



R.A. Malatest and Associates Ltd.

**National Capital Region 2009
External Travel Survey - Final
Report**

Ottawa, Ontario

June 2010



National Capital Region 2009 External Travel Survey - Final Report

Ottawa, Ontario

June 2010

HDR | iTRANS

1545 Carling Avenue, Suite 410
Ottawa, ON K1Z 8P9
Tel: (613) 234-7575
Fax: (613) 238-6096
www.hdrinc.com
www.itransconsulting.com

Project # 4817

Client Project Team

Project Manager	Ahmad Subhani – City of Ottawa
Project Team	Pat Griepsma - Ministry of Transportation of Ontario Hanako Cardinal - Ministère des Transports du Québec

R.A. Malatest & Associates Project Team

Project Leader	Robert Malatest, B.A., M.A., C.M.R.P.
Research Manager	Andreas Rose, B.A., B.Sc.
Research Analyst	Jon Wood, B.A.
Field Manager	Kenneth Amin, B.Sc.

HDR | iTRANS Project Team

Project Director	David Kriger, P.Eng., MCIP
Project Manager	Krista Tanaka, P.Eng., P.E.
Technical Team	Kevin Shen, B.Sc. Kunjan Ghimire, M.Eng., EIT

TABLE OF CONTENTS

1. Introduction	1
1.1 Purpose of Report	1
1.2 Organization of Report	1
1.3 Glossary	1
1.4 Acknowledgements.....	2
2. About The Survey.....	4
2.1 Purpose of Survey.....	4
2.2 Survey Sites and Sampling	5
2.3 Types of Data Collected	8
2.4 Data Expansion Methodology	8
3. Key findings	10
3.1 Travel by Time of Day	10
3.2 Travel by Purpose	12
3.3 Travel Breakdown by Origin / Destination	14
3.4 Trips Using Park-and-Ride	20
3.5 Vehicle Occupancy	21
4. Station Summaries	23

Tables

Table 1: Survey Station Daily Traffic Volumes and Survey Type	6
Table 2: Valid Data Completion by Survey Site	7
Table 3: Trip Purpose by Origin for 11-Hour Survey, AM Peak and PM Peak Periods	12
Table 4: Park-and-Ride Trips by Survey Site	20
Table 5: Average Vehicle Occupancy by Purpose	21

Exhibits

Exhibit 1: Survey Area.....	4
Exhibit 2: Survey Site Locations	5
Exhibit 3: Inbound and Outbound Vehicle Trips by Time of Day – Ontario	10
Exhibit 4: Inbound and Outbound Vehicle Trips by Time of Day – Québec	11
Exhibit 5: Trip Purpose by Origin for 11-Hour Survey Period	13
Exhibit 6: Internal and External Vehicle Trips	15
Exhibit 7: Origin and Destinations for 11-Hour Survey Period	15
Exhibit 8: AM Peak Period Origins	16
Exhibit 9: AM Peak Period Destinations	17
Exhibit 10: PM Peak Period Origins.....	19
Exhibit 11: PM Peak Period Destinations.....	19
Exhibit 12: Average Distance Travelled and Vehicle Occupancy.....	22

1. INTRODUCTION

1.1 Purpose of Report

This report summarizes the findings of the 2009 National Capital Region (NCR) External Travel Survey, a travel ‘origin-destination’ survey that was conducted in spring/summer of 2009. The survey was conducted for 23 roadway locations that act as gateways to the National Capital Region (NCR): 18 sites in Ontario and 5 sites in Québec. Two forms of data collection were used – roadside intercept surveys on lower and medium volume roads and licence plate capture with prepaid mail-back surveys for higher volume roads.

The findings are presented in tabular and graphical format mainly according to three levels of detail: overall totals for the survey area, totals for the Québec and Ontario sites and broken down for each of the 23 survey sites. The findings include broad travel characteristics and detailed information about trip purpose for each of the sites surveyed.

This report reflects the expanded survey results. To this end, the survey results were first subjected to a rigorous editing, imputation, expansion and validation process prior to their tabulation and summary.¹

1.2 Organization of Report

The report is organized into four chapters. The remainder of Chapter 1 presents a glossary of key terms, to help the reader understand the findings. Chapter 2 provides some background information to the survey. Chapter 3 presents key findings from the survey and Chapter 4 presents characteristics for the 23 survey sites, as well as for the overall survey area, Québec and Ontario.

1.3 Glossary

The following is a glossary of key terms and their meaning as applied to this report:

- Vehicle trip, or trip, is a single or one-directional movement of one vehicle from one point (origin) to a second point (destination), for a single purpose. For example, the commute from home to work represents one trip. The purpose of this trip is to go to work. However, if the commuter stopped along the way to drop off a child at a daycare, then two trips have been made: first, for the purpose of ‘serving a passenger’ (pick up or drop off) and then to go to work. The survey is focused on the movement of people and accordingly did not capture commercial trips (that is, trips that are made to move goods or to provide services as part of one’s regular job).

¹ The survey process is described in R.A. Malatest & Associates, Survey Methodology Technical Report, prepared for TRANS, January 2010.

- Peak periods are the times of day when the transportation system typically carries the maximum numbers of trips. They typically correspond to the morning or evening commuter peak periods, each of which is assigned here a duration of 3 hours. By definition, the morning (AM) peak period corresponds to trips starting between 6:00 and 8:59. The afternoon (PM) peak period corresponds to trips starting between 15:00 and 17:59.
- Purpose describes the reason that the trip is made. Typically, these are defined in terms of the activity at the destination: for example, “work” refers to the trip to go to work. The following trip purposes are used in this report:
 - Work (usual place of work)
 - Work-related (other than usual place of work – e.g., go to a meeting outside one’s usual place of work). Note that this is not the same as a commercial trip.
 - School
 - Shopping / restaurant
 - Tourism / recreation
 - Visit friends / family
 - Medical / dental visit
 - Drop someone off / pick someone up (serve passenger)
 - Return home (from any venue)
 - Other
- Origin is the location where a trip begins. It is described in terms of a street address, a monument (e.g., a well-known location, an office building, a school, etc.), a street intersection, traffic zone or a district. All survey origins have been geo-coded for precision.
- Destination is the location where a trip ends. It has similar attributes as the trip origin.
- Origin-destination describes both ‘ends’ of a single trip. This term is commonly abbreviated to ‘O-D’.
- Inbound trips are the trips that pass through a survey site heading into the National Capital Region (NCR) from areas outside the NCR.
- Outbound trips are the trips that pass through a survey site heading away from the NCR to external areas.

1.4 Acknowledgements

The NCR 2009 External Travel Survey was commissioned and coordinated by TRANS, a joint transportation planning committee serving the National Capital Region (NCR) with six member agencies including: the National Capital Commission, the Ministère des Transports du Québec, the Ministry of Transportation of Ontario, Ville de Gatineau, the City of Ottawa, and the Société de transport de l’Outaouais. The survey was conducted by R.A. Malatest &

Associates Ltd. HDR Corporation, hereto referred to as HDR | iTRANS, served as a sub-consultant to the team, to provide input on the survey design and to prepare a post-survey analysis of the results.

The direction and guidance of the TRANS' Steering Committee is gratefully acknowledged: in particular, Ahmad Subhani (Project Manager), Hanako Cardinal (Ministère des Transports du Québec) and Pat Griepsma (Ministry of Transportation of Ontario).

The Malatest team, including: Robert Malatest as a Project Leader, Andreas Rose as Research Manager, Jon Wood as a Research Analyst and Kenneth Amin as a Field Manager, has greatly contributed to the successful completion of this project.

This report was prepared by HDR | iTRANS. It was prepared by Krista Tanaka (HDR | iTRANS Project Manager), under the general direction of David Kriger (HDR | iTRANS Project Director) with tabulations and the district summaries prepared by Kevin Shen and Kunjan Ghimire.

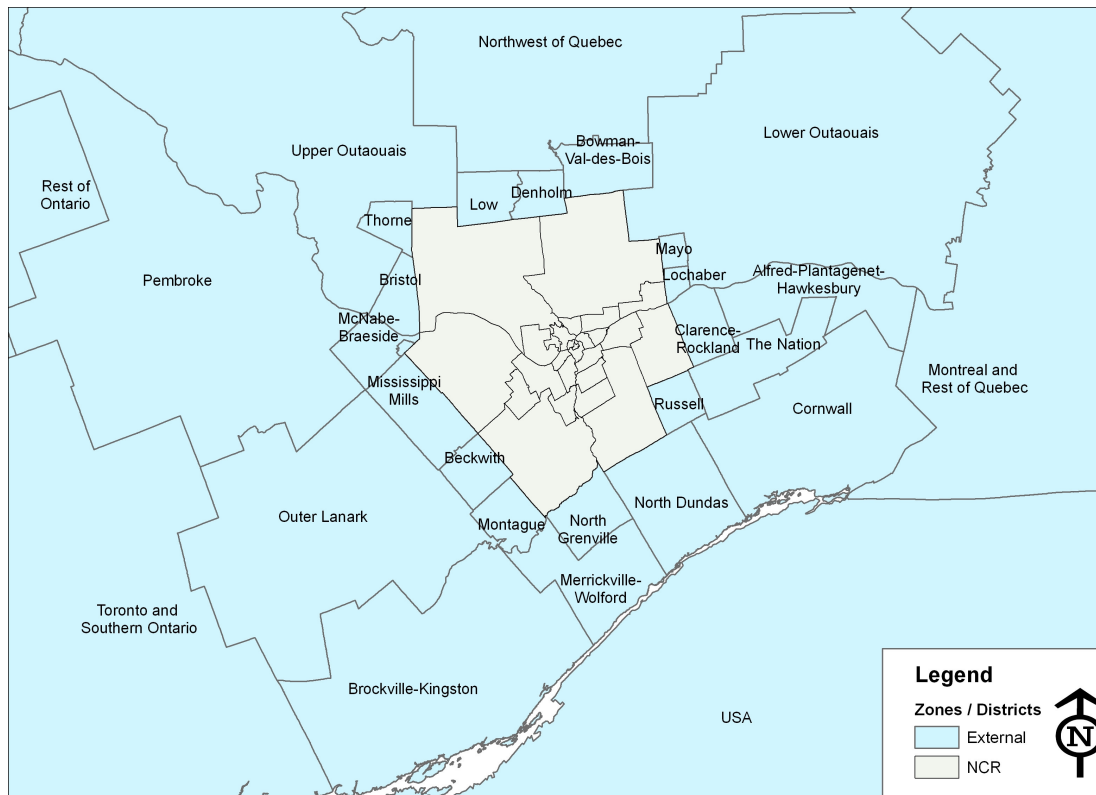
2. ABOUT THE SURVEY

2.1 Purpose of Survey

Origin-destination surveys are used worldwide to provide a detailed picture of current trip patterns and travel choices made by residents of large communities. Information about where people go, as well as why, when and how they choose to get there is an important resource for transportation planners.

The NCR 2009 External Travel Survey is an important follow-up to the household-based 2005 O-D Survey, as it captures information on trip patterns that were not captured in the 2005 survey, specifically trips that originate in, or are destined to, locations outside of the NCR. **Exhibit 1** shows the location of the NCR in relation to the surrounding external districts.

Exhibit 1: Survey Area



The data from this survey will be critical in identifying area-wide transportation infrastructure needs and services, measuring trends and monitoring progress in implementing transportation policies. In addition to collecting origin-destination information, classification and occupancy counts for vehicles travelling on the selected routes during the enumeration day were also collected.

2.2 Survey Sites and Sampling

The survey was conducted for 23 roadway locations, shown in **Exhibit 2**, that act as gateways to the NCR: 18 sites in Ontario and 5 sites in Québec. Four of the original Ontario sites were eliminated from the study due to time constraints in administering the survey. The final sites surveyed therefore do not represent a complete “air-tight” cordon around the NCR. Due to this lack of complete coverage there may be some missing trips on the Ontario side and therefore the results of this survey should be used with caution. It should also be noted that – relative to the size of the urban core - the sites in Québec were somewhat more remote than those in Ontario. In other words, some of the Québec traffic may capture activity related to the more remote, external parts of the NCR than purely internal-external activity as is the case in Ontario, where the city of Ottawa dominates. Two forms of data collection were used – roadside intercept surveys on lower and medium volume roads and licence plate capture with prepaid mail-back surveys for higher volume roads. **Table 1** summarizes the traffic volumes and survey type for each of the sites. The report entitled *Methodology Report 2009 External Travel Survey*, prepared by R.A. Malatest and Associates, describes the details of the survey data collection methods used.

Exhibit 2: Survey Site Locations

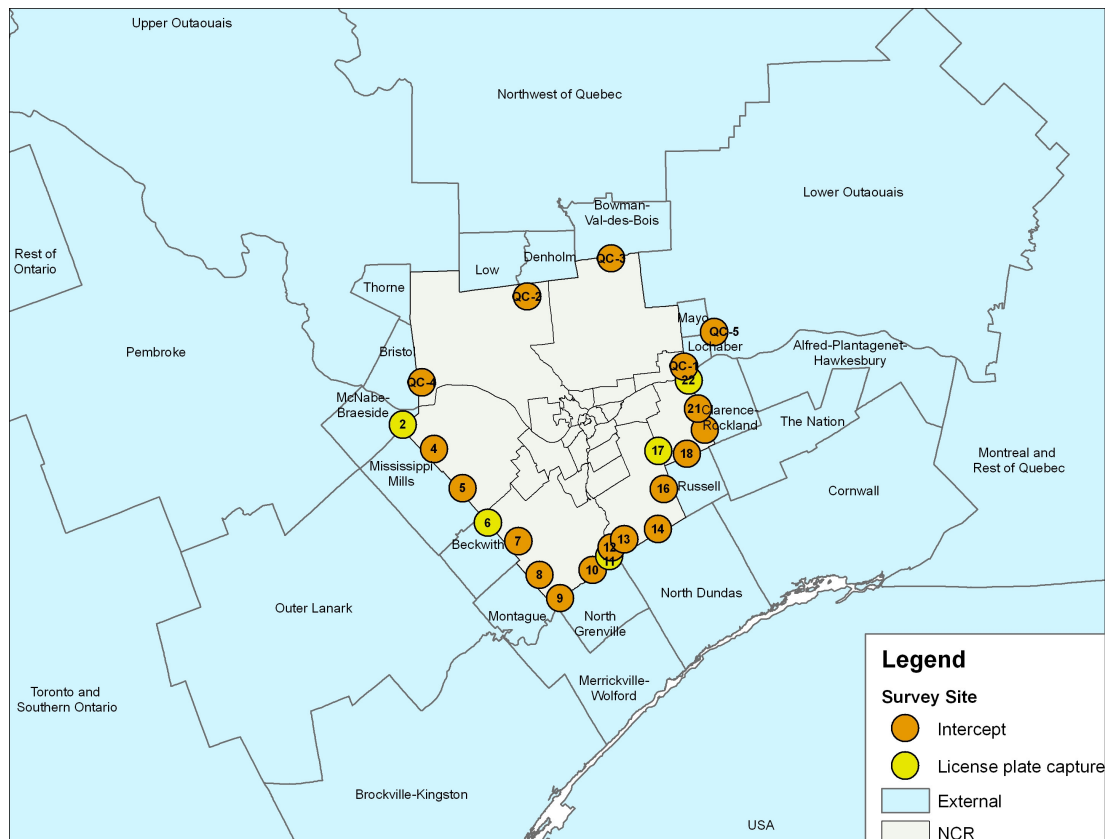


Table 1: Survey Station Daily Traffic Volumes and Survey Type

Station Code	Station Name	Weekday Average Daily Traffic (vpd) ¹	Count Dates	Survey Type
2	Highway 417 West (Near Arnprior)	15,420	Sep. 26 – 28, 2006	Licence Plate Capture with Mailback Survey
4	Rd 20 (Kinburn Side Rd)	2,240	Jun. 22 – Jul. 6, 2009	Roadside Intercept
5	Rd 49 (March Rd)	8,900	May 27 – Jun. 3, 2009	Roadside Intercept
6	Highway 7 (Near Ashton Station Rd)	15,890	May 11 – 15, 2009	Licence Plate Capture with Mailback Survey
7	Rd 10 (Franktown Rd)	4,280	Jun. 10 – 18, 2009	Roadside Intercept
8	Rd 6 (Roger Stevens Dr)	4,080	Jun. 10 – 16, 2009	Roadside Intercept
9	Rd 2 (Donnelly Dr)	1,550	Jun. 17 – 25, 2009	Roadside Intercept
10	Rd 44 (Merlyn Wilson Rd)	4,760	Jun. 17 – 25, 2009	Roadside Intercept
11	Highway 416 (River Rd)	20,730	May 8 – 15, 2009	Licence Plate Capture with Mailback Survey
12	Rd 19 (Rideau River Rd)	3,650	Jun. 1 – 10, 2009	Roadside Intercept
13	Rd 25 (Stagecoach Rd)	2,580	Jun. 2 – 10, 2009	Roadside Intercept
14	Rd 31 (Bank St)	6,870	Jun. 15 – 23, 2009	Roadside Intercept
16	Rd 6 (Victoria St)	3,250	Jun. 2 – 10, 2009	Roadside Intercept
17	Highway 417 East (Near Limoges)	29,450	Oct. 16 – 19, 2006	Licence Plate Capture with Mailback Survey
18	Rd 33 (Rockdale Rd)	6,820	Jun. 8 – 17, 2009	Roadside Intercept
20	Rd 26 (Russell Rd)	5,960	Jun. 16 – 24, 2009	Roadside Intercept
21	Rd 28 (Colonial Rd)	3,460	Jun. 9 – 18, 2009	Roadside Intercept
22	Rd 174	21,910	Jun. 9 – 17, 2009	Licence Plate Capture with Mailback Survey
QC-1	Route 148 Est (près de Masson)	7,710	May 25 – Jun 2, 2009	Roadside Intercept
QC-2	Route 105 (Farrellton)	4,490	May 27 – Jun. 3, 2009	Roadside Intercept
QC-3	Route 309 (Notre-Dame-de-la Salette)	2,400	May 19 – 26, 2009	Roadside Intercept
QC-4	Route 148 Ouest (près de Quyon)	3,090	May 20 – 27, 2009	Roadside Intercept
QC-5	Autoroute 50 (près de Thurso)	5,260	May 26 – Jun. 2, 2009	Roadside Intercept

¹ Weekday Average Daily Traffic = average of Tuesday, Wednesday and Thursday 24-hour, two-way, traffic volumes

The survey was conducted in spring / summer 2009 (from May 19 – June 25, 2009). The surveys were conducted on Tuesday, Wednesday or Thursday between the hours of 6:00 - 11:59 and 14:00 – 18:59 for an 11-hour survey period. The survey sampled 18,708 personal vehicle trips at the 23 survey locations. After data cleaning and validation, the valid survey completions yielded detailed information on 17,744 weekday trips that were made, into or out of the NCR through the survey sites. The valid completions for each survey site are shown in **Table 2**.

Table 2: Valid Data Completion by Survey Site

Station Code	Station Name	Number of Trips Surveyed	% of 11-h Survey Period Traffic Volume ¹
2	Highway 417 West (Near Arnprior) ²	701	6.3%
4	Rd 20 (Kinburn Side Rd)	630	40.4%
5	Rd 49 (March Rd)	847	12.8%
6	Highway 7 (Near Ashton station Rd)	824	7.2%
7	Rd 10 (Franktown Rd)	695	21.5%
8	Rd 6 (Roger Stevens Dr)	630	21.1%
9	Rd 2 (Donnelly Dr)	369	32.6%
10	Rd 44 (Merlyn Wilson Rd)	706	20.4%
11	Highway 416 (River Rd)	713	4.8%
12	Rd 19 (Rideau River Rd)	806	29.5%
13	Rd 25 (Stagecoach Rd)	599	31.4%
14	Rd 31 (Bank St)	984	19.6%
16	Rd 6 (Victoria St)	668	28.7%
17	Highway 417 East (Near Limoges) ²	1,129	5.2%
18	Rd 33 (Rockdale Rd)	985	20.2%
20	Rd 26 (Russell Rd)	764	17.5%
21	Rd 28 (Colonial Rd)	669	26.4%
22	Rd 174	1,492	9.7%
QC-1	Route 148 Est (près de Masson)	872	15.8%
QC-2	Route 105 (Farrellton)	778	24.3%
QC-3	Route 309 (Notre-Dame-de-la Salette)	569	32.9%
QC-4	Route 148 Ouest (près de Quyon)	589	26.8%
QC-5	Autoroute 50 (près de Thurso)	725	18.8%
Total		17,744	13.3%

¹ 11-h survey period traffic volumes are based on the average weekday (Tuesday, Wednesday and Thursday) traffic volumes for the following periods: 6:00 -11:59 and 14:00 – 18:59 and include commercial vehicles. Data were obtained from automated traffic counts undertaken by MTO, MTQ and City of Ottawa during the time of the surveys.

² Site for which ATR data were not collected during the survey.

The final dataset represents 13.3% of all traffic passing through the survey sites during the 11-hour survey period and provides a rich, comprehensive database for the study area. The percentage of valid completions varied between roadway intercept sites and licence plate capture sites. On average the number of valid completions represented 21.7% of the traffic at roadway intercept sites. For licence plate capture sites, the average percentage was 6.5%. It should be noted that licence plate information was only captured for Ontario plates.

2.3 Types of Data Collected

Unlike other O-D surveys, which collect information on household, persons and trips, the typical external survey usually collects only trip-related information. The NCR 2009 External Travel Survey collected the following information as part of the surveys:

- Origin
- Departure time from origin
- Destination
- Arrival time at destination
- Purpose of trip
- Use of park-and-ride facility as part of the trip
- Occurrence of a trip in the opposite direction on the same route that day and time of that trip
- Frequency with which the trip is made
- Licence plate issuing province / state*
- Vehicle type (personal, motorcycle, commercial, or other)*
- Total number of occupants in the vehicle*

* denotes data items recorded by the field personnel during the roadside interviews.

2.4 Data Expansion Methodology

After the survey data were collected, the number of surveyed trips passing through each site was expanded to equal the number of personal vehicle trips along the route during an average weekday, by direction and by hour, during the 11-hour survey period using of the following expansion method.

1. *Average weekday traffic volumes were determined by hour and by direction for each site.* Recent Automated Traffic Recorder (ATR) counts were provided by the City of Ottawa, the MTO or MTQ for each of the survey locations. When possible, ATR counts were collected during the survey day as well as a few days before or after the survey. Otherwise, the jurisdiction provided the most recent counts available for the location. These counts included an hourly count of all vehicles passing through the site. Average weekday traffic volumes, by hour and by direction, were determined for the 11-hour survey period for each site, by averaging the hourly volumes for all typical weekdays (Tuesday, Wednesday or Thursday) for which traffic data were available.

2. *Percentage of personal vehicle trips was determined by hour and direction for each site.* Classification and Occupancy (C & O) counts undertaken at the time of the surveys were used to determine the portion of the total traffic volumes that consisted of personal vehicle trips versus commercial vehicle trips.
3. *Number of personal vehicle trips was determined by hour and direction for each site.* Average weekday traffic volumes were multiplied by the percentage of personal vehicle trips to determine the number of personal vehicle trips passing through each site by hour and direction for the 11-hour survey period.
4. *Expansion factor was determined and applied.* The expansion factor was determined by dividing the number of personal vehicle by the number of surveyed trips for each site by hour and by direction. The expansion factor was then applied to the surveyed trips to expand surveyed trips to personal vehicle trips.

Based on hourly traffic volumes from Weekday Average Daily Traffic data, 133,793 vehicles passed through the sites during the 11-hour survey period. Out of which, 17,744 valid trips were surveyed and expanded to 116,456 personal vehicle trips for all sites over the 11-hour survey period. Expansion was done by site, direction and by hour.

3. KEY FINDINGS

The numbers shown in the exhibits and tables in this chapter are based on the expanded results of the NCR 2009 External Travel Survey.

3.1 Travel by Time of Day

Exhibit 3 and **Exhibit 4** present the hourly distribution of start times of vehicle trips by time of day, for trips passing through the survey sites in Ontario and Québec, respectively. Note that the hourly distribution of trips only includes those trips for which survey respondents were able to provide a specific start time. Trips for which respondents provided a start time range were not included in the summary.

Exhibit 3: Inbound and Outbound Vehicle Trips by Time of Day – Ontario

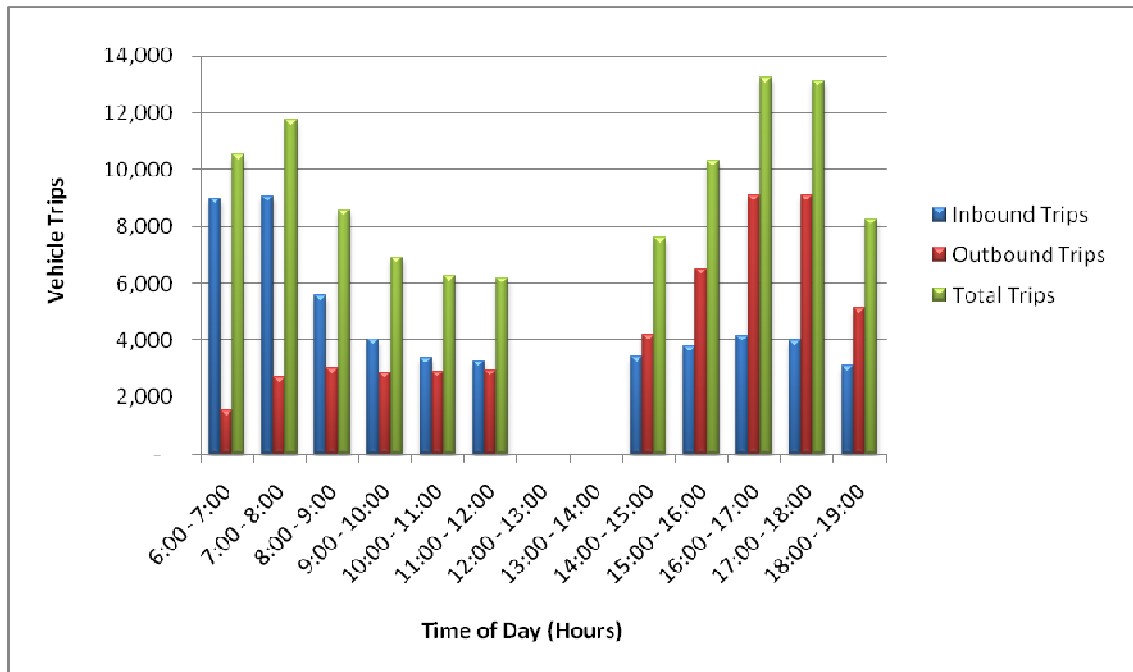
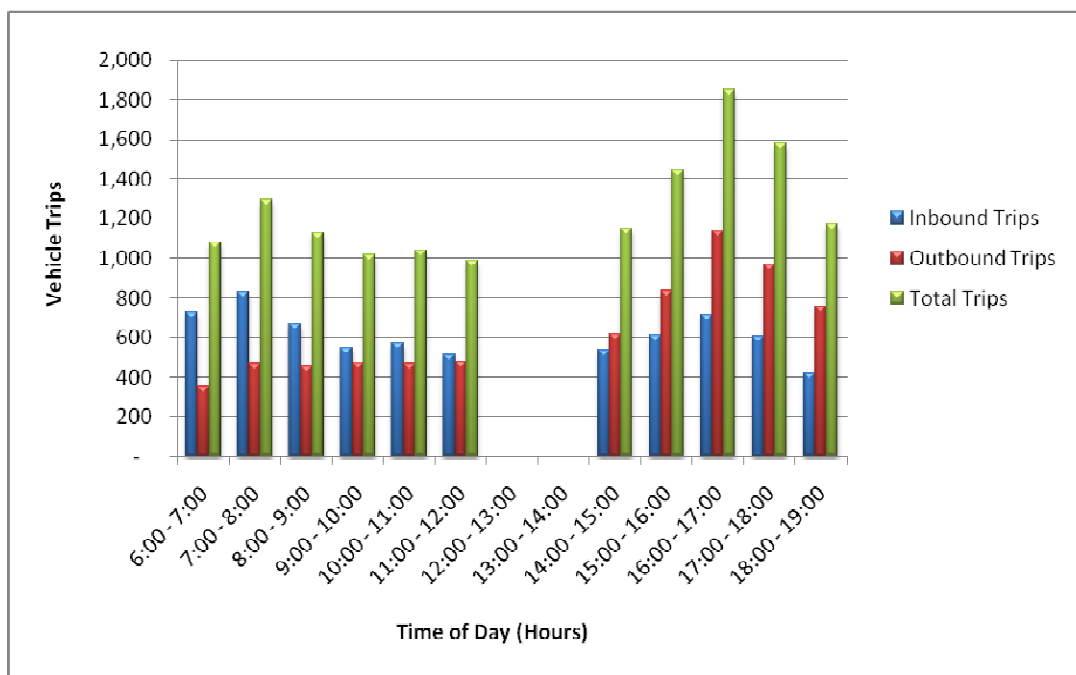


Exhibit 4: Inbound and Outbound Vehicle Trips by Time of Day – Québec



Key points related to the distribution of vehicle trips by time of day are:

- Peak times of travel for trips passing through the survey sites at both the Québec and Ontario survey locations are the two commuter (AM and PM) peak periods.
- It can be seen from **Exhibit 3** and **Exhibit 4** that in the AM period, inbound traffic volumes are higher than the outbound traffic volumes and during the PM peak period the number of outbound trips is higher than the inbound trips for both Ontario and Québec sites.
- The single highest hourly volume of trips occurred in the PM peak period, between 16:00 and 16:59, during which time approximately 13,250 trips passed through the Ontario survey sites and approximately 1,850 trips passed through the Québec sites, into and out of the NCR.
- The total number of trips passing through the Ontario sites is much greater than the total number of trips passing through the Québec sites.
- There is more of a balance between inbound and outbound trips on the Québec side, than on the Ontario side. One possible explanation is that the survey stations on the Québec side are farther removed from the urban area than they are on the Ontario side. Their location reflects political boundaries, not really the boundary of the urban area. Therefore some of the surveys may have been conducted in the midst of an economic area, with commuters going in both directions. However, it should be noted that there is a stronger AM inbound / PM outbound orientation to the Québec trips; it is just not as pronounced as it is on the Ontario side.

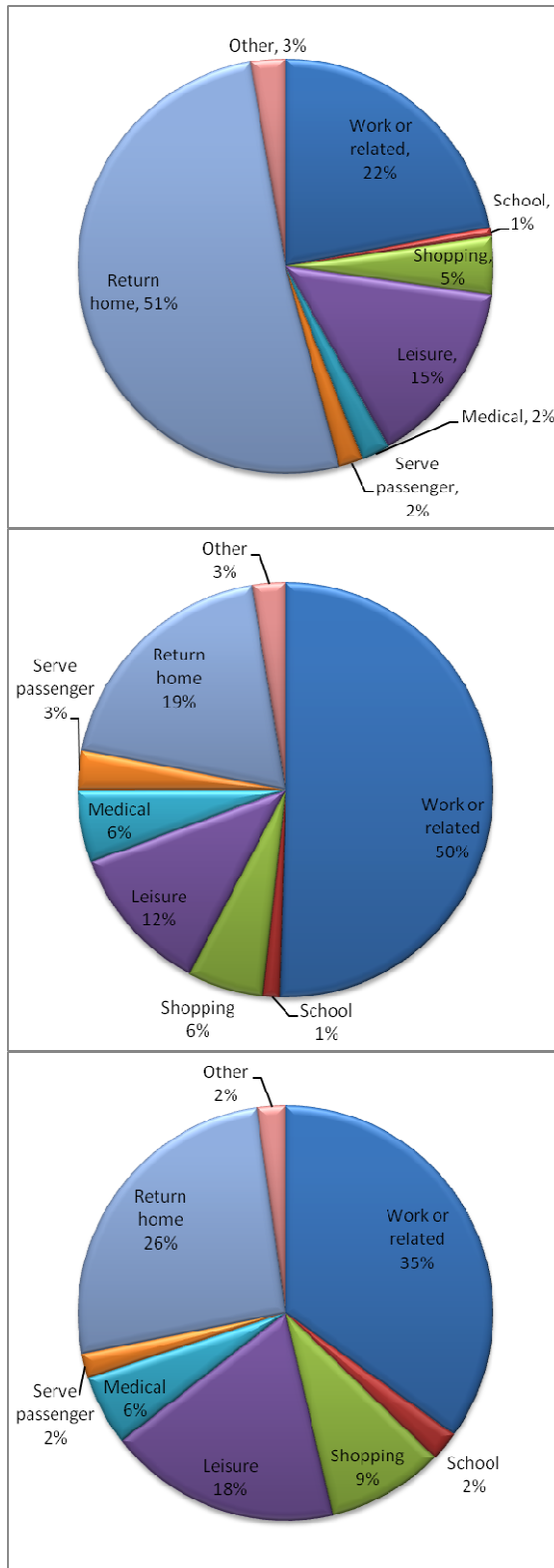
3.2 Travel by Purpose

The survey included a question which asked respondents what the purpose of their trip was. **Table 3** provides a summary of the trips by purpose for the 11-hour survey period as well as the AM and PM peak periods. The data are summarized based on the origin of the trips, i.e., trip originating in the NCR, External Ontario or External Québec. **Exhibit 5** summarizes the information in a graphical format.

Table 3: Trip Purpose by Origin for 11-Hour Survey, AM Peak and PM Peak Periods

Time	Trip Purpose	Originating in NCR		Originating in External Ontario		Originating in External Québec	
11-Hour Survey Period	Work or related	12,340	22%	26,340	50%	2,870	35%
	School	410	1%	700	1%	190	2%
	Shopping	2,500	5%	3,090	6%	750	9%
	Leisure	8,150	15%	6,120	12%	1,490	18%
	Medical	1,240	2%	2,920	6%	450	5%
	Serve passenger	1,060	2%	1,610	3%	160	2%
	Return home	28,790	51%	10,070	19%	2,130	26%
	Other	1,530	3%	1,380	3%	180	2%
	Total	56,020	100%	52,230	100%	8,220	100%
AM Peak Period	Work or related	5,860	66%	20,220	87%	1,670	72%
	School	130	1%	350	1%	100	4%
	Shopping	270	3%	380	2%	140	6%
	Leisure	1,250	14%	740	3%	130	6%
	Medical	150	2%	620	3%	160	7%
	Serve passenger	200	2%	350	1%	20	1%
	Return home	660	7%	370	2%	60	3%
	Other	310	4%	180	1%	20	1%
	Total	8,830	100%	23,210	100%	2,300	100%
PM Peak Period	Work or related	3,500	13%	1,580	14%	440	16%
	School	120	0%	160	1%	30	1%
	Shopping	980	4%	800	7%	140	5%
	Leisure	1,970	7%	2,210	19%	710	25%
	Medical	310	1%	250	2%	80	3%
	Serve passenger	540	2%	560	5%	100	4%
	Return home	19,390	72%	5,680	49%	1,260	45%
	Other	330	1%	320	3%	40	1%
	Total	27,140	100%	11,560	100%	2,800	100%

Exhibit 5: Trip Purpose by Origin for 11-Hour Survey Period



Vehicle Trips
Originating in the NCR

Vehicle Trips
Originating in External Ontario

Vehicle Trips
Originating in External Québec

Key points related to trip purpose are as follows:

- Work is the primary purpose cited for trips entering the NCR from external areas of Ontario and Québec; 50% and 35%, respectively, for all trips during the 11-hour survey period.
- Return home is the purpose cited most for trips exiting the NCR for external areas during the 11-hour survey period at 51%.
- During the AM peak period, the work purpose represents 87% of trips entering the NCR from Ontario external districts, 72% of trips entering the NCR from Québec external districts, and 66% of trips exiting the NCR for external districts in Ontario and Québec. The lower percentage of work trips to the NCR during the AM peak could be a result of the bi-directional commuting on the Québec side.
- During the PM peak period, the return home purpose represents 49% of trips entering the NCR from Ontario external districts, 45% of trips entering the NCR from Québec external districts, and 72% of trips exiting the NCR for external districts in Ontario and Québec.
- Leisure trips account for 12-18% of trips during the 11-h survey period.
- Shopping trips account for 4-9% of all trips during the 11-hour survey period.
- Medical trips represent approximately 6% of trips during the survey period for trips originating outside of the NCR from both Ontario external and Québec external areas.
- Serve passenger purpose and school purpose trips represent the lowest proportion of trips during the 11-hour survey periods, regardless of the origin. School trips would likely represent a higher portion of total trips if the survey were conducted during the school year.

3.3 Travel Breakdown by Origin / Destination

Exhibit 6 summarizes the total number of vehicle trips during the 11-hour survey period going between internal and external districts, those travelling just within the NCR, and those travelling through the NCR. The aggregation of trips from the site level to the district level was done by assigning the trip ends (either origin or destination) reported for each trip to the district or zone based on the geographic location geo-coded during data input.

Exhibit 7 shows vehicle trips between geographic areas such as trips travelling between the NCR and Ontario External or Québec External during the 11-hour survey period.

Exhibit 6: Internal and External Vehicle Trips

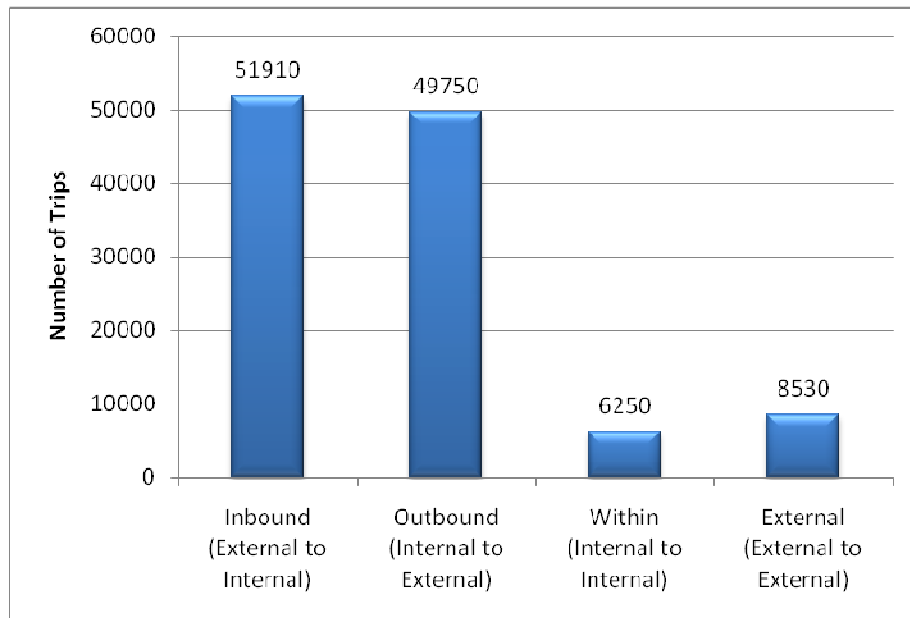
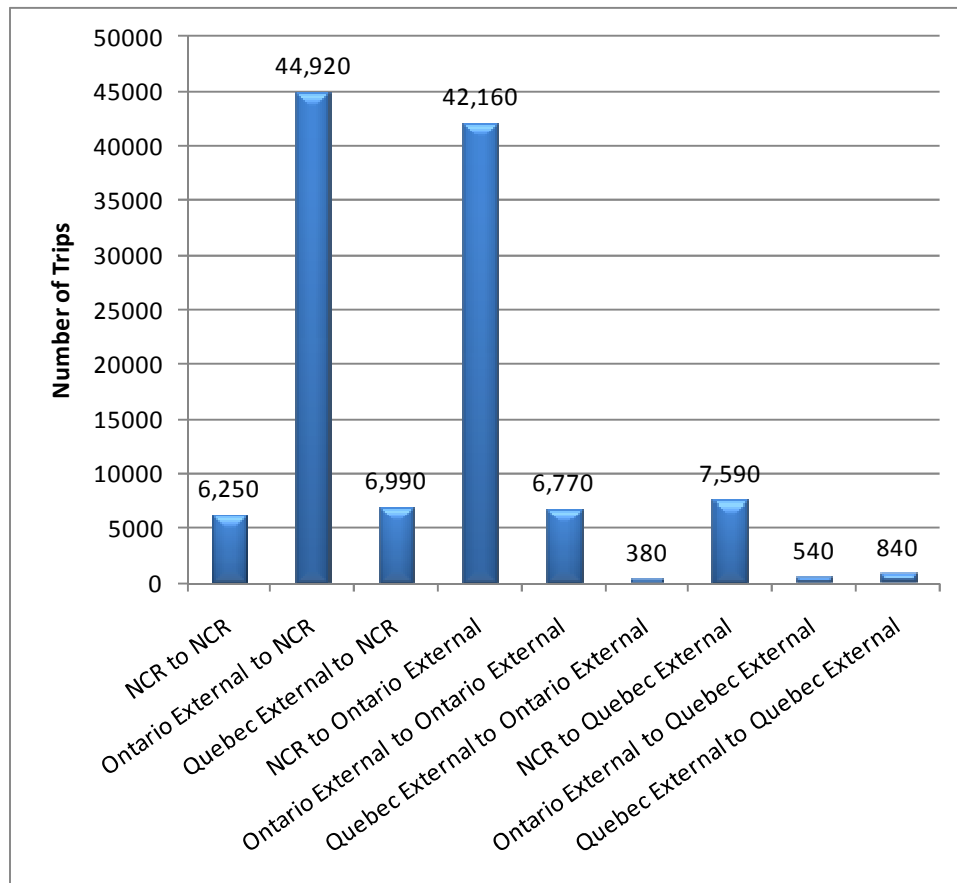


Exhibit 7: Origin and Destinations for 11-Hour Survey Period



Key points related to trip origin and destinations during the 11-hour survey period are as follows:

- Inbound and outbound vehicle trips (trips between external and internal districts – either way) represent 87% of all trips travelling through the survey sites during the 11-hour survey period.
- Trips passing through the NCR, travelling from one external district to another, account for approximately 7% of all trips during the 11-hour survey period.
- Note that there were some trips captured that had an origin and a destination within the NCR (internal to internal trips). These trips represent approximately 6% of the overall trips and are likely due to the location of the survey sites (just within the NCR in some instances).

Exhibit 8 and **Exhibit 9** show the AM peak period origins and destinations, respectively.

