Portland Bicycle Count Report 2013-2014

PBOT
PORTLAND BUREAU OF TRANSPORTATION

Introduction

The Portland Bureau of Transportation (PBOT) has been collecting and analyzing data about bicycle use in the city of Portland since the early 1990s. The City uses various means to collect this data—most prominently from annual one-day volunteer counts at locations throughout the city. PBOT also collects data from fixed count locations on a growing number of locations, including the Hawthorne Bridge, Broadway Bridge, Riverwalk, Eastbank Esplanade and SW Moody Street. The City also uses decennial census and annual American Community Survey data from the U.S. Census Bureau about commute trips and other data as it becomes available.

This document reports on and analyzes data principally from the volunteer counts and fixed count locations. It also reports on commute data from the American Community Survey. This report includes data from both 2013 and 2014 bicycle counts as there was no independent report issued in 2013.

Collecting the data

In 2014 volunteers conducted two-hour peak hour counts at 218 locations city-wide (215 locations in 2013), typically, but not exclusively at the intersection of two established bikeways. Another 27 locations either counted in the past or identified as a desired location to begin counting were not counted in 2014, principally due to a shortage of volunteer support. An additional five locations were counted using automated equipment. More than 100 volunteers participated in these annual efforts. The volunteers recorded 39,272 people in 2013 and 41,590 people in 2014.

All the data discussed in this report is displayed graphically in the appendix.

Summary of the 2013/2014 Bicycle Counts:

- Bicycle use in Portland continues to grow. Since 2012 the annual growth in bicycle use has consistently been about 3 percent. Though lower than growth in previous years, this increase outpaces both population growth and the percentage increase in the number of Portland commuters.
- In 2014 peak summer bicycle trips across the bicycle-friendly Willamette River Bridges topped 20,000 daily trips for the first time
- The 2014 count revealed the highest proportion of women counted at just over 32 percent; Inner NE Portland had the highest proportion of women riders (35 percent) and East Portland had the fewest (21 percent)
- In 2014 helmet use also hit the highest recorded total ever at just over 81 percent; North Portland had the highest rate of helmet use (86 percent) while East Portland had the lowest (59 percent); Women continue to wear helmets at a higher rate (87 percent) than men (78 percent).
- The number of locations in 2014 with more than 1000 daily trips dropped from 69 in 2012 (and 68 in 2013) to 67 in 2014
- In 2014 103 manually counted locations showed increases compared to 2013 and 87 showed decreases; overall there were more than 5,800 additional daily bicycle trips at counted locations in 2014 compared to 2013
- From the US Census: Portland added 40,354 new commuters between 2000 and 2013. Of that number, 34 percent commuted by bicycle, 26 percent worked at home, 16 percent drove alone, 12 percent walked and 9 percent used transit; during this period bicycle commuting contributed the most to minimizing congestion from the increase in Portland commuters
- Counts on the Hawthorne Bridge for both 2013 and 2014 indicate that bicycle use rises to at least 80 percent of peak use for 7 months of the year

Counts on and off the bridges

Bicycle use across the five bicycle-friendly central bridges continues its long pattern of steady increase. In 2014 peak summer time bicycle trips topped 20,000 daily trips for the first time (see graph *Summer Bridge Traffic before 1992-2014 i*n Appendix). The increase in bicycle traffic across these inner Willamette River Bridges continues to show a correlation with increases in bikeway miles citywide. (see graph *Bridge Bicycle Traffic vs. Bikeway Miles* in Appendix).

The trips on the bridge are mirrored closely by those locations off the bridge that have been consistently counted since 2006. Those 30 location show a similar growth pattern to bicycle traffic counted across the bridges. (see graph *Bridge and Non-Bridge Traffic* in Appendix).

Change in bicycle use by district

Table 1 shows the change in counted bicycle trips by district each year beginning in 2008. The chart shows the large growth in bicycle transportation in 2008 in the face of high gasoline prices. It also shows the large drop in bicycle use the following year with the global economic collapse.

