Pedestrian and Bicycle Count Report 2014

City of Bellevue

City of Bellevue

Pedestrian and Bicycle Count Report 2014

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TABLE OF CONTENTS

Purpose and Overview 1

Methodology 2

- Locations 2
- Data Collection 4
  - Counting Technics 4
  - Date and Time 5

Results 5

- Peak Period Volumes 2014, measured in 15-minute Intervals 6
- Average Weekday Volumes 2009-2014 10

Analysis 14

- Time of Day 14
- Count Year 22

Appendix A: Complete Camera Locations Count Data 2014 28

Appendix B: Weekday AM and PM Peak Period Pedestrian and Bicycle Volumes 2009-2014 33

Appendix C: All City of Bellevue Locations Count Data 2009-2014 39

Appendix D: Count Forms and Instructions 41

List of Tables

Table 1: Camera Count Locations 2009-2014 2
Table 2: All City of Bellevue Count Locations 2009-2014 3
Table 3: Camera Count Locations and Screenlines 2014 4
Table 4: Average Weekday AM Peak Period Pedestrian Volumes 2014 6
Table 5: Average Weekday PM Peak Period Pedestrian Volumes 2014 6
Table 6: Average Weekday AM Peak Period Bicycle Volumes 2014 8
Table 7: Average Weekday PM Peak Period Bicycle Volumes 2014 8
Table 8: Average Weekday AM Peak Period Pedestrian Volumes 2009-2014 10
Table 9: Average Weekday PM Peak Period Pedestrian Volumes 2009-2014 11
Table 10: Average Weekday AM Peak Period Bicycle Volumes 2009-2014 12
Table 11: Average Weekday PM Peak Period Bicycle Volumes 2009-2014 13
Table 12: Average Weekday AM and PM Peak Period Pedestrian Volumes 2014 15
Table 13: Average Weekday AM and PM Peak Period Bicycle Volumes 2014 19
Table 14: Average Weekday AM and PM Peak Period Pedestrian Volumes 2013-2014 23
Table 15: Average Weekday AM and PM Peak Period Bicycle Volumes 2013-2014 26
Table 16: 114th Ave SE north of SE 8th St AM and PM Peak Period 15-minute Count Data 28
Table 17: NE 12th St west of 116th Ave NE AM and PM Peak Period 15-minute Count Data 29
Table 18: 108th Ave NE north of Northup Way AM and PM Peak Period 15-minute Count Data 30
Table 19: 108th Ave NE south of NE 4th St AM and PM Peak Period 15-minute Count Data 31
Table 20: Lake Washington Loop Trail at Coal Creek Pkwy SE AM and PM Peak Period 15-minute Count Data 32
Table 21: Average Weekday AM Peak Period Pedestrian Volumes 2009-2014 33
Table 22: Average Weekday PM Peak Period Pedestrian Volumes 2009-2014 33
Table 23: Average Weekday AM Peak Period Bicycle Volumes 2009-2014 36
Table 24: Average Weekday PM Peak Period Bicycle Volumes 2009-2014 36
Table 25: Average Weekday AM and PM Peak Period Pedestrian Counts All Bellevue Locations 2009-2014 39
Table 26: Average Weekday AM and PM Peak Period Bicycle Counts All Bellevue Locations 2009-2014 40
Table 27: Count Forms 41

List of Figures

Figure 1: All City of Bellevue Count Locations Map 3
Figure 2: Average Weekday AM Peak Period Pedestrian Volumes 2014 7
Figure 3: Average Weekday PM Peak Period Pedestrian Volumes 2014 7
Figure 4: Average Weekday AM Peak Period Bicycle Volumes 2014 9
Figure 5: Average Weekday PM Peak Period Bicycle Volumes 2014 9
Table 6: Average Weekday AM Peak Period Pedestrian Volumes 2014 15-minute Interval Totals 16
Table 7: Average Weekday PM Peak Period Pedestrian Volumes 2014 15-minute Interval Totals 16
Figure 8: Average Weekly AM and PM Peak Period Pedestrian Volumes 2014 17
Table 9: Average Weekday AM Peak Period Bicycle Volumes 2014 15-minute Interval Totals 20
Table 10: Average Weekday PM Peak Period Bicycle Volumes 2014 15-minute Interval Totals 20
Figure 11: Average Weekday AM and PM Peak Periods Bicycle Volumes 2014 21
Figure 12: Average Weekday AM Peak Period Pedestrian Volumes 2013-2014 24
Figure 13: Average Weekday PM Peak Period Pedestrian Volumes 2013-2014 24
Figure 14: Average Weekday AM Peak Period Bicycle Volumes 2013-2014 27
Figure 15: Average Weekday PM Peak Period Bicycle Volumes 2013-2014 27
Figure 16: Average Weekday AM Peak Period Pedestrian Volumes 2009-2014 34
Figure 17: Average Weekday PM Peak Period Pedestrian Volumes 2009-2014 35
Figure 18: Average Weekday AM Peak Period Bicycle Volumes 2009-2014 37
Figure 19: Average Weekday PM Peak Period Bicycle Volumes 2009-2014 38

PURPOSE AND OVERVIEW

Policy PB-29 of Bellevue's Comprehensive Plan policy instructs Transportation Department staff to "develop procedures to collect data in order to measure pedestrian and bicycle usage on an ongoing basis." The data collected through annual counts helps track Bellevue's progress toward its goal of improving bicycling and walking conditions in the city. The information also contributes to a larger effort in Washington State to improve decisions about where to invest transportation funds and how to improve safety. Data from these counts will be used to inform investments in bicycle and pedestrian facilities as well as educational programs statewide.

City of Bellevue staff conducted manual counts of bicyclists and pedestrians at five locations in the city using video capture technology. The counts were performed for two peak periods (7:00 AM - 9:00 AM and 4:00 PM - 6:00 PM) for three consecutive days from Tuesday 9/30/2014 through Thursday 10/2/2014. The Cascade Bicycle Club performed single-day, on-site counts at four additional locations throughout the city during the AM, PM, or both AM and PM peak periods. This was the seventh annual count of its type, and the sixth to use video capture technology.

The resulting data provided 15-minute counts for bicycles and pedestrians for the five locations monitored by the City of Bellevue. These data were used for time of day analysis and for comparison to previous years' counts. The results of this study including methodology, count results, data analysis, and discussion are contained in this report.

Travelers in Downtown Bellevue opt for non-motorized transportation choices
(108th Ave NE and NE 4th St, looking southwest)

Bicyclist at Lake Washington Loop Trail at Coal Creek Pkwy SE, looking south

METHODOLOGY

Locations

For the original 2009 Pedestrian and Bicycle Count, five locations were chosen which displayed high traffic for pedestrians and bicycles. These sites were chosen under several guidelines: locations which roughly encircle downtown, locations with major trip destinations, and locations along priority bicycle corridors as designated in the 2009 Pedestrian and Bicycle Transportation Plan.

The following year, in 2010, pedestrian and bicycle volumes counts were recorded for the same five locations, but counts for NE Northup Way were taken at 108th Avenue NE instead of at Bellevue Way NE. The data collected at these adjacent intersections is comparable and is considered to represent the same node of activity.

In 2011, four of the five previous count locations were observed. The fifth location, NE 12th St at 116th Ave NE, was omitted due to ongoing construction throughout the duration of the count, resulting in non-typical pedestrian and bicycle traffic.

The next year, in 2012, the City was in the process of testing a new traffic camera system during count period and the camera at the Bellevue Way, north of 4th Street was not able to make recordings. A forth location was selected at Lake Washington Loop trail at Coal Creek Parkway SE. This location was selected as it located along on a trail designated bicycle corridor by the 2009 Pedestrian and Bicycle Transportation Plan report and based on the wayfinding installation project in 2013, directing pedestrians and bicyclists to the trail from multiple destinations.

In 2013, the City conducted manual counts using recordings at five locations, adding back the NE 12th St west of 116th Ave NE location. The Coal Creek Parkway SE at Lake Washington Trail Loop was counted again to build data to analyze how wayfinding and other improvements may influence usage. In 2013 a Bicycle Wayfinding Project added Wayfinding signs along Lake Washington Trail Loop.

In 2014, the count locations remained the same as those in 2013.

See Table 1 for the City of Bellevue camera count locations from 2009 to 2014.
See Table 2 and Figure 1 for all City of Bellevue count locations from 2009 to 2014.

2009 Count Locations

G	114th Ave NE north of SE 8th St
D	NE 12th St west of 116th Ave NE
A	Bellevue Way north of NE Northup Way
F	108th Ave NE south of NE 4th St
E	Bellevue Way north of NE 4th St

2010 Count Locations

G	114th Ave NE north of SE 8th St
D	NE 12th St west of 116th Ave NE
A	108th Ave NE north of NE Northup Way
F	108th Ave NE south of NE 4th St
E	Bellevue Way north of NE 4th St

2011 Count Locations

G	114th Ave NE north of SE 8th St
A	108th Ave NE north of NE Northup Way
F	108th Ave NE south of NE 4th St
E	Bellevue Way north of NE 4th St

2012 Count Locations

G	114th Ave NE north of SE 8th St
A	108th Ave NE north of NE Northup Way
F	108th Ave NE south of NE 4th St
M	Coal Creek Parkway SE at Lake WA Loop

2013 Count Locations

G	114th Ave NE north of SE 8th St
D	NE 12th St west of 116th Ave NE
A	108th Ave NE north of NE Northup Way
F	108th Ave NE south of NE 4th St
M	Lake Washington Loop at Coal Creek Pkwy SE

2014 Count Locations

G	114th Ave NE north of SE 8th St
D	NE 12th St west of 116th Ave NE
A	108th Ave NE north of NE Northup Way
F	108th Ave NE south of NE 4th St
M	Lake Washington Loop at Coal Creek Pkwy SE

Table 1: Camera Count Locations 2009-2014

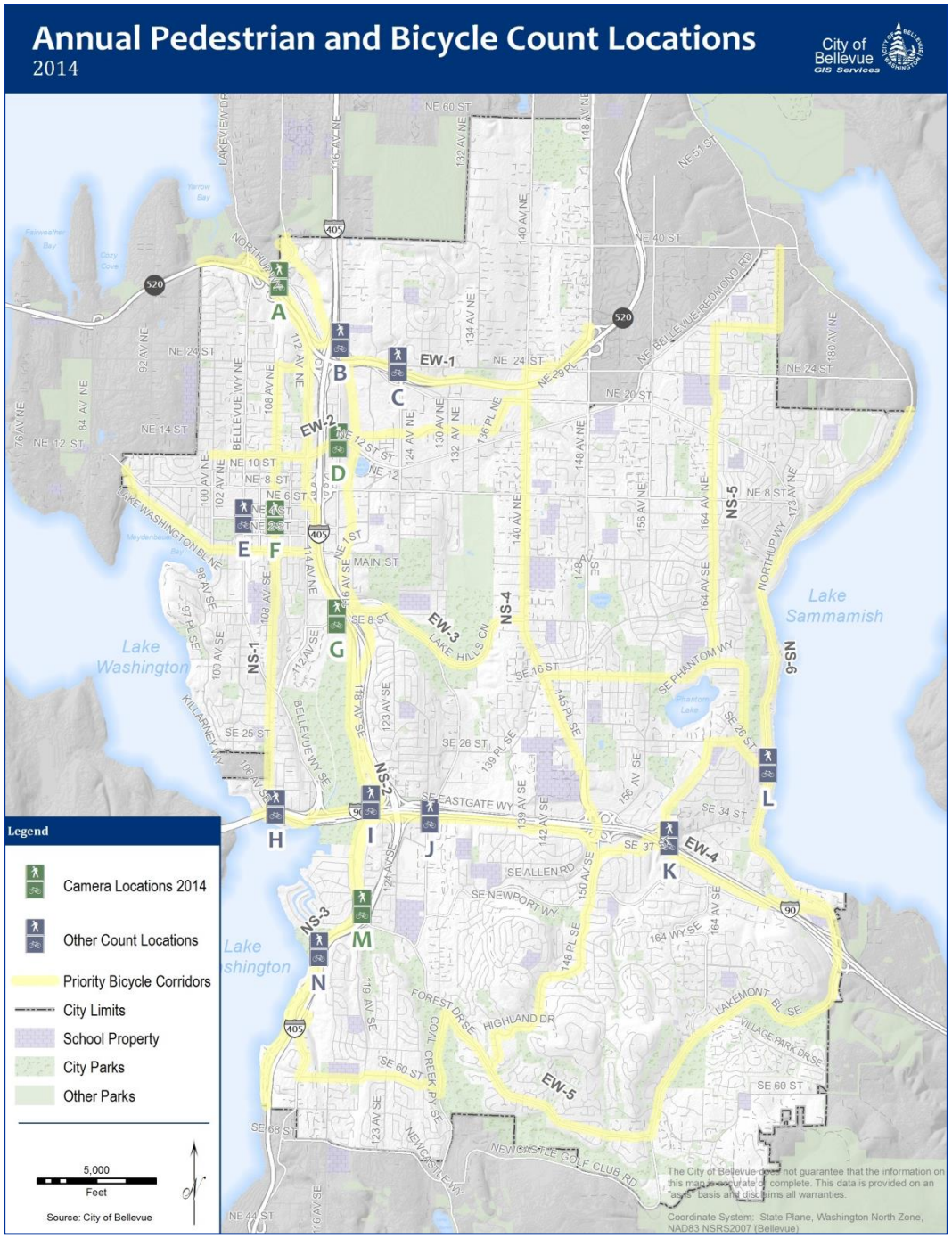


Figure 1: All City of Bellevue Count Locations Map

All Count Locations

A	108th Ave NE north of NE Northup Way
B	115th Ave NE east of 116th Ave NE
C	SR 520 Trail at NE 24TH St
D	NE 12th St west of 116th Ave NE
E	Bellevue Way north of NE 4th St
F	108th Ave NE south of NE 4th St
G	114th Ave NE north of SE 8th St
H	I-90 Trail at Enatai
I	118th Ave SE north of I-90
J	I-90 Bike Trail west of Factoria Blvd SE
K	I-90 Sunset Bike Trail east of Eastgate Way
L	West Lake Sammamish south of SE 26th St
M	Lake Washington Loop at Coal Creek Pkwy SE
N	Trail at Newcastle Beach Park

Table 2: All City of Bellevue Count Locations 2009-2014

Bicyclists at I-90 trail at Factoria Blvd

Data Collection

Counting Techniques

Following the National Bicycle and Pedestrian Documentation Project (NBPD) guidelines, the City of Bellevue selected five sites for manual screen line counts of bicycles and pedestrians. Counts were performed by recording two-hour AM and PM peak segments using existing traffic cameras. City of Bellevue intern volunteers reviewed the recordings and manually counted pedestrians and bicycles for the five locations.

Manual screen line counting is the process of counting pedestrians and bicycles that cross a pre-designated point or line on the road. A tally is made for each pedestrian and bicycle that crosses this line in either direction. The tallies represent the number of pedestrians and bicycles that have traveled that street for the given time period. A depiction of the screen lines used in the count is shown in Table 3. The red line designates the screen line in each figure. City staff used counting forms to tally pedestrian and bicycle volumes at each site. Copies of 2014 Count Forms can be found in Appendix D.