Exhibit 8: AM Peak Period Origins

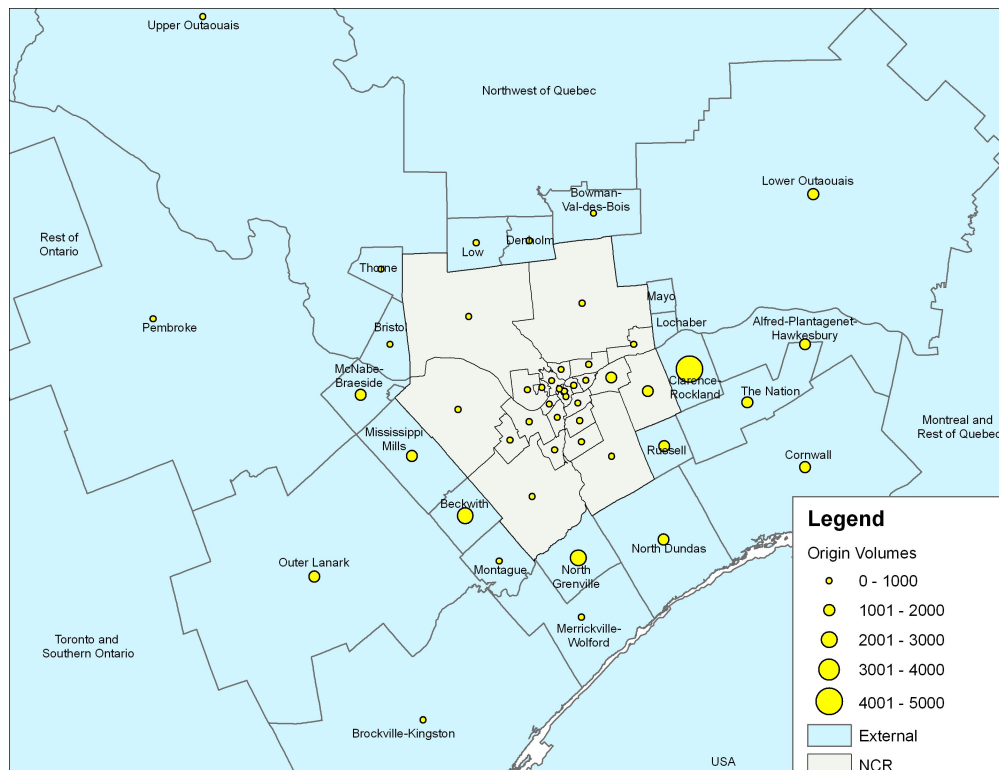
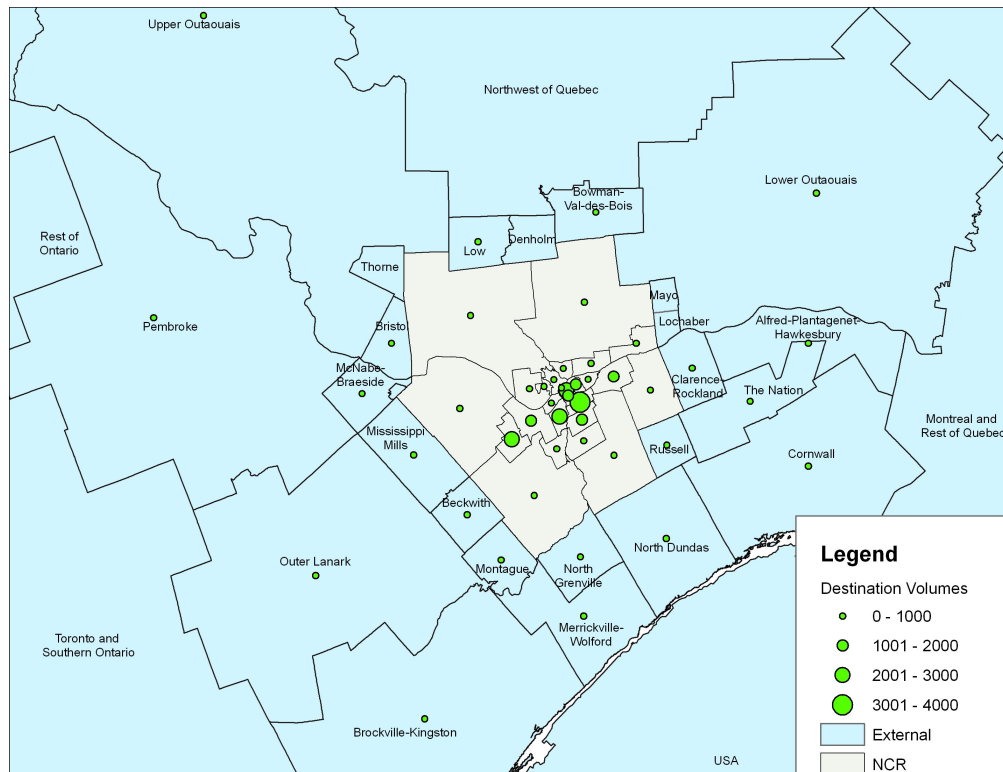


Exhibit 9: AM Peak Period Destinations



Key points related to trip origin and destinations during the AM peak period are as follows:

- The trend is for inbound trips during the AM peak period.
- Inbound and outbound trips (trips between external and internal districts – either way) represent 88% of all trips travelling through the survey sites during the AM peak period.
- Approximately 62% of the trips passing through the survey sites are going from Ontario External districts to NCR.
- Trips passing through the NCR, travelling from one external district to another, account for approximately 6% of all trips during the AM peak period.
- The top five origins during the AM peak period are:
 - Clarence / Rockland
 - Beckwith
 - North Grenville
 - Russell
 - The Nation
- The top five destinations during the AM peak period are:
 - Alta Vista
 - Ottawa Centre
 - Merivale
 - Kanata / Stittsville
 - Ottawa Inner Area

These destinations suggest that the downtown areas are not the only key attractors for external commuters: the hospital campuses in Alta Vista and the high-technology workplaces in Merivale and Kanata / Stittsville are prominent.

Exhibit 10 and **Exhibit 11** show the PM peak period origins and destinations, respectively.

Key points related to trip origin and destinations during the PM peak period are as follows:

- The trend is for outbound trips during the PM peak period.
- Inbound and outbound trips (trips between external and internal districts – either way) represent 89% of all trips travelling through the survey sites during the PM peak period.
- Approximately 54% of the trips passing through the survey sites are going from the NCR to Ontario External districts.
- Trips passing through the NCR, travelling from one external district to another, account for approximately 7% of all trips during the PM peak period.
- The top five origins during the PM peak period are the reverse of the AM destinations:
 - Alta Vista
 - Kanata / Stittsville
 - Ottawa Centre
 - Merivale
 - Ottawa Inner Area
- The top five destinations during the PM peak period are the reverse of the AM origins:
 - Clarence / Rockland
 - North Grenville
 - Beckwith
 - Russell
 - Mississippi Mills

Exhibit 10: PM Peak Period Origins

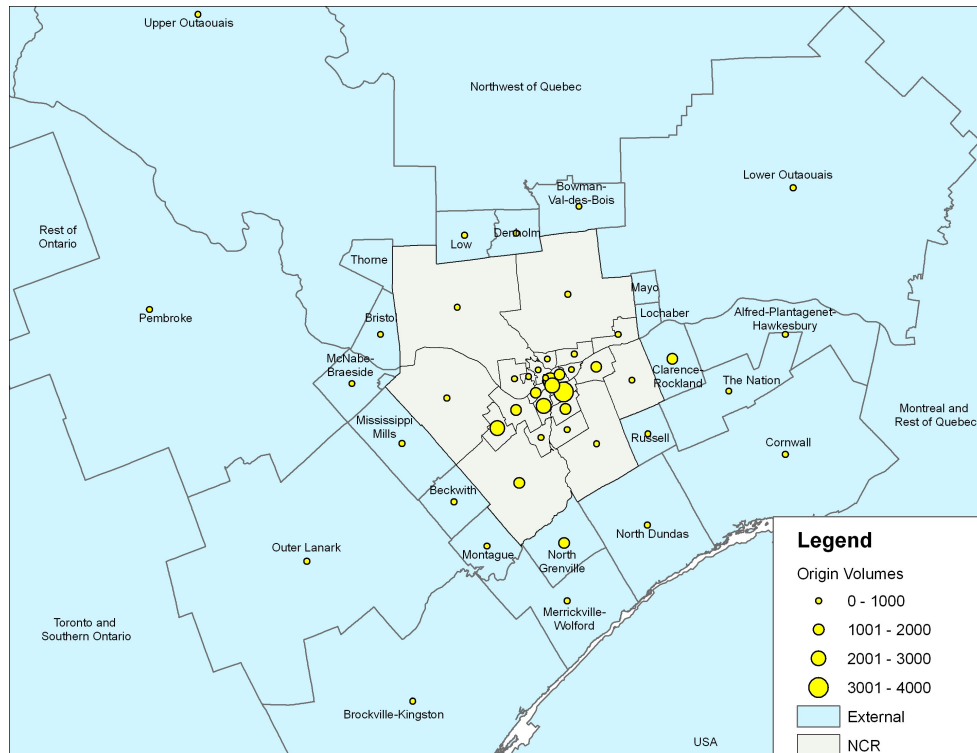
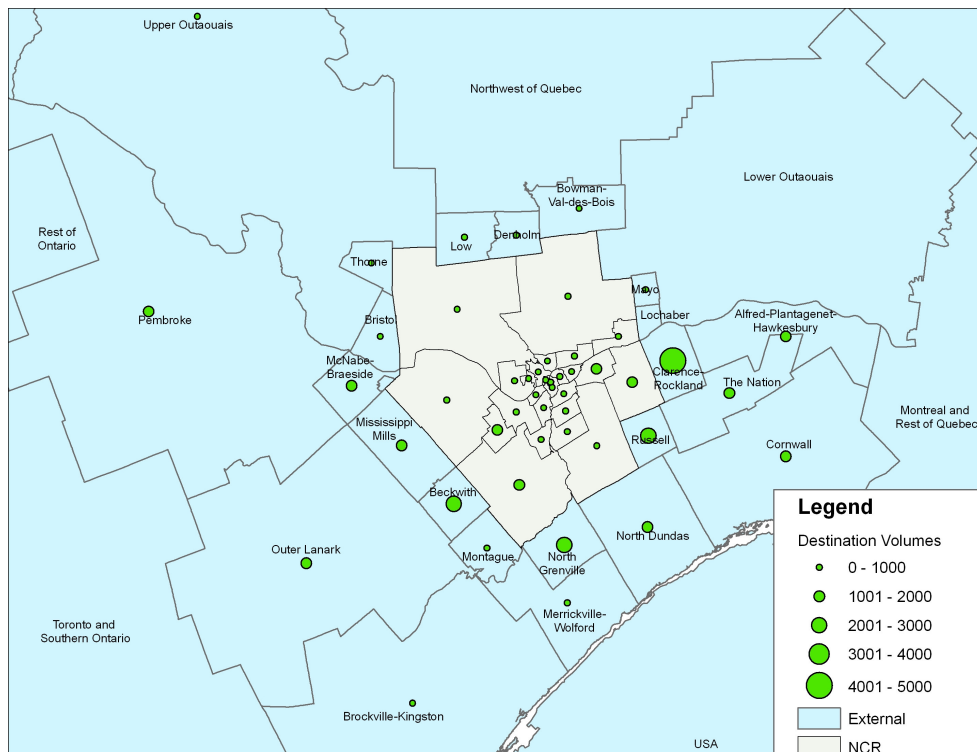


Exhibit 11: PM Peak Period Destinations



3.4 Trips Using Park-and-Ride

The survey asked if respondents used park-and-ride facilities as part of their trip. **Table 4** summarizes the inbound AM peak period trips that include a park-and-ride component by site. Sites with higher than average percentage of park-and-ride trips are highlighted in grey in the table.

Table 4: Park-and-Ride Trips by Survey Site

Station Code	Station Name	Inbound AM Peak Period Park-and-Ride Trips	Total Inbound AM Peak Period Trips	% Park-and-Ride Trips
2	Highway 417 West (Near Arnprior)	80	1,820	4.4%
4	Rd 20 (Kinburn Side Rd)	10	310	3.2%
5	Rd 49 (March Rd)	50	1,500	3.3%
6	Highway 7 (Near Ashton station Rd)	180	2,420	7.4%
7	Rd 10 (Franktown Rd)	10	720	1.4%
8	Rd 6 (Roger Stevens Dr)	10	590	1.7%
9	Rd 2 (Donnelly Dr)	0	200	0.0%
10	Rd 44 (Merlyn Wilson Rd)	10	490	2.0%
11	Highway 416 (River Rd)	220	2,590	8.5%
12	Rd 19 (Rideau River Rd)	0	540	0.0%
13	Rd 25 (Stagecoach Rd)	10	470	2.1%
14	Rd 31 (Bank St)	30	1,010	3.0%
16	Rd 6 (Victoria St)	0	340	0.0%
17	Highway 417 East (Near Limoges)	140	5,070	2.8%
18	Rd 33 (Rockdale Rd)	10	520	1.9%
20	Rd 26 (Russell Rd)	20	1,110	1.8%
21	Rd 28 (Colonial Rd)	20	610	3.3%
22	Rd 174	370	3,260	11.3%
QC-1	Route 148 Est (près de Masson)	50	780	6.4%
QC-2	Route 105 (Farrellton)	0	420	0.0%
QC-3	Route 309 (Notre-Dame-de-la Salette)	0	260	0.0%
QC-4	Route 148 Ouest (près de Quyon)	10	290	3.4%
QC-5	Autoroute 50 (près de Thurso)	10	480	2.1%
Total		1,240	25,800	4.8%

Key points related to the trips that contained park-and-ride are as follows:

- 4.8% of the trips through the survey sites included park-and-ride as part of the trip.
- Highest park-and-ride use was observed for Ottawa Road 174 representing 11.3% of total trips entering the NCR through that site during the AM peak period.

- None of the trips entering the NCR on Route 105 near Farrellton, Road 2 (Donnelly Dr), Road 19 (Rideau River Road) or Road 6 (Victoria Street) included park-and-ride.

3.5 Vehicle Occupancy

Vehicle occupancy data were collected by the surveyors at roadside intercept sites and reported by the respondents for the mail back surveys. **Table 5** summarizes the average vehicle occupancy by purpose and geographic area.

Exhibit 12 shows the trend between distance travelled and the average number of persons per vehicle for survey sites.

Table 5: Average Vehicle Occupancy by Purpose

Purpose	Average Persons per Vehicle		
	All Survey Sites	Ontario Sites	Québec Sites
Work or work related	1.21	1.20	1.26
School	1.33	1.36	1.26
Shopping	1.61	1.64	1.51
Leisure	1.64	1.64	1.63
Medical	1.66	1.64	1.74
Serve passenger	1.77	1.79	1.64
Return Home	1.38	1.38	1.37
Other	1.55	1.54	1.61

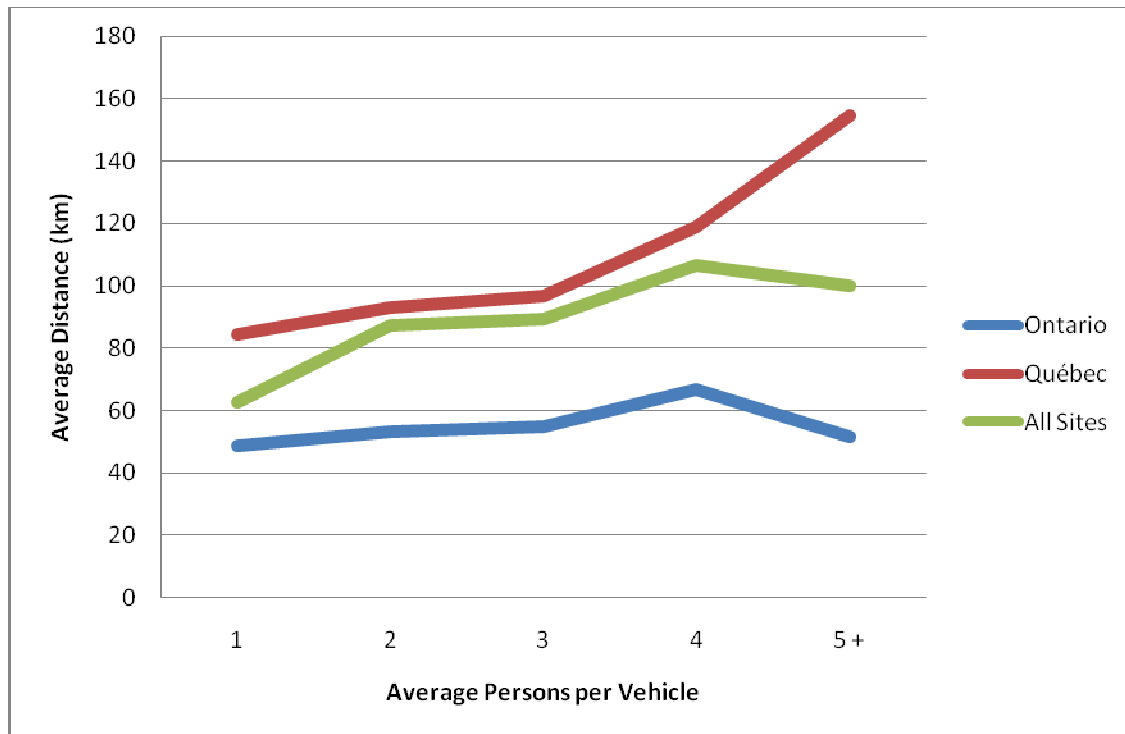
Key points related to vehicle occupancy and trip purpose are as follows:

- The highest vehicle occupancy tends to be for the purpose of serving passengers for Ontario sites (1.79 persons per vehicle) and for the medical purpose for Québec sites (1.74 persons per vehicle).
- Generally, the lowest vehicle occupancies are for work, school and return home trips.

Key points related to vehicle occupancy and distance travelled are as follows:

- Generally vehicle occupancy tends to increase with an increase in distance travelled for all sites, although occupancy rises more slowly for the Ontario sites than for the Québec sites by distance travelled. The distance – occupancy relationship on the Ontario side, in fact, peaks at 4 persons per vehicle, whereas it increases significantly on the Québec side.
- Average distances travelled for Québec sites are significantly longer than those for Ontario sites.

Exhibit 12: Average Distance Travelled and Vehicle Occupancy



4. STATION SUMMARIES

This section provides a two-page summary of travel patterns for each of the 23 survey stations.

Each pair of pages presents:

- A map of the survey site
- A summary of traffic statistics
- A summary of vehicle trips by time periods
- A summary of vehicle trips by purpose
- A graph depicting the hourly distribution of inbound and outbound vehicle trips
- A graph showing the distance travelled by purpose
- Two maps showing the inbound and outbound origins and destinations for the AM peak period

Note that the vehicle trips shown in each two-page summary reflect only those trips that were recorded at each site.

It should be noted that inbound trips are higher than outbound trips during AM peak period and outbound trips are higher than inbound trips during the PM peak period for all survey sites except for Site 18 -Rd 33 (Rockdale Road). This might be due to the location of survey station which was located approximately 500 m north of Highway 417 on Rockdale Road. From this site, there are several options to travel to the NCR which are as follows:

- Option 1 : Driving approximately 1.3 km northbound on Rockdale Road and turning westbound on Divine Road to get onto Highway 417
- Option 2: Driving approximately 4 km northbound on Rockdale Road and turning westbound on Russell Road
- Option 3: Driving approximately 500 m southbound on Rockdale Road and turning westbound on Highway 417

During data collection, only the northbound trips were considered as inbound trips and all the southbound trips were considered as outbound trips for Site 18. However, it can be seen from option 3 that inbound trips (trips to the NCR) can be made by driving southbound to Highway 417 and continuing on Highway 417 westbound.

Site 2 - Highway 417 West (Near Arnprior)



2009 TRAFFIC STATISTICS

Average Daily Traffic ¹	15,420
Weekday Average Daily Traffic ¹	15,420
11-h Weekday Two-Way Traffic ¹	10,720
11-h Weekday EB Traffic ¹	5,310
11-h Weekday WB Traffic ¹	5,410
11-h to 24-h Weekday Factor (EB) ¹	1.43
11-h to 24-h Weekday Factor (WB) ¹	1.45
% Personal Vehicles (11-h)	85%
% Commercial Vehicles (11-h)	15%

¹ Includes commercial vehicles

Summary of Personal Vehicle Trips by Time Period

	11-Hour	AM Peak	PM Peak
Both Directions	9,160	2,520	3,120
Inbound	4,770	1,820	1,300
Outbound	4,390	700	1,810
Directional Split	0.52	0.72	0.58
Park & Ride	-	130	110

Note: 11-Hour Survey Period: 6:00 - 11:59 & 14:00 - 18:59

AM Peak Period 6:00 - 8:59

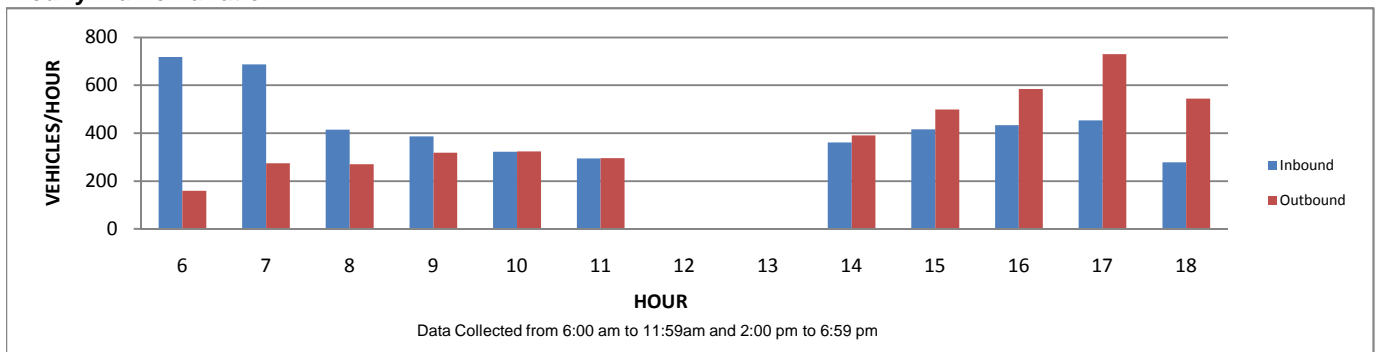
PM Peak Period 15:00 - 17:59

Inbound = Eastbound ; Outbound = Westbound

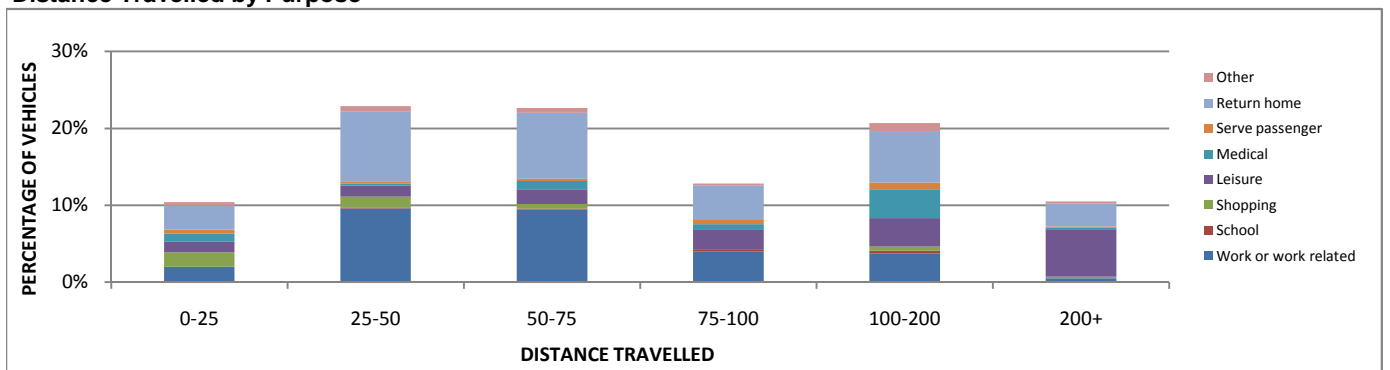
Trips by Purpose for Personal Vehicle Trips

Trip Purpose	No. of Trips	% of Trips	Avg. Persons per veh.	Avg. Distance per Trip (km)
Work or work related	2,680	29%	1.26	80
School	80	1%	1.10	95
Shopping	430	5%	1.44	65
Leisure	1,560	17%	1.72	290
Medical	660	7%	1.88	120
Serve passenger	240	3%	2.29	140
Return home	3,200	35%	1.46	120
Other	310	3%	1.90	150
Total	9,160	100%	1.63	135

Hourly Traffic Variation

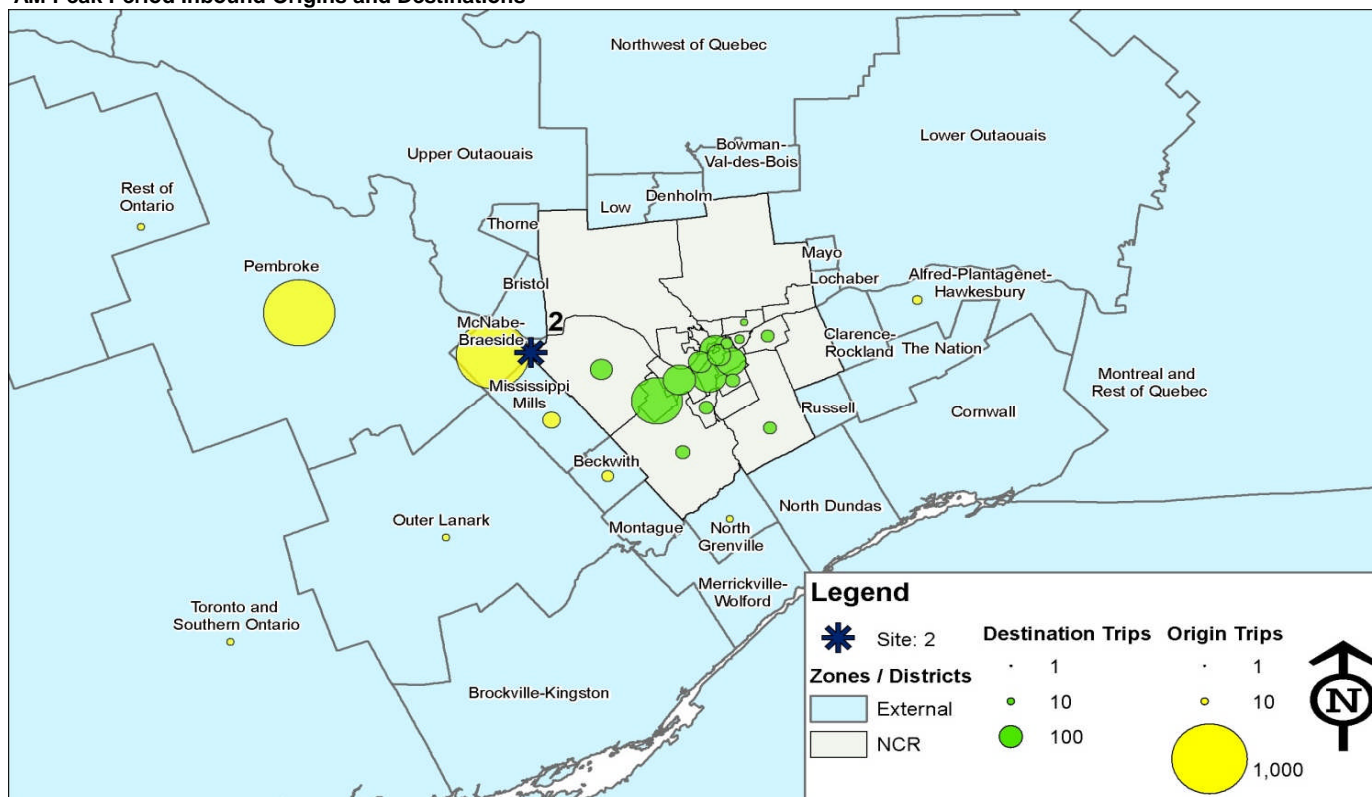


Distance Travelled by Purpose

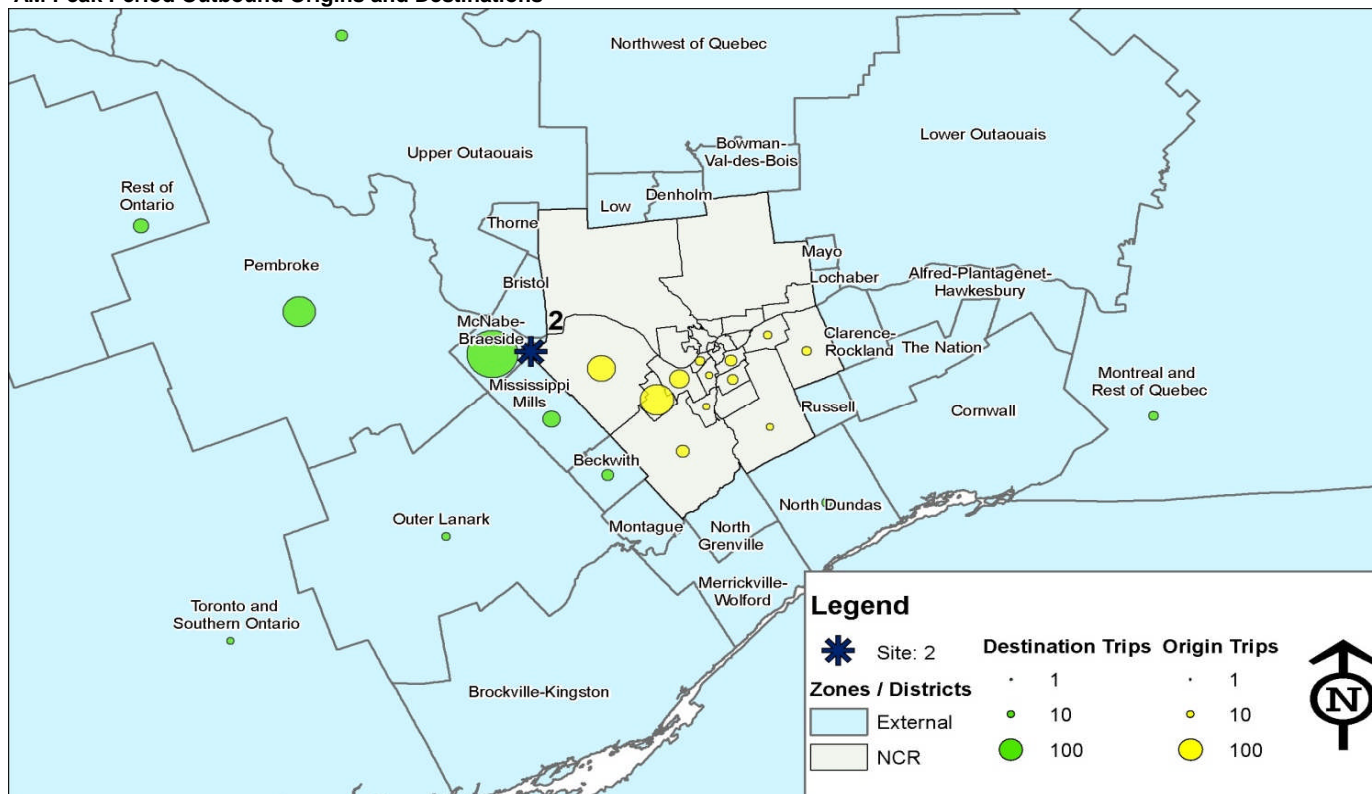


Site 2 - Highway 417 West (Near Arnprior)

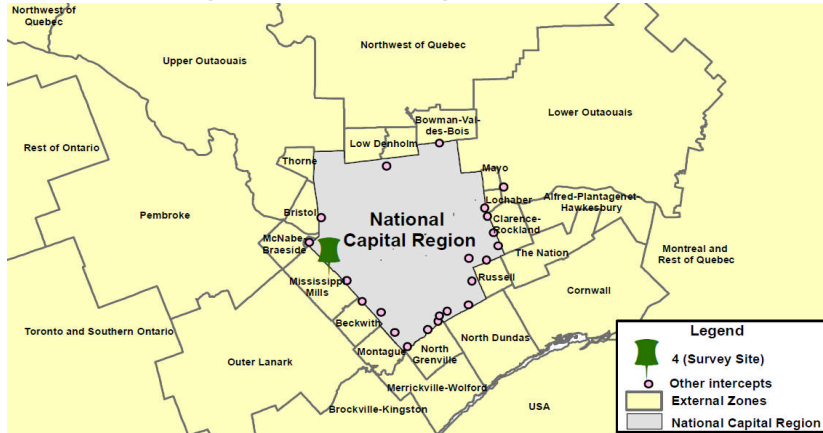
AM Peak Period Inbound Origins and Destinations



AM Peak Period Outbound Origins and Destinations



Site 4 - Rd 20 (Kinburn Side Rd)



2009 TRAFFIC STATISTICS

Average Daily Traffic ¹	2,320
Weekday Average Daily Traffic ¹	2,240
11-h Weekday Two-Way Traffic ¹	1,520
11-h Weekday EB Traffic ¹	750
11-h Weekday WB Traffic ¹	760
11-h to 24-h Weekday Factor (EB) ¹	1.56
11-h to 24-h Weekday Factor (WB) ¹	1.51
% Personal Vehicles (11-h)	94%
% Commercial Vehicles (11-h)	6%

¹ Includes commercial vehicles

Summary of Personal Vehicle Trips by Time Period

	11-Hour	AM Peak	PM Peak
Both Directions	1,430	390	510
Inbound	730	310	180
Outbound	700	90	330
Directional Split	0.51	0.79	0.65
Park & Ride	-	10	10

Note: 11-Hour Survey Period: 6:00 - 11:59 & 14:00 - 18:59

AM Peak Period 6:00 - 8:59

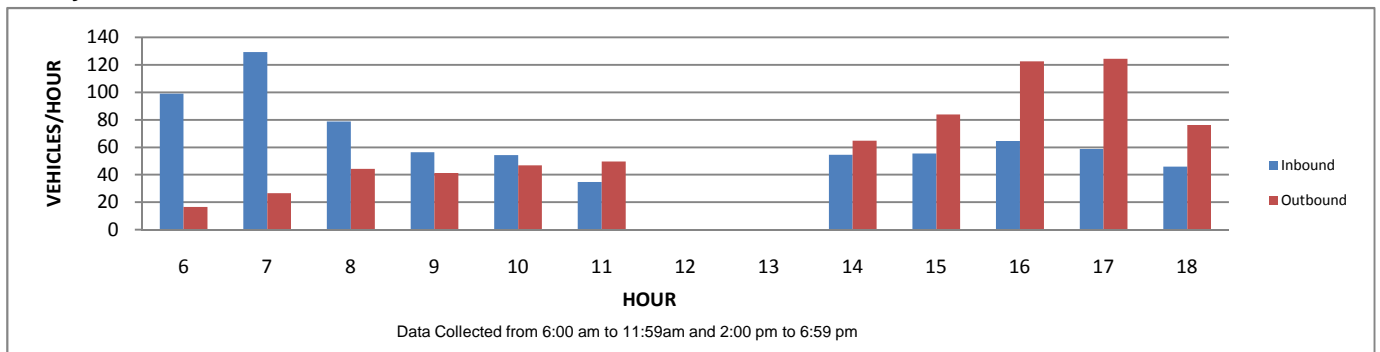
PM Peak Period 15:00 - 17:59

Inbound = Eastbound ; Outbound = Westbound

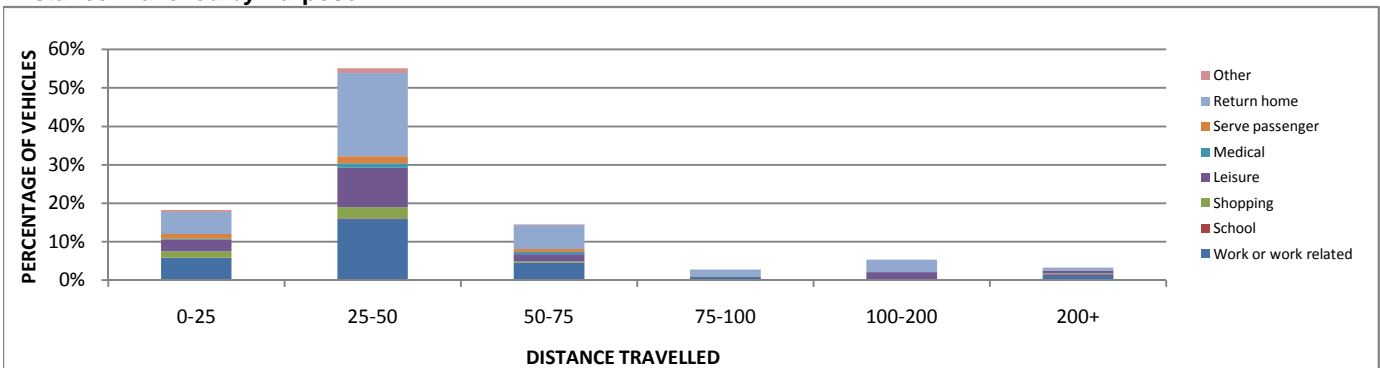
Trips by Purpose for Personal Vehicle Trips

Trip Purpose	No. of Trips	% of Trips	Avg. Persons per veh.	Avg. Distance per Trip (km)
Work or work related	410	28%	1.15	60
School	10	1%	1.25	165
Shopping	70	5%	1.63	40
Leisure	260	18%	1.51	100
Medical	30	2%	1.27	45
Serve passenger	60	4%	1.60	35
Return home	570	40%	1.35	55
Other	30	2%	1.60	35
Total	1,440	100%	1.42	65

Hourly Traffic Variation

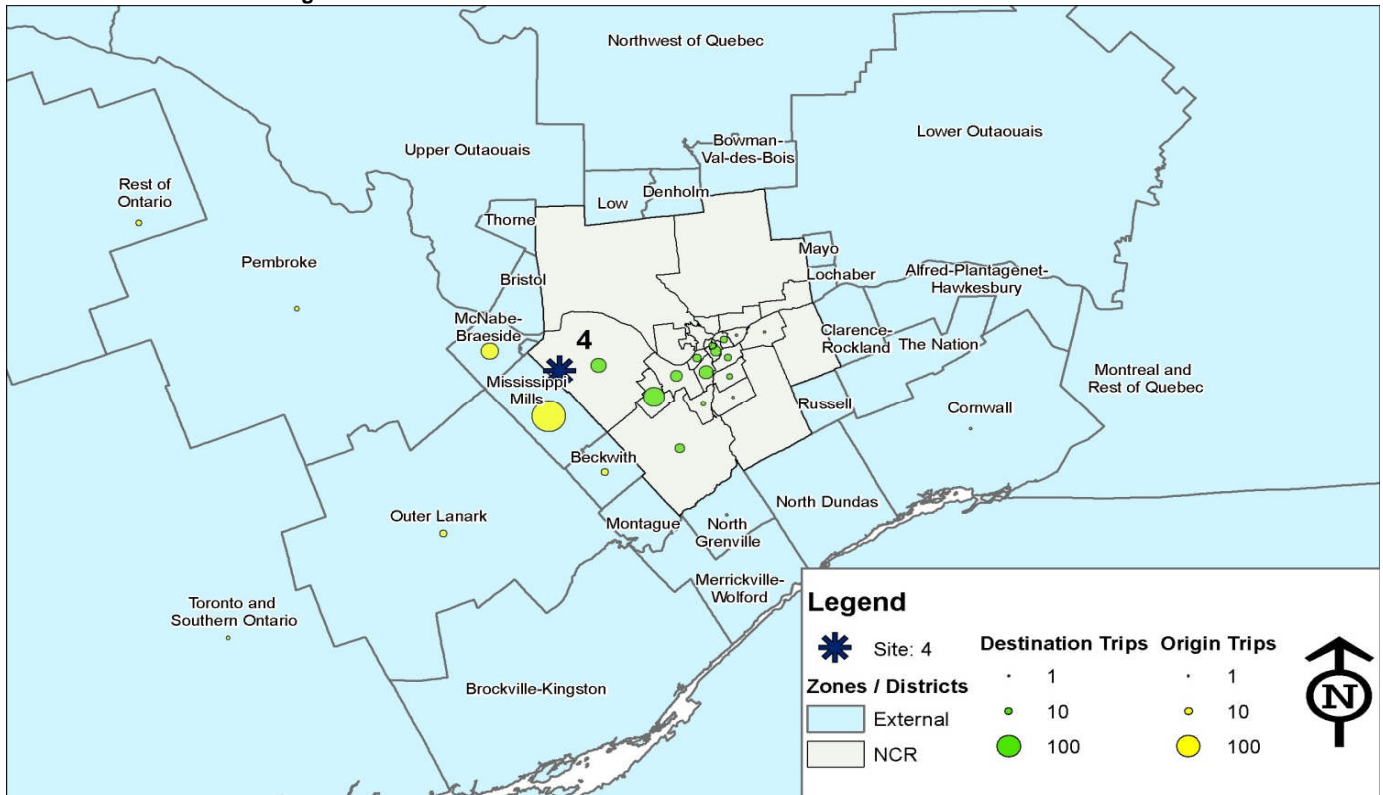


Distance Travelled by Purpose

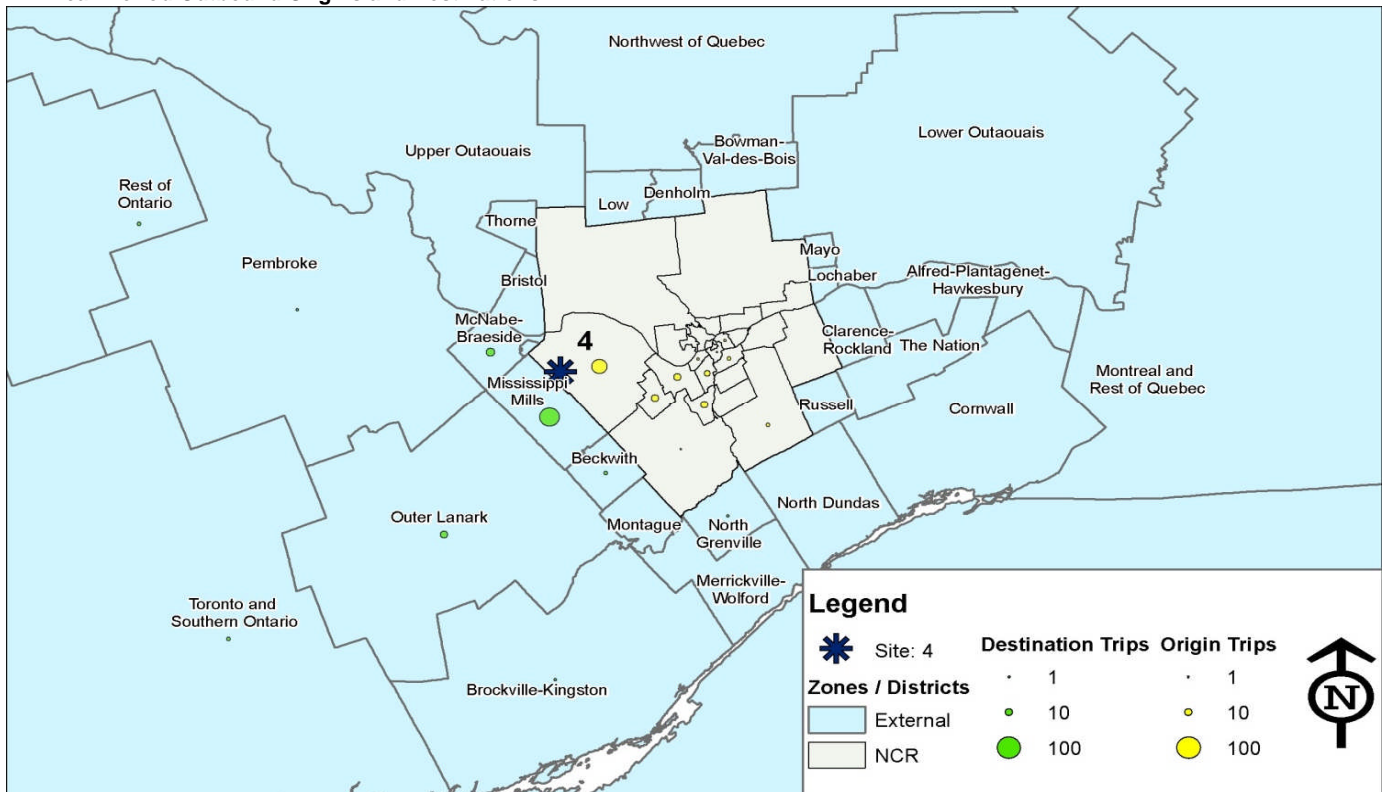


Site 4 - Rd 20 (Kinburn Side Rd)

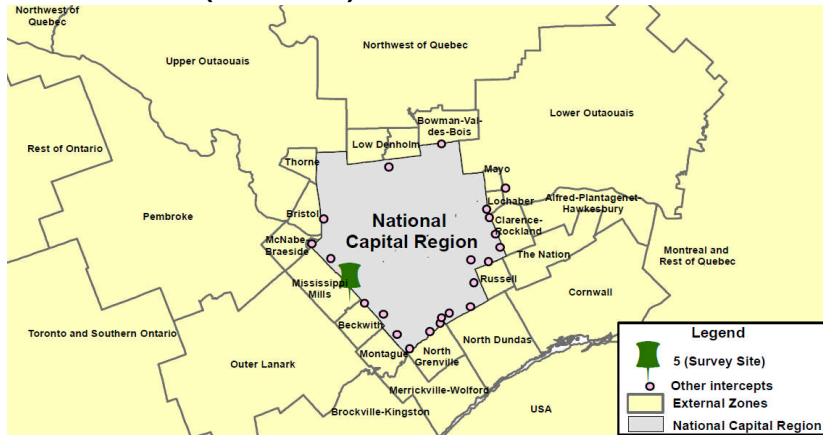
AM Peak Period Inbound Origins and Destinations



