

# Technical Memorandum

To: Jerzy Jurewicz (Cuhaci and Associates)  
Copy: David Hendrycks, OCDSB  
From: Mark Baker, P.Eng.

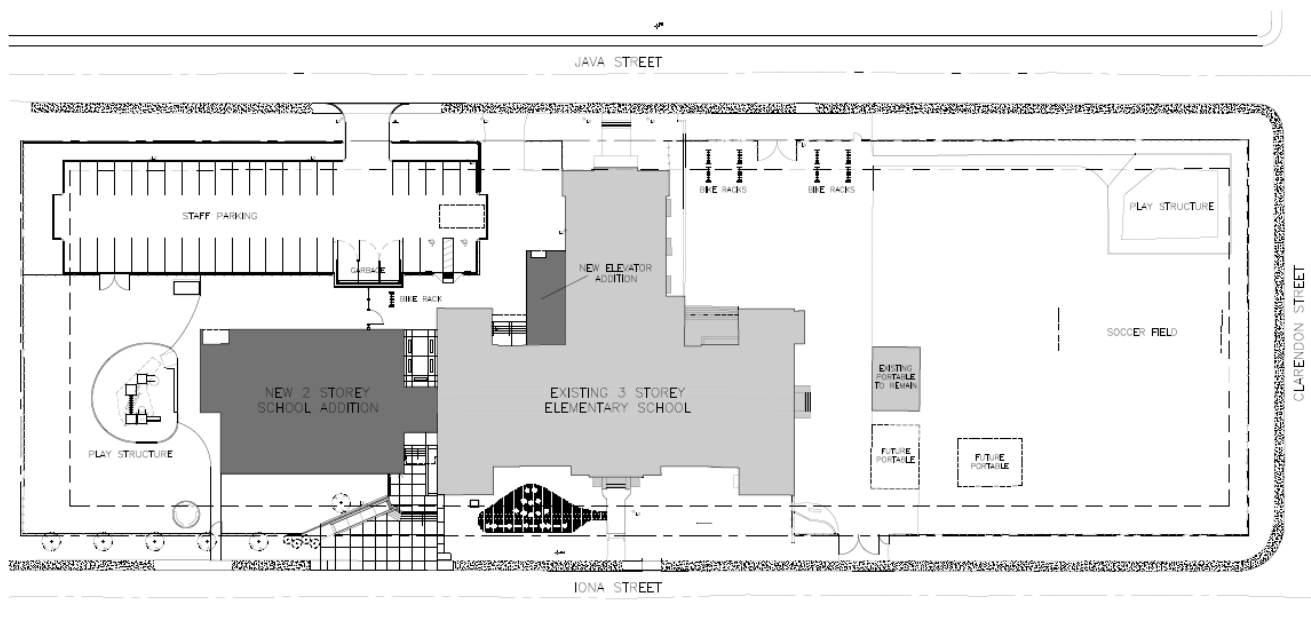
Date: 26 April 2019  
Project: 476969-01000

**Re: 49 Iona Street, Elmdale Public School – Proposed Addition (Ottawa, ON)**  
*Transportation Review*

## 1. INTRODUCTION

This technical memo has been prepared to address the transportation-related concerns received in response to the proposed addition to Elmdale Public School located at 49 Iona Street in the Hampton Park Community of Ottawa. The development proposal (see Figure 1) consists of a two-storey addition to the west of the existing elementary school for classroom space, as well as a small addition next to the gymnasium to accommodate an elevator. Both additions will provide Barrier Free access to the School. It is understood that the new classroom space will replace the majority the existing six portables that are currently located to the east of the existing school.

Figure 1: Proposed Site Plan



As outlined in the Planning Rationale Report (Cuhaci, Dec 2018), the site development work includes the following (from a transportation perspective):

- **new vehicular parking** located fully within school property. This parking lot will be enclosed by fencing to provide separation of vehicles, pedestrians and students, whereas the non-conforming vehicular parking along Iona Street will be removed;
- **barrier-free parking** spaces near the new north addition that includes the elevator;
- **new bicycle parking** within school property; and
- **new main entrance** to the school from Iona Street, which will be Barrier-Free entrance with a new entry plaza.

## 2. IMPACT ASSESSMENT

The City of Ottawa has developed Transportation Impact Assessment (TIA) Guidelines to help guide the need and scope of transportation studies needed in support development applications. The current process involves several interim report submissions to, and approvals by, the City of Ottawa. Parsons has completed the initial Screening Report for the Site Plan (included as Appendix A), and none of the three triggers were met:

- The number of additional trips to/from the school resulting from the addition is forecasted to be negligible as the increase in the effective classroom space and staffing requirements is not substantial.
- A review of the 5-year collision data on study area streets (i.e., Iona, Java, Clarendon, Mayfair) indicates a single reported collision on Iona in March 2014 involving one vehicle reversing into an unattended parked vehicle (see Appendix C).

On this basis, the decision was made that a full/comprehensive TIA would not be required. That said, the community has raised a number of transportation concerns related to operations of the existing school. To the extent reasonable, these community concerns/comments will be reviewed within ensuing sections of this report.

## 3. EXISTING CONDITIONS/FIELD OBSERVATIONS

A general review of traffic conditions near Elmdale Public School was completed by Tom Carmody, a retired City of Ottawa employee who currently specializes in data collection and transportation assessments of this type. The complete review, entitled *Elmdale Public School – General Traffic Review* (based on observations in April 2019) is included as Appendix B. The highlights are summarized below:

- **Sidewalks** – provided on both sides of Java and Iona, with the exception of a stretch on Java east of Mayfair (50m) where no sidewalks are provided;
- **School crossing guards** – provided at the Clarendon/Iona intersection and Clarendon/Iona intersections; at each location, there are between 120 and 200 pedestrian crossings during the busiest morning and afternoon 30-min window;
- **School bus activity** – the school bus loading zone is located on the north side of Iona in front of the school; in the morning three buses arrive close to 8:50 am, and in the afternoon three buses depart close to 3:40pm;
- **On-site parking** – one lot of 14 spaces for staff is located on the north side of the school accessed via Java Street, with a second lot of 22 spaces located on the north side of Iona Street (west of the existing school; stalls are all perpendicular to the street and are considered non-compliant);
- **On-street parking** – adjacent to the school (Mon-Fri) on Java, no parking is permitted on the south side and no stopping on the north side; on Iona, no stopping is permitted on the south side and no stopping on the north side; see the figure included on the last page of Appendix B for details on time periods, limits, etc.;
- **Student drop-off and pick-up activity** – this occurs mostly on the south side of Java within the designated no parking zone (stopping is permitted); there were a small number of violations of the no stopping signage; and some use of private driveways to turn-around;
- **Vehicle travel speeds** – posted speed is 30 km/h Iona, whereas average speed is 35 km/h; posted speed on Java is 50 km/h Java, whereas average speed is 42 km/h (see Appendix C);
- **Traffic volumes** – during the morning and afternoon peaks, 45 to 90 veh/h two-way on Iona and Java; see raw pedestrian, bicycle and vehicle counts (provided within Appendix C).

## 4. COMMENTS RECEIVED

Table 1 is a summary of the major transportation issues that have been identified based on our review of the comprehensive series of comments that emerged from the circulation of the initial Site Plan Application (March 2019). A preliminary response, based on the findings of the foregoing review, has also been provided within the summary table. Note that a response has not been provided to every single comment/query as many are considered architectural/design/internal operational issues. The complete circulation comments, as provided by the City of Ottawa, are included as Appendix D.

Table 1: Summary of Key Transportation Issues

Issue/Comment	Response
1. Concern with the number of parking spaces being increased to 40.	<i>Observations indicated the existing 36 spaces (14 + 22) are currently well utilized. The additional spaces will provide some flexibility to provide visitor parking spaces on-site. The By-law requirement for the proposed school is for 21 spaces.</i>
2. The new parking lot will result in more traffic as a result of staff use Java Street, which is already clogged with the cars of parents at drop off and pick up times.	<i>The new parking lot located off Java will provide 40 spaces instead of the existing 14 spaces. The traffic generated by the teacher and staff component of the school is not considered significant. Furthermore, the arrival and departure patterns of teachers and staff vary by individual, but typically occur 30-min before and after the start/end of school day for students. On rare occasions would staff arrival/departure coincide with student pick-up and drop-off activity, which normally is limited to a 10 to 15-min window.</i>
3. Relocate on-site parking area off Clarendon.	<i>See previous response. From a transportation perspective, there is limited benefit in relocating the parking area off Clarendon.</i>
4. No documentation has been provided on the expected traffic impact of the proposed expansion, nor recognition of changing traffic patterns.	<i>The TIA Screening Report confirmed that the forecasted impact does not constitute completion of a comprehensive transportation study. The subject report is intended to address this comment.</i>
5. Applicant should conduct studies to determine existing travel patterns, drop-off and pick-up activity, etc.	<i>See General Traffic Review (Appendix B).</i>
6. Traffic congestion on Iona related to school bus operations and drop-off and pick-up activity	<i>Observations revealed no safety issues involving school bus operations, and minor occurrences of drivers violating the no-stopping signs. Both prevent two-way operation, but drivers were found to be generally courteous allowing other vehicles to proceed through the temporary bottleneck.</i>
7. Traffic congestion on Java related to drop-off and pick-up activity	<i>Stopping is permitted on the south side of Iona, and observations revealed that over 20 vehicles stopped to drop-off children in the morning peak. No safety-related issues were observed given the low volume of through traffic.</i>
8. High travel speed on Iona	<i>Iona is posted at 30 km/h, whereas a speed survey conducted for a 2-hour period (including the school-related activity) indicate an average speed of 35 km/h and 85<sup>th</sup> percentile speed of 41 km/h. All other streets in the area are posted at 40 and 50 km/h.</i>
9. Winter conditions make travel on the resulting narrow road widths and sidewalks challenging.	<i>City of Ottawa maintenance issue.</i>
10. Consider building an underground parking lot.	<i>This is considered extremely cost prohibitive</i>

## 5. SUMMARY

The existing parking and stopping restrictions adjacent to the school appear appropriate given the neighbourhood context. A small number of parking/stopping violations were witnessed during field observations, as was the use of private driveway to turn-around. It is recognized that this practice may be frustrating for some, but in general, no serious safety-related issues were observed during the field observation conducted in April 2019 nor does the recorded collision history provide any evidence of safety issues. It is recommended that the school continue to remind parents/drivers of the current prohibitions regarding stopping and parking near the School, and request they adhere to them for the safety and benefit of all street users.





City of Ottawa 2017 TIA Guidelines

Date

11/28/2018

## TIA Screening Form

Project

Elmdale School Expansion

Project Number

N/A

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

### Module 1.1 - Description of Proposed Development

Municipal Address	49 Iona Street, Ottawa ON K1Y 3L9
Description of location	Fronting on Iona, 2 blocks east of Island Park and 2 blocks south of Byron
Land Use	Public School/Institutional
Development Size	922 sq. m additional (35% increase) plus 4 new parking spaces
Number of Accesses and Locations	One driveway connection to Java servicing 40 parking spaces
Development Phasing	One
Buildout Year	2020
Sketch Plan / Site Plan	See attached

### Module 1.2 - Trip Generation Trigger

Land Use Type	Public School/Institutional
Development Size	Existing 2,729 sq. m to Projected 3,795 sq. m
Trip Generation Trigger Met?	No

### Module 1.3 - Location Triggers

Development Proposes a new driveway to a boundary street that is designated as part of the City's Transit Priority, Rapid Transit, or Spine Bicycle Networks (See Sheet 3)	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;	No	
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?	No	



# **Elmdale Public School**

## *General Traffic Review*

### **Introduction**

The purpose of this report is to provide a summary of traffic and student drop-off/pick-up activity around Elmdale Public School and confirm parking and stopping regulations on adjacent roadways at the school.

Additionally, four-hour turning movement traffic counts were conducted at the four intersections on Iona Street and Java Street and general comments are provided regarding the details collected. As speeding is always a concern around schools, spot speed surveys were undertaken on both Iona Street and Java Street during the time when children were arriving or departing the school property.

### **Site Description**

Elmdale Public School is located at 49 Iona Street in Hampton Park with the school property connecting Java Street and Iona Street mid-way between Clarendon Avenue and Mayfair Avenue South.

Two parking areas are provided for staff with one located on the north side of the school accessed from Java Street. There are 14 spaces. The other is located southwest of the school proper on the north side of Iona Street providing 22 spaces. As outlined in the Edward J. Cuhaci and Associates' report, the parking area on the north side of Iona Street crosses over the property line onto City of Ottawa property. Access to and from the parking lot from Iona Street is difficult due to the raised pedestrian sidewalk curb with only two depressed access points.

All roadways around the school are local residential roadways as defined in the City of Ottawa Transportation Master Plan. Sidewalks are provided on both sides of Clarendon Avenue, on the north side of Iona Street, the major portion of the south side of Iona Street west of Clarendon Avenue, and the major portions of both sides of Java Street west of Clarendon Avenue.

School crossing guards are provided at the intersections of Clarendon Avenue/Iona Street and at Clarendon Avenue/Java Street.



The speed limits on the roadways in the immediate vicinity of Elmdale Public School (Clarendon Avenue, Faraday Street, Iona Street, Java Street and Mayfair Avenue South) are inconsistent. The attached table illustrates the differences.

<b>Street</b>	<b>Between</b>	<b>Speed Limit</b>
<b>Clarendon Ave.</b>	Byron Ave. & southerly end of Clarendon	50 km/h
<b>Faraday St.</b>	Harmer Ave. (S) & Mayfair Ave. (S)	40 km/h
<b>Iona St.</b>	Island Park Dr. & Harmer Ave. (S)	30 km/h
<b>Java St.</b>	Harmer Ave. (S) & Mayfair Ave. (S)	50 km/h
<b>Mayfair Ave. (S)</b>	Byron Ave. & Helena St.	50 km/h

The provision of a 24 hour/day school zone speed limit (30 km/h) on Iona Street is unusual. Within older established neighbourhoods vehicle speeds are generally low and don't require aesthetically displeasing regulatory speed limit signing.

### **Student Drop-Off and Pick-Up Activity**

Parents and caregivers walk, bicycle and drive their children to Elmdale Public School with much of the activity taking place on Java Street where two accesses to the school property are available.

### **Java Street**

Java Street is a short, two-block long local residential roadway connecting Mayfair Avenue South in the west and Harmer Avenue North in the east. Observation of student arrival and departure activity was undertaken on 2 April, 2019 from 0830 to 0915 and 1515 to 1600.

During the morning arrival time one driver stopped briefly in the 'No Stopping' area on the north side of the street and twenty-one vehicles stopped (this is a permitted use) in the 'No Parking' area on the south side of the street. Several vehicles parked in the legal parking spaces on the south side of the street at the west end of the school playground.

In general, one of the primary issues at peak school times relates to the volume of through traffic on roadways adjacent to the area where parents are dropping off or picking up their children. In this particular case, given the local nature of Java Street, through traffic is virtually nil. Accordingly, no safety related issues were noted.

I spoke with a resident who lives on the north side of Java Street across from the primary student pick-up and drop-off area. He stated that he is in favour of the new school but is concerned for the children because of the proposed replacement of the playground on the northwest portion of the school property with the teachers' parking area. He also said that he has no problem if parents use his laneway although he noted that some of his neighbours are less amused.

During the morning review, two parents used laneways to turn around and two others completed three-point (U) turns on Java Street.

During the afternoon departure time no vehicles stopped in the 'No Stopping' area on the north side of the street, seven stopped in the 'No Parking' area and several used the legal parking area on the south side of Java Street at the west end of the school playground. One driver completed a three-point (U) turn. No drivers used private driveways.

A second observation of the afternoon departure time was completed on 11 April, 2019 between 1500 and 1600. Two vehicles stopped in the 'No Stopping' area on the north side, one of which was not school related, six stopped in the 'No Parking' area on the south side of the street and several used the legal parking area on the south side of Java Street at the west end of the school playground. One driver completed a three-point (U) turn and one used a private driveway.

## **Iona Street**

Iona Street is a local residential roadway; however, although not officially designated as a collector roadway in the City of Ottawa Transportation Master Plan, it functions as a minor neighbourhood collector roadway. It is approximately 1.3 kilometers in length commencing at Broadhead Avenue in the west and Harmer Avenue South in the east.

Observances of the student drop-off and pick-up activity took place between 0830 and 0915 on Thursday, 4 April and between 1515 and 1600 on Thursday, 11 April 2019.

During the morning, one driver completed a three-point (U) turn, and three used private driveways. Two drivers stopped in the 'No Stopping' zone on the south side of the street opposite the school bus loading zone.

In the afternoon, no three-point turns occurred and only one driver used a private driveway. It appeared two parents used the teacher parking area on the north side of Iona Street to wait for their children, backing out onto the roadway after they picked them up. A UPS driver and one passenger vehicle stopped briefly in the 'No Stopping' area on the north side of Iona Street immediately west of Clarendon Avenue.

The school buses arrived in the morning at 0848, 0851 and 0856. In the afternoon, all left at 1538. No issues were noted involving school buses.

In general, there were no serious issues during either the morning or afternoon time periods. As the roadway is not wide enough to comfortably accommodate two-way traffic when vehicles are parked along the south side of the road, drivers are generally courteous allowing other vehicles to proceed.

### **Adult School Crossing Guard Activity**

An adult school crossing guard is in place at each of the two intersections located east of the school - Clarendon Avenue and Iona Street and at Clarendon Avenue and Java Street. They assist children from approximately 0830 to after 0900 in the morning and from before 1530 to 1600.

During the four-hour traffic count at Clarendon Avenue and Iona Street, a total of 336 pedestrian crossings were observed on all four approaches. Between 0830-0900 there were 123 crossings and between 1530-1600, 114 crossings.

At Clarendon and Java, a total of 424 crossings were observed on all four approaches. Between 0830-0900, there were 209 crossings and between 1530-1600, 111 crossings.

Traffic volumes are relatively light and the crossing guards had everything well in hand.

At Java Street and Mayfair Avenue South, crossing guards are neither present, nor required. Children, students, parents and caregivers walk down the middle of Java Street to and from the school as vehicles are parked on both sides of the street west of the westerly end of the sidewalks. Given the presence of school children both here and on Iona Street at Mayfair Avenue South, perhaps the sidewalks should be extended to Mayfair Avenue South.

## Spot Speed Surveys

Two spot speed surveys were conducted, both mid-block, with one on Iona Street and one on Java Street. They were conducted for two hour periods, including the time when the majority of school related activity was taking place. Historical speed surveys of this type conducted around schools during the time students are present in large numbers confirm drivers travel up to 16 km/h slower than they would have if students were not present. The number of free-flow vehicle speeds on Java Street is insufficient for a valid statistical sample.

The results of these two surveys are as follows:

Street	Speed Limit	# of Vehicles	Average Speed	85 <sup>th</sup> Percentile Speed	Compliance with Speed Limit	Pace Speed Range
<b>Iona St.</b>	30 km/h	46	35 km/h	41 km/h	27%	29-44 km/h
<b>Java St.</b>	50 km/h	14	33 km/h	42 km/h	100%	23-38 km/h

The results of the two speed surveys do not confirm an issue with speeding traffic during the time students are either heading to school in the morning or leaving the school in the afternoon.

## Parking and Stopping Regulations

The City of Ottawa implemented limited parking and stopping regulations in the vicinity of the primary student drop-off and pick-up areas as well as near the intersections where the adult school crossing guards are located.

The map on page 7 of this report provides details pertaining to the hours of operation and type of regulation in place.

The stopping regulations on the south, north and west legs of the intersections at Clarendon Avenue/Iona Street and Clarendon Avenue and Java Street are a combination of either 'No Stopping at Any Time' or 'No Stopping 7:30 am to 9:30 am & 2:30 pm to 4:30 pm Monday to Friday.

Stopping is prohibited between 8:30 am to 9:30 am and 3:00 pm to 4:00 pm Monday to Friday on the north side of Java Street for approximately 2/3 of the street west of Clarendon Avenue. This serves to ensure the majority of parents

drop off and pick up their children on the south side of the street where parking is prohibited, but loading and unloading is permitted during the same time periods. As school commences at 0900 and ends at 3:30, these regulations appear appropriate as they are in place from Monday to Friday only.

On Iona Street, stopping is prohibited on the north side of the street from Clarendon Avenue to the school bus loading zone in front of the school and west of the school bus loading zone across the teachers' off street parking area west of the school. The hours of operation are 7:30 am to 7:00 pm, Monday to Friday.

Stopping is prohibited on the south side of Iona Street directly across from the school bus loading area and for a similar distance. This prohibition is in effect 8:00 am to 4:00 pm Monday to Friday, September to June. This regulation ensures parents do not stop in this area when school buses are present and through traffic can safely pass.

Six hour parking is permitted at other times on Clarendon Avenue, Iona Street, Java Street and Mayfair Avenue South and the presence of parked vehicles serves to reduce vehicle speeds on these streets. During this review, it was observed vehicles park on both sides on Java Street immediately east of Mayfair Avenue South and when this happens, the width of the travelled portion of the roadway is severely reduced. The sidewalks on both sides of the street do not extend to Mayfair Avenue South and the pavement is already reduced in width here. Consideration should be given to prohibiting parking on at least one side of the road between Mayfair Avenue South and the westerly end of the sidewalk.











