adult day program, small office space, restaurant, and potentially a clinic. These uses are expected to be open to the public, but uses such as the café, gym and restaurant are likely to be frequented by patrons and employees that are already on-site. So as a result of the mixed-use nature of the proposed development, it is expected there will be significant internal trips. Additionally, amenities such as the gym and café are anticipated to produce a negligible number of external trips due to the predominant use of hotel patrons. The adult day program is expected to operate outside of peak hours. As a result, these land-uses are expected to have a negligible impact on the overall trips generated during the peak commuter hours and will be considered as having no additional trip implications in this analysis.

Table 2: Mode Shares

Travel Mode	Mode Share					Justification
	EXISTING - COMMERCIAL		EXISTING - RESIDENTIAL		PROPOSED	
Auto Driver	77%	71%	47%	51%	55%	Decreased due to proximity to rapid transit.
Auto Passenger	14%	20%	15%	19%	18%	Similar to existing mode shares for commercial and residential.
Transit	3%	2%	29%	24%	20%	Increased transit share due to nearby LRT Phase 2 extension at Trim Road.
Cycling	0%	1%	1%	1%	2%	Negligible change in active modes. Increase of walking trips can be considered accounted for in the transit mode share.
Pedestrian	6%	5%	9%	6%	5%	
Total	**100%**	**100%**	**100%**	**100%**	**100%**	

The mode share percentages shown in **Table 2** were determined based on the 2011 TRANS OD Survey (Orleans district) and were adjusted to accommodate an expected increase in transit use due to the addition of the new Trim station as part of the LRT Phase 2 extension. It should be noted that the proposed afternoon mode share

percentages were used for the site generated trips for both morning and afternoon peak hours due to the higher auto driver mode share percentage, representing the worst-case scenario.

The appropriate trip generation rates for the effective commercial land-uses were obtained from the ITE Trip Generation Manual (11th Edition). The manual provides the peak hour rates for the morning (7:00am - 9:00am) and afternoon (4:00pm – 6:00pm) for the hotel, pharmacy, small office, and high turnover sit down restaurant land-uses as shown below in **Table 3**.

Table 3: Proposed Development Trip Rates

Land Use	Data Source	Trip Rate	
		AM PEAK	PM PEAK
Hotel	ITE 310	T = 0.59(du)	T = 0.76(du)
Commercial 1 (Pharmacy)	ITE 880	T = 3.76(x)	T = 10.89(x)
Commercial 5 and 6 (Small Office)	ITE 712	T = 2.14(x)	T = 2.76(x)
High Turnover Sit Down Restaurant	ITE 932	T = 12.25(x)	T = 11.58(x)
Notes:	1.28 factor to account for typical North American auto occupancy values of approximately 1.15 and combined transit and non-motorized modal shares of less than 10% T = Average Vehicle Trip Ends du = Dwelling Units x = Gross Floor Area (1000 ft²)		

The total number of person trips per hour generated by the proposed development are multiplied by a factor of 1.28, as per TIA standards, to account for typical North American auto occupancy values of approximately 1.15 and combined transit and non-motorized modal shares of less than 10%. The resulting total person trips per hour are summarized in **Table 4**.

Table 4: Peak Hour Person Trips

Land Use	Data Source	Units	AM Peak (Person Trips/hr)			PM Peak (Person Trips/hr)		
			IN	OUT	TOTAL	IN	OUT	TOTAL
Hotel	ITE 310	61 du	20	16	36	23	23	46
Commercial 1 (Pharmacy)	ITE 880	900 ft²	1	2	3	4	6	10
Commercial 5 and 6 (Small Office)	ITE 712	3,800 ft²	6	2	8	3	8	11
High Turnover Sit Down Restaurant	ITE 932	1,400 ft²	8	9	17	8	8	16
		Total	**35**	**29**	**64**	**38**	**45**	**83**

As shown in the **Table 4**, the proposed development is anticipated to generate a total of 64 and 83 new person trips during morning and afternoon peak hours, respectively.

Pass-by Trips

Due to the mixed-share nature, location of the development, low non-motorized mode share percentages, and the significant internal trips, it is anticipated the volume of pass-by trips will be considerably low. Additionally, the following uses were further justified for not considering pass-by trips:

- The hotel and small office space are expected to have longer stays,
- The café use does not have a drive-through and there are no posted ITE pass-by rates,
- There remains uncertainty regarding the space usage currently assumed to be a pharmacy.

As a result, the only use that will be considered for pass-by rates will be the high turnover restaurant. A pass-by rate of 40% was determined based on the average of posted 2021 ITE pass-by rates. See **Table 5** for the high turnover restaurant pass-by trips and mode share breakdown.

Table 5: High Turnover Sit Down Restaurant Trips Mode Share Breakdown

Travel Mode	Mode Share	AM Peak (Person Trips/hr)			PM Peak (Person Trips/hr)		
		IN	OUT	TOTAL	IN	OUT	TOTAL
Auto Driver	55%	5	5	10	5	5	10
Auto Passenger	18%	2	2	4	2	2	4
Transit	20%	1	2	3	1	1	2
Non-motorized	7%	0	0	0	0	0	0
Total Person Trips	100%	8	9	17	8	8	16
	Less Pass-by (40%)	-2	-2	-4	-2	-2	-4
Total 'New' High Turnover Sit Down Restaurant Auto Trips		**3**	**3**	**6**	**3**	**3**	**6**

Based on the proposed mode share in **Table 2**, **Table 6** summarizes the total trips generated by the proposed development for the hotel, pharmacy, small office and sit-down restaurant components.

Table 6: Total Site Peak Hour Trips Mode Share Breakdown

Travel Mode	Mode Share	AM Peak (Person Trips/hr)			PM Peak (Person Trips/hr)		
		IN	OUT	TOTAL	IN	OUT	TOTAL
Auto Driver	55%	20	16	36	21	25	46
Auto Passenger	18%	6	6	12	7	8	15
Transit	20%	7	5	12	8	9	17
Non-motorized	7%	2	2	4	2	3	5
Total Person Trips	100%	35	29	64	38	45	83
Pass By Trip Reduction	-	-2	-2	-4	-2	-2	-4
Total 'New' Auto Trips		**18**	**14**	**32**	**19**	**23**	**42**

Based on the results provided in **Table 6**, the proposed future development is anticipated to generate a total of 64 and 83 person trips, and 32 and 42 'new' vehicle trips external to the development during the morning and afternoon peak hours, respectively.

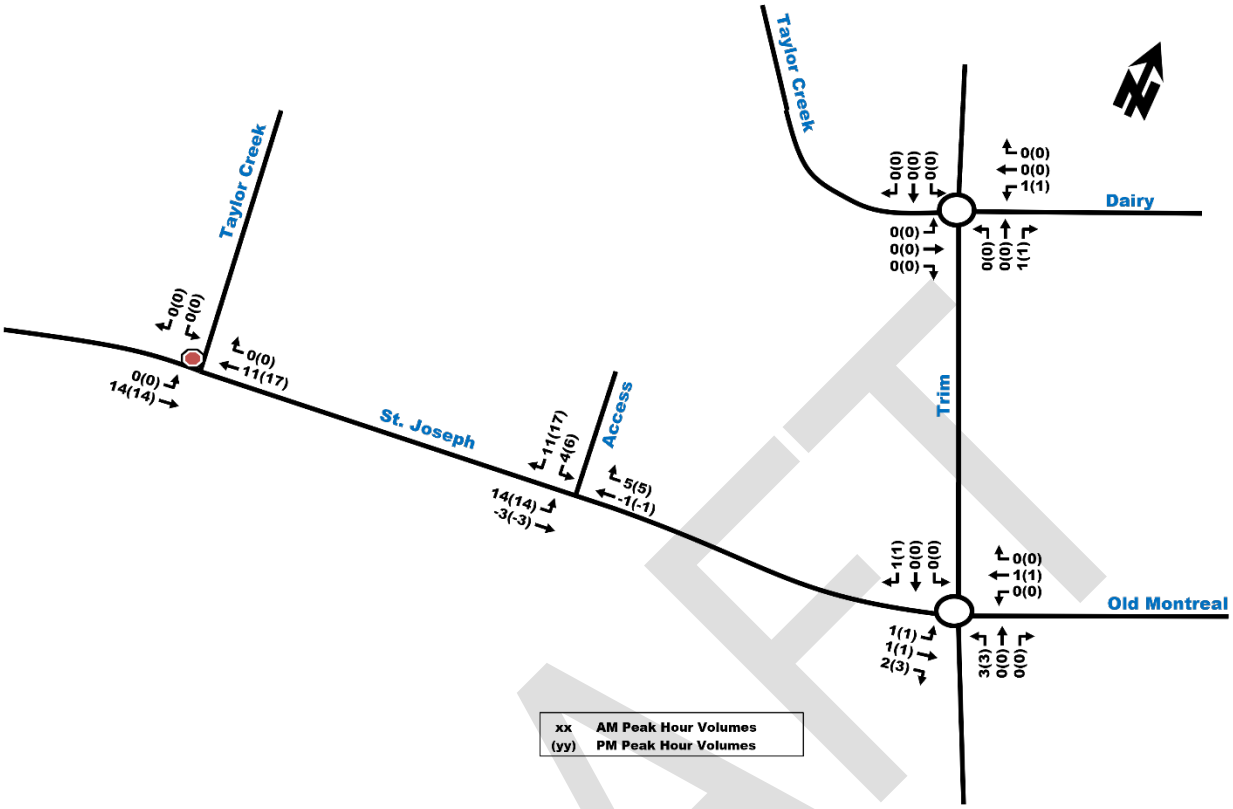
3.1.2. Trip Distribution and Assignment

As determined in **Section 3.1.1**, the anticipated number of vehicle trips generated by the proposed development are very minimal. Nevertheless, based on the 2011 OD Survey (Orleans district) and the location of adjacent arterial roadways and neighborhoods, the distribution of site-generated traffic volumes was estimated as follows:

- 10% to/from the east via OR174 and Old Montreal Road.
- 65% to/from the west via St. Joseph Blvd and OR174.
- 25% to/from the south via Trim Road.

Note that traffic was not distributed or assigned to/from the north, as the Ottawa River forms a natural barrier north of the OR174. See **Figure 10** for the assignment of 'new' auto trips generated by the site.

Figure 10: Site Generated Traffic with Pass-By Trips



3.2. Background Network Traffic

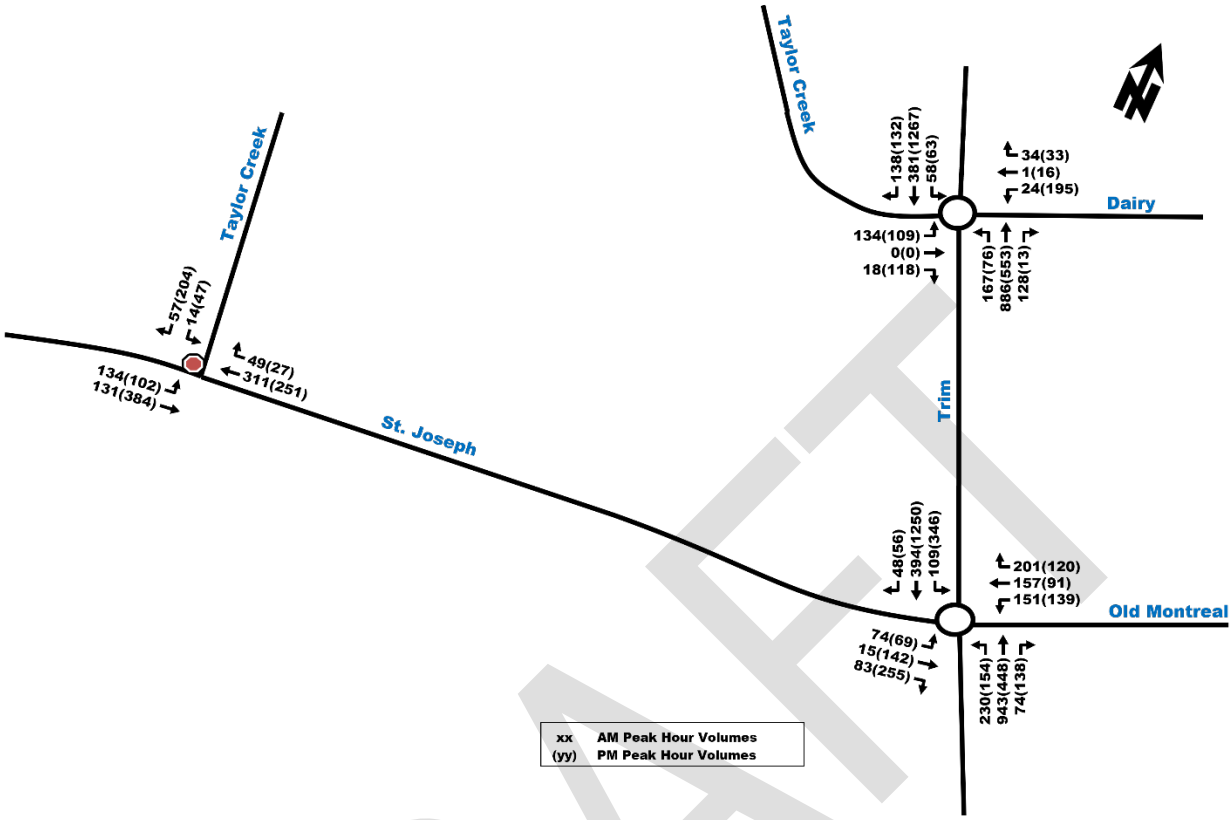
3.2.1. Transportation Network Plans

Refer to **Section 2.1.3**: Planned Study Area Transportation Network Changes.

3.2.2. Background Growth

Considering the location of the proposed development and the limited significance and number of nearby developments, traffic volumes within the study area are not expected to increase significantly by the buildout year of 2025. However, to accommodate the potential for future growth and anticipated increases in residential units in the surrounding area after 2025, a conservative short-term 3% background growth rate was applied to the traffic network. This growth rate is based on the TIA prepared by Novatech for 3277 St. Joseph Blvd (**Section 2.1.3.2**) and will also account for any unexpected developments that are constructed within the scope of this study. For the following years after 2025, a smaller long-term growth rate would be considered more suitable. The 2025 build-out year background traffic volumes are illustrated in **Figure 11** below.

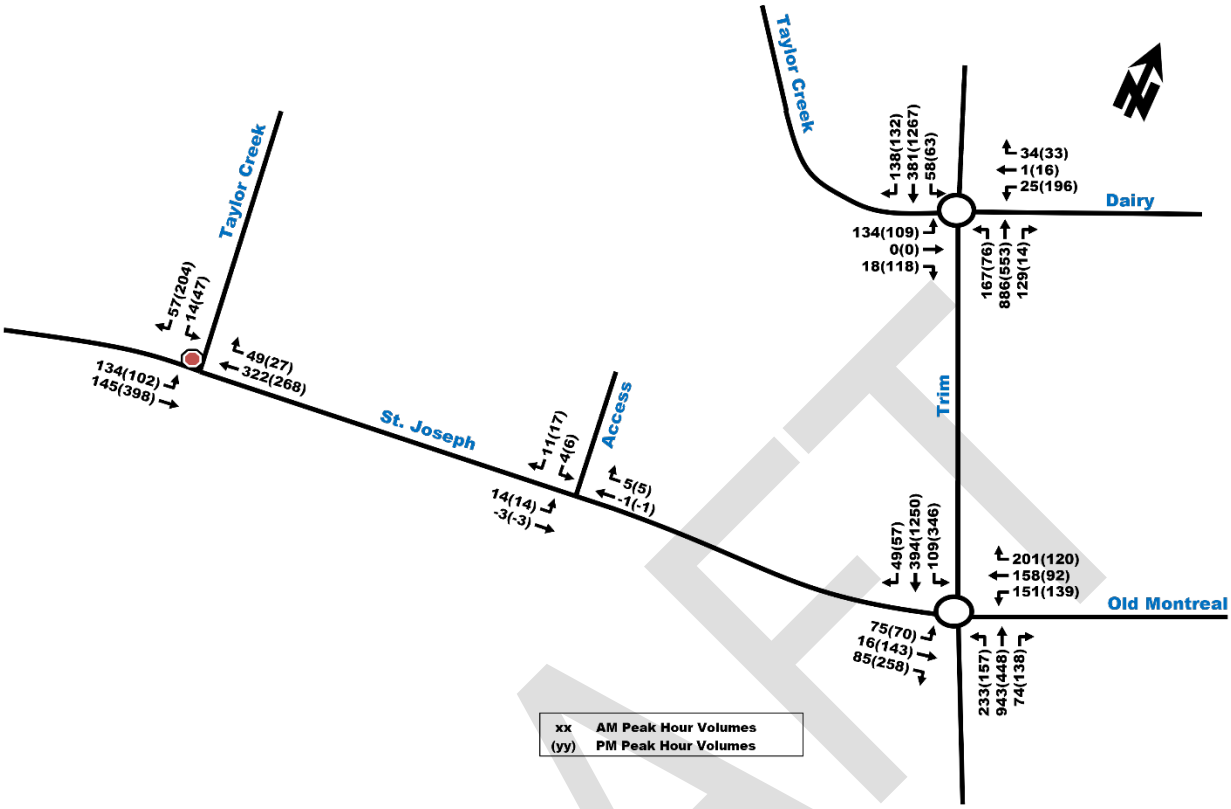
Figure 11: Background 2025 Traffic Volumes – AM(PM) Peak Hour



3.3. Demand Rationalization

Since this site is expected to generate very low vehicle trips during the morning and afternoon peak hours it is anticipated that the additional trips will have negligible impact on the vehicle operations along the study area intersections. No demand rationalization is proposed for the site trip generation or surrounding background traffic.

Figure 12: 2025 Total Traffic Volumes



4.0 ANALYSIS

4.1. Development Design

4.1.1. Design for Sustainable Modes

The proposed development is consistent with the City of Ottawa's Urban Design Guidelines and transportation policies. The site provides direct access to St. Joseph Boulevard, connecting to the future Trim Road LRT station. A 3.0m future MUP has been protected for on the eastern site boundary, to provide improved pedestrian and cyclist connectivity to the LRT when constructed. Bicycle parking is to be offered at the front and rear of the building adjacent to the future MUP. Solid surfaces of well-draining material will connect the front door to the sidewalk on St. Joseph, and from the rear of the site to the future MUP.

As described in Section 4.5, the proponent proposes offering pre-paid Presto cards to employees to encourage the use of transit, while paid parking will be considered as an additional measures to reduce auto dependency. The site provides a variety of amenities to reduce the overall dependency for patrons and employees to leave the site for mid-day trips. The site offers space for a future MUP on the easy side of the development to minimize walking distances to the future Trim LRT.

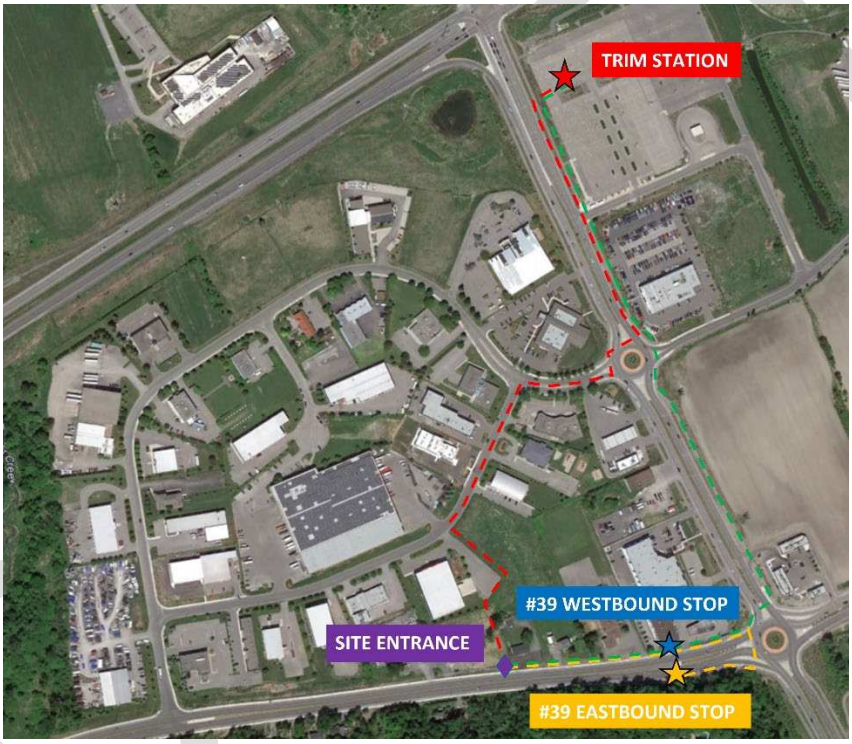
The site proposes a significant shared parking strategy to minimize the auto requirement for the site.
Vehicle parking spaces will be provided in a two-level underground parking garage with parking aisles that are proposed to be 6.0m wide to accommodate two-way traffic in two-lanes. Site access is provided to St. Joseph Blvd. and the adjacent commercia plaza which will facilitate heavy vehicle circulation of the site.

Location of Transit Facilities

There are two existing bus stops for Route #39 approximately 200m east from the site access along St. Joseph just east of the Trim/St. Joseph roundabout. The westbound and eastbound bus stops are located on the north and south side of St. Joseph Blvd, respectively, both of which are equidistant from the Trim/St. Joseph roundabout. From the front entrance of the proposed development, the north and south side stops are an approximate 120m and 410m walk, respectively.

As previously mentioned in **Section 2.1.3.2**, the new Trim station will be located an approximate direct distance of 700m away from the site. The addition of the MUP along the east boundary of the property connecting St. Joseph Blvd and Lacolle Way will provide pedestrians a more direct path to the Trim station. This path will result in an approximate 900m walk from the front doors of the development to the Trim station entrance in comparison to an approximate 1km walk if pedestrians were to walk east down St. Joseph Blvd, then north up Trim Rd. Refer to **Figure 13** below for an illustration of the walking paths to the previously mentioned transit facilities.

Figure 13: Pedestrian and Cycling Paths



Pedestrian/Cycling Routes and Facilities

The site will provide concrete sidewalks and pathways from the entrances connecting to existing pedestrian facilities along St. Joseph Blvd. As previously mentioned, the site will provide a north-south MUP along the east boundary of the site, connecting the north sidewalk to Lacolle Way. However, Lacolle Way does not provide any pedestrian walkways along either side, and it is currently unknown whether there are plans for additional pedestrian/cycling facilities in the future. With this exception, Trim station and all bus stops are accessible via a combination of paved sidewalks and MUPs.

St. Joseph Blvd and Trim Rd are both denominated as cycling spine routes, with unidirectional curbside bike lanes on both sides of each road along the relevant segments. As previously mentioned in **Section 2.1.2**, on all approaches for both the Trim/Dairy and Trim/St. Joseph roundabouts, the concrete sidewalks and bike lanes merge into MUPs within the intersections.

4.1.2. Circulation and Access

The garbage pickup area for the development will be located at the bottom of the site ramp just outside of the parking garage entrance. Waste will be rolled from the garbage area for pick-up by employees. The garbage trucks will use circulate around the back of the adjacent site (3735 St. Joseph) and exit from the neighboring sites adjacent access point.

For patrons, a drop off area is proposed at the front of the site on the east side of the internal driveway. This would provide a barrier-free short term parking stall.

4.2. Parking

Figure 14 illustrates the location of the proposed development with respect to Schedule A from the Orleans Corridor Secondary Plan. As per the vehicular parking policies of the OCSP Section 4.11(1), there is no minimum vehicle parking space rate for developments located within the Secondary Plan Boundary on Schedule A – Designation Plan.

However, the following parking analysis reflects the minimum number of parking rates and spaces based on the City of Ottawa Zoning By-Law. The site is located in Area C: Suburban on Schedule 1A, and is not within a 600m walk to any rapid transit station within Schedule 2A or B.

Figure 14: Extract from Schedule A – Orleans Corridor Secondary Plan

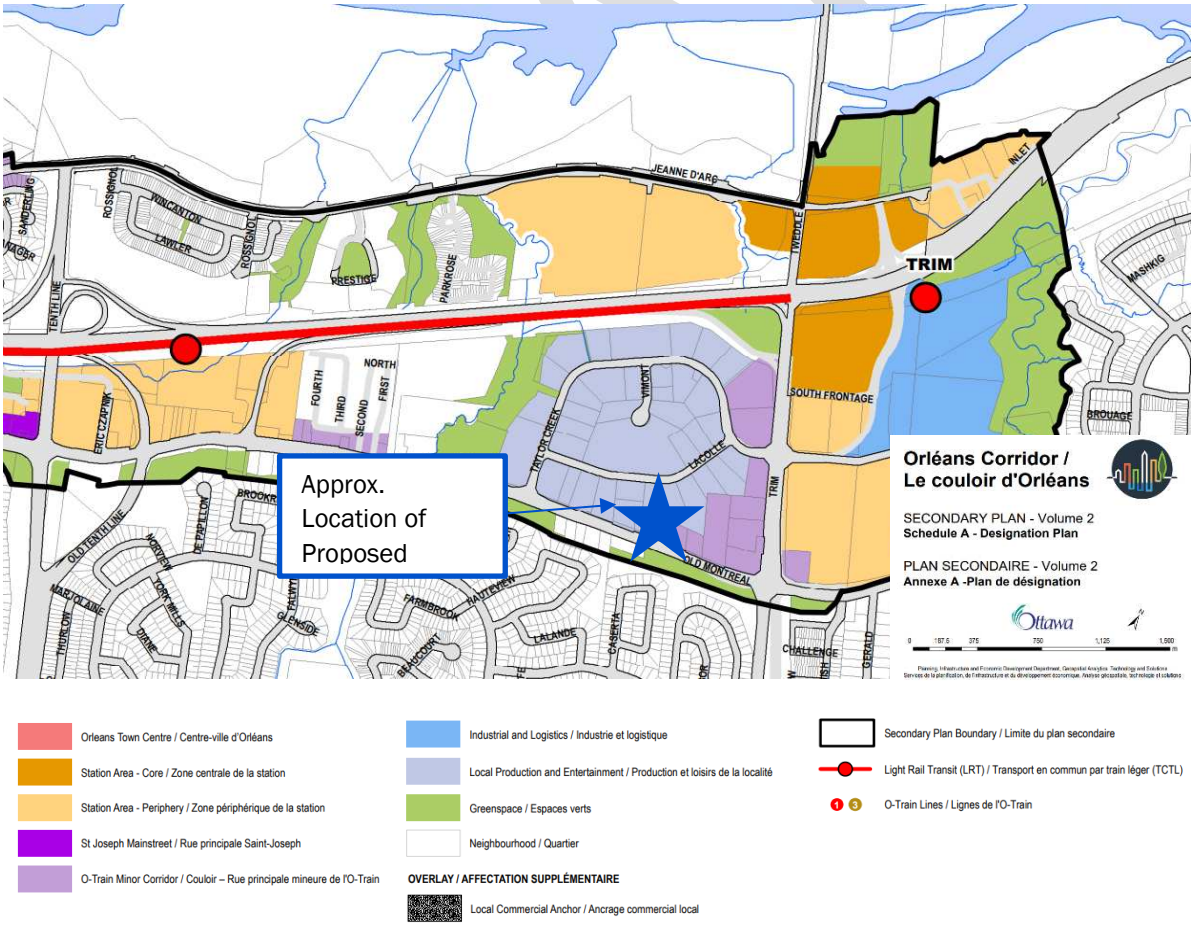


Table 7 summarizes the minimum vehicle parking rates from Part 4, Parking, Queueing and Loading Provisions parking by-law, referenced from Tables 101, 102, and 111A. **Table 7** indicates the base parking rates for both vehicles and bicycles and the minimum required spaces before and after consideration of the shared parking revisions. It should be noted that the commercial 6 (co-working space), atrium/multi-purpose space, and commercial 4 (Gym space) were excluded from the parking review since they are considered a shared-use of the hotel.

