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File:	163601122	Date:	November 29, 2017

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**Reference: 2017 Glebe BIA Transportation Data Collection Summary**

## 1.0 INTRODUCTION

Stantec Consulting Ltd. (Stantec) was retained by The Glebe Business Improvement Area (BIA) to review and summarize collected transportation data along the Bank Street corridor within the Glebe area of Ottawa, Ontario.

## 2.0 BACKGROUND

The Glebe BIA has initiated a transportation data collection program to collect multi-modal traffic volumes at key intersections along Bank Street within the Glebe. The aim of the program is to provide a better understanding of traffic activity and demands along the Bank Street corridor in the Glebe.

## 3.0 DATA COLLECTION OVERVIEW

Multi-modal traffic volume data collection was arranged and completed by the City of Ottawa using the automated Miovision system. Traffic data at key intersections were collected over several dates in 2017 to develop full day transportation data profiles under different days, seasons and conditions.

### 3.1 STUDY AREA INTERSECTIONS

The transportation data collection program included the following study area intersections:

1. Pretoria Avenue at Bank Street;
2. Glebe Avenue at Bank Street;
3. Second Avenue at Bank Street;
4. Fifth Avenue at Bank Street;
5. Holmwood Avenue at Bank Street; and
6. Wilton Crescent at Bank Street.

Study area intersections are illustrated in **Figure 1**.



**Figure 1 – Study Area**  
Glebe BIA Transportation Data Collection Summary

**Reference: 2017 Glebe BIA Transportation Data Collection Summary**

### **3.2 Data Collection Dates**

Multi-modal transportation data was collected at study area intersections during the following dates to capture transportation demands over various seasonal and event-based variations:

1. Wednesday, July 19<sup>th</sup> 2017 (*Ottawa REDBLACKS Regular Season Game*)
2. Thursday, July 20<sup>th</sup> 2017 (*Typical Summer Weekday*)
3. Saturday, August 5<sup>th</sup> 2017 (*Summer Long Weekend*)
4. Sunday, September 10<sup>th</sup> 2017 (*Typical Summer Weekend – Ottawa Farmers Market*)
5. Tuesday October 10<sup>th</sup> 2017 (*Typical Fall Weekday*).

In addition to the dates listed above, a sixth data collection date is scheduled to take place in early December 2017:

6. Saturday, December 9<sup>th</sup> 2017 (*Lansdowne Winter Christmas Market*)

### **3.3 Data Collection Parameters**

Transportation data was collected over a full day period between 6:00 AM and 2:00 PM. Data was collected for regular vehicle traffic, heavy vehicles (including transit buses), pedestrian and cycling volumes.

Transportation volume summaries along the Bank Street corridor were developed under various periods which include:

1. AM Period (6:00 AM - 9:00 AM);
2. Mid-Morning Period (9:00 AM - 12:00 PM);
3. Mid-Day Period (12:00 PM – 3:00 PM);
4. PM Period (3:00 PM - 6:00 PM);
5. Evening Period (6:00 PM - 9:00 PM);
6. Night Period (9:00 PM - 12:00 AM);
7. Late Period (12:00 PM - 2:00 AM);
8. Full Day (6:00 AM - 2:00 AM);

The two busiest hours during weekday collection dates, known as the AM Peak Hour and PM Peak Hour, were also summarized to provide an overview of morning and afternoon commuter traffic demands. The busiest one hour period on weekend data collection dates was also summarized to provide an overview of the peak weekend shopping activity.

**Reference: 2017 Glebe BIA Transportation Data Collection Summary**

## 4.0 DATA COLLECTION SUMMARIES

### 4.1 Bank Street Traffic Volume Profiles

Traffic volume profile graphs were developed for the Bank Street corridor. Two separate sets of graphs were developed to visualize northbound and southbound vehicular demands at study area intersections over the course of each data collection date.

A comparative graph with average hourly corridor volumes for each data collection date is provided. These graphs illustrate variations in transportation demands under different scenarios (i.e. weekend, weekday, event).

Bank Street Traffic Volume Profiles are summarized in **Appendix A**.

### 4.2 Bank Street Pedestrian Volume Profiles

Pedestrian demand graphs were developed for the Bank Street corridor. Graphs visualize combined pedestrian crossing volumes along the Bank Street corridor at study area intersections. The pedestrian volume profile represents an aggregate of northbound and southbound pedestrian crossing demands at each study area intersection.

A comparative graph with average hourly pedestrian crossing volumes is also provided to illustrate variations in pedestrian demands under different scenarios (i.e. weekend, weekday, event).

Bank Street Pedestrian Volume profiles are summarized in **Appendix B**.

### 4.3 Bank Street Traffic and Pedestrian Volume Figures

Traffic and pedestrian volume figures were developed to summarize AM Peak, PM Peak, and Full Day demands along the Bank Street corridor.

Bank Street Traffic and Pedestrian Volume figures are included in **Appendix C**.

## 5.0 OBSERVATIONS

The following observations were made:

- Mid-Day (i.e. between 10:00 AM – 8:00 PM) average vehicular traffic volumes along Bank Street are consistent in profile and demand regardless of seasonal or day of week variations;
- Average vehicular traffic volumes on Weekdays have higher demands in the northbound direction in the AM Peak Period and higher demands in the southbound direction in the PM Peak Period;

**Reference: 2017 Glebe BIA Transportation Data Collection Summary**

- Average vehicular demands during a Major Event (Wednesday, July 19 2017) are marginally higher than typical weekday AM and PM peak hour demands (approximately 25% higher in average corridor demands);
- Average pedestrian demands are significantly higher during a Major Event (600% increase in overall pedestrian demands);
- Average pedestrian demands during Weekdays are consistent in terms of profile and demand;
- Observed pedestrian demands are highest at Wilton Crescent/ Holmwood Avenue and gradually decrease towards Pretoria Avenue.

**STANTEC CONSULTING LTD.**

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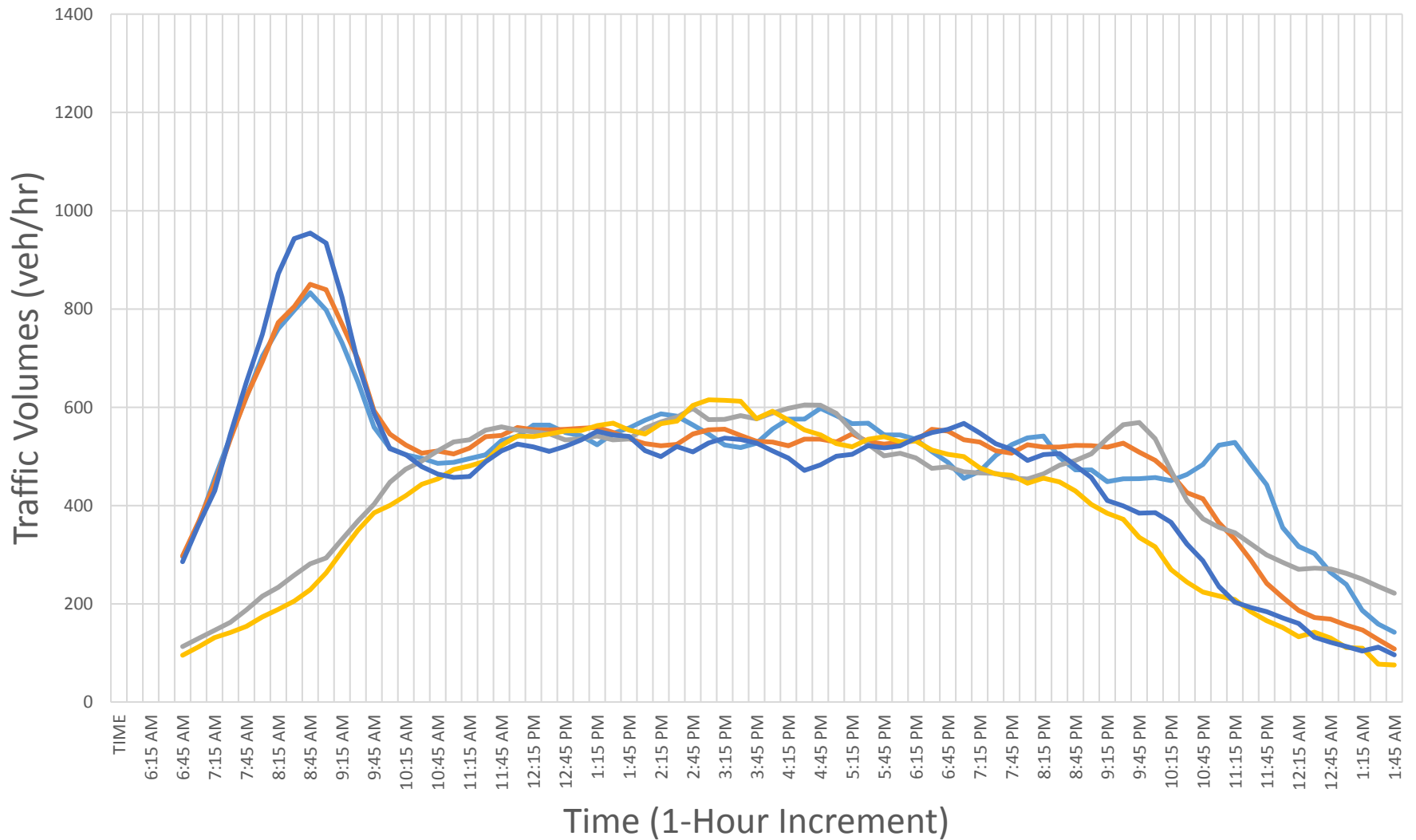
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Haitham.AlRajie@stantec.com

Attachment: Appendix A – Bank Street Traffic Volume Profiles  
Appendix B – Bank Street Pedestrian Volume Profiles  
Appendix C – Bank Street Traffic and Pedestrian Volume Figures

# APPENDIX A

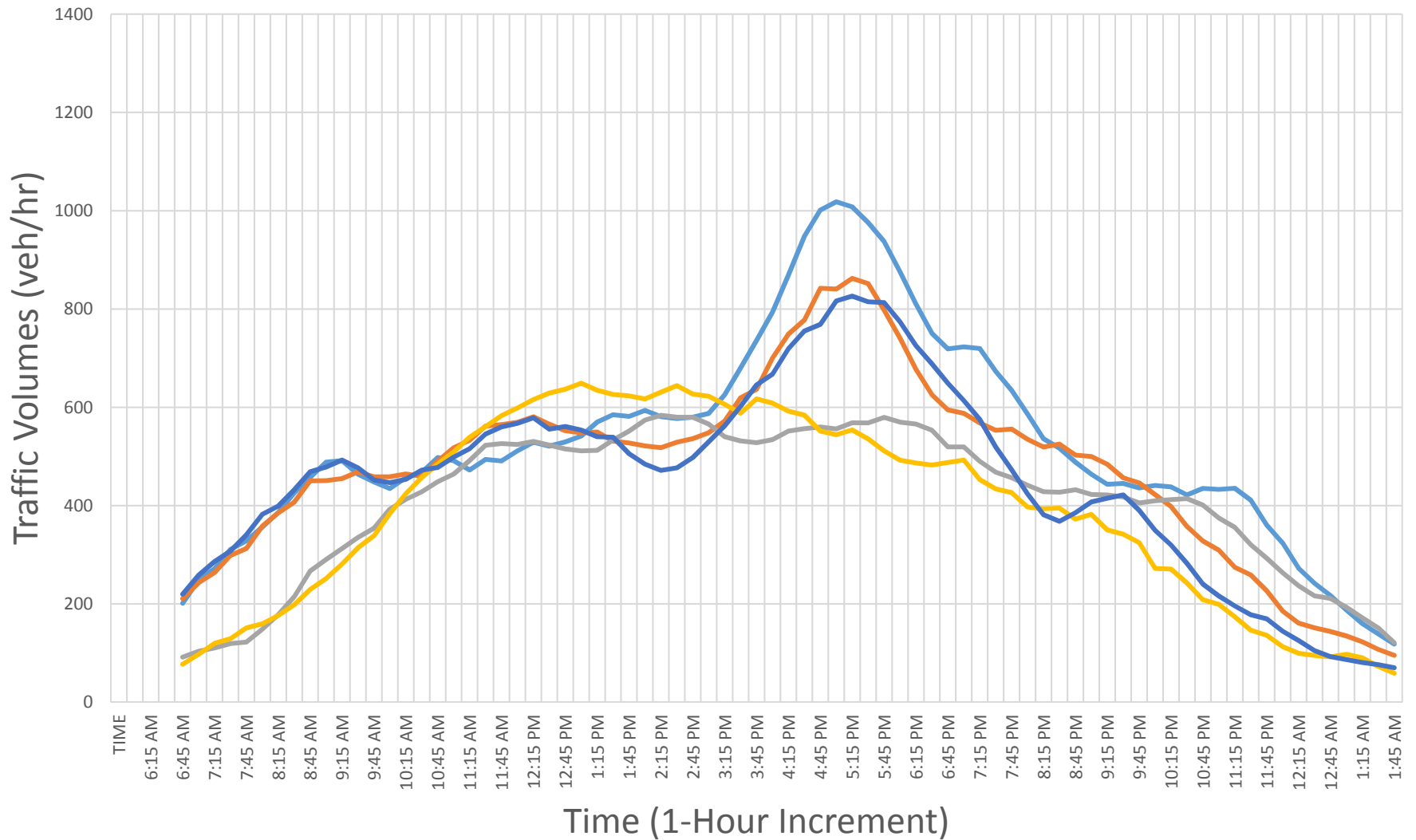
Bank Street Traffic Volume Profiles

## Average Bank Street Traffic Volumes (Northbound)



- REDBLACKS Weekday Game (Wednesday July 19, 2017)
- Typical Weekday (Thursday July 20, 2017)
- Summer Long Weekend (Saturday August 5, 2017)
- Typical Summer Weekend (Sunday September 10, 2017)
- Typical Fall Weekday (Tuesday October 10, 2017)

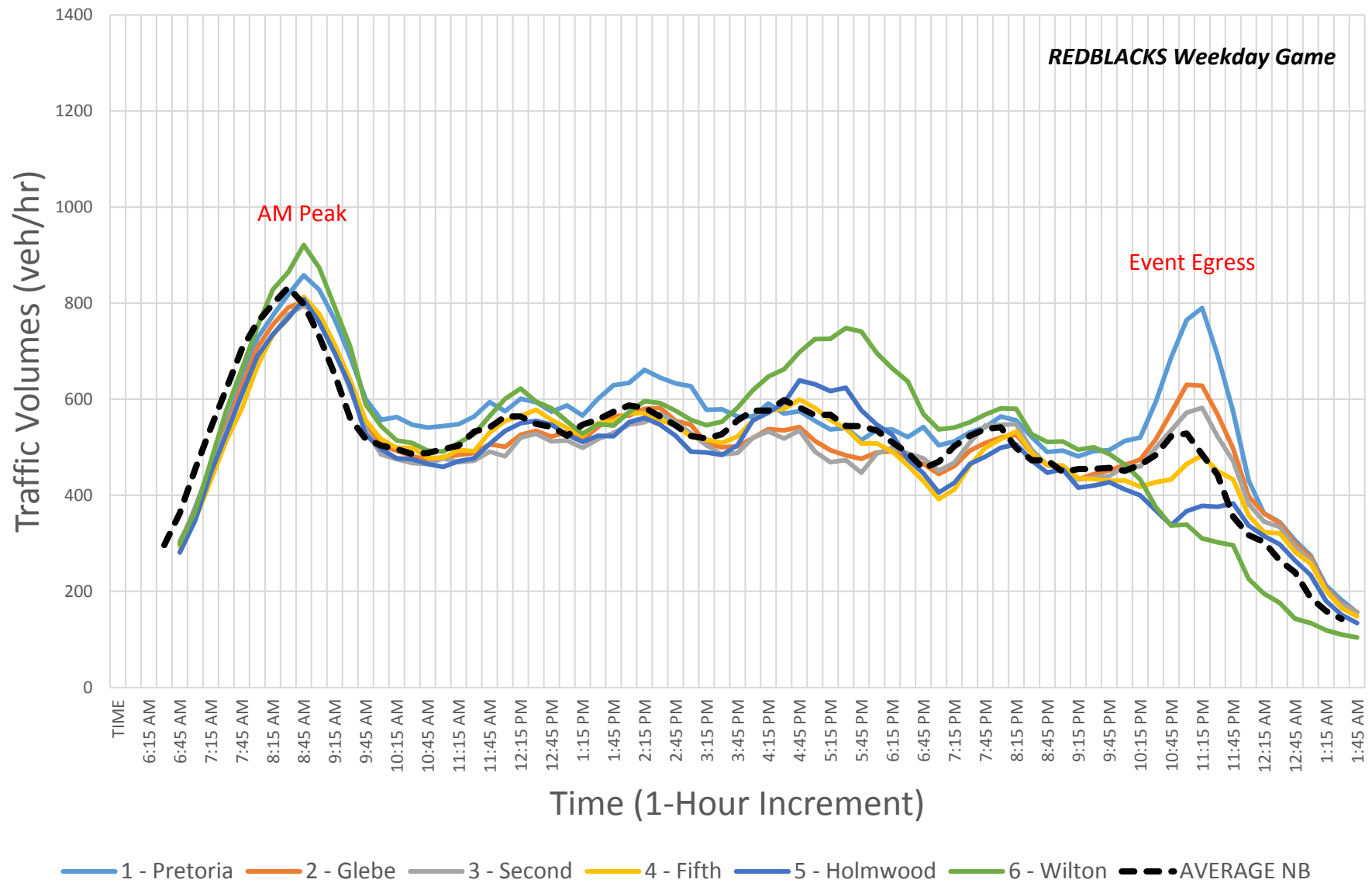
## Average Bank Street Traffic Volumes (Southbound)