Table 1. Annual Growth in Bicycle Use by Sector 2007-2014
compared to growth in population and number of commuters

Sector	2007-2008	2008-2009	2009-2010	2010-2011	2011-2012	2012-2013	2014-2013
City Center	18.2%	-0.7%	11.9%	3.1%	0.1%	7.0%	3.8%
East Portland	32.1%	-3.2%	7.3%	18.0%	5.0%	-9.0%	-0.5%
Inner NE Portland	31.2%	-7.1%	11.4%	16.1%	9.3%	0.2%	7.2%
Inner SE Portland	42.7%	-8.6%	6.1%	2.3%	2.3%	1.5%	2.1%
North Portland	41.0%	-7.9%	7.0%	10.9%	8.5%	6.8%	0.9%
NW Portland	27.8%	-8.5%	2.7%	6.7%	-5.7%	7.9%	1.3%
SW Portland	21.1%	-10.5%	18.5%	2.9%	-6.6%	-0.1%	3.4%
City Wide	**34.1%**	**-7.2%**	**9.2%**	**6.7%**	**2.8%**	**2.8%**	**2.9%**
Population Growth	1.7%	1.1%	3.3%	1.7%	1.4%	1.2%	
Commuter Growth	3.8%	-0.6%	-1.2%	5.4%	2.1%	1.2%	

In recent years (2012-2014) the annual growth in bicycle use has levelled off at just under 3 percent. While lower than the strong growth in 2010 and 2011, bicycle use city-wide continues to outpace both population growth as well as the percentage increase in the number of Portland commuters. This is shown graphically in the Appendix (*City of Portland Bicycle Counts: Annual Growth 2007-2014*).

Table 2 shows the comparative change in bicycle counts at the same manually-counted locations by district. Citywide there were almost 6,000 more daily trips recorded in 2014 compared to 2013 at locations with data for both years. The comparison of 2012 data to 2014 data showed an increase of more than 10,000 daily trips.

Table 2. Number of count locations showing increases or decreases 2014 compared to 2013 and 2012

	2014 compared to 2013				2014 compared to 2012			
	Locations where daily bicycle trips showed an…				Locations where daily bicycle trips showed an…			
	Increase	Decrease	No comparative data	Overall Change	Increase	Decrease	No comparative data	Overall change
Inner SE	23	18	12	1,210	23	16	15	1,435
Inner NE	22	10	8	1,970	15	16	7	1,710
North	11	12	10	255	12	10	10	3,120
East	9	15	9	575	6	17	8	-675
Southwest	16	13	2	465	12	17	2	240
Northwest	9	7	3	165	10	7	2	1,085
Central City	13	12	6	1,250	16	9	6	3,310
Citywide	**103**	**87**	**50**	**5,890**	**94**	**92**	**50**	**10,225**

Data for the bicycle trips at each count location is displayed in the series of eight graphs in the Appendix titled *Daily Bicycle Traffic pre 2000, 2006, 2009-2014*. All count data for 2013 and 2014 is also mapped and shown in the Appendix (*2013 [2014] Bicycle Count Locations by Daily Bicycle Traffic*).

Neighborhood Greenways

The development of neighborhood greenways has been a focus for Portland since 2010. The miles of neighborhood greenways grew in Portland from 30 miles in 2009 to 74 miles by the end of 2014. Data about bicycle trips on neighborhood greenways is displayed in a series of four graphs in the Appendix (*Daily Bicycle Traffic Neighborhood Greenways: SE and NE; N, NW, SW and E, 500 daily trips and more; Fewer than 500 daily trips*).

Of the 85 greenway locations counts in both 2013 and 2014, 51 showed increased bicycle use and 34 showed decreases. Of the 87 locations counted in both 2010 and 2014, 73 locations showed increased bicycle use (84 percent of locations).

Gender Split

Why count gender? Cities with high bicycle use typically achieve a balance between male and female ridership. Gender parity in bicycling is considered an important indicator of success in creating safe, comfortable and attractive conditions for bicycling.