Table 7: Required and Proposed Vehicle and Bicycle Parking Spaces

Land Use	Units (unit or m²)	Vehicles			Bicycles	
		Base Rate	Min Required Spaces	Min Required Spaces After Shared Parking	Base Rate	Min required Spaces
Hotel (N44)	61	1/unit	61	61	1/1500 m²	1.7
Retail Store (N51)	81 m²	4/100 m²	3	21	1/250 m²	0.3
Restaurant – Take out (N77)	82 m²	5.0/100 m²	4		1/250 m²	0.3
Retail Store (N51)	94 m²	3.4/100 m²	3		1/250 m²	0.4
Office (N51)	85 m²	2.4/100 m²	2		1/250 m²	0.3
Restaurant – Full Service (N76)	112 m²	10/100 m²	11		1/250 m²	0.5
Day Program	208 m²	3.4/100 m²	7	7	1/250 m²	0.8
Total			**91**	**89**		**4**

Table 8 indicates the number of parking spaces permitted to be shared by land use. The number of spaces were calculated by referencing Table 104 in the Shared Parking Provisions, which permits certain percentages of shared parking dependent on time of day and land use. It is noted that the hotel, co-working space, gym, and adult day program are not eligible for shared parking.

Table 8: Available Shared Parking Space Requirements based on Table 104

Land Use	Land use (Table 104)	II Weekday - Morning	III Weekday - Noon	IV Weekday - Afternoon	V Weekday - Evening	VI Saturday1 - Morning	VII Saturday1 - Noon	VIII Saturday1 - Afternoon	IX Saturday1 - Evening
Retail Store (N51)	c)	2.4	2.6	2.8	2.4	1.9	2.9	3.2	1.6
Restaurant – Take out (N77)	d)	1.2	3.7	2.5	4.1	1.2	3.3	2.1	4.1
Retail Store (N51)	a)	3.2	2.9	3.2	0.5	0.6	0.6	0.3	0.2
Office (N51)	a)	2.0	1.8	2.0	0.3	0.4	0.4	0.2	0.1
Restaurant – Full Service (N76)	d)	3.4	10.1	6.7	11.2	3.4	9.0	5.6	11.2
Total		**12**	**21**	**17**	**19**	**8**	**16**	**11**	**17**

As shown above in **Table 7**, the minimum required spaces for vehicles including shared parking is 89 spaces and the minimum required bicycle spaces is 4. A total of 81 vehicle parking spaces will be provided on the site, 76 of which will be provide in the three-level underground parking lot. Parking level 1 will provide 19 vehicle parking spaces, level 2 will provide 32 vehicle parking spaces, and level 3 will provide 25 vehicle parking spaces.

Additionally, 1 space will be located at the front of the building and 3 spaces will be located outside in the north-west corner of the lot, acting as a continuation of the existing spaces provided by the adjacent site. Finally, 20 outdoor covered bicycle parking spaces will be provided, exceeding the minimum required spaces highlighted in **Table 7**.

4.2.1. Spillover Parking

While it is recognized that the site exceeds the minimum parking designated by secondary plan, there exists a potential for spillover parking. There is a difference of 8 spaces between the 81 provided spaces and the required 89 spaces which can result in parking demand exceeding the site supply. Due to the accessibility of the parking provided by the adjacent site, spillover parking is likely to impact this lot rather than adjacent communities.

The potential for spillover is expected to be minimized due the provisions of TDM Measures such as a transit incentive for employees; the sites context relative to the future Trim LRT Station; and the anticipated restaurant operations as being primarily for hotel use so likely having a reduced parking demand than the results in **Table 8**.

4.3. Boundary Street Design

Multi-Modal Level of Service (MMLOS) analysis was conducted for the site frontage, St. Joseph Boulevard, based on the City of Ottawa's MMLOS Analysis Guidelines.

St. Joseph Boulevard is an arterial road that consists of the following features within the study area:

- 2 vehicle travel lanes in each direction,
- Approximately 2.0m wide sidewalks and no boulevard on both sides of the road,
- 2.0m unidirectional painted bike lanes without buffers,
- Less than 3000 average daily curb lane traffic,
- No on-street parking,
- No transit facilities,
- Posted speed limit of 60km/h,
- Approximately 3.5 m wide lane,

The multi-modal level of service analysis for St. Joseph Blvd is summarized in **Table 9**, with detailed analysis provided in **Appendix E**. The table also identifies the target LOS, based on the land-use designation and road classification of the development site and the boundary streets. The Transportation Master Plan (TMP) of the City of Ottawa identifies the land-use designation of the development site as a General Urban Area. The road classifications of each of the boundary streets were noted in the descriptions of features above.

Table 9: MMLOS - Boundary Road Analysis

Road Segment	Level of Service							
	Pedestrian (PLOS)		Bicycle (BLOS)		Transit (TLOS)		Truck (TkLOS)	
	PLOS	Target	BLOS	Target	TLOS	Target	TkLOS	Target
St. Joseph Boulevard	B	C	E	C	D	D	A	D

As shown in **Table 8**, the Bicycle LOS minimum desirable target is not met along St. Joseph Blvd. This LOS rating is largely due to the higher operating speeds of 70km/h for a bike lane not adjacent to a parking lane.

4.4. Access Intersection Design

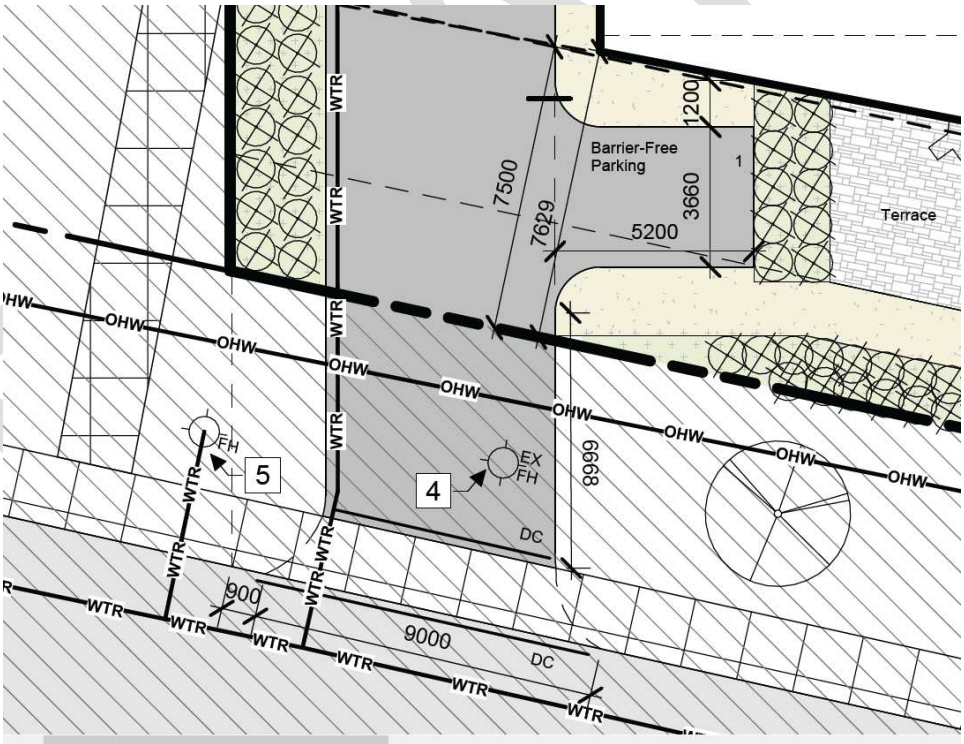
4.4.1. Location and Design of Access

There will be one direct access for the proposed development that will be located on the north side of St. Joseph Blvd, at the south-west end of the property approximately 35 east of the adjacent site access (3735 St. Joseph). The access will continue as an internal driveway to the entrance of the underground parking garage located at the rear of the proposed development (see Figure 2). The access will have STOP control for vehicles exiting the site onto St. Joseph and there are no signalized intersections are near the proposed development access.

The Transportation Association of Canada's (TAC) Geometric Design Guide for Canadian Roads, Chapter 8 (Access), was reviewed for the clear throat length provided by the proposed development access was determined to be sufficient. Figure 14 illustrates the available clear throat length is approximately 7.0m, measured from the end of the site access curb return to the nearest conflict (the mid-point of the curb return to the barrier-free drop off area).

Per TAC Table 8.9.3, the suggested minimum clear throat length to an arterial road for a motel (<150 rooms) is 25m and a general office (<5,000 m^2) is 15m. Given the forecasted site traffic volumes, the proposed TDM measures and infrastructure design, and the desire to allow a form of short-term parking fronting the site, the 7.0m length is considered a reasonable clear throat length. This distance would allow for a single vehicle to safely enter the site without hindering St. Joseph Blvd. traffic, while queues on site can be safely managed given the distance between the access and the ramp to the underground parking.

Figure 15: Clear Throat Length of Proposed Site Access



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

- As required, the width of the proposed development access does not exceed 9m. The access will be 9.0m at the streetline and 6.0m at the property line.

- As required, given the proposed number of parking spaces, the distance between the proposed access and the nearest adjacent intersecting street line (i.e., Trim Rd) is approximately 300m.
- The distance between the proposed access and the adjacent property line is approximately 0.90m. While this is below the desired 3.0m distance, the proposed site access arrangement maximizes its distance from the adjacent Trim/St. Joseph roundabout while maintaining adequate sight lines and not creating an undue traffic hazard.
- The grade of the private approach is to not exceed 2% within the private property for a distance of 9.0m to the curb line.

Therefore, the access is design is in conformance with the City of Ottawa Private Approach By-law 2003-447. The access is to be constructed per City of Ottawa Standard Detail SC 7.1.

4.5. Transportation Demand Management

4.5.1. Context for TDM

Based on the type of mixed-use non-residential of development, it is assumed that a variety of trip purposes will take place during commuter and off-peak periods. Employees to the hotel can arrive at various times of the day, depending on future shift changes. Hotel patrons can also frequent the site at various days. The office uses are anticipated to have typical morning and afternoon commuter hours, while the restaurant and gym will be open for business most days. Sections 3.1.1 and 3.1.2 describe how many trips are anticipated per travel mode and anticipates the likely locations that they will travel to and from based on the OD-Survey 2011 for Ottawa. The site is located approximately a 900m walk to the future Trim LRT Station.

The Orleans Corridor Secondary Plan (OCSP) notes that new development is to plan and design to prioritize sustainable transportation.

4.5.2. Need and Opportunity

Given that the development is predominantly located within 1km or less of rapid transit, it is expected that TDM measures be utilized to promote sustainable active and transit mode shares. Such measures are described in more detail in Section 4.5.3 below but can include safe and efficient connectivity to public transit.

4.5.3. TDM Program

The TDM Infrastructure and TDM Measures Checklists for the residential land use have been provided in **Appendix F**. The proposed measures for each respective checklist are provided below.

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

- Provide hotel employees a transit fare incentive in the form of a pre-paid Presto card to encourage transit use.
- Display local area maps with walking/cycling access routes and key destinations at major entrances,
- Display relevant transit schedules and route maps at entrances,
- Provide online links from the hotel webpage to OC Transpo information,
- Provide a muti-modal travel option information package to employees, and make available to hotel patrons,
- Provide on-site amenities such as a café, restaurant, pharmacy and gym to reduce the need for mid-day errands.
- Explore the option to charge for parking.

Proposed measures identified in the TDM-supportive Development Design and Infrastructure Checklist are:

- Locate building close to the street, and do not locate parking areas between the street and building,
- Locate building entrances in order to minimize walking distances to sidewalks and transit stops/stations,
- Locate building doors and windows to ensure visibility of pedestrians from the building, for their security and comfort,
- Through direct connections to St. Joseph Blvd. and the future MUP, provide safe, direct and attractive pedestrian access from public sidewalks to building entrances through such measures as: reducing distances between public sidewalks and major building entrances; providing walkways from public streets to major building entrances; within a site, providing walkways along the front of adjoining buildings, between adjacent buildings, and connecting areas where people may congregate, such as courtyards and transit stops; and providing weather protection through canopies, colonnades, and other design elements wherever possible,
- Provide sidewalks of smooth, well-drained walking surfaces of contrasting materials or treatments to differentiate pedestrian areas from vehicle areas, and provide marked pedestrian crosswalks at intersection sidewalks,
- Make sidewalks and open space areas easily accessible through features such as gradual grade transition, depressed curbs at street corners and convenient access to extra-wide parking spaces and ramps,
- Through provisions of a future MUP, include adequately spaced inter-block/street cycling and pedestrian connections to facilitate travel by active transportation. Provide links to the existing or planned network of public sidewalks, multi-use pathways and on- road cycle routes. Where public sidewalks and multi-use pathways intersect with roads, consider providing traffic control devices to give priority to cyclists and pedestrians,
- Provide safe, direct and attractive walking routes from building entrances to nearby transit stops,
- Ensure that walking routes to transit stops are secure and lighted wherever possible,
- Provide lighting, landscaping and benches along walking and cycling routes between building entrances and streets, sidewalks and trails,
- Provide bicycle parking in highly visible and lighted areas, sheltered from the weather wherever possible,
- Provide the number of bicycle parking spaces specified for various land uses in different parts of Ottawa; provide convenient access to main entrances or well- used areas,
- Ensure that bicycle parking spaces and access aisles meet minimum dimensions; that no more than 50% of spaces are vertical spaces; and that parking racks are securely anchored,
- Where more than 50 bicycle parking spaces are provided for a single residential building, locate at least 25% of spaces within a building/structure, a secure area (e.g. supervised parking lot or enclosure) or bicycle lockers,
- Provide secure bicycle parking spaces equivalent to at least the number of units at condominiums or multi- family residential developments,
- Do not provide more parking than permitted by zoning, nor less than required by zoning, unless a variance is being applied for.

4.6. Neighbourhood Traffic Management

Exempt – see **Table 1**.

4.7. Transit

Referring to **Section 3.1.1**, the site is expected to generate a total of 12 and 17 transit person trips for the morning and afternoon peak hours, respectively. The mode shares used for the trip generation analysis accounted for the expected increase of transit use with the addition of the new Trim station in the near future. Due to the overall low transit volumes generated by the site for both morning and afternoon peak hours, with the

majority of trips likely to utilize the Trim LRT, it is anticipated there will be little impact on the existing transit network and will not require any further analysis.

4.8. Review of Network Concept

Exempt – see **Table 1**.

4.9. Intersection Design

4.9.1. Intersection control

Exempt – see **Table 1**.

4.9.2. Intersection design

Exempt – see **Table 1**.

5.0 FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

Based on the results summarized herein, the following transportation related conclusions are offered:

Proposed Development

- 13890767 CANADA INC is proposing a mixed-use development at the municipal address of 3745 St. Joseph Blvd. The development is assumed to be constructed by the year 2025 and will be built in a single phase.
- The development will consist of a six-storey mixed-use building with approximately 61 hotel units, 5,400m^2 of first-floor commercial area, and a 475m^2 rooftop amenity area. The proposed uses will primarily consist of a hotel that will occupy the top four-storeys and varying types of amenities such as a café, gym, co-working space etc. for the first two-storeys.
- The minimum required parking by-law requirements are not met by a small margin. However, the OCSP has no minimum parking requirements for new developments located within the plans boundary. Additionally, TDM measures have been proposed to leverage the sites close proximity to transit and bike parking minimums were also exceeded to encourage active travel.
- One site access will be provided on the south boundary of the site along the north side of St. Joseph Blvd. The proposed access will provide a full movement driveway off St. Joseph with a STOP control for exiting vehicles. The access location and design were found to meet the requirements of the City of Ottawa's Private Approach By-Law and TAC Guidelines.
- The development is anticipated to generate up to approximately 83 person trips during peak hours, which includes 42 new vehicle trips, 15 passenger trips, 17 transit trips, and 4 non-motorized (walking and cycling) trips.
- A suite of TDM measures will be adopted by the proponent for the purpose of encouraging sustainable modes of transportation, such as walking, cycling and transit. This includes displaying multi-modal travel information for walking, providing a transit-fare incentive to employees, and investigating unbundling parking costs from monthly rent.

Existing and Future Background Conditions

- MMLOS analysis for St. Joseph Blvd was conducted and the existing conditions are expected to remain the same to future conditions for the scope of this study. The analysis indicates that the pedestrian, transit, and truck all meet the minimum desirable targets with the exception of the bicycle LOS, failing to meet the desirable BLOS target of C.
- After reviewing the TRANS model from the Orleans district and TIA's prepared for other developments, a 3% annual growth rate was applied to the entirety of the existing network at the buildout year of 2025.

- Overall, there are no existing safety concerns along the proposed development frontage and study area intersections. As a result, no safety mitigation measures were considered.
- A MUP is proposed along the east boundary of the site to support pedestrian and cycling accessibility in support of the new Trim LRT station.

Projected Conditions

- Through a review of adjacent development applications, a 3% annual growth rate was applied to background traffic to reflect growth in future adjacent subdivisions, to and from the future Trim Road LRT park and ride, and any unforeseen developments.
- In total projected 2025 conditions, traffic operations are anticipated to operate similar to the existing conditions, considering the low number of trips generated by the site.
- No roadway modifications were recommended within the study area to support the proposed development.

Based on the proposed land use, the site context, the low traffic volumes anticipated to be generated by the proposed development and the analysis conducted, the proposed development will have minimal impact to the study area and is recommended to proceed from a transportation perspective.

Appendix A:

Screening Form

PARSONS

1223 Michael Street, Suite 100, Ottawa, Ontario, K1J 7T2
P: +1 613.738.4160 | F: +1 613.739.7105 | www.parsons.com

City of Ottawa 2017 TIA Guidelines

TIA Screening Form

Date	12.14.2022
Project	3745 St. Joseph Blvd. TIA
Project Number	478426-01000

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

Module 1.1 - Description of Proposed Development	
Municipal Address	3745 St. Joseph Boulevard
Description of location	Greenfield site located north of St. Joseph Blvd and 300m west of the Trim Road/St. Joseph Blvd.-Old Montreal Road roundabout.
Land Use	Hotel
Development Size	58,000 sq.ft. / 5,388 m2
Number of Accesses and Locations	One full movement access to St. Joseph Blvd.
Development Phasing	One phase
Buildout Year	2025
Sketch Plan / Site Plan	See attached

Module 1.2 - Trip Generation Trigger		
Land Use Type	Lodging - Hotel (33)	
Development Size	60	Rooms
Trip Generation Trigger Met?	No	
60 hotel rooms is forecast to generate 28 vehicle trips in the morning peak hour and 36 trips in the afternoon peak hour. Therefore forecast person trips are below the 50 person-trips in the peak hour threshold to meet the trip generation trigger		

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	St. Joseph is a Spine Route
Development is in a Design Priority Area (DPA) or Transit-oriented Development (TOD) zone. (See Sheet 3)	No	
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	300m to Trim/St. Joseph Roundabout
A proposed driveway makes use of an existing median break that serves an existing site	No	
There is a documented history of traffic operations or safety concerns on the boundary streets within 500 m of the development	No	*Not to our current knowledge
The development includes a drive-thru facility	No	
Safety Trigger Met?	No	

Appendix B:

Transit Route Maps

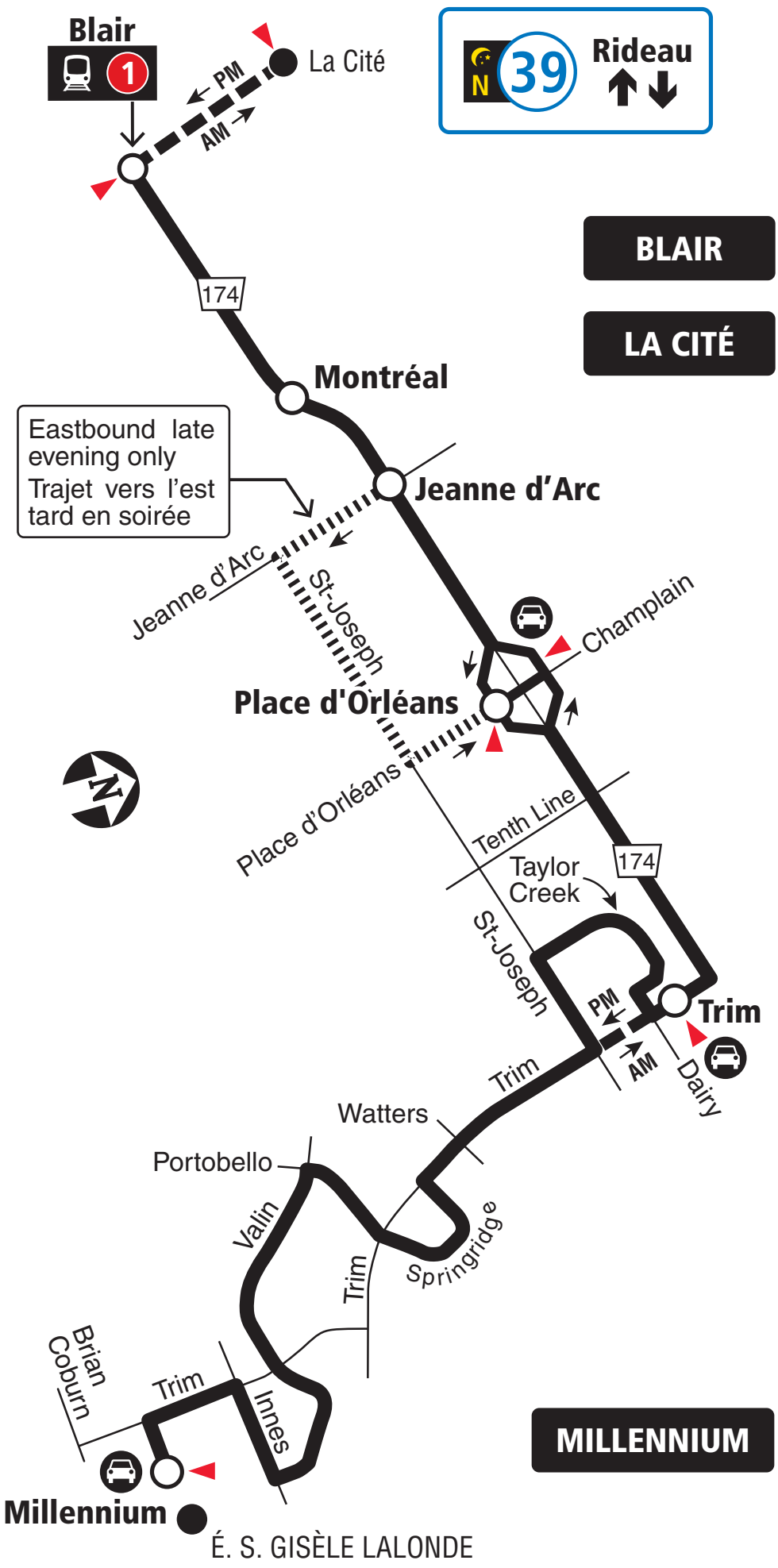
39 Rapide

MILLENNIUM

BLAIR
LA CITÉ

7 days a week / 7 jours par semaine

All day service and limited overnight
Service toute la journée et limité la nuit



Station

Peak periods / Périodes de pointe

Park & Ride / Parc-o-bus

Timepoint / Heures de passage

N 39

When O-Train Line 1 is not running overnight, Route 39 will be extended downtown to Rideau Station. / Lorsque la ligne 1 de l'O-Train ne circule pas la nuit, le circuit 39 sera prolongée au centre-ville jusqu'à la station Rideau.

2019.07

1

Future route after O-Train Line 1 is open
Trajet du circuit après l'ouverture de la Ligne 1 de l'O-Train

Lost and Found / Objets perdus..... **613-563-4011**
Security / Sécurité **613-741-2478**

OC Transpo

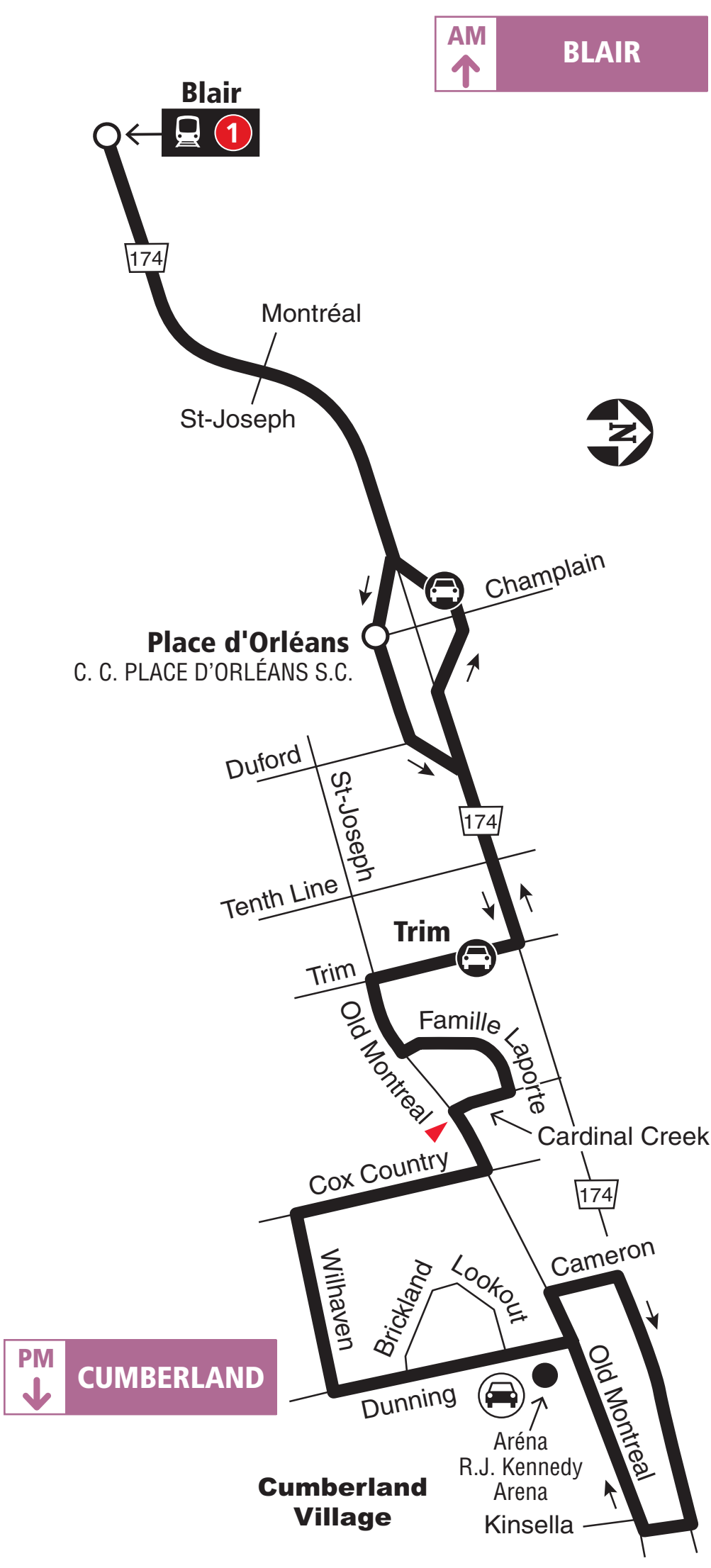
INFO 613-741-4390
octranspo.com

221 Connexion

CUMBERLAND
BLAIR

Monday to Friday / Lundi au vendredi

Peak periods only
Périodes de pointe seulement



Station

Park & Ride / Parc-o-bus

Timepoint / Heures de passage

2019.07

Future route after O-Train Line 1 is open
Trajet du circuit après l'ouverture de la Ligne 1 de l'O-Train

Lost and Found / Objets perdus..... **613-563-4011**
Security / Sécurité..... **613-741-2478**

OC Transpo

INFO 613-741-4390
octranspo.com

Appendix C:

