729-753 Ridgewood Ave

TIA Strategy Report

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TABLE OF CONTENTS

LIST OF FIGURES

LIST OF TABLES

LIST OF APPENDICES

Strategy Report

Parsons has been retained by Brigil Construction to prepare a TIA in support of a Zoning By-Law Amendment (ZBLA) for a residential development located at 729-753 Ridgewood Ave. This document follows the new TIA process, as outlined in the City Transportation Impact Assessment (TIA) Guidelines (2017). The following report represents Step 4 – Strategy Report.

1. Screening Form

The screening form confirmed the need for a TIA Report based on the Trip Generation trigger and the Safety trigger. Trip Generation module is triggered given that the proposed development consists of five buildings ranging from 4 to 15-storeys high, with approximately 387 residential apartment units. Safety module is triggered given that the proposed development access is located less than 150 meters from the signalized intersection of Riverside/Ridgewood. The Location module was not triggered. The Screening Form has been provided in Appendix A.

2. Scoping Report

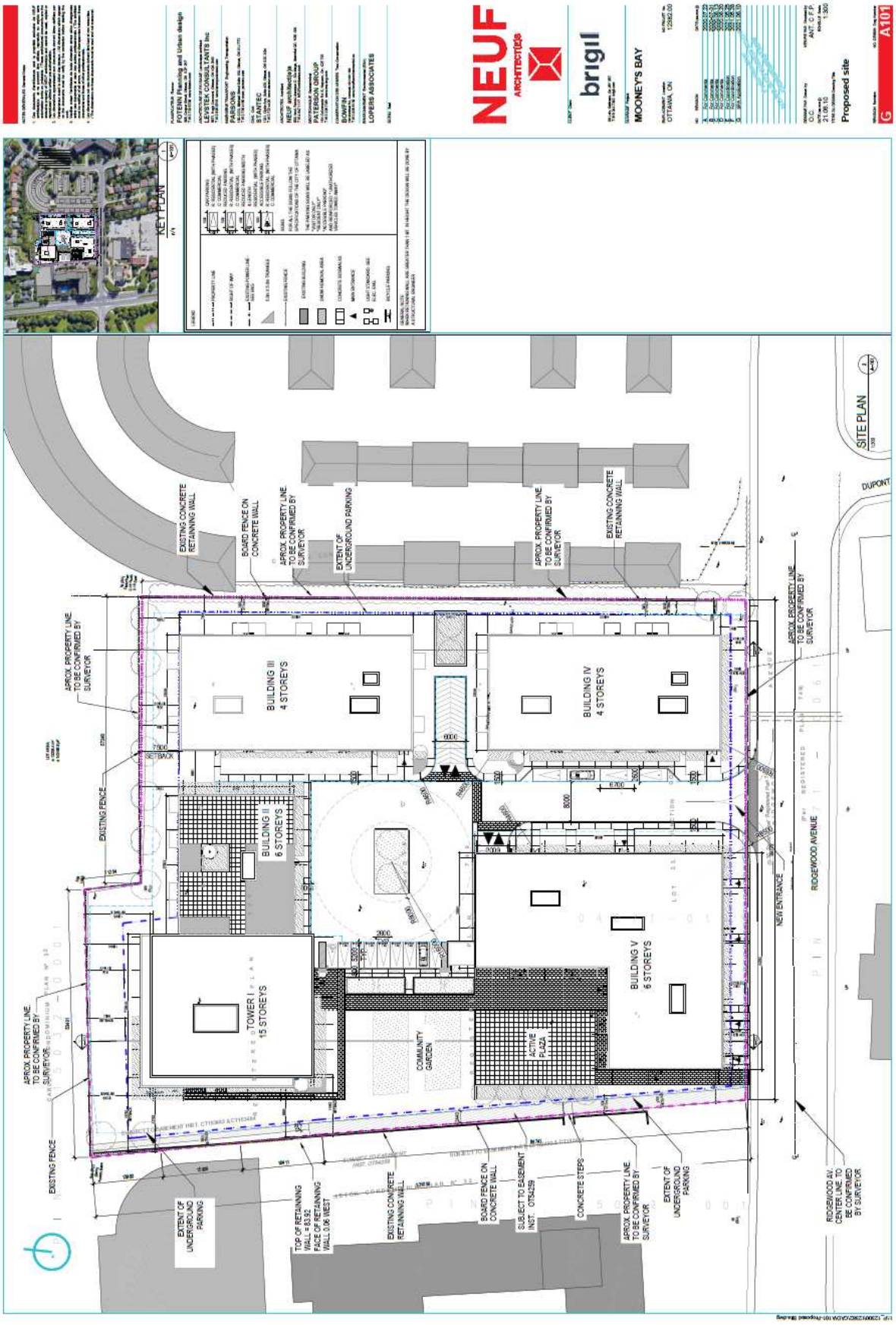
2.1. Existing and Planned Conditions

2.1.1. PROPOSED DEVELOPMENT

The proposed site is located at the combined addresses of 729 & 753 Ridgewood Avenue and will be composed of five apartment buildings that are 4 to 15-storeys high and consist of 387 residential units and 856 m^2 (9,213 ft^2) of commercial space, which will be constructed in a single phase by horizon year 2024. The site is currently occupied by a small shopping center containing a pharmacy, a grocer, and insurance brokers. The site proposes a single driveway access connection to Ridgewood Avenue, located on the south west edge of the site. Additionally, the total number of parking spaces proposed are approximately 572 vehicle parking spaces and 198 bicycle parking spaces. The two properties are currently zoned as GM1 F (1.0), General Mixed-Use Zone. The local context of the site is displayed in Figure 1 and the proposed Concept Plan is shown in Figure 2.

Figure 1: Local Context

Figure 2: Concept Plan



2.1.2. EXISTING CONDITIONS

Area Road Network

Riverside Drive is a municipal arterial roadway in Ottawa, that extends from its north terminus at Tremblay Road and the Hwy 417 EB Off Ramps, to its south terminus at Limebank Road, where it continues as River Road until the City's limits. Riverside Drive provides a four-lane cross-section, with auxiliary turn lanes at major intersections. The posted speed limit is 60 km/h.

Brookfield Road is a municipal major collector roadway in Ottawa, that runs from Bronson Avenue in the east to Riverside Drive in the west, where it continues as Hog's Back Road. The roadway provides a four-lane cross-section. The posted speed limit is 50 km/h.

Ridgewood Avenue is a municipal collector roadway in Ottawa, that runs from Springland Drive in the east to Riverside Drive in the west. The roadway provides a two-lane cross-section with space for on-street parking. The posted speed limit is 40 km/h.

Springland Drive is a municipal collector roadway in Ottawa, that runs from Walkley Road in the south to the VIA Rail tracks in the northeast, where it reaches a dead end. The roadway provides a two-lane cross-section. The posted speed limit is 40 km/h.

Flannery Drive is a municipal collector roadway in Ottawa, that runs from Springland Drive in the south to Brookfield Road in the north. The roadway provides a two-lane cross-section. The posted speed limit is 50 km/h.

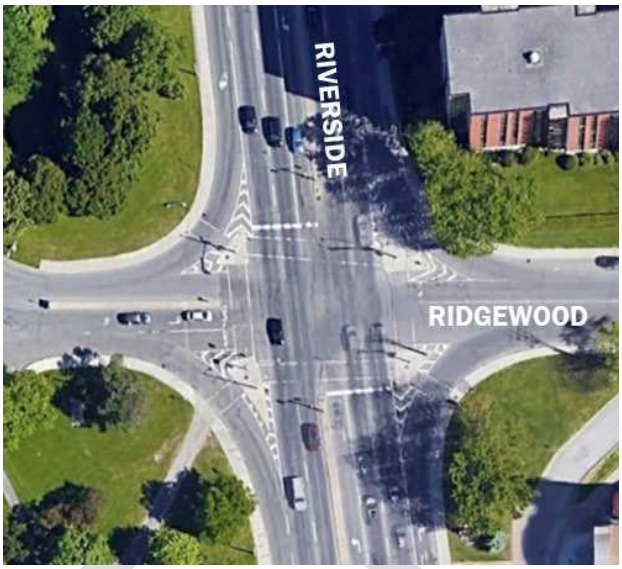
Existing Study Area Intersections

Riverside/Brookfield

The Riverside/Brookfield intersection is a four-legged signalized intersection. The northbound and southbound approaches consist of a left-turn lane, a channelized right-turn and three through-lanes. The eastbound and westbound approaches consist of a left-turn lane, a channelized right-turn, and a single through-lane. All movements are permitted at this intersection.

Riverside/Ridgewood

The Riverside/Ridgewood intersection is a four-legged signalized intersection. The north and south legs of the intersection provide a left-turn lane, a channelized right turn lane and two through lanes. The eastbound approach provides a left-turn lane, a channelized right-turn and one through-lane. The westbound approach provides a shared left/through lane and a channelized right-turn. All movements are permitted at this location.



Brookfield/Flannery

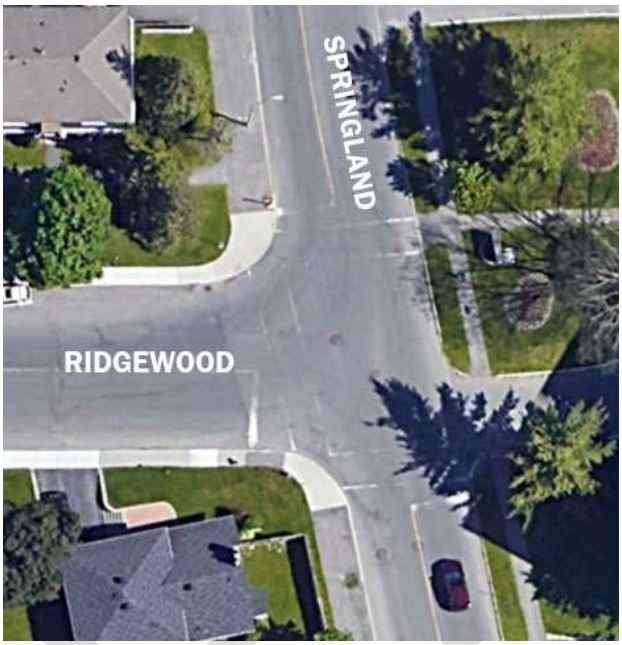
The Brookfield/Flannery intersection is a roundabout intersection with two conventional legs and two sets of on-off ramps from Airport Pkwy. The west leg consists of two entry lanes and one exit lane that widens to two lanes. The south leg consists of a single in and out lane. The north and east legs consist of two on and two off single lane ramps that connect to Airport Pkwy.

Springland/Flannery

The Springland/Flannery intersection is a four-legged all-way stop controlled intersection. All of the approaches consist of a single all movement lane. All movements are permitted at this location.

Springland/Ridgewood

The Springland/Ridgewood intersection is a three-legged all-way stop controlled intersection. The northbound, southbound and eastbound approaches all consist of a single all movement lane. There is an access on the east leg of the intersection for a driveway loop used for pick-up/drop-off at a residential building. All movements are permitted at this location.



Existing Driveways to Adjacent Developments

As shown highlighted red in Figure 3, there are several adjacent driveways within 200m of the proposed sites driveways.

Figure 3: Adjacent Driveways

- Ridgewood Avenue North Side
  - 2951 Riverside Dr: a full access driveway for a residential building is located approximately 70 meters west of the proposed site access.
  - 757A Ridgewood Ave: full access to a residential building's underground parking garage is located approximately 70 meters east of the proposed site access.
- Ridgewood Avenue South Side
  - 2975 Riverside Dr: three full access driveways to the St. Elias Cathedral parking are located approximately 6, 65 and 100 meters west of the proposed site access.

- 770 Ridgewood Ave: full access driveway to a single private residency driveway is located approximately 100 meters east of the proposed site access.
- 778 Ridgewood Ave: full access driveway to a single private residency driveway is located approximately 120 meters east of the proposed site access.

Existing Area Traffic Management Measures

Below are the existing area traffic management measures within the study area, which have been identified using Google Earth and street view:

- Channelized right-turns at all Riverside Dr intersections;
- On-street parking on Ridgewood Ave and Springland Dr;
- "MAX 40 km/h" pavement markings along Springland Dr;
- Chicane and flashing pedestrian signs provided at some of the Brookfield/Flannery roundabout legs.

Pedestrian/Cycling Network

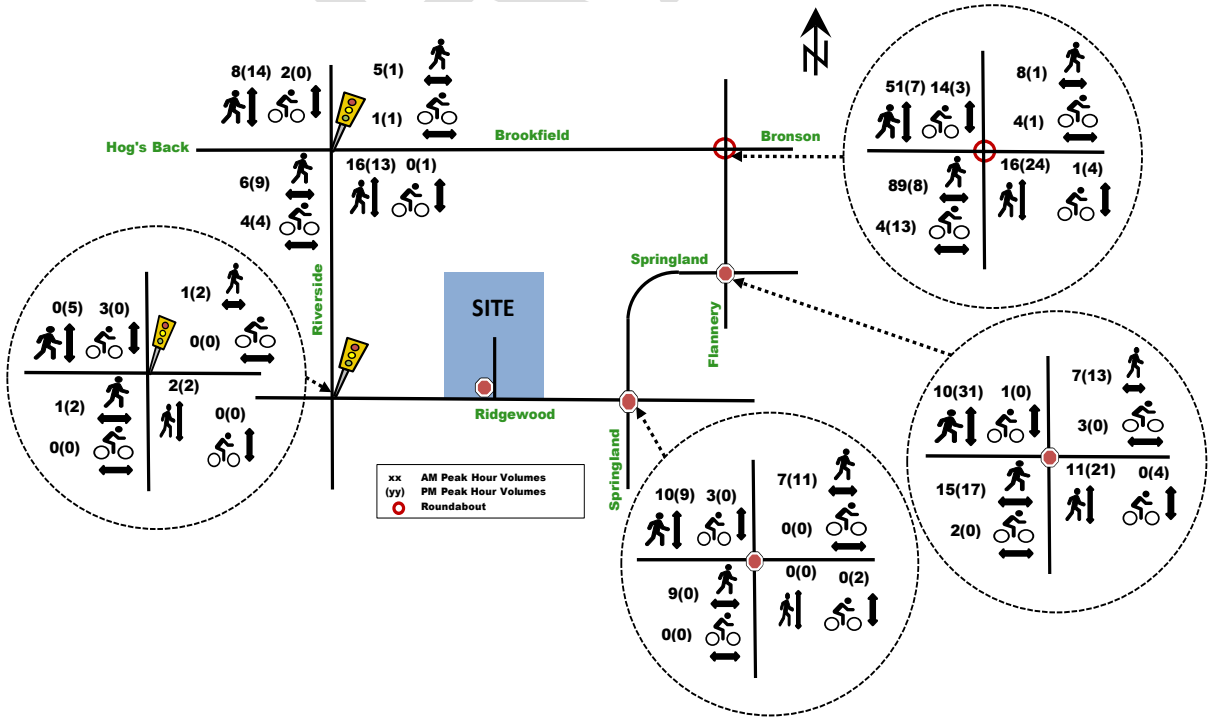
Pedestrian sidewalk facilities are provided on both sides of the roadways throughout the study area, with the exception of a short segment along Springland Dr between Hobson Rd and Flannery Dr where only a south sidewalk is provided.

With regards to cycling, a pathway on the south side of Brookfield Rd was recently (in 2020) converted to a cycle track which extends on to the existing Multi-Use Pathway (MUP) on the south side of Hog's Back Road and connects to the Rideau River Eastern Pathway system. West of Ridgewood, there is another connection point to the Rideau River Eastern Pathway system. A network of cycle-tracks and pathways can be accessed from the Brookfield/Flannery roundabout and include Brookfield Pathway which extends east, Sawmill Creek Pathway which extends south, and curbside bike lanes on both sides of Airport Pkwy heading north. Curbside bike lanes are also provided for small sections on the north side of Brookfield Rd and along both sides of Riverside Dr. Based on GeoOttawa maps, Brookfield Rd and Flannery Dr are suggested cycling routes.

Figure 4 illustrates the existing pedestrian and cycling facilities in the surrounding road network and Figure 5 shows the existing active transportation volumes at study area intersections.

Figure 4: Existing Pedestrian and Cycling Facilities

Figure 5: Existing Active Transportation



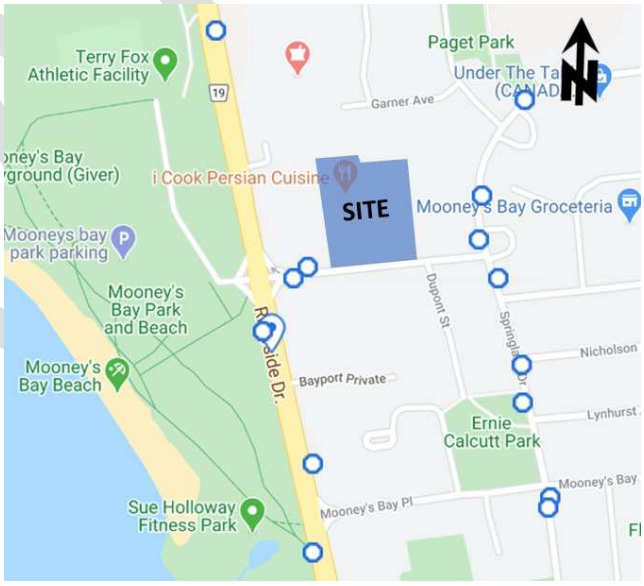
Transit Network

The transit network for the study area is illustrated in Figure 6, with nearby bus stops illustrated in Figure 7. The transit route maps are provided in Appendix B. The following OC Transpo routes currently operate within the study area:

- **Route #90 (Greenboro <-> Hurdman)**: identified by OC Transpo as a "frequent route", this route operates at a high frequency along major roads and provides connectivity to Trillium Line 2 LRT and Confederation Line 1 LRT. Route #90 operates 7 days a week, at an average rate of every 15 minutes or less during weekday peak hours. Bus stops for this route are available on both sides of Ridgewood Ave, at the frontage of the site.
- **Route #190 (Mooney's Bay <-> Hurdman)**: identified by OC Transpo as a "local route", this route operates on customized routing and schedules, to serve local destinations. Route #190 operates twice a day. Bus stops for this route are available on both sides of Riverside Dr, approximately 360 meters northwest of the site.
- **Route #290 (McCarthy <-> Hurdman)**: identified by OC Transpo as a "connexion route", this route operates on customized routing and schedules, to provide convenient connections to and from the LRT. Route #290 operates during weekday peak hours only. Bus stops for this route are available on both sides of Springland Dr less than 250 meters east of the site.

Figure 6: Area Transit Network

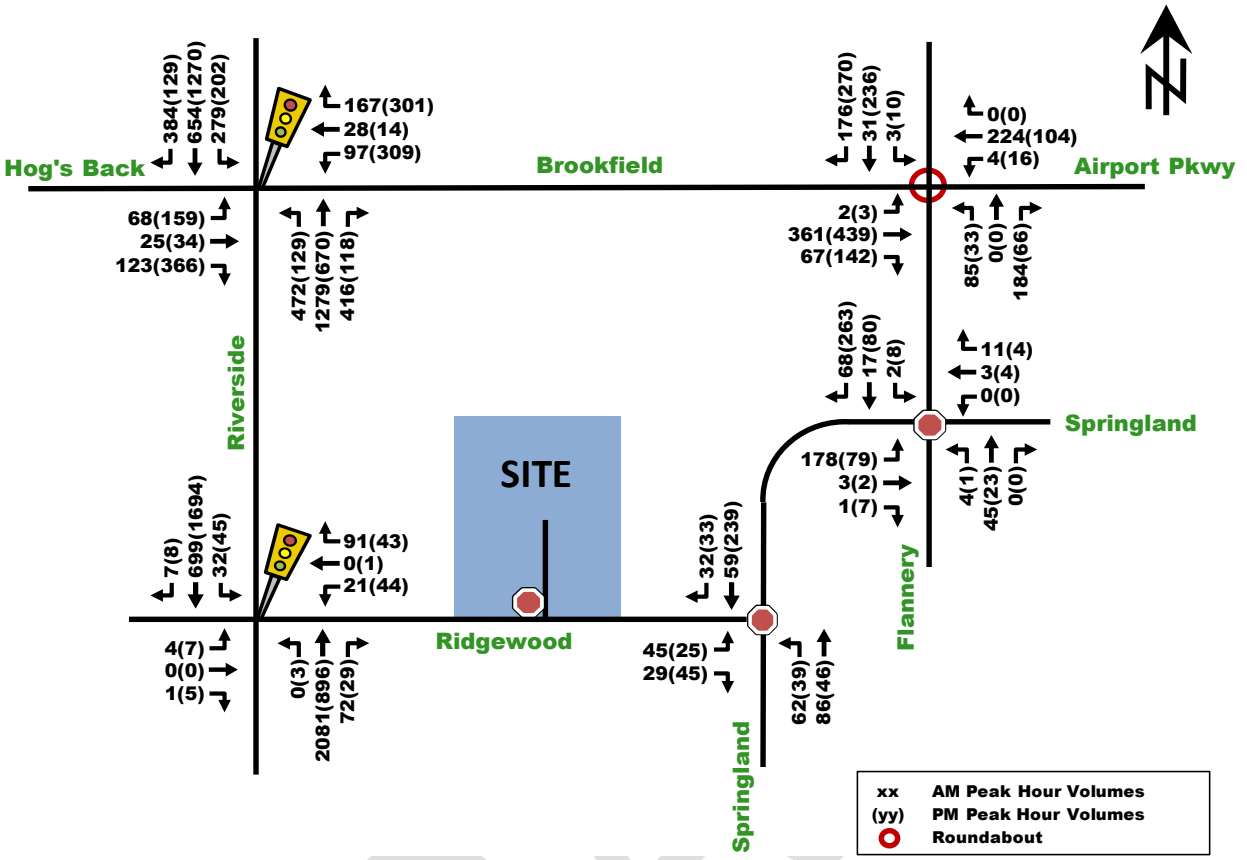
Figure 7: Bus Stop Locations



Peak Hour Travel Demands

The existing peak hour traffic volumes within the study area, as illustrated in Figure 8, were obtained from the City of Ottawa. The peak hour traffic volume count data has been provided in Appendix C.

Figure 8: Existing Peak Hour Traffic Volumes



Existing Road Safety Conditions

A five-year collision history data (2015-2019, inclusive) was requested and obtained from the City of Ottawa for all intersections and road segments within the study area. Upon analyzing the collision data, the total number of collisions observed within the study area was determined to be 120 collisions within the five-year period. Of the total collisions, 96 (80%) resulted in property damage only, while the remaining collisions resulted in a non-fatal injury. Furthermore, the type of impacts that resulted in 120 collisions were broken down into the following: 82 (68%) rear end, 18 (15%) sideswipes, 14 (12%) turning movement, 4 (3%) angle, and 2 (2%) other.

A standard unit of measure for assessing collisions at an intersection is based on the number of collisions per million entering vehicles (MEV). Locations with MEV higher than 1.0 are considered to have a higher propensity for collisions. To understand the severity, a secondary measure is conducted which looks at what percentage of collisions caused injury. Locations that have more than 30% producing non-fatal injuries could have design deficiencies or other factors making them more dangerous. At signalized intersections within the study area, reported collisions have historically taken place at a rate of:

- 0.82 Collisions/MEV with 22% producing non-fatal injuries at the intersection of Riverside/Brookfield (total of 68 collisions, where 45 (66%) resulted from rear-ends)
- 0.28 Collisions/MEV with 6% producing non-fatal injuries at the intersection of Riverside/Ridgewood (total of 17 collisions, where 14 (82%) of collision involved rear ends)
- 0.25 Collisions/MEV with 31% producing non-fatal injuries at the intersection of Riverside/Mooney's Bay (total of 13 collisions, 11 (85%) of the collisions involved rear-ends). Although the percentage of non-fatal injury is higher than 30%, the total number of collisions and the propensity of collisions at this location are notably low.

Other collisions within the study area include:

- 22 collisions in mid-block sections, with 16 or 73% of them occurring between Brookfield Rd and Ridgewood Ave on Riverside Dr.
- There was one collision in 2019 that involved a pedestrian. The collision occurred on Ridgewood Ave, between Riverside Dr and Dupont St, which resulted in property damage only.
- 3 collisions involving cyclists, 2 occurring at Riverside/Brookfield intersection and 1 at Riverside/Ridgewood. All collisions resulted in non-fatal injury.

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

2.1.3. PLANNED CONDITIONS

Planned Study Area Transportation Network Changes

Transit Network

The City of Ottawa Transportation Master Plan (TMP) does not illustrate changes to the surrounding transit network with regards to the 2031 affordable network plan. However, the ultimate network plan illustrates Riverside Dr as a transit priority corridor with isolated measures between Hunt Club Rd and Heron Rd.

Cycling Network

Within the Ultimate Cycling Plan, Riverside Dr, Brookfield Rd, and Hog's Back Rd are all designated as future 'spine routes'. Flannery Dr, which is currently a 'suggested route', is designated as future 'local route'.

Other Area Developments

The following section outlines adjacent developments in the surrounding area that were considered in the TIA. Using the City of Ottawa's Development Application Search tool, the following development applications have been identified in the study area.

740 SPRINGLAND DR

Norberry Residences is proposing an extension to the existing residential complex. The extension would comprise of three 4.5-storey buildings with a total of 231 new units. A TIA prepared by Castleglenn Consultants projects two-way vehicle trips of approximately 85 and 93 veh/h during the AM and PM peak hours respectively. This development is anticipated to be fully constructed prior to the construction of the 729 Ridgewood development.

770 BROOKFIELD RD

Hobin Architecture is proposing a mixed-use development consisting of 13,600 ft^2 of commercial retail and 808 apartment units. A TIA prepared by Parsons projects two-way vehicle trips of approximately 95 to 120 veh/h during the AM and PM peak hours respectively. This development is anticipated to be fully constructed prior to the construction of the 729 Ridgewood development.

3071 RIVERSIDE DR

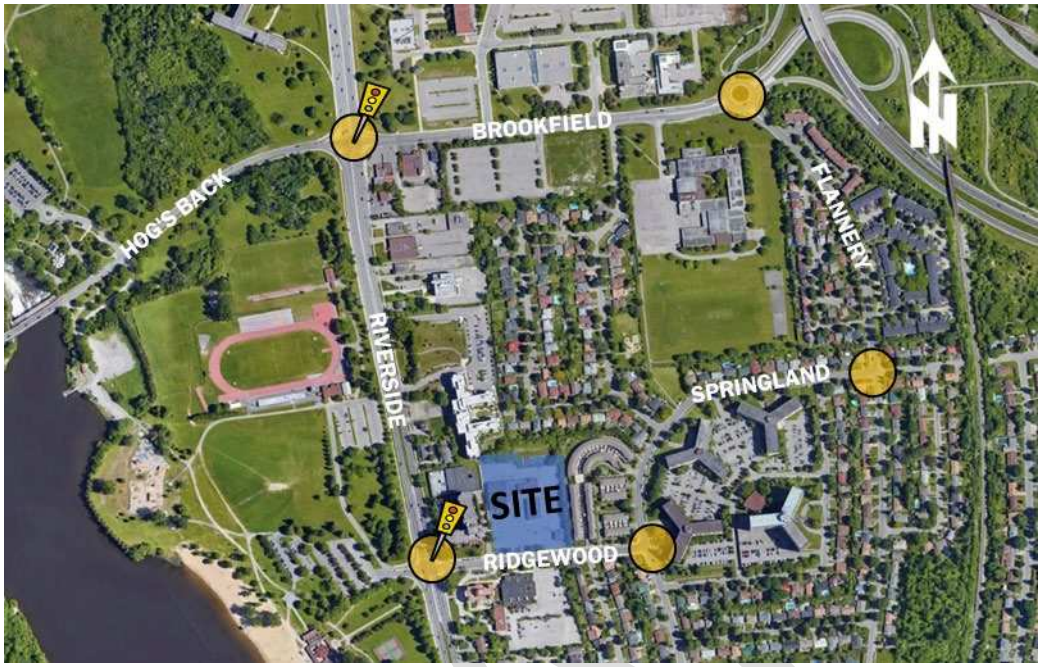
Canoe Bay Development Inc is proposing a senior's home development, with two 3-storey mixed-use building, a 6-storey retirement complex, townhouses and low-rise apartment dwellings. The development will consist of 110 residential units, 513 senior/retirement units and 21,795 ft2 of retail space. This development is anticipated to be fully constructed prior to the construction of the 729 Ridgewood development.

2.2. Study Area and Time Periods

The proposed site is a residential development that is planned to be constructed by 2024. As such, the horizon years being analyzed in this report are the 2024 and 2029 (five-years after full buildout) horizon years, using the weekday morning and afternoon peak hour time periods. Proposed study area intersections and boundary roads are outlined below and highlighted in Figure 9.

- Riverside/Brookfield/Hog's Back intersection;
- Riverside/Ridgewood intersection;
- Brookfield/Flannery intersection;
- Springfield/Flannery intersection;
- Springfield/Ridgewood intersection;
- Along Ridgewood Drive adjacent to the site;

Figure 9: Study Area



2.3. Exemption Review

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

Table 1: Exemptions Review Summary

Module	Element	Exemption Consideration
4.1 – 4.4 Design Review Component	All elements	Not required for applications involving ZBLA. However, a brief description may be provided.
4.8 Network Concept	4.8 Network Concept	Only required if proposed development is anticipated to generate more than 200 person-trips over the permitted zoning.

3. Forecasting Report

3.1. Development Generated Travel Demand

3.1.1. TRIP GENERATION AND MODE SHARES

Existing Development Trips

As mentioned previously, the site is currently occupied by a strip mall consisting of a grocery store, a pharmacy and insurance brokers, which generate trips for the site in existing conditions. These trips are accounted for as they reduce the number of 'new' trips that would be generated by the proposed development at this site. Note that, using google maps street view, it was determined that the grocery store has been closed since at least 2019. Most counts used for this study (provided in Appendix C) are dated 2019 and 2020, as such, they are assumed to already exclude any would be trips of the grocery store. For the remainder of the strip mall, the ITE Trip Generation Manual (10th edition) can be used to obtain trip rates.

The “Shopping Centre” land use from the ITE Manual has been assumed to encompass the remaining land uses of the strip mall. However, this would result in an overly conservative estimate of trips, as the strip mall is relatively old and consists of specialty stores that would not generate a large number of trips at once. For this purpose, the shopping centre trip rates have been reduced by 50% as shown in Table 2.

Table 2: Existing Strip Mall Trip Rate Adjustment

Land Use	Data Source	Trip Rates	
		AM Peak Hour	PM Peak Hour
Shopping Centre	ITE 820	T = 0.94(x);	T = 3.81(x);
Shopping Centre 50%		T = 0.47(x);	T = 1.90(x);
Notes: *T = Average Vehicle Trip Ends* *x = Gross Floor Area (GFA) (1000 ft²)*			

The gross floor area used for the strip mall was determined using the GeoOttawa measuring tool, as shown in Figure 10, which indicates a total area of approximately 15,500 ft².

Figure 10: Existing Strip Mall Gross Floor Area

Using the total gross floor area and the readjusted shopping centre trip rates, the person trips generated by the existing strip mall can be calculated. Note that the trip rates 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/hour for the existing strip mall are provided in Table 12. The inbound and outbound percentages were also obtained from the ITE Manual.

Table 3: Existing Strip Mall Person Trips

Land Use	Area (ft²)	AM Peak (Person Trips/h)			PM Peak (Person Trips/h)		
		In (62%)	Out (38%)	Total	In (48%)	Out (52%)	Total
Shopping Centre	15,500	5	4	9	18	20	38

As such, the strip mall is assumed to generate a total of 9 and 38 person trips during the morning and afternoon peak hours respectively.

Proposed Development Trips

The proposed development will consist of 387 residential units within 4 to 15-storey high apartment buildings, as well as 9,213 ft² of commercial space.

Residential Trips Generated

The appropriate trip generation rates for a high-rise apartment land use were obtained from the 2020 TRANS Trip Generation Manual. Table 3 in the Manual provides person-trip rates during the peak AM and PM periods (7am-9:30am and 3:30PM-6PM). The trip rates are summarized in Table 4 below.

Table 4: Residential Trip Generation Trip Rates

Land Use	Data Source	Trip Rates	
		AM Peak Period (7-9:30am)	PM Peak Period (3:30-6pm)
High-Rise Apartment Buildings	TRANS 2020	T = 0.8(du);	T = 0.9(du);
Notes: *T = Average Vehicle Trip Ends* *du = Dwelling unit*			

Using the trip rates provided in Table 4, the total number of person trips generated during the morning and afternoon peak periods can be found in Table 5.

Table 5: Apartment Units Peak Period Person Trip Generation

Land Use	Dwelling Units	AM Peak Period Person Trips	PM Peak Period Person Trips
High-Rise Apartment Buildings	387	310	348

The proposed development is anticipated to generate 310 and 348 person trips during the morning and afternoon peak periods, respectively. The total peak period person trips in Table 5 are then divided into different travel modes, as shown in Table 6, using mode share percentages obtained from the 2020 TRANS Manual, which is aggregated for the Alta Visa zone.

Table 6: Peak Period Trips Mode Shares Breakdown

Travel Mode	Mode Share	AM Peak Period Person Trip	Mode Share	PM Peak Period Person Trips
Auto Driver	38%	118	45%	157
Auto Passenger	12%	37	16%	56
Transit	41%	127	28%	97
Cycling	2%	6	2%	7
Walking	7%	22	9%	31
Total Person Trips	**100%**	**310**	**100%**	**348**

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

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

Travel Mode	Peak Period to Peak Hour Conversion Factors	
	AM	PM
Auto Driver	0.48	0.44
Passenger	0.31	0.29
Transit	0.55	0.47
Bike	0.58	0.48
Walk	0.58	0.52

Note that conversion factors for auto passenger trips are not available in the 2020 TRANS Manual. To obtain the passenger trip factor it is assumed that the total person trip peak hour conversion factor is the average of the provided adjustment factors minus the passenger trip peak hour conversion factor and has been calculated as shown in the example below:

$$0.5 = \frac{x + 0.48 + 0.55 + 0.58 + 0.58}{5}$$

$$x = 2.5 - 0.48 - 0.55 - 0.58 - 0.58$$

$$x = 0.31 \rightarrow AM\ passenger\ trip\ peak\ hour\ conversion\ factor$$

Using the conversion rates in Table 7 and the peak period person trips for different travel modes in Table 6, the peak hour trips for different travel modes can be calculated as shown in Table 8. The actual peak hour mode share percentages can be reverse calculated using the percentage of each travel mode to the total person trips.

Table 8: Peak Hour Trips Mode Share Breakdown

Travel Mode	Mode Share	AM Peak Hour Trips	Mode Share	PM Peak Hour Trips
Auto Driver	37%	57	46%	69
Auto Passenger	7%	11	11%	16
Transit	45%	70	30%	46
Cycling	2%	3	2%	3
Walking	8%	13	11%	16
Total Person Trips	**100%**	**154**	**100%**	**150**

As shown in Table 8, the proposed development is anticipated to generate a total of 154 and 150 person trips during the morning and afternoon peak hours. However, the TRANS mode share assumptions were adjusted to reflect the local context more appropriately, as shown in Table 9. It was assumed that the same mode share distribution would occur in the morning and afternoon peak hours.

The transit and walk mode shares were lowered based on the suburban context, and the lack of rapid transit adjacent to the site. The auto-driver mode share was increased accordingly, while the passenger mode share was adjusted to maintain an auto-occupancy factor of approximately 1.20, closer to the city-wide average. Cycling mode share was increased to account for the proximity of major pathways at Mooney's Bay following the Rideau River.

Table 9: Adjusted Mode Share Percentages and Peak Hour Trips

Travel Mode	Mode Share	AM Peak Hour Trips	PM Peak Hour Trips
Auto Driver	60%	92	90
Auto Passenger	12%	18	18
Transit	20%	31	30
Cycling	5%	8	8
Walking	3%	5	4
Total Person Trips	**100%**	**154**	**150**

Inbound and outbound percentages were obtained from Table 9 of the 2020 TRANS Manual and applied to each travel mode in Table 9 as shown in Table 10.

Table 10: Inbound/Outbound Morning and Afternoon Peak Hour Trips

Travel Mode	Mode Shares	AM Peak (Person Trips/h)			PM Peak (Person Trips/h)		
		In (31%)	Out (69%)	Total	In (58%)	Out (42%)	Total
Auto Driver	60%	29	63	92	52	38	90
Passenger	12%	6	12	18	10	8	18
Transit	20%	10	21	31	17	13	30
Bike	5%	2	6	8	5	3	8
Walk	3%	2	3	5	2	2	4
Total Person Trips	**100%**	**49**	**105**	**154**	**86**	**64**	**150**

As shown in Table 10, approximately 90 new vehicular trips and 30 new transit trips are expected in the morning and afternoon peak hours from the proposed development.

Commercial Trips Generated

Appropriate Trip Generation rates for the commercial land use were obtained from the ITE Trip Generation Manual (10th edition), assuming "Shopping Centre" land use. The trip rates for the commercial land use are summarized in Table 11.

Table 11: Commercial Trip Generation Trip Rates

Land Use	Data Source	Trip Rates	
		AM Peak Hour	PM Peak Hour
Shopping Centre (commercial space)	ITE 820	T = 0.94(x);	T = 3.81(x);
Notes: *T = Average Vehicle Trip Ends* *x = Gross Floor Area (GFA) (1000 ft²)*			

Person trips per hour for the commercial land use are calculated directly using the trip rates shown in Table 11 and 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/hour for the commercial space of the proposed development are provided in Table 12. The inbound and outbound percentages were also obtained from the ITE Manual.

Table 12: Commercial Space Peak Hour Person Trip Generation

Land Use	Area (ft²)	AM Peak (Person Trips/h)			PM Peak (Person Trips/h)		
		In (62%)	Out (38%)	Total	In (48%)	Out (52%)	Total
Shopping Centre (commercial space)	9,213	6	5	11	21	24	45

For simplicity, the assumed existing strip mall person trips in Table 3 can be subtracted from the projected person trips of the commercial land use, resulting in a 'net' number of trips generated by the "Shopping Centre" of the proposed development, as shown in Table 13.

Table 13: Net New Person Trips of Shopping Centre (Commercial Space)

Land Use	AM Peak (Person Trips/h)			PM Peak (Person Trips/h)		
	In (62%)	Out (38%)	Total	In (48%)	Out (52%)	Total
Shopping Centre (commercial space)	1	1	2	3	4	7

The net change in estimated commercial trips was minimal. The addition of high-density residential units on site was expected to reduce external trips, as local residents would make up the majority of customers. Therefore, no new commercial trips were expected to be generated at full buildout.

Total Trips Generated

Therefore, the estimated total trips by mode generated by the proposed development can be found in Table 10. Approximately **90 new vehicular trips** and **30 new transit trips** are expected to be generated by the proposed development in both the morning and afternoon peak hours.

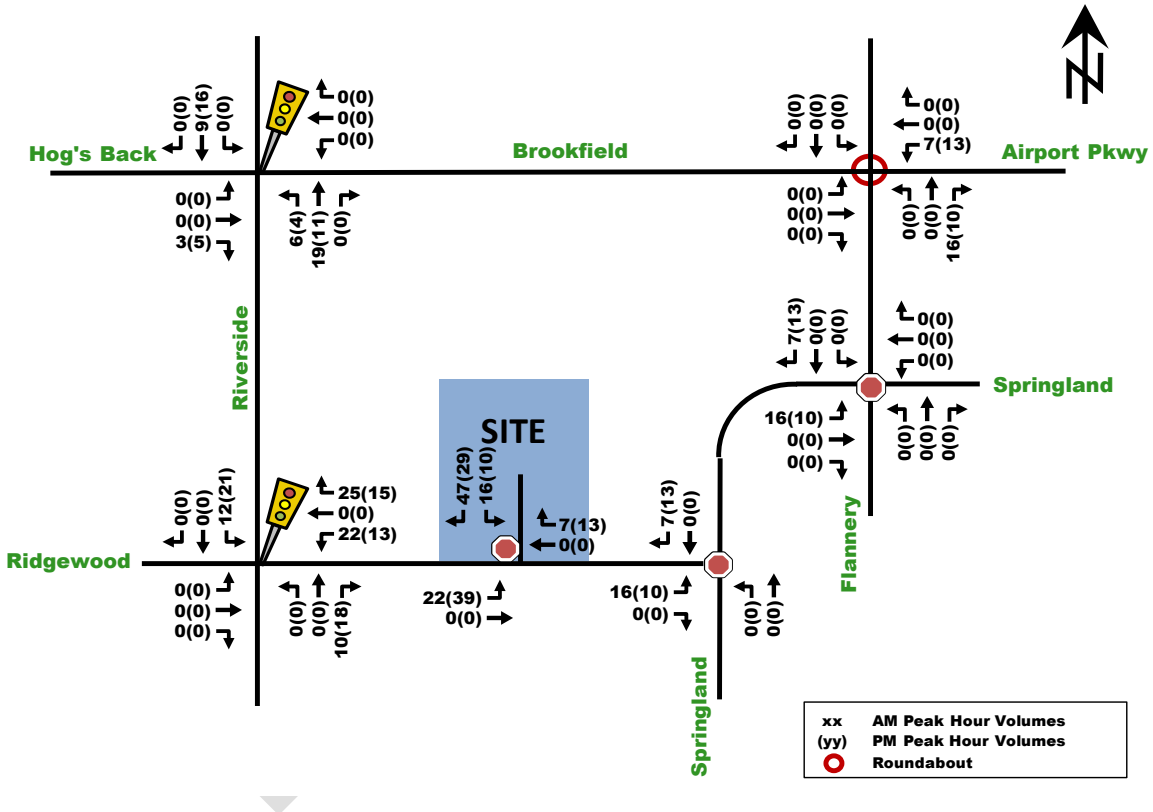
3.1.2. TRIP DISTRIBUTION AND ASSIGNMENT

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

- 45% to/from the north, via Riverside Dr and the Airport Pkwy;
- 25% to/from the south, via Riverside Dr;
- 10% to/from the east, via Riverside Dr; and,
- 20% to/from the west, Via Riverside Dr and Hog's Back Rd.

The anticipated site-generated auto trips for the proposed development from Table 10 were then assigned to the road networks as shown in Figure 11.

Figure 11: Proposed Development Site-Generated Traffic



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

Given that the proposed development will be located in the inner suburbs of the City of Ottawa, traffic along study area roadways is not anticipated to increase drastically within the future horizon years. Nonetheless, a 1% background growth has been applied to Riverside Dr, Hog's Back Rd and Brookfield Rd to account for future

traffic increases along these roadways. Note that this is consistent with the approved TIA report for the future 740 Springland Drive development, which also applied a 1% background growth to Riverside Dr. Figure 12 provides the 2024 future background traffic and Figure 13 provides the 2029 future background traffic.

Figure 12: Future Background 2024 Traffic Volumes

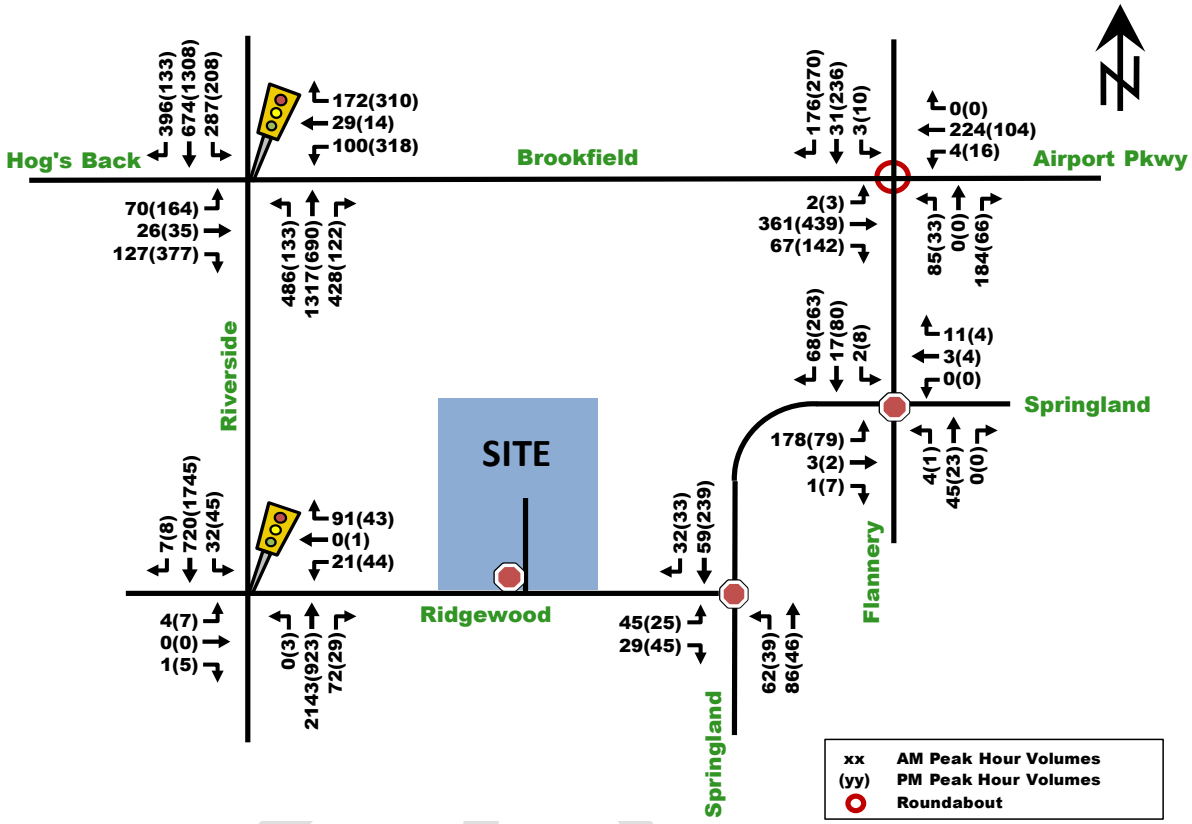
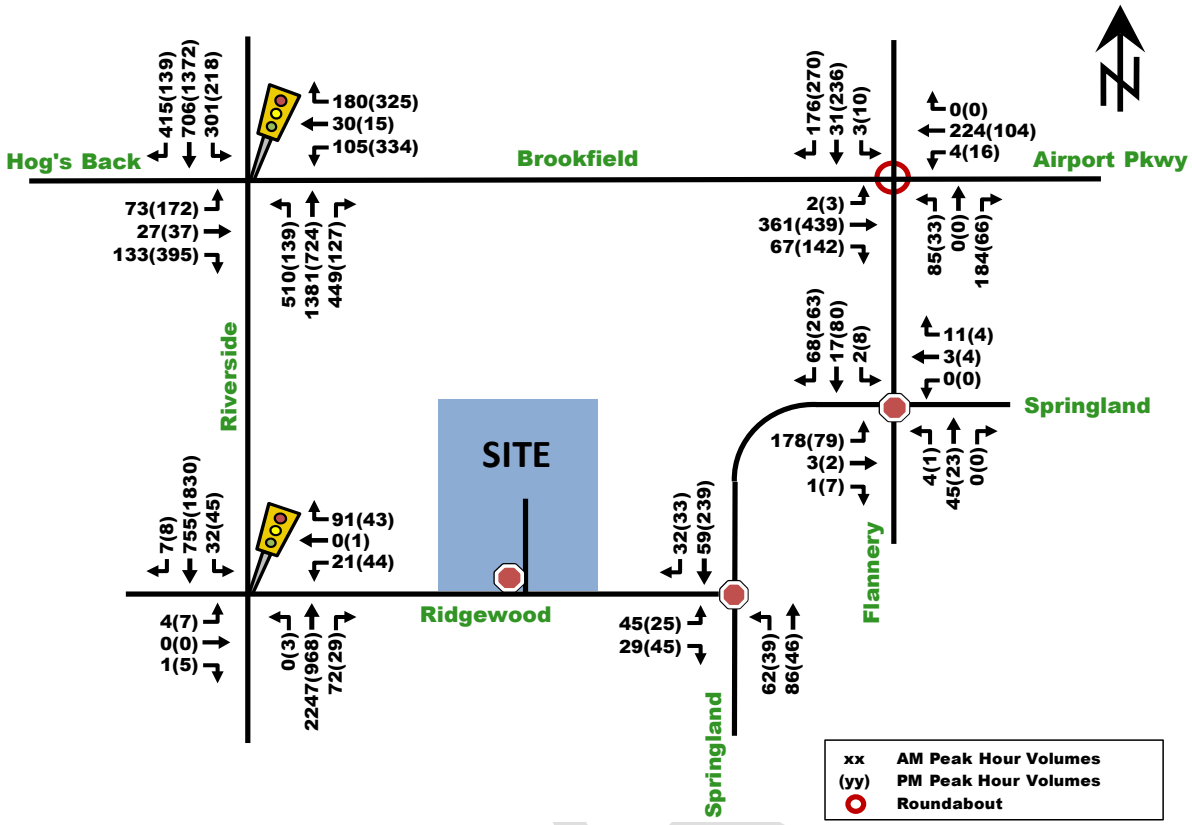


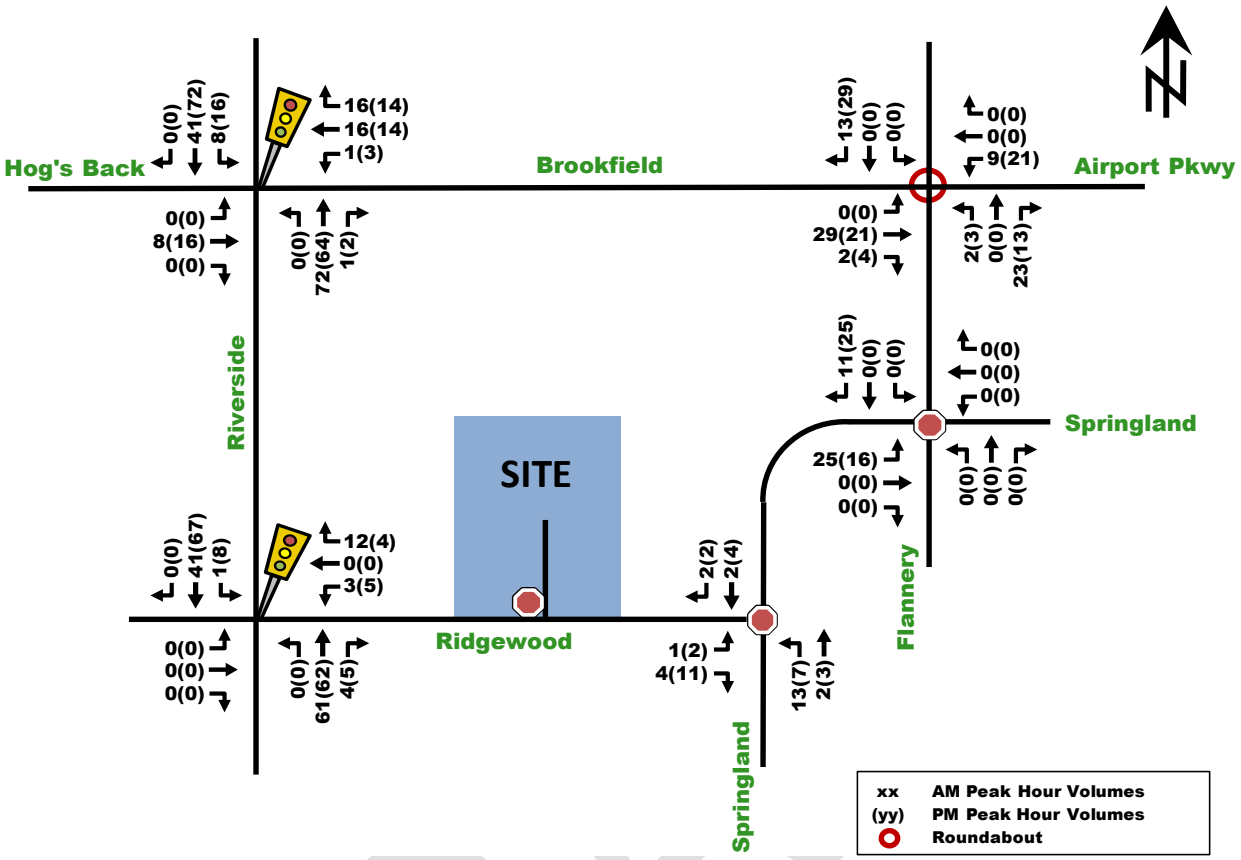
Figure 13: Future Background 2029 Traffic Volumes



3.2.3. OTHER DEVELOPMENTS

Description of other area developments taking place within the study area was provided in Section 2.1.3: Other Area Developments. Traffic volumes generated by all three identified future adjacent developments will be considered in the TIA. The total traffic volumes anticipated to be generated by the future adjacent development in the study area are illustrated in Figure 14.

Figure 14: Future Adjacent Developments Total Site-Generated Traffic Volumes



The anticipated buildout year of the future adjacent development is anticipated to be prior to the buildout date of the proposed 729 Ridgewood development. As such, their traffic volumes will be included in both the total projected 2024 and 2029 traffic volumes. The volumes in Figure 14 can be added to the future background volumes in Figure 12 and Figure 13 to create total future background 2024 and 2029 traffic volumes illustrated in Figure 15 and Figure 16.