# City Operations - Transportation Services

## Collision Details Report - Public Version

**From:** January 1, 2013 **To:** December 31, 2017

**Location:** IONA ST btwn MAYFAIR AVE & CLARENDON AVE

**Traffic Control:** No control

**Total Collisions:** 1

Date/Day/Time	Environment	Impact Type	Classification	Surface Cond'n	Veh. Dir	Vehicle Manoeuvre	Vehicle type	First Event	No. Ped
2014-Mar-21, Fri,15:40	Clear	SMV unattended vehicle	P.D. only	Dry	South	Reversing	Pick-up truck	Unattended vehicle	





# Spot Speed Survey Summary

Including Estimated Driver Compliance and  
Recommended Speed Limits



## Java Street between Clarendon Avenue & Mayfair Avenue South

Mid-way at Elmdale Public School

Hampton Park

Ward: 15

Ottawa, ON

Thursday 4 April 2019

Road Surface: Asphalt

Road Condition:

Dry

Weather: Partly Cloudy

Survey Hours: 1415-1615

Notes: School-related activity results in extremely slow vehicle speeds without a reduction in the speed limit.

### Spot Speed Survey Summaries for All Vehicle Types

Westbound		Speed Limit  <b>50</b> km/h	Eastbound	
Total Number of All Vehicles	7		Total Number of All Vehicles	7
Average (Mean) Speed	33 km/h		Average (Mean) Speed	33 km/h
85th Percentile Speed	43 km/h		85th Percentile Speed	42 km/h
95th Percentile Speed	49 km/h		95th Percentile Speed	47 km/h
Upper Limit Pace Speed Range	38 km/h		Upper Limit Pace Speed Range	40 km/h
Driver Compliance with Speed Limit	100 %		Driver Compliance with Speed Limit	100 %

Spot Speed Summary - Combined Both Directions	
Total Number of All Vehicles	14
Average (Mean) Speed	33 km/h
85th Percentile Speed	42 km/h
95th Percentile Speed	48 km/h
Upper Limit Pace Speed Range	38 km/h
Driver Compliance with Speed Limit	100%

Additional Survey Details	
Highest vehicle speed in summary	48 km/h
Slowest vehicle speed in summary	22 km/h
Speed Differential	26 km/h
Fastest Speed Observed *	48 km/h
* The <b>FASTEST</b> speed observed is <b>NOT</b> included in the summary if it is > than the <b>HIGHEST</b> vehicle speed in the summary. It is included for information only.	

### Heavy Vehicle Spot Speed Survey Summary

Total Number of Heavy Vehicles *	N/A
Average (Mean) Speed	N/A km/h
85th Percentile Speed	N/A km/h
Driver Compliance with Speed Limit	n/a

Trucks



0

Buses



0

School Buses



0

\* N/A if the total number of heavy vehicles < 6.

\* If the total number of heavy vehicles is < 30, this value is insufficient for a valid statistical sample.

Local Residential Roadway

Current  
Speed  
Limit

Speed Limit	Compliance
30 km/h	46%
40 km/h	79%
50 km/h	100%
60 km/h	100%
70 km/h	100%
80 km/h	100%
90 km/h	100%
100 km/h	100%

#### NOTE

The number of vehicle speeds is insufficient for a valid statistical sample.

### City of Ottawa Speed Zoning Policy for Urban and Rural Roads (2009)

Based **exclusively** on the results of this spot speed survey and using the criteria set forth in the *City of Ottawa Speed Zoning Policy for Urban and Rural Roads (2009)*, the ideal speed limit for this roadway is:

**40 km/h**

The lowest speed limit appropriate for this roadway shall not differ from the 85th percentile speed by more than 13 km/h. In this case, the lowest speed limit must not be lower than:

**30 km/h**



# Spot Speed Survey Histogram

Glossary of Relevant Spot Speed Survey Terms



## Java Street between Clarendon Avenue & Mayfair Avenue South

Mid-way at Elmdale Public School

Hampton Park

Ward: 15

Ottawa, ON

Thursday 4 April 2019

Road Surface: Asphalt

Road Condition:

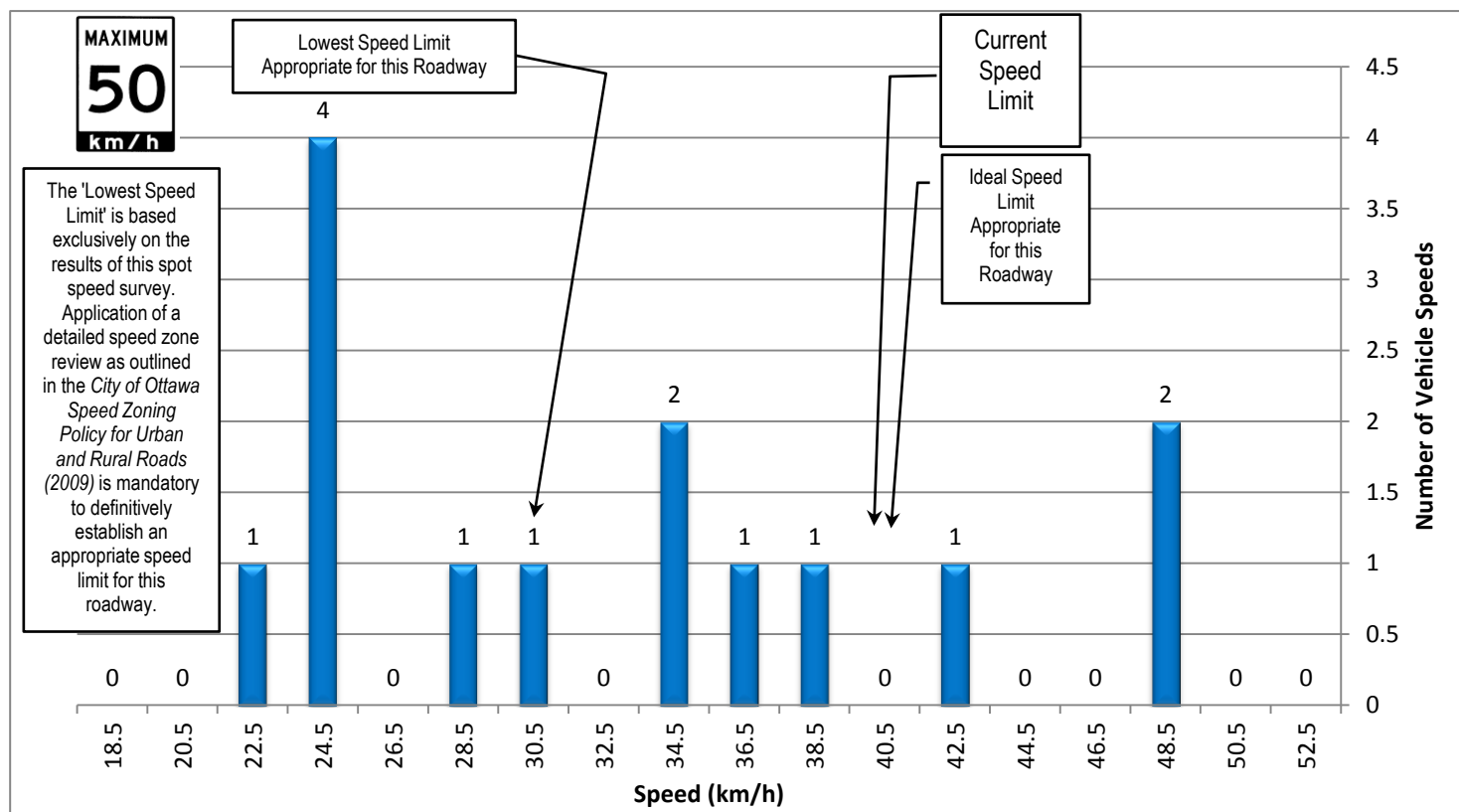
Dry

Weather: Partly Cloudy

Survey Hours: 1415-1615

Notes: School-related activity results in extremely slow vehicle speeds without a reduction in the speed limit.

## Spot Speed Survey Histogram - All Vehicles - Combined Directions



## Glossary of Relevant Spot Speed Survey Terms

<b>Mean Speed:</b>	The average speed, calculated as the sum of all speeds divided by the number of speed observations.
<b>Median Speed</b>	The speed that equally divides the distribution of spot speeds; 50 % of observed speeds are higher than the median; 50 % of the observed speeds are lower than the median.
<b>Mode:</b>	The number that occurs most frequently in a series of numbers.
<b>Pace Speed:</b>	The 16 km/h (typically, 15 km/h) increment in speeds that encompass the highest portion of observed speeds; often, the pace speed range is the mean speed plus/minus 8 km/h.
<b>85th percentile Speed:</b>	The speed at or below which 85 % of a sample of free-flowing vehicles is travelling (based on the results of a spot speed survey). The 85th percentile speed is typically used as a baseline for establishing the speed limit.

### DISCLAIMER

The data contained in this data summary are for information purposes only, and may not apply to your situation. Every effort is made to ensure the traffic count or speed survey information is accurate for the survey date provided on the summary, flow chart and/or histogram forms. The author, publisher, and distributor provide no warranty about the content or accuracy of either the summary, flow charts, or histogram. Information provided is subjective. The publisher, author, and distributor shall not be liable for any loss of profit or any other commercial damages resulting from the use of the data.



# Spot Speed Survey Histogram

Glossary of Relevant Spot Speed Survey Terms



## Iona Street between Clarendon Avenue & Mayfair Avenue South

Mid-way at west limit of Elmdale Public School building

**Hampton Park**

**Ward: 15**

**Ottawa, ON**

**Thursday**

**4**

**April**

**2019**

**Road Surface:**

**Asphalt**

**Road Condition:**

**Dry**

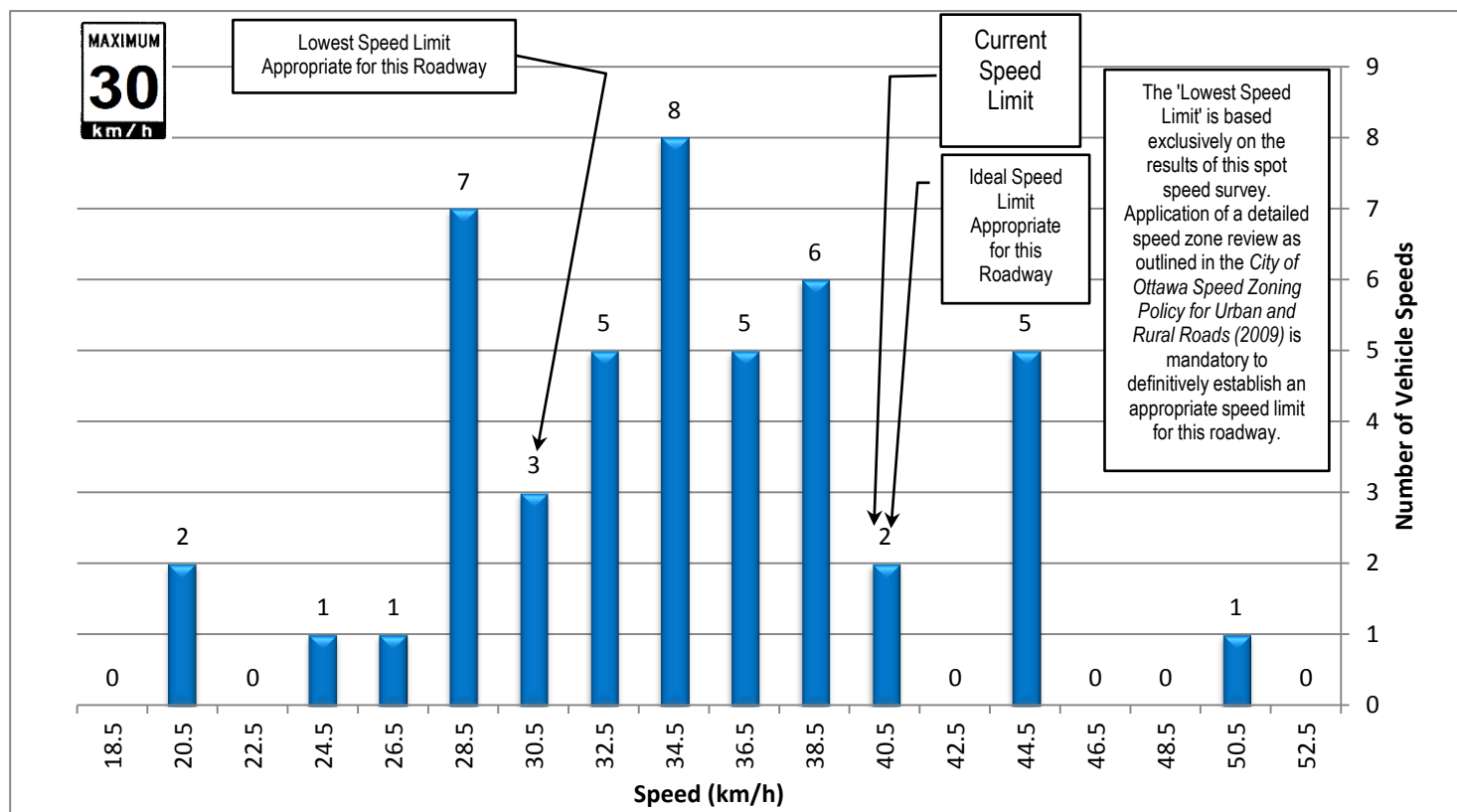
**Weather:** Partly Cloudy

**Survey Hours:**

**0650-0850**

**Notes:** Pavement in poor condition. Maximum # of parked vehicles - 9 on south side and 1 on north side.

## Spot Speed Survey Histogram - All Vehicles - Combined Directions



## Glossary of Relevant Spot Speed Survey Terms

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## Turning Movement Count - Peak Hour Diagram

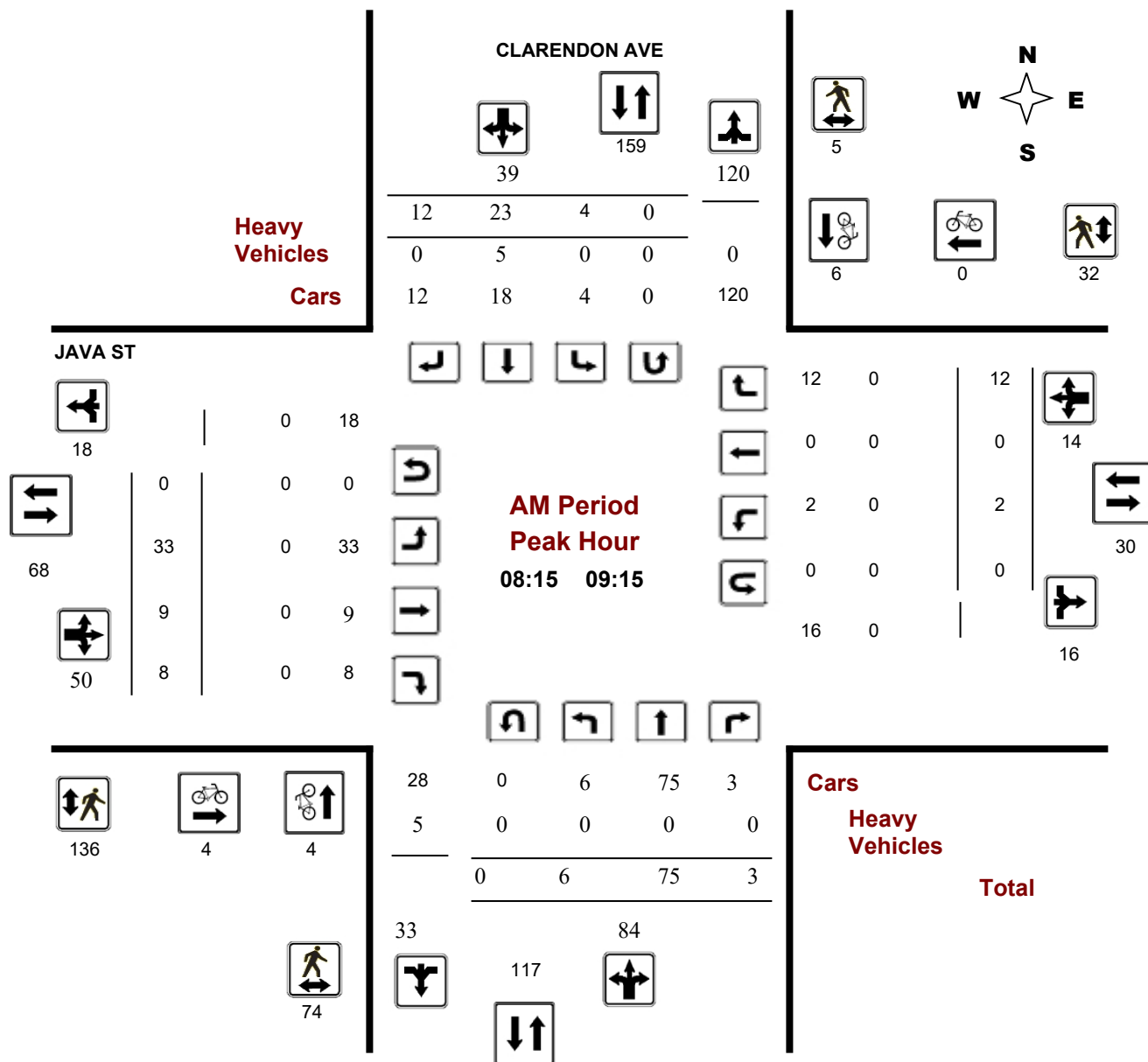
### CLARENDON AVE @ JAVA ST

**Survey Date:** Wednesday, November 22, 2017

**Start Time:** 07:00

**WO No:** 37318

**Device:** Miovision



**Comments**

## Turning Movement Count - Peak Hour Diagram

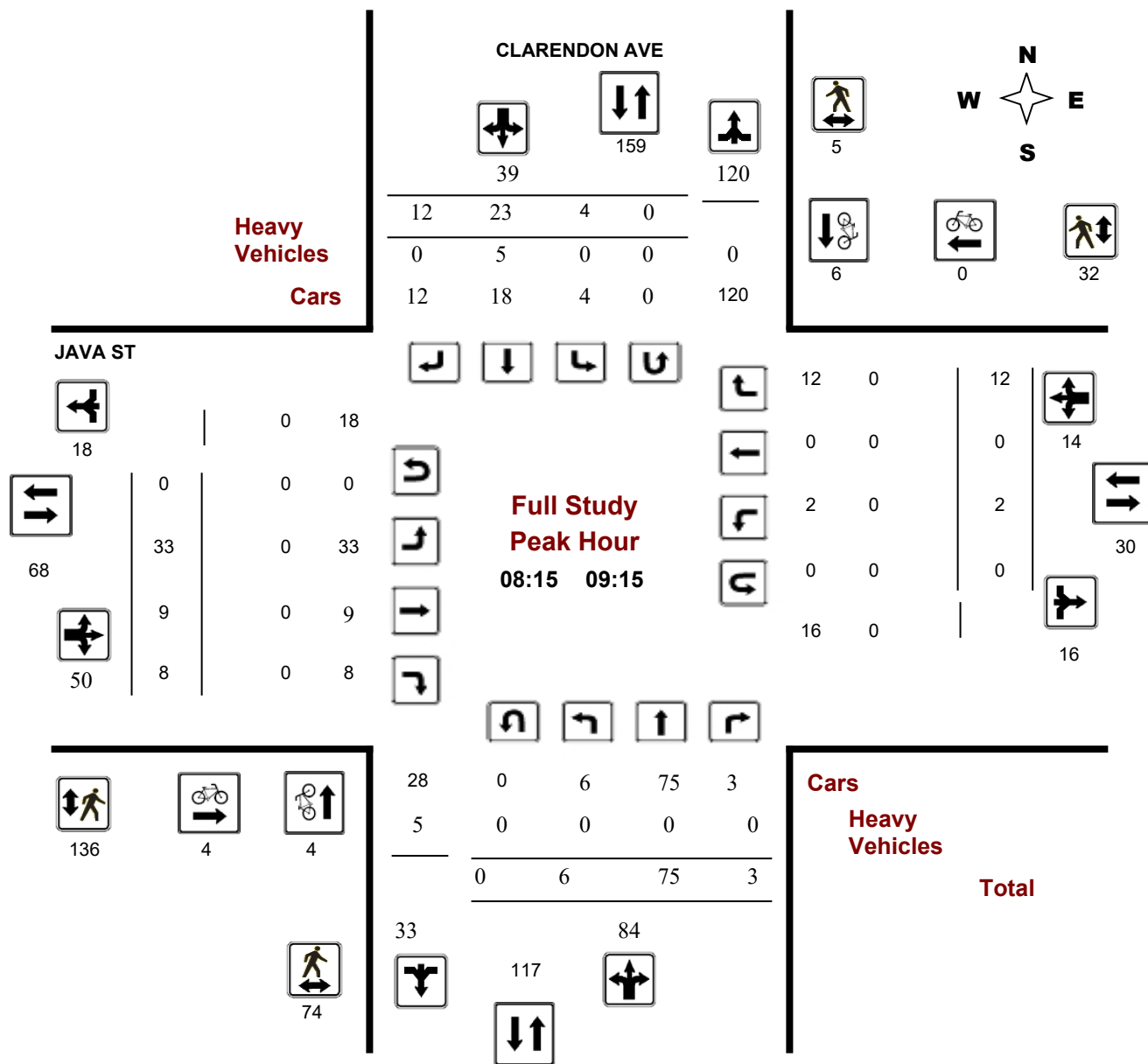
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**Comments**