Traffic Data

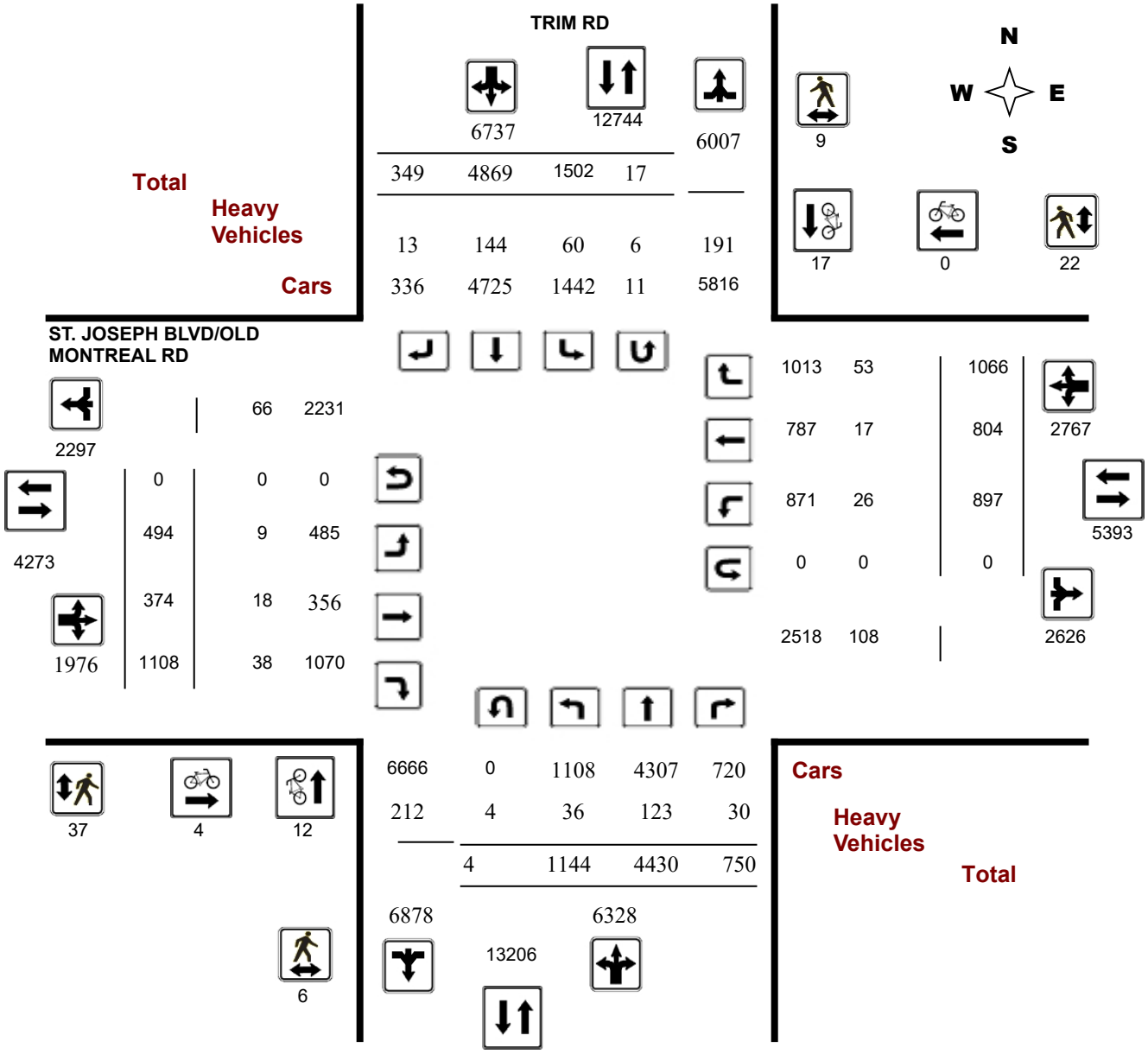
Transportation Services - Traffic Services

Turning Movement Count - Study Results

ST. JOSEPH BLVD/OLD MONTREAL RD @ TRIM RD

Survey Date: Thursday, May 16, 2019
Start Time: 07:00
WO No: 40749
Device: Miovision

Full Study Diagram



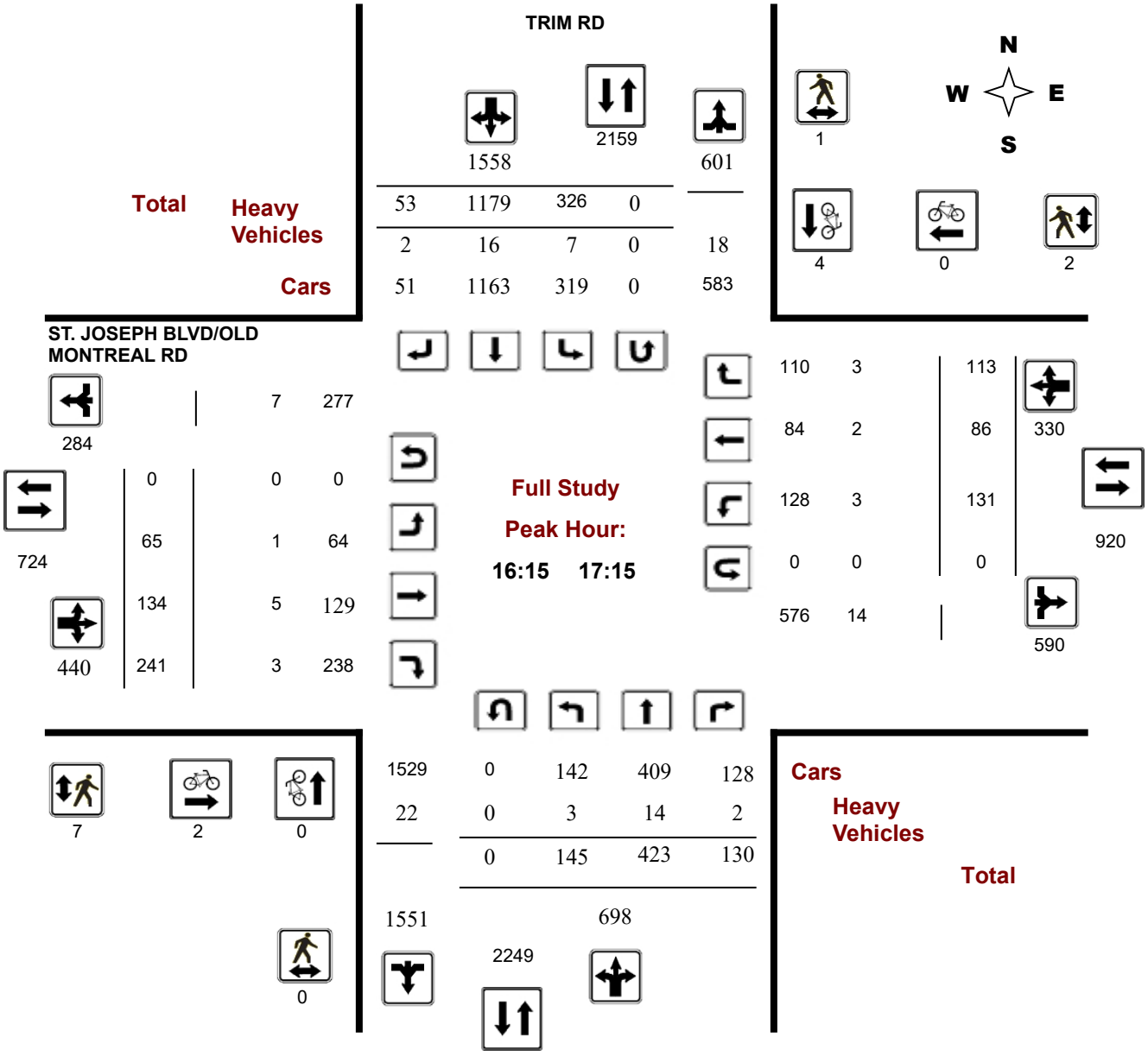
Transportation Services - Traffic Services

Turning Movement Count - Study Results

ST. JOSEPH BLVD/OLD MONTREAL RD @ TRIM RD

Survey Date: Thursday, May 16, 2019
Start Time: 07:00
WO No: 40749
Device: Miovision

Full Study Peak Hour Diagram



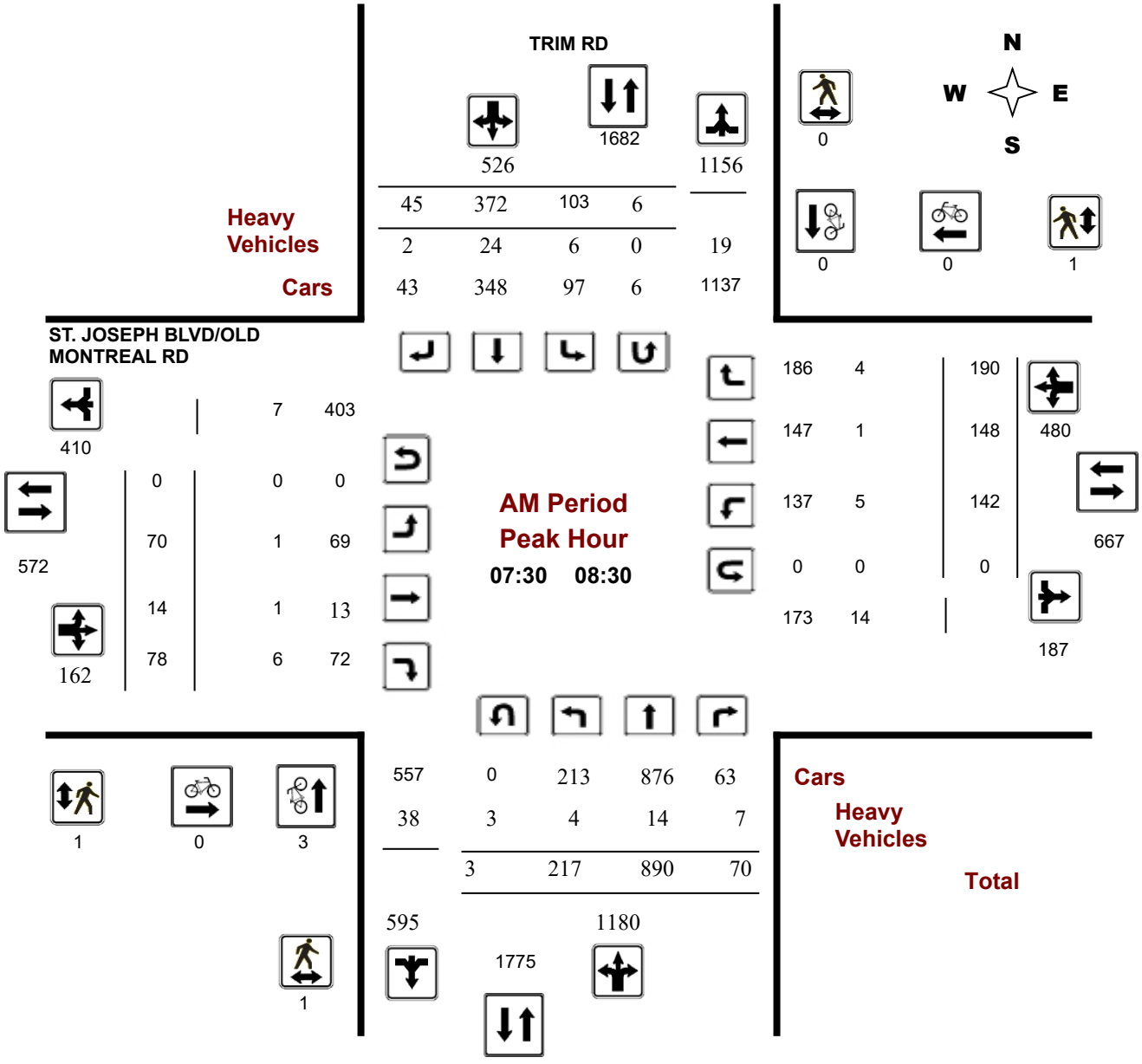
Transportation Services - Traffic Services

Turning Movement Count - Peak Hour Diagram

ST. JOSEPH BLVD/OLD MONTREAL RD @ TRIM RD

Survey Date: Thursday, May 16, 2019 **WO No:** 40749

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



Comments

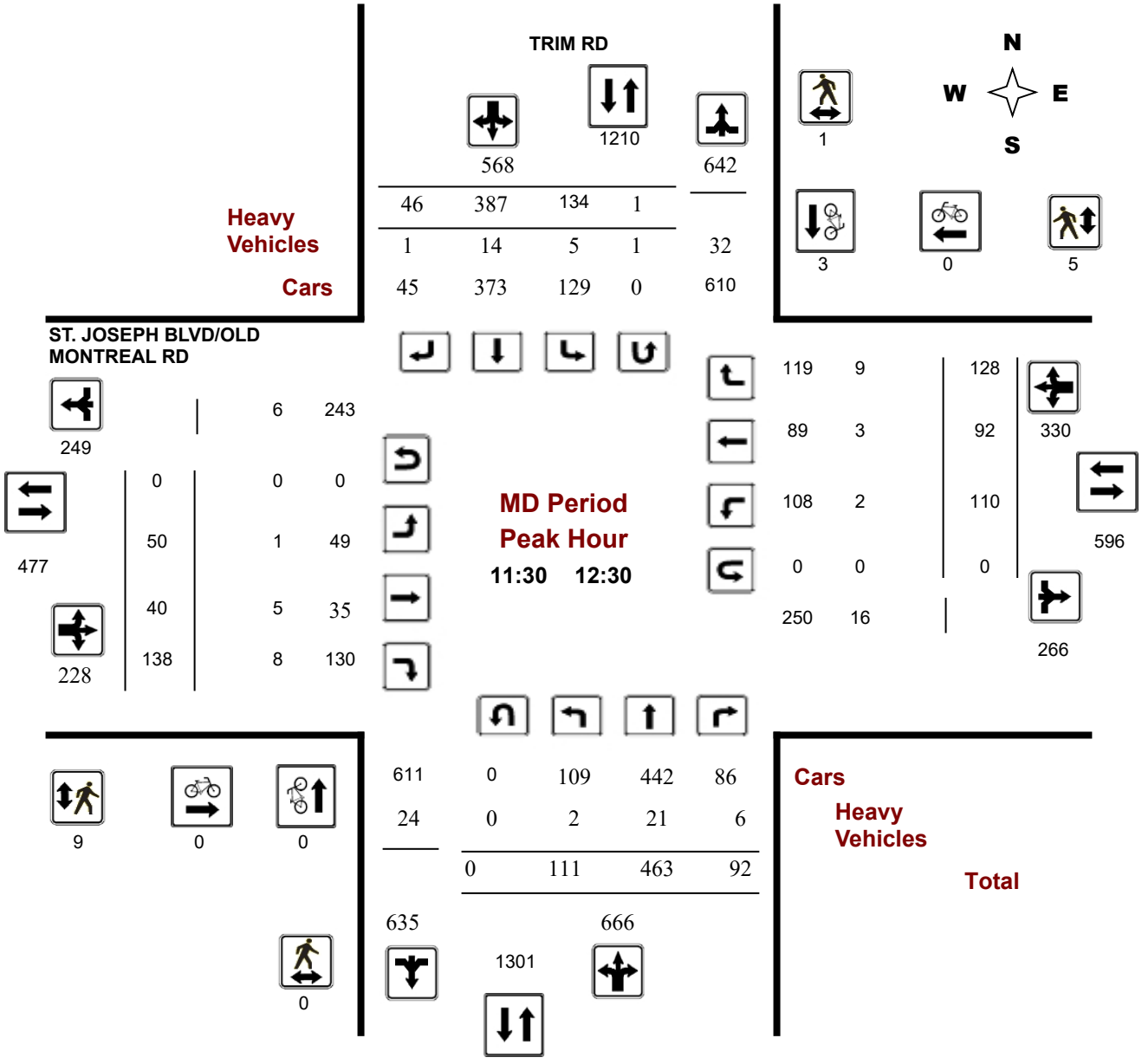
Transportation Services - Traffic Services

Turning Movement Count - Peak Hour Diagram

ST. JOSEPH BLVD/OLD MONTREAL RD @ TRIM RD

Survey Date: Thursday, May 16, 2019 **WO No:** 40749

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



Comments

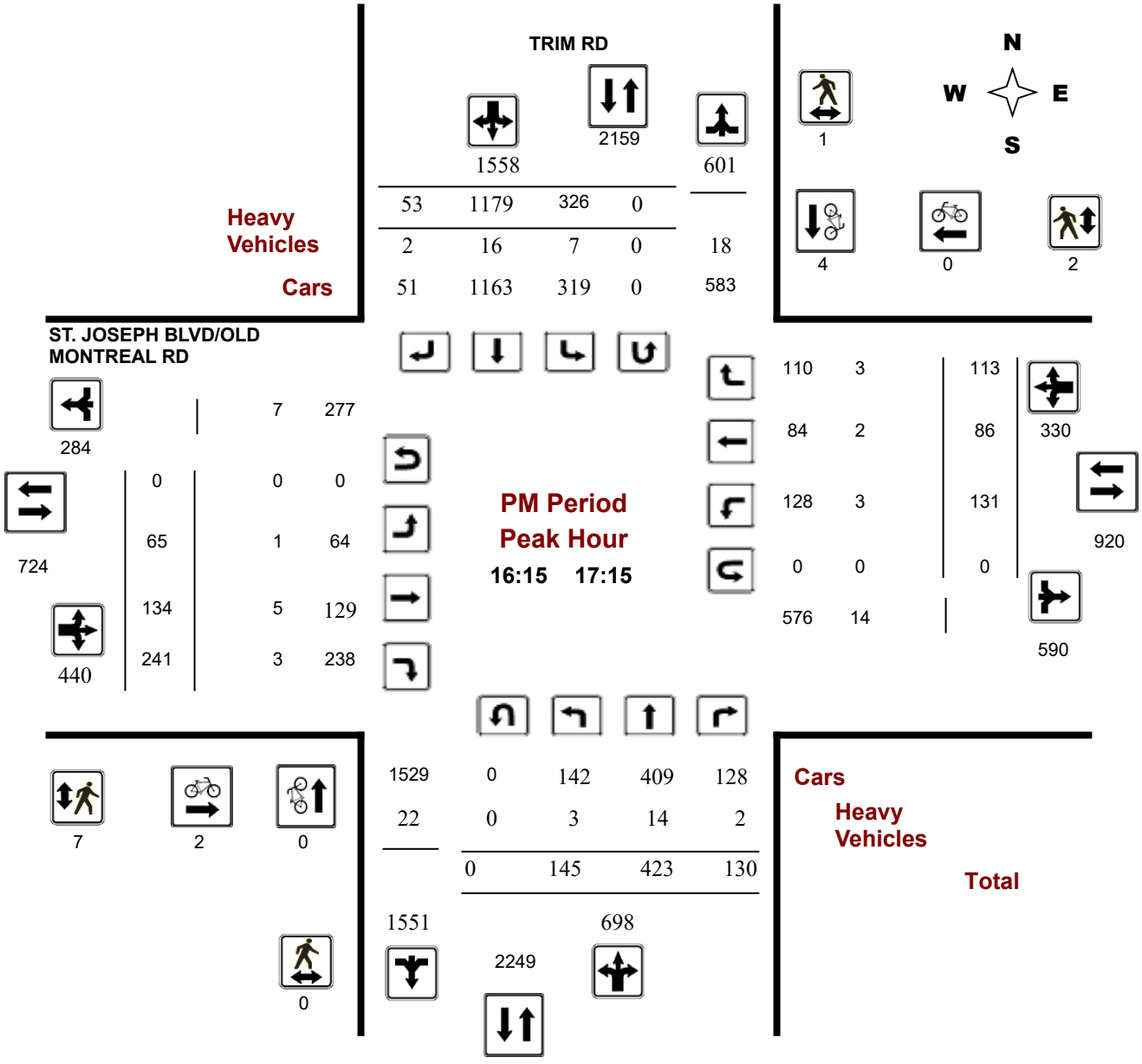
Transportation Services - Traffic Services

Turning Movement Count - Peak Hour Diagram

ST. JOSEPH BLVD/OLD MONTREAL RD @ TRIM RD

Survey Date: Thursday, May 16, 2019 **WO No:** 40749

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



Comments

Transportation Services - Traffic Services

Turning Movement Count - Study Results

ST. JOSEPH BLVD/OLD MONTREAL RD @ TRIM RD

Survey Date: Thursday, May 16, 2019 **WO No:** 40749

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

Full Study Summary (8 HR Standard)

Survey Date: Thursday, May 16, 2019

Total Observed U-Turns

Northbound: 4 Southbound: 17

Eastbound: 0 Westbound: 0

AADT Factor

.90

	TRIM RD								ST. JOSEPH BLVD/OLD MONTREAL RD									
	Northbound				Southbound					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**	**Grand Total**
07:00 08:00	182	931	58	**1171**	91	358	36	**485**	**1656**	62	12	49	**123**	134	193	222	**549**	**672**	**2328**
08:00 09:00	193	764	78	**1035**	102	316	41	**459**	**1494**	53	19	78	**150**	118	113	182	**413**	**563**	**2057**
09:00 10:00	162	567	69	**798**	134	265	27	**426**	**1224**	51	11	76	**138**	105	70	117	**292**	**430**	**1654**
11:30 12:30	111	463	92	**666**	134	387	46	**567**	**1233**	50	40	138	**228**	110	92	128	**330**	**558**	**1791**
12:30 13:30	112	362	79	**553**	122	464	47	**633**	**1186**	52	46	114	**212**	81	85	106	**272**	**484**	**1670**
15:00 16:00	114	446	112	**672**	289	867	48	**1204**	**1876**	90	28	184	**302**	115	85	100	**300**	**602**	**2478**
16:00 17:00	151	402	141	**694**	319	1191	46	**1556**	**2250**	63	134	252	**449**	146	71	97	**314**	**763**	**3013**
17:00 18:00	119	495	121	**735**	311	1021	58	**1390**	**2125**	73	84	217	**374**	88	95	114	**297**	**671**	**2796**
Sub Total	1144	4430	750	**6324**	1502	4869	349	**6720**	**13044**	494	374	1108	**1976**	897	804	1066	**2767**	**4743**	**17787**
U Turns				**4**				**17**	**21**				**0**				**0**	**0**	**21**
Total	1144	4430	750	**6328**	1502	4869	349	**6737**	**13065**	494	374	1108	**1976**	897	804	1066	**2767**	**4743**	**17808**
EQ 12Hr	1590	6158	1042	**8796**	2088	6768	485	**9364**	**18160**	687	520	1540	**2747**	1247	1118	1482	**3846**	**6593**	**24753**
Note: These values are calculated by multiplying the totals by the appropriate expansion factor.														**1.39**					
AVG 12Hr	1431	5542	938	**7916**	1879	7979	572	**8428**	**16344**	618	468	1386	**2472**	1122	1006	1334	**3461**	**5934**	**22278**
Note: These volumes are calculated by multiplying the Equivalent 12 hr. totals by the AADT factor.														**.90**					
AVG 24Hr	1875	7260	1229	**10370**	2461	10452	749	**11041**	**21411**	810	613	1816	**3238**	1470	1318	1748	**4534**	**7774**	**29184**
Note: These volumes are calculated by multiplying the Average Daily 12 hr. totals by 12 to 24 expansion factor.														**1.31**					

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

Transportation Services - Traffic Services

Turning Movement Count - Study Results

ST. JOSEPH BLVD/OLD MONTREAL RD @ TRIM RD

Survey Date: Thursday, May 16, 2019 **WO No:** 40749

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

Full Study 15 Minute Increments

		TRIM RD									ST. JOSEPH BLVD/OLD MONTREAL RD									
		Northbound				Southbound					Eastbound				Westbound					
Time 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	43	258	8	309	20	63	8	91	400	10	2	11	23	20	44	70	134	157	557
07:15	07:30	28	221	15	264	22	82	8	112	376	8	5	5	18	29	57	60	146	164	540
07:30	07:45	55	219	9	284	27	103	7	142	426	25	0	15	40	42	51	50	143	183	609
07:45	08:00	56	233	26	315	22	110	13	145	460	19	5	18	42	43	41	42	126	168	628
08:00	08:15	55	226	13	295	26	73	15	114	409	7	9	26	42	25	25	58	108	150	559
08:15	08:30	51	212	22	286	28	86	10	125	411	19	0	19	38	32	31	40	103	141	552
08:30	08:45	47	181	20	248	25	71	9	105	353	13	7	17	37	34	20	45	99	136	489
08:45	09:00	40	145	23	209	23	86	7	116	325	14	3	16	33	27	37	39	103	136	461
09:00	09:15	47	170	22	239	36	73	6	120	359	12	0	19	31	30	17	27	74	105	464
09:15	09:30	37	139	20	196	31	71	7	109	305	12	3	18	33	26	23	41	90	123	428
09:30	09:45	38	127	11	176	34	59	5	99	275	13	3	17	33	25	19	25	69	102	377
09:45	10:00	40	131	16	187	33	62	9	104	291	14	5	22	41	24	11	24	59	100	391
11:30	11:45	25	129	15	169	43	91	4	138	307	12	18	37	67	24	27	29	80	147	454
11:45	12:00	31	106	18	155	24	101	11	137	292	13	4	33	50	28	16	38	82	132	424
12:00	12:15	26	113	32	171	33	85	16	134	305	10	11	36	57	28	22	31	81	138	443
12:15	12:30	29	115	27	171	34	110	15	159	330	15	7	32	54	30	27	30	87	141	471
12:30	12:45	26	90	18	134	30	114	8	152	286	13	14	29	56	28	22	26	76	132	418
12:45	13:00	29	96	18	143	32	113	12	157	300	10	15	30	55	23	31	23	77	132	432
13:00	13:15	37	92	25	154	30	114	16	160	314	19	5	27	51	13	15	33	61	112	426
13:15	13:30	20	84	18	122	30	123	11	164	286	10	12	28	50	17	17	24	58	108	394
15:00	15:15	25	114	25	164	60	186	12	258	422	21	7	46	74	31	17	26	74	148	570
15:15	15:30	30	103	22	155	68	219	16	303	458	22	5	42	69	31	16	25	72	141	599
15:30	15:45	31	113	38	182	77	222	4	303	485	20	8	51	79	28	33	31	92	171	656
15:45	16:00	28	116	27	171	84	240	16	341	512	27	8	45	80	25	19	18	62	142	654
16:00	16:15	33	85	41	159	86	277	10	373	532	16	33	70	119	40	12	21	73	192	724
16:15	16:30	37	108	38	183	80	273	10	363	546	18	27	54	99	42	17	17	76	175	721
16:30	16:45	39	106	33	178	75	305	14	394	572	12	32	78	122	34	25	28	87	209	781
16:45	17:00	42	103	29	174	78	336	12	426	600	17	42	50	109	30	17	31	78	187	787
17:00	17:15	27	106	30	163	93	265	17	375	538	18	33	59	110	25	27	37	89	199	737
17:15	17:30	37	117	37	191	75	242	9	327	518	14	25	62	101	23	21	41	85	186	704
17:30	17:45	26	139	32	197	72	287	17	376	573	18	17	56	91	13	24	19	56	147	720
17:45	18:00	29	133	22	184	71	227	15	315	499	23	9	40	72	27	23	17	67	139	638
Total:		1144	4430	750	6328	1502	4869	349	6737	13065	494	374	1108	1976	897	804	1066	2767	4743	17,808

Note: U-Turns are included in Totals.