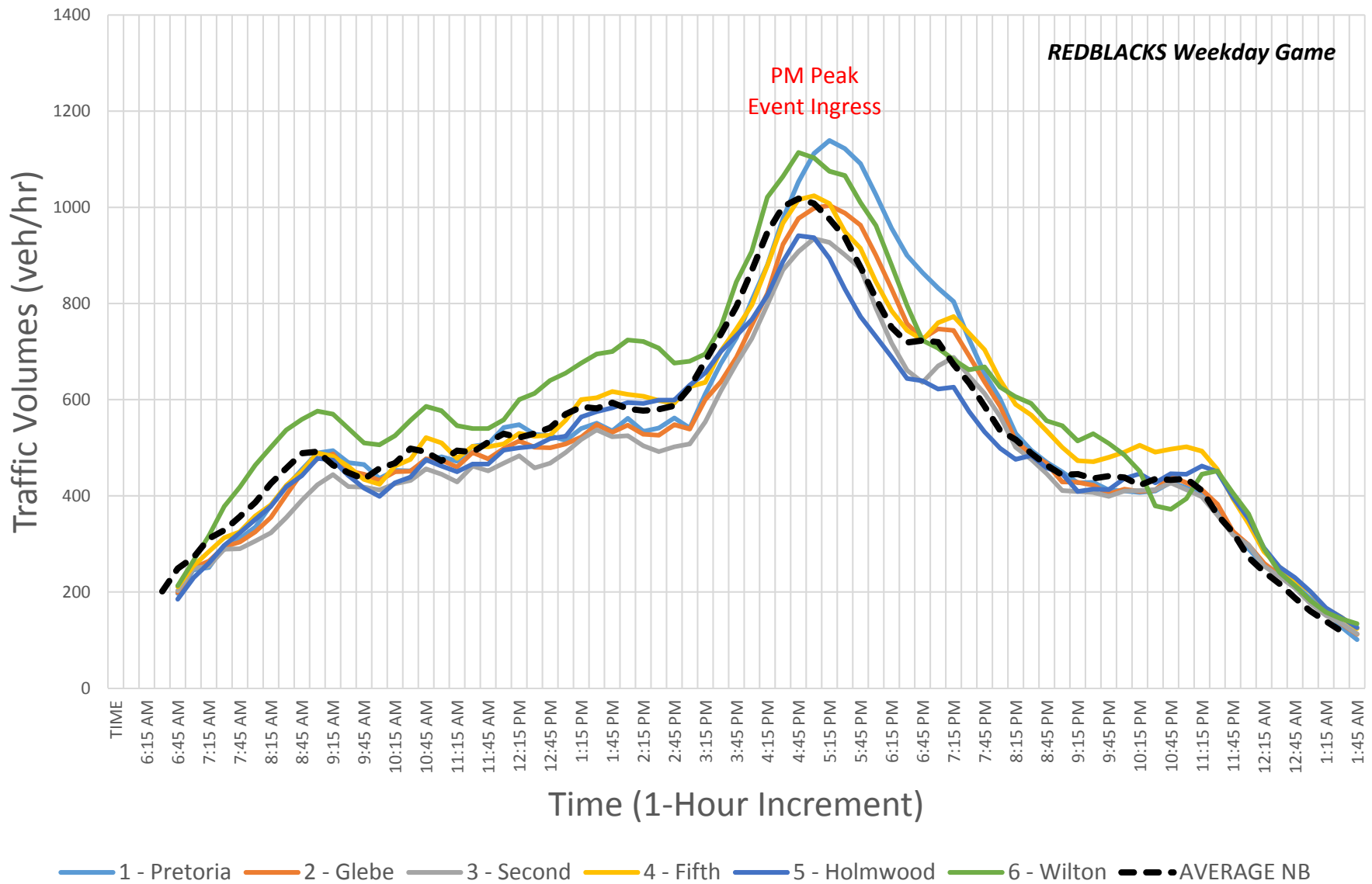


# Bank Street Traffic Volumes (Northbound) Wednesday, July 19 2017

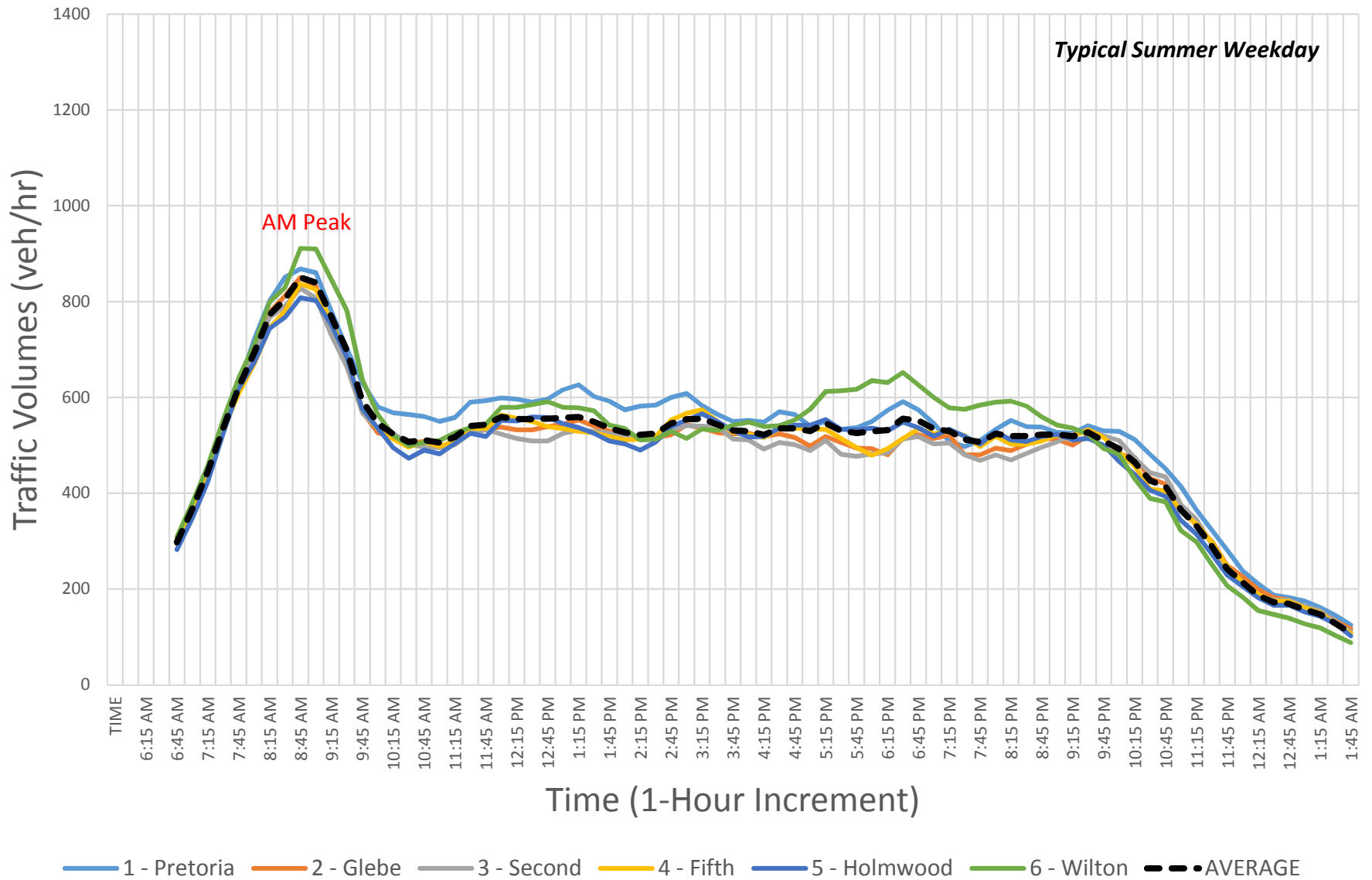
**REDBLACKS Weekday Game**



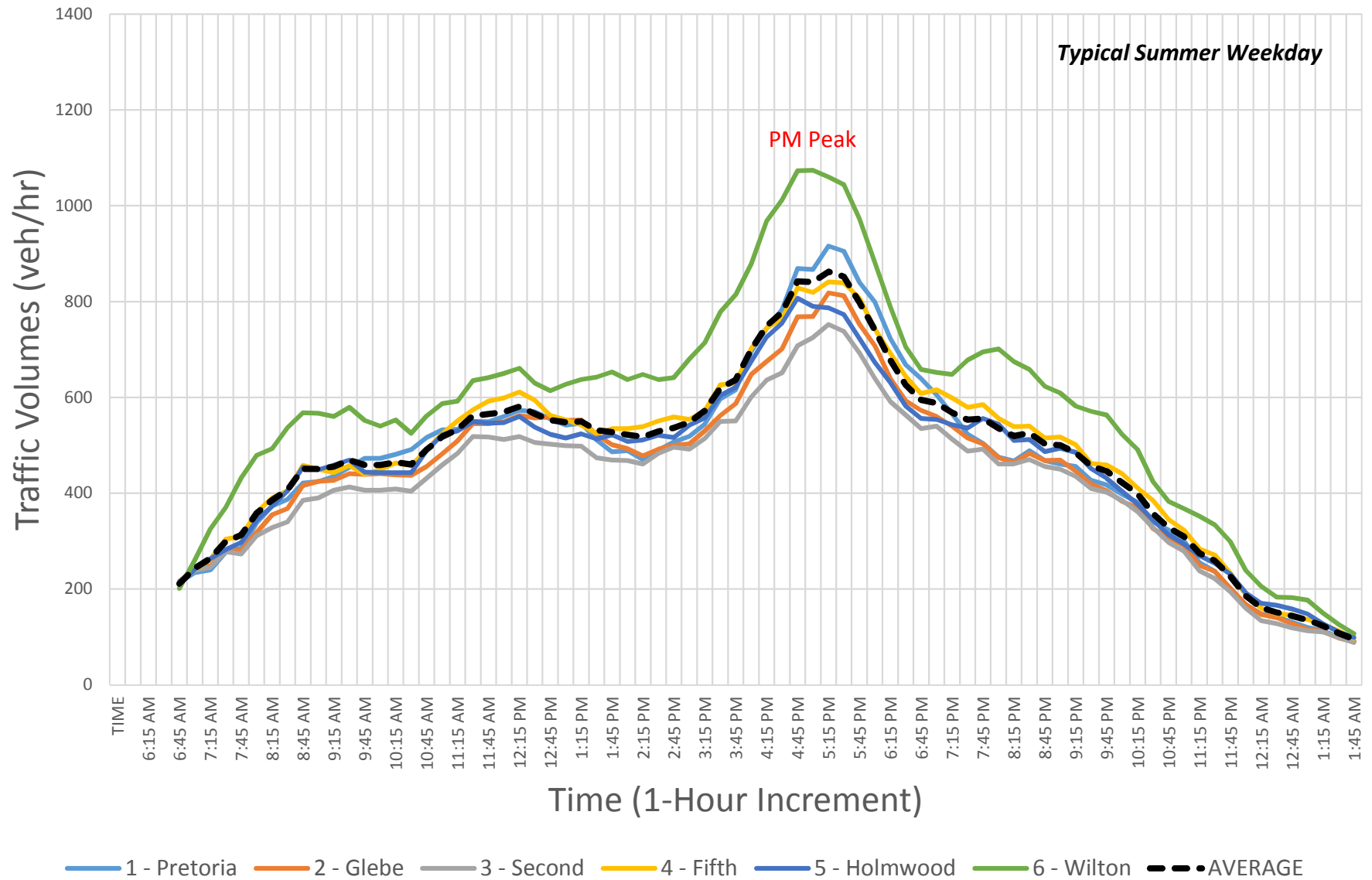
# Bank Street Traffic Volumes (Southbound) Wednesday, July 19 2017



## Bank Street Traffic Volumes (Northbound) Thursday, July 20 2017

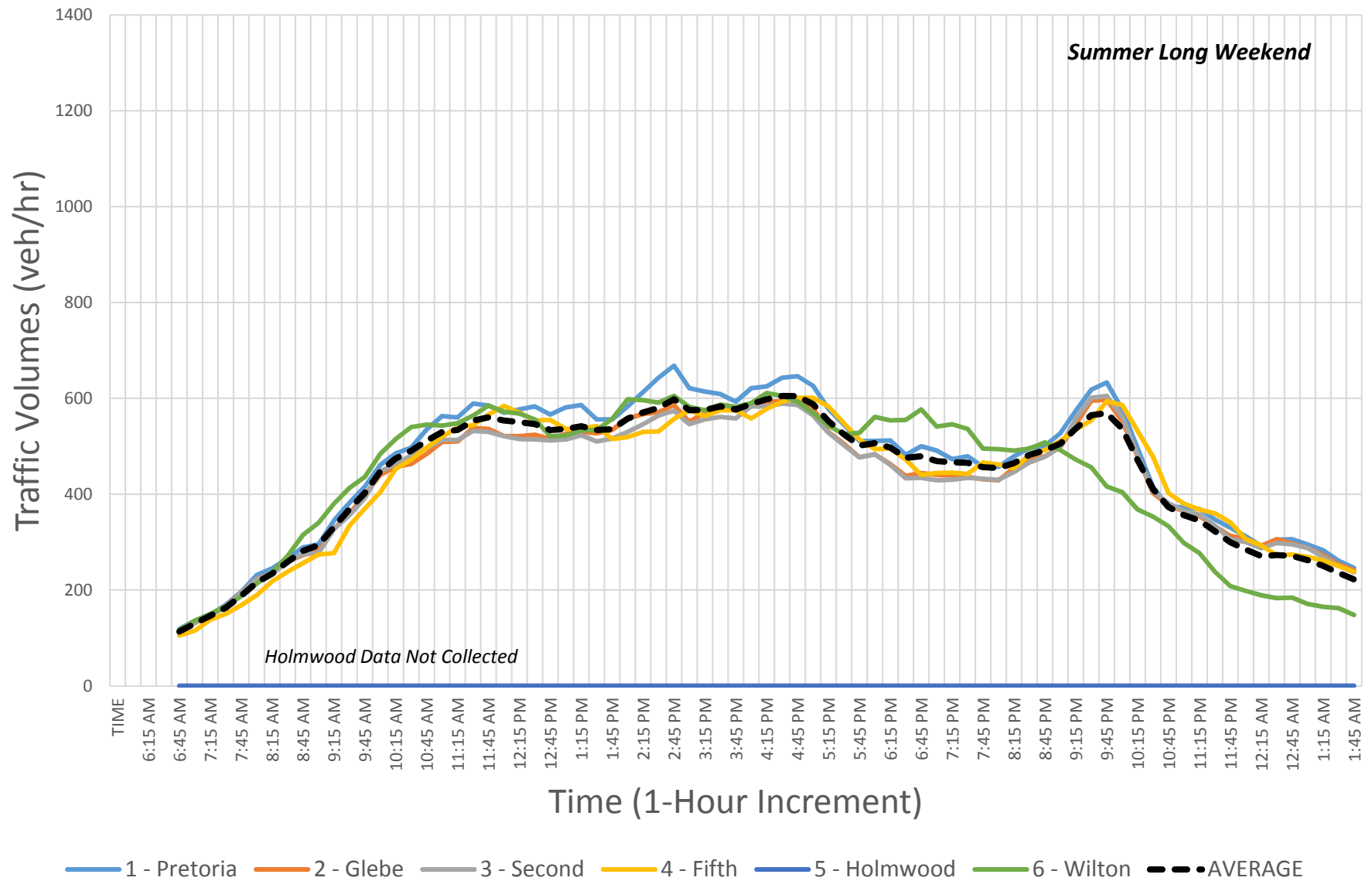


## Bank Street Traffic Volumes (Southbound) Thursday, July 20 2017

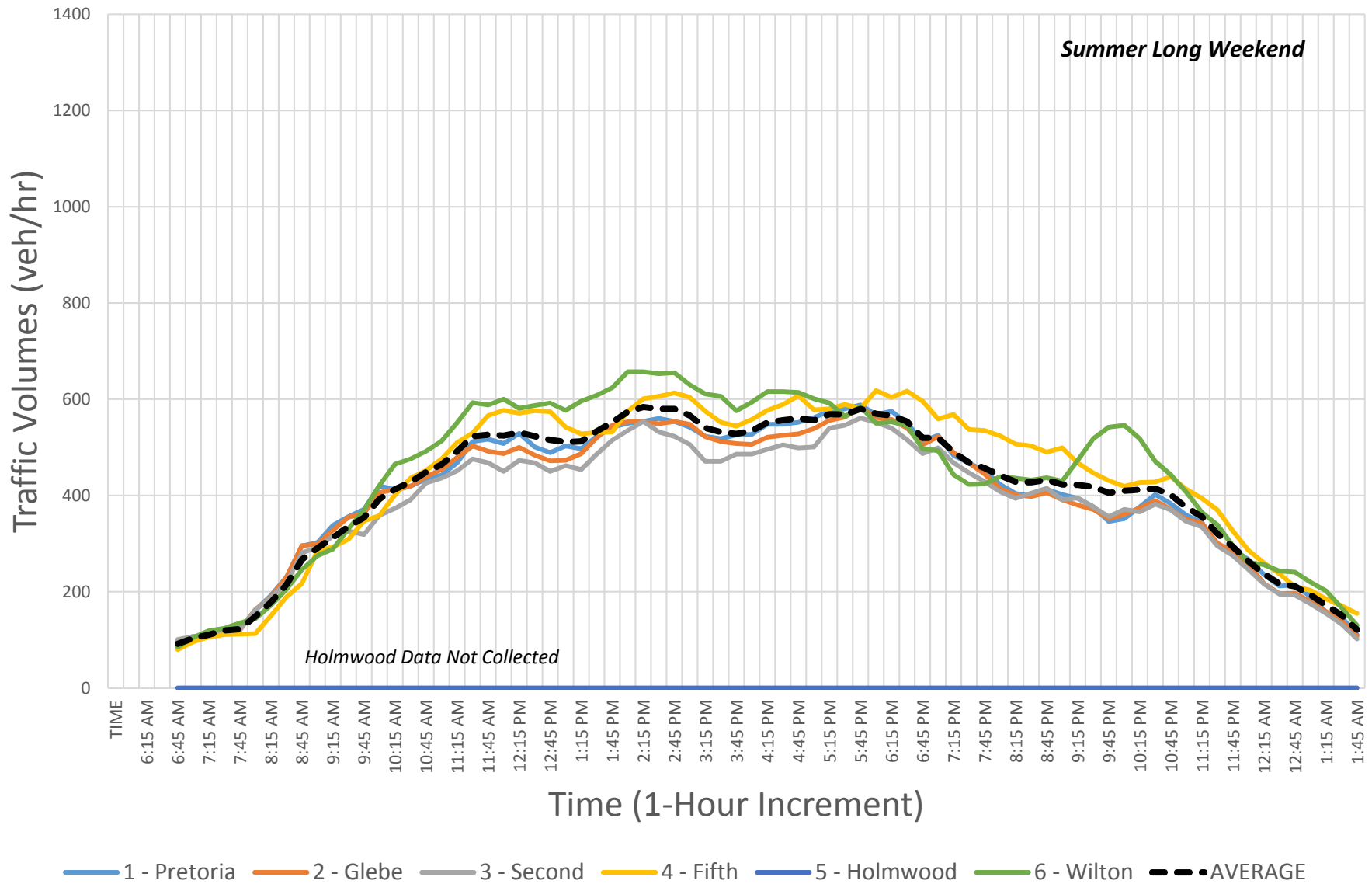




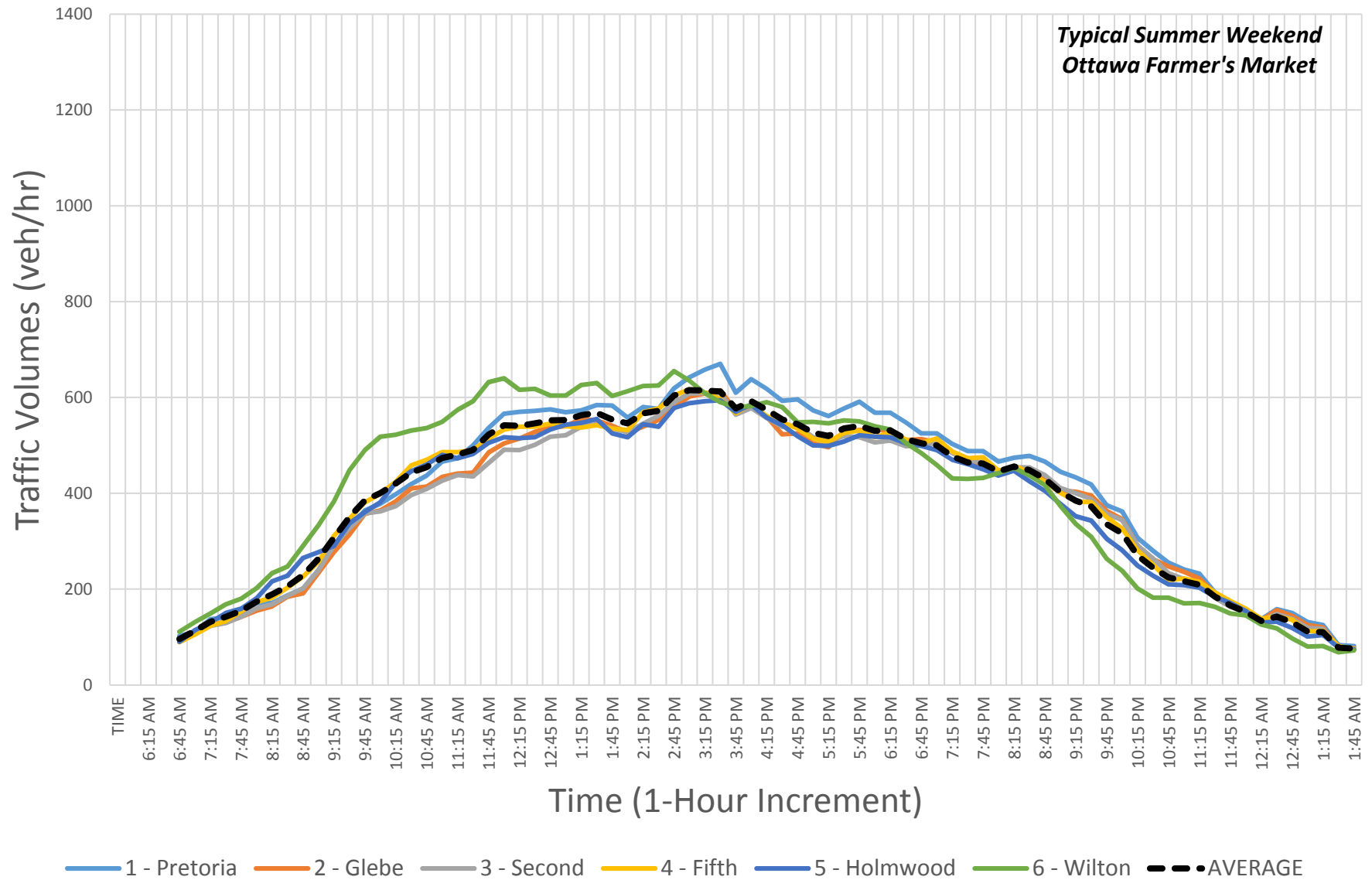
## Bank Street Traffic Volumes (Northbound) Saturday, August 5 2017



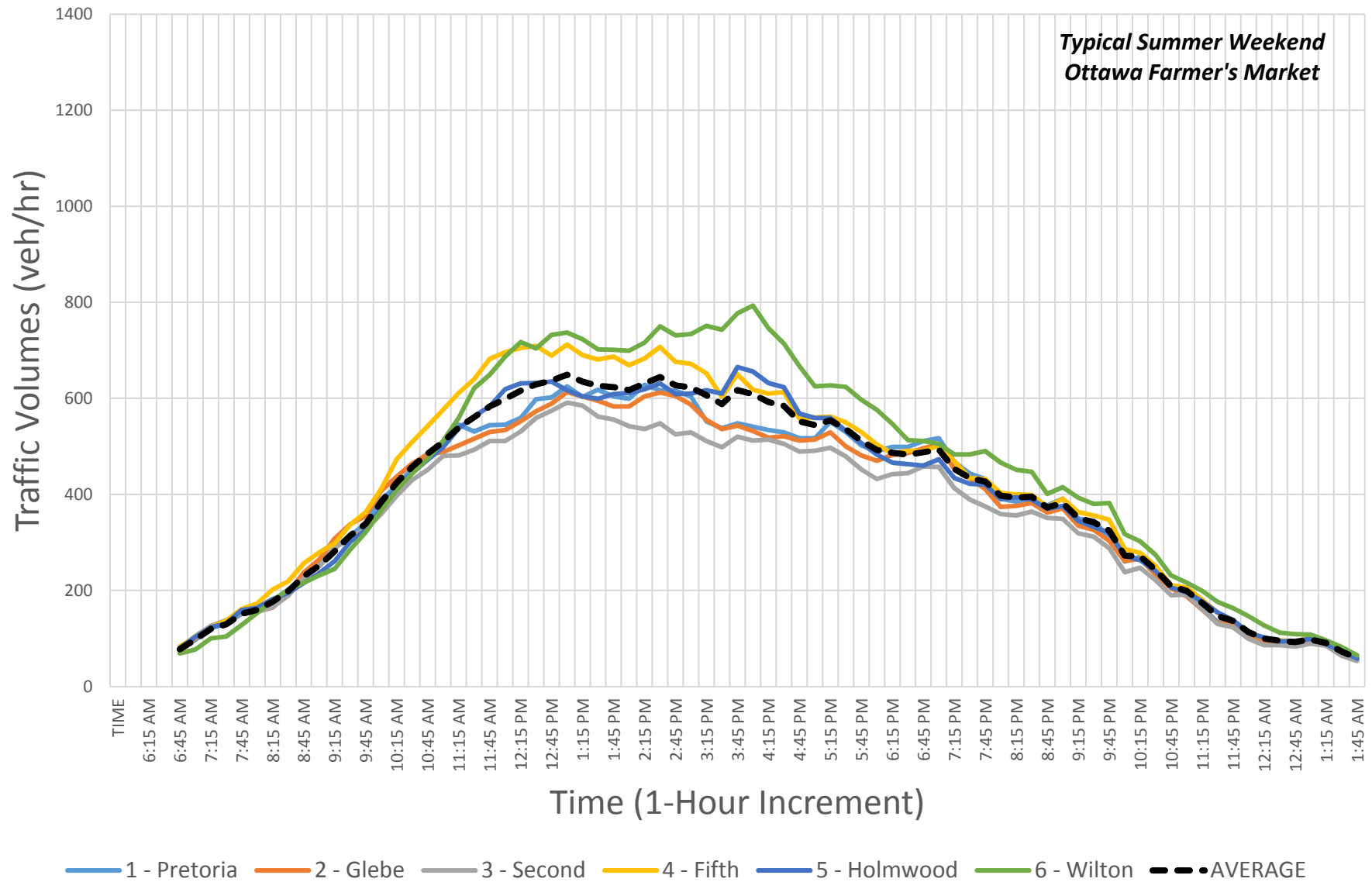
## Bank Street Traffic Volumes (Southbound) Saturday, August 5 2017