## Turning Movement Count - Peak Hour Diagram

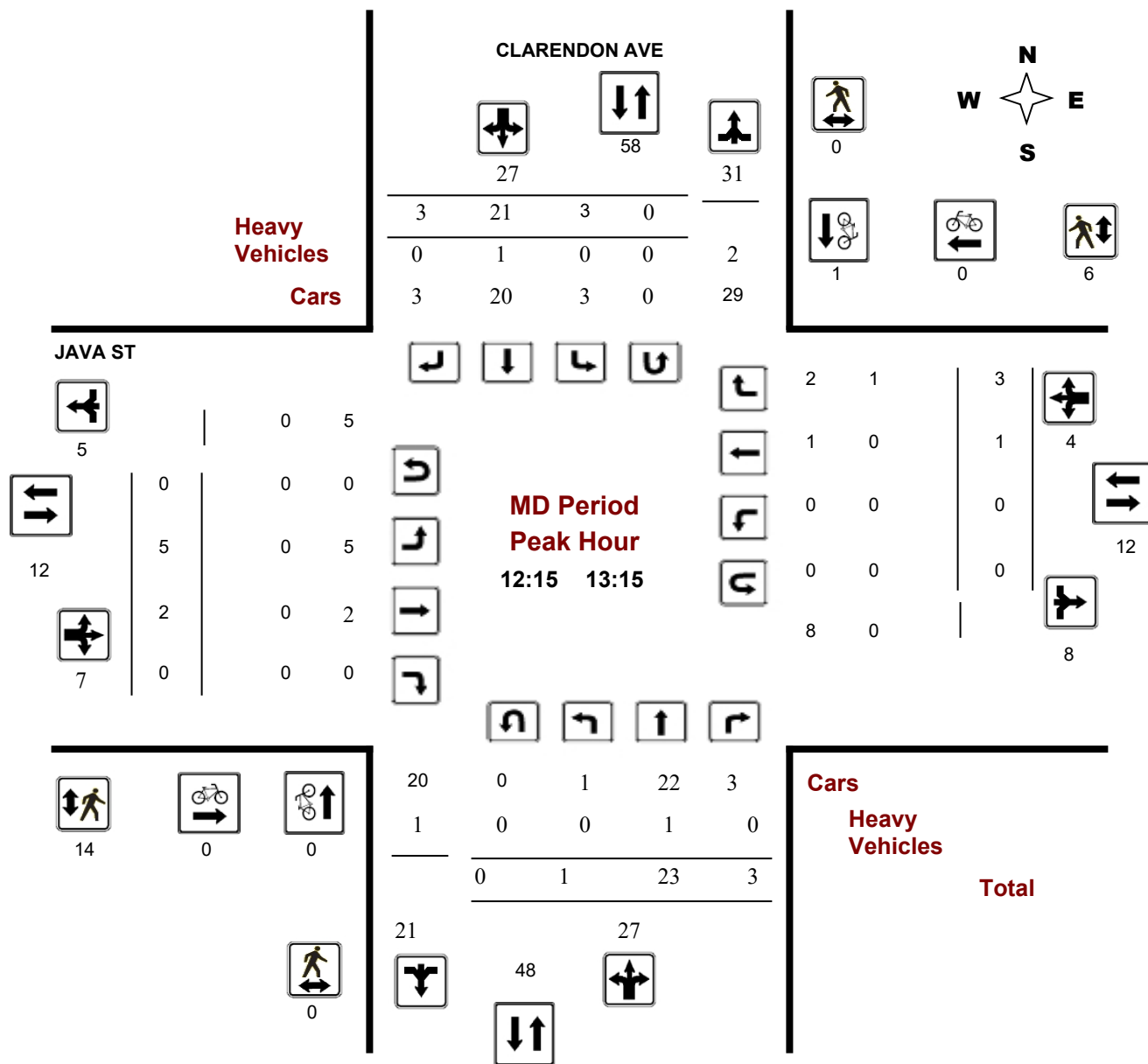
### CLARENDON AVE @ JAVA ST

**Survey Date:** Wednesday, November 22, 2017

**Start Time:** 07:00

**WO No:** 37318

**Device:** Miovision



## Turning Movement Count - Peak Hour Diagram

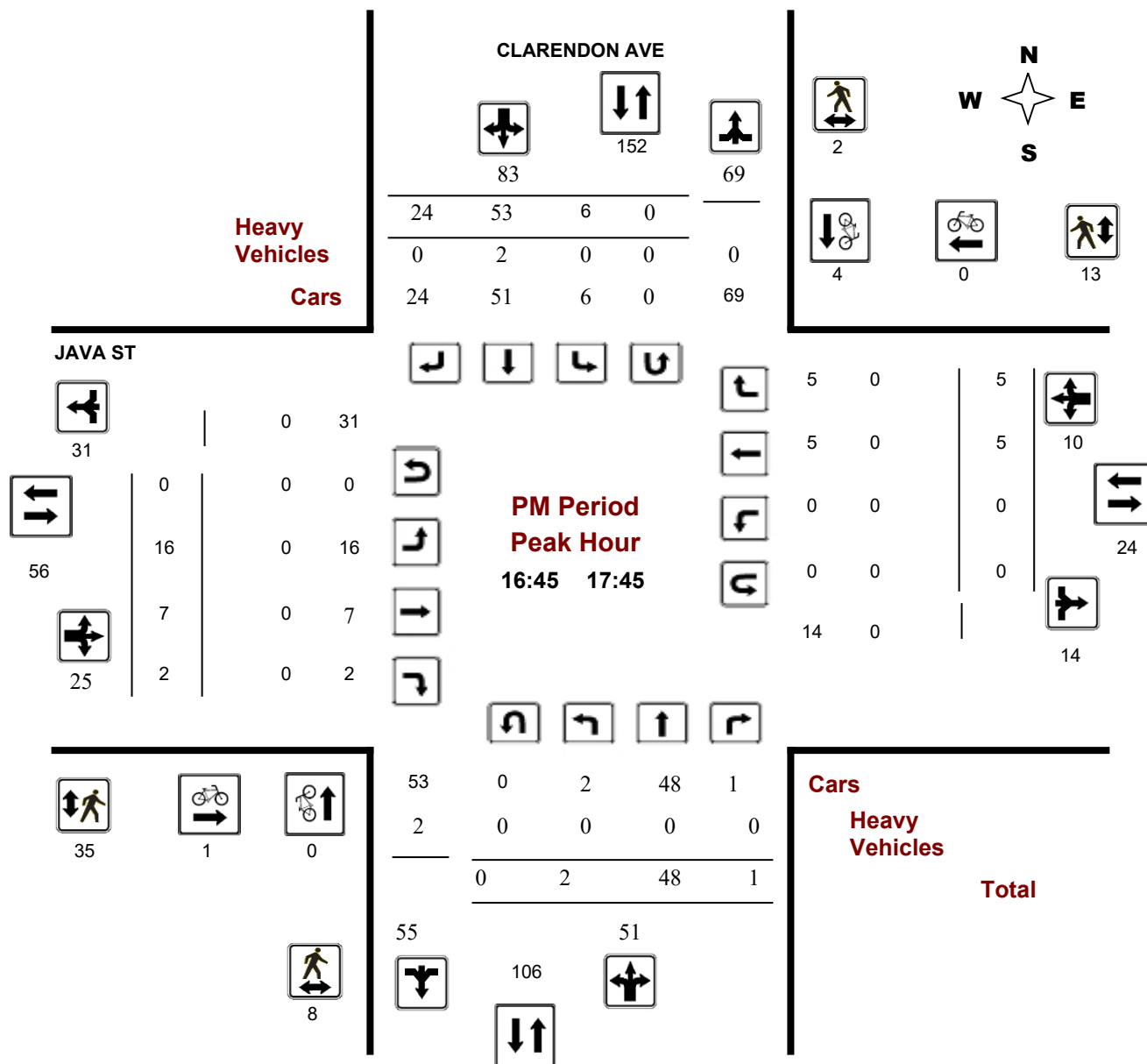
## CLARENDON AVE @ JAVA ST

**Survey Date:** Wednesday, November 22, 2017

**Start Time:** 07:00

**WO No:** 37318

**Device:** Miovision



## Comments

# Transportation Services - Traffic Services

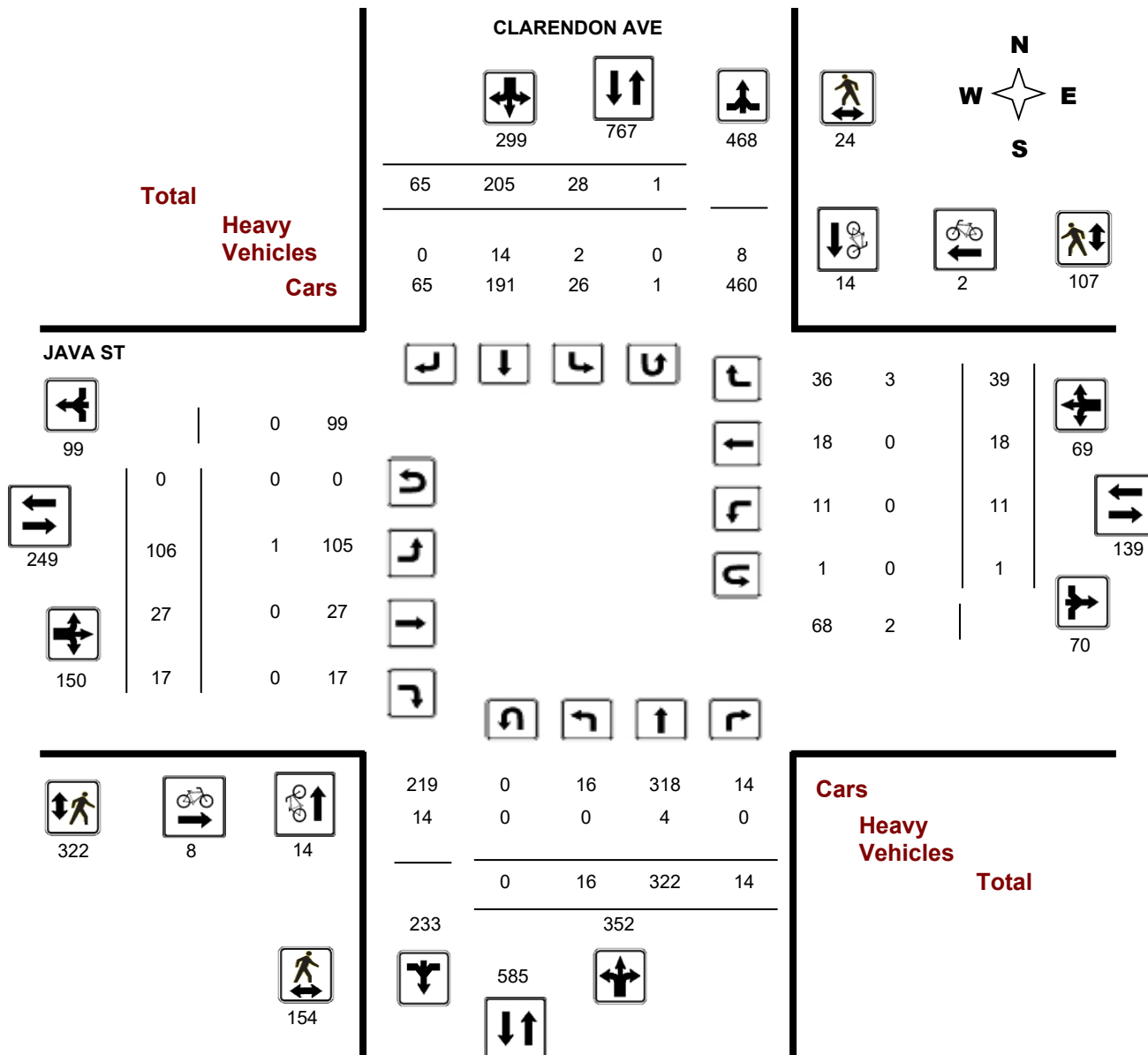
## Turning Movement Count - Full Study Diagram

### CLARENDON AVE @ JAVA ST

**Survey Date:** Wednesday, November 22, 2017

**WO#:** 37318

**Device:** Miovision



**Comments**



## Turning Movement Count - Full Study Summary Report

### CLARENDON AVE @ JAVA ST

**Survey Date:** Wednesday, November 22, 2017

#### Total Observed U-Turns

#### AADT Factor

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

.90

#### Full Study

CLARENDON AVE										JAVA ST										STR TOT	Grand Total
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				
07:00 08:00	1	36	1	38	3	13	2	18	56	5	1	0	6	2	1	2	5	11	67		
08:00 09:00	4	69	3	76	4	24	10	38	114	31	7	5	43	2	1	12	15	58	172		
09:00 10:00	2	39	4	45	3	14	3	20	65	10	2	4	16	2	0	4	6	22	87		
11:30 12:30	0	24	2	26	1	14	3	18	44	3	0	1	4	0	2	5	7	11	55		
12:30 13:30	1	17	2	20	4	25	4	33	53	3	2	0	5	1	1	3	5	10	63		
15:00 16:00	6	43	0	49	5	26	9	40	89	17	5	4	26	1	4	5	10	36	125		
16:00 17:00	1	46	1	48	4	36	12	52	100	15	3	2	20	2	4	7	13	33	133		
17:00 18:00	1	48	1	50	4	53	22	79	129	22	7	1	30	1	5	1	7	37	166		
Sub Total	16	322	14	352	28	205	65	298	650	106	27	17	150	11	18	39	68	218	868		
U Turns				0				1	1				0				1	1	2		
Total	16	322	14	352	28	205	65	299	651	106	27	17	150	11	18	39	69	219	870		
EQ 12Hr	22	448	19	489	39	285	90	416	905	147	38	24	208	15	25	54	96	304	1209		
Note: These values are calculated by multiplying the totals by the appropriate expansion factor.													1.39								
AVG 12Hr	20	403	18	440	35	256	81	374	814	133	34	21	188	14	23	49	86	274	1088		
Note: These volumes are calculated by multiplying the Equivalent 12 hr. totals by the AADT factor.													.90								
AVG 24Hr	26	528	23	577	46	336	107	490	1067	174	44	28	246	18	29	64	113	359	1426		
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.



## Turning Movement Count - 15 Minute Summary Report

### CLARENDON AVE @ JAVA ST

**Survey Date:** Wednesday, November 22, 2017

**Total Observed U-Turns**

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

CLARENDON AVE										JAVA ST										Grand Total
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		
07:00 07:15	0	1	0	1	1	1	0	2	3	0	0	0	0	0	0	0	1	1	4	
07:15 07:30	0	9	0	9	0	3	0	3	12	0	1	0	1	0	1	0	1	2	14	
07:30 07:45	0	9	0	9	1	3	1	5	14	2	0	0	2	1	0	1	2	4	18	
07:45 08:00	1	17	1	19	1	6	1	8	27	3	0	0	3	1	0	1	2	5	32	
08:00 08:15	0	12	1	13	1	6	1	8	21	8	0	0	8	1	1	2	4	12	33	
08:15 08:30	0	17	0	17	1	4	4	9	26	2	2	1	5	0	0	3	3	8	34	
08:30 08:45	1	20	2	23	2	8	1	11	34	4	4	0	8	0	0	5	5	13	47	
08:45 09:00	3	20	0	23	0	6	4	10	33	17	1	4	22	1	0	2	3	25	58	
09:00 09:15	2	18	1	21	1	5	3	9	30	10	2	3	15	1	0	2	3	18	48	
09:15 09:30	0	11	2	13	1	4	0	5	18	0	0	1	1	0	0	1	1	2	20	
09:30 09:45	0	4	0	4	1	3	0	4	8	0	0	0	0	0	0	1	1	1	9	
09:45 10:00	0	6	1	7	0	2	0	2	9	0	0	0	0	1	0	0	1	1	10	
11:30 11:45	0	2	0	2	1	3	0	5	7	0	0	1	1	0	0	3	3	4	11	
11:45 12:00	0	3	0	3	0	4	1	5	8	1	0	0	1	0	1	0	1	2	10	
12:00 12:15	0	9	0	9	0	2	2	4	13	0	0	0	0	0	1	1	2	2	15	
12:15 12:30	0	10	2	12	0	5	0	5	17	2	0	0	2	0	0	1	1	3	20	
12:30 12:45	0	5	0	5	2	4	1	7	12	0	1	0	1	0	1	2	3	4	16	
12:45 13:00	0	5	0	5	0	7	0	7	12	1	1	0	2	0	0	0	0	2	14	
13:00 13:15	1	3	1	5	1	5	2	8	13	2	0	0	2	0	0	0	0	2	15	
13:15 13:30	0	4	1	5	1	9	1	11	16	0	0	0	0	1	0	1	2	2	18	
15:00 15:15	2	5	0	7	1	5	2	8	15	1	0	0	1	1	1	1	3	4	19	
15:15 15:30	3	12	0	15	3	6	4	13	28	0	1	0	1	0	3	2	5	6	34	
15:30 15:45	1	14	0	15	1	7	1	9	24	15	4	3	22	0	0	1	1	23	47	
15:45 16:00	0	12	0	12	0	8	2	10	22	1	0	1	2	0	0	1	1	3	25	
16:00 16:15	0	11	0	11	1	9	2	12	23	4	0	0	4	2	0	1	3	7	30	
16:15 16:30	0	11	1	12	0	9	1	10	22	4	1	0	5	0	1	1	2	7	29	
16:30 16:45	0	15	0	15	1	8	6	15	30	4	1	1	6	0	2	1	3	9	39	
16:45 17:00	1	9	0	10	2	10	3	15	25	3	1	1	5	0	1	4	5	10	35	
17:00 17:15	0	10	1	11	1	16	4	21	32	2	1	1	4	0	3	0	3	7	39	
17:15 17:30	0	18	0	18	2	11	7	20	38	4	3	0	7	0	0	0	0	7	45	
17:30 17:45	1	11	0	12	1	16	10	27	39	7	2	0	9	0	1	1	2	11	50	
17:45 18:00	0	9	0	9	0	10	1	11	20	9	1	0	10	1	1	0	2	12	32	
TOTAL:	16	322	14	352	28	205	65	299	651	106	27	17	150	11	18	39	69	219	870	

Note: U-Turns are included in Totals.

**Comment:**



# Transportation Services - Traffic Services

## Turning Movement Count - Cyclist Volume Report

Work Order  
37318

### CLARENDON AVE @ JAVA ST

**Count Date:** Wednesday, November 22, 2017

**Start Time:** 07:00

Time Period	CLARENDON AVE			JAVA ST			Grand Total
	Northbound	Southbound	Street Total	Eastbound	Westbound	Street Total	
07:00 08:00	2	0	2	0	0	0	2
08:00 09:00	5	6	11	3	0	3	14
09:00 10:00	3	0	3	1	0	1	4
11:30 12:30	1	1	2	0	0	0	2
12:30 13:30	0	1	1	0	0	0	1
15:00 16:00	2	1	3	3	0	3	6
16:00 17:00	1	2	3	0	2	2	5
17:00 18:00	0	3	3	1	0	1	4
Total .....	14	14	28	8	2	10	38

**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

W.O.  
37318

## Turning Movement Count - Heavy Vehicle Report

### CLARENDON AVE @ JAVA ST

**Survey Date:** Wednesday, November 22, 2017

CLARENDON AVE											JAVA ST									
Time Period		Northbound			Southbound			Eastbound			Westbound									Grand Total
		LT	ST	RT	N TOT	LT	ST	RT	S TOT	STR TOT	LT	ST	RT	E TOT	LT	ST	RT	W TOT	STR TOT	
07:00	08:00	0	1	0	1	1	2	0	3	4	0	0	0	0	0	0	0	0	0	4
08:00	09:00	0	0	0	0	0	4	0	4	4	0	0	0	0	0	0	0	0	0	4
09:00	10:00	0	1	0	1	0	2	0	2	3	0	0	0	0	0	0	0	0	0	3
11:30	12:30	0	2	0	2	0	0	0	0	2	0	0	0	0	0	0	2	2	2	4
12:30	13:30	0	0	0	0	1	1	0	2	2	0	0	0	0	0	0	1	1	1	3
15:00	16:00	0	0	0	0	0	3	0	3	3	0	0	0	0	0	0	0	0	0	3
16:00	17:00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17:00	18:00	0	0	0	0	0	2	0	2	2	1	0	0	1	0	0	0	0	1	3
<b>Sub Total</b>		0	4	0	4	2	14	0	16	20	1	0	0	1	0	0	3	3	4	24
<b>U-Turns (Heavy Vehicles)</b>					0				0	0				0				0	0	0
<b>Total</b>		0	4	0	0	2	14	0	16	20	1	0	0	1	0	0	3	3	4	24

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

37318

## Turning Movement Count - Pedestrian Volume Report

### CLARENDON AVE @ JAVA ST

Count Date: Wednesday, November 22, 2017

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	0	1	1	1	0	1	2
07:15 07:30	1	0	1	2	1	3	4
07:30 07:45	1	1	2	3	4	7	9
07:45 08:00	3	0	3	4	3	7	10
07:00 08:00	5	2	7	10	8	18	25
08:00 08:15	2	1	3	3	3	6	9
08:15 08:30	2	1	3	4	3	7	10
08:30 08:45	21	2	23	42	13	55	78
08:45 09:00	32	1	33	79	12	91	124
08:00 09:00	57	5	62	128	31	159	221
09:00 09:15	19	1	20	11	4	15	35
09:15 09:30	0	0	0	4	1	5	5
09:30 09:45	0	0	0	3	3	6	6
09:45 10:00	0	0	0	1	1	2	2
09:00 10:00	19	1	20	19	9	28	48
11:30 11:45	0	0	0	1	0	1	1
11:45 12:00	2	1	3	0	4	4	7
12:00 12:15	0	0	0	5	2	7	7
12:15 12:30	0	0	0	6	3	9	9
11:30 12:30	2	1	3	12	9	21	24
12:30 12:45	0	0	0	4	1	5	5
12:45 13:00	0	0	0	1	2	3	3
13:00 13:15	0	0	0	3	0	3	3
13:15 13:30	0	0	0	1	1	2	2
12:30 13:30	0	0	0	9	4	13	13
15:00 15:15	1	0	1	2	3	5	6
15:15 15:30	22	0	22	19	5	24	46
15:30 15:45	28	10	38	63	12	75	113
15:45 16:00	2	0	2	10	2	12	14
15:00 16:00	53	10	63	94	22	116	179
16:00 16:15	4	2	6	7	1	8	14
16:15 16:30	2	0	2	6	3	9	11
16:30 16:45	3	0	3	1	2	3	6
16:45 17:00	3	0	3	5	2	7	10
16:00 17:00	12	2	14	19	8	27	41
17:00 17:15	3	1	4	6	4	10	14
17:15 17:30	1	1	2	13	4	17	19
17:30 17:45	1	0	1	11	3	14	15
17:45 18:00	1	1	2	1	5	6	8
17:00 18:00	6	3	9	31	16	47	56
Total .....	154	24	178	322	107	429	607

Comment:

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

### CLARENDON AVE @ JAVA ST

**Survey Date:** Wednesday, November 22, 2017

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	1	1
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	1	0	0	1
11:45	12:00	0	0	0	0	0
12:00	12:15	0	0	0	0	0
12:15	12:30	0	0	0	0	0
12:30	12:45	0	0	0	0	0
12:45	13:00	0	0	0	0	0
13:00	13:15	0	0	0	0	0
13:15	13:30	0	0	0	0	0
15:00	15:15	0	0	0	0	0
15:15	15:30	0	0	0	0	0
15:30	15:45	0	0	0	0	0
15:45	16:00	0	0	0	0	0
16:00	16:15	0	0	0	0	0
16:15	16:30	0	0	0	0	0
16:30	16:45	0	0	0	0	0
16:45	17:00	0	0	0	0	0
17:00	17:15	0	0	0	0	0
17:15	17:30	0	0	0	0	0
17:30	17:45	0	0	0	0	0
17:45	18:00	0	0	0	0	0
Total		0	1	0	1	2



# Turning Movement Count Bicycle Summary Flow Diagram



Clarendon Avenue & Java Street Ottawa, ON

## Bicycles

(Including electric bicycles and electric scooters)

### Note:

Bicycle volumes are **NOT** included in vehicle totals.