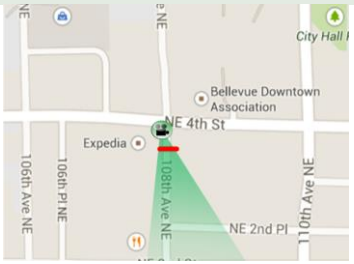
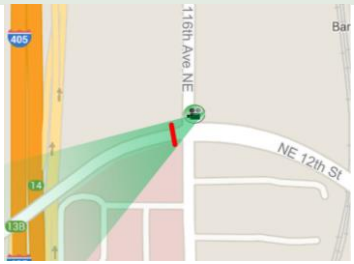
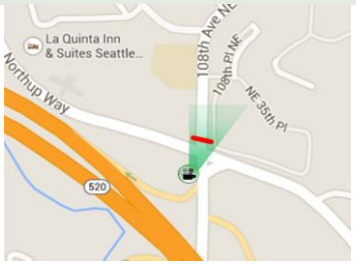
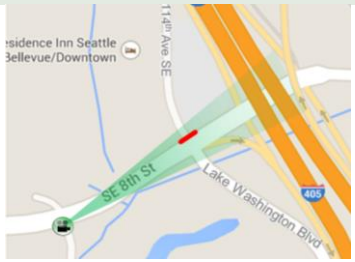
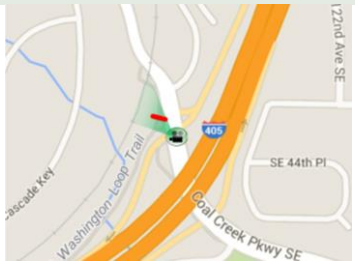
	108th Ave NE south of NE 4th St	NE 12th St west of 116th Ave NE	108th Ave NE north of Northup Way	114th Ave SE north of SE 8th St	Lake Washington Loop Trail at Coal Creek Pkwy SE
Screenline					
Camera Location					

Table 3: Camera Count Locations and Screenlines 2014

Date and Time

In the past the Pedestrian and Bicycle Count has counted volumes for a single Tuesday for the AM and PM peak period in late September or early October. Counting for a single day could possibly present misleading statistics due to random spikes in volume.

Since 2011, counts have been performed for three consecutive days from Tuesday to Thursday.

In 2014, counts were performed from Tuesday 9/30/2014 to Thursday 10/2/2014. AM and PM peak period counts from 7:00 AM – 9:00 AM and 4:00 PM – 6:00 PM were performed for each day. Counts were tabulated every 15 minutes.

Counting for multiple days allowed for the analysis to take averages for all three days in order to determine "typical" weekday volumes. In addition, because the volumes were tabulated every 15 minutes, this allows for a time of day analysis to see how volumes change throughout the morning and afternoon commute periods.

RESULTS

After counts were performed, data were separated by the three count days and the AM and PM peak periods. These data can be found in Appendix A.

One recording error was detected when videos were reviewed for counting. The camera located at Lake Washington Loop Trail and Coal Creek Pkwy SE was not able to make recording on the count day of 10/2/2014 for the PM peak period.

In order to determine "typical" weekday volumes, averages were taken for each count interval for three days in 2014. For the interval in which data was missing, the averages were taken for the remaining two days. See Table 4, Table 5, Figure 2 and Figure 3 for the resulting peak period pedestrian volumes, and Table 6, Table 7, Figure 4 and Figure 5 for the resulting peak period bicycle volumes. Values were rounded to the nearest whole number.

Peak Period Volumes 2014, measured in 15-minute intervals

Pedestrian Volumes

	114th Ave SE north of SE 8th St	NE 12th St west of 116th Ave NE	108th Ave NE north of Northup Way	108th Ave NE south of NE 4th St	Lake Washington Loop Trail at Coal Creek Pkwy SE
7:00-7:15		1	3	33	2
7:15-7:30	1	3	8	43	
7:30-7:45	1	2	2	54	1
7:45-8:00	1	4	8	68	2
8:00-8:15	2	2	4	65	1
8:15-8:30	1	4	3	70	1
8:30-8:45	1	2	2	61	1
8:45-9:00	1	3	4	81	4
AM # Total:	8	21	34	475	11

Table 4: Average Weekday AM Peak Period Pedestrian Volumes 2014

	114th Ave SE north of SE 8th St	NE 12th St west of 116th Ave NE	108th Ave NE north of Northup Way	108th Ave NE south of NE 4th St	Lake Washington Loop Trail at Coal Creek Pkwy SE
16:00-16:15	2	5	7	73	23
16:15-16:30	3	5	4	63	8
16:30-16:45	3	3	5	55	
16:45-17:00	3	4	2	70	2
17:00-17:15		5	7	92	1
17:15-17:30	2	6	5	75	5
17:30-17:45	2	4	5	59	2
17:45-18:00	1	3	4	58	1
PM # Total:	16	35	40	546	41

Table 5: Average Weekday PM Peak Period Pedestrian Volumes 2014

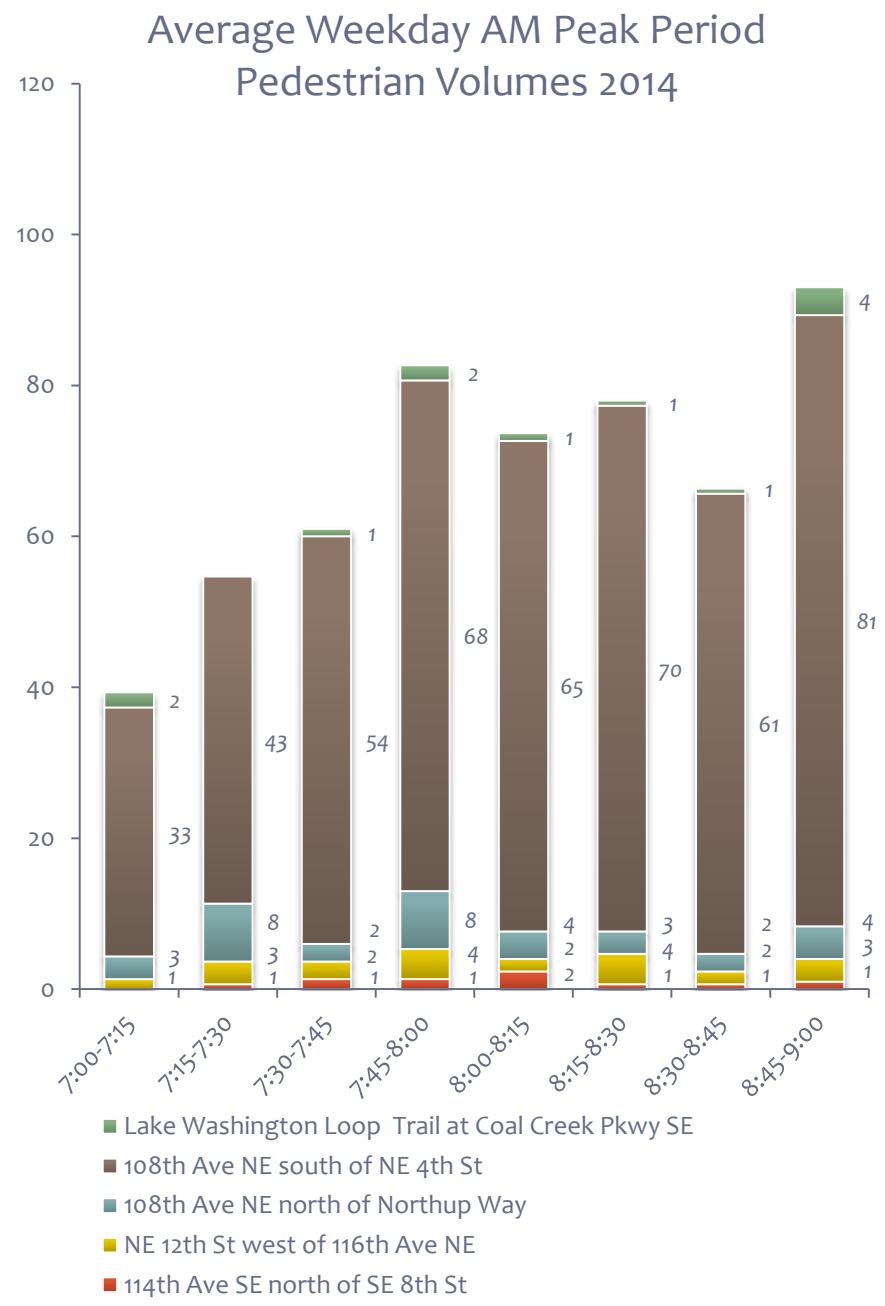


Figure 2: Average Weekday AM Peak Period Pedestrian Volumes 2014

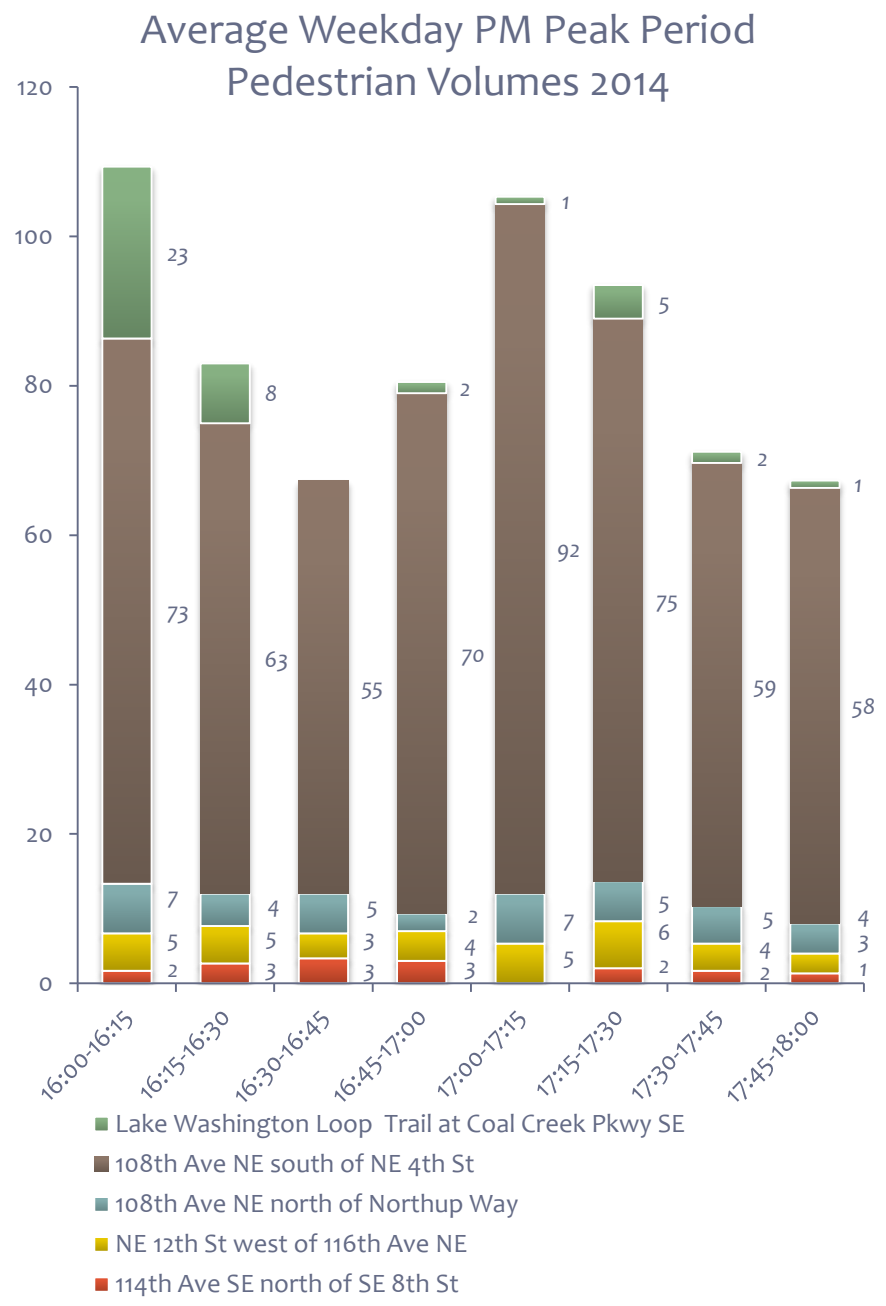


Figure 3: Average Weekday PM Peak Period Pedestrian Volumes 2014

Bicycle Volumes

	114th Ave SE north of SE 8th St	NE 12th St west of 116th Ave NE	108th Ave NE north of Northup Way	108th Ave NE south of NE 4th St	Lake Washington Loop Trail at Coal Creek Pkwy SE
7:00-7:15	1	2		2	2
7:15-7:30	2	4		1	4
7:30-7:45	2	2	2	4	3
7:45-8:00	5	5	2	4	2
8:00-8:15	2	7	2	3	3
8:15-8:30	3	2	1	4	4
8:30-8:45	1	4		3	3
8:45-9:00	2	3	1	3	3
AM # Total:	18	29	8	23	24

Table 6: Average Weekday AM Peak Period Bicycle Volumes 2014

	114th Ave SE north of SE 8th St	NE 12th St west of 116th Ave NE	108th Ave NE north of Northup Way	108th Ave NE south of NE 4th St	Lake Washington Loop Trail at Coal Creek Pkwy SE
16:00-16:15	3	2		2	5
16:15-16:30	1	4	1	2	9
16:30-16:45	3	3	1	2	9
16:45-17:00	3	2	1	3	8
17:00-17:15	3	4	2	4	11
17:15-17:30	3	5	1	5	9
17:30-17:45	2	5	2	5	10
17:45-18:00	3	5	1	2	12
PM # Total:	20	31	9	26	72