Table 3. Percentage of bicyclists Identified as female by district

DISTRICT	2006	2012	2013	2014
Citywide Total	**29.8%**	**31.4%**	**31.5%**	**32.2%**
Inner Northeast	29.8%	35.4%	35.3%	35.7%
North	34.3%	34.8%	34.4%	34.1%
Inner Southeast	30.0%	31.2%	31.6%	31.6%
Northwest	28.9%	31.2%	29.5%	31.6%
Southwest	23.0%	24.8%	29.8%	31.4%
East	13.2%	21.1%	21.0%	21.0%

The 2014 count found the highest ratio of women to men recorded in Portland. Of the 41,590 people recorded riding bicycles in Portland fully 32.2% of them were women. This is slightly better than in 2013 when 31.5% of the 39,272 people counted were women. There are significant differences in the gender split among the sectors of the city. In 2014 inner NE and North Portland had the highest proportion of female cyclists, at 36 percent and 34 percent, respectively. East Portland had the fewest female cyclists, at only 21 percent of all people counted. Table 3 shows the proportion of female cyclists by district for 2006, and for 2012 through 2014. This data is also displayed graphically in the Appendix (*Gender by Year 1992*-2014 and *Gender by Sector 2013 [2014])*.

Table 4 shows the locations with the highest and lowest proportion of women counted. In general, the proportion of women riding bicycles is higher in the closer-in neighborhoods and lower in East and Southwest Portland. The locations with the highest proportion of women were in North Portland, with a count at N Fessenden and the Peninsula Crossing trail finding a majority of women. These contrasts with the very low proportions of fewer than 15 percent women at locations in East and Southwest Portland. This information is mapped in the Appendix (*2013 [2014] Bicycle Count Locations by Percentage of Women)*.

Table 4. 2014 Locations with Highest and Lowest Share of Female Cyclists*

RANK	LOCATION	% TRIPS BY WOMEN	TOTAL DAILY TRIPS	RANK (%) in 2013
1	N Fessenden & Peninsula Crossing	56%	430	NA
2	N Vancouver & Ainsworth	48%	1,260	9 (41%)
3	SW Moody & Gibbs	48%	2,575	12 (40%)
4	NE Irving & 21st	44%	575	3 (43%)
5	SW Moody & River Parkway	44%	2,255	19 (38%)
6	SW Waterfront & Harbor Way	44%	2,900	11 (41%)
7	NE Going & 9th	43%	1,990	20 (38%)
8	NE Tillamook & 28th	42%	1,490	13 (40%)
9	NE Hancock & 47th	42%	780	56 (33%)
10	NE Broadway & 7th	41%	1,890	15 (39%)
…				
166	E Burnside & 122nd	17%	355	139 (19%)
167	SE Steele at I-205 overcrossing	16%	650	130 (23%)
168	SW Capitol Hwy & Terwilliger	16%	670	128 (23%)
169	SW Barbur & Hamilton	14%	815	150 (15%)
170	SW Canyon Ct & Skyline	14%	675	153 (14%)
171	SE Holgate & 100th	12%	250	NA
172	SW Multnomah & 25th	12%	300	157 (12%)
173	SW Terwilliger & Taylors Ferry	12%	430	126 (24%)
174	SE Division & 122nd	9%	335	159 (11%)
175	SW Kingston & Rose Garden	8%	380	NA

*minimum 50 people counted during 2-hour peak

Helmet Use

The use of helmets by people riding bicycles in Portland has generally hovered at the 80 percent level since 2008. City wide helmet use in 2014 hit its highest recorded levels in Portland at just over 81%. There continue to be large discrepancies in helmet use based on sector of city, as well as based on gender.

Helmet use was highest in North Portland and Southwest Portland and by far the lowest in East Portland at 59 percent of people counted. This is consistent with data from previous years. Overall, women wear helmets at higher rates than men. Citywide, 87 percent of women counted were wearing helmets; 78 percent of men counted wore helmets.

This data is displayed graphically in the Appendix (*Helmet use by Sector 2013 [2014], Helmet Use by Gender and Sector 2013 [2014])* and is also shown on maps (*2013 [2014] Bicycle Count Locations by Percentage of Helmet Use*).

Table 5. Helmet Use by District

DISTRICT	2006	2012	2013	2014
Citywide Total	**74%**	**80%**	**81%**	**81%**
Inner Northeast	69%	79%	81%	81%
North	80%	83%	83%	86%
Inner Southeast	72%	79%	80%	80%
Northwest	60%	80%	78%	79%
Southwest	90%	90%	86%	85%
East	34%	63%	58%	59%

Hawthorne Bridge Data

Tables 6 and 7 display the raw monthly data for bicycle trips across the Hawthorne Bridge in 2013 and 2014. Bicycle use across the bridge grew approximately 1.3% between 2013 and 2014, with higher weekday growth (2.6%) relative to weekend use, which saw a 5 percent decrease in 2014 compared to 2013.