Tuesday, 2 April 2019

0700-0900 & 1530-1730

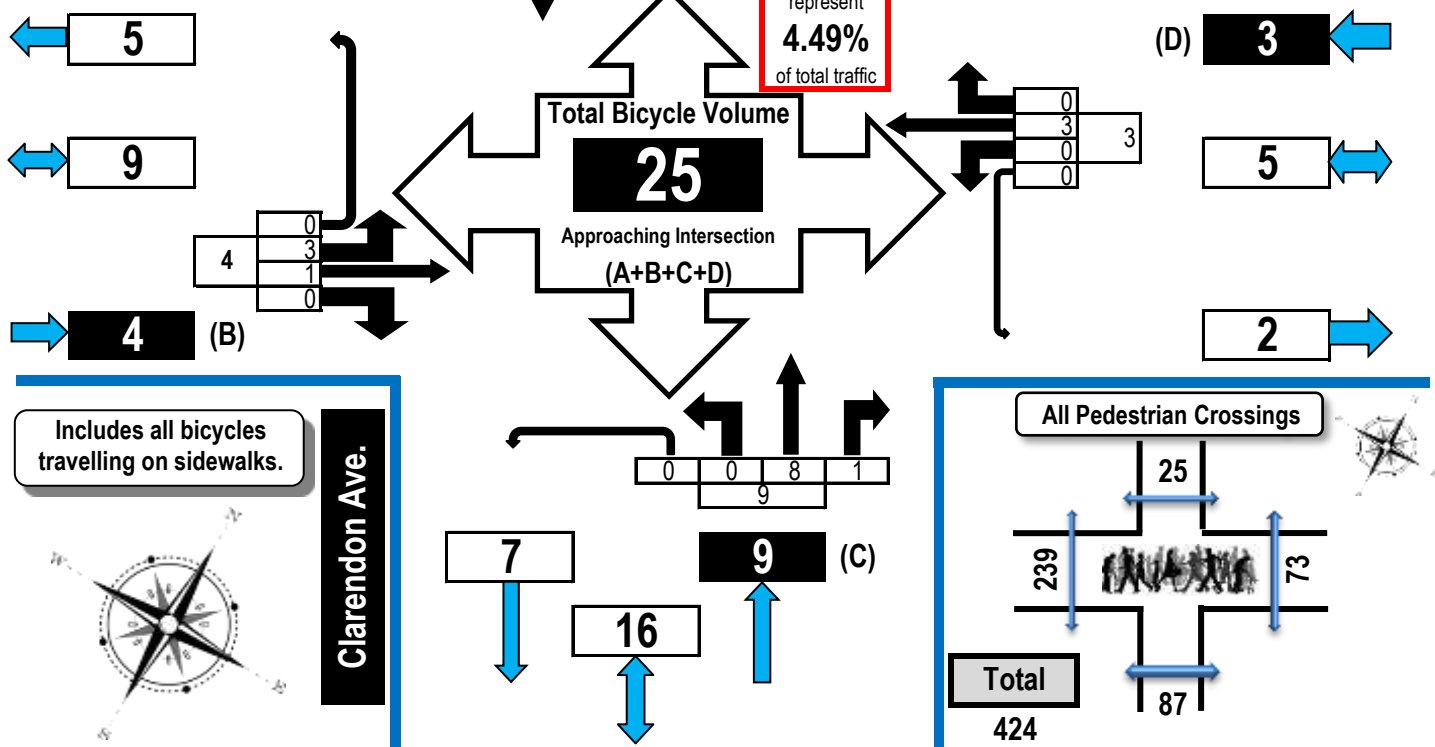
4 Hour Survey

City of Ottawa Ward 15

Java St.

Clarendon Ave.

Java St.



Time Period	Java St. Eastbound					Java St. Westbound					Clarendon Ave. Northbound					Clarendon Ave. Southbound					G.Tot.
	LT	ST	RT	UT	S. Tot	LT	ST	RT	UT	S. Tot	LT	ST	RT	UT	S. Tot	LT	ST	RT	UT	S. Tot	
0700-0800	0	0	0	0	0	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	5
0800-0900	1	1	0	0	2	0	1	0	0	1	0	3	1	0	4	0	0	0	0	0	7
1530-1630	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	2	1	0	3	5
1630-1730	0	0	0	0	0	0	2	0	0	2	0	0	0	0	0	0	5	1	0	6	8
Totals	3	1	0	0	4	0	3	0	0	3	0	8	1	0	9	0	7	2	0	9	25

## Comments:

School crossing guards on duty between 0830 to after 0900 and 1520 to 1600. School buses represent 50% of the heavy vehicle volume total. Several homes were under renovation in the immediate area and appear to account for some of the heavy truck activity.



# Turning Movement Count Summary, AM and PM Peak Hour Flow Diagrams

Automobiles, Taxis, Light Trucks, Vans, SUV's, Motorcycles, Heavy Trucks, Buses, and School Buses

Clarendon Avenue & Java Street

Ottawa, ON

## All Vehicles

(Except Bicycles & Electric Scooters)

Tuesday, 2 April 2019

0700-0900 & 1530-1730

4 Hour Survey

City of Ottawa Ward 15

Java St.

Clarendon Ave.

Java St.

Total Volume

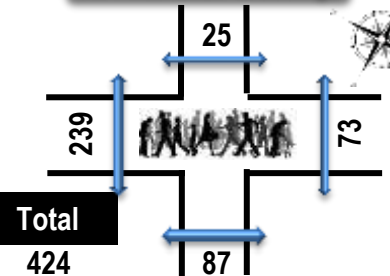
532

Approaching Intersection

(A+B+C+D)

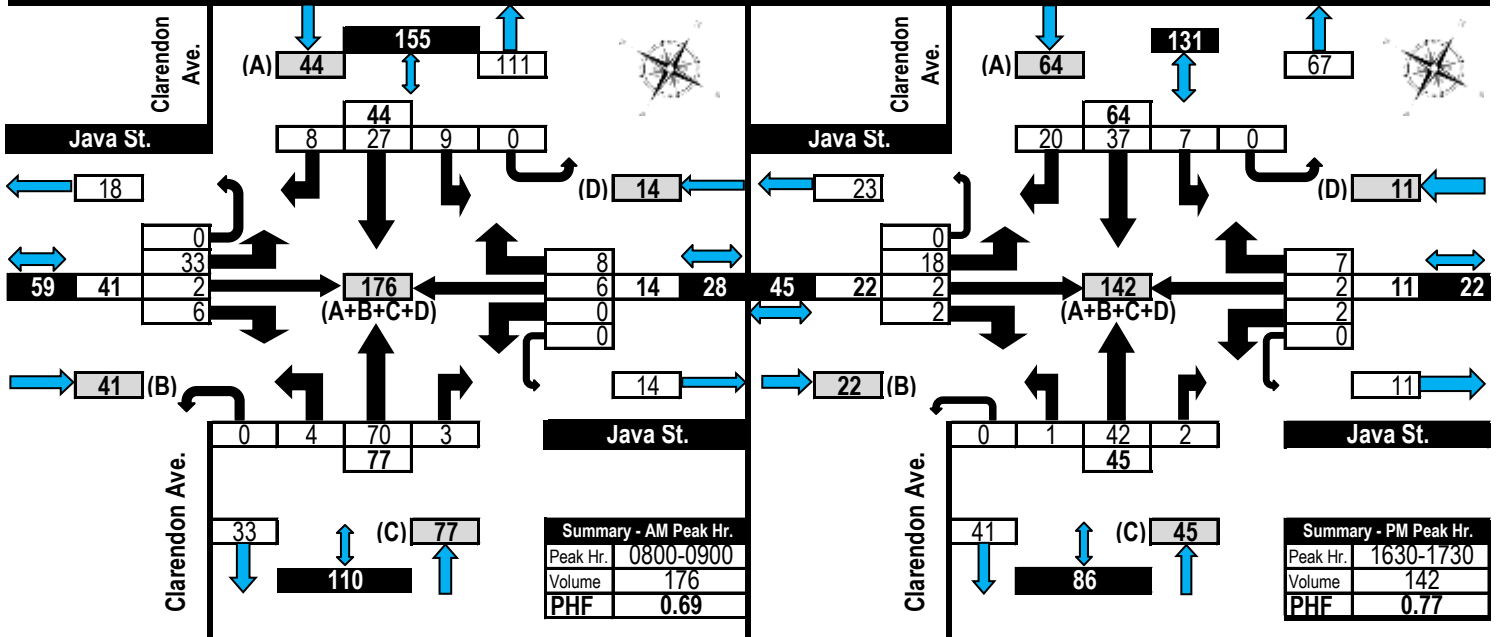


All Pedestrian Crossings



AM Peak Hour Flow Diagram

PM Peak Hour Flow Diagram







# Turning Movement Count Heavy Vehicle Summary Flow Diagram

Heavy Trucks, Buses,  
and School Buses

Clarendon Avenue & Java Street

Ottawa, ON

## Heavy Vehicles

(Construction Vehicles, Heavy Trucks, Buses & School Buses).  
Heavy vehicle totals ARE included in the all vehicles summary and flow diagrams.

Java St.

Clarendon Ave.

Tuesday, 2 April 2019

0700-0900 & 1530-1730

4 Hour Survey

City of Ottawa Ward 15

Java St.

Clarendon Ave.

All Pedestrian Crossings

Total  
424

Java St.

Eastbound

Java St.

Westbound

Clarendon Ave.

Northbound

Clarendon Ave.

Southbound

Time Period	LT	ST	RT	UT	S. Tot	LT	ST	RT	UT	S. Tot	LT	ST	RT	UT	S. Tot	LT	ST	RT	UT	S. Tot	G.Tot.
0700-0800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2
0800-0900	0	0	0	0	0	0	0	0	0	0	0	3	0	0	3	0	5	0	0	5	8
1530-1630	0	0	0	0	0	0	0	2	0	2	0	1	0	0	1	1	2	0	0	3	6
1630-1730	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	2	2
Totals	0	0	0	0	0	0	0	2	0	2	0	4	0	0	4	2	10	0	0	12	18

## Comments:

School crossing guards on duty between 0830 to after 0900 and 1520 to 1600. School buses represent 50% of the heavy vehicle volume total. Several homes were under renovation in the immediate area and appear to account for some of the heavy truck activity.



# Turning Movement Count Pedestrian Crossings Summary and Flow Diagram



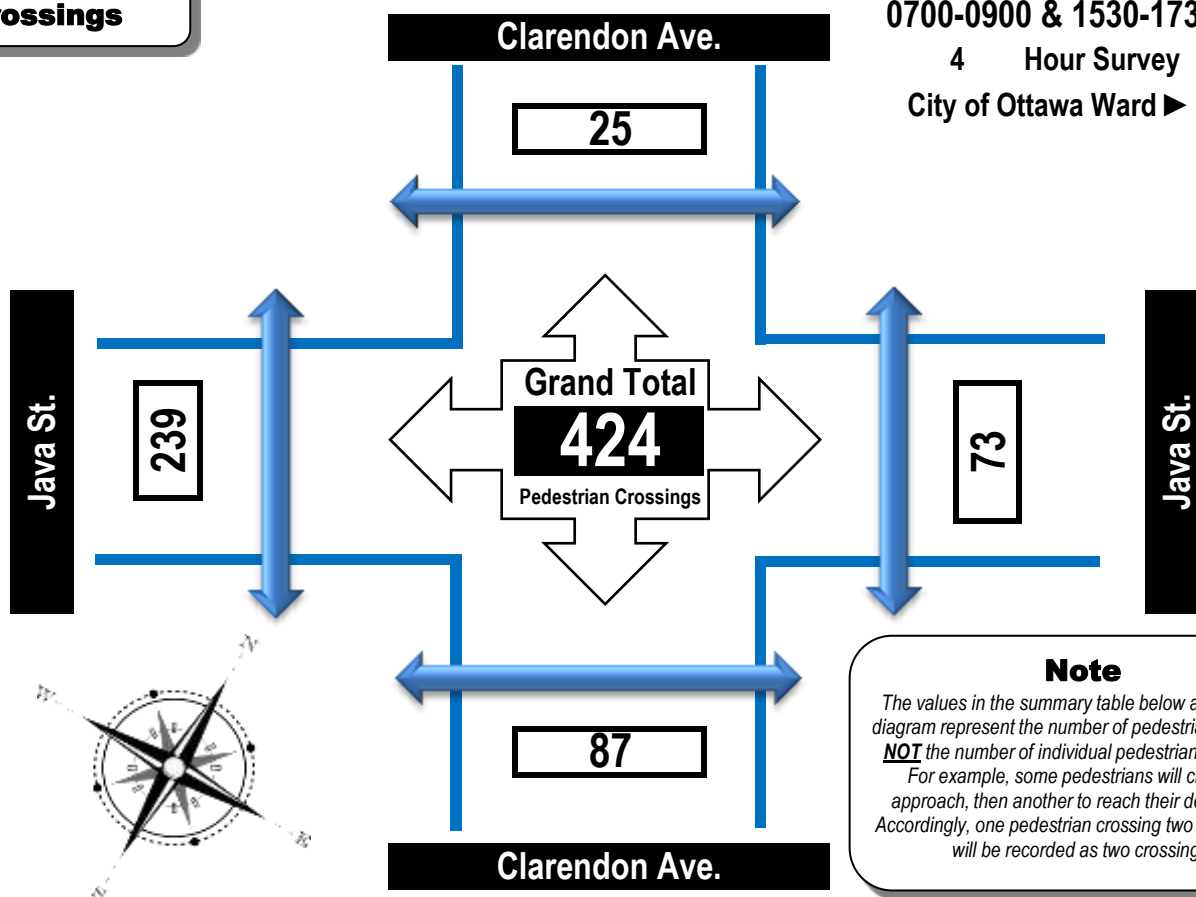
Clarendon Avenue & Java Street

Ottawa, ON

## Pedestrian Crossings

Tuesday, 2 April 2019  
0700-0900 & 1530-1730

4 Hour Survey  
City of Ottawa Ward 15



### Note

The values in the summary table below and the flow diagram represent the number of pedestrian crossings **NOT** the number of individual pedestrians crossing. For example, some pedestrians will cross one approach, then another to reach their destination. Accordingly, one pedestrian crossing two approaches will be recorded as two crossings.

Time Period	West Side Crossing Java St.	East Side Crossing Java St.	Street Total	South Side Crossing Clarendon Ave.	North Side Crossing Clarendon Ave.	Street Total	Grand Total
0700-0800	12	9	21	4	4	8	29
0800-0900	127	28	155	49	5	54	209
1530-1630	66	18	84	20	7	27	111
1630-1730	34	18	52	14	9	23	75
Totals	239	73	312	87	25	112	424

### Comments:

School crossing guards on duty between 0830 to after 0900 and 1520 to 1600. School buses represent 50% of the heavy vehicle volume total. Several homes were under renovation in the immediate area and appear to account for some of the heavy truck activity.



# Turning Movement Count Summary Report AADT and Expansion Factors

Automobiles, Taxis,  
Light Trucks, Vans,  
SUV's, Motorcycles,  
Heavy Trucks, Buses,  
and School Buses

## Clarendon Avenue & Java Street

Ottawa, ON

Survey Date: Tuesday, 2 April 2019

Start Time: 0700

AADT Factor: 0.7

Weather AM: Overcast -2°C

Survey Duration: 4 Hrs.

Survey Hours: 0700-0900 & 1530-1730

Weather PM: Cloudy +7°C

Surveyor(s): Carmody

Java St.						Java St.						Clarendon Ave.						Clarendon Ave.					
Eastbound						Westbound						Northbound						Southbound					
Time Period	LT	ST	RT	UT	E/B Tot	LT	ST	RT	UT	W/B Tot	Street Total	LT	ST	RT	UT	N/B Tot	LT	ST	RT	UT	S/B Tot	Street Total	Grand Total
0700-0800	10	1	0	0	11	0	0	3	0	3	14	2	43	2	0	47	2	14	7	0	23	70	84
0800-0900	33	2	6	0	41	0	6	8	0	14	55	4	70	3	0	77	9	27	8	0	44	121	176
1530-1630	26	1	2	0	29	0	1	4	0	5	34	3	50	2	0	55	4	31	6	0	41	96	130
1630-1730	18	2	2	0	22	2	2	7	0	11	33	1	42	2	0	45	7	37	20	0	64	109	142
Totals	87	6	10	0	103	2	9	22	0	33	136	10	205	9	0	224	22	109	41	0	172	396	532

### Equivalent 12 & 24-hour Vehicle Volumes Including the Annual Average Daily Traffic (AADT) Factor Applicable to the Day and Month of the Turning Movement Count

**Expansion factors are applied exclusively to standard weekday 8-hour turning movement counts conducted during the hours of 0700h - 1000h, 1130h - 1330h and 1500h - 1800h**

Equivalent 12-hour vehicle volumes. These volumes are calculated by multiplying the 8-hour totals by the 8 → 12 expansion factor of 1.39

Equ. 12 Hr	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
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Average daily 12-hour vehicle volumes. These volumes are calculated by multiplying the equivalent 12-hour totals by the AADT factor of: 0.7

AADT 12-hr	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
------------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

24-Hour AADT. These volumes are calculated by multiplying the average daily 12-hour vehicle volumes by the 12 → 24 expansion factor of 1.31

AADT 24 Hr	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
------------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

### AADT and expansion factors provided by the City of Ottawa

AM Peak Hour Factor → 0.69

Highest Hourly Vehicle Volume Between 0700h & 0900h

AM Peak Hr	LT	ST	RT	UT	TOT	LT	ST	RT	UT	TOT	S.TOT	LT	ST	RT	UT	TOT	LT	ST	RT	UT	TOT	S.TOT	G.TOT
0800-0900	33	2	6	0	41	0	6	8	0	14	55	4	70	3	0	77	9	27	8	0	44	121	176

PM Peak Hour Factor → 0.77

Highest Hourly Vehicle Volume Between 1530h & 1730h

PM Peak Hr	LT	ST	RT	UT	TOT	LT	ST	RT	UT	TOT	S.TOT	LT	ST	RT	UT	TOT	LT	ST	RT	UT	TOT	S.TOT	G.TOT
1630-1730	18	2	2	0	22	2	2	7	0	11	33	1	42	2	0	45	7	37	20	0	64	109	142

### Comments:

School crossing guards on duty between 0830 to after 0900 and 1520 to 1600. School buses represent 50% of the heavy vehicle volume total. Several homes were under renovation in the immediate area and appear to account for some of the heavy truck activity.