Figure 15: Total Future Background 2024 Traffic Volumes

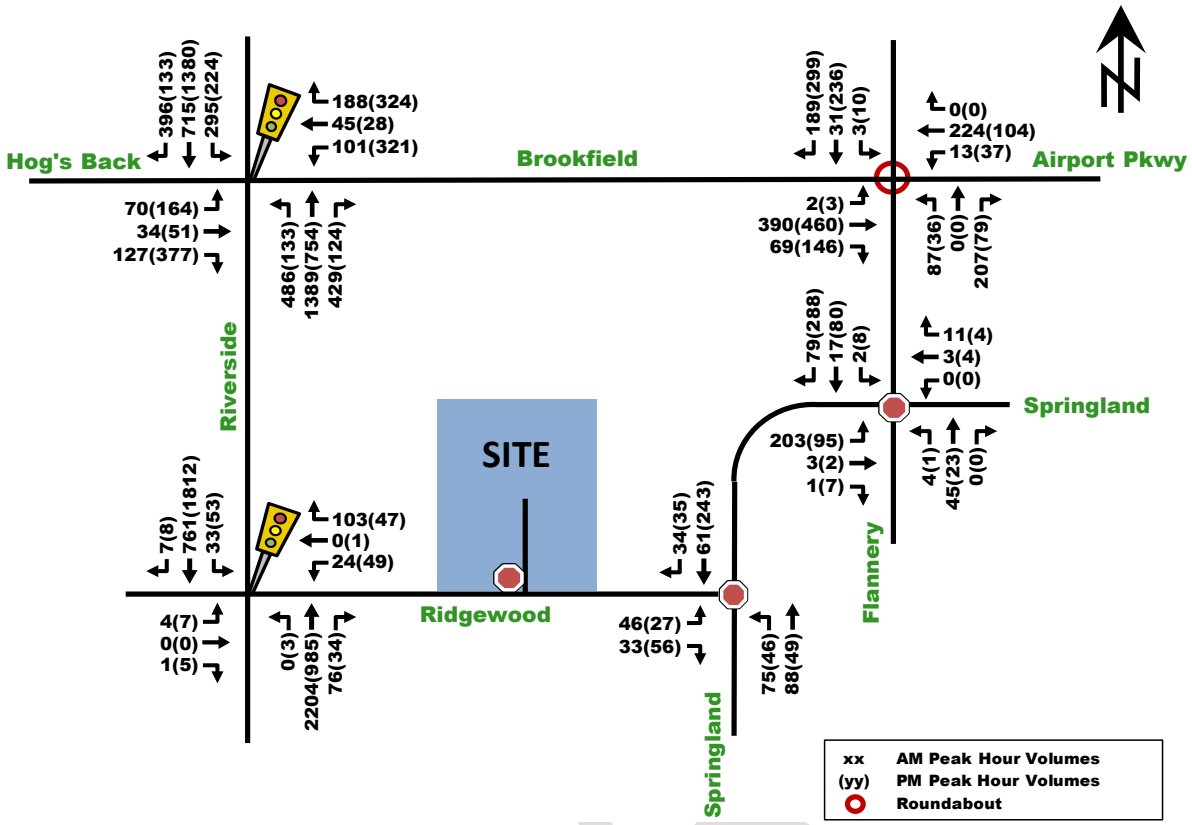
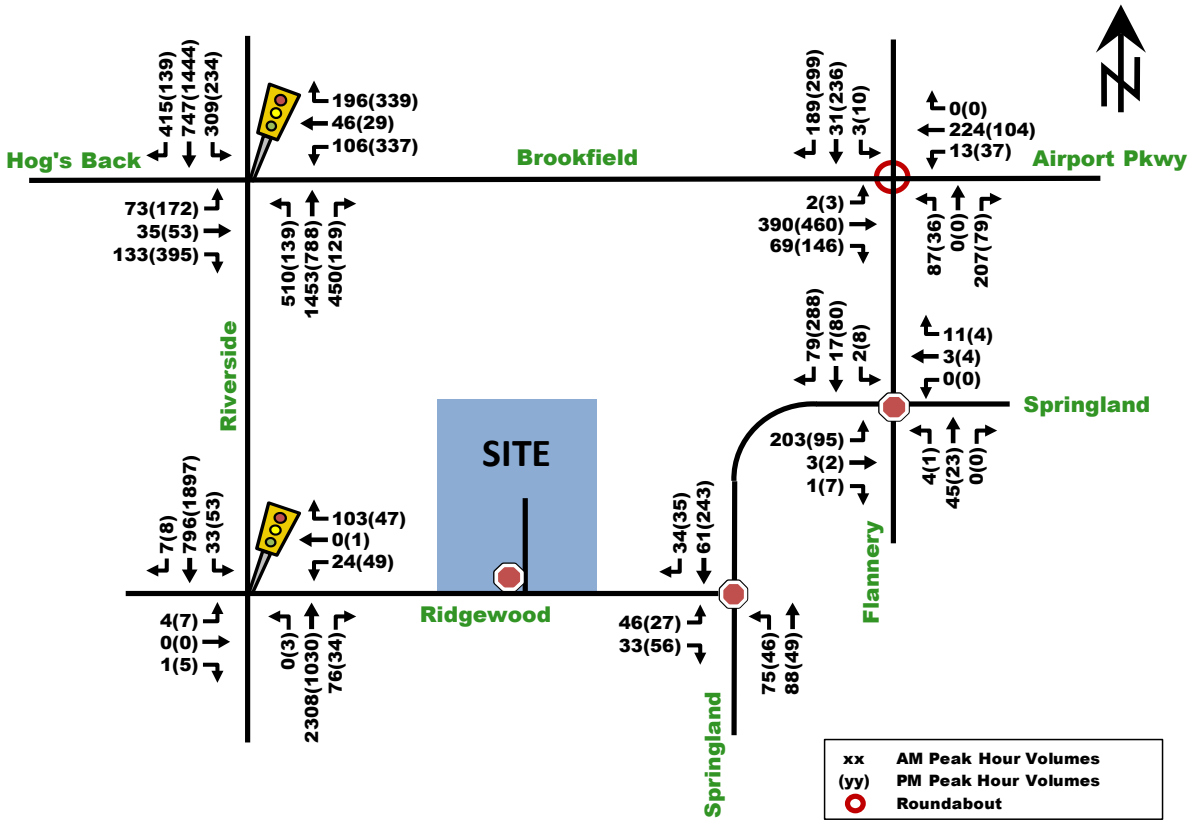


Figure 16: Total Future Background 2029 Traffic Volumes



3.3. Demand Rationalization

The total projected future traffic volumes can be determined by superimposing the site-generated traffic volumes in Figure 11, onto the total future background traffic volumes in Figure 15 and Figure 16, resulting in the total projected traffic volumes 2024 and 2029 illustrated in Figure 17 and Figure 18. The proposed development is anticipated to have little impact on the vehicle operations along the study area intersections. Further analysis of study area intersections is provided as part of Section 4.9.2.

Figure 17: Total Projected 2024 Traffic Volumes

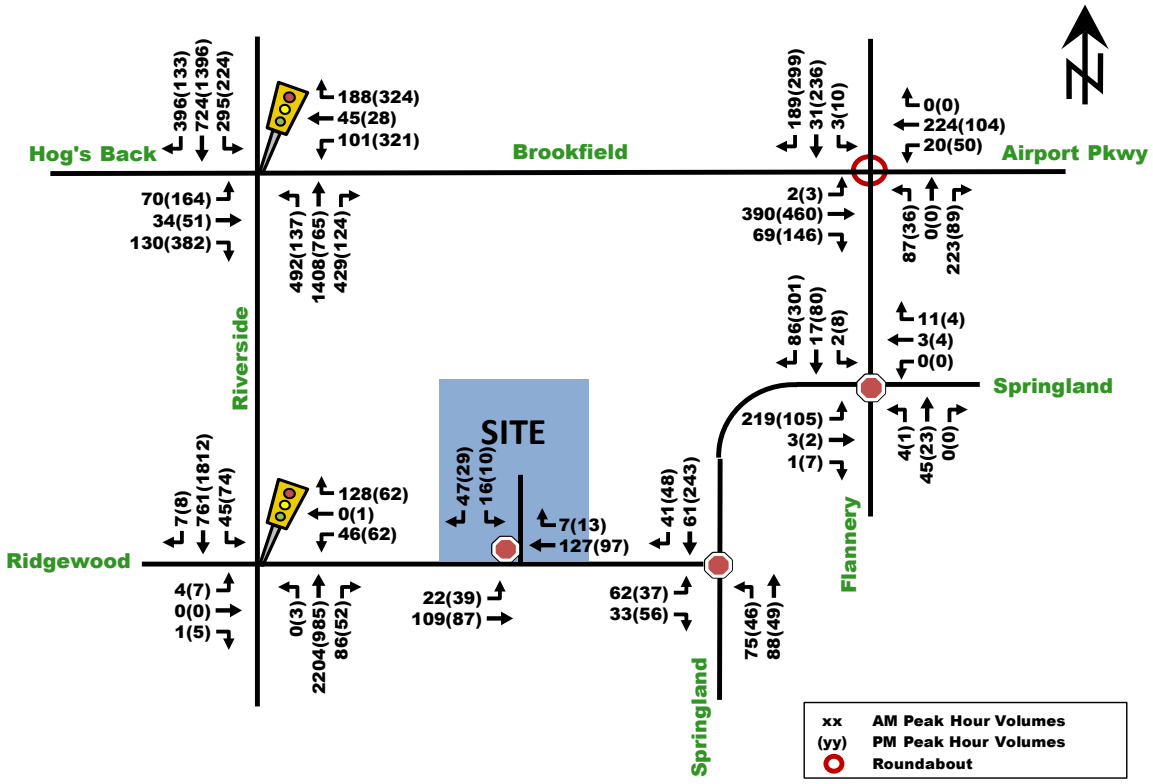
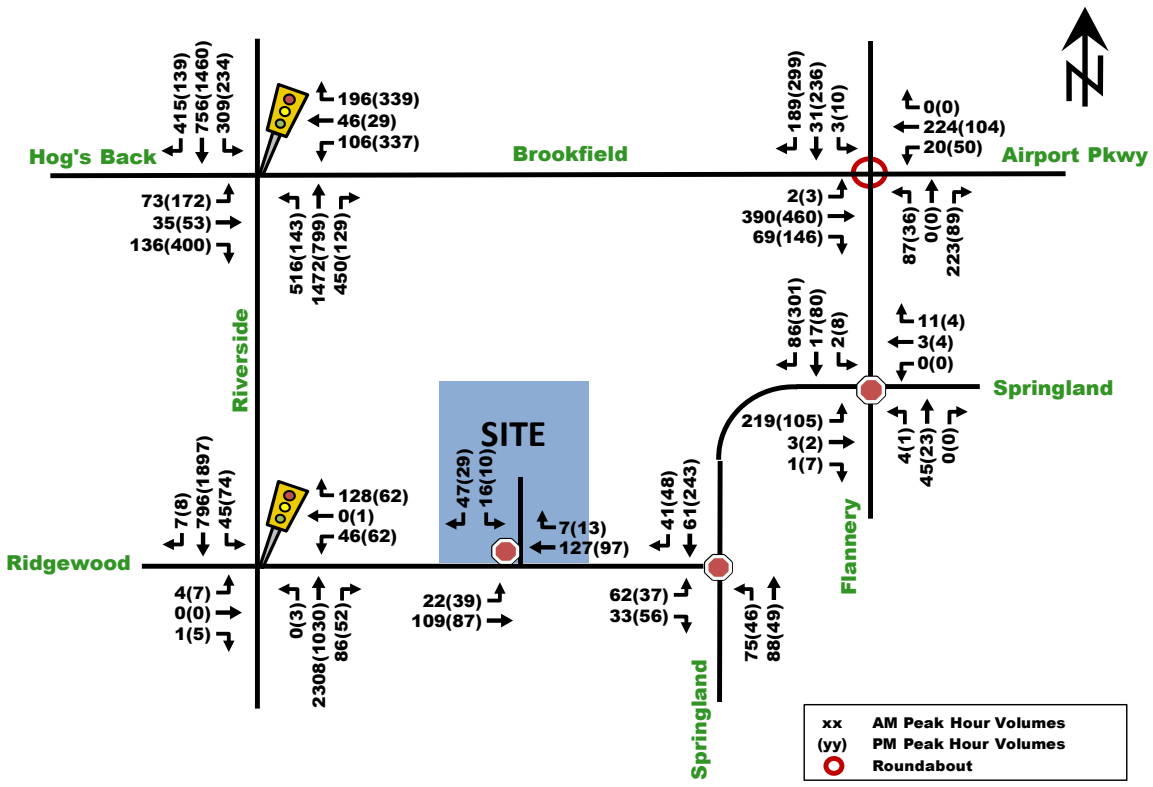


Figure 18: Total Projected 2029 Traffic Volumes



4. Analysis

4.1. Development Design

As this is a ZBLA, design related elements will be provided in more detail in the future Site Plan Application submission of the proposed development. The majority of vehicle and bicycle parking spaces will be provided in an underground parking garage, with some surface vehicle parking spaces provided. Within the site, sidewalk facilities will be provided to allow safe and efficient pedestrian maneuverability and access to all building entrances. There are no anticipated changes to the existing transit routes in the surrounding road network. The City of Ottawa's TDM-supportive Development Design and Infrastructure has been provided in Appendix E.

4.2. Parking

Based on City of Ottawa Parking Provisions, Schedule 1A, the proposed development is located in "Area C". A total of 572 vehicle parking spaces will be provided for the proposed development. Of the total, 559 spaces will be provided in a two-level underground parking lot, while 13 will be provided on the surface, within the site.

For the residential land use, 465 vehicle parking spaces are proposed, with an additional 78 visitor parking spaces. For the commercial land use, 29 vehicle parking spaces are proposed. Included in the total number of parking spaces are 14 accessible vehicle parking spaces. For bicycle parking, 194 spaces are provided for residential use and 4 are provided for commercial use, for a total of 198 spaces. Table 14 summarizes the parking requirements of the proposed development and the proposed number of spaces currently provided.

Table 14: The Required and Provided Vehicle and Bicycle Parking Supplys

Land Use	Size	Parking Rates			Required Spaces			Proposed Spaces		
		Base	Visitors	Bicycle	Base	Visitors	Bicycle	Base	Visitors	Bicycle
High-Rise Residential	387 Units	1.2 per unit	0.2 per unit	0.5 per unit	465	78	194	465	78	194
Commercial	856 m^2	3.4 per 100 m^2	-	1.0 per 250 m^2	29	-	4	29	-	4
				Total	**494**	**78**	**198**	**494**	**78**	**198**

As such, the proposed number of parking spaces meet all parking requirements for vehicle and bicycle parking spaces.

4.3. Boundary Street Design

The detailed Multi-Modal Level of Service (MMLOS) analysis for boundary streets and signalized intersections will be provided in the future Site Plan Application.

4.4. Access Intersection Design

Vehicle access to the proposed development will be provided via a single access on the north side of Ridgewood Ave. The access will use Stop control for vehicles exiting the site. Within the site internal driveways, there are two ramps that provide access to the underground parking garage, one ramp is located between building 3 and 4, while another ramp is located to the north of building 5. Existing adjacent accesses to the proposed development access are discussed in Section 2.1.2: Existing Driveways to Adjacent Developments.

4.5. Transportation Demand Management

The TDM Measures Checklist has been provided in Appendix E.

4.6. Neighbourhood Traffic Management

This module compares the maximum one-way traffic of a local or collector road during morning and afternoon peak hours, to the recommended thresholds outlined in the City of Ottawa TIA Guidelines. The main access/egress streets included in this analysis were Ridgewood Ave, Springland Dr and Flannery Dr.

The thresholds provided in the TIA Guidelines indicate a maximum one-way traffic of 300 veh/h for collector roads. Using the total projected 2029 traffic volumes in Figure 18, future traffic volumes along the respective collector roads can be compared to the threshold as follows:

- For Ridgewood Ave, the maximum one-way traffic volume is approximately 172 veh/h between Riverside Dr and Springland Dr, which occurs during the morning peak hour. This volume is well below the 300 veh/h threshold of a collector road

- For Springland Dr between Ridgewood Ave and Flannery Dr, the 300 veh/h threshold is slightly exceeded at the WB egress of the intersection of Springland/Flannery, with an afternoon volume of 306 veh/h. Side street movements at this intersection have generally low volumes. As such, there are no concerns with regards to traffic operations.

- For Flannery Dr, north of Ridgewood Ave, the 300 veh/h threshold is currently exceeded in the southbound direction from Brookfield Rd and will continue to be so in the future, with an afternoon volume of 432 veh/h. By the time traffic arrives at the SB approach of the intersection of Springland/Flannery, it is reduced to approximately 389 veh/h during the afternoon peak hour, most of which make a right-turn and continue onto Springland Dr.

However, the design of Flannery Dr between Brookfield Rd and Ridgewood is more consistent with a major collector road. This section clearly has far more stringent access management compared to Springland Dr, which has direct residential frontage with driveway access to the roadway. There are also daytime on-street parking restrictions, which reduces friction and increases its overall vehicular capacity, whereas Springland Dr has no time restrictions.

The City recommended major collector roadway threshold is 600 vehicles per hour per direction, which adequately accommodates anticipated vehicle traffic in the future. At this time, there are no indications the existing vehicular volumes cannot be accommodated.

Ultimately, this section of the roadway can be monitored by the City of Ottawa's Area Traffic Management unit if needed to determine if reclassification or modification of the roadway is necessary. The City may also incorporate traffic calming measures such as road narrowing, pavement markings and signage to address potential safety concerns if required.

4.7. Transit

Transit facilities are anticipated to continue operating in the future as mentioned in Section 2.1.2: Transit Network. The proposed development is anticipated to generate 31 and 30 transit trips during the morning and afternoon peak hours respectively. Bus route #90 is a frequent route that travels in both directions on Ridgewood Ave and arrives 4 to 5 times during peak hours, for a total of 8 to 10 buses in both directions. As such, the proposed development will have little impact to the surrounding transit network.

4.8. Review of Network Concept

Exempt – see Table 1.

4.9. Intersection Design

4.9.1. INTERSECTION CONTROL

Stop control is anticipated to be sufficient for vehicles exiting the proposed site access.

4.9.2. INTERSECTION DESIGN

Synchro 10 Trafficware was used to analyze intersection performance of signalized and unsignalized intersections within the study area. For the Brookfield/Flannery roundabout, the Sidra software was used for analysis. Critical movements at each of the intersections were assessed based on either the movement with the highest volume-to-capacity ratio (at signalized intersections), or the movement experiencing the highest average delay (at unsignalized and roundabout intersections).

Generally, an overall ('as a whole') level-of-service (LOS) 'D' or better is recommended for intersection operations during the peak hour periods. For signalized intersections, an overall LOS 'E' is generally considered acceptable at major arterial intersections in the City of Ottawa, as multi-lane arterial roads are intended to accommodate high levels of traffic volumes during peak hour periods.

It should be noted that, as per the TIA Guidelines, the Peak Hour Factor (PHF) used for analysis was 0.9 in existing conditions and 1.0 in all future scenario conditions. All Synchro and Sidra report outputs for existing and future conditions have been provided in Appendix F.

Existing Conditions

Table 15 below summarizes the intersection performance of study area intersections, based on the existing conditions traffic volumes illustrated in Figure 8.

Table 15: Existing Conditions Intersection Performance

Intersection	Weekday AM Peak (PM Peak)					
	Critical Movement			Intersection 'As a Whole'		
	LOS	max. v/c or avg. delay (s)	Movement	Delay (s)	LOS	v/c
Riverside Dr/Hog's Back Rd/Brookfield Rd (S)	F(F)	1.10(1.42)	NBT(WBL)	66.1(57.6)	E(D)	0.98(0.90)
Riverside Dr/Ridgewood Ave (S)	E(B)	0.93(0.68)	NBT(SBT)	18.0(8.8)	D(B)	0.90(0.67)
Springland Dr/Ridgewood Ave (U)	A(A)	8.4(9.4)	NB(SB)	8.0(8.9)	A(A)	-
Flannery Dr/Springland Dr (U)	A(A)	9.0(9.4)	EB(SB)	8.4(9.2)	A(A)	-
Brookfield Rd/Flannery Dr (R)	A(A)	6.0(6.1)	NB(NB)	3.9(4.0)	A(A)	-
Note: Analysis of signalized intersections assumes a PHF of 0.9 and a saturation flow rate of 1800 veh/h/lane. (S) – Signalized intersection, critical movement based on max v/c (U) – Unsignalized intersection, critical movement based on highest average delay (R) – Roundabout intersection, critical movement based on highest average delay						

As shown in Table 15, the intersection of Riverside/Brookfield 'as a whole' operates near capacity during the morning peak hour, with critical NBT and WBL movements operating at capacity during the morning and afternoon peak hours respectively. The intersection of Riverside/Ridgewood operates acceptably 'as a whole', with the critical NBT movement operating near capacity during the morning peak hour. The unsignalized and roundabout intersections all operate at a LOS 'A' during both peak hours.

Total Future Background 2024

Table 16 below summarizes the Synchro traffic operations at study area intersections, based on the total future background 2024 conditions in Figure 15.

Table 16: Future Background 2024 Intersection Performance

Intersection	Weekday AM Peak (PM Peak)					
	Critical Movement			Intersection 'As a Whole'		
	LOS	max. v/c or avg. delay (s)	Movement	Delay (s)	LOS	v/c
Riverside Dr/Hog's Back Rd/Brookfield Rd (S)	F(F)	1.07(1.33)	NBT(WBL)	59.2(52.1)	E(D)	0.96(0.86)
Riverside Dr/Ridgewood Ave (S)	D(B)	0.88(0.65)	NBT(SBT)	15.2(8.6)	D(B)	0.85(0.64)
Springland Dr/Ridgewood Ave (U)	A(A)	8.3(9.1)	NB(SB)	8.0(8.7)	A(A)	-
Flannery Dr/Springland Dr (U)	A(A)	9.0(9.3)	EB(SB)	8.4(9.1)	A(A)	-
Brookfield Rd/Flannery Dr (R)	A(A)	5.9(5.9)	NB(NB)	3.9(4.0)	A(A)	-
Note: Analysis of signalized intersections assumes a PHF of 1.0 and a saturation flow rate of 1800 veh/h/lane. (S) – Signalized intersection, critical movement based on max v/c (U) – Unsignalized intersection, critical movement based on highest average delay (R) – Roundabout intersection, critical movement based on highest average delay						

As shown in Table 16, study area intersections are projected to operate similar or better than existing conditions due to increasing the PHF to 1.0.

Total Future Background 2029

Table 17 below summarizes the Synchro traffic operations at study area intersections, based on future background 2029 traffic volumes in Figure 16.

Table 17: Total Future Background 2029 Intersection Performance

Intersection	Weekday AM Peak (PM Peak)					
	Critical Movement			Intersection 'As a Whole'		
	LOS	max. v/c or avg. delay (s)	Movement	Delay (s)	LOS	v/c
Riverside Dr/Hog's Back Rd/Brookfield Rd (S)	F(F)	1.11(1.40)	NBT(WBL)	68.4(56.7)	E(E)	0.99(0.91)
Riverside Dr/Ridgewood Ave (S)	E(B)	0.92(0.68)	NBT(SBT)	17.6(9.1)	D(B)	0.89(0.67)
Springland Dr/Ridgewood Ave (U)	A(A)	8.3(9.1)	NB(SB)	8.0(8.7)	A(A)	-
Flannery Dr/Springland Dr (U)	A(A)	9.0(9.3)	EB(SB)	8.4(9.1)	A(A)	-
Brookfield Rd/Flannery Dr (R)	A(A)	5.9(5.9)	NB(NB)	3.9(4.0)	A(A)	-
Note: Analysis of signalized intersections assumes a PHF of 1.0 and a saturation flow rate of 1800 veh/h/lane. (S) – Signalized intersection, critical movement based on max v/c (U) – Unsignalized intersection, critical movement based on highest average delay (R) – Roundabout intersection, critical movement based on highest average delay						

As indicated by Table 17, traffic operations are anticipated to be similar to the total future background 2024 traffic operations, with slightly higher delays and v/c ratios.

Total Projected 2024

Based on total projected 2024 traffic volumes in Figure 17, study area intersections were analyzed using Synchro, with results summarized in Table 18 below.

Table 18: Total Projected 2024 Intersection Performance

Intersection	Weekday AM Peak (PM Peak)					
	Critical Movement			Intersection 'As a Whole'		
	LOS	max. v/c or avg. delay (s)	Movement	Delay (s)	LOS	v/c
Riverside Dr/Hog's Back Rd/Brookfield Rd (S)	E(E)	0.99(0.99)	NBT(WBL)	46.4(44.2)	E(D)	0.91(0.89)
Riverside Dr/Ridgewood Ave (S)	E(B)	0.93(0.66)	NBT(SBT)	21.3(10.4)	D(B)	0.90(0.65)
Springland Dr/Ridgewood Ave (U)	A(A)	8.4(9.3)	NB(SB)	8.1(8.8)	A(A)	-
Flannery Dr/Springland Dr (U)	A(A)	9.2(9.5)	EB(SB)	8.5(9.2)	A(A)	-
Ridgewood Ave/Site Access (U)	A(A)	9.5(9.3)	SB(SB)	2.3(2.4)	A(A)	-
Brookfield Rd/Flannery Dr (R)	A(A)	5.8(5.8)	NB(NB)	4.0(4.1)	A(A)	-
Note: Analysis of signalized intersections assumes a PHF of 1.0 and a saturation flow rate of 1800 veh/h/lane. (S) – Signalized intersection, critical movement based on max v/c (U) – Unsignalized intersection, critical movement based on highest average delay (R) – Roundabout intersection, critical movement based on highest average delay						

Note that the intersection of Riverside/Brookfield was optimized for phase splits in Synchro, resulting in improved traffic operations during both peak hours; 'as a whole' the intersection is projected to operate acceptably given that Riverside Dr is a major arterial intersection, with critical movements operating near capacity during both peak hours.

The intersection of Riverside/Ridgewood 'as a whole' operates near capacity in the morning peak hour. Unsignalized intersections, including the roundabout intersection and the proposed site access, operate at a LOS 'A' during both peak hours.

Total Projected 2029

Based on total projected 2029 traffic volumes in Figure 18, study are intersections were analyzed using Synchro, with results summarized in Table 19 below.

Table 19: Total Projected 2029 Intersection Performance

Intersection	Weekday AM Peak (PM Peak)					
	Critical Movement			Intersection 'As a Whole'		
	LOS	max. v/c or avg. delay (s)	Movement	Delay (s)	LOS	v/c
Riverside Dr/Hog's Back Rd/Brookfield Rd (S)	F(F)	1.08(1.04)	NBT(WBL)	62.2(50.0)	E(E)	0.97(0.95)
Riverside Dr/Ridgewood Ave (S)	E(B)	0.97(0.69)	NBT(SBT)	23.2(10.8)	E(B)	0.94(0.68)
Springland Dr/Ridgewood Ave (U)	A(A)	8.4(9.3)	NB(SB)	8.1(8.8)	A(A)	-
Flannery Dr/Springland Dr (U)	A(A)	9.2(9.5)	EB(SB)	8.5(9.2)	A(A)	-
Ridgewood Ave/Site Access (U)	A(A)	9.5(9.3)	SB(SB)	2.3(2.4)	A(A)	-
Brookfield Rd/Flannery Dr (R)	A(A)	5.8(5.8)	NB(NB)	4.0(4.1)	A(A)	-
Note: Analysis of signalized intersections assumes a PHF of 1.0 and a saturation flow rate of 1800 veh/h/lane. (S) – Signalized intersection, critical movement based on max v/c (U) – Unsignalized intersection, critical movement based on highest average delay (R) – Roundabout intersection, critical movement based on highest average delay						

As indicated by Table 19, traffic operations are anticipated to be similar to the total future projected 2024 traffic operations, with only slightly higher delays and v/c ratios.

The intersection of Riverside/Brookfield was optimized in Synchro with regards to phase splits during both peak hours; 'as a whole', the intersection operates near capacity. The intersection of Riverside/Ridgewood operate 'as a whole' near capacity during the morning peak hour. All unsignalized and roundabout intersections operate at LOS 'A' during both peak hours.

Generally, operations at the two Riverside Drive intersections are expected to only approach congested conditions in the peak hour periods, but still operate within acceptable limits for major arterial intersections. If desired, operations can be improved to a LOS 'D' at each of the intersection with the following modifications:

- At Riverside/Brookfield: Add a left-turn lane to the southbound and westbound approaches for double left-turn lanes.
- At Riverside/Ridgewood: adjust the timing of the southbound left-turn lane to increase the available green time, but would adversely impact cycle length timing priority.

5. Findings, Conclusions and Recommendations

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

Proposed Development

- The proposed development will be located at the combined addresses of 729 & 753 Ridgewood Avenue. The site is currently occupied by a strip mall, which will be replaced by the proposed development.
- The development will consist of five apartment buildings that are 4 to 15 storeys and consist of 387 residential units and 856 m^2 (9.213 ft^2) of commercial space, which will all be constructed in a single phase by 2024.
- Access will be provided via a driveway on the north side of Ridgewood Ave. Stop control is anticipated to be sufficient for future traffic exiting the site.
- A total of 572 vehicle parking spaces and 198 bicycle parking spaces are proposed, which meets the requirements of City of Ottawa Parking Provisions.
- At full buildout in 2024, the development is expected approximately 154 and 150 person trips during the morning and afternoon peak hours respectively.
- Approximately 90 new vehicular trips and 30 new transit trips are expected to be generated by the proposed development in both the morning and afternoon peak hours. Approximately 13 new bike and walk trips were expected in both the morning and afternoon peak hours.

Existing and Background Conditions

- In existing conditions, the following traffic operations are noted:
    - Riverside/Brookfield 'as a whole' operates near capacity (at a LOS 'E'), but acceptably for an significant urban arterial intersection in the morning peak hour, with poorly operating movements (the NBT and WBL) in the morning and afternoon peak hours respectively.
    - The Riverside/Ridgewood intersection operates acceptably 'as a whole' (at a LOS 'D') in the morning peak hour.
    - The remaining intersections all operate at a LOS 'A' during both peak hours.
- A background growth rate of 1% per year was applied to Riverside Dr, Hog's Back Rd, and Brookfield Rd for future horizon years 2024 and 2029.
- Other proposed developments within the area were also included in the future traffic analysis, including: 740 Springland (Norberry Residences), 770 Brookfield, and 3071 Riverside (Canoe Bay).
- As required by the TIA Guidelines, the PHF in future conditions is increased to 1.0, which results in improved or similar traffic operations for total future background 2024 and 2029 as compared to existing conditions.

Projected Conditions

- Ridgewood Ave and Springland Dr are appropriately classified as collector roadways. Flannery Dr between Ridgewood Ave and Brookfield Rd experiences higher vehicular traffic volumes that suggests a major collector classification may be appropriate. However, the intersection operational analysis indicates there are no traffic concerns along the corridor in the future and the design does include characteristics found in major collectors, e.g. parking restrictions and no direct residential frontage.
- For total projected 2024 conditions, the intersection of Riverside/Brookfield has poorly operating individual movements, but 'as a whole' operates acceptably (at a LOS 'E') during both peak hours. All other intersections operate acceptably, similar to existing conditions.
- For total projected 2029 conditions, higher delays and v/c ratios are experienced compared to total projected 2024 conditions. The intersection of Riverside/Brookfield continues to operate acceptably overall. Similarly, the intersection of Riverside/Ridgewood 'as a whole' operates closer to capacity (at a LOS 'E), but acceptably in the morning peak hour. All other intersections operate similar to existing conditions.

In summary, the adjacent road network is expected to accommodate anticipated development traffic in the future. Therefore, the proposed development is recommended to proceed from a transportation perspective.

Appendix A

SCREENING FORM

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

City of Ottawa 2017 TIA Guidelines

TIA Screening Form

Date	22-Mar-21
Project	729-753 Ridgewood Ave
Project Number	477549 - 01000

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

Module 1.1 - Description of Proposed Development	
Municipal Address	729-753 Ridgewood Avenue, Ottawa, ON
Description of location	North side of Ridgewood Ave
Land Use	Five residential buildings and commercials space
Development Size	390 apartment units and 835 m^2 commercial
Number of Accesses and Locations	Single access proposed along north side of Ridgewood Ave
Development Phasing	Single Phase
Buildout Year	2024
Sketch Plan / Site Plan	See attached

Module 1.2 - Trip Generation Trigger		
Land Use Type	Townhomes or Apartments	
Development Size	390	Units
Trip Generation Trigger Met?	Yes	

Module 1.3 - Location Triggers	
Development Proposes a new driveway to a boundary street that is designated as part of the City's Transit Priority, Rapid Transit, or Spine Bicycle Networks (See Sheet 3)	No
Development is in a Design Priority Area (DPA) or Transit-oriented Development (TOD) zone. (See Sheet 3)	No
Location Trigger Met?	No

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

Appendix B

TRANSIT ROUTE MAPS

90

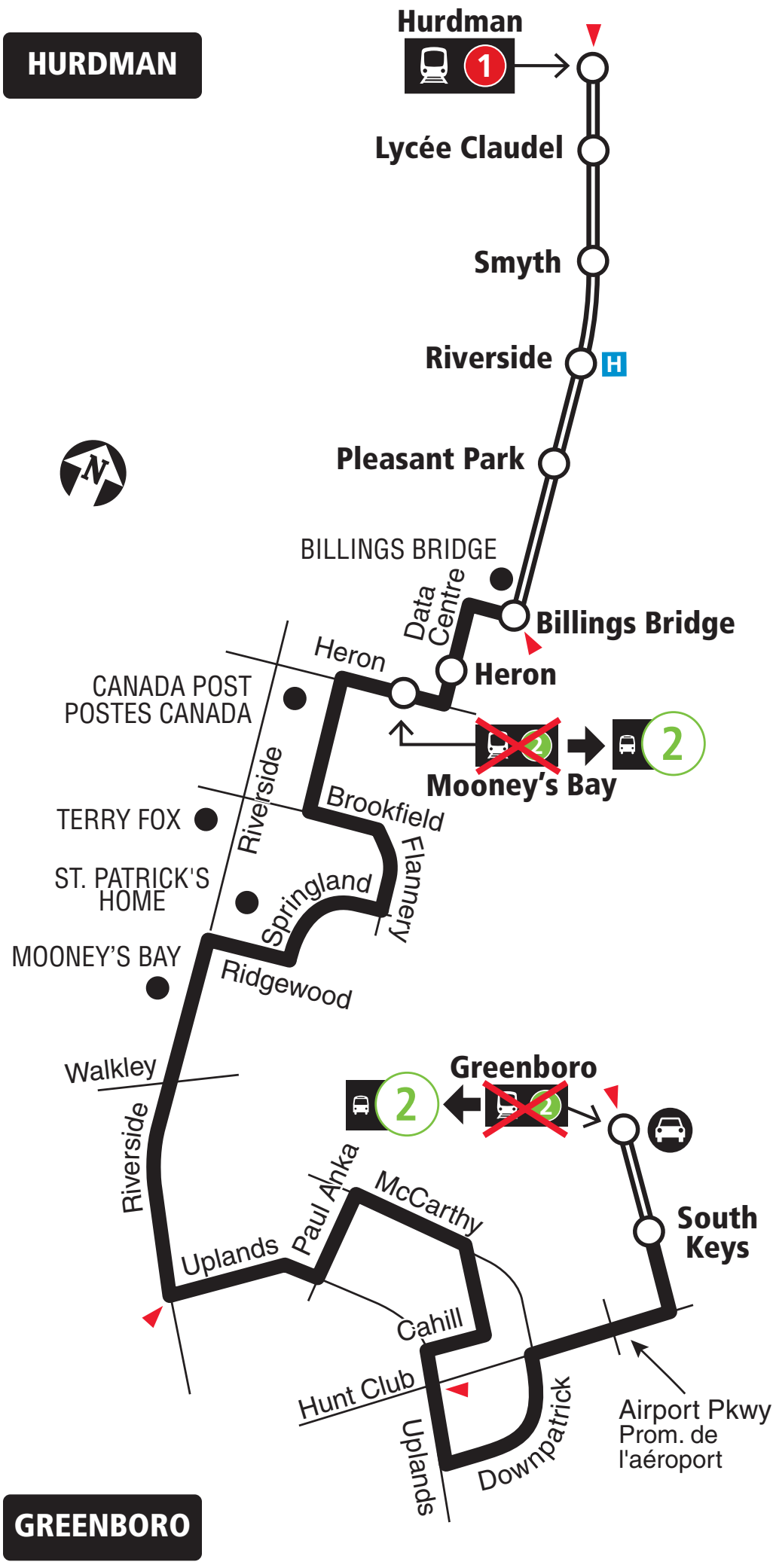
Fréquent

GREENBORO
HURDMAN

7 days a week / 7 jours par semaine

All day service

Service toute la journée



Transitway & Station

Park & Ride / Parc-o-bus

Timepoint / Heures de passage

2020.04

Schedule / Horaire.....613-560-1000

Text / Texto 560560

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

Customer Service
Service à la clientèle **613-741-4390**

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

Security / Sécurité **613-741-2478**

Effective May 3, 2020

En vigueur 3 mai 2020

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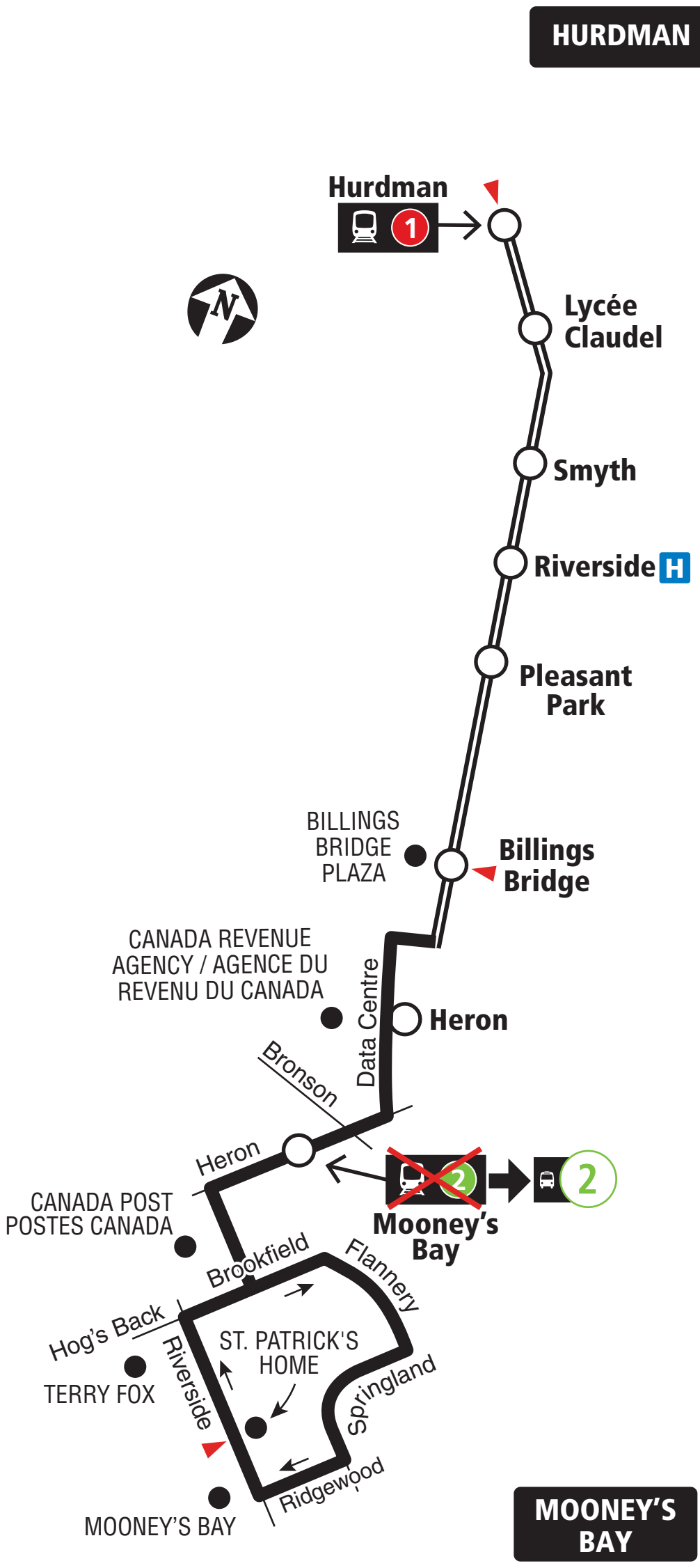
190

MOONEY'S BAY
HURDMAN

Local

7 days a week / 7 jours par semaine

Selected trips only
Trajets sélectionnés seulement



Transitway & Station

Timepoint / Heures de passage

2020.04

Schedule / Horaire.....613-560-1000
Text / Texto 560560

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

Customer Service
Service à la clientèle **613-741-4390**

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Security / Sécurité **613-741-2478**

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290 Connexion

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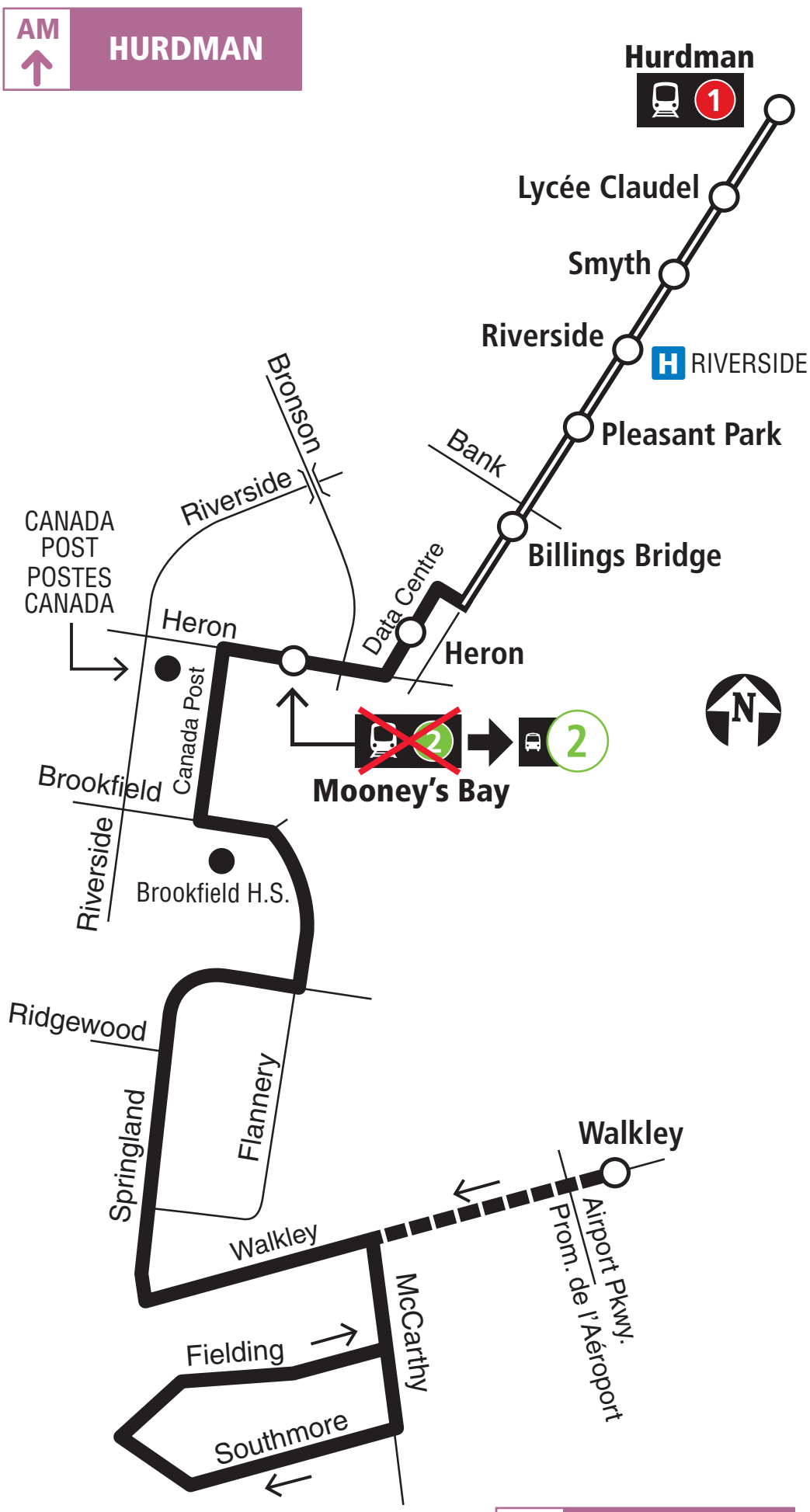
Périodes de pointe seulement

AM ↑ HURDMAN



PM ↓ McCARTHY

Transitway & Station

AM trips only / Trajets du matin seulement

2021.03

Schedule / Horaire.....613-560-1000
Text / Texto 560560

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

Customer Relations
Service à la clientèle 613-741-4390

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

Security / Sécurité 613-741-2478

Effective March 8, 2021
En vigueur 8 mars 2021

OC Transpo

INFO 613-741-4390
octranspo.com

Appendix C

TRAFFIC DATA

Transportation Services - Traffic Services

W.O. 36342

Turning Movement Count - 15 Minute Summary Report

AIRPORT PKWY/BROOKFIELD RD @ FLANNERY DR/AIRPORT PKWY RAMPS 52A/53

Survey Date: Thursday, September 22, 2016

Total Observed U-Turns

Northbound: 1 Southbound: 0

Eastbound: 34 Westbound: 0

		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	6	0	20	**26**	0	6	38	**44**	**70**	0	69	3	**72**	3	40	0	**43**	**115**	**185**
07:15	07:30	8	0	40	**48**	0	4	47	**51**	**99**	0	81	4	**87**	0	44	0	**44**	**131**	**230**
07:30	07:45	15	1	49	**65**	0	3	36	**39**	**104**	0	110	10	**120**	1	55	0	**56**	**176**	**280**
07:45	08:00	14	0	39	**53**	1	8	41	**50**	**103**	0	118	4	**122**	0	52	0	**52**	**174**	**277**
08:00	08:15	18	0	63	**81**	0	8	36	**44**	**125**	1	92	17	**111**	0	57	0	**57**	**168**	**293**
08:15	08:30	16	0	42	**58**	0	10	43	**53**	**111**	1	80	8	**91**	1	60	0	**61**	**152**	**263**
08:30	08:45	24	0	44	**68**	1	3	51	**55**	**123**	0	91	14	**105**	3	45	0	**48**	**153**	**276**
08:45	09:00	27	0	35	**62**	2	10	46	**58**	**120**	0	98	28	**127**	0	62	0	**62**	**189**	**309**
09:00	09:15	13	0	23	**36**	0	8	44	**52**	**88**	0	78	16	**95**	6	37	0	**43**	**138**	**226**
09:15	09:30	5	0	19	**24**	0	7	32	**39**	**63**	1	71	12	**84**	3	30	0	**33**	**117**	**180**
09:30	09:45	12	0	24	**36**	0	6	24	**30**	**66**	2	60	8	**72**	2	22	0	**24**	**96**	**162**
09:45	10:00	16	0	22	**38**	2	6	17	**25**	**63**	0	32	6	**39**	3	19	0	**22**	**61**	**124**
11:30	11:45	12	0	16	**29**	3	12	18	**33**	**62**	0	72	12	**85**	1	19	0	**20**	**105**	**167**
11:45	12:00	6	0	18	**24**	0	11	20	**31**	**55**	1	69	11	**84**	3	16	0	**19**	**103**	**158**
12:00	12:15	10	0	21	**31**	1	8	16	**25**	**56**	0	66	18	**84**	3	18	0	**21**	**105**	**161**
12:15	12:30	9	0	14	**23**	0	16	13	**29**	**52**	0	79	17	**98**	1	22	0	**23**	**121**	**173**
12:30	12:45	12	1	21	**34**	0	17	23	**40**	**74**	0	56	12	**68**	3	20	0	**23**	**91**	**165**
12:45	13:00	6	0	13	**19**	0	10	19	**29**	**48**	0	48	13	**62**	2	23	0	**25**	**87**	**135**
13:00	13:15	11	0	15	**26**	3	12	23	**38**	**64**	0	51	10	**61**	1	27	0	**28**	**89**	**153**
13:15	13:30	5	0	20	**25**	3	12	12	**27**	**52**	1	48	16	**67**	0	29	0	**29**	**96**	**148**
15:00	15:15	14	0	12	**26**	3	18	30	**51**	**77**	0	125	34	**160**	6	28	0	**34**	**194**	**271**
15:15	15:30	13	1	10	**24**	2	20	47	**69**	**93**	0	105	24	**129**	3	31	0	**34**	**163**	**256**
15:30	15:45	13	1	21	**35**	2	18	53	**73**	**108**	0	120	25	**147**	8	38	0	**46**	**193**	**301**
15:45	16:00	10	0	13	**23**	0	34	53	**87**	**110**	1	122	27	**152**	2	30	0	**32**	**184**	**294**
16:00	16:15	13	0	12	**25**	5	33	69	**107**	**132**	0	136	31	**167**	0	24	0	**24**	**191**	**323**
16:15	16:30	4	0	18	**22**	2	62	70	**134**	**156**	1	109	27	**140**	3	31	0	**34**	**174**	**330**
16:30	16:45	8	0	19	**27**	3	68	62	**133**	**160**	2	101	46	**149**	7	24	0	**31**	**180**	**340**
16:45	17:00	8	0	17	**25**	0	73	69	**142**	**167**	0	93	38	**134**	6	25	0	**31**	**165**	**332**
17:00	17:15	12	0	15	**27**	0	63	48	**111**	**138**	0	99	24	**124**	3	26	0	**29**	**153**	**291**
17:15	17:30	13	0	12	**25**	0	60	47	**107**	**132**	1	101	29	**132**	6	34	0	**40**	**172**	**304**
17:30	17:45	6	0	25	**31**	2	55	52	**109**	**140**	0	109	23	**132**	6	24	0	**30**	**162**	**302**
17:45	18:00	7	0	26	**33**	0	33	47	**80**	**113**	1	87	26	**116**	3	28	0	**31**	**147**	**260**
TOTAL:		366	4	758	**1129**	35	714	1246	**1995**	**3124**	13	2776	593	**3416**	89	1040	0	**1129**	**4545**	**7669**

	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**

Note: U-Turns are included in Totals.

Comment:

Transportation Services - Traffic Services

Turning Movement Count - Cyclist Volume Report

Work Order
36342

AIRPORT PKWY/BROOKFIELD RD @ FLANNERY DR/AIRPORT PKWY RAMPS 52A/53

Count Date: Thursday, September 22, 2016 **Start Time:** 07:00

Time Period	Northbound	Southbound	**Street Total**	Eastbound	Westbound	**Street Total**	**Grand Total**
07:00 08:00	11	1	**12**	1	6	**7**	**19**
08:00 09:00	14	1	**15**	4	4	**8**	**23**
09:00 10:00	1	0	**1**	0	2	**2**	**3**
11:30 12:30	3	4	**7**	2	0	**2**	**9**
12:30 13:30	1	0	**1**	4	2	**6**	**7**
15:00 16:00	0	3	**3**	4	2	**6**	**9**
16:00 17:00	3	4	**7**	13	1	**14**	**21**
17:00 18:00	2	2	**4**	12	2	**14**	**18**
Total	35	15	**50**	40	19	**59**	**109**

Comment:

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

Transportation Services - Traffic Services

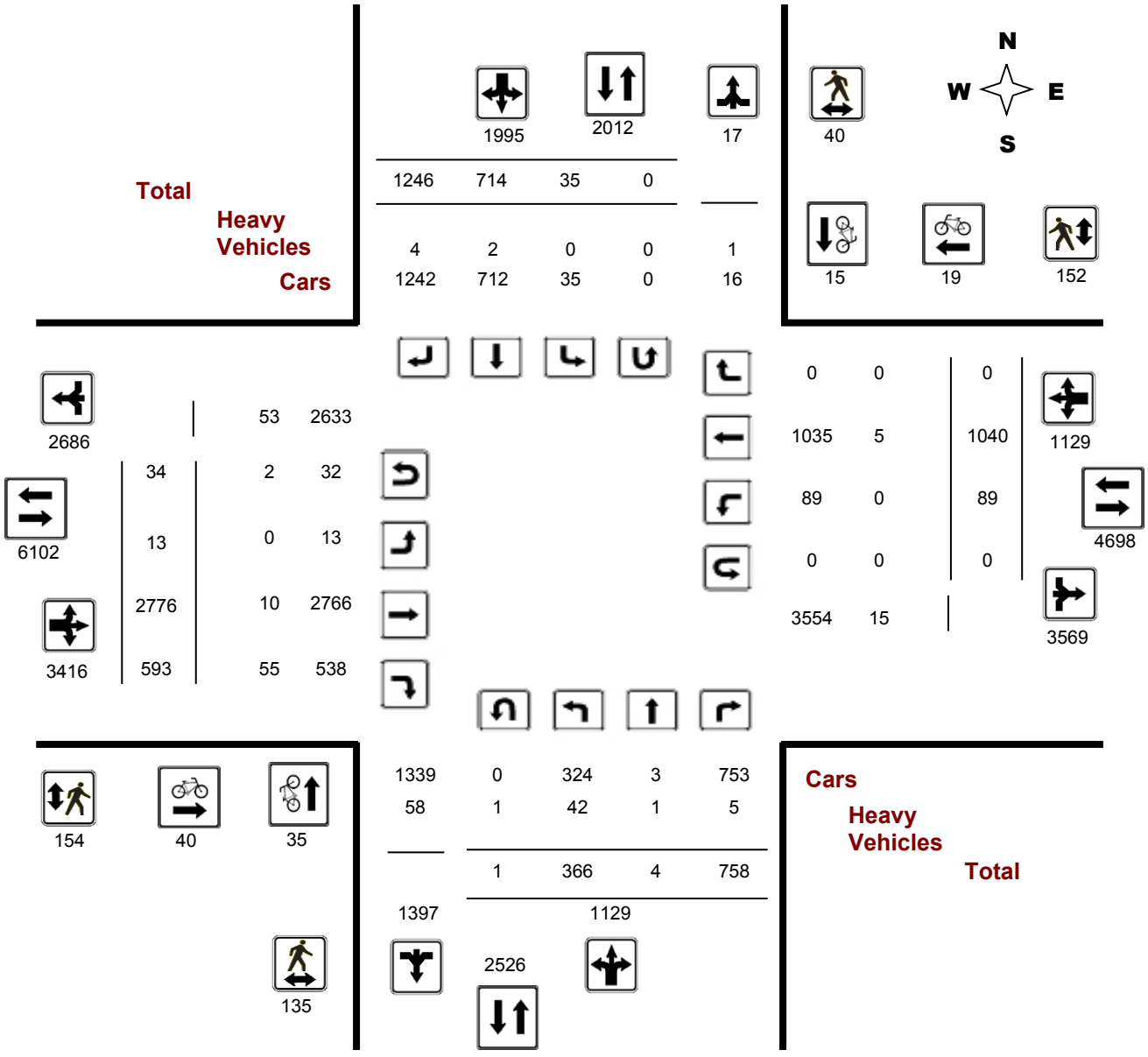
Turning Movement Count - Full Study Diagram

AIRPORT PKWY/BROOKFIELD RD @ FLANNERY DR/AIRPORT PKWY RAMPS 52A/53

Survey Date: Thursday, September 22, 2016

WO#: 36342

Device: Miovision



Comments

Transportation Services - Traffic Services

W.O. 36342

Turning Movement Count - Heavy Vehicle Report

AIRPORT PKWY/BROOKFIELD RD @ FLANNERY DR/AIRPORT PKWY RAMPS 52A/53

Survey Date: Thursday, September 22, 2016

		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	08:00	9	0	0	**9**	0	0	0	**0**	**9**	0	1	4	**5**	0	0	0	**0**	**5**	**14**
08:00	09:00	6	0	1	**7**	0	0	1	**1**	**8**	0	1	6	**7**	0	2	0	**2**	**9**	**17**
09:00	10:00	7	0	0	**7**	0	0	1	**1**	**8**	0	1	7	**8**	0	0	0	**0**	**8**	**16**
11:30	12:30	4	0	0	**5**	0	1	0	**1**	**6**	0	0	5	**6**	0	1	0	**1**	**7**	**13**
12:30	13:30	4	0	1	**5**	0	1	0	**1**	**6**	0	2	4	**6**	0	0	0	**0**	**6**	**12**
15:00	16:00	5	1	1	**7**	0	0	1	**1**	**8**	0	3	12	**16**	0	2	0	**2**	**18**	**26**
16:00	17:00	4	0	1	**5**	0	0	0	**0**	**5**	0	1	9	**10**	0	0	0	**0**	**10**	**15**
17:00	18:00	3	0	1	**4**	0	0	1	**1**	**5**	0	1	8	**9**	0	0	0	**0**	**9**	**14**
Sub Total		42	1	5	**49**	0	2	4	**6**	**55**	0	10	55	**67**	0	5	0	**5**	**72**	**127**
U-Turns (Heavy Vehicles)					**1**				**0**	**1**				**2**				**0**	**2**	**3**
Total		42	1	5	**0**	0	2	4	**6**	**56**	0	10	55	**69**	0	5	0	**5**	**74**	**130**

Heavy Vehicles include Buses, Single-Unit Trucks and Articulated Trucks. Further, they ARE included in the Turning Movement Count Summary.