AM Peak Period Outbound Origins and Destinations



Site 5 - Rd 49 (March Rd)



2009 TRAFFIC STATISTICS

Average Daily Traffic ¹	8,080
Weekday Average Daily Traffic ¹	8,900
11-h Weekday Two-Way Traffic ¹	6,640
11-h Weekday EB Traffic ¹	3,390
11-h Weekday WB Traffic ¹	3,250
11-h to 24-h Weekday Factor (EB) ¹	1.17
11-h to 24-h Weekday Factor (WB) ¹	1.26
% Personal Vehicles (11-h)	90%
% Commercial Vehicles (11-h)	10%

¹ Includes commercial vehicles

Summary of Personal Vehicle Trips by Time Period

	11-Hour	AM Peak	PM Peak
Both Directions	5,960	1,860	2,120
Inbound	3,090	1,500	640
Outbound	2,870	360	1,480
Directional Split	0.52	0.81	0.70
Park & Ride	-	50	30

Note: 11-Hour Survey Period: 6:00 - 11:59 & 14:00 - 18:59

AM Peak Period 6:00 - 8:59

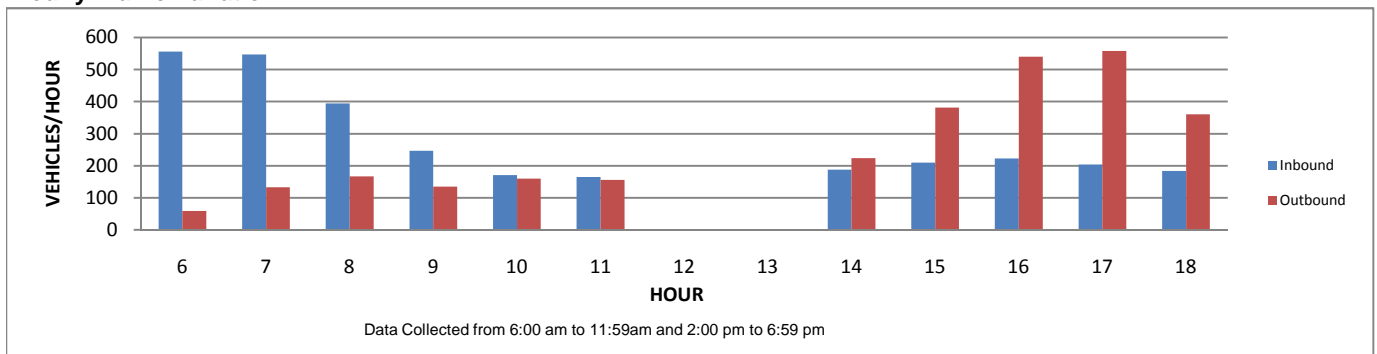
PM Peak Period 15:00 - 17:59

Inbound = Eastbound ; Outbound = Westbound

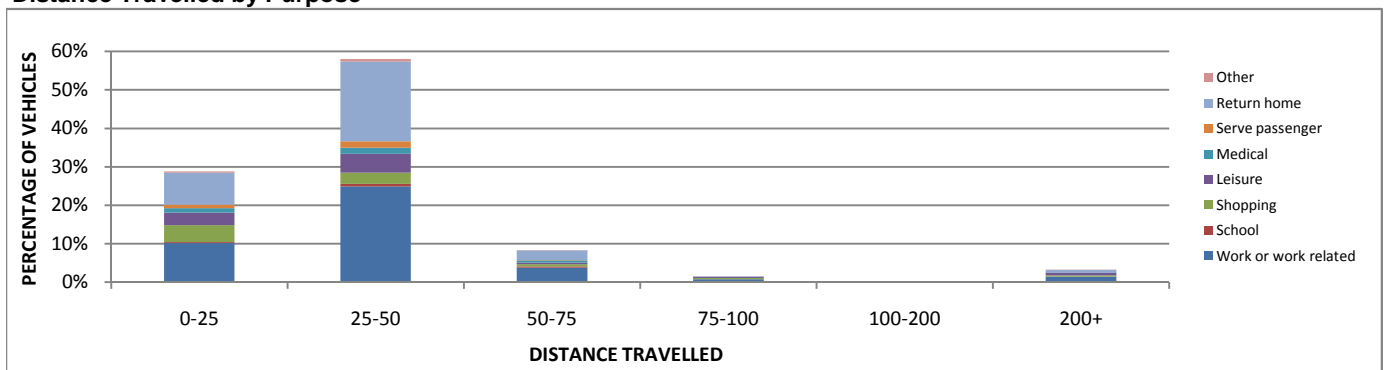
Trips by Purpose for Personal Vehicle Trips

Trip Purpose	No. of Trips	% of Trips	Avg. Persons per veh.	Avg. Distance per Trip (km)
Work or work related	2,450	41%	1.17	50
School	70	1%	1.36	40
Shopping	500	8%	1.49	40
Leisure	580	10%	1.57	50
Medical	200	3%	1.49	45
Serve passenger	160	3%	1.65	30
Return home	1,920	32%	1.23	40
Other	70	1%	1.20	65
Total	5,950	100%	1.39	45

Hourly Traffic Variation

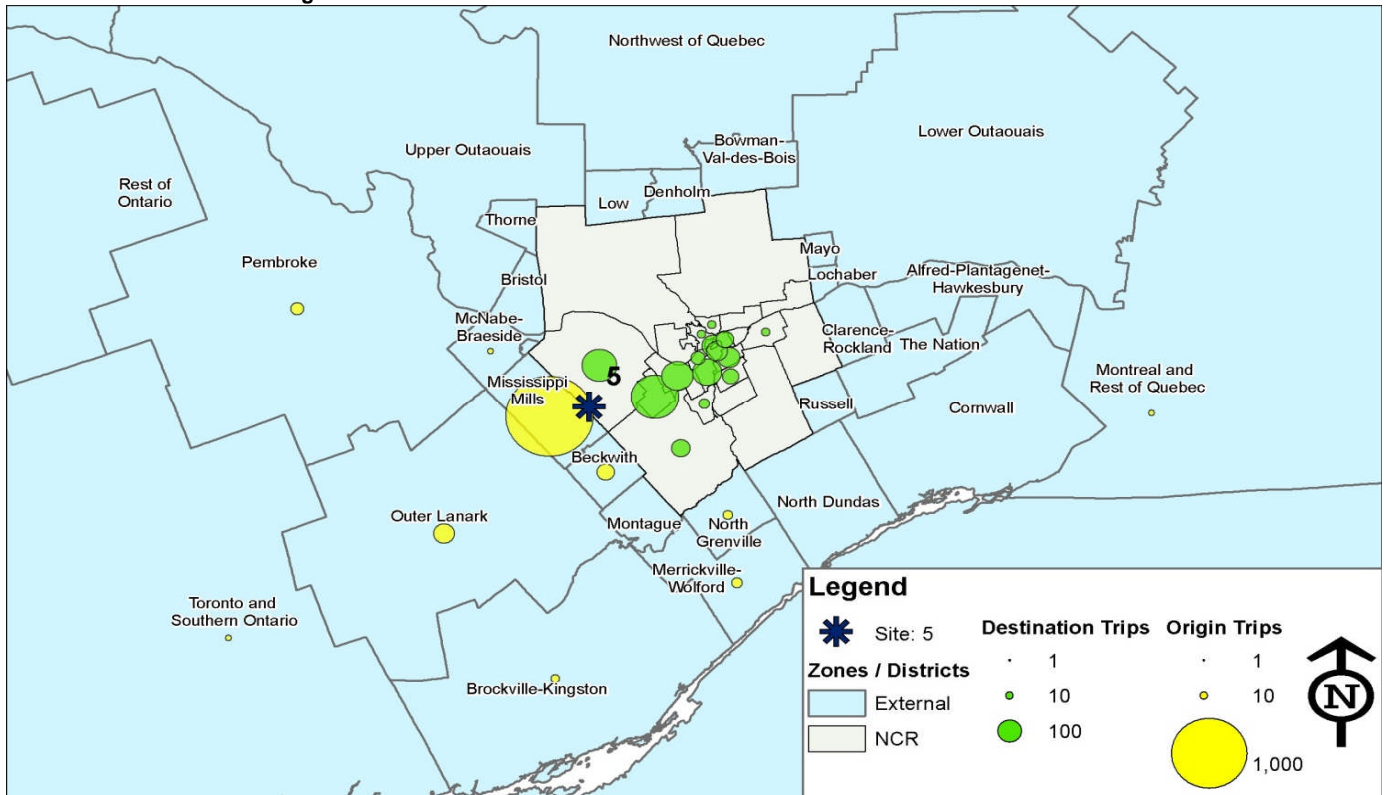


Distance Travelled by Purpose

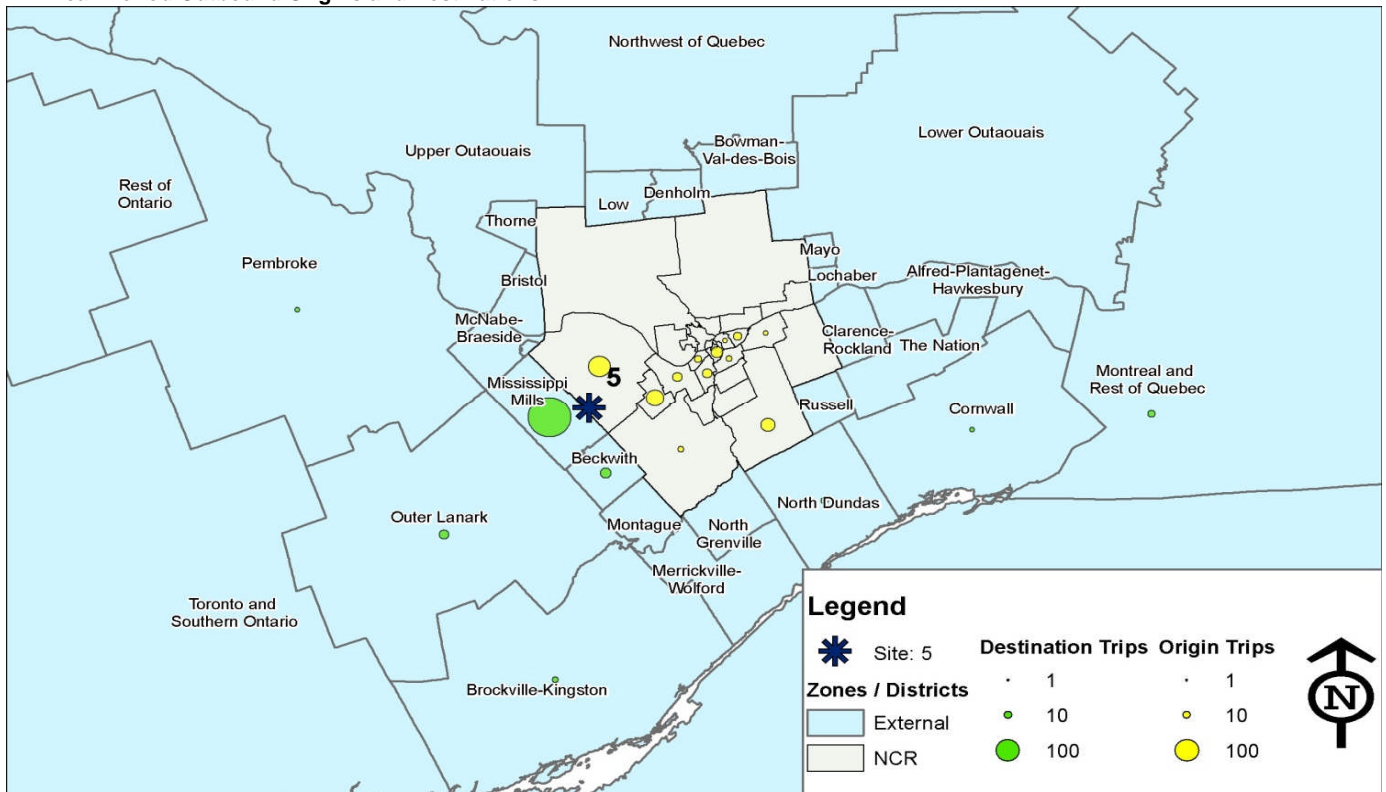


Site 5 - Rd 49 (March Rd)

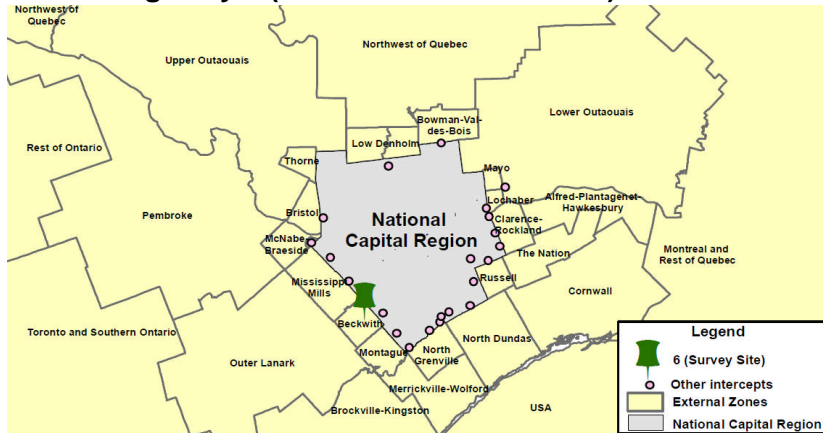
AM Peak Period Inbound Origins and Destinations



AM Peak Period Outbound Origins and Destinations



Site 6 - Highway 7 (Near Ashton Station Rd)



2009 TRAFFIC STATISTICS

Average Daily Traffic ¹	15,890
Weekday Average Daily Traffic ¹	15,890
11-h Weekday Two-Way Traffic ¹	11,510
11-h Weekday EB Traffic ¹	5,680
11-h Weekday WB Traffic ¹	5,830
11-h to 24-h Weekday Factor (EB) ¹	1.41
11-h to 24-h Weekday Factor (WB) ¹	1.35
% Personal Vehicles (11-h)	89%
% Commercial Vehicles (11-h)	11%

¹ Includes commercial vehicles

Summary of Personal Vehicle Trips by Time Period

	11-Hour	AM Peak	PM Peak
Both Directions	10,200	3,040	3,680
Inbound	5,170	2,420	1,070
Outbound	5,040	620	2,610
Directional Split	0.51	0.80	0.71
Park & Ride	-	180	150

Note: 11-Hour Survey Period: 6:00 - 11:59 & 14:00 - 18:59

AM Peak Period 6:00 - 8:59

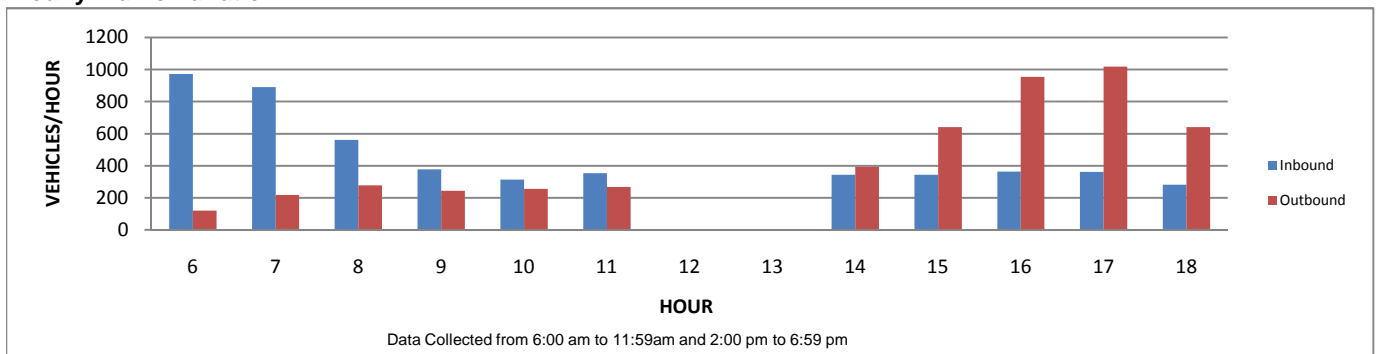
PM Peak Period 15:00 - 17:59

Inbound = Eastbound ; Outbound = Westbound

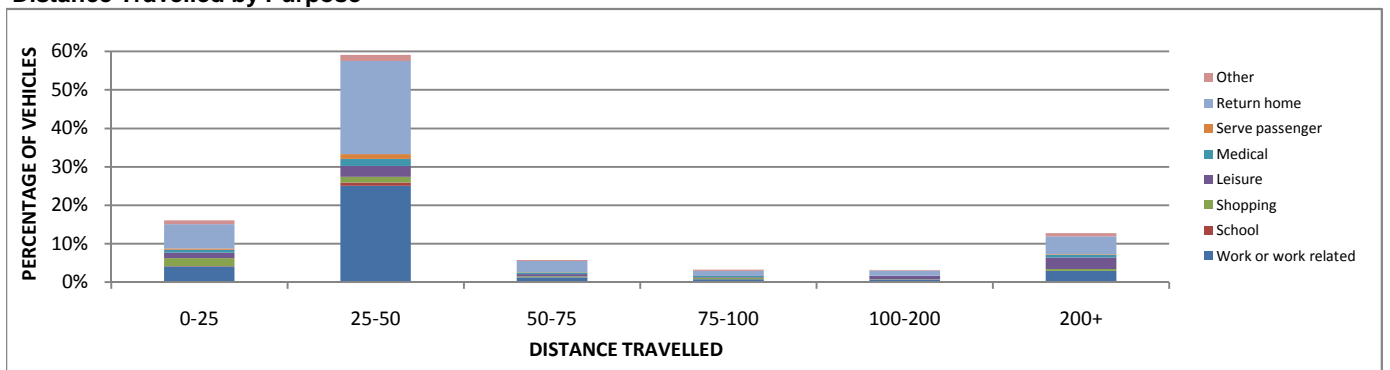
Trips by Purpose for Personal Vehicle Trips

Trip Purpose	No. of Trips	% of Trips	Avg. Persons per veh.	Avg. Distance per Trip (km)
Work or work related	3,540	35%	1.19	60
School	90	1%	1.70	35
Shopping	510	5%	1.70	55
Leisure	890	9%	1.66	145
Medical	400	4%	1.88	90
Serve passenger	200	2%	1.72	60
Return home	4,160	41%	1.37	75
Other	410	4%	1.48	95
Total	10,200	100%	1.59	75

Hourly Traffic Variation

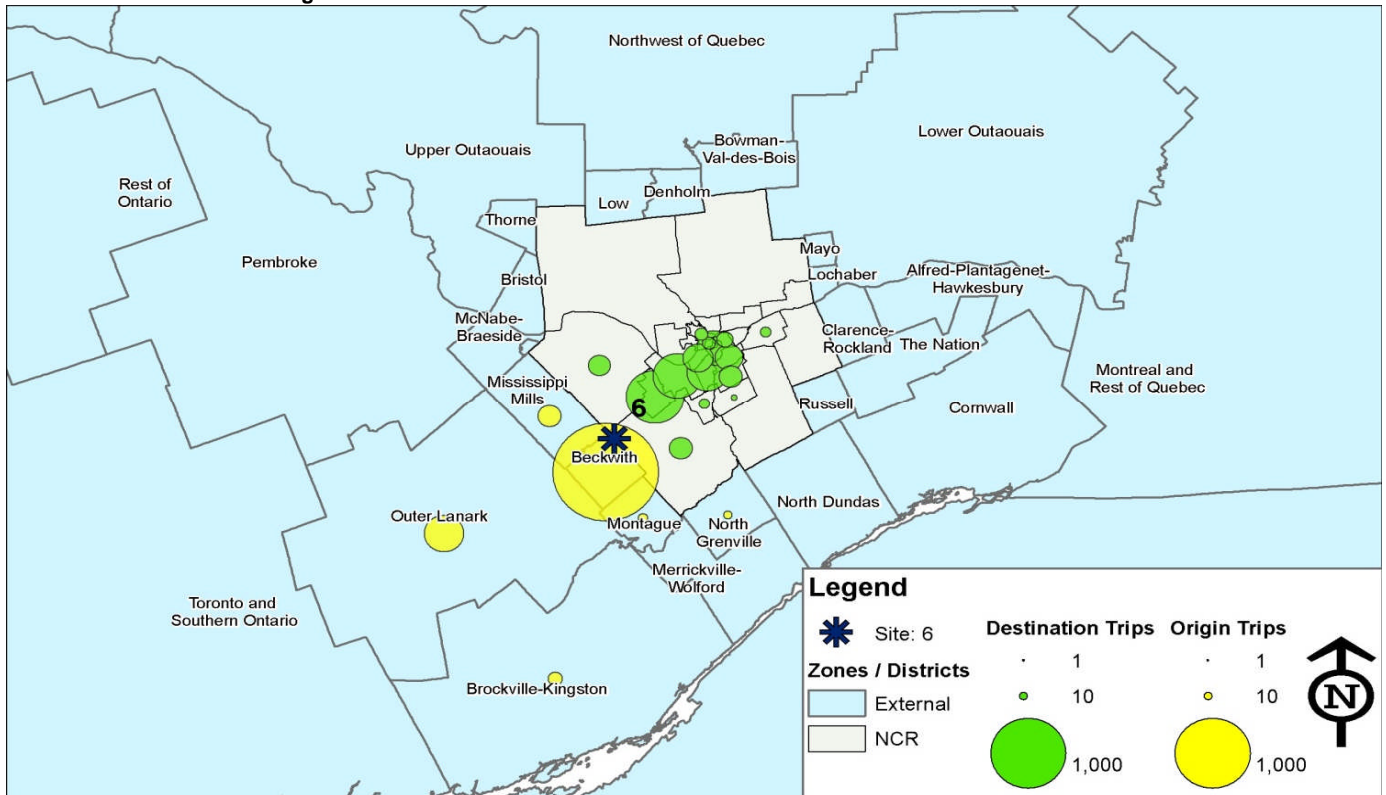


Distance Travelled by Purpose

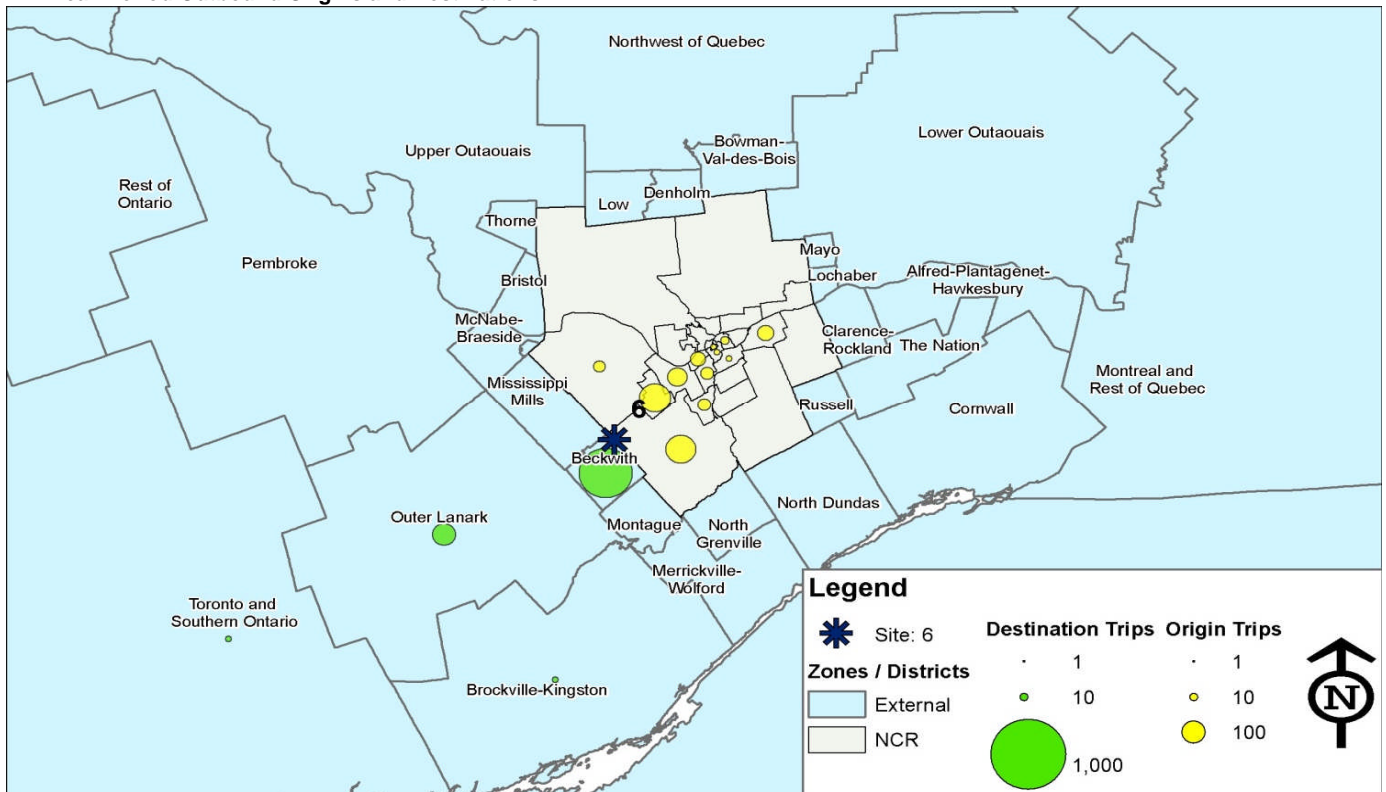


Site 6 - Highway 7 (Near Ashton Station Rd)

AM Peak Period Inbound Origins and Destinations



AM Peak Period Outbound Origins and Destinations



Site 7 - Rd 10 (Franktown Rd)



2009 TRAFFIC STATISTICS

Average Daily Traffic ¹	4,270
Weekday Average Daily Traffic ¹	4,280
11-h Weekday Two-Way Traffic ¹	3,230
11-h Weekday EB Traffic ¹	1,650
11-h Weekday WB Traffic ¹	1,590
11-h to 24-h Weekday Factor (EB) ¹	1.30
11-h to 24-h Weekday Factor (WB) ¹	1.35
% Personal Vehicles (11-h)	91%
% Commercial Vehicles (11-h)	9%

¹ Includes commercial vehicles

Summary of Personal Vehicle Trips by Time Period

	11-Hour	AM Peak	PM Peak
Both Directions	2,940	910	1,080
Inbound	1,520	720	370
Outbound	1,410	180	720
Directional Split	0.52	0.79	0.67
Park & Ride	-	10	0

Note: 11-Hour Survey Period: 6:00 - 11:59 & 14:00 - 18:59

AM Peak Period 6:00 - 8:59

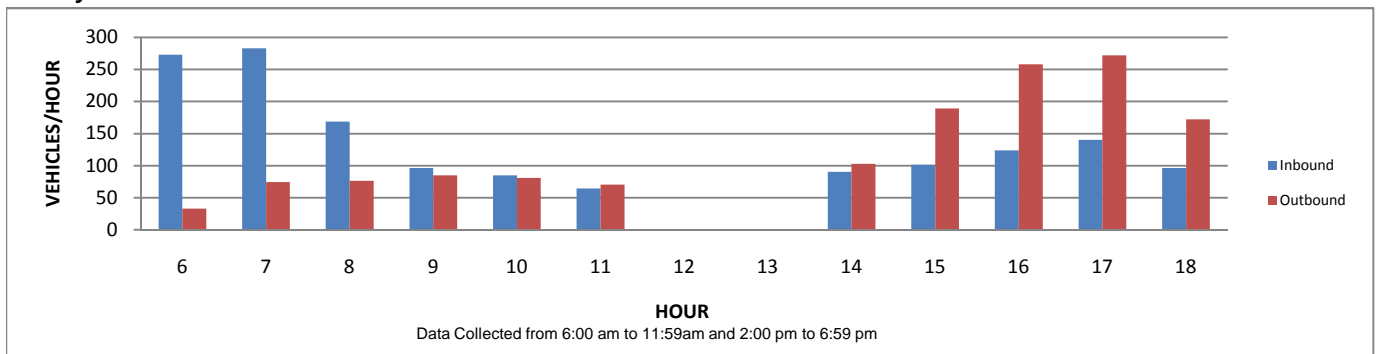
PM Peak Period 15:00 - 17:59

Inbound = Eastbound ; Outbound = Westbound

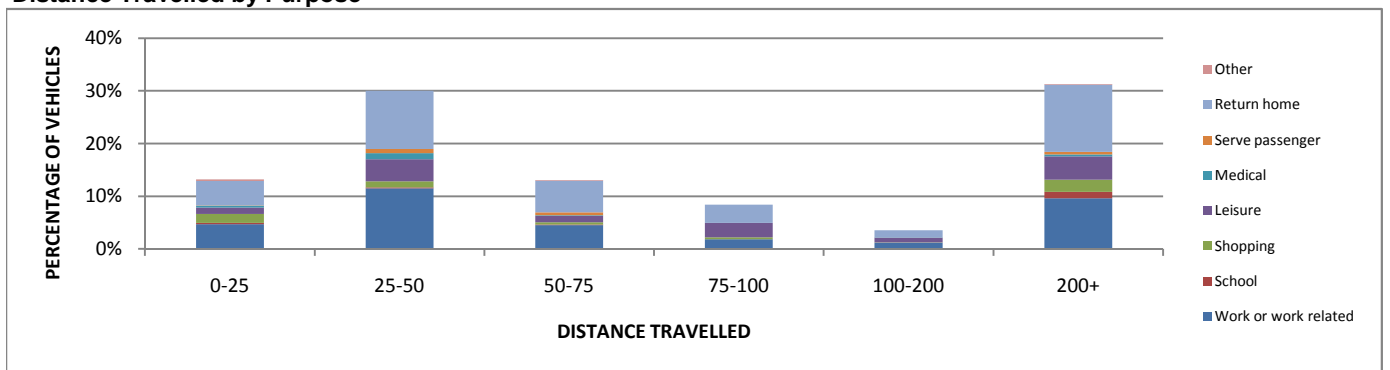
Trips by Purpose for Personal Vehicle Trips

Trip Purpose	No. of Trips	% of Trips	Avg. Persons per veh.	Avg. Distance per Trip (km)
Work or work related	990	34%	1.15	120
School	50	2%	1.10	140
Shopping	180	6%	1.48	150
Leisure	430	15%	1.71	145
Medical	60	2%	1.42	95
Serve passenger	60	2%	1.29	100
Return home	1,160	39%	1.30	150
Other	20	1%	1.75	95
Total	2,950	100%	1.40	125

Hourly Traffic Variation

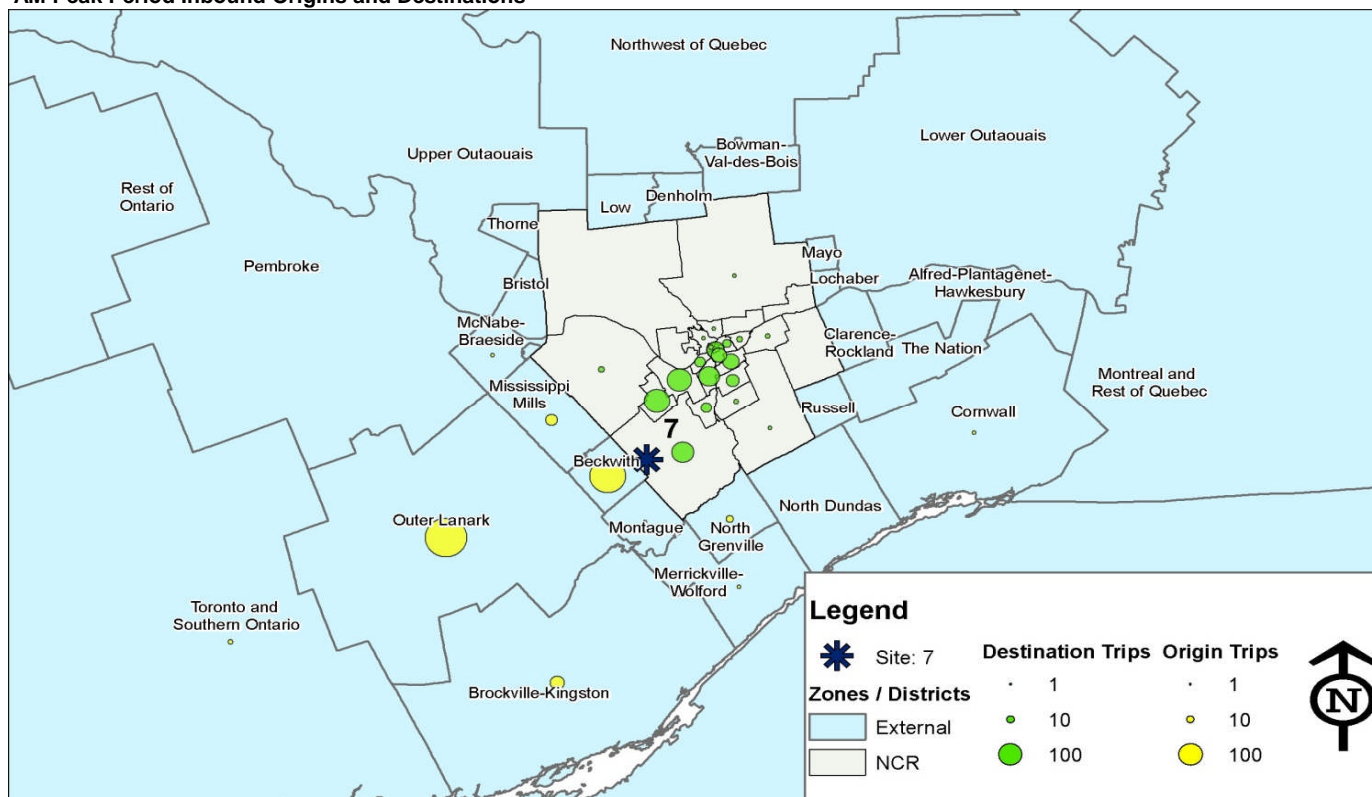


Distance Travelled by Purpose

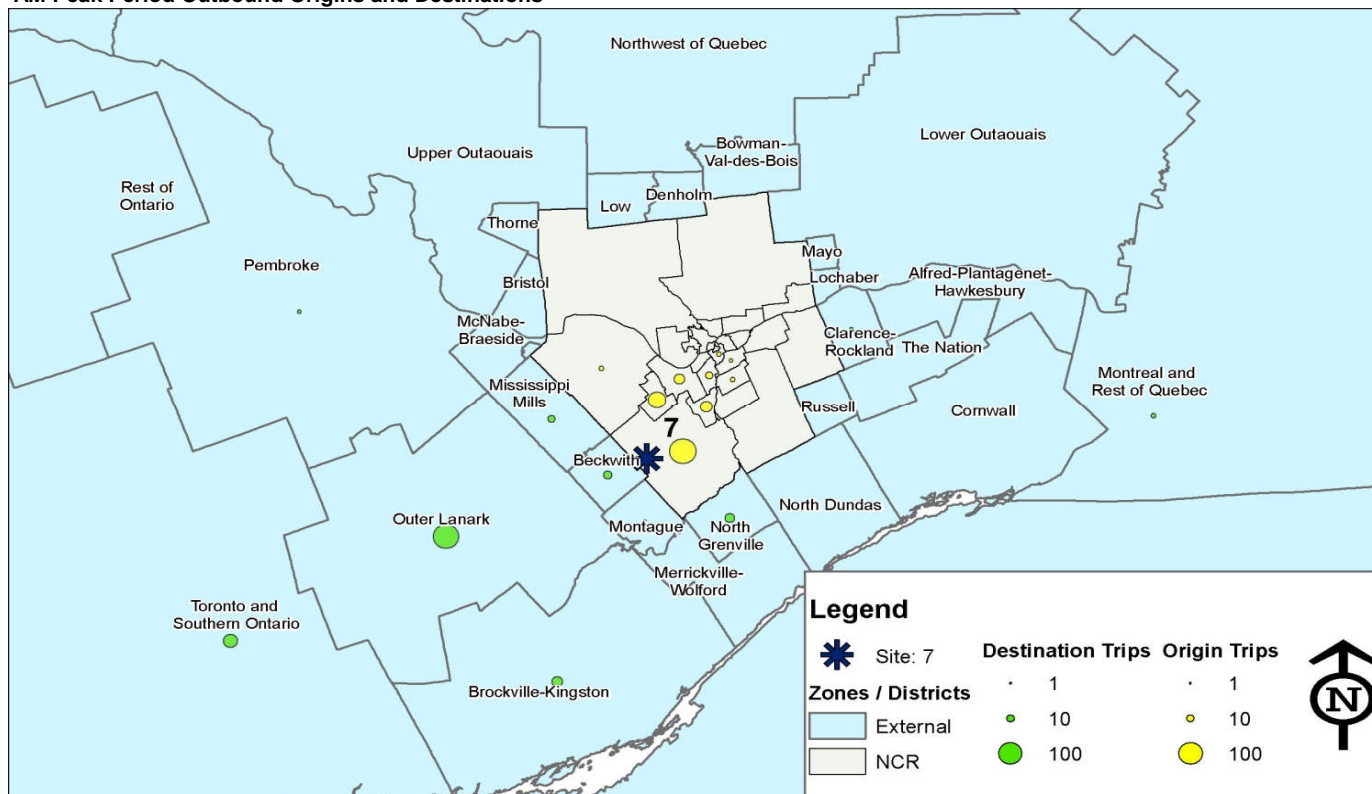


Site 7 - Rd 10 (Franktown Rd)

AM Peak Period Inbound Origins and Destinations



AM Peak Period Outbound Origins and Destinations



Site 8 - Rd 6 (Roger Stevens Dr)



2009 TRAFFIC STATISTICS

Average Daily Traffic ¹	3,330
Weekday Average Daily Traffic ¹	4,080
11-h Weekday Two-Way Traffic ¹	2,980
11-h Weekday EB Traffic ¹	1,470
11-h Weekday WB Traffic ¹	1,510
11-h to 24-h Weekday Factor (EB) ¹	1.15
11-h to 24-h Weekday Factor (WB) ¹	1.09
% Personal Vehicles (11-h)	91%
% Commercial Vehicles (11-h)	9%

¹ Includes commercial vehicles

Summary of Personal Vehicle Trips by Time Period

	11-Hour	AM Peak	PM Peak
Both Directions	2,700	810	950
Inbound	1,320	590	320
Outbound	1,380	220	630
Directional Split	0.51	0.73	0.66
Park & Ride	-	20	20

Note: 11-Hour Survey Period: 6:00 - 11:59 & 14:00 - 18:59

AM Peak Period 6:00 - 8:59

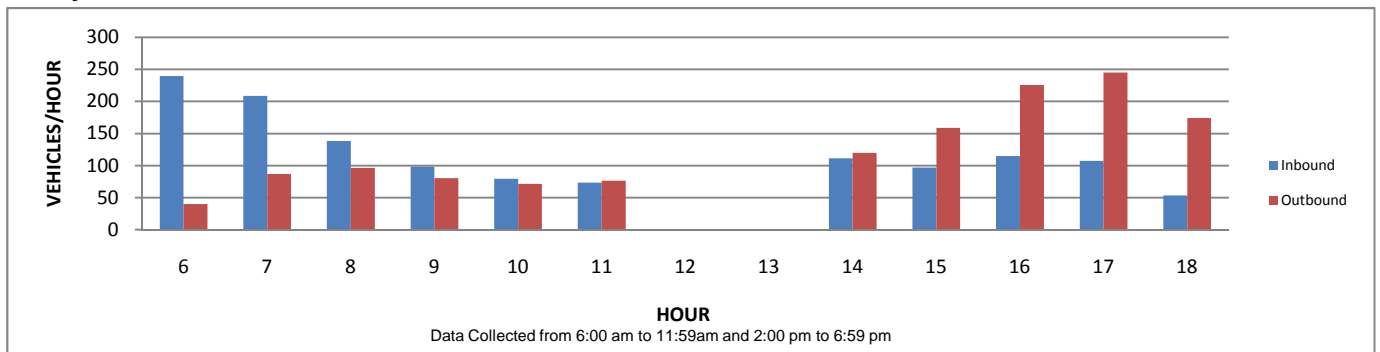
PM Peak Period 15:00 - 17:59

Inbound = Eastbound ; Outbound = Westbound

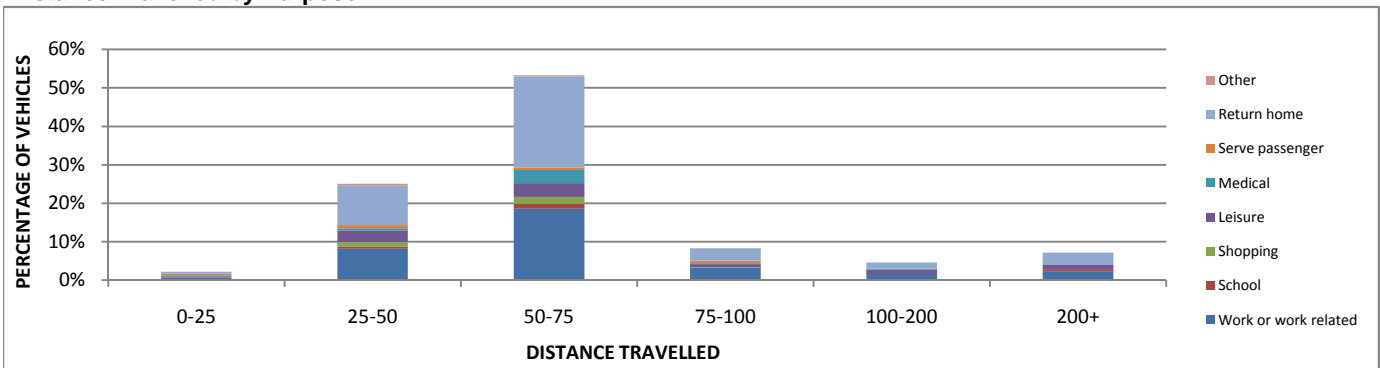
Trips by Purpose for Personal Vehicle Trips

Trip Purpose	No. of Trips	% of Trips	Avg. Persons per veh.	Avg. Distance per Trip (km)
Work or work related	920	34%	1.19	80
School	60	2%	1.33	90
Shopping	90	3%	1.44	55
Leisure	270	10%	1.67	110
Medical	120	4%	1.59	50
Serve passenger	70	3%	1.29	55
Return home	1,130	42%	1.30	80
Other	20	1%	1.00	55
Total	2,680	100%	1.35	70