### Notes:

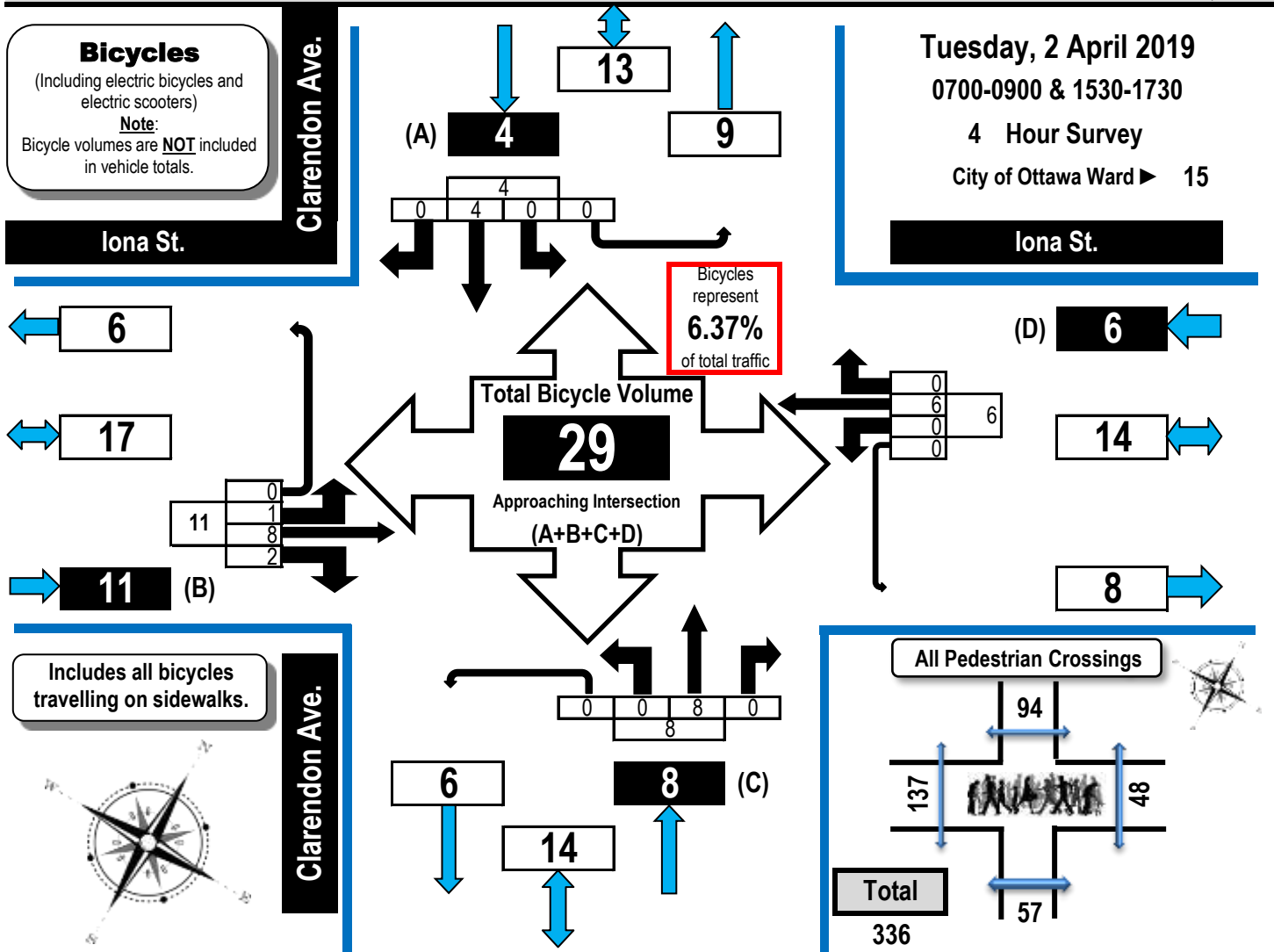
1. Includes all vehicle types except bicycles, electric bicycles, and electric scooters.
2. When expansion and AADT factors are applied, the results will differ slightly due to rounding.



# Turning Movement Count Bicycle Summary Flow Diagram



## Clarendon Avenue & Iona Street Ottawa, ON



Time Period	Iona St. Eastbound					Iona St. Westbound					Clarendon Ave. Northbound					Clarendon Ave. Southbound					G.Tot.
	LT	ST	RT	UT	S. Tot	LT	ST	RT	UT	S. Tot	LT	ST	RT	UT	S. Tot	LT	ST	RT	UT	S. Tot	
0700-0800	0	3	0	0	3	0	0	0	0	0	0	5	0	0	5	0	0	0	0	0	8
0800-0900	1	4	0	0	5	0	0	0	0	0	0	3	0	0	3	0	0	0	0	0	8
1530-1630	0	1	2	0	3	0	5	0	0	5	0	0	0	0	0	0	2	0	0	2	10
1630-1730	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	2	0	0	2	3
Totals	1	8	2	0	11	0	6	0	0	6	0	8	0	0	8	0	4	0	0	4	29

### Comments:

School crossing guards on duty between 0830 to after 0900 and 1515 to 1600. School buses represent 50% of the heavy vehicle volume total. Several homes were under renovation in the immediate area and appear to account for some of the heavy truck activity.



# Turning Movement Count Summary, AM and PM Peak Hour Flow Diagrams

Automobiles, Taxis, Light Trucks, Vans, SUV's, Motorcycles, Heavy Trucks, Buses, and School Buses

Clarendon Avenue & Iona Street

Ottawa, ON

## All Vehicles

(Except Bicycles & Electric Scooters)

Tuesday, 2 April 2019

0700-0900 & 1530-1730

4 Hour Survey

City of Ottawa Ward 15

Iona St.

Clarendon Ave.

Iona St.

Total Volume

426

Approaching Intersection

(A+B+C+D)

(D) 48

88

40



All Pedestrian Crossings

94

137

48

Total

336

57

AM Peak Hour Flow Diagram

PM Peak Hour Flow Diagram

Clarendon Ave.

(A) 35 113 78

35 18 6 0

11 18 6 0

147 (A+B+C+D)

17 46

27 73 46

38 (B)

0 4 38 4

0 19 7 8

107 (A+B+C+D)

34 (B)

0 1 34 0

31 66 35

31 (C)

Summary - AM Peak Hr.		
Peak Hr.	0800-0900	
Volume	147	
PHF	0.64	

Clarendon Ave.

(A) 31 85 54

31 23 5 0

3 23 5 0

107 (A+B+C+D)

34 (B)

0 1 34 0

31 66 35

31 (C)

Summary - PM Peak Hr.		
Peak Hr.	1530-1630	
Volume	107	
PHF	0.69	



# Turning Movement Count Heavy Vehicle Summary Flow Diagram

Heavy Trucks, Buses,  
and School Buses

Clarendon Avenue & Iona Street

Ottawa, ON

## Heavy Vehicles

(Construction Vehicles, Heavy Trucks, Buses & School Buses).  
Heavy vehicle totals ARE included in the all vehicles summary and flow diagrams.

Iona St.

Clarendon Ave.

Tuesday, 2 April 2019

0700-0900 & 1530-1730

4 Hour Survey

City of Ottawa Ward 15

Iona St.

Clarendon Ave.

All Pedestrian Crossings

Total  
336

Iona St.

Eastbound

Iona St.

Westbound

Clarendon Ave.

Northbound

Clarendon Ave.

Southbound

Time Period	LT	ST	RT	UT	S. Tot	LT	ST	RT	UT	S. Tot	LT	ST	RT	UT	S. Tot	LT	ST	RT	UT	S. Tot	G.Tot.
0700-0800	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	2
0800-0900	1	0	0	0	1	1	1	0	0	2	0	2	0	0	2	0	2	3	0	5	10
1530-1630	0	1	0	0	1	0	1	0	0	1	0	1	0	0	1	0	1	1	0	2	5
1630-1730	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
Totals	1	1	0	0	2	1	2	0	0	3	0	3	0	0	3	0	6	4	0	10	18

## Comments:

School crossing guards on duty between 0830 to after 0900 and 1515 to 1600. School buses represent 50% of the heavy vehicle volume total. Several homes were under renovation in the immediate area and appear to account for some of the heavy truck activity.

# Turning Movement Count Pedestrian Crossings Summary and Flow Diagram



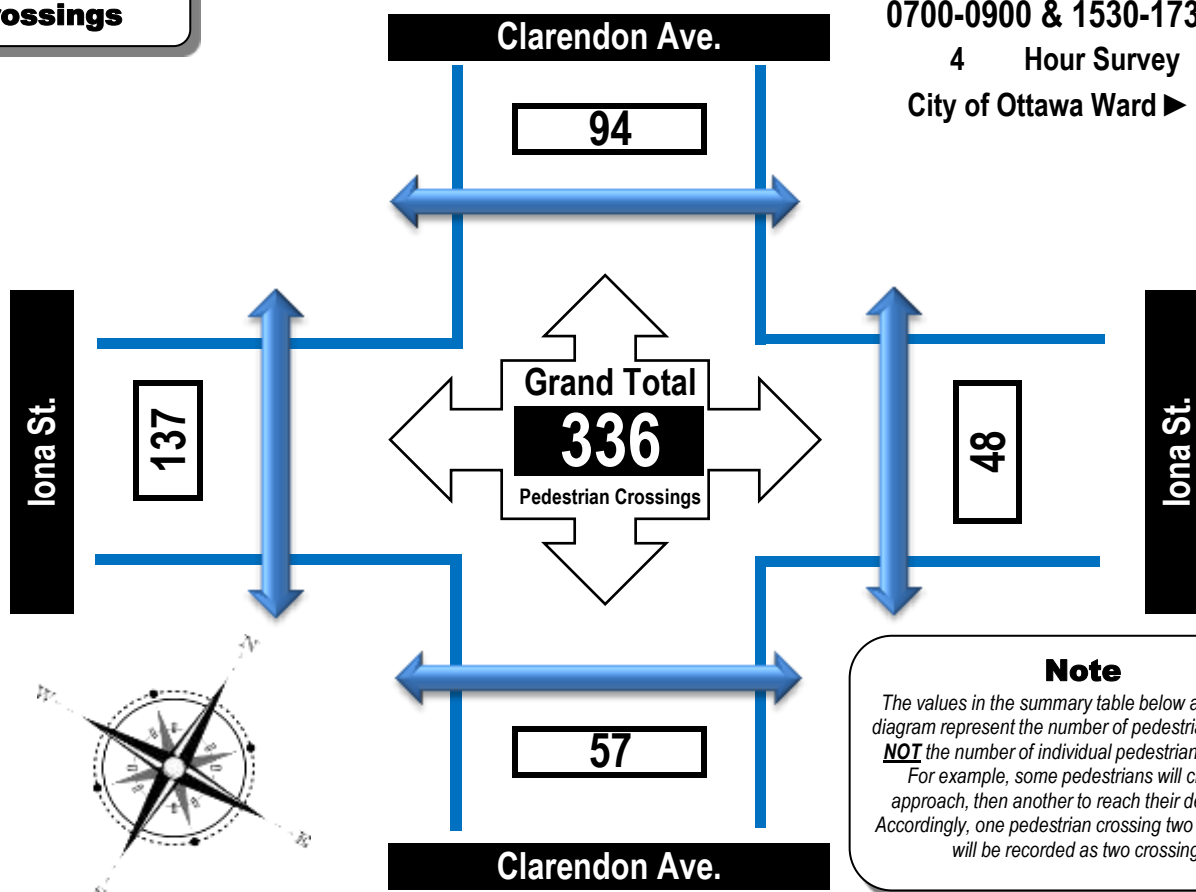
Clarendon Avenue & Iona Street

Ottawa, ON

## Pedestrian Crossings

Tuesday, 2 April 2019  
0700-0900 & 1530-1730

4 Hour Survey  
City of Ottawa Ward 15



### Note

The values in the summary table below and the flow diagram represent the number of pedestrian crossings **NOT** the number of individual pedestrians crossing. For example, some pedestrians will cross one approach, then another to reach their destination. Accordingly, one pedestrian crossing two approaches will be recorded as two crossings.

Time Period	West Side Crossing Iona St.	East Side Crossing Iona St.	Street Total	South Side Crossing Clarendon Ave.	North Side Crossing Clarendon Ave.	Street Total	Grand Total
0700-0800	12	4	16	5	17	22	38
0800-0900	54	10	64	22	37	59	123
1530-1630	46	21	67	19	28	47	114
1630-1730	25	13	38	11	12	23	61
Totals	137	48	185	57	94	151	336

### Comments:

School crossing guards on duty between 0830 to after 0900 and 1515 to 1600. School buses represent 50% of the heavy vehicle volume total. Several homes were under renovation in the immediate area and appear to account for some of the heavy truck activity.





# Turning Movement Count Summary Report AADT and Expansion Factors

Automobiles, Taxis,  
Light Trucks, Vans,  
SUV's, Motorcycles,  
Heavy Trucks, Buses,  
and School Buses

## Clarendon Avenue & Iona Street

Ottawa, ON

Survey Date: Tuesday, 2 April 2019

Start Time: 0700

AADT Factor: 0.7

Weather AM: Overcast -2°C

Survey Duration: 4 Hrs.

Survey Hours: 0700-0900 & 1530-1730

Weather PM: Cloudy +7°C

Surveyor(s): Mousseau

Iona St.						Iona St.						Clarendon Ave.						Clarendon Ave.					
Eastbound						Westbound						Northbound						Southbound					
Time Period	LT	ST	RT	UT	E/B Tot	LT	ST	RT	UT	W/B Tot	Street Total	LT	ST	RT	UT	N/B Tot	LT	ST	RT	UT	S/B Tot	Street Total	Grand Total
0700-0800	16	3	2	1	22	2	3	4	0	9	31	7	27	1	0	35	1	11	2	0	14	49	80
0800-0900	26	7	5	0	38	4	10	14	0	28	66	4	38	4	0	46	6	18	11	0	35	81	147
1530-1630	19	7	8	0	34	0	6	1	0	7	41	1	34	0	0	35	5	23	3	0	31	66	107
1630-1730	23	2	0	0	25	1	1	2	0	4	29	1	20	1	0	22	3	27	11	0	41	63	92
Totals	84	19	15	1	119	7	20	21	0	48	167	13	119	6	0	138	15	79	27	0	121	259	426

### Equivalent 12 & 24-hour Vehicle Volumes Including the Annual Average Daily Traffic (AADT) Factor Applicable to the Day and Month of the Turning Movement Count

**Expansion factors are applied exclusively to standard weekday 8-hour turning movement counts conducted during the hours of 0700h - 1000h, 1130h - 1330h and 1500h - 1800h**

Equivalent 12-hour vehicle volumes. These volumes are calculated by multiplying the 8-hour totals by the 8 → 12 expansion factor of 1.39

Equ. 12 Hr	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
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Average daily 12-hour vehicle volumes. These volumes are calculated by multiplying the equivalent 12-hour totals by the AADT factor of: 0.7

AADT 12-hr	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
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24-Hour AADT. These volumes are calculated by multiplying the average daily 12-hour vehicle volumes by the 12 → 24 expansion factor of 1.31

AADT 24 Hr	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
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### AADT and expansion factors provided by the City of Ottawa

AM Peak Hour Factor → 0.64

Highest Hourly Vehicle Volume Between 0700h & 0900h

AM Peak Hr	LT	ST	RT	UT	TOT	LT	ST	RT	UT	TOT	S.TOT	LT	ST	RT	UT	TOT	LT	ST	RT	UT	TOT	S.TOT	G.TOT
0800-0900	26	7	5	0	38	4	10	14	0	28	66	4	38	4	0	46	6	18	11	0	35	81	147

PM Peak Hour Factor → 0.69

Highest Hourly Vehicle Volume Between 1530h & 1730h

PM Peak Hr	LT	ST	RT	UT	TOT	LT	ST	RT	UT	TOT	S.TOT	LT	ST	RT	UT	TOT	LT	ST	RT	UT	TOT	S.TOT	G.TOT
1530-1630	19	7	8	0	34	0	6	1	0	7	41	1	34	0	0	35	5	23	3	0	31	66	107

### Comments:

School crossing guards on duty between 0830 to after 0900 and 1515 to 1600. School buses represent 50% of the heavy vehicle volume total. Several homes were under renovation in the immediate area and appear to account for some of the heavy truck activity.

### Notes:

1. Includes all vehicle types except bicycles, electric bicycles, and electric scooters.
2. When expansion and AADT factors are applied, the results will differ slightly due to rounding.





# Turning Movement Count Bicycle Summary Flow Diagram



Iona Street & Mayfair Avenue South

Ottawa, ON

## Bicycles

(Including electric bicycles and electric scooters)

### Note:

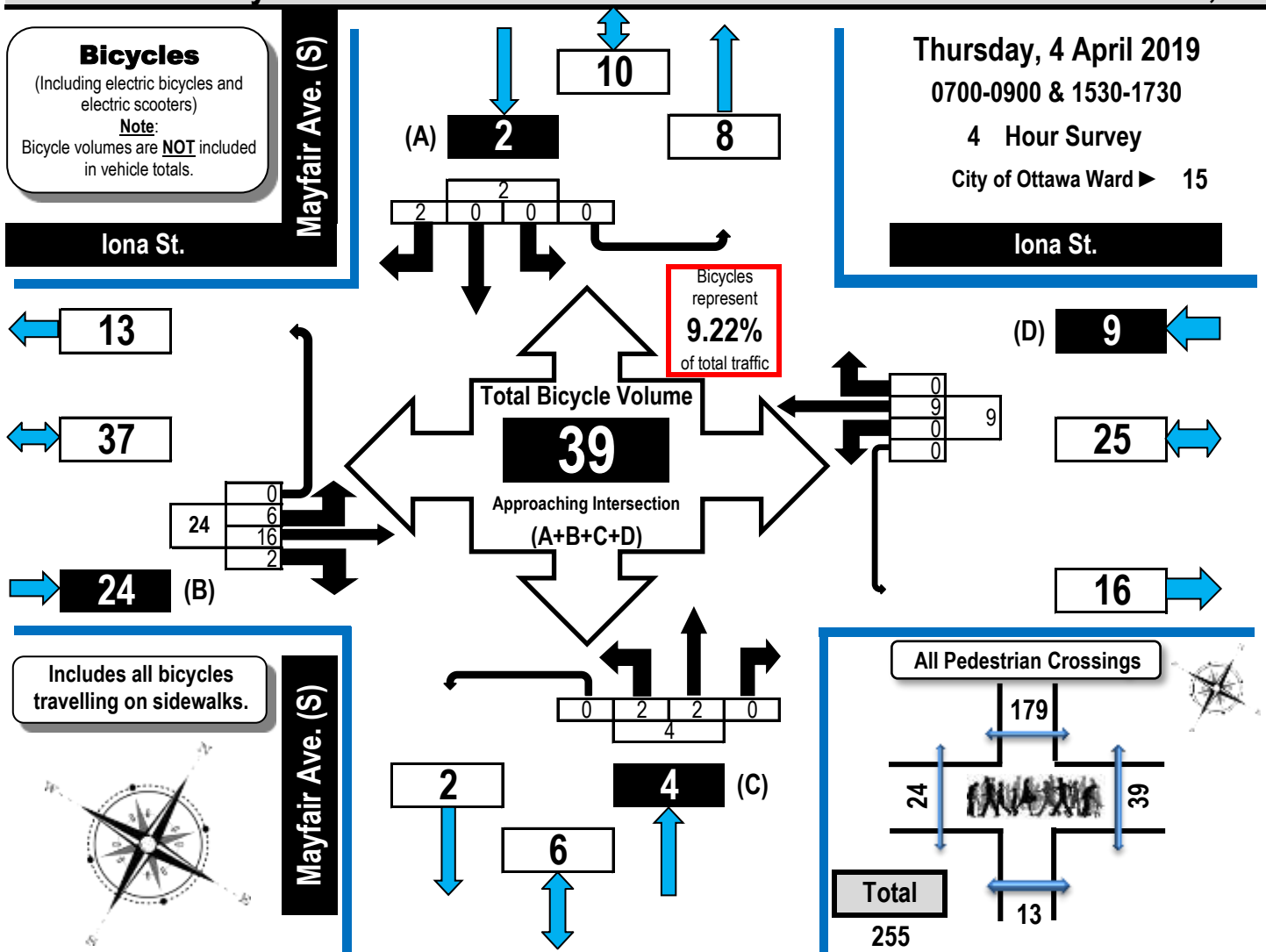
Bicycle volumes are **NOT** included in vehicle totals.

Thursday, 4 April 2019

0700-0900 & 1530-1730

4 Hour Survey

City of Ottawa Ward 15



Time Period	Iona St. Eastbound					Iona St. Westbound					Mayfair Ave. (S) Northbound					Mayfair Ave. (S) Southbound					S. Tot	G.Tot.
	LT	ST	RT	UT	S. Tot	LT	ST	RT	UT	S. Tot	LT	ST	RT	UT	S. Tot	LT	ST	RT	UT	S. Tot		
0700-0800	1	4	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
0800-0900	4	9	0	0	13	0	2	0	0	2	2	2	0	0	4	0	0	1	0	1	1	20
1530-1630	1	3	0	0	4	0	3	0	0	3	0	0	0	0	0	0	0	1	0	1	1	8
1630-1730	0	0	2	0	2	0	4	0	0	4	0	0	0	0	0	0	0	0	0	0	0	6
Totals	6	16	2	0	24	0	9	0	0	9	2	2	0	0	4	0	0	2	0	2	39	

Comments:



# Turning Movement Count Summary, AM and PM Peak Hour Flow Diagrams

Automobiles, Taxis, Light  
Trucks, Vans, SUV's,  
Motorcycles, Heavy Trucks,  
Buses, and School Buses

Iona Street & Mayfair Avenue South

Ottawa, ON

## All Vehicles

(Except Bicycles & Electric Scooters)

Thursday, 4 April 2019

0700-0900 & 1530-1730

4 Hour Survey

City of Ottawa Ward 15

Iona St.