Transportation Services - Traffic Services

Work Order
36342

Turning Movement Count - Pedestrian Volume Report

AIRPORT PKWY/BROOKFIELD RD @ FLANNERY DR/AIRPORT PKWY RAMPS 52A/53

Count Date: Thursday, September 22, 2016 **Start Time:** 07:00

Time Period	NB Approach (E or W Crossing)	SB Approach (E or W Crossing)	Total	EB Approach (N or S Crossing)	WB Approach (N or S Crossing)	Total	Grand Total
07:00 07:15	1	0	**1**	0	0	**0**	**1**
07:15 07:30	5	0	**5**	3	5	**8**	**13**
07:30 07:45	2	1	**3**	2	2	**4**	**7**
07:45 08:00	1	0	**1**	2	4	**6**	**7**
07:00 08:00	9	1	**10**	7	11	**18**	**28**
08:00 08:15	1	2	**3**	2	6	**8**	**11**
08:15 08:30	21	1	**22**	7	4	**11**	**33**
08:30 08:45	65	1	**66**	13	6	**19**	**85**
08:45 09:00	2	4	**6**	29	0	**29**	**35**
08:00 09:00	89	8	**97**	51	16	**67**	**164**
09:00 09:15	7	4	**11**	5	3	**8**	**19**
09:15 09:30	0	0	**0**	0	0	**0**	**0**
09:30 09:45	0	3	**3**	0	7	**7**	**10**
09:45 10:00	0	2	**2**	1	5	**6**	**8**
09:00 10:00	7	9	**16**	6	15	**21**	**37**
11:30 11:45	2	1	**3**	1	8	**9**	**12**
11:45 12:00	0	0	**0**	2	4	**6**	**6**
12:00 12:15	0	2	**2**	5	1	**6**	**8**
12:15 12:30	0	3	**3**	7	5	**12**	**15**
11:30 12:30	2	6	**8**	15	18	**33**	**41**
12:30 12:45	0	2	**2**	6	4	**10**	**12**
12:45 13:00	0	0	**0**	2	2	**4**	**4**
13:00 13:15	0	0	**0**	2	4	**6**	**6**
13:15 13:30	0	0	**0**	1	4	**5**	**5**
12:30 13:30	0	2	**2**	11	14	**25**	**27**
15:00 15:15	6	4	**10**	25	2	**27**	**37**
15:15 15:30	5	4	**9**	20	6	**26**	**35**
15:30 15:45	4	1	**5**	4	8	**12**	**17**
15:45 16:00	0	1	**1**	0	4	**4**	**5**
15:00 16:00	15	10	**25**	49	20	**69**	**94**
16:00 16:15	0	1	**1**	1	3	**4**	**5**
16:15 16:30	1	0	**1**	3	4	**7**	**8**
16:30 16:45	5	0	**5**	0	11	**11**	**16**
16:45 17:00	2	0	**2**	3	6	**9**	**11**
16:00 17:00	8	1	**9**	7	24	**31**	**40**
17:00 17:15	2	2	**4**	5	5	**10**	**14**
17:15 17:30	1	1	**2**	0	9	**9**	**11**
17:30 17:45	2	0	**2**	2	12	**14**	**16**
17:45 18:00	0	0	**0**	1	8	**9**	**9**
17:00 18:00	5	3	**8**	8	34	**42**	**50**
Total	135	40	**175**	154	152	**306**	**481**

Comment:

Transportation Services - Traffic Services

Work Order
36342

Turning Movement Count - Full Study Summary Report

AIRPORT PKWY/BROOKFIELD RD @ FLANNERY DR/AIRPORT PKWY RAMPS 52A/53

Survey Date: Thursday, September 22, 2016

Total Observed U-Turns

Northbound: 1 Southbound: 0
Eastbound: 34 Westbound: 0

AADT Factor
1.00

Full Study

	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	43	1	148	**192**	1	21	162	**184**	**376**	0	378	21	**399**	4	191	0	**195**	**594**	**970**
08:00 09:00	85	0	184	**269**	3	31	176	**210**	**479**	2	361	67	**430**	4	224	0	**228**	**658**	**1137**
09:00 10:00	46	0	88	**134**	2	27	117	**146**	**280**	3	241	42	**286**	14	108	0	**122**	**408**	**688**
11:30 12:30	37	0	69	**106**	4	47	67	**118**	**224**	1	286	58	**345**	8	75	0	**83**	**428**	**652**
12:30 13:30	34	1	69	**104**	6	51	77	**134**	**238**	1	203	51	**255**	6	99	0	**105**	**360**	**598**
15:00 16:00	50	2	56	**108**	7	90	183	**280**	**388**	1	472	110	**583**	19	127	0	**146**	**729**	**1117**
16:00 17:00	33	0	66	**99**	10	236	270	**516**	**615**	3	439	142	**584**	16	104	0	**120**	**704**	**1319**
17:00 18:00	38	0	78	**116**	2	211	194	**407**	**523**	2	396	102	**500**	18	112	0	**130**	**630**	**1153**
Sub Total	366	4	758	**1128**	35	714	1246	**1995**	**3123**	13	2776	593	**3382**	89	1040	0	**1129**	**4511**	**7634**
U Turns				**1**				**0**	**1**				**34**				**0**	**34**	**35**
Total	366	4	758	**1129**	35	714	1246	**1995**	**3124**	13	2776	593	**3416**	89	1040	0	**1129**	**4545**	**7669**
EQ 12Hr	509	6	1054	**1569**	49	992	1732	**2773**	**4342**	18	3859	824	**4748**	124	1446	0	**1569**	**6317**	**10659**
Note: These values are calculated by multiplying the totals by the appropriate expansion factor.													**1.39**						
AVG 12Hr	509	6	1054	**1569**	49	992	1732	**2773**	**4342**	18	3859	824	**4748**	124	1446	0	**1569**	**6317**	**10659**
Note: These volumes are calculated by multiplying the Equivalent 12 hr. totals by the AADT factor.													**1.00**						
AVG 24Hr	666	7	1380	**2056**	64	1300	2269	**3633**	**5689**	24	5055	1080	**6220**	162	1894	0	**2056**	**8276**	**13965**
Note: These volumes are calculated by multiplying the Average Daily 12 hr. totals by 12 to 24 expansion factor.													**1.31**						

Comments:

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

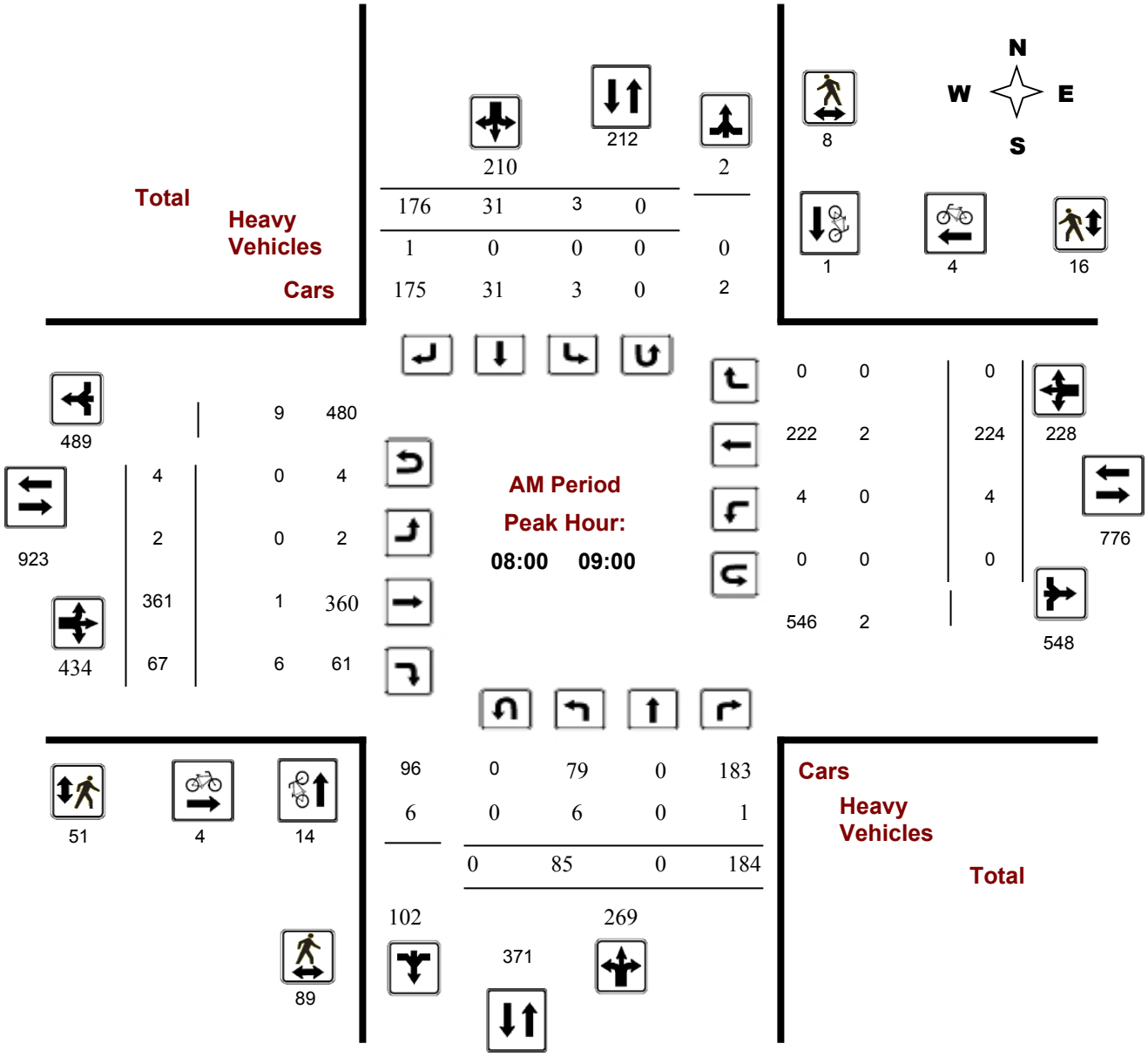
Transportation Services - Traffic Services

Turning Movement Count - Full Study Peak Hour Diagram

AIRPORT PKWY/BROOKFIELD RD @ FLANNERY DR/AIRPORT PKWY RAMPS 52A/53

Survey Date: Thursday, September 22, 2016 **WO No:** 36342

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



Comments

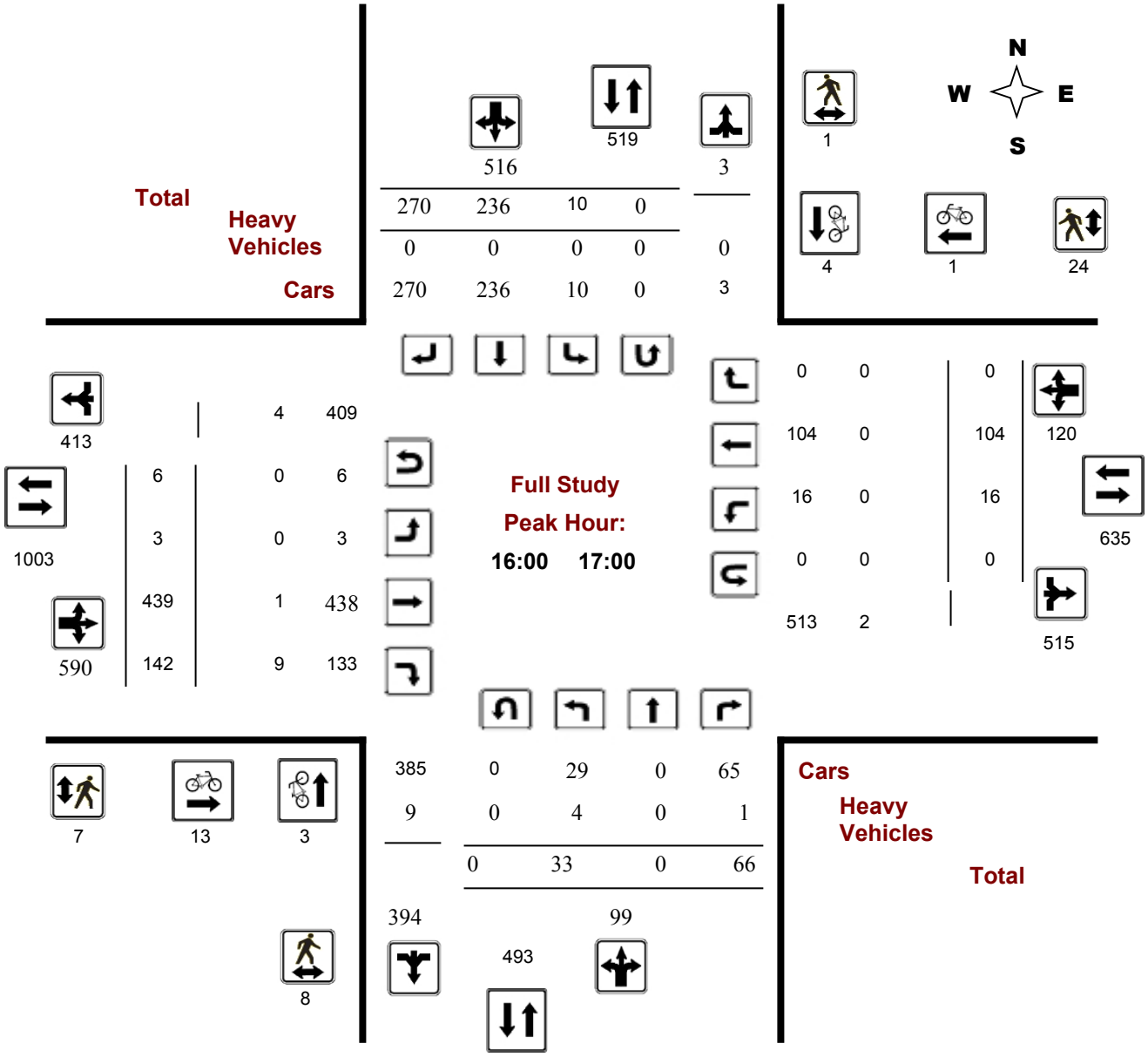
Transportation Services - Traffic Services

Turning Movement Count - Full Study Peak Hour Diagram

AIRPORT PKWY/BROOKFIELD RD @ FLANNERY DR/AIRPORT PKWY RAMPS 52A/53

Survey Date: Thursday, September 22, 2016 **WO No:** 36342

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



Comments

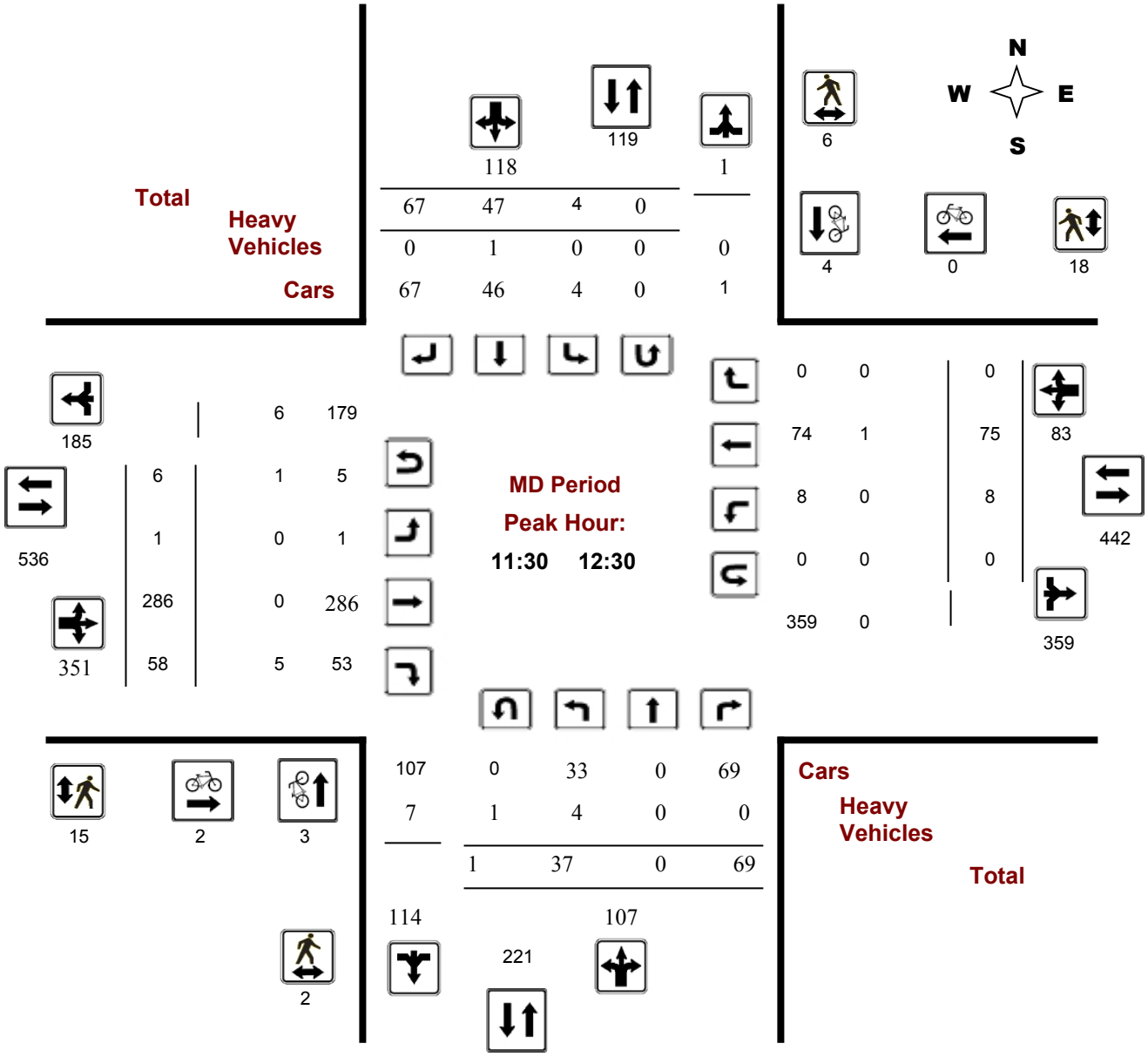
Transportation Services - Traffic Services

Turning Movement Count - Full Study Peak Hour Diagram

AIRPORT PKWY/BROOKFIELD RD @ FLANNERY DR/AIRPORT PKWY RAMPS 52A/53

Survey Date: Thursday, September 22, 2016 **WO No:** 36342

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



Comments

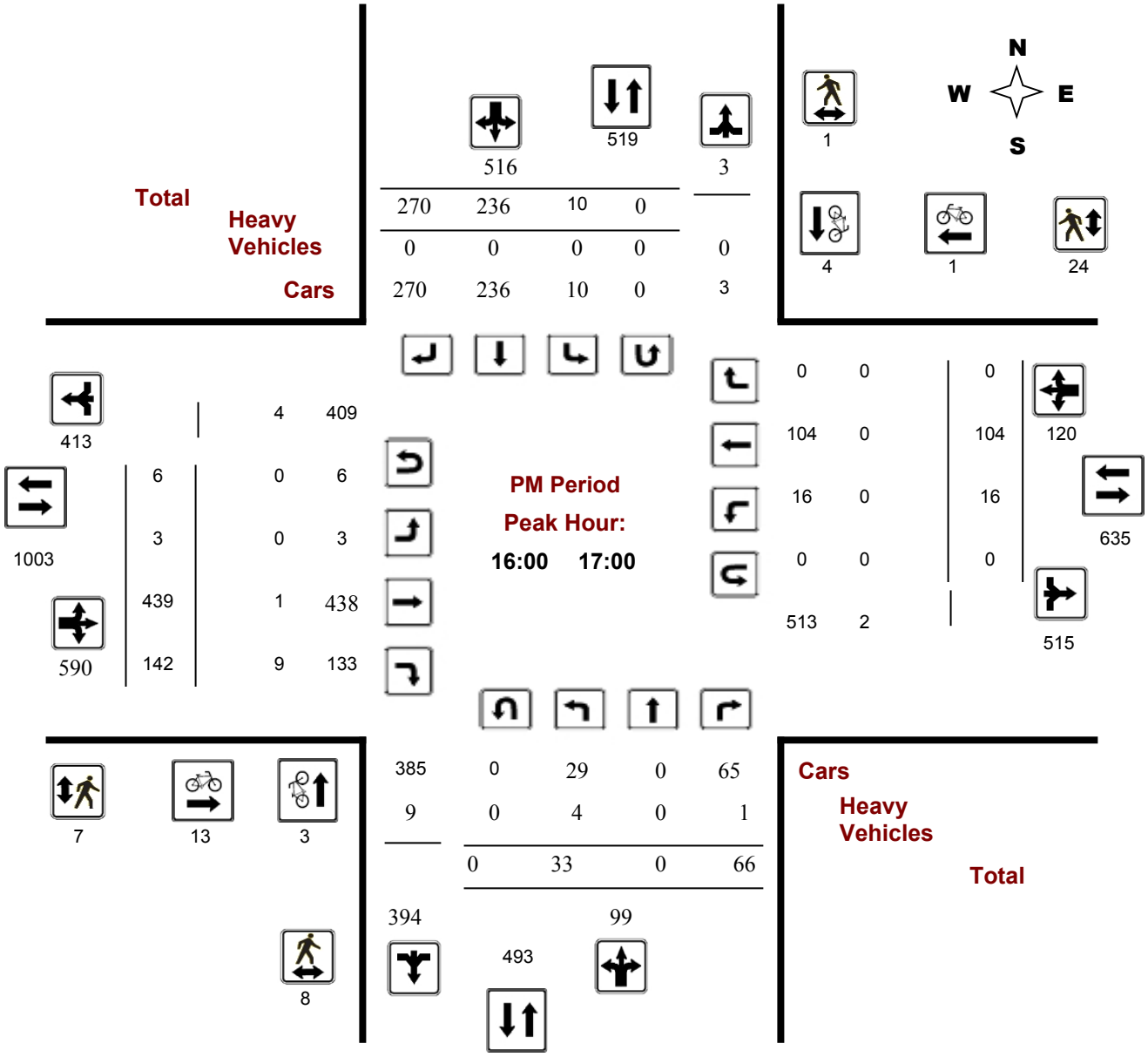
Transportation Services - Traffic Services

Turning Movement Count - Full Study Peak Hour Diagram

AIRPORT PKWY/BROOKFIELD RD @ FLANNERY DR/AIRPORT PKWY RAMPS 52A/53

Survey Date: Thursday, September 22, 2016 **WO No:** 36342

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



Comments

Transportation Services - Traffic Services

Work Order
36342

Turning Movement Count - 15 Min U-Turn Total Report

AIRPORT PKWY/BROOKFIELD RD @ FLANNERY DR/AIRPORT PKWY RAMPS 52A/53

Survey Date: Thursday, September 22, 2016

Time Period		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	2	0	2
07:30	07:45	0	0	0	0	0
07:45	08:00	0	0	0	0	0
08:00	08:15	0	0	1	0	1
08:15	08:30	0	0	2	0	2
08:30	08:45	0	0	0	0	0
08:45	09:00	0	0	1	0	1
09:00	09:15	0	0	1	0	1
09:15	09:30	0	0	0	0	0
09:30	09:45	0	0	2	0	2
09:45	10:00	0	0	1	0	1
11:30	11:45	1	0	1	0	2
11:45	12:00	0	0	3	0	3
12:00	12:15	0	0	0	0	0
12:15	12:30	0	0	2	0	2
12:30	12:45	0	0	0	0	0
12:45	13:00	0	0	1	0	1
13:00	13:15	0	0	0	0	0
13:15	13:30	0	0	2	0	2
15:00	15:15	0	0	1	0	1
15:15	15:30	0	0	0	0	0
15:30	15:45	0	0	2	0	2
15:45	16:00	0	0	2	0	2
16:00	16:15	0	0	0	0	0
16:15	16:30	0	0	3	0	3
16:30	16:45	0	0	0	0	0
16:45	17:00	0	0	3	0	3
17:00	17:15	0	0	1	0	1
17:15	17:30	0	0	1	0	1
17:30	17:45	0	0	0	0	0
17:45	18:00	0	0	2	0	2
Total		1	0	34	0	35

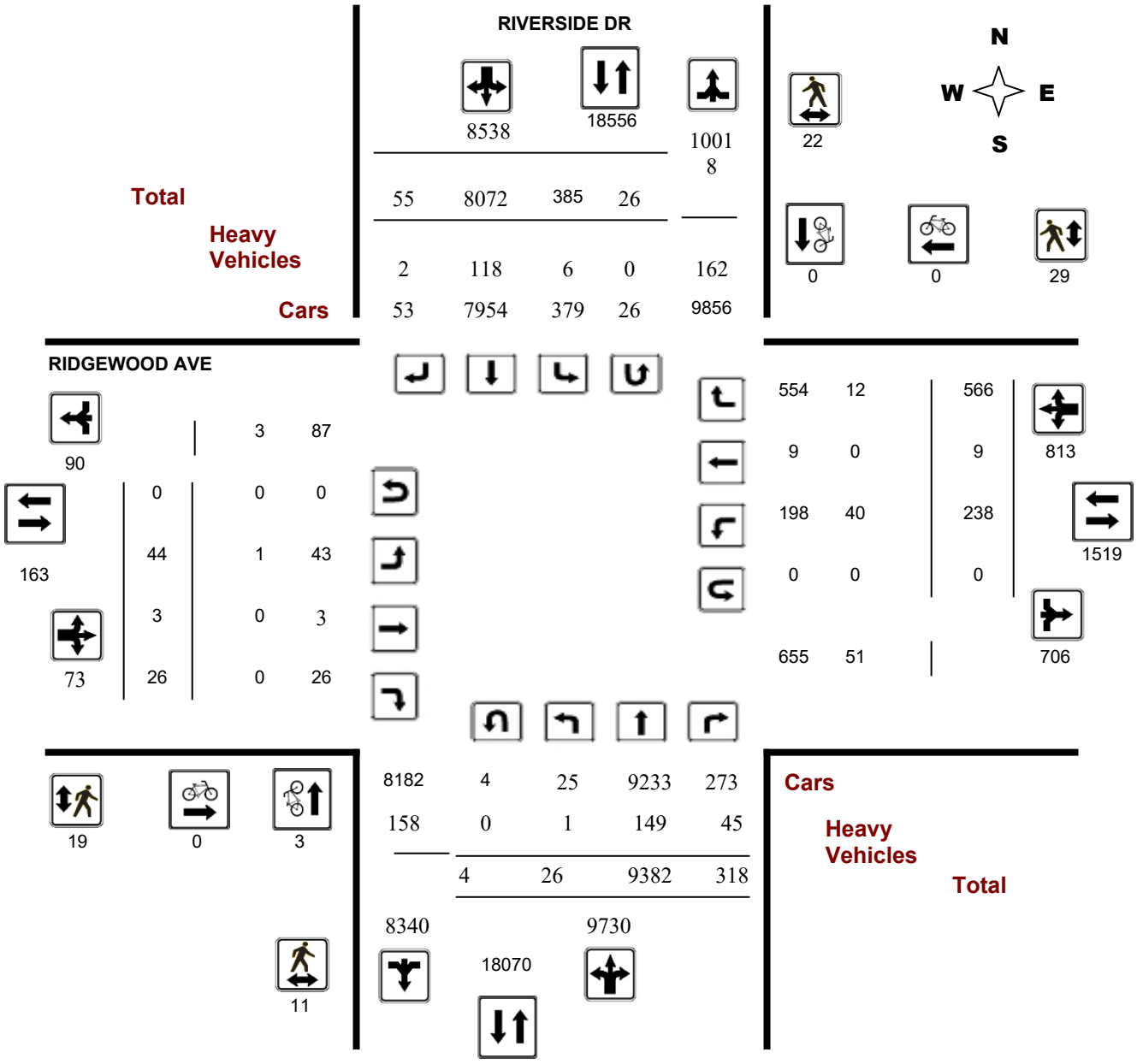
Transportation Services - Traffic Services

Turning Movement Count - Study Results

RIDGEWOOD AVE @ RIVERSIDE DR

Survey Date: Wednesday, March 06, 2019
Start Time: 07:00
WO No: 38313
Device: Miovision

Full Study Diagram



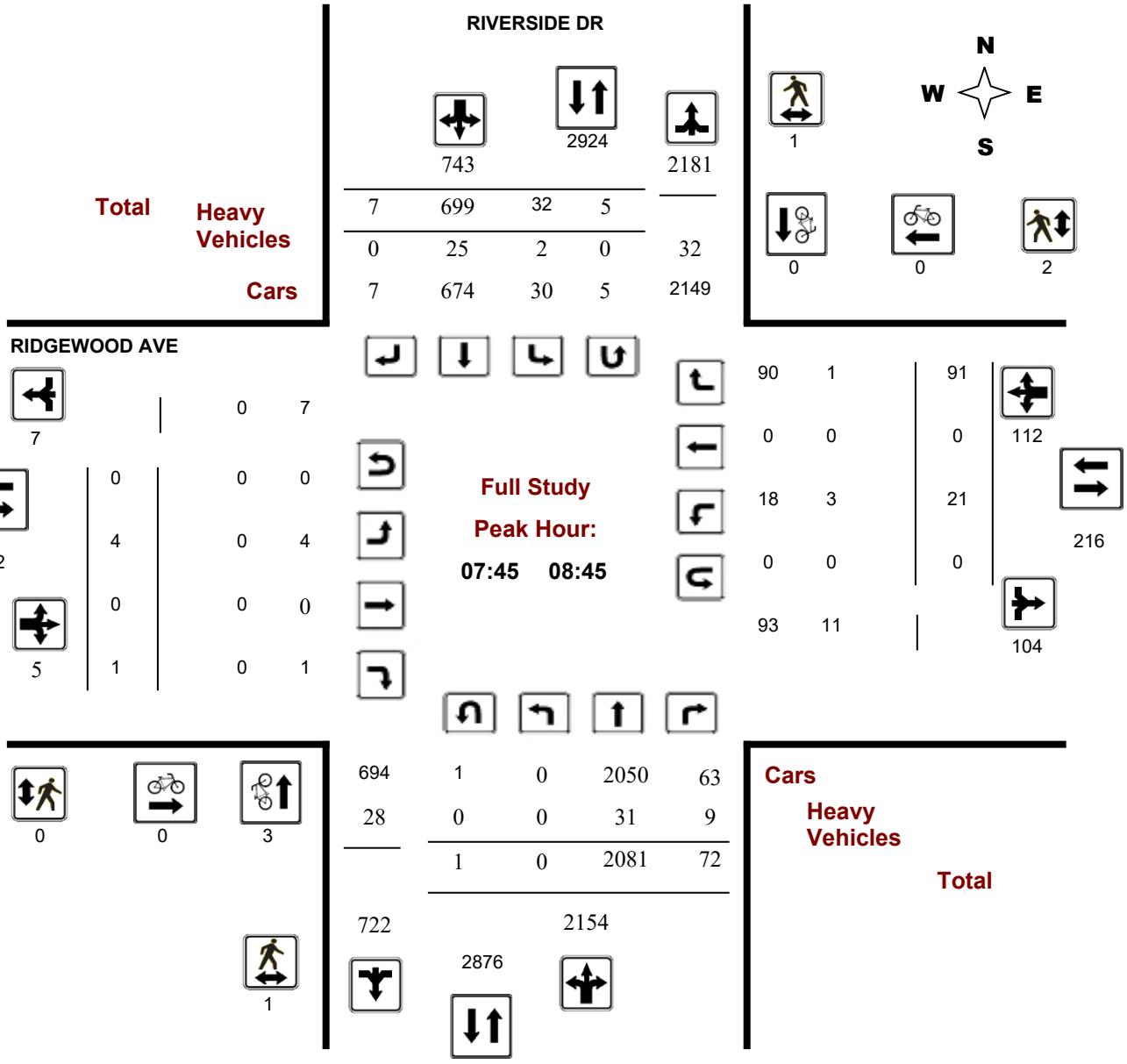
Transportation Services - Traffic Services

Turning Movement Count - Study Results

RIDGEWOOD AVE @ RIVERSIDE DR

Survey Date: Wednesday, March 06, 2019
Start Time: 07:00
WO No: 38313
Device: Miovision

Full Study Peak Hour Diagram



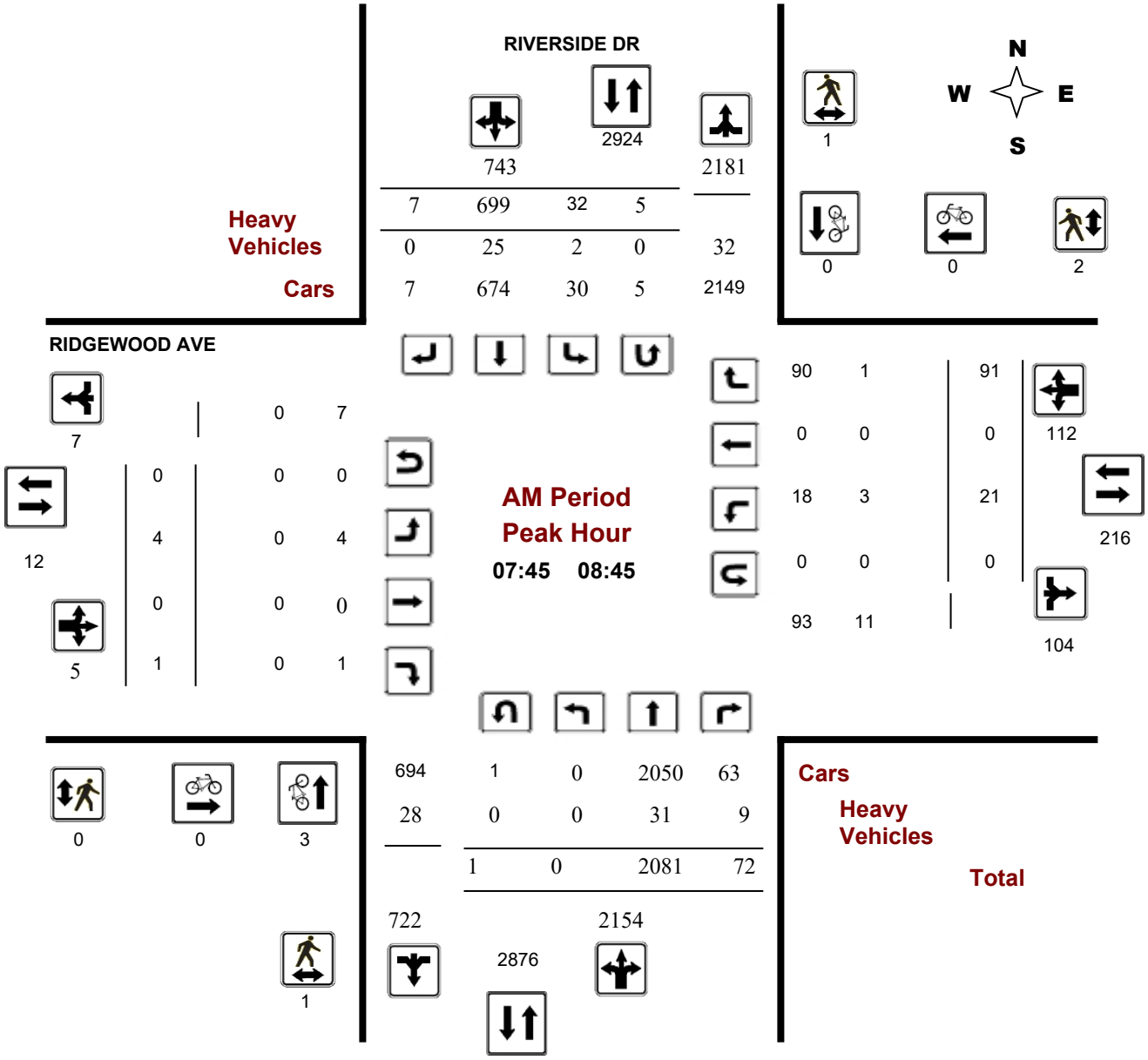
Transportation Services - Traffic Services

Turning Movement Count - Peak Hour Diagram

RIDGEWOOD AVE @ RIVERSIDE DR

Survey Date: Wednesday, March 06, 2019 **WO No:** 38313

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



Comments

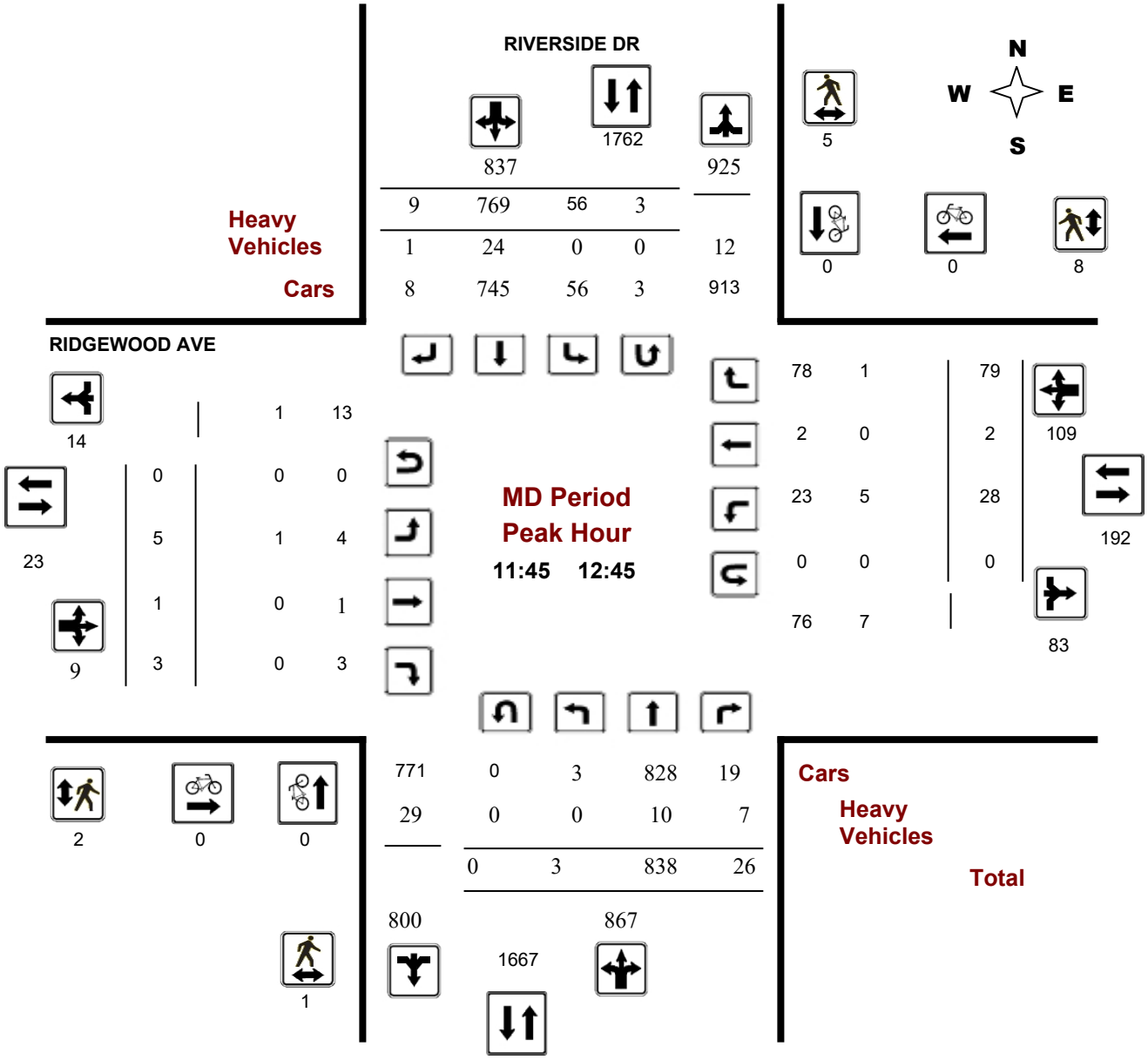
Transportation Services - Traffic Services

Turning Movement Count - Peak Hour Diagram

RIDGEWOOD AVE @ RIVERSIDE DR

Survey Date: Wednesday, March 06, 2019 **WO No:** 38313

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



Comments

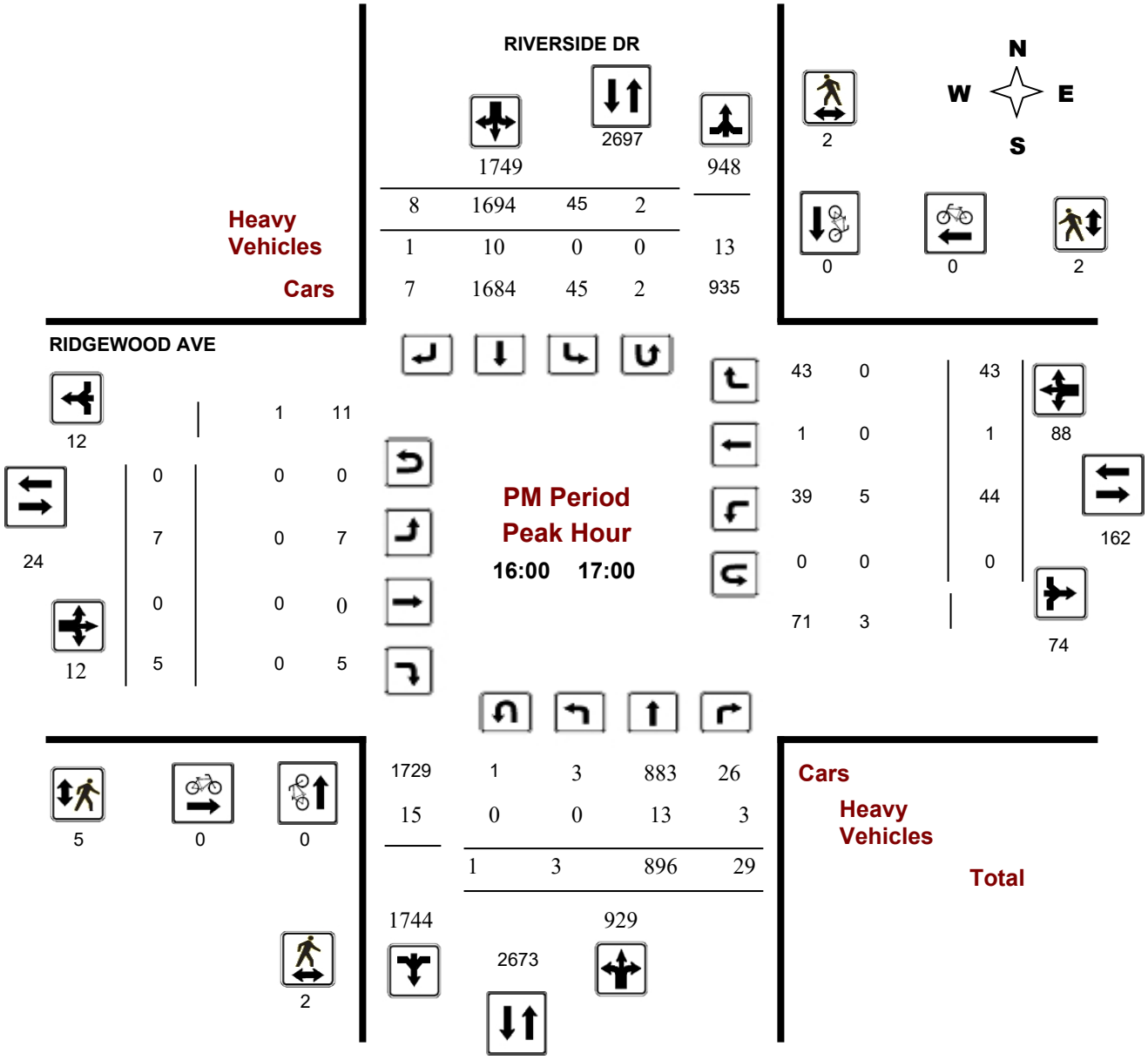
Transportation Services - Traffic Services

Turning Movement Count - Peak Hour Diagram

RIDGEWOOD AVE @ RIVERSIDE DR

Survey Date: Wednesday, March 06, 2019 **WO No:** 38313

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



Comments

Transportation Services - Traffic Services

Turning Movement Count - Study Results

RIDGEWOOD AVE @ RIVERSIDE DR

Survey Date: Wednesday, March 06, 2019 **WO No:** 38313

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

Full Study Summary (8 HR Standard)

Survey Date: Wednesday, March 06, 2019

Total Observed U-Turns

Northbound: 4 Southbound: 26

Eastbound: 0 Westbound: 0

AADT Factor

1.00

	RIVERSIDE DR									RIDGEWOOD AVE									
	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	1930	48	**1978**	25	624	2	**651**	**2629**	2	0	1	**3**	20	1	88	**109**	**112**	**2741**
08:00 09:00	1	2019	68	**2088**	42	730	7	**779**	**2867**	2	0	1	**3**	23	0	89	**112**	**115**	**2982**
09:00 10:00	3	1223	69	**1295**	68	609	2	**679**	**1974**	0	0	0	**0**	30	3	92	**125**	**125**	**2099**
11:30 12:30	7	811	25	**843**	59	765	6	**830**	**1673**	8	1	4	**13**	28	2	80	**110**	**123**	**1796**
12:30 13:30	1	828	29	**858**	49	727	12	**788**	**1646**	6	0	4	**10**	30	0	72	**102**	**112**	**1758**
15:00 16:00	5	798	32	**835**	51	1591	9	**1651**	**2486**	7	1	4	**12**	33	0	51	**84**	**96**	**2582**
16:00 17:00	3	896	29	**928**	45	1694	8	**1747**	**2675**	7	0	5	**12**	44	1	43	**88**	**100**	**2775**
17:00 18:00	6	877	18	**901**	46	1332	9	**1387**	**2288**	12	1	7	**20**	30	2	51	**83**	**103**	**2391**
Sub Total	26	9382	318	**9726**	385	8072	55	**8512**	**18238**	44	3	26	**73**	238	9	566	**813**	**886**	**19124**
U Turns				**4**				**26**	**30**				**0**				**0**	**0**	**30**
Total	26	9382	318	**9730**	385	8072	55	**8538**	**18268**	44	3	26	**73**	238	9	566	**813**	**886**	**19154**
EQ 12Hr	36	13041	442	**13525**	535	11220	76	**11868**	**25393**	61	4	36	**101**	331	13	787	**1130**	**1232**	**26624**
Note: These values are calculated by multiplying the totals by the appropriate expansion factor.														**1.39**					
AVG 12Hr	34	12290	417	**12746**	504	10574	72	**11185**	**25393**	58	4	34	**96**	312	12	741	**1065**	**1232**	**26624**
Note: These volumes are calculated by multiplying the Equivalent 12 hr. totals by the AADT factor.														**1**					
AVG 24Hr	45	16100	546	**16698**	661	13852	94	**14652**	**31350**	76	5	45	**125**	408	15	971	**1395**	**1520**	**32870**
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

RIDGEWOOD AVE @ RIVERSIDE DR

Survey Date: Wednesday, March 06, 2019 **WO No:** 38313

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

Full Study 15 Minute Increments

		RIVERSIDE DR									RIDGEWOOD AVE									
		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	425	8	433	6	120	0	128	11	0	0	1	1	4	1	13	18	11	580
07:15	07:30	0	473	11	484	7	167	0	174	6	0	0	0	0	4	0	22	26	6	684
07:30	07:45	0	537	13	550	7	171	0	178	13	0	0	0	0	5	0	29	34	13	762
07:45	08:00	0	495	16	511	5	166	2	173	16	2	0	0	2	7	0	24	31	16	717
08:00	08:15	0	547	26	573	5	180	1	186	19	0	0	0	0	3	0	24	27	19	786
08:15	08:30	0	496	14	510	9	175	1	189	14	1	0	0	1	8	0	19	27	14	727
08:30	08:45	0	543	16	560	13	178	3	195	18	1	0	1	2	3	0	24	27	18	784
08:45	09:00	1	433	12	446	15	197	2	214	11	0	0	0	0	9	0	22	31	11	691
09:00	09:15	2	330	14	346	11	148	1	160	19	0	0	0	0	10	0	26	36	19	542
09:15	09:30	0	321	15	336	16	159	0	178	10	0	0	0	0	7	0	19	26	10	540
09:30	09:45	1	305	20	326	25	165	1	191	12	0	0	0	0	8	1	22	31	12	548
09:45	10:00	0	267	20	287	16	137	0	156	8	0	0	0	0	5	2	25	32	8	475
11:30	11:45	4	198	5	207	11	171	1	184	10	4	0	1	5	8	0	18	26	10	422
11:45	12:00	0	208	7	215	17	201	2	221	13	2	0	1	3	8	0	23	31	13	470
12:00	12:15	1	200	5	206	18	220	1	240	10	1	0	0	1	7	1	22	30	10	477
12:15	12:30	2	205	8	215	13	173	2	189	9	1	1	2	4	5	1	17	23	9	431
12:30	12:45	0	225	6	231	8	175	4	187	10	1	0	0	1	8	0	17	25	10	444
12:45	13:00	1	224	8	233	19	195	2	216	12	1	0	1	2	7	0	11	18	12	469
13:00	13:15	0	188	6	194	9	180	3	192	8	1	0	1	2	6	0	20	26	8	414
13:15	13:30	0	191	9	200	13	177	3	193	10	3	0	2	5	9	0	24	33	10	431
15:00	15:15	0	201	4	205	11	377	1	390	10	0	0	2	2	8	0	11	19	10	616
15:15	15:30	1	206	10	217	16	380	4	400	9	3	0	0	3	6	0	18	24	9	644
15:30	15:45	1	210	6	217	12	438	3	453	10	3	0	1	4	8	0	13	21	10	695
15:45	16:00	3	181	12	197	12	396	1	410	4	1	1	1	3	11	0	9	20	4	630
16:00	16:15	1	247	10	259	17	429	2	449	7	1	0	0	1	7	1	11	19	7	728
16:15	16:30	1	217	9	227	9	419	2	430	11	1	0	4	5	15	0	18	33	11	695
16:30	16:45	0	222	3	225	10	436	4	451	5	3	0	1	4	16	0	9	25	5	705
16:45	17:00	1	210	7	218	9	410	0	419	4	2	0	0	2	6	0	5	11	4	650
17:00	17:15	0	224	5	229	10	375	2	387	8	5	0	4	9	11	1	11	23	8	648
17:15	17:30	2	215	7	224	13	332	2	350	4	3	1	3	7	6	0	16	22	4	603
17:30	17:45	0	236	4	240	11	348	3	364	7	1	0	0	1	5	0	18	23	7	628
17:45	18:00	4	202	2	209	12	277	2	291	3	3	0	0	3	8	1	6	15	3	518
Total:		26	9382	318	9730	385	8072	55	8538	321	44	3	26	73	238	9	566	813	321	19,154

Note: U-Turns are included in Totals.