## Bank Street Traffic Volumes (Northbound) Sunday, September 10 2017

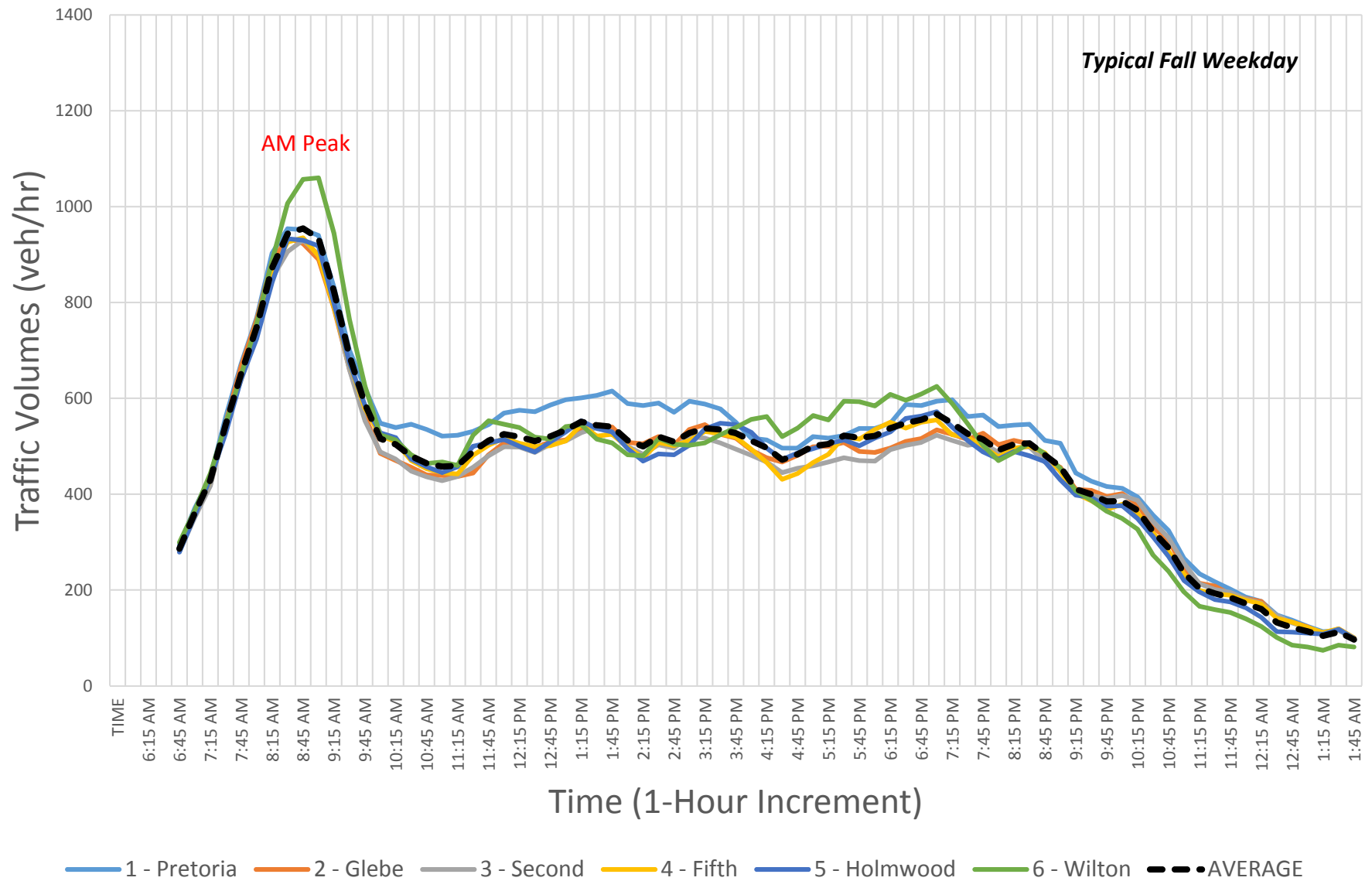


## Bank Street Traffic Volumes (Southbound) Sunday, September 10 2017

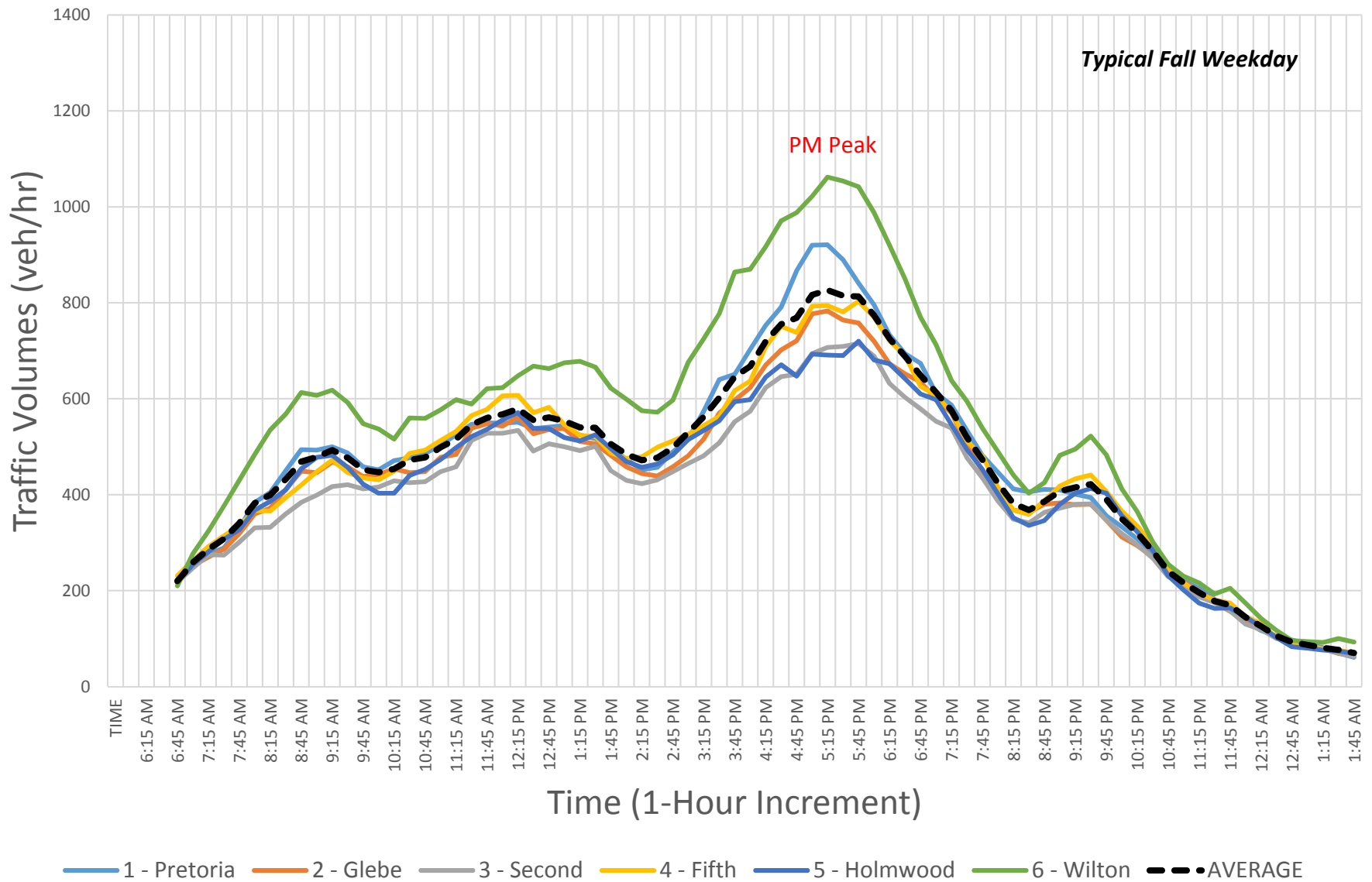




## Bank Street Traffic Volumes (Northbound) Tuesday, October 10 2017



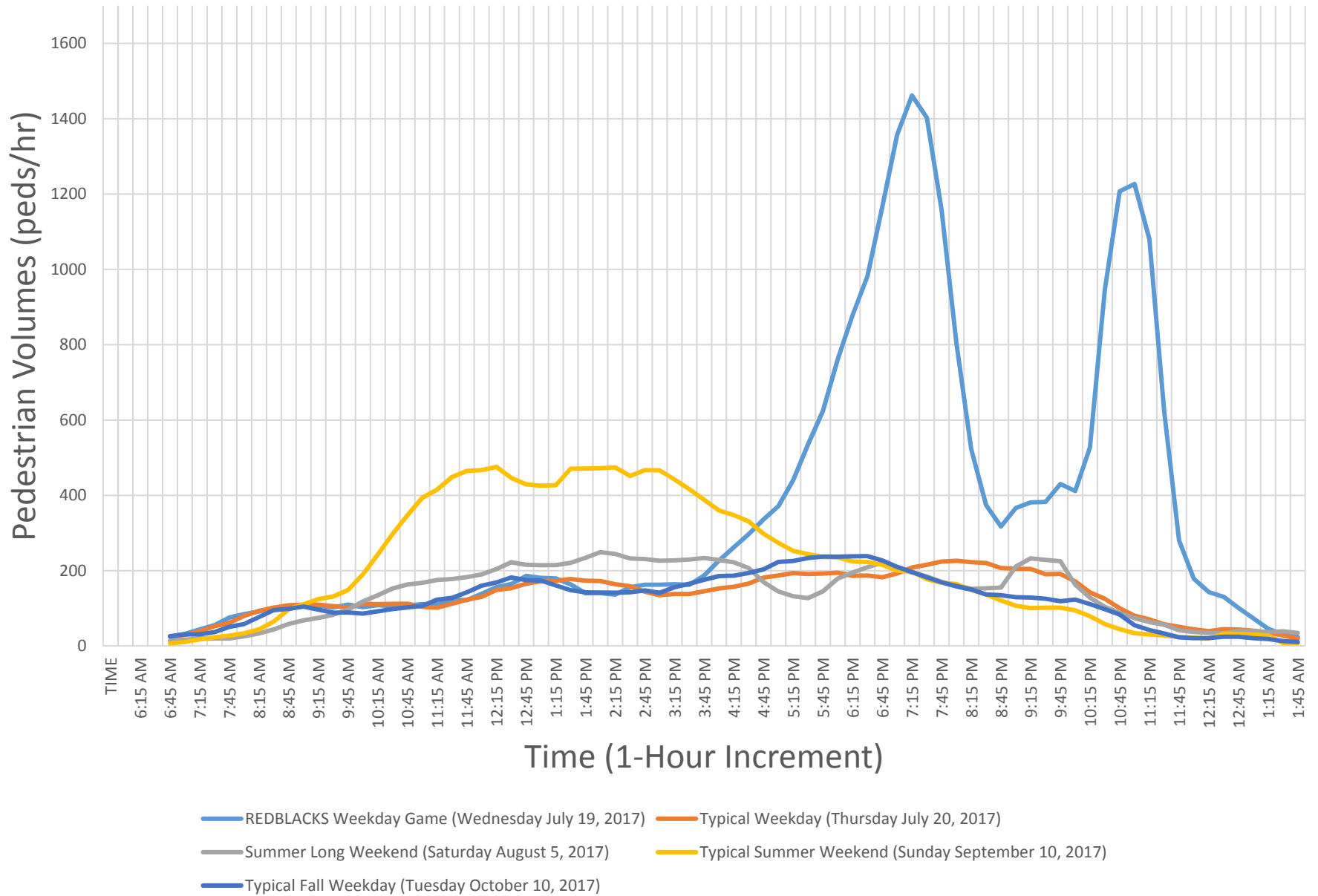
## Bank Street Traffic Volumes (Southbound) Tuesday, October 10 2017



## APPENDIX B

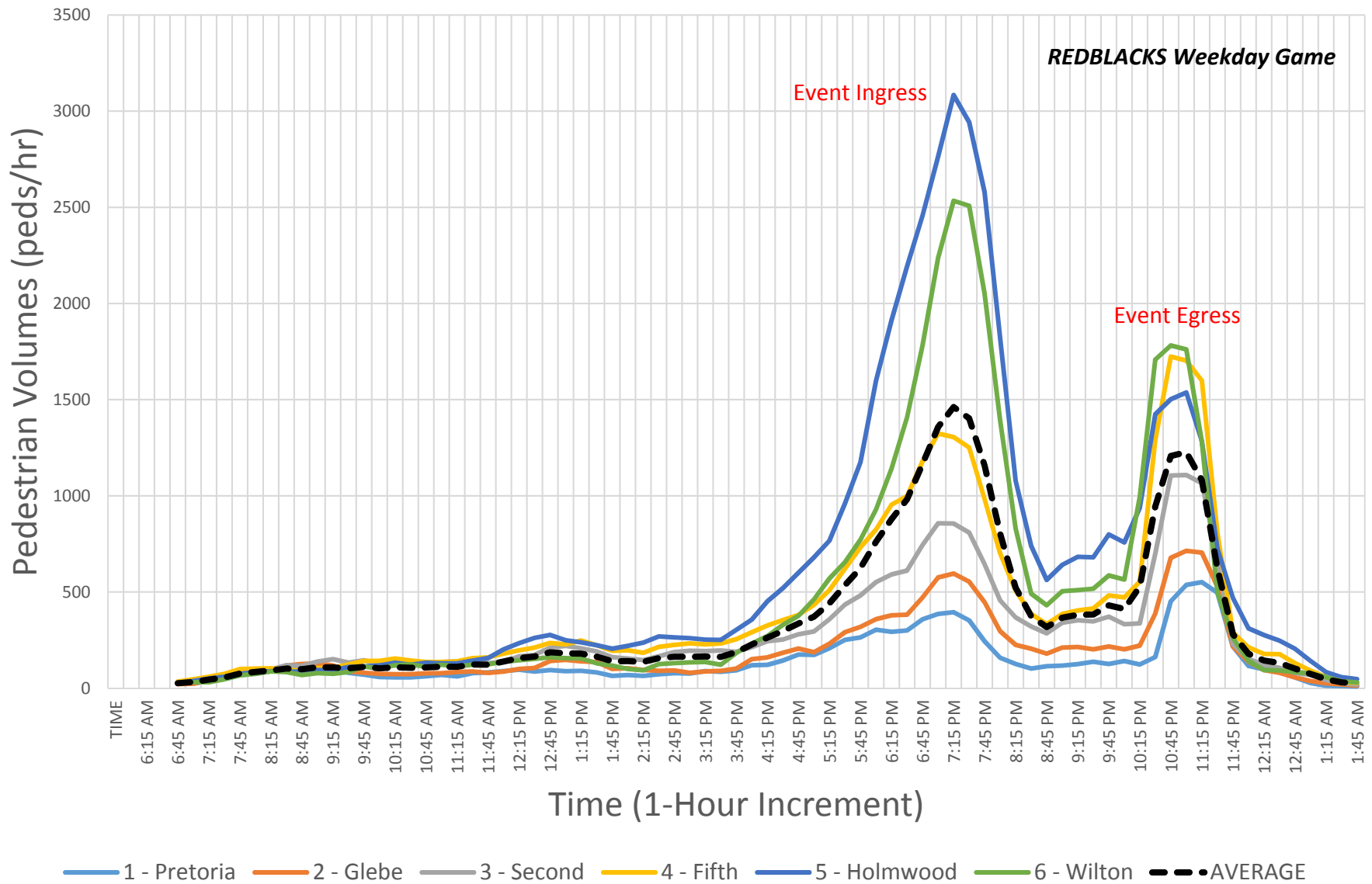
Bank Street Pedestrian Volume Profiles

## Average Bank Street Pedestrian Volumes



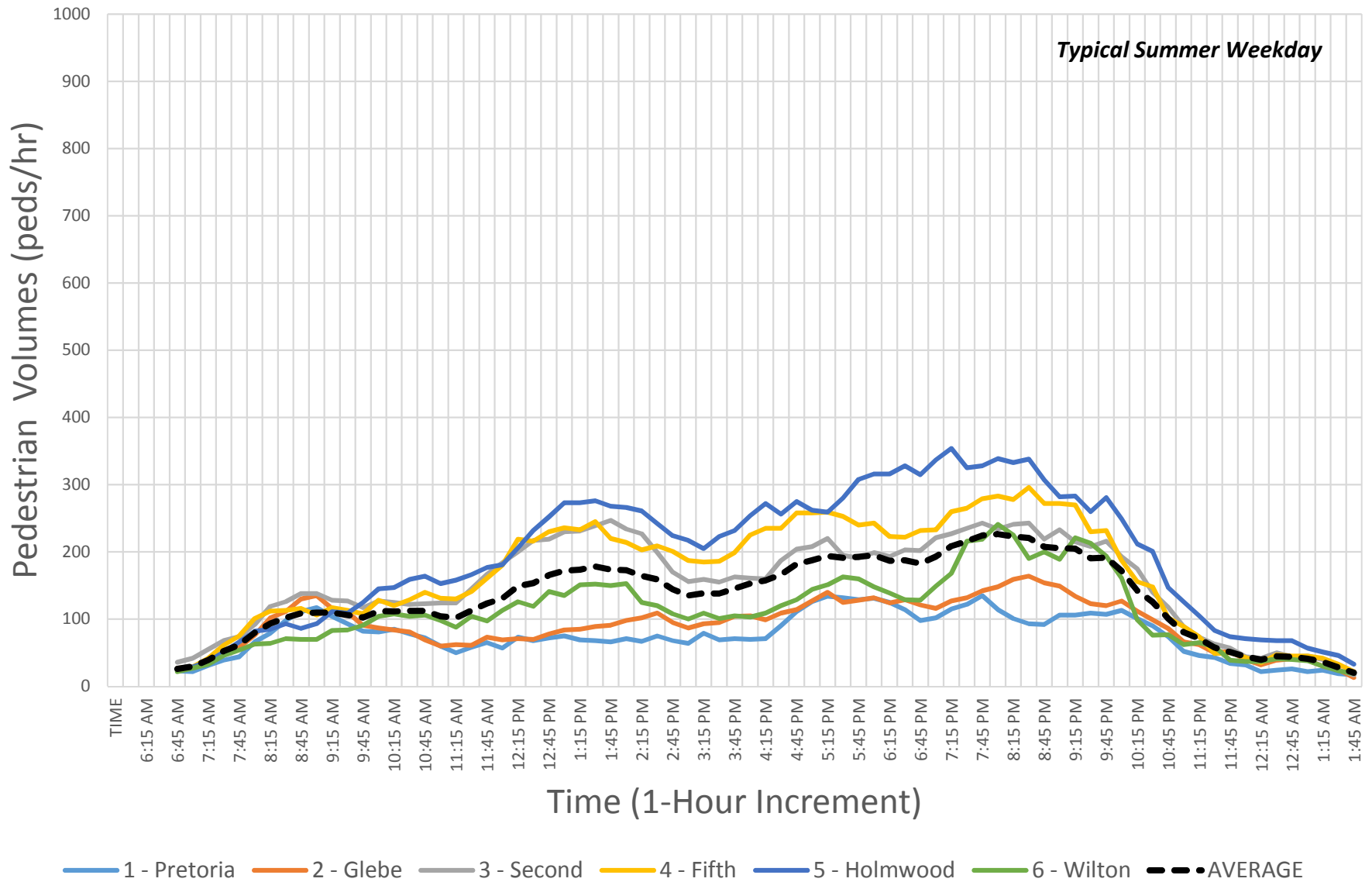
# Bank Street Pedestrian Volumes (Northbound + Southbound)