Hourly Traffic Variation

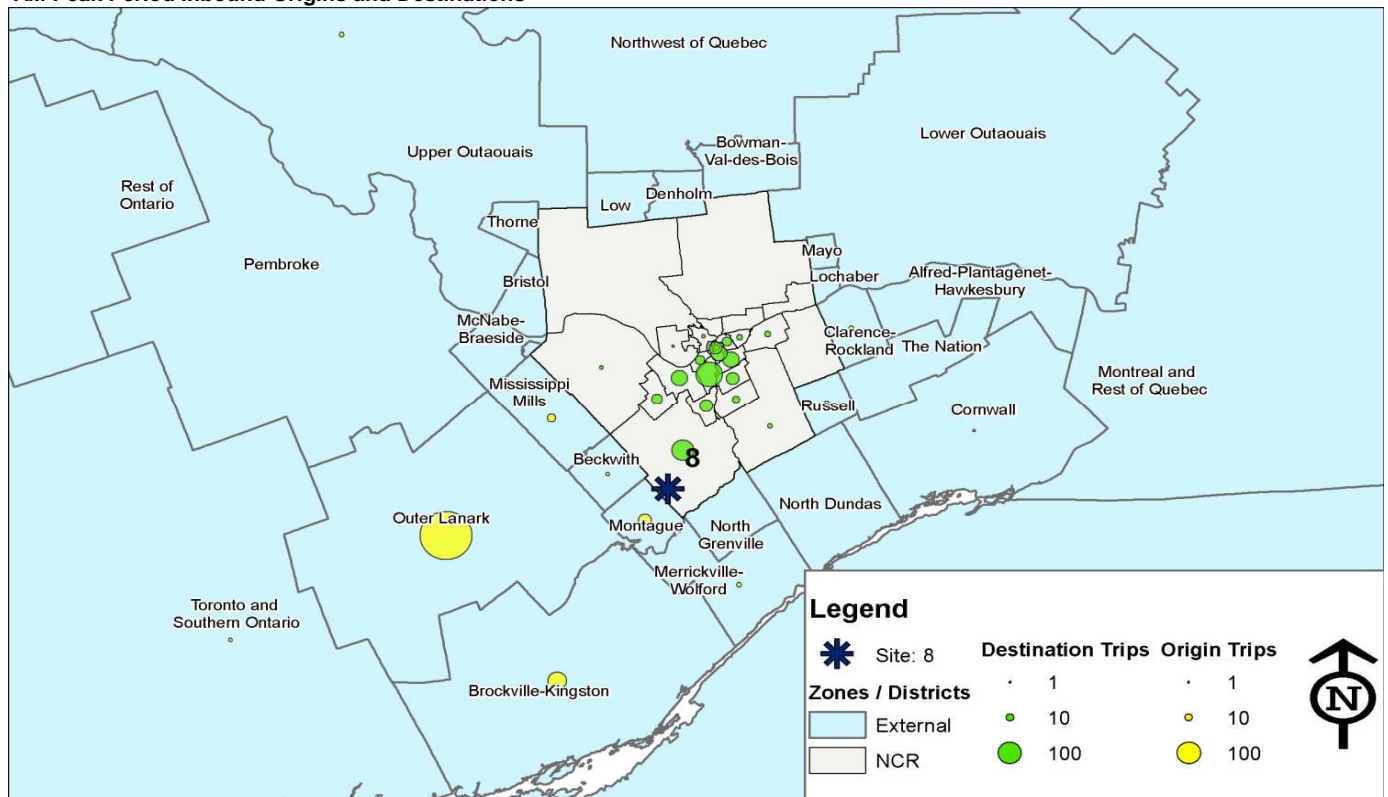


Distance Travelled by Purpose

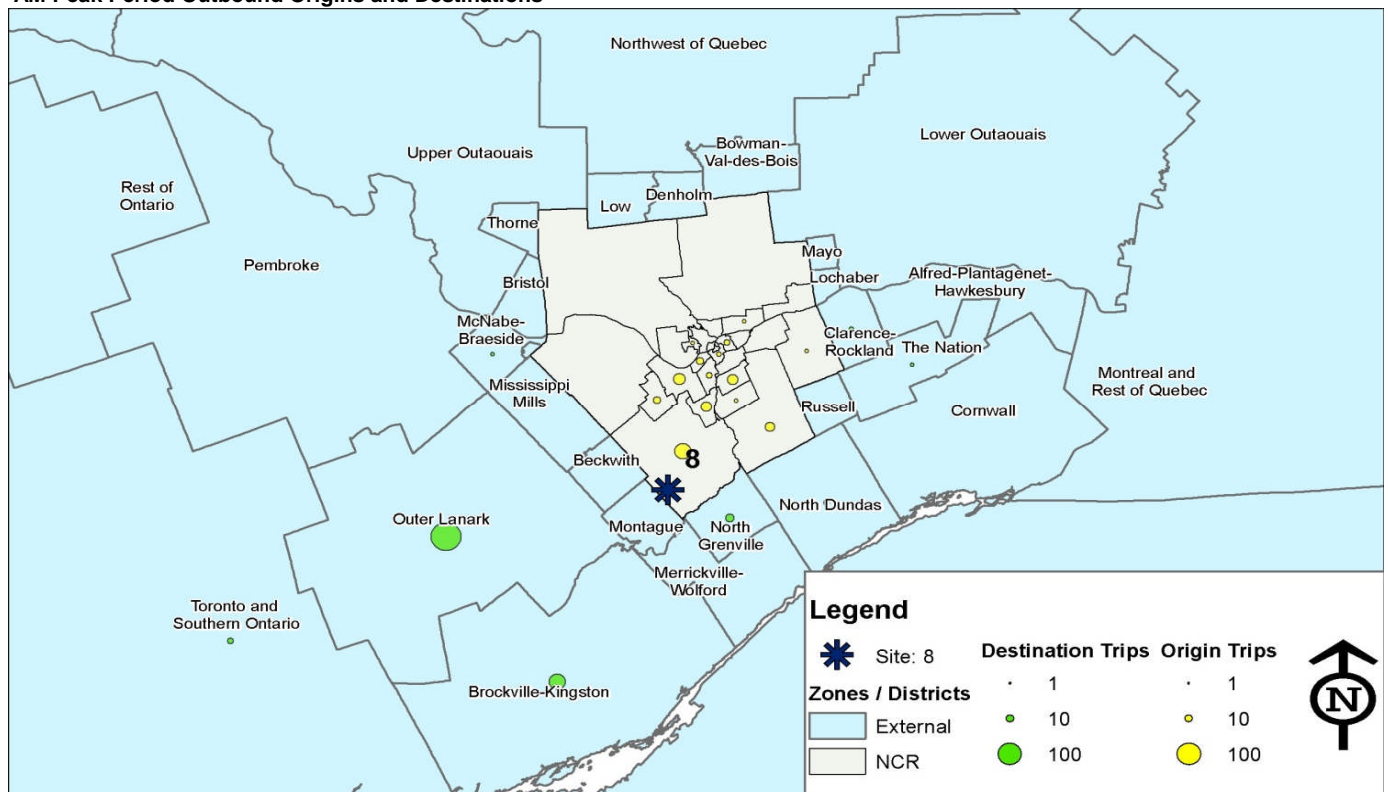


Site 8 - Rd 6 (Roger Stevens Dr)

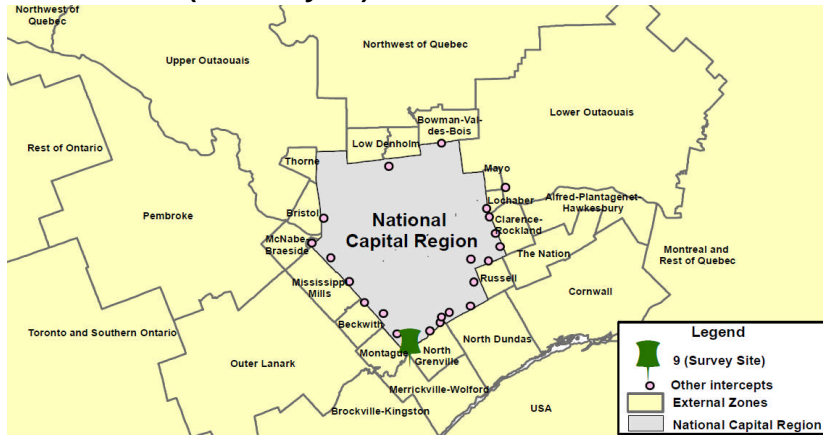
AM Peak Period Inbound Origins and Destinations



AM Peak Period Outbound Origins and Destinations



Site 9 - Rd 2 (Donnelly Dr)



2009 TRAFFIC STATISTICS

Average Daily Traffic ¹	1,570
Weekday Average Daily Traffic ¹	1,550
11-h Weekday Two-Way Traffic ¹	1,130
11-h Weekday EB Traffic ¹	580
11-h Weekday WB Traffic ¹	550
11-h to 24-h Weekday Factor (EB) ¹	1.36
11-h to 24-h Weekday Factor (WB) ¹	1.42
% Personal Vehicles (11-h)	86%
% Commercial Vehicles (11-h)	14%

¹ Includes commercial vehicles

Summary of Personal Vehicle Trips by Time Period

	11-Hour	AM Peak	PM Peak
Both Directions	970	270	370
Inbound	540	200	150
Outbound	440	60	220
Directional Split	0.56	0.74	0.59
Park & Ride	-	0	0

Note: 11-Hour Survey Period: 6:00 - 11:59 & 14:00 - 18:59

AM Peak Period 6:00 - 8:59

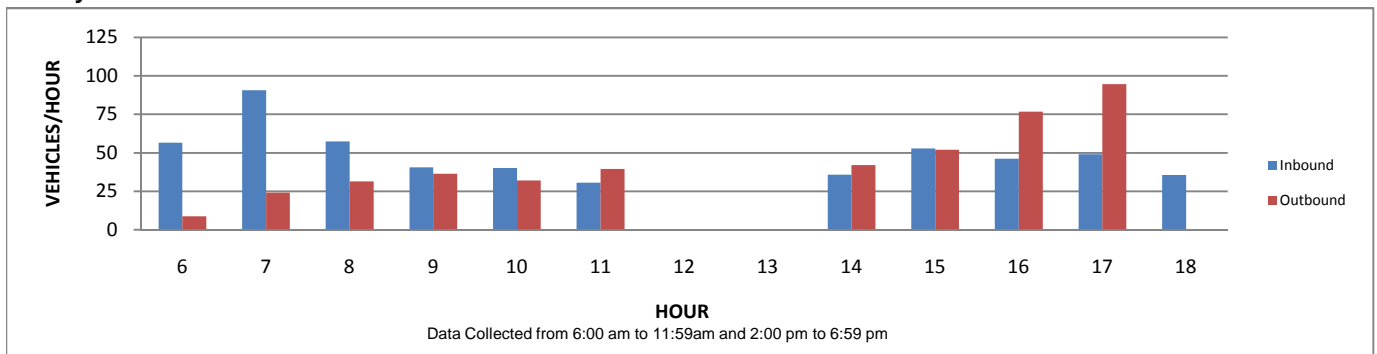
PM Peak Period 15:00 - 17:59

Inbound = Eastbound ; Outbound = Westbound

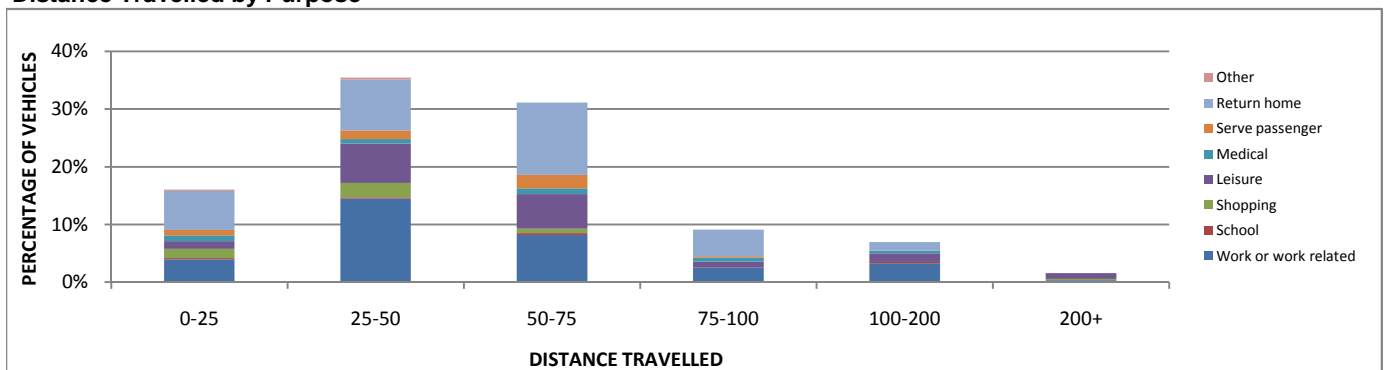
Trips by Purpose for Personal Vehicle Trips

Trip Purpose	No. of Trips	% of Trips	Avg. Persons per veh.	Avg. Distance per Trip (km)
Work or work related	320	33%	1.14	55
School	10	1%	1.50	55
Shopping	50	5%	1.54	55
Leisure	170	18%	1.51	70
Medical	40	4%	1.55	50
Serve passenger	50	5%	2.09	45
Return home	330	34%	1.47	50
Other	0	0%	0.50	15
Total	970	100%	1.41	50

Hourly Traffic Variation

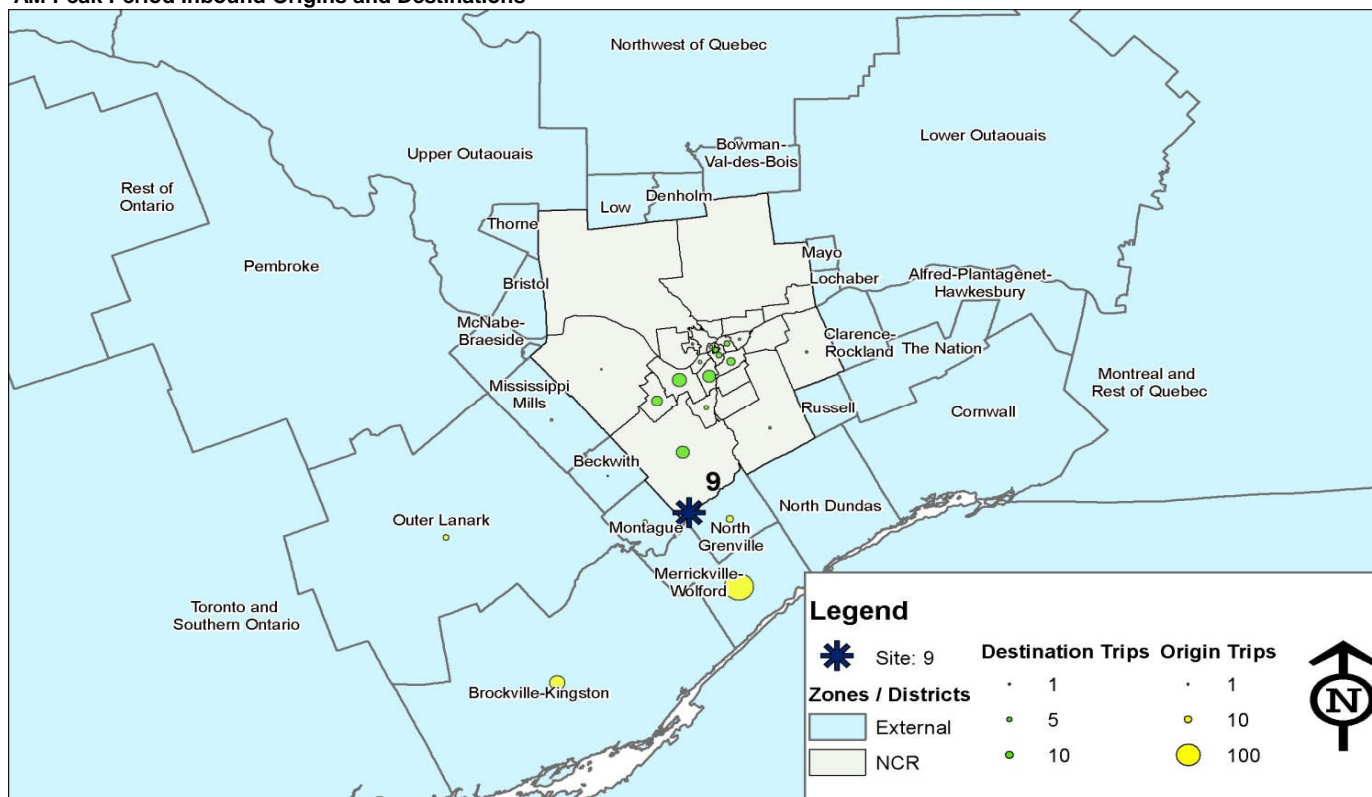


Distance Travelled by Purpose

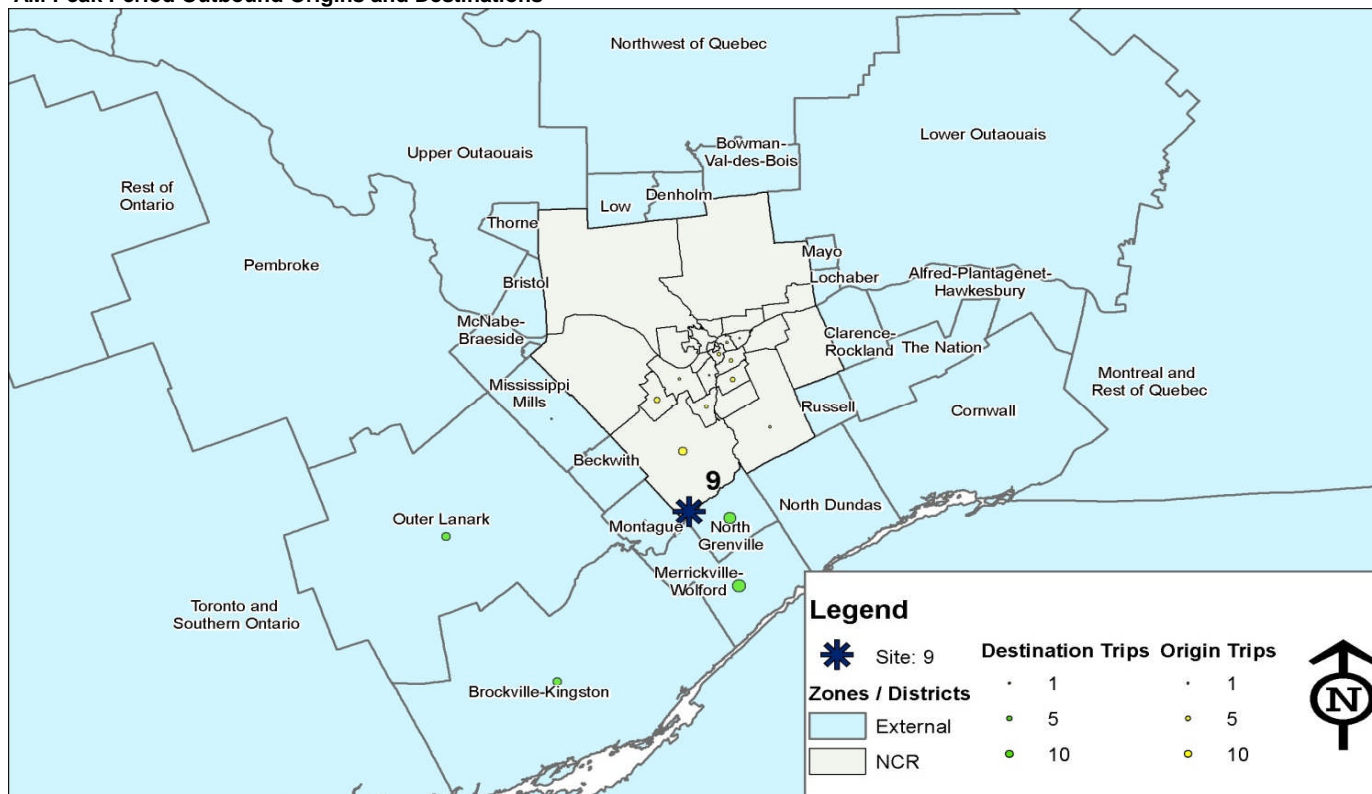


Site 9 - Rd 2 (Donnelly Dr)

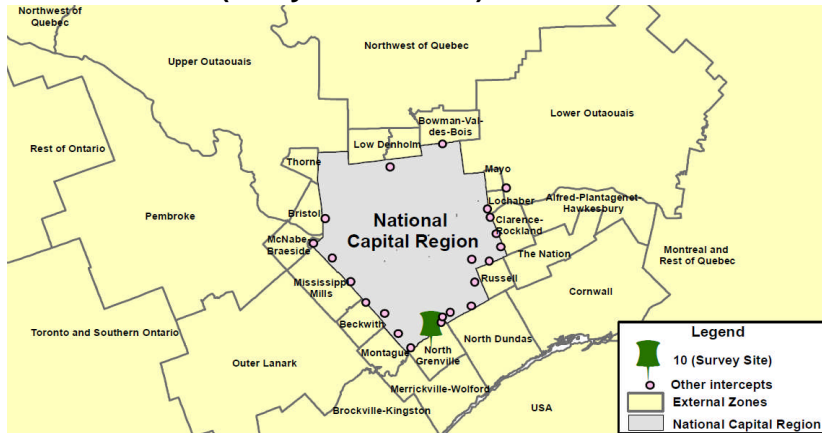
AM Peak Period Inbound Origins and Destinations



AM Peak Period Outbound Origins and Destinations



Site 10 - Rd 44 (Merlyn Wilson Rd)



2009 TRAFFIC STATISTICS

Average Daily Traffic ¹	4,560
Weekday Average Daily Traffic ¹	4,760
11-h Weekday Two-Way Traffic ¹	3,460
11-h Weekday EB Traffic ¹	1,710
11-h Weekday WB Traffic ¹	1,750
11-h to 24-h Weekday Factor (EB) ¹	1.30
11-h to 24-h Weekday Factor (WB) ¹	1.34
% Personal Vehicles (11-h)	82%
% Commercial Vehicles (11-h)	18%

¹ Includes commercial vehicles

Summary of Personal Vehicle Trips by Time Period

	11-Hour	AM Peak	PM Peak
Both Directions	2,850	750	1,080
Inbound	1,480	490	410
Outbound	1,370	250	660
Directional Split	0.52	0.65	0.61
Park & Ride	-	10	10

Note: 11-Hour Survey Period: 6:00 - 11:59 & 14:00 - 18:59

AM Peak Period 6:00 - 8:59

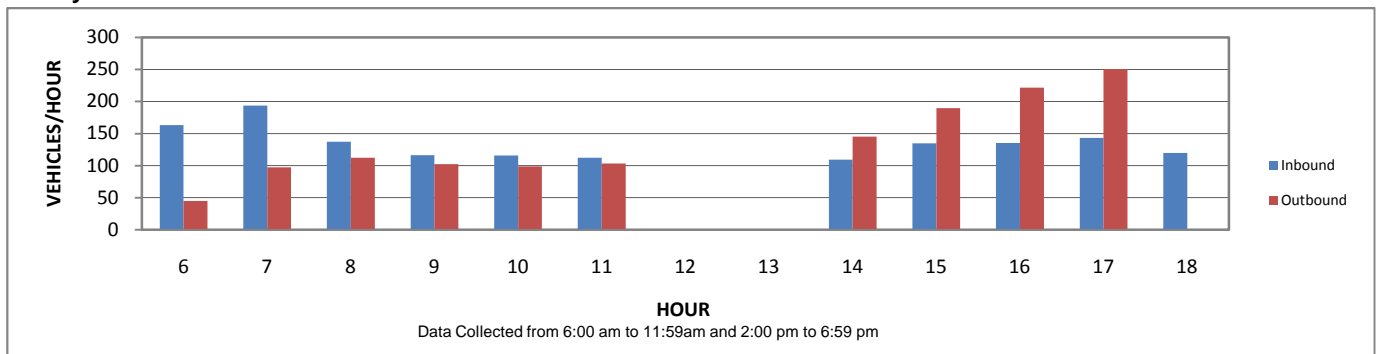
PM Peak Period 15:00 - 17:59

Inbound = Northbound ; Outbound = Southbound

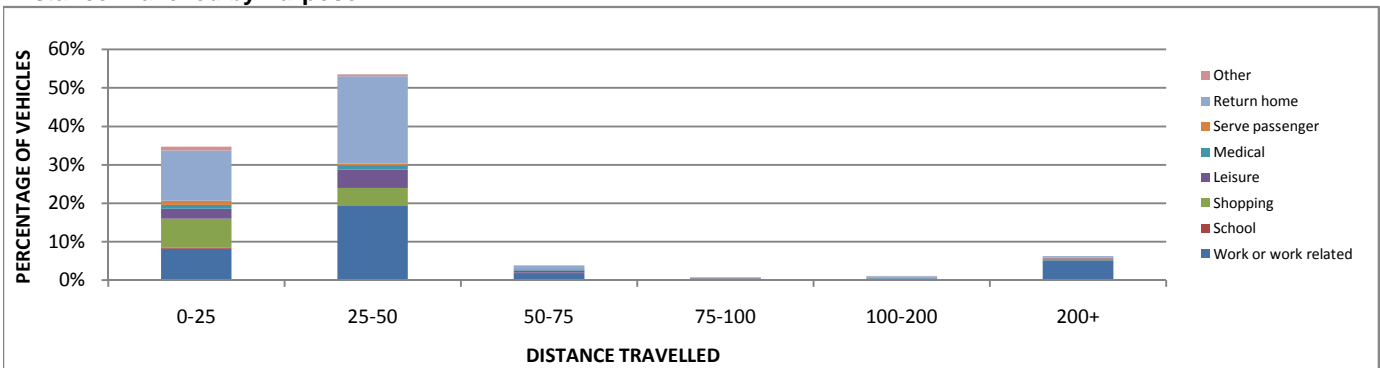
Trips by Purpose for Personal Vehicle Trips

Trip Purpose	No. of Trips	% of Trips	Avg. Persons per veh.	Avg. Distance per Trip (km)
Work or work related	990	35%	1.14	55
School	10	0%	1.00	30
Shopping	360	13%	1.54	35
Leisure	240	8%	1.39	40
Medical	70	2%	1.50	35
Serve passenger	50	2%	1.48	40
Return home	1,070	38%	1.29	40
Other	50	2%	1.17	30
Total	2,840	100%	1.31	40

Hourly Traffic Variation

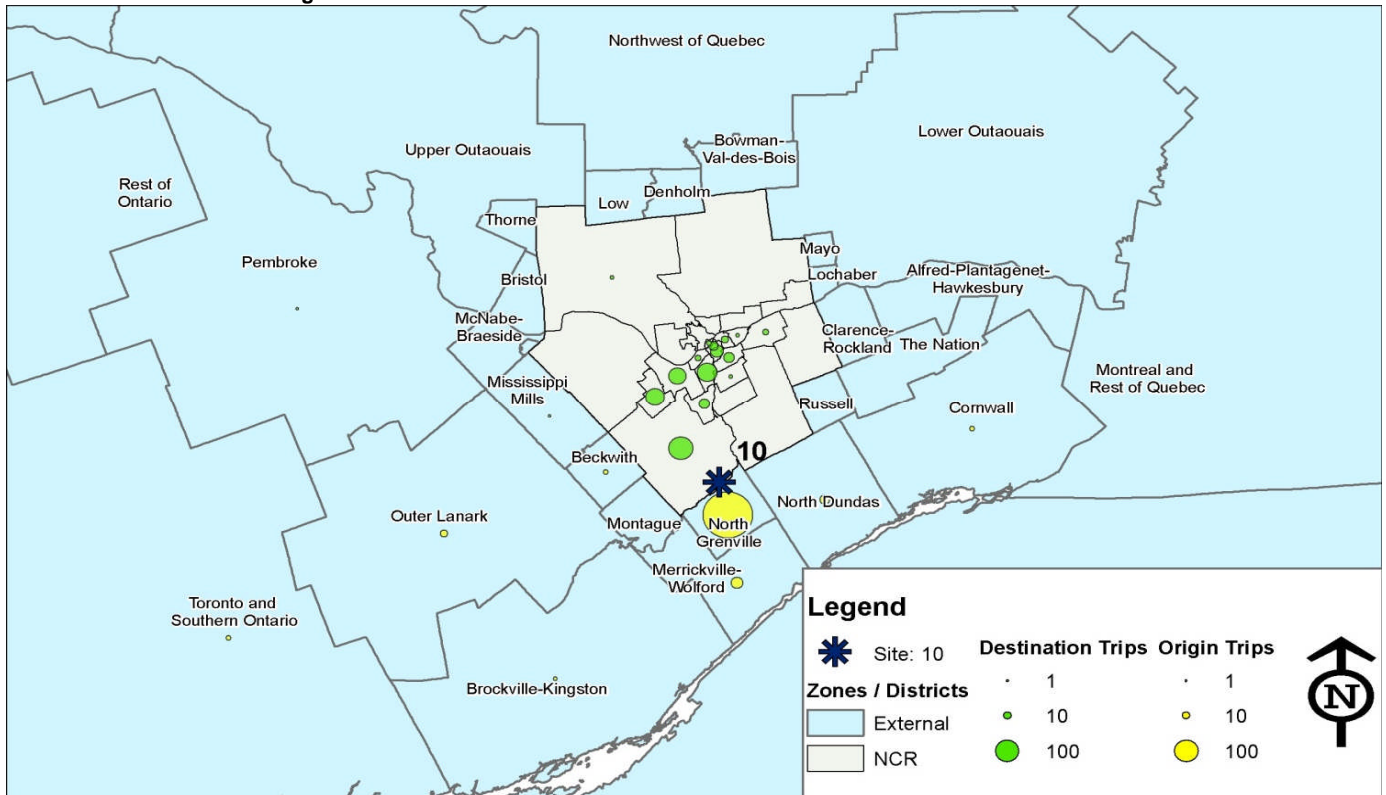


Distance Travelled by Purpose

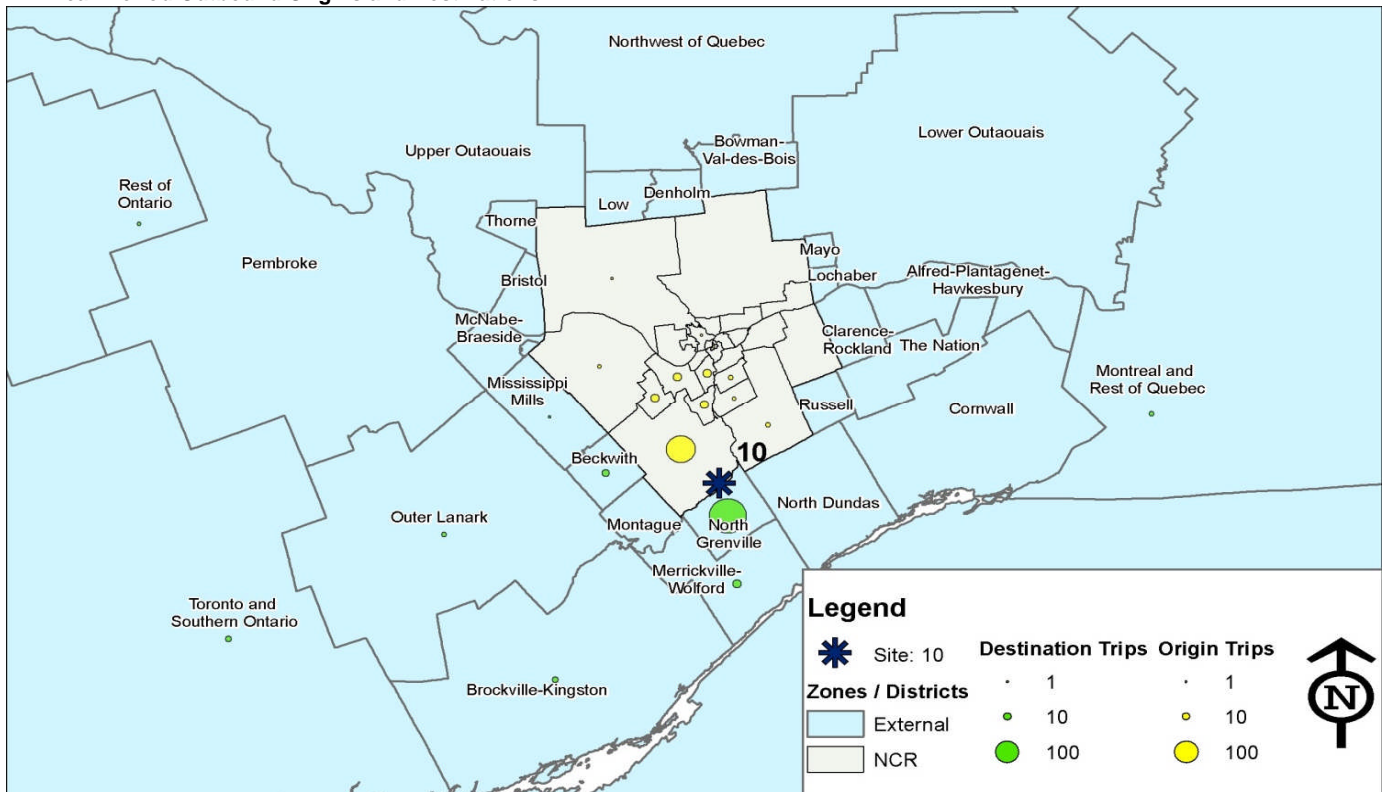


Site 10 - Rd 44 (Merlyn Wilson Rd)

AM Peak Period Inbound Origins and Destinations



AM Peak Period Outbound Origins and Destinations



Site 11 - Highway 416 (River Rd)



2009 TRAFFIC STATISTICS

Average Daily Traffic ¹	19,490
Weekday Average Daily Traffic ¹	20,730
11-h Weekday Two-Way Traffic ¹	14,850
11-h Weekday EB Traffic ¹	7,350
11-h Weekday WB Traffic ¹	7,490
11-h to 24-h Weekday Factor (EB) ¹	1.28
11-h to 24-h Weekday Factor (WB) ¹	1.34
% Personal Vehicles (11-h)	91%
% Commercial Vehicles (11-h)	9%

¹ Includes commercial vehicles

Summary of Personal Vehicle Trips by Time Period

	11-Hour	AM Peak	PM Peak
Both Directions	13,500	3,700	4,720
Inbound	6,790	2,590	1,780
Outbound	6,720	1,110	2,940
Directional Split	0.50	0.70	0.62
Park & Ride	-	220	190

Note: 11-Hour Survey Period: 6:00 - 11:59 & 14:00 - 18:59

AM Peak Period 6:00 - 8:59

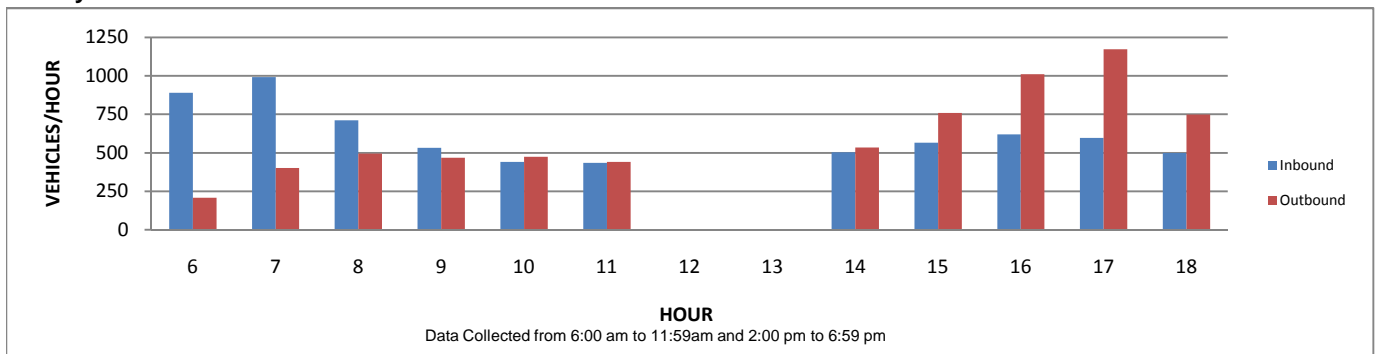
PM Peak Period 15:00 - 17:59

Inbound = Northbound ; Outbound = Southbound

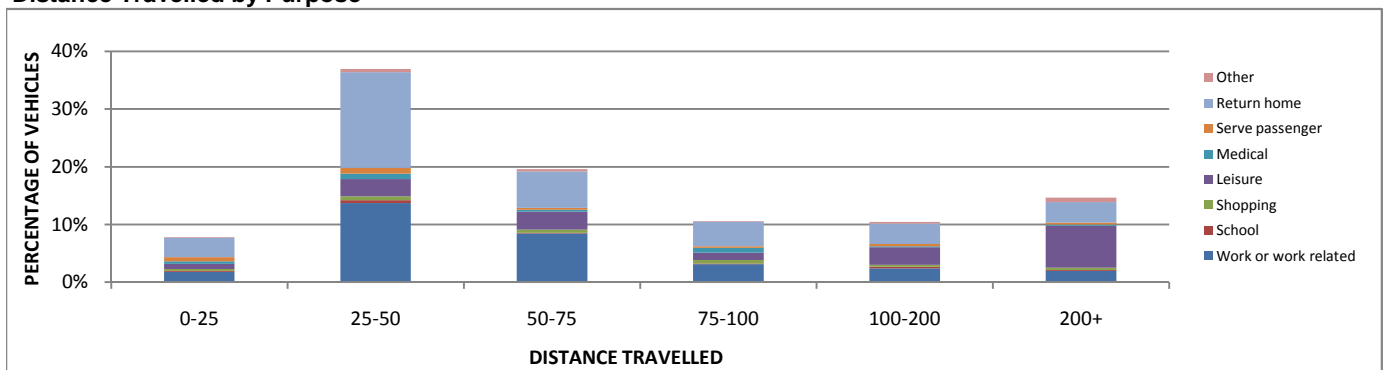
Trips by Purpose for Personal Vehicle Trips

Trip Purpose	No. of Trips	% of Trips	Avg. Persons per veh.	Avg. Distance per Trip (km)
Work or work related	4,240	31%	1.22	85
School	170	1%	1.45	150
Shopping	390	3%	2.09	155
Leisure	2,510	19%	2.13	240
Medical	400	3%	1.60	105
Serve passenger	410	3%	2.10	110
Return home	5,090	38%	1.50	100
Other	290	2%	1.63	230
Total	13,500	100%	1.71	145

Hourly Traffic Variation

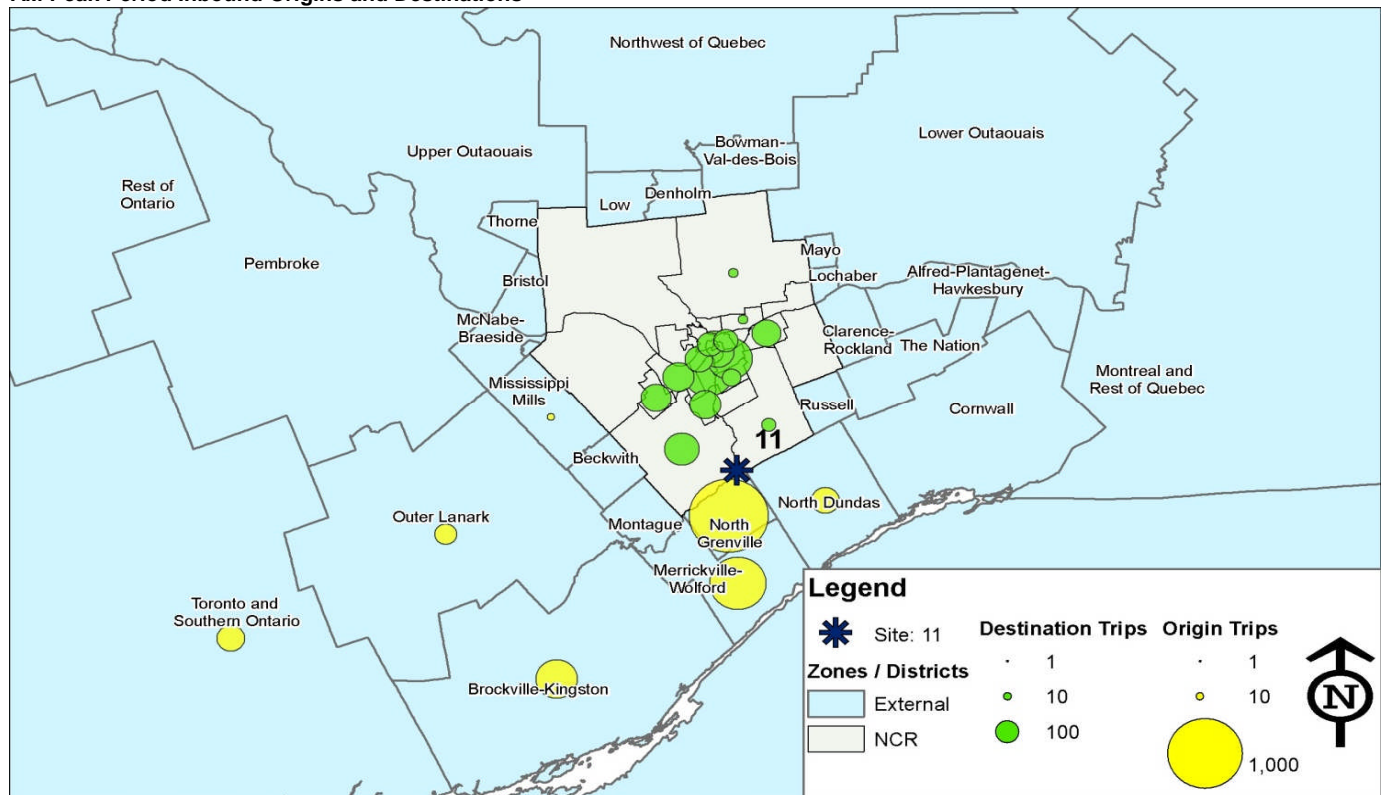


Distance Travelled by Purpose

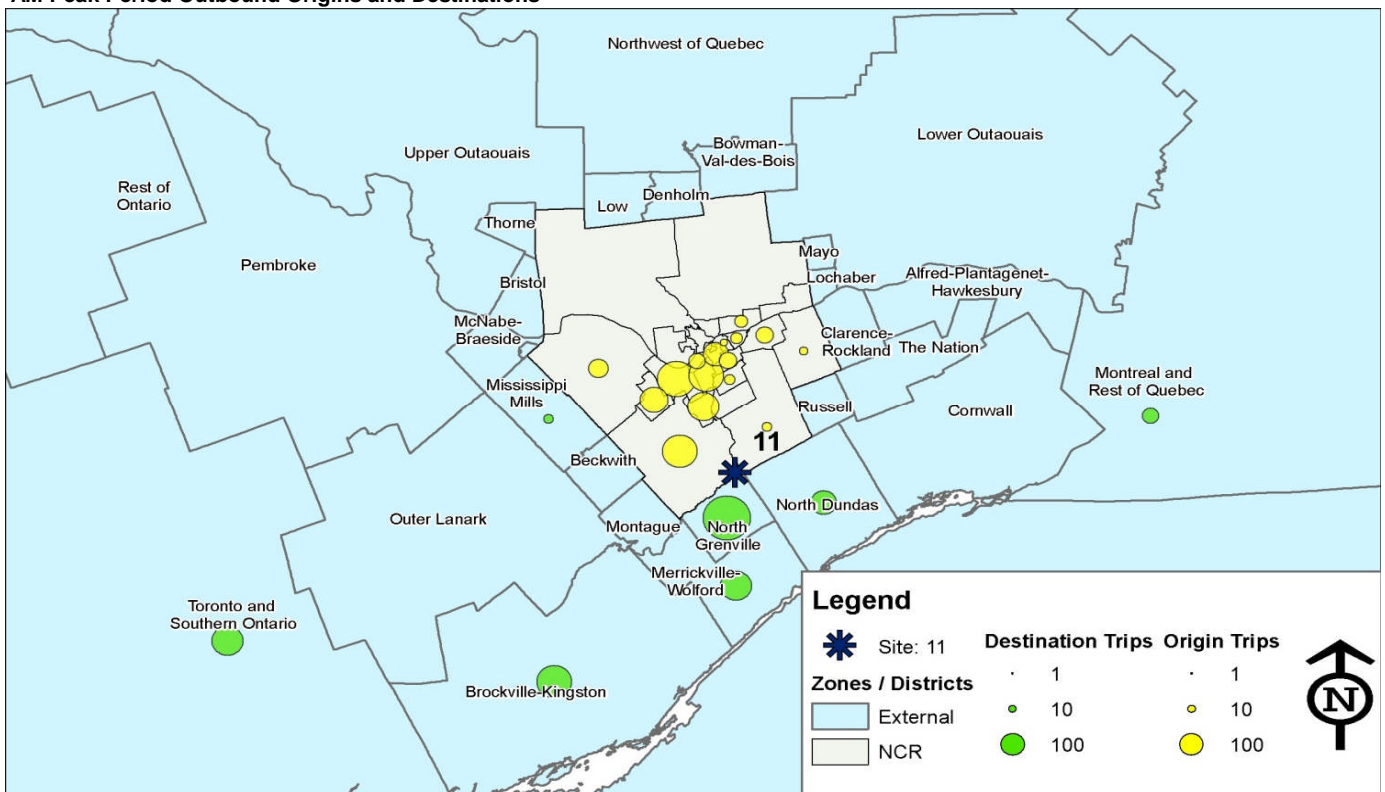


Site 11 - Highway 416 (River Rd)

AM Peak Period Inbound Origins and Destinations



AM Peak Period Outbound Origins and Destinations



Site 12 - Rd 19 (Rideau River Rd)