Table 7: Average Weekday PM Peak Period Bicycle Volumes 2014

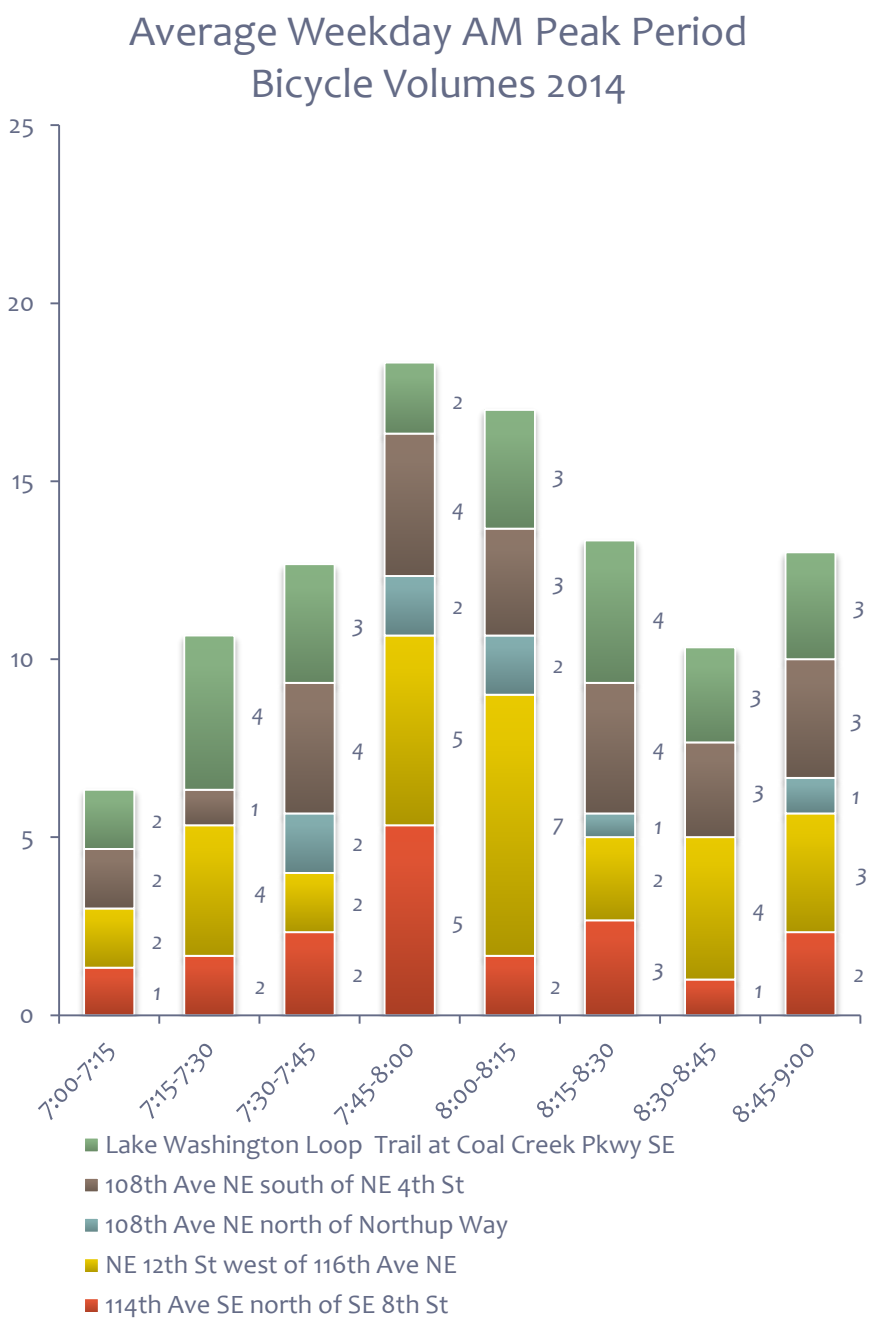


Figure 4: Average Weekday AM Peak Period Bicycle Volumes 2014

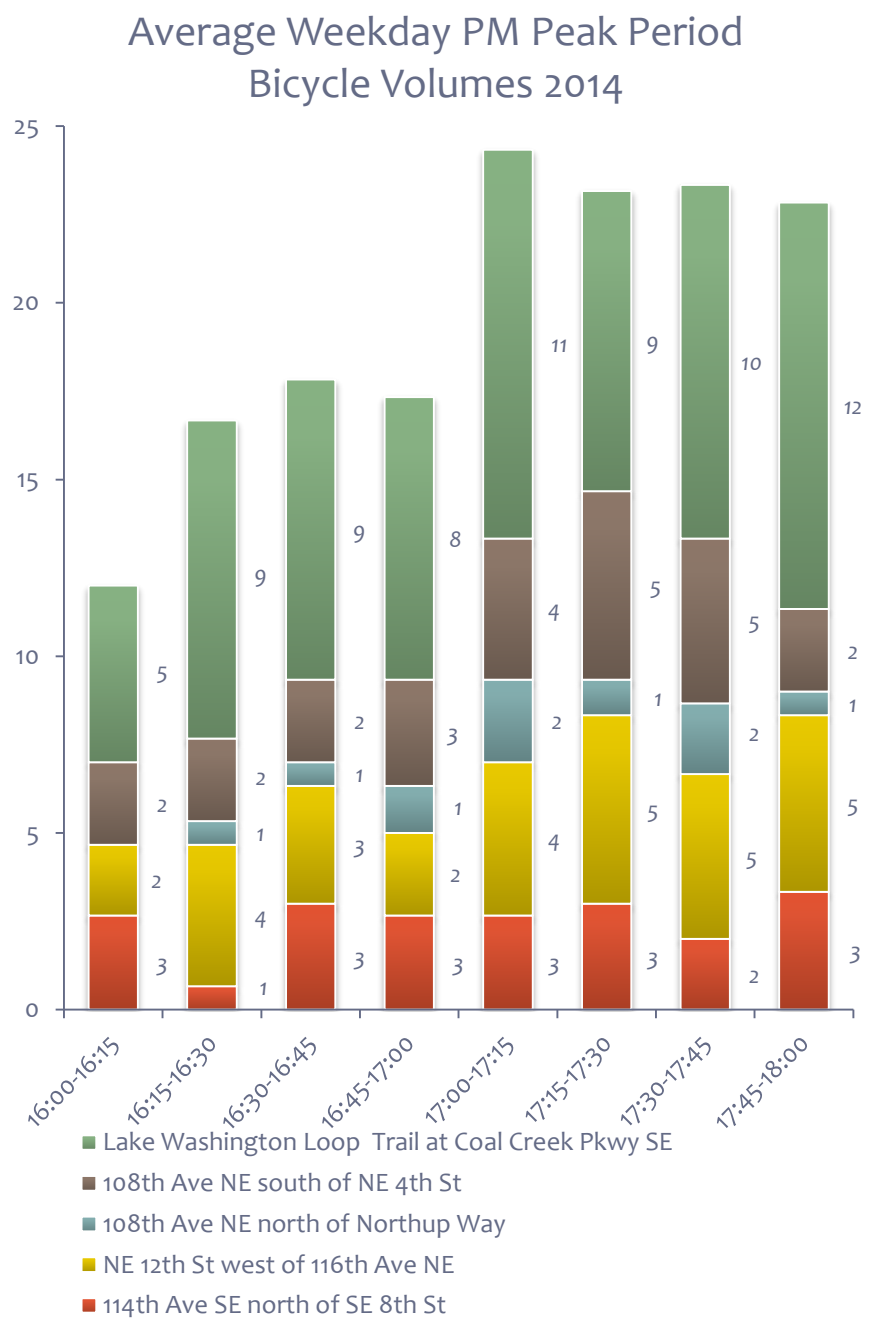


Figure 5: Average Weekday PM Peak Period Bicycle Volumes 2014

Average Weekday Volumes 2009-2014

Peak Period volume totals from previous years were compared side by side with the 2014 totals. In addition to volume data, weather conditions were noted for each year. The resulting data are shown in Tables 8, Table 9, Table 10 and Table 11. Values were rounded to the nearest whole number.

Pedestrian Volumes

Year	Date	Weather*		114th Ave SE north of SE 8th St	NE 12th St west of 116th Ave NE	108th Ave NE north of Northup Way	108th Ave NE south of NE 4th St	Bellevue Way north of NE 4th St	Lake Washington Loop Trail at Coal Creek Pkwy SE
		°F	Conditions						
2009	29-Sep	48.0	Fair	4	32	19	295	265	-
2010	5-Oct	48.8	Sunny to Clear	30	16	34	294	235	-
2011	27-Sep 28-Sep 29-Sep	52.4	Clear to Mostly Cloudy	9	-	28	441	229	-
2012	25-Sep 26-Sep 27-Sep	64.3	Clear to Scattered Showers	7	-	32	247	-	9
2013	1-Oct 2-Oct 3-Oct	53.9	Mostly Cloudy Light Rain Overcast	7	29	24	222	-	4
2014	30-Sep 1-Oct 2-Oct	62.0	Overcast to Clear	8	21	34	475	-	11

Table 8: Average Weekday AM Peak Period Pedestrian Volumes 2009-2014

** Weather information provided by www.wunderground.com*

Year	Date	Weather		114th Ave SE north of SE 8th St	NE 12th St west of 116th Ave NE	108th Ave NE north of Northup Way	108th Ave NE south of NE 4th St	Bellevue Way north of NE 4th St	Lake Washington Loop Trail at Coal Creek Pkwy SE
		°F	Conditions						
2009	29-Sep	48.0	Fair	6	27	11	361	359	-
2010	5-Oct	48.8	Sunny to Clear	16	16	38	368	443	-
2011	27-Sep 28-Sep 29-Sep	52.4	Clear to Mostly Cloudy	9	-	32	507	569	-
2012	25-Sep 26-Sep 27-Sep	64.3	Clear to Scattered Showers	10	-	52	351	-	22
2013	1-Oct 2-Oct 3-Oct	53.9	Mostly Cloudy Light Rain Overcast	23	28	30	370	-	27
2014	30-Sep 1-Oct 2-Oct	62.0	Overcast to Clear	16	35	40	546	-	41

Table 9: Average Weekday PM Peak Period Pedestrian Volumes 2009-2014

Bicycle Volumes

Year	Date	Weather*		114th Ave SE north of SE 8th St	NE 12th St west of 116th Ave NE	108th Ave NE north of Northup Way	108th Ave NE south of NE 4th St	Bellevue Way north of NE 4th St	Lake Washington Loop Trail at Coal Creek Pkwy SE
		°F	Conditions						
2009	29-Sep	48.0	Fair	14	24	19	11	3	-
2010	5-Oct	48.8	Sunny to Clear	39	17	6	16	3	-
2011	27-Sep 28-Sep 29-Sep	52.4	Clear to Mostly Cloudy	21	-	4	19	9	-
2012	25-Sep 26-Sep 27-Sep	64.3	Clear to Scattered Showers	21	-	12	12	-	21
2013	1-Oct 2-Oct 3-Oct	53.9	Mostly Cloudy Light Rain Overcast	11	17	7	11	-	16
2014	30-Sep 1-Oct 2-Oct	62.0	Overcast to Clear	18	29	8	23	-	24

Table 10: Average Weekday AM Peak Period Bicycle Volumes 2009-2014

Year	Date	Weather		114th Ave SE north of SE 8th St	NE 12th St west of 116th Ave NE	108th Ave NE north of Northup Way	108th Ave NE south of NE 4th St	Bellevue Way north of NE 4th St	Lake Washington Loop Trail at Coal Creek Pkwy SE
		°F	Conditions						
2009	29-Sep	48.0	Fair	17	20	21	15	5	-
2010	5-Oct	48.8	Sunny to Clear	42	25	9	19	12	-
2011	27-Sep 28-Sep 29-Sep	52.4	Clear to Mostly Cloudy	39	-	12	19	13	-
2012	25-Sep 26-Sep 27-Sep	64.3	Clear to Scattered Showers	23	-	17	12	-	48
2013	1-Oct 2-Oct 3-Oct	53.9	Mostly Cloudy Light Rain Overcast	14	22	5	16	-	35
2014	30-Sep 1-Oct 2-Oct	62.0	Overcast to Clear	20	31	9	26	-	72

Table 11: Average Weekday PM Peak Period Bicycle Volumes 2009-2014

For all City of Bellevue Count Locations Results 2009-2014, see Appendix C.

ANALYSIS

Two types of analysis can be performed on the data collected from this year's count. First, a time of day comparison is possible by retrieving average volumes for each 15-minute count interval. Second, a comparison to previous years' peak period volumes can be made.

Time of Day

Pedestrian Volumes Change AM-PM

In 2014 among the count locations coordinated by Bellevue, a total of 549 pedestrians were counted during the AM, and 678 pedestrians were counted during the PM peak period. Of these, the largest amounts, 16.9% (93 counts) and 16.1% (109 counts) occurred during the 8:45 AM-9:00 AM and 4:00 PM – 4:15 PM interval respectively.

Of the five count locations observed by the City of Bellevue Transportation Department staff, the Downtown location at 108th Avenue NE south of NE 4th Street had by far the highest observed pedestrian volumes. Counts at this location account for 86.5% (475 counts) of pedestrians counted during the AM peak period and 80.6% (546 counts) of pedestrians counted during the PM peak period, or 83.2% (1021 counts) of pedestrians counted during both the AM and PM peak periods.

44.7% (549 counts) of pedestrian trips were recorded during the AM peak period and 55.3% (678 counts) were recorded during the PM peak period. The smallest AM-PM peak period pedestrian volume change, 15.1% (475 AM counts, 546 PM counts) occurred at 108th Avenue NE south of NE 4th Street. The largest AM-PM peak period pedestrian volume change occurred at Lake Washington Loop Trail at Coal Creek Pkwy SE, where pedestrian volumes increased from 11 in the AM period to 41 in the PM period, a 257.4% increase.

Total pedestrian activity at the five locations was 23.5% higher during the PM peak period.

See Table 12, Figure 6, Figure 7 and Figure 8 for Average Weekday AM-PM Peak Periods Pedestrian Volumes Change in 2014.

Time Interval	114th Ave SE north of SE 8th St	NE 12th St west of 116th Ave NE	108th Ave NE north of Northup Way	108th Ave NE south of NE 4th St	Lake Washington Loop Trail at Coal Creek Pkwy SE	**15-Minute Interval Total #**	**15-Minute Interval %**
7:00-7:15		1	3	33	2	**39**	**7.2%**
7:15-7:30	1	3	8	43		**55**	**10.0%**
7:30-7:45	1	2	2	54	1	**61**	**11.1%**
7:45-8:00	1	4	8	68	2	**83**	**15.1%**
8:00-8:15	2	2	4	65	1	**74**	**13.4%**
8:15-8:30	1	4	3	70	1	**78**	**14.2%**
8:30-8:45	1	2	2	61	1	**66**	**12.1%**
8:45-9:00	1	3	4	81	4	**93**	**17.0%**
AM # Total	**8**	**21**	**34**	**475**	**11**	**549**	**100.0%**
AM %	**1.5%**	**3.8%**	**6.2%**	**86.5%**	**2.0%**	**100.0%**	
16:00-16:15	2	5	7	73	23	**109**	**16.1%**
16:15-16:30	3	5	4	63	8	**83**	**12.3%**
16:30-16:45	3	3	5	55		**67**	**9.9%**
16:45-17:00	3	4	2	70	2	**81**	**11.9%**
17:00-17:15		5	7	92	1	**105**	**15.5%**
17:15-17:30	2	6	5	75	5	**94**	**13.8%**
17:30-17:45	2	4	5	59	2	**71**	**10.5%**
17:45-18:00	1	3	4	58	1	**67**	**9.9%**
PM # Total	**16**	**35**	**40**	**546**	**41**	**678**	
PM %	**2.3%**	**5.2%**	**5.9%**	**80.6%**	**6.0%**		
AM and PM # Total	**24**	**56**	**74**	**1021**	**52**	**1226**	
AM and PM %	**1.9%**	**4.6%**	**6.0%**	**83.3%**	**4.2%**		
AM/PM # Change	**8**	**14**	**6**	**72**	**29**	**129**	
AM/PM Change %	**100.0%**	**68.3%**	**16.7%**	**15.1%**	**257.4%**	**23.5%**	