## Wednesday, July 19 2017



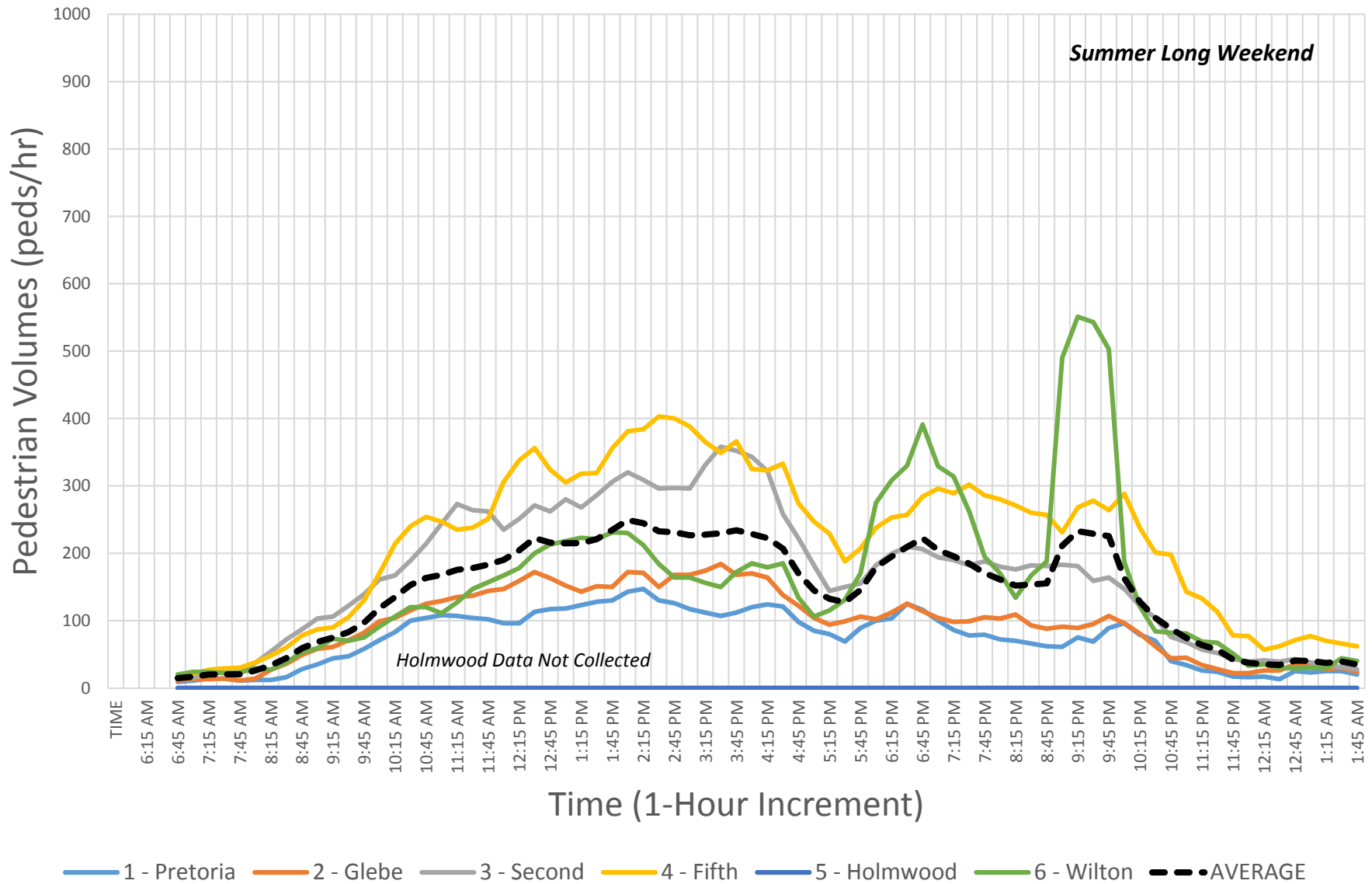
## Bank Street Pedestrian Volumes (Northbound + Southbound)

### Thursday, July 20 2017



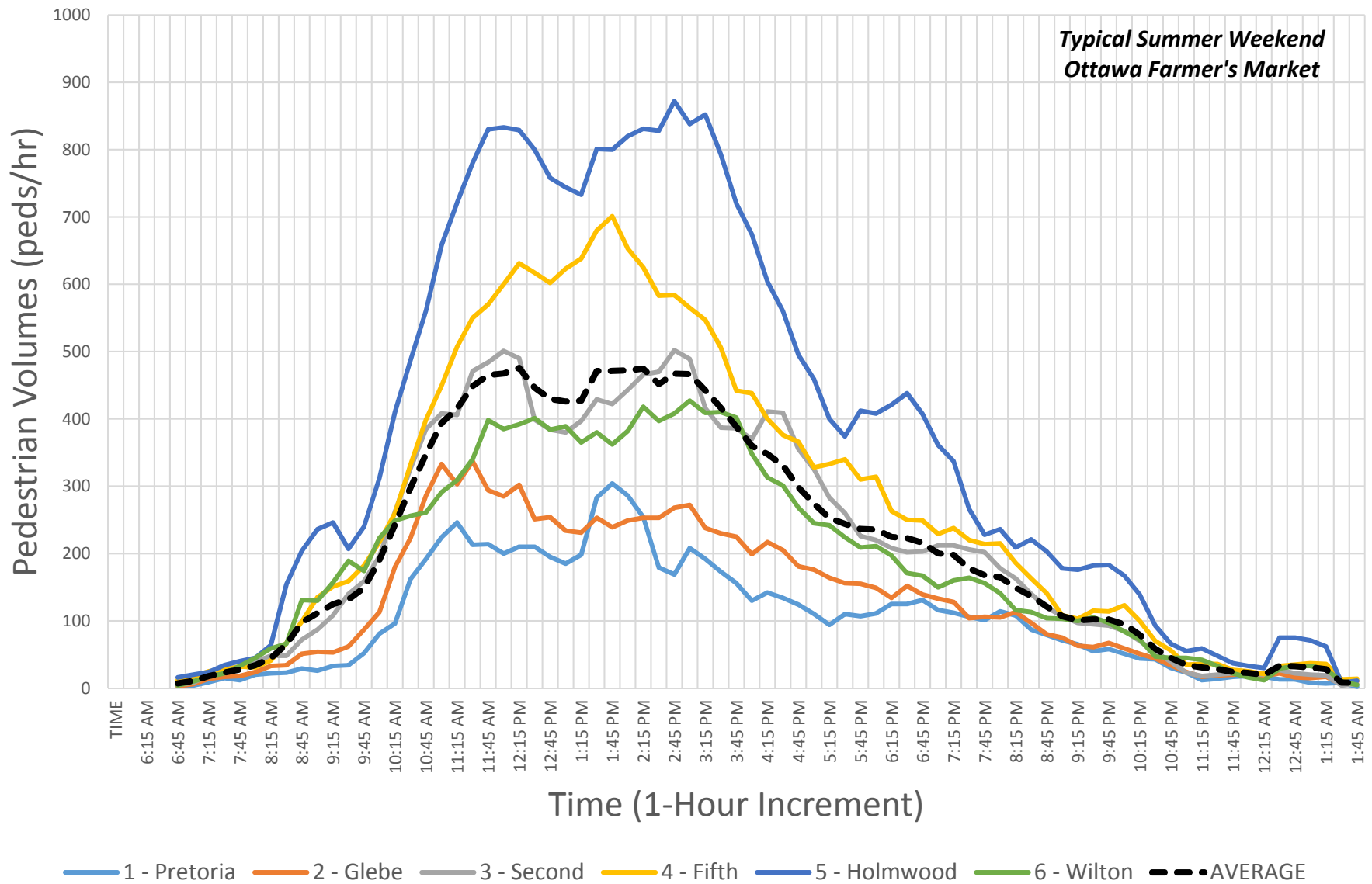
# Bank Street Pedestrian Volumes (Northbound + Southbound)

## Saturday, August 5 2017



# Bank Street Pedestrian Volumes (Northbound + Southbound)

## Sunday, September 10 2017

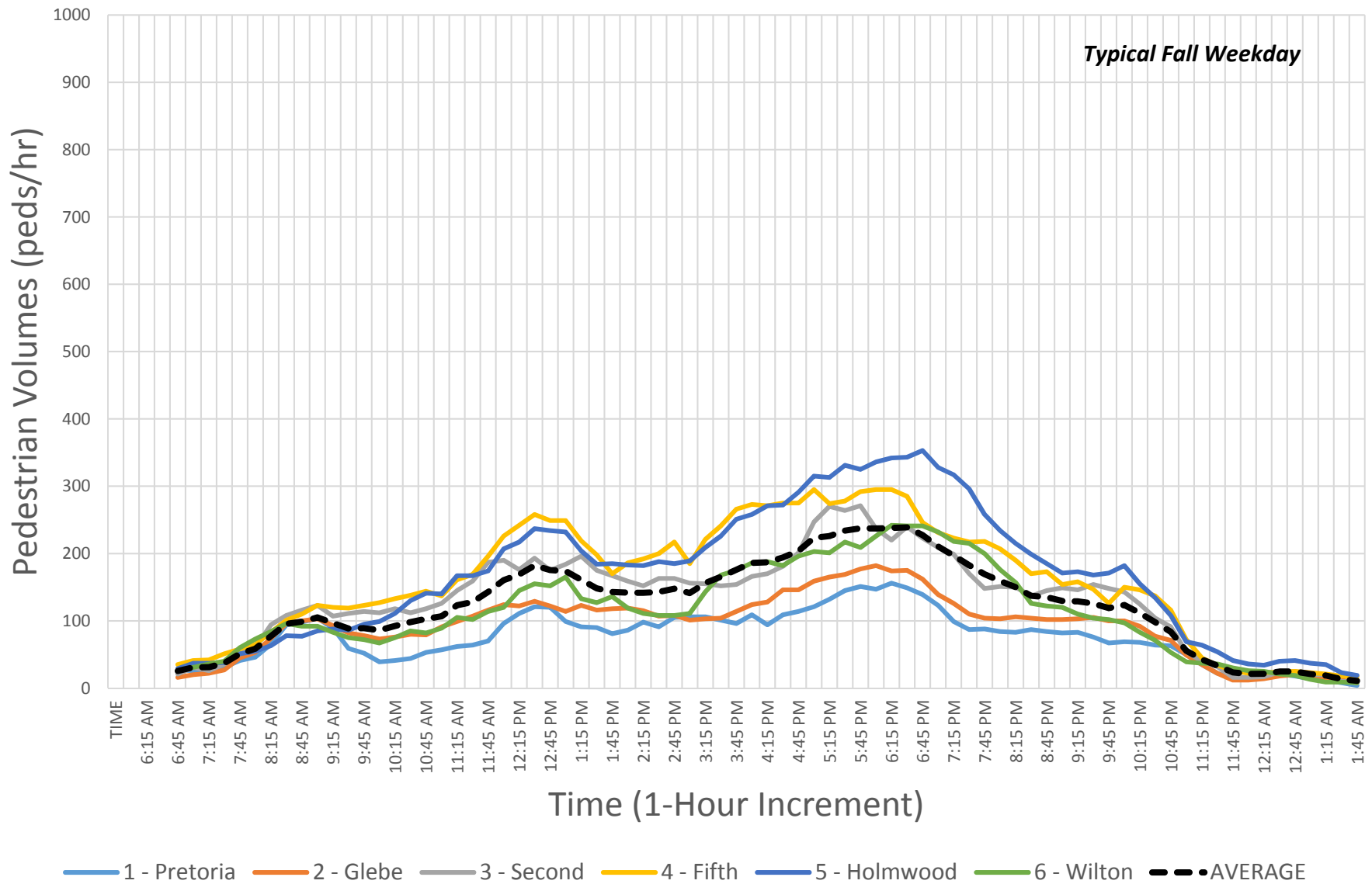






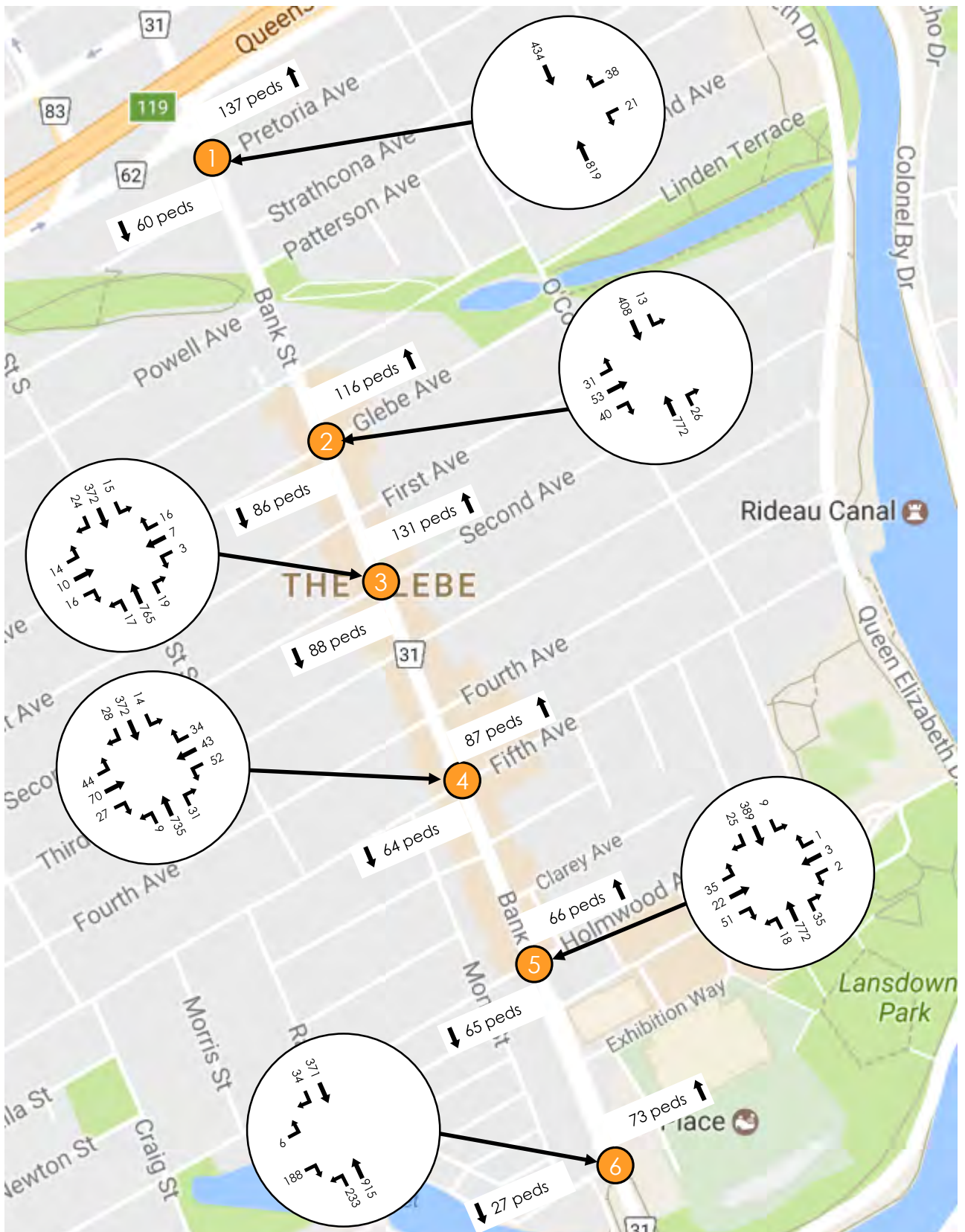
# Bank Street Pedestrian Volumes (Northbound + Southbound)

## Tuesday, October 10 2017

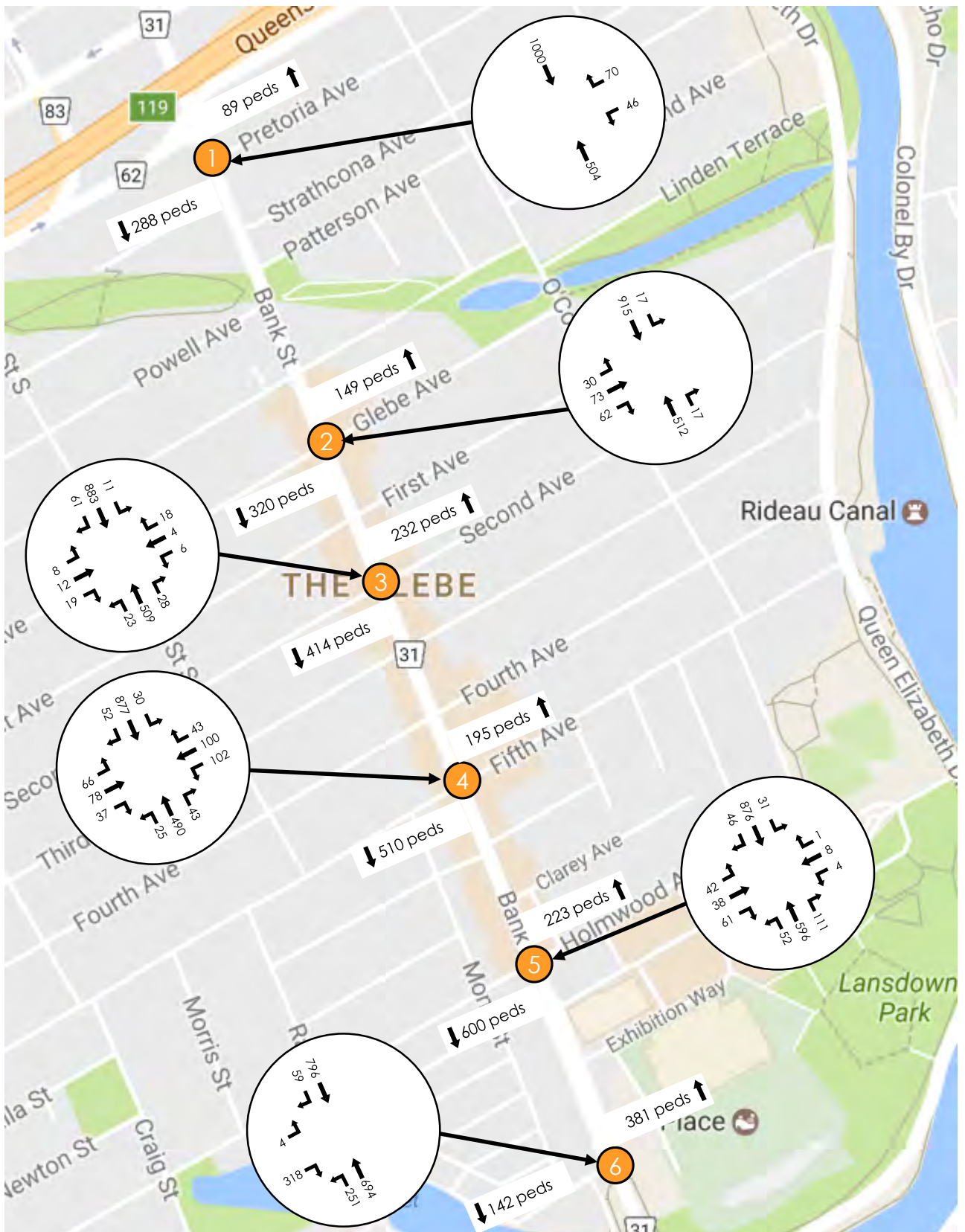


## APPENDIX C

Bank Street Traffic and Pedestrian Volume Figures

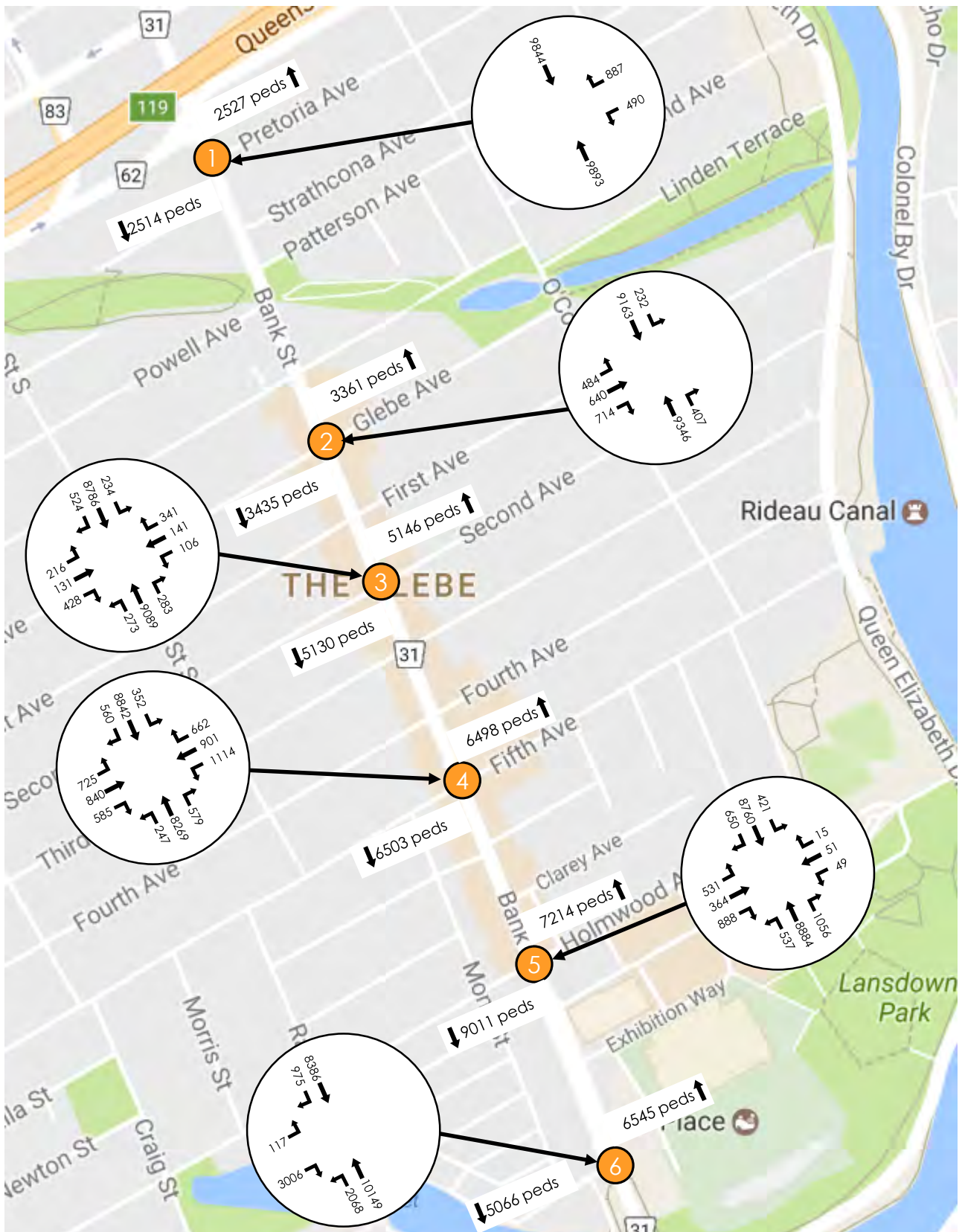


**Figure 1 - Bank Street Corridor Vehicle Volumes**  
 Wednesday, July 19, 2017 (AM Peak Hour)  
 Glebe BIA Transportation Data Collection Summary