2009 TRAFFIC STATISTICS

Average Daily Traffic ¹	3,450
Weekday Average Daily Traffic ¹	3,650
11-h Weekday Two-Way Traffic ¹	2,750
11-h Weekday EB Traffic ¹	1,340
11-h Weekday WB Traffic ¹	1,410
11-h to 24-h Weekday Factor (EB) ¹	1.26
11-h to 24-h Weekday Factor (WB) ¹	1.25
% Personal Vehicles (11-h)	88%
% Commercial Vehicles (11-h)	12%

¹ Includes commercial vehicles

Summary of Personal Vehicle Trips by Time Period

	11-Hour	AM Peak	PM Peak
Both Directions	2,410	670	920
Inbound	1,160	540	270
Outbound	1,240	140	650
Directional Split	0.51	0.81	0.71
Park & Ride	-	0	0

Note: 11-Hour Survey Period: 6:00 - 11:59 & 14:00 - 18:59

AM Peak Period 6:00 - 8:59

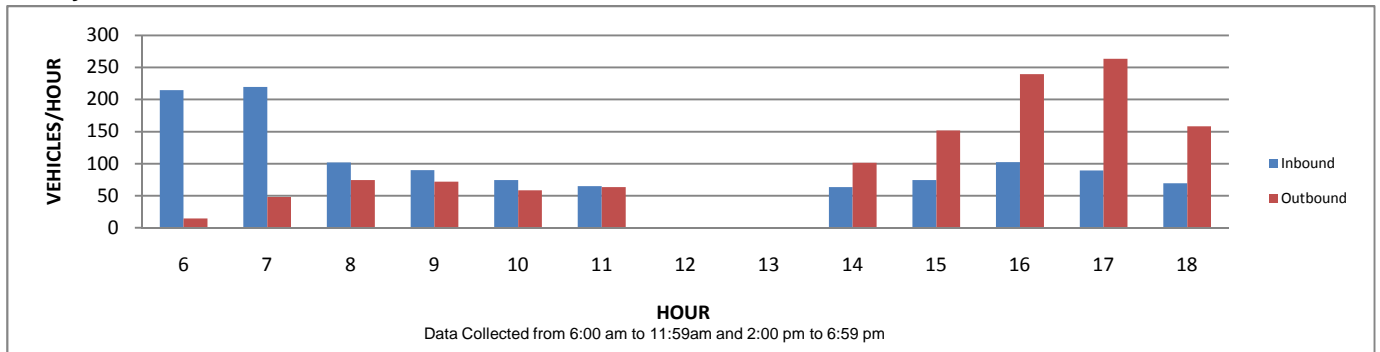
PM Peak Period 15:00 - 17:59

Inbound = Northbound ; Outbound = Southbound

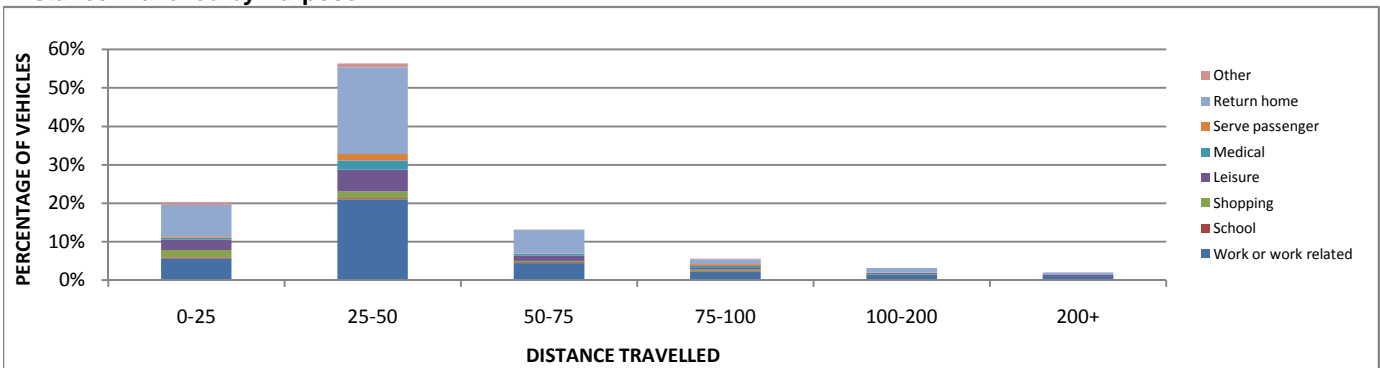
Trips by Purpose for Personal Vehicle Trips

Trip Purpose	No. of Trips	% of Trips	Avg. Persons per veh.	Avg. Distance per Trip (km)
Work or work related	850	35%	1.14	60
School	20	1%	1.29	30
Shopping	110	5%	1.59	35
Leisure	260	11%	1.50	65
Medical	90	4%	1.77	45
Serve passenger	70	3%	1.64	50
Return home	960	40%	1.32	55
Other	40	2%	1.62	40
Total	2,400	100%	1.48	50

Hourly Traffic Variation

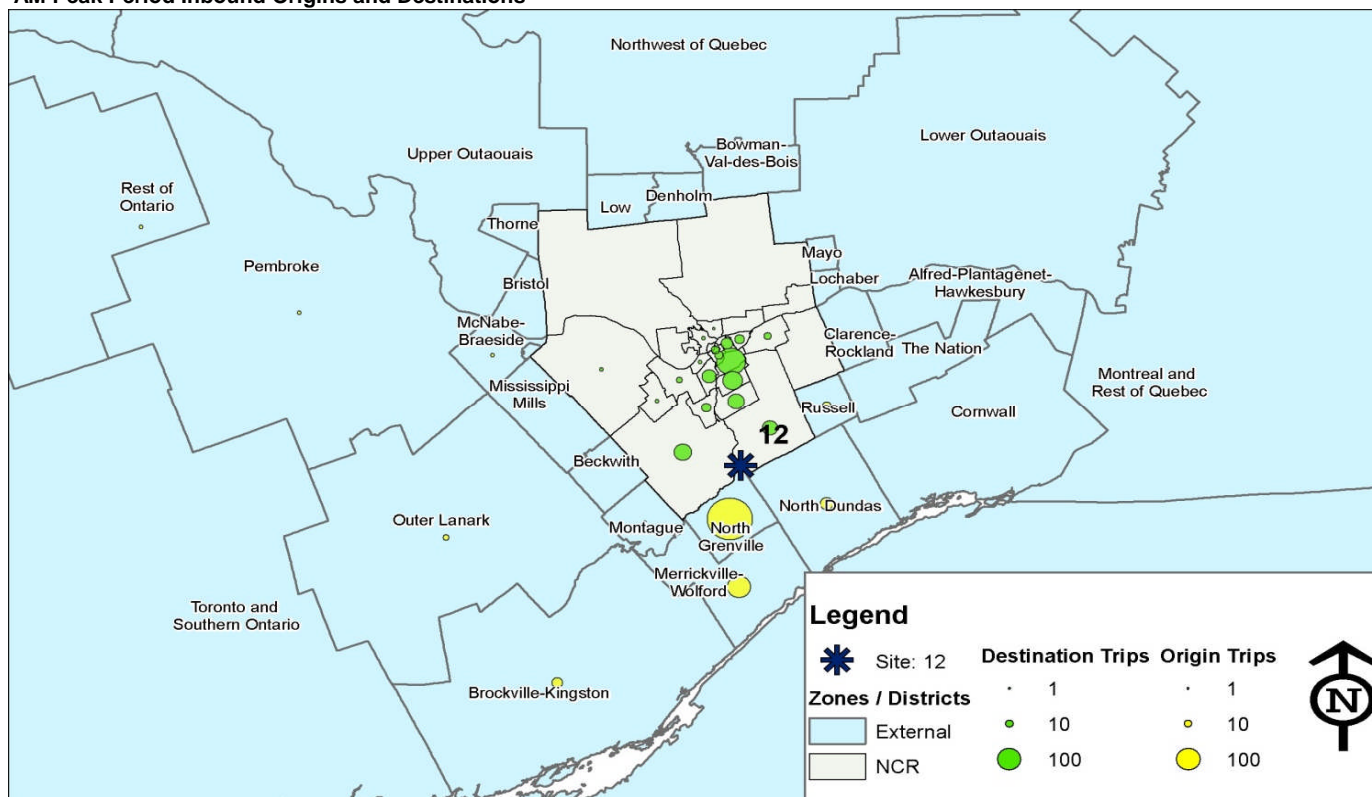


Distance Travelled by Purpose

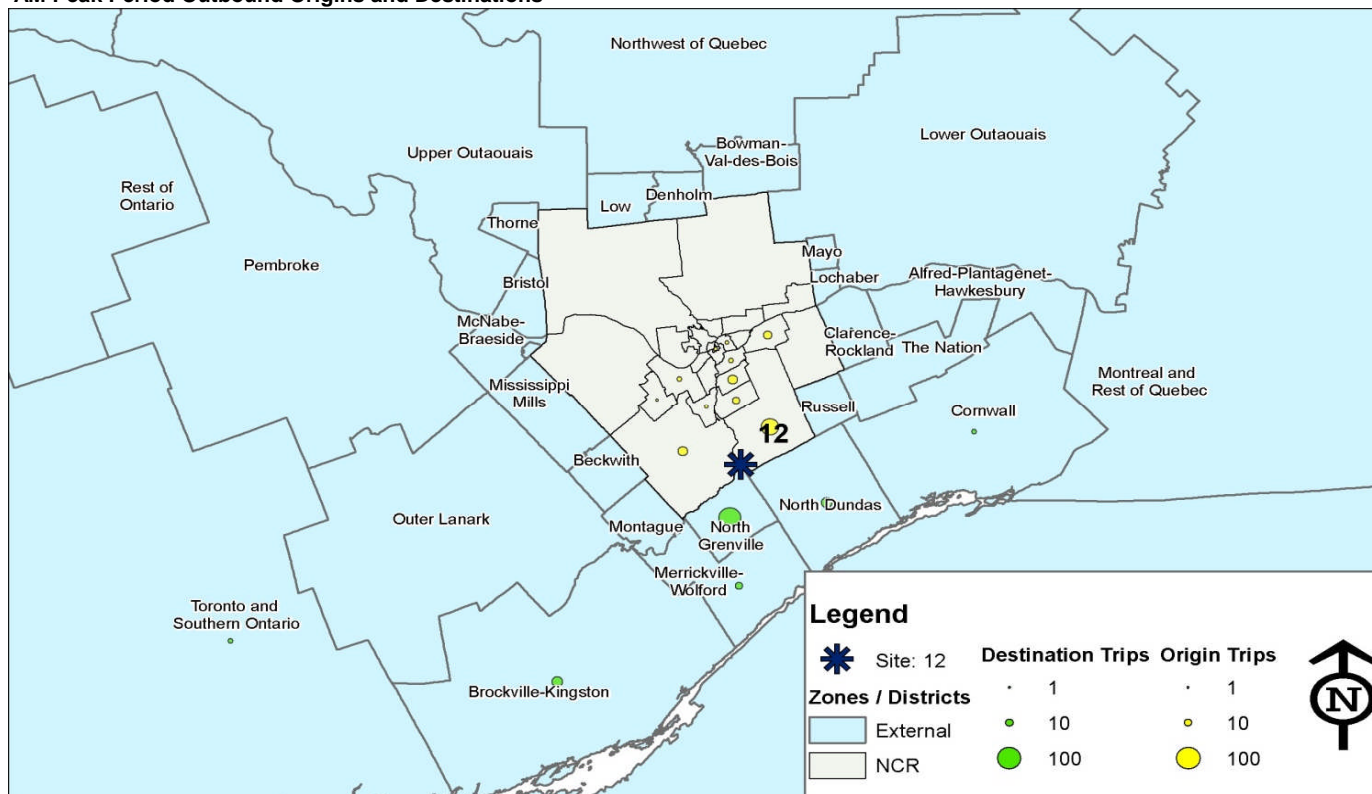


Site 12 - Rd 19 (Rideau River Rd)

AM Peak Period Inbound Origins and Destinations



AM Peak Period Outbound Origins and Destinations



Site 13 - Rd 25 (Stagecoach Rd)



2009 TRAFFIC STATISTICS

Average Daily Traffic ¹	2,270
Weekday Average Daily Traffic ¹	2,580
11-h Weekday Two-Way Traffic ¹	1,910
11-h Weekday EB Traffic ¹	950
11-h Weekday WB Traffic ¹	960
11-h to 24-h Weekday Factor (EB) ¹	1.18
11-h to 24-h Weekday Factor (WB) ¹	1.20
% Personal Vehicles (11-h)	87%
% Commercial Vehicles (11-h)	13%

¹ Includes commercial vehicles

Summary of Personal Vehicle Trips by Time Period

	11-Hour	AM Peak	PM Peak
Both Directions	1,660	550	610
Inbound	840	470	160
Outbound	820	90	450
Directional Split	0.51	0.85	0.74
Park & Ride	-	10	10

Note: 11-Hour Survey Period: 6:00 - 11:59 & 14:00 - 18:59

AM Peak Period 6:00 - 8:59

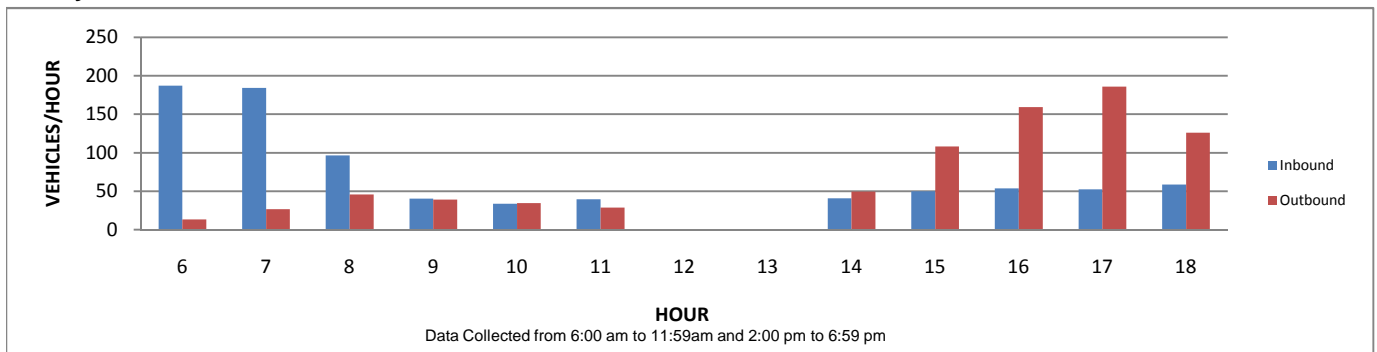
PM Peak Period 15:00 - 17:59

Inbound = Northbound ; Outbound = Southbound

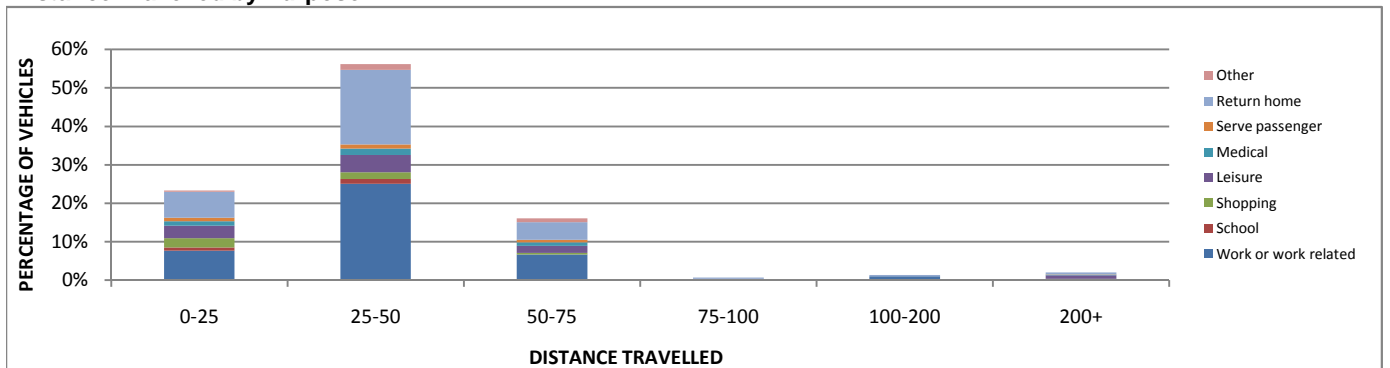
Trips by Purpose for Personal Vehicle Trips

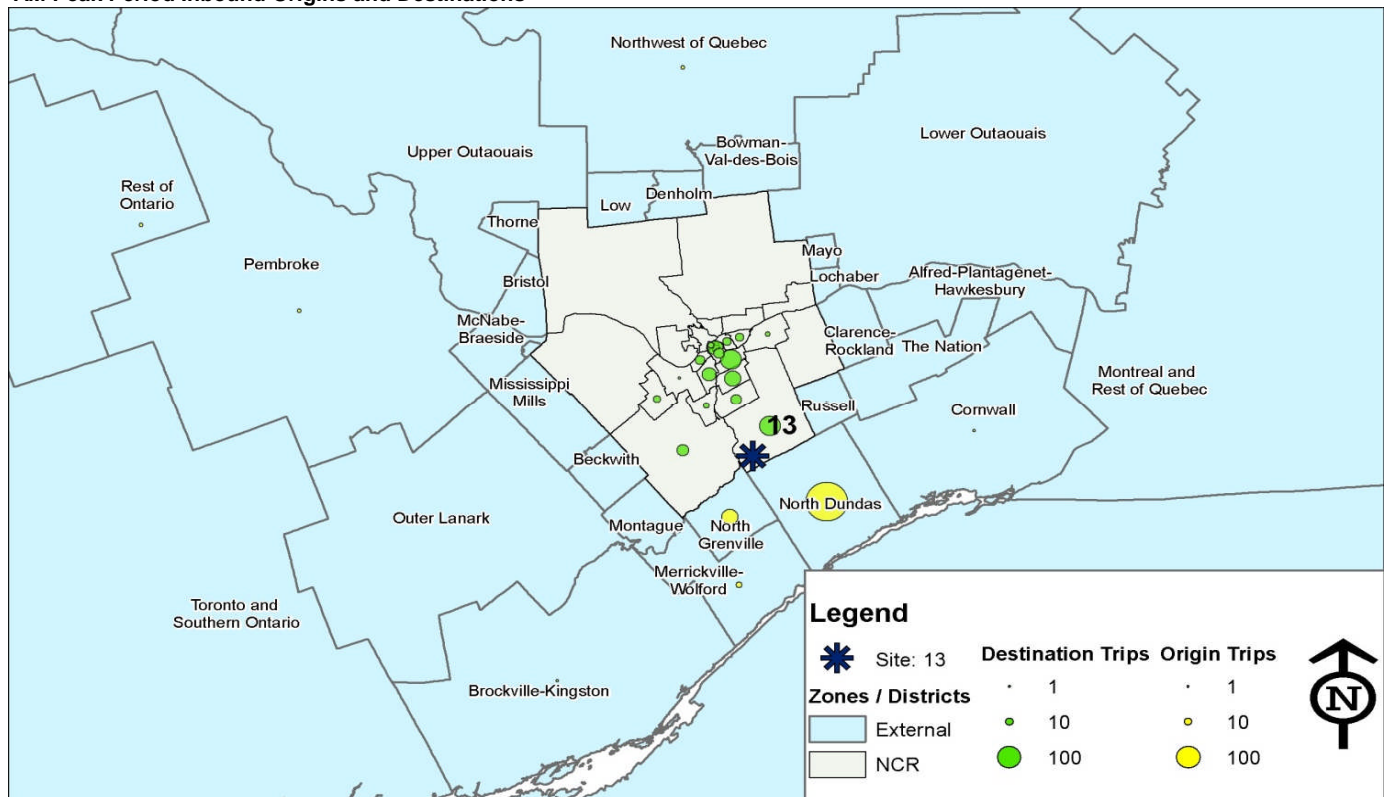
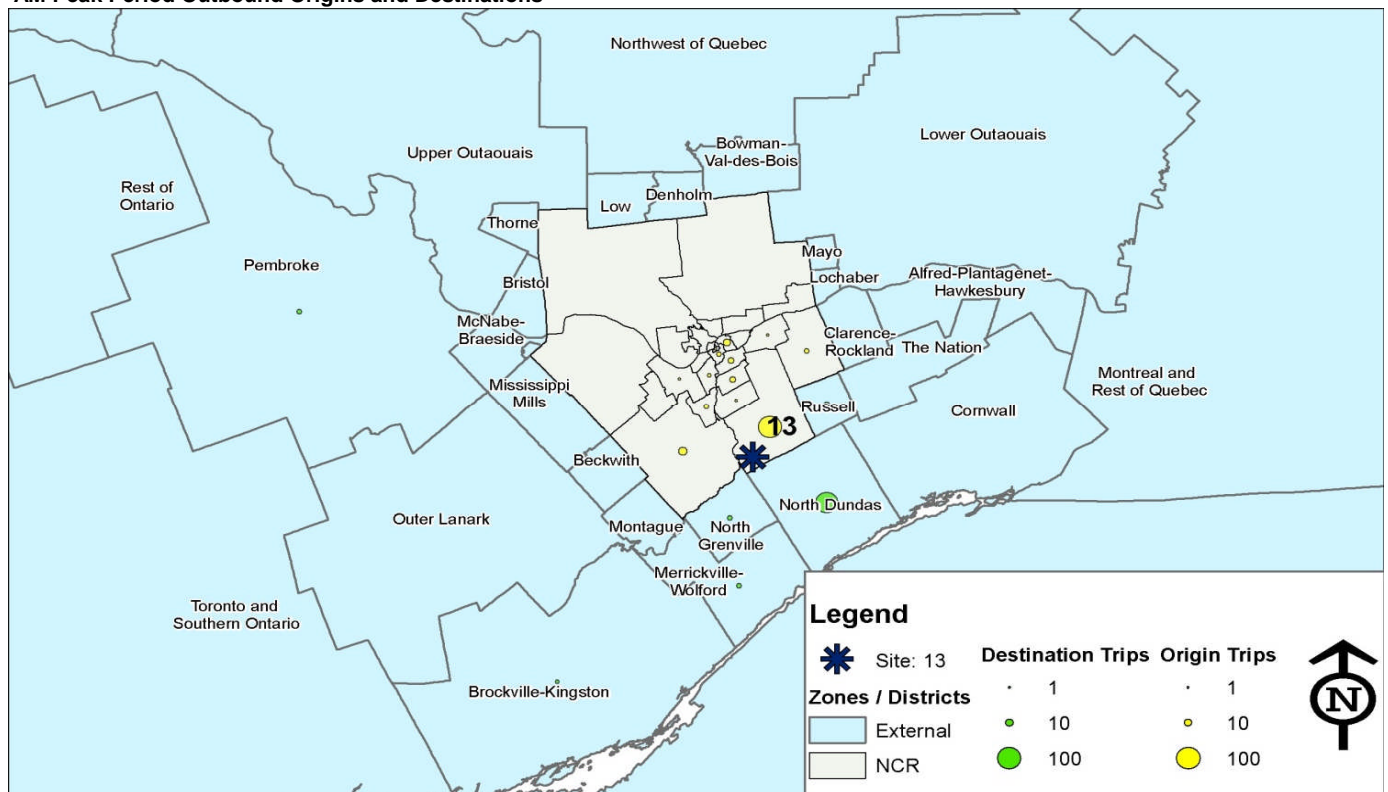
Trip Purpose	No. of Trips	% of Trips	Avg. Persons per veh.	Avg. Distance per Trip (km)
Work or work related	680	41%	1.24	40
School	30	2%	2.19	30
Shopping	80	5%	1.39	50
Leisure	170	10%	1.51	95
Medical	70	4%	1.63	45
Serve passenger	50	3%	1.67	55
Return home	530	32%	1.19	40
Other	50	3%	1.57	35
Total	1,660	100%	1.55	50

Hourly Traffic Variation



Distance Travelled by Purpose



Site 13 - Rd 25 (Stagecoach Rd)**AM Peak Period Inbound Origins and Destinations****AM Peak Period Outbound Origins and Destinations**

Site 14 - Rd 31 (Bank St)



2009 TRAFFIC STATISTICS

Average Daily Traffic ¹	6,360
Weekday Average Daily Traffic ¹	6,870
11-h Weekday Two-Way Traffic ¹	5,030
11-h Weekday EB Traffic ¹	2,650
11-h Weekday WB Traffic ¹	2,380
11-h to 24-h Weekday Factor (EB) ¹	1.22
11-h to 24-h Weekday Factor (WB) ¹	1.31
% Personal Vehicles (11-h)	85%
% Commercial Vehicles (11-h)	15%

¹ Includes commercial vehicles

Summary of Personal Vehicle Trips by Time Period

	11-Hour	AM Peak	PM Peak
Both Directions	4,280	1,260	1,510
Inbound	2,260	1,010	500
Outbound	2,020	250	1,010
Directional Split	0.53	0.80	0.67
Park & Ride	-	30	10

Note: 11-Hour Survey Period: 6:00 - 11:59 & 14:00 - 18:59

AM Peak Period 6:00 - 8:59

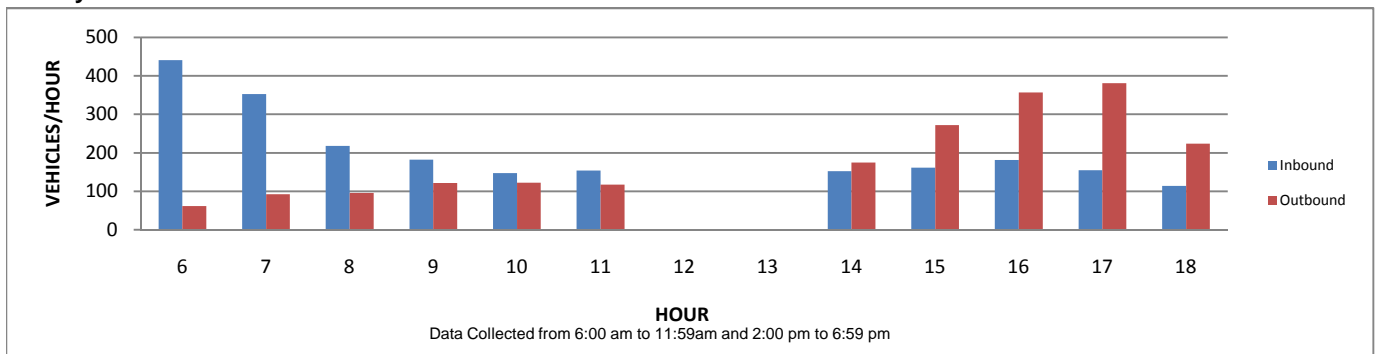
PM Peak Period 15:00 - 17:59

Inbound = Northbound ; Outbound = Southbound

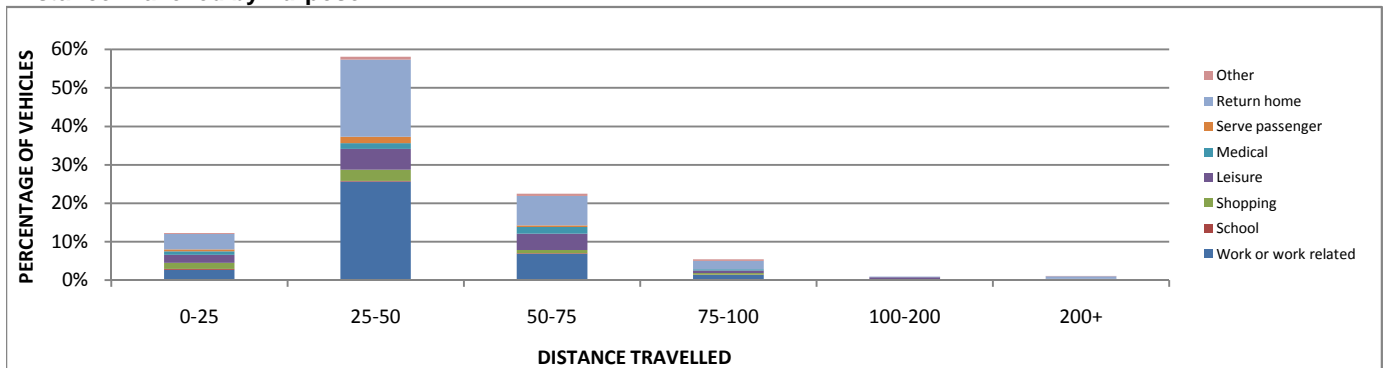
Trips by Purpose for Personal Vehicle Trips

Trip Purpose	No. of Trips	% of Trips	Avg. Persons per veh.	Avg. Distance per Trip (km)
Work or work related	1,570	37%	1.17	50
School	30	1%	1.06	60
Shopping	250	6%	1.43	35
Leisure	550	13%	1.61	55
Medical	190	4%	1.46	45
Serve passenger	110	3%	1.42	40
Return home	1,480	35%	1.35	50
Other	90	2%	1.34	65
Total	4,270	100%	1.35	50

Hourly Traffic Variation

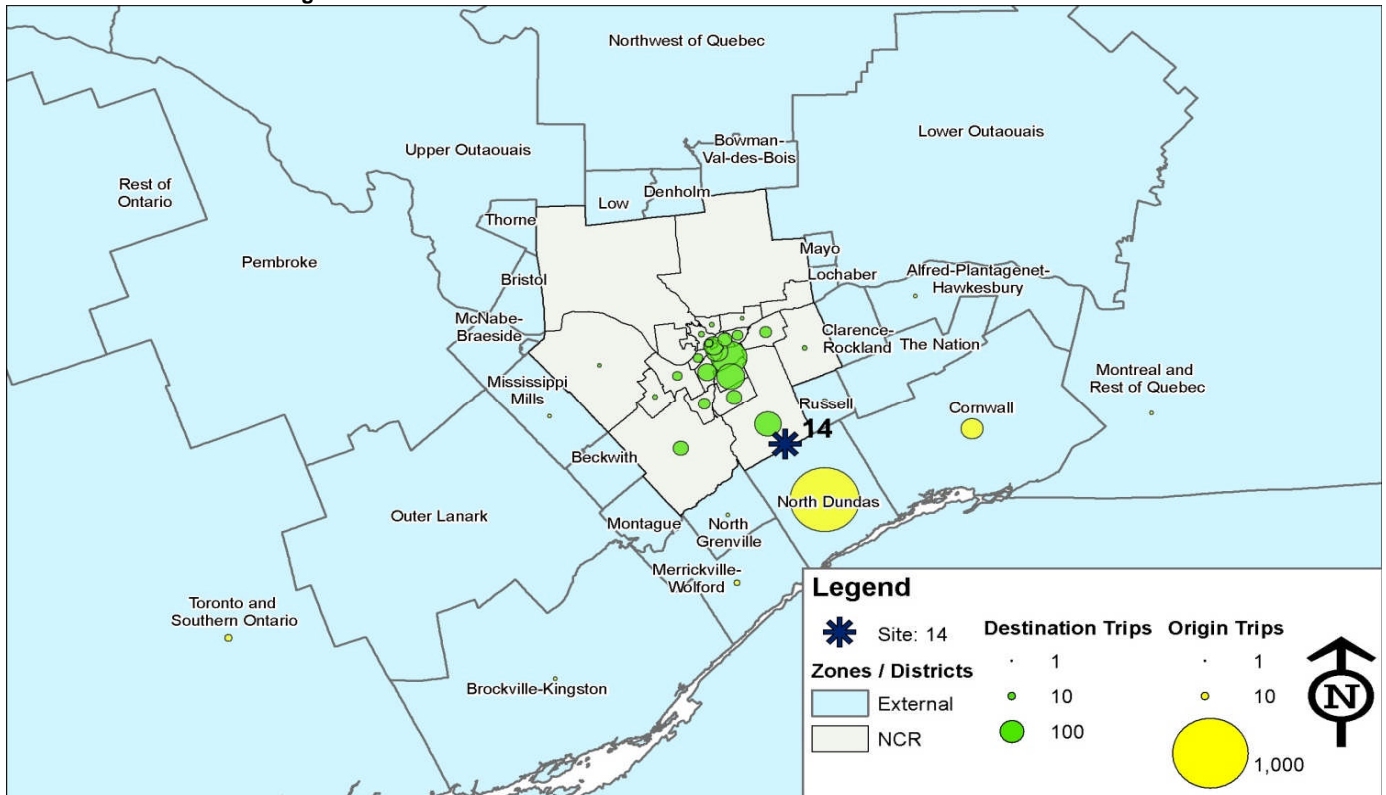


Distance Travelled by Purpose

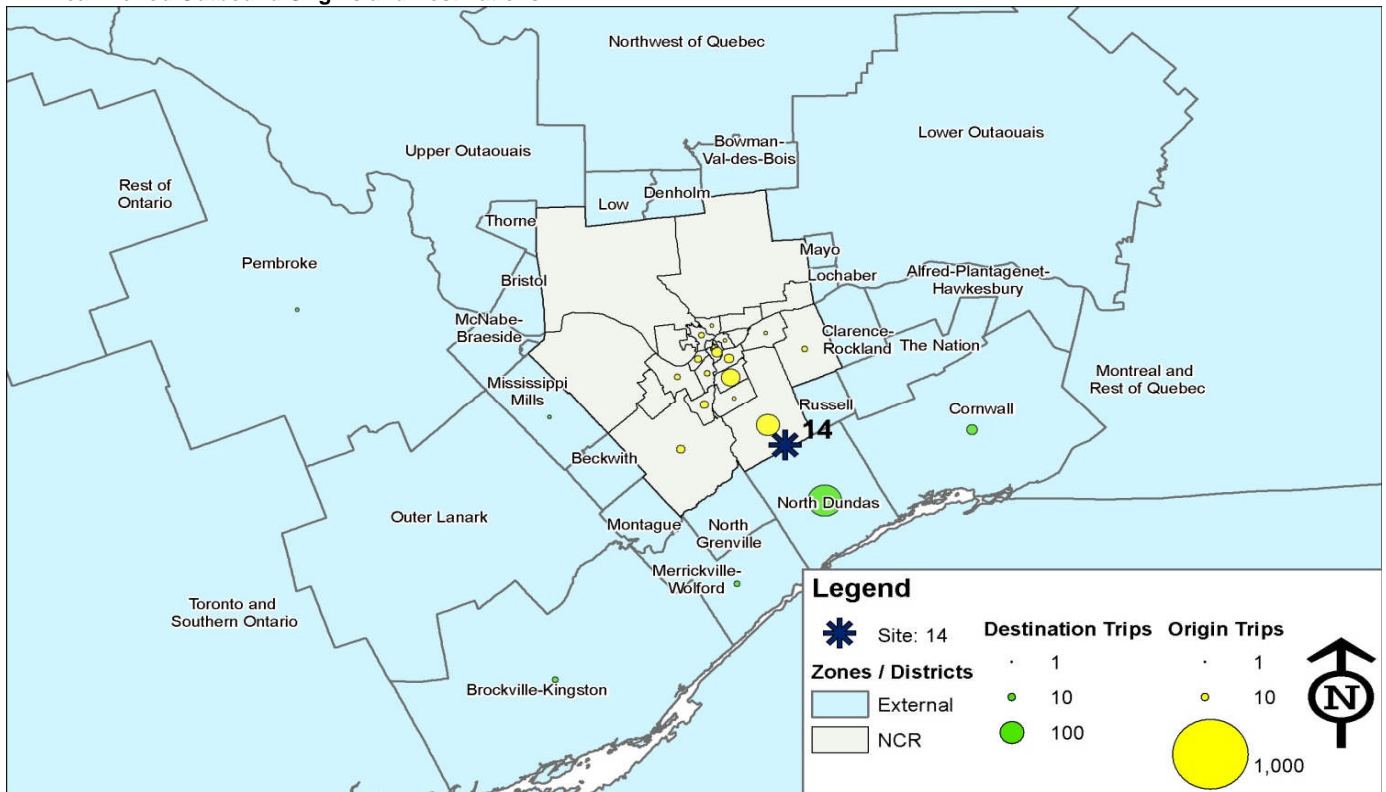


Site 14 - Rd 31 (Bank St)

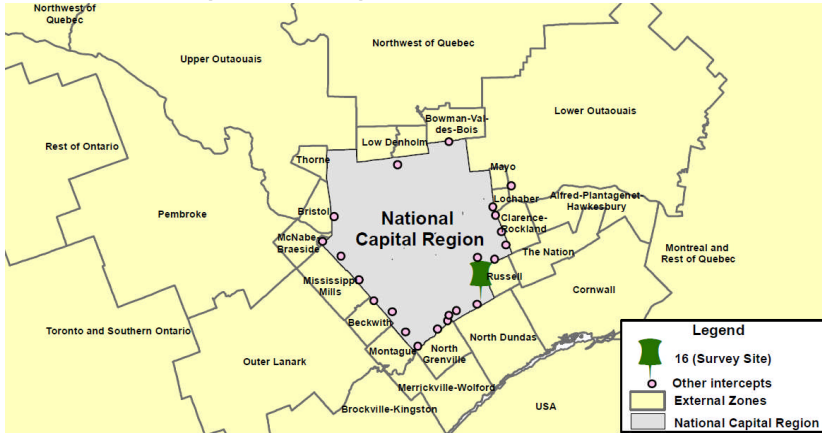
AM Peak Period Inbound Origins and Destinations



AM Peak Period Outbound Origins and Destinations



Site 16 - Rd 6 (Victoria St)



2009 TRAFFIC STATISTICS

Average Daily Traffic ¹	3,140
Weekday Average Daily Traffic ¹	3,250
11-h Weekday Two-Way Traffic ¹	2,330
11-h Weekday EB Traffic ¹	1,180
11-h Weekday WB Traffic ¹	1,150
11-h to 24-h Weekday Factor (EB) ¹	1.33
11-h to 24-h Weekday Factor (WB) ¹	1.37
% Personal Vehicles (11-h)	76%
% Commercial Vehicles (11-h)	24%

¹ Includes commercial vehicles

Summary of Personal Vehicle Trips by Time Period

	11-Hour	AM Peak	PM Peak
Both Directions	1,780	530	670
Inbound	850	340	200
Outbound	920	180	460
Directional Split	0.52	0.64	0.69
Park & Ride	-	0	0

Note: 11-Hour Survey Period: 6:00 - 11:59 & 14:00 - 18:59

AM Peak Period 6:00 - 8:59

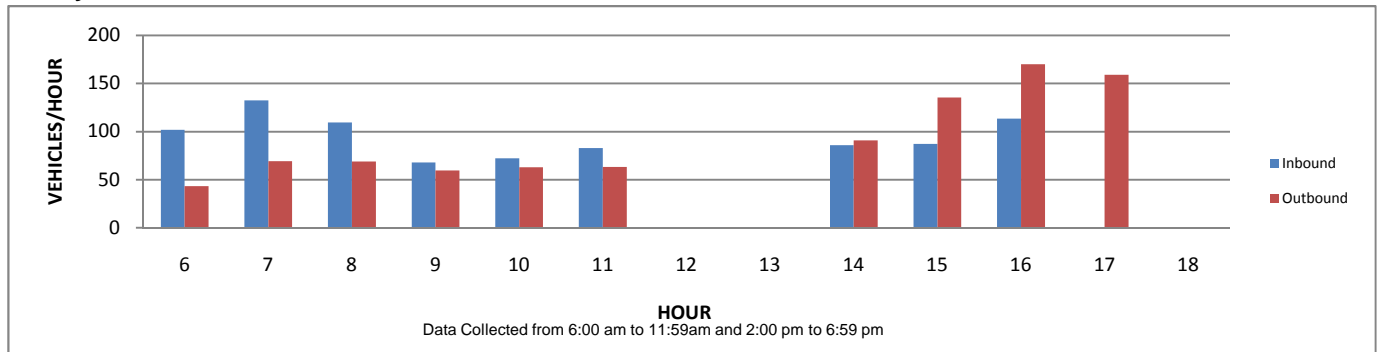
PM Peak Period 15:00 - 17:59

Inbound = Westbound ; Outbound = Eastbound

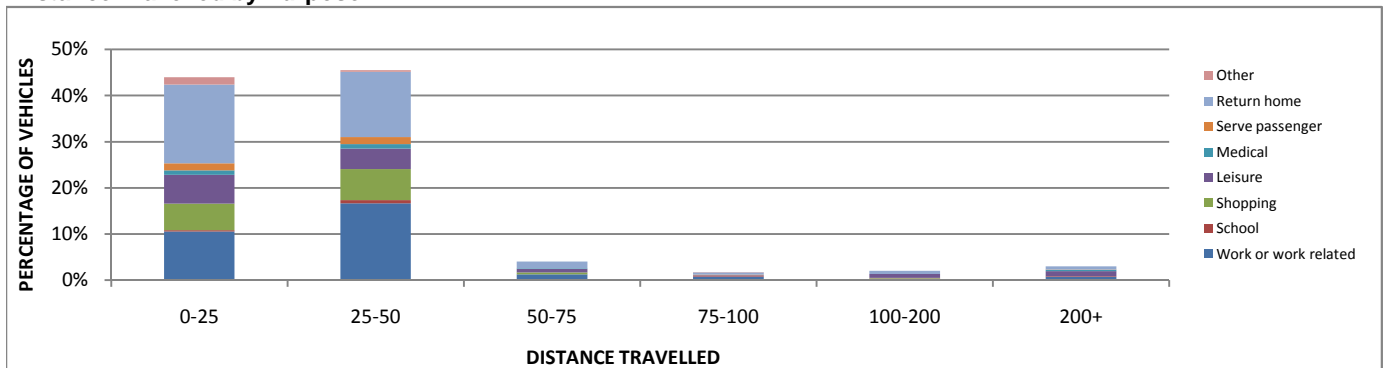
Trips by Purpose for Personal Vehicle Trips

Trip Purpose	No. of Trips	% of Trips	Avg. Persons per veh.	Avg. Distance per Trip (km)
Work or work related	530	30%	1.15	45
School	20	1%	1.09	80
Shopping	230	13%	1.42	25
Leisure	240	14%	1.52	95
Medical	40	2%	1.60	130
Serve passenger	60	3%	1.40	40
Return home	610	34%	1.38	40
Other	40	2%	1.09	20
Total	1,770	100%	1.33	60