Mayfair Ave. (S)

Iona St.

Total Volume

384

Approaching Intersection

(A+B+C+D)

(D) 93

139

232

119

296

177 (B)

35

88

53 (C)

Total

255

13

All Pedestrian Crossings

179

24

39

13

## AM Peak Hour Flow Diagram

## PM Peak Hour Flow Diagram

Mayfair Ave. (S)

(A) 19

56

37

19

10

3

6

0

Iona St.

42

108

66

43

4

66 (B)

0

7

12

7

26

8

34

26 (C)

143

(A+B+C+D)

6

25

32

88

56

1

0

0

0

0

0

0

Iona St.

56

34

26

8

34

26

8

34

26

Summary - AM Peak Hr.

Peak Hr. 0800-0900

Volume 143

PHF 0.74

Mayfair Ave. (S)

(A) 16

44

28

16

7

4

5

0

Iona St.

32

80

48

23

48 (B)

0

3

5

3

11

9

20

11 (C)

100

(A+B+C+D)

1

22

25

56

1

0

0

0

0

0

0

0

Iona St.

31

20

11

9

20

11

9

20

Summary - PM Peak Hr.

Peak Hr. 1615-1715

Volume 100

PHF 0.89



# Turning Movement Count Heavy Vehicle Summary Flow Diagram

Heavy Trucks, Buses,  
and School Buses

Iona Street & Mayfair Avenue South

Ottawa, ON

## Heavy Vehicles

(Construction Vehicles, Heavy Trucks, Buses & School Buses).  
Heavy vehicle totals ARE included in the all vehicles summary and flow diagrams.

Iona St.

Mayfair Ave. (S)

Thursday, 4 April 2019

0700-0900 & 1530-1730

4 Hour Survey

City of Ottawa Ward 15

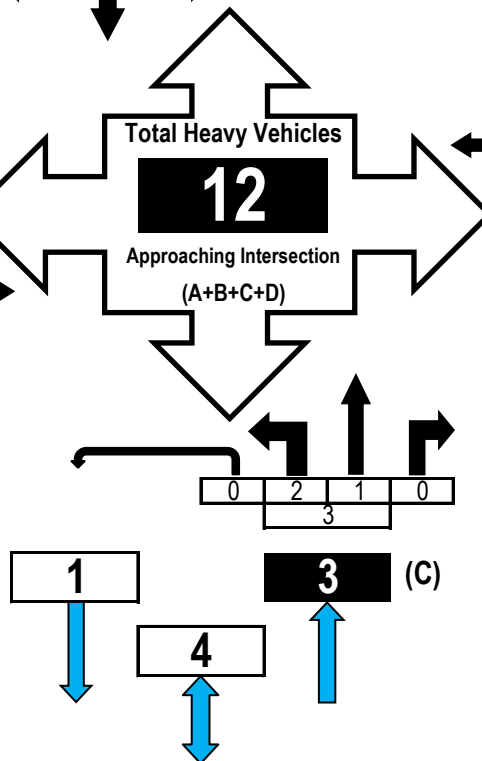
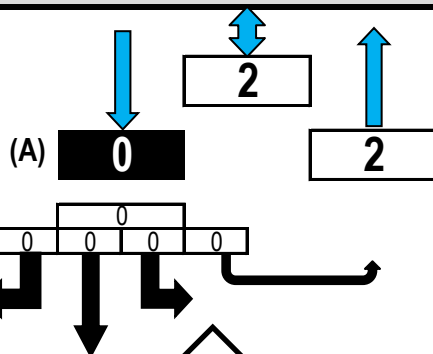
Iona St.

7

10

3

(B)

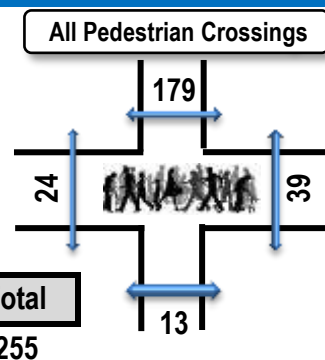


(D) 6

8

2

1  
5  
0  
0



Iona St.

Eastbound

Iona St.

Westbound

Mayfair Ave. (S)

Northbound

Mayfair Ave. (S)

Southbound

Time Period	LT	ST	RT	UT	S. Tot	LT	ST	RT	UT	S. Tot	LT	ST	RT	UT	S. Tot	LT	ST	RT	UT	S. Tot	G.Tot.
0700-0800	0	1	0	0	1	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	2
0800-0900	0	0	1	0	1	0	3	0	0	3	1	0	0	0	1	0	0	0	0	0	5
1530-1630	0	1	0	0	1	0	2	1	0	3	1	0	0	0	1	0	0	0	0	0	5
1630-1730	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	0	2	1	0	3	0	5	1	0	6	2	1	0	0	3	0	0	0	0	0	12

Comments:



# Turning Movement Count Pedestrian Crossings Summary and Flow Diagram



Iona Street & Mayfair Avenue South

Ottawa, ON

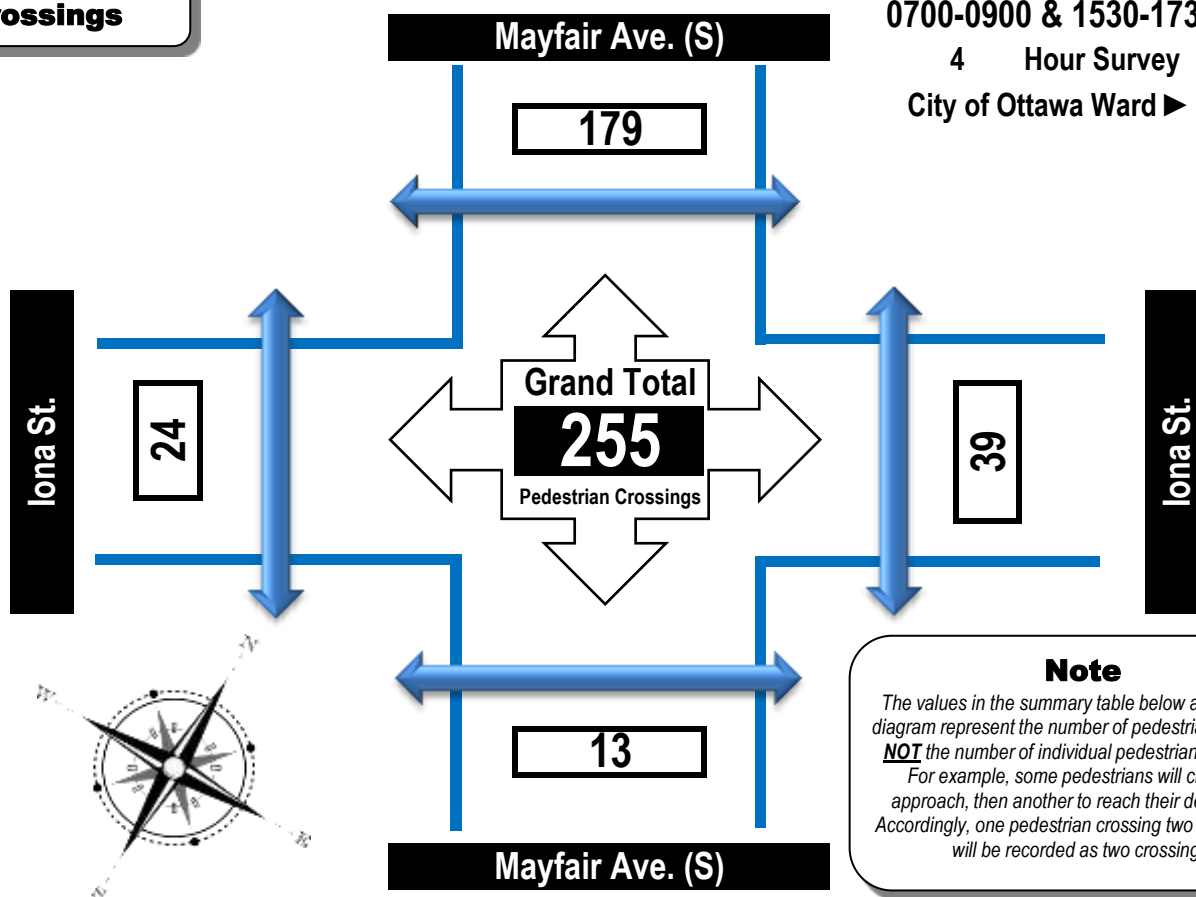
## Pedestrian Crossings

Thursday, 4 April 2019

0700-0900 & 1530-1730

4 Hour Survey

City of Ottawa Ward ► 15



### Note

The values in the summary table below and the flow diagram represent the number of pedestrian crossings **NOT** the number of individual pedestrians crossing. For example, some pedestrians will cross one approach, then another to reach their destination. Accordingly, one pedestrian crossing two approaches will be recorded as two crossings.

Time Period	West Side Crossing Iona St.	East Side Crossing Iona St.	Street Total	South Side Crossing Mayfair Ave. (S)	North Side Crossing Mayfair Ave. (S)	Street Total	Grand Total
0700-0800	1	3	4	1	11	12	16
0800-0900	11	15	26	2	86	88	114
1530-1630	9	15	24	10	69	79	103
1630-1730	3	6	9	0	13	13	22
Totals	24	39	63	13	179	192	255

Comments:



# Turning Movement Count Summary Report AADT and Expansion Factors

Automobiles, Taxis,  
Light Trucks, Vans,  
SUV's, Motorcycles,  
Heavy Trucks, Buses,  
and School Buses

## Iona Street & Mayfair Avenue South Ottawa, ON

Survey Date: Thursday, 4 April 2019 Start Time: 0700 AADT Factor: 0.9  
Weather AM: Clear -1°C Survey Duration: 4 Hrs. Survey Hours: 0700-0900 & 1530-1730  
Weather PM: Partly Cloudy +1°C Surveyor(s): Mousseau

Iona St.						Iona St.						Mayfair Ave. (S)						Mayfair Ave. (S)					
Eastbound						Westbound						Northbound						Southbound					
Time Period	LT	ST	RT	UT	E/B Tot	LT	ST	RT	UT	W/B Tot	Street Total	LT	ST	RT	UT	N/B Tot	LT	ST	RT	UT	S/B Tot	Street Total	Grand Total
0700-0800	3	24	1	0	28	1	12	0	0	13	41	1	5	0	0	6	3	1	3	0	7	13	54
0800-0900	19	43	4	0	66	1	25	6	0	32	98	7	12	7	0	26	6	3	10	0	19	45	143
1530-1630	13	18	1	1	33	3	18	3	0	24	57	4	3	3	0	10	2	11	8	0	21	31	88
1630-1730	20	27	3	0	50	2	20	2	0	24	74	4	5	2	0	11	4	4	6	0	14	25	99
Totals	55	112	9	1	177	7	75	11	0	93	270	16	25	12	0	53	15	19	27	0	61	114	384

### Equivalent 12 & 24-hour Vehicle Volumes Including the Annual Average Daily Traffic (AADT) Factor Applicable to the Day and Month of the Turning Movement Count

**Expansion factors are applied exclusively to standard weekday 8-hour turning movement counts conducted during the hours of 0700h - 1000h, 1130h - 1330h and 1500h - 1800h**

Equivalent 12-hour vehicle volumes. These volumes are calculated by multiplying the 8-hour totals by the 8 → 12 expansion factor of 1.39																						
Equ. 12 Hr	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Average daily 12-hour vehicle volumes. These volumes are calculated by multiplying the equivalent 12-hour totals by the AADT factor of: 0.9																						
AADT 12-hr	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
24-Hour AADT. These volumes are calculated by multiplying the average daily 12-hour vehicle volumes by the 12 → 24 expansion factor of 1.31																						
AADT 24 Hr	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

### AADT and expansion factors provided by the City of Ottawa

AM Peak Hour Factor → 0.74												Highest Hourly Vehicle Volume Between 0700h & 0900h											
AM Peak Hr	LT	ST	RT	UT	TOT	LT	ST	RT	UT	TOT	S.TOT	LT	ST	RT	UT	TOT	LT	ST	RT	UT	TOT	S.TOT	G.TOT
0800-0900	19	43	4	0	66	1	25	6	0	32	98	7	12	7	0	26	6	3	10	0	19	45	143

PM Peak Hour Factor → 0.89												Highest Hourly Vehicle Volume Between 1530h & 1730h											
PM Peak Hr	LT	ST	RT	UT	TOT	LT	ST	RT	UT	TOT	S.TOT	LT	ST	RT	UT	TOT	LT	ST	RT	UT	TOT	S.TOT	G.TOT
1615-1715	22	23	3	0	48	2	22	1	0	25	73	3	5	3	0	11	5	4	7	0	16	27	100

### Comments:

### Notes:

1. Includes all vehicle types except bicycles, electric bicycles, and electric scooters.
2. When expansion and AADT factors are applied, the results will differ slightly due to rounding.



# Spot Speed Survey Summary

Including Estimated Driver Compliance and  
Recommended Speed Limits



## Iona Street between Clarendon Avenue & Mayfair Avenue South

Mid-way at west limit of Elmdale Public School building

Hampton Park

Ward: 15

Ottawa, ON

Thursday 4 April 2019

Road Surface: Asphalt

Road Condition:

Dry

Weather: Partly Cloudy

Survey Hours: 0650-0850

Notes: Pavement in poor condition. Maximum # of parked vehicles - 9 on south side and 1 on north side.

### Spot Speed Survey Summaries for All Vehicle Types

Westbound		Speed Limit <b>30</b> km/h	Eastbound	
Total Number of All Vehicles	23		Total Number of All Vehicles	23
Average (Mean) Speed	35 km/h		Average (Mean) Speed	34 km/h
85th Percentile Speed	42 km/h		85th Percentile Speed	40 km/h
95th Percentile Speed	46 km/h		95th Percentile Speed	44 km/h
Upper Limit Pace Speed Range	44 km/h		Upper Limit Pace Speed Range	44 km/h
Driver Compliance with Speed Limit	33 %		Driver Compliance with Speed Limit	22 %

Spot Speed Summary - Combined Both Directions	
Total Number of All Vehicles	46
Average (Mean) Speed	35 km/h
85th Percentile Speed	41 km/h
95th Percentile Speed	45 km/h
Upper Limit Pace Speed Range	44 km/h
Driver Compliance with Speed Limit	27%

Additional Survey Details	
Highest vehicle speed in summary	50 km/h
Slowest vehicle speed in summary	20 km/h
Speed Differential	30 km/h
Fastest Speed Observed *	50 km/h
* The FASTEST speed observed is NOT included in the summary if it is > than the HIGHEST vehicle speed in the summary. It is included for information only.	

### Heavy Vehicle Spot Speed Survey Summary

Total Number of Heavy Vehicles *	N/A
Average (Mean) Speed	N/A km/h
85th Percentile Speed	N/A km/h
Driver Compliance with Speed Limit	n/a

Trucks



0

Buses



0

School Buses



0

\* N/A if the total number of heavy vehicles < 6.

\* If the total number of heavy vehicles is < 30, this value is insufficient for a valid statistical sample.

Local Residential Roadway

Current  
Speed  
Limit

### Estimated Driver Compliance

with an increase or decrease in the posted speed limit.

Speed Limit	Compliance
30 km/h	27%
40 km/h	85%
50 km/h	99%
60 km/h	100%
70 km/h	100%
80 km/h	100%
90 km/h	100%
100 km/h	100%

### City of Ottawa Speed Zoning Policy for Urban and Rural Roads (2009)

Based <b>exclusively</b> on the results of this spot speed survey and using the criteria set forth in the <i>City of Ottawa Speed Zoning Policy for Urban and Rural Roads (2009)</i> , the ideal speed limit for this roadway is:	<b>40 km/h</b>
The lowest speed limit appropriate for this roadway shall not differ from the 85th percentile speed by more than 13 km/h. In this case, the lowest speed limit must not be lower than:	<b>30 km/h</b>



# Turning Movement Count Bicycle Summary Flow Diagram



Java Street & Mayfair Avenue South

Ottawa, ON

## Bicycles

(Including electric bicycles and electric scooters)

### Note:

Bicycle volumes are **NOT** included in vehicle totals.

N/A

Mayfair Ave. (S)

Tuesday, 2 April 2019

0700-0900 & 1530-1730

4 Hour Survey

City of Ottawa Ward ► 15

Java St.

0

0

0 (B)

(A) 13

0 1 12 0

Bicycles represent  
7.84%  
of total traffic

Total Bicycle Volume

24

Approaching Intersection  
(A+B+C+D)

(D) 7

21

14

Includes all bicycles  
travelling on sidewalks.

Mayfair Ave. (S)



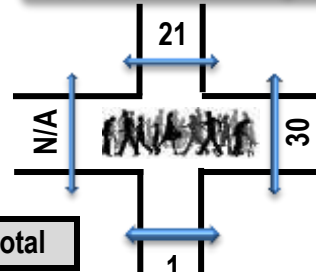
1

5

(C) 4

0 0 2 2  
4

All Pedestrian Crossings



Total

52

N/A						Java St.					Mayfair Ave. (S)					Mayfair Ave. (S)				
Eastbound						Westbound					Northbound					Southbound				

Time Period	LT	ST	RT	UT	S. Tot	LT	ST	RT	UT	S. Tot	LT	ST	RT	UT	S. Tot	LT	ST	RT	UT	S. Tot	G.Tot.
0700-0800	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	1	0	0	0	1	3
0800-0900	0	0	0	0	0	0	0	1	0	1	0	0	2	0	2	10	1	0	0	11	14
1530-1630	0	0	0	0	0	0	0	5	0	5	0	0	0	0	0	1	0	0	0	1	6
1630-1730	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1
Totals	0	0	0	0	0	0	0	7	0	7	0	2	2	0	4	12	1	0	0	13	24

## Comments:

The three heavy vehicles consisted of two school buses and one Para Transpo bus. Vehicles parked on both sides of Java Street at the westerly end of the sidewalks reduce the pavement width to a single lane. The majority of pedestrians walk on the travelled portion of the roadway with back to traffic.