Table 12: Average Weekday AM and PM Peak Period Pedestrian Volumes 2014

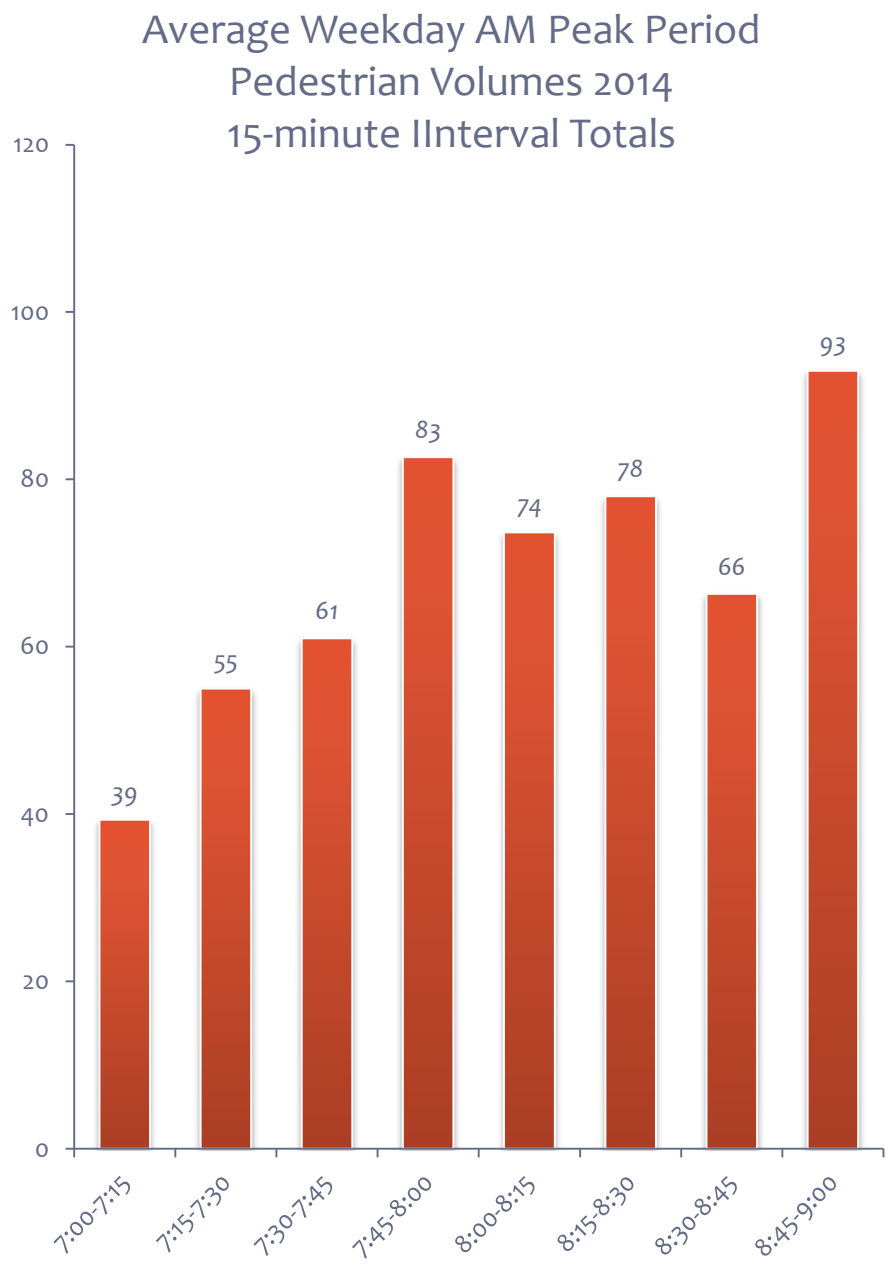


Table 6: Average Weekday AM Peak Period Pedestrian Volumes 2014
15-minute Interval Totals

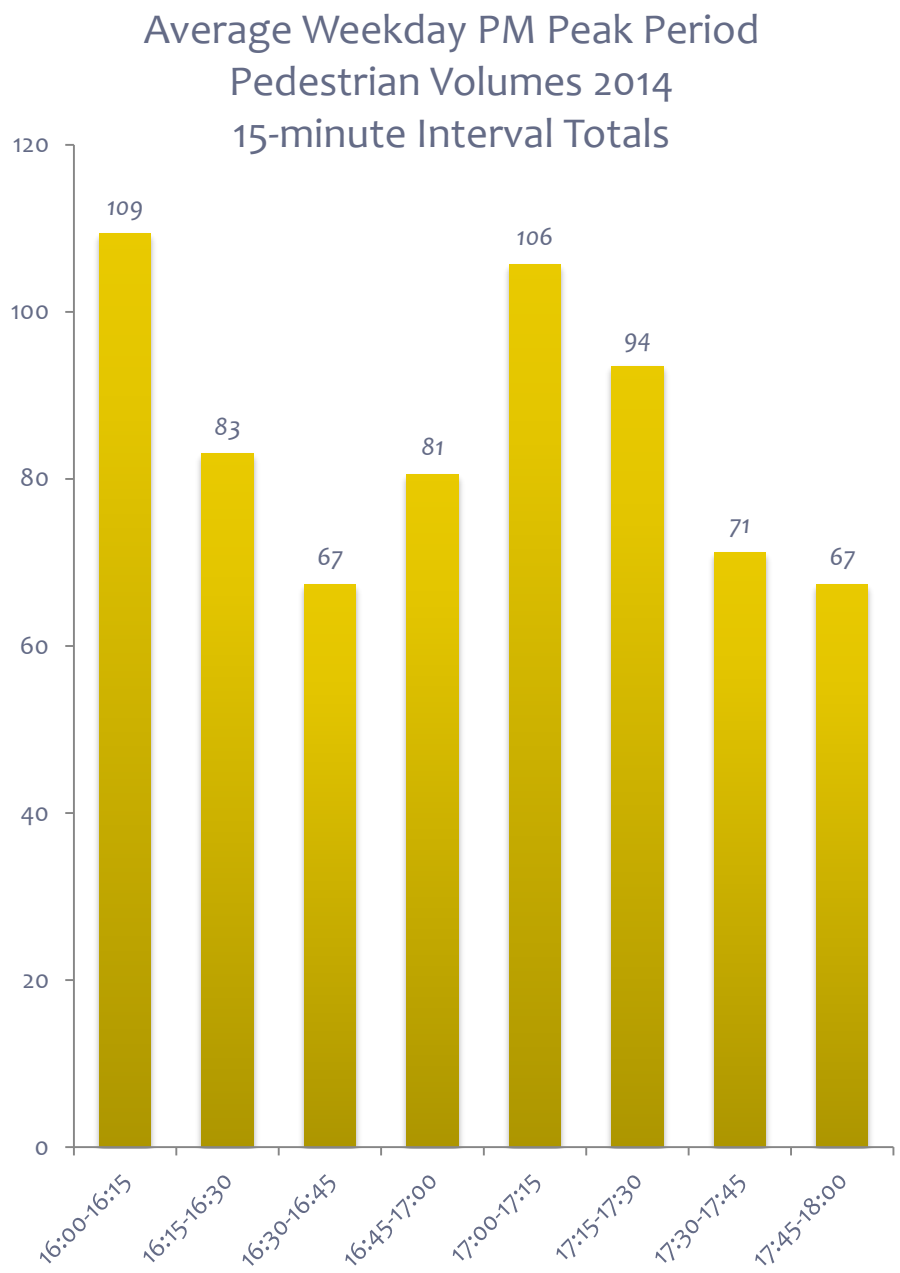


Table 7: Average Weekday PM Peak Period Pedestrian Volumes 2014
15-minute Interval Totals

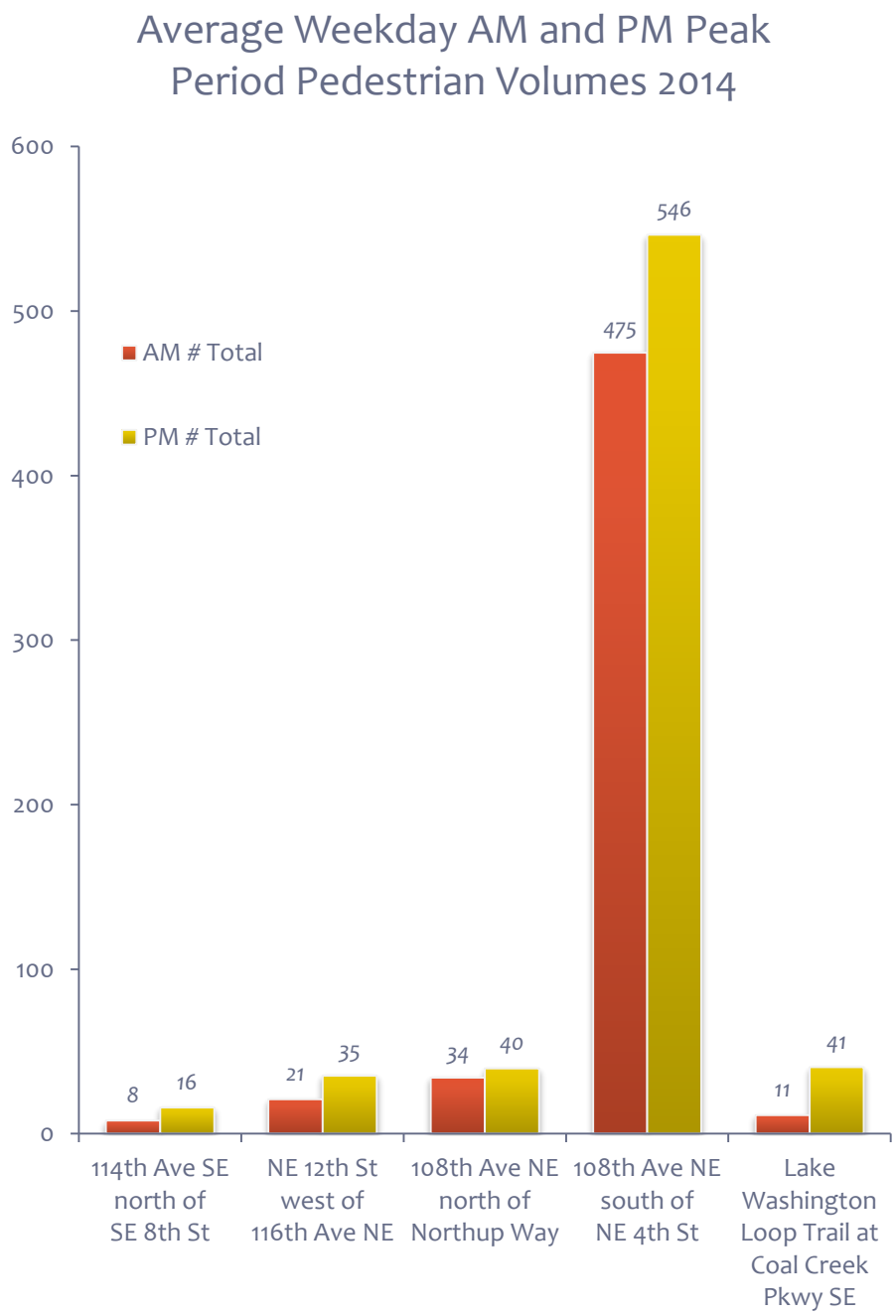


Figure 8: Average Weekly AM and PM Peak Period Pedestrian Volumes 2014

Pedestrians crossing 108th Ave NE at NE 4th St, looking east

Pedestrians at Lake Washington Loop Trail at Coal Creek Pkwy SE, looking south

Bicycle Volumes Change AM-PM

Similar to pedestrian travel volumes recorded this year, 39.5% (103 counts) of all bicycle trips (260 counts) were recorded during the AM peak period and 60.5% (158 counts) were recorded during the PM peak period.

For the five locations coordinated by Bellevue in 2014, a total of 103 bicyclists were counted during the AM peak period. Of these, the largest amount, 17.9% (18 counts) occurred during the 7:45-8:00 AM interval. Of the 158 PM peak period bicycle counts, the largest number, 15.4% (24 counts) occurred during the 5:00-5:15 PM interval.

The NE 12th St west of 116th Ave NE count location had the highest recorded AM bicycle volumes of all count locations - 28.6% (29 counts). The Lake Washington Loop Trail at Coal Creek Pkwy SE location had the highest PM bicycle volumes of all count locations - 45.4% (72 counts). It also had the highest combined AM and PM bicycle volumes at 36.8% (96 counts). The second highest volume location, with 23.2% (60 counts) was NE 12th Street west of 116th Avenue NE.

All of the five locations had higher bicycle volumes during the PM period. The smallest change (5.7%) occurred at NE 12th Street west of 116th Avenue NE, which counted 29 bicycles for the AM period and 31 for the PM period. Lake Washington Loop Trail at Coal Creek Pkwy SE location recorded the greatest increase – from 24 bicyclists during the AM period to 72 bicyclists during the PM period, a change of 193.8%.

The total bicycle activity at the five locations increased by 53.4% during the PM peak period.

See Table 13 and Figure 7, Figure 8 and Figure 9 for Average Weekday AM-PM Peak Periods Bicycle Volumes Change in 2014.