Figure 1 graphically displays the data for average weekday, average weekend and peak day for the two years.

The weekend comparison from 2013 to 2014 on the Hawthorne Bridge is affected by the record-setting bike count recorded on Saturday, June 9, 2013. The 9,834 trips recorded that day remain the record highest one-day count for the bridge. On that day, the World Naked Bike Ride started at the Portland Art Museum downtown and attracted high bike traffic.

On more analytic notes, approximately one third of each year's trips were taken in the summer months (July, August, and September) in both years (31 percent of annual trips in 2013 and 33 percent in 2014). The lowest bicycle use of the year is during the winter (January, February and March) when less than 20 percent of all annual trips are recorded. See Tables 8 and 9 for a breakdown by month and season for the two-year period.

Hawthorne Bridge Bicycle Counts 2013

Bicycle Trips by Month	Total Trips	Total Weekday	Total Weekend	Average Weekday	Average Weekend	Peak Day
January	95,602	85,895	9,707	3,735	1,213	4,682
February	107,245	91,772	15,473	4,589	1,934	5,532
March	126,930	100,790	26,140	4,800	2,614	5,711
April	152,216	132,817	19,399	6,037	2,425	7,828
May	165,305	138,919	26,386	6,040	3,298	8,233
June	174,748	128,931	45,817	6,447	4,582	9,834
July	190,272	157,168	33,104	6,833	4,138	7,933
August	188,369	150,560	37,809	6,844	4,201	8,452
September	151,812	127,535	24,277	6,073	2,697	7,476
October	161,149	142,550	18,599	6,198	2,325	7,128
November	99,344	84,839	14,505	4,991	1,813	6,067
December	78,403	68,614	9,789	3,119	1,088	4,991
Total 2013	1,691,395	1,410,390	281,005			

Table 6. *Hawthorne Bridge Counts 2013. High in each category highlighted. Secondary high peak day in August is outlined as June's peak reflected an event.*

Hawthorne Bridge Bicycle Counts 2014

Bicycle Trips by Month	Total Trips	Total Weekday	Total Weekend	Average Weekday	Average Weekend	Peak Day
January	113,650	100,865	12,785	4,385	1,598	5,392
February	80,845	70,807	10,038	3,540	1,255	4,846
March	120,290	100,294	19,996	4,776	2,000	6,597
April	148,792	129,132	19,660	5,870	2,458	8,031
May	173,992	147,262	26,730	6,694	2,970	8,395
June	170,232	138,351	31,881	6,588	3,542	8,222
July	190,607	160,715	29,892	6,988	3,737	7,886
August	189,020	148,052	40,968	7,050	4,097	7,922
September	179,062	148,735	30,327	6,761	3,791	7,854
October	159,684	139,124	20,560	6,049	2,570	8,293
November	99,155	85,375	13,780	4,269	1,378	6,266
December	88,878	78,819	10,059	3,427	1,257	5,089
Total 2014	1,714,207	1,447,531	266,676			