Transportation Services - Traffic Services

Turning Movement Count - Study Results

ST. JOSEPH BLVD/OLD MONTREAL RD @ TRIM RD

Survey Date: Thursday, May 16, 2019 **WO No:** 40749

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

Full Study Cyclist Volume

Time Period		TRIM RD			ST. JOSEPH BLVD/OLD MONTREAL RD			
		Northbound	Southbound	Street Total	Eastbound	Westbound	Street Total	Grand Total
07:00	07:15	0	0	0	1	0	1	1
07:15	07:30	0	0	0	0	0	0	0
07:30	07:45	1	0	1	0	0	0	1
07:45	08:00	1	0	1	0	0	0	1
08:00	08:15	0	0	0	0	0	0	0
08:15	08:30	1	0	1	0	0	0	1
08:30	08:45	1	1	2	1	0	1	3
08:45	09:00	0	0	0	0	0	0	0
09:00	09:15	0	1	1	0	0	0	1
09:15	09:30	0	0	0	0	0	0	0
09:30	09:45	0	0	0	0	0	0	0
09:45	10:00	1	0	1	0	0	0	1
11:30	11:45	0	3	3	0	0	0	3
11:45	12:00	0	0	0	0	0	0	0
12:00	12:15	0	0	0	0	0	0	0
12:15	12:30	0	0	0	0	0	0	0
12:30	12:45	0	0	0	0	0	0	0
12:45	13:00	0	0	0	0	0	0	0
13:00	13:15	0	0	0	0	0	0	0
13:15	13:30	0	0	0	0	0	0	0
15:00	15:15	1	1	2	0	0	0	2
15:15	15:30	0	0	0	0	0	0	0
15:30	15:45	0	1	1	0	0	0	1
15:45	16:00	2	1	3	0	0	0	3
16:00	16:15	0	0	0	0	0	0	0
16:15	16:30	0	0	0	0	0	0	0
16:30	16:45	0	1	1	0	0	0	1
16:45	17:00	0	0	0	0	0	0	0
17:00	17:15	0	3	3	2	0	2	5
17:15	17:30	0	5	5	0	0	0	5
17:30	17:45	4	0	4	0	0	0	4
17:45	18:00	0	0	0	0	0	0	0
Total		12	17	**29**	4	0	4	33

Transportation Services - Traffic Services

Turning Movement Count - Study Results

ST. JOSEPH BLVD/OLD MONTREAL RD @ TRIM RD

Survey Date: Thursday, May 16, 2019 **WO No:** 40749

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

Full Study Pedestrian Volume

	TRIM RD			ST. JOSEPH BLVD/OLD MONTREAL RD			
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	0	1	**1**	0	0	**0**	**1**
07:15 07:30	0	0	**0**	2	0	**2**	**2**
07:30 07:45	0	0	**0**	0	0	**0**	**0**
07:45 08:00	0	0	**0**	0	0	**0**	**0**
08:00 08:15	1	0	**1**	1	1	**2**	**3**
08:15 08:30	0	0	**0**	0	0	**0**	**0**
08:30 08:45	0	1	**1**	1	2	**3**	**4**
08:45 09:00	0	2	**2**	0	0	**0**	**2**
09:00 09:15	0	0	**0**	1	0	**1**	**1**
09:15 09:30	0	0	**0**	0	0	**0**	**0**
09:30 09:45	1	0	**1**	0	0	**0**	**1**
09:45 10:00	0	0	**0**	0	0	**0**	**0**
11:30 11:45	0	1	**1**	0	3	**3**	**4**
11:45 12:00	0	0	**0**	8	1	**9**	**9**
12:00 12:15	0	0	**0**	1	1	**2**	**2**
12:15 12:30	0	0	**0**	0	0	**0**	**0**
12:30 12:45	0	0	**0**	7	0	**7**	**7**
12:45 13:00	0	0	**0**	0	2	**2**	**2**
13:00 13:15	0	0	**0**	2	0	**2**	**2**
13:15 13:30	0	0	**0**	2	1	**3**	**3**
15:00 15:15	0	1	**1**	0	0	**0**	**1**
15:15 15:30	0	1	**1**	0	1	**1**	**2**
15:30 15:45	0	0	**0**	0	2	**2**	**2**
15:45 16:00	0	1	**1**	0	4	**4**	**5**
16:00 16:15	1	0	**1**	3	0	**3**	**4**
16:15 16:30	0	0	**0**	4	1	**5**	**5**
16:30 16:45	0	0	**0**	2	0	**2**	**2**
16:45 17:00	0	1	**1**	0	0	**0**	**1**
17:00 17:15	0	0	**0**	1	1	**2**	**2**
17:15 17:30	1	0	**1**	1	1	**2**	**3**
17:30 17:45	1	0	**1**	0	0	**0**	**1**
17:45 18:00	1	0	**1**	1	1	**2**	**3**
Total	6	9	**15**	37	22	**59**	**74**

Transportation Services - Traffic Services

Turning Movement Count - Study Results

ST. JOSEPH BLVD/OLD MONTREAL RD @ TRIM RD

Survey Date: Thursday, May 16, 2019 **WO No:** 40749

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

Full Study Heavy Vehicles

		TRIM RD									ST. JOSEPH BLVD/OLD MONTREAL RD									
		Northbound				Southbound					Eastbound				Westbound					
Time 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	1	2	0	**12**	0	7	2	**13**	**25**	0	0	2	**5**	0	0	2	**2**	**7**	**16**
07:15	07:30	0	6	2	**19**	4	8	1	**21**	**40**	0	0	1	**4**	2	2	2	**12**	**16**	**28**
07:30	07:45	1	5	1	**24**	0	9	0	**16**	**40**	0	0	2	**3**	4	0	2	**7**	**10**	**25**
07:45	08:00	1	4	1	**13**	1	6	0	**11**	**24**	0	1	1	**4**	0	1	0	**4**	**8**	**16**
08:00	08:15	1	4	3	**17**	3	5	2	**16**	**33**	1	0	1	**5**	1	0	1	**8**	**13**	**23**
08:15	08:30	1	1	2	**12**	2	4	0	**8**	**20**	0	0	2	**3**	0	0	1	**5**	**8**	**14**
08:30	08:45	3	0	1	**9**	4	1	1	**13**	**22**	1	1	2	**9**	2	1	6	**15**	**24**	**23**
08:45	09:00	2	2	0	**11**	0	2	1	**7**	**18**	0	0	1	**4**	2	0	2	**4**	**8**	**13**
09:00	09:15	3	8	3	**23**	5	6	0	**21**	**44**	0	0	2	**5**	1	0	2	**11**	**16**	**30**
09:15	09:30	1	2	1	**15**	2	8	0	**14**	**29**	0	0	0	**1**	3	0	2	**8**	**9**	**19**
09:30	09:45	2	5	0	**14**	2	3	1	**15**	**29**	1	0	2	**6**	2	0	1	**5**	**11**	**20**
09:45	10:00	1	1	0	**6**	3	2	1	**9**	**15**	0	0	2	**4**	0	0	2	**5**	**9**	**12**
11:30	11:45	1	7	3	**19**	4	3	0	**17**	**36**	0	2	3	**7**	2	1	3	**15**	**22**	**29**
11:45	12:00	0	6	1	**13**	0	4	0	**16**	**29**	0	0	2	**3**	0	1	4	**6**	**9**	**19**
12:00	12:15	1	5	1	**12**	0	4	0	**10**	**22**	1	2	1	**6**	0	1	0	**4**	**10**	**16**
12:15	12:30	0	3	1	**9**	1	3	1	**10**	**19**	0	1	2	**4**	0	0	2	**5**	**9**	**14**
12:30	12:45	1	2	0	**6**	3	3	1	**13**	**19**	2	0	0	**5**	0	1	2	**6**	**11**	**15**
12:45	13:00	1	3	1	**12**	3	6	0	**13**	**25**	0	2	1	**4**	0	0	1	**7**	**11**	**18**
13:00	13:15	3	1	1	**12**	3	5	0	**12**	**24**	1	0	1	**5**	1	0	2	**7**	**12**	**18**
13:15	13:30	1	2	1	**9**	2	5	0	**12**	**21**	0	0	0	**3**	0	2	3	**8**	**11**	**16**
15:00	15:15	1	6	1	**17**	2	6	0	**15**	**32**	0	0	2	**3**	1	0	1	**5**	**8**	**20**
15:15	15:30	0	4	1	**10**	1	3	0	**12**	**22**	0	0	1	**4**	1	3	4	**10**	**14**	**18**
15:30	15:45	1	5	0	**13**	2	6	0	**15**	**28**	0	1	1	**3**	0	0	2	**5**	**8**	**18**
15:45	16:00	2	3	2	**12**	2	4	0	**12**	**24**	0	0	1	**3**	0	0	1	**5**	**8**	**16**
16:00	16:15	2	4	1	**16**	2	8	0	**15**	**31**	1	3	1	**8**	0	1	0	**7**	**15**	**23**
16:15	16:30	1	7	1	**16**	2	5	2	**16**	**32**	0	2	1	**7**	1	1	0	**7**	**14**	**23**
16:30	16:45	1	4	1	**12**	0	5	0	**10**	**22**	0	0	1	**2**	0	0	1	**2**	**4**	**13**
16:45	17:00	1	2	0	**10**	4	5	0	**14**	**24**	1	0	1	**4**	1	1	2	**8**	**12**	**18**
17:00	17:15	0	1	0	**3**	1	1	0	**3**	**6**	0	3	0	**3**	1	0	0	**5**	**8**	**7**
17:15	17:30	1	5	0	**10**	1	4	0	**14**	**24**	0	0	0	**2**	0	1	2	**4**	**6**	**15**
17:30	17:45	1	6	0	**10**	0	2	0	**8**	**18**	0	0	1	**2**	0	0	0	**0**	**2**	**10**
17:45	18:00	0	7	0	**9**	1	1	0	**13**	**22**	0	0	0	**0**	1	0	0	**2**	**2**	**12**
Total:	None	36	123	30	**405**	60	144	13	**414**	**819**	9	18	38	**131**	26	17	53	**204**	**335**	**577**

Transportation Services - Traffic Services

Turning Movement Count - Study Results

ST. JOSEPH BLVD/OLD MONTREAL RD @ TRIM RD

Survey Date: Thursday, May 16, 2019 **WO No:** 40749

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

Full Study 15 Minute U-Turn Total

Time Period		TRIM RD		ST. JOSEPH BLVD/OLD MONTREAL RD		
		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	1	5	0	0	6
07:45	08:00	0	0	0	0	0
08:00	08:15	1	0	0	0	1
08:15	08:30	1	1	0	0	2
08:30	08:45	0	0	0	0	0
08:45	09:00	1	0	0	0	1
09:00	09:15	0	5	0	0	5
09:15	09:30	0	0	0	0	0
09:30	09:45	0	1	0	0	1
09:45	10:00	0	0	0	0	0
11:30	11:45	0	0	0	0	0
11:45	12:00	0	1	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	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	1	0	0	1
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	1	0	0	1
17:30	17:45	0	0	0	0	0
17:45	18:00	0	2	0	0	2
Total		4	17	0	0	21

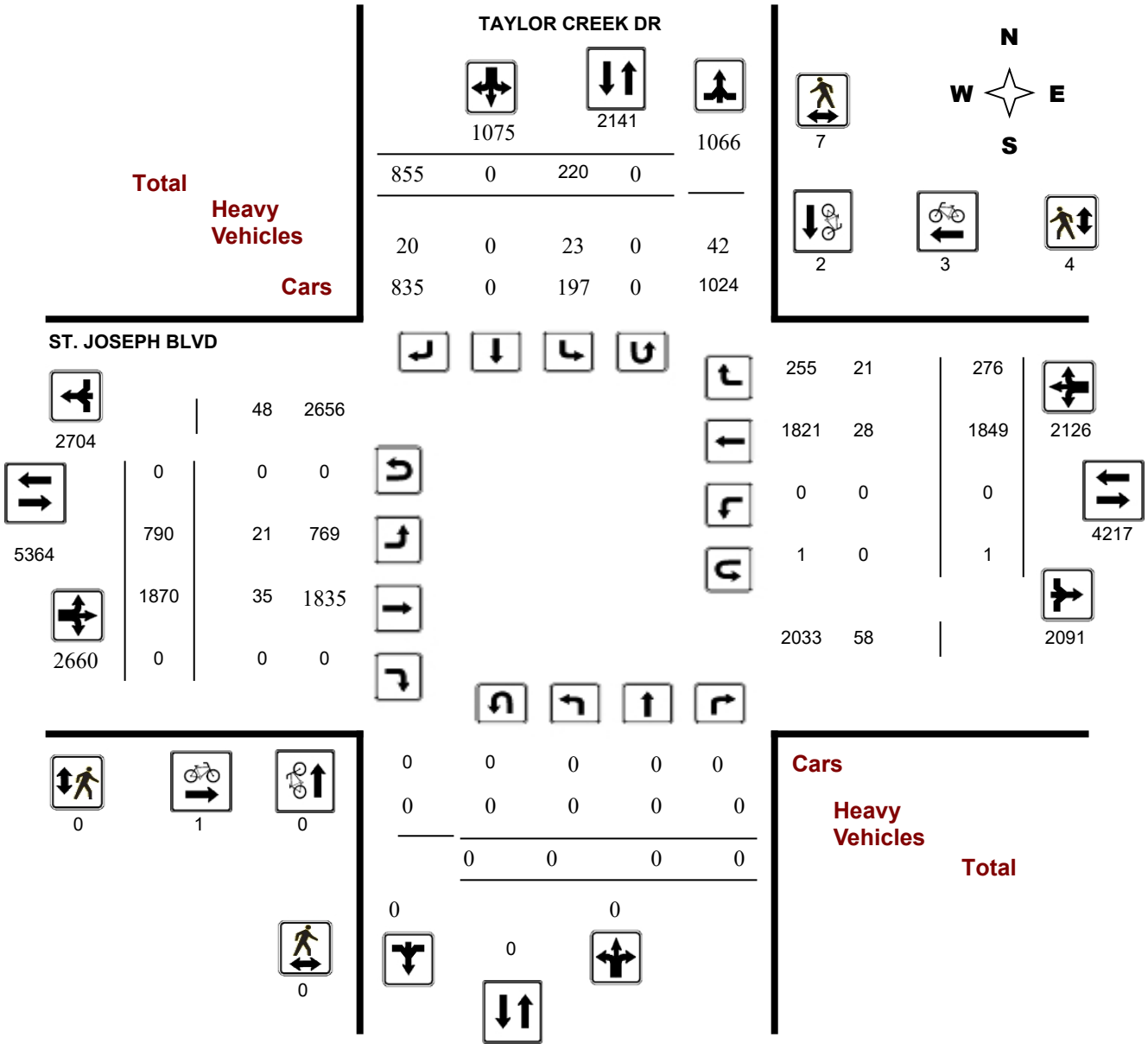
Transportation Services - Traffic Services

Turning Movement Count - Study Results

ST. JOSEPH BLVD @ TAYLOR CREEK DR

Survey Date: Wednesday, August 28, 2019
Start Time: 07:00
WO No: 38745
Device: Miovision

Full Study Diagram



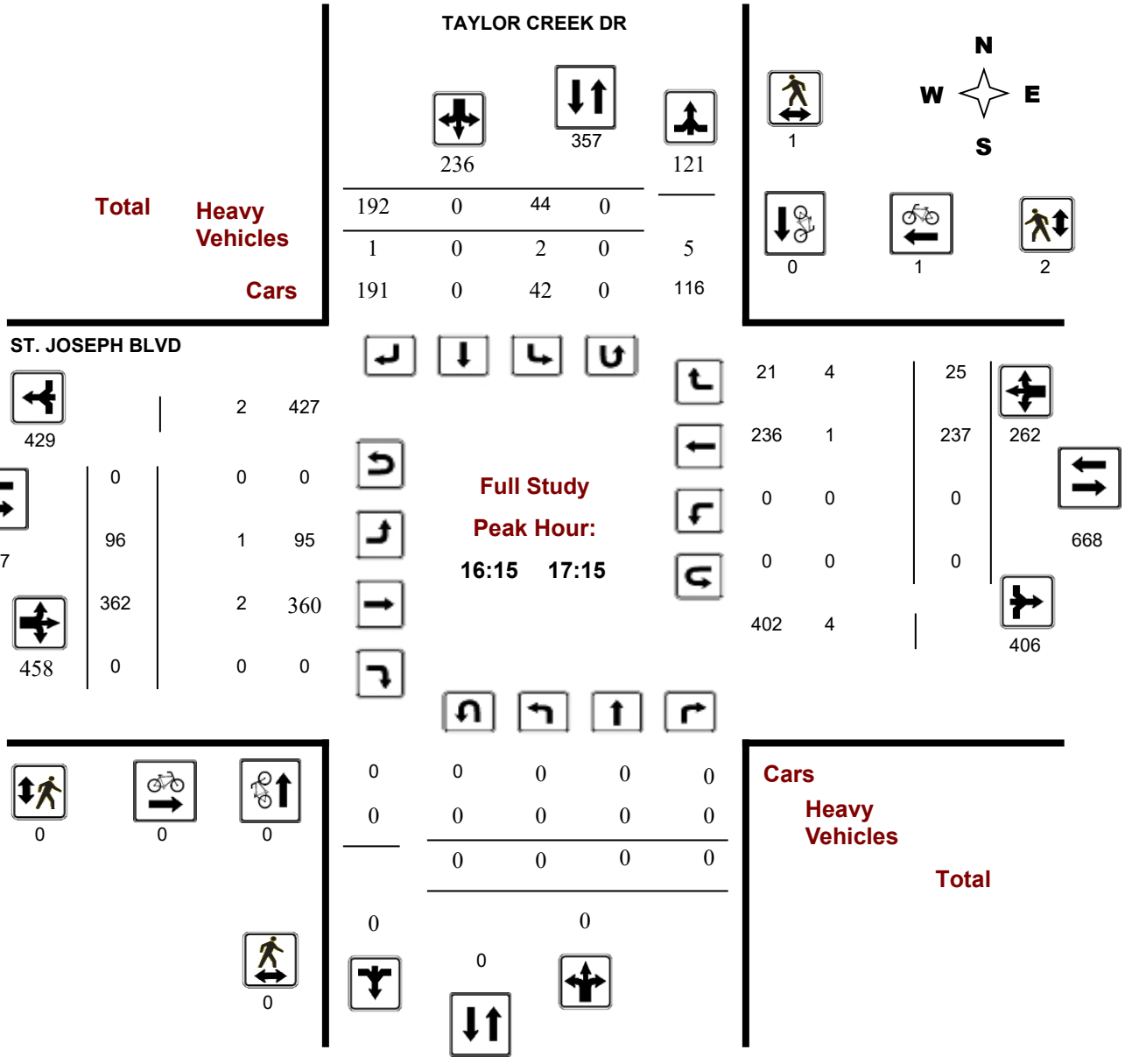
Transportation Services - Traffic Services

Turning Movement Count - Study Results

ST. JOSEPH BLVD @ TAYLOR CREEK DR

Survey Date: Wednesday, August 28, 2019
Start Time: 07:00
WO No: 38745
Device: Miovision

Full Study Peak Hour Diagram



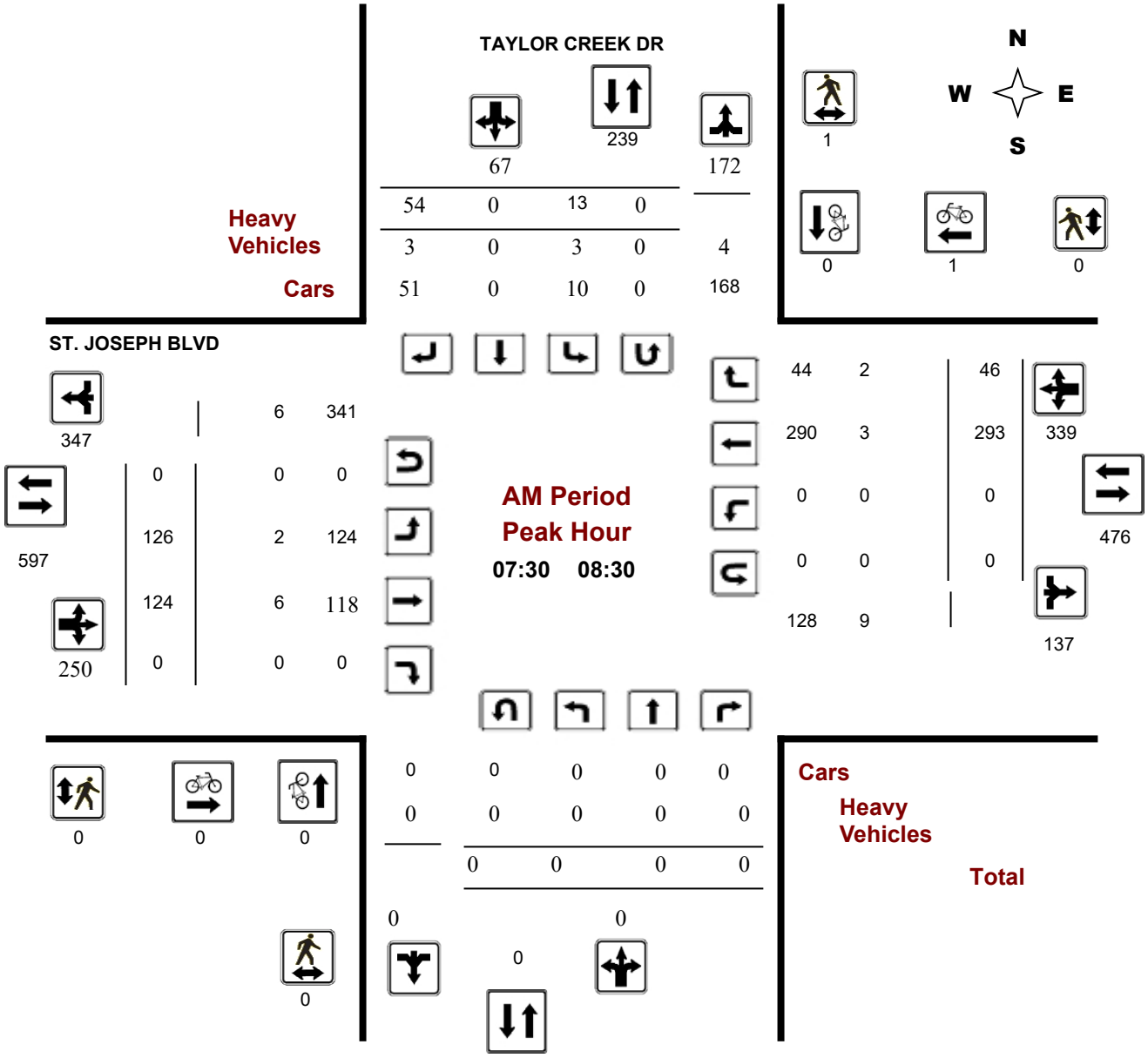
Transportation Services - Traffic Services

Turning Movement Count - Peak Hour Diagram

ST. JOSEPH BLVD @ TAYLOR CREEK DR

Survey Date: Wednesday, August 28, 2019 **WO No:** 38745

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



Comments

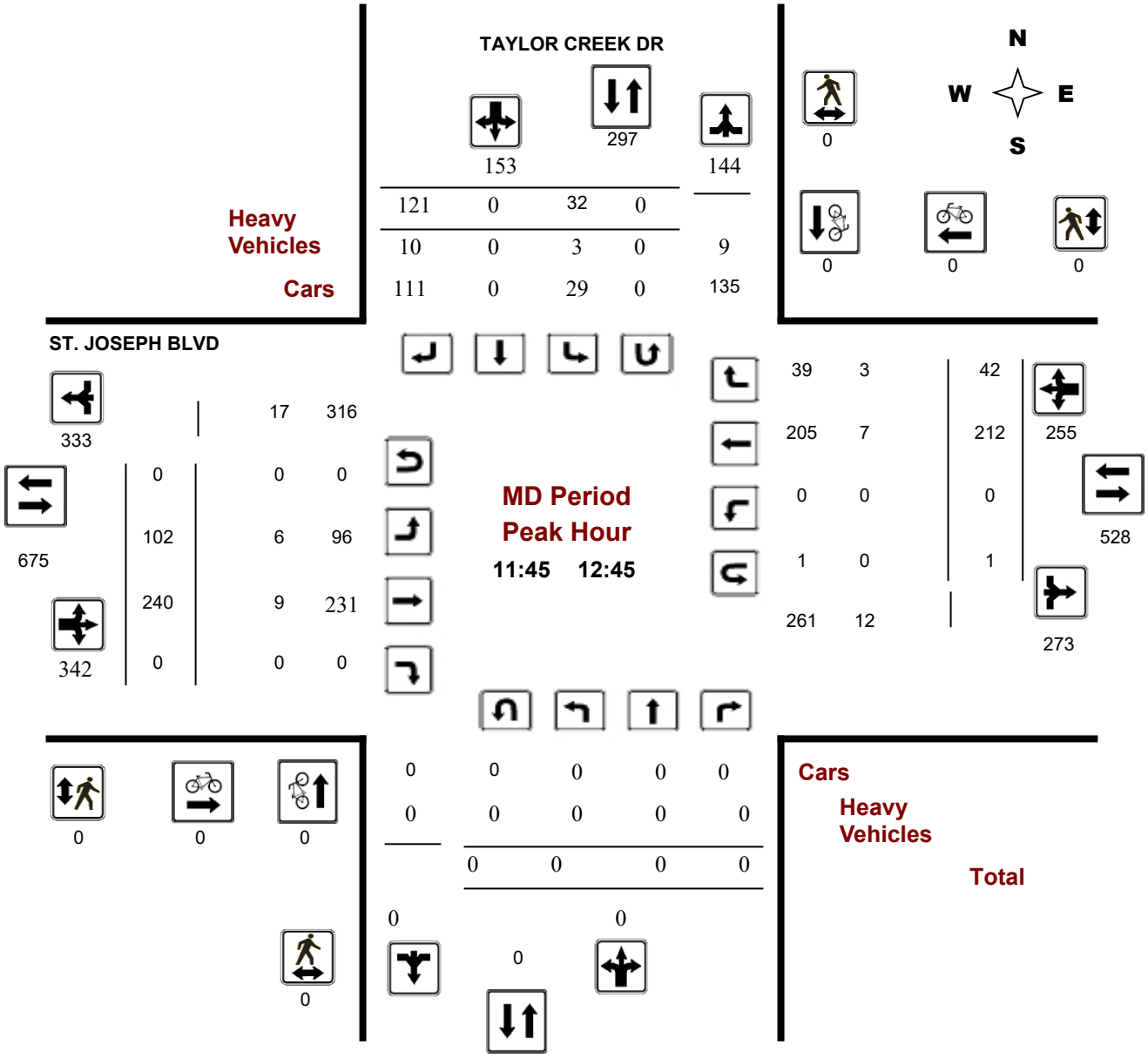
Transportation Services - Traffic Services