Hourly Traffic Variation

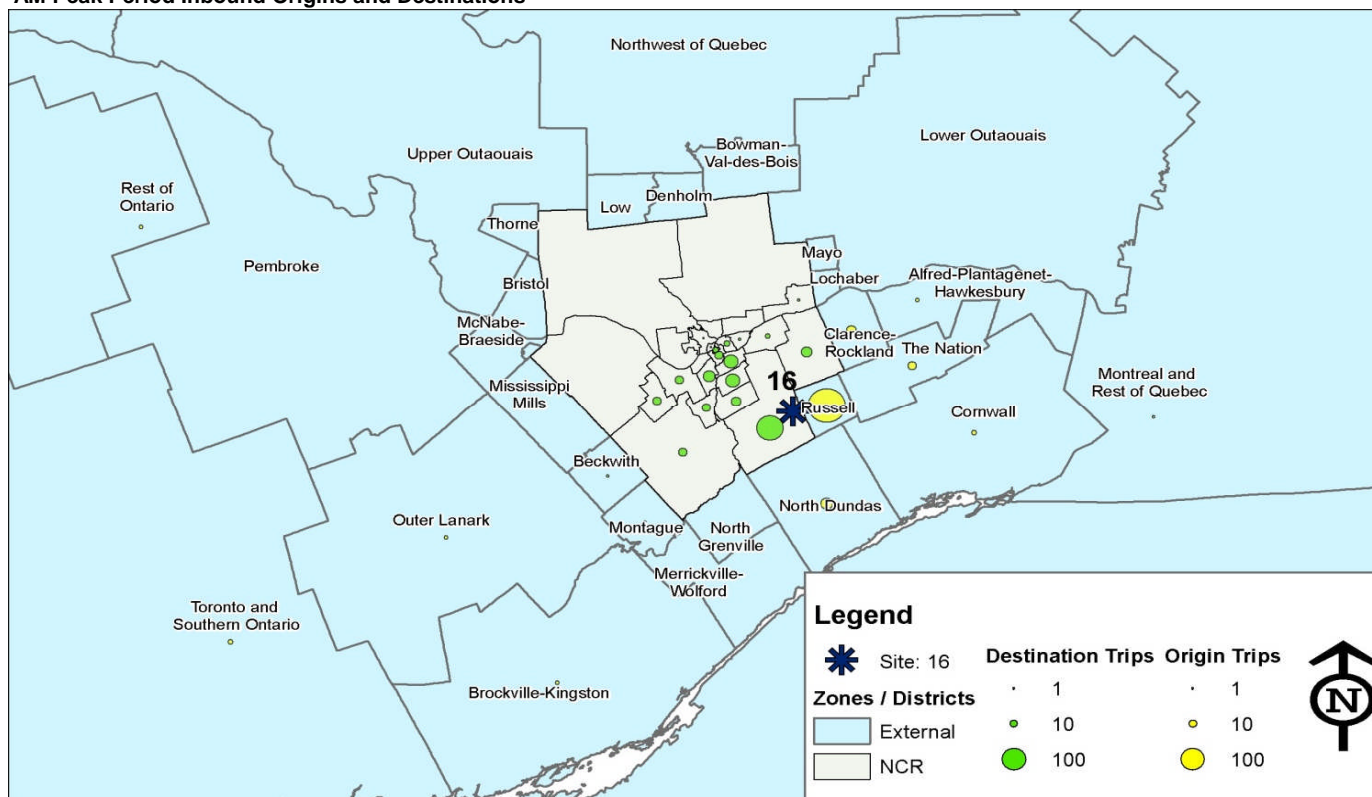


Distance Travelled by Purpose

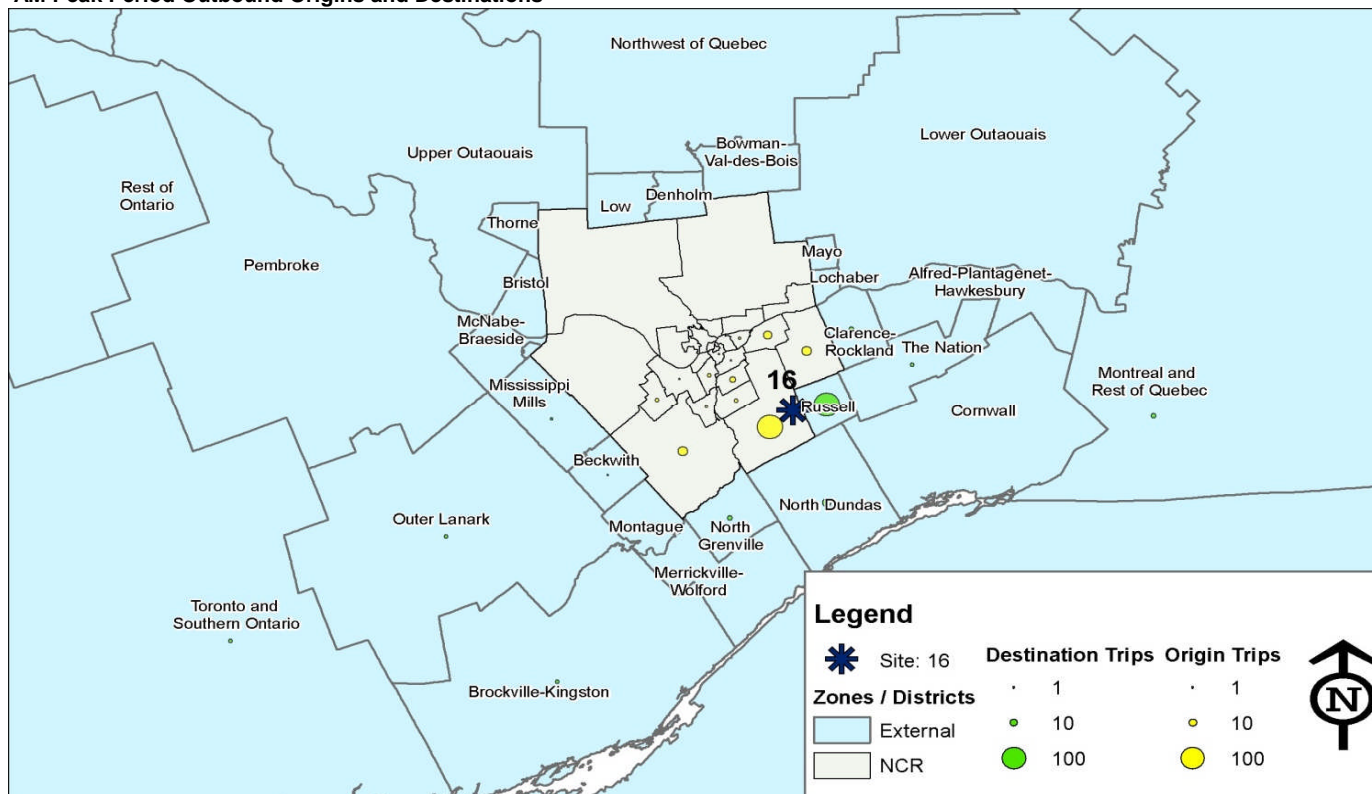


Site 16 - Rd 6 (Victoria St)

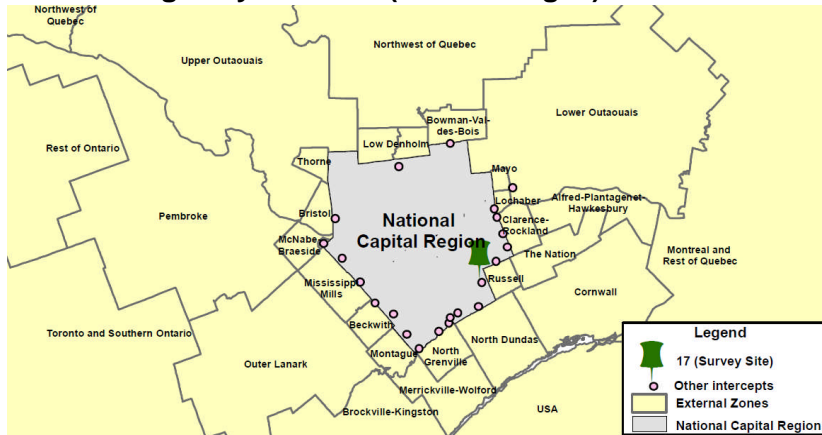
AM Peak Period Inbound Origins and Destinations



AM Peak Period Outbound Origins and Destinations



Site 17 - Highway 417 East (Near Limoges)



2009 TRAFFIC STATISTICS

Average Daily Traffic ¹	29,450
Weekday Average Daily Traffic ¹	29,450
11-h Weekday Two-Way Traffic ¹	21,660
11-h Weekday EB Traffic ¹	10,530
11-h Weekday WB Traffic ¹	11,130
11-h to 24-h Weekday Factor (EB) ¹	1.40
11-h to 24-h Weekday Factor (WB) ¹	1.32
% Personal Vehicles (11-h)	89%
% Commercial Vehicles (11-h)	11%

¹ Includes commercial vehicles

Summary of Personal Vehicle Trips by Time Period

	11-Hour	AM Peak	PM Peak
Both Directions	19,190	6,100	6,810
Inbound	9,910	5,070	1,750
Outbound	9,280	1,030	5,060
Directional Split	0.52	0.83	0.74
Park & Ride	-	140	140

Note: 11-Hour Survey Period: 6:00 - 11:59 & 14:00 - 18:59

AM Peak Period 6:00 - 8:59

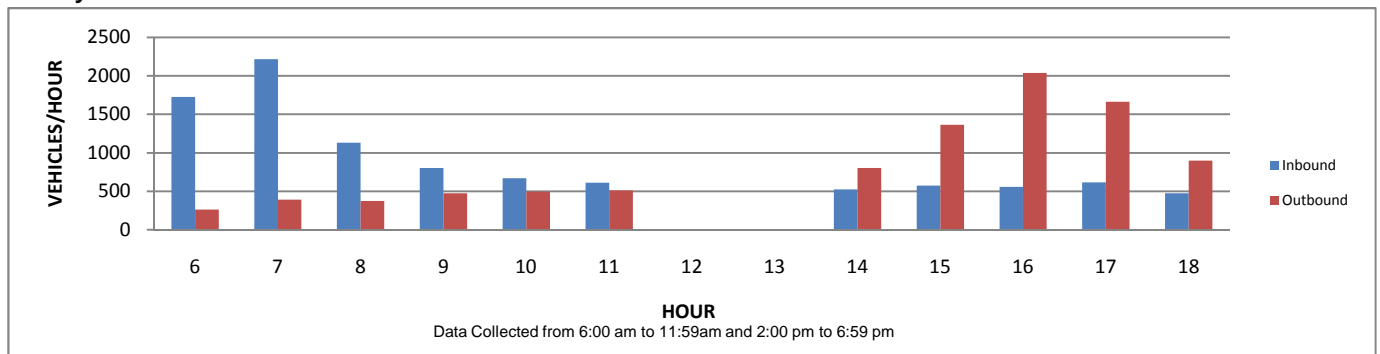
PM Peak Period 15:00 - 17:59

Inbound = Westbound ; Outbound = Eastbound

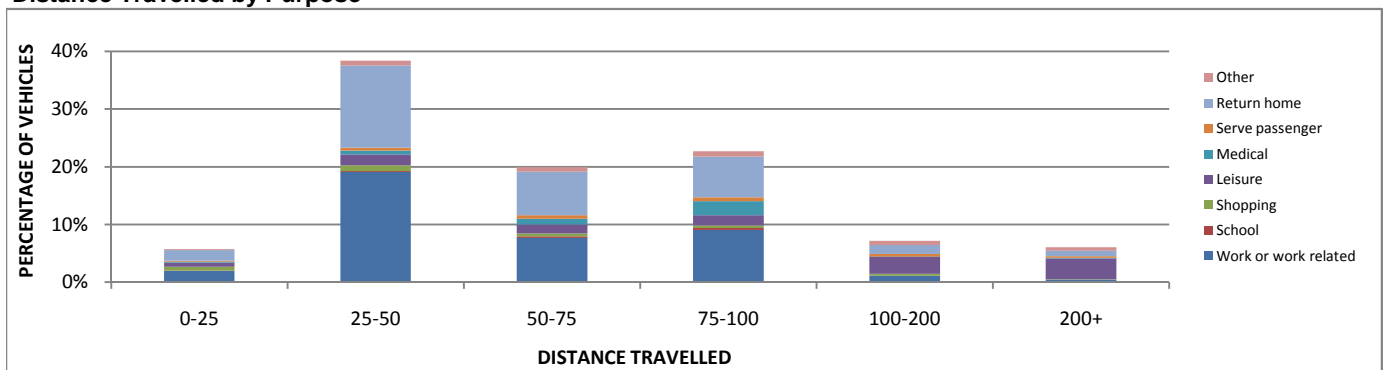
Trips by Purpose for Personal Vehicle Trips

Trip Purpose	No. of Trips	% of Trips	Avg. Persons per veh.	Avg. Distance per Trip (km)
Work or work related	7,550	39%	1.31	65
School	170	1%	1.61	40
Shopping	540	3%	1.89	95
Leisure	2,430	13%	1.69	275
Medical	850	4%	1.64	75
Serve passenger	500	3%	1.93	95
Return home	6,370	33%	1.44	110
Other	780	4%	1.57	160
Total	19,190	100%	1.63	115

Hourly Traffic Variation

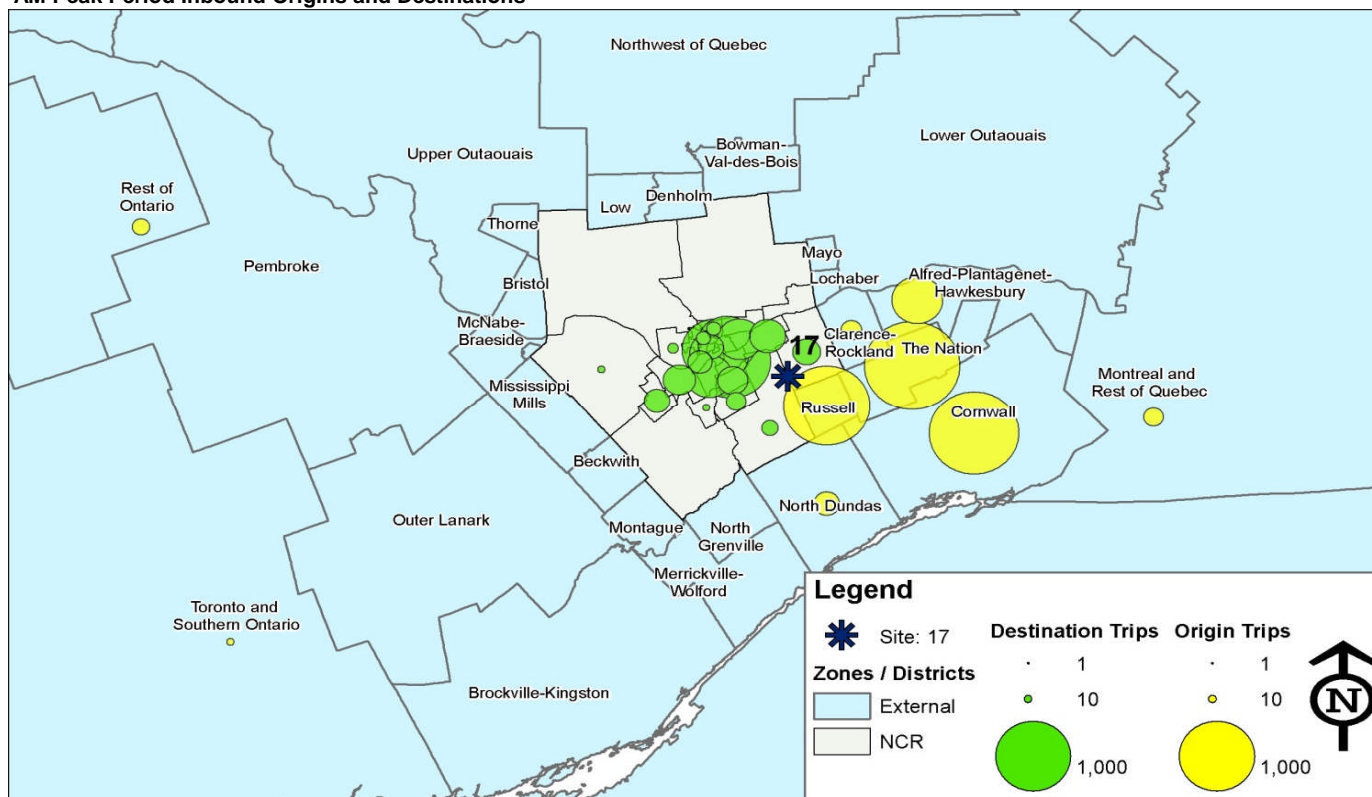


Distance Travelled by Purpose

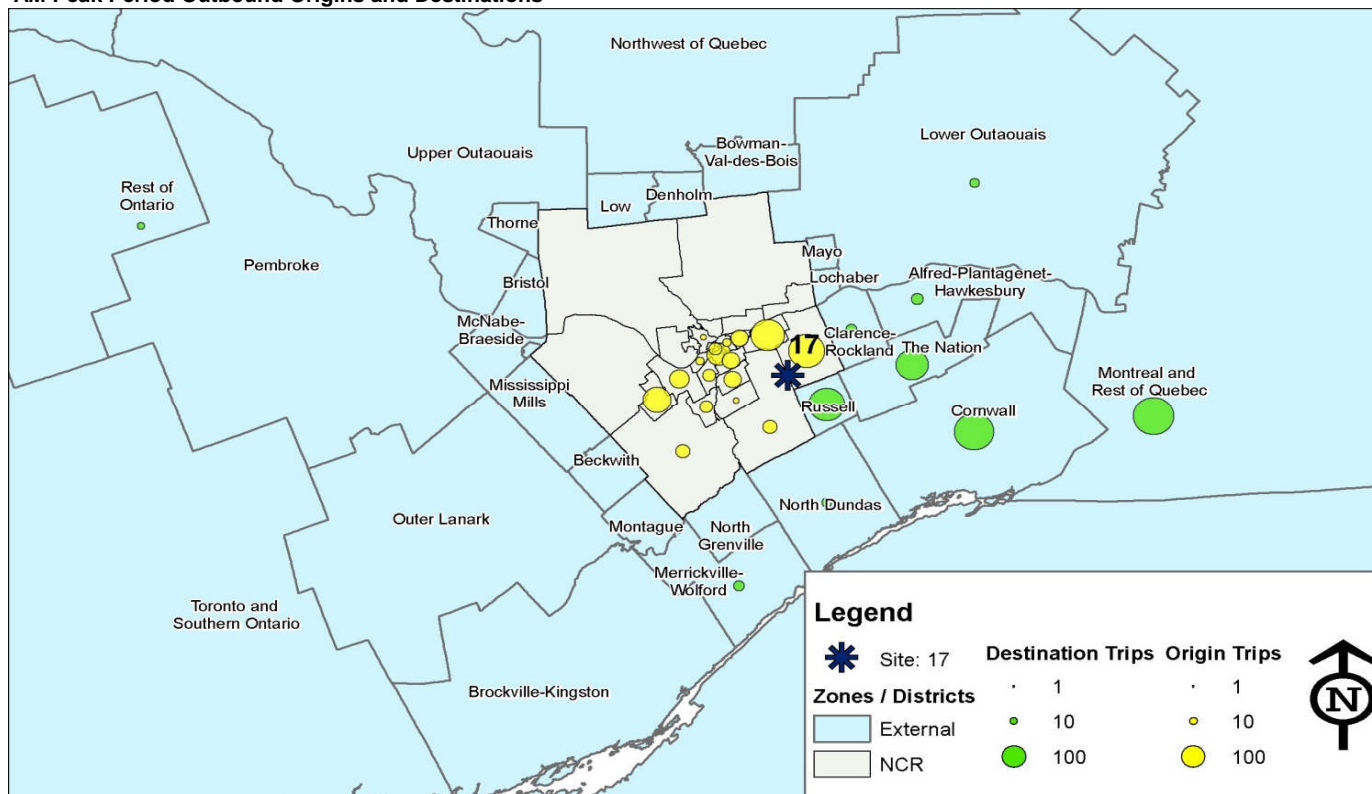


Site 17 - Highway 417 East (Near Limoges)

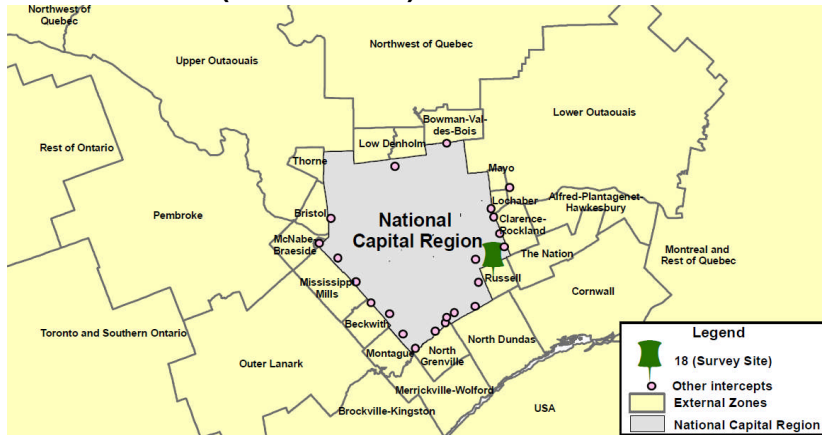
AM Peak Period Inbound Origins and Destinations



AM Peak Period Outbound Origins and Destinations



Site 18 - Rd 33 (Rockdale Rd)



2009 TRAFFIC STATISTICS

Average Daily Traffic ¹	6,430
Weekday Average Daily Traffic ¹	6,820
11-h Weekday Two-Way Traffic ¹	4,940
11-h Weekday EB Traffic ¹	2,390
11-h Weekday WB Traffic ¹	2,550
11-h to 24-h Weekday Factor (EB) ¹	1.22
11-h to 24-h Weekday Factor (WB) ¹	1.37
% Personal Vehicles (11-h)	86%
% Commercial Vehicles (11-h)	14%

¹ Includes commercial vehicles

Summary of Personal Vehicle Trips by Time Period

	11-Hour	AM Peak	PM Peak
Both Directions	4,270	1,240	1,550
Inbound	2,060	520	790
Outbound	2,220	720	760
Directional Split	0.52	0.58	0.51
Park & Ride	-	20	30

Note: 11-Hour Survey Period: 6:00 - 11:59 & 14:00 - 18:59

AM Peak Period 6:00 - 8:59

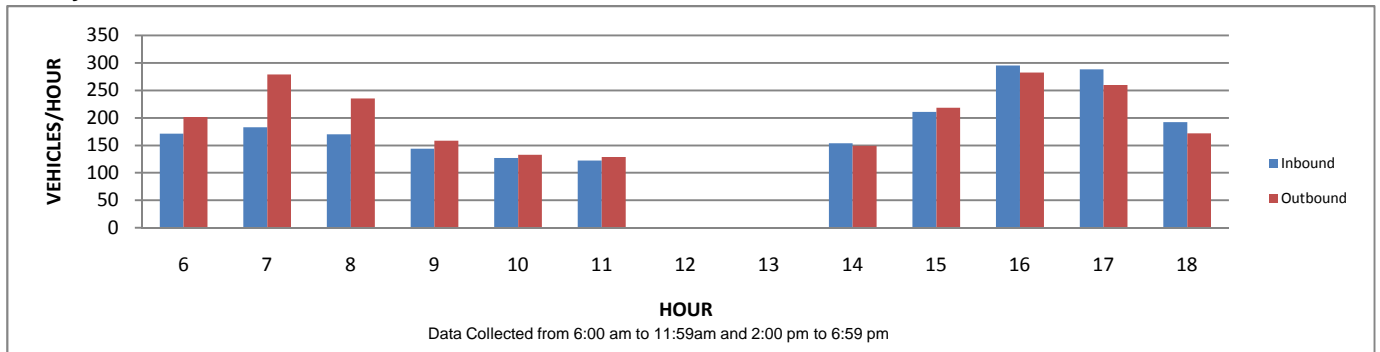
PM Peak Period 15:00 - 17:59

Inbound = Northbound ; Outbound = Southbound

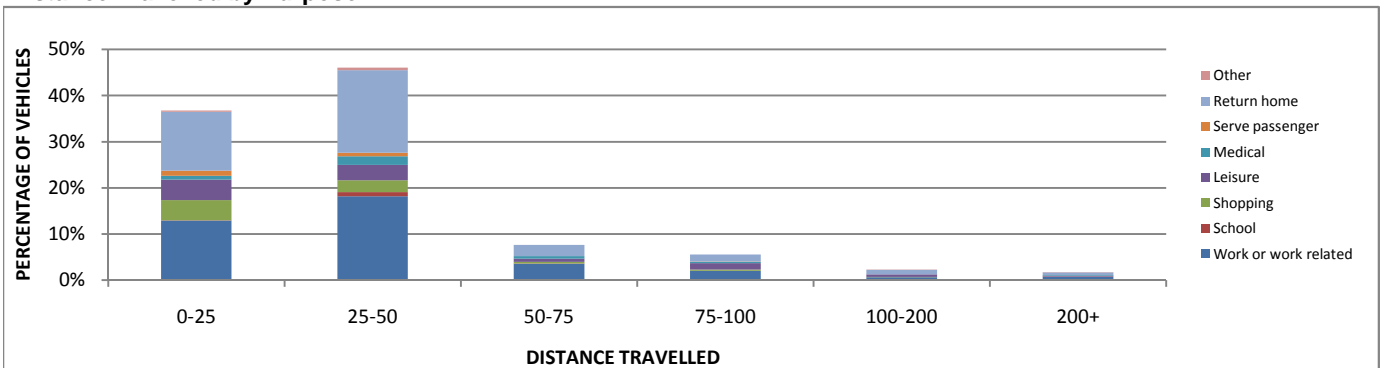
Trips by Purpose for Personal Vehicle Trips

Trip Purpose	No. of Trips	% of Trips	Avg. Persons per veh.	Avg. Distance per Trip (km)
Work or work related	1,620	38%	1.16	40
School	50	1%	1.25	150
Shopping	330	8%	1.64	25
Leisure	450	11%	1.52	60
Medical	160	4%	1.32	50
Serve passenger	80	2%	1.44	25
Return home	1,540	36%	1.26	45
Other	40	1%	1.15	100
Total	4,270	100%	1.34	60

Hourly Traffic Variation

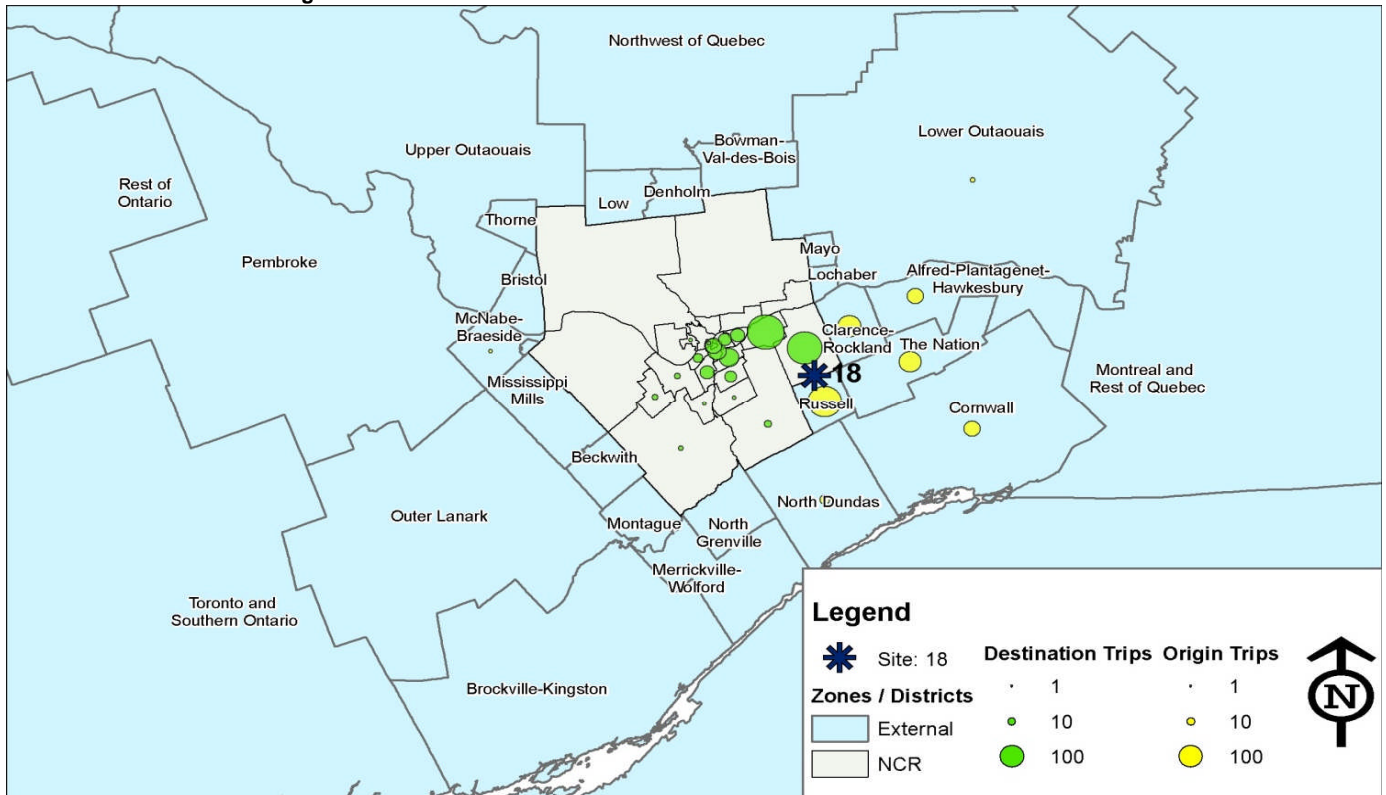


Distance Travelled by Purpose

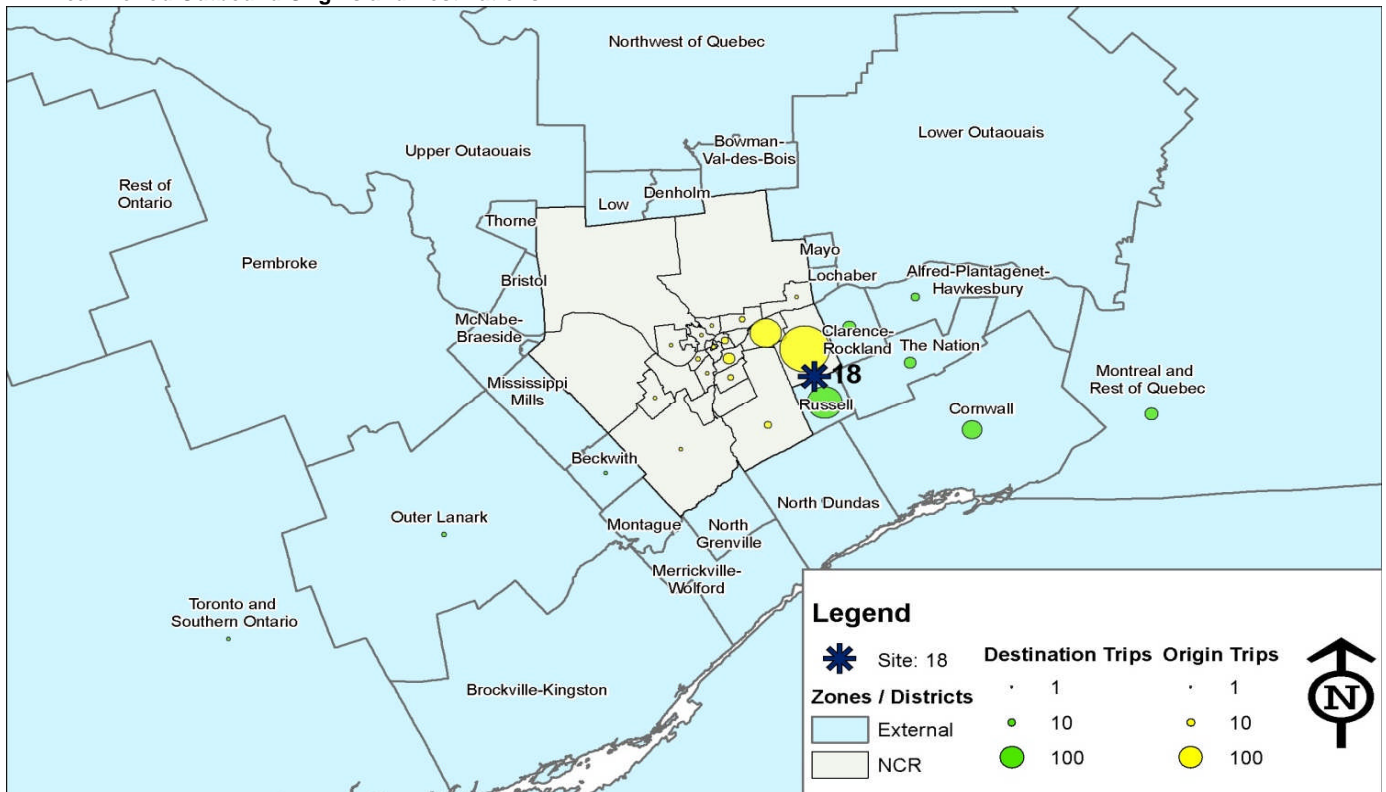


Site 18 - Rd 33 (Rockdale Rd)

AM Peak Period Inbound Origins and Destinations



AM Peak Period Outbound Origins and Destinations



Site 20 - Rd 26 (Russell Rd)



2009 TRAFFIC STATISTICS

Average Daily Traffic ¹	5,410
Weekday Average Daily Traffic ¹	5,960
11-h Weekday Two-Way Traffic ¹	4,360
11-h Weekday EB Traffic ¹	2,120
11-h Weekday WB Traffic ¹	2,240
11-h to 24-h Weekday Factor (EB) ¹	1.24
11-h to 24-h Weekday Factor (WB) ¹	1.24
% Personal Vehicles (11-h)	81%
% Commercial Vehicles (11-h)	19%

¹ Includes commercial vehicles

Summary of Personal Vehicle Trips by Time Period

	11-Hour	AM Peak	PM Peak
Both Directions	3,530	1,340	1,400
Inbound	1,930	1,110	360
Outbound	1,600	230	1,040
Directional Split	0.55	0.83	0.74
Park & Ride	-	20	10

Note: 11-Hour Survey Period: 6:00 - 11:59 & 14:00 - 18:59

AM Peak Period 6:00 - 8:59

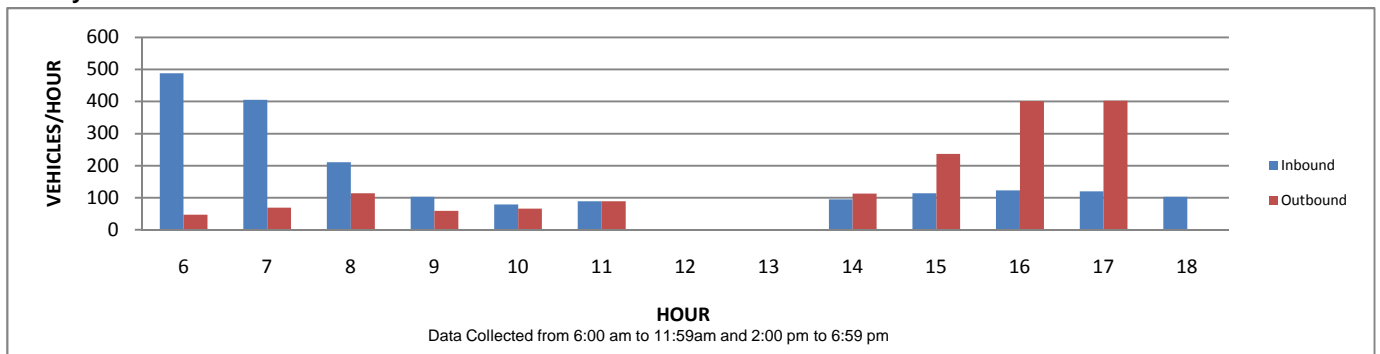
PM Peak Period 15:00 - 17:59

Inbound = Westbound ; Outbound = Eastbound

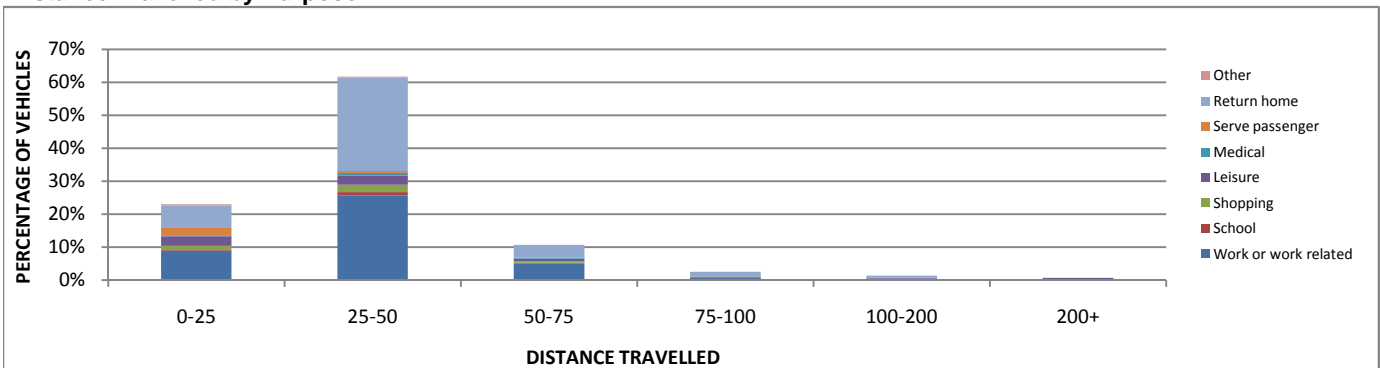
Trips by Purpose for Personal Vehicle Trips

Trip Purpose	No. of Trips	% of Trips	Avg. Persons per veh.	Avg. Distance per Trip (km)
Work or work related	1,450	41%	1.20	35
School	50	1%	1.35	40
Shopping	150	4%	1.42	35
Leisure	260	7%	1.42	75
Medical	50	1%	1.19	30
Serve passenger	100	3%	1.72	25
Return home	1,450	41%	1.24	35
Other	20	1%	2.25	25
Total	3,530	100%	1.47	40

Hourly Traffic Variation

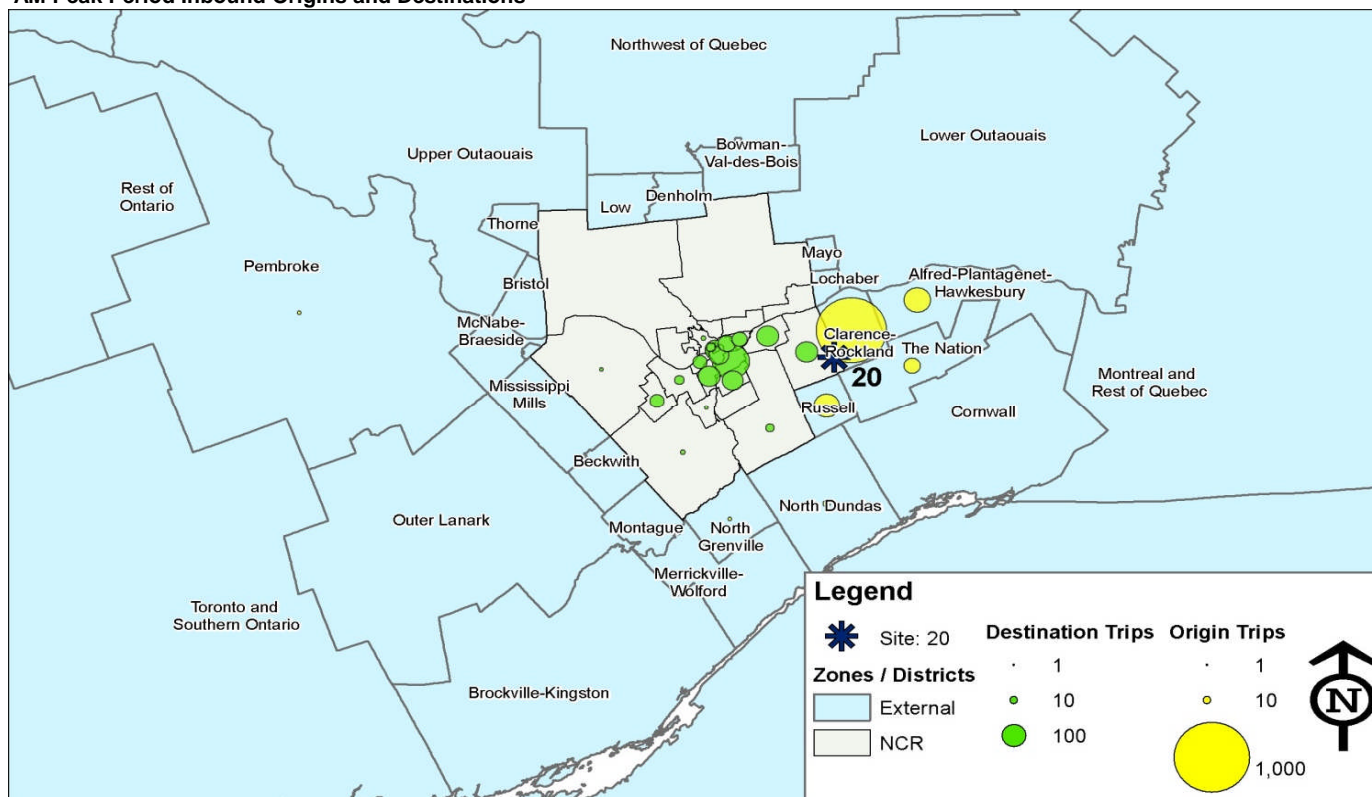


Distance Travelled by Purpose

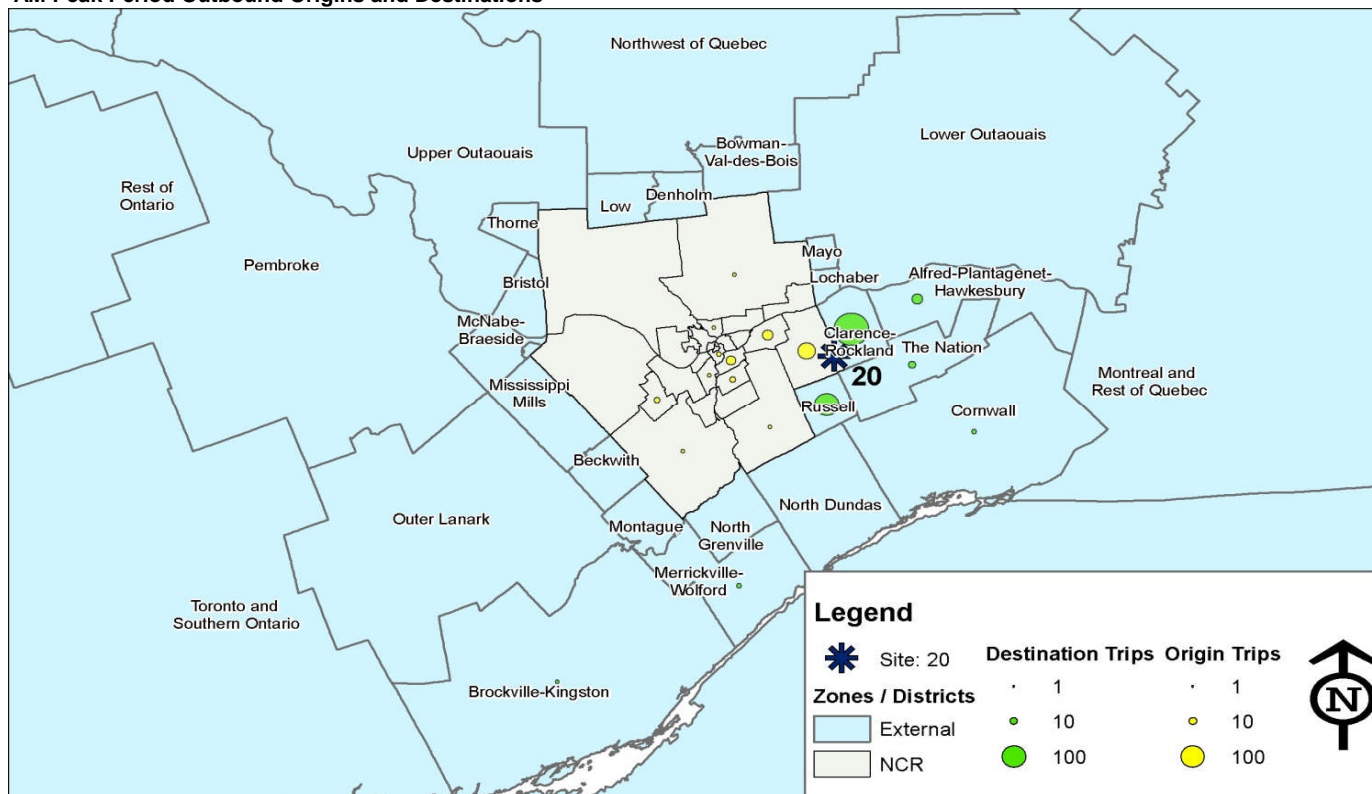


Site 20 - Rd 26 (Russell Rd)

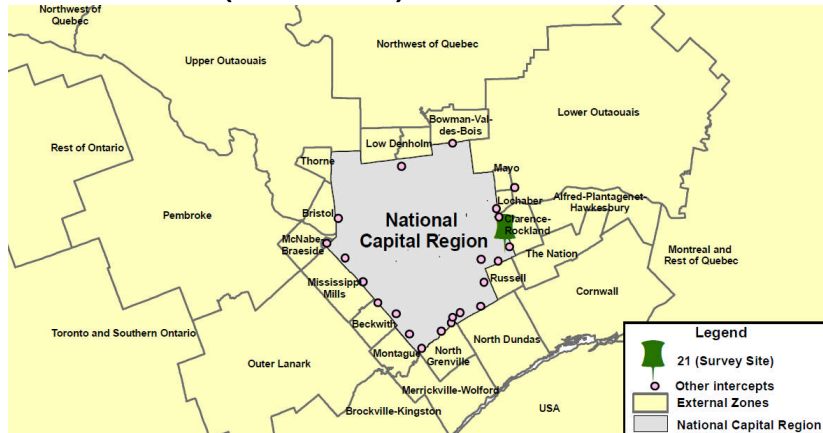
AM Peak Period Inbound Origins and Destinations