Transportation Services - Traffic Services

Turning Movement Count - Study Results

RIDGEWOOD AVE @ RIVERSIDE DR

Survey Date: Wednesday, March 06, 2019 **WO No:** 38313

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

Full Study Cyclist Volume

Time Period		RIVERSIDE DR			RIDGEWOOD AVE			
		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	2	0	2	0	0	0	2
08:00	08:15	1	0	1	0	0	0	1
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	0	0	0
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	0	0	0	0
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	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	0	0	0
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	0	0	0	0	0	0	0
Total		3	0	**3**	0	0	0	3

Transportation Services - Traffic Services

Turning Movement Count - Study Results

RIDGEWOOD AVE @ RIVERSIDE DR

Survey Date: Wednesday, March 06, 2019 **WO No:** 38313

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

Full Study Pedestrian Volume

	RIVERSIDE DR			RIDGEWOOD AVE			
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	1	0	**1**	0	0	**0**	**1**
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	1	**1**	**1**
08:15 08:30	0	0	**0**	0	0	**0**	**0**
08:30 08:45	1	1	**2**	0	0	**0**	**2**
08:45 09:00	1	0	**1**	1	1	**2**	**3**
09:00 09:15	0	1	**1**	0	0	**0**	**1**
09:15 09:30	0	0	**0**	1	0	**1**	**1**
09:30 09:45	1	1	**2**	0	0	**0**	**2**
09:45 10:00	0	1	**1**	0	1	**1**	**2**
11:30 11:45	0	0	**0**	1	0	**1**	**1**
11:45 12:00	0	3	**3**	0	0	**0**	**3**
12:00 12:15	0	0	**0**	2	4	**6**	**6**
12:15 12:30	1	2	**3**	0	3	**3**	**6**
12:30 12:45	0	0	**0**	0	1	**1**	**1**
12:45 13:00	1	1	**2**	3	0	**3**	**5**
13:00 13:15	0	0	**0**	0	1	**1**	**1**
13:15 13:30	0	0	**0**	0	1	**1**	**1**
15:00 15:15	1	1	**2**	0	3	**3**	**5**
15:15 15:30	0	0	**0**	1	1	**2**	**2**
15:30 15:45	0	1	**1**	1	0	**1**	**2**
15:45 16:00	0	1	**1**	0	2	**2**	**3**
16:00 16:15	0	2	**2**	2	1	**3**	**5**
16:15 16:30	1	0	**1**	0	0	**0**	**1**
16:30 16:45	1	0	**1**	2	1	**3**	**4**
16:45 17:00	0	0	**0**	1	0	**1**	**1**
17:00 17:15	0	4	**4**	0	4	**4**	**8**
17:15 17:30	1	0	**1**	1	1	**2**	**3**
17:30 17:45	1	3	**4**	1	2	**3**	**7**
17:45 18:00	0	0	**0**	2	0	**2**	**2**
Total	11	22	**33**	19	29	**48**	**81**

Transportation Services - Traffic Services

Turning Movement Count - Study Results

RIDGEWOOD AVE @ RIVERSIDE DR

Survey Date: Wednesday, March 06, 2019 **WO No:** 38313

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

Full Study Heavy Vehicles

		RIVERSIDE DR									RIDGEWOOD AVE									
		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	5	1	**6**	0	5	0	**5**	**11**	0	0	0	**0**	1	0	0	**1**	**1**	**12**
07:15	07:30	0	4	0	**4**	1	1	0	**2**	**6**	0	0	0	**0**	0	0	0	**0**	**0**	**6**
07:30	07:45	0	5	2	**7**	1	5	0	**6**	**13**	0	0	0	**0**	1	0	0	**1**	**1**	**14**
07:45	08:00	0	5	3	**8**	0	8	0	**8**	**16**	0	0	0	**0**	1	0	1	**2**	**2**	**18**
08:00	08:15	0	11	3	**14**	0	5	0	**5**	**19**	0	0	0	**0**	1	0	0	**1**	**1**	**20**
08:15	08:30	0	7	2	**9**	0	5	0	**5**	**14**	0	0	0	**0**	1	0	0	**1**	**1**	**15**
08:30	08:45	0	8	1	**9**	2	7	0	**9**	**18**	0	0	0	**0**	0	0	0	**0**	**0**	**18**
08:45	09:00	0	5	1	**6**	0	5	0	**5**	**11**	0	0	0	**0**	2	0	1	**3**	**3**	**14**
09:00	09:15	1	8	5	**14**	0	5	0	**5**	**19**	0	0	0	**0**	2	0	2	**4**	**4**	**23**
09:15	09:30	0	5	2	**7**	0	3	0	**3**	**10**	0	0	0	**0**	1	0	0	**1**	**1**	**11**
09:30	09:45	0	11	0	**11**	0	1	0	**1**	**12**	0	0	0	**0**	2	0	2	**4**	**4**	**16**
09:45	10:00	0	6	1	**7**	0	1	0	**1**	**8**	0	0	0	**0**	1	0	0	**1**	**1**	**9**
11:30	11:45	0	3	1	**4**	1	5	0	**6**	**10**	0	0	0	**0**	1	0	0	**1**	**1**	**11**
11:45	12:00	0	6	2	**8**	0	4	1	**5**	**13**	1	0	0	**1**	1	0	0	**1**	**2**	**15**
12:00	12:15	0	3	0	**3**	0	7	0	**7**	**10**	0	0	0	**0**	1	0	0	**1**	**1**	**11**
12:15	12:30	0	1	3	**4**	0	5	0	**5**	**9**	0	0	0	**0**	1	0	0	**1**	**1**	**10**
12:30	12:45	0	0	2	**2**	0	8	0	**8**	**10**	0	0	0	**0**	2	0	1	**3**	**3**	**13**
12:45	13:00	0	8	1	**9**	0	3	0	**3**	**12**	0	0	0	**0**	2	0	1	**3**	**3**	**15**
13:00	13:15	0	3	1	**4**	0	4	0	**4**	**8**	0	0	0	**0**	1	0	0	**1**	**1**	**9**
13:15	13:30	0	7	2	**9**	0	1	0	**1**	**10**	0	0	0	**0**	2	0	0	**2**	**2**	**12**
15:00	15:15	0	2	1	**3**	1	6	0	**7**	**10**	0	0	0	**0**	1	0	1	**2**	**2**	**12**
15:15	15:30	0	6	0	**6**	0	3	0	**3**	**9**	0	0	0	**0**	0	0	2	**2**	**2**	**11**
15:30	15:45	0	5	2	**7**	0	3	0	**3**	**10**	0	0	0	**0**	1	0	0	**1**	**1**	**11**
15:45	16:00	0	1	2	**3**	0	1	0	**1**	**4**	0	0	0	**0**	1	0	1	**2**	**2**	**6**
16:00	16:15	0	4	1	**5**	0	1	1	**2**	**7**	0	0	0	**0**	1	0	0	**1**	**1**	**8**
16:15	16:30	0	5	1	**6**	0	5	0	**5**	**11**	0	0	0	**0**	2	0	0	**2**	**2**	**13**
16:30	16:45	0	2	1	**3**	0	2	0	**2**	**5**	0	0	0	**0**	1	0	0	**1**	**1**	**6**
16:45	17:00	0	2	0	**2**	0	2	0	**2**	**4**	0	0	0	**0**	1	0	0	**1**	**1**	**5**
17:00	17:15	0	5	2	**7**	0	1	0	**1**	**8**	0	0	0	**0**	2	0	0	**2**	**2**	**10**
17:15	17:30	0	2	1	**3**	0	1	0	**1**	**4**	0	0	0	**0**	1	0	0	**1**	**1**	**5**
17:30	17:45	0	4	0	**4**	0	3	0	**3**	**7**	0	0	0	**0**	1	0	0	**1**	**1**	**8**
17:45	18:00	0	0	1	**1**	0	2	0	**2**	**3**	0	0	0	**0**	4	0	0	**4**	**4**	**7**
Total:	None	1	149	45	**195**	6	118	2	**126**	**321**	1	0	0	**1**	40	0	12	**52**	**53**	**374**

Transportation Services - Traffic Services

Turning Movement Count - Study Results

RIDGEWOOD AVE @ RIVERSIDE DR

Survey Date: Wednesday, March 06, 2019 **WO No:** 38313

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

Full Study 15 Minute U-Turn Total

Time Period		RIVERSIDE DR Northbound U-Turn Total	RIVERSIDE DR Southbound U-Turn Total	RIDGEWOOD AVE Eastbound U-Turn Total	RIDGEWOOD AVE Westbound U-Turn Total	Total
07:00	07:15	0	2	0	0	2
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	4	0	0	4
08:30	08:45	1	1	0	0	2
08:45	09:00	0	0	0	0	0
09:00	09:15	0	0	0	0	0
09:15	09:30	0	3	0	0	3
09:30	09:45	0	0	0	0	0
09:45	10:00	0	3	0	0	3
11:30	11:45	0	1	0	0	1
11:45	12:00	0	1	0	0	1
12:00	12:15	0	1	0	0	1
12:15	12:30	0	1	0	0	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	1	0	0	1
15:15	15:30	0	0	0	0	0
15:30	15:45	0	0	0	0	0
15:45	16:00	1	1	0	0	2
16:00	16:15	1	1	0	0	2
16:15	16:30	0	0	0	0	0
16:30	16:45	0	1	0	0	1
16:45	17:00	0	0	0	0	0
17:00	17:15	0	0	0	0	0
17:15	17:30	0	3	0	0	3
17:30	17:45	0	2	0	0	2
17:45	18:00	1	0	0	0	1
Total		4	26	0	0	30

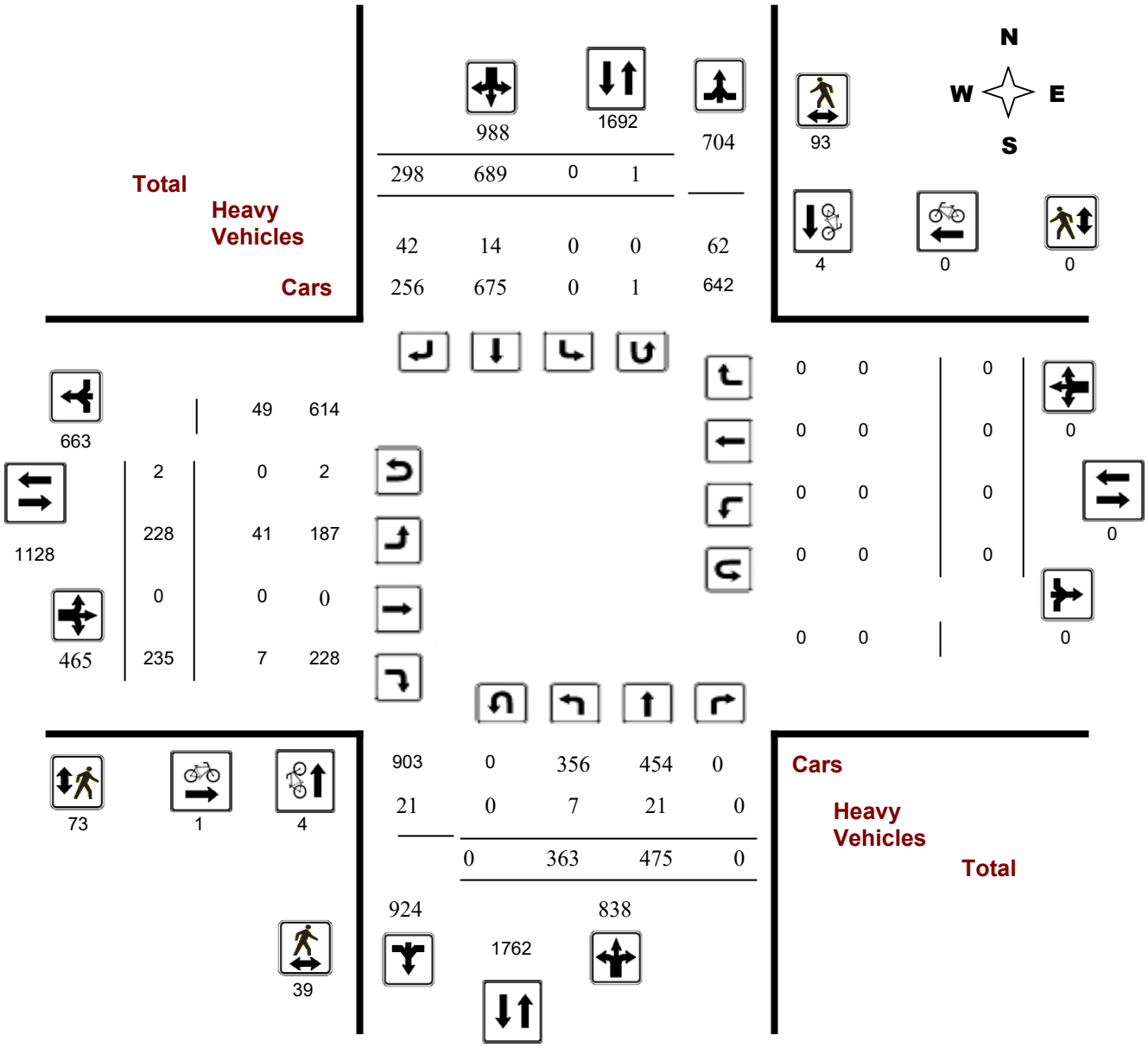
Transportation Services - Traffic Services

Turning Movement Count - Study Results

RIDGEWOOD AVE @ SPRINGLAND DR

Survey Date: Thursday, December 05, 2019
Start Time: 07:00
WO No: 39196
Device: Miovision

Full Study Diagram



Transportation Services - Traffic Services

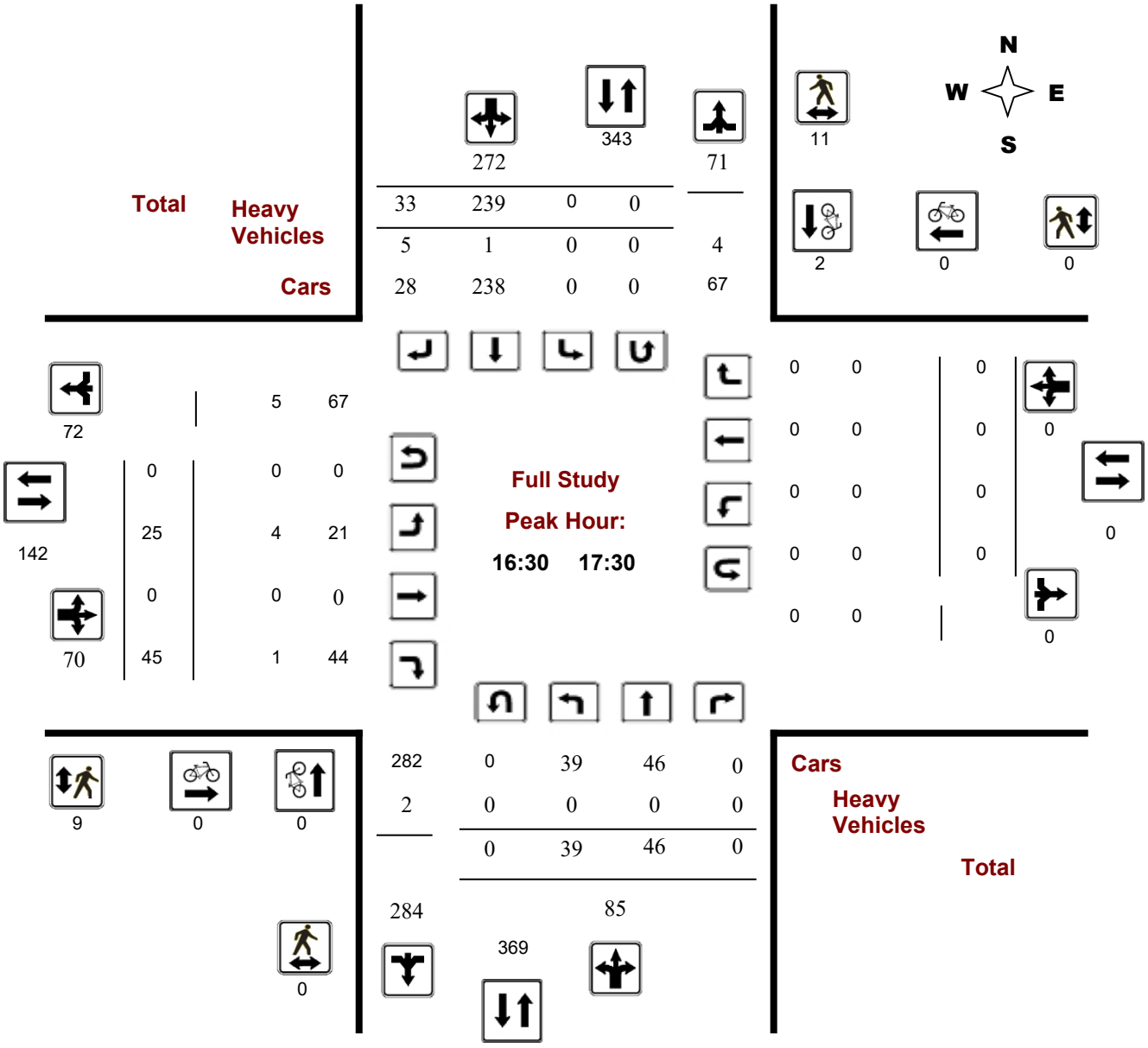
Turning Movement Count - Study Results

RIDGEWOOD AVE @ SPRINGLAND DR

Survey Date: Thursday, December 05, 2019 **WO No:** 39196

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

Full Study Peak Hour Diagram



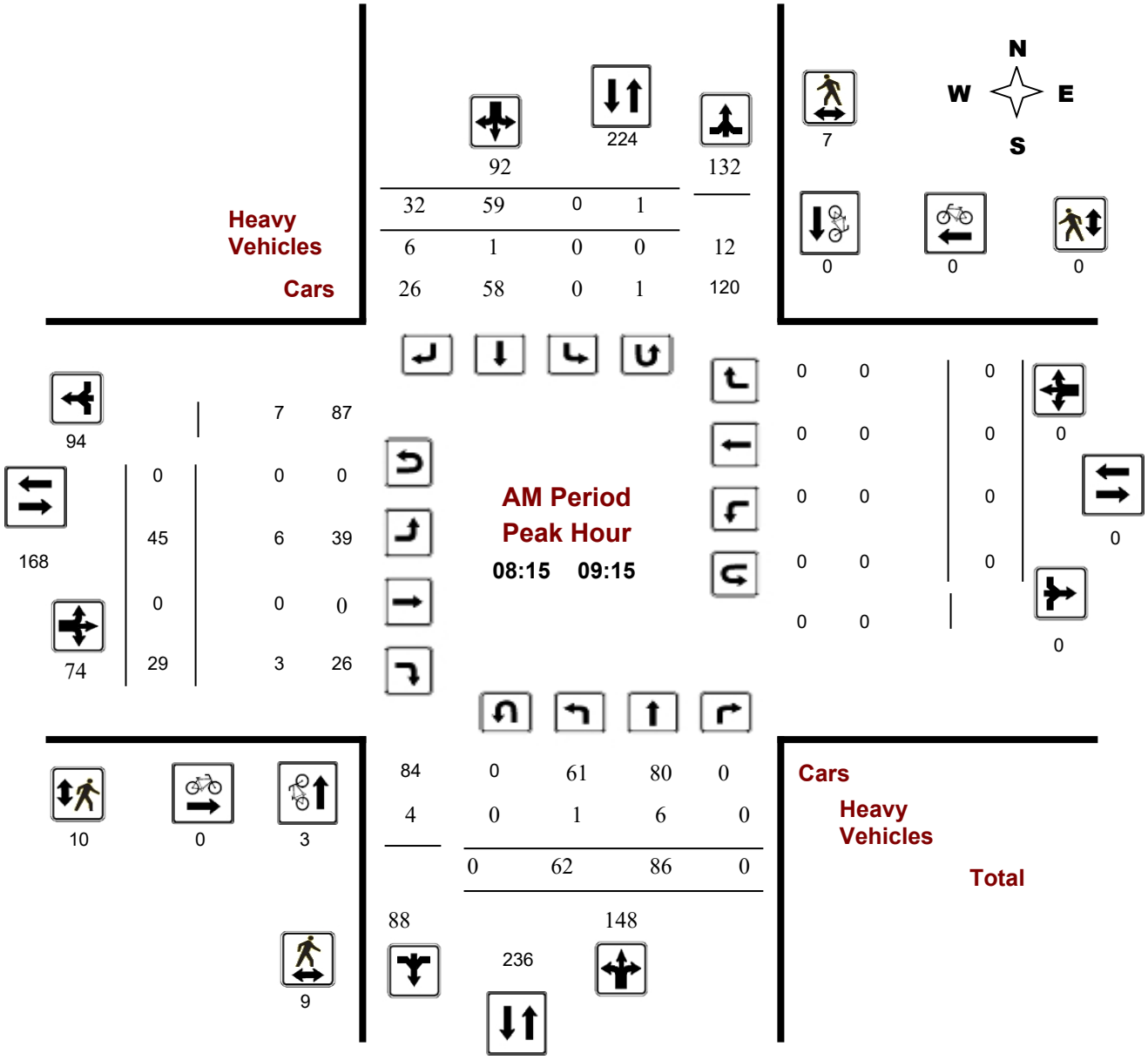
Transportation Services - Traffic Services

Turning Movement Count - Peak Hour Diagram

RIDGEWOOD AVE @ SPRINGLAND DR

Survey Date: Thursday, December 05, 2019 **WO No:** 39196

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



Comments

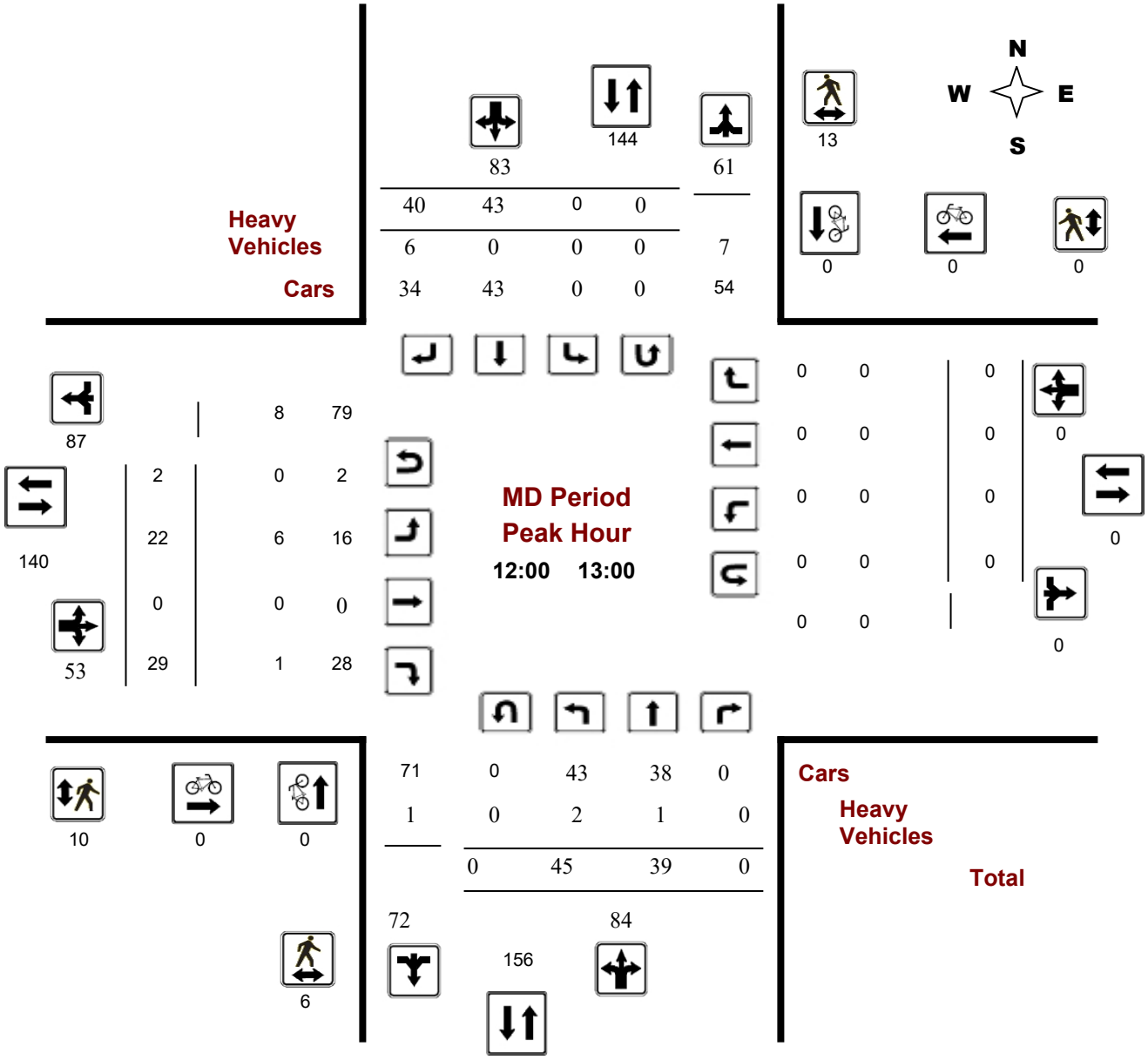
Transportation Services - Traffic Services

Turning Movement Count - Peak Hour Diagram

RIDGEWOOD AVE @ SPRINGLAND DR

Survey Date: Thursday, December 05, 2019 **WO No:** 39196

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



Comments

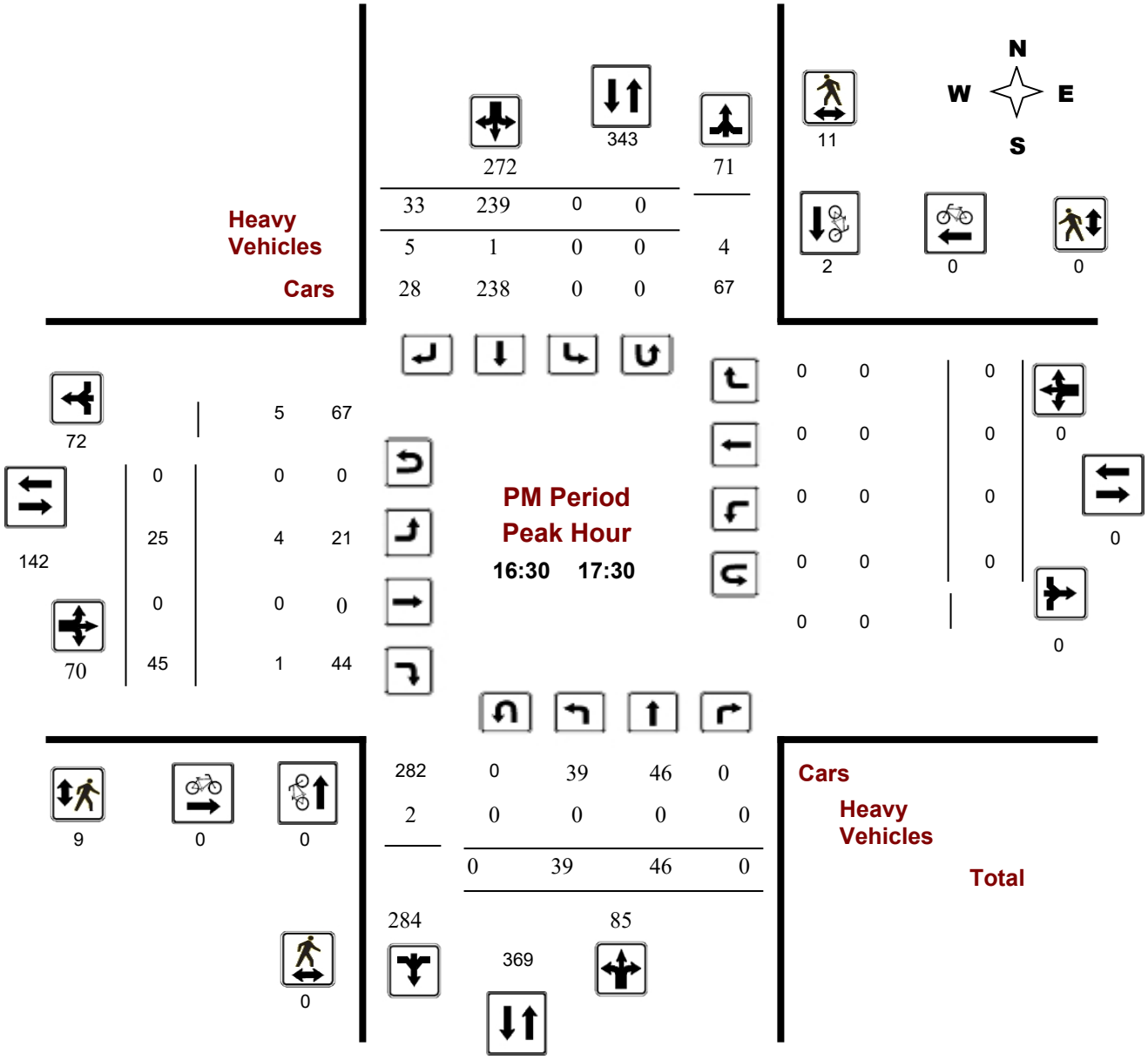
Transportation Services - Traffic Services

Turning Movement Count - Peak Hour Diagram

RIDGEWOOD AVE @ SPRINGLAND DR

Survey Date: Thursday, December 05, 2019 **WO No:** 39196

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



Comments

Transportation Services - Traffic Services

Turning Movement Count - Study Results

RIDGEWOOD AVE @ SPRINGLAND DR

Survey Date: Thursday, December 05, 2019 **WO No:** 39196

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

Full Study Summary (8 HR Standard)

Survey Date: Thursday, December 05, 2019

Total Observed U-Turns

Northbound: 0 Southbound: 1

Eastbound: 2 Westbound: 0

AADT Factor

1.00

	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	48	68	0	**116**	0	32	40	**72**	**188**	28	0	13	**41**	0	0	0	**0**	**41**	**229**
08:00 09:00	48	94	0	**142**	0	52	37	**89**	**231**	49	0	33	**82**	0	0	0	**0**	**82**	**313**
09:00 10:00	72	65	0	**137**	0	39	26	**65**	**202**	34	0	20	**54**	0	0	0	**0**	**54**	**256**
11:30 12:30	46	35	0	**81**	0	39	34	**73**	**154**	23	0	25	**48**	0	0	0	**0**	**48**	**202**
12:30 13:30	40	42	0	**82**	0	42	41	**83**	**165**	18	0	24	**42**	0	0	0	**0**	**42**	**207**
15:00 16:00	36	61	0	**97**	0	95	45	**140**	**237**	24	0	38	**62**	0	0	0	**0**	**62**	**299**
16:00 17:00	33	45	0	**78**	0	239	37	**276**	**354**	27	0	46	**73**	0	0	0	**0**	**73**	**427**
17:00 18:00	40	65	0	**105**	0	151	38	**189**	**294**	25	0	36	**61**	0	0	0	**0**	**61**	**355**
Sub Total	363	475	0	**838**	0	689	298	**987**	**1825**	228	0	235	**463**	0	0	0	**0**	**463**	**2288**
U Turns				**0**				**1**	**1**				**2**				**0**	**2**	**3**
Total	363	475	0	**838**	0	689	298	**988**	**1826**	228	0	235	**465**	0	0	0	**0**	**465**	**2291**
EQ 12Hr	505	660	0	**1165**	0	958	414	**1373**	**2538**	317	0	327	**646**	0	0	0	**0**	**646**	**3184**
Note: These values are calculated by multiplying the totals by the appropriate expansion factor.														**1.39**					
AVG 12Hr	476	622	0	**1098**	0	903	390	**1294**	**2538**	299	0	308	**609**	0	0	0	**0**	**646**	**3184**
Note: These volumes are calculated by multiplying the Equivalent 12 hr. totals by the AADT factor.														**1**					
AVG 24Hr	623	815	0	**1438**	0	1182	511	**1696**	**3134**	391	0	403	**798**	0	0	0	**0**	**798**	**3932**
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

RIDGEWOOD AVE @ SPRINGLAND DR

Survey Date: Thursday, December 05, 2019 **WO No:** 39196

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

Full Study 15 Minute Increments

		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	8	12	0	20	0	6	8	14	2	3	0	2	5	0	0	0	0	2	39
07:15	07:30	6	13	0	19	0	8	10	18	2	9	0	1	10	0	0	0	0	2	47
07:30	07:45	18	22	0	40	0	10	7	17	4	10	0	3	13	0	0	0	0	4	70
07:45	08:00	16	21	0	37	0	8	15	23	3	6	0	7	13	0	0	0	0	3	73
08:00	08:15	10	32	0	42	0	11	12	23	4	11	0	7	18	0	0	0	0	4	83
08:15	08:30	19	19	0	38	0	12	11	23	5	13	0	8	21	0	0	0	0	5	82
08:30	08:45	10	22	0	32	0	12	4	16	2	12	0	8	20	0	0	0	0	2	68
08:45	09:00	9	21	0	30	0	17	10	27	4	13	0	10	23	0	0	0	0	4	80
09:00	09:15	24	24	0	48	0	18	7	26	3	7	0	3	10	0	0	0	0	3	84
09:15	09:30	13	17	0	30	0	4	9	13	1	9	0	4	13	0	0	0	0	1	56
09:30	09:45	21	14	0	35	0	10	6	16	1	10	0	5	15	0	0	0	0	1	66
09:45	10:00	14	10	0	24	0	7	4	11	1	8	0	8	16	0	0	0	0	1	51
11:30	11:45	13	12	0	25	0	6	11	17	3	5	0	6	11	0	0	0	0	3	53
11:45	12:00	10	9	0	19	0	14	5	19	2	6	0	6	12	0	0	0	0	2	50
12:00	12:15	10	12	0	22	0	9	12	21	1	5	0	5	10	0	0	0	0	1	53
12:15	12:30	13	2	0	15	0	10	6	16	1	7	0	8	15	0	0	0	0	1	46
12:30	12:45	7	14	0	21	0	15	11	26	3	4	0	9	14	0	0	0	0	3	61
12:45	13:00	15	11	0	26	0	9	11	20	4	6	0	7	14	0	0	0	0	4	60
13:00	13:15	6	10	0	16	0	7	7	14	2	2	0	6	8	0	0	0	0	2	38
13:15	13:30	12	7	0	19	0	11	12	23	3	6	0	2	8	0	0	0	0	3	50
15:00	15:15	7	18	0	25	0	24	15	39	4	6	0	6	12	0	0	0	0	4	76
15:15	15:30	6	11	0	17	0	25	10	35	6	5	0	12	17	0	0	0	0	6	69
15:30	15:45	12	11	0	23	0	18	10	28	2	3	0	9	12	0	0	0	0	2	63
15:45	16:00	11	21	0	32	0	28	10	38	3	10	0	11	21	0	0	0	0	3	91
16:00	16:15	9	13	0	22	0	41	11	52	4	7	0	9	16	0	0	0	0	4	90
16:15	16:30	7	16	0	23	0	60	7	67	4	8	0	12	20	0	0	0	0	4	110
16:30	16:45	9	8	0	17	0	72	12	84	1	5	0	13	18	0	0	0	0	1	119
16:45	17:00	8	8	0	16	0	66	7	73	2	7	0	12	19	0	0	0	0	2	108
17:00	17:15	9	13	0	22	0	45	6	51	2	5	0	10	15	0	0	0	0	2	88
17:15	17:30	13	17	0	30	0	56	8	64	1	8	0	10	18	0	0	0	0	1	112
17:30	17:45	6	20	0	26	0	33	15	48	2	4	0	12	16	0	0	0	0	2	90
17:45	18:00	12	15	0	27	0	17	9	26	2	8	0	4	12	0	0	0	0	2	65
Total:		363	475	0	838	0	689	298	988	84	228	0	235	465	0	0	0	0	84	2,291

Note: U-Turns are included in Totals.

Transportation Services - Traffic Services

Turning Movement Count - Study Results

RIDGEWOOD AVE @ SPRINGLAND DR

Survey Date: Thursday, December 05, 2019 **WO No:** 39196

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

Full Study Cyclist Volume

Time Period		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	1	1	0	0	0	1
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	2	0	2	0	0	0	2
08:30	08:45	1	0	1	0	0	0	1
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	1	0	1	0	0	0	1
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	0	0	0
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	0	0	0
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	1	0	1	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	1	1	0	0	0	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		4	4	**8**	1	0	1	9

Transportation Services - Traffic Services

Turning Movement Count - Study Results

RIDGEWOOD AVE @ SPRINGLAND DR

Survey Date: Thursday, December 05, 2019 **WO No:** 39196

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

Full Study Pedestrian Volume

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	1	0	**1**	1	0	**1**	**2**
07:15 07:30	1	1	**2**	0	0	**0**	**2**
07:30 07:45	3	5	**8**	5	0	**5**	**13**
07:45 08:00	2	0	**2**	3	0	**3**	**5**
08:00 08:15	1	1	**2**	1	0	**1**	**3**
08:15 08:30	0	4	**4**	1	0	**1**	**5**
08:30 08:45	7	2	**9**	3	0	**3**	**12**
08:45 09:00	2	1	**3**	3	0	**3**	**6**
09:00 09:15	0	0	**0**	3	0	**3**	**3**
09:15 09:30	4	1	**5**	0	0	**0**	**5**
09:30 09:45	1	1	**2**	0	0	**0**	**2**
09:45 10:00	0	0	**0**	0	0	**0**	**0**
11:30 11:45	1	0	**1**	0	0	**0**	**1**
11:45 12:00	2	2	**4**	0	0	**0**	**4**
12:00 12:15	1	7	**8**	1	0	**1**	**9**
12:15 12:30	0	3	**3**	6	0	**6**	**9**
12:30 12:45	3	3	**6**	1	0	**1**	**7**
12:45 13:00	2	0	**2**	2	0	**2**	**4**
13:00 13:15	0	1	**1**	0	0	**0**	**1**
13:15 13:30	1	2	**3**	0	0	**0**	**3**
15:00 15:15	1	7	**8**	3	0	**3**	**11**
15:15 15:30	2	6	**8**	12	0	**12**	**20**
15:30 15:45	1	3	**4**	4	0	**4**	**8**
15:45 16:00	1	7	**8**	5	0	**5**	**13**
16:00 16:15	0	8	**8**	3	0	**3**	**11**
16:15 16:30	1	6	**7**	1	0	**1**	**8**
16:30 16:45	0	3	**3**	2	0	**2**	**5**
16:45 17:00	0	4	**4**	4	0	**4**	**8**
17:00 17:15	0	1	**1**	2	0	**2**	**3**
17:15 17:30	0	3	**3**	1	0	**1**	**4**
17:30 17:45	1	4	**5**	4	0	**4**	**9**
17:45 18:00	0	7	**7**	2	0	**2**	**9**
Total	39	93	**132**	73	0	**73**	**205**

Transportation Services - Traffic Services

Turning Movement Count - Study Results

RIDGEWOOD AVE @ SPRINGLAND DR

Survey Date: Thursday, December 05, 2019 **WO No:** 39196

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

Full Study Heavy Vehicles

Time Period		Northbound				Southbound					Eastbound				Westbound					
		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	1	0	**1**	0	0	1	**1**	**2**	0	0	0	**0**	0	0	0	**0**	**0**	**2**
07:15	07:30	0	1	0	**1**	0	0	1	**1**	**2**	1	0	1	**2**	0	0	0	**0**	**2**	**4**
07:30	07:45	1	2	0	**3**	0	0	1	**1**	**4**	2	0	0	**2**	0	0	0	**0**	**2**	**6**
07:45	08:00	0	1	0	**1**	0	1	1	**2**	**3**	1	0	0	**1**	0	0	0	**0**	**1**	**4**
08:00	08:15	0	3	0	**3**	0	0	1	**1**	**4**	2	0	0	**2**	0	0	0	**0**	**2**	**6**
08:15	08:30	1	1	0	**2**	0	0	3	**3**	**5**	2	0	0	**2**	0	0	0	**0**	**2**	**7**
08:30	08:45	0	2	0	**2**	0	0	0	**0**	**2**	1	0	2	**3**	0	0	0	**0**	**3**	**5**
08:45	09:00	0	2	0	**2**	0	0	2	**2**	**4**	1	0	1	**2**	0	0	0	**0**	**2**	**6**
09:00	09:15	0	1	0	**1**	0	1	1	**2**	**3**	2	0	0	**2**	0	0	0	**0**	**2**	**5**
09:15	09:30	0	0	0	**0**	0	0	1	**1**	**1**	2	0	0	**2**	0	0	0	**0**	**2**	**3**
09:30	09:45	0	0	0	**0**	0	0	1	**1**	**1**	2	0	0	**2**	0	0	0	**0**	**2**	**3**
09:45	10:00	0	0	0	**0**	0	0	1	**1**	**1**	1	0	0	**1**	0	0	0	**0**	**1**	**2**
11:30	11:45	0	0	0	**0**	0	1	2	**3**	**3**	1	0	0	**1**	0	0	0	**0**	**1**	**4**
11:45	12:00	0	0	0	**0**	0	0	2	**2**	**2**	1	0	0	**1**	0	0	0	**0**	**1**	**3**
12:00	12:15	0	0	0	**0**	0	0	1	**1**	**1**	1	0	0	**1**	0	0	0	**0**	**1**	**2**
12:15	12:30	0	0	0	**0**	0	0	1	**1**	**1**	2	0	0	**2**	0	0	0	**0**	**2**	**3**
12:30	12:45	0	1	0	**1**	0	0	2	**2**	**3**	1	0	1	**2**	0	0	0	**0**	**2**	**5**
12:45	13:00	2	0	0	**2**	0	0	2	**2**	**4**	2	0	0	**2**	0	0	0	**0**	**2**	**6**
13:00	13:15	0	0	0	**0**	0	0	2	**2**	**2**	0	0	0	**0**	0	0	0	**0**	**0**	**2**
13:15	13:30	1	0	0	**1**	0	1	1	**2**	**3**	2	0	0	**2**	0	0	0	**0**	**2**	**5**
15:00	15:15	0	2	0	**2**	0	1	1	**2**	**4**	0	0	0	**0**	0	0	0	**0**	**0**	**4**
15:15	15:30	0	1	0	**1**	0	2	3	**5**	**6**	2	0	0	**2**	0	0	0	**0**	**2**	**8**
15:30	15:45	0	1	0	**1**	0	0	1	**1**	**2**	1	0	0	**1**	0	0	0	**0**	**1**	**3**
15:45	16:00	1	0	0	**1**	0	1	1	**2**	**3**	2	0	0	**2**	0	0	0	**0**	**2**	**5**
16:00	16:15	1	1	0	**2**	0	1	1	**2**	**4**	2	0	0	**2**	0	0	0	**0**	**2**	**6**
16:15	16:30	0	1	0	**1**	0	2	1	**3**	**4**	1	0	1	**2**	0	0	0	**0**	**2**	**6**
16:30	16:45	0	0	0	**0**	0	0	1	**1**	**1**	0	0	0	**0**	0	0	0	**0**	**0**	**1**
16:45	17:00	0	0	0	**0**	0	1	1	**2**	**2**	2	0	1	**3**	0	0	0	**0**	**3**	**5**
17:00	17:15	0	0	0	**0**	0	0	2	**2**	**2**	1	0	0	**1**	0	0	0	**0**	**1**	**3**
17:15	17:30	0	0	0	**0**	0	0	1	**1**	**1**	1	0	0	**1**	0	0	0	**0**	**1**	**2**
17:30	17:45	0	0	0	**0**	0	1	1	**2**	**2**	1	0	0	**1**	0	0	0	**0**	**1**	**3**
17:45	18:00	0	0	0	**0**	0	1	1	**2**	**2**	1	0	0	**1**	0	0	0	**0**	**1**	**3**
Total:	None	7	21	0	**28**	0	14	42	**56**	**84**	41	0	7	**48**	0	0	0	**0**	**48**	**132**

Transportation Services - Traffic Services

Turning Movement Count - Study Results

RIDGEWOOD AVE @ SPRINGLAND DR

Survey Date: Thursday, December 05, 2019 **WO No:** 39196

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

Full Study 15 Minute U-Turn Total

Time Period		Northbound U-Turn Total	Southbound U-Turn Total	Eastbound U-Turn Total	Westbound U-Turn Total	Total
07:00	07:15	0	0	0	0	0
07:15	07:30	0	0	0	0	0
07:30	07:45	0	0	0	0	0
07:45	08:00	0	0	0	0	0
08:00	08:15	0	0	0	0	0
08:15	08:30	0	0	0	0	0
08:30	08:45	0	0	0	0	0
08:45	09:00	0	0	0	0	0
09:00	09:15	0	1	0	0	1
09:15	09:30	0	0	0	0	0
09:30	09:45	0	0	0	0	0
09:45	10:00	0	0	0	0	0
11:30	11:45	0	0	0	0	0
11:45	12:00	0	0	0	0	0
12:00	12:15	0	0	0	0	0
12:15	12:30	0	0	0	0	0
12:30	12:45	0	0	1	0	1
12:45	13:00	0	0	1	0	1
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	1	2	0	3

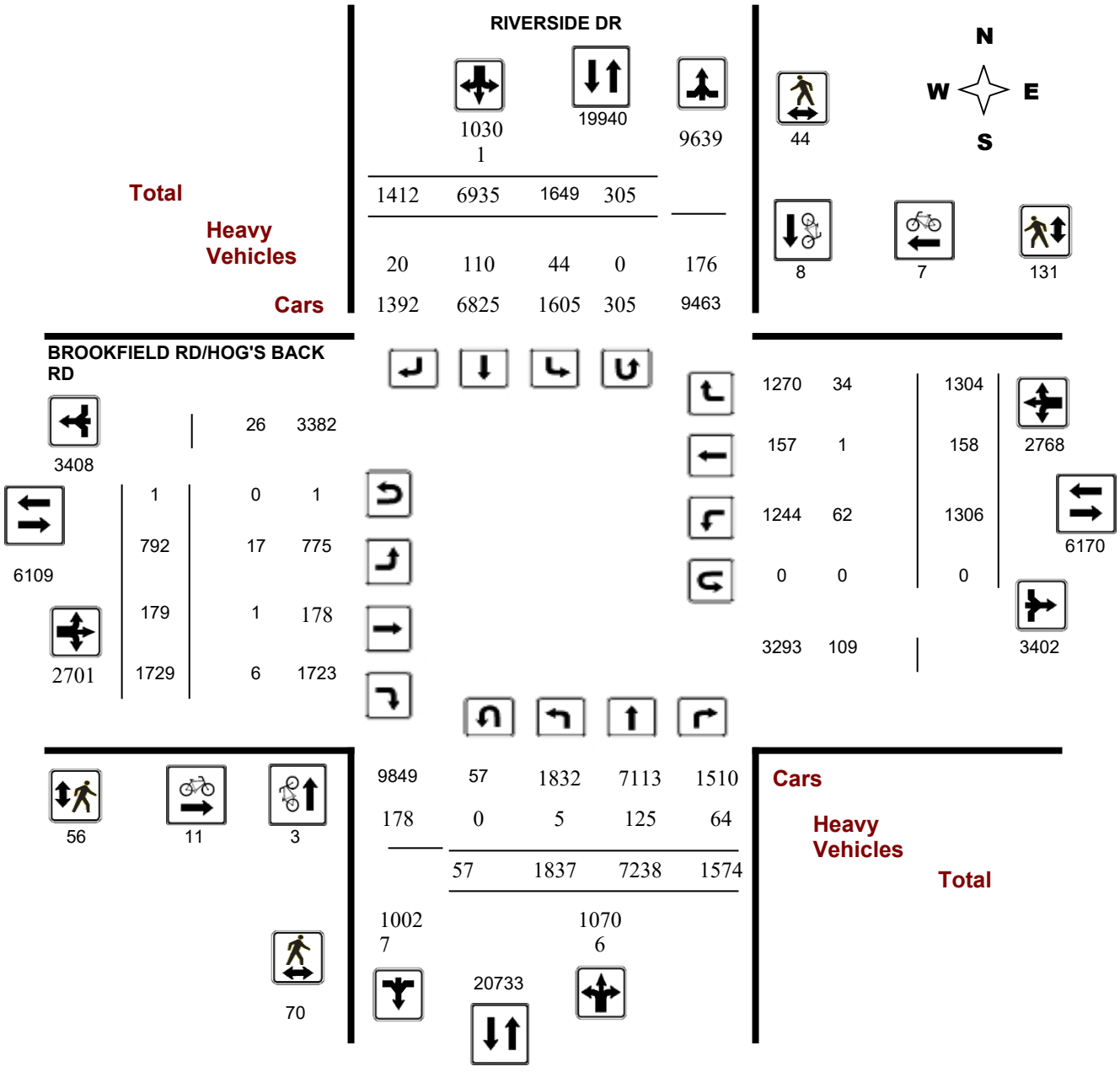
Transportation Services - Traffic Services

Turning Movement Count - Study Results

RIVERSIDE DR @ BROOKFIELD RD/HOG'S BACK RD

Survey Date: Tuesday, March 03, 2020
Start Time: 07:00
WO No: 39649
Device: Miovision

Full Study Diagram



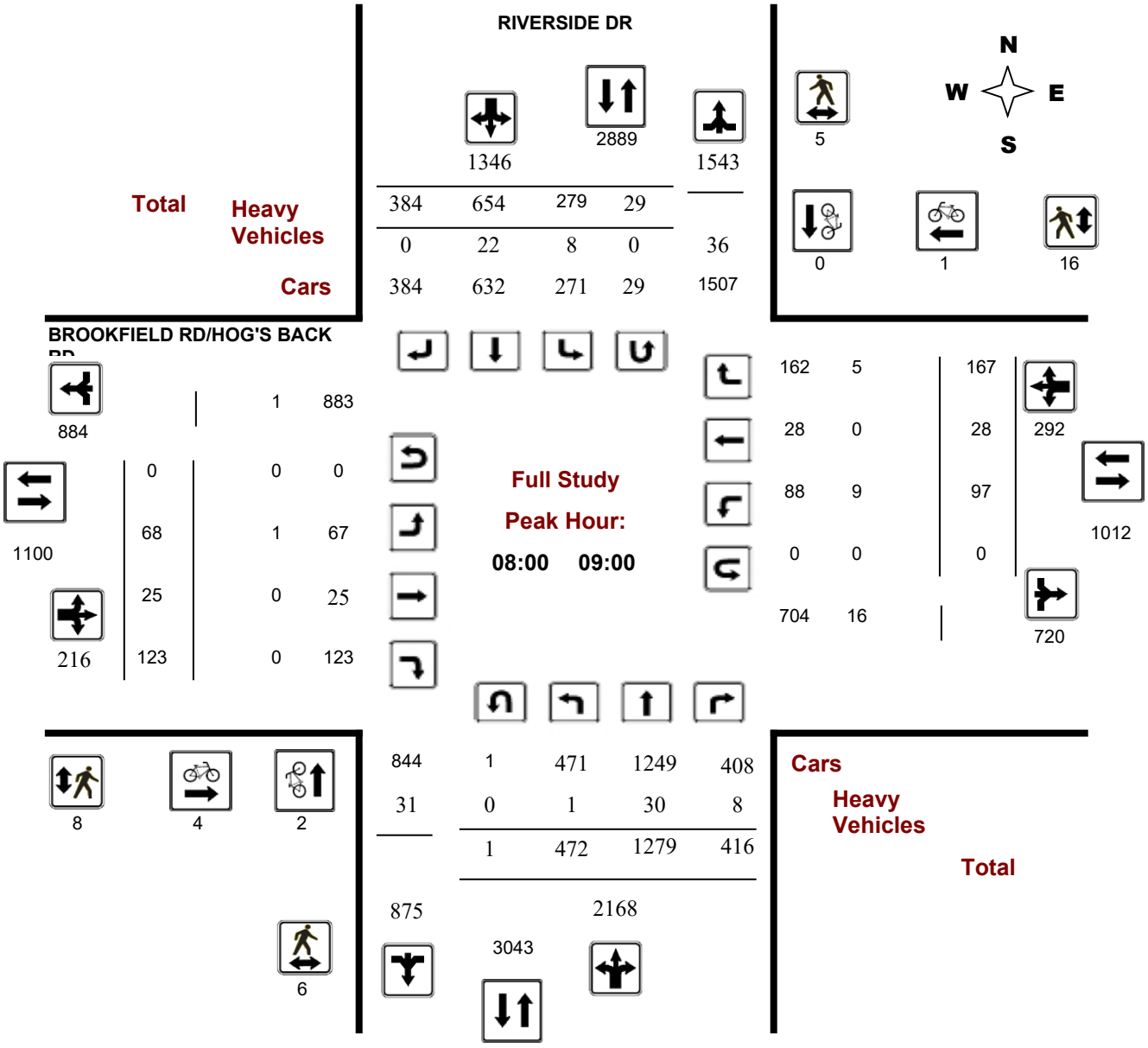
Transportation Services - Traffic Services

Turning Movement Count - Study Results

RIVERSIDE DR @ BROOKFIELD RD/HOG'S BACK RD

Survey Date: Tuesday, March 03, 2020
Start Time: 07:00
WO No: 39649
Device: Miovision