Turning Movement Count - Peak Hour Diagram

ST. JOSEPH BLVD @ TAYLOR CREEK DR

Survey Date: Wednesday, August 28, 2019 **WO No:** 38745

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



Comments

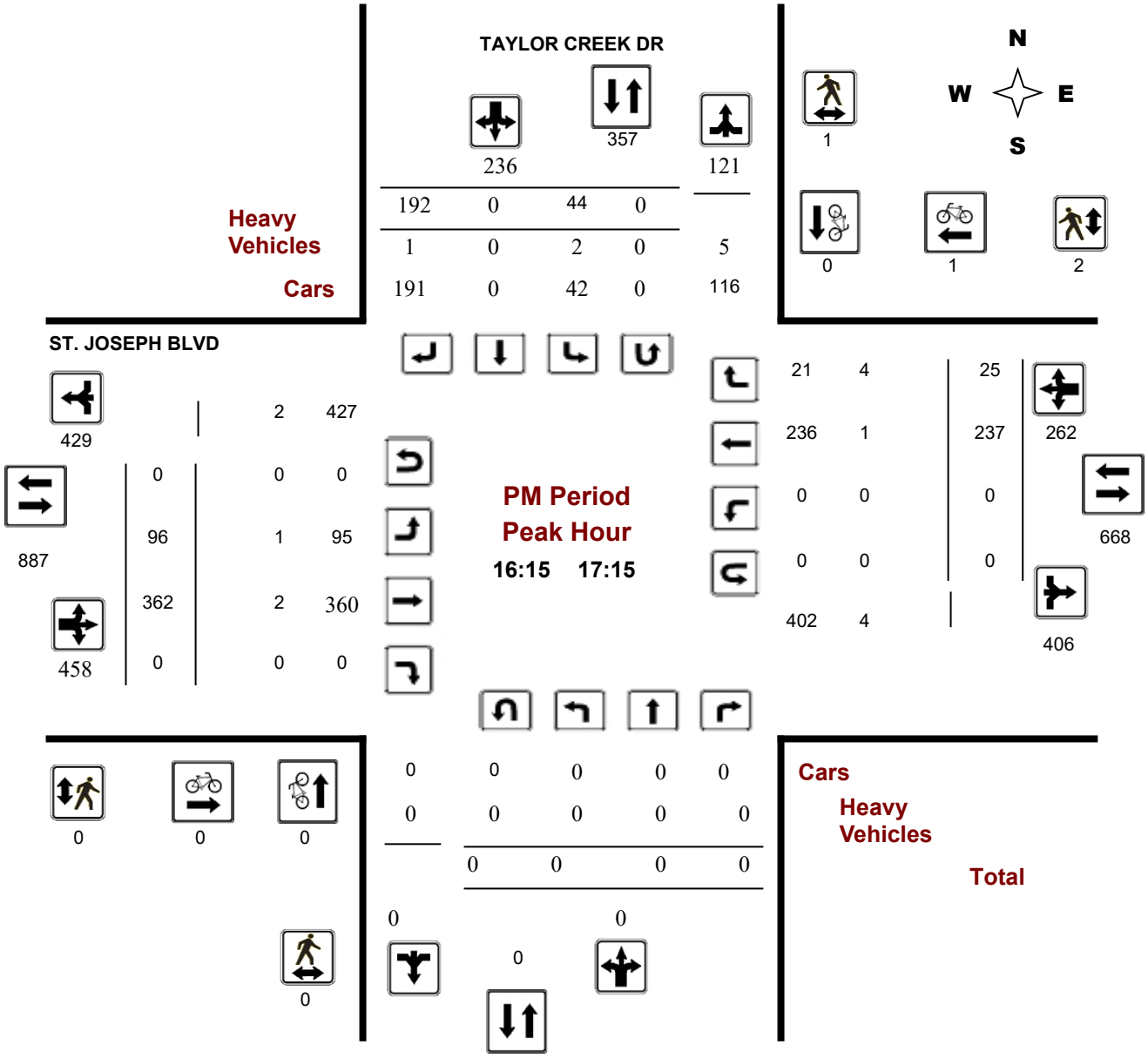
Transportation Services - Traffic Services

Turning Movement Count - Peak Hour Diagram

ST. JOSEPH BLVD @ TAYLOR CREEK DR

Survey Date: Wednesday, August 28, 2019 **WO No:** 38745

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



Comments

Transportation Services - Traffic Services

Turning Movement Count - Study Results

ST. JOSEPH BLVD @ TAYLOR CREEK DR

Survey Date: Wednesday, August 28, 2019 **WO No:** 38745

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

Full Study Summary (8 HR Standard)

Survey Date: Wednesday, August 28, 2019

Total Observed U-Turns

Northbound: 0 Southbound: 0

Eastbound: 0 Westbound: 1

AADT Factor

.90

	TAYLOR CREEK DR									ST. JOSEPH BLVD									
	Northbound				Southbound					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	Grand Total
07:00 08:00	0	0	0	**0**	7	0	53	**60**	**60**	99	104	0	**203**	0	326	36	**362**	**565**	**625**
08:00 09:00	0	0	0	**0**	19	0	58	**77**	**77**	135	125	0	**260**	0	241	51	**292**	**552**	**629**
09:00 10:00	0	0	0	**0**	27	0	64	**91**	**91**	82	147	0	**229**	0	200	37	**237**	**466**	**557**
11:30 12:30	0	0	0	**0**	35	0	112	**147**	**147**	85	226	0	**311**	0	200	43	**243**	**554**	**701**
12:30 13:30	0	0	0	**0**	22	0	83	**105**	**105**	112	217	0	**329**	0	223	36	**259**	**588**	**693**
15:00 16:00	0	0	0	**0**	35	0	121	**156**	**156**	95	335	0	**430**	0	191	22	**213**	**643**	**799**
16:00 17:00	0	0	0	**0**	34	0	198	**232**	**232**	104	350	0	**454**	0	243	27	**270**	**724**	**956**
17:00 18:00	0	0	0	**0**	41	0	166	**207**	**207**	78	366	0	**444**	0	225	24	**249**	**693**	**900**
Sub Total	0	0	0	**0**	220	0	855	**1075**	**1075**	790	1870	0	**2660**	0	1849	276	**2125**	**4785**	**5860**
U Turns				**0**				**0**	**0**				**0**				**1**	**1**	**1**
Total	0	0	0	**0**	220	0	855	**1075**	**1075**	790	1870	0	**2660**	0	1849	276	**2126**	**4786**	**5861**
EQ 12Hr	0	0	0	**0**	306	0	1188	**1494**	**1494**	1098	2599	0	**3697**	0	2570	384	**2955**	**6653**	**8147**
Note: These values are calculated by multiplying the totals by the appropriate expansion factor.													**1.39**						
AVG 12Hr	0	0	0	**0**	275	0	1401	**1345**	**1345**	988	2339	0	**3327**	0	2313	346	**2660**	**5988**	**7332**
Note: These volumes are calculated by multiplying the Equivalent 12 hr. totals by the AADT factor.													**.90**						
AVG 24Hr	0	0	0	**0**	360	0	1835	**1762**	**1762**	1294	3064	0	**4358**	0	3030	453	**3485**	**7844**	**9605**
Note: These volumes are calculated by multiplying the Average Daily 12 hr. totals by 12 to 24 expansion factor.													**1.31**						

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

Transportation Services - Traffic Services

Turning Movement Count - Study Results

ST. JOSEPH BLVD @ TAYLOR CREEK DR

Survey Date: Wednesday, August 28, 2019 **WO No:** 38745

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

Full Study 15 Minute Increments

		TAYLOR CREEK DR									ST. JOSEPH BLVD									
		Northbound				Southbound					Eastbound				Westbound					
Time 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	0	0	0	0	1	0	5	6	6	16	23	0	39	0	79	4	83	122	128
07:15	07:30	0	0	0	0	1	0	23	24	24	20	23	0	43	0	83	11	94	137	161
07:30	07:45	0	0	0	0	2	0	7	9	9	27	23	0	50	0	90	7	97	147	156
07:45	08:00	0	0	0	0	3	0	18	21	21	36	35	0	71	0	74	14	88	159	180
08:00	08:15	0	0	0	0	3	0	11	14	14	29	31	0	60	0	60	13	73	133	147
08:15	08:30	0	0	0	0	5	0	18	23	23	34	35	0	69	0	69	12	81	150	173
08:30	08:45	0	0	0	0	6	0	13	19	19	32	31	0	63	0	53	14	67	130	149
08:45	09:00	0	0	0	0	5	0	16	21	21	40	28	0	68	0	59	12	71	139	160
09:00	09:15	0	0	0	0	4	0	15	19	19	29	35	0	64	0	61	14	75	139	158
09:15	09:30	0	0	0	0	5	0	16	21	21	18	33	0	51	0	43	7	50	101	122
09:30	09:45	0	0	0	0	5	0	19	24	24	17	38	0	55	0	45	8	53	108	132
09:45	10:00	0	0	0	0	13	0	14	27	27	18	41	0	59	0	51	8	59	118	145
11:30	11:45	0	0	0	0	5	0	20	25	25	17	52	0	69	0	51	6	57	126	151
11:45	12:00	0	0	0	0	11	0	29	40	40	22	53	0	75	0	54	10	64	139	179
12:00	12:15	0	0	0	0	10	0	42	52	52	24	61	0	85	0	50	8	58	143	195
12:15	12:30	0	0	0	0	9	0	21	30	30	22	60	0	82	0	45	19	65	147	177
12:30	12:45	0	0	0	0	2	0	29	31	31	34	66	0	100	0	63	5	68	168	199
12:45	13:00	0	0	0	0	5	0	15	20	20	34	42	0	76	0	50	12	62	138	158
13:00	13:15	0	0	0	0	8	0	17	25	25	22	59	0	81	0	56	4	60	141	166
13:15	13:30	0	0	0	0	7	0	22	29	29	22	50	0	72	0	54	15	69	141	170
15:00	15:15	0	0	0	0	7	0	29	36	36	13	86	0	99	0	49	6	55	154	190
15:15	15:30	0	0	0	0	8	0	28	36	36	29	86	0	115	0	39	5	44	159	195
15:30	15:45	0	0	0	0	9	0	22	31	31	29	85	0	114	0	49	3	52	166	197
15:45	16:00	0	0	0	0	11	0	42	53	53	24	78	0	102	0	54	8	62	164	217
16:00	16:15	0	0	0	0	7	0	60	67	67	27	95	0	122	0	66	7	73	195	262
16:15	16:30	0	0	0	0	12	0	40	52	52	25	84	0	109	0	64	6	70	179	231
16:30	16:45	0	0	0	0	5	0	50	55	55	29	89	0	118	0	55	8	63	181	236
16:45	17:00	0	0	0	0	10	0	48	58	58	23	82	0	105	0	58	6	64	169	227
17:00	17:15	0	0	0	0	17	0	54	71	71	19	107	0	126	0	60	5	65	191	262
17:15	17:30	0	0	0	0	6	0	47	53	53	23	92	0	115	0	51	11	62	177	230
17:30	17:45	0	0	0	0	15	0	38	53	53	20	89	0	109	0	44	2	46	155	208
17:45	18:00	0	0	0	0	3	0	27	30	30	16	78	0	94	0	70	6	76	170	200
Total:		0	0	0	0	220	0	855	1075	1075	790	1870	0	2660	0	1849	276	2126	4786	5,861

Note: U-Turns are included in Totals.

Transportation Services - Traffic Services

Turning Movement Count - Study Results

ST. JOSEPH BLVD @ TAYLOR CREEK DR

Survey Date: Wednesday, August 28, 2019 **WO No:** 38745

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

Full Study Cyclist Volume

Time Period		TAYLOR CREEK DR			ST. JOSEPH BLVD			
		Northbound	Southbound	Street Total	Eastbound	Westbound	Street Total	Grand Total
07:00	07:15	0	0	0	0	0	0	0
07:15	07:30	0	0	0	0	0	0	0
07:30	07:45	0	0	0	0	0	0	0
07:45	08:00	0	0	0	0	1	1	1
08:00	08:15	0	0	0	0	0	0	0
08:15	08:30	0	0	0	0	0	0	0
08:30	08:45	0	0	0	0	0	0	0
08:45	09:00	0	0	0	0	0	0	0
09:00	09:15	0	0	0	0	0	0	0
09:15	09:30	0	0	0	0	0	0	0
09:30	09:45	0	0	0	0	0	0	0
09:45	10:00	0	0	0	0	0	0	0
11:30	11:45	0	0	0	0	0	0	0
11:45	12:00	0	0	0	0	0	0	0
12:00	12:15	0	0	0	0	0	0	0
12:15	12:30	0	0	0	0	0	0	0
12:30	12:45	0	0	0	0	0	0	0
12:45	13:00	0	0	0	0	0	0	0
13:00	13:15	0	0	0	0	1	1	1
13:15	13:30	0	0	0	0	0	0	0
15:00	15:15	0	0	0	0	0	0	0
15:15	15:30	0	0	0	1	0	1	1
15:30	15:45	0	0	0	0	0	0	0
15:45	16:00	0	0	0	0	0	0	0
16:00	16:15	0	1	1	0	0	0	1
16:15	16:30	0	0	0	0	0	0	0
16:30	16:45	0	0	0	0	0	0	0
16:45	17:00	0	0	0	0	0	0	0
17:00	17:15	0	0	0	0	1	1	1
17:15	17:30	0	0	0	0	0	0	0
17:30	17:45	0	1	1	0	0	0	1
17:45	18:00	0	0	0	0	0	0	0
Total		0	2	**2**	1	3	4	6

Transportation Services - Traffic Services

Turning Movement Count - Study Results

ST. JOSEPH BLVD @ TAYLOR CREEK DR

Survey Date: Wednesday, August 28, 2019 **WO No:** 38745

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

Full Study Pedestrian Volume

	TAYLOR CREEK DR			ST. JOSEPH BLVD			
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	0	0	**0**	0	0	**0**	**0**
07:15 07:30	0	0	**0**	0	0	**0**	**0**
07:30 07:45	0	0	**0**	0	0	**0**	**0**
07:45 08:00	0	0	**0**	0	0	**0**	**0**
08:00 08:15	0	0	**0**	0	0	**0**	**0**
08:15 08:30	0	1	**1**	0	0	**0**	**1**
08:30 08:45	0	0	**0**	0	0	**0**	**0**
08:45 09:00	0	0	**0**	0	0	**0**	**0**
09:00 09:15	0	0	**0**	0	0	**0**	**0**
09:15 09:30	0	0	**0**	0	0	**0**	**0**
09:30 09:45	0	0	**0**	0	0	**0**	**0**
09:45 10:00	0	0	**0**	0	0	**0**	**0**
11:30 11:45	0	1	**1**	0	0	**0**	**1**
11:45 12:00	0	0	**0**	0	0	**0**	**0**
12:00 12:15	0	0	**0**	0	0	**0**	**0**
12:15 12:30	0	0	**0**	0	0	**0**	**0**
12:30 12:45	0	0	**0**	0	0	**0**	**0**
12:45 13:00	0	0	**0**	0	0	**0**	**0**
13:00 13:15	0	2	**2**	0	0	**0**	**2**
13:15 13:30	0	0	**0**	0	0	**0**	**0**
15:00 15:15	0	1	**1**	0	0	**0**	**1**
15:15 15:30	0	0	**0**	0	2	**2**	**2**
15:30 15:45	0	0	**0**	0	0	**0**	**0**
15:45 16:00	0	0	**0**	0	0	**0**	**0**
16:00 16:15	0	0	**0**	0	0	**0**	**0**
16:15 16:30	0	1	**1**	0	1	**1**	**2**
16:30 16:45	0	0	**0**	0	0	**0**	**0**
16:45 17:00	0	0	**0**	0	1	**1**	**1**
17:00 17:15	0	0	**0**	0	0	**0**	**0**
17:15 17:30	0	1	**1**	0	0	**0**	**1**
17:30 17:45	0	0	**0**	0	0	**0**	**0**
17:45 18:00	0	0	**0**	0	0	**0**	**0**
Total	0	7	**7**	0	4	**4**	**11**

Transportation Services - Traffic Services

Turning Movement Count - Study Results

ST. JOSEPH BLVD @ TAYLOR CREEK DR

Survey Date: Wednesday, August 28, 2019 **WO No:** 38745

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

Full Study Heavy Vehicles

		TAYLOR CREEK DR									ST. JOSEPH BLVD									
		Northbound				Southbound					Eastbound				Westbound					
Time 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	0	0	0	**0**	1	0	0	**2**	**2**	0	0	0	**0**	0	0	1	**2**	**2**	**2**
07:15	07:30	0	0	0	**0**	0	0	1	**1**	**1**	0	1	0	**2**	0	0	0	**1**	**3**	**2**
07:30	07:45	0	0	0	**0**	1	0	0	**3**	**3**	1	0	0	**1**	0	0	1	**2**	**3**	**3**
07:45	08:00	0	0	0	**0**	1	0	3	**5**	**5**	1	0	0	**4**	0	0	0	**1**	**5**	**5**
08:00	08:15	0	0	0	**0**	0	0	0	**1**	**1**	0	3	0	**5**	0	2	1	**6**	**11**	**6**
08:15	08:30	0	0	0	**0**	1	0	0	**1**	**1**	0	3	0	**4**	0	1	0	**5**	**9**	**5**
08:30	08:45	0	0	0	**0**	2	0	0	**3**	**3**	0	0	0	**2**	0	2	1	**5**	**7**	**5**
08:45	09:00	0	0	0	**0**	2	0	0	**3**	**3**	1	0	0	**1**	0	0	0	**2**	**3**	**3**
09:00	09:15	0	0	0	**0**	0	0	0	**3**	**3**	2	4	0	**7**	0	1	1	**6**	**13**	**8**
09:15	09:30	0	0	0	**0**	0	0	0	**0**	**0**	0	2	0	**3**	0	1	0	**3**	**6**	**3**
09:30	09:45	0	0	0	**0**	1	0	1	**4**	**4**	1	2	0	**4**	0	0	1	**4**	**8**	**6**
09:45	10:00	0	0	0	**0**	1	0	0	**2**	**2**	1	0	0	**2**	0	1	0	**2**	**4**	**3**
11:30	11:45	0	0	0	**0**	0	0	0	**1**	**1**	0	2	0	**4**	0	2	1	**5**	**9**	**5**
11:45	12:00	0	0	0	**0**	0	0	5	**7**	**7**	1	2	0	**10**	0	2	1	**5**	**15**	**11**
12:00	12:15	0	0	0	**0**	2	0	2	**7**	**7**	2	1	0	**7**	0	2	1	**6**	**13**	**10**
12:15	12:30	0	0	0	**0**	1	0	1	**4**	**4**	2	2	0	**6**	0	1	0	**4**	**10**	**7**
12:30	12:45	0	0	0	**0**	0	0	2	**4**	**4**	1	4	0	**9**	0	2	1	**7**	**16**	**10**
12:45	13:00	0	0	0	**0**	0	0	0	**1**	**1**	1	0	0	**3**	0	2	0	**2**	**5**	**3**
13:00	13:15	0	0	0	**0**	2	0	2	**6**	**6**	1	0	0	**4**	0	1	1	**4**	**8**	**7**
13:15	13:30	0	0	0	**0**	1	0	2	**3**	**3**	0	1	0	**6**	0	3	0	**5**	**11**	**7**
15:00	15:15	0	0	0	**0**	1	0	0	**3**	**3**	1	2	0	**4**	0	1	1	**5**	**9**	**6**
15:15	15:30	0	0	0	**0**	0	0	0	**0**	**0**	0	1	0	**1**	0	0	0	**1**	**2**	**1**
15:30	15:45	0	0	0	**0**	1	0	0	**3**	**3**	1	1	0	**5**	0	3	1	**6**	**11**	**7**
15:45	16:00	0	0	0	**0**	1	0	0	**3**	**3**	0	0	0	**0**	0	0	2	**3**	**3**	**3**
16:00	16:15	0	0	0	**0**	0	0	0	**2**	**2**	1	2	0	**3**	0	0	1	**3**	**6**	**4**
16:15	16:30	0	0	0	**0**	1	0	1	**5**	**5**	1	0	0	**2**	0	0	2	**3**	**5**	**5**
16:30	16:45	0	0	0	**0**	0	0	0	**1**	**1**	0	2	0	**3**	0	1	1	**4**	**7**	**4**
16:45	17:00	0	0	0	**0**	1	0	0	**1**	**1**	0	0	0	**0**	0	0	0	**1**	**1**	**1**
17:00	17:15	0	0	0	**0**	0	0	0	**1**	**1**	0	0	0	**0**	0	0	1	**1**	**1**	**1**
17:15	17:30	0	0	0	**0**	0	0	0	**1**	**1**	1	0	0	**1**	0	0	0	**0**	**1**	**1**
17:30	17:45	0	0	0	**0**	1	0	0	**2**	**2**	0	0	0	**0**	0	0	1	**2**	**2**	**2**
17:45	18:00	0	0	0	**0**	1	0	0	**2**	**2**	1	0	0	**1**	0	0	0	**1**	**2**	**2**
Total:	None	0	0	0	**0**	23	0	20	**85**	**85**	21	35	0	**104**	0	28	21	**107**	**211**	**148**

Transportation Services - Traffic Services

Turning Movement Count - Study Results

ST. JOSEPH BLVD @ TAYLOR CREEK DR

Survey Date: Wednesday, August 28, 2019 **WO No:** 38745

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

Full Study 15 Minute U-Turn Total

Time Period		TAYLOR CREEK DR Northbound U-Turn Total	TAYLOR CREEK DR Southbound U-Turn Total	ST. JOSEPH BLVD Eastbound U-Turn Total	ST. JOSEPH BLVD 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	1	1
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
Total		0	0	0	1	1

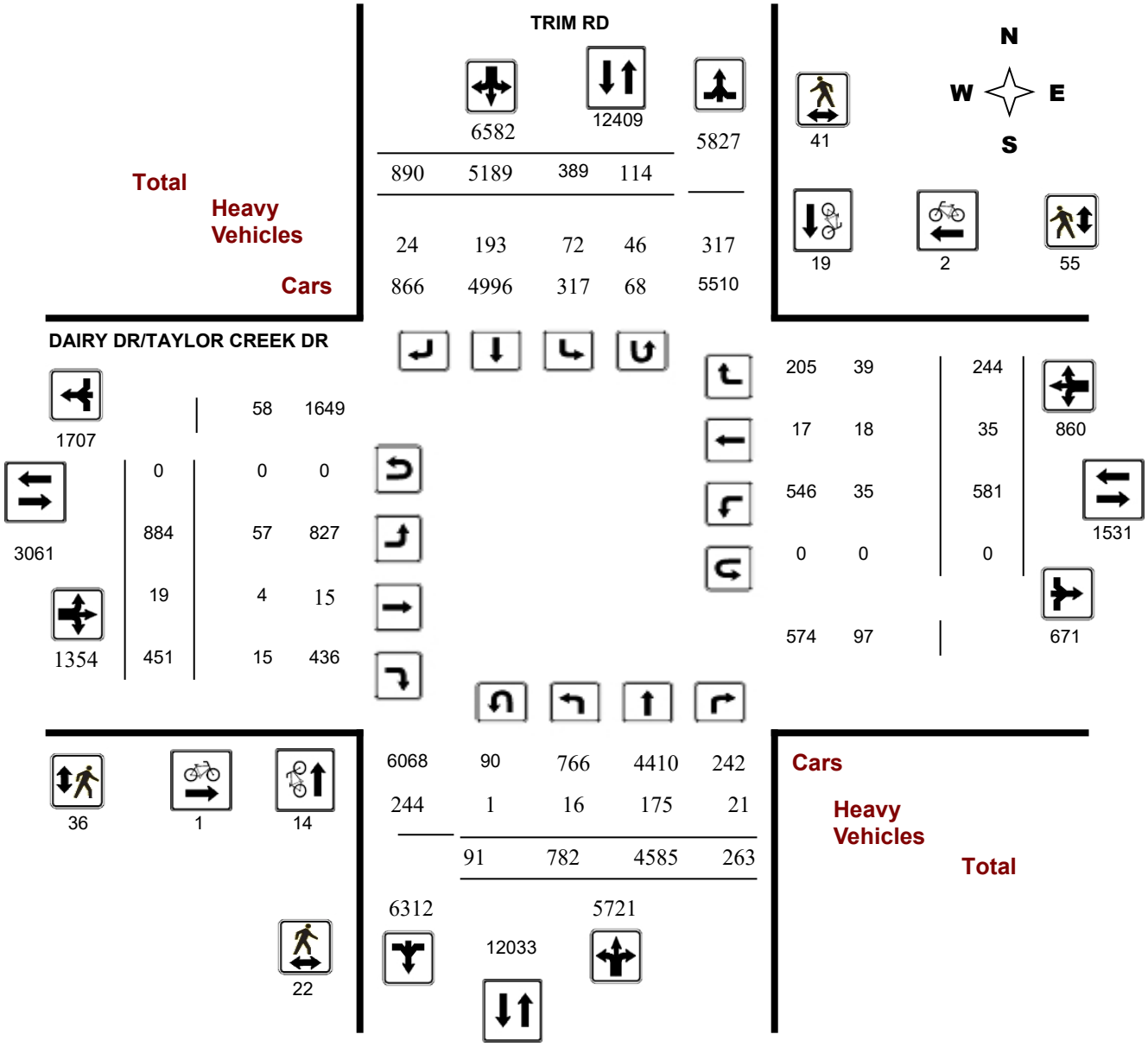
Transportation Services - Traffic Services

Turning Movement Count - Study Results

TRIM RD @ DAIRY DR/TAYLOR CREEK DR

Survey Date: Wednesday, October 09, 2019
Start Time: 07:00
WO No: 40916
Device: Miovision

Full Study Diagram



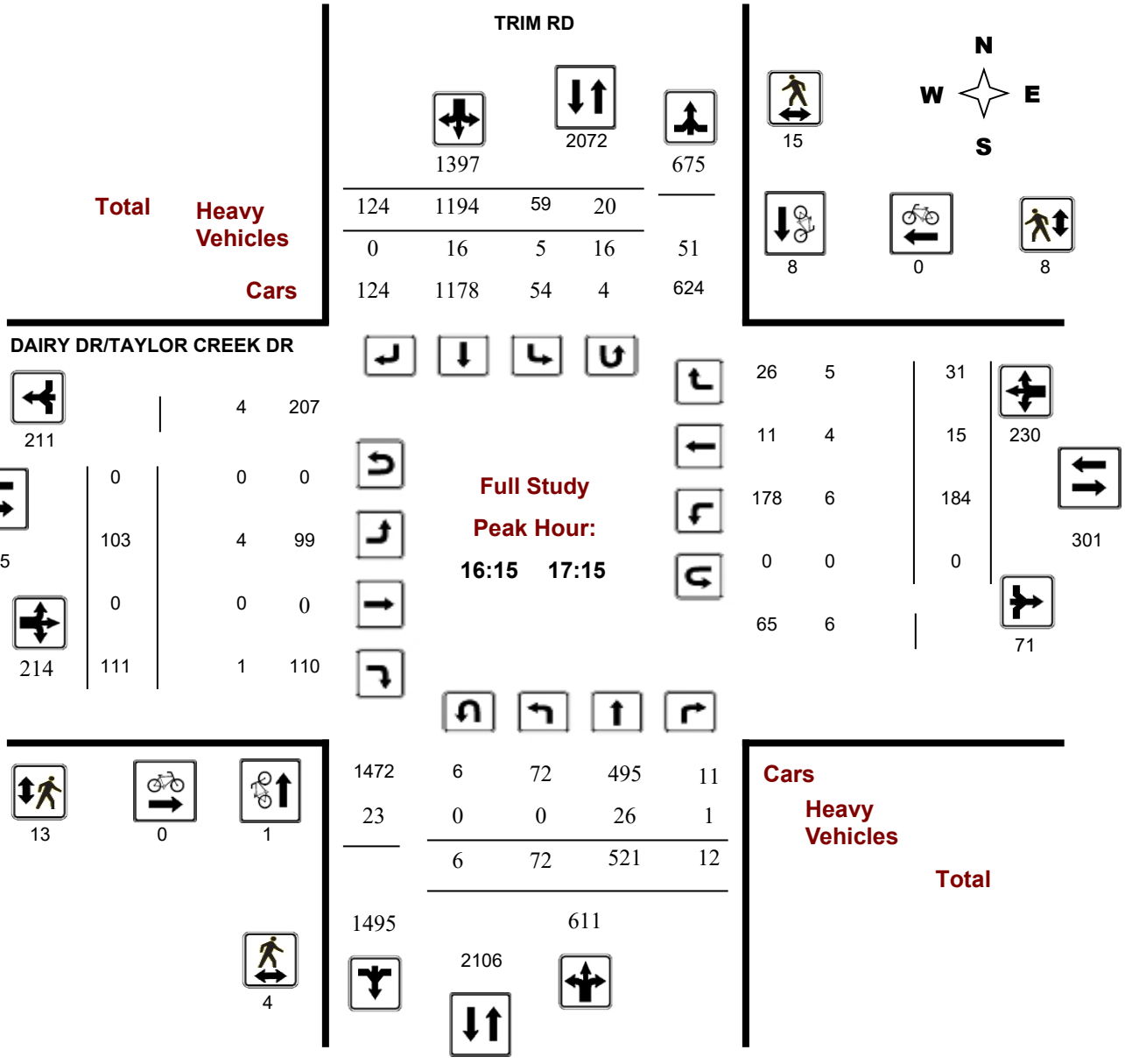
Transportation Services - Traffic Services