# Turning Movement Count Summary, AM and PM Peak Hour Flow Diagrams

Automobiles, Taxis, Light  
Trucks, Vans, SUV's,  
Motorcycles, Heavy Trucks,  
Buses, and School Buses

Java Street & Mayfair Avenue South

Ottawa, ON

## All Vehicles

(Except Bicycles & Electric Scooters)

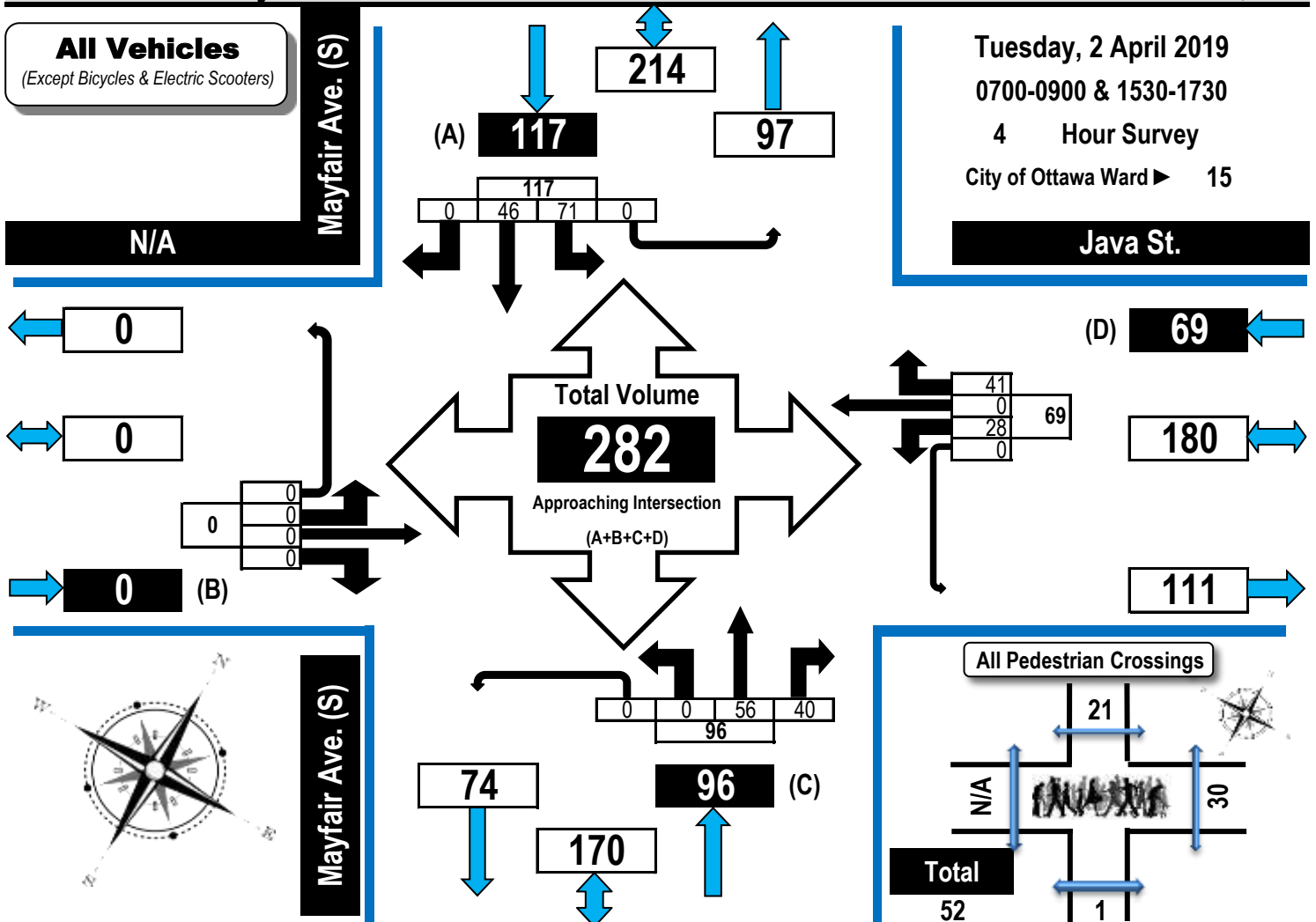
Tuesday, 2 April 2019

0700-0900 & 1530-1730

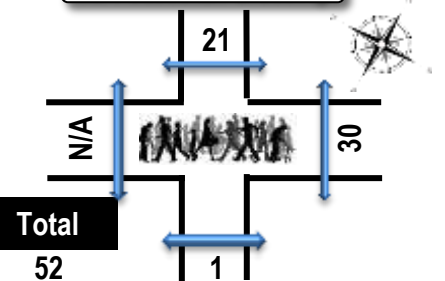
4 Hour Survey

City of Ottawa Ward 15

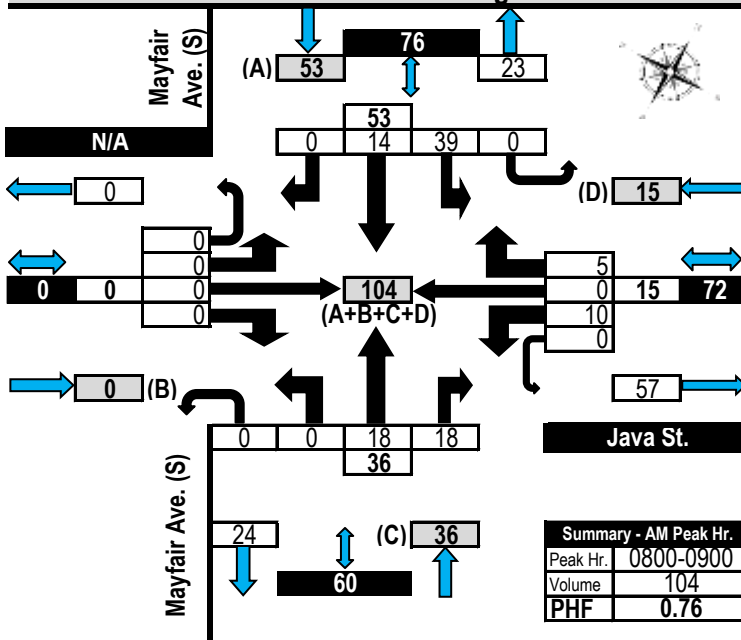
Java St.



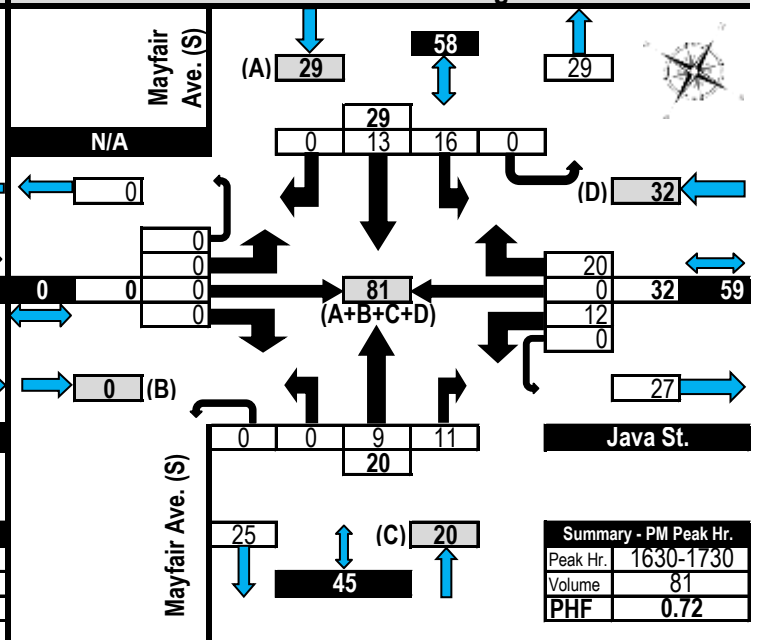
## All Pedestrian Crossings



## AM Peak Hour Flow Diagram



## PM Peak Hour Flow Diagram







# Turning Movement Count Heavy Vehicle Summary Flow Diagram

Heavy Trucks, Buses,  
and School Buses

Java Street & Mayfair Avenue South

Ottawa, ON

## Heavy Vehicles

(Construction Vehicles, Heavy Trucks, Buses & School Buses).  
Heavy vehicle totals ARE included in the all vehicles summary and flow diagrams.

N/A

Mayfair Ave. (S)

Tuesday, 2 April 2019

0700-0900 & 1530-1730

4 Hour Survey

City of Ottawa Ward 15

Java St.

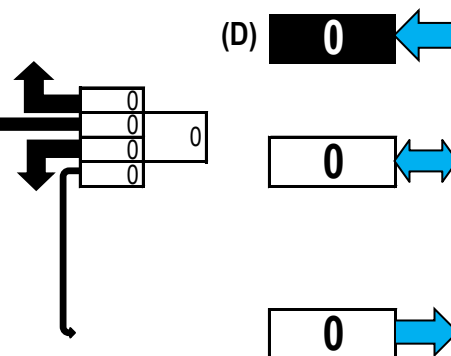
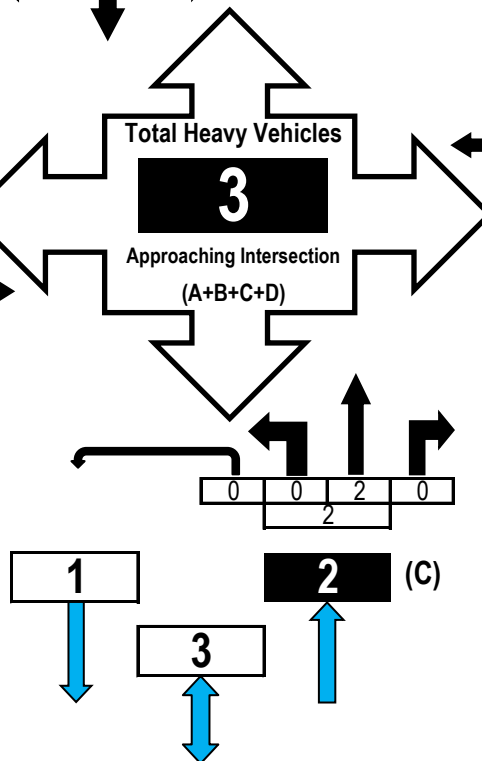
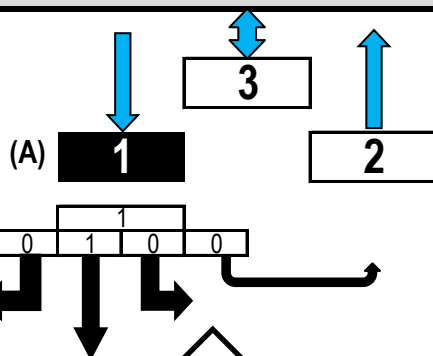
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0

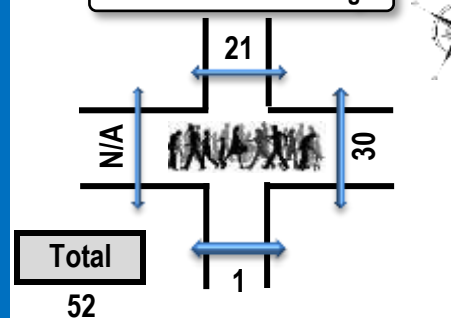
0 (B)



Mayfair Ave. (S)



## All Pedestrian Crossings



N/A  
Eastbound

Java St.  
Westbound

Mayfair Ave. (S)  
Northbound

Mayfair Ave. (S)  
Southbound

Time Period	LT	ST	RT	UT	S. Tot	LT	ST	RT	UT	S. Tot	LT	ST	RT	UT	S. Tot	LT	ST	RT	UT	S. Tot	G. Tot
0700-0800	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	0	1	2
0800-0900	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1530-1630	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	1
1630-1730	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	0	0	0	0	0	0	0	0	0	0	0	2	0	0	2	0	1	0	0	1	3

## Comments:

The three heavy vehicles consisted of two school buses and one Para Transpo bus. Vehicles parked on both sides of Java Street at the westerly end of the sidewalks reduce the pavement width to a single lane. The majority of pedestrians walk on the travelled portion of the roadway with back to traffic.

# Turning Movement Count Pedestrian Crossings Summary and Flow Diagram



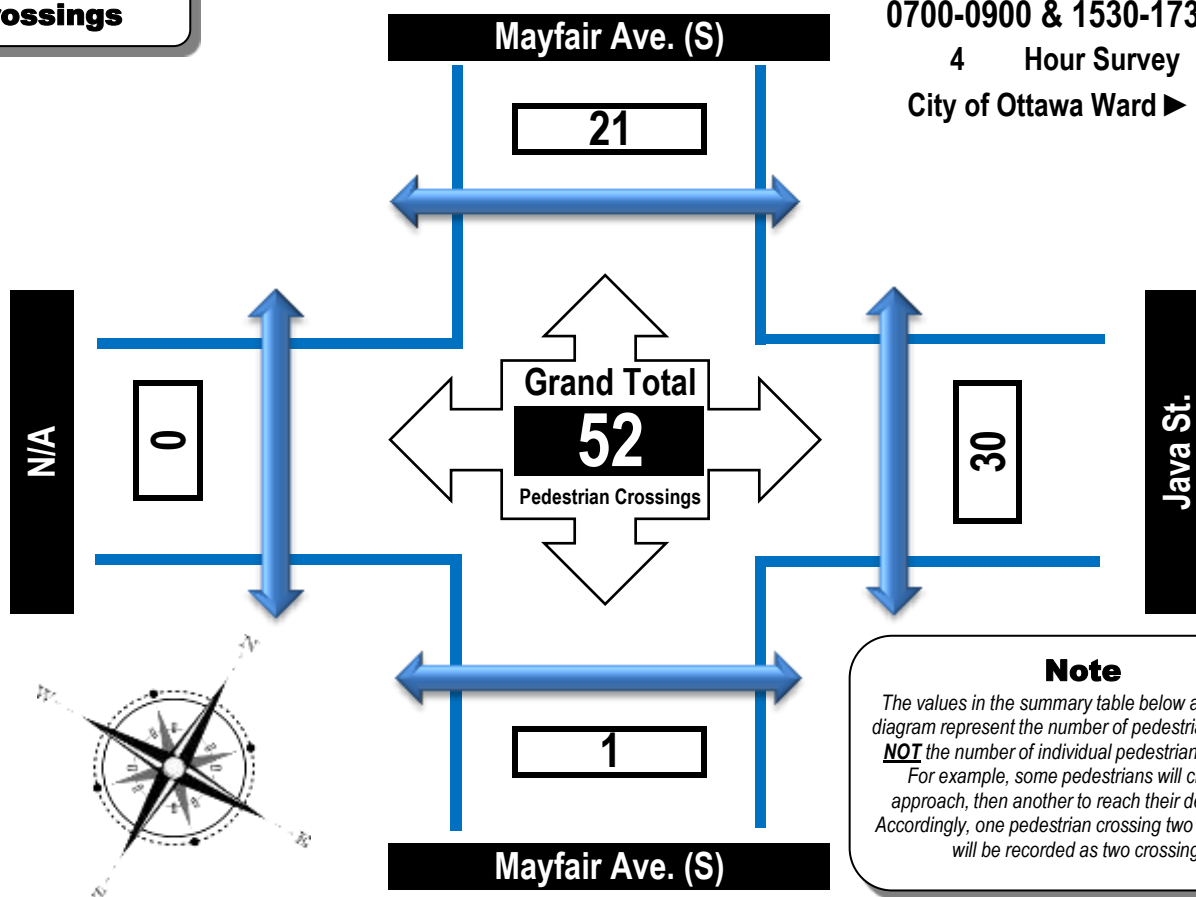
Java Street & Mayfair Avenue South

Ottawa, ON

## Pedestrian Crossings

Tuesday, 2 April 2019  
0700-0900 & 1530-1730

4 Hour Survey  
City of Ottawa Ward ► 15



### Note

The values in the summary table below and the flow diagram represent the number of pedestrian crossings **NOT** the number of individual pedestrians crossing. For example, some pedestrians will cross one approach, then another to reach their destination. Accordingly, one pedestrian crossing two approaches will be recorded as two crossings.

Time Period	West Side Crossing N/A	East Side Crossing Java St.	Street Total	South Side Crossing Mayfair Ave. (S)	North Side Crossing Mayfair Ave. (S)	Street Total	Grand Total
0700-0800	0	2	2	0	0	0	2
0800-0900	0	17	17	0	11	11	28
1530-1630	0	6	6	1	8	9	15
1630-1730	0	5	5	0	2	2	7
Totals	0	30	30	1	21	22	52

### Comments:

The three heavy vehicles consisted of two school buses and one Para Transpo bus. Vehicles parked on both sides of Java Street at the westerly end of the sidewalks reduce the pavement width to a single lane. The majority of pedestrians walk on the travelled portion of the roadway with back to traffic.



# Turning Movement Count Summary Report AADT and Expansion Factors

Automobiles, Taxis,  
Light Trucks, Vans,  
SUV's, Motorcycles,  
Heavy Trucks, Buses,  
and School Buses

## Java Street & Mayfair Avenue South

Ottawa, ON

Survey Date: Tuesday, 2 April 2019

Start Time: 0700

AADT Factor: 0.7

Weather AM: Overcast -2°C

Survey Duration: 4 Hrs.

Survey Hours: 0700-0900 & 1530-1730

Weather PM: Cloudy +7°C

Surveyor(s): Carmody

N/A						Java St.						Mayfair Ave. (S)						Mayfair Ave. (S)					
Eastbound						Westbound						Northbound						Southbound					
Time Period	LT	ST	RT	UT	E/B Tot	LT	ST	RT	UT	W/B Tot	Street Total	LT	ST	RT	UT	N/B Tot	LT	ST	RT	UT	S/B Tot	Street Total	Grand Total
0700-0800	0	0	0	0	0	2	0	4	0	6	6	0	11	5	0	16	9	6	0	0	15	31	37
0800-0900	0	0	0	0	0	10	0	5	0	15	15	0	18	18	0	36	39	14	0	0	53	89	104
1530-1630	0	0	0	0	0	4	0	12	0	16	16	0	18	6	0	24	7	13	0	0	20	44	60
1630-1730	0	0	0	0	0	12	0	20	0	32	32	0	9	11	0	20	16	13	0	0	29	49	81
Totals	0	0	0	0	0	28	0	41	0	69	69	0	56	40	0	96	71	46	0	0	117	213	282

**Equivalent 12 & 24-hour Vehicle Volumes Including the Annual Average Daily Traffic (AADT) Factor  
Applicable to the Day and Month of the Turning Movement Count**

**Expansion factors are applied exclusively to standard weekday 8-hour turning movement counts  
conducted during the hours of 0700h - 1000h, 1130h - 1330h and 1500h - 1800h**

Equivalent 12-hour vehicle volumes. These volumes are calculated by multiplying the 8-hour totals by the 8 → 12 expansion factor of 1.39

Equ. 12 Hr	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
------------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

Average daily 12-hour vehicle volumes. These volumes are calculated by multiplying the equivalent 12-hour totals by the AADT factor of: 0.7

AADT 12-hr	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
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24-Hour AADT. These volumes are calculated by multiplying the average daily 12-hour vehicle volumes by the 12 → 24 expansion factor of 1.31

AADT 24 Hr	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
------------	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

**AADT and expansion factors provided by the City of Ottawa**

AM Peak Hour Factor → 0.76

Highest Hourly Vehicle Volume Between 0700h & 0900h

AM Peak Hr	LT	ST	RT	UT	TOT	LT	ST	RT	UT	TOT	S.TOT	LT	ST	RT	UT	TOT	LT	ST	RT	UT	TOT	S.TOT	G.TOT
0800-0900	0	0	0	0	0	10	0	5	0	15	15	0	18	18	0	36	39	14	0	0	53	89	104

PM Peak Hour Factor → 0.72

Highest Hourly Vehicle Volume Between 1530h & 1730h

PM Peak Hr	LT	ST	RT	UT	TOT	LT	ST	RT	UT	TOT	S.TOT	LT	ST	RT	UT	TOT	LT	ST	RT	UT	TOT	S.TOT	G.TOT
1630-1730	0	0	0	0	0	12	0	20	0	32	32	0	9	11	0	20	16	13	0	0	29	49	81

### Comments:

The three heavy vehicles consisted of two school buses and one Para Transpo bus. Vehicles parked on both sides of Java Street at the westerly end of the sidewalks reduce the pavement width to a single lane. The majority of pedestrians walk on the travelled portion of the roadway with back to traffic.

### Notes:

1. Includes all vehicle types except bicycles, electric bicycles, and electric scooters.
2. When expansion and AADT factors are applied, the results will differ slightly due to rounding.

## **APPENDIX D – Initial Circulation Comments**

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## **Circulation comments - 49 Iona Street - Site Plan Control - D07-12-18-0194**

### **Planning**

1. The proposed relocation and reconfiguration of the teacher's parking will significantly reduce existing conflicts with pedestrians, buses and circulation on Iona Street.
2. Although the relocation of the teacher's parking will alleviate part of the existing conflicts on Iona Street, further traffic analysis will be required to assess conflicts between bus and vehicle drop-off/pick-up and local circulation.
3. Please indicate the location of bicycle parking.

### **Engineering**

Attached.

### **Forestry**

1. A permit is required prior to any tree removal on site; one will be made available upon site plan approval. Please contact the planner associated with the file or Mark Richardson ([mark.richardson@ottawa.ca](mailto:mark.richardson@ottawa.ca)) when a permit is required or for additional information on obtaining a permit.
2. One City-owned tree is listed for removal – Forestry Services will need to provide permission for this tree to be removed.
3. Unless there is a redeeming design requirement, please consider changing the Acer ginnala to another species.
4. If they have not been injected, please consider removing and replacing the ash trees on site.

### **Transportation**

1. The concrete sidewalks should be 2.0 metres in width and be continuous and depressed through the proposed access.
2. The closure of an existing private approach shall reinstate the sidewalk, shoulder, curb and boulevard to City standards.

3. Bicycle parking spaces are required as per Section 111 of the Ottawa Comprehensive Zoning By-law. Bicycle parking spaces should be located in safe, secure places near main entrances and preferably protected from the weather.
4. The Owner shall be required to enter into maintenance and liability agreement for all pavers, plant and landscaping material placed in the City right-of-way and the Owner shall assume all maintenance and replacement responsibilities in perpetuity.

### **Enbridge Gas Distribution**

Attached.

### **Hydro Ottawa**

Attached.

### **Rogers**

Rogers has no comment or concerns in regards to this circulation.

Please contact Aubrey MacMillan at 613-301-8793 or Graham Winn at 613-218-5765 or e-mail at 240-OPE@rci.rogers.com for Rogers Site Servicing if approved, or if you require additional information.

### **Public comments**

1. I want to emphasise that I fully agree with the rehab of the school as it's time to get rid of the portables that are taking up much needed play area on the seniors side of the school and deal with the issues that are present in the current 1930's design of the school (like the washrooms and the asbestos and the addition of the elevator to make the school more accessible).

My concerns are with the changes that are proposed for the kinder side of the school.