AM Peak Period Outbound Origins and Destinations



Site 21 - Rd 28 (Colonial Rd)



2009 TRAFFIC STATISTICS

Average Daily Traffic ¹	3,100
Weekday Average Daily Traffic ¹	3,460
11-h Weekday Two-Way Traffic ¹	2,570
11-h Weekday EB Traffic ¹	1,240
11-h Weekday WB Traffic ¹	1,340
11-h to 24-h Weekday Factor (EB) ¹	1.23
11-h to 24-h Weekday Factor (WB) ¹	1.18
% Personal Vehicles (11-h)	88%
% Commercial Vehicles (11-h)	12%

¹ Includes commercial vehicles

Summary of Personal Vehicle Trips by Time Period

	11-Hour	AM Peak	PM Peak
Both Directions	2,260	730	830
Inbound	1,170	610	200
Outbound	1,090	120	630
Directional Split	0.52	0.84	0.76
Park & Ride	-	20	30

Note: 11-Hour Survey Period: 6:00 - 11:59 & 14:00 - 18:59

AM Peak Period 6:00 - 8:59

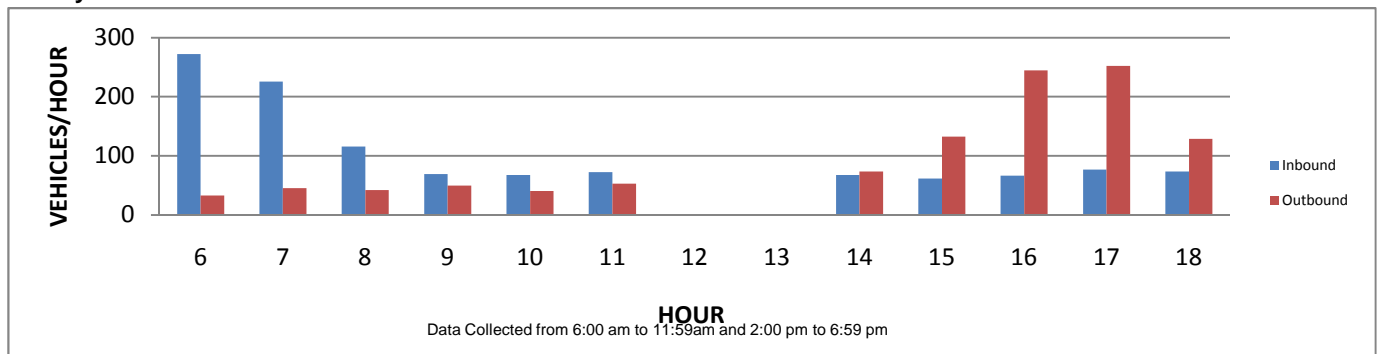
PM Peak Period 15:00 - 17:59

Inbound = Westbound ; Outbound = Eastbound

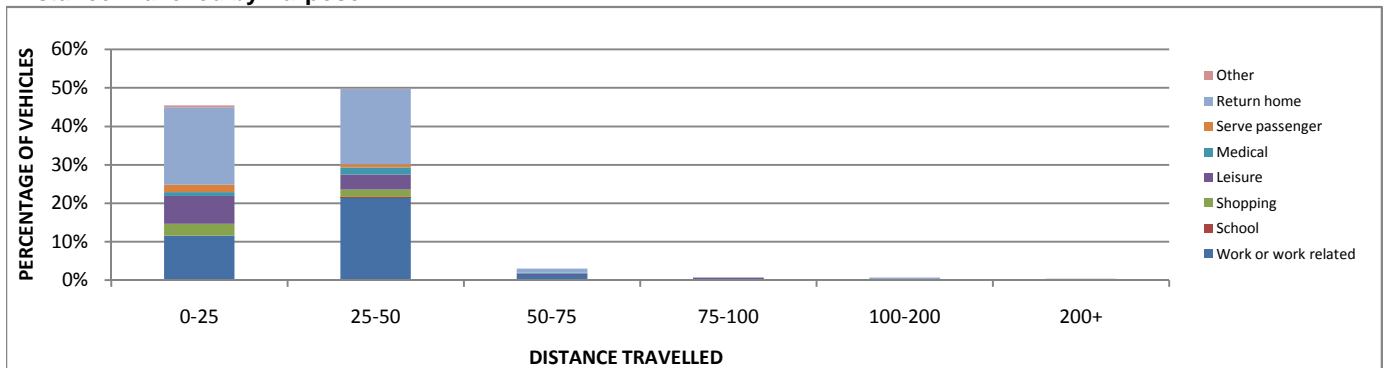
Trips by Purpose for Personal Vehicle Trips

Trip Purpose	No. of Trips	% of Trips	Avg. Persons per veh.	Avg. Distance per Trip (km)
Work or work related	790	35%	1.33	30
School	0	0%	0.50	20
Shopping	120	5%	1.60	25
Leisure	270	12%	1.52	30
Medical	70	3%	1.15	35
Serve passenger	60	3%	1.51	25
Return home	940	42%	1.30	30
Other	10	0%	0.88	10
Total	2,260	100%	1.22	25

Hourly Traffic Variation

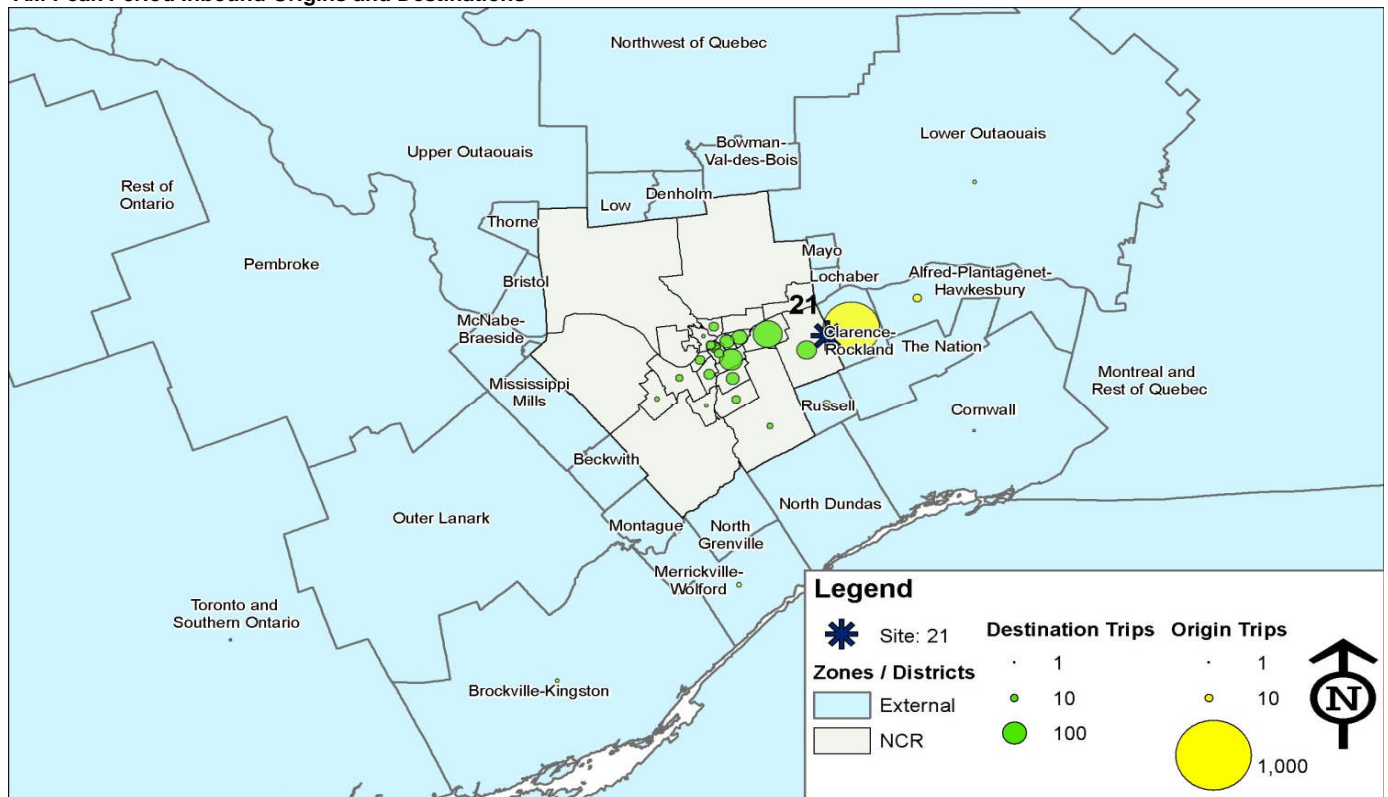


Distance Travelled by Purpose

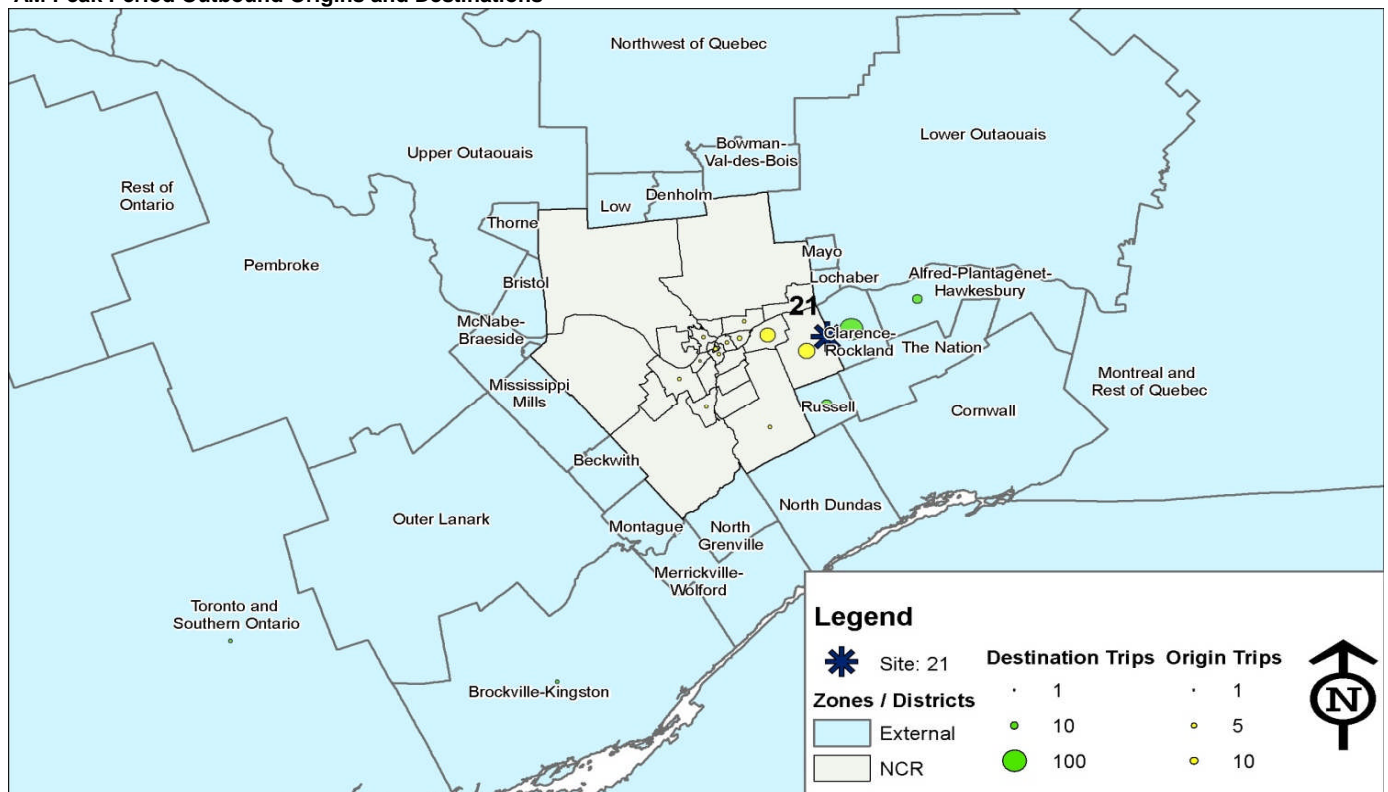


Site 21 - Rd 28 (Colonial Rd)

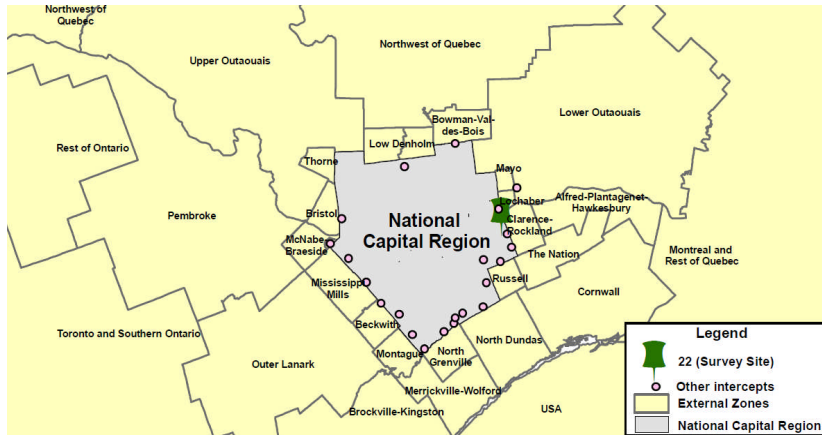
AM Peak Period Inbound Origins and Destinations



AM Peak Period Outbound Origins and Destinations



Site 22 - Rd 174



2009 TRAFFIC STATISTICS

Average Daily Traffic ¹	16,200
Weekday Average Daily Traffic ¹	21,910
11-h Weekday Two-Way Traffic ¹	15,440
11-h Weekday EB Traffic ¹	7,560
11-h Weekday WB Traffic ¹	7,880
11-h to 24-h Weekday Factor (EB) ¹	1.01
11-h to 24-h Weekday Factor (WB) ¹	1.27
% Personal Vehicles (11-h)	88%
% Commercial Vehicles (11-h)	12%

¹ Includes commercial vehicles

Summary of Personal Vehicle Trips by Time Period

	11-Hour	AM Peak	PM Peak
Both Directions	13,620	4,160	4,690
Inbound	7,130	3,260	1,470
Outbound	6,500	900	3,220
Directional Split	0.52	0.78	0.69
Park & Ride	-	420	410

Note: 11-Hour Survey Period: 6:00 - 11:59 & 14:00 - 18:59

AM Peak Period 6:00 - 8:59

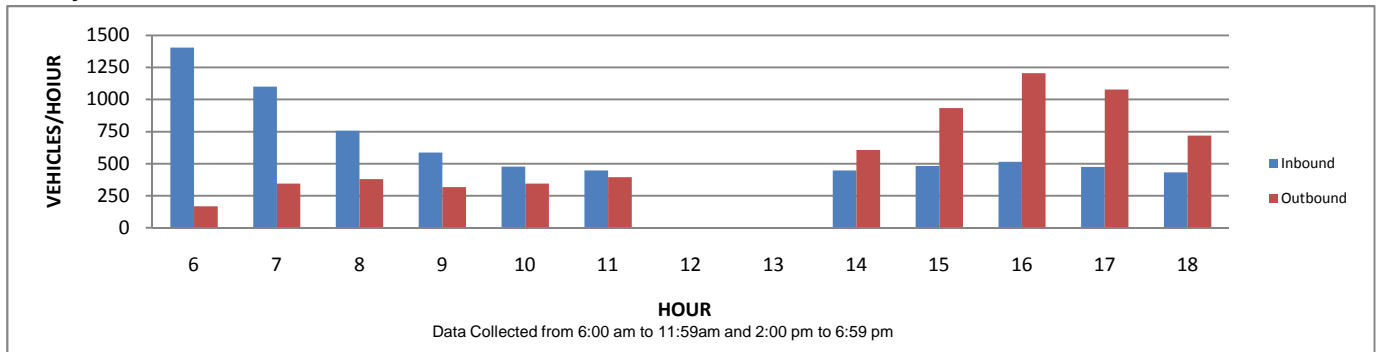
PM Peak Period 15:00 - 17:59

Inbound = Westbound ; Outbound = Eastbound

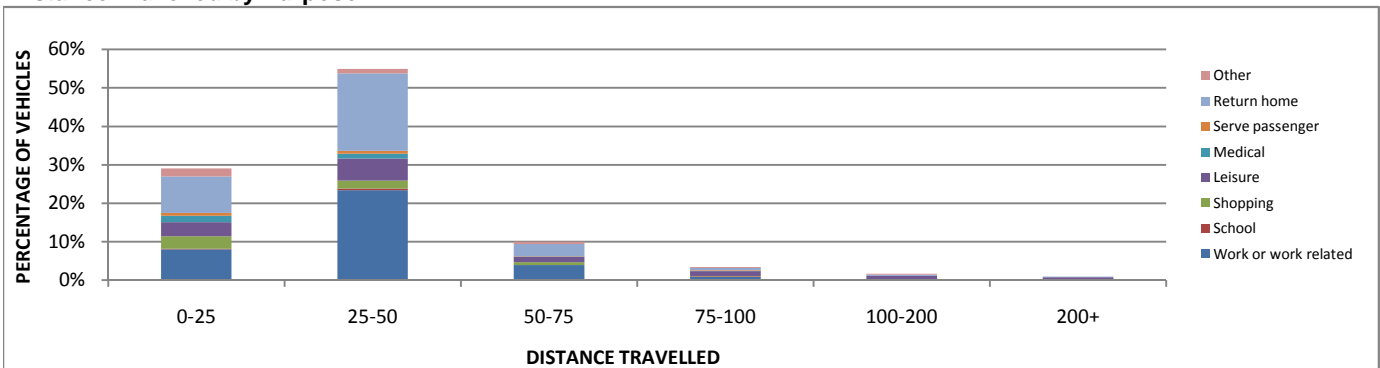
Trips by Purpose for Personal Vehicle Trips

Trip Purpose	No. of Trips	% of Trips	Avg. Persons per veh.	Avg. Distance per Trip (km)
Work or work related	4,960	36%	1.26	35
School	110	1%	1.25	30
Shopping	840	6%	1.77	25
Leisure	1,860	14%	1.73	65
Medical	420	3%	1.48	30
Serve passenger	230	2%	1.91	35
Return home	4,620	34%	1.51	40
Other	580	4%	1.51	35
Total	13,620	100%	1.55	35

Hourly Traffic Variation

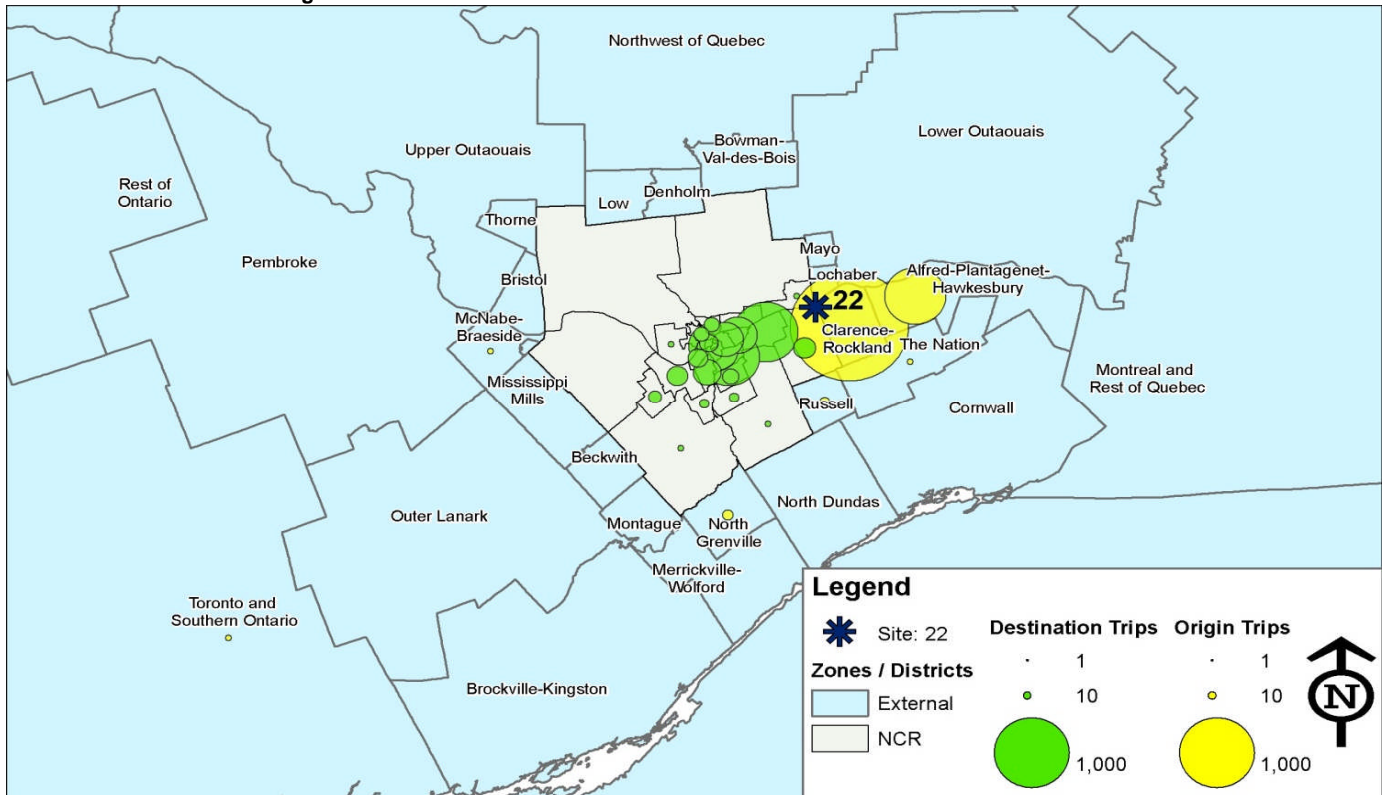


Distance Travelled by Purpose

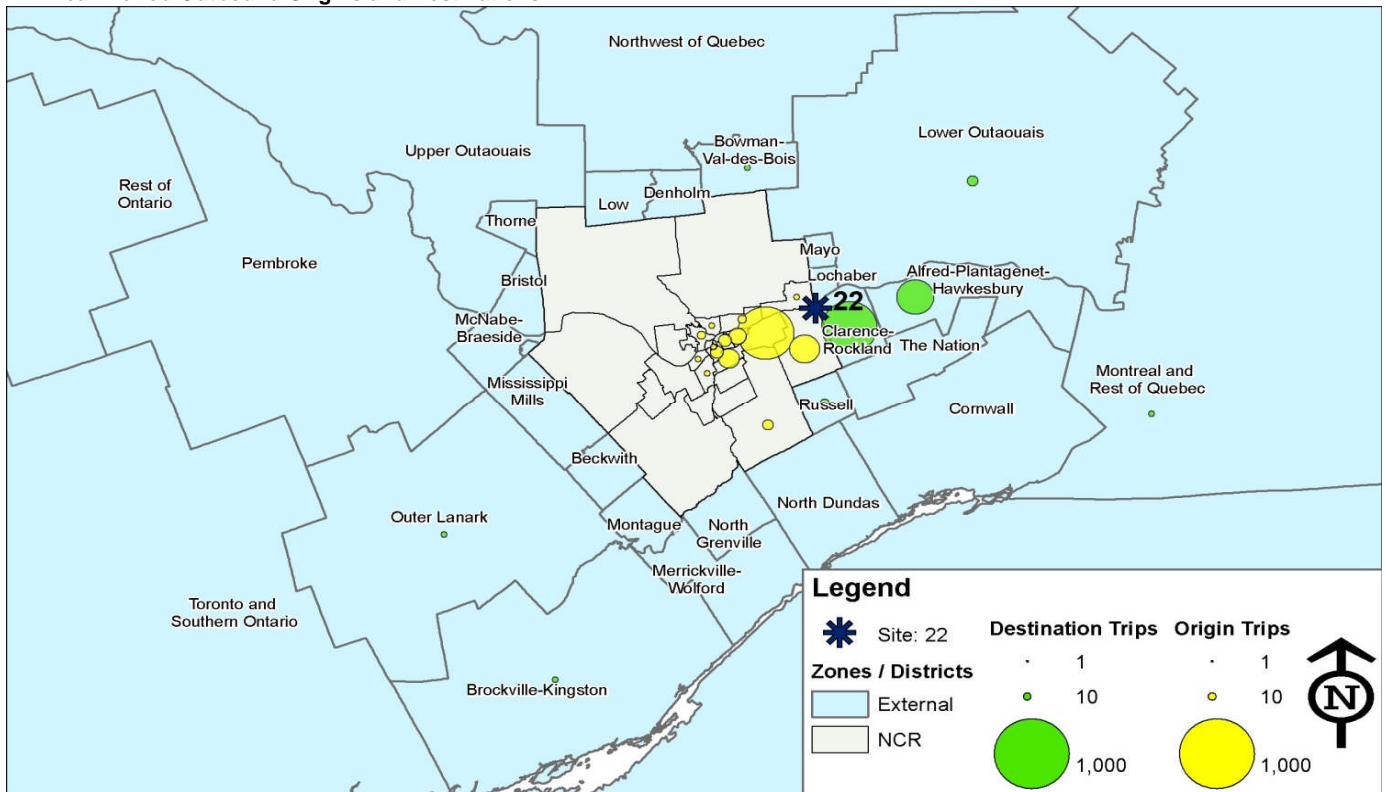


Site 22 - Rd 174

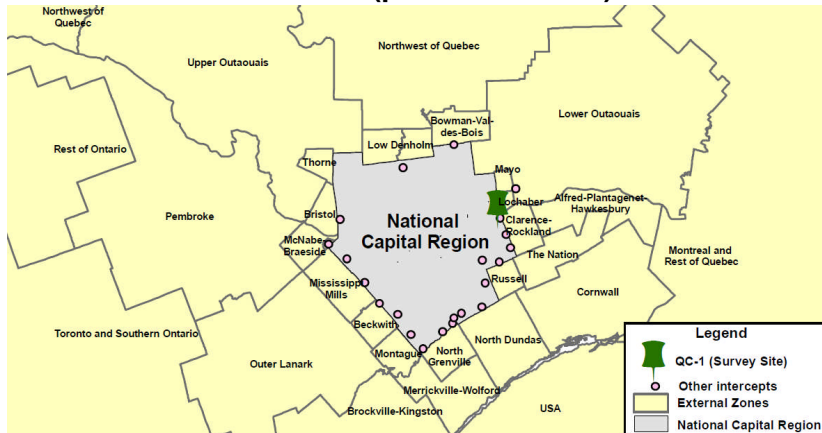
AM Peak Period Inbound Origins and Destinations



AM Peak Period Outbound Origins and Destinations



Site QC-1 - Route 148 Est (près de Masson)



2009 TRAFFIC STATISTICS

Average Daily Traffic ¹	8,090
Weekday Average Daily Traffic ¹	7,710
11-h Weekday Two-Way Traffic ¹	5,510
11-h Weekday EB Traffic ¹	2,650
11-h Weekday WB Traffic ¹	2,860
11-h to 24-h Weekday Factor (EB) ¹	1.46
11-h to 24-h Weekday Factor (WB) ¹	1.48
% Personal Vehicles (11-h)	83%
% Commercial Vehicles (11-h)	17%

¹ Includes commercial vehicles

Summary of Personal Vehicle Trips by Time Period

	11-Hour	AM Peak	PM Peak
Both Directions	4,590	1,220	1,630
Inbound	2,420	780	720
Outbound	2,170	430	910
Directional Split	0.53	0.64	0.56
Park & Ride	-	60	50

Note: 11-Hour Survey Period: 6:00 - 11:59 & 14:00 - 18:59

AM Peak Period 6:00 - 8:59

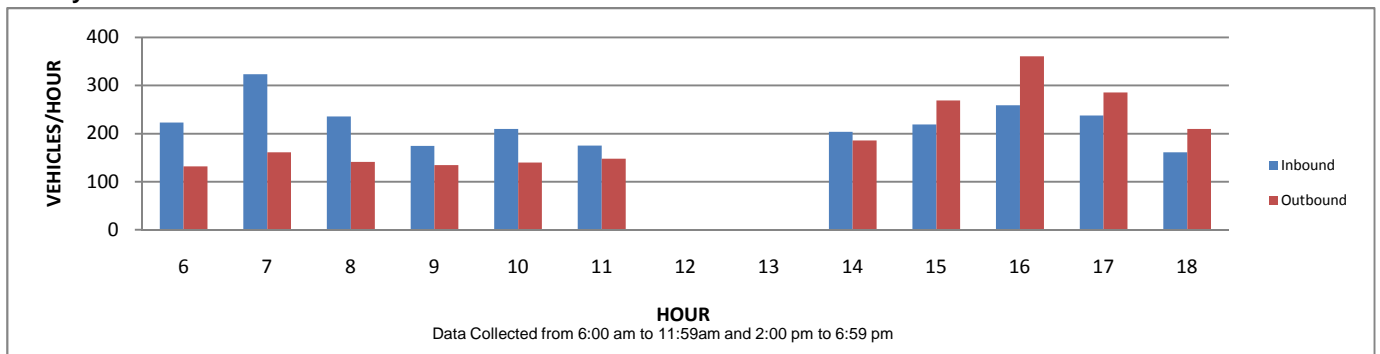
PM Peak Period 15:00 - 17:59

Inbound = Westbound ; Outbound = Eastbound

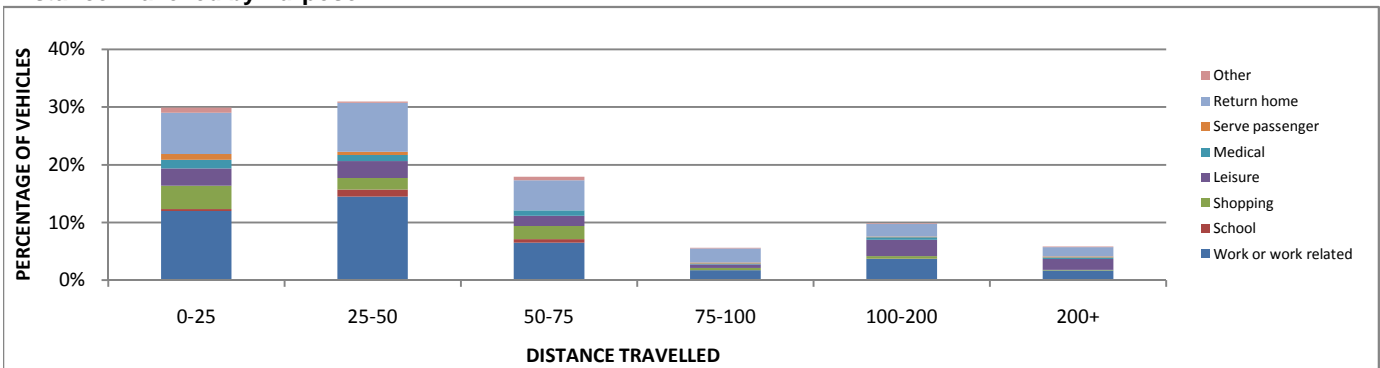
Trips by Purpose for Personal Vehicle Trips

Trip Purpose	No. of Trips	% of Trips	Avg. Persons per veh.	Avg. Distance per Trip (km)
Work or work related	1,830	40%	1.22	80
School	100	2%	1.16	55
Shopping	430	9%	1.54	50
Leisure	600	13%	1.74	130
Medical	200	4%	1.63	55
Serve passenger	90	2%	1.55	90
Return home	1,240	27%	1.34	90
Other	90	2%	1.48	100
Total	4,580	100%	1.46	80

Hourly Traffic Variation

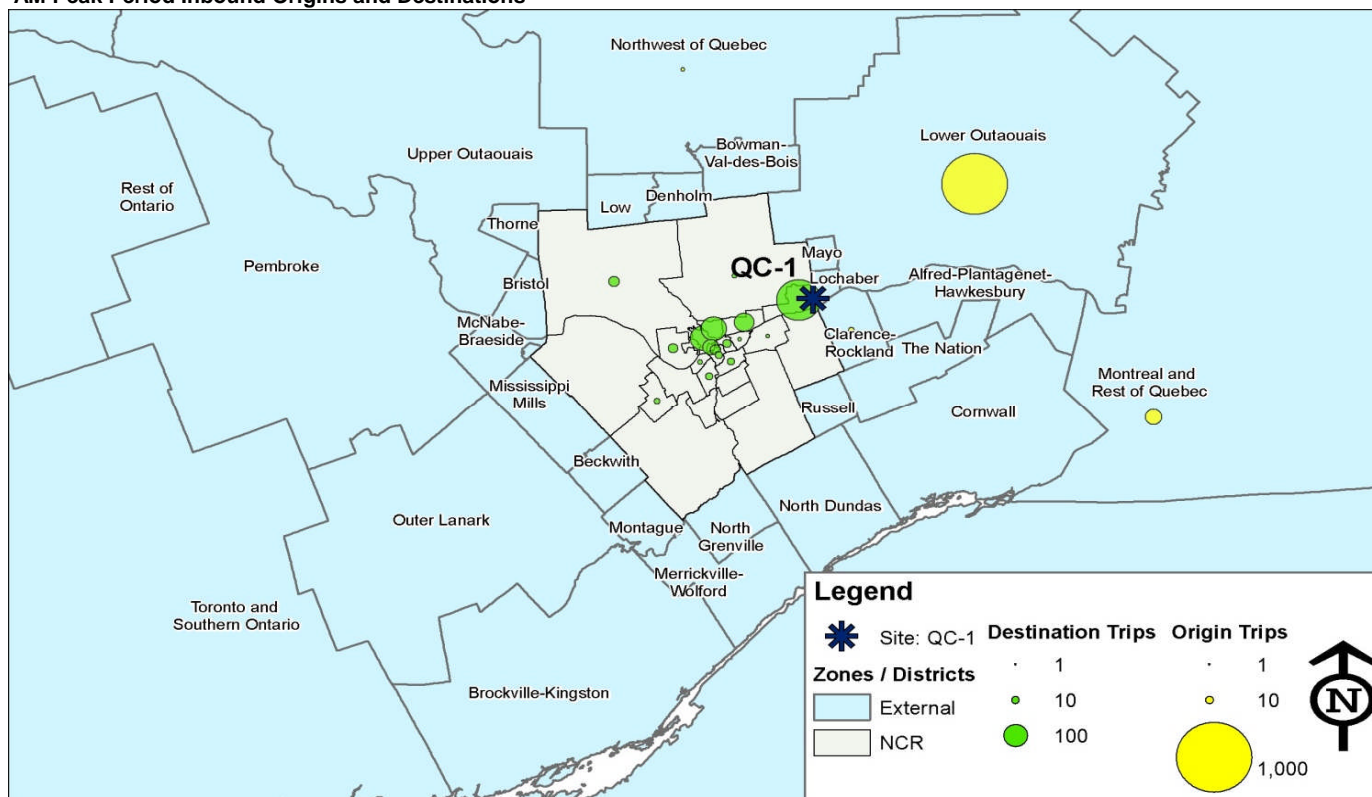


Distance Travelled by Purpose

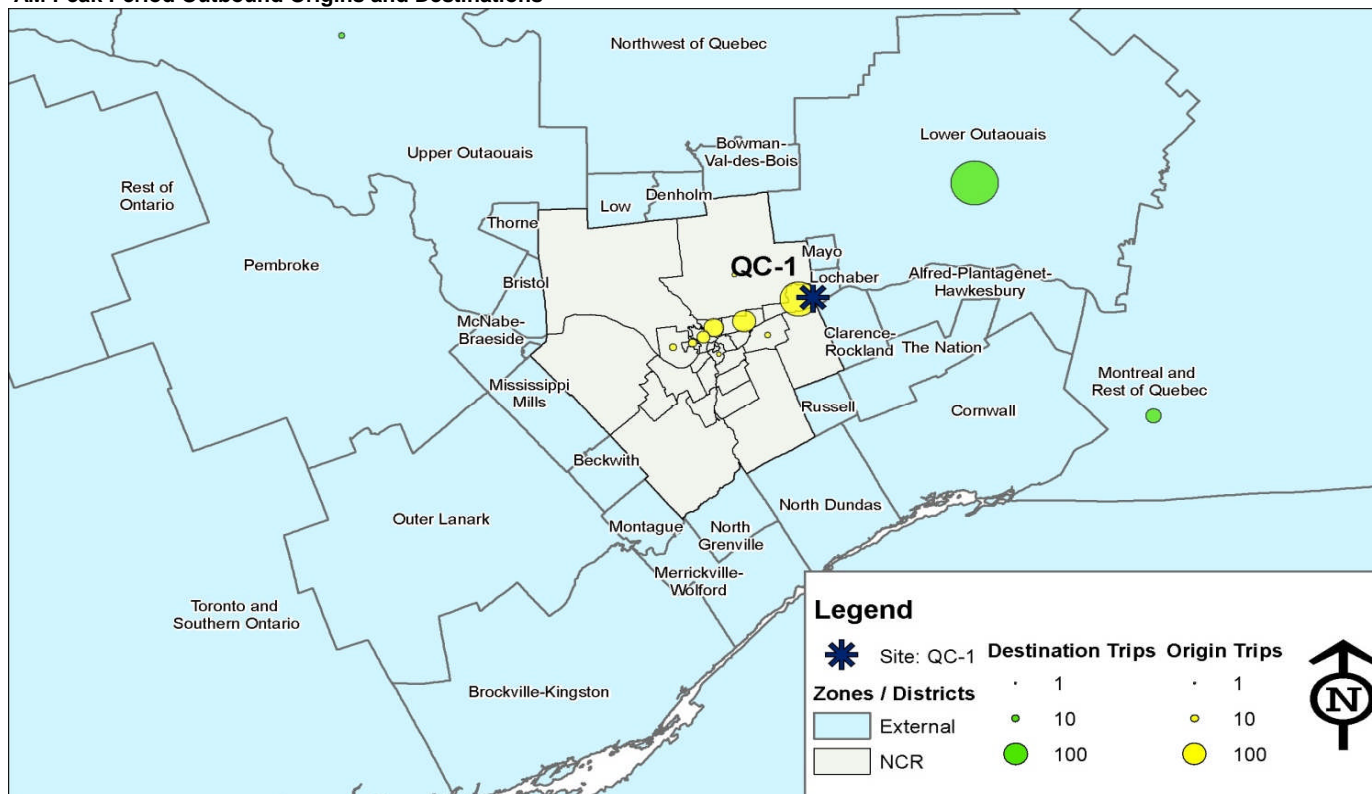


Site QC-1 - Route 148 Est (près de Masson)

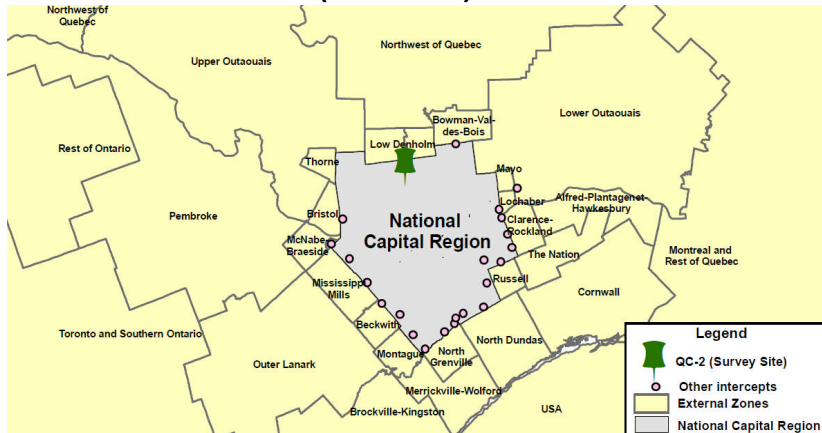
AM Peak Period Inbound Origins and Destinations



AM Peak Period Outbound Origins and Destinations



Site QC-2 - Route 105 (Farrellton)



2009 TRAFFIC STATISTICS

Average Daily Traffic ¹	5,560
Weekday Average Daily Traffic ¹	4,490
11-h Weekday Two-Way Traffic ¹	3,230
11-h Weekday EB Traffic ¹	1,560
11-h Weekday WB Traffic ¹	1,670
11-h to 24-h Weekday Factor (EB) ¹	1.76
11-h to 24-h Weekday Factor (WB) ¹	1.69
% Personal Vehicles (11-h)	82%
% Commercial Vehicles (11-h)	18%

¹ Includes commercial vehicles

Summary of Personal Vehicle Trips by Time Period

	11-Hour	AM Peak	PM Peak
Both Directions	2,660	630	930
Inbound	1,290	420	340
Outbound	1,370	220	590
Directional Split	0.52	0.67	0.63
Park & Ride	-	0	10

Note: 11-Hour Survey Period: 6:00 - 11:59 & 14:00 - 18:59

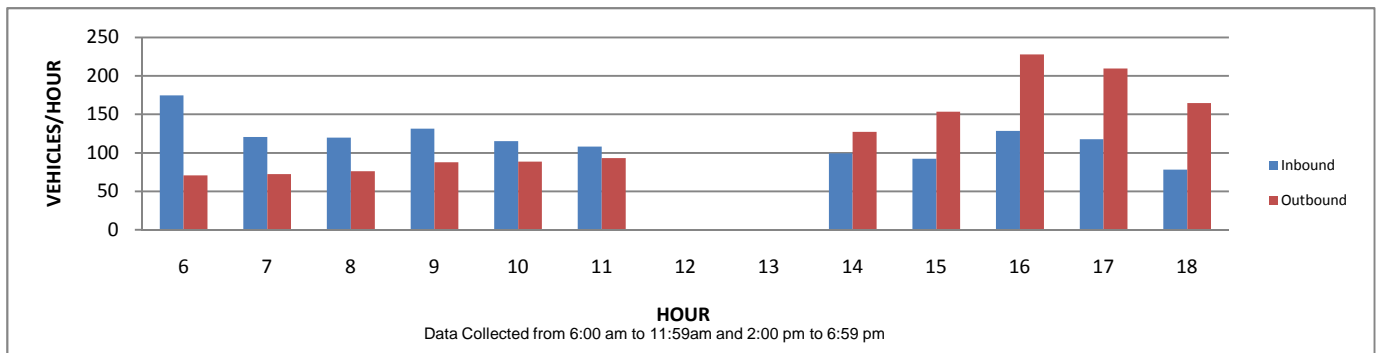
AM Peak Period 6:00 - 8:59

PM Peak Period 15:00 - 17:59

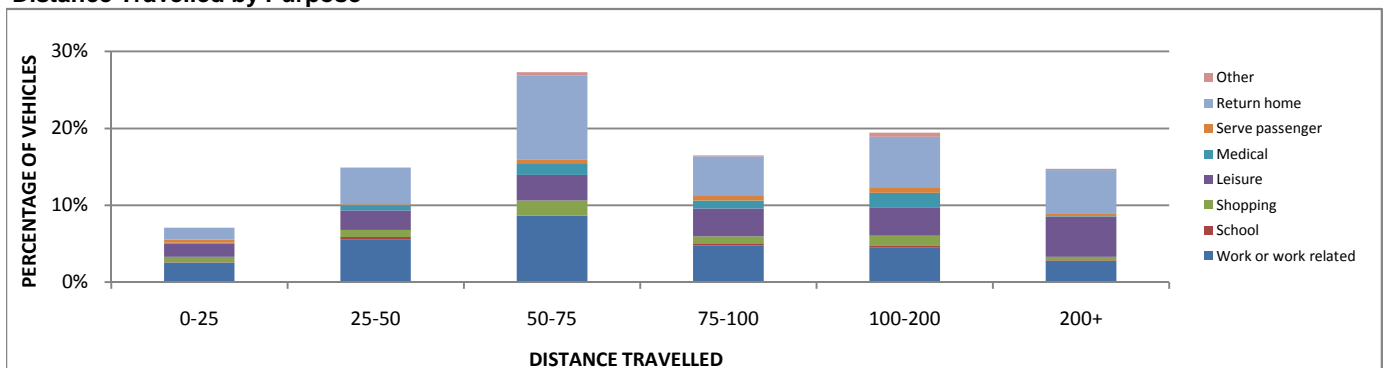
Inbound = Southbound ; Outbound = Northbound