Turning Movement Count - Study Results

TRIM RD @ DAIRY DR/TAYLOR CREEK DR

Survey Date: Wednesday, October 09, 2019
Start Time: 07:00
WO No: 40916
Device: Miovision

Full Study Peak Hour Diagram



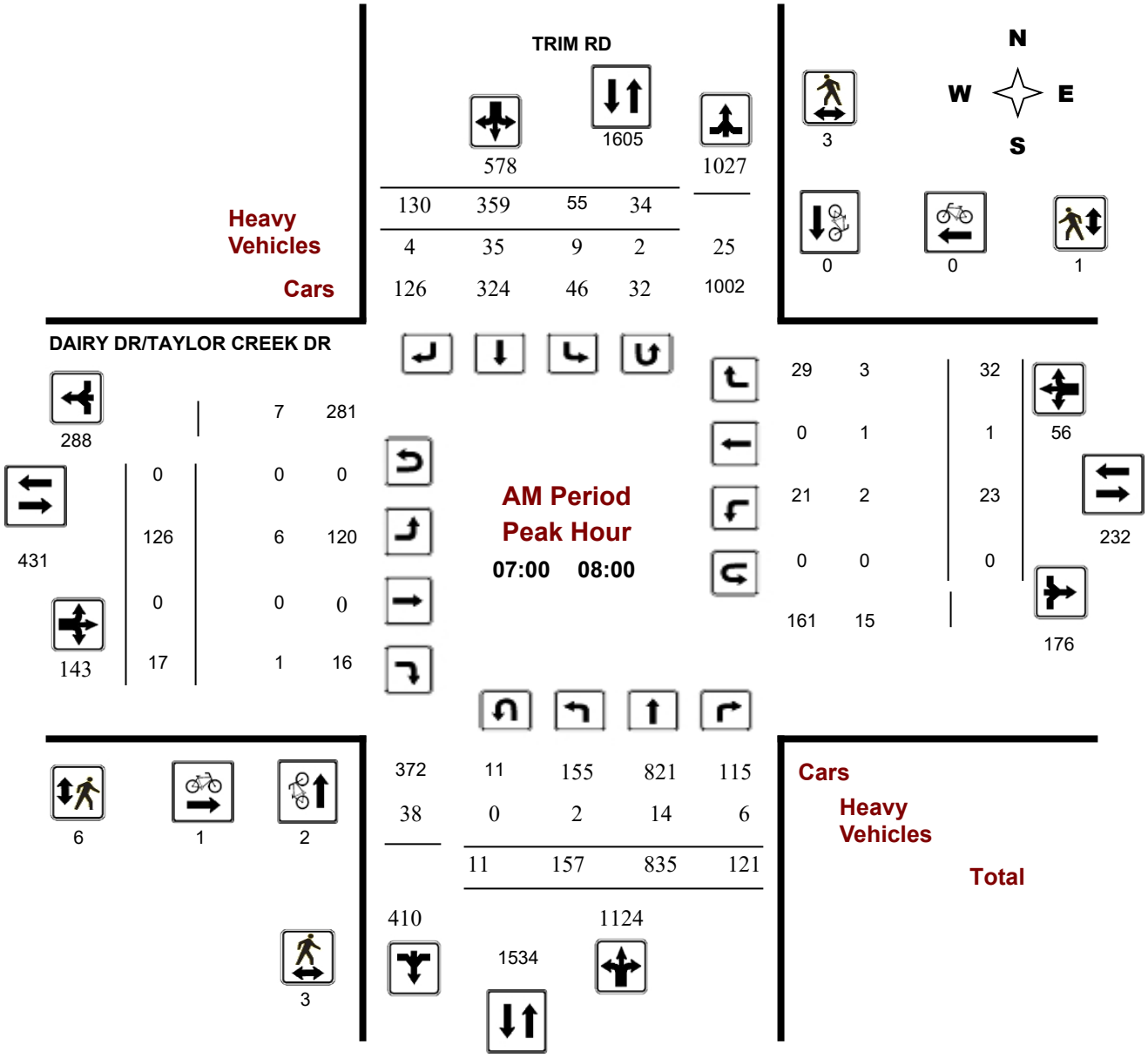
Transportation Services - Traffic Services

Turning Movement Count - Peak Hour Diagram

TRIM RD @ DAIRY DR/TAYLOR CREEK DR

Survey Date: Wednesday, October 09, 2019 **WO No:** 40916

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



Comments

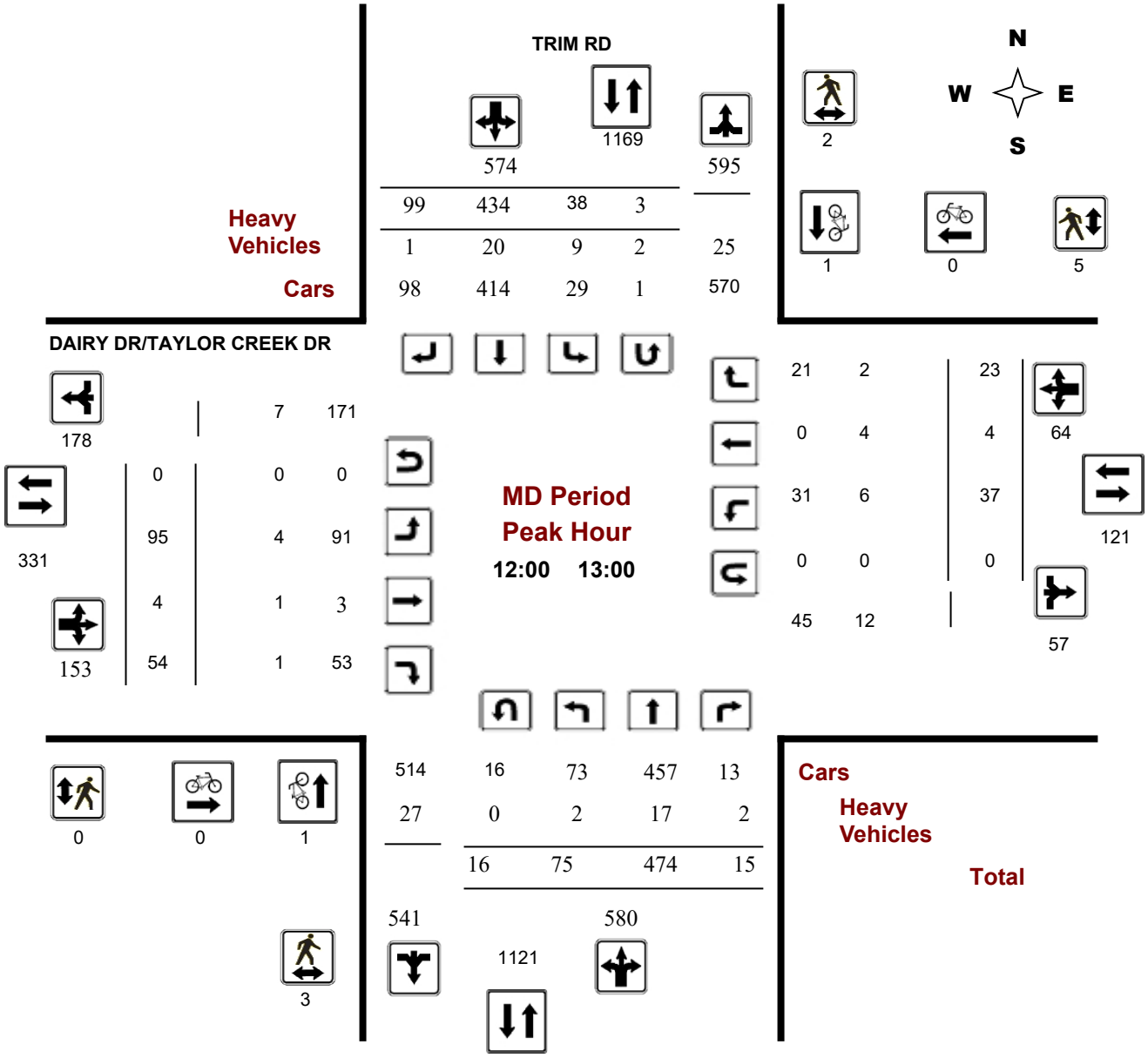
Transportation Services - Traffic Services

Turning Movement Count - Peak Hour Diagram

TRIM RD @ DAIRY DR/TAYLOR CREEK DR

Survey Date: Wednesday, October 09, 2019 **WO No:** 40916

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



Comments

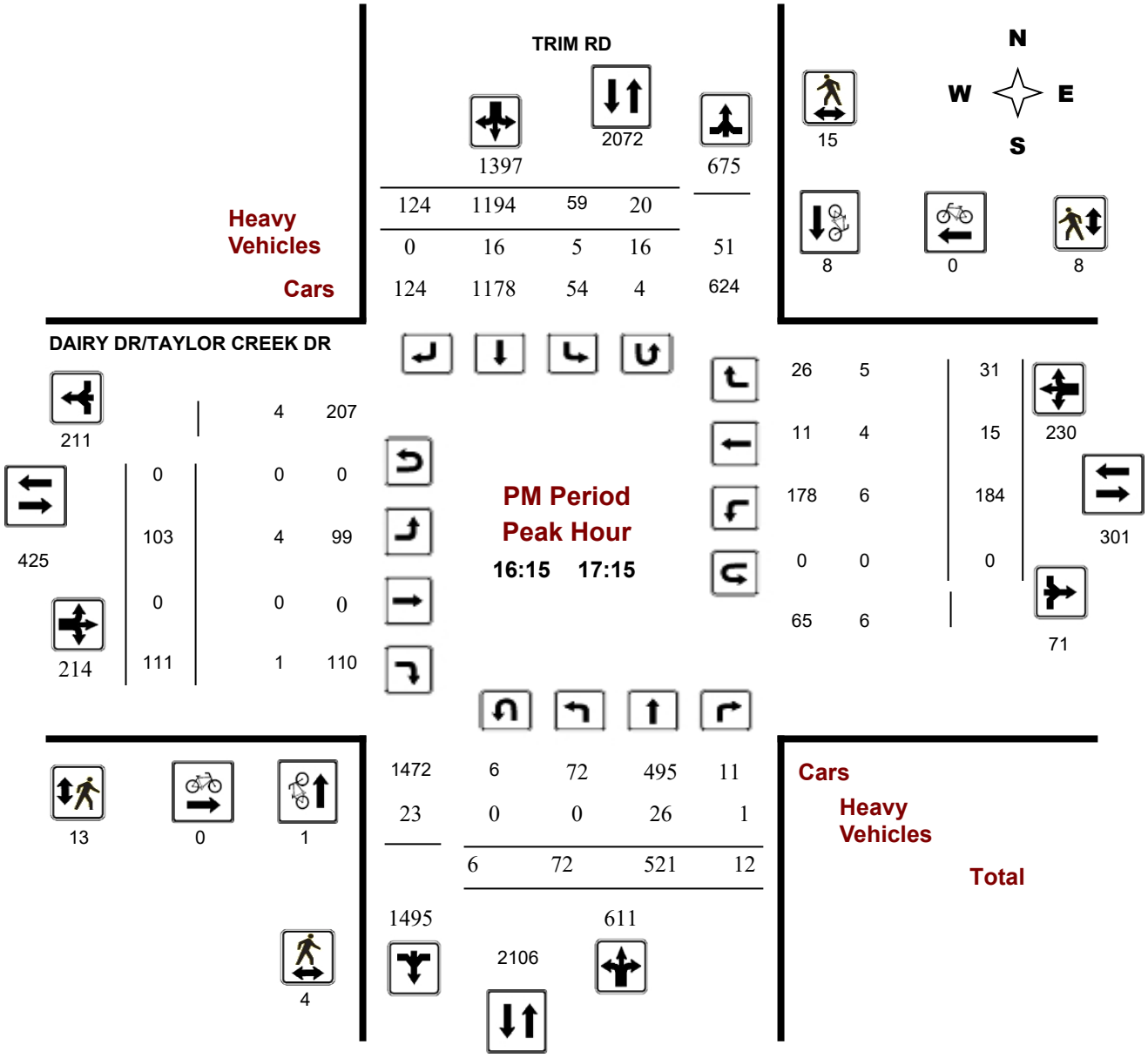
Transportation Services - Traffic Services

Turning Movement Count - Peak Hour Diagram

TRIM RD @ DAIRY DR/TAYLOR CREEK DR

Survey Date: Wednesday, October 09, 2019 **WO No:** 40916

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



Comments

Transportation Services - Traffic Services

Turning Movement Count - Study Results

TRIM RD @ DAIRY DR/TAYLOR CREEK DR

Survey Date: Wednesday, October 09, 2019 **WO No:** 40916

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

Full Study Summary (8 HR Standard)

Survey Date: Wednesday, October 09, 2019

Total Observed U-Turns

Northbound: 91 Southbound: 114

Eastbound: 0 Westbound: 0

AADT Factor

.90

	TRIM RD								DAIRY DR/TAYLOR CREEK DR									
	Northbound				Southbound					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**	**Grand Total**
07:00 08:00	157	835	121	**1113**	55	359	130	**544**	**1657**	126	0	17	**143**	23	1	32	**56**	**199**	**1856**
08:00 09:00	138	774	49	**961**	56	368	111	**535**	**1496**	144	0	41	**185**	26	6	40	**72**	**257**	**1753**
09:00 10:00	111	638	21	**770**	30	326	92	**448**	**1218**	90	4	18	**112**	35	2	32	**69**	**181**	**1399**
11:30 12:30	82	461	18	**561**	34	429	105	**568**	**1129**	111	6	39	**156**	40	4	20	**64**	**220**	**1349**
12:30 13:30	67	425	17	**509**	50	421	101	**572**	**1081**	105	3	57	**165**	32	3	16	**51**	**216**	**1297**
15:00 16:00	58	454	14	**526**	54	1027	106	**1187**	**1713**	95	4	76	**175**	75	1	49	**125**	**300**	**2013**
16:00 17:00	73	499	13	**585**	47	1218	141	**1406**	**1991**	100	0	112	**212**	162	15	32	**209**	**421**	**2412**
17:00 18:00	96	499	10	**605**	63	1041	104	**1208**	**1813**	113	2	91	**206**	188	3	23	**214**	**420**	**2233**
Sub Total	782	4585	263	**5630**	389	5189	890	**6468**	**12098**	884	19	451	**1354**	581	35	244	**860**	**2214**	**14312**
U Turns				**91**				**114**	**205**				**0**				**0**	**0**	**205**
Total	782	4585	263	**5721**	389	5189	890	**6582**	**12303**	884	19	451	**1354**	581	35	244	**860**	**2214**	**14517**
EQ 12Hr	1087	6373	366	**7952**	541	7213	1237	**9149**	**17101**	1229	26	627	**1882**	808	49	339	**1195**	**3077**	**20179**
Note: These values are calculated by multiplying the totals by the appropriate expansion factor.														**1.39**					
AVG 12Hr	978	5736	329	**7157**	487	8504	1459	**8234**	**15391**	1106	23	564	**1694**	727	44	305	**1076**	**2769**	**18161**
Note: These volumes are calculated by multiplying the Equivalent 12 hr. totals by the AADT factor.														**.90**					
AVG 24Hr	1281	7514	431	**9376**	638	11140	1911	**10787**	**20162**	1449	30	739	**2219**	952	58	400	**1410**	**3627**	**23791**
Note: These volumes are calculated by multiplying the Average Daily 12 hr. totals by 12 to 24 expansion factor.														**1.31**					

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

Transportation Services - Traffic Services

Turning Movement Count - Study Results

TRIM RD @ DAIRY DR/TAYLOR CREEK DR

Survey Date: Wednesday, October 09, 2019 **WO No:** 40916

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

Full Study 15 Minute Increments

		TRIM RD									DAIRY DR/TAYLOR CREEK DR									
		Northbound				Southbound					Eastbound				Westbound					
Time 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	45	232	25	304	12	55	31	109	413	34	0	4	38	4	1	13	18	56	469
07:15	07:30	43	222	33	300	13	98	42	162	462	29	0	6	35	4	0	7	11	46	508
07:30	07:45	34	193	34	264	14	93	26	141	405	31	0	3	34	8	0	7	15	49	454
07:45	08:00	35	188	29	256	16	113	31	166	422	32	0	4	36	7	0	5	12	48	470
08:00	08:15	29	190	17	240	16	94	24	143	383	26	0	10	36	7	2	4	13	49	432
08:15	08:30	29	211	16	256	18	102	27	148	404	40	0	8	48	5	2	10	17	65	469
08:30	08:45	48	194	8	256	11	80	32	127	383	39	0	11	50	7	2	12	21	71	454
08:45	09:00	32	179	8	224	11	92	28	137	361	39	0	12	51	7	0	14	21	72	433
09:00	09:15	28	169	11	218	4	95	18	118	336	16	0	5	21	10	0	8	18	39	375
09:15	09:30	30	155	5	193	8	73	26	108	301	26	4	4	34	7	1	12	20	54	355
09:30	09:45	22	168	3	196	6	84	21	115	311	23	0	1	24	5	0	5	10	34	345
09:45	10:00	31	146	2	184	12	74	27	113	297	25	0	8	33	13	1	7	21	54	351
11:30	11:45	20	118	7	146	9	105	35	149	295	30	2	9	41	15	0	2	17	58	353
11:45	12:00	24	105	4	133	11	109	27	148	281	29	0	7	36	8	1	4	13	49	330
12:00	12:15	16	117	5	143	6	109	28	144	287	25	1	11	37	8	3	9	20	57	344
12:15	12:30	22	121	2	150	8	106	15	129	279	27	3	12	42	9	0	5	14	56	335
12:30	12:45	18	122	4	145	8	109	29	148	293	18	0	16	34	14	0	8	22	56	349
12:45	13:00	19	114	4	142	16	110	27	153	295	25	0	15	40	6	1	1	8	48	343
13:00	13:15	16	85	6	107	18	91	22	131	238	39	0	16	55	7	1	7	15	70	308
13:15	13:30	14	104	3	123	8	111	23	142	265	23	3	10	36	5	1	0	6	42	307
15:00	15:15	12	121	1	139	12	195	22	231	370	24	0	19	43	17	0	16	33	76	446
15:15	15:30	12	114	7	138	10	264	22	298	436	34	2	19	55	13	1	14	28	83	519
15:30	15:45	12	116	3	132	9	251	27	296	428	18	0	15	33	16	0	11	27	60	488
15:45	16:00	22	103	3	130	23	317	35	375	505	19	2	23	44	29	0	8	37	81	586
16:00	16:15	16	105	5	126	9	295	39	349	475	28	0	33	61	36	0	6	42	103	578
16:15	16:30	18	124	2	144	10	320	36	369	513	29	0	9	38	32	7	7	46	84	597
16:30	16:45	15	148	2	168	13	308	35	363	531	20	0	34	54	47	2	10	59	113	644
16:45	17:00	24	122	4	150	15	295	31	347	497	23	0	36	59	47	6	9	62	121	618
17:00	17:15	15	127	4	149	21	271	22	318	467	31	0	32	63	58	0	5	63	126	593
17:15	17:30	22	118	4	144	17	281	27	329	473	25	0	16	41	58	2	8	68	109	582
17:30	17:45	17	126	0	144	11	274	30	319	463	27	0	25	52	43	0	5	48	100	563
17:45	18:00	42	128	2	177	14	215	25	257	434	30	2	18	50	29	1	5	35	85	519
Total:		782	4585	263	5721	389	5189	890	6582	12303	884	19	451	1354	581	35	244	860	2214	14,517

Note: U-Turns are included in Totals.

Transportation Services - Traffic Services

Turning Movement Count - Study Results

TRIM RD @ DAIRY DR/TAYLOR CREEK DR

Survey Date: Wednesday, October 09, 2019 **WO No:** 40916

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

Full Study Cyclist Volume

Time Period		TRIM RD			DAIRY DR/TAYLOR CREEK DR			
		Northbound	Southbound	Street Total	Eastbound	Westbound	Street Total	Grand Total
07:00	07:15	0	0	0	0	0	0	0
07:15	07:30	1	0	1	0	0	0	1
07:30	07:45	0	0	0	1	0	1	1
07:45	08:00	1	0	1	0	0	0	1
08:00	08:15	0	0	0	0	0	0	0
08:15	08:30	0	0	0	0	0	0	0
08:30	08:45	0	0	0	0	0	0	0
08:45	09:00	1	0	1	0	0	0	1
09:00	09:15	0	0	0	0	0	0	0
09:15	09:30	0	0	0	0	0	0	0
09:30	09:45	0	0	0	0	0	0	0
09:45	10:00	0	0	0	0	0	0	0
11:30	11:45	0	0	0	0	0	0	0
11:45	12:00	0	0	0	0	0	0	0
12:00	12:15	0	0	0	0	0	0	0
12:15	12:30	0	0	0	0	0	0	0
12:30	12:45	0	1	1	0	0	0	1
12:45	13:00	1	0	1	0	0	0	1
13:00	13:15	0	0	0	0	0	0	0
13:15	13:30	2	2	4	0	0	0	4
15:00	15:15	1	2	3	0	0	0	3
15:15	15:30	4	2	6	0	2	2	8
15:30	15:45	0	1	1	0	0	0	1
15:45	16:00	1	1	2	0	0	0	2
16:00	16:15	0	1	1	0	0	0	1
16:15	16:30	0	0	0	0	0	0	0
16:30	16:45	1	1	2	0	0	0	2
16:45	17:00	0	1	1	0	0	0	1
17:00	17:15	0	6	6	0	0	0	6
17:15	17:30	0	0	0	0	0	0	0
17:30	17:45	0	0	0	0	0	0	0
17:45	18:00	1	1	2	0	0	0	2
Total		14	19	**33**	1	2	3	36

Transportation Services - Traffic Services

Turning Movement Count - Study Results

TRIM RD @ DAIRY DR/TAYLOR CREEK DR

Survey Date: Wednesday, October 09, 2019 **WO No:** 40916

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

Full Study Pedestrian Volume

	TRIM RD			DAIRY DR/TAYLOR CREEK DR			
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	0	1	**1**	3	0	**3**	**4**
07:15 07:30	3	0	**3**	0	0	**0**	**3**
07:30 07:45	0	2	**2**	2	1	**3**	**5**
07:45 08:00	0	0	**0**	1	0	**1**	**1**
08:00 08:15	0	0	**0**	0	0	**0**	**0**
08:15 08:30	0	0	**0**	0	2	**2**	**2**
08:30 08:45	3	0	**3**	2	3	**5**	**8**
08:45 09:00	0	3	**3**	0	4	**4**	**7**
09:00 09:15	0	2	**2**	1	1	**2**	**4**
09:15 09:30	0	0	**0**	0	2	**2**	**2**
09:30 09:45	0	0	**0**	1	2	**3**	**3**
09:45 10:00	0	1	**1**	0	1	**1**	**2**
11:30 11:45	1	0	**1**	1	1	**2**	**3**
11:45 12:00	0	0	**0**	0	0	**0**	**0**
12:00 12:15	1	0	**1**	0	3	**3**	**4**
12:15 12:30	0	0	**0**	0	1	**1**	**1**
12:30 12:45	0	1	**1**	0	0	**0**	**1**
12:45 13:00	2	1	**3**	0	1	**1**	**4**
13:00 13:15	3	1	**4**	0	2	**2**	**6**
13:15 13:30	0	0	**0**	0	4	**4**	**4**
15:00 15:15	3	2	**5**	1	2	**3**	**8**
15:15 15:30	0	1	**1**	1	5	**6**	**7**
15:30 15:45	0	0	**0**	2	2	**4**	**4**
15:45 16:00	1	2	**3**	1	2	**3**	**6**
16:00 16:15	0	3	**3**	0	1	**1**	**4**
16:15 16:30	4	3	**7**	3	1	**4**	**11**
16:30 16:45	0	6	**6**	5	1	**6**	**12**
16:45 17:00	0	4	**4**	4	3	**7**	**11**
17:00 17:15	0	2	**2**	1	3	**4**	**6**
17:15 17:30	1	3	**4**	5	1	**6**	**10**
17:30 17:45	0	2	**2**	1	0	**1**	**3**
17:45 18:00	0	1	**1**	1	6	**7**	**8**
Total	22	41	**63**	36	55	**91**	**154**

Transportation Services - Traffic Services

Turning Movement Count - Study Results

TRIM RD @ DAIRY DR/TAYLOR CREEK DR

Survey Date: Wednesday, October 09, 2019 **WO No:** 40916

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

Full Study Heavy Vehicles

		TRIM RD									DAIRY DR/TAYLOR CREEK DR									
		Northbound				Southbound					Eastbound				Westbound					
Time 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	0	2	1	**9**	2	6	1	**17**	**26**	2	0	0	**4**	0	1	2	**6**	**10**	**18**
07:15	07:30	1	2	1	**17**	2	13	1	**19**	**36**	0	0	0	**2**	0	0	1	**4**	**6**	**21**
07:30	07:45	1	3	2	**14**	2	8	1	**17**	**31**	1	0	0	**3**	0	0	0	**4**	**7**	**19**
07:45	08:00	0	7	2	**20**	3	8	1	**22**	**42**	3	0	1	**5**	2	0	0	**7**	**12**	**27**
08:00	08:15	0	3	2	**11**	1	5	1	**15**	**26**	1	0	1	**5**	0	2	0	**5**	**10**	**18**
08:15	08:30	0	8	0	**16**	2	8	2	**24**	**40**	1	0	0	**3**	0	0	3	**5**	**8**	**24**
08:30	08:45	1	4	0	**16**	4	8	2	**22**	**38**	2	0	2	**9**	1	2	2	**9**	**18**	**28**
08:45	09:00	0	3	2	**15**	3	9	1	**25**	**40**	4	0	1	**6**	0	0	5	**10**	**16**	**28**
09:00	09:15	2	13	3	**33**	1	12	2	**33**	**66**	0	0	1	**5**	2	0	3	**9**	**14**	**40**
09:15	09:30	0	10	0	**20**	6	8	0	**36**	**56**	7	0	0	**8**	2	1	3	**12**	**20**	**38**
09:30	09:45	1	7	0	**17**	2	9	1	**20**	**37**	1	0	0	**3**	0	0	0	**2**	**5**	**21**
09:45	10:00	0	7	1	**18**	3	6	0	**19**	**37**	3	0	0	**4**	4	1	0	**9**	**13**	**25**
11:30	11:45	2	7	2	**18**	2	5	4	**25**	**43**	5	1	1	**13**	1	0	2	**8**	**21**	**32**
11:45	12:00	1	6	0	**13**	3	6	0	**19**	**32**	3	0	0	**4**	0	0	1	**4**	**8**	**20**
12:00	12:15	0	11	2	**19**	1	4	1	**20**	**39**	0	0	0	**4**	2	3	1	**9**	**13**	**26**
12:15	12:30	1	4	0	**10**	3	3	0	**12**	**22**	2	1	1	**5**	1	0	0	**5**	**10**	**16**
12:30	12:45	1	2	0	**12**	2	7	0	**15**	**27**	1	0	0	**2**	2	0	1	**5**	**7**	**17**
12:45	13:00	0	0	0	**7**	3	6	0	**10**	**17**	1	0	0	**2**	1	1	0	**5**	**7**	**12**
13:00	13:15	2	5	0	**12**	2	4	2	**15**	**27**	1	0	1	**6**	0	0	1	**3**	**9**	**18**
13:15	13:30	1	4	0	**17**	2	9	0	**17**	**34**	2	1	3	**8**	0	1	0	**4**	**12**	**23**
15:00	15:15	1	5	0	**9**	3	2	1	**20**	**29**	2	0	0	**4**	1	0	3	**7**	**11**	**20**
15:15	15:30	0	10	0	**15**	0	4	0	**23**	**38**	1	0	1	**3**	0	1	4	**5**	**8**	**23**
15:30	15:45	1	2	0	**12**	2	6	1	**19**	**31**	1	0	0	**3**	1	0	1	**4**	**7**	**19**
15:45	16:00	0	4	1	**19**	4	12	1	**25**	**44**	4	1	0	**6**	2	0	0	**8**	**14**	**29**
16:00	16:15	0	8	1	**17**	3	5	1	**27**	**44**	2	0	1	**4**	2	0	0	**6**	**10**	**27**
16:15	16:30	0	4	0	**12**	1	7	0	**21**	**33**	2	0	0	**4**	1	2	1	**5**	**9**	**21**
16:30	16:45	0	6	0	**13**	1	5	0	**25**	**38**	0	0	0	**2**	2	2	1	**6**	**8**	**23**
16:45	17:00	0	9	0	**13**	1	2	0	**24**	**37**	2	0	1	**3**	1	0	2	**4**	**7**	**22**
17:00	17:15	0	7	1	**12**	2	2	0	**18**	**30**	0	0	0	**0**	2	0	1	**6**	**6**	**18**
17:15	17:30	0	6	0	**9**	3	2	0	**21**	**30**	1	0	0	**1**	1	0	1	**5**	**6**	**18**
17:30	17:45	0	4	0	**7**	2	1	0	**15**	**22**	0	0	0	**0**	2	0	0	**4**	**4**	**13**
17:45	18:00	0	2	0	**5**	1	1	0	**12**	**17**	2	0	0	**3**	2	1	0	**4**	**7**	**12**
Total:	None	16	175	21	**457**	72	193	24	**652**	**1109**	57	4	15	**134**	35	18	39	**189**	**323**	**716**