Table 7.*Hawthorne Bridge Counts 2014. High in each category highlighted.*

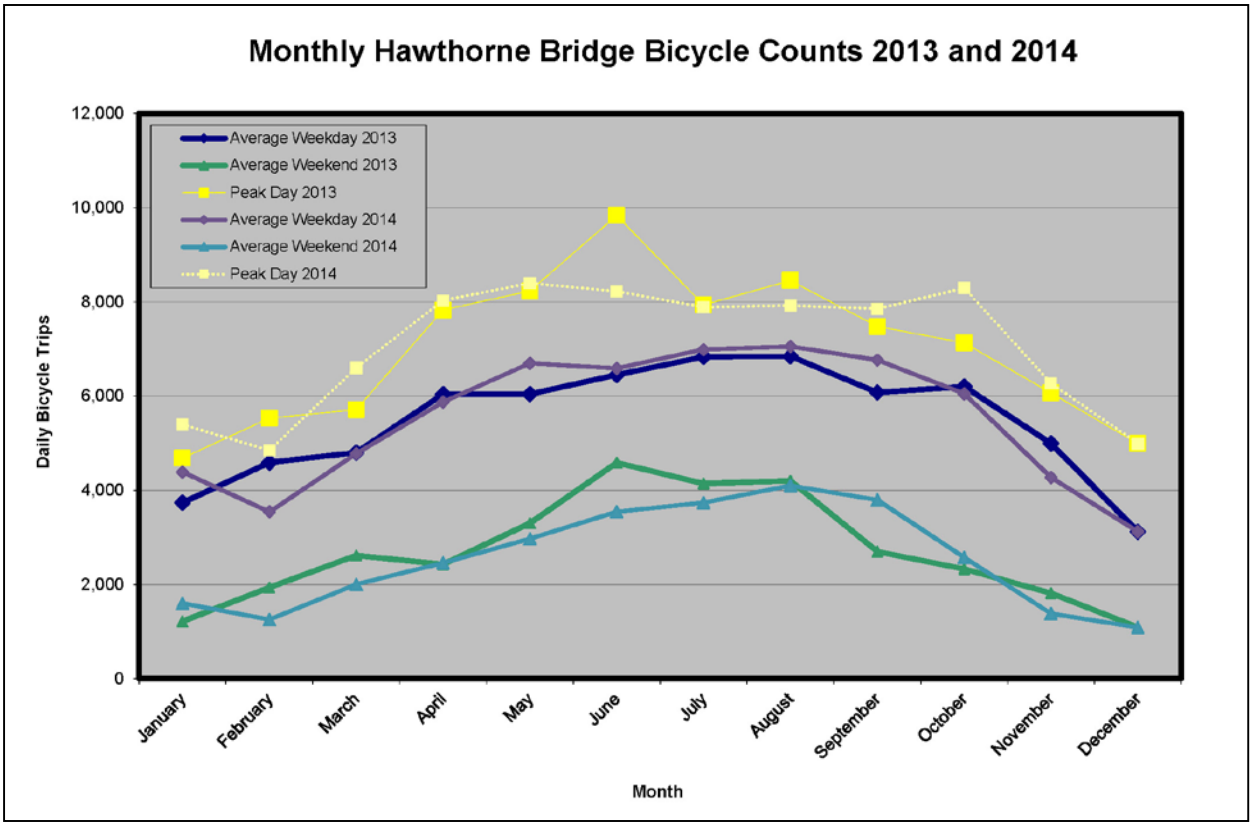


Figure 1. Monthly Hawthorne Bridge Bicycle Counts 2013 and 2014

Like the other data presented here, this displays a consistency between the years of monthly and seasonal use on the Hawthorne Bridge.

One of the perennial questions asked about bicycle transportation is how much does bicycle use drop during adverse weather conditions? Data from the Hawthorne Bridge shows that for 2013 and 2014 weekday bicycle use was at least 80 percent of peak use for seven months of each year. In 2013 bicycle use dipped below 50 percent of peak use only one month (December) and in 2014 it dipped below 50 percent of peak use in both December and February. The weekday use profile in 2014 was more consistent across the months in 2014 than in 2013. This consistency is also displayed in the figures in the Appendix that show daily bicycle use in 2013 and 2014, respectively (*Daily Bicycle Trips on the Hawthorne Bridge 2013 [2014]*).

Hawthorne Bridge:
Proportion of trips by month and season
2013 and 2014

	% of annual trips this month			% of trips by Season	
Year:	**2013**	**2014**		**2013**	**2014**
January	6%	7%	Winter	19%	18%
February	6%	5%			
March	8%	7%			
April	9%	9%	Spring	29%	29%
May	10%	10%			
June	10%	10%			
July	11%	11%	Summer	31%	33%
August	11%	11%			
September	9%	10%			
October	10%	9%	Fall	20%	20%
November	6%	6%			
December	5%	5%			

Table 10 indicates that bicycle use on weekdays during the dark and rainy months remains at higher levels compared to annual peak use than does bicycle use on weekends during winter months. This seems to indicate the relative strength of bicycling for utilitarian purposes versus recreational uses.