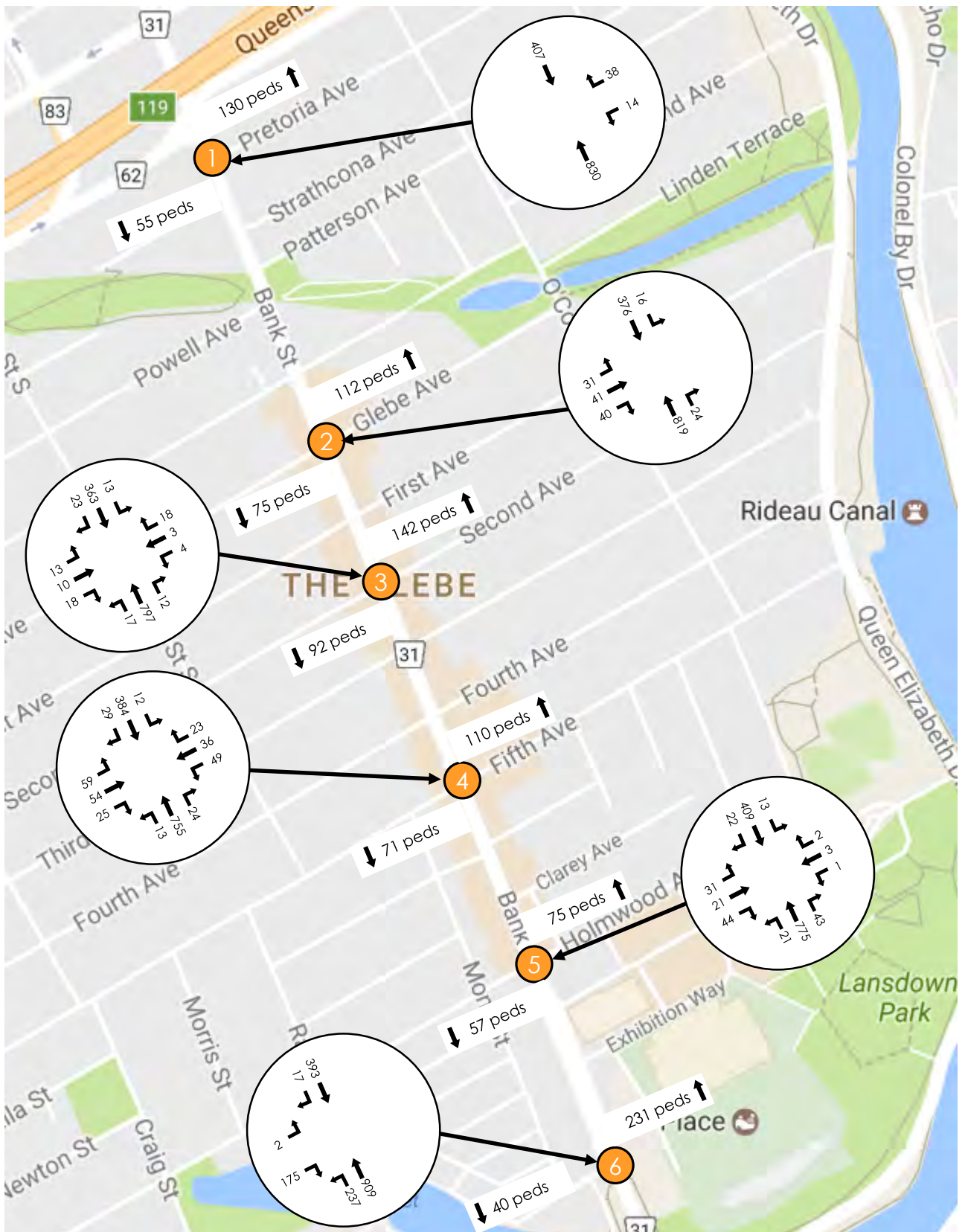


**Figure 2 - Bank Street Corridor Vehicle Volumes**  
 Wednesday, July 19, 2017 (PM Peak Hour)  
 Glebe BIA Transportation Data Collection Summary



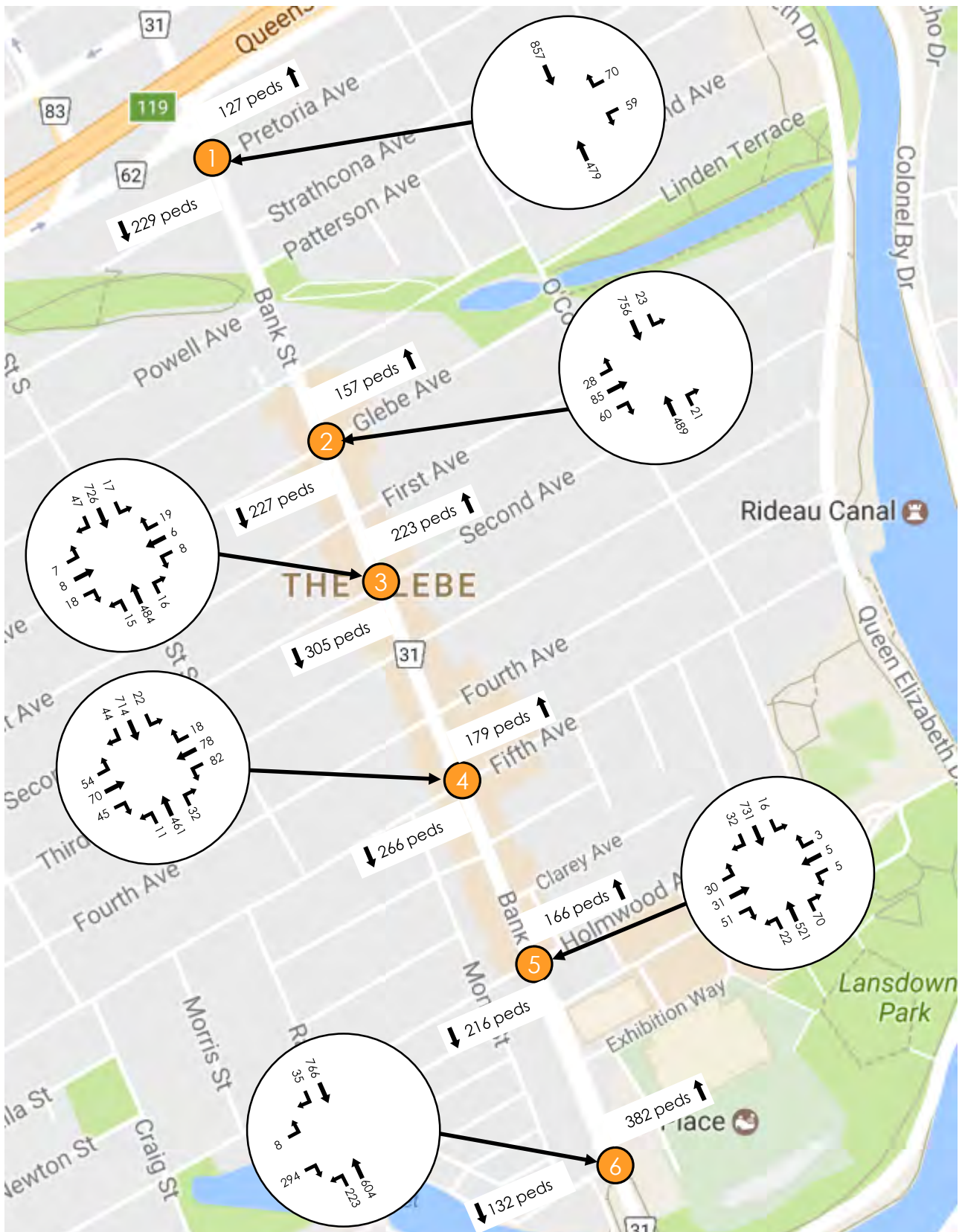


**Figure 3 - Bank Street Corridor Vehicle Volumes**  
 Wednesday, July 19, 2017 (Full Day)  
 Glebe BIA Transportation Data Collection Summary



**Figure 4 - Bank Street Corridor Vehicle Volumes**  
 Thursday, July 20, 2017 (AM Peak Hour)  
 Glebe BIA Transportation Data Collection Summary

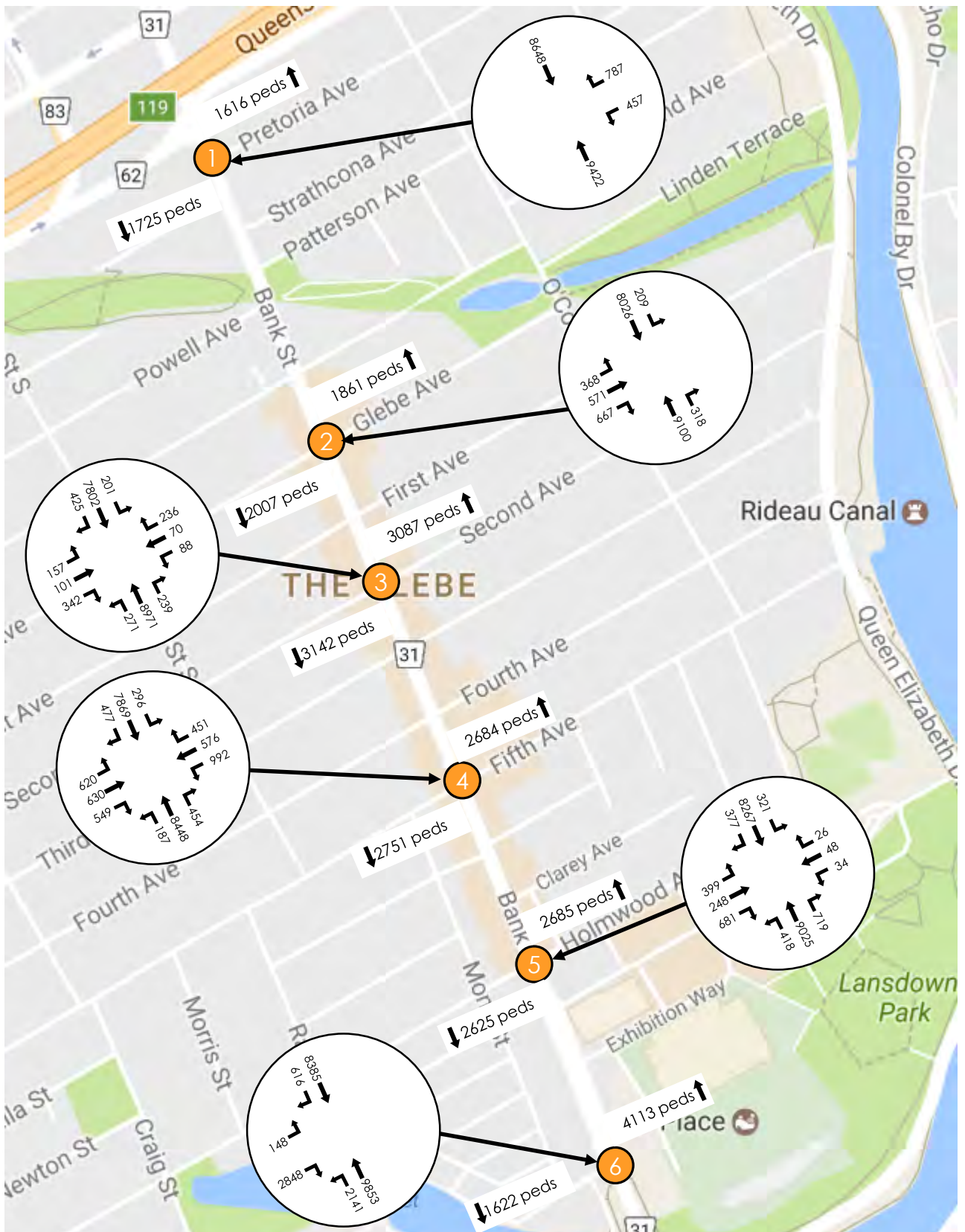




**Figure 5 - Bank Street Corridor Vehicle Volumes**

Thursday, July 20, 2017 (PM Peak Hour)

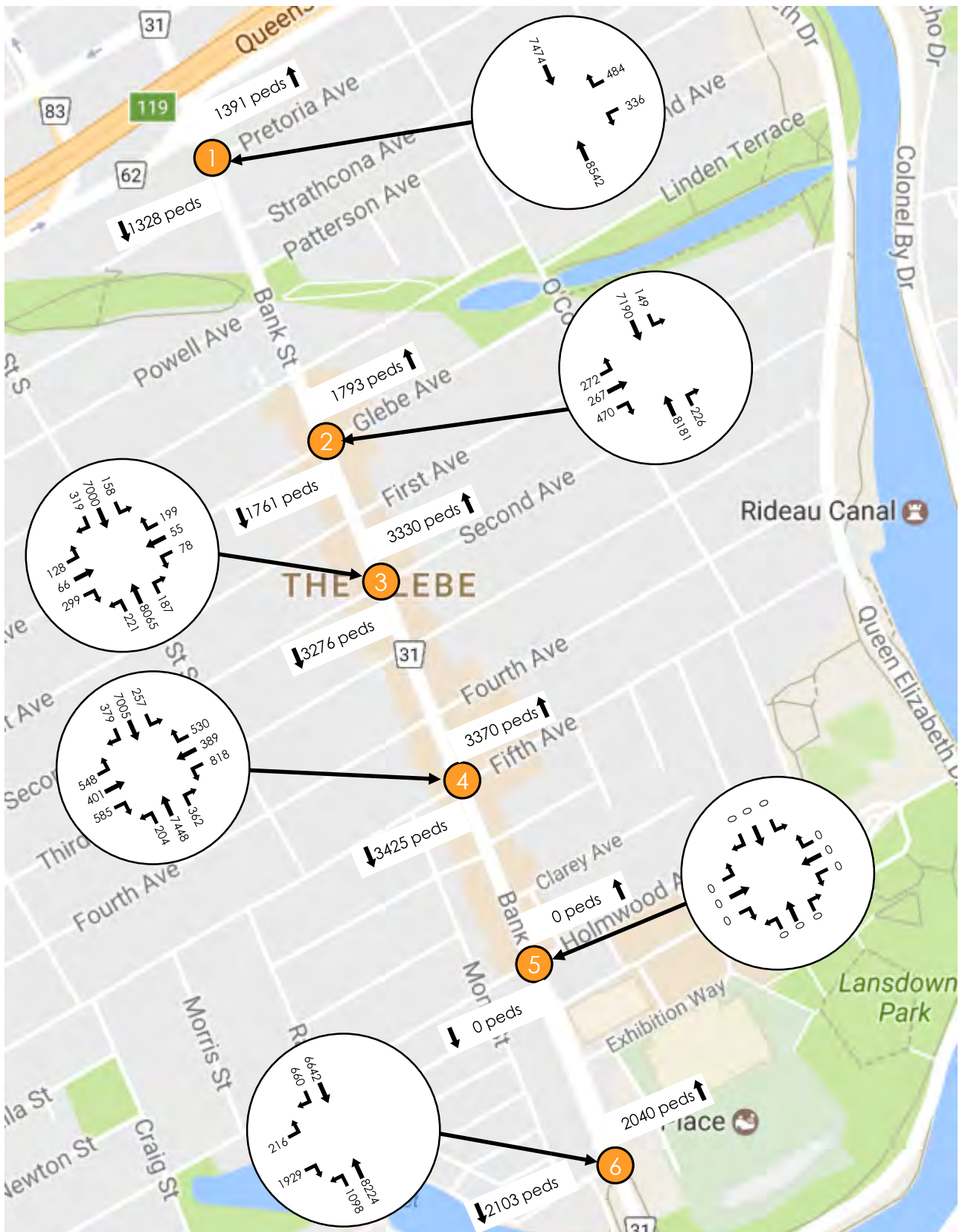
Glebe BIA Transportation Data Collection Summary



**Figure 6 - Bank Street Corridor Vehicle Volumes**  
 Thursday, July 20, 2017 (Full Day)  
 Glebe BIA Transportation Data Collection Summary

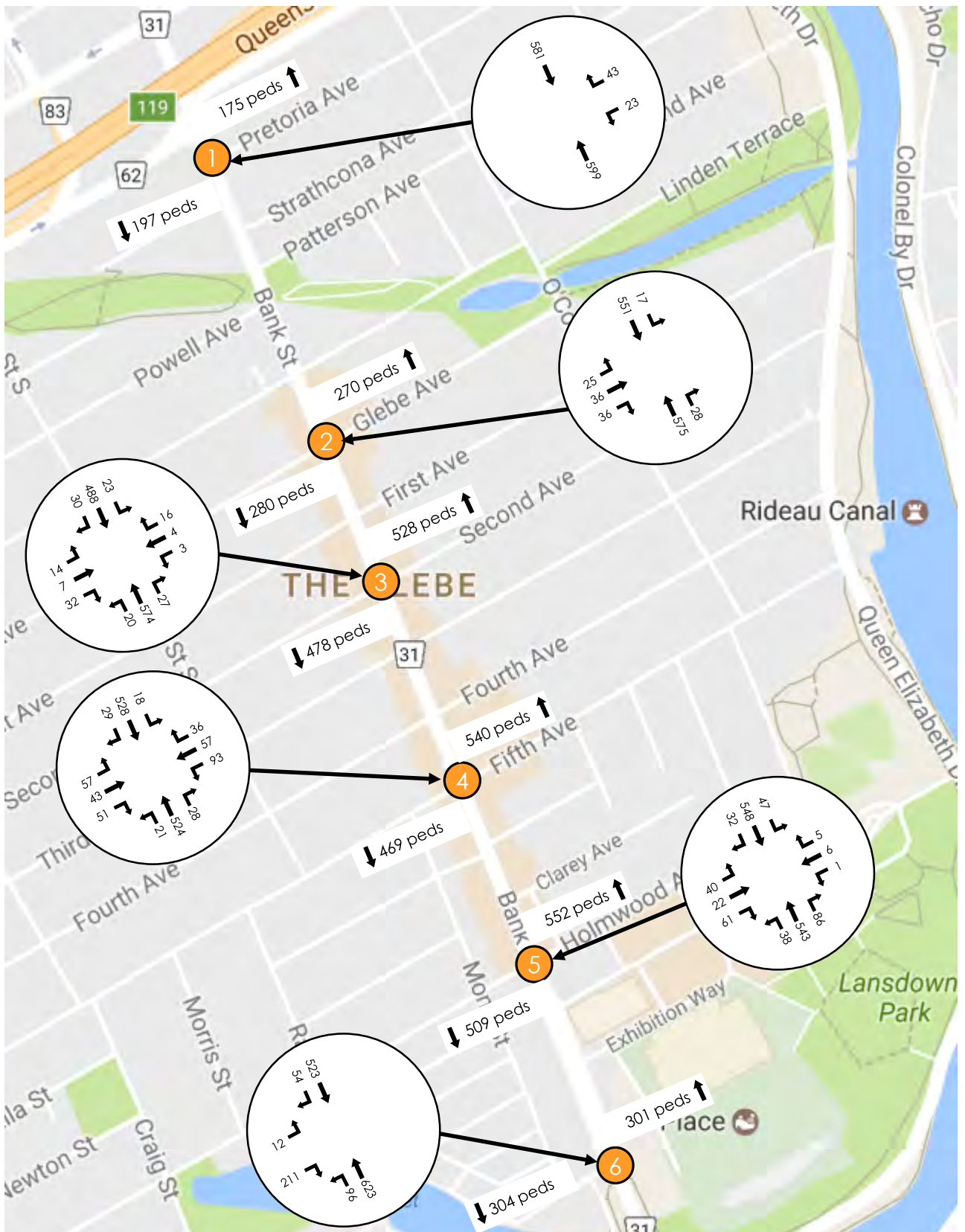




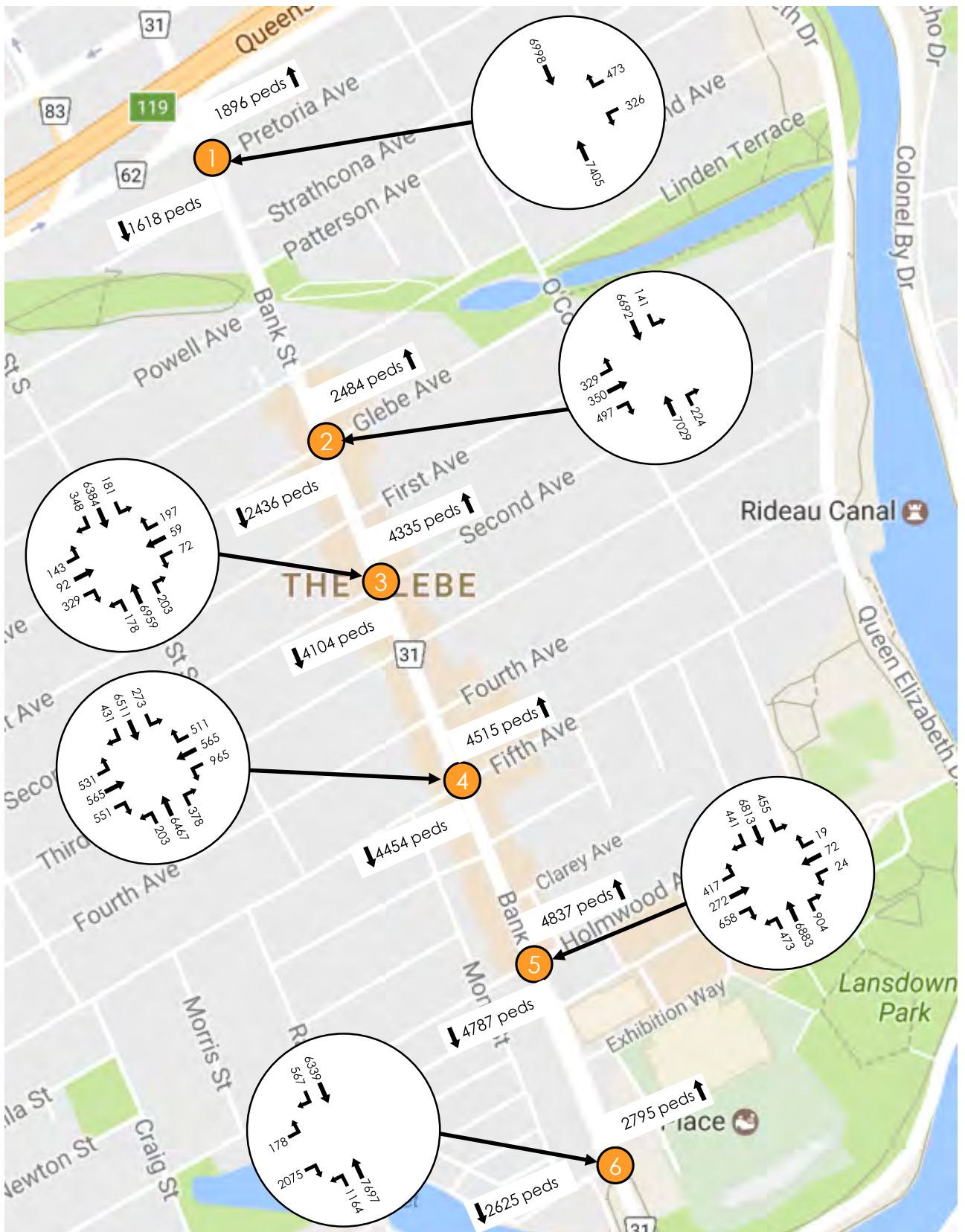


**Figure 8 - Bank Street Corridor Vehicle Volumes**  
 Saturday, August 5, 2017 (Full Day)  
 Glebe BIA Transportation Data Collection Summary