- Specifically I'm disappointed to see that their play area (both the asphalted area and the earth area) being taken over for parked cars. With all the emphasis on getting the kids to walk to school and be more active, the use of the new LRT and enhancements to the existing bus infrastructure, the message that the school board is sending to say that play space is secondary to parking isn't what I was expecting. I'm even more concerned that the number of parking spaces is being expanded to 40 whereas most other public institutions and new commercial buildings are

cutting back on parking; again, *there may be no legal obligation on the part of the school to adopt the “limit the use of personal vehicles” approach that other levels of government are adopting but I would have hoped that they too would lead by example.*

- Under the current design, there are two areas designated for truck access off Java St: (a) a loading area approximately where the current parking and loading area is and (b) an area in the new parking lot (current asphalted play area) where the refuse containers are being housed (which currently are in the current parking area off Java). In my experience the janitor staff will use the new elevator to move their garbage and recyclables between floors and having the refuse containers as close to the elevator as possible just makes good sense rather than walking outside and into the new parking area. In addition, it would limit truck access to only one entrance off Java and so make monitoring of the students while a truck is operating much easier. *I would strongly recommend that the garbage, recycle containers be located in the loading area not in the new parking area.*

One final concern about the documents that have been supplied by the school board for this project, I can't see where the traffic impact of the new design has been documented. It appears that the Board is assuming that there will be no change to traffic patterns with this design but if you look at traffic enforcement requests you will see that there have been continued issues on both Java and Iona with traffic and the impact it has on students accessing the school. The redesign offers the opportunity for many of the traffic issue to be addressed or at least options implemented to mitigate the effect of narrow streets, especially in winter with snow banks part of the equation, with parked cars impacting school kids walking and biking to Elmdale. *If it is within the capability of the city, I would strongly suggest that the Board be required to undertake the traffic survey and determine how the existing problems can be addressed with their new design.*

2. We are submitting comments on the Site Plan Control Application for the Addition to Elmdale Elementary School. We live directly across from the schoolyard and the north east entrance to Elmdale. As a result, we have a direct interest in the design, construction and ongoing management of the proposed addition and reconfiguration of on-site school parking, including the associated plans for stormwater management and snow removal, and the implications for traffic on Java Street.

### **Stormwater Management**

#### **Current Situation**

Section 1.1 of the Site Servicing and Stormwater Management Plan states the school does not connect to the municipal stormwater system and the site drains to the right-of-way catch basins on Java Street and Iona Street. Java Street slopes from west to east, and we live downslope from the surface water that flows from the school's existing Java Street parking lot, down the entrance driveway and onto Java Street. During rainstorms, the school run-off combines with the water from the western end of the street and flows into or past the catchbasins in our part of the block. In heavy rain, the catchbasins are not able to capture all of the run-off, resulting in transient pooling along the curb and across the sidewalk at the ends of the driveways.

During the winter and early spring, the right-of-way catch basins on Java Street are obstructed by snow and ice from road plowing, such that rain and melt-water run-off accumulates on the road and large puddles form across the sidewalk at the ends of driveways where the snow has been cleared. When the water freezes, it creates treacherously icy conditions for us and other pedestrians, including students and parents. While our neighbour to the east and we do our best to keep the catch basins in front of our respective properties open (and thereby reduce the likelihood of meltwater accumulation and freezing), the combination of snow plowing and vehicle parking make that an ongoing challenge. It is essential that the school take more responsibility for managing the stormwater drainage from school property, and not rely on the goodwill and labour of the neighbours.

#### Applicant's Stormwater Management Proposal

We are pleased that several improvements to stormwater discharge from the school property are proposed in the Site Servicing and Stormwater Management Plan. These include collecting water from the existing school roof, the roof of the addition and the new parking area proposed on Java Street which will feed into a new on-site storm sewer network connected to the Java Street municipal storm sewer.

However, the Plan does not contemplate connecting the existing Java Street parking area into the on-site network. As noted above, this area is a significant contributor to stormwater that is not being effectively captured in catch basins on Java Street. The area (shown as "B6 – hard area draining to Java Street – east parking lot" on Figure 2 of the Plan) is indicated to be 0.050 ha or 495 m<sup>2</sup>. According to the Plan, this is the only hard area that is within the footprint of the proposed expansion where surface drainage will not be captured. Part of the 300 mm diameter storm sewer to be installed on the school property is situated directly below this area (reference: Site Servicing Plan).

#### Stormwater Management Plan Recommended Change



*Amend the proposed Site Servicing and Stormwater Management Plan to include area B6. This would include adjusting the surface slopes in area B6 and adding the appropriate stormwater catchment capacity to drain into the planned on-site storm sewer network, such that the surface run off onto Java Street is minimized.*

We have noted an error in the Plan. The final paragraph of section 1.2 notes that stormwater management calculations/analysis for the entire site was not included in the scope of work, therefore the overland flow route cannot be confirmed. The paragraph concludes with a sentence that reads, "However, based on the topographical survey data, it appears that the direction of overland flow follows the alignment of the site's access road towards Greenbank Road." This statement would appear to be a copy and paste from another plan. As we have noted, stormwater flow is an important consideration given the slope of the school property and Java Street and existing issues should be addressed in the design and implementation of the Plan.

### **Snow Pile Management**

#### **Current Situation**

Snow clearing and piling is a routine winter activity at the school. A considerable portion of the run-off from the school yard and parking areas during winter thaws and in the spring is meltwater from snow piles.

#### **Applicant's Snow Pile Management Proposal**

Site Plan Note 16 indicates that snow storage will be in a soft surface area in the northwest corner of the school property. The limited area between the new parking area and the fence at the west end of the school property does not appear to be sufficient to accommodate the snow that will be cleared from all the hard surface areas along Java Street.

While meltwater will percolate into the soil once the ground thaws, during winter thaws and at the beginning of the spring thaw it can be expected that the water will flow onto the hard surface of the parking lot or across the grass onto Java Street.

#### **Snowpile Management Recommended Changes**

*Our recommendation is that the Applicant confirm that:*

- *the area proposed for snow piles is sufficient to accommodate the anticipated volume of snow to be stored, including in high snow years*
- *snow storage areas are located such that meltwater enters the new on-site stormwater network*

- *the proposed design includes adequate catchment capacity (currently showing as one catch basin, three catch basin manholes and two manholes) for rapid snowmelt and intense rainstorm events.*

*In addition, while not a site plan issue, the OCSB must ensure ongoing maintenance of catchment structures so that rain and meltwater from the school property drain into them. Winter conditions need to be factored into the design and maintenance of the stormwater network to ensure it will achieve the desired results.*

## **Traffic**

### **Current Situation**

We are aware that the current Iona Street parking lot is “non-conforming”, and that there are considerations for student safety associated with the school bus drop off on Iona Street close to that parking lot. Iona Street has parking restrictions to discourage parents from using it as a drop off or pick up area. Most parents dropping off their children use Java Street, often parking (legally or illegally) to walk them into the school yard. The No Stopping and No Parking signs installed on Java Street a couple of years ago have made some contribution to reducing the congestion on the street, but are consistently ignored by parents and rarely enforced. In the winter the road is narrowed by snowbanks and clogged with the (illegally) stopped cars of parents, who deliberately block residential driveways because they are the only cleared space where their children can get out of the car. For several months of the year, it frequently becomes impossible for residents to get in or out of our driveways during daycare and school pick up and drop off times.

### **Applicant’s Proposal**

The plan is to move all of the school staff parking into a larger parking lot accessed from Java Street. The new parking lot will result in more traffic as a result of staff use Java Street, which is already clogged with the cars of parents at drop off and pick up times. In addition, the new parking lot will form a barrier between Java Street and the primary school yard, such that parents will no longer be able to safely “drop-off” a child along the sidewalk or at the gate of the school yard.

Unless the drop off area shifts to Iona Street or there is a designated crosswalk and crossing guard in the new Java Street parking lot, parents of primary students will have to leave their cars and walk their children across the parking lot to the entrance to the school yard. This will increase the time that cars will be stopped/parked on Java Street and exacerbate congestion on the street every morning. Parents walking their children across the parking lot to get them to the

safety of the primary yard, will either have to violate the parking restrictions on Java Street or park around the corner on Mayfair Avenue, which is even narrower than Java Street.

#### *Traffic Recommendations*

*The City of Ottawa should make road and sidewalk plowing and snow removal on Java and Iona Streets a high priority.*

*If it has not already done so, the Applicant should conduct studies to determine:*

- *how many students currently access the primary and intermediate yards from Java Street and from Iona Street*
- *how many students are dropped off or picked up on Java Street and how long do cars stay stopped or parked during drop off and pick up times*
- *the traffic patterns on Java Street at daycare and school drop off and pick up times, including in the winter when the street is narrowed by high snow banks.*

*The reports on these studies should be shared with residents. The final decision on whether to relocate the staff parking lot to Java Street should take into account the impact on traffic on Java Street.*

#### **Erosion and Sediment Control**

At present, the salt, sand and grit spread on the Java Street parking lot are washed onto Java Street with the snowmelt or early spring rains. Drawing C2 *Site Grading and Drainage, Erosion & Sediment Control Plan* note 07 says "Protect existing manholes and catchbasins using a filter sock or filter base in accordance with detail 4/C3". The drawing does not include the catchbasins on the north side of Java Street, which receive much of the run off from the current Java Street parking lot at the school.

#### *Erosion and Sediment Control Recommendation*

*The construction site should be managed to minimize silt run off onto Java Street, and the catchbasins on the north side of Java Street across from and to the east of the parking lot driveway should be protected.*

#### **Construction**

We have concerns with respect to the disruption which may be associated with the construction, including:

- the routing, volume and timing of construction traffic, e.g. worker traffic and parking, heavy equipment and trucks

- hours of work, construction noise and vibration, including the possibility of damage to the foundations and plaster in our houses.

Can you please advise us of the appropriate contact with the City of Ottawa for those concerns? To date, the Ottawa-Carleton District School Board has not initiated any contact with us or other neighbours of the school. As a result, it would seem that issues of concern to the residents of the adjacent neighbourhood will need to be raised with the City.

### **Conclusion**

We ask that the issues we have raised be addressed before the OCDSB receives approval of the plans for the addition to the school and reconfiguration of the parking areas.

3. I am submitting comments on the Site Plan Control Application for the Addition to Elmdale Elementary School. I live directly across from the schoolyard and the north west entrance to Elmdale and so have a direct interest in the proposed reconfiguration of the on-site school parking and re-location of garbage and delivery truck access along with the design, construction and on-going management of the construction effort.

In reviewing the site plan I've noticed that there's an opportunity to minimize the impact of truck delivery and garbage pickup by consolidating both of them into one area which will minimize the impact on the children and make supervision of the children during these events easier. In addition, I have a suggestion to relocate where the teacher and visitor parking is located to minimize the traffic and congestion around the school. I believe that these changes will better meet the objectives for the revitalization of Elmdale and give the children the green space that they deserve plus a safer environment for them.

### **Request:**

I'd appreciate it if you would ensure that these proposals are considered in the review of the proposed site plan control application before the OCDSB receives approval of the plans for the addition to the school and reconfiguration of the parking areas.

Should you have any concerns or questions about the points that have been raised, please do not hesitate to contact me by email or by phone at the number below.



- (1) New pedestrian entrance on Java Street.
- (2) One access point for deliveries and garbage.
  - a) Deliveries and garbage stay in their current location providing easy access by the trucks and convenient access to the garbage bins for the cleaning staff.
  - b) One access point cuts down on possible accidents.
- (3) Add 2 handicapped parking spots next to new elevator entrance in the delivery/garbage area on the east side making it easier for handicapped person(s) to access the new elevator.
- (4) Widen Garbage and delivery access from Java by removing 6' of fence to the west of the current opening.
- (5) The east side play structure will need to be moved forward to make room for the new 'teachers' parking lot.
- (6) Add a pathway on north east side of school yard from teachers parking lot to schools paved area.

- (7) New gate access from parking lot to walking path.
- (8) New entrance off Clarendon to teachers parking lot.
- (9) Locate teachers parking next to Clarendon with access on Clarendon; there is room for approximately 42 to 44 cars. Relocating the parking entrance on Clarendon will help reduce traffic/congestion on Iona and Java. This will not require any mature trees to be destroyed and with the addition of the 40+ car parking lot next to Clarendon and the removal of most of the portables, the amount of green space in the East play yard will remain close to its current size.

4. We live across the street from Elmdale School. The school is an anchor for the neighbourhood, and we welcome improvements that will benefit our community.

We have questions to raise with the planning committee with respect to the renovations planned for Elmdale School at 49 Iona Street. The renovation is an opportunity to address some ongoing concerns with respect to buses and parking on streets around the school.

Note that at the east end of Iona Street, at Fisher Park Public School, some 600 students come and go every day. Many travel on Iona Street by foot, by bike and by parent pick up and drop off by car as well, adding to street congestion.

The report entitled *Site Plan Control Application Planning Rationale Report* states "A new main entrance to the school from Iona Street. This will be a Barrier-Free entrance with a new entry plaza giving an opportunity for gathering and collaboration of students and parents."

#### THE SCENE AT LEAST TWICE A DAY

Currently, on the north side of Iona Street, school buses drop off and pick up students in the morning and the afternoon. At least twice a day, school buses are parked on the north side of the street.

At these times, Iona Street is a busy tableau, with buses pulling up and out; parents walking their children to and from school; parents dropping off and picking up their children, often ignoring the posted bus zone signs; teenagers walking in large groups and/or biking to and from Fisher Park and Nepean High Schools. Traffic is jammed in front of and behind the buses.

In the wintertime, snowbanks add to the problem, and often, for some reason, garbage and recycling pick-up coincides with the busiest times for moving students to and from the school.

We often have a lot of difficulty accessing our driveway. At least once a week, we are blocked in by oblivious parents and need to remind them not to block our driveway. In some cases, there are verbal exchanges by drivers trying to travel on Iona Street, while someone is illegally parked.

## BUSES

- a. What are the city/provincial current standards, guidelines and policies regarding traffic and movement issues around a school?
- b. Are there requirements for a street to be a certain width (e.g., 40 or 50 feet) for a school bus stop to load and unload?
- c. Will the bus zone extend the entire length of the school along the north side of Iona Street?
- d. As part of the redesign can the city consider building a school bus pull off or an indentation on the north side of Iona?

## PARENT PARKING, DROPOFF and PICKUP

Parents picking up and dropping off students, and visitor parking is a major concern for residents of Iona Street. There is limited parking in the visitor parking area resulting in these individuals parking on the street. This becomes problematic for us, as when we have people visiting your place, they need to park down the street or on the next block.

- a. As part of the plan is the city going to conduct a traffic flow study?
- b. Is the city planning to investigate issues pertaining to pedestrian and vehicular traffic safety and movement adjacent to school sites?
- c. Will the traffic flow also take into account the pedestrian traffic going towards Fisher Park School?
- d. Will consideration be given to roadway markings?
- e. Will consideration be given to speed bumps or other initiatives to reduce speeding on this portion of Iona Street?
- f. Can the plan consider placing several square parking (or 90 deg parking) spaces on Clarendon Street between Java and Iona Street?
- g. Can pullout parking spots be installed on Java Street near Clarendon Street?
- h. Can pullout parking spots be installed on Iona Street on the north side closer to Clarendon Street?
- i. Can we have a priority for parking control to patrol the area and enforce parking restrictions?
- j. Can the curbs of the street be painted to indicate a no parking zone?
- k. Can the school develop an education program to notify the parents about the no parking zone?
- l. To what extent can the city hire a private security company to issue parking tickets around Elmdale school (private security)?

- m. To what extent can the city use photo technology to enforce parking (e.g., the parking enforcement officer drives by a vehicle illegally parked and takes a photo of the licence plate. The ticket is mailed to the owner)?

Hampton Park on Island Park Drive has a large parking lot that is lightly used at peak student transport hours.

- a. Is there an opportunity to use Hampton Park as a drop off and pick up point for parents by instituting a shuttle service between Hampton Park and the School?
- b. Could using Hampton Park as a school transport hub help slow down traffic on Island Park?

#### TEACHER PARKING

We wish to maintain good relationships with our neighbours on Java Street. We on Iona are currently dealing with teacher parking, buses, and parent parking. Java neighbours are dealing primarily with parent and teacher parking.

We are supportive of moving the parking lot to Java or even off Clarendon street. We understand it needs to be relocated because it infringes the city of Ottawa's property line. We understand the redesign of the south part of the school will include a ramp for handicap individuals. Thus, the parking lot needs to be relocated to accommodate the redesign of the ramp as well for possible handicap parking.

- a. Is there an opportunity to improve ingress and egress from the teacher parking lot for better traffic flow?

#### PARKING ON MAYFAIR STREET

On Mayfair street, parking is permitted on both sides of the street. Many times, people park on both sides and vehicles traveling north or south bound cannot continue. This is a problem for school buses and other large vehicles such as Canada Post, FedEx and UPS. We have witnessed several instances where the street was impassable due to vehicles parked on both sides.

- a. Can the city consider placing no parking signs on either the west or east side of the Mayfair Street?

- 5. I live in the west Wellington neighbourhood and my children attend Elmdale public school. Overall I think the renovation plans looks good, however I'm disappointed by how much of the yard will be used for parking. In the primary yard, it looks like the entire soccer field will now be a parking lot and the children will be forced to play in a smaller space. For a downtown/urban school, I'm not



sure why so many parking spots are required. Instead, staff should be encouraged to use public transit and/or active commuting.

6. We live immediately adjacent to the school, on the western border. We are one of just two properties - the other, north of us, on Java - that are immediate neighbors of the school. We're writing in anticipation of the February 21st meeting.

For more than 29 years, we have been happy to be adjacent neighbors of an elementary school, even though our three children were attending French public schools, a distance away.

Certainly one of the chief bonuses of our proximity to Elmdale is the playground - which our own children enjoyed and now our granddaughter also occasionally visits when she is at our home. Also, the green grass, trees, space - these are significant attributes in our neighborhood where parks and green space are at a premium. We have been happy that our neighbors are school children - and so we get to enjoy the sounds of children playing, singing, laughing.

For our part, we have tried, over these three decades, to be good neighbors to the Elmdale community. Safety is our biggest concern, since we drive a car and our driveway is adjacent to the school parking lot.

That is why we got in the habit, more than 20 years ago, of **always** backing our car into our own driveway (adjacent to the parking lot). We have a clearer view of pedestrians, cyclists and vehicles that way.

Now that Elmdale school is going to get its long overdue renovation and expansion, you have the opportunity to address some long-standing issues and rough spots in the school/community relationship.

You are well aware of many of the traffic concerns of other neighbors. We share many of their views.

**We believe that the health and safety - of the children, the neighbors and the neighborhood - should be the priority.**

Here are some of the issues we hope you can address in your planning:

### **1. Safety, Health, Traffic, and Air Quality**

Traffic problems, inadequate space for school buses, poor snow clearance - these are problems the school board, the city, the school and the entire neighborhood are well aware of, we believe. While you consider a new enlarged parking area, that conforms to safety concerns and city by-laws, why not consider another possibility?

Create an underground parking lot, beneath the playground along Clarendon. That way you would not have to sacrifice playground space. Another benefit would be that teachers and staff would be able to keep their cars free of snow and ice in winter.

For us, the most serious problem concerns air quality in the neighborhood. This is a health issue not only for us but also young school children.

**Suggestion:**

**The school, school board, and the City should undertake a serious, coordinated campaign of public education and other efforts to explain to parents and others the health dangers of idling. This does not have to wait until the construction is completed.**

Enlist help from **Ottawa Public Health**. Martha Robinson, with the Air Quality dossier, told me yesterday, February 19, that they have appropriate signage available. Martha Robinson recommended speaking with another person with Ottawa Public Health, **Birgit Isernhagan**, who knows about anti-idling signage to help with this. Birgit can be reached at **613-580-2424 x 27912**.

**2. Garbage and debris in northwest corner of parking area and on school property**

In spring, summer and fall, the northwest corner of the parking area becomes a garbage dump. Leaves, yes, but also bottles, plastic containers, dog feces, and other debris pile up and sit there for weeks and months. A large garbage receptacle might help remind people not to litter. Signage, too, might also help.

**Suggestions:**

Incorporate into your design plans receptacles for garbage.

Post signage to discourage littering.

Do some public education with students and families about how to dispose of garbage.

Be certain to adequately fund staff for clean up of your grounds and other exterior areas.

**3. Landscaping, fencing, sod**

We share the fence and also some scrappy weed-like trees and bushes with the school. We also "share" the clouds of dust and dirt from the playground. Over the years, the grass and sod covering the southwest corner of the playground have taken a beating. As a result, the children are usually playing in mud and dirt.

### **Suggestions:**

Please keep us informed about your design choices for fencing and landscaping. We would be happy to talk with you, if possible. We hope that the both the fencing and new landscaping - especially bushes and trees - will be attractive. We also hope that we will have some view of the green space and air, even if you choose a more private fencing type.

We hope that it may be possible to level this area of the schoolyard, adjacent to us, and put in new grass, in order to keep the dust down.

### **4. Opportunity for "green" design**

The school is also a physical plant, almost an industrial plant. Along with green spaces on the outdoors, the school involves a huge HVAC system, garbage and delivery traffic and noise, and related industrial-type activities. If the school design can mitigate some of the ill effects of such a large physical plant, it could position itself as a "green" leader in our neighborhood and save the school board **money**.

### **Suggestions:**

**Consider incorporating green designs such as a "green roof" and solar panels.**

**The Federation of Canadian Municipalities has funds available for such initiatives.**

**The benefits would be: Lower heating and cooling costs; cleaner air as a green roof takes up carbon and manufacturers oxygen; less stormwater; an opportunity for the school to be an environmental leader; the opportunity for learning and teaching experiences in the school.**

### **5. Security**

While we understand the need for lighting to ensure security during off hours, we are uncomfortable with the current lighting system that shines our way, that is on the west side of the building. It is very intense and seems to be aimed horizontally at our home. As a result, we are always closing curtains, blinds, and doors to keep out the unwanted bright lights at night.

### **Suggestion/Query**

**Can you design the external lighting of the school so that fixtures are directed downwards in a way that ensures security but also minimizes uncomfortable lighting for your neighbors?**

Along with all of you, we are looking forward to a beautiful, improved Elmdale School and a safer, healthier environment for all of us in the Elmdale neighborhood.