Time Interval	114th Ave SE north of SE 8th St	NE 12th St west of 116th Ave NE	108th Ave NE north of Northup Way	108th Ave NE south of NE 4th St	Lake Washington Loop Trail at Coal Creek Pkwy SE	**15-Minute Interval Total #**	**15-Minute Interval %**
7:00-7:15	1	2		2	2	6	6.5%
7:15-7:30	2	4		1	4	11	10.7%
7:30-7:45	2	2	2	4	3	13	12.3%
7:45-8:00	5	5	2	4	2	18	17.9%
8:00-8:15	2	7	2	3	3	17	16.6%
8:15-8:30	3	2	1	4	4	13	13.0%
8:30-8:45	1	4		3	3	10	10.4%
8:45-9:00	2	3	1	3	3	13	12.7%
AM # Total	18	29	7	23	24	102	
AM %	17.9%	28.6%	7.5%	22.4%	23.7%		
16:00-16:15	3	2		2	5	12	7.6%
16:15-16:30	1	4	1	2	9	17	10.6%
16:30-16:45	3	3	1	2	9	18	11.3%
16:45-17:00	3	2	1	3	8	17	11.0%
17:00-17:15	3	4	2	4	11	24	15.4%
17:15-17:30	3	5	1	5	9	23	14.7%
17:30-17:45	2	5	2	5	10	23	14.8%
17:45-18:00	3	5	1	2	12	23	14.5%
PM # Total	20	31	9	26	72	158	
PM %	12.7%	19.7%	5.5%	16.7%	45.4%		
AM and PM # Total	38	60	15	49	96	259	
AM and PM %	14.8%	23.3%	5.9%	19.0%	37.0%		
AM/PM # Change	2	2	2	3	47	56	
AM/PM Change %	9.1%	5.7%	13.0%	14.5%	193.8%	53.4%	

Table 13: Average Weekday AM and PM Peak Period Bicycle Volumes 2014

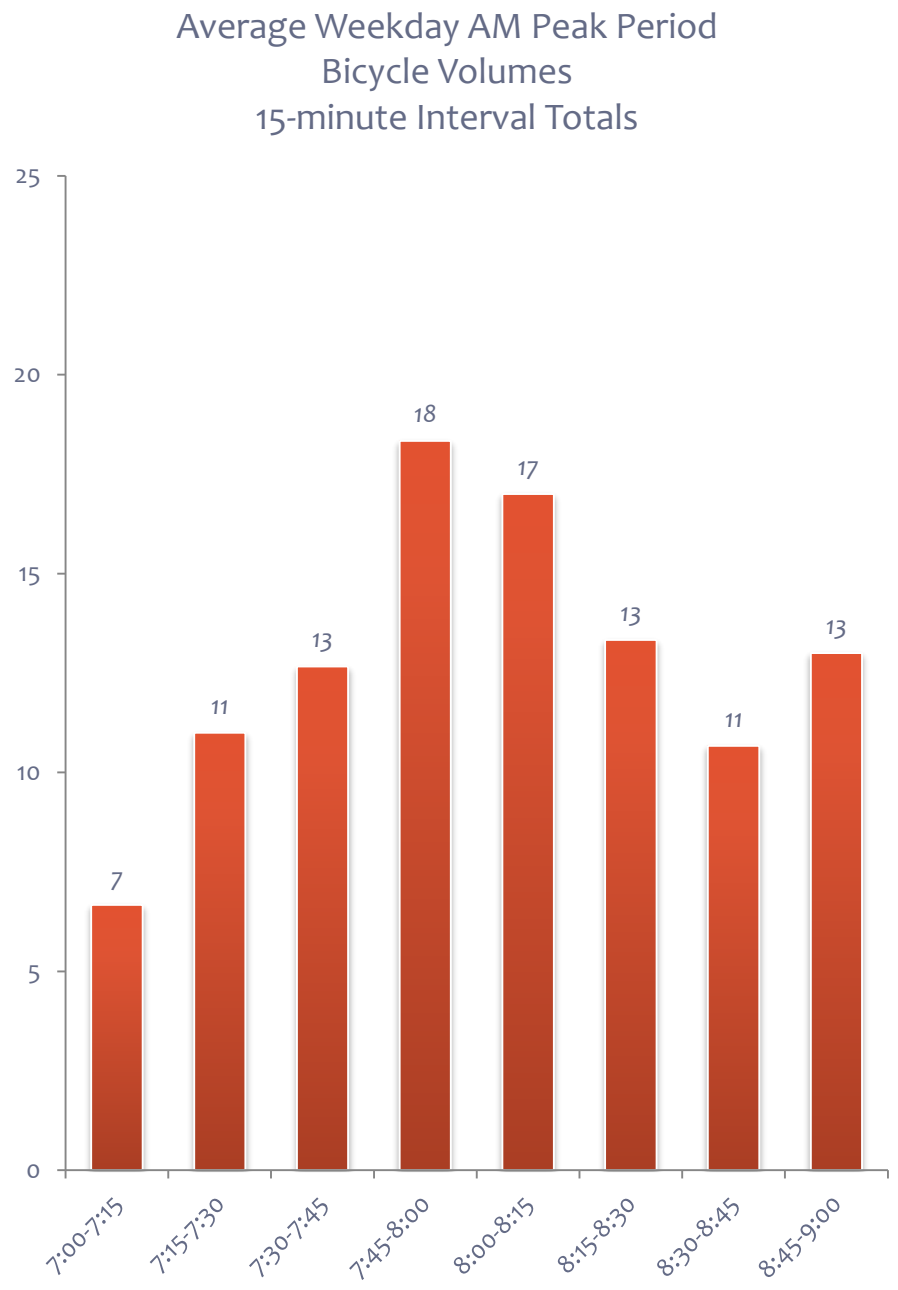


Table 9: Average Weekday AM Peak Period Bicycle Volumes 2014
15-minute Interval Totals

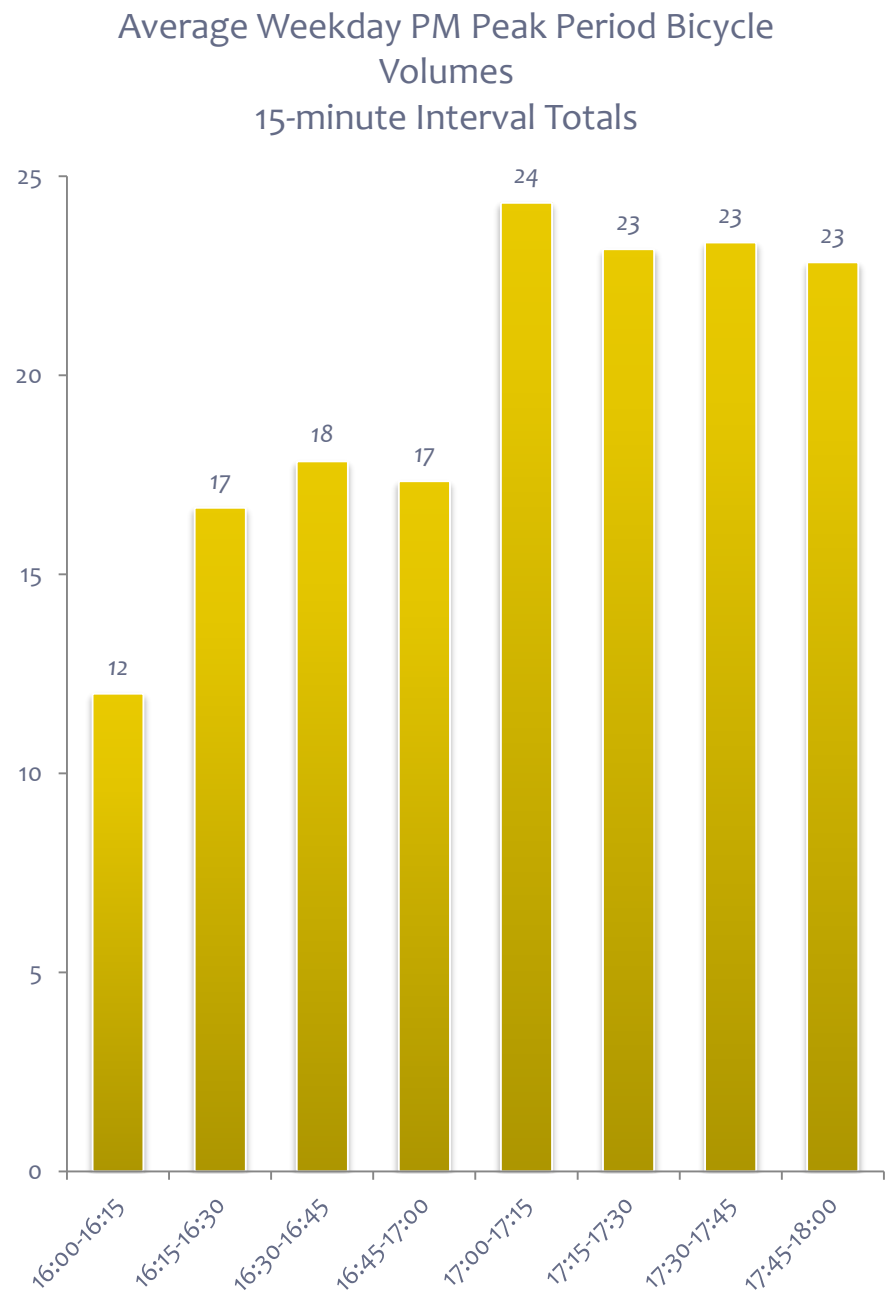


Table 10: Average Weekday PM Peak Period Bicycle Volumes 2014
15-minute Interval Totals

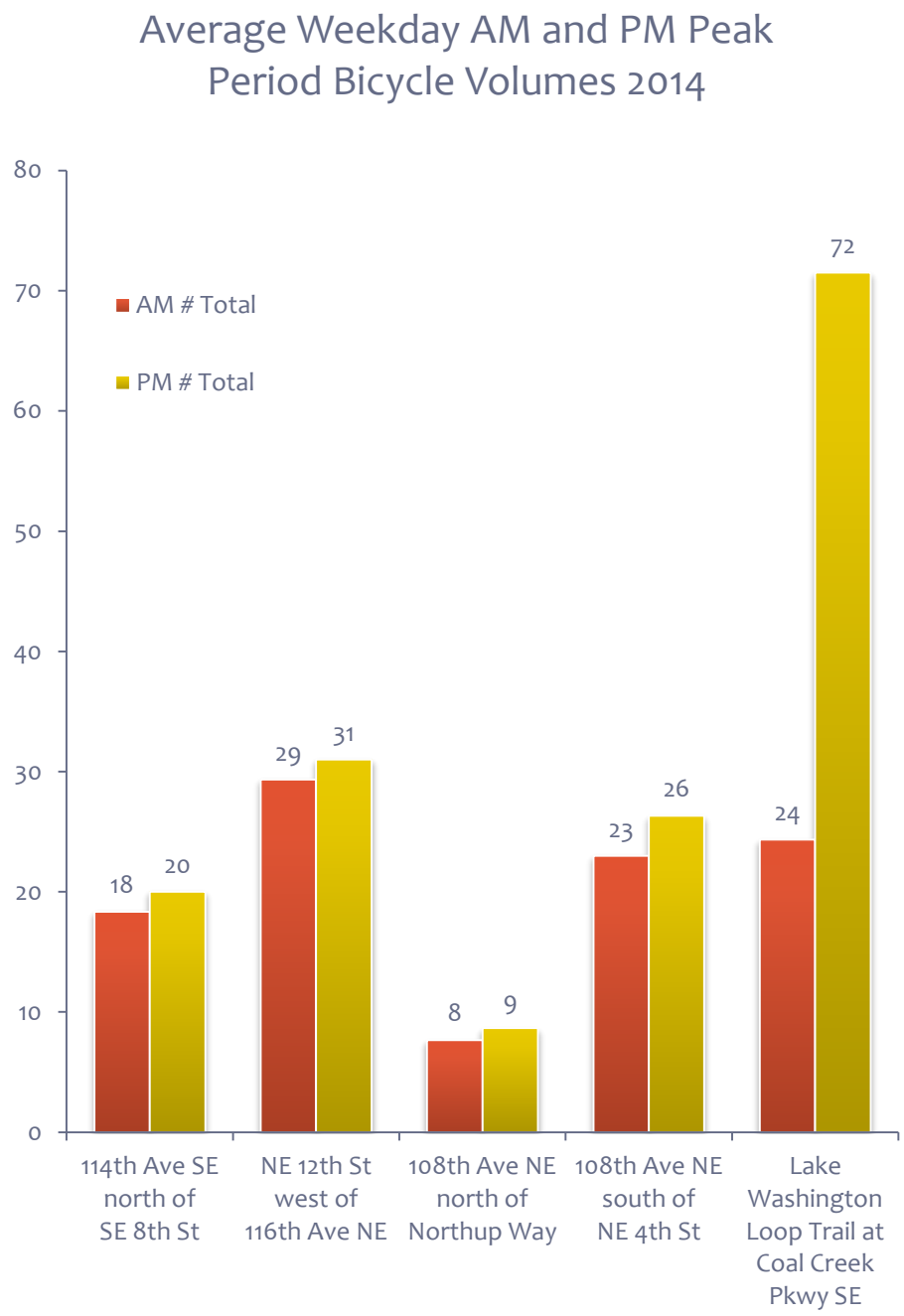


Figure 11: Average Weekday AM and PM Peak Periods Bicycle Volumes 2014

Bicyclist at Lake Washington Loop Trail & Coal Creel Pkwy SE, looking south

Bicyclist crossing SE 8th St at 114th Ave SE, looking south

Count Year

A comparison was made for pedestrian and bicycle traffic between 2013 and 2014. Table 8, Table 9, Table 10 and Table 11 in the Results section show the numerical volumes for each year.

Weekday AM and PM pedestrian and bicycle volumes for 2009-2014 can be found in Appendix B.

Pedestrian Volume Change 2013-2014

The City of Bellevue Transportation Department recorded data for all of the five count locations for both 2013 and 2014. For these locations, the total AM and PM peak period pedestrian volumes increased from 707 in 2013 to 1171 in 2014, a 65.6% increase. The 108th Avenue NE south of NE 4th Street count location showed the highest total AM and PM increase in peak period pedestrian volumes in 2014 compared to 2013, an increase of 72.5% (429 counts).

The total AM peak period pedestrian volumes for the five intersections increased by 105.4% (271 counts) in 2014 compared to 2013. The highest increase was recorded at Lake Washington Loop Trail at Coal Creek Pkwy SE, 183.3% (7 counts), followed by the 108th Avenue NE south of NE 4th Street with 113.8% (253 counts) increase. The only AM peak period pedestrian volume decrease for 2014 compared to 2013 occurred at the NE 12th Street west of 116th Avenue NE count location. Pedestrian volumes decreased by 27.6% (8 counts) relative to 2013.

For the five locations, PM peak period pedestrian volumes increased by 42.8% (193 counts) in 2014. During the PM peak period, pedestrian volumes decreased only at 114th Avenue SE north of SE 8th Street, a decrease of 30.4% (7 counts). A notable increase in PM peak period pedestrian volumes of 50.0% (14) was observed at Lake Washington Loop Trail at Coal Creek Pkwy SE, followed by 108th Avenue NE south of NE 4th Street with 47.7% (176 counts) increase.

Table 14, Figure 12 and Figure 13 display pedestrian volumes for 2013 and 2014 for all locations that the Transportation Department staff recorded in both 2013 and 2014.