Full Study Peak Hour Diagram



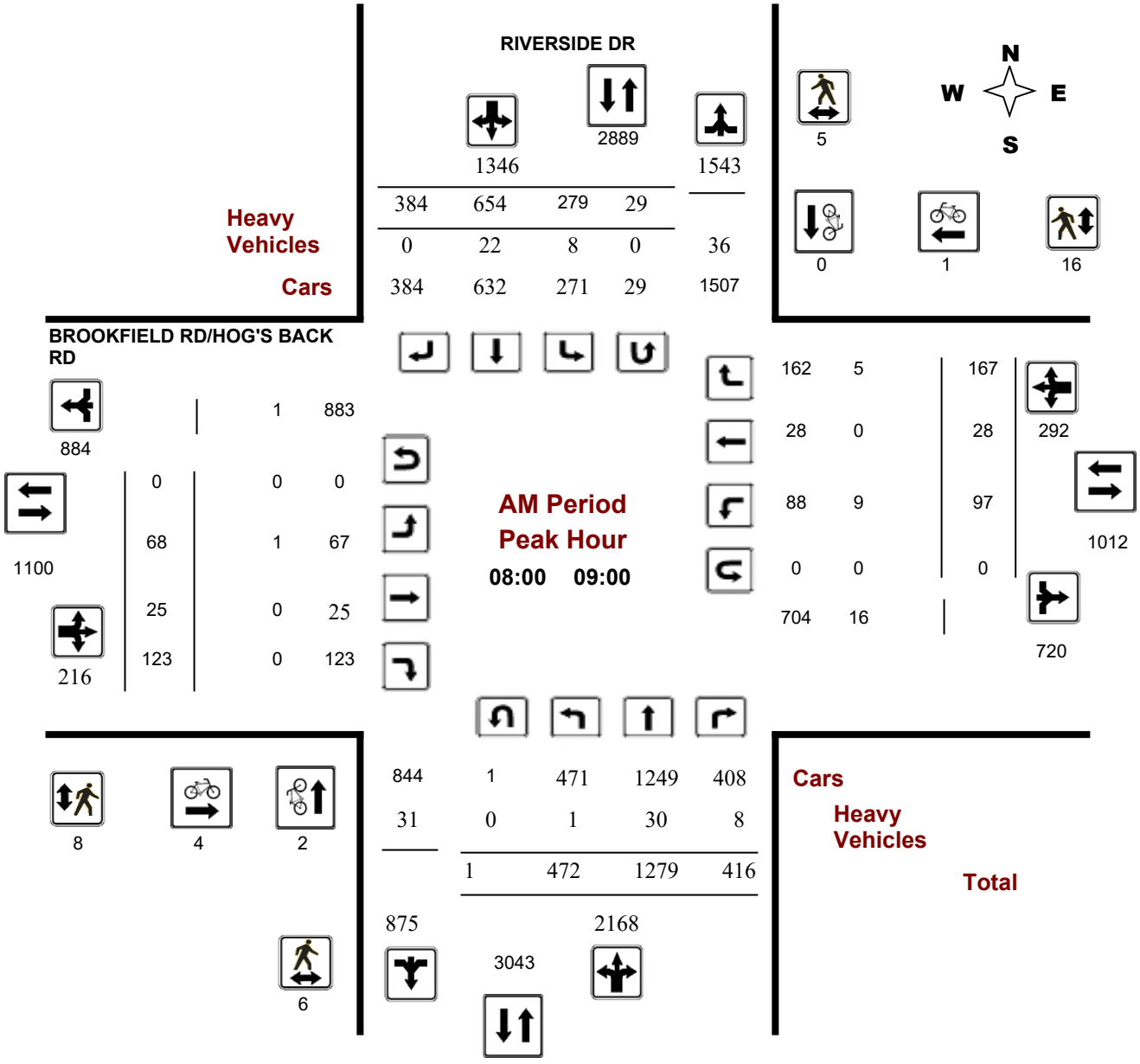
Transportation Services - Traffic Services

Turning Movement Count - Peak Hour Diagram

RIVERSIDE DR @ BROOKFIELD RD/HOG'S BACK RD

Survey Date: Tuesday, March 03, 2020 **WO No:** 39649

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



Comments

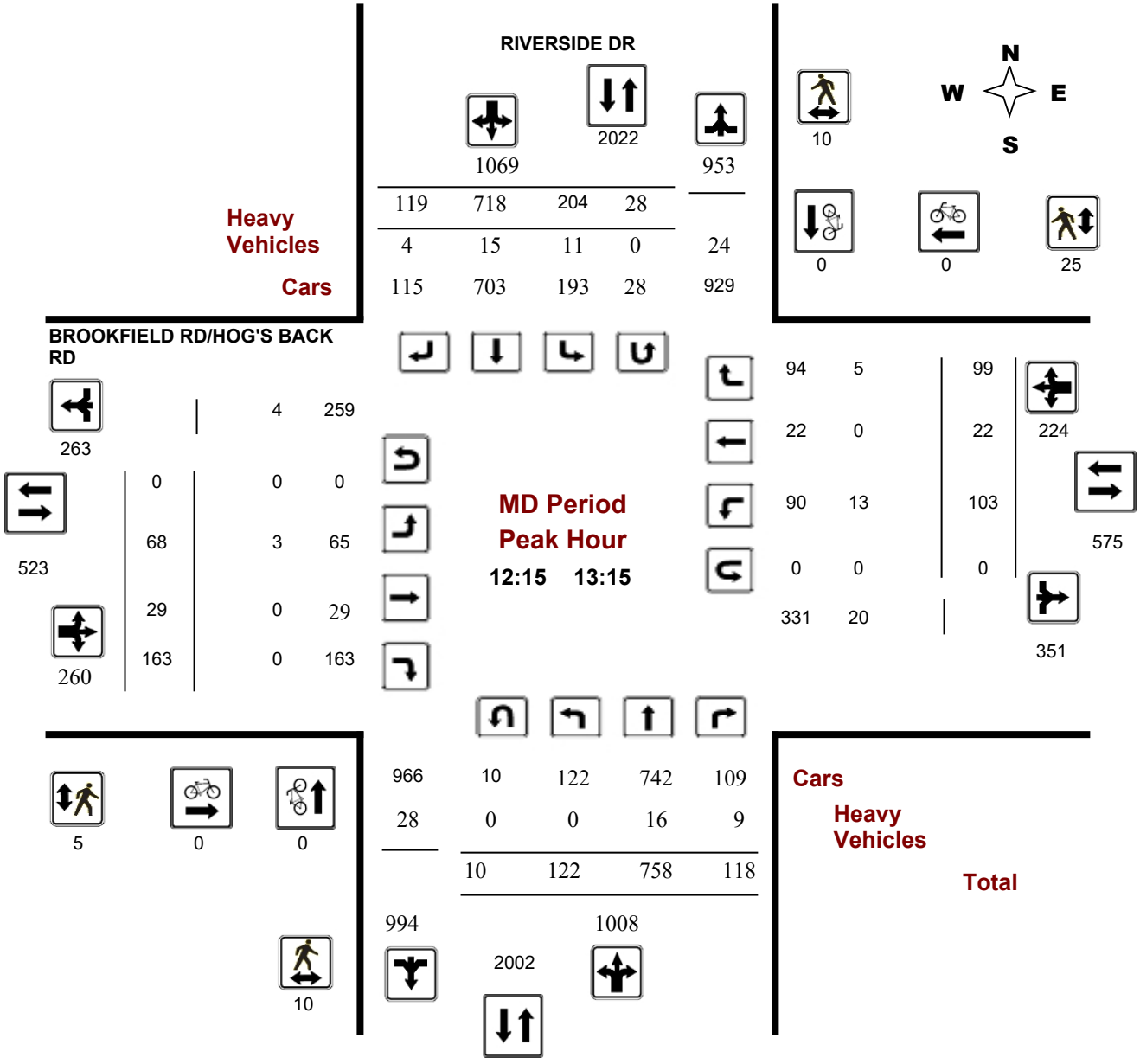
Transportation Services - Traffic Services

Turning Movement Count - Peak Hour Diagram

RIVERSIDE DR @ BROOKFIELD RD/HOG'S BACK RD

Survey Date: Tuesday, March 03, 2020 **WO No:** 39649

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



Comments

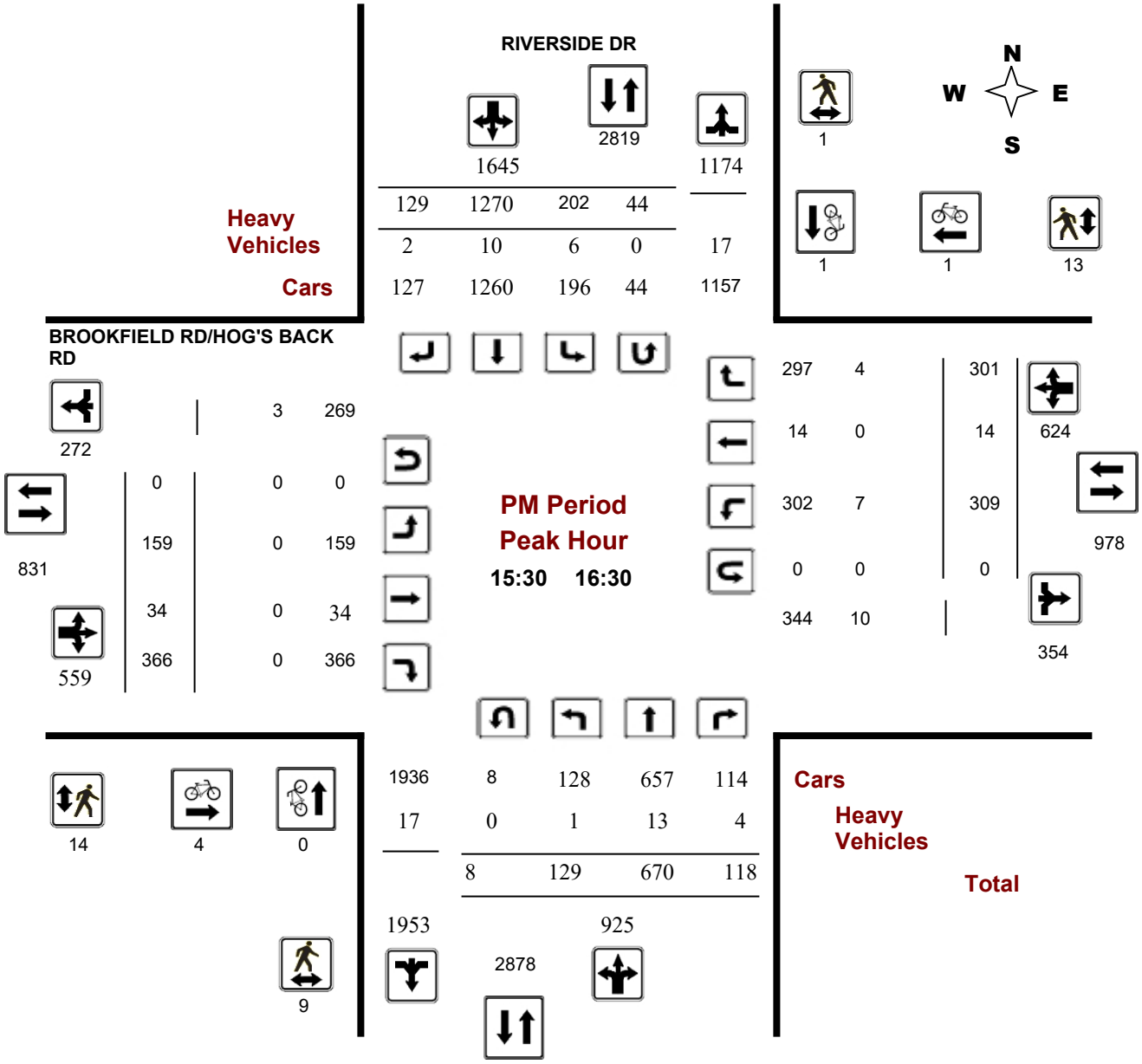
Transportation Services - Traffic Services

Turning Movement Count - Peak Hour Diagram

RIVERSIDE DR @ BROOKFIELD RD/HOG'S BACK RD

Survey Date: Tuesday, March 03, 2020 **WO No:** 39649

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



Comments

Transportation Services - Traffic Services

Turning Movement Count - Study Results

RIVERSIDE DR @ BROOKFIELD RD/HOG'S BACK RD

Survey Date: Tuesday, March 03, 2020 **WO No:** 39649

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

Full Study Summary (8 HR Standard)

Survey Date: Tuesday, March 03, 2020

Total Observed U-Turns

Northbound: 57 Southbound: 305

Eastbound: 1 Westbound: 0

AADT Factor

1.00

	RIVERSIDE DR									BROOKFIELD RD/HOG'S BACK 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	382	1342	397	**2121**	193	631	169	**993**	**3114**	22	4	83	**109**	64	22	111	**197**	**306**	**3420**
08:00 09:00	472	1279	416	**2167**	279	654	384	**1317**	**3484**	68	25	123	**216**	97	28	167	**292**	**508**	**3992**
09:00 10:00	261	1034	210	**1505**	167	634	186	**987**	**2492**	47	13	95	**155**	76	15	73	**164**	**319**	**2811**
11:30 12:30	108	756	114	**978**	155	714	99	**968**	**1946**	118	23	168	**309**	107	13	118	**238**	**547**	**2493**
12:30 13:30	136	736	110	**982**	204	719	116	**1039**	**2021**	76	29	177	**282**	98	20	101	**219**	**501**	**2522**
15:00 16:00	142	713	129	**984**	253	1245	102	**1600**	**2584**	110	18	323	**451**	310	14	296	**620**	**1071**	**3655**
16:00 17:00	111	624	117	**852**	197	1244	141	**1582**	**2434**	171	38	383	**592**	306	20	260	**586**	**1178**	**3612**
17:00 18:00	225	754	81	**1060**	201	1094	215	**1510**	**2570**	180	29	377	**586**	248	26	178	**452**	**1038**	**3608**
Sub Total	1837	7238	1574	**10649**	1649	6935	1412	**9996**	**20645**	792	179	1729	**2700**	1306	158	1304	**2768**	**5468**	**26113**
U Turns				**57**				**305**	**362**				**1**				**0**	**1**	**363**
Total	1837	7238	1574	**10706**	1649	6935	1412	**10301**	**21007**	792	179	1729	**2701**	1306	158	1304	**2768**	**5469**	**26476**
EQ 12Hr	2553	10061	2188	**14881**	2292	9640	1963	**14318**	**29200**	1101	249	2403	**3754**	1815	220	1813	**3848**	**7602**	**36802**
Note: These values are calculated by multiplying the totals by the appropriate expansion factor.														**1.39**					
AVG 12Hr	2406	9482	2062	**14025**	2160	9085	1850	**13494**	**29200**	1038	234	2265	**3538**	1711	207	1708	**3626**	**7602**	**36802**
Note: These volumes are calculated by multiplying the Equivalent 12 hr. totals by the AADT factor.														**1**					
AVG 24Hr	3152	12421	2701	**18373**	2830	11901	2423	**17678**	**36051**	1359	307	2967	**4635**	2241	271	2238	**4750**	**9385**	**45436**
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

RIVERSIDE DR @ BROOKFIELD RD/HOG'S BACK RD

Survey Date: Tuesday, March 03, 2020 **WO No:** 39649

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

Full Study 15 Minute Increments

		RIVERSIDE DR									BROOKFIELD RD/HOG'S BACK 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	56	308	86	450	36	135	19	196	12	2	1	19	22	12	3	24	39	12	707
07:15	07:30	89	364	93	546	52	149	33	243	8	2	0	21	23	17	3	29	49	8	861
07:30	07:45	100	303	104	507	47	205	57	319	13	11	3	23	37	16	7	29	52	13	915
07:45	08:00	137	367	114	620	58	142	60	268	8	7	0	20	27	19	9	29	57	8	972
08:00	08:15	130	306	94	530	74	162	112	353	16	12	3	29	44	19	7	40	66	16	993
08:15	08:30	131	307	106	544	63	163	117	352	24	19	8	30	57	24	14	31	69	24	1022
08:30	08:45	109	304	108	521	69	166	92	335	14	16	9	24	49	21	2	42	65	14	970
08:45	09:00	102	362	108	573	73	163	63	306	15	21	5	40	66	33	5	54	92	15	1037
09:00	09:15	66	251	76	393	52	175	35	265	20	10	3	36	49	21	5	22	48	20	755
09:15	09:30	73	302	55	431	49	166	48	272	19	8	4	23	35	16	3	22	41	19	779
09:30	09:45	57	234	44	336	31	139	48	232	11	13	4	22	39	22	3	16	41	11	648
09:45	10:00	65	247	35	347	35	154	55	251	18	16	2	14	32	17	4	13	34	18	664
11:30	11:45	38	185	31	255	33	182	30	251	16	46	8	58	112	26	4	32	62	16	680
11:45	12:00	30	186	27	243	39	192	23	258	11	46	5	55	106	28	2	35	65	11	672
12:00	12:15	20	188	22	233	35	170	18	227	10	17	6	30	54	23	1	25	49	10	563
12:15	12:30	20	197	34	254	48	170	28	255	15	9	4	25	38	30	6	26	62	15	609
12:30	12:45	28	195	28	254	49	178	34	266	10	14	4	37	55	22	6	25	53	10	628
12:45	13:00	38	175	30	245	53	201	33	292	17	15	8	45	68	29	4	24	57	17	662
13:00	13:15	36	191	26	255	54	169	24	256	13	30	13	56	99	22	6	24	52	13	662
13:15	13:30	34	175	26	237	48	171	25	250	17	17	4	39	60	25	4	28	57	17	604
15:00	15:15	35	206	40	286	84	282	23	400	12	19	2	69	90	86	1	84	171	12	947
15:15	15:30	32	158	34	227	66	346	20	442	9	22	5	83	110	81	4	70	155	9	934
15:30	15:45	39	176	29	244	51	334	23	415	10	26	7	90	123	71	4	77	152	10	934
15:45	16:00	36	173	26	238	52	283	36	377	11	43	4	81	128	72	5	65	142	11	885
16:00	16:15	29	176	30	239	59	286	31	393	9	41	13	110	164	85	3	85	173	9	969
16:15	16:30	25	145	33	204	40	367	39	460	6	49	10	85	144	81	2	74	157	6	965
16:30	16:45	32	163	24	226	56	288	40	404	6	47	10	107	164	68	4	52	124	6	918
16:45	17:00	25	140	30	198	42	303	31	384	1	34	5	81	120	72	11	49	132	1	834
17:00	17:15	45	204	20	273	39	254	40	355	6	45	1	105	151	79	6	62	147	6	926
17:15	17:30	50	206	18	277	45	293	52	411	4	44	10	83	137	64	6	56	126	4	951
17:30	17:45	76	209	25	313	50	257	52	372	5	44	9	119	172	58	2	36	96	5	953
17:45	18:00	54	135	18	207	67	290	71	441	2	47	9	70	126	47	12	24	83	2	857
Total:		1837	7238	1574	1070	1649	6935	1412	10301	368	792	179	1729	2701	1306	158	1304	2768	368	26,476

Note: U-Turns are included in Totals.

Transportation Services - Traffic Services

Turning Movement Count - Study Results

RIVERSIDE DR @ BROOKFIELD RD/HOG'S BACK RD

Survey Date: Tuesday, March 03, 2020 **WO No:** 39649

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

Full Study Cyclist Volume

Time Period		RIVERSIDE DR			BROOKFIELD RD/HOG'S BACK RD			
		Northbound	Southbound	Street Total	Eastbound	Westbound	Street Total	Grand Total
07:00	07:15	0	0	0	0	1	1	1
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	1	0	1	1
08:15	08:30	1	0	1	1	0	1	2
08:30	08:45	1	0	1	2	0	2	3
08:45	09:00	0	0	0	0	1	1	1
09:00	09:15	0	0	0	0	1	1	1
09:15	09:30	0	0	0	0	0	0	0
09:30	09:45	0	0	0	1	0	1	1
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	1	1	0	0	0	1
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	0	0	0	0	0	0
15:45	16:00	0	0	0	1	0	1	1
16:00	16:15	0	0	0	1	0	1	1
16:15	16:30	0	1	1	2	1	3	4
16:30	16:45	0	1	1	0	1	1	2
16:45	17:00	0	2	2	2	1	3	5
17:00	17:15	0	1	1	0	0	0	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		3	8	**11**	11	7	18	29

Transportation Services - Traffic Services

Turning Movement Count - Study Results

RIVERSIDE DR @ BROOKFIELD RD/HOG'S BACK RD

Survey Date: Tuesday, March 03, 2020 **WO No:** 39649

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

Full Study Pedestrian Volume

	RIVERSIDE DR			BROOKFIELD RD/HOG'S BACK 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	2	**2**	0	2	**2**	**4**
07:15 07:30	0	1	**1**	2	3	**5**	**6**
07:30 07:45	2	2	**4**	1	4	**5**	**9**
07:45 08:00	1	1	**2**	1	3	**4**	**6**
08:00 08:15	1	2	**3**	4	4	**8**	**11**
08:15 08:30	1	2	**3**	4	3	**7**	**10**
08:30 08:45	3	0	**3**	0	5	**5**	**8**
08:45 09:00	1	1	**2**	0	4	**4**	**6**
09:00 09:15	3	2	**5**	3	6	**9**	**14**
09:15 09:30	2	1	**3**	0	3	**3**	**6**
09:30 09:45	1	1	**2**	1	4	**5**	**7**
09:45 10:00	0	1	**1**	0	4	**4**	**5**
11:30 11:45	7	3	**10**	8	0	**8**	**18**
11:45 12:00	5	2	**7**	1	2	**3**	**10**
12:00 12:15	2	6	**8**	1	5	**6**	**14**
12:15 12:30	5	5	**10**	4	13	**17**	**27**
12:30 12:45	0	1	**1**	0	6	**6**	**7**
12:45 13:00	3	3	**6**	0	5	**5**	**11**
13:00 13:15	2	1	**3**	1	1	**2**	**5**
13:15 13:30	2	1	**3**	1	5	**6**	**9**
15:00 15:15	2	0	**2**	0	7	**7**	**9**
15:15 15:30	7	0	**7**	1	2	**3**	**10**
15:30 15:45	3	0	**3**	3	4	**7**	**10**
15:45 16:00	1	0	**1**	1	1	**2**	**3**
16:00 16:15	3	1	**4**	5	4	**9**	**13**
16:15 16:30	2	0	**2**	5	4	**9**	**11**
16:30 16:45	2	1	**3**	2	6	**8**	**11**
16:45 17:00	0	3	**3**	2	4	**6**	**9**
17:00 17:15	2	0	**2**	2	11	**13**	**15**
17:15 17:30	2	1	**3**	1	5	**6**	**9**
17:30 17:45	4	0	**4**	2	1	**3**	**7**
17:45 18:00	1	0	**1**	0	0	**0**	**1**
Total	70	44	**114**	56	131	**187**	**301**

Transportation Services - Traffic Services

Turning Movement Count - Study Results

RIVERSIDE DR @ BROOKFIELD RD/HOG'S BACK RD

Survey Date: Tuesday, March 03, 2020 **WO No:** 39649

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

Full Study Heavy Vehicles

		RIVERSIDE DR									BROOKFIELD RD/HOG'S BACK 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	1	2	**4**	0	7	1	**8**	**12**	0	0	1	**1**	1	0	0	**1**	**2**	**14**
07:15	07:30	0	4	0	**4**	2	2	0	**4**	**8**	0	0	0	**0**	5	1	1	**7**	**7**	**15**
07:30	07:45	0	2	5	**7**	4	2	0	**6**	**13**	4	0	1	**5**	1	0	0	**1**	**6**	**19**
07:45	08:00	0	4	3	**7**	0	1	0	**1**	**8**	0	0	0	**0**	4	0	1	**5**	**5**	**13**
08:00	08:15	0	7	1	**8**	0	8	0	**8**	**16**	1	0	0	**1**	2	0	2	**4**	**5**	**21**
08:15	08:30	1	11	2	**14**	3	7	0	**10**	**24**	0	0	0	**0**	2	0	1	**3**	**3**	**27**
08:30	08:45	0	5	3	**8**	1	5	0	**6**	**14**	0	0	0	**0**	2	0	0	**2**	**2**	**16**
08:45	09:00	0	7	2	**9**	4	2	0	**6**	**15**	0	0	0	**0**	3	0	2	**5**	**5**	**20**
09:00	09:15	0	4	5	**9**	3	6	2	**11**	**20**	1	0	1	**2**	2	0	1	**3**	**5**	**25**
09:15	09:30	0	7	3	**10**	0	3	6	**9**	**19**	2	0	0	**2**	2	0	1	**3**	**5**	**24**
09:30	09:45	0	5	2	**7**	1	3	0	**4**	**11**	2	0	0	**2**	2	0	3	**5**	**7**	**18**
09:45	10:00	0	7	3	**10**	2	6	0	**8**	**18**	0	0	0	**0**	1	0	0	**1**	**1**	**19**
11:30	11:45	1	6	3	**10**	0	6	0	**6**	**16**	0	0	0	**0**	2	0	3	**5**	**5**	**21**
11:45	12:00	0	4	4	**8**	0	1	2	**3**	**11**	0	0	1	**1**	2	0	0	**2**	**3**	**14**
12:00	12:15	0	4	2	**6**	0	4	0	**4**	**10**	2	0	0	**2**	3	0	1	**4**	**6**	**16**
12:15	12:30	0	6	1	**7**	2	5	1	**8**	**15**	0	0	0	**0**	4	0	1	**5**	**5**	**20**
12:30	12:45	0	2	2	**4**	1	3	2	**6**	**10**	2	0	0	**2**	3	0	0	**3**	**5**	**15**
12:45	13:00	0	3	3	**6**	6	4	1	**11**	**17**	0	0	0	**0**	2	0	0	**2**	**2**	**19**
13:00	13:15	0	5	3	**8**	2	3	0	**5**	**13**	1	0	0	**1**	4	0	4	**8**	**9**	**22**
13:15	13:30	0	3	4	**7**	2	7	1	**10**	**17**	0	0	0	**0**	3	0	2	**5**	**5**	**22**
15:00	15:15	0	2	4	**6**	4	2	0	**6**	**12**	1	1	1	**3**	3	0	2	**5**	**8**	**20**
15:15	15:30	0	4	2	**6**	0	2	1	**3**	**9**	1	0	0	**1**	2	0	1	**3**	**4**	**13**
15:30	15:45	0	5	2	**7**	3	0	0	**3**	**10**	0	0	0	**0**	3	0	1	**4**	**4**	**14**
15:45	16:00	1	1	2	**4**	2	4	1	**7**	**11**	0	0	0	**0**	3	0	1	**4**	**4**	**15**
16:00	16:15	0	3	0	**3**	1	4	1	**6**	**9**	0	0	0	**0**	1	0	1	**2**	**2**	**11**
16:15	16:30	0	4	0	**4**	0	2	0	**2**	**6**	0	0	0	**0**	0	0	1	**1**	**1**	**7**
16:30	16:45	0	3	0	**3**	0	2	1	**3**	**6**	0	0	0	**0**	0	0	2	**2**	**2**	**8**
16:45	17:00	0	1	0	**1**	0	0	0	**0**	**1**	0	0	0	**0**	0	0	0	**0**	**0**	**1**
17:00	17:15	0	0	1	**1**	0	5	0	**5**	**6**	0	0	0	**0**	0	0	1	**1**	**1**	**7**
17:15	17:30	1	1	0	**2**	1	1	0	**2**	**4**	0	0	1	**1**	0	0	1	**1**	**2**	**6**
17:30	17:45	0	3	0	**3**	0	2	0	**2**	**5**	0	0	0	**0**	0	0	0	**0**	**0**	**5**
17:45	18:00	0	1	0	**1**	0	1	0	**1**	**2**	0	0	0	**0**	0	0	0	**0**	**0**	**2**
Total:	None	5	125	64	**194**	44	110	20	**174**	**368**	17	1	6	**24**	62	1	34	**97**	**121**	**489**

Transportation Services - Traffic Services

Turning Movement Count - Study Results

RIVERSIDE DR @ BROOKFIELD RD/HOG'S BACK RD

Survey Date: Tuesday, March 03, 2020 **WO No:** 39649

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

Full Study 15 Minute U-Turn Total

		RIVERSIDE DR		BROOKFIELD RD/HOG'S BACK RD		
Time Period		Northbound U-Turn Total	Southbound U-Turn Total	Eastbound U-Turn Total	Westbound U-Turn Total	Total
07:00	07:15	0	6	0	0	6
07:15	07:30	0	9	0	0	9
07:30	07:45	0	10	0	0	10
07:45	08:00	2	8	0	0	10
08:00	08:15	0	5	0	0	5
08:15	08:30	0	9	0	0	9
08:30	08:45	0	8	0	0	8
08:45	09:00	1	7	0	0	8
09:00	09:15	0	3	0	0	3
09:15	09:30	1	9	0	0	10
09:30	09:45	1	14	0	0	15
09:45	10:00	0	7	0	0	7
11:30	11:45	1	6	0	0	7
11:45	12:00	0	4	0	0	4
12:00	12:15	3	4	1	0	8
12:15	12:30	3	9	0	0	12
12:30	12:45	3	5	0	0	8
12:45	13:00	2	5	0	0	7
13:00	13:15	2	9	0	0	11
13:15	13:30	2	6	0	0	8
15:00	15:15	5	11	0	0	16
15:15	15:30	3	10	0	0	13
15:30	15:45	0	7	0	0	7
15:45	16:00	3	6	0	0	9
16:00	16:15	4	17	0	0	21
16:15	16:30	1	14	0	0	15
16:30	16:45	7	20	0	0	27
16:45	17:00	3	8	0	0	11
17:00	17:15	4	22	0	0	26
17:15	17:30	3	21	0	0	24
17:30	17:45	3	13	0	0	16
17:45	18:00	0	13	0	0	13
Total		57	305	1	0	363

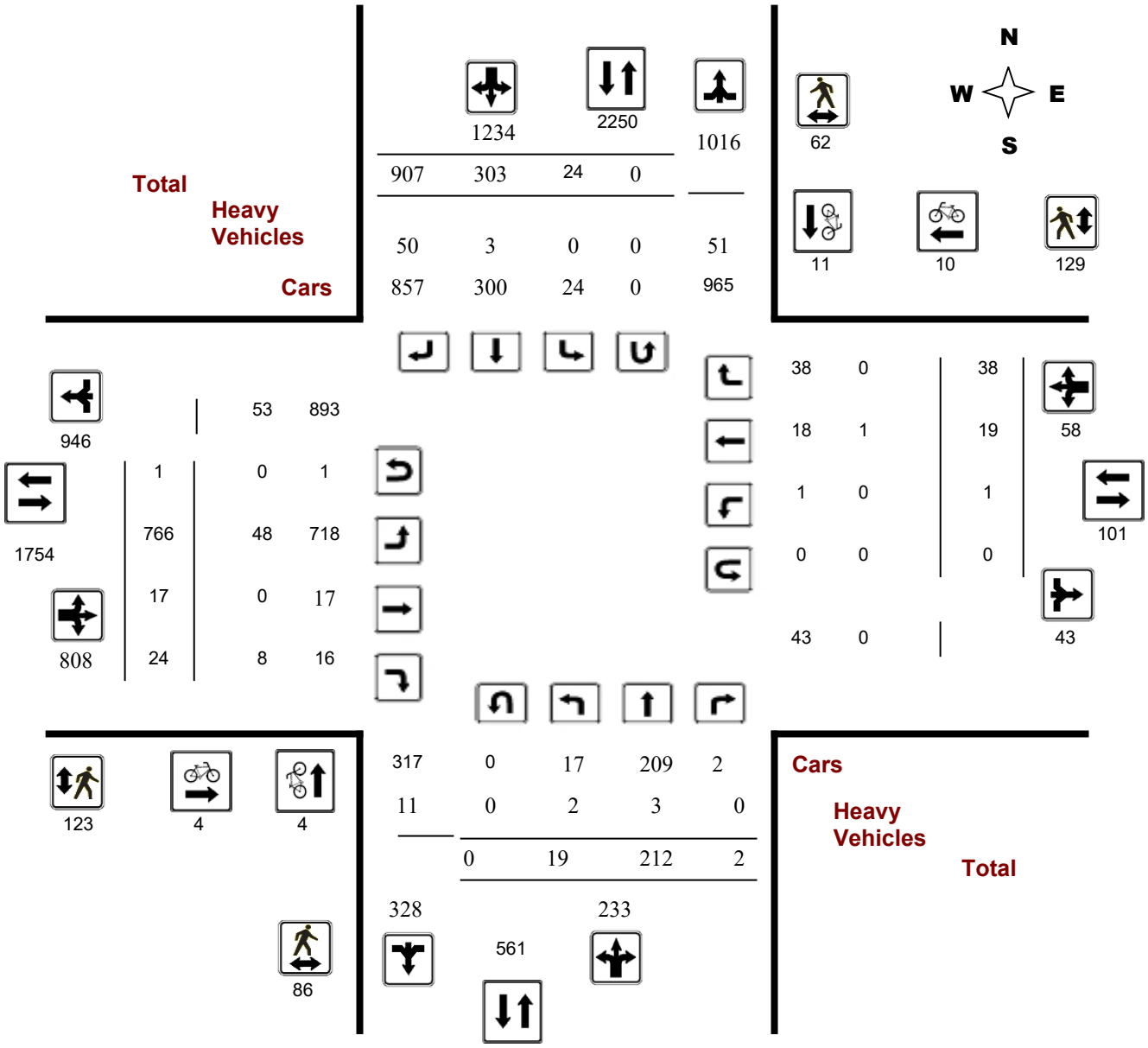
Transportation Services - Traffic Services

Turning Movement Count - Study Results

SPRINGLAND DR N @ FLANNERY DR N

Survey Date: Tuesday, November 26, 2019
Start Time: 07:00
WO No: 39107
Device: Miovision

Full Study Diagram



Transportation Services - Traffic Services

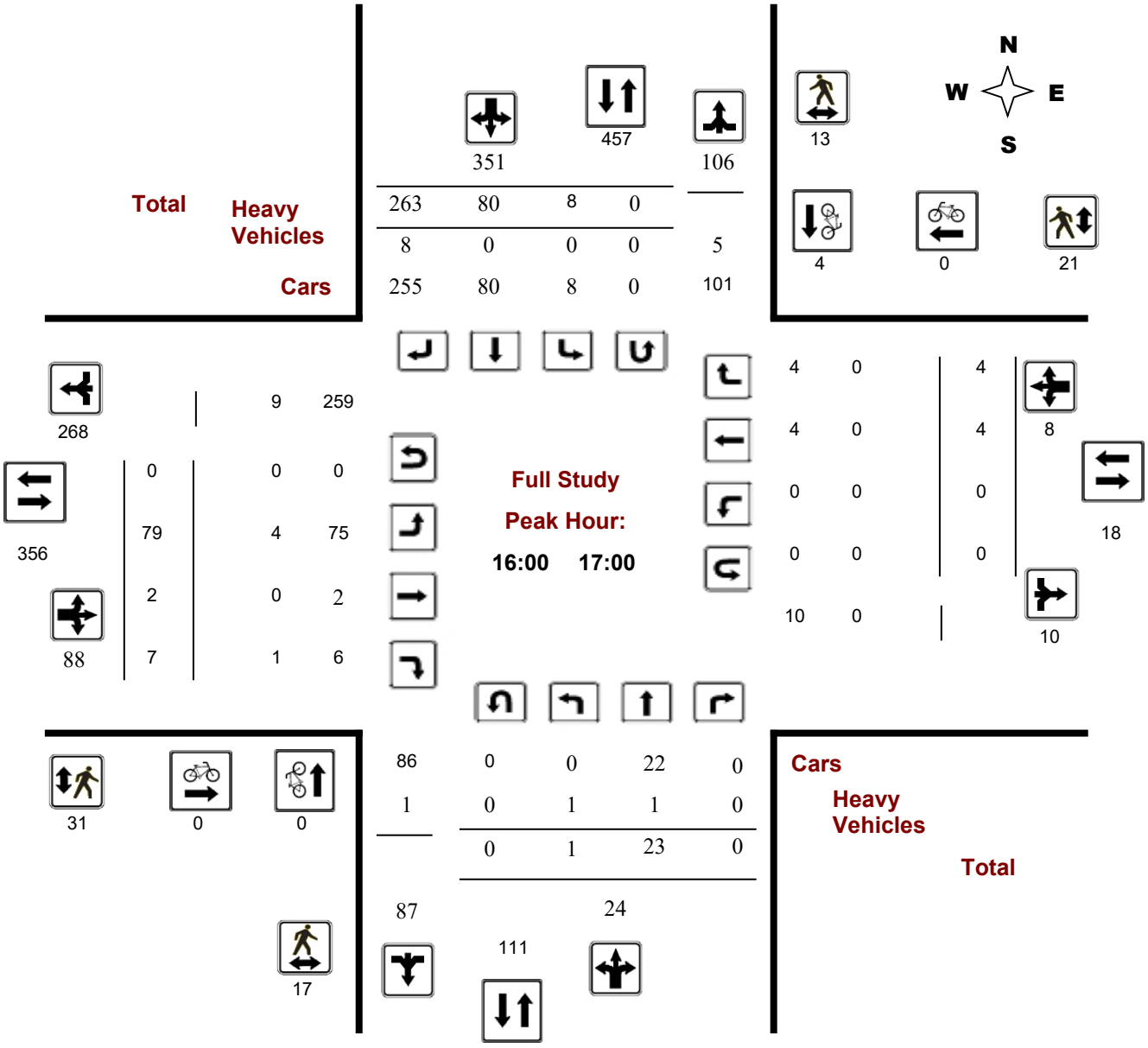
Turning Movement Count - Study Results

SPRINGLAND DR N @ FLANNERY DR N

Survey Date: Tuesday, November 26, 2019 **WO No:** 39107

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

Full Study Peak Hour Diagram



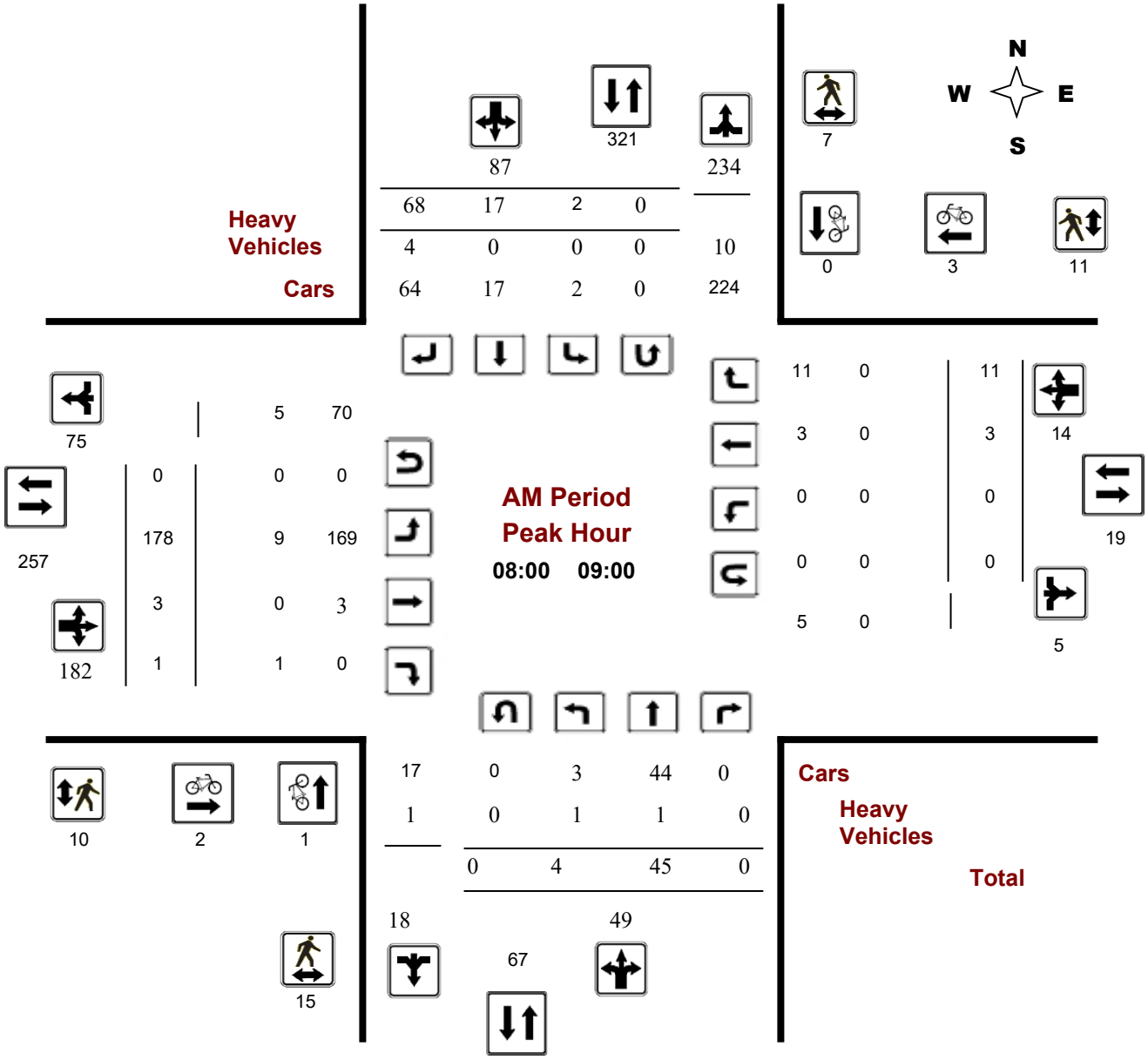
Transportation Services - Traffic Services

Turning Movement Count - Peak Hour Diagram

SPRINGLAND DR N @ FLANNERY DR N

Survey Date: Tuesday, November 26, 2019 **WO No:** 39107

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



Comments

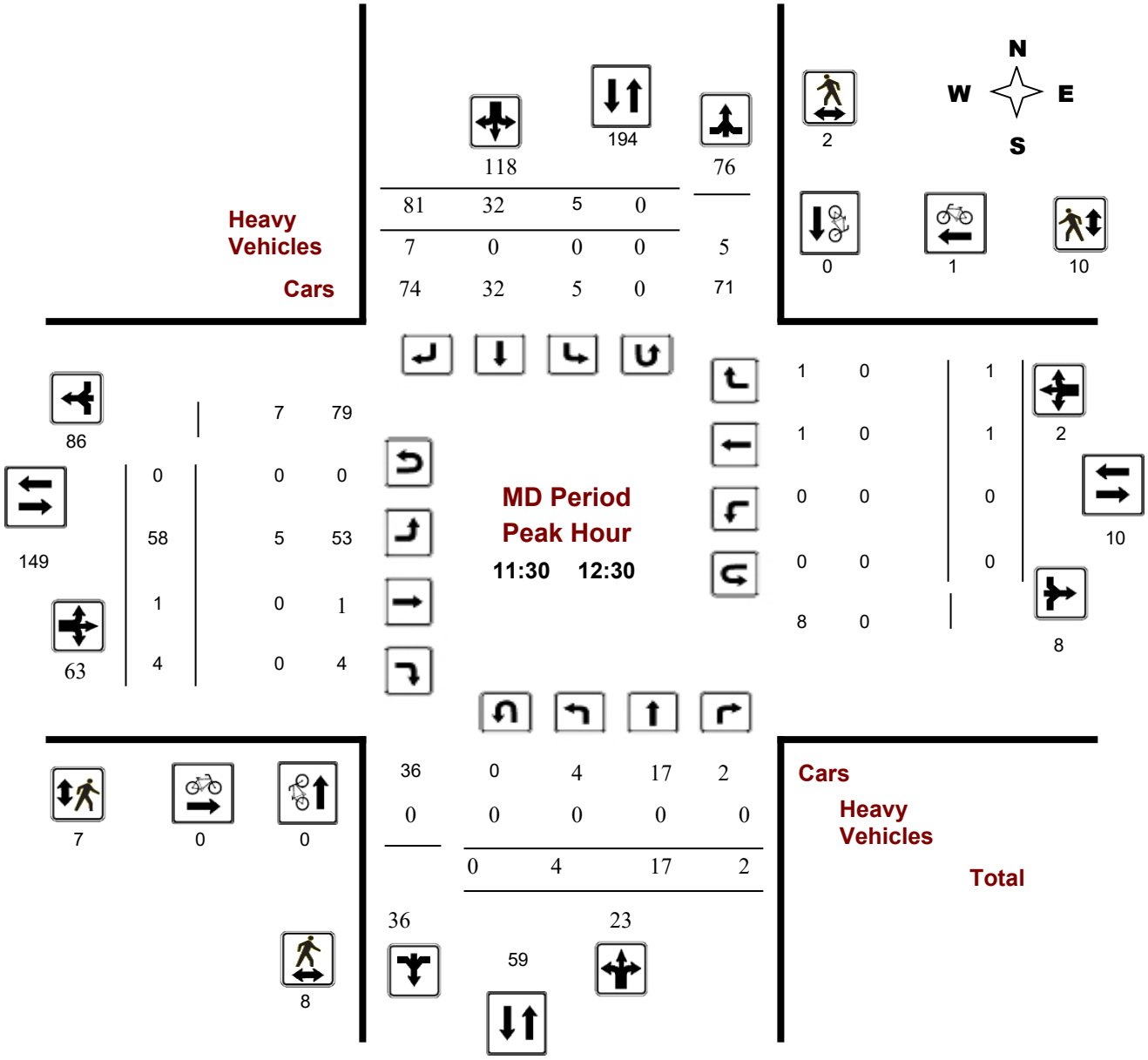
Transportation Services - Traffic Services

Turning Movement Count - Peak Hour Diagram

SPRINGLAND DR N @ FLANNERY DR N

Survey Date: Tuesday, November 26, 2019 **WO No:** 39107

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



Comments

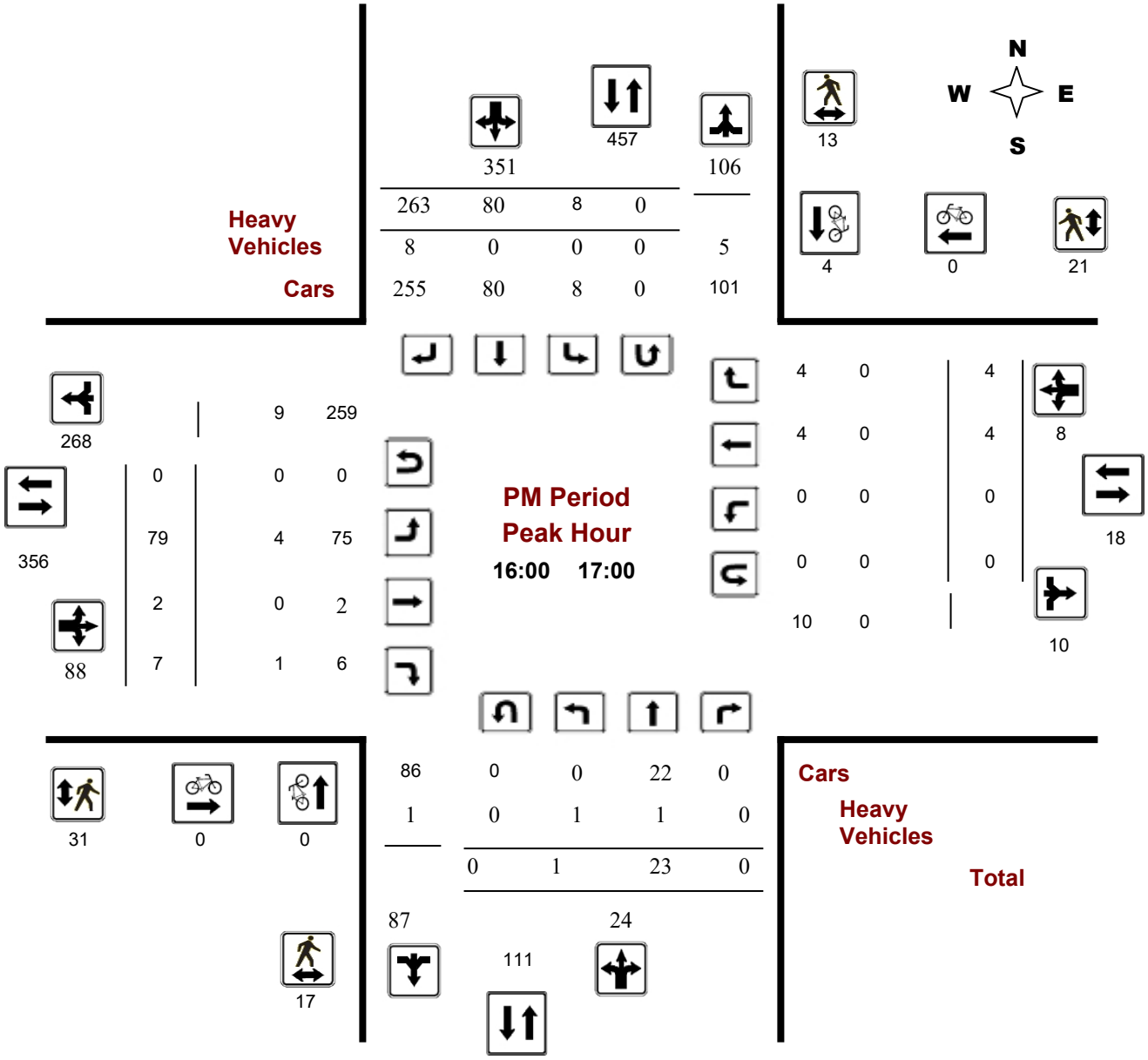
Transportation Services - Traffic Services

Turning Movement Count - Peak Hour Diagram

SPRINGLAND DR N @ FLANNERY DR N

Survey Date: Tuesday, November 26, 2019 **WO No:** 39107

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



Comments

Transportation Services - Traffic Services

Turning Movement Count - Study Results

SPRINGLAND DR N @ FLANNERY DR N

Survey Date: Tuesday, November 26, 2019 **WO No:** 39107

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

Full Study Summary (8 HR Standard)

Survey Date: Tuesday, November 26, 2019

Total Observed U-Turns

Northbound: 0 Southbound: 0

Eastbound: 1 Westbound: 0

AADT Factor

1.00

	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	2	36	0	**38**	1	10	35	**46**	**84**	143	0	3	**146**	0	0	6	**6**	**152**	**236**
08:00 09:00	4	45	0	**49**	2	17	68	**87**	**136**	178	3	1	**182**	0	3	11	**14**	**196**	**332**
09:00 10:00	1	34	0	**35**	3	16	52	**71**	**106**	100	5	4	**109**	1	2	4	**7**	**116**	**222**
11:30 12:30	4	17	2	**23**	5	32	81	**118**	**141**	58	1	4	**63**	0	1	1	**2**	**65**	**206**
12:30 13:30	1	14	0	**15**	1	30	75	**106**	**121**	66	3	1	**70**	0	4	3	**7**	**77**	**198**
15:00 16:00	5	20	0	**25**	1	58	142	**201**	**226**	72	2	3	**77**	0	3	3	**6**	**83**	**309**
16:00 17:00	1	23	0	**24**	8	80	263	**351**	**375**	79	2	7	**88**	0	4	4	**8**	**96**	**471**
17:00 18:00	1	23	0	**24**	3	60	191	**254**	**278**	70	1	1	**72**	0	2	6	**8**	**80**	**358**
Sub Total	19	212	2	**233**	24	303	907	**1234**	**1467**	766	17	24	**807**	1	19	38	**58**	**865**	**2332**
U Turns				**0**				**0**	**0**				**1**				**0**	**1**	**1**
Total	19	212	2	**233**	24	303	907	**1234**	**1467**	766	17	24	**808**	1	19	38	**58**	**866**	**2333**
EQ 12Hr	26	295	3	**324**	33	421	1261	**1715**	**2039**	1065	24	33	**1123**	1	26	53	**81**	**1204**	**3243**
Note: These values are calculated by multiplying the totals by the appropriate expansion factor.														**1.39**					
AVG 12Hr	25	278	3	**305**	31	397	1188	**1617**	**2039**	1003	22	31	**1058**	1	25	50	**76**	**1204**	**3243**
Note: These volumes are calculated by multiplying the Equivalent 12 hr. totals by the AADT factor.														**1**					
AVG 24Hr	33	364	3	**400**	41	520	1557	**2118**	**2518**	1315	29	41	**1387**	2	33	65	**100**	**1487**	**4005**
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

SPRINGLAND DR N @ FLANNERY DR N

Survey Date: Tuesday, November 26, 2019 **WO No:** 39107

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

Full Study 15 Minute Increments

		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	6	0	6	0	2	6	8	1	28	0	0	28	0	0	1	1	1	43
07:15	07:30	1	7	0	8	0	2	9	11	1	32	0	0	32	0	0	0	0	1	51
07:30	07:45	1	11	0	12	0	2	7	9	1	39	0	3	42	0	0	4	4	1	67
07:45	08:00	0	12	0	12	1	4	13	18	1	44	0	0	44	0	0	1	1	1	75
08:00	08:15	1	9	0	10	1	1	13	15	1	52	0	1	53	0	1	4	5	1	83
08:15	08:30	0	16	0	16	0	3	14	17	1	41	0	0	41	0	0	1	1	1	75
08:30	08:45	1	9	0	10	1	4	15	20	1	44	3	0	47	0	0	5	5	1	82
08:45	09:00	2	11	0	13	0	9	26	35	3	41	0	0	41	0	2	1	3	3	92
09:00	09:15	0	11	0	11	1	2	8	11	1	31	3	3	37	0	1	0	1	1	60
09:15	09:30	0	11	0	11	2	5	9	16	1	30	0	0	30	0	0	0	0	1	57
09:30	09:45	1	6	0	7	0	5	13	18	3	18	1	1	20	0	1	3	4	3	49
09:45	10:00	0	6	0	6	0	4	22	26	0	21	1	0	22	1	0	1	2	0	56
11:30	11:45	2	3	0	5	0	9	20	29	3	16	0	2	18	0	0	0	0	3	52
11:45	12:00	1	4	0	5	0	7	16	23	2	9	1	1	11	0	1	1	2	2	41
12:00	12:15	1	4	1	6	2	11	22	35	1	14	0	0	14	0	0	0	0	1	55
12:15	12:30	0	6	1	7	3	5	23	31	1	19	0	1	20	0	0	0	0	1	58
12:30	12:45	0	3	0	3	0	7	18	25	1	14	2	0	16	0	2	1	3	1	47
12:45	13:00	1	1	0	2	0	6	16	22	2	13	0	0	13	0	0	0	0	2	37
13:00	13:15	0	5	0	5	0	4	21	25	1	17	0	0	17	0	0	1	1	1	48
13:15	13:30	0	5	0	5	1	13	20	34	4	22	1	1	24	0	2	1	3	4	66
15:00	15:15	0	9	0	9	0	11	35	46	1	14	0	0	14	0	1	1	2	1	71
15:15	15:30	1	3	0	4	0	20	31	51	5	18	0	2	20	0	0	0	0	5	75
15:30	15:45	1	4	0	5	0	14	35	49	2	22	2	0	25	0	1	1	2	2	81
15:45	16:00	3	4	0	7	1	13	41	55	1	18	0	1	19	0	1	1	2	1	83
16:00	16:15	1	10	0	11	1	12	60	73	4	19	2	4	25	0	2	3	5	4	114
16:15	16:30	0	5	0	5	1	22	65	88	2	24	0	1	25	0	1	0	1	2	119
16:30	16:45	0	4	0	4	3	28	79	110	1	21	0	2	23	0	0	1	1	1	138
16:45	17:00	0	4	0	4	3	18	59	80	3	15	0	0	15	0	1	0	1	3	100
17:00	17:15	1	5	0	6	1	13	62	76	2	14	0	0	14	0	2	1	3	2	99
17:15	17:30	0	7	0	7	1	15	51	67	2	21	1	0	22	0	0	1	1	2	97
17:30	17:45	0	4	0	4	1	18	36	55	1	20	0	1	21	0	0	3	3	1	83
17:45	18:00	0	7	0	7	0	14	42	56	4	15	0	0	15	0	0	1	1	4	79
Total:		19	212	2	233	24	303	907	1234	58	766	17	24	808	1	19	38	58	58	2,333

Note: U-Turns are included in Totals.