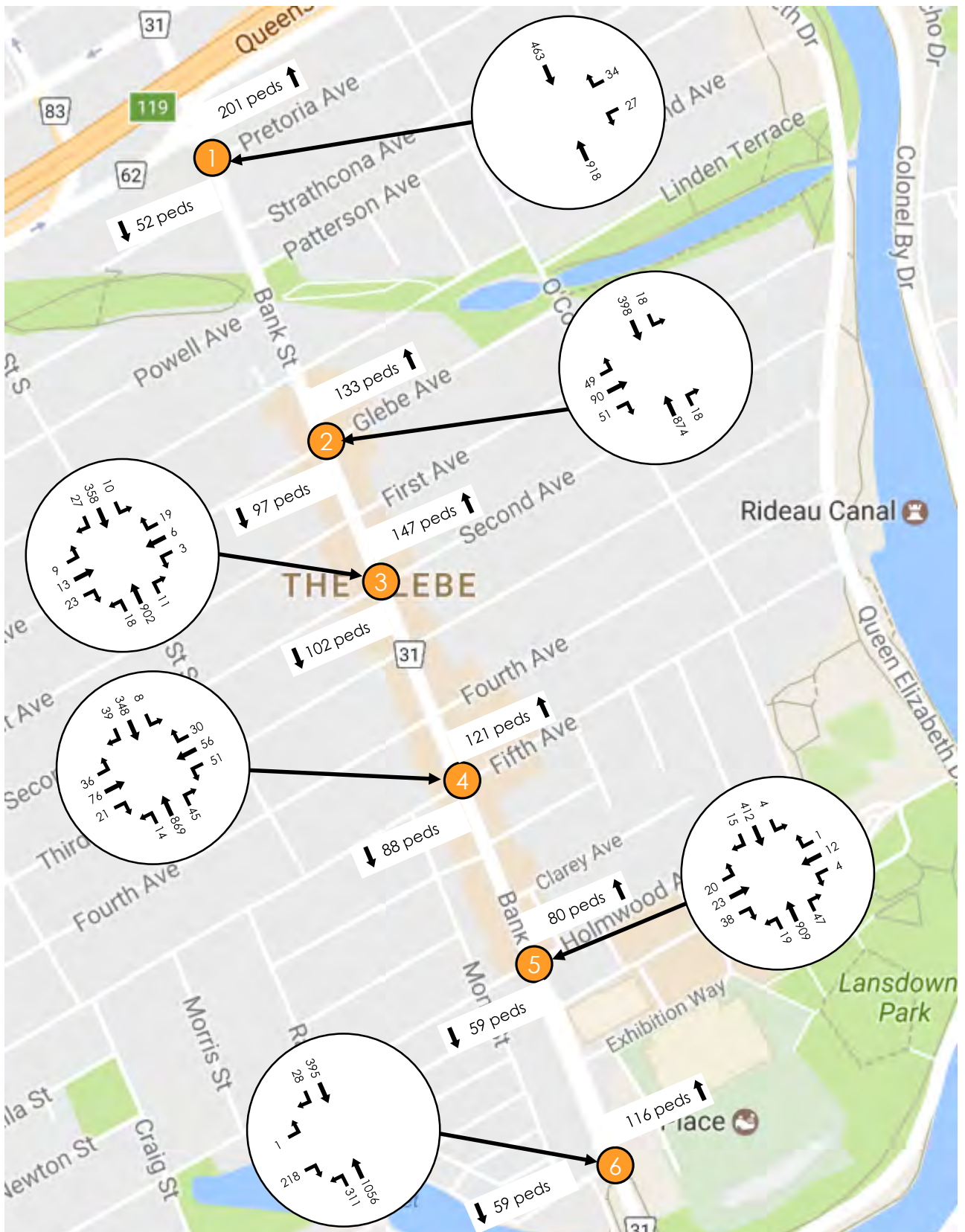


**Figure 9 - Bank Street Corridor Vehicle Volumes**  
 Sunday, September 10, 2017 (Peak Hour)  
 Glebe BIA Transportation Data Collection Summary

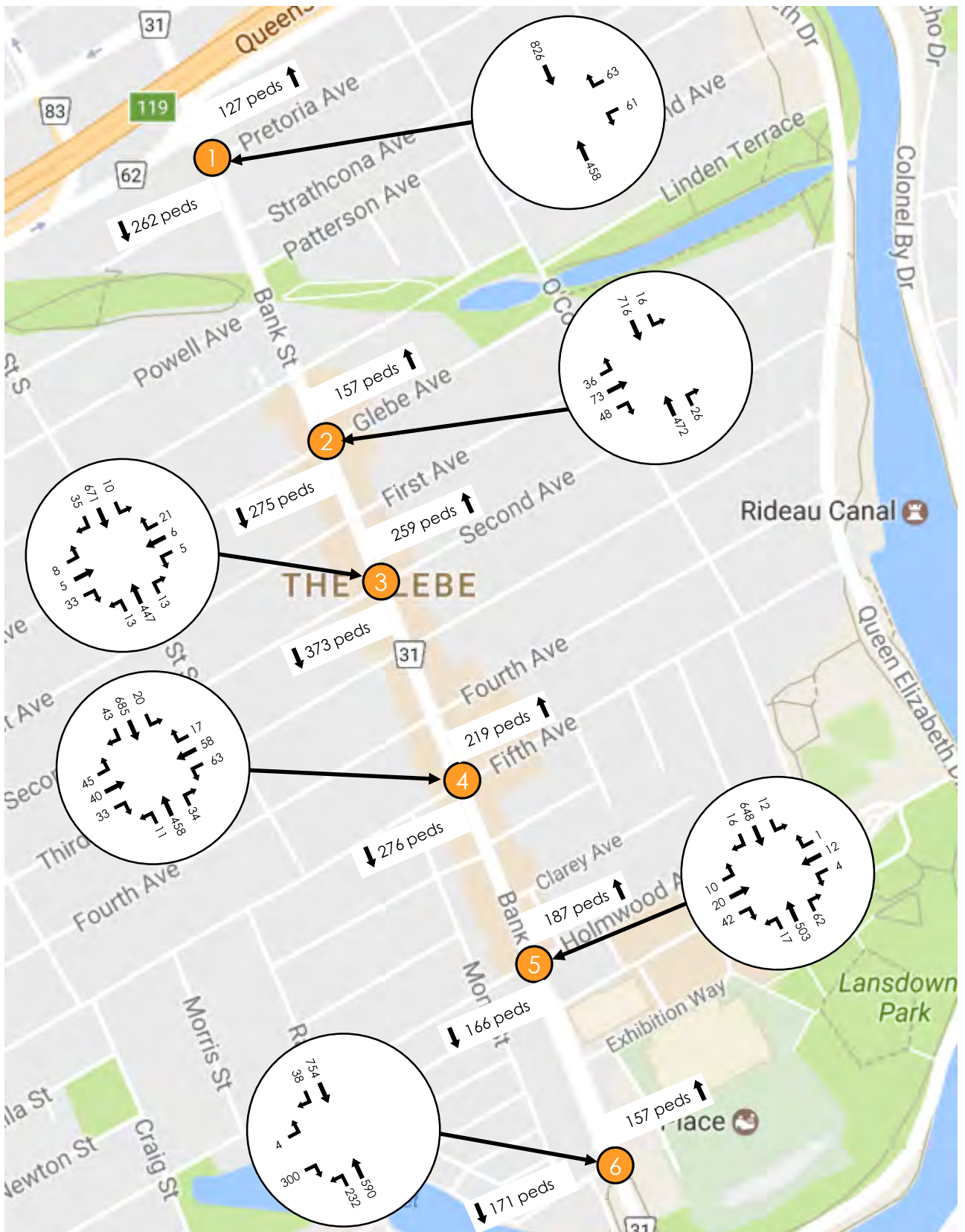


**Figure 10 - Bank Street Corridor Vehicle Volumes**  
 Sunday, September 10, 2017 (Full Day)  
 Glebe BIA Transportation Data Collection Summary



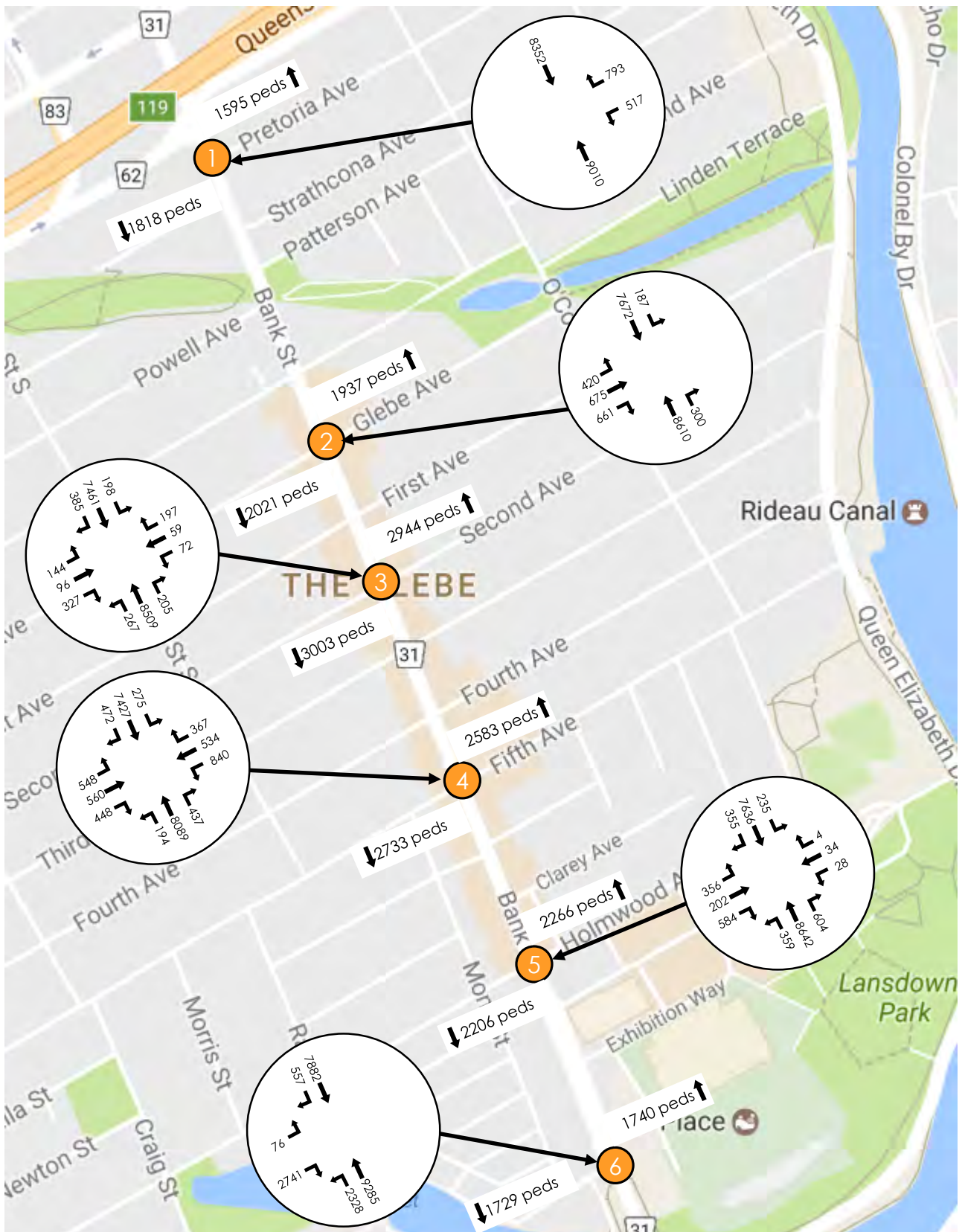


**Figure 11 - Bank Street Corridor Vehicle Volumes**  
 Tuesday, October 10, 2017 (AM Peak Hour)  
 Glebe BIA Transportation Data Collection Summary

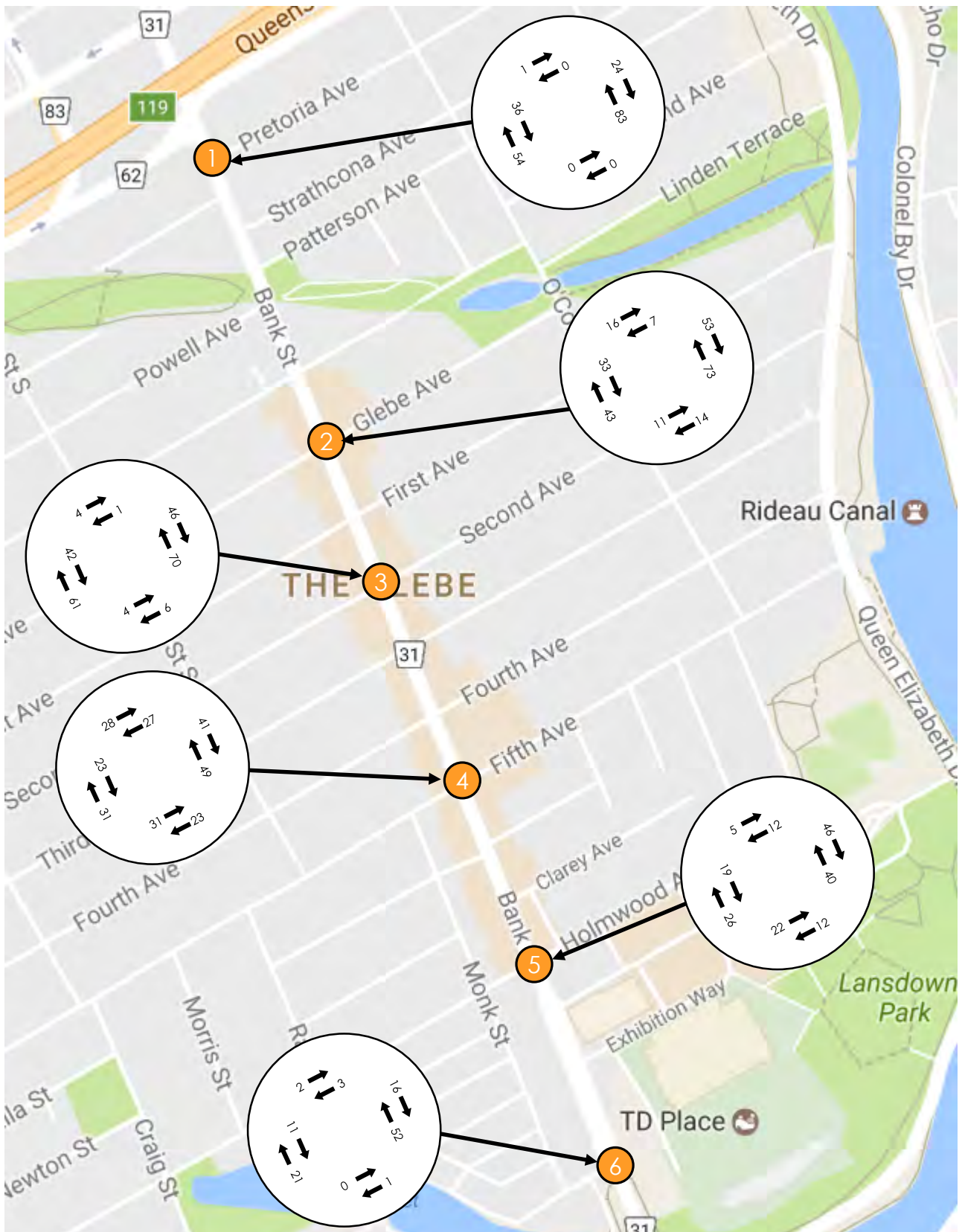


**Figure 12 - Bank Street Corridor Vehicle Volumes**  
 Tuesday, October 10, 2017 (PM Peak Hour)  
 Glebe BIA Transportation Data Collection Summary



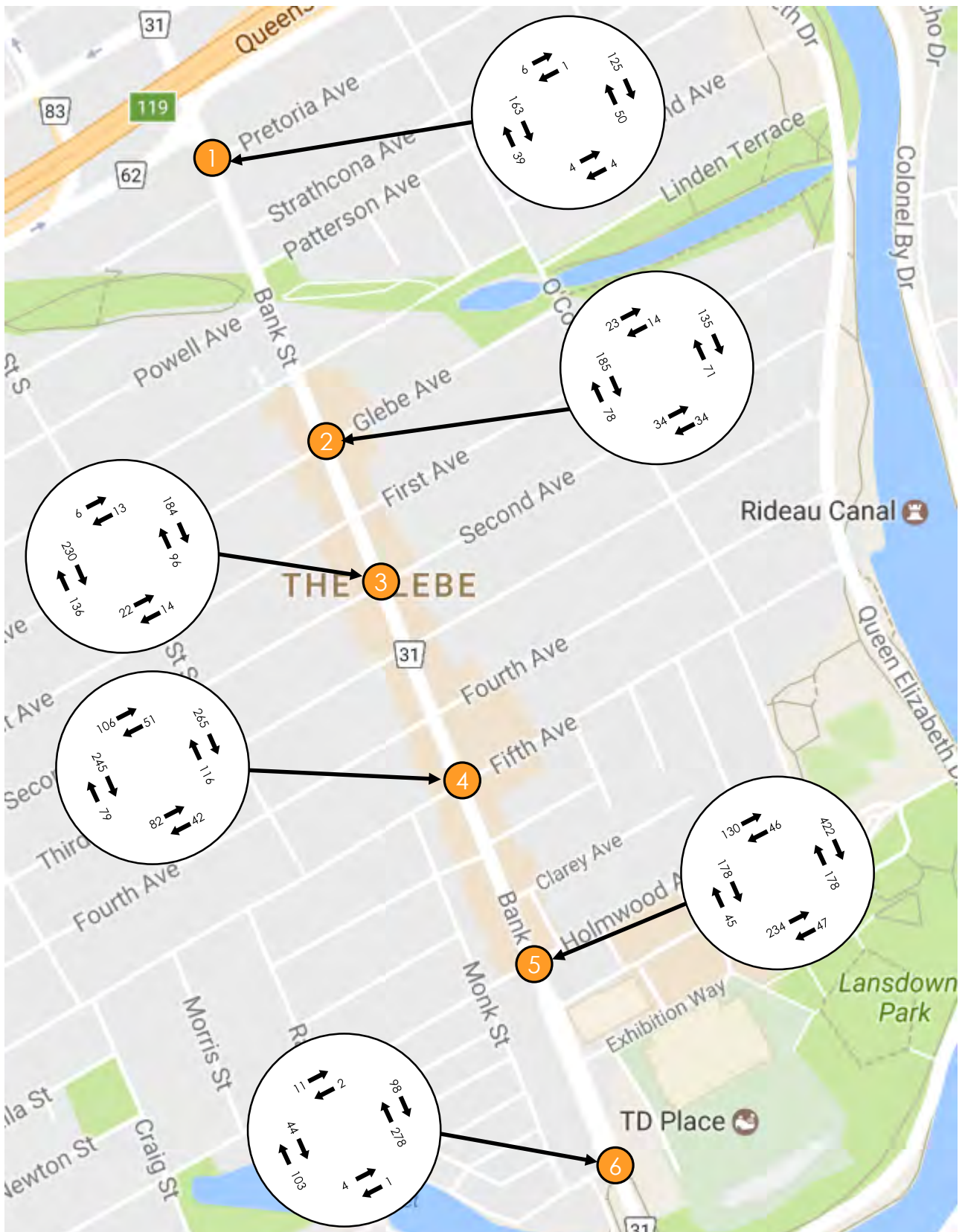


**Figure 13 - Bank Street Corridor Vehicle Volumes**  
 Tuesday, October 10, 2017 (Full Day)  
 Glebe BIA Transportation Data Collection Summary