Trips by Purpose for Personal Vehicle Trips

Trip Purpose	No. of Trips	% of Trips	Avg. Persons per veh.	Avg. Distance per Trip (km)
Work or work related	770	29%	1.27	100
School	20	1%	1.69	60
Shopping	170	6%	1.61	95
Leisure	530	20%	1.66	170
Medical	140	5%	1.93	80
Serve passenger	70	3%	1.91	130
Return home	930	35%	1.42	150
Other	30	1%	1.34	125
Total	2,660	100%	1.60	115

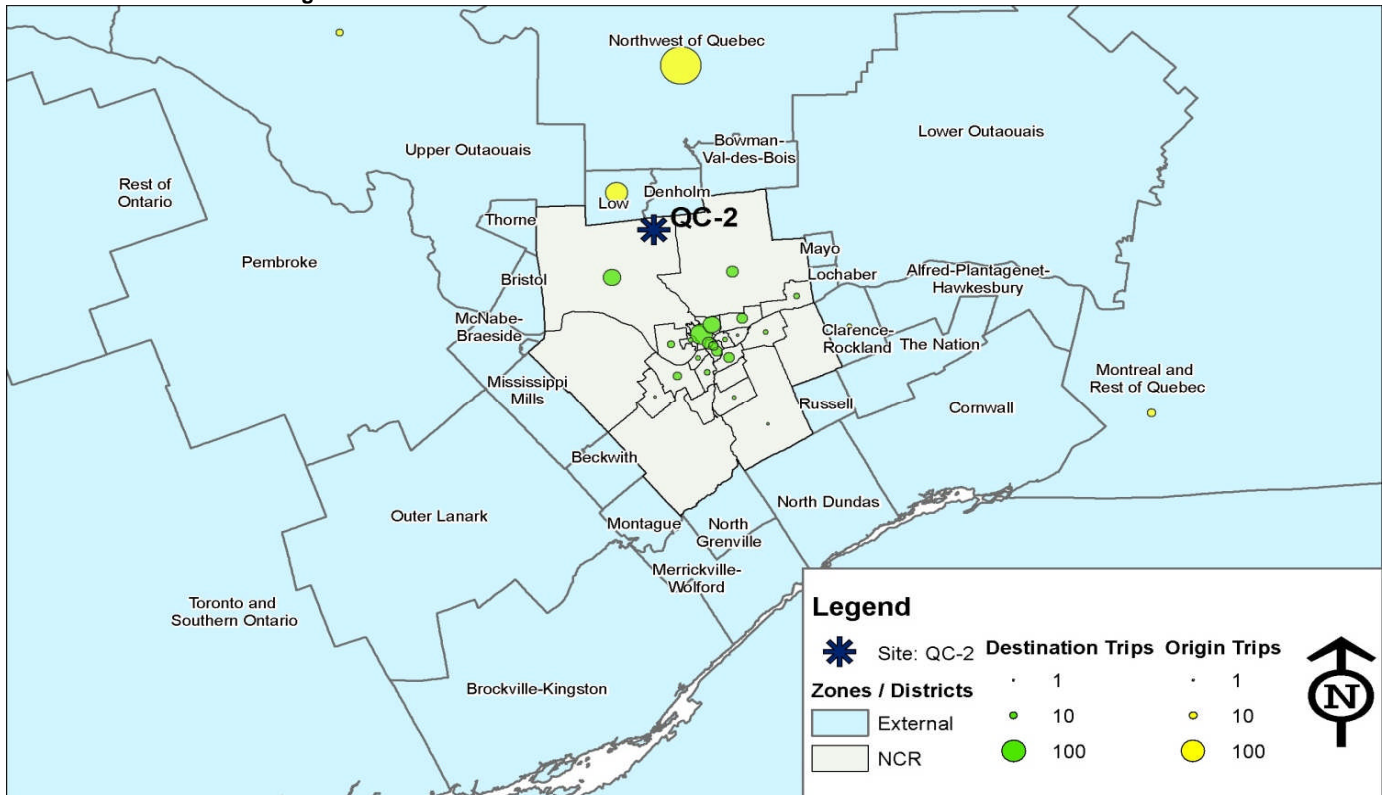


Distance Travelled by Purpose

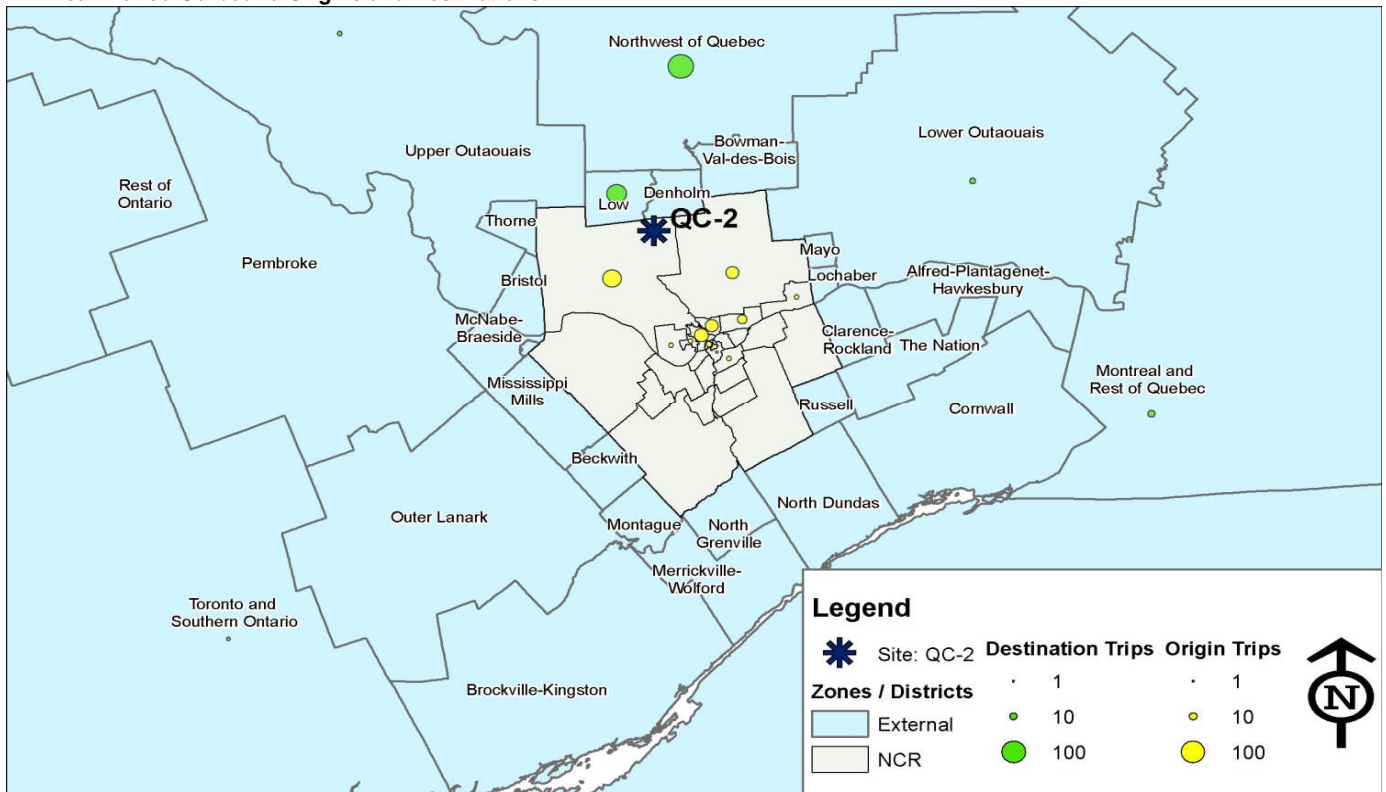


Site QC-2 - Route 105 (Farrellton)

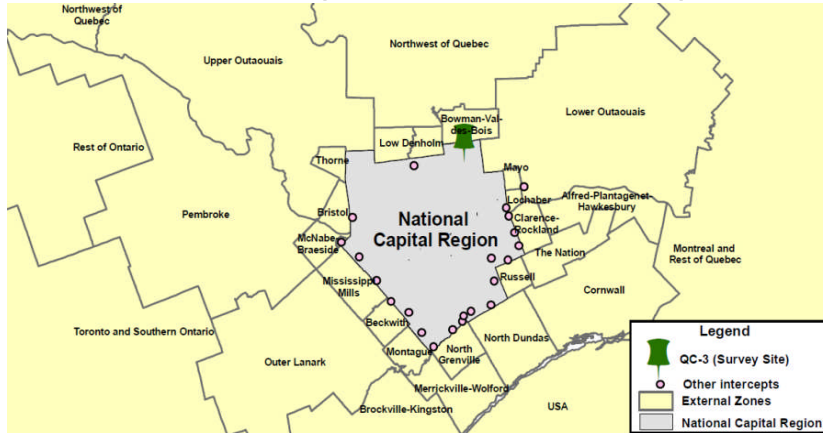
AM Peak Period Inbound Origins and Destinations



AM Peak Period Outbound Origins and Destinations



Site QC-3 - Route 309 (Notre-Dame-de-la-Salette)



2009 TRAFFIC STATISTICS

Average Daily Traffic ¹	3,130
Weekday Average Daily Traffic ¹	2,400
11-h Weekday Two-Way Traffic ¹	1,730
11-h Weekday EB Traffic ¹	830
11-h Weekday WB Traffic ¹	910
11-h to 24-h Weekday Factor (EB) ¹	1.88
11-h to 24-h Weekday Factor (WB) ¹	1.74
% Personal Vehicles (11-h)	88%
% Commercial Vehicles (11-h)	12%

¹ Includes commercial vehicles

Summary of Personal Vehicle Trips by Time Period

	11-Hour	AM Peak	PM Peak
Both Directions	1,520	380	480
Inbound	710	260	160
Outbound	810	120	330
Directional Split	0.53	0.68	0.69
Park & Ride	-	0	10

Note: 11-Hour Survey Period: 6:00 - 11:59 & 14:00 - 18:59

AM Peak Period 6:00 - 8:59

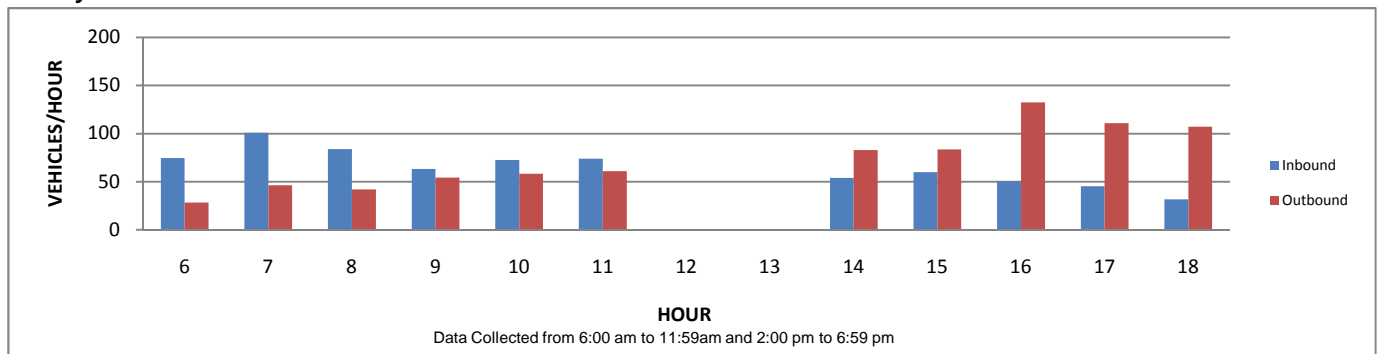
PM Peak Period 15:00 - 17:59

Inbound = Southbound ; Outbound = Northbound

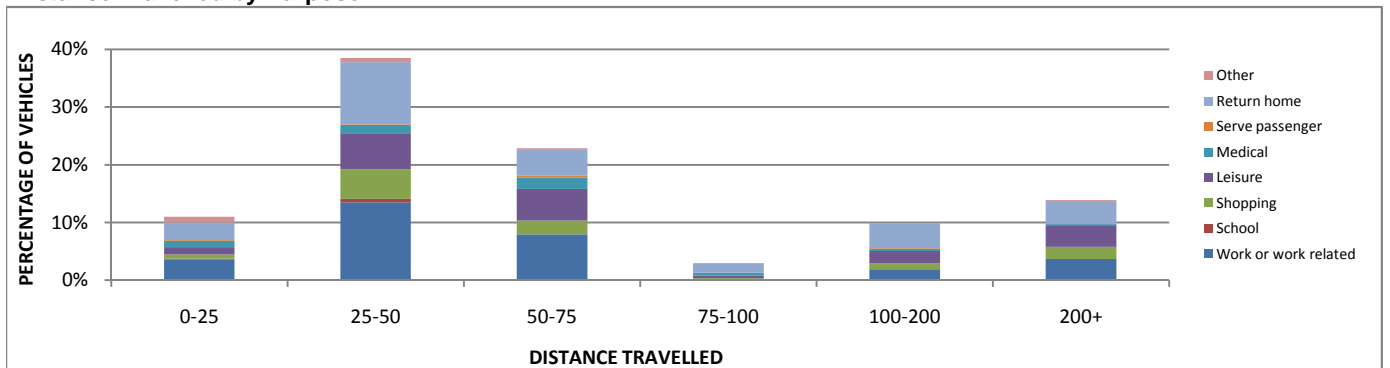
Trips by Purpose for Personal Vehicle Trips

Trip Purpose	No. of Trips	% of Trips	Avg. Persons per veh.	Avg. Distance per Trip (km)
Work or work related	470	31%	1.29	100
School	10	1%	0.70	20
Shopping	180	12%	1.53	110
Leisure	300	20%	1.58	130
Medical	90	6%	1.98	60
Serve passenger	10	1%	1.17	55
Return home	430	28%	1.42	115
Other	40	3%	1.36	65
Total	1,530	100%	1.38	80

Hourly Traffic Variation

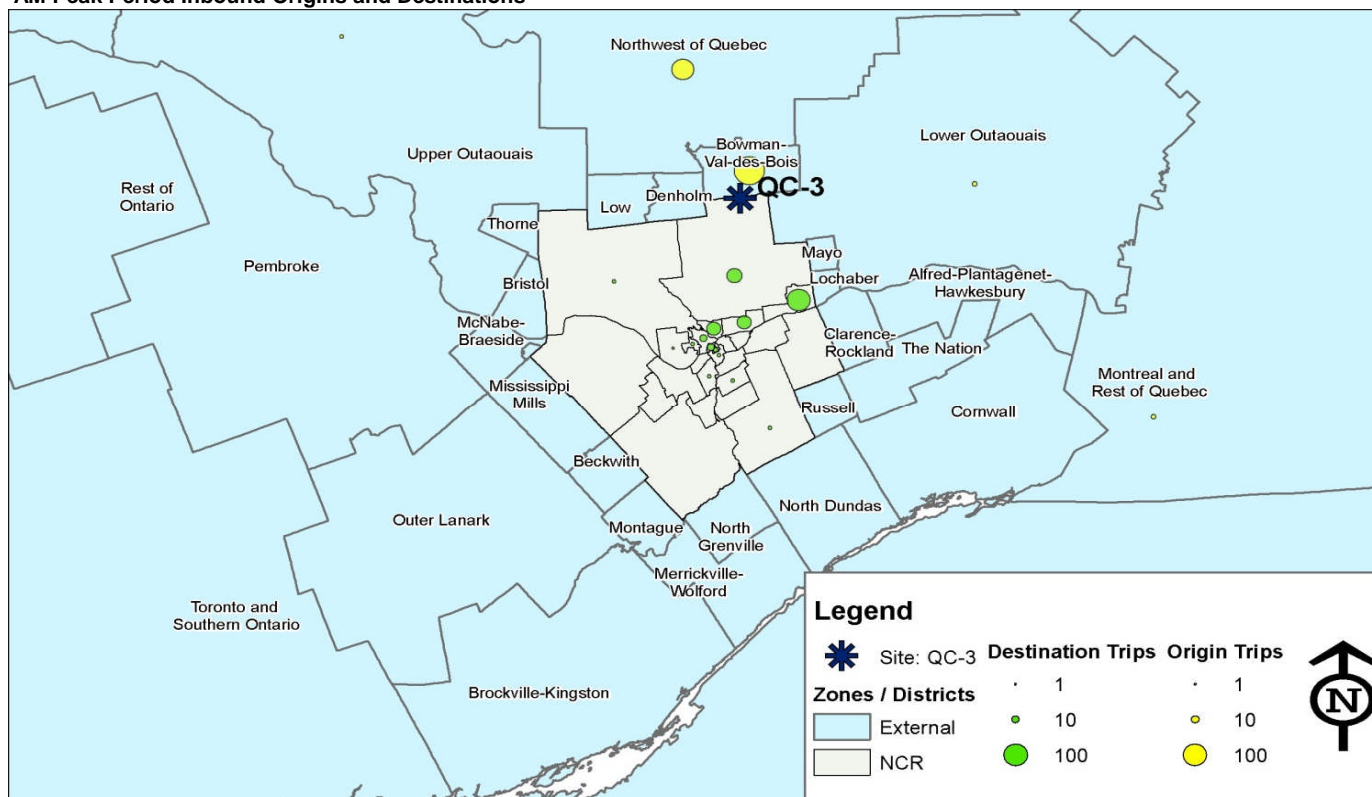


Distance Travelled by Purpose

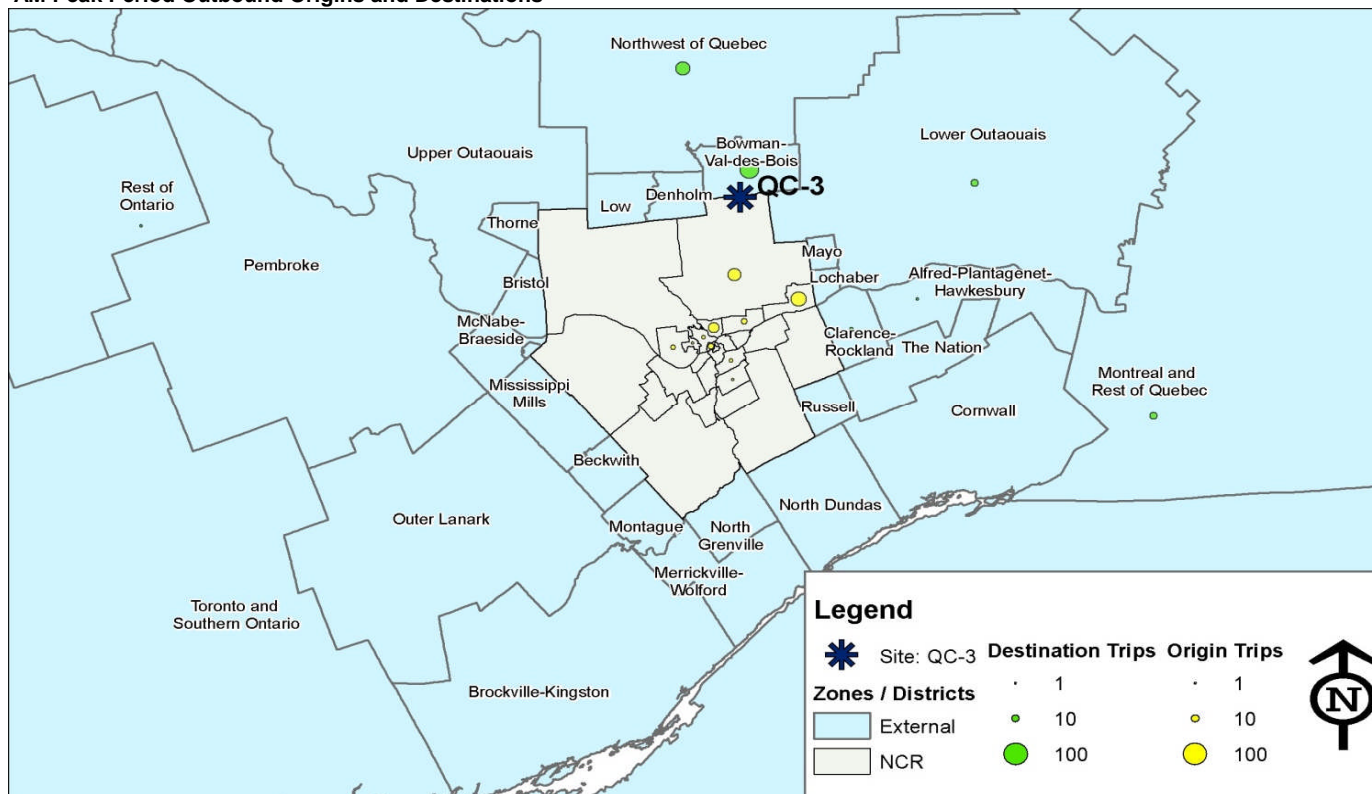


Site QC-3 - Route 309 (Notre-Dame-de-la-Salette)

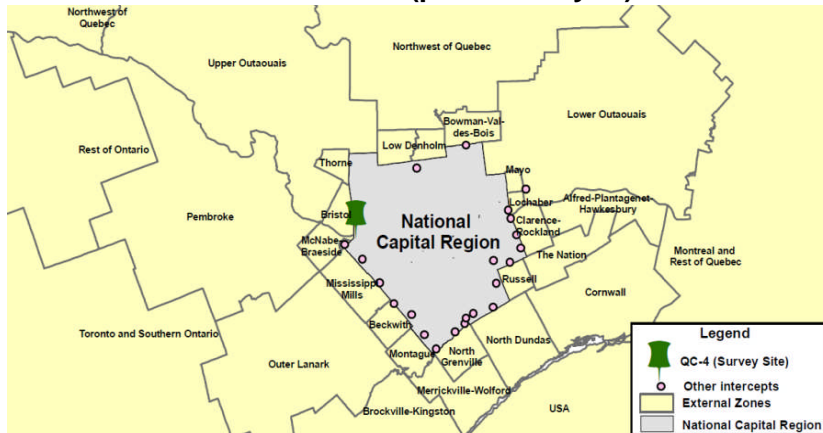
AM Peak Period Inbound Origins and Destinations



AM Peak Period Outbound Origins and Destinations



Site QC-4 - Route 148 Ouest (près de Quyon)



2009 TRAFFIC STATISTICS

Average Daily Traffic ¹	3,330
Weekday Average Daily Traffic ¹	3,090
11-h Weekday Two-Way Traffic ¹	2,200
11-h Weekday EB Traffic ¹	1,070
11-h Weekday WB Traffic ¹	1,130
11-h to 24-h Weekday Factor (EB) ¹	1.57
11-h to 24-h Weekday Factor (WB) ¹	1.47
% Personal Vehicles (11-h)	87%
% Commercial Vehicles (11-h)	13%

¹ Includes commercial vehicles

Summary of Personal Vehicle Trips by Time Period

	11-Hour	AM Peak	PM Peak
Both Directions	1,910	490	690
Inbound	910	290	300
Outbound	1,000	200	390
Directional Split	0.52	0.59	0.57
Park & Ride	-	20	0

Note: 11-Hour Survey Period: 6:00 - 11:59 & 14:00 - 18:59

AM Peak Period 6:00 - 8:59

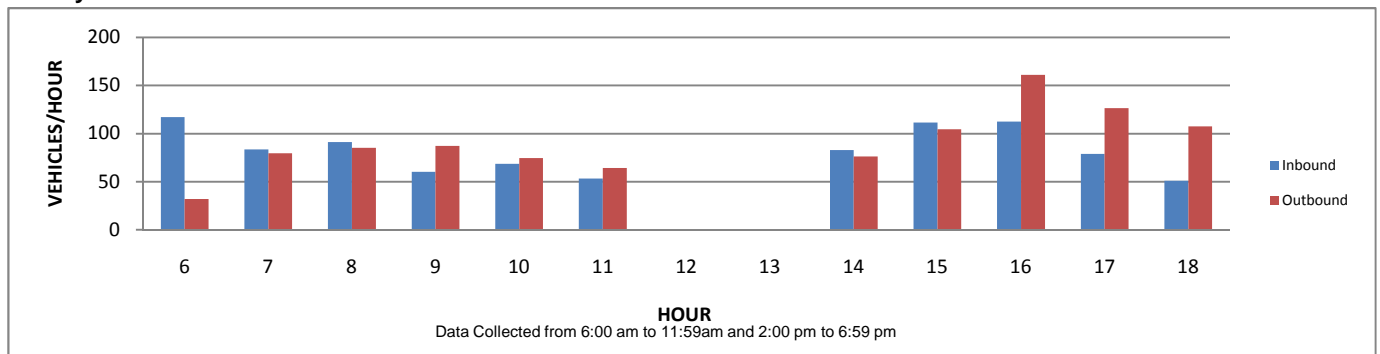
PM Peak Period 15:00 - 17:59

Inbound = Eastbound ; Outbound = Westbound

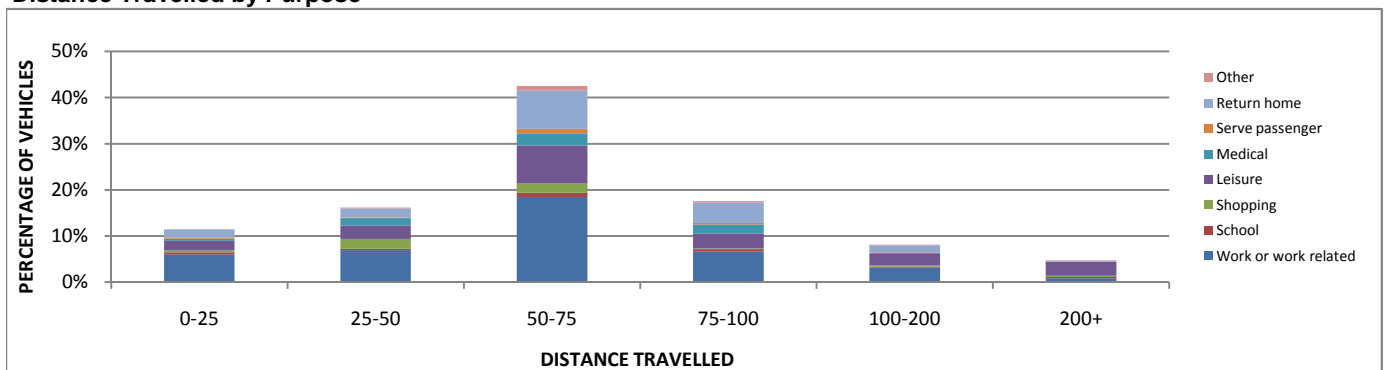
Trips by Purpose for Personal Vehicle Trips

Trip Purpose	No. of Trips	% of Trips	Avg. Persons per veh.	Avg. Distance per Trip (km)
Work or work related	800	42%	1.23	70
School	50	3%	1.22	90
Shopping	100	5%	1.31	80
Leisure	420	22%	1.64	125
Medical	130	7%	1.72	60
Serve passenger	30	2%	1.54	65
Return home	340	18%	1.33	65
Other	30	2%	1.42	125
Total	1,900	100%	1.42	85

Hourly Traffic Variation

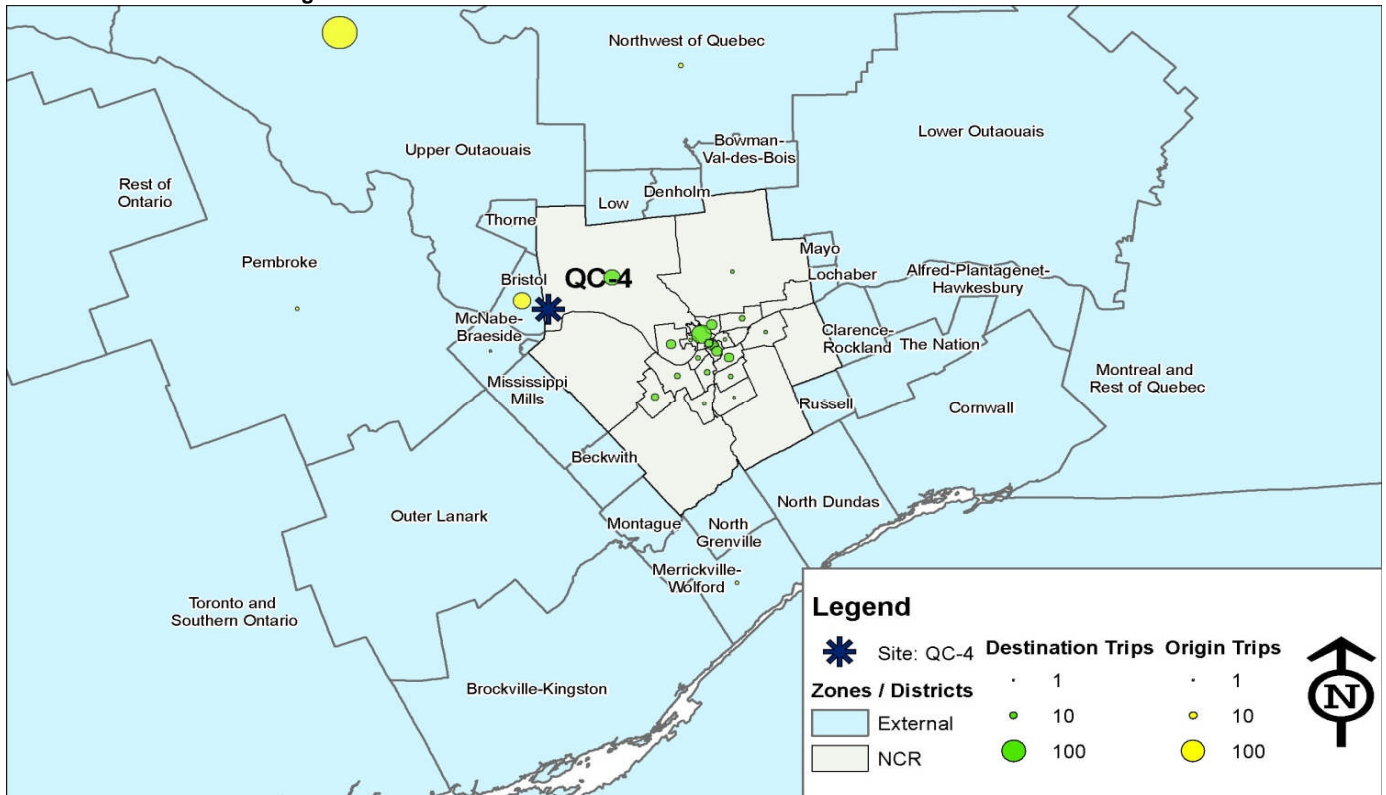


Distance Travelled by Purpose

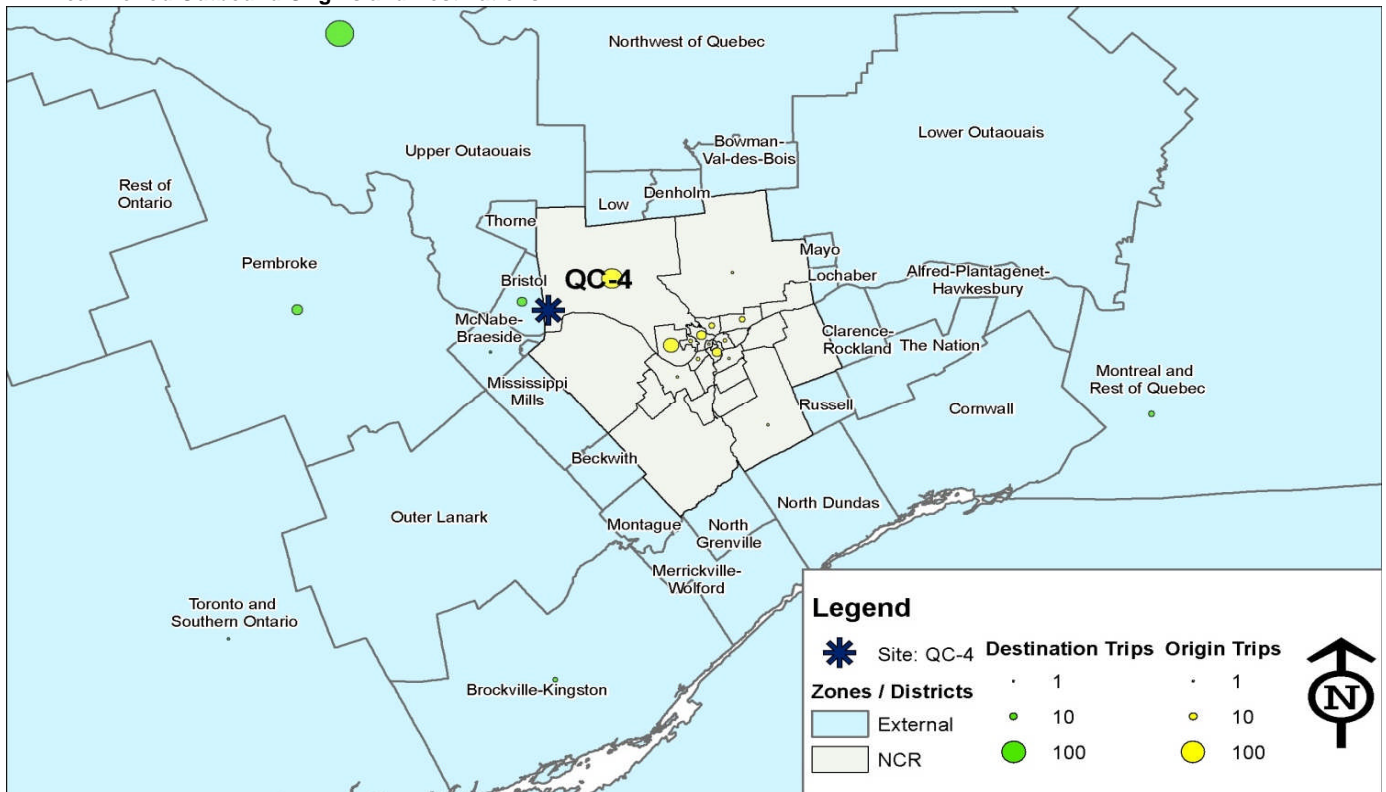


Site QC-4 - Route 148 Ouest (près de Quyon)

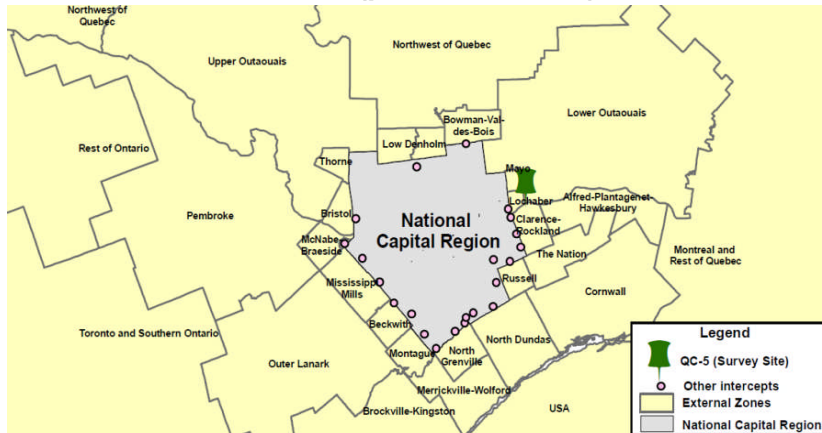
AM Peak Period Inbound Origins and Destinations



AM Peak Period Outbound Origins and Destinations



Site QC-5 - Autoroute 50 (près de Thurso)



2009 TRAFFIC STATISTICS

Average Daily Traffic ¹	5,450
Weekday Average Daily Traffic ¹	5,260
11-h Weekday Two-Way Traffic ¹	3,850
11-h Weekday EB Traffic ¹	2,060
11-h Weekday WB Traffic ¹	1,790
11-h to 24-h Weekday Factor (EB) ¹	1.42
11-h to 24-h Weekday Factor (WB) ¹	1.41
% Personal Vehicles (11-h)	80%
% Commercial Vehicles (11-h)	20%

¹ Includes commercial vehicles

Summary of Personal Vehicle Trips by Time Period

	11-Hour	AM Peak	PM Peak
Both Directions	3,070	790	1,140
Inbound	1,410	480	420
Outbound	1,660	310	720
Directional Split	0.54	0.61	0.63
Park & Ride	-	10	10

Note: 11-Hour Survey Period: 6:00 - 11:59 & 14:00 - 18:59

AM Peak Period 6:00 - 8:59

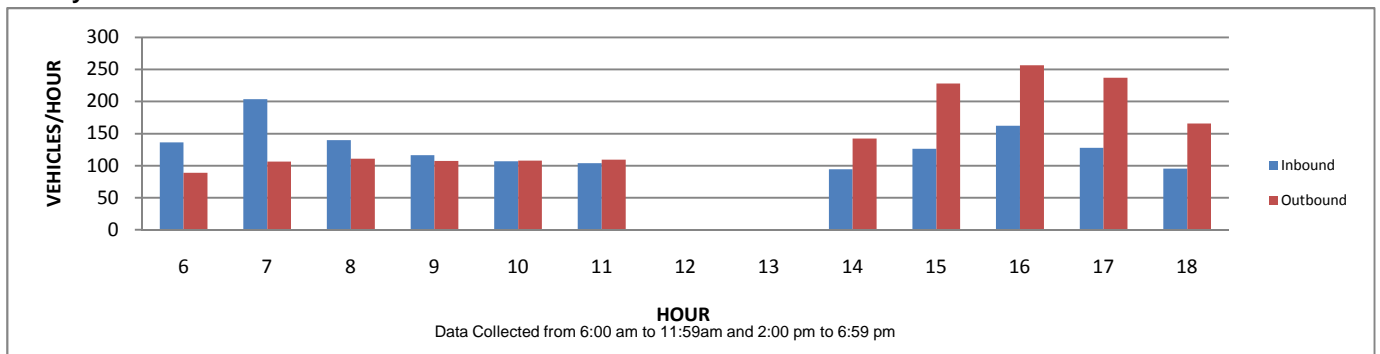
PM Peak Period 15:00 - 17:59

Inbound = Westbound ; Outbound = Eastbound

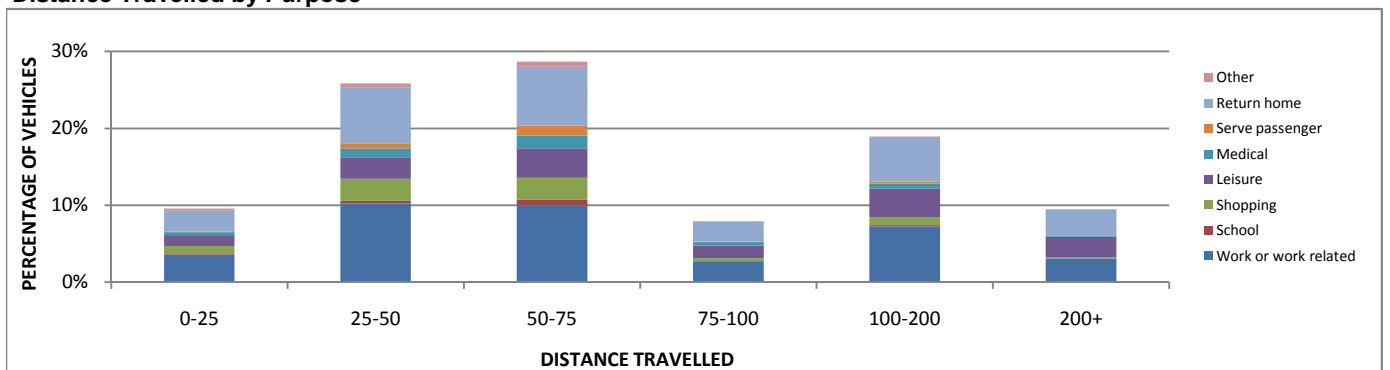
Trips by Purpose for Personal Vehicle Trips

Trip Purpose	No. of Trips	% of Trips	Avg. Persons per veh.	Avg. Distance per Trip (km)
Work or work related	1,130	37%	1.21	105
School	40	1%	1.05	65
Shopping	250	8%	1.55	65
Leisure	480	16%	1.50	135
Medical	140	5%	1.66	90
Serve passenger	70	2%	1.55	60
Return home	900	29%	1.30	130
Other	50	2%	1.93	75
Total	3,060	100%	1.47	90

Hourly Traffic Variation

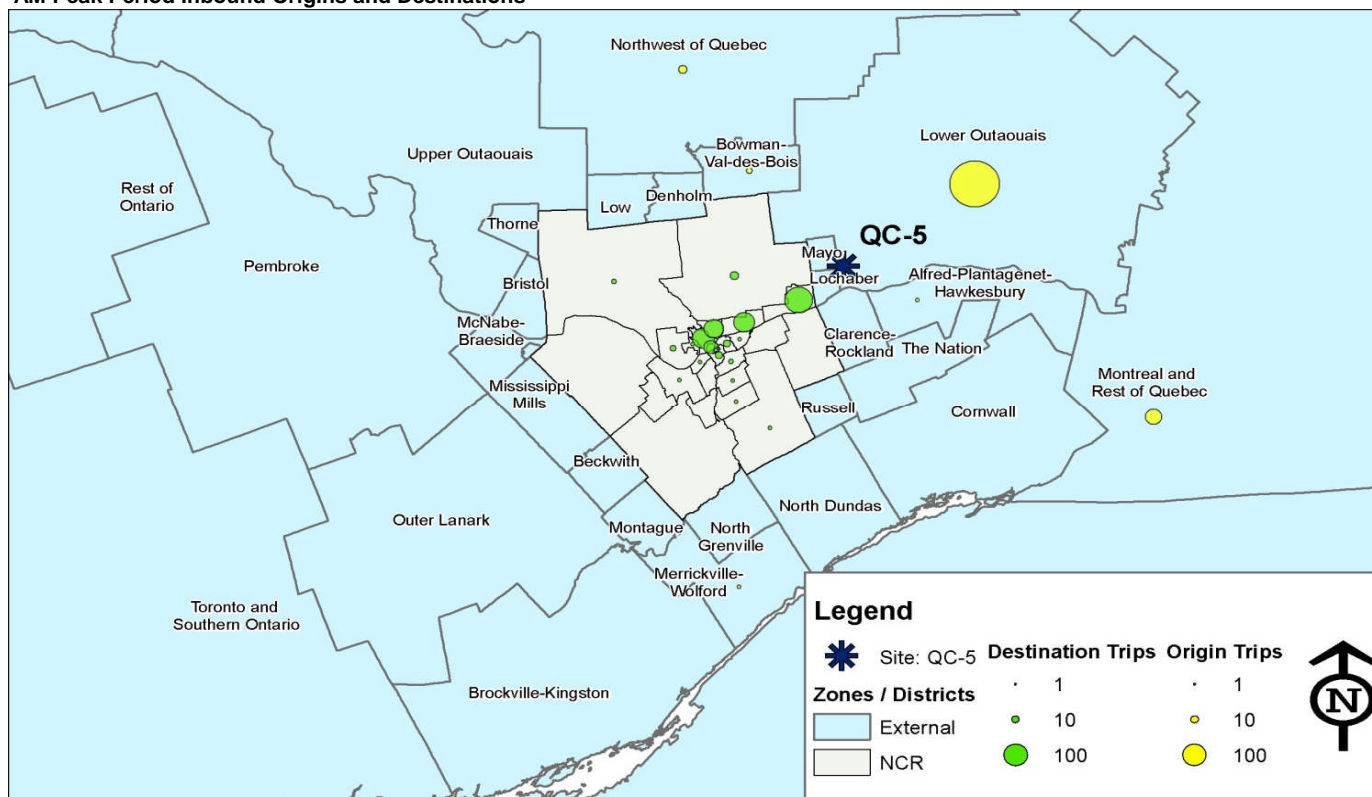


Distance Travelled by Purpose



Site QC-5 - Autoroute 50 (près de Thurso)

AM Peak Period Inbound Origins and Destinations



AM Peak Period Outbound Origins and Destinations