Transportation Services - Traffic Services

Turning Movement Count - Study Results

TRIM RD @ DAIRY DR/TAYLOR CREEK DR

Survey Date: Wednesday, October 09, 2019 **WO No:** 40916

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

Full Study 15 Minute U-Turn Total

		TRIM RD		DAIRY DR/TAYLOR CREEK DR		
Time Period		Northbound U-Turn Total	Southbound U-Turn Total	Eastbound U-Turn Total	Westbound U-Turn Total	Total
07:00	07:15	2	11	0	0	13
07:15	07:30	2	9	0	0	11
07:30	07:45	3	8	0	0	11
07:45	08:00	4	6	0	0	10
08:00	08:15	4	9	0	0	13
08:15	08:30	0	1	0	0	1
08:30	08:45	6	4	0	0	10
08:45	09:00	5	6	0	0	11
09:00	09:15	10	1	0	0	11
09:15	09:30	3	1	0	0	4
09:30	09:45	3	4	0	0	7
09:45	10:00	5	0	0	0	5
11:30	11:45	1	0	0	0	1
11:45	12:00	0	1	0	0	1
12:00	12:15	5	1	0	0	6
12:15	12:30	5	0	0	0	5
12:30	12:45	1	2	0	0	3
12:45	13:00	5	0	0	0	5
13:00	13:15	0	0	0	0	0
13:15	13:30	2	0	0	0	2
15:00	15:15	5	2	0	0	7
15:15	15:30	5	2	0	0	7
15:30	15:45	1	9	0	0	10
15:45	16:00	2	0	0	0	2
16:00	16:15	0	6	0	0	6
16:15	16:30	0	3	0	0	3
16:30	16:45	3	7	0	0	10
16:45	17:00	0	6	0	0	6
17:00	17:15	3	4	0	0	7
17:15	17:30	0	4	0	0	4
17:30	17:45	1	4	0	0	5
17:45	18:00	5	3	0	0	8
Total		91	114	0	0	205

Appendix D:

Collision Data

Total Area

Classification of Accident	*Rear End*	*Turning Movement*	*Sideswipe*	*Angle*	*Approaching*	*SMV other*	*SMV unattended vehicle*	*Other*	*Total*	
P.D. only	20	1	55	49	1	7	0	1	134	88%
Non-fatal injury	5	0	4	6	0	1	0	2	18	12%
Non-reportable	0	0	0	0	0	0	0	0	0	0%
Total	**25**	**1**	**59**	**55**	**1**	**8**	**0**	**3**	**152**	100%
	#3 or 16%	#6 or 1%	#1 or 39%	#2 or 36%	#6 or 1%	#4 or 5%	#8 or 0%	#5 or 2%		

ST. JOSEPH BLVD/TAYLOR CREEK DR

Years	*Total # Collisions*	*24 Hr AADT Veh Volume*	*Days*	*Collisions/MEV*
2017-2021	3	9,605	1825	**0.17**

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

ST. JOSEPH BLVD/OLD MONTREAL RD/TRIM RD

Years	*Total # Collisions*	*24 Hr AADT Veh Volume*	*Days*	*Collisions/MEV*
2017-2021	149	29,184	1825	**2.80**

Classification of Accident	*Rear End*	*Turning Movement*	*Sideswipe*	*Angle*	*Approaching*	*SMV other*	*SMV unattended vehicle*	*Other*	*Total*	
P.D. only	20	0	55	49	1	7	0	0	132	89%
Non-fatal injury	5	0	4	5	0	1	0	2	17	11%
Non-reportable	0	0	0	0	0	0	0	0	0	0%
Total	**25**	**0**	**59**	**54**	**1**	**8**	**0**	**2**	**149**	100%
	17%	0%	40%	36%	1%	5%	0%	1%		

Transportation Services - Traffic Services

Collision Details Report - Public Version

From: January 1, 2017 **To:** December 31, 2021

Location: ST. JOSEPH BLVD @ TAYLOR CREEK DR

Traffic Control: Stop sign **Total Collisions:** 3

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
2019-Nov-15, Fri,10:22	Clear	Angle	Non-fatal injury	Wet	South	Turning left	Automobile, station wagon	Other motor vehicle	0
					West	Going ahead	Automobile, station wagon	Other motor vehicle	
2020-Feb-10, Mon,10:00	Clear	Other	P.D. only	Packed snow	West	Turning right	Automobile, station wagon	Skidding/sliding	0
					South	Going ahead	Automobile, station wagon	Other motor vehicle	
2020-Jul-29, Wed,07:25	Clear	Turning movement	P.D. only	Dry	East	Turning left	Pick-up truck	Other motor vehicle	0
					West	Going ahead	Unknown	Other motor vehicle	

Location: ST. JOSEPH BLVD/OLD MONTREAL RD @ TRIM RD

Traffic Control: Roundabout **Total Collisions:** 149

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
2017-Jan-23, Mon,14:27	Clear	Angle	P.D. only	Dry	North	Going ahead	Automobile, station wagon	Other motor vehicle	0
					East	Going ahead	Automobile, station wagon	Other motor vehicle	
2017-Jan-30, Mon,19:30	Clear	Sideswipe	P.D. only	Dry	West	Changing lanes	Automobile, station wagon	Other motor vehicle	0
					West	Going ahead	Automobile, station wagon	Other motor vehicle	
2017-Feb-12, Sun,17:19	Snow	SMV other	P.D. only	Packed snow	North	Going ahead	Automobile, station wagon	Ran off road	0
2017-Feb-13, Mon,14:36	Clear	Sideswipe	P.D. only	Loose snow	West	Going ahead	Pick-up truck	Other motor vehicle	0
					West	Going ahead	Automobile, station wagon	Other motor vehicle	
2017-Feb-24, Fri,21:30	Rain	Sideswipe	P.D. only	Wet	North	Going ahead	Pick-up truck	Other motor vehicle	0
					North	Going ahead	Automobile, station wagon	Other motor vehicle	
2017-Mar-12, Sun,09:43	Clear	Sideswipe	P.D. only	Dry	West	Going ahead	Automobile, station wagon	Other motor vehicle	0
					West	Going ahead	Automobile, station wagon	Other motor vehicle	
2017-Mar-17, Fri,13:01	Clear	Sideswipe	P.D. only	Dry	North	Going ahead	Delivery van	Other motor vehicle	0
					North	Going ahead	Automobile, station wagon	Other motor vehicle	

Transportation Services - Traffic Services

Collision Details Report - Public Version

From: January 1, 2017 **To:** December 31, 2021

Location: ST. JOSEPH BLVD/OLD MONTREAL RD @ TRIM RD

Traffic Control: Roundabout **Total Collisions:** 149

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
2017-Apr-16, Sun,14:27	Rain	Angle	P.D. only	Wet	South	Going ahead	Pick-up truck	Other motor vehicle	0
					West	Going ahead	Automobile, station wagon	Other motor vehicle	
2017-Apr-23, Sun,12:23	Clear	Angle	P.D. only	Dry	South	Merging	Automobile, station wagon	Other motor vehicle	0
					West	Going ahead	Pick-up truck	Other motor vehicle	
2017-Apr-28, Fri,11:28	Clear	Sideswipe	P.D. only	Dry	North	Going ahead	Pick-up truck	Other motor vehicle	0
					North	Going ahead	Automobile, station wagon	Other motor vehicle	
2017-May-01, Mon,07:05	Rain	Sideswipe	P.D. only	Wet	North	Going ahead	Automobile, station wagon	Other motor vehicle	0
					North	Going ahead	Automobile, station wagon	Other motor vehicle	
2017-May-02, Tue,21:29	Rain	Sideswipe	P.D. only	Wet	West	Going ahead	Pick-up truck	Other motor vehicle	0
					West	Going ahead	Automobile, station wagon	Other motor vehicle	
2017-May-13, Sat,14:25	Clear	Sideswipe	P.D. only	Dry	North	Going ahead	Automobile, station wagon	Other motor vehicle	0
					North	Going ahead	Pick-up truck	Other motor vehicle	
2017-Jun-02, Fri,09:49	Clear	Angle	P.D. only	Dry	West	Going ahead	Pick-up truck	Other motor vehicle	0
					North	Going ahead	Passenger van	Other motor vehicle	
2017-Jun-09, Fri,16:35	Clear	Rear end	Non-fatal injury	Dry	East	Turning right	Pick-up truck	Other motor vehicle	0
					East	Turning right	Automobile, station wagon	Other motor vehicle	
2017-Jun-10, Sat,13:15	Clear	Angle	P.D. only	Dry	West	Merging	Pick-up truck	Other motor vehicle	0
					North	Going ahead	Passenger van	Other motor vehicle	
2017-Jun-17, Sat,16:00	Clear	Angle	P.D. only	Dry	North	Going ahead	Automobile, station wagon	Other motor vehicle	0
					East	Going ahead	Automobile, station wagon	Other motor vehicle	
2017-Jun-21, Wed,13:59	Clear	Rear end	Non-fatal injury	Dry	East	Going ahead	Automobile, station wagon	Other motor vehicle	0
					East	Stopped	Automobile, station wagon	Other motor vehicle	
2017-Jun-29, Thu,14:55	Rain	Angle	P.D. only	Wet	East	Going ahead	Passenger van	Other motor vehicle	0
					South	Going ahead	Automobile, station wagon	Other motor vehicle	

Transportation Services - Traffic Services

Collision Details Report - Public Version

From: January 1, 2017 **To:** December 31, 2021

Location: ST. JOSEPH BLVD/OLD MONTREAL RD @ TRIM RD

Traffic Control: Roundabout **Total Collisions:** 149

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
2017-Jul-18, Tue,16:15	Clear	Angle	P.D. only	Dry	East	Merging	Automobile, station wagon	Other motor vehicle	0
					South	Going ahead	Pick-up truck	Other motor vehicle	
2017-Aug-04, Fri,13:01	Clear	Sideswipe	P.D. only	Dry	East	Unknown	Unknown	Other motor vehicle	0
					East	Going ahead	Automobile, station wagon	Other motor vehicle	
2017-Aug-04, Fri,15:00	Clear	Approaching	P.D. only	Dry	South	Going ahead	Automobile, station wagon	Other motor vehicle	0
					North	Going ahead	Automobile, station wagon	Other motor vehicle	
2017-Aug-04, Fri,16:37	Clear	Angle	P.D. only	Dry	South	Merging	Automobile, station wagon	Other motor vehicle	0
					East	Going ahead	Automobile, station wagon	Other motor vehicle	
2017-Aug-12, Sat,13:10	Clear	Sideswipe	P.D. only	Dry	North	Going ahead	Automobile, station wagon	Other motor vehicle	0
					North	Going ahead	Automobile, station wagon	Other motor vehicle	
2017-Aug-21, Mon,15:33	Clear	Rear end	P.D. only	Dry	South	Slowing or stopping	Automobile, station wagon	Other motor vehicle	0
					South	Slowing or stopping	Automobile, station wagon	Other motor vehicle	
2017-Aug-22, Tue,13:30	Rain	Sideswipe	P.D. only	Wet	South	Going ahead	Automobile, station wagon	Other motor vehicle	0
					South	Going ahead	Delivery van	Other motor vehicle	
2017-Sep-16, Sat,16:25	Clear	Rear end	Non-fatal injury	Dry	South	Turning right	Automobile, station wagon	Other motor vehicle	0
					South	Turning right	Automobile, station wagon	Other motor vehicle	
2017-Sep-29, Fri,17:13	Clear	Angle	Non-fatal injury	Dry	West	Turning left	Municipal transit bus	Other motor vehicle	0
					North	Going ahead	Automobile, station wagon	Other motor vehicle	
2017-Oct-06, Fri,07:58	Clear	Sideswipe	P.D. only	Dry	North	Changing lanes	Automobile, station wagon	Other motor vehicle	0
					North	Going ahead	Automobile, station wagon	Other motor vehicle	
2017-Oct-20, Fri,10:00	Clear	Rear end	P.D. only	Dry	West	Going ahead	Automobile, station wagon	Other motor vehicle	0
					West	Turning right	Truck - dump	Other motor vehicle	
2017-Oct-22, Sun,15:33	Clear	Angle	P.D. only	Dry	South	Going ahead	Automobile, station wagon	Other motor vehicle	0
					West	Going ahead	Automobile, station wagon	Other motor vehicle	

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Collision Details Report - Public Version

From: January 1, 2017 **To:** December 31, 2021

Location: ST. JOSEPH BLVD/OLD MONTREAL RD @ TRIM RD

Traffic Control: Roundabout **Total Collisions:** 149

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
2017-Oct-28, Sat,12:25	Clear	Sideswipe	P.D. only	Dry	North	Going ahead	Automobile, station wagon	Other motor vehicle	0
					North	Going ahead	Automobile, station wagon	Other motor vehicle	
2017-Nov-08, Wed,06:38	Clear	Angle	P.D. only	Dry	North	Going ahead	Automobile, station wagon	Other motor vehicle	0
					West	Going ahead	Pick-up truck	Other motor vehicle	
2017-Nov-20, Mon,09:25	Clear	Sideswipe	P.D. only	Dry	North	Going ahead	Automobile, station wagon	Other motor vehicle	0
					North	Going ahead	Pick-up truck	Other motor vehicle	
2017-Nov-21, Tue,08:30	Clear	Sideswipe	P.D. only	Dry	North	Going ahead	Automobile, station wagon	Other motor vehicle	0
					North	Going ahead	Automobile, station wagon	Other motor vehicle	
2017-Nov-25, Sat,11:20	Rain	Angle	P.D. only	Wet	East	Merging	Automobile, station wagon	Other motor vehicle	0
					South	Going ahead	Automobile, station wagon	Other motor vehicle	
2017-Nov-25, Sat,14:13	Rain	Rear end	P.D. only	Wet	North	Slowing or stopping	Automobile, station wagon	Other motor vehicle	0
					North	Slowing or stopping	Automobile, station wagon	Other motor vehicle	
2017-Dec-08, Fri,12:00	Clear	Rear end	P.D. only	Dry	North	Going ahead	Truck - car carrier	Other motor vehicle	0
					North	Stopped	Automobile, station wagon	Other motor vehicle	
2017-Dec-14, Thu,10:43	Clear	Rear end	P.D. only	Wet	South	Stopped	Automobile, station wagon	Other motor vehicle	0
					South	Going ahead	Automobile, station wagon	Other motor vehicle	
2017-Dec-20, Wed,03:48	Clear	SMV other	P.D. only	Wet	East	Going ahead	Automobile, station wagon	Curb	0
2018-Feb-08, Thu,07:09	Clear	Sideswipe	P.D. only	Packed snow	North	Changing lanes	Automobile, station wagon	Other motor vehicle	0
					North	Going ahead	Automobile, station wagon	Other motor vehicle	
2018-Feb-12, Mon,18:27	Clear	Angle	P.D. only	Dry	South	Going ahead	Automobile, station wagon	Other motor vehicle	0
					West	Going ahead	Pick-up truck	Other motor vehicle	
2018-Apr-04, Wed,18:33	Snow	Rear end	P.D. only	Wet	North	Going ahead	Automobile, station wagon	Other motor vehicle	0
					North	Going ahead	Automobile, station wagon	Other motor vehicle	

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Collision Details Report - Public Version

From: January 1, 2017 **To:** December 31, 2021

Location: ST. JOSEPH BLVD/OLD MONTREAL RD @ TRIM RD

Traffic Control: Roundabout **Total Collisions:** 149

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
2018-Apr-23, Mon,11:25	Clear	Angle	P.D. only	Dry	West	Merging	Automobile, station wagon	Other motor vehicle	0
					South	Going ahead	Automobile, station wagon	Other motor vehicle	
2018-May-24, Thu,16:40	Clear	Angle	Non-fatal injury	Dry	East	Merging	Automobile, station wagon	Other motor vehicle	0
					South	Going ahead	Automobile, station wagon	Other motor vehicle	
2018-Jun-28, Thu,11:45	Clear	Sideswipe	P.D. only	Dry	North	Going ahead	Automobile, station wagon	Other motor vehicle	0
					North	Going ahead	Pick-up truck	Other motor vehicle	
2018-Jul-20, Fri,11:55	Clear	Angle	P.D. only	Dry	East	Going ahead	Automobile, station wagon	Other motor vehicle	0
					South	Going ahead	Automobile, station wagon	Other motor vehicle	
2018-Jul-21, Sat,09:33	Clear	Angle	P.D. only	Dry	South	Unknown	Unknown	Other motor vehicle	0
					East	Going ahead	Automobile, station wagon	Other motor vehicle	
2018-Jul-21, Sat,15:30	Clear	Sideswipe	P.D. only	Dry	North	Unknown	Automobile, station wagon	Other motor vehicle	0
					North	Unknown	Automobile, station wagon	Other motor vehicle	
2018-Aug-01, Wed,17:00	Clear	Sideswipe	P.D. only	Dry	South	Going ahead	Automobile, station wagon	Other motor vehicle	0
					South	Going ahead	Automobile, station wagon	Other motor vehicle	
2018-Aug-31, Fri,13:30	Clear	Sideswipe	P.D. only	Dry	West	Going ahead	Automobile, station wagon	Other motor vehicle	0
					West	Going ahead	Automobile, station wagon	Other motor vehicle	
2018-Sep-16, Sun,18:03	Clear	Angle	P.D. only	Dry	East	Going ahead	Automobile, station wagon	Other motor vehicle	0
					South	Going ahead	Automobile, station wagon	Other motor vehicle	
2018-Sep-29, Sat,10:30	Clear	Angle	P.D. only	Dry	West	Going ahead	Automobile, station wagon	Other motor vehicle	0
					South	Going ahead	Automobile, station wagon	Other motor vehicle	
2018-Oct-16, Tue,14:31	Clear	Sideswipe	Non-fatal injury	Dry	West	Going ahead	Automobile, station wagon	Other motor vehicle	0
					West	Going ahead	Automobile, station wagon	Other motor vehicle	
2018-Oct-26, Fri,16:22	Clear	Angle	Non-fatal injury	Dry	East	Merging	School bus	Other motor vehicle	0
					South	Going ahead	Automobile, station wagon	Other motor vehicle	

Transportation Services - Traffic Services

Collision Details Report - Public Version

From: January 1, 2017 **To:** December 31, 2021

Location: ST. JOSEPH BLVD/OLD MONTREAL RD @ TRIM RD

Traffic Control: Roundabout **Total Collisions:** 149

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
2018-Oct-27, Sat,09:45	Rain	Sideswipe	P.D. only	Wet	West	Changing lanes	Automobile, station wagon	Other motor vehicle	0
					West	Going ahead	Automobile, station wagon	Other motor vehicle	
2018-Nov-06, Tue,13:00	Rain	Angle	P.D. only	Wet	South	Going ahead	Automobile, station wagon	Other motor vehicle	0
					West	Going ahead	Automobile, station wagon	Other motor vehicle	
2018-Dec-04, Tue,14:00	Clear	Rear end	P.D. only	Dry	East	Slowing or stopping	Pick-up truck	Other motor vehicle	0
					East	Unknown	Automobile, station wagon	Other motor vehicle	
2018-Dec-10, Mon,19:15	Clear	Sideswipe	P.D. only	Dry	East	Going ahead	Automobile, station wagon	Other motor vehicle	0
					East	Going ahead	Automobile, station wagon	Other motor vehicle	
2018-Dec-11, Tue,11:11	Freezing Rain	SMV other	P.D. only	Ice	North	Going ahead	Automobile, station wagon	Skidding/sliding	0
2019-Jan-07, Mon,17:26	Snow	Sideswipe	P.D. only	Wet	West	Going ahead	Unknown	Other motor vehicle	0
					West	Going ahead	Automobile, station wagon	Other motor vehicle	
2019-Jan-22, Tue,06:45	Clear	Rear end	P.D. only	Ice	North	Slowing or stopping	Pick-up truck	Other motor vehicle	0
					North	Going ahead	Automobile, station wagon	Other motor vehicle	
2019-Jan-22, Tue,07:52	Clear	Rear end	P.D. only	Packed snow	North	Going ahead	Automobile, station wagon	Other motor vehicle	0
					North	Stopped	Automobile, station wagon	Other motor vehicle	
2019-Feb-04, Mon,16:34	Freezing Rain	Angle	P.D. only	Slush	West	Merging	Automobile, station wagon	Other motor vehicle	0
					North	Going ahead	Automobile, station wagon	Other motor vehicle	
2019-Feb-14, Thu,11:50	Clear	Sideswipe	P.D. only	Wet	North	Merging	Truck - closed	Other motor vehicle	0
					North	Going ahead	Automobile, station wagon	Other motor vehicle	
2019-Feb-14, Thu,12:40	Clear	Angle	P.D. only	Dry	South	Merging	Automobile, station wagon	Other motor vehicle	0
					West	Going ahead	Automobile, station wagon	Other motor vehicle	
2019-Feb-26, Tue,15:30	Clear	Rear end	P.D. only	Dry	East	Turning right	Unknown	Other motor vehicle	0
					East	Turning right	Pick-up truck	Other motor vehicle	

Transportation Services - Traffic Services

Collision Details Report - Public Version

From: January 1, 2017 **To:** December 31, 2021

Location: ST. JOSEPH BLVD/OLD MONTREAL RD @ TRIM RD

Traffic Control: Roundabout **Total Collisions:** 149

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
2019-Mar-14, Thu,12:20	Clear	Sideswipe	P.D. only	Ice	North	Unknown	Automobile, station wagon	Other motor vehicle	0
					North	Unknown	Automobile, station wagon	Other motor vehicle	
2019-Mar-15, Fri,15:00	Clear	Rear end	P.D. only	Wet	East	Turning right	Automobile, station wagon	Other motor vehicle	0
					East	Turning right	Automobile, station wagon	Other motor vehicle	
2019-Mar-30, Sat,18:50	Clear	Sideswipe	P.D. only	Dry	South	Changing lanes	Automobile, station wagon	Other motor vehicle	0
					South	Going ahead	Automobile, station wagon	Other motor vehicle	
2019-Apr-09, Tue,06:45	Snow	Other	Non-fatal injury	Loose snow	North	Slowing or stopping	Automobile, station wagon	Skidding/sliding	0
					North	Going ahead	Automobile, station wagon	Other motor vehicle	
2019-Apr-09, Tue,14:20	Snow	Sideswipe	P.D. only	Loose snow	East	Unknown	Unknown	Other motor vehicle	0
					East	Going ahead	School bus	Other motor vehicle	
2019-Apr-27, Sat,20:00	Clear	SMV other	Non-fatal injury	Dry	North	Slowing or stopping	Motorcycle	Skidding/sliding	0
2019-May-15, Wed,14:13	Rain	Sideswipe	P.D. only	Wet	North	Going ahead	Automobile, station wagon	Other motor vehicle	0
					North	Going ahead	Automobile, station wagon	Other motor vehicle	
2019-May-25, Sat,12:20	Rain	Sideswipe	P.D. only	Wet	North	Changing lanes	Automobile, station wagon	Other motor vehicle	0
					North	Going ahead	Automobile, station wagon	Other motor vehicle	
2019-May-27, Mon,17:59	Clear	Angle	P.D. only	Dry	West	Merging	Automobile, station wagon	Other motor vehicle	0
					North	Going ahead	Pick-up truck	Other motor vehicle	
2019-May-29, Wed,07:45	Clear	Rear end	P.D. only	Dry	East	Going ahead	Automobile, station wagon	Other motor vehicle	0
					East	Stopped	Automobile, station wagon	Other motor vehicle	
2019-Jun-10, Mon,14:36	Clear	Sideswipe	Non-fatal injury	Dry	West	Going ahead	Automobile, station wagon	Other motor vehicle	0
					West	Going ahead	Passenger van	Other motor vehicle	
2019-Jun-10, Mon,19:00	Clear	Sideswipe	P.D. only	Dry	North	Going ahead	Automobile, station wagon	Other motor vehicle	0
					North	Going ahead	Pick-up truck	Other motor vehicle	

Transportation Services - Traffic Services

Collision Details Report - Public Version

From: January 1, 2017 **To:** December 31, 2021

Location: ST. JOSEPH BLVD/OLD MONTREAL RD @ TRIM RD

Traffic Control: Roundabout **Total Collisions:** 149

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
2019-Jun-11, Tue,16:10	Clear	Sideswipe	P.D. only	Dry	North	Changing lanes	Automobile, station wagon	Other motor vehicle	0
					North	Going ahead	Automobile, station wagon	Other motor vehicle	
2019-Jun-23, Sun,17:49	Clear	Angle	P.D. only	Dry	South	Merging	Automobile, station wagon	Other motor vehicle	0
					West	Going ahead	Automobile, station wagon	Other motor vehicle	
2019-Jun-25, Tue,13:19	Clear	Rear end	Non-fatal injury	Dry	East	Turning right	Automobile, station wagon	Other motor vehicle	0
					East	Turning right	Automobile, station wagon	Other motor vehicle	
2019-Jul-07, Sun,15:30	Clear	Rear end	P.D. only	Dry	East	Turning right	Automobile, station wagon	Other motor vehicle	0
					East	Turning right	Automobile, station wagon	Other motor vehicle	
2019-Jul-10, Wed,16:54	Clear	Rear end	P.D. only	Dry	North	Slowing or stopping	Automobile, station wagon	Other motor vehicle	0
					North	Stopped	Pick-up truck	Other motor vehicle	
2019-Jul-12, Fri,15:15	Clear	Angle	P.D. only	Dry	East	Merging	Automobile, station wagon	Other motor vehicle	0
					South	Going ahead	Automobile, station wagon	Other motor vehicle	
2019-Aug-05, Mon,21:15	Clear	Angle	P.D. only	Dry	North	Merging	Automobile, station wagon	Other motor vehicle	0
					East	Going ahead	Automobile, station wagon	Other motor vehicle	
2019-Sep-09, Mon,18:40	Clear	Rear end	P.D. only	Dry	North	Slowing or stopping	Automobile, station wagon	Other motor vehicle	0
					North	Stopped	Pick-up truck	Other motor vehicle	
2019-Sep-19, Thu,01:58	Clear	SMV other	P.D. only	Dry	East	Going ahead	Automobile, station wagon	Pole (sign, parking meter)	0
2019-Sep-19, Thu,06:25	Clear	Sideswipe	P.D. only	Dry	West	Going ahead	Pick-up truck	Other motor vehicle	0
					West	Going ahead	Automobile, station wagon	Other motor vehicle	
2019-Sep-20, Fri,18:20	Clear	Angle	P.D. only	Dry	West	Going ahead	Pick-up truck	Other motor vehicle	0
					North	Going ahead	Pick-up truck	Other motor vehicle	
2019-Oct-11, Fri,10:02	Clear	Sideswipe	P.D. only	Dry	North	Going ahead	Automobile, station wagon	Other motor vehicle	0
					North	Going ahead	Automobile, station wagon	Other motor vehicle	