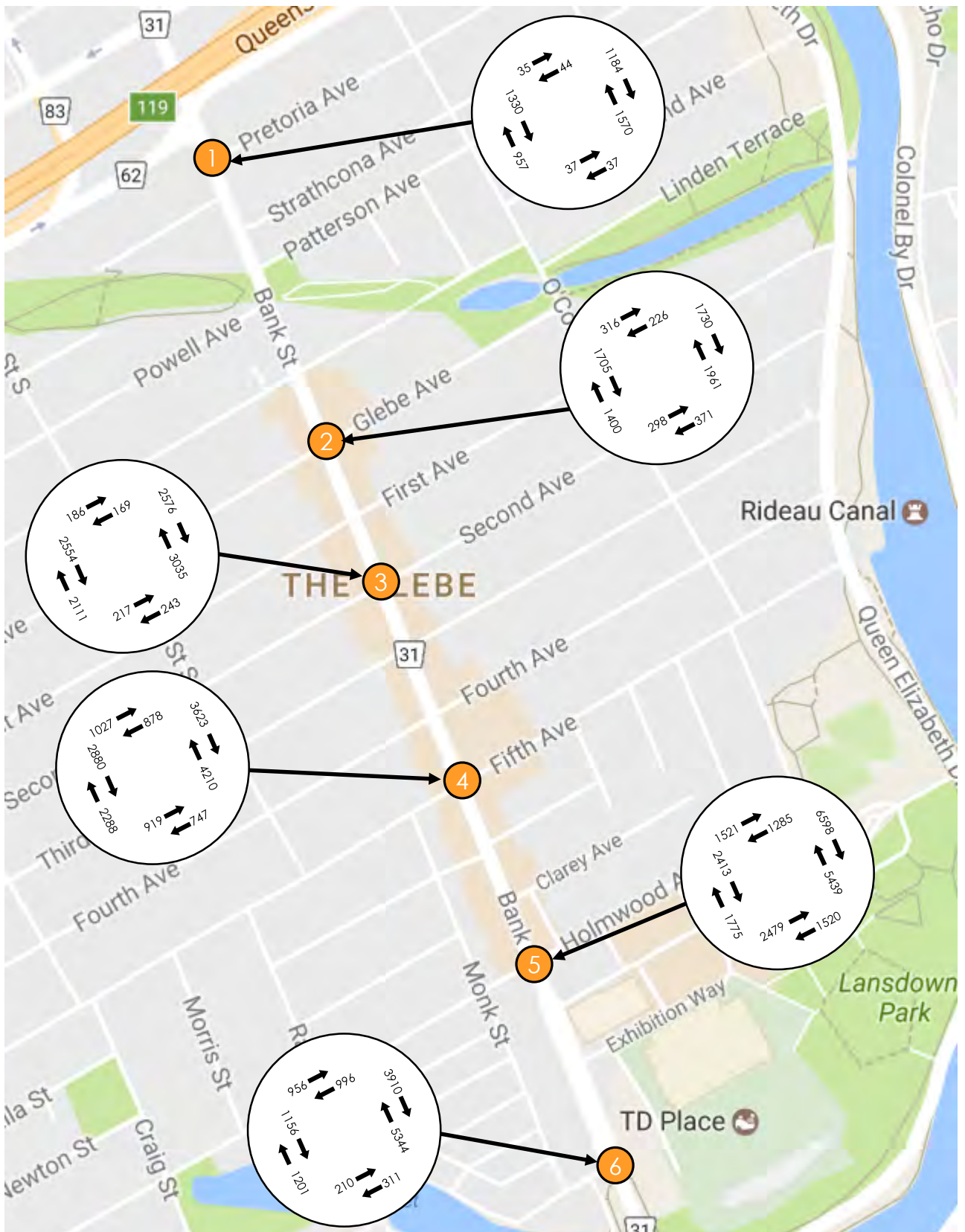


**Figure 14 - Bank Street Corridor Pedestrian Volumes**  
 Wednesday, July 19, 2017 (AM Peak Hour)  
 Glebe BIA Transportation Data Collection Summary



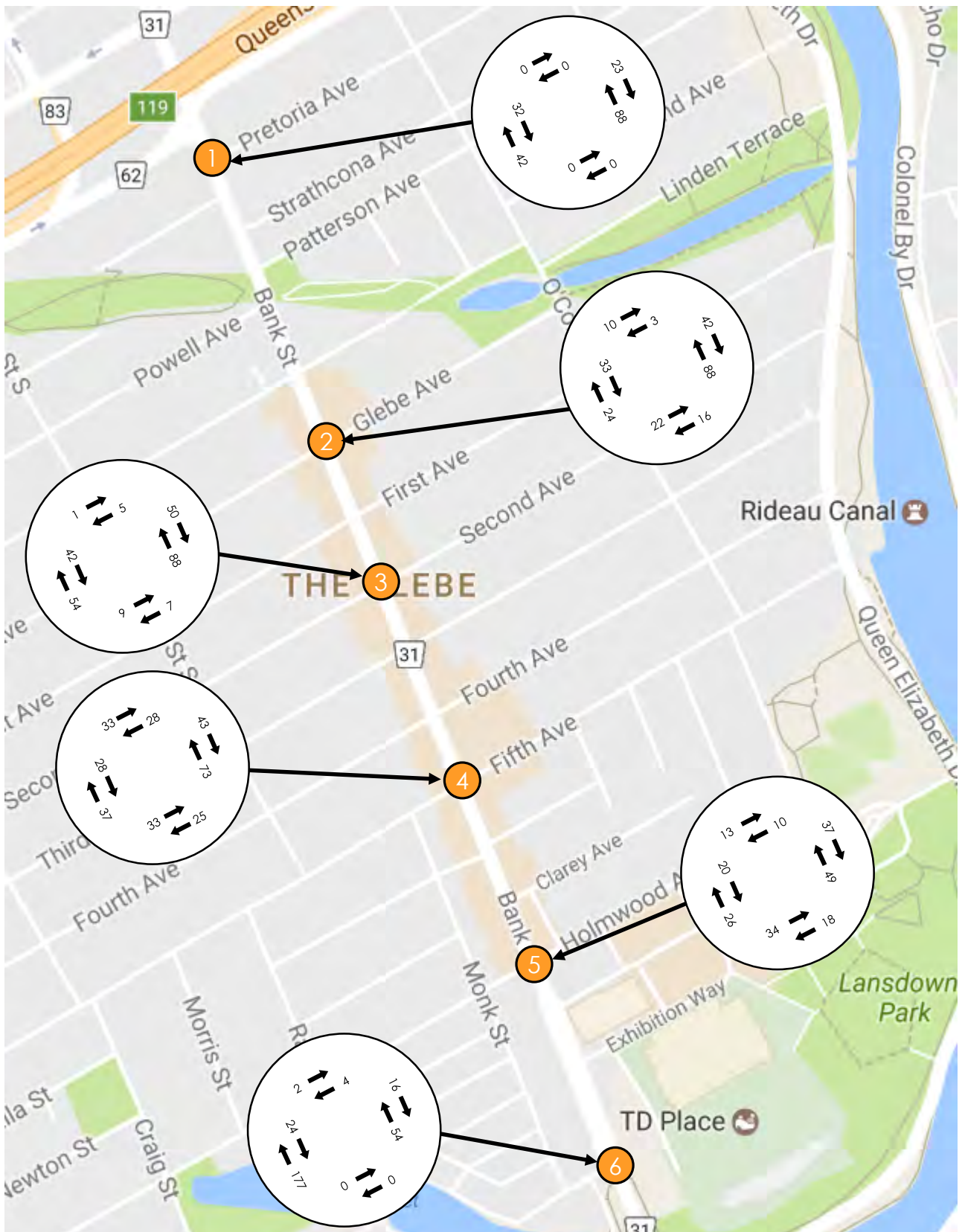


**Figure 15 - Bank Street Corridor Pedestrian Volumes**  
 Wednesday, July 19, 2017 (PM Peak Hour)  
 Glebe BIA Transportation Data Collection Summary

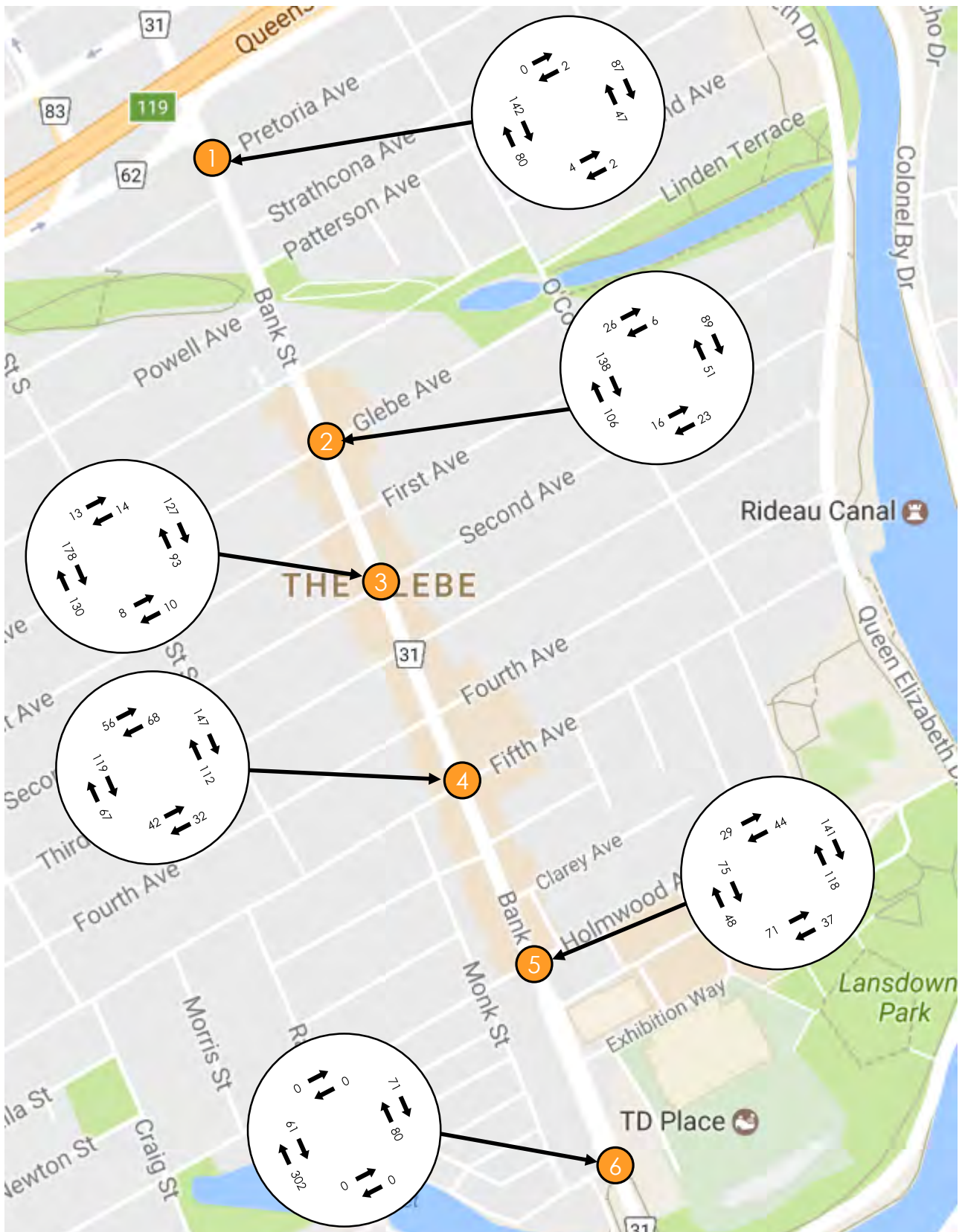


**Figure 16 - Bank Street Corridor Pedestrian Volumes**  
 Wednesday, July 19, 2017 (Full Day)  
 Glebe BIA Transportation Data Collection Summary



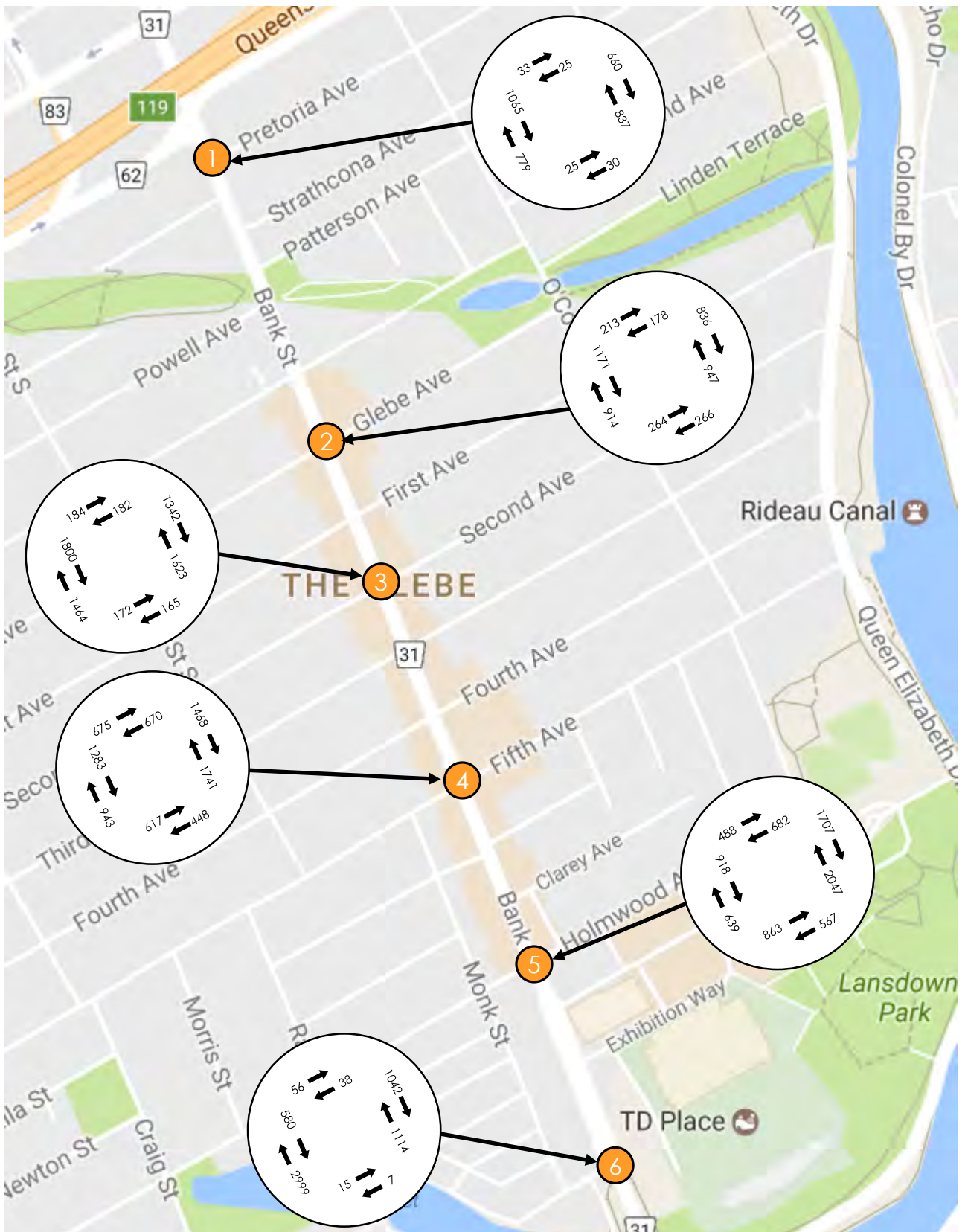


**Figure 17 - Bank Street Corridor Pedestrian Volumes**  
 Thursday, July 20, 2017 (AM Peak Hour)  
 Glebe BIA Transportation Data Collection Summary

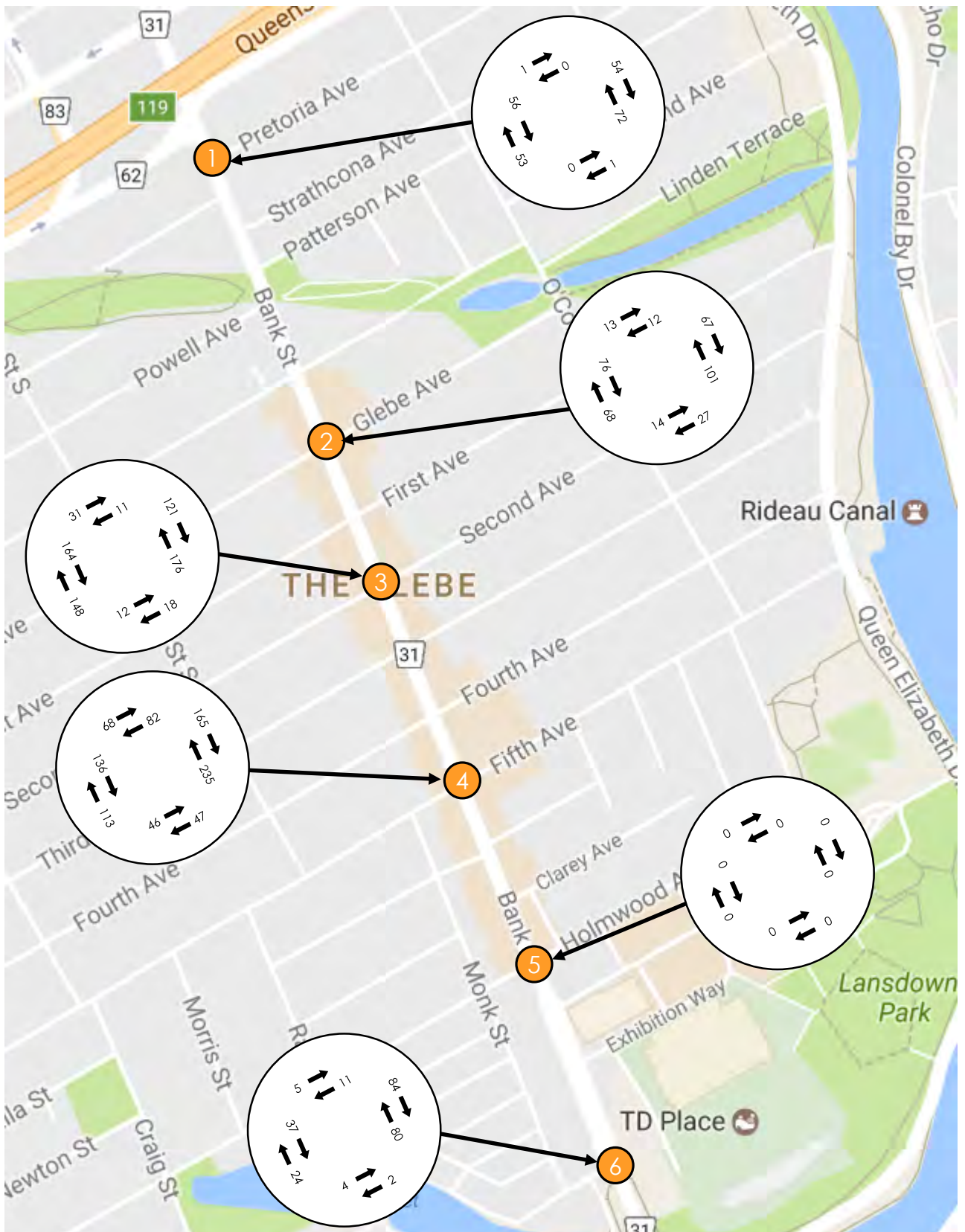


**Figure 18 - Bank Street Corridor Pedestrian Volumes**  
 Thursday, July 20, 2017 (PM Peak Hour)  
 Glebe BIA Transportation Data Collection Summary



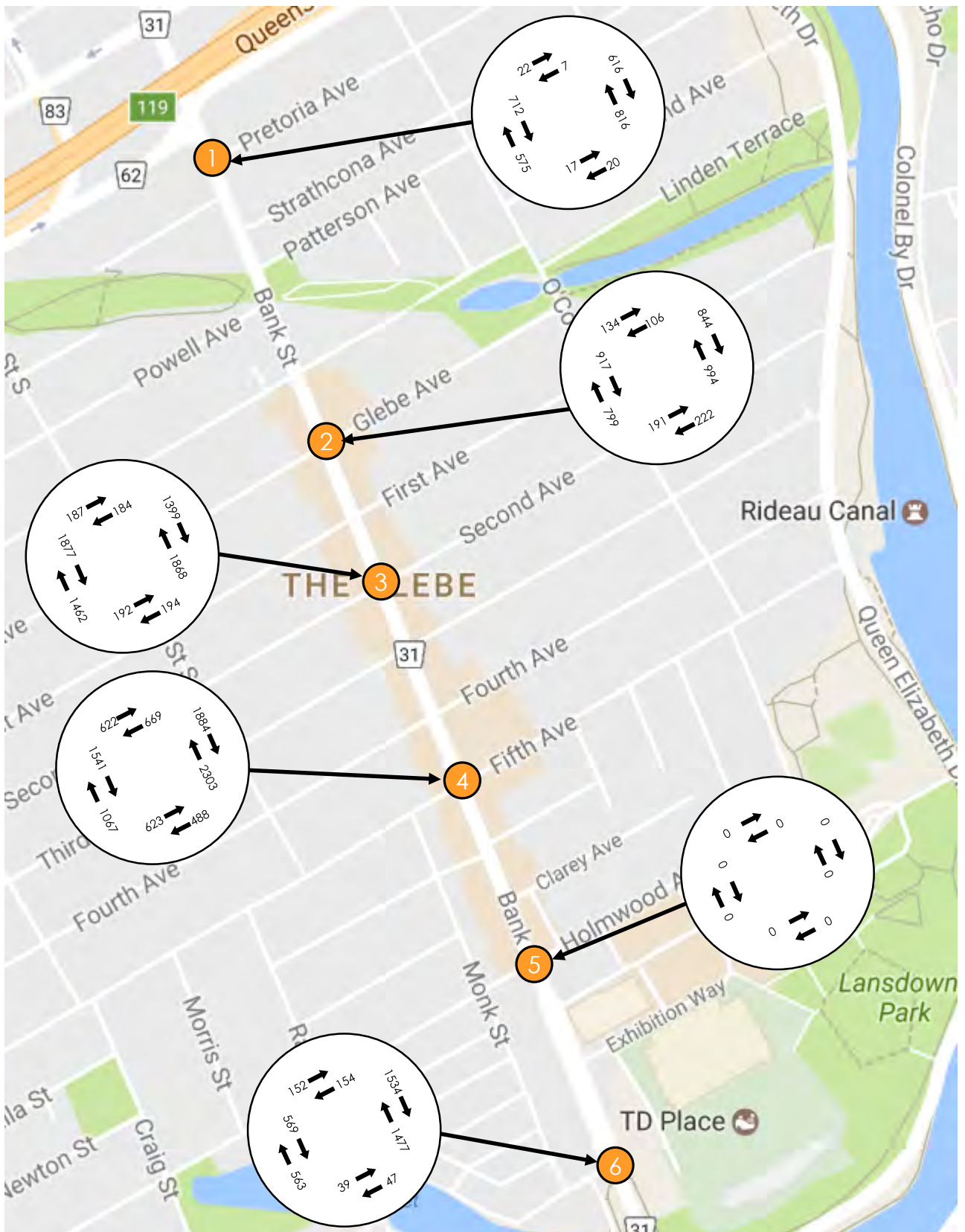


**Figure 19 - Bank Street Corridor Pedestrian Volumes**  
 Thursday, July 20, 2017 (Full Day)  
 Glebe BIA Transportation Data Collection Summary