Transportation Services - Traffic Services

Turning Movement Count - Study Results

SPRINGLAND DR N @ FLANNERY DR N

Survey Date: Tuesday, November 26, 2019 **WO No:** 39107

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

Full Study Cyclist Volume

Time Period		Northbound	Southbound	Street Total	Eastbound	Westbound	Street Total	Grand Total
07:00	07:15	1	1	2	0	2	2	4
07:15	07:30	0	0	0	0	1	1	1
07:30	07:45	1	0	1	0	1	1	2
07:45	08:00	0	0	0	0	0	0	0
08:00	08:15	0	0	0	1	1	2	2
08:15	08:30	1	0	1	1	1	2	3
08:30	08:45	0	0	0	0	1	1	1
08:45	09:00	0	0	0	0	0	0	0
09:00	09:15	0	0	0	0	1	1	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	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	1	1	1
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	1	1	1
12:45	13:00	0	0	0	0	0	0	0
13:00	13:15	1	0	1	0	0	0	1
13:15	13:30	0	0	0	1	0	1	1
15:00	15:15	0	2	2	0	0	0	2
15:15	15:30	0	0	0	0	0	0	0
15:30	15:45	0	0	0	0	0	0	0
15:45	16:00	0	3	3	0	0	0	3
16:00	16:15	0	2	2	0	0	0	2
16:15	16:30	0	2	2	0	0	0	2
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	0	0	0
17:15	17:30	0	0	0	0	0	0	0
17:30	17:45	0	1	1	1	0	1	2
17:45	18:00	0	0	0	0	0	0	0
Total		4	11	**15**	4	10	14	29

Transportation Services - Traffic Services

Turning Movement Count - Study Results

SPRINGLAND DR N @ FLANNERY DR N

Survey Date: Tuesday, November 26, 2019 **WO No:** 39107

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

Full Study Pedestrian Volume

Time Period	NB Approach (E or W Crossing)	SB Approach (E or W Crossing)	Total	EB Approach (N or S Crossing)	WB Approach (N or S Crossing)	Total	Grand Total
07:00 07:15	5	0	**5**	0	6	**6**	**11**
07:15 07:30	1	0	**1**	0	1	**1**	**2**
07:30 07:45	4	1	**5**	1	2	**3**	**8**
07:45 08:00	0	4	**4**	2	5	**7**	**11**
08:00 08:15	3	0	**3**	4	3	**7**	**10**
08:15 08:30	1	2	**3**	3	1	**4**	**7**
08:30 08:45	7	1	**8**	3	1	**4**	**12**
08:45 09:00	4	4	**8**	0	6	**6**	**14**
09:00 09:15	2	2	**4**	1	2	**3**	**7**
09:15 09:30	2	1	**3**	0	2	**2**	**5**
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	4	1	**5**	2	4	**6**	**11**
11:45 12:00	1	0	**1**	0	2	**2**	**3**
12:00 12:15	1	0	**1**	3	3	**6**	**7**
12:15 12:30	2	1	**3**	2	1	**3**	**6**
12:30 12:45	3	0	**3**	5	7	**12**	**15**
12:45 13:00	2	0	**2**	8	1	**9**	**11**
13:00 13:15	1	0	**1**	2	5	**7**	**8**
13:15 13:30	2	0	**2**	3	4	**7**	**9**
15:00 15:15	3	2	**5**	6	1	**7**	**12**
15:15 15:30	4	17	**21**	12	16	**28**	**49**
15:30 15:45	5	1	**6**	7	2	**9**	**15**
15:45 16:00	1	3	**4**	2	11	**13**	**17**
16:00 16:15	8	4	**12**	8	11	**19**	**31**
16:15 16:30	3	3	**6**	5	4	**9**	**15**
16:30 16:45	2	2	**4**	9	1	**10**	**14**
16:45 17:00	4	4	**8**	9	5	**14**	**22**
17:00 17:15	0	0	**0**	2	1	**3**	**3**
17:15 17:30	3	3	**6**	12	5	**17**	**23**
17:30 17:45	5	3	**8**	4	7	**11**	**19**
17:45 18:00	2	3	**5**	8	9	**17**	**22**
Total	86	62	**148**	123	129	**252**	**400**

Transportation Services - Traffic Services

Turning Movement Count - Study Results

SPRINGLAND DR N @ FLANNERY DR N

Survey Date: Tuesday, November 26, 2019 **WO No:** 39107

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

Full Study Heavy Vehicles

		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**	0	0	1	**1**	**1**	3	0	0	**3**	0	0	0	**0**	**3**	**4**
07:15	07:30	0	0	0	**0**	0	0	1	**1**	**1**	0	0	0	**0**	0	0	0	**0**	**0**	**1**
07:30	07:45	0	0	0	**0**	0	0	1	**1**	**1**	3	0	2	**5**	0	0	0	**0**	**5**	**6**
07:45	08:00	0	0	0	**0**	0	0	1	**1**	**1**	3	0	0	**3**	0	0	0	**0**	**3**	**4**
08:00	08:15	0	0	0	**0**	0	0	1	**1**	**1**	4	0	1	**5**	0	0	0	**0**	**5**	**6**
08:15	08:30	0	0	0	**0**	0	0	1	**1**	**1**	0	0	0	**0**	0	0	0	**0**	**0**	**1**
08:30	08:45	0	0	0	**0**	0	0	1	**1**	**1**	3	0	0	**3**	0	0	0	**0**	**3**	**4**
08:45	09:00	1	1	0	**2**	0	0	1	**1**	**3**	2	0	0	**2**	0	0	0	**0**	**2**	**5**
09:00	09:15	0	0	0	**0**	0	0	1	**1**	**1**	4	0	2	**6**	0	0	0	**0**	**6**	**7**
09:15	09:30	0	0	0	**0**	0	0	1	**1**	**1**	1	0	0	**1**	0	0	0	**0**	**1**	**2**
09:30	09:45	0	0	0	**0**	0	0	3	**3**	**3**	1	0	0	**1**	0	0	0	**0**	**1**	**4**
09:45	10:00	0	0	0	**0**	0	0	0	**0**	**0**	2	0	0	**2**	0	0	0	**0**	**2**	**2**
11:30	11:45	0	0	0	**0**	0	0	3	**3**	**3**	1	0	0	**1**	0	0	0	**0**	**1**	**4**
11:45	12:00	0	0	0	**0**	0	0	2	**2**	**2**	2	0	0	**2**	0	0	0	**0**	**2**	**4**
12:00	12:15	0	0	0	**0**	0	0	1	**1**	**1**	0	0	0	**0**	0	0	0	**0**	**0**	**1**
12:15	12:30	0	0	0	**0**	0	0	1	**1**	**1**	2	0	0	**2**	0	0	0	**0**	**2**	**3**
12:30	12:45	0	0	0	**0**	0	0	1	**1**	**1**	0	0	0	**0**	0	0	0	**0**	**0**	**1**
12:45	13:00	0	0	0	**0**	0	0	2	**2**	**2**	1	0	0	**1**	0	0	0	**0**	**1**	**3**
13:00	13:15	0	0	0	**0**	0	0	1	**1**	**1**	2	0	0	**2**	0	0	0	**0**	**2**	**3**
13:15	13:30	0	1	0	**1**	0	2	1	**3**	**4**	0	0	0	**0**	0	0	0	**0**	**0**	**4**
15:00	15:15	0	0	0	**0**	0	0	1	**1**	**1**	4	0	0	**4**	0	0	0	**0**	**4**	**5**
15:15	15:30	0	0	0	**0**	0	1	4	**5**	**5**	1	0	1	**2**	0	0	0	**0**	**2**	**7**
15:30	15:45	0	0	0	**0**	0	0	2	**2**	**2**	1	0	0	**1**	0	1	0	**1**	**2**	**4**
15:45	16:00	0	0	0	**0**	0	0	1	**1**	**1**	1	0	1	**2**	0	0	0	**0**	**2**	**3**
16:00	16:15	1	0	0	**1**	0	0	3	**3**	**4**	1	0	1	**2**	0	0	0	**0**	**2**	**6**
16:15	16:30	0	0	0	**0**	0	0	2	**2**	**2**	1	0	0	**1**	0	0	0	**0**	**1**	**3**
16:30	16:45	0	0	0	**0**	0	0	1	**1**	**1**	2	0	0	**2**	0	0	0	**0**	**2**	**3**
16:45	17:00	0	1	0	**1**	0	0	2	**2**	**3**	0	0	0	**0**	0	0	0	**0**	**0**	**3**
17:00	17:15	0	0	0	**0**	0	0	2	**2**	**2**	2	0	0	**2**	0	0	0	**0**	**2**	**4**
17:15	17:30	0	0	0	**0**	0	0	2	**2**	**2**	0	0	0	**0**	0	0	0	**0**	**0**	**2**
17:30	17:45	0	0	0	**0**	0	0	1	**1**	**1**	0	0	0	**0**	0	0	0	**0**	**0**	**1**
17:45	18:00	0	0	0	**0**	0	0	4	**4**	**4**	1	0	0	**1**	0	0	0	**0**	**1**	**5**
Total:	None	2	3	0	**5**	0	3	50	**53**	**58**	48	0	8	**56**	0	1	0	**1**	**57**	**115**

Transportation Services - Traffic Services

Turning Movement Count - Study Results

SPRINGLAND DR N @ FLANNERY DR N

Survey Date: Tuesday, November 26, 2019 **WO No:** 39107

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

Full Study 15 Minute U-Turn Total

Time Period		Northbound U-Turn Total	Southbound U-Turn Total	Eastbound U-Turn Total	Westbound U-Turn Total	Total
07:00	07:15	0	0	0	0	0
07:15	07:30	0	0	0	0	0
07:30	07:45	0	0	0	0	0
07:45	08:00	0	0	0	0	0
08:00	08:15	0	0	0	0	0
08:15	08:30	0	0	0	0	0
08:30	08:45	0	0	0	0	0
08:45	09:00	0	0	0	0	0
09:00	09:15	0	0	0	0	0
09:15	09:30	0	0	0	0	0
09:30	09:45	0	0	0	0	0
09:45	10:00	0	0	0	0	0
11:30	11:45	0	0	0	0	0
11:45	12:00	0	0	0	0	0
12:00	12:15	0	0	0	0	0
12:15	12:30	0	0	0	0	0
12:30	12:45	0	0	0	0	0
12:45	13:00	0	0	0	0	0
13:00	13:15	0	0	0	0	0
13:15	13:30	0	0	0	0	0
15:00	15:15	0	0	0	0	0
15:15	15:30	0	0	0	0	0
15:30	15:45	0	0	1	0	1
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	1	0	1

Appendix D

COLLISION DATA

Total Area

Classification of Accident	Rear End	Turning Movement	Sideswipe	Angle	Approaching	Single Vehicle (other)	Single vehicle (Unattended vehicle)	Other	Total	
P.D. only	64	9	17	4	0	0	0	2	96	80%
Non-fatal injury	18	5	1	0	0	0	0	0	24	20%
Non reportable	0	0	0	0	0	0	0	0	0	0%
Total	**82**	**14**	**18**	**4**	**0**	**0**	**0**	**2**	**120**	100%
	#1 or 68%	#3 or 12%	#2 or 15%	#4 or 3%	#6 or 0%	#6 or 0%	#6 or 0%	#5 or 2%		

Mooney's Bay Pl/Riverside Dr

Years	Total # Collisions	24 Hr AADT Veh Volume	Days	Collisions/MEV
2015-2019	13	28,825	1825	**0.25**

Classification of Accident	Rear End	Turning Movement	Sideswipe	Angle	Approaching	Single Vehicle (other)	Single vehicle (Unattended vehicle)	Other	Total	
P.D. only	7	1	1	0	0	0	0	0	9	69%
Non-fatal injury	4	0	0	0	0	0	0	0	4	31%
Non reportable	0	0	0	0	0	0	0	0	0	0%
Total	**11**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**13**	100%
	85%	8%	8%	0%	0%	0%	0%	0%		

Ridgewood Ave/Riverside Dr

Years	Total # Collisions	24 Hr AADT Veh Volume	Days	Collisions/MEV
2015-2019	17	32,870	1825	**0.28**

Classification of Accident	Rear End	Turning Movement	Sideswipe	Angle	Approaching	Single Vehicle (other)	Single vehicle (Unattended vehicle)	Other	Total	
P.D. only	13	0	3	0	0	0	0	0	16	94%
Non-fatal injury	1	0	0	0	0	0	0	0	1	6%
Non reportable	0	0	0	0	0	0	0	0	0	0%
Total	**14**	**0**	**3**	**0**	**0**	**0**	**0**	**0**	**17**	100%
	82%	0%	18%	0%	0%	0%	0%	0%		

Ridgewood Ave, Riverside Dr to Dupont St

Years	Total # Collisions	24 Hr AADT Veh Volume	Days	Collisions/MEV
2015-2019	2	n/a	1825	**n/a**

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

Riverside Dr/Brookfield Rd/Hog's Back Rd

Years	Total # Collisions	24 Hr AADT Veh Volume	Days	Collisions/MEV
2015-2019	68	45,436	1825	**0.82**

Classification of Accident	Rear End	Turning Movement	Sideswipe	Angle	Approaching	Single Vehicle (other)	Single vehicle (Unattended vehicle)	Other	Total	
P.D. only	36	8	6	2	0	0	0	1	53	78%
Non-fatal injury	9	5	1	0	0	0	0	0	15	22%
Non reportable	0	0	0	0	0	0	0	0	0	0%
Total	**45**	**13**	**7**	**2**	**0**	**0**	**0**	**1**	**68**	100%
	66%	19%	10%	3%	0%	0%	0%	1%		

Riverside Dr, Bayport Priv to Mooney's Bay Pl

Years	Total # Collisions	24 Hr AADT Veh Volume	Days	Collisions/MEV
2015-2019	2	n/a	1825	**n/a**

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

Riverside Dr, Hog's Back Rd to Ridgewood Ave

Years	Total # Collisions	24 Hr AADT Veh Volume	Days	Collisions/MEV
2015-2019	16	n/a	1825	**n/a**

Classification of Accident	Rear End	Turning Movement	Sideswipe	Angle	Approaching	Single Vehicle (other)	Single vehicle (Unattended vehicle)	Other	Total	
P.D. only	6	0	6	1	0	0	0	0	13	81%
Non-fatal injury	3	0	0	0	0	0	0	0	3	19%
Non reportable	0	0	0	0	0	0	0	0	0	0%
Total	**9**	**0**	**6**	**1**	**0**	**0**	**0**	**0**	**16**	100%
	56%	0%	38%	6%	0%	0%	0%	0%		

Riverside Dr, Ridgewood Ave to Bayport Priv

Years	Total # Collisions	24 Hr AADT Veh Volume	Days	Collisions/MEV
2015-2019	2	n/a	1825	**n/a**

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

City Operations - Transportation Services

Collision Details Report - Public Version

From: January 1, 2014 **To:** December 31, 2018

Location: MOONEY'S BAY PL @ RIVERSIDE DR

Traffic Control: Traffic signal

Total Collisions: 9

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2015-May-01, Fri,15:58	Clear	Rear end	P.D. only	Dry	South	Going ahead	Passenger van	Other motor vehicle	
					South	Stopped	Automobile, station wagon	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2015-Aug-08, Sat,12:30	Clear	Rear end	Non-fatal injury	Dry	North	Slowing or stopping	Pick-up truck	Other motor vehicle	
					North	Slowing or stopping	Automobile, station wagon	Other motor vehicle	
					North	Going ahead	Passenger van	Other motor vehicle	
					North	Changing lanes	Automobile, station wagon	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2015-Aug-20, Thu,10:08	Clear	Sideswipe	P.D. only	Dry	North	Going ahead	Truck - closed	Other motor vehicle	
					North	Slowing or stopping	Passenger van	Other motor vehicle	
					North	Slowing or stopping	Automobile, station wagon	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2016-Aug-23, Tue,16:46	Clear	Rear end	P.D. only	Dry	South	Going ahead	Automobile, station wagon	Other motor vehicle	
					South	Going ahead	Automobile, station wagon	Other motor vehicle	
					South	Going ahead	Automobile, station wagon	Other motor vehicle	

City Operations - Transportation Services

Collision Details Report - Public Version

From: January 1, 2014 **To:** December 31, 2018

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2016-Dec-07, Wed,16:52	Clear	Rear end	P.D. only	Wet	North	Going ahead	Automobile, station wagon	Other motor vehicle	
					North	Stopped	Automobile, station wagon	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2016-Dec-31, Sat,16:56	Snow	Turning movement	P.D. only	Loose snow	North	Slowing or stopping	Automobile, station wagon	Other motor vehicle	
					North	Making "U" turn	Truck - tractor	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2017-Apr-21, Fri,09:44	Clear	Rear end	Non-fatal injury	Dry	North	Going ahead	Automobile, station wagon	Other motor vehicle	
					North	Going ahead	Automobile, station wagon	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2018-Feb-23, Fri,19:26	Freezing Rain	Rear end	P.D. only	Ice	North	Slowing or stopping	Automobile, station wagon	Other motor vehicle	
					North	Stopped	Automobile, station wagon	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2018-Jul-16, Mon,18:02	Clear	Rear end	Non-fatal injury	Dry	North	Stopped	Pick-up truck	Other motor vehicle	
					North	Going ahead	Automobile, station wagon	Other motor vehicle	

Location: RIDGEWOOD AVE @ RIVERSIDE DR

Traffic Control: Traffic signal

Total Collisions: 19

City Operations - Transportation Services

Collision Details Report - Public Version

From: January 1, 2014 **To:** December 31, 2018

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2014-Jan-26, Sun,10:44	Clear	Rear end	P.D. only	Slush	South	Slowing or stopping	Automobile, station wagon	Other motor vehicle	
					South	Stopped	Automobile, station wagon	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2014-Mar-06, Thu,13:00	Clear	Rear end	P.D. only	Dry	North	Going ahead	Automobile, station wagon	Other motor vehicle	
					North	Stopped	Automobile, station wagon	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2014-Apr-06, Sun,22:35	Clear	Turning movement	P.D. only	Dry	North	Going ahead	Automobile, station wagon	Other motor vehicle	
					South	Turning left	Automobile, station wagon	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2014-Dec-01, Mon,10:20	Clear	Rear end	P.D. only	Dry	South	Going ahead	Automobile, station wagon	Other motor vehicle	
					South	Stopped	Automobile, station wagon	Other motor vehicle	
					South	Stopped	Automobile, station wagon	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2015-Jan-28, Wed,19:05	Clear	Sideswipe	P.D. only	Wet	South	Changing lanes	Automobile, station wagon	Other motor vehicle	
					South	Going ahead	Automobile, station wagon	Other motor vehicle	

City Operations - Transportation Services

Collision Details Report - Public Version

From: January 1, 2014 **To:** December 31, 2018

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2015-Jul-11, Sat,17:02	Clear	Rear end	Non-fatal injury	Dry	South	Turning left	Unknown	Cyclist	
					South	Turning left	Bicycle	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2015-Aug-28, Fri,12:32	Clear	Rear end	P.D. only	Dry	North	Slowing or stopping	Automobile, station wagon	Other motor vehicle	
					North	Stopped	Pick-up truck	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2015-Sep-08, Tue,14:55	Clear	Sideswipe	P.D. only	Dry	North	Changing lanes	Pick-up truck	Other motor vehicle	
					North	Slowing or stopping	Automobile, station wagon	Other motor vehicle	
					North	Slowing or stopping	Truck - closed	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2015-Oct-20, Tue,12:44	Clear	Rear end	P.D. only	Dry	North	Going ahead	Automobile, station wagon	Other motor vehicle	
					North	Slowing or stopping	Automobile, station wagon	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2016-May-25, Wed,18:13	Clear	Sideswipe	P.D. only	Dry	West	Turning left	Pick-up truck	Other motor vehicle	
					West	Turning left	Automobile, station wagon	Other motor vehicle	

City Operations - Transportation Services

Collision Details Report - Public Version

From: January 1, 2014 **To:** December 31, 2018

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2016-Aug-20, Sat,17:10	Clear	SMV other	P.D. only	Dry	South	Going ahead	Pick-up truck	Curb	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2016-Oct-01, Sat,13:37	Clear	Rear end	P.D. only	Dry	South	Going ahead	Automobile, station wagon	Other motor vehicle	
					South	Slowing or stopping	Automobile, station wagon	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2017-Feb-16, Thu,14:52	Clear	Rear end	P.D. only	Loose snow	North	Changing lanes	Automobile, station wagon	Other motor vehicle	
					North	Going ahead	Pick-up truck	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2017-Jun-27, Tue,19:31	Clear	Rear end	P.D. only	Dry	South	Going ahead	Passenger van	Other motor vehicle	
					South	Stopped	Pick-up truck	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2017-Jul-15, Sat,14:55	Clear	Rear end	P.D. only	Dry	North	Going ahead	Automobile, station wagon	Other motor vehicle	
					North	Stopped	Automobile, station wagon	Other motor vehicle	

City Operations - Transportation Services

Collision Details Report - Public Version

From: January 1, 2014 **To:** December 31, 2018

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2018-Jan-28, Sun,14:57	Clear	Rear end	P.D. only	Dry	North	Slowing or stopping	Automobile, station wagon	Other motor vehicle	
					North	Stopped	Automobile, station wagon	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2018-Aug-14, Tue,08:16	Clear	Rear end	P.D. only	Dry	North	Going ahead	Passenger van	Other motor vehicle	
					North	Stopped	Automobile, station wagon	Other motor vehicle	
					North	Stopped	Pick-up truck	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2018-Nov-19, Mon,11:20	Clear	Rear end	P.D. only	Slush	West	Turning right	Passenger van	Other motor vehicle	
					West	Turning right	Automobile, station wagon	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2018-Nov-23, Fri,14:51	Clear	Rear end	P.D. only	Dry	North	Going ahead	Automobile, station wagon	Other motor vehicle	
					North	Stopped	Automobile, station wagon	Other motor vehicle	

Location: RIDGEWOOD AVE btwn RIVERSIDE DR & DUPONT ST

Traffic Control: No control

Total Collisions: 3

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2016-Oct-06, Thu,00:00	Clear	SMV unattended vehicle	P.D. only	Dry	North	Reversing	Automobile, station wagon	Unattended vehicle	

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2018-Jul-19, Thu,18:02	Clear	Angle	P.D. only	Dry	North	Turning right	Automobile, station wagon	Other motor vehicle	
					East	Going ahead	Automobile, station wagon	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2018-Sep-06, Thu,09:20	Clear	Other	P.D. only	Dry	South	Reversing	Unknown	Other motor vehicle	
					North	Stopped	Automobile, station wagon	Other motor vehicle	

Location: RIVERSIDE DR @ BROOKFIELD RD/HOG'S BACK RD

Traffic Control: Traffic signal **Total Collisions:** 72

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2014-Jan-11, Sat,07:17	Freezing Rain	Rear end	P.D. only	Ice	South	Going ahead	Automobile, station wagon	Skidding/sliding	
					South	Stopped	Automobile, station wagon	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2014-Feb-12, Wed,09:32	Clear	Turning movement	P.D. only	Dry	East	Turning left	Passenger van	Other motor vehicle	
					West	Going ahead	Pick-up truck	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2014-Jul-02, Wed,15:40	Clear	Rear end	P.D. only	Dry	East	Turning right	Automobile, station wagon	Other motor vehicle	
					East	Turning right	Automobile, station wagon	Other motor vehicle	

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2014-Jul-28, Mon,21:00	Clear	Other	P.D. only	Dry	North	Reversing	Passenger van	Other motor vehicle	
					South	Stopped	Motorcycle	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2014-Aug-01, Fri,16:00	Clear	Rear end	P.D. only	Dry	West	Going ahead	Pick-up truck	Other motor vehicle	
					West	Stopped	Automobile, station wagon	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2014-Sep-01, Mon,15:30	Clear	Other	P.D. only	Dry	West	Reversing	Automobile, station wagon	Other motor vehicle	
					East	Stopped	Automobile, station wagon	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2014-Sep-03, Wed,15:51	Clear	Rear end	P.D. only	Dry	West	Turning right	Automobile, station wagon	Other motor vehicle	
					West	Turning right	Truck and trailer	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2014-Sep-07, Sun,12:24	Clear	Rear end	P.D. only	Dry	North	Going ahead	Automobile, station wagon	Other motor vehicle	
					North	Stopped	Automobile, station wagon	Other motor vehicle	
					North	Stopped	Automobile, station wagon	Other motor vehicle	

City Operations - Transportation Services

Collision Details Report - Public Version

From: January 1, 2014 **To:** December 31, 2018

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2014-Nov-04, Tue,17:30	Rain	Sideswipe	P.D. only	Wet	North	Changing lanes	Automobile, station wagon	Other motor vehicle	
					North	Turning left	Automobile, station wagon	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2014-Nov-25, Tue,00:08	Clear	Angle	Non-fatal injury	Dry	South	Going ahead	Automobile, station wagon	Other motor vehicle	
					East	Going ahead	Pick-up truck	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2014-Dec-01, Mon,17:35	Clear	Rear end	P.D. only	Dry	East	Turning right	Automobile, station wagon	Other motor vehicle	
					East	Turning right	Automobile, station wagon	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2014-Dec-05, Fri,17:00	Clear	Rear end	P.D. only	Ice	East	Slowing or stopping	Pick-up truck	Other motor vehicle	
					East	Stopped	Pick-up truck	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2014-Dec-12, Fri,16:35	Clear	Rear end	P.D. only	Wet	West	Going ahead	Pick-up truck	Other motor vehicle	
					West	Stopped	Automobile, station wagon	Other motor vehicle	

City Operations - Transportation Services

Collision Details Report - Public Version

From: January 1, 2014 **To:** December 31, 2018

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2014-Dec-16, Tue,20:29	Freezing Rain	Turning movement	P.D. only	Ice	South	Turning right	Automobile, station wagon	Other motor vehicle	
					South	Turning right	Automobile, station wagon	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2015-Jan-18, Sun,00:42	Clear	Turning movement	P.D. only	Dry	East	Turning left	Automobile, station wagon	Other motor vehicle	
					West	Going ahead	Automobile, station wagon	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2015-Jan-22, Thu,08:00	Clear	Rear end	P.D. only	Ice	East	Going ahead	Automobile, station wagon	Other motor vehicle	
					East	Stopped	Passenger van	Other motor vehicle	
					East	Stopped	Automobile, station wagon	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2015-Jan-30, Fri,20:20	Clear	Turning movement	P.D. only	Dry	East	Turning left	Unknown	Other motor vehicle	
					West	Going ahead	Automobile, station wagon	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2015-Feb-04, Wed,13:47	Snow	Rear end	P.D. only	Ice	North	Turning left	Automobile, station wagon	Other motor vehicle	
					North	Turning left	Passenger van	Other motor vehicle	

City Operations - Transportation Services

Collision Details Report - Public Version

From: January 1, 2014 **To:** December 31, 2018

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2015-Feb-05, Thu,07:20	Clear	Rear end	P.D. only	Wet	North	Going ahead	Automobile, station wagon	Other motor vehicle	
					North	Stopped	Delivery van	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2015-Feb-19, Thu,08:49	Clear	Rear end	P.D. only	Wet	South	Slowing or stopping	Automobile, station wagon	Other motor vehicle	
					South	Stopped	Automobile, station wagon	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2015-Mar-22, Sun,15:35	Clear	Rear end	P.D. only	Dry	South	Turning right	Pick-up truck	Other motor vehicle	
					South	Turning right	Automobile, station wagon	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2015-Mar-23, Mon,19:06	Clear	SMV other	P.D. only	Dry	West	Turning right	Automobile, station wagon	Pole (sign, parking meter)	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2015-Apr-21, Tue,16:16	Clear	Rear end	Non-fatal injury	Dry	West	Going ahead	Automobile, station wagon	Other motor vehicle	
					West	Stopped	Automobile, station wagon	Other motor vehicle	

City Operations - Transportation Services

Collision Details Report - Public Version

From: January 1, 2014 **To:** December 31, 2018

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2015-May-01, Fri,16:11	Clear	Rear end	P.D. only	Dry	North	Turning right	Automobile, station wagon	Other motor vehicle	
					North	Turning right	Delivery van	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2015-Oct-09, Fri,07:28	Rain	Sideswipe	Non-fatal injury	Wet	North	Going ahead	Pick-up truck	Other motor vehicle	
					North	Turning left	Pick-up truck	Other motor vehicle	
					North	Turning left	Automobile, station wagon	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2015-Oct-14, Wed,14:37	Clear	Rear end	P.D. only	Dry	South	Turning right	Automobile, station wagon	Other motor vehicle	
					South	Turning right	Pick-up truck	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2015-Dec-12, Sat,14:30	Clear	Rear end	Non-fatal injury	Dry	East	Turning right	Passenger van	Other motor vehicle	
					East	Turning right	Automobile, station wagon	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2016-Jan-02, Sat,16:24	Clear	Rear end	P.D. only	Wet	South	Going ahead	Automobile, station wagon	Other motor vehicle	
					South	Stopped	Pick-up truck	Other motor vehicle	

City Operations - Transportation Services

Collision Details Report - Public Version

From: January 1, 2014 **To:** December 31, 2018

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2016-Jan-06, Wed,21:48	Clear	Turning movement	P.D. only	Dry	East	Turning left	Automobile, station wagon	Other motor vehicle	
					West	Going ahead	Automobile, station wagon	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2016-Mar-27, Sun,20:55	Clear	Rear end	P.D. only	Dry	East	Turning right	Pick-up truck	Other motor vehicle	
					East	Turning right	Automobile, station wagon	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2016-Mar-30, Wed,15:30	Clear	Rear end	P.D. only	Dry	South	Turning right	Pick-up truck	Other motor vehicle	
					South	Turning right	Pick-up truck	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2016-Mar-30, Wed,21:16	Clear	Turning movement	P.D. only	Dry	North	Going ahead	Automobile, station wagon	Other motor vehicle	
					South	Turning left	Automobile, station wagon	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2016-May-20, Fri,08:00	Clear	Rear end	P.D. only	Dry	South	Going ahead	Automobile, station wagon	Other motor vehicle	
					South	Stopped	Pick-up truck	Other motor vehicle	

City Operations - Transportation Services

Collision Details Report - Public Version

From: January 1, 2014 **To:** December 31, 2018

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2016-Jun-07, Tue,17:15	Clear	Sideswipe	P.D. only	Dry	East	Changing lanes	Pick-up truck	Other motor vehicle	
					East	Changing lanes	Automobile, station wagon	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2016-Jun-17, Fri,21:28	Clear	Turning movement	Non-fatal injury	Dry	East	Turning left	Automobile, station wagon	Cyclist	
					West	Going ahead	Bicycle	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2016-Jul-19, Tue,16:58	Clear	Rear end	Non-fatal injury	Dry	East	Turning right	Automobile, station wagon	Other motor vehicle	
					East	Turning right	Automobile, station wagon	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2016-Aug-02, Tue,17:44	Clear	Rear end	P.D. only	Dry	South	Turning right	Automobile, station wagon	Other motor vehicle	
					South	Turning right	Automobile, station wagon	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2016-Sep-09, Fri,22:37	Clear	Turning movement	P.D. only	Dry	East	Turning left	Automobile, station wagon	Other motor vehicle	
					West	Going ahead	Automobile, station wagon	Other motor vehicle	

City Operations - Transportation Services

Collision Details Report - Public Version

From: January 1, 2014 **To:** December 31, 2018

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2016-Sep-15, Thu,17:58	Clear	Sideswipe	P.D. only	Dry	West	Changing lanes	Pick-up truck	Other motor vehicle	
					West	Going ahead	Pick-up truck	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2016-Sep-24, Sat,12:55	Clear	Rear end	Non-fatal injury	Dry	East	Going ahead	Automobile, station wagon	Other motor vehicle	
					East	Stopped	Automobile, station wagon	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2016-Sep-29, Thu,16:30	Clear	Rear end	Non-fatal injury	Dry	South	Slowing or stopping	Automobile, station wagon	Other motor vehicle	
					South	Slowing or stopping	Automobile, station wagon	Other motor vehicle	
					West	Going ahead	Fire vehicle	Other	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2016-Oct-18, Tue,08:56	Clear	Rear end	P.D. only	Dry	South	Going ahead	Tow truck	Other motor vehicle	
					South	Slowing or stopping	Automobile, station wagon	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2016-Dec-05, Mon,08:52	Clear	SMV other	P.D. only	Packed snow	East	Turning right	Automobile, station wagon	Skidding/sliding	

City Operations - Transportation Services

Collision Details Report - Public Version

From: January 1, 2014 **To:** December 31, 2018

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2016-Dec-23, Fri,12:40	Clear	Sideswipe	P.D. only	Dry	South	Changing lanes	Pick-up truck	Other motor vehicle	
					South	Going ahead	Automobile, station wagon	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2017-Jan-16, Mon,09:00	Clear	Rear end	P.D. only	Dry	South	Turning left	Unknown	Other motor vehicle	
					South	Turning left	Automobile, station wagon	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2017-Feb-08, Wed,13:19	Freezing Rain	Rear end	P.D. only	Ice	West	Slowing or stopping	Automobile, station wagon	Other motor vehicle	
					West	Stopped	Automobile, station wagon	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2017-Feb-09, Thu,09:52	Clear	Rear end	P.D. only	Dry	East	Going ahead	Automobile, station wagon	Other motor vehicle	
					East	Stopped	Automobile, station wagon	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2017-Feb-12, Sun,20:50	Snow	Rear end	P.D. only	Packed snow	North	Slowing or stopping	Automobile, station wagon	Other motor vehicle	
					North	Stopped	Automobile, station wagon	Other motor vehicle	

City Operations - Transportation Services

Collision Details Report - Public Version

From: January 1, 2014 **To:** December 31, 2018

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2017-Mar-08, Wed,19:01	Clear	Rear end	P.D. only	Dry	East	Unknown	Unknown	Other motor vehicle	
					East	Stopped	Automobile, station wagon	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2017-Mar-14, Tue,17:23	Snow	Rear end	P.D. only	Loose snow	North	Turning left	Automobile, station wagon	Other motor vehicle	
					North	Turning left	Automobile, station wagon	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2017-Apr-10, Mon,17:00	Clear	Rear end	Non-fatal injury	Dry	North	Slowing or stopping	Pick-up truck	Other motor vehicle	
					North	Stopped	Pick-up truck	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2017-Jun-13, Tue,12:16	Clear	Rear end	P.D. only	Dry	North	Slowing or stopping	Passenger van	Other motor vehicle	
					North	Stopped	Passenger van	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2017-Jun-23, Fri,09:50	Rain	Rear end	P.D. only	Wet	North	Slowing or stopping	Automobile, station wagon	Other motor vehicle	
					North	Stopped	Automobile, station wagon	Other motor vehicle	

City Operations - Transportation Services

Collision Details Report - Public Version

From: January 1, 2014 **To:** December 31, 2018

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2017-Jul-13, Thu,08:55	Clear	Turning movement	P.D. only	Dry	East	Turning right	Automobile, station wagon	Other motor vehicle	
					East	Going ahead	Pick-up truck	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2017-Jul-14, Fri,12:31	Clear	Other	P.D. only	Dry	South	Reversing	Pick-up truck	Other motor vehicle	
					North	Stopped	Motorcycle	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2017-Aug-14, Mon,09:20	Clear	Angle	P.D. only	Dry	South	Turning left	Automobile, station wagon	Other motor vehicle	
					West	Going ahead	Automobile, station wagon	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2017-Sep-18, Mon,20:21	Clear	Rear end	Non-fatal injury	Dry	South	Going ahead	Automobile, station wagon	Other motor vehicle	
					South	Stopped	Automobile, station wagon	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2017-Sep-23, Sat,20:00	Clear	Sideswipe	P.D. only	Dry	East	Changing lanes	Automobile, station wagon	Other motor vehicle	
					East	Going ahead	Automobile, station wagon	Other motor vehicle	

City Operations - Transportation Services

Collision Details Report - Public Version

From: January 1, 2014 **To:** December 31, 2018

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2017-Sep-27, Wed,14:34	Rain	Rear end	P.D. only	Wet	West	Turning right	Pick-up truck	Other motor vehicle	
					West	Turning right	Passenger van	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2017-Oct-25, Wed,08:45	Clear	Rear end	P.D. only	Dry	West	Turning right	Automobile, station wagon	Other motor vehicle	
					West	Turning right	Automobile, station wagon	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2017-Dec-16, Sat,15:32	Clear	Sideswipe	P.D. only	Dry	South	Changing lanes	Automobile, station wagon	Other motor vehicle	
					South	Going ahead	Automobile, station wagon	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2018-Jan-20, Sat,15:15	Clear	Rear end	P.D. only	Loose snow	North	Going ahead	Automobile, station wagon	Other motor vehicle	
					North	Stopped	Automobile, station wagon	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2018-Mar-05, Mon,01:12	Clear	SMV other	P.D. only	Dry	North	Going ahead	Automobile, station wagon	Pole (utility, power)	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2018-Mar-17, Sat,02:33	Clear	SMV other	P.D. only	Dry	East	Turning left	Automobile, station wagon	Ran off road	

City Operations - Transportation Services

Collision Details Report - Public Version

From: January 1, 2014 **To:** December 31, 2018

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2018-Sep-23, Sun,17:30	Clear	Rear end	P.D. only	Dry	East	Going ahead	Automobile, station wagon	Other motor vehicle	
					East	Stopped	Automobile, station wagon	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2018-Oct-05, Fri,17:14	Clear	Turning movement	Non-fatal injury	Dry	North	Turning left	Automobile, station wagon	Other motor vehicle	
					South	Going ahead	Motorcycle	Other motor vehicle	
					South	Stopped	Automobile, station wagon	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2018-Oct-09, Tue,10:00	Clear	Rear end	P.D. only	Dry	South	Going ahead	Automobile, station wagon	Other motor vehicle	
					South	Stopped	Automobile, station wagon	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2018-Nov-02, Fri,18:02	Rain	Rear end	P.D. only	Wet	West	Slowing or stopping	Automobile, station wagon	Other motor vehicle	
					West	Slowing or stopping	Automobile, station wagon	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2018-Dec-08, Sat,21:03	Clear	Turning movement	Non-fatal injury	Packed snow	East	Turning left	Automobile, station wagon	Other motor vehicle	
					West	Going ahead	Automobile, station wagon	Other motor vehicle	

City Operations - Transportation Services

Collision Details Report - Public Version

From: January 1, 2014 **To:** December 31, 2018

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2018-Dec-11, Tue,11:10	Snow	Rear end	P.D. only	Loose snow	South	Turning right	Automobile, station wagon	Other motor vehicle	
					South	Turning right	Automobile, station wagon	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2018-Dec-21, Fri,15:18	Rain	Turning movement	Non-fatal injury	Wet	West	Turning left	Automobile, station wagon	Cyclist	
					East	Going ahead	Bicycle	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2018-Dec-29, Sat,19:21	Clear	Turning movement	Non-fatal injury	Dry	East	Turning left	Automobile, station wagon	Other motor vehicle	
					West	Going ahead	Automobile, station wagon	Other motor vehicle	

Location: RIVERSIDE DR btwn BAYPORT PRIV & MOONEY'S BAY PL

Traffic Control: No control

Total Collisions: 3

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2014-May-26, Mon,19:15	Clear	Rear end	P.D. only	Dry	South	Changing lanes	Passenger van	Other motor vehicle	
					South	Slowing or stopping	Automobile, station wagon	Other motor vehicle	

City Operations - Transportation Services

Collision Details Report - Public Version

From: January 1, 2014 **To:** December 31, 2018

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2014-Jun-11, Wed,07:58	Clear	Rear end	Non-fatal injury	Dry	North	Going ahead	Automobile, station wagon	Other motor vehicle	
					North	Stopped	Automobile, station wagon	Other motor vehicle	
					North	Going ahead	Automobile, station wagon	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2016-Jul-22, Fri,14:36	Clear	Rear end	P.D. only	Dry	South	Slowing or stopping	Automobile, station wagon	Other motor vehicle	
					South	Going ahead	Pick-up truck	Other motor vehicle	

Location: RIVERSIDE DR btwn HOG'S BACK RD & RIDGEWOOD AVE

Traffic Control: No control

Total Collisions: 17

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2014-Jan-16, Thu,18:30	Clear	Rear end	P.D. only	Wet	East	Going ahead	Automobile, station wagon	Other motor vehicle	
					East	Stopped	Automobile, station wagon	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2014-Oct-30, Thu,15:20	Clear	Rear end	P.D. only	Dry	North	Going ahead	Automobile, station wagon	Other motor vehicle	
					North	Stopped	Automobile, station wagon	Other motor vehicle	

City Operations - Transportation Services

Collision Details Report - Public Version

From: January 1, 2014 **To:** December 31, 2018

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2014-Dec-11, Thu,07:17	Clear	Turning movement	P.D. only	Slush	North	Turning right	Tow truck	Other motor vehicle	
					North	Going ahead	Pick-up truck	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2015-May-17, Sun,21:22	Clear	Rear end	Non-fatal injury	Dry	South	Going ahead	Automobile, station wagon	Other motor vehicle	
					South	Stopped	Pick-up truck	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2015-Dec-13, Sun,00:15	Clear	SMV other	P.D. only	Dry	South	Changing lanes	Automobile, station wagon	Ran off road	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2015-Dec-15, Tue,08:16	Rain	Rear end	P.D. only	Wet	North	Going ahead	Pick-up truck	Other motor vehicle	
					North	Stopped	Pick-up truck	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2015-Dec-16, Wed,11:30	Clear	Rear end	Non-fatal injury	Dry	North	Going ahead	Automobile, station wagon	Other motor vehicle	
					North	Turning right	Automobile, station wagon	Other motor vehicle	
					North	Going ahead	Unknown	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2015-Dec-16, Wed,11:40	Clear	Rear end	P.D. only	Dry	North	Going ahead	Pick-up truck	Other motor vehicle	
					North	Stopped	Automobile, station wagon	Other motor vehicle	

City Operations - Transportation Services

Collision Details Report - Public Version

From: January 1, 2014 **To:** December 31, 2018

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2016-Jan-22, Fri,14:41	Clear	Sideswipe	P.D. only	Dry	South	Changing lanes	Truck - closed	Other motor vehicle	
					South	Going ahead	Automobile, station wagon	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2016-May-13, Fri,15:33	Clear	Rear end	P.D. only	Dry	North	Going ahead	Passenger van	Other motor vehicle	
					North	Stopped	Automobile, station wagon	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2016-Jun-24, Fri,21:25	Clear	Rear end	Non-fatal injury	Dry	South	Going ahead	Automobile, station wagon	Other motor vehicle	
					South	Slowing or stopping	Pick-up truck	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2016-Sep-03, Sat,07:58	Clear	Sideswipe	P.D. only	Dry	North	Going ahead	Automobile, station wagon	Other motor vehicle	
					North	Changing lanes	Pick-up truck	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2016-Oct-04, Tue,15:07	Clear	Angle	P.D. only	Dry	West	Turning left	Automobile, station wagon	Other motor vehicle	
					South	Going ahead	Pick-up truck	Other motor vehicle	

City Operations - Transportation Services

Collision Details Report - Public Version

From: January 1, 2014 **To:** December 31, 2018

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2017-Feb-14, Tue,10:17	Clear	Sideswipe	P.D. only	Dry	South	Changing lanes	Automobile, station wagon	Other motor vehicle	
					South	Going ahead	Passenger van	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2017-Aug-22, Tue,12:13	Clear	Sideswipe	P.D. only	Wet	South	Going ahead	Automobile, station wagon	Other motor vehicle	
					South	Going ahead	Automobile, station wagon	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2018-Jul-25, Wed,14:25	Clear	Sideswipe	P.D. only	Dry	North	Going ahead	Automobile, station wagon	Other motor vehicle	
					North	Changing lanes	Automobile, station wagon	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2018-Dec-22, Sat,07:20	Snow	Rear end	P.D. only	Packed snow	North	Going ahead	Pick-up truck	Other motor vehicle	
					North	Merging	Automobile, station wagon	Other motor vehicle	

Location: RIVERSIDE DR btwn RIDGEWOOD AVE & BAYPORT PRIV

Traffic Control: No control

Total Collisions: 3

City Operations - Transportation Services

Collision Details Report - Public Version

From: January 1, 2014 **To:** December 31, 2018

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2014-Jul-12, Sat,13:11	Clear	Rear end	P.D. only	Dry	South	Changing lanes	Automobile, station wagon	Other motor vehicle	
					South	Slowing or stopping	Automobile, station wagon	Other motor vehicle	
					South	Going ahead	Automobile, station wagon	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2015-Sep-11, Fri,16:12	Clear	Rear end	Non-fatal injury	Dry	South	Going ahead	Pick-up truck	Other motor vehicle	
					South	Slowing or stopping	Pick-up truck	Other motor vehicle	
Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
									0
2016-Aug-23, Tue,17:02	Clear	Sideswipe	P.D. only	Dry	South	Changing lanes	Pick-up truck	Other motor vehicle	
					South	Going ahead	Automobile, station wagon	Other motor vehicle	

Transportation Services - Traffic Services

Collision Details Report - Public Version

From: January 1, 2019 **To:** December 31, 2019

Location: MOONEY'S BAY PL @ RIVERSIDE DR

Traffic Control: Traffic signal **Total Collisions:** 4

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
2019-Jul-01, Mon,12:23	Clear	Rear end	P.D. only	Dry	South	Slowing or stopping	Automobile, station wagon	Other motor vehicle	0
					South	Stopped	Automobile, station wagon	Other motor vehicle	
2019-Jul-10, Wed,08:41	Clear	Rear end	P.D. only	Dry	North	Slowing or stopping	Delivery van	Other motor vehicle	0
					North	Stopped	Automobile, station wagon	Other motor vehicle	
2019-Sep-18, Wed,11:57	Clear	Rear end	P.D. only	Dry	North	Going ahead	Automobile, station wagon	Other motor vehicle	0
					North	Slowing or stopping	Automobile, station wagon	Other motor vehicle	
					North	Stopped	Automobile, station wagon	Other motor vehicle	
2019-Dec-05, Thu,07:20	Snow	Rear end	Non-fatal injury	Loose snow	South	Slowing or stopping	Automobile, station wagon	Other motor vehicle	0
					South	Stopped	Automobile, station wagon	Other motor vehicle	

Location: RIDGEWOOD AVE @ RIVERSIDE DR

Traffic Control: Traffic signal **Total Collisions:** 4

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
2019-Jan-17, Thu,11:15	Clear	Rear end	P.D. only	Dry	West	Turning right	Automobile, station wagon	Other motor vehicle	0
					West	Turning right	Automobile, station wagon	Other motor vehicle	
2019-Jan-27, Sun,11:30	Clear	SMV other	P.D. only	Packed snow	North	Going ahead	Automobile, station wagon	Snowbank/drift	0
2019-Apr-03, Wed,23:00	Clear	Rear end	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-12, Sun,20:00	Clear	Rear end	P.D. only	Dry	North	Going ahead	Automobile, station wagon	Other motor vehicle	0
					North	Stopped	Automobile, station wagon	Other motor vehicle	

Location: RIDGEWOOD AVE btwn RIVERSIDE DR & DUPONT ST

Traffic Control: No control **Total Collisions:** 2

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped

Transportation Services - Traffic Services

Collision Details Report - Public Version

From: January 1, 2019 **To:** December 31, 2019

Location: RIDGEWOOD AVE btwn RIVERSIDE DR & DUPONT ST

Traffic Control: No control **Total Collisions:** 2

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
2019-Jun-13, Thu,13:53	Clear	SMV unattended vehicle	Non-fatal injury	Dry	East	Going ahead	Automobile, station wagon	Unattended vehicle	0
2019-Jul-19, Fri,23:00	Clear	SMV other	P.D. only	Dry	East	Going ahead	Automobile, station wagon	Pedestrian	1

Location: RIVERSIDE DR @ BROOKFIELD RD/HOG'S BACK RD

Traffic Control: Traffic signal **Total Collisions:** 14

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
2019-Apr-19, Fri,19:10	Rain	Rear end	Non-fatal injury	Wet	North	Going ahead	Automobile, station wagon	Other motor vehicle	0
					North	Going ahead	Automobile, station wagon	Other motor vehicle	
2019-May-25, Sat,19:13	Rain	Angle	P.D. only	Wet	South	Going ahead	Automobile, station wagon	Other motor vehicle	0
					East	Turning left	Automobile, station wagon	Other motor vehicle	
2019-May-31, Fri,22:14	Clear	Turning movement	P.D. only	Dry	East	Turning left	Automobile, station wagon	Other motor vehicle	0
					West	Going ahead	Automobile, station wagon	Other motor vehicle	
2019-Jun-23, Sun,20:45	Clear	Rear end	P.D. only	Dry	North	Going ahead	Automobile, station wagon	Other motor vehicle	0
					North	Changing lanes	Automobile, station wagon	Other motor vehicle	
2019-Jun-28, Fri,10:10	Clear	Turning movement	P.D. only	Dry	West	Turning left	Automobile, station wagon	Other motor vehicle	0
					East	Going ahead	Automobile, station wagon	Other motor vehicle	
2019-Jun-28, Fri,15:30	Clear	Rear end	P.D. only	Dry	North	Going ahead	Automobile, station wagon	Other motor vehicle	0
					North	Stopped	Automobile, station wagon	Other motor vehicle	
2019-Jul-17, Wed,19:41	Clear	Rear end	P.D. only	Dry	South	Turning right	Automobile, station wagon	Other motor vehicle	0
					South	Turning right	Automobile, station wagon	Other motor vehicle	
2019-Jul-31, Wed,12:05	Clear	Sideswipe	P.D. only	Dry	North	Changing lanes	Automobile, station wagon	Other motor vehicle	0
					North	Turning left	Automobile, station wagon	Other motor vehicle	
2019-Aug-28, Wed,22:30	Clear	Rear end	P.D. only	Dry	East	Turning right	Pick-up truck	Other motor vehicle	0
					East	Turning right	Automobile, station wagon	Other motor vehicle	

Transportation Services - Traffic Services

Collision Details Report - Public Version

From: January 1, 2019 **To:** December 31, 2019

Location: RIVERSIDE DR @ BROOKFIELD RD/HOG'S BACK RD

Traffic Control: Traffic signal **Total Collisions:** 14

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
2019-Oct-03, Thu,16:12	Clear	Rear end	P.D. only	Dry	North	Turning right	Automobile, station wagon	Other motor vehicle	0
					North	Turning right	Automobile, station wagon	Other motor vehicle	
2019-Oct-07, Mon,15:35	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-Oct-24, Thu,17:55	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-Dec-11, Wed,17:36	Freezing Rain	Rear end	P.D. only	Ice	North	Going ahead	Automobile, station wagon	Other motor vehicle	0
					North	Slowing or stopping	Automobile, station wagon	Other motor vehicle	
2019-Dec-13, Fri,16:30	Clear	Rear end	P.D. only	Dry	East	Turning right	Automobile, station wagon	Other motor vehicle	0
					East	Stopped	Automobile, station wagon	Other motor vehicle	

Location: RIVERSIDE DR btwn BAYPORT PRIV & MOONEY'S BAY PL

Traffic Control: No control **Total Collisions:** 1

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
2019-Jul-13, Sat,14:30	Clear	Rear end	P.D. only	Dry	South	Slowing or stopping	Automobile, station wagon	Other motor vehicle	0
					South	Stopped	Passenger van	Other motor vehicle	
					South	Stopped	Passenger van	Other motor vehicle	

Location: RIVERSIDE DR btwn HOG'S BACK RD & RIDGEWOOD AVE

Traffic Control: No control **Total Collisions:** 4

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
2019-Feb-19, Tue,14:51	Clear	Rear end	P.D. only	Loose snow	North	Slowing or stopping	Automobile, station wagon	Other motor vehicle	0
					North	Stopped	Automobile, station wagon	Other motor vehicle	
					North	Stopped	Automobile, station wagon	Other motor vehicle	

Transportation Services - Traffic Services

Collision Details Report - Public Version

From: January 1, 2019 **To:** December 31, 2019

Location: RIVERSIDE DR btwn HOG'S BACK RD & RIDGEWOOD AVE

Traffic Control: No control **Total Collisions:** 4

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuver	Vehicle type	First Event	No. Ped
2019-Jul-19, Fri,06:59	Clear	Sideswipe	P.D. only	Dry	North	Changing lanes	Truck - closed	Other motor vehicle	0
					North	Turning right	Automobile, station wagon	Other motor vehicle	
2019-Jul-26, Fri,09:31	Clear	Rear end	P.D. only	Dry	North	Going ahead	Automobile, station wagon	Other motor vehicle	0
					North	Stopped	Automobile, station wagon	Other motor vehicle	
2019-Nov-16, Sat,03:46	Clear	SMV other	P.D. only	Dry	South	Going ahead	Automobile, station wagon	Ran off road	0