Year/Time Period	114th Ave SE north of SE 8th St	NE 12th St west of 116th Ave NE	108th Ave NE north of Northup Way	108th Ave NE south of NE 4th St	Lake Washington Loop Trail at Coal Creek Pkwy SE	All Locations
2013/AM Peak	7	29	24	222	4	257
2014/AM Peak	8	21	34	475	11	528
AM Change #	1	-8	10	253	7	271
AM % Change	14.3%	-27.6%	41.7%	113.8%	183.3%	105.4%
2013/PM Peak	23	28	30	370	27	450
2014/PM Peak	16	35	40	546	41	643
PM Change #	-7	7	10	176	14	193
PM % Change	-30.4%	25.0%	32.2%	47.7%	50.0%	42.8%
2013/AM and PM	30	57	54	592	31	707
2014/AM and PM	24	56	74	1021	52	1171
AM and PM Change #	-6	-1	20	429	21	464
AM and PM % Change	-20.0%	-1.8%	36.4%	72.5%	67.2%	65.6%

Table 14: Average Weekday AM and PM Peak Period Pedestrian Volumes 2013-2014

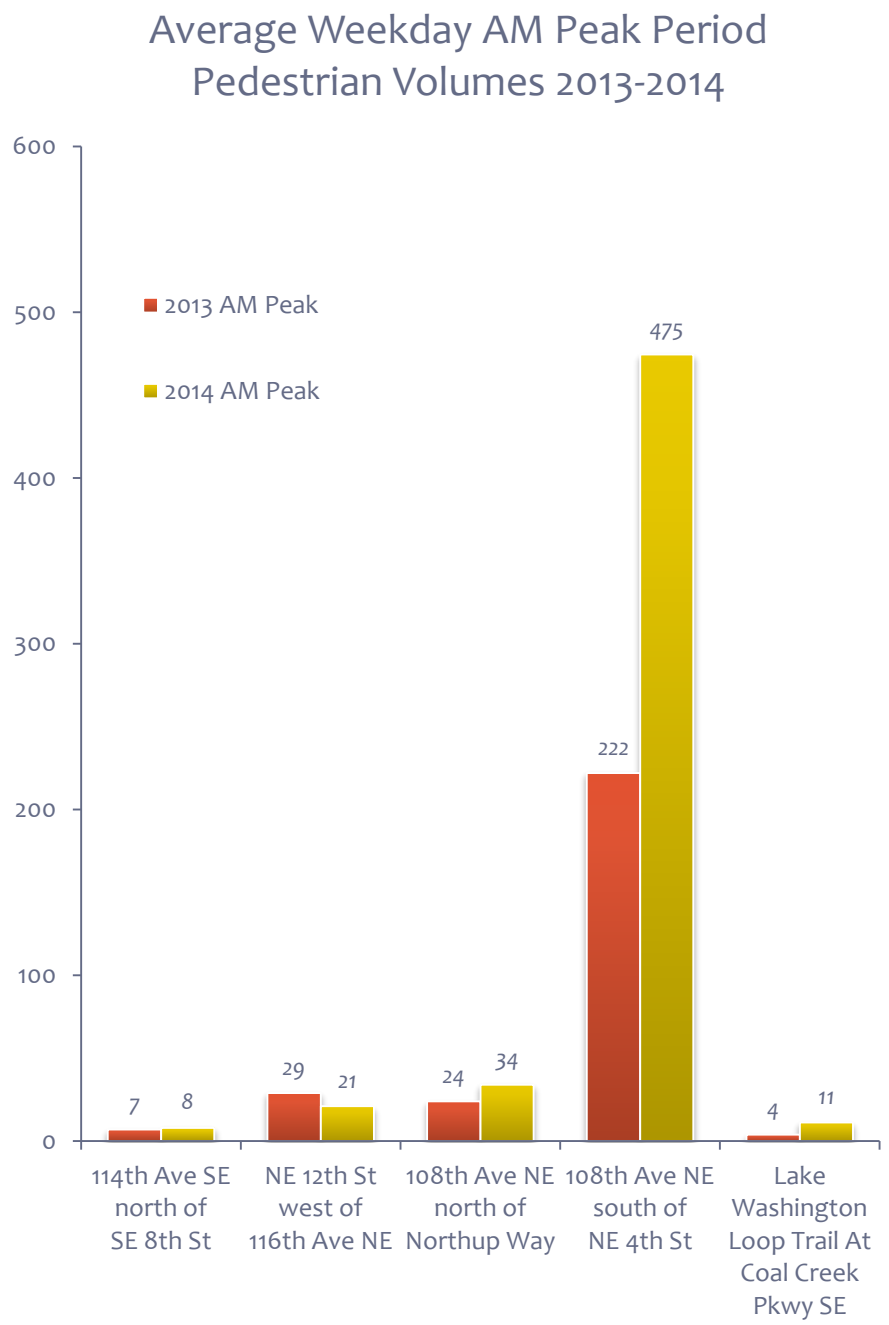


Figure 12: Average Weekday AM Peak Period Pedestrian Volumes 2013-2014

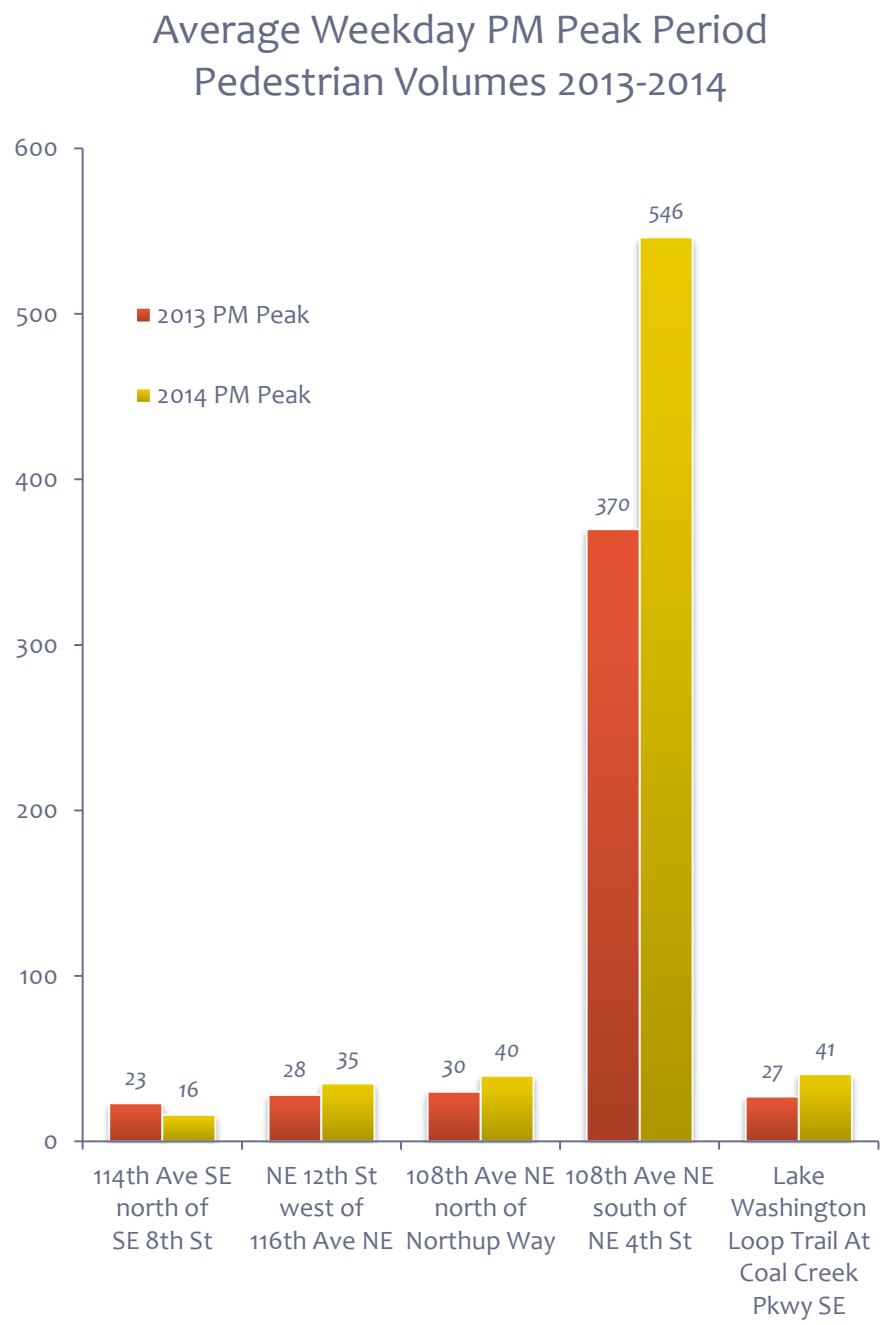


Figure 13: Average Weekday PM Peak Period Pedestrian Volumes 2013-2014

Bicycle Volume Change 2013-2014

The City of Bellevue Transportation Department recorded data for the five count locations for both 2013 and 2014. For these locations, peak period bicycle volumes increased from 117 in 2013 to 200 in 2014, an increase of 70.8%. The highest total AM and PM peak periods bicycle volumes were recorded at the Lake Washington Loop Trail at Coal Creek Pkwy SE count location.

Total AM peak period bicycle volumes increased by 56.0% (26 counts). One less bicyclist was counted in 2014 compared to 2013 at 108th Avenue NE north of Northup Way, a decrease of 14.8%. The highest increase, 109.1 % (12 counts), was recorded at the 108th Avenue NE south of NE 4th Street count location.

PM peak period bicycle volumes increased by 80.7% (57 counts). All count locations showed increase in PM peak period bicycle volumes in 2014 compared to 2013. The highest increase, 104.3% (37 counts) was recorded at Lake Washington Loop Trail at Coal Creek Pkwy SE. A notable increase in PM peak period bicycle volumes of 73.3% (12) was observed at the 108th Avenue NE north of Northup Way count location.

Table 15, Figure 14 and Figure 15 display bicycle volumes for 2013 and 2014 for all locations that the Transportation Department staff recorded in both 2013 and 2014.

Year	114th Ave SE north of SE 8th St	NE 12th St west of 116th Ave NE	108th Ave NE north of Northup Way	108th Ave NE south of NE 4th St	Lake Washington Loop Trail at Coal Creek Pkwy SE	All Locations
2013/AM Peak	11	17	9	11	16	47
2014/AM Peak	18	29	8	23	24	73
AM Change #	7	12	-1	12	8	26
AM % Change	66.7%	70.6%	-14.8%	109.1%	52.1%	56.0%
2013/PM Peak	14	22	5	16	35	70
2014/PM Peak	20	31	9	26	72	127
PM Change #	6	9	4	10	37	57
PM % Change	42.9%	40.9%	73.3%	64.6%	104.3%	80.7%
2013/AM and PM	25	39	14	27	51	117
2014/AM and PM	38	60	16	49	96	200
AM and PM Change #	13	21	2	22	45	83
AM and PM % Change	53.3%	53.8%	16.7%	82.7%	87.9%	70.8%