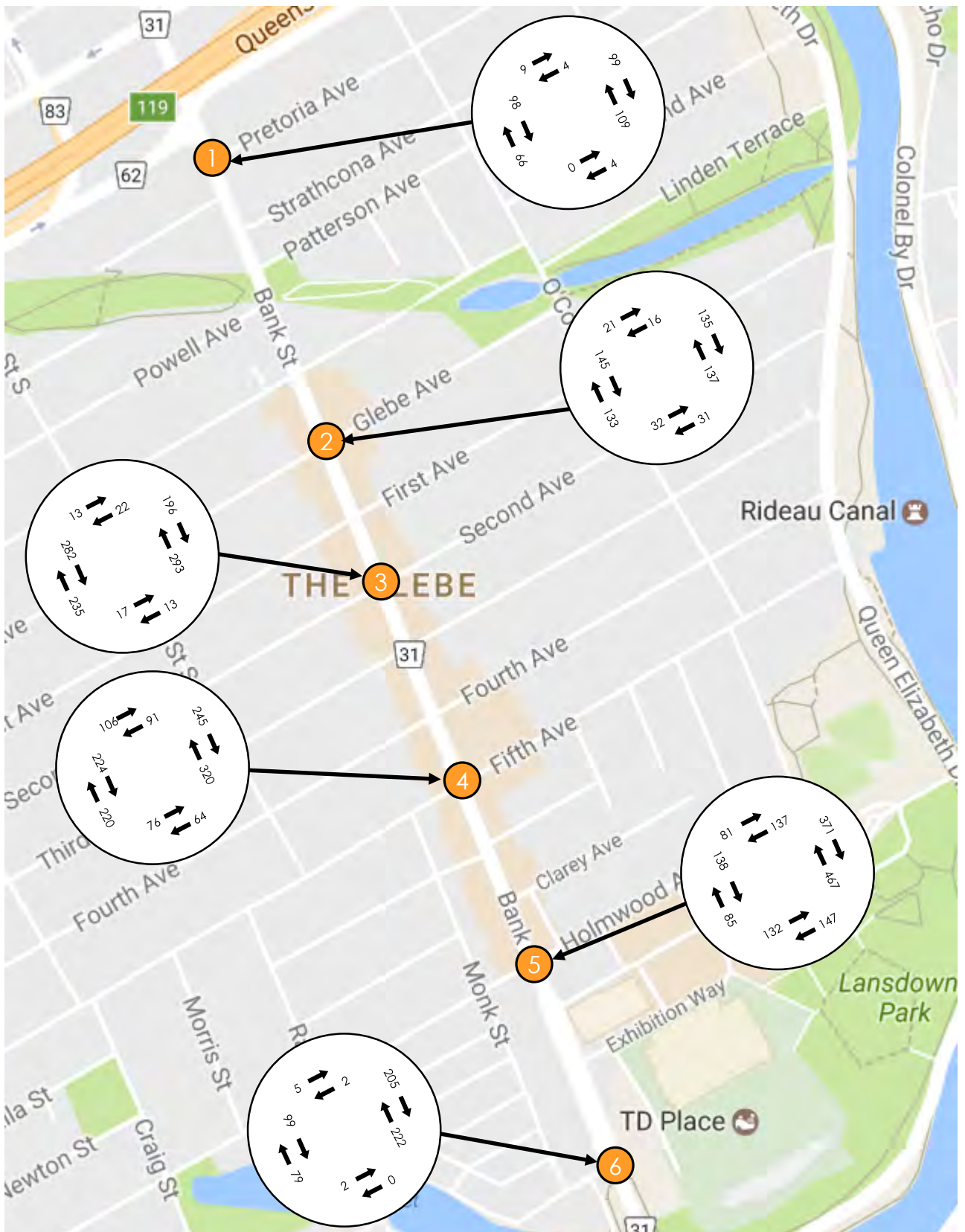


**Figure 20 - Bank Street Corridor Pedestrian Volumes**  
 Saturday, August 5, 2017 (Peak Hour)  
 Glebe BIA Transportation Data Collection Summary



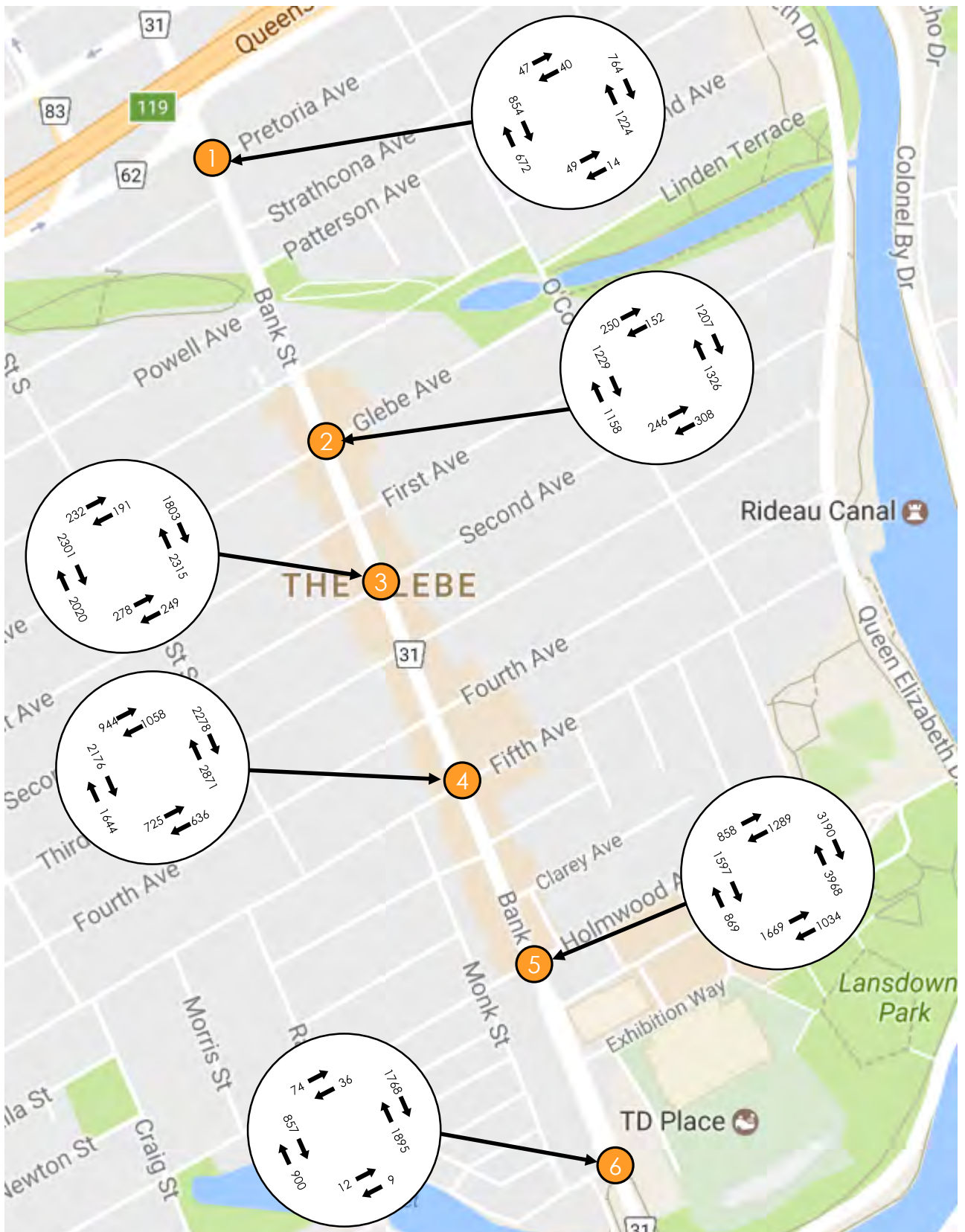


**Figure 21 - Bank Street Corridor Pedestrian Volumes**  
 Saturday, August 5, 2017 (Full Day)  
 Glebe BIA Transportation Data Collection Summary

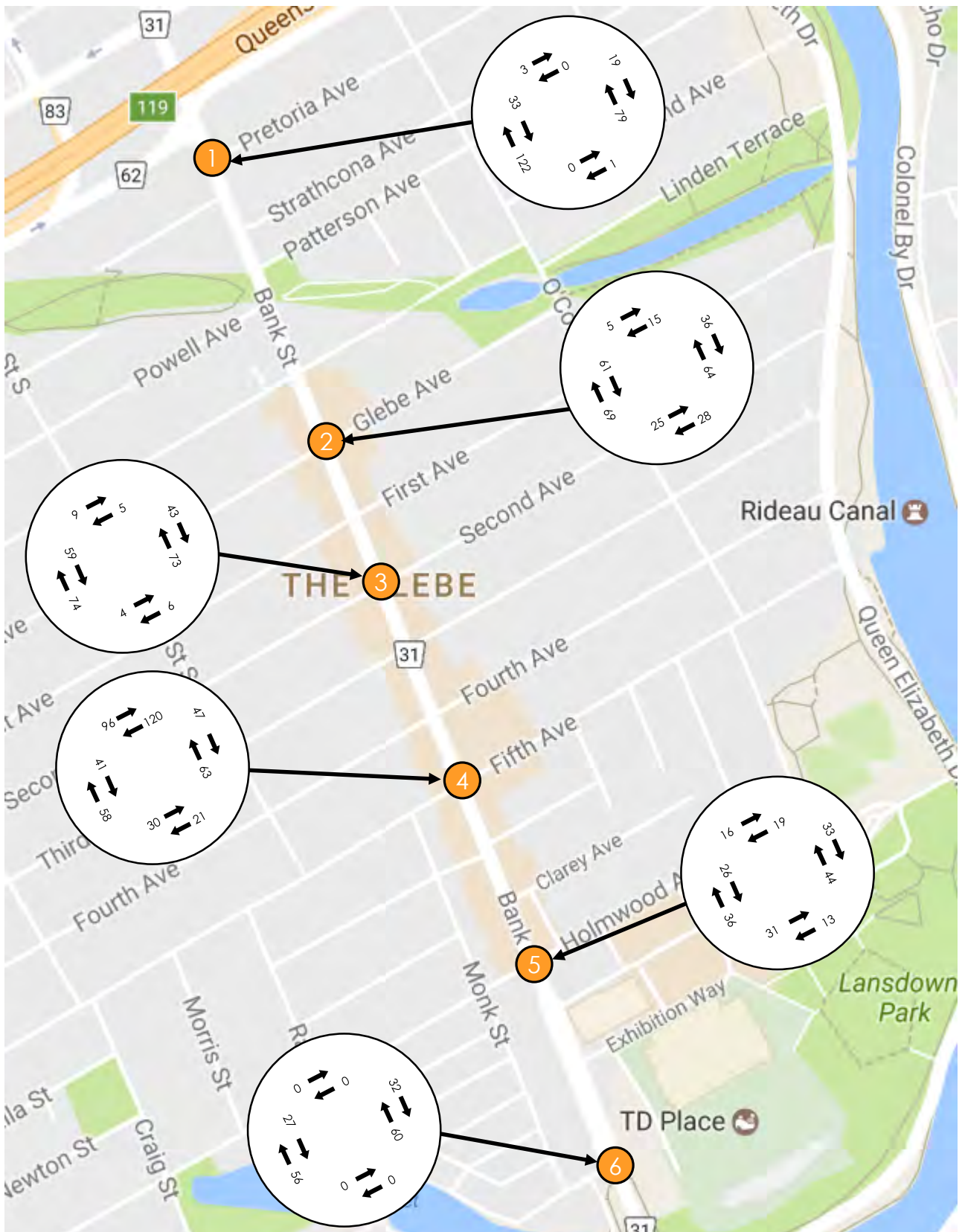


**Figure 22 - Bank Street Corridor Pedestrian Volumes**  
 Sunday, September 10, 2017 (Peak Hour)  
 Glebe BIA Transportation Data Collection Summary



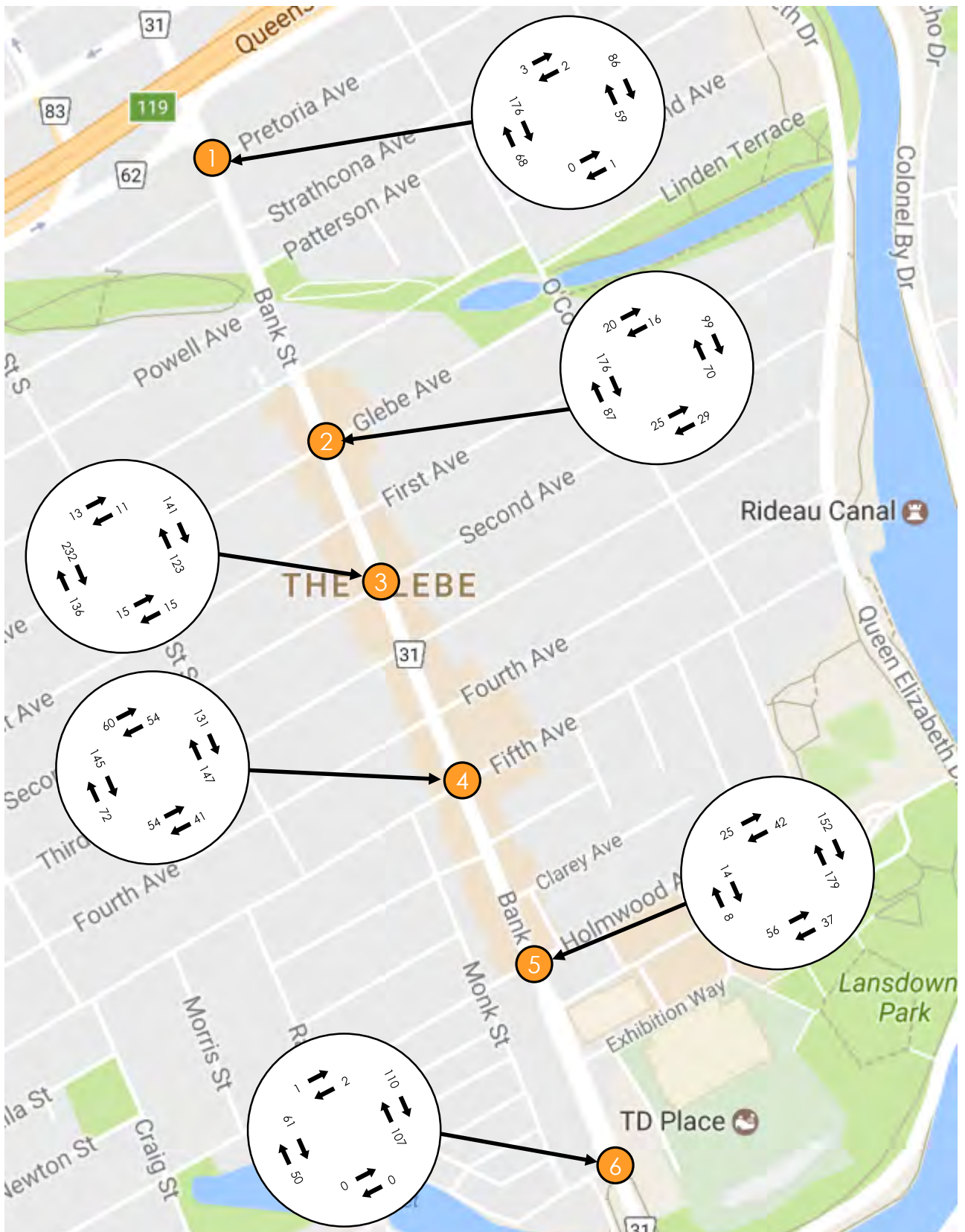


**Figure 23 - Bank Street Corridor Pedestrian Volumes**  
 Sunday, September 10, 2017 (Full Day)  
 Glebe BIA Transportation Data Collection Summary

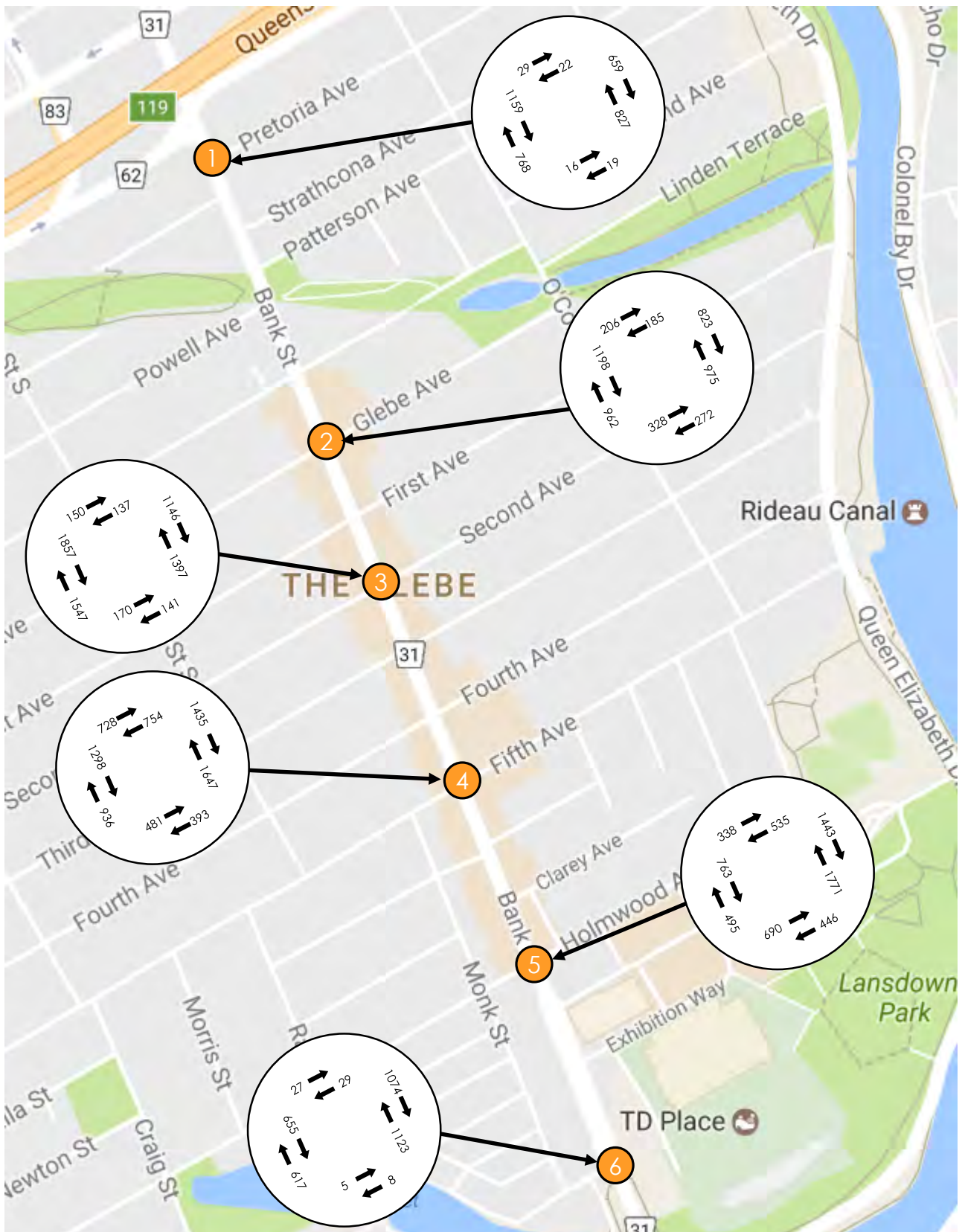


**Figure 24 - Bank Street Corridor Pedestrian Volumes**  
 Tuesday, October 10, 2017 (AM Peak Hour)  
 Glebe BIA Transportation Data Collection Summary





**Figure 25 - Bank Street Corridor Pedestrian Volumes**  
 Tuesday, October 10, 2017 (PM Peak Hour)  
 Glebe BIA Transportation Data Collection Summary



**Figure 26 - Bank Street Corridor Pedestrian Volumes**  
 Tuesday, October 10, 2017 (Full Day)  
 Glebe BIA Transportation Data Collection Summary