Average Daily Totals by Season

	2013			2014		
	Weekday	Weekend	Overall	Weekday	Weekend	Overall
Winter	4,351	1,974	3,664	4,249	1,647	3,498
Spring	6,164	3,523	5,410	6,381	3,010	5,418
Summer	6,595	3,661	5,766	6,932	3,892	6,073
Fall	4,485	1,650	3,684	4,596	1,708	3,780
Annual	5,404	2,702	4,634	5,546	2,564	4,696

***Table 9**. Average daily totals by year and season.*

This is also reflected in the total number of days that bicycle trips across the bridge exceeded certain levels. In both years bicycle traffic hit 5,000 or greater daily trips on 44% of the days. At higher levels there was a noted difference between the years. In 2013 approximately 13 percent of all days saw bicycle traffic of 7000 trips or more while in 2014 fully one-fifth of days saw that level of traffic. The difference is even greater when looking just at the weekdays. In

Hawthorne Bridge bicycle trips relative to peak month 2013 and 2014

	2013			2014		
	Monthly total	Weekday	Weekend	Monthly total	Weekday	Weekend
January	*0.50*	*0.55*	*0.21*	*0.60*	*0.63*	*0.31*
February	*0.56*	*0.58*	*0.34*	*0.42*	*0.44*	*0.25*
March	*0.67*	*0.64*	*0.57*	*0.63*	*0.62*	*0.49*
April	*0.80*	*0.85*	*0.42*	*0.78*	*0.80*	*0.48*
May	*0.87*	*0.88*	*0.58*	*0.91*	*0.92*	*0.65*
June	*0.92*	*0.82*	**1.00**	*0.89*	*0.86*	*0.78*
July	**1.00**	**1.00**	*0.72*	**1.00**	**1.00**	*0.73*
August	*0.99*	*0.96*	*0.83*	*0.99*	*0.92*	**1.00**
September	*0.80*	*0.81*	*0.53*	*0.94*	*0.93*	*0.74*
October	*0.85*	*0.91*	*0.41*	*0.84*	*0.87*	*0.50*
November	*0.52*	*0.54*	*0.32*	*0.52*	*0.53*	*0.34*
December	*0.41*	*0.44*	*0.21*	*0.47*	*0.49*	*0.25*

***Table 10**. Bicycle trips relative to monthly peaks. Highest count for each month by category (identified in dark green with the number "1.00") is used to index all other monthly counts by category.*

Proportion of days with 5000 or more daily bicycle trips on the Hawthorne Bridge				
	2013		2014	
Number of days with trips>=5000	162	*44%*	160	*44%*
Number of days with trips>=6000	103	*28%*	117	*32%*
Number of days with trips>=7000	49	*13%*	72	*20%*
Number of days with trips>=8000	6	*2%*	8	*2%*

Table 11. Days in 2013 and 2014 with high bicycle traffic on the Hawthorne Bridge. 2014 saw more days than 2013 with relatively high volumes of bicycle traffic

Proportion of weekdays with 5000 or more daily bicycle trips on the Hawthorne Bridge				
	2013		2014	
Number of weekdays with trips>=5000	158	*61%*	157	*60%*
Number of weekdays with trips>=6000	101	*39%*	116	*44%*
Number of weekdays with trips>=7000	47	*18%*	72	*28%*
Number of weekdays with trips>=8000	5	*2%*	8	*3%*

Table 12. Weekdays in 2013 and 2014 with high bicycle traffic on the Hawthorne Bridge. More than one-quarter of weekdays in 2014 saw bicycle traffic exceeding 7000 daily trips.

2014 more than one-quarter of weekdays (28 percent) had bicycle traffic exceeding 7,000 trips, compared to 18 percent in 2013. In both years, 6 out of 10 weekdays had bicycle traffic exceeding 5,000 daily trips. See Tables 6 and 7.

Weekend bicycle use on the bridge shows much more variation. Weekend use drops to as low as one-fifth of peak weekend use. Table 5 uses color to display the relationship between the peak month and the rest of the year for monthly, weekday and weekend bicycle trips.

In both years July had the highest number of bicycle trips and weekday bicycle trips. Also in both years bicycle use across the bridge was at least 80 percent of peak use between April and October. The months with the lowest bicycle use were December in 2013 and February in 2014.

Crash Data

The City of Portland reports an indexed bicycle crash rate based on the reported number of crashes and the number of daily bicycle trips across the central city Willamette River Bridges. Beginning in 2008, in response to the city's Community Policing Agreement with the Police Bureau, the Bicycle Transportation Alliance