Appendix E

TDM CHECKLISTS

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

Legend

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

		TDM-supportive design & infrastructure measures: *Residential developments*	Check if completed & add descriptions, explanations or plan/drawing references
	1.	**WALKING & CYCLING: ROUTES**	
	1.1	**Building location & access points**	
BASIC	1.1.1	Locate building close to the street, and do not locate parking areas between the street and building entrances	☐
BASIC	1.1.2	Locate building entrances in order to minimize walking distances to sidewalks and transit stops/stations	☐
BASIC	1.1.3	Locate building doors and windows to ensure visibility of pedestrians from the building, for their security and comfort	☐
	1.2	**Facilities for walking & cycling**	
REQUIRED	1.2.1	Provide convenient, direct access to stations or major stops along rapid transit routes within 600 metres; minimize walking distances from buildings to rapid transit; provide pedestrian-friendly, weather-protected (where possible) environment between rapid transit accesses and building entrances; ensure quality linkages from sidewalks through building entrances to integrated stops/stations *(see Official Plan policy 4.3.3)*	☑
REQUIRED	1.2.2	Provide safe, direct and attractive pedestrian access from public sidewalks to building entrances through such measures as: reducing distances between public sidewalks and major building entrances; providing walkways from public streets to major building entrances; within a site, providing walkways along the front of adjoining buildings, between adjacent buildings, and connecting areas where people may congregate, such as courtyards and transit stops; and providing weather protection through canopies, colonnades, and other design elements wherever possible *(see Official Plan policy 4.3.12)*	☑

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

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

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

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

Legend

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

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

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

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

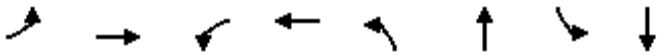
			TDM measures: *Residential developments*	Check if proposed & add descriptions
		3.	**TRANSIT**	
		3.1	**Transit information**	
BASIC		3.1.1	Display relevant transit schedules and route maps at entrances *(multi-family, condominium)*	☑
BETTER		3.1.2	Provide real-time arrival information display at entrances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

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

Appendix F

SYNCHRO AND SIDRA ANALYSIS REPORTS

Existing Conditions

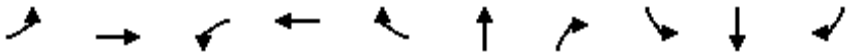


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	68	25	97	28	472	1279	279	654
Future Volume (vph)	68	25	97	28	472	1279	279	654
Lane Group Flow (vph)	76	165	108	217	524	1883	310	1154
Turn Type	pm+pt	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases	7	4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	7	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	11.2	36.7	36.7	36.7	11.1	25.6	11.1	25.6
Total Split (s)	15.0	52.0	37.0	37.0	32.0	48.0	20.0	36.0
Total Split (%)	12.5%	43.3%	30.8%	30.8%	26.7%	40.0%	16.7%	30.0%
Yellow Time (s)	3.3	3.3	3.3	3.3	3.7	3.7	3.7	3.7
All-Red Time (s)	2.9	3.4	3.4	3.4	2.4	1.9	2.4	1.9
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.2	6.7	6.7	6.7	6.1	5.6	6.1	5.6
Lead/Lag	Lead		Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max
Act Effct Green (s)	29.3	28.8	16.8	16.8	42.4	42.4	30.4	30.4
Actuated g/C Ratio	0.24	0.24	0.14	0.14	0.35	0.35	0.25	0.25
v/c Ratio	0.39	0.35	0.66	0.58	0.88	1.10	0.72	0.92
Control Delay	38.2	9.8	67.1	15.7	35.7	97.1	54.4	51.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	38.2	9.8	67.1	15.7	35.7	97.1	54.4	51.9
LOS	D	A	E	B	D	F	D	D
Approach Delay		18.7		32.8		83.7		52.4
Approach LOS		B		C		F		D
Queue Length 50th (m)	13.8	5.0	24.5	6.5	112.3	~186.5	69.1	88.6
Queue Length 95th (m)	23.8	19.7	40.7	27.6	m#168.8	m#214.2	#139.3	#115.4
Internal Link Dist (m)		228.4		515.1		121.4		276.2
Turn Bay Length (m)	15.0				135.0		160.0	
Base Capacity (vph)	201	674	294	531	598	1705	429	1252
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.38	0.24	0.37	0.41	0.88	1.10	0.72	0.92

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 91 (76%), Referenced to phase 2:NBT and 6:SBT, Start of Green	
Natural Cycle: 145	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.10	
Intersection Signal Delay: 66.1	Intersection LOS: E
Intersection Capacity Utilization 90.8%	ICU Level of Service E
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: Riverside Dr & Hog's Back Rd/Brookfield Rd



Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	NBR	SBL	SBT	SBR	Ø5
Lane Configurations											
Traffic Volume (vph)	4	0	21	0	91	2081	72	32	699	7	
Future Volume (vph)	4	0	21	0	91	2081	72	32	699	7	
Lane Group Flow (vph)	4	1	0	23	101	2312	80	36	777	8	
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	Prot	NA	Perm	
Protected Phases		4		8		2		1	6		5
Permitted Phases	4		8		8		2			6	
Detector Phase	4	4	8	8	8	2	2	1	6	6	
Switch Phase											
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0
Minimum Split (s)	30.8	30.8	30.8	30.8	30.8	26.6	26.6	10.8	26.6	26.6	10.8
Total Split (s)	31.0	31.0	31.0	31.0	31.0	75.0	75.0	14.0	75.0	75.0	14.0
Total Split (%)	25.8%	25.8%	25.8%	25.8%	25.8%	62.5%	62.5%	11.7%	62.5%	62.5%	12%
Yellow Time (s)	3.3	3.3	3.3	3.3	3.3	3.7	3.7	3.7	3.7	3.7	3.7
All-Red Time (s)	3.5	3.5	3.5	3.5	3.5	1.9	1.9	2.1	1.9	1.9	2.1
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.8	6.8		6.8	6.8	5.6	5.6	5.8	5.6	5.6	
Lead/Lag						Lag	Lag	Lead	Lag	Lag	Lead
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max	None
Act Effct Green (s)	10.3	10.3		10.3	10.3	88.3	88.3	8.0	97.3	97.3	
Actuated g/C Ratio	0.09	0.09		0.09	0.09	0.74	0.74	0.07	0.81	0.81	
v/c Ratio	0.04	0.00		0.20	0.45	0.93	0.07	0.32	0.28	0.01	
Control Delay	50.8	0.0		55.2	16.8	23.2	1.4	50.9	1.6	0.0	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	50.8	0.0		55.2	16.8	23.2	1.4	50.9	1.6	0.0	
LOS	D	A		E	B	C	A	D	A	A	
Approach Delay		40.6		23.9		22.5			3.8		
Approach LOS		D		C		C			A		
Queue Length 50th (m)	0.9	0.0		5.2	0.0	243.6	0.0	8.7	14.8	0.0	
Queue Length 95th (m)	4.4	0.0		13.4	16.4	#347.3	4.4	m11.6	m13.7	m0.0	
Internal Link Dist (m)		58.8		118.5		110.2			196.4		
Turn Bay Length (m)					35.0		50.0	90.0		55.0	
Base Capacity (vph)	267	531		272	386	2494	1139	125	2749	1247	
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	
Reduced v/c Ratio	0.01	0.00		0.08	0.26	0.93	0.07	0.29	0.28	0.01	

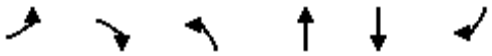
Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 100 (83%), Referenced to phase 2:NBT and 6:SBT, Start of Green	
Natural Cycle: 150	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.93	
Intersection Signal Delay: 18.0	Intersection LOS: B
Intersection Capacity Utilization 93.4%	ICU Level of Service F
Analysis Period (min) 15	

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Riverside Dr & Ridgewood Ave

Lane Group	EBL	NBT	SBT
Lane Configurations			
Traffic Volume (vph)	45	86	59
Future Volume (vph)	45	86	59
Lane Group Flow (vph)	82	165	102
Sign Control	Stop	Stop	Stop

Intersection Summary		
Control Type: Unsignalized		
Intersection Capacity Utilization 26.2%		ICU Level of Service A
Analysis Period (min) 15		



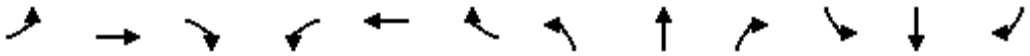
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Traffic Volume (vph)	45	29	62	86	59	32
Future Volume (vph)	45	29	62	86	59	32
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	50	32	69	96	66	36

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total (vph)	82	165	102
Volume Left (vph)	50	69	0
Volume Right (vph)	32	0	36
Hadj (s)	-0.08	0.12	-0.18
Departure Headway (s)	4.4	4.3	4.1
Degree Utilization, x	0.10	0.20	0.12
Capacity (veh/h)	760	810	855
Control Delay (s)	7.9	8.4	7.6
Approach Delay (s)	7.9	8.4	7.6
Approach LOS	A	A	A

Intersection Summary			
Delay	8.0		
Level of Service	A		
Intersection Capacity Utilization	26.2%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBT	WBT	NBT	SBT
Lane Configurations				
Traffic Volume (vph)	3	3	45	17
Future Volume (vph)	3	3	45	17
Lane Group Flow (vph)	202	15	54	97
Sign Control	Stop	Stop	Stop	Stop

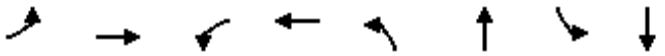
Intersection Summary		
Control Type: Unsignalized		
Intersection Capacity Utilization 29.9%		ICU Level of Service A
Analysis Period (min) 15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	178	3	1	0	3	11	4	45	0	2	17	68
Future Volume (vph)	178	3	1	0	3	11	4	45	0	2	17	68
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	198	3	1	0	3	12	4	50	0	2	19	76

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	202	15	54	97
Volume Left (vph)	198	0	4	2
Volume Right (vph)	1	12	0	76
Hadj (s)	0.23	-0.45	0.05	-0.43
Departure Headway (s)	4.5	4.0	4.6	4.0
Degree Utilization, x	0.25	0.02	0.07	0.11
Capacity (veh/h)	780	837	742	832
Control Delay (s)	9.0	7.1	7.9	7.5
Approach Delay (s)	9.0	7.1	7.9	7.5
Approach LOS	A	A	A	A

Intersection Summary				
Delay	8.4			
Level of Service	A			
Intersection Capacity Utilization	29.9%	ICU Level of Service	A	
Analysis Period (min)	15			

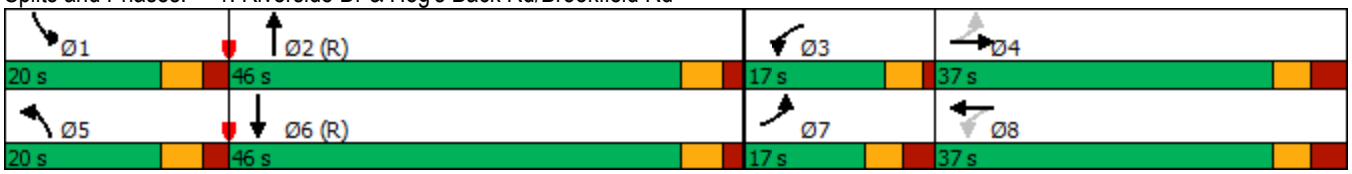


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	159	34	309	14	129	670	202	1270
Future Volume (vph)	159	34	309	14	129	670	202	1270
Lane Group Flow (vph)	177	445	343	350	143	875	224	1554
Turn Type	pm+pt	NA	pm+pt	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	11.2	36.7	9.5	36.7	11.1	25.6	11.1	25.6
Total Split (s)	17.0	37.0	17.0	37.0	20.0	46.0	20.0	46.0
Total Split (%)	14.2%	30.8%	14.2%	30.8%	16.7%	38.3%	16.7%	38.3%
Yellow Time (s)	3.3	3.3	3.5	3.3	3.7	3.7	3.7	3.7
All-Red Time (s)	2.9	3.4	1.0	3.4	2.4	1.9	2.4	1.9
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.2	6.7	4.5	6.7	6.1	5.6	6.1	5.6
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max
Act Effct Green (s)	34.2	23.0	37.8	23.1	13.5	41.3	20.3	48.1
Actuated g/C Ratio	0.28	0.19	0.32	0.19	0.11	0.34	0.17	0.40
v/c Ratio	0.84	0.90	1.42	0.65	0.75	0.53	0.78	0.80
Control Delay	61.0	43.0	238.8	13.3	66.6	43.4	68.7	37.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	61.0	43.0	238.8	13.3	66.6	43.4	68.7	37.0
LOS	E	D	F	B	E	D	E	D
Approach Delay		48.1		124.9		46.7		41.0
Approach LOS		D		F		D		D
Queue Length 50th (m)	30.0	49.1	~91.4	9.6	32.5	78.4	51.4	122.8
Queue Length 95th (m)	#53.7	#87.7	#141.6	36.8	#63.0	91.8	#110.2	#161.7
Internal Link Dist (m)		228.4		515.1		121.4		276.2
Turn Bay Length (m)	15.0				135.0		160.0	
Base Capacity (vph)	213	571	242	611	202	1658	287	1934
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.83	0.78	1.42	0.57	0.71	0.53	0.78	0.80

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 84 (70%), Referenced to phase 2:NBT and 6:SBT, Start of Green	
Natural Cycle: 125	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.42	
Intersection Signal Delay: 57.6	Intersection LOS: E
Intersection Capacity Utilization 99.4%	ICU Level of Service F
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Riverside Dr & Hog's Back Rd/Brookfield Rd



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	7	0	44	1	43	3	896	29	45	1694	8
Future Volume (vph)	7	0	44	1	43	3	896	29	45	1694	8
Lane Group Flow (vph)	8	6	0	50	48	3	996	32	50	1882	9
Turn Type	Perm	NA	Perm	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4		8		5	2		1	6	
Permitted Phases	4		8		8			2			6
Detector Phase	4	4	8	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	30.8	30.8	30.8	30.8	30.8	10.8	26.6	26.6	10.8	26.6	26.6
Total Split (s)	31.0	31.0	31.0	31.0	31.0	14.0	75.0	75.0	14.0	75.0	75.0
Total Split (%)	25.8%	25.8%	25.8%	25.8%	25.8%	11.7%	62.5%	62.5%	11.7%	62.5%	62.5%
Yellow Time (s)	3.3	3.3	3.3	3.3	3.3	3.7	3.7	3.7	3.7	3.7	3.7
All-Red Time (s)	3.5	3.5	3.5	3.5	3.5	2.1	1.9	1.9	2.1	1.9	1.9
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.8	6.8		6.8	6.8	5.8	5.6	5.6	5.8	5.6	5.6
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	11.2	11.2		11.2	11.2	5.8	88.4	88.4	8.9	98.4	98.4
Actuated g/C Ratio	0.09	0.09		0.09	0.09	0.05	0.74	0.74	0.07	0.82	0.82
v/c Ratio	0.07	0.02		0.41	0.23	0.04	0.40	0.03	0.40	0.68	0.01
Control Delay	49.6	0.2		61.4	6.6	55.0	8.8	0.0	60.2	6.0	0.0
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	49.6	0.2		61.4	6.6	55.0	8.8	0.0	60.2	6.0	0.0
LOS	D	A		E	A	D	A	A	E	A	A
Approach Delay		28.4		34.6			8.6			7.4	
Approach LOS		C		C			A			A	
Queue Length 50th (m)	1.8	0.0		11.4	0.0	0.7	48.7	0.0	12.2	37.1	0.0
Queue Length 95th (m)	6.5	0.0		23.5	4.9	3.9	75.4	0.0	m14.1	m49.5	m0.0
Internal Link Dist (m)		58.8		118.5			110.2			196.4	
Turn Bay Length (m)					35.0	50.0		50.0	90.0		55.0
Base Capacity (vph)	260	407		261	366	115	2497	1140	135	2780	1259
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.03	0.01		0.19	0.13	0.03	0.40	0.03	0.37	0.68	0.01

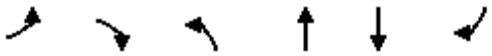
Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 112 (93%), Referenced to phase 2:NBT and 6:SBT, Start of Green	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.68	
Intersection Signal Delay: 8.8	Intersection LOS: A
Intersection Capacity Utilization 69.1%	ICU Level of Service C
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Riverside Dr & Ridgewood Ave

Lane Group	EBL	NBT	SBT
Lane Configurations			
Traffic Volume (vph)	25	46	239
Future Volume (vph)	25	46	239
Lane Group Flow (vph)	78	94	303
Sign Control	Stop	Stop	Stop

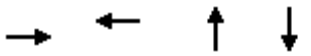
Intersection Summary		
Control Type: Unsignalized		
Intersection Capacity Utilization 34.6%		ICU Level of Service A
Analysis Period (min) 15		



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Traffic Volume (vph)	25	45	39	46	239	33
Future Volume (vph)	25	45	39	46	239	33
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	28	50	43	51	266	37

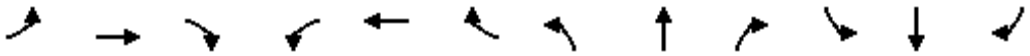
Direction, Lane #	EB 1	NB 1	SB 1
Volume Total (vph)	78	94	303
Volume Left (vph)	28	43	0
Volume Right (vph)	50	0	37
Hadj (s)	-0.28	0.13	-0.04
Departure Headway (s)	4.5	4.5	4.2
Degree Utilization, x	0.10	0.12	0.35
Capacity (veh/h)	733	766	841
Control Delay (s)	8.0	8.1	9.4
Approach Delay (s)	8.0	8.1	9.4
Approach LOS	A	A	A

Intersection Summary			
Delay	8.9		
Level of Service	A		
Intersection Capacity Utilization	34.6%	ICU Level of Service	A
Analysis Period (min)	15		



Lane Group	EBT	WBT	NBT	SBT
Lane Configurations				
Traffic Volume (vph)	2	4	23	80
Future Volume (vph)	2	4	23	80
Lane Group Flow (vph)	98	8	27	390
Sign Control	Stop	Stop	Stop	Stop

Intersection Summary		
Control Type: Unsignalized		
Intersection Capacity Utilization	43.4%	ICU Level of Service A
Analysis Period (min)	15	

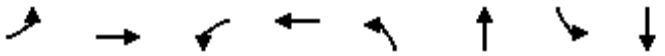


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	79	2	7	0	4	4	1	23	0	8	80	263
Future Volume (vph)	79	2	7	0	4	4	1	23	0	8	80	263
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Hourly flow rate (vph)	88	2	8	0	4	4	1	26	0	9	89	292

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	98	8	27	390
Volume Left (vph)	88	0	1	9
Volume Right (vph)	8	4	0	292
Hadj (s)	0.16	-0.27	0.04	-0.41
Departure Headway (s)	4.9	4.6	4.6	3.8
Degree Utilization, x	0.13	0.01	0.03	0.41
Capacity (veh/h)	672	697	744	929
Control Delay (s)	8.7	7.7	7.7	9.4
Approach Delay (s)	8.7	7.7	7.7	9.4
Approach LOS	A	A	A	A

Intersection Summary			
Delay	9.2		
Level of Service	A		
Intersection Capacity Utilization	43.4%	ICU Level of Service	A
Analysis Period (min)	15		

Total Future Background 2024

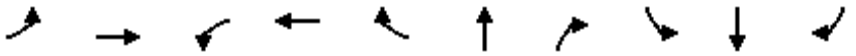


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	70	34	101	45	486	1389	295	715
Future Volume (vph)	70	34	101	45	486	1389	295	715
Lane Group Flow (vph)	70	161	101	233	486	1818	295	1111
Turn Type	pm+pt	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases	7	4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	7	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	11.2	36.7	36.7	36.7	11.1	25.6	11.1	25.6
Total Split (s)	15.0	52.0	37.0	37.0	32.0	48.0	20.0	36.0
Total Split (%)	12.5%	43.3%	30.8%	30.8%	26.7%	40.0%	16.7%	30.0%
Yellow Time (s)	3.3	3.3	3.3	3.3	3.7	3.7	3.7	3.7
All-Red Time (s)	2.9	3.4	3.4	3.4	2.4	1.9	2.4	1.9
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.2	6.7	6.7	6.7	6.1	5.6	6.1	5.6
Lead/Lag	Lead		Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max
Act Effct Green (s)	28.6	28.1	16.2	16.2	43.1	42.4	31.1	30.4
Actuated g/C Ratio	0.24	0.23	0.14	0.14	0.36	0.35	0.26	0.25
v/c Ratio	0.40	0.35	0.64	0.65	0.80	1.07	0.67	0.89
Control Delay	39.2	10.9	66.7	23.4	31.8	83.5	51.3	48.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	39.2	10.9	66.7	23.4	31.8	83.5	51.3	48.6
LOS	D	B	E	C	C	F	D	D
Approach Delay		19.5		36.5		72.6		49.2
Approach LOS		B		D		E		D
Queue Length 50th (m)	12.8	6.1	22.9	14.1	104.9	~174.4	64.5	84.4
Queue Length 95th (m)	22.4	21.0	38.7	37.5	m#157.9	#204.7	#127.5	#105.1
Internal Link Dist (m)		228.4		515.1		121.4		276.2
Turn Bay Length (m)	15.0				135.0		160.0	
Base Capacity (vph)	184	673	295	521	608	1707	439	1251
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.38	0.24	0.34	0.45	0.80	1.07	0.67	0.89

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 91 (76%), Referenced to phase 2:NBT and 6:SBT, Start of Green	
Natural Cycle: 135	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.07	
Intersection Signal Delay: 59.2	Intersection LOS: E
Intersection Capacity Utilization 95.1%	ICU Level of Service F
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: Riverside Dr & Hog's Back Rd/Brookfield Rd



Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	NBR	SBL	SBT	SBR	Ø5
Lane Configurations											
Traffic Volume (vph)	4	0	24	0	103	2204	76	33	761	7	
Future Volume (vph)	4	0	24	0	103	2204	76	33	761	7	
Lane Group Flow (vph)	4	1	0	24	103	2204	76	33	761	7	
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	Prot	NA	Perm	
Protected Phases		4		8		2		1	6		5
Permitted Phases	4		8		8		2			6	
Detector Phase	4	4	8	8	8	2	2	1	6	6	
Switch Phase											
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0
Minimum Split (s)	30.8	30.8	30.8	30.8	30.8	26.6	26.6	10.8	26.6	26.6	10.8
Total Split (s)	31.0	31.0	31.0	31.0	31.0	75.0	75.0	14.0	75.0	75.0	14.0
Total Split (%)	25.8%	25.8%	25.8%	25.8%	25.8%	62.5%	62.5%	11.7%	62.5%	62.5%	12%
Yellow Time (s)	3.3	3.3	3.3	3.3	3.3	3.7	3.7	3.7	3.7	3.7	3.7
All-Red Time (s)	3.5	3.5	3.5	3.5	3.5	1.9	1.9	2.1	1.9	1.9	2.1
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.8	6.8		6.8	6.8	5.6	5.6	5.8	5.6	5.6	
Lead/Lag						Lag	Lag	Lead	Lag	Lag	Lead
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max	None
Act Effct Green (s)	10.3	10.3		10.3	10.3	88.4	88.4	7.8	97.3	97.3	
Actuated g/C Ratio	0.09	0.09		0.09	0.09	0.74	0.74	0.06	0.81	0.81	
v/c Ratio	0.04	0.00		0.21	0.46	0.88	0.07	0.30	0.28	0.01	
Control Delay	50.8	0.0		55.5	16.7	19.4	1.2	50.8	1.6	0.0	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	50.8	0.0		55.5	16.7	19.4	1.2	50.8	1.6	0.0	
LOS	D	A		E	B	B	A	D	A	A	
Approach Delay		40.6		24.1		18.8			3.6		
Approach LOS		D		C		B			A		
Queue Length 50th (m)	0.9	0.0		5.4	0.0	209.7	0.0	8.2	14.0	0.0	
Queue Length 95th (m)	4.4	0.0		13.8	16.4	#318.6	4.0	m10.9	m14.1	m0.0	
Internal Link Dist (m)		58.8		118.5		110.2			196.4		
Turn Bay Length (m)					35.0		50.0	90.0		55.0	
Base Capacity (vph)	267	536		272	388	2497	1140	124	2749	1247	
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	
Reduced v/c Ratio	0.01	0.00		0.09	0.27	0.88	0.07	0.27	0.28	0.01	

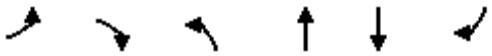
Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 100 (83%), Referenced to phase 2:NBT and 6:SBT, Start of Green	
Natural Cycle: 130	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.88	
Intersection Signal Delay: 15.2	Intersection LOS: B
Intersection Capacity Utilization 97.0%	ICU Level of Service F
Analysis Period (min) 15	

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Riverside Dr & Ridgewood Ave

Lane Group	EBL	NBT	SBT
Lane Configurations			
Traffic Volume (vph)	46	88	61
Future Volume (vph)	46	88	61
Lane Group Flow (vph)	79	163	95
Sign Control	Stop	Stop	Stop

Intersection Summary		
Control Type: Unsignalized		
Intersection Capacity Utilization 27.4%		ICU Level of Service A
Analysis Period (min) 15		



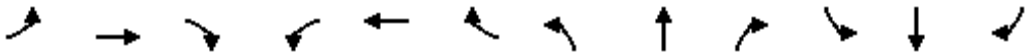
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Traffic Volume (vph)	46	33	75	88	61	34
Future Volume (vph)	46	33	75	88	61	34
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	46	33	75	88	61	34

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total (vph)	79	163	95
Volume Left (vph)	46	75	0
Volume Right (vph)	33	0	34
Hadj (s)	-0.10	0.13	-0.18
Departure Headway (s)	4.4	4.3	4.1
Degree Utilization, x	0.10	0.20	0.11
Capacity (veh/h)	778	812	858
Control Delay (s)	7.8	8.3	7.6
Approach Delay (s)	7.8	8.3	7.6
Approach LOS	A	A	A

Intersection Summary			
Delay	8.0		
Level of Service	A		
Intersection Capacity Utilization	27.4%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBT	WBT	NBT	SBT
Lane Configurations				
Traffic Volume (vph)	3	3	45	17
Future Volume (vph)	3	3	45	17
Lane Group Flow (vph)	207	14	49	98
Sign Control	Stop	Stop	Stop	Stop

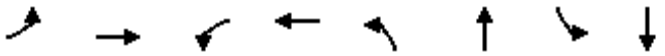
Intersection Summary		
Control Type: Unsignalized		
Intersection Capacity Utilization 32.1%		ICU Level of Service A
Analysis Period (min) 15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	203	3	1	0	3	11	4	45	0	2	17	79
Future Volume (vph)	203	3	1	0	3	11	4	45	0	2	17	79
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	203	3	1	0	3	11	4	45	0	2	17	79

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	207	14	49	98
Volume Left (vph)	203	0	4	2
Volume Right (vph)	1	11	0	79
Hadj (s)	0.23	-0.44	0.05	-0.45
Departure Headway (s)	4.5	4.0	4.6	4.0
Degree Utilization, x	0.26	0.02	0.06	0.11
Capacity (veh/h)	782	837	740	834
Control Delay (s)	9.0	7.1	7.9	7.5
Approach Delay (s)	9.0	7.1	7.9	7.5
Approach LOS	A	A	A	A

Intersection Summary				
Delay	8.4			
Level of Service	A			
Intersection Capacity Utilization	32.1%	ICU Level of Service	A	
Analysis Period (min)	15			

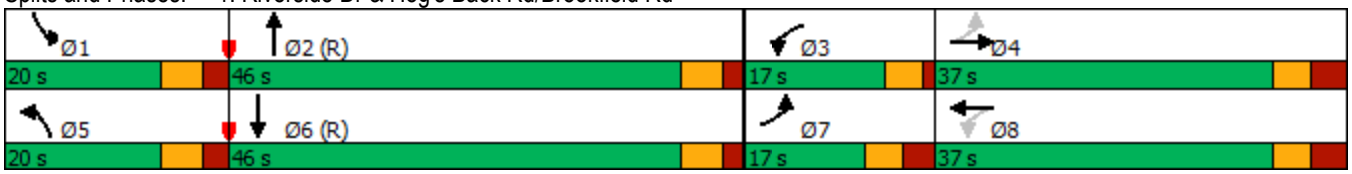


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	164	51	321	28	133	754	224	1380
Future Volume (vph)	164	51	321	28	133	754	224	1380
Lane Group Flow (vph)	164	428	321	352	133	878	224	1513
Turn Type	pm+pt	NA	pm+pt	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	11.2	36.7	9.5	36.7	11.1	25.6	11.1	25.6
Total Split (s)	17.0	37.0	17.0	37.0	20.0	46.0	20.0	46.0
Total Split (%)	14.2%	30.8%	14.2%	30.8%	16.7%	38.3%	16.7%	38.3%
Yellow Time (s)	3.3	3.3	3.5	3.3	3.7	3.7	3.7	3.7
All-Red Time (s)	2.9	3.4	1.0	3.4	2.4	1.9	2.4	1.9
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.2	6.7	4.5	6.7	6.1	5.6	6.1	5.6
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max
Act Effct Green (s)	32.5	21.4	36.4	21.7	13.4	41.8	21.4	49.8
Actuated g/C Ratio	0.27	0.18	0.30	0.18	0.11	0.35	0.18	0.42
v/c Ratio	0.78	0.89	1.33	0.67	0.70	0.52	0.74	0.76
Control Delay	54.8	40.9	203.5	13.8	61.8	43.1	64.0	34.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	54.8	40.9	203.5	13.8	61.8	43.1	64.0	34.4
LOS	D	D	F	B	E	D	E	C
Approach Delay		44.8		104.2		45.6		38.3
Approach LOS		D		F		D		D
Queue Length 50th (m)	28.6	44.2	~80.6	9.2	30.2	78.9	50.1	112.3
Queue Length 95th (m)	#43.2	79.3	#126.5	35.9	#56.4	92.4	#110.2	#154.1
Internal Link Dist (m)		228.4		515.1		121.4		276.2
Turn Bay Length (m)	15.0				135.0		160.0	
Base Capacity (vph)	213	575	241	617	205	1678	302	2001
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.77	0.74	1.33	0.57	0.65	0.52	0.74	0.76

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 84 (70%), Referenced to phase 2:NBT and 6:SBT, Start of Green	
Natural Cycle: 115	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.33	
Intersection Signal Delay: 52.1	Intersection LOS: D
Intersection Capacity Utilization 104.3%	ICU Level of Service G
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Riverside Dr & Hog's Back Rd/Brookfield Rd



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	7	0	49	1	47	3	985	34	53	1812	8
Future Volume (vph)	7	0	49	1	47	3	985	34	53	1812	8
Lane Group Flow (vph)	7	5	0	50	47	3	985	34	53	1812	8
Turn Type	Perm	NA	Perm	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4		8		5	2		1	6	
Permitted Phases	4		8		8			2			6
Detector Phase	4	4	8	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	30.8	30.8	30.8	30.8	30.8	10.8	26.6	26.6	10.8	26.6	26.6
Total Split (s)	31.0	31.0	31.0	31.0	31.0	14.0	75.0	75.0	14.0	75.0	75.0
Total Split (%)	25.8%	25.8%	25.8%	25.8%	25.8%	11.7%	62.5%	62.5%	11.7%	62.5%	62.5%
Yellow Time (s)	3.3	3.3	3.3	3.3	3.3	3.7	3.7	3.7	3.7	3.7	3.7
All-Red Time (s)	3.5	3.5	3.5	3.5	3.5	2.1	1.9	1.9	2.1	1.9	1.9
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.8	6.8		6.8	6.8	5.8	5.6	5.6	5.8	5.6	5.6
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	11.2	11.2		11.2	11.2	5.8	88.2	88.2	9.1	98.4	98.4
Actuated g/C Ratio	0.09	0.09		0.09	0.09	0.05	0.74	0.74	0.08	0.82	0.82
v/c Ratio	0.06	0.02		0.41	0.22	0.04	0.40	0.03	0.41	0.65	0.01
Control Delay	49.4	0.2		61.4	6.2	55.0	8.8	0.1	62.6	5.4	0.0
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	49.4	0.2		61.4	6.2	55.0	8.8	0.1	62.6	5.4	0.0
LOS	D	A		E	A	D	A	A	E	A	A
Approach Delay		28.9		34.6			8.7			7.0	
Approach LOS		C		C			A			A	
Queue Length 50th (m)	1.5	0.0		11.4	0.0	0.7	48.3	0.0	13.1	33.7	0.0
Queue Length 95th (m)	6.0	0.0		23.5	4.7	3.9	75.0	0.0	m15.8	m46.8	m0.0
Internal Link Dist (m)		58.8		118.5			110.2			196.4	
Turn Bay Length (m)					35.0	50.0		50.0	90.0		55.0
Base Capacity (vph)	260	408		261	366	115	2492	1138	137	2780	1259
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.03	0.01		0.19	0.13	0.03	0.40	0.03	0.39	0.65	0.01

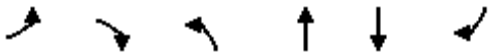
Intersection Summary		
Cycle Length: 120		
Actuated Cycle Length: 120		
Offset: 112 (93%), Referenced to phase 2:NBT and 6:SBT, Start of Green		
Natural Cycle: 100		
Control Type: Actuated-Coordinated		
Maximum v/c Ratio: 0.65		
Intersection Signal Delay: 8.6	Intersection LOS: A	
Intersection Capacity Utilization 72.8%	ICU Level of Service C	
Analysis Period (min) 15		

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Riverside Dr & Ridgewood Ave

Lane Group	EBL	NBT	SBT
Lane Configurations			
Traffic Volume (vph)	27	49	243
Future Volume (vph)	27	49	243
Lane Group Flow (vph)	83	95	278
Sign Control	Stop	Stop	Stop

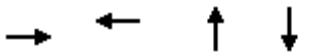
Intersection Summary		
Control Type: Unsignalized		
Intersection Capacity Utilization 36.4%		ICU Level of Service A
Analysis Period (min) 15		



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Traffic Volume (vph)	27	56	46	49	243	35
Future Volume (vph)	27	56	46	49	243	35
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	27	56	46	49	243	35

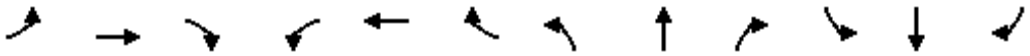
Direction, Lane #	EB 1	NB 1	SB 1
Volume Total (vph)	83	95	278
Volume Left (vph)	27	46	0
Volume Right (vph)	56	0	35
Hadj (s)	-0.31	0.13	-0.04
Departure Headway (s)	4.4	4.5	4.2
Degree Utilization, x	0.10	0.12	0.32
Capacity (veh/h)	748	769	838
Control Delay (s)	7.9	8.1	9.1
Approach Delay (s)	7.9	8.1	9.1
Approach LOS	A	A	A

Intersection Summary			
Delay	8.7		
Level of Service	A		
Intersection Capacity Utilization	36.4%	ICU Level of Service	A
Analysis Period (min)	15		



Lane Group	EBT	WBT	NBT	SBT
Lane Configurations				
Traffic Volume (vph)	2	4	23	80
Future Volume (vph)	2	4	23	80
Lane Group Flow (vph)	104	8	24	376
Sign Control	Stop	Stop	Stop	Stop

Intersection Summary		
Control Type: Unsignalized		
Intersection Capacity Utilization	46.0%	ICU Level of Service A
Analysis Period (min)	15	

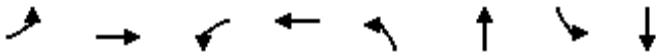


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	95	2	7	0	4	4	1	23	0	8	80	288
Future Volume (vph)	95	2	7	0	4	4	1	23	0	8	80	288
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	95	2	7	0	4	4	1	23	0	8	80	288

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	104	8	24	376
Volume Left (vph)	95	0	1	8
Volume Right (vph)	7	4	0	288
Hadj (s)	0.18	-0.27	0.04	-0.42
Departure Headway (s)	4.9	4.6	4.6	3.8
Degree Utilization, x	0.14	0.01	0.03	0.40
Capacity (veh/h)	677	705	743	928
Control Delay (s)	8.7	7.6	7.7	9.3
Approach Delay (s)	8.7	7.6	7.7	9.3
Approach LOS	A	A	A	A

Intersection Summary			
Delay	9.1		
Level of Service	A		
Intersection Capacity Utilization	46.0%	ICU Level of Service	A
Analysis Period (min)	15		

Total Future Background 2029

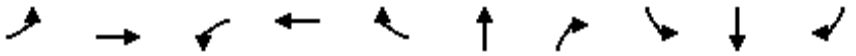


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	73	35	106	46	510	1453	309	747
Future Volume (vph)	73	35	106	46	510	1453	309	747
Lane Group Flow (vph)	73	168	106	242	510	1903	309	1162
Turn Type	pm+pt	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases	7	4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	7	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	11.2	36.7	36.7	36.7	11.1	25.6	11.1	25.6
Total Split (s)	15.0	52.0	37.0	37.0	32.0	48.0	20.0	36.0
Total Split (%)	12.5%	43.3%	30.8%	30.8%	26.7%	40.0%	16.7%	30.0%
Yellow Time (s)	3.3	3.3	3.3	3.3	3.7	3.7	3.7	3.7
All-Red Time (s)	2.9	3.4	3.4	3.4	2.4	1.9	2.4	1.9
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.2	6.7	6.7	6.7	6.1	5.6	6.1	5.6
Lead/Lag	Lead		Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max
Act Effct Green (s)	29.1	28.6	16.6	16.6	42.6	42.4	30.6	30.4
Actuated g/C Ratio	0.24	0.24	0.14	0.14	0.36	0.35	0.26	0.25
v/c Ratio	0.41	0.35	0.66	0.66	0.85	1.11	0.72	0.93
Control Delay	39.5	10.7	67.2	24.0	33.8	101.3	53.8	53.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	39.5	10.7	67.2	24.0	33.8	101.3	53.8	53.1
LOS	D	B	E	C	C	F	D	D
Approach Delay		19.4		37.1		87.0		53.3
Approach LOS		B		D		F		D
Queue Length 50th (m)	13.2	6.3	24.1	15.4	107.5	~190.0	68.7	90.1
Queue Length 95th (m)	23.0	21.4	40.0	39.2	m#161.0	m#219.4	#137.3	#117.4
Internal Link Dist (m)		228.4		515.1		121.4		276.2
Turn Bay Length (m)	15.0				135.0		160.0	
Base Capacity (vph)	182	676	293	523	601	1707	432	1250
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.40	0.25	0.36	0.46	0.85	1.11	0.72	0.93

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 91 (76%), Referenced to phase 2:NBT and 6:SBT, Start of Green	
Natural Cycle: 145	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.11	
Intersection Signal Delay: 68.4	Intersection LOS: E
Intersection Capacity Utilization 98.4%	ICU Level of Service F
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: Riverside Dr & Hog's Back Rd/Brookfield Rd



Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	NBR	SBL	SBT	SBR	Ø5
Lane Configurations											
Traffic Volume (vph)	4	0	24	0	103	2308	76	33	796	7	
Future Volume (vph)	4	0	24	0	103	2308	76	33	796	7	
Lane Group Flow (vph)	4	1	0	24	103	2308	76	33	796	7	
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	Prot	NA	Perm	
Protected Phases		4		8		2		1	6		5
Permitted Phases	4		8		8		2			6	
Detector Phase	4	4	8	8	8	2	2	1	6	6	
Switch Phase											
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0
Minimum Split (s)	30.8	30.8	30.8	30.8	30.8	26.6	26.6	10.8	26.6	26.6	10.8
Total Split (s)	31.0	31.0	31.0	31.0	31.0	75.0	75.0	14.0	75.0	75.0	14.0
Total Split (%)	25.8%	25.8%	25.8%	25.8%	25.8%	62.5%	62.5%	11.7%	62.5%	62.5%	12%
Yellow Time (s)	3.3	3.3	3.3	3.3	3.3	3.7	3.7	3.7	3.7	3.7	3.7
All-Red Time (s)	3.5	3.5	3.5	3.5	3.5	1.9	1.9	2.1	1.9	1.9	2.1
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.8	6.8		6.8	6.8	5.6	5.6	5.8	5.6	5.6	
Lead/Lag						Lag	Lag	Lead	Lag	Lag	Lead
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max	None
Act Effct Green (s)	10.3	10.3		10.3	10.3	88.4	88.4	7.8	97.3	97.3	
Actuated g/C Ratio	0.09	0.09		0.09	0.09	0.74	0.74	0.06	0.81	0.81	
v/c Ratio	0.04	0.00		0.21	0.46	0.92	0.07	0.30	0.29	0.01	
Control Delay	50.8	0.0		55.5	16.7	22.8	1.2	50.4	1.6	0.0	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	50.8	0.0		55.5	16.7	22.8	1.2	50.4	1.6	0.0	
LOS	D	A		E	B	C	A	D	A	A	
Approach Delay		40.6		24.1		22.1			3.5		
Approach LOS		D		C		C			A		
Queue Length 50th (m)	0.9	0.0		5.4	0.0	240.4	0.0	8.0	14.7	0.0	
Queue Length 95th (m)	4.4	0.0		13.8	16.4	#345.1	4.0	m10.7	m14.0	m0.0	
Internal Link Dist (m)		58.8		118.5		110.2			196.4		
Turn Bay Length (m)					35.0		50.0	90.0		55.0	
Base Capacity (vph)	267	526		272	388	2497	1140	124	2749	1247	
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	
Reduced v/c Ratio	0.01	0.00		0.09	0.27	0.92	0.07	0.27	0.29	0.01	

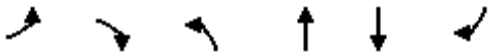
Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 100 (83%), Referenced to phase 2:NBT and 6:SBT, Start of Green	
Natural Cycle: 150	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.92	
Intersection Signal Delay: 17.6	Intersection LOS: B
Intersection Capacity Utilization 100.0%	ICU Level of Service G
Analysis Period (min) 15	

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Riverside Dr & Ridgewood Ave

Lane Group	EBL	NBT	SBT
Lane Configurations			
Traffic Volume (vph)	46	88	61
Future Volume (vph)	46	88	61
Lane Group Flow (vph)	79	163	95
Sign Control	Stop	Stop	Stop

Intersection Summary		
Control Type: Unsignalized		
Intersection Capacity Utilization 27.4%		ICU Level of Service A
Analysis Period (min) 15		



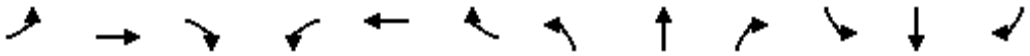
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Traffic Volume (vph)	46	33	75	88	61	34
Future Volume (vph)	46	33	75	88	61	34
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	46	33	75	88	61	34

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total (vph)	79	163	95
Volume Left (vph)	46	75	0
Volume Right (vph)	33	0	34
Hadj (s)	-0.10	0.13	-0.18
Departure Headway (s)	4.4	4.3	4.1
Degree Utilization, x	0.10	0.20	0.11
Capacity (veh/h)	778	812	858
Control Delay (s)	7.8	8.3	7.6
Approach Delay (s)	7.8	8.3	7.6
Approach LOS	A	A	A

Intersection Summary			
Delay	8.0		
Level of Service	A		
Intersection Capacity Utilization	27.4%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBT	WBT	NBT	SBT
Lane Configurations				
Traffic Volume (vph)	3	3	45	17
Future Volume (vph)	3	3	45	17
Lane Group Flow (vph)	207	14	49	98
Sign Control	Stop	Stop	Stop	Stop

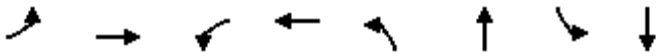
Intersection Summary		
Control Type: Unsignalized		
Intersection Capacity Utilization 32.1%		ICU Level of Service A
Analysis Period (min) 15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	203	3	1	0	3	11	4	45	0	2	17	79
Future Volume (vph)	203	3	1	0	3	11	4	45	0	2	17	79
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	203	3	1	0	3	11	4	45	0	2	17	79

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	207	14	49	98
Volume Left (vph)	203	0	4	2
Volume Right (vph)	1	11	0	79
Hadj (s)	0.23	-0.44	0.05	-0.45
Departure Headway (s)	4.5	4.0	4.6	4.0
Degree Utilization, x	0.26	0.02	0.06	0.11
Capacity (veh/h)	782	837	740	834
Control Delay (s)	9.0	7.1	7.9	7.5
Approach Delay (s)	9.0	7.1	7.9	7.5
Approach LOS	A	A	A	A

Intersection Summary				
Delay	8.4			
Level of Service	A			
Intersection Capacity Utilization	32.1%	ICU Level of Service	A	
Analysis Period (min)	15			

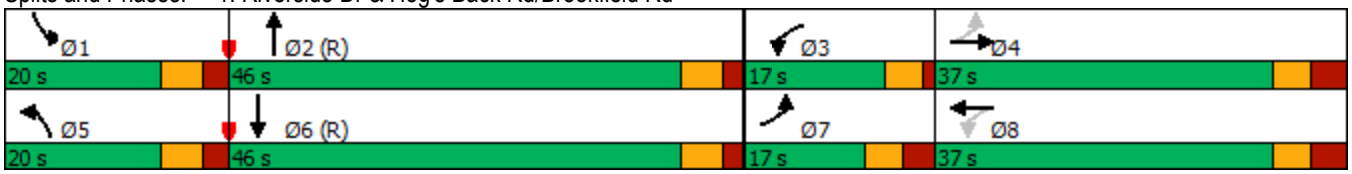


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	172	53	337	29	139	788	234	1444
Future Volume (vph)	172	53	337	29	139	788	234	1444
Lane Group Flow (vph)	172	448	337	368	139	917	234	1583
Turn Type	pm+pt	NA	pm+pt	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	11.2	36.7	9.5	36.7	11.1	25.6	11.1	25.6
Total Split (s)	17.0	37.0	17.0	37.0	20.0	46.0	20.0	46.0
Total Split (%)	14.2%	30.8%	14.2%	30.8%	16.7%	38.3%	16.7%	38.3%
Yellow Time (s)	3.3	3.3	3.5	3.3	3.7	3.7	3.7	3.7
All-Red Time (s)	2.9	3.4	1.0	3.4	2.4	1.9	2.4	1.9
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.2	6.7	4.5	6.7	6.1	5.6	6.1	5.6
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max
Act Effct Green (s)	34.3	23.1	38.0	23.3	13.3	40.5	20.9	48.2
Actuated g/C Ratio	0.29	0.19	0.32	0.19	0.11	0.34	0.17	0.40
v/c Ratio	0.82	0.91	1.40	0.68	0.74	0.56	0.79	0.82
Control Delay	58.0	43.2	229.5	15.9	65.5	44.5	69.0	37.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	58.0	43.2	229.5	15.9	65.5	44.5	69.0	37.5
LOS	E	D	F	B	E	D	E	D
Approach Delay		47.3		118.0		47.2		41.5
Approach LOS		D		F		D		D
Queue Length 50th (m)	29.0	49.8	~88.3	14.0	31.5	82.5	54.2	125.8
Queue Length 95th (m)	#50.9	#88.7	#138.4	43.6	#60.4	96.2	#116.0	#166.9
Internal Link Dist (m)		228.4		515.1		121.4		276.2
Turn Bay Length (m)	15.0				135.0		160.0	
Base Capacity (vph)	213	573	241	610	200	1629	295	1939
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.81	0.78	1.40	0.60	0.69	0.56	0.79	0.82

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 84 (70%), Referenced to phase 2:NBT and 6:SBT, Start of Green	
Natural Cycle: 125	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.40	
Intersection Signal Delay: 56.7	Intersection LOS: E
Intersection Capacity Utilization 108.3%	ICU Level of Service G
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Riverside Dr & Hog's Back Rd/Brookfield Rd



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	7	0	49	1	47	3	1030	34	53	1897	8
Future Volume (vph)	7	0	49	1	47	3	1030	34	53	1897	8
Lane Group Flow (vph)	7	5	0	50	47	3	1030	34	53	1897	8
Turn Type	Perm	NA	Perm	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4		8		5	2		1	6	
Permitted Phases	4		8		8			2			6
Detector Phase	4	4	8	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	30.8	30.8	30.8	30.8	30.8	10.8	26.6	26.6	10.8	26.6	26.6
Total Split (s)	31.0	31.0	31.0	31.0	31.0	14.0	75.0	75.0	14.0	75.0	75.0
Total Split (%)	25.8%	25.8%	25.8%	25.8%	25.8%	11.7%	62.5%	62.5%	11.7%	62.5%	62.5%
Yellow Time (s)	3.3	3.3	3.3	3.3	3.3	3.7	3.7	3.7	3.7	3.7	3.7
All-Red Time (s)	3.5	3.5	3.5	3.5	3.5	2.1	1.9	1.9	2.1	1.9	1.9
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.8	6.8		6.8	6.8	5.8	5.6	5.6	5.8	5.6	5.6
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	11.2	11.2		11.2	11.2	5.8	88.2	88.2	9.1	98.4	98.4
Actuated g/C Ratio	0.09	0.09		0.09	0.09	0.05	0.74	0.74	0.08	0.82	0.82
v/c Ratio	0.06	0.02		0.41	0.22	0.04	0.41	0.03	0.41	0.68	0.01
Control Delay	49.4	0.2		61.4	6.2	55.0	9.0	0.1	60.8	6.4	0.0
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	49.4	0.2		61.4	6.2	55.0	9.0	0.1	60.8	6.4	0.0
LOS	D	A		E	A	D	A	A	E	A	A
Approach Delay		28.9		34.6			8.9			7.8	
Approach LOS		C		C			A			A	
Queue Length 50th (m)	1.5	0.0		11.4	0.0	0.7	51.4	0.0	12.9	35.9	0.0
Queue Length 95th (m)	6.0	0.0		23.5	4.7	3.9	79.5	0.0	m14.7	m48.3	m0.0
Internal Link Dist (m)		58.8		118.5			110.2			196.4	
Turn Bay Length (m)					35.0	50.0		50.0	90.0		55.0
Base Capacity (vph)	260	406		261	366	115	2492	1138	137	2780	1259
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.03	0.01		0.19	0.13	0.03	0.41	0.03	0.39	0.68	0.01

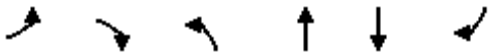
Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 112 (93%), Referenced to phase 2:NBT and 6:SBT, Start of Green	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.68	
Intersection Signal Delay: 9.1	Intersection LOS: A
Intersection Capacity Utilization 75.3%	ICU Level of Service D
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Riverside Dr & Ridgewood Ave

Lane Group	EBL	NBT	SBT
Lane Configurations			
Traffic Volume (vph)	27	49	243
Future Volume (vph)	27	49	243
Lane Group Flow (vph)	83	95	278
Sign Control	Stop	Stop	Stop

Intersection Summary		
Control Type: Unsignalized		
Intersection Capacity Utilization 36.4%		ICU Level of Service A
Analysis Period (min) 15		



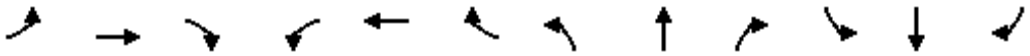
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Traffic Volume (vph)	27	56	46	49	243	35
Future Volume (vph)	27	56	46	49	243	35
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	27	56	46	49	243	35

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total (vph)	83	95	278
Volume Left (vph)	27	46	0
Volume Right (vph)	56	0	35
Hadj (s)	-0.31	0.13	-0.04
Departure Headway (s)	4.4	4.5	4.2
Degree Utilization, x	0.10	0.12	0.32
Capacity (veh/h)	748	769	838
Control Delay (s)	7.9	8.1	9.1
Approach Delay (s)	7.9	8.1	9.1
Approach LOS	A	A	A

Intersection Summary			
Delay	8.7		
Level of Service	A		
Intersection Capacity Utilization	36.4%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBT	WBT	NBT	SBT
Lane Configurations				
Traffic Volume (vph)	2	4	23	80
Future Volume (vph)	2	4	23	80
Lane Group Flow (vph)	104	8	24	376
Sign Control	Stop	Stop	Stop	Stop

Intersection Summary		
Control Type: Unsignalized		
Intersection Capacity Utilization	46.0%	ICU Level of Service A
Analysis Period (min)	15	

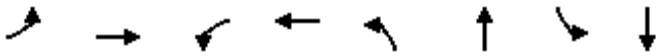


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	95	2	7	0	4	4	1	23	0	8	80	288
Future Volume (vph)	95	2	7	0	4	4	1	23	0	8	80	288
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	95	2	7	0	4	4	1	23	0	8	80	288

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	104	8	24	376
Volume Left (vph)	95	0	1	8
Volume Right (vph)	7	4	0	288
Hadj (s)	0.18	-0.27	0.04	-0.42
Departure Headway (s)	4.9	4.6	4.6	3.8
Degree Utilization, x	0.14	0.01	0.03	0.40
Capacity (veh/h)	677	705	743	928
Control Delay (s)	8.7	7.6	7.7	9.3
Approach Delay (s)	8.7	7.6	7.7	9.3
Approach LOS	A	A	A	A

Intersection Summary			
Delay	9.1		
Level of Service	A		
Intersection Capacity Utilization	46.0%	ICU Level of Service	A
Analysis Period (min)	15		