Table 15: Average Weekday AM and PM Peak Period Bicycle Volumes 2013-2014

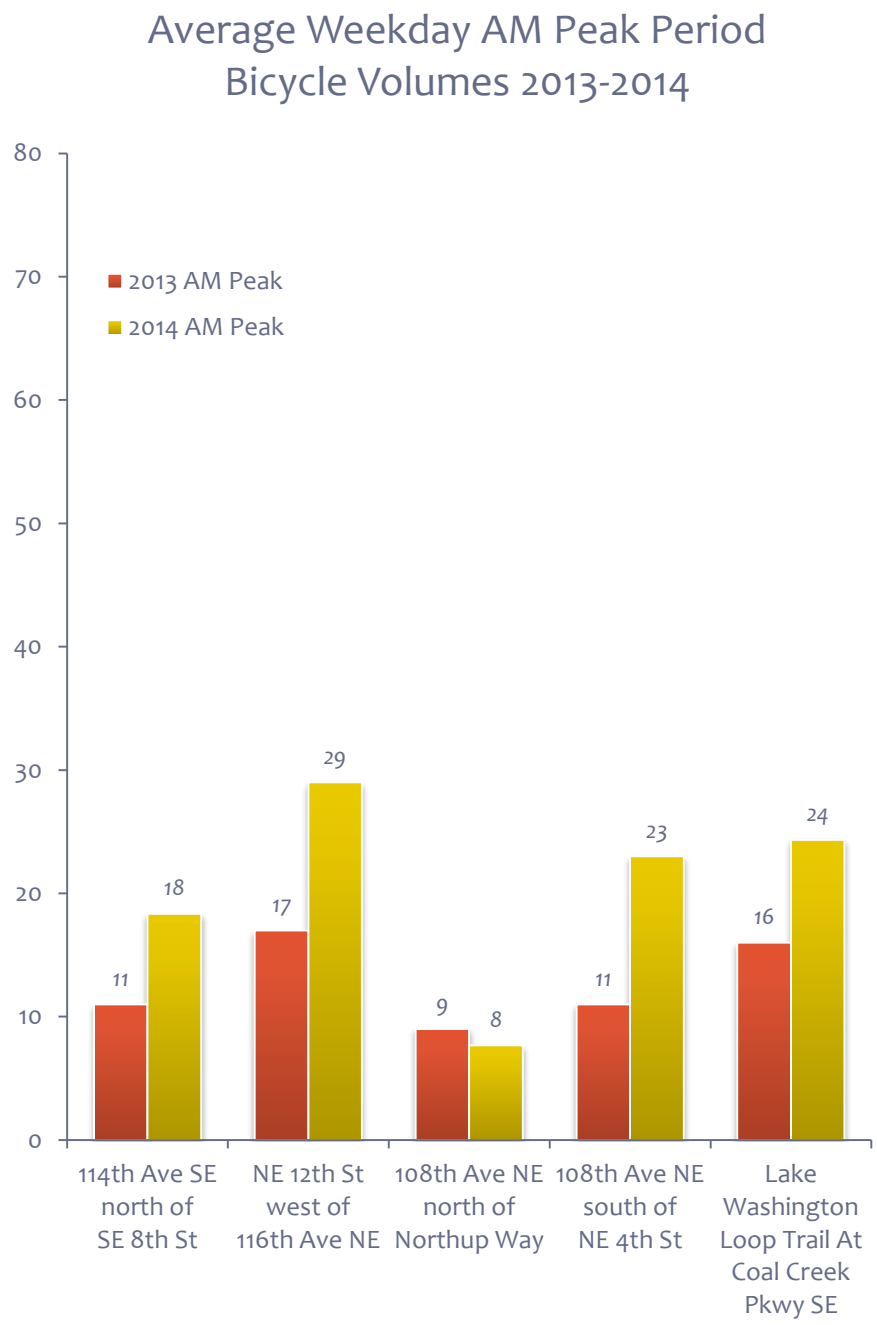


Figure 14: Average Weekday AM Peak Period Bicycle Volumes 2013-2014

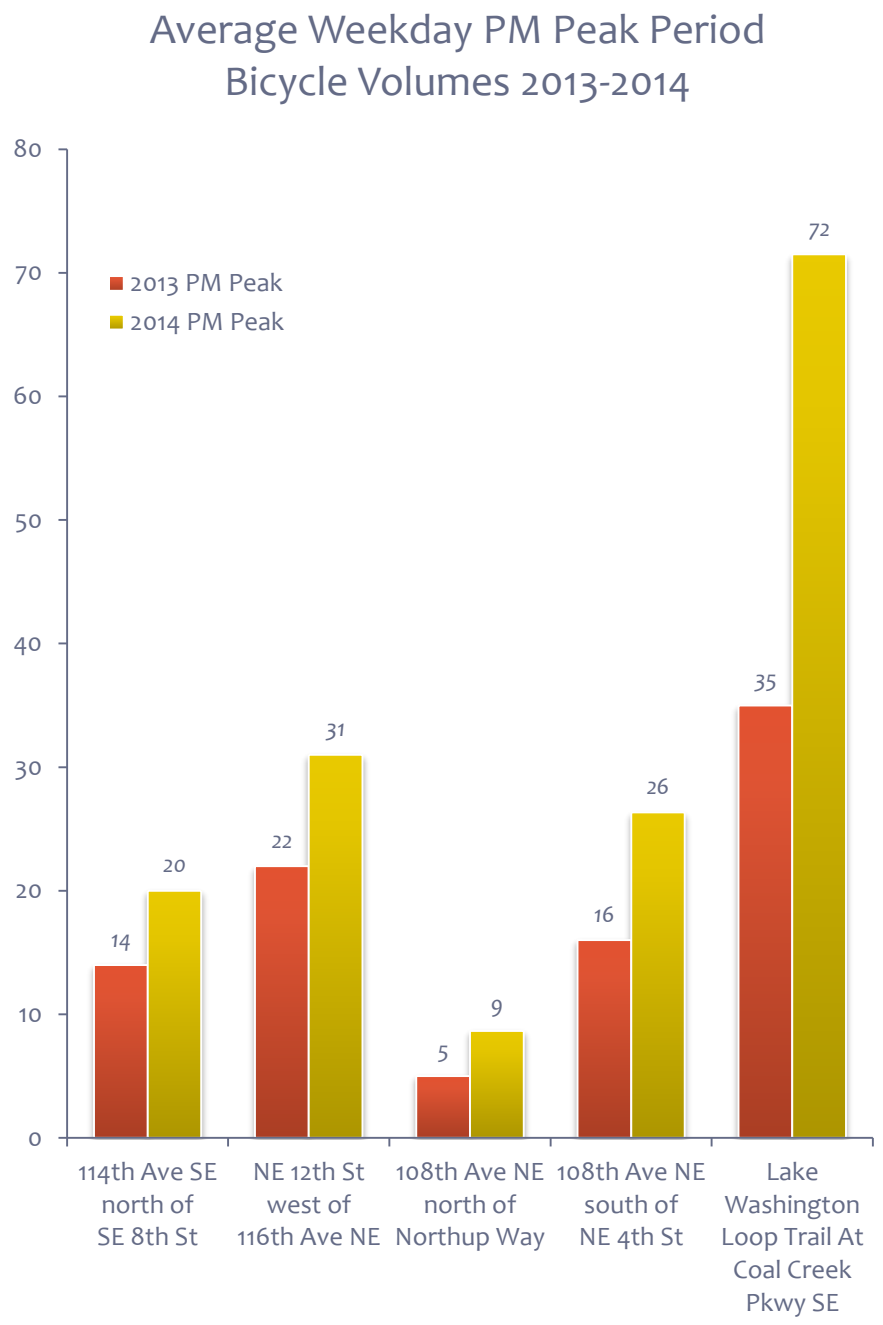


Figure 15: Average Weekday PM Peak Period Bicycle Volumes 2013-201

Appendix A: Complete Camera Locations Count Data 2014

114th Avenue SE north of SE 8th Street

	Day 1		Day 2		Day 3	
Time Interval	Bicyclists	Pedestrians	Bicyclists	Pedestrians	Bicyclists	Pedestrians
7:00-7:15	0	0	3	0	1	0
7:15-7:30	1	2	2	0	2	0
7:30-7:45	0	1	2	2	5	1
7:45-8:00	5	0	6	1	5	3
8:00-8:15	0	0	2	3	3	4
8:15-8:30	1	0	4	1	3	1
8:30-8:45	0	0	0	0	3	2
8:45-9:00	0	0	3	1	4	2
Total:	7	3	22	8	26	13
16:00-16:15	2	1	3	3	3	1
16:15-16:30	1	1	0	3	1	4
16:30-16:45	2	3	2	6	5	1
16:45-17:00	1	1	5	2	2	6
17:00-17:15	2	1	3	0	3	0
17:15-17:30	1	2	5	3	3	1
17:30-17:45	0	0	1	3	5	2
17:45-18:00	4	0	3	2	3	2
Total:	13	9	22	22	25	17

Table 16: 114th Ave SE north of SE 8th St AM and PM Peak Period 15-minute Count Data

NE 12th Street west of 116th Avenue NE

	Day 1		Day 2		Day 3	
Time Interval	Bicyclists	Pedestrians	Bicyclists	Pedestrians	Bicyclists	Pedestrians
7:00-7:15	2	0	2	4	1	0
7:15-7:30	3	3	5	3	3	3
7:30-7:45	1	1	1	3	3	3
7:45-8:00	3	6	7	4	6	2
8:00-8:15	6	2	5	2	11	1
8:15-8:30	3	7	1	4	3	1
8:30-8:45	6	2	1	0	5	3
8:45-9:00	0	0	5	4	5	5
Total:	24	21	27	24	37	18
16:00-16:15	3	4	1	6	2	5
16:15-16:30	5	3	2	5	5	7
16:30-16:45	1	4	2	1	7	5
16:45-17:00	1	7	3	2	3	3
17:00-17:15	5	7	4	4	4	5
17:15-17:30	3	2	9	12	4	5
17:30-17:45	4	4	4	3	6	4
17:45-18:00	3	2	7	4	5	2
Total:	25	33	32	37	36	36

Table 17: NE 12th St west of 116th Ave NE AM and PM Peak Period 15-minute Count Data

108th Avenue NE north of Northup Way

	Day 1		Day 2		Day 3	
Time Interval	Bicyclists	Pedestrians	Bicyclists	Pedestrians	Bicyclists	Pedestrians
7:00-7:15	0	5	1	3	0	1
7:15-7:30	1	3	0	10	0	10
7:30-7:45	0	3	2	2	3	2
7:45-8:00	0	8	2	8	3	7
8:00-8:15	2	2	0	7	3	2
8:15-8:30	2	6	0	2	0	1
8:30-8:45	1	1	0	5	0	1
8:45-9:00	2	2	1	6	0	5
Total:	8	30	6	43	9	29
16:00-16:15	0	8	0	5	0	7
16:15-16:30	1	7	1	4	0	2
16:30-16:45	0	8	0	7	2	1
16:45-17:00	0	3	1	1	3	3
17:00-17:15	4	7	2	8	1	5
17:15-17:30	2	5	0	5	1	6
17:30-17:45	3	7	1	3	2	5
17:45-18:00	1	4	1	2	0	6
Total:	11	49	6	35	9	35

Table 18: 108th Ave NE north of Northup Way AM and PM Peak Period 15-minute Count Data

108th Avenue NE south of NE 4th Street

	Day 1		Day 2		Day 3	
Time Interval	Bicyclists	Pedestrians	Bicyclists	Pedestrians	Bicyclists	Pedestrians
7:00-7:15	3	27	1	39	1	33
7:15-7:30	0	50	1	38	2	42
7:30-7:45	2	52	3	50	6	60
7:45-8:00	2	75	6	64	4	64
8:00-8:15	2	66	4	79	3	50
8:15-8:30	1	88	2	70	8	51
8:30-8:45	3	57	4	64	1	62
8:45-9:00	2	77	3	77	5	89
Total:	15	492	24	481	30	451
16:00-16:15	2	66	2	71	3	82
16:15-16:30	2	60	0	53	5	76
16:30-16:45	3	57	4	54	0	55
16:45-17:00	2	72	3	66	4	71
17:00-17:15	5	89	3	85	4	103
17:15-17:30	4	85	8	62	4	79
17:30-17:45	3	64	5	52	6	62
17:45-18:00	3	51	3	54	1	70
Total:	24	544	28	497	27	598

Table 19: 108th Ave NE south of NE 4th St AM and PM Peak Period 15-minute Count Data

Lake Washington Loop Trail at Coal Creek Pkwy SE

	Day 1		Day 2		Day 3	
Time Interval	Bicyclists	Pedestrians	Bicyclists	Pedestrians	Bicyclists	Pedestrians
7:00-7:15	0	4	3	2	2	0
7:15-7:30	2	0	9	1	2	0
7:30-7:45	1	1	6	1	3	1
7:45-8:00	1	6	2	0	3	0
8:00-8:15	1	0	8	3	1	0
8:15-8:30	2	2	3	0	7	0
8:30-8:45	2	2	2	0	4	0
8:45-9:00	2	0	4	8	3	3
Total:	11	15	37	15	25	4
16:00-16:15	4	6	6	40		
16:15-16:30	9	3	9	13		
16:30-16:45	8	0	9	0		
16:45-17:00	5	0	11	3		
17:00-17:15	7	2	15	0		
17:15-17:30	11	4	6	5		
17:30-17:45	5	1	15	2		
17:45-18:00	8	0	15	2		
Total:	57	16	86	65		

Table 20: Lake Washington Loop Trail at Coal Creek Pkwy SE AM and PM Peak Period 15-minute Count Data

Appendix B: Weekday AM and PM Peak Period Pedestrian and Bicycle Volumes 2009-2014

Weekday AM and PM Peak Period Pedestrian Volumes 2009-2014

Year	114th Ave SE north of SE 8th St	NE 12th St west of 116th Ave NE	108th Ave NE north of Northup Way	108th Ave NE south of NE 4th St	Bellevue Way north of NE 4th St	Lk Washington Loop Trail at Coal Creek Pkwy SE
2009	4	32	19	295	265	
2010	30	16	34	294	235	
2011	9		28	441	229	
2012	7		32	247		9
2013	7	29	24	222		4
2014	8	21	34	475		11

Table 21: Average Weekday AM Peak Period Pedestrian Volumes 2009-2014

Year	114th Ave SE north of SE 8th St	NE 12th St west of 116th Ave NE	108th Ave NE north of Northup Way	108th Ave NE south of NE 4th St	Bellevue Way north of NE 4th St	Lk Washington Loop Trail at Coal Creek Pkwy SE
2009	6	27	11	361	359	
2010	16	16	38	368	443	
2011	9		32	507	569	
2012	10		52	351		22
2013	23	28	30	370		27
2014	16	35	40	546		41