Transportation Services - Traffic Services

Collision Details Report - Public Version

From: January 1, 2017 **To:** December 31, 2021

Location: ST. JOSEPH BLVD/OLD MONTREAL RD @ TRIM RD

Traffic Control: Roundabout **Total Collisions:** 149

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
2019-Nov-04, Mon,18:15	Clear	Sideswipe	P.D. only	Dry	North	Going ahead	Automobile, station wagon	Other motor vehicle	0
					North	Going ahead	Automobile, station wagon	Other motor vehicle	
2019-Nov-13, Wed,10:28	Clear	Sideswipe	P.D. only	Dry	East	Changing lanes	Automobile, station wagon	Other motor vehicle	0
					East	Going ahead	Automobile, station wagon	Other motor vehicle	
2019-Nov-19, Tue,17:17	Clear	Rear end	P.D. only	Dry	South	Going ahead	Delivery van	Other motor vehicle	0
					South	Slowing or stopping	Automobile, station wagon	Other motor vehicle	
2019-Nov-20, Wed,17:30	Clear	Sideswipe	P.D. only	Dry	North	Going ahead	Automobile, station wagon	Other motor vehicle	0
					North	Going ahead	Passenger van	Other motor vehicle	
2019-Nov-25, Mon,18:25	Clear	SMV other	P.D. only	Dry	North	Going ahead	Automobile, station wagon	Ran off road	0
2019-Dec-13, Fri,07:55	Clear	Angle	P.D. only	Dry	West	Merging	Automobile, station wagon	Other motor vehicle	0
					North	Going ahead	Automobile, station wagon	Other motor vehicle	
2020-Jan-08, Wed,18:30	Clear	Sideswipe	P.D. only	Dry	North	Unknown	Unknown	Other motor vehicle	0
					North	Going ahead	Automobile, station wagon	Other motor vehicle	
2020-Jan-15, Wed,18:55	Clear	Angle	Non-fatal injury	Wet	South	Merging	Pick-up truck	Other motor vehicle	0
					West	Going ahead	Automobile, station wagon	Other motor vehicle	
2020-Jan-18, Sat,20:00	Snow	Angle	P.D. only	Packed snow	East	Going ahead	Pick-up truck	Other motor vehicle	0
					South	Going ahead	Automobile, station wagon	Other motor vehicle	
2020-Mar-31, Tue,14:31	Clear	Sideswipe	P.D. only	Dry	West	Changing lanes	Pick-up truck	Other motor vehicle	0
					West	Going ahead	Pick-up truck	Other motor vehicle	
2020-May-20, Wed,14:30	Clear	Sideswipe	P.D. only	Dry	South	Going ahead	Pick-up truck	Other motor vehicle	0
					South	Going ahead	Pick-up truck	Other motor vehicle	
2020-Jun-14, Sun,11:35	Clear	Rear end	Non-fatal injury	Dry	North	Slowing or stopping	Pick-up truck	Other motor vehicle	0
					North	Stopped	Automobile, station wagon	Other motor vehicle	

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2020-Jun-20, Sat,15:11	Clear	Angle	P.D. only	Dry	South	Going ahead	Pick-up truck	Other motor vehicle	0
					West	Going ahead	Automobile, station wagon	Other motor vehicle	
2020-Jun-27, Sat,12:42	Clear	Sideswipe	P.D. only	Dry	West	Going ahead	Automobile, station wagon	Other motor vehicle	0
					West	Going ahead	Automobile, station wagon	Other motor vehicle	
2020-Jul-27, Mon,12:14	Clear	Angle	P.D. only	Dry	East	Merging	Automobile, station wagon	Other motor vehicle	0
					South	Going ahead	Automobile, station wagon	Other motor vehicle	
2020-Aug-13, Thu,21:00	Clear	Angle	Non-fatal injury	Dry	East	Merging	Automobile, station wagon	Cyclist	0
					South	Going ahead	Bicycle	Other motor vehicle	
2020-Aug-17, Mon,17:08	Clear	Other	Non-fatal injury	Dry	North	Going ahead	Automobile, station wagon	Pole (utility, power)	0
					South	Going ahead	Passenger van	Pole (utility, power)	
2020-Aug-30, Sun,14:45	Clear	Angle	P.D. only	Dry	North	Merging	Pick-up truck	Other motor vehicle	0
					East	Going ahead	Automobile, station wagon	Other motor vehicle	
2020-Sep-10, Thu,15:45	Clear	Rear end	P.D. only	Dry	South	Slowing or stopping	Pick-up truck	Other motor vehicle	0
					South	Slowing or stopping	Pick-up truck	Other motor vehicle	
2020-Sep-14, Mon,08:20	Clear	Sideswipe	P.D. only	Dry	North	Going ahead	Unknown	Other motor vehicle	0
					North	Going ahead	Pick-up truck	Other motor vehicle	
2020-Sep-26, Sat,15:45	Clear	Angle	P.D. only	Dry	South	Merging	Automobile, station wagon	Other motor vehicle	0
					West	Going ahead	Pick-up truck	Other motor vehicle	
2020-Oct-19, Mon,16:05	Rain	Sideswipe	P.D. only	Wet	East	Going ahead	Automobile, station wagon	Other motor vehicle	0
					East	Going ahead	Pick-up truck	Other motor vehicle	
2020-Oct-23, Fri,08:35	Clear	Angle	P.D. only	Dry	East	Merging	Automobile, station wagon	Other motor vehicle	0
					South	Going ahead	Automobile, station wagon	Other motor vehicle	
2020-Oct-30, Fri,16:45	Clear	Angle	P.D. only	Dry	West	Going ahead	Delivery van	Other motor vehicle	0
					South	Going ahead	Automobile, station wagon	Other motor vehicle	

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2020-Nov-07, Sat,13:15	Clear	Angle	P.D. only	Dry	South	Going ahead	Unknown	Other motor vehicle	0
					East	Going ahead	Automobile, station wagon	Other motor vehicle	
2020-Nov-16, Mon,16:57	Clear	Angle	P.D. only	Dry	East	Merging	Automobile, station wagon	Other motor vehicle	0
					South	Slowing or stopping	Automobile, station wagon	Other motor vehicle	
2021-Feb-04, Thu,07:20	Clear	Angle	P.D. only	Dry	North	Merging	Passenger van	Other motor vehicle	0
					East	Going ahead	Pick-up truck	Other motor vehicle	
2021-Feb-18, Thu,21:41	Clear	Angle	P.D. only	Dry	West	Going ahead	Automobile, station wagon	Other motor vehicle	0
					North	Going ahead	Pick-up truck	Other motor vehicle	
2021-Mar-16, Tue,14:36	Clear	SMV other	P.D. only	Dry	North	Going ahead	Truck - tank	Ran off road	0
2021-Mar-16, Tue,17:00	Clear	Sideswipe	P.D. only	Dry	East	Going ahead	Automobile, station wagon	Other motor vehicle	0
					East	Going ahead	Delivery van	Other motor vehicle	
2021-Apr-10, Sat,16:40	Clear	Angle	P.D. only	Dry	North	Merging	Automobile, station wagon	Other motor vehicle	0
					East	Going ahead	Pick-up truck	Other motor vehicle	
2021-Apr-24, Sat,14:40	Clear	Sideswipe	P.D. only	Dry	South	Changing lanes	Pick-up truck	Other motor vehicle	0
					South	Going ahead	Automobile, station wagon	Other motor vehicle	
2021-May-08, Sat,14:40	Clear	Sideswipe	P.D. only	Dry	North	Going ahead	Automobile, station wagon	Other motor vehicle	0
					North	Going ahead	Passenger van	Other motor vehicle	
2021-Jun-10, Thu,18:30	Clear	Rear end	P.D. only	Dry	East	Slowing or stopping	Pick-up truck	Other motor vehicle	0
					East	Stopped	Automobile, station wagon	Other motor vehicle	
2021-Jun-13, Sun,15:15	Clear	SMV other	P.D. only	Dry	West	Going ahead	Motorcycle	Skidding/sliding	0
2021-Jun-14, Mon,09:44	Clear	Sideswipe	P.D. only	Dry	North	Going ahead	Automobile, station wagon	Other motor vehicle	0
					North	Going ahead	Pick-up truck	Other motor vehicle	
2021-Jun-27, Sun,12:45	Clear	Angle	P.D. only	Dry	East	Going ahead	Pick-up truck	Other motor vehicle	0
					South	Going ahead	Pick-up truck	Other motor vehicle	

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2021-Jul-07, Wed,06:00	Clear	Sideswipe	P.D. only	Dry	West	Going ahead	Pick-up truck	Other motor vehicle	0
					West	Going ahead	Pick-up truck	Other motor vehicle	
2021-Aug-04, Wed,13:30	Clear	Sideswipe	P.D. only	Dry	North	Changing lanes	Pick-up truck	Other motor vehicle	0
					North	Going ahead	Automobile, station wagon	Other motor vehicle	
2021-Aug-06, Fri,07:55	Clear	Angle	P.D. only	Dry	East	Going ahead	Automobile, station wagon	Other motor vehicle	0
					North	Going ahead	Pick-up truck	Other motor vehicle	
2021-Aug-06, Fri,17:57	Clear	Sideswipe	P.D. only	Dry	West	Going ahead	Pick-up truck	Other motor vehicle	0
					West	Going ahead	Pick-up truck	Other motor vehicle	
2021-Aug-07, Sat,07:16	Clear	Rear end	P.D. only	Dry	North	Going ahead	Pick-up truck	Other motor vehicle	0
					North	Going ahead	Pick-up truck	Other motor vehicle	
2021-Aug-07, Sat,13:39	Clear	Sideswipe	P.D. only	Dry	East	Going ahead	Pick-up truck	Other motor vehicle	0
					East	Going ahead	Pick-up truck	Other motor vehicle	
2021-Aug-08, Sun,16:19	Clear	Angle	P.D. only	Dry	North	Merging	Pick-up truck	Other motor vehicle	0
					East	Going ahead	Pick-up truck	Other motor vehicle	
2021-Aug-27, Fri,07:21	Clear	Sideswipe	Non-fatal injury	Dry	East	Going ahead	Automobile, station wagon	Other motor vehicle	0
					East	Going ahead	Pick-up truck	Other motor vehicle	
2021-Aug-31, Tue,09:45	Clear	Angle	P.D. only	Dry	South	Merging	Automobile, station wagon	Other motor vehicle	0
					West	Going ahead	Automobile, station wagon	Other motor vehicle	
2021-Aug-31, Tue,17:54	Clear	Angle	P.D. only	Dry	North	Merging	Automobile, station wagon	Other motor vehicle	0
					East	Going ahead	Automobile, station wagon	Other motor vehicle	
2021-Sep-17, Fri,12:05	Clear	Angle	P.D. only	Dry	North	Merging	Passenger van	Other motor vehicle	0
					East	Going ahead	Automobile, station wagon	Other motor vehicle	
2021-Sep-22, Wed,13:44	Rain	Angle	P.D. only	Wet	South	Merging	Automobile, station wagon	Other motor vehicle	0
					West	Going ahead	Automobile, station wagon	Other motor vehicle	

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2021-Sep-25, Sat,19:30	Clear	Sideswipe	Non-fatal injury	Dry	North	Going ahead	Pick-up truck	Other motor vehicle	0
					North	Going ahead	Automobile, station wagon	Other motor vehicle	
2021-Oct-12, Tue,09:30	Clear	Sideswipe	P.D. only	Dry	South	Going ahead	Pick-up truck	Other motor vehicle	0
					South	Unknown	Pick-up truck	Other motor vehicle	
2021-Oct-24, Sun,13:35	Clear	Sideswipe	P.D. only	Dry	East	Going ahead	Automobile, station wagon	Other motor vehicle	0
					East	Going ahead	Automobile, station wagon	Other motor vehicle	
2021-Nov-07, Sun,13:27	Clear	Rear end	P.D. only	Dry	East	Merging	Automobile, station wagon	Other motor vehicle	0
					East	Stopped	School bus	Other motor vehicle	
2021-Nov-11, Thu,15:15	Clear	Angle	P.D. only	Dry	West	Merging	Automobile, station wagon	Other motor vehicle	0
					North	Stopped	Automobile, station wagon	Other motor vehicle	
2021-Nov-27, Sat,12:55	Clear	Angle	P.D. only	Dry	West	Going ahead	Automobile, station wagon	Other motor vehicle	0
					South	Going ahead	Automobile, station wagon	Other motor vehicle	
2021-Dec-03, Fri,18:10	Clear	Sideswipe	P.D. only	Dry	South	Going ahead	Pick-up truck	Other motor vehicle	0
					South	Going ahead	Pick-up truck	Other motor vehicle	
2021-Dec-08, Wed,14:10	Snow	Sideswipe	P.D. only	Loose snow	North	Going ahead	Automobile, station wagon	Other motor vehicle	0
					North	Going ahead	Automobile, station wagon	Other motor vehicle	
2021-Dec-24, Fri,16:45	Snow	Angle	P.D. only	Loose snow	South	Going ahead	Pick-up truck	Other motor vehicle	0
					West	Going ahead	Automobile, station wagon	Other motor vehicle	

Appendix E:

MMLOS Analysis

Multi-Modal Level of Service - Segments Form

Consultant	Parsons	**Project**	78426-01000
Scenario	Existing and Future	**Date**	may 5 2023
Comments			

SEGMENTS		Street A	loseph Blvd (Exist 1	Section 2	Section 3	Section 4	Section 5	Section 6	Section 7	Section 8	Section 9
Pedestrian	Sidewalk Width Boulevard Width	B	≥ 2 m 0.5 - 2 m								
	Avg Daily Curb Lane Traffic Volume		≤ 3000								
	Operating Speed On-Street Parking		> 60 km/h no								
	Exposure to Traffic PLoS		**B**	-	-	-	-	-	-	-	-
	Effective Sidewalk Width		2.0 m								
	Pedestrian Volume		250 ped/hr								
	Crowding PLoS		**B**	-	-	-	-	-	-	-	-
	Level of Service		**B**	-	-	-	-	-	-	-	-
Bicycle	Type of Cycling Facility	E	Curbside Bike Lane								
	Number of Travel Lanes		2 ea. dir. (no median)								
	Operating Speed		> 70 km/h								
	# of Lanes & Operating Speed LoS		**E**	-	-	-	-	-	-	-	-
	Bike Lane (+ Parking Lane) Width		≥1.5 to <1.8 m								
	Bike Lane Width LoS		**B**	-	-	-	-	-	-	-	-
	Bike Lane Blockages		Rare								
	Blockage LoS		**A**	-	-	-	-	-	-	-	-
	Median Refuge Width (no median = < 1.8 m)		< 1.8 m refuge								
	No. of Lanes at Unsignalized Crossing		4-5 lanes								
	Sidestreet Operating Speed		>50 to 60 km/h								
	Unsignalized Crossing - Lowest LoS		**D**	-	-	-	-	-	-	-	-
	Level of Service		**E**	-	-	-	-	-	-	-	-
Transit	Facility Type	D	Mixed Traffic								
	Friction or Ratio Transit:Posted Speed		Vt/Vp ≥ 0.8								
	Level of Service		**D**	-	-	-	-	-	-	-	-
Truck	Truck Lane Width	A	≤ 3.5 m								
	Travel Lanes per Direction		> 1								
	Level of Service		**A**	-	-	-	-	-	-	-	-

Appendix F:

TDM Measures and Infrastructures Design Checklist

TDM Measures Checklist:

Non-Residential Developments (office, institutional, retail or industrial)

Legend

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

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

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

		TDM measures: *Non-residential developments*	Check if proposed & add descriptions
		1. TDM PROGRAM MANAGEMENT	
		1.1 Program coordinator	
BASIC	*	1.1.1 Designate an internal coordinator, or contract with an external coordinator	☐
		1.2 Travel surveys	
BETTER		1.2.1 Conduct periodic surveys to identify travel-related behaviours, attitudes, challenges and solutions, and to track progress	☐
		2. WALKING AND CYCLING	
		2.1 Information on walking/cycling routes & destinations	
BASIC		2.1.1 Display local area maps with walking/cycling access routes and key destinations at major entrances	☒ Signs/maps to be installed in main lobby.
		2.2 Bicycle skills training	
		Commuter travel	
BETTER	*	2.2.1 Offer on-site cycling courses for commuters, or subsidize off-site courses	☐
		2.3 Valet bike parking	
		Visitor travel	
BETTER		2.3.1 Offer secure valet bike parking during public events when demand exceeds fixed supply (e.g. for festivals, concerts, games)	☐

		TDM measures: *Non-residential developments*	Check if proposed & add descriptions
		3. TRANSIT	
		3.1 Transit information	
BASIC		3.1.1 Display relevant transit schedules and route maps at entrances	☒ Signs/maps to be installed in lobby.
BASIC		3.1.2 Provide online links to OC Transpo and STO information	☒ To be included on the hotel website.
BETTER		3.1.3 Provide real-time arrival information display at entrances	☐
		3.2 Transit fare incentives	
		Commuter travel	
BETTER		3.2.1 Offer preloaded PRESTO cards to encourage commuters to use transit	☒ These would be provided to employees.
BETTER	*	3.2.2 Subsidize or reimburse monthly transit pass purchases by employees	☐
		Visitor travel	
BETTER		3.2.3 Arrange inclusion of same-day transit fare in price of tickets (e.g. for festivals, concerts, games)	☐
		3.3 Enhanced public transit service	
		Commuter travel	
BETTER		3.3.1 Contract with OC Transpo to provide enhanced transit services (e.g. for shift changes, weekends)	☐
		Visitor travel	
BETTER		3.3.2 Contract with OC Transpo to provide enhanced transit services (e.g. for festivals, concerts, games)	☐
		3.4 Private transit service	
		Commuter travel	
BETTER		3.4.1 Provide shuttle service when OC Transpo cannot offer sufficient quality or capacity to serve demand (e.g. for shift changes, weekends)	☐
		Visitor travel	
BETTER		3.4.2 Provide shuttle service when OC Transpo cannot offer sufficient quality or capacity to serve demand (e.g. for festivals, concerts, games)	☐

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

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

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

Legend

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

		TDM-supportive design & infrastructure measures: *Non-residential developments*	Check if completed & add descriptions, explanations or plan/drawing references
	1.	**WALKING & CYCLING: ROUTES**	
	1.1	**Building location & access points**	
BASIC	1.1.1	Locate building close to the street, and do not locate parking areas between the street and building entrances	☑ Building located near St. Joseph frontage, parking mostly underground.
BASIC	1.1.2	Locate building entrances in order to minimize walking distances to sidewalks and transit stops/stations	☑ Entrance directly connects to St. Joseph.
BASIC	1.1.3	Locate building doors and windows to ensure visibility of pedestrians from the building, for their security and comfort	☑ Podium level provides windows facing St. Joseph.
	1.2	**Facilities for walking & cycling**	
REQUIRED	1.2.1	Provide convenient, direct access to stations or major stops along rapid transit routes within 600 metres; minimize walking distances from buildings to rapid transit; provide pedestrian-friendly, weather-protected (where possible) environment between rapid transit accesses and building entrances; ensure quality linkages from sidewalks through building entrances to integrated stops/stations *(see Official Plan policy 4.3.3)*	☑ Front entranceway connects directly to St. Joseph Blvd., providing access to the future Trim LRT station. A 3.0m MUP has been protected for on the eastern site boundary to facilitate future connection to the LRT Trim Station.

REQUIRED	1.2.2	Provide safe, direct and attractive pedestrian access from public sidewalks to building entrances through such measures as: reducing distances between public sidewalks and major building entrances; providing walkways from public streets to major building entrances; within a site, providing walkways along the front of adjoining buildings, between adjacent buildings, and connecting areas where people may congregate, such as courtyards and transit stops; and providing weather protection through canopies, colonnades, and other design elements wherever possible *(see Official Plan policy 4.3.12)*	☑ Front entranceway connects directly to St. Joseph Blvd., providing access to the future Trim LRT station. A 3.0m MUP has been protected for on the eastern site boundary to facilitate future connection to the LRT Trim Station.

TDM-supportive design & infrastructure measures: *Non-residential developments*			Check if completed & add descriptions, explanations or plan/drawing
REQUIRED	1.2.3	Provide sidewalks of smooth, well-drained walking surfaces of contrasting materials or treatments to differentiate pedestrian areas from vehicle areas, and provide marked pedestrian crosswalks at intersection sidewalks *(see Official Plan policy 4.3.10)*	☑ Sidewalks are of a smooth, well-drained walking surface and separate for vehicle areas.
REQUIRED	1.2.4	Make sidewalks and open space areas easily accessible through features such as gradual grade transition, depressed curbs at street corners and convenient access to extra-wide parking spaces and ramps *(see Official Plan policy 4.3.10)*	☑ Top floor amenity space and front entrance is accessed through building
REQUIRED	1.2.5	Include adequately spaced inter-block/street cycling and pedestrian connections to facilitate travel by active transportation. Provide links to the existing or planned network of public sidewalks, multi-use pathways and on- road cycle routes. Where public sidewalks and multi-use pathways intersect with roads, consider providing traffic control devices to give priority to cyclists and pedestrians *(see Official Plan policy 4.3.11)*	☑ The future 3.0m MUP will provide connectivity through the site to St. Joseph and the future Trim Road Station
BASIC	1.2.6	Provide safe, direct and attractive walking routes from building entrances to nearby transit stops	☑ Front door connects directly to St. Joseph. Lighting to be provided at east face of building to illuminate future MUP.
BASIC	1.2.7	Ensure that walking routes to transit stops are secure, visible, lighted, shaded and wind-protected wherever possible	☑ Front door connects directly to St. Joseph. Lighting to be provided at east face of building to illuminate future MUP.
BASIC	1.2.8	Design roads used for access or circulation by cyclists using a target operating speed of no more than 30 km/h, or provide a separated cycling facility	☐ N/A

	1.3	**Amenities for walking & cycling**	
BASIC	1.3.1	Provide lighting, landscaping and benches along walking and cycling routes between building entrances and streets, sidewalks and trails	☑ The future 3.0m MUP will provide connectivity through the site to St. Joseph and the future Trim Road Station
BASIC	1.3.2	Provide wayfinding signage for site access (where required, e.g. when multiple buildings or entrances exist) and egress (where warranted, such as when directions to reach transit stops/stations, trails or other common destinations are not obvious)	☐ N/A

TDM-supportive design & infrastructure measures: *Non-residential developments*			Check if completed & add descriptions, explanations or plan/drawing references
	2.	**WALKING & CYCLING: END-OF-TRIP FACILITIES**	
	2.1	**Bicycle parking**	
REQUIRED	2.1.1	Provide bicycle parking in highly visible and lighted areas, sheltered from the weather wherever possible *(see Official Plan policy 4.3.6)*	☑ Bicycle parking provided at front and rear of building
REQUIRED	2.1.2	Provide the number of bicycle parking spaces specified for various land uses in different parts of Ottawa; provide convenient access to main entrances or well-used areas *(see Zoning By-law Section 111)*	☑ 20 bicycle stalls provided which exceeds the Zoning By-Law
REQUIRED	2.1.3	Ensure that bicycle parking spaces and access aisles meet minimum dimensions; that no more than 50% of spaces are vertical spaces; and that parking racks are securely anchored *(see Zoning By-law Section 111)*	☑ All spaces are horizontal spaces.
BASIC	2.1.4	Provide bicycle parking spaces equivalent to the expected number of commuter cyclists (assuming the cycling mode share target is met), plus the expected peak number of customer/visitor cyclists	☑ 20 bicycle stalls can accommodate the combined transit and non-motorized trips.
BETTER	2.1.5	Provide bicycle parking spaces equivalent to the expected number of commuter and customer/visitor cyclists, plus an additional buffer (e.g. 25 percent extra) to encourage other cyclists and ensure adequate capacity in peak cycling season	☐
	2.2	**Secure bicycle parking**	
REQUIRED	2.2.1	Where more than 50 bicycle parking spaces are provided for a single office building, locate at least 25% of spaces within a building/structure, a secure area (e.g. supervised parking lot or enclosure) or bicycle lockers *(see Zoning By-law Section 111)*	☐ Less than 50 spaces are provided.
BETTER	2.2.2	Provide secure bicycle parking spaces equivalent to the expected number of commuter cyclists (assuming the cycling mode share target is met)	☐
	2.3	**Shower & change facilities**	
BASIC	2.3.1	Provide shower and change facilities for the use of active commuters	☐
BETTER	2.3.2	In addition to shower and change facilities, provide dedicated lockers, grooming stations, drying racks and laundry facilities for the use of active commuters	☐

	2.4	**Bicycle repair station**	
BETTER	2.4.1	Provide a permanent bike repair station, with commonly used tools and an air pump, adjacent to the main bicycle parking area (or secure bicycle parking area, if provided)	☐

		TDM-supportive design & infrastructure measures: ***Non-residential developments***	**Check if completed & add descriptions, explanations or plan/drawing references**
	3.	**TRANSIT**	
	3.1	**Customer amenities**	
BASIC	3.1.1	Provide shelters, lighting and benches at any on-site transit stops	☐ N/A
BASIC	3.1.2	Where the site abuts an off-site transit stop and insufficient space exists for a transit shelter in the public right-of-way, protect land for a shelter and/or install a shelter	☐
BETTER	3.1.3	Provide a secure and comfortable interior waiting area by integrating any on-site transit stops into the building	☐
	4.	**RIDESHARING**	
	4.1	**Pick-up & drop-off facilities**	
BASIC	4.1.1	Provide a designated area for carpool drivers (plus taxis and ride-hailing services) to drop off or pick up passengers without using fire lanes or other no-stopping zones	☑ Provided nearest the front door for drop-off spaces.
	4.2	**Carpool parking**	
BASIC	4.2.1	Provide signed parking spaces for carpools in a priority location close to a major building entrance, sufficient in number to accommodate the mode share target for carpools	☐
BETTER	4.2.2	At large developments, provide spaces for carpools in a separate, access-controlled parking area to simplify enforcement	☐
	5.	**CARSHARING & BIKESHARING**	
	5.1	**Carshare parking spaces**	
BETTER	5.1.1	Provide carshare parking spaces in permitted non-residential zones, occupying either required or provided parking spaces *(see Zoning By-law Section 94)*	☐
	5.2	**Bikeshare station location**	
BETTER	5.2.1	Provide a designated bikeshare station area near a major building entrance, preferably lighted and sheltered with a direct walkway connection	☐

	TDM-supportive design & infrastructure measures: *Non-residential developments*		Check if completed & add descriptions, explanations or plan/drawing references
	6.	**PARKING**	
	6.1	**Number of parking spaces**	
REQUIRED	6.1.1	Do not provide more parking than permitted by zoning, nor less than required by zoning, unless a variance is being applied for	☑ Parking incorporates shared provisions and targets zoning minimums.
BASIC	6.1.2	Provide parking for long-term and short-term users that is consistent with mode share targets, considering the potential for visitors to use off-site public parking	☐
BASIC	6.1.3	Where a site features more than one use, provide shared parking and reduce the cumulative number of parking spaces accordingly *(see Zoning By-law Section 104)*	☑ Parking incorporates shared provisions and targets zoning minimums.
BETTER	6.1.4	Reduce the minimum number of parking spaces required by zoning by one space for each 13 square metres of gross floor area provided as shower rooms, change rooms, locker rooms and other facilities for cyclists in conjunction with bicycle parking *(see Zoning By-law Section 111)*	☐
	6.2	**Separate long-term & short-term parking areas**	
BETTER	6.2.1	Separate short-term and long-term parking areas using signage or physical barriers, to permit access controls and simplify enforcement (i.e. to discourage employees from parking in visitor spaces, and vice versa)	☐
	7.	**OTHER**	
	7.1	**On-site amenities to minimize off-site trips**	
BETTER	7.1.1	Provide on-site amenities to minimize mid-day or mid-commute errands	☑ Restaurant, café and gym are on site. Site is adjacent to a commercial plaza.