Total Projected 2024

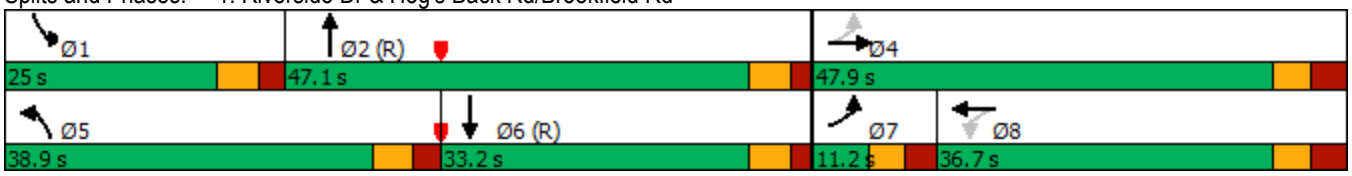


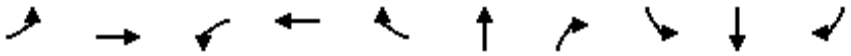
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	70	34	101	45	492	1407	295	723
Future Volume (vph)	70	34	101	45	492	1407	295	723
Lane Group Flow (vph)	70	164	101	233	492	1836	295	1119
Turn Type	pm+pt	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases	7	4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	7	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	11.2	36.7	36.7	36.7	11.1	25.6	11.1	25.6
Total Split (s)	11.2	47.9	36.7	36.7	38.9	47.1	25.0	33.2
Total Split (%)	9.3%	39.9%	30.6%	30.6%	32.4%	39.3%	20.8%	27.7%
Yellow Time (s)	3.3	3.3	3.3	3.3	3.7	3.7	3.7	3.7
All-Red Time (s)	2.9	3.4	3.4	3.4	2.4	1.9	2.4	1.9
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.2	6.7	6.7	6.7	6.1	5.6	6.1	5.6
Lead/Lag	Lead		Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max
Act Effct Green (s)	25.7	25.2	16.2	16.2	43.9	46.2	30.2	32.6
Actuated g/C Ratio	0.21	0.21	0.14	0.14	0.37	0.38	0.25	0.27
v/c Ratio	0.53	0.38	0.64	0.65	0.79	0.99	0.69	0.84
Control Delay	50.1	12.1	66.6	23.6	26.9	56.3	51.1	45.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	50.1	12.1	66.6	23.6	26.9	56.3	51.1	45.1
LOS	D	B	E	C	C	E	D	D
Approach Delay		23.5		36.6		50.1		46.3
Approach LOS		C		D		D		D
Queue Length 50th (m)	13.4	6.4	23.0	14.3	87.4	~172.5	62.9	86.3
Queue Length 95th (m)	23.5	22.1	38.7	37.8	m110.4	m#206.1	#111.6	#119.5
Internal Link Dist (m)		228.4		515.1		121.4		276.2
Turn Bay Length (m)	15.0				135.0		160.0	
Base Capacity (vph)	133	625	291	517	619	1852	427	1329
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.53	0.26	0.35	0.45	0.79	0.99	0.69	0.84

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 91 (76%), Referenced to phase 2:NBT and 6:SBT, Start of Green	
Natural Cycle: 135	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.99	
Intersection Signal Delay: 46.4	Intersection LOS: D
Intersection Capacity Utilization 95.6%	ICU Level of Service F
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: Riverside Dr & Hog's Back Rd/Brookfield Rd





Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	NBR	SBL	SBT	SBR	Ø5
Lane Configurations											
Traffic Volume (vph)	4	0	45	0	127	2204	86	44	761	7	
Future Volume (vph)	4	0	45	0	127	2204	86	44	761	7	
Lane Group Flow (vph)	4	1	0	45	127	2204	86	44	761	7	
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	Prot	NA	Perm	
Protected Phases		4		8		2		1	6		5
Permitted Phases	4		8		8		2			6	
Detector Phase	4	4	8	8	8	2	2	1	6	6	
Switch Phase											
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0
Minimum Split (s)	30.8	30.8	30.8	30.8	30.8	26.6	26.6	10.8	26.6	26.6	10.8
Total Split (s)	30.8	30.8	30.8	30.8	30.8	78.4	78.4	10.8	78.4	78.4	10.8
Total Split (%)	25.7%	25.7%	25.7%	25.7%	25.7%	65.3%	65.3%	9.0%	65.3%	65.3%	9%
Yellow Time (s)	3.3	3.3	3.3	3.3	3.3	3.7	3.7	3.7	3.7	3.7	3.7
All-Red Time (s)	3.5	3.5	3.5	3.5	3.5	1.9	1.9	2.1	1.9	1.9	2.1
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.8	6.8		6.8	6.8	5.6	5.6	5.8	5.6	5.6	
Lead/Lag						Lag	Lag	Lead	Lag	Lag	Lead
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max	None
Act Effct Green (s)	11.6	11.6		11.6	11.6	83.7	83.7	8.8	96.0	96.0	
Actuated g/C Ratio	0.10	0.10		0.10	0.10	0.70	0.70	0.07	0.80	0.80	
v/c Ratio	0.03	0.00		0.34	0.59	0.93	0.08	0.35	0.28	0.01	
Control Delay	47.8	0.0		57.2	33.4	26.3	1.9	59.1	2.6	0.0	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	47.8	0.0		57.2	33.4	26.3	1.9	59.1	2.6	0.0	
LOS	D	A		E	C	C	A	E	A	A	
Approach Delay		38.2		39.6		25.4			5.6		
Approach LOS		D		D		C			A		
Queue Length 50th (m)	0.9	0.0		10.2	11.4	218.1	0.0	11.0	14.0	0.0	
Queue Length 95th (m)	4.2	0.0		21.2	29.8	#339.7	5.8	m15.6	m18.0	m0.0	
Internal Link Dist (m)		58.8		118.5		110.2			196.4		
Turn Bay Length (m)					35.0		50.0	90.0		55.0	
Base Capacity (vph)	259	517		270	365	2363	1084	124	2711	1230	
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	
Reduced v/c Ratio	0.02	0.00		0.17	0.35	0.93	0.08	0.35	0.28	0.01	

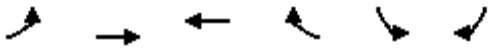
Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 100 (83%), Referenced to phase 2:NBT and 6:SBT, Start of Green	
Natural Cycle: 130	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.93	
Intersection Signal Delay: 21.3	Intersection LOS: C
Intersection Capacity Utilization 97.0%	ICU Level of Service F
Analysis Period (min) 15	

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Riverside Dr & Ridgewood Ave

Lane Group	EBT	WBT	SBL
Lane Configurations			
Traffic Volume (vph)	109	127	15
Future Volume (vph)	109	127	15
Lane Group Flow (vph)	130	134	61
Sign Control	Free	Free	Stop

Intersection Summary		
Control Type: Unsignalized		
Intersection Capacity Utilization 28.7%		ICU Level of Service A
Analysis Period (min) 15		



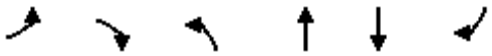
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	21	109	127	7	15	46
Future Volume (Veh/h)	21	109	127	7	15	46
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	21	109	127	7	15	46
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)		143				
pX, platoon unblocked						
vC, conflicting volume	134				282	130
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	134				282	130
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	99				98	95
cM capacity (veh/h)	1451				698	919

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	130	134	61
Volume Left	21	0	15
Volume Right	0	7	46
cSH	1451	1700	853
Volume to Capacity	0.01	0.08	0.07
Queue Length 95th (m)	0.3	0.0	1.8
Control Delay (s)	1.3	0.0	9.5
Lane LOS	A		A
Approach Delay (s)	1.3	0.0	9.5
Approach LOS			A

Intersection Summary			
Average Delay	2.3		
Intersection Capacity Utilization	28.7%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	NBT	SBT
Lane Configurations			
Traffic Volume (vph)	61	88	61
Future Volume (vph)	61	88	61
Lane Group Flow (vph)	94	163	102
Sign Control	Stop	Stop	Stop

Intersection Summary		
Control Type: Unsignalized		
Intersection Capacity Utilization 28.3%		ICU Level of Service A
Analysis Period (min) 15		



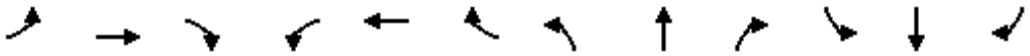
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Traffic Volume (vph)	61	33	75	88	61	41
Future Volume (vph)	61	33	75	88	61	41
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	61	33	75	88	61	41

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total (vph)	94	163	102
Volume Left (vph)	61	75	0
Volume Right (vph)	33	0	41
Hadj (s)	-0.05	0.13	-0.21
Departure Headway (s)	4.4	4.4	4.1
Degree Utilization, x	0.12	0.20	0.12
Capacity (veh/h)	756	801	853
Control Delay (s)	8.0	8.4	7.6
Approach Delay (s)	8.0	8.4	7.6
Approach LOS	A	A	A

Intersection Summary			
Delay	8.1		
Level of Service	A		
Intersection Capacity Utilization	28.3%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBT	WBT	NBT	SBT
Lane Configurations				
Traffic Volume (vph)	3	3	45	17
Future Volume (vph)	3	3	45	17
Lane Group Flow (vph)	222	14	49	105
Sign Control	Stop	Stop	Stop	Stop

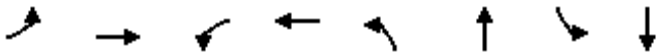
Intersection Summary		
Control Type: Unsignalized		
Intersection Capacity Utilization 33.4%		ICU Level of Service A
Analysis Period (min) 15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	218	3	1	0	3	11	4	45	0	2	17	86
Future Volume (vph)	218	3	1	0	3	11	4	45	0	2	17	86
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	218	3	1	0	3	11	4	45	0	2	17	86

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	222	14	49	105
Volume Left (vph)	218	0	4	2
Volume Right (vph)	1	11	0	86
Hadj (s)	0.23	-0.44	0.05	-0.45
Departure Headway (s)	4.5	4.1	4.6	4.1
Degree Utilization, x	0.28	0.02	0.06	0.12
Capacity (veh/h)	779	828	730	826
Control Delay (s)	9.2	7.1	7.9	7.6
Approach Delay (s)	9.2	7.1	7.9	7.6
Approach LOS	A	A	A	A

Intersection Summary			
Delay	8.5		
Level of Service	A		
Intersection Capacity Utilization	33.4%	ICU Level of Service	A
Analysis Period (min)	15		

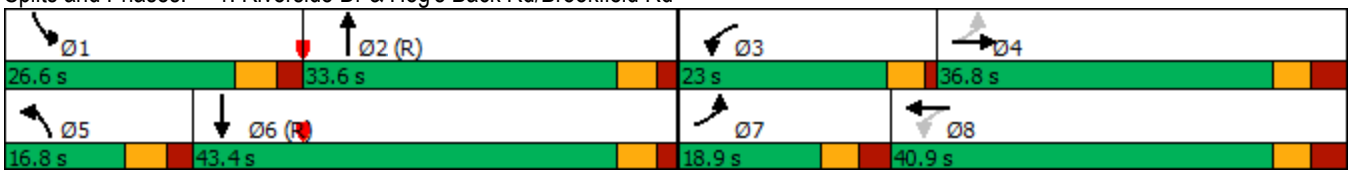


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	164	51	321	28	137	765	224	1395
Future Volume (vph)	164	51	321	28	137	765	224	1395
Lane Group Flow (vph)	164	433	321	352	137	889	224	1528
Turn Type	pm+pt	NA	pm+pt	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	11.2	36.7	9.5	36.7	11.1	25.6	11.1	25.6
Total Split (s)	18.9	36.8	23.0	40.9	16.8	33.6	26.6	43.4
Total Split (%)	15.8%	30.7%	19.2%	34.1%	14.0%	28.0%	22.2%	36.2%
Yellow Time (s)	3.3	3.3	3.5	3.3	3.7	3.7	3.7	3.7
All-Red Time (s)	2.9	3.4	1.0	3.4	2.4	1.9	2.4	1.9
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.2	6.7	4.5	6.7	6.1	5.6	6.1	5.6
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max
Act Effct Green (s)	34.3	22.0	46.9	26.9	13.3	37.3	19.3	43.3
Actuated g/C Ratio	0.29	0.18	0.39	0.22	0.11	0.31	0.16	0.36
v/c Ratio	0.63	0.90	0.99	0.59	0.73	0.59	0.82	0.88
Control Delay	36.2	41.9	80.1	9.6	65.0	38.6	72.2	43.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	36.2	41.9	80.1	9.6	65.0	38.6	72.2	43.4
LOS	D	D	F	A	E	D	E	D
Approach Delay		40.3		43.2		42.1		47.1
Approach LOS		D		D		D		D
Queue Length 50th (m)	25.9	46.1	59.3	5.2	30.6	76.3	50.3	129.2
Queue Length 95th (m)	37.6	82.0	#108.7	29.3	#70.0	92.8	#87.3	#166.5
Internal Link Dist (m)		228.4		515.1		121.4		276.2
Turn Bay Length (m)	15.0				135.0		160.0	
Base Capacity (vph)	271	571	324	669	187	1498	295	1745
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.61	0.76	0.99	0.53	0.73	0.59	0.76	0.88

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 84 (70%), Referenced to phase 2:NBT and 6:SBT, Start of Green	
Natural Cycle: 125	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.99	
Intersection Signal Delay: 44.2	Intersection LOS: D
Intersection Capacity Utilization 105.2%	ICU Level of Service G
Analysis Period (min) 15	

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Riverside Dr & Hog's Back Rd/Brookfield Rd



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	7	0	62	1	62	3	985	52	73	1812	8
Future Volume (vph)	7	0	62	1	62	3	985	52	73	1812	8
Lane Group Flow (vph)	7	5	0	63	62	3	985	52	73	1812	8
Turn Type	Perm	NA	Perm	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4		8		5	2		1	6	
Permitted Phases	4		8		8			2			6
Detector Phase	4	4	8	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	30.8	30.8	30.8	30.8	30.8	10.8	26.6	26.6	10.8	26.6	26.6
Total Split (s)	31.0	31.0	31.0	31.0	31.0	14.0	75.0	75.0	14.0	75.0	75.0
Total Split (%)	25.8%	25.8%	25.8%	25.8%	25.8%	11.7%	62.5%	62.5%	11.7%	62.5%	62.5%
Yellow Time (s)	3.3	3.3	3.3	3.3	3.3	3.7	3.7	3.7	3.7	3.7	3.7
All-Red Time (s)	3.5	3.5	3.5	3.5	3.5	2.1	1.9	1.9	2.1	1.9	1.9
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.8	6.8		6.8	6.8	5.8	5.6	5.6	5.8	5.6	5.6
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	12.2	12.2		12.2	12.2	5.8	85.9	85.9	10.7	97.5	97.5
Actuated g/C Ratio	0.10	0.10		0.10	0.10	0.05	0.72	0.72	0.09	0.81	0.81
v/c Ratio	0.05	0.02		0.48	0.28	0.04	0.41	0.05	0.48	0.66	0.01
Control Delay	47.9	0.2		62.6	10.6	55.0	10.2	0.7	72.5	6.4	0.0
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	47.9	0.2		62.6	10.6	55.0	10.2	0.7	72.5	6.4	0.0
LOS	D	A		E	B	D	B	A	E	A	A
Approach Delay		28.0		36.8			9.9			8.9	
Approach LOS		C		D			A			A	
Queue Length 50th (m)	1.5	0.0		14.4	0.0	0.7	52.7	0.0	18.3	26.3	0.0
Queue Length 95th (m)	5.9	0.0		27.8	9.4	3.9	82.4	1.7	m21.3	m220.6	m0.0
Internal Link Dist (m)		58.8		118.5			110.2			196.4	
Turn Bay Length (m)					35.0	50.0		50.0	90.0		55.0
Base Capacity (vph)	257	408		261	366	115	2426	1110	155	2753	1248
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.03	0.01		0.24	0.17	0.03	0.41	0.05	0.47	0.66	0.01

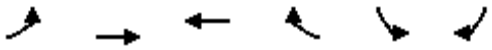
Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 112 (93%), Referenced to phase 2:NBT and 6:SBT, Start of Green	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.66	
Intersection Signal Delay: 10.4	Intersection LOS: B
Intersection Capacity Utilization 82.6%	ICU Level of Service E
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Riverside Dr & Ridgewood Ave

Lane Group	EBT	WBT	SBL
Lane Configurations			
Traffic Volume (vph)	87	97	9
Future Volume (vph)	87	97	9
Lane Group Flow (vph)	125	110	37
Sign Control	Free	Free	Stop

Intersection Summary		
Control Type: Unsignalized		
Intersection Capacity Utilization	23.7%	ICU Level of Service A
Analysis Period (min)	15	



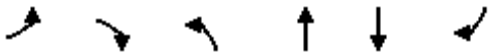
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	38	87	97	13	9	28
Future Volume (Veh/h)	38	87	97	13	9	28
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	38	87	97	13	9	28
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)		143				
pX, platoon unblocked						
vC, conflicting volume	110				266	104
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	110				266	104
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	97				99	97
cM capacity (veh/h)	1480				704	951

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	125	110	37
Volume Left	38	0	9
Volume Right	0	13	28
cSH	1480	1700	876
Volume to Capacity	0.03	0.06	0.04
Queue Length 95th (m)	0.6	0.0	1.0
Control Delay (s)	2.4	0.0	9.3
Lane LOS	A		A
Approach Delay (s)	2.4	0.0	9.3
Approach LOS			A

Intersection Summary			
Average Delay	2.4		
Intersection Capacity Utilization	23.7%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	NBT	SBT
Lane Configurations			
Traffic Volume (vph)	36	49	243
Future Volume (vph)	36	49	243
Lane Group Flow (vph)	92	95	291
Sign Control	Stop	Stop	Stop

Intersection Summary		
Control Type: Unsignalized		
Intersection Capacity Utilization 37.7%		ICU Level of Service A
Analysis Period (min) 15		



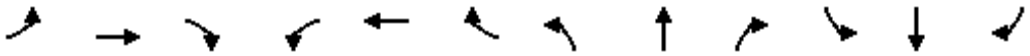
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Traffic Volume (vph)	36	56	46	49	243	48
Future Volume (vph)	36	56	46	49	243	48
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	36	56	46	49	243	48

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total (vph)	92	95	291
Volume Left (vph)	36	46	0
Volume Right (vph)	56	0	48
Hadj (s)	-0.25	0.13	-0.06
Departure Headway (s)	4.5	4.6	4.2
Degree Utilization, x	0.11	0.12	0.34
Capacity (veh/h)	734	759	837
Control Delay (s)	8.1	8.2	9.3
Approach Delay (s)	8.1	8.2	9.3
Approach LOS	A	A	A

Intersection Summary			
Delay	8.8		
Level of Service	A		
Intersection Capacity Utilization	37.7%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBT	WBT	NBT	SBT
Lane Configurations				
Traffic Volume (vph)	2	4	23	80
Future Volume (vph)	2	4	23	80
Lane Group Flow (vph)	113	8	24	389
Sign Control	Stop	Stop	Stop	Stop

Intersection Summary		
Control Type: Unsignalized		
Intersection Capacity Utilization 47.4%		ICU Level of Service A
Analysis Period (min) 15		

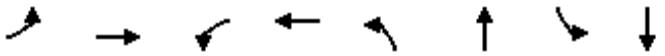


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	104	2	7	0	4	4	1	23	0	8	80	301
Future Volume (vph)	104	2	7	0	4	4	1	23	0	8	80	301
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	104	2	7	0	4	4	1	23	0	8	80	301

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	113	8	24	389
Volume Left (vph)	104	0	1	8
Volume Right (vph)	7	4	0	301
Hadj (s)	0.18	-0.27	0.04	-0.43
Departure Headway (s)	4.9	4.6	4.6	3.8
Degree Utilization, x	0.16	0.01	0.03	0.41
Capacity (veh/h)	672	695	734	912
Control Delay (s)	8.8	7.7	7.8	9.5
Approach Delay (s)	8.8	7.7	7.8	9.5
Approach LOS	A	A	A	A

Intersection Summary			
Delay	9.2		
Level of Service	A		
Intersection Capacity Utilization	47.4%	ICU Level of Service	A
Analysis Period (min)	15		

Total Projected 2029

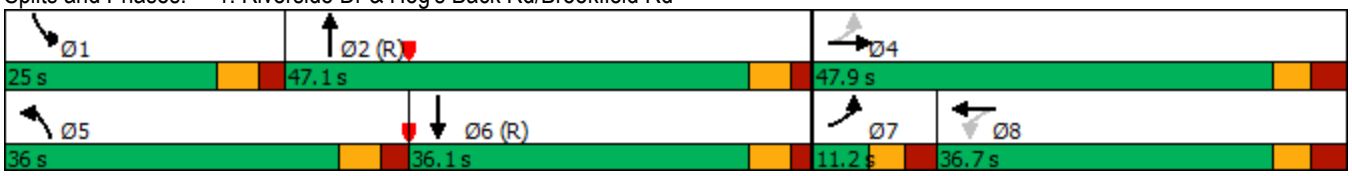


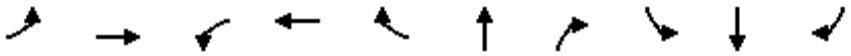
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	73	35	106	46	516	1471	309	755
Future Volume (vph)	73	35	106	46	516	1471	309	755
Lane Group Flow (vph)	73	171	106	242	516	1921	309	1170
Turn Type	pm+pt	NA	Perm	NA	Prot	NA	Prot	NA
Protected Phases	7	4		8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	7	4	8	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	10.0	10.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	11.2	36.7	36.7	36.7	11.1	25.6	11.1	25.6
Total Split (s)	11.2	47.9	36.7	36.7	36.0	47.1	25.0	36.1
Total Split (%)	9.3%	39.9%	30.6%	30.6%	30.0%	39.3%	20.8%	30.1%
Yellow Time (s)	3.3	3.3	3.3	3.3	3.7	3.7	3.7	3.7
All-Red Time (s)	2.9	3.4	3.4	3.4	2.4	1.9	2.4	1.9
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.2	6.7	6.7	6.7	6.1	5.6	6.1	5.6
Lead/Lag	Lead		Lag	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes		Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max
Act Effct Green (s)	26.1	25.6	16.7	16.7	45.5	44.2	31.8	30.5
Actuated g/C Ratio	0.22	0.21	0.14	0.14	0.38	0.37	0.26	0.25
v/c Ratio	0.55	0.39	0.66	0.66	0.80	1.08	0.69	0.93
Control Delay	51.5	11.8	67.1	24.1	26.4	88.5	50.2	53.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	51.5	11.8	67.1	24.1	26.4	88.5	50.2	53.4
LOS	D	B	E	C	C	F	D	D
Approach Delay		23.7		37.2		75.4		52.7
Approach LOS		C		D		E		D
Queue Length 50th (m)	13.9	6.5	24.1	15.6	97.4	~197.0	64.9	90.9
Queue Length 95th (m)	24.1	22.5	40.0	39.3	m#140.5	m#210.8	#121.4	#118.6
Internal Link Dist (m)		228.4		515.1		121.4		276.2
Turn Bay Length (m)	15.0				135.0		160.0	
Base Capacity (vph)	132	629	289	519	642	1774	448	1255
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.55	0.27	0.37	0.47	0.80	1.08	0.69	0.93

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 91 (76%), Referenced to phase 2:NBT and 6:SBT, Start of Green	
Natural Cycle: 145	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.08	
Intersection Signal Delay: 62.2	Intersection LOS: E
Intersection Capacity Utilization 98.7%	ICU Level of Service F
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 1: Riverside Dr & Hog's Back Rd/Brookfield Rd





Lane Group	EBL	EBT	WBL	WBT	WBR	NBT	NBR	SBL	SBT	SBR	Ø5
Lane Configurations											
Traffic Volume (vph)	4	0	45	0	127	2308	86	44	796	7	
Future Volume (vph)	4	0	45	0	127	2308	86	44	796	7	
Lane Group Flow (vph)	4	1	0	45	127	2308	86	44	796	7	
Turn Type	Perm	NA	Perm	NA	Perm	NA	Perm	Prot	NA	Perm	
Protected Phases		4		8		2		1	6		5
Permitted Phases	4		8		8		2			6	
Detector Phase	4	4	8	8	8	2	2	1	6	6	
Switch Phase											
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0
Minimum Split (s)	30.8	30.8	30.8	30.8	30.8	26.6	26.6	10.8	26.6	26.6	10.8
Total Split (s)	31.0	31.0	31.0	31.0	31.0	75.0	75.0	14.0	75.0	75.0	14.0
Total Split (%)	25.8%	25.8%	25.8%	25.8%	25.8%	62.5%	62.5%	11.7%	62.5%	62.5%	12%
Yellow Time (s)	3.3	3.3	3.3	3.3	3.3	3.7	3.7	3.7	3.7	3.7	3.7
All-Red Time (s)	3.5	3.5	3.5	3.5	3.5	1.9	1.9	2.1	1.9	1.9	2.1
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Lost Time (s)	6.8	6.8		6.8	6.8	5.6	5.6	5.8	5.6	5.6	
Lead/Lag						Lag	Lag	Lead	Lag	Lag	Lead
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max	None
Act Effct Green (s)	10.9	10.9		10.9	10.9	84.6	84.6	8.5	96.7	96.7	
Actuated g/C Ratio	0.09	0.09		0.09	0.09	0.70	0.70	0.07	0.81	0.81	
v/c Ratio	0.03	0.00		0.37	0.52	0.97	0.08	0.37	0.29	0.01	
Control Delay	49.5	0.0		59.8	18.3	30.3	1.8	52.8	2.1	0.0	
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Total Delay	49.5	0.0		59.8	18.3	30.3	1.8	52.8	2.1	0.0	
LOS	D	A		E	B	C	A	D	A	A	
Approach Delay		39.6		29.2		29.3			4.7		
Approach LOS		D		C		C			A		
Queue Length 50th (m)	0.9	0.0		10.2	1.8	246.8	0.0	10.9	14.8	0.0	
Queue Length 95th (m)	4.3	0.0		21.7	19.6	#357.1	5.4	m14.6	m18.7	m0.0	
Internal Link Dist (m)		58.8		118.5		110.2			196.4		
Turn Bay Length (m)					35.0		50.0	90.0		55.0	
Base Capacity (vph)	261	526		272	400	2390	1095	131	2731	1239	
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	
Reduced v/c Ratio	0.02	0.00		0.17	0.32	0.97	0.08	0.34	0.29	0.01	

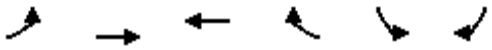
Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 100 (83%), Referenced to phase 2:NBT and 6:SBT, Start of Green	
Natural Cycle: 150	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.97	
Intersection Signal Delay: 23.2	Intersection LOS: C
Intersection Capacity Utilization 100.0%	ICU Level of Service G
Analysis Period (min) 15	

95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.
m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Riverside Dr & Ridgewood Ave

Lane Group	EBT	WBT	SBL
Lane Configurations			
Traffic Volume (vph)	109	127	15
Future Volume (vph)	109	127	15
Lane Group Flow (vph)	130	134	61
Sign Control	Free	Free	Stop

Intersection Summary		
Control Type: Unsignalized		
Intersection Capacity Utilization 28.7%		ICU Level of Service A
Analysis Period (min) 15		



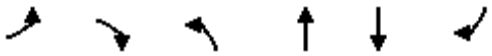
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	21	109	127	7	15	46
Future Volume (Veh/h)	21	109	127	7	15	46
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	21	109	127	7	15	46
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)		143				
pX, platoon unblocked						
vC, conflicting volume	134				282	130
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	134				282	130
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	99				98	95
cM capacity (veh/h)	1451				698	919

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	130	134	61
Volume Left	21	0	15
Volume Right	0	7	46
cSH	1451	1700	853
Volume to Capacity	0.01	0.08	0.07
Queue Length 95th (m)	0.3	0.0	1.8
Control Delay (s)	1.3	0.0	9.5
Lane LOS	A		A
Approach Delay (s)	1.3	0.0	9.5
Approach LOS			A

Intersection Summary			
Average Delay	2.3		
Intersection Capacity Utilization	28.7%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	NBT	SBT
Lane Configurations			
Traffic Volume (vph)	61	88	61
Future Volume (vph)	61	88	61
Lane Group Flow (vph)	94	163	102
Sign Control	Stop	Stop	Stop

Intersection Summary		
Control Type: Unsignalized		
Intersection Capacity Utilization 28.3%		ICU Level of Service A
Analysis Period (min) 15		



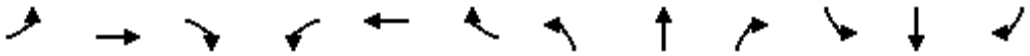
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Traffic Volume (vph)	61	33	75	88	61	41
Future Volume (vph)	61	33	75	88	61	41
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	61	33	75	88	61	41

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total (vph)	94	163	102
Volume Left (vph)	61	75	0
Volume Right (vph)	33	0	41
Hadj (s)	-0.05	0.13	-0.21
Departure Headway (s)	4.4	4.4	4.1
Degree Utilization, x	0.12	0.20	0.12
Capacity (veh/h)	756	801	853
Control Delay (s)	8.0	8.4	7.6
Approach Delay (s)	8.0	8.4	7.6
Approach LOS	A	A	A

Intersection Summary			
Delay	8.1		
Level of Service	A		
Intersection Capacity Utilization	28.3%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBT	WBT	NBT	SBT
Lane Configurations				
Traffic Volume (vph)	3	3	45	17
Future Volume (vph)	3	3	45	17
Lane Group Flow (vph)	222	14	49	105
Sign Control	Stop	Stop	Stop	Stop

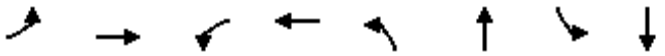
Intersection Summary		
Control Type: Unsignalized		
Intersection Capacity Utilization 33.4%		ICU Level of Service A
Analysis Period (min) 15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	218	3	1	0	3	11	4	45	0	2	17	86
Future Volume (vph)	218	3	1	0	3	11	4	45	0	2	17	86
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	218	3	1	0	3	11	4	45	0	2	17	86

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	222	14	49	105
Volume Left (vph)	218	0	4	2
Volume Right (vph)	1	11	0	86
Hadj (s)	0.23	-0.44	0.05	-0.45
Departure Headway (s)	4.5	4.1	4.6	4.1
Degree Utilization, x	0.28	0.02	0.06	0.12
Capacity (veh/h)	779	828	730	826
Control Delay (s)	9.2	7.1	7.9	7.6
Approach Delay (s)	9.2	7.1	7.9	7.6
Approach LOS	A	A	A	A

Intersection Summary			
Delay	8.5		
Level of Service	A		
Intersection Capacity Utilization	33.4%	ICU Level of Service	A
Analysis Period (min)	15		

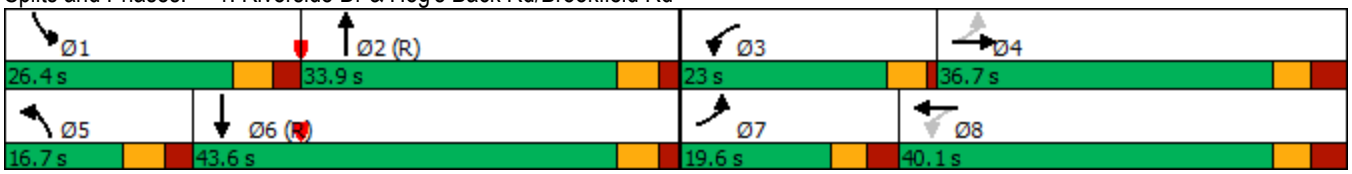


Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Configurations								
Traffic Volume (vph)	172	53	337	29	143	799	234	1459
Future Volume (vph)	172	53	337	29	143	799	234	1459
Lane Group Flow (vph)	172	453	337	368	143	928	234	1598
Turn Type	pm+pt	NA	pm+pt	NA	Prot	NA	Prot	NA
Protected Phases	7	4	3	8	5	2	1	6
Permitted Phases	4		8					
Detector Phase	7	4	3	8	5	2	1	6
Switch Phase								
Minimum Initial (s)	5.0	10.0	5.0	10.0	5.0	10.0	5.0	10.0
Minimum Split (s)	11.2	36.7	9.5	36.7	11.1	25.6	11.1	25.6
Total Split (s)	19.6	36.7	23.0	40.1	16.7	33.9	26.4	43.6
Total Split (%)	16.3%	30.6%	19.2%	33.4%	13.9%	28.3%	22.0%	36.3%
Yellow Time (s)	3.3	3.3	3.5	3.3	3.7	3.7	3.7	3.7
All-Red Time (s)	2.9	3.4	1.0	3.4	2.4	1.9	2.4	1.9
Lost Time Adjust (s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.2	6.7	4.5	6.7	6.1	5.6	6.1	5.6
Lead/Lag	Lead	Lag	Lead	Lag	Lead	Lag	Lead	Lag
Lead-Lag Optimize?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	C-Max	None	C-Max
Act Effct Green (s)	36.8	23.9	48.4	28.3	13.2	35.0	19.7	41.5
Actuated g/C Ratio	0.31	0.20	0.40	0.24	0.11	0.29	0.16	0.35
v/c Ratio	0.64	0.91	1.04	0.59	0.77	0.66	0.84	0.96
Control Delay	35.3	45.5	93.8	9.4	69.1	41.4	74.6	52.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	35.3	45.5	93.8	9.4	69.1	41.4	74.6	52.7
LOS	D	D	F	A	E	D	E	D
Approach Delay		42.7		49.8		45.1		55.5
Approach LOS		D		D		D		E
Queue Length 50th (m)	26.0	53.0	~68.0	5.3	32.8	83.8	52.3	~148.6
Queue Length 95th (m)	39.4	#102.1	#121.2	30.6	#74.4	96.7	#93.9	#178.5
Internal Link Dist (m)		228.4		515.1		121.4		276.2
Turn Bay Length (m)	15.0				135.0		160.0	
Base Capacity (vph)	283	563	324	672	186	1408	293	1672
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.61	0.80	1.04	0.55	0.77	0.66	0.80	0.96

Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 84 (70%), Referenced to phase 2:NBT and 6:SBT, Start of Green	
Natural Cycle: 125	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 1.04	
Intersection Signal Delay: 50.0	Intersection LOS: D
Intersection Capacity Utilization 109.2%	ICU Level of Service H
Analysis Period (min) 15	

~ Volume exceeds capacity, queue is theoretically infinite.
Queue shown is maximum after two cycles.
95th percentile volume exceeds capacity, queue may be longer.
Queue shown is maximum after two cycles.

Splits and Phases: 1: Riverside Dr & Hog's Back Rd/Brookfield Rd



Lane Group	EBL	EBT	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations											
Traffic Volume (vph)	7	0	62	1	62	3	1030	52	73	1897	8
Future Volume (vph)	7	0	62	1	62	3	1030	52	73	1897	8
Lane Group Flow (vph)	7	5	0	63	62	3	1030	52	73	1897	8
Turn Type	Perm	NA	Perm	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases		4		8		5	2		1	6	
Permitted Phases	4		8		8			2			6
Detector Phase	4	4	8	8	8	5	2	2	1	6	6
Switch Phase											
Minimum Initial (s)	10.0	10.0	10.0	10.0	10.0	5.0	10.0	10.0	5.0	10.0	10.0
Minimum Split (s)	30.8	30.8	30.8	30.8	30.8	10.8	26.6	26.6	10.8	26.6	26.6
Total Split (s)	31.0	31.0	31.0	31.0	31.0	14.0	75.0	75.0	14.0	75.0	75.0
Total Split (%)	25.8%	25.8%	25.8%	25.8%	25.8%	11.7%	62.5%	62.5%	11.7%	62.5%	62.5%
Yellow Time (s)	3.3	3.3	3.3	3.3	3.3	3.7	3.7	3.7	3.7	3.7	3.7
All-Red Time (s)	3.5	3.5	3.5	3.5	3.5	2.1	1.9	1.9	2.1	1.9	1.9
Lost Time Adjust (s)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Lost Time (s)	6.8	6.8		6.8	6.8	5.8	5.6	5.6	5.8	5.6	5.6
Lead/Lag						Lead	Lag	Lag	Lead	Lag	Lag
Lead-Lag Optimize?						Yes	Yes	Yes	Yes	Yes	Yes
Recall Mode	None	None	None	None	None	None	C-Max	C-Max	None	C-Max	C-Max
Act Effct Green (s)	12.2	12.2		12.2	12.2	5.8	85.9	85.9	10.7	97.5	97.5
Actuated g/C Ratio	0.10	0.10		0.10	0.10	0.05	0.72	0.72	0.09	0.81	0.81
v/c Ratio	0.05	0.02		0.48	0.28	0.04	0.42	0.05	0.48	0.69	0.01
Control Delay	47.9	0.2		62.6	10.6	55.0	10.4	0.7	70.0	7.1	0.0
Queue Delay	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	47.9	0.2		62.6	10.6	55.0	10.4	0.7	70.0	7.1	0.0
LOS	D	A		E	B	D	B	A	E	A	A
Approach Delay		28.0		36.8			10.1			9.4	
Approach LOS		C		D			B			A	
Queue Length 50th (m)	1.5	0.0		14.4	0.0	0.7	56.2	0.0	18.3	32.4	0.0
Queue Length 95th (m)	5.9	0.0		27.8	9.4	3.9	87.5	1.7	m19.8	m223.8	m0.0
Internal Link Dist (m)		58.8		118.5			110.2			196.4	
Turn Bay Length (m)					35.0	50.0		50.0	90.0		55.0
Base Capacity (vph)	257	406		261	366	115	2426	1110	155	2753	1248
Starvation Cap Reductn	0	0		0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0		0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0		0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.03	0.01		0.24	0.17	0.03	0.42	0.05	0.47	0.69	0.01

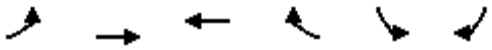
Intersection Summary	
Cycle Length: 120	
Actuated Cycle Length: 120	
Offset: 112 (93%), Referenced to phase 2:NBT and 6:SBT, Start of Green	
Natural Cycle: 100	
Control Type: Actuated-Coordinated	
Maximum v/c Ratio: 0.69	
Intersection Signal Delay: 10.8	Intersection LOS: B
Intersection Capacity Utilization 84.7%	ICU Level of Service E
Analysis Period (min) 15	

m Volume for 95th percentile queue is metered by upstream signal.

Splits and Phases: 2: Riverside Dr & Ridgewood Ave

Lane Group	EBT	WBT	SBL
Lane Configurations			
Traffic Volume (vph)	87	97	9
Future Volume (vph)	87	97	9
Lane Group Flow (vph)	125	110	37
Sign Control	Free	Free	Stop

Intersection Summary		
Control Type: Unsignalized		
Intersection Capacity Utilization 23.7%		ICU Level of Service A
Analysis Period (min) 15		



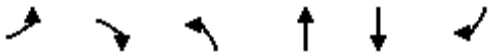
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	38	87	97	13	9	28
Future Volume (Veh/h)	38	87	97	13	9	28
Sign Control		Free	Free		Stop	
Grade		0%	0%		0%	
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	38	87	97	13	9	28
Pedestrians						
Lane Width (m)						
Walking Speed (m/s)						
Percent Blockage						
Right turn flare (veh)						
Median type		None	None			
Median storage veh)						
Upstream signal (m)		143				
pX, platoon unblocked						
vC, conflicting volume	110				266	104
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	110				266	104
tC, single (s)	4.1				6.4	6.2
tC, 2 stage (s)						
tF (s)	2.2				3.5	3.3
p0 queue free %	97				99	97
cM capacity (veh/h)	1480				704	951

Direction, Lane #	EB 1	WB 1	SB 1
Volume Total	125	110	37
Volume Left	38	0	9
Volume Right	0	13	28
cSH	1480	1700	876
Volume to Capacity	0.03	0.06	0.04
Queue Length 95th (m)	0.6	0.0	1.0
Control Delay (s)	2.4	0.0	9.3
Lane LOS	A		A
Approach Delay (s)	2.4	0.0	9.3
Approach LOS			A

Intersection Summary			
Average Delay	2.4		
Intersection Capacity Utilization	23.7%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBL	NBT	SBT
Lane Configurations			
Traffic Volume (vph)	36	49	243
Future Volume (vph)	36	49	243
Lane Group Flow (vph)	92	95	291
Sign Control	Stop	Stop	Stop

Intersection Summary		
Control Type: Unsignalized		
Intersection Capacity Utilization 37.7%		ICU Level of Service A
Analysis Period (min) 15		



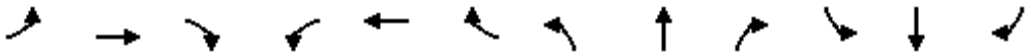
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Sign Control	Stop			Stop	Stop	
Traffic Volume (vph)	36	56	46	49	243	48
Future Volume (vph)	36	56	46	49	243	48
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	36	56	46	49	243	48

Direction, Lane #	EB 1	NB 1	SB 1
Volume Total (vph)	92	95	291
Volume Left (vph)	36	46	0
Volume Right (vph)	56	0	48
Hadj (s)	-0.25	0.13	-0.06
Departure Headway (s)	4.5	4.6	4.2
Degree Utilization, x	0.11	0.12	0.34
Capacity (veh/h)	734	759	837
Control Delay (s)	8.1	8.2	9.3
Approach Delay (s)	8.1	8.2	9.3
Approach LOS	A	A	A

Intersection Summary			
Delay	8.8		
Level of Service	A		
Intersection Capacity Utilization	37.7%	ICU Level of Service	A
Analysis Period (min)	15		

Lane Group	EBT	WBT	NBT	SBT
Lane Configurations				
Traffic Volume (vph)	2	4	23	80
Future Volume (vph)	2	4	23	80
Lane Group Flow (vph)	113	8	24	389
Sign Control	Stop	Stop	Stop	Stop

Intersection Summary		
Control Type: Unsignalized		
Intersection Capacity Utilization	47.4%	ICU Level of Service A
Analysis Period (min)	15	



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Sign Control		Stop			Stop			Stop			Stop	
Traffic Volume (vph)	104	2	7	0	4	4	1	23	0	8	80	301
Future Volume (vph)	104	2	7	0	4	4	1	23	0	8	80	301
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Hourly flow rate (vph)	104	2	7	0	4	4	1	23	0	8	80	301

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total (vph)	113	8	24	389
Volume Left (vph)	104	0	1	8
Volume Right (vph)	7	4	0	301
Hadj (s)	0.18	-0.27	0.04	-0.43
Departure Headway (s)	4.9	4.6	4.6	3.8
Degree Utilization, x	0.16	0.01	0.03	0.41
Capacity (veh/h)	672	695	734	912
Control Delay (s)	8.8	7.7	7.8	9.5
Approach Delay (s)	8.8	7.7	7.8	9.5
Approach LOS	A	A	A	A

Intersection Summary			
Delay	9.2		
Level of Service	A		
Intersection Capacity Utilization	47.4%	ICU Level of Service	A
Analysis Period (min)	15		

Roundabout Analysis Reports

MOVEMENT SUMMARY

Site: 101 [Existing AM]

New Site
Site Category: (None)
Roundabout

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Flannery Dr												
1	L2	94	2.0	0.295	9.1	LOS A	1.3	9.1	0.46	0.61	0.46	48.0
3	R2	204	2.0	0.295	4.6	LOS A	1.3	9.1	0.46	0.61	0.46	46.5
Approach		299	2.0	0.295	6.0	LOS A	1.3	9.1	0.46	0.61	0.46	47.0
East: Airport Pkwy NB On-Off / SB On Ramps												
4	L2	4	2.0	0.198	7.8	LOS A	1.0	7.1	0.25	0.33	0.25	49.6
5	T1	249	2.0	0.198	2.9	LOS A	1.0	7.1	0.25	0.33	0.25	49.3
Approach		253	2.0	0.198	3.0	LOS A	1.0	7.1	0.25	0.33	0.25	49.3
North: Airport Pkwy SB Off Ramp												
7	L2	3	2.0	0.197	9.1	LOS A	1.1	8.0	0.49	0.52	0.49	48.6
8	T1	34	2.0	0.197	4.2	LOS A	1.1	8.0	0.49	0.52	0.49	48.3
9	R2	196	2.0	0.197	4.6	LOS A	1.1	8.0	0.49	0.52	0.49	47.0
Approach		233	2.0	0.197	4.6	LOS A	1.1	8.0	0.49	0.52	0.49	47.2
West: Brookfield Rd												
11	T1	401	2.0	0.153	2.7	LOS A	0.9	6.1	0.16	0.30	0.16	49.6
12	R2	74	2.0	0.153	3.5	LOS A	0.9	6.1	0.16	0.31	0.16	48.2
Approach		476	2.0	0.153	2.8	LOS A	0.9	6.1	0.16	0.30	0.16	49.4
All Vehicles		1261	2.0	0.295	3.9	LOS A	1.3	9.1	0.31	0.42	0.31	48.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Existing PM]

New Site
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Flannery Dr												
1	L2	37	2.0	0.117	9.1	LOS A	0.5	3.4	0.48	0.61	0.48	47.9
3	R2	73	2.0	0.117	4.6	LOS A	0.5	3.4	0.48	0.61	0.48	46.4
Approach		110	2.0	0.117	6.1	LOS A	0.5	3.4	0.48	0.61	0.48	46.9
East: Airport Pkwy NB On-Off / SB On Ramps												
4	L2	18	2.0	0.098	7.6	LOS A	0.5	3.3	0.13	0.34	0.13	49.7
5	T1	116	2.0	0.098	2.7	LOS A	0.5	3.3	0.13	0.34	0.13	49.4
Approach		133	2.0	0.098	3.3	LOS A	0.5	3.3	0.13	0.34	0.13	49.4
North: Airport Pkwy SB Off Ramp												
7	L2	11	2.0	0.413	8.4	LOS A	2.8	20.0	0.42	0.43	0.42	48.9
8	T1	262	2.0	0.413	3.5	LOS A	2.8	20.0	0.42	0.43	0.42	48.5
9	R2	300	2.0	0.413	4.0	LOS A	2.8	20.0	0.42	0.43	0.42	47.3
Approach		573	2.0	0.413	3.8	LOS A	2.8	20.0	0.42	0.43	0.42	47.9
West: Brookfield Rd												
11	T1	488	2.0	0.239	3.8	LOS A	1.5	10.9	0.48	0.44	0.48	48.3
12	R2	158	2.0	0.239	4.3	LOS A	1.5	10.9	0.47	0.44	0.47	47.0
Approach		646	2.0	0.239	3.9	LOS A	1.5	10.9	0.48	0.44	0.48	48.0
All Vehicles		1462	2.0	0.413	4.0	LOS A	2.8	20.0	0.42	0.44	0.42	48.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Total Background 2024 and 2029 AM]

New Site
Site Category: (None)
Roundabout

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Flannery Dr												
1	L2	87	2.0	0.289	9.0	LOS A	1.2	8.9	0.46	0.60	0.46	48.1
3	R2	207	2.0	0.289	4.6	LOS A	1.2	8.9	0.46	0.60	0.46	46.6
Approach		294	2.0	0.289	5.9	LOS A	1.2	8.9	0.46	0.60	0.46	47.0
East: Airport Pkwy NB On-Off / SB On Ramps												
4	L2	13	2.0	0.184	7.8	LOS A	0.9	6.5	0.23	0.34	0.23	49.6
5	T1	224	2.0	0.184	2.9	LOS A	0.9	6.5	0.23	0.34	0.23	49.2
Approach		237	2.0	0.184	3.2	LOS A	0.9	6.5	0.23	0.34	0.23	49.2
North: Airport Pkwy SB Off Ramp												
7	L2	3	2.0	0.186	8.9	LOS A	1.0	7.4	0.47	0.51	0.47	48.7
8	T1	31	2.0	0.186	4.0	LOS A	1.0	7.4	0.47	0.51	0.47	48.3
9	R2	189	2.0	0.186	4.5	LOS A	1.0	7.4	0.47	0.51	0.47	47.1
Approach		223	2.0	0.186	4.5	LOS A	1.0	7.4	0.47	0.51	0.47	47.3
West: Brookfield Rd												
11	T1	390	2.0	0.148	2.7	LOS A	0.8	5.7	0.17	0.30	0.17	49.6
12	R2	69	2.0	0.148	3.5	LOS A	0.8	5.7	0.16	0.31	0.16	48.2
Approach		459	2.0	0.148	2.8	LOS A	0.8	5.7	0.17	0.30	0.17	49.4
All Vehicles		1213	2.0	0.289	3.9	LOS A	1.2	8.9	0.31	0.42	0.31	48.4

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Total Background 2024 and 2029 PM]

New Site
Site Category: (None)
Roundabout

Movement Performance - Vehicles

Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Flannery Dr												
1	L2	36	2.0	0.120	9.0	LOS A	0.5	3.5	0.47	0.60	0.47	48.0
3	R2	79	2.0	0.120	4.5	LOS A	0.5	3.5	0.47	0.60	0.47	46.5
Approach		115	2.0	0.120	5.9	LOS A	0.5	3.5	0.47	0.60	0.47	47.0
East: Airport Pkwy NB On-Off / SB On Ramps												
4	L2	37	2.0	0.104	7.6	LOS A	0.5	3.4	0.13	0.39	0.13	49.4
5	T1	104	2.0	0.104	2.7	LOS A	0.5	3.4	0.13	0.39	0.13	49.0
Approach		141	2.0	0.104	4.0	LOS A	0.5	3.4	0.13	0.39	0.13	49.1
North: Airport Pkwy SB Off Ramp												
7	L2	10	2.0	0.396	8.4	LOS A	2.6	18.8	0.42	0.44	0.42	48.9
8	T1	236	2.0	0.396	3.5	LOS A	2.6	18.8	0.42	0.44	0.42	48.5
9	R2	299	2.0	0.396	4.0	LOS A	2.6	18.8	0.42	0.44	0.42	47.3
Approach		545	2.0	0.396	3.9	LOS A	2.6	18.8	0.42	0.44	0.42	47.8
West: Brookfield Rd												
11	T1	460	2.0	0.223	3.7	LOS A	1.4	10.0	0.47	0.44	0.47	48.4
12	R2	146	2.0	0.223	4.3	LOS A	1.4	10.0	0.45	0.43	0.45	47.1
Approach		606	2.0	0.223	3.9	LOS A	1.4	10.0	0.46	0.43	0.46	48.0
All Vehicles		1407	2.0	0.396	4.0	LOS A	2.6	18.8	0.41	0.44	0.41	48.0

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Total Projected 2024 and 2029 AM]

New Site
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Flannery Dr												
1	L2	87	2.0	0.304	9.0	LOS A	1.3	9.5	0.46	0.60	0.46	48.1
3	R2	222	2.0	0.304	4.6	LOS A	1.3	9.5	0.46	0.60	0.46	46.6
Approach		309	2.0	0.304	5.8	LOS A	1.3	9.5	0.46	0.60	0.46	47.0
East: Airport Pkwy NB On-Off / SB On Ramps												
4	L2	20	2.0	0.189	7.8	LOS A	0.9	6.7	0.23	0.35	0.23	49.5
5	T1	224	2.0	0.189	2.9	LOS A	0.9	6.7	0.23	0.35	0.23	49.1
Approach		244	2.0	0.189	3.3	LOS A	0.9	6.7	0.23	0.35	0.23	49.2
North: Airport Pkwy SB Off Ramp												
7	L2	3	2.0	0.186	9.0	LOS A	1.0	7.4	0.48	0.51	0.48	48.7
8	T1	31	2.0	0.186	4.1	LOS A	1.0	7.4	0.48	0.51	0.48	48.3
9	R2	189	2.0	0.186	4.5	LOS A	1.0	7.4	0.48	0.51	0.48	47.1
Approach		223	2.0	0.186	4.5	LOS A	1.0	7.4	0.48	0.51	0.48	47.3
West: Brookfield Rd												
11	T1	390	2.0	0.149	2.7	LOS A	0.8	5.6	0.18	0.31	0.18	49.5
12	R2	69	2.0	0.149	3.5	LOS A	0.8	5.6	0.17	0.32	0.17	48.1
Approach		459	2.0	0.149	2.8	LOS A	0.8	5.6	0.18	0.31	0.18	49.3
All Vehicles		1235	2.0	0.304	4.0	LOS A	1.3	9.5	0.31	0.43	0.31	48.3

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.

MOVEMENT SUMMARY

Site: 101 [Total Projected 2024 and 2029 PM]

New Site
Site Category: (None)
Roundabout

Movement Performance - Vehicles												
Mov ID	Turn	Demand Flows Total veh/h	HV %	Deg. Satn v/c	Average Delay sec	Level of Service	95% Back of Queue Vehicles veh	Distance m	Prop. Queued	Effective Stop Rate	Aver. No. Cycles	Average Speed km/h
South: Flannery Dr												
1	L2	36	2.0	0.129	9.0	LOS A	0.5	3.9	0.47	0.60	0.47	48.1
3	R2	88	2.0	0.129	4.6	LOS A	0.5	3.9	0.47	0.60	0.47	46.5
Approach		124	2.0	0.129	5.8	LOS A	0.5	3.9	0.47	0.60	0.47	47.0
East: Airport Pkwy NB On-Off / SB On Ramps												
4	L2	50	2.0	0.113	7.6	LOS A	0.5	3.8	0.13	0.41	0.13	49.2
5	T1	104	2.0	0.113	2.7	LOS A	0.5	3.8	0.13	0.41	0.13	48.8
Approach		154	2.0	0.113	4.3	LOS A	0.5	3.8	0.13	0.41	0.13	48.9
North: Airport Pkwy SB Off Ramp												
7	L2	10	2.0	0.400	8.5	LOS A	2.7	19.1	0.43	0.45	0.43	48.8
8	T1	236	2.0	0.400	3.6	LOS A	2.7	19.1	0.43	0.45	0.43	48.5
9	R2	299	2.0	0.400	4.1	LOS A	2.7	19.1	0.43	0.45	0.43	47.2
Approach		545	2.0	0.400	3.9	LOS A	2.7	19.1	0.43	0.45	0.43	47.8
West: Brookfield Rd												
11	T1	460	2.0	0.225	3.8	LOS A	1.4	10.1	0.48	0.44	0.48	48.3
12	R2	146	2.0	0.225	4.4	LOS A	1.4	10.1	0.46	0.44	0.46	47.0
Approach		606	2.0	0.225	3.9	LOS A	1.4	10.1	0.47	0.44	0.47	48.0
All Vehicles		1429	2.0	0.400	4.1	LOS A	2.7	19.1	0.42	0.45	0.42	47.9

Site Level of Service (LOS) Method: Delay (SIDRA). Site LOS Method is specified in the Parameter Settings dialog (Site tab).
Roundabout LOS Method: SIDRA Roundabout LOS.
Vehicle movement LOS values are based on average delay per movement.
Intersection and Approach LOS values are based on average delay for all vehicle movements.
Roundabout Capacity Model: SIDRA Standard.
SIDRA Standard Delay Model is used. Control Delay includes Geometric Delay.
Gap-Acceptance Capacity: SIDRA Standard (Akçelik M3D).
HV (%) values are calculated for All Movement Classes of All Heavy Vehicle Model Designation.