Table 22: Average Weekday PM Peak Period Pedestrian Volumes 2009-2014

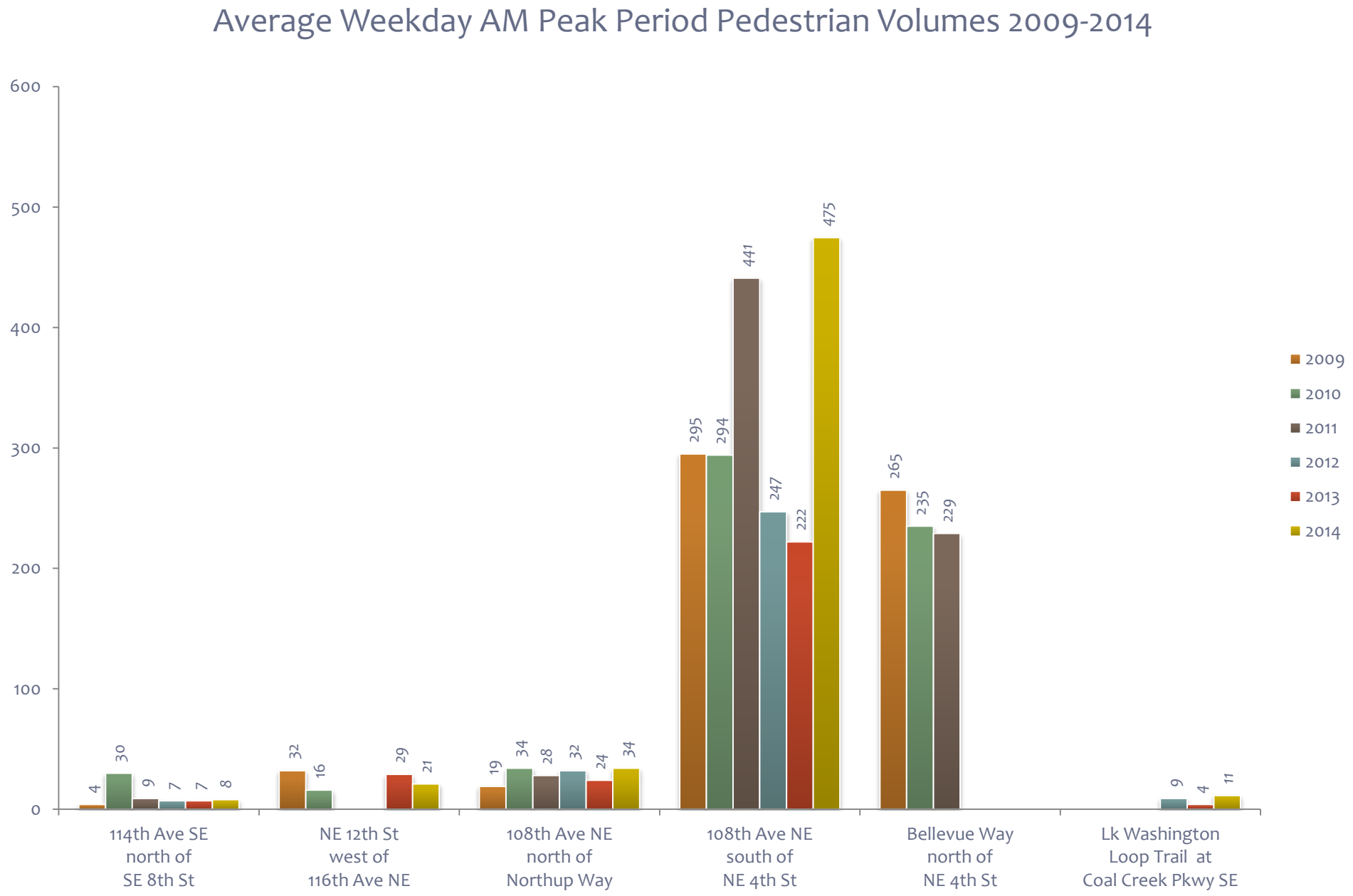


Figure 16: Average Weekday AM Peak Period Pedestrian Volumes 2009-2014

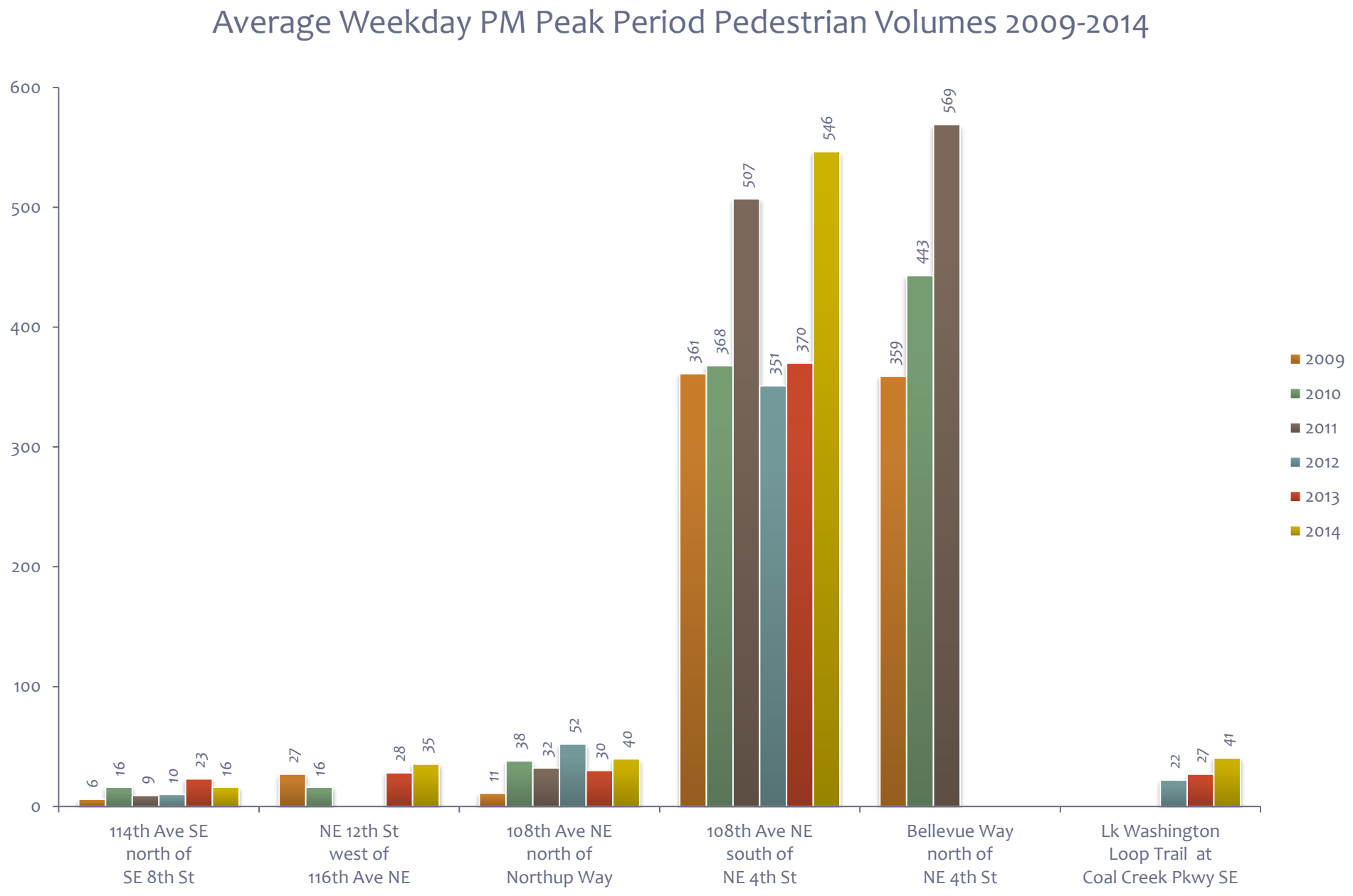


Figure 17: Average Weekday PM Peak Period Pedestrian Volumes 2009-2014

Weekday AM and PM Peak Period Bicycle Volumes 2009-2013

Year	114th Ave SE north of SE 8th St	NE 12th St west of 116th Ave NE	108th Ave NE north of Northup Way	108th Ave NE south of NE 4th St	Bellevue Way north of NE 4th St	Lk Washington Loop Trail at Coal Creek Pkwy SE
2009	14	24	19	11	3	
2010	39	17	6	16	3	
2011	21		4	19	9	
2012	21		12	12		21
2013	11	17	9	10		16
2014	18	29	8	23		24

Table 23: Average Weekday AM Peak Period Bicycle Volumes 2009-2014

Year	114th Ave SE north of SE 8th St	NE 12th St west of 116th Ave NE	108th Ave NE north of Northup Way	108th Ave NE south of NE 4th St	Bellevue Way north of NE 4th St	Lk Washington Loop Trail at Coal Creek Pkwy SE
2009	17	20	21	15	5	
2010	42	25	9	19	12	
2011	39		12	19	13	
2012	23		17	12		48
2013	14	22	5	16		35
2014	20	31	9	26		72

Table 24: Average Weekday PM Peak Period Bicycle Volumes 2009-2014

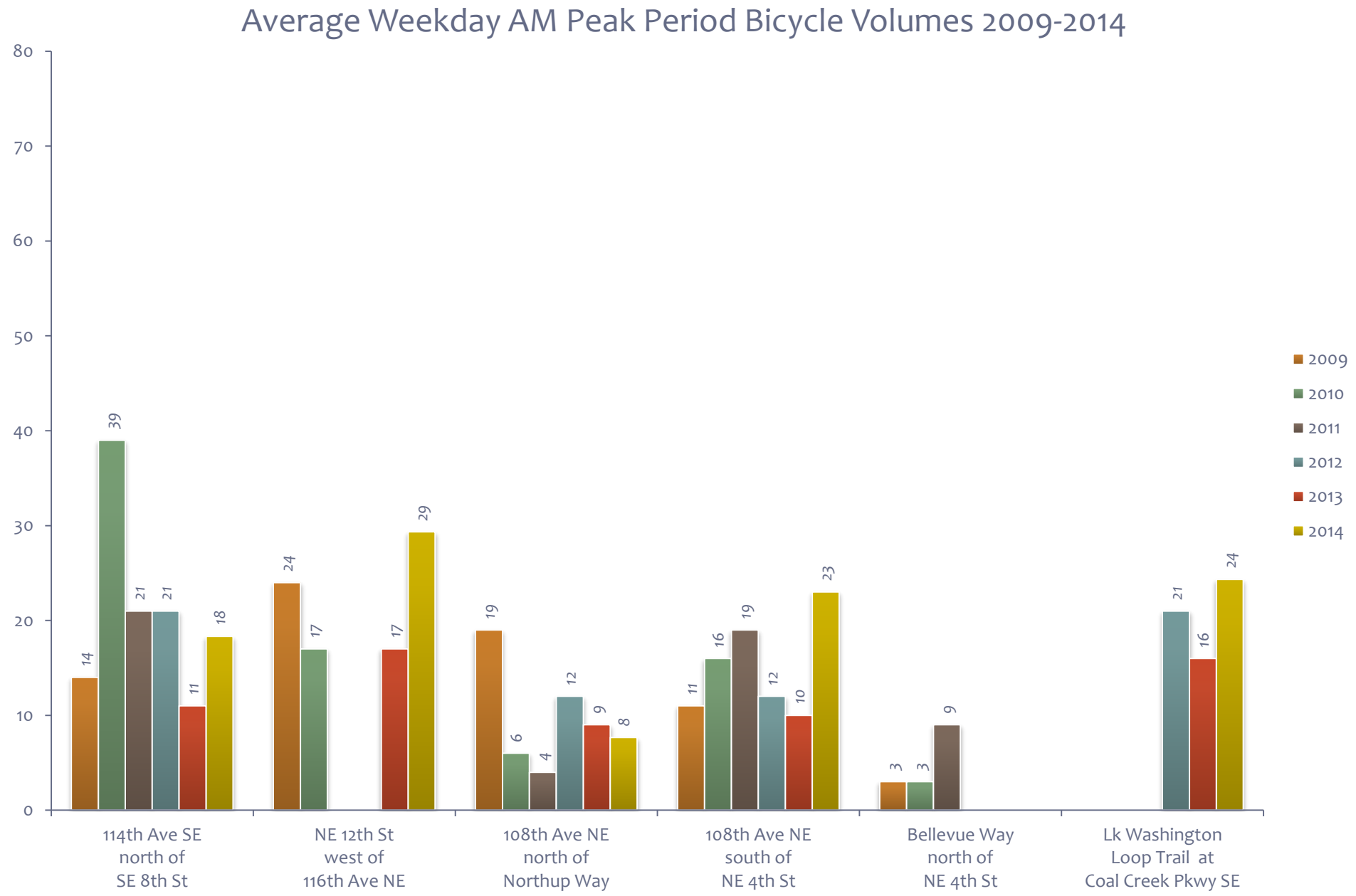


Figure 18: Average Weekday AM Peak Period Bicycle Volumes 2009-2014

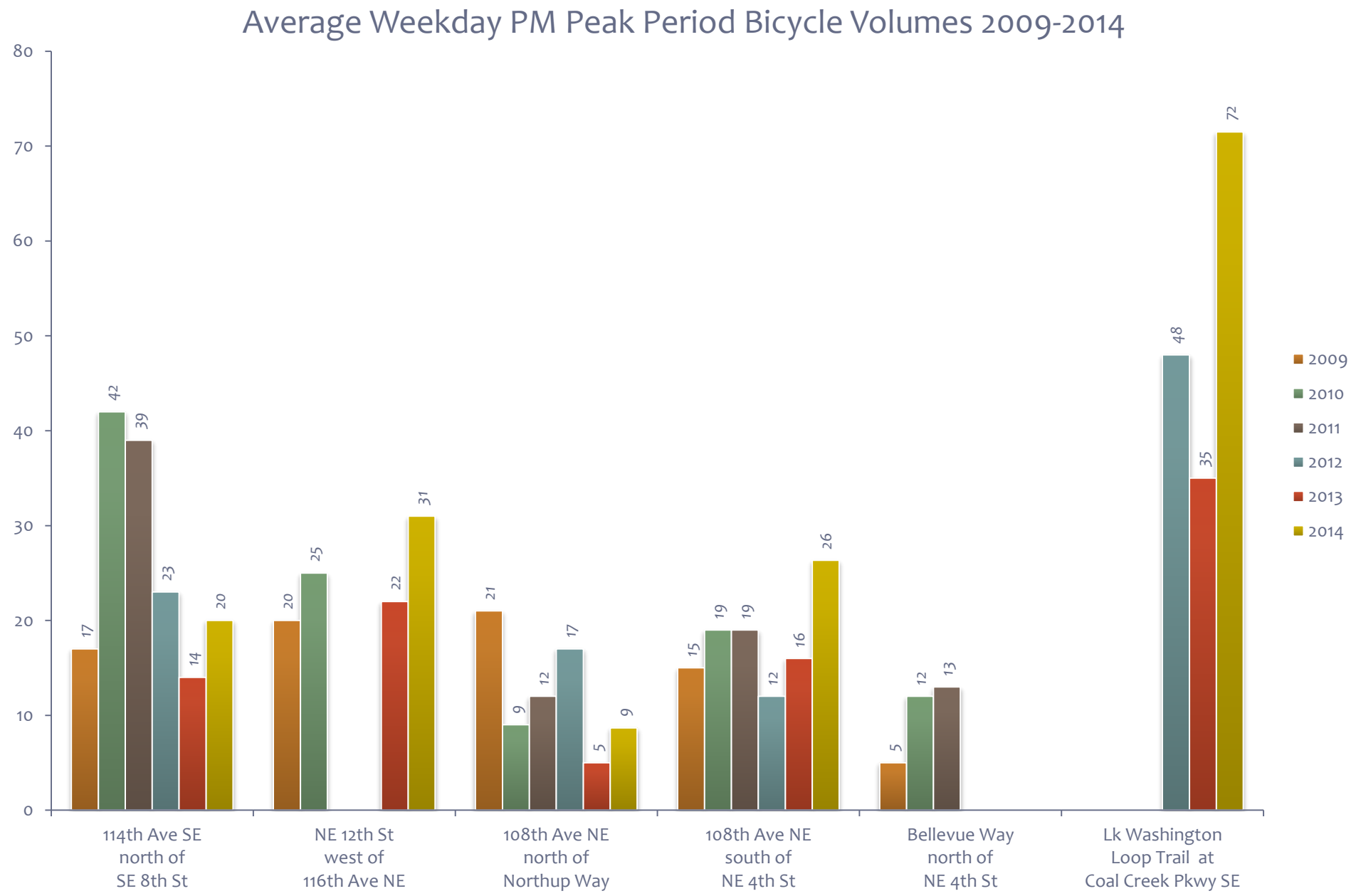


Figure 19: Average Weekday PM Peak Period Bicycle Volumes 2009-2014

Appendix C: All City of Bellevue Locations Count Data (2009-2014)

		2009		2010		2011		2012		2013		2014	
No.	Location	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
A	108th Ave NE north of NE Northup Way	19	11	34	38	28	32	32	52	24	30	34	40
B	115th Ave NE east of 116th Ave NE	4	27					6	11				8
C	SR 520 Trail at NE 24TH St							6	15	3	14	5	
D	NE 12th St west of 116th Ave NE	32	27	16	16		79	52		29	28	21	35
E	Bellevue Way north of NE 4th St	265	359	235	443	229	569					272	691
F	108th Ave NE south of NE 4th St	295	361	294	368	441	507	247	351	222	370	475	546
G	114th Ave NE north of SE 8th St	4	6	30	16	9	9	7	10	7	23	8	16
H	I-90 Trail at Enatai					10	91		47	5	35	8	27
I	118th Ave SE north of I-90												
J	I-90 Bike Trail west of Factoria Blvd SE					48	11	50	111	34	80		93
K	I-90 Sunset Bike Trail east of Eastgate Way						23	7	18	11	19		
L	West Lake Sammamish south of SE 26th St					2	4	6	16		16		
M	Lake Washington Loop at Coal Creek Pkwy SE							9	22	4	27	11	41
N	Trail at Newcastle Beach Park					16		4	12	9			

Table 25: Average Weekday AM and PM Peak Period Pedestrian Counts All Bellevue Locations 2009-2014

		2009		2010		2011		2012		2013		2014	
No.	Location	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
A	108th Ave NE north of NE Northup Way	19	21	6	9	4	12	21	23	9	5	8	9
B	115th Ave NE east of 116th Ave NE	6	13	17	22			16	21				23
C	SR 520 Trail at NE 24TH St	24	22	24	42			30	38	25	41	31	
D	NE 12th St west of 116th Ave NE	24	20	17	25		27	18		17	22	29	31
E	Bellevue Way north of NE 4th St	3	5	3	12	9	13					6	10
F	108th Ave NE south of NE 4th St	11	15	16	19	19	19	10	17	11	16	23	26
G	114th Ave NE north of SE 8th St	14	17	39	42	21	39	12	24	11	14	18	20
H	I-90 Trail at Enatai	61	98	119	182	143	188		194	59	73	93	127
I	118th Ave SE north of I-90	22	28	39	67								
J	I-90 Bike Trail west of Factoria Blvd SE	35	43	62	76	63	85	51	117	38	41		100
K	I-90 Sunset Bike Trail east of Eastgate Way	8	17	16	20		23	12	14	15	13		
L	West Lake Sammamish south of SE 26th St	3	5	4	20	2	15	7	13		10		
M	Lake Washington Loop at Coal Creek Pkwy SE							21	48	16	35	24	72
N	Trail at Newcastle Beach Park	17	29	20	69	30		30	87	12			

Table 26: Average Weekday AM and PM Peak Period Bicycle Counts All Bellevue Locations 2009-2014

Appendix D: Count Forms and Instructions

When recording non-motorized road users for the Annual Pedestrian and Bicycle counts, staff or volunteers are asked to follow the five basic instructions for all agencies and jurisdictions involved in the statewide documentation project. These guidelines include:

1. Count for two hours in 15-minute intervals;
2. Count bicyclists who ride on the sidewalk;
3. Count the number of people on bicycles, not the number of bicycles;
4. Pedestrians include people in wheelchairs or others using assistive devices, children in strollers, etc.; and
5. People using equipment such as skateboards or rollerblades should be included in the "other non-motorized" category.

Pedestrian and Bicycle Count:	City of Bellevue Screenline Count Form	
Data Collector Name:		
Data Collection Date:		
Count Date:		
Count Time:		
Weather Conditions:		
Average Temperature:		
Average Humidity:		
Wind Speed:		
Location:		
Time Interval	Bicyclists	Pedestrians
7:00-7:15		
7:15-7:30		
7:30-7:45		
7:45-8:00		
8:00-8:15		
8:15-8:30		
8:30-8:45		
8:45-9:00		
Total:		
Location:		
Time Interval	Bicyclists	Pedestrians
16:00-16:15		
16:15-16:30		
16:30-16:45		
16:45-17:00		
17:00-17:15		
17:15-17:30		
17:30-17:45		
17:45-18:00		
Total:		

Table 27: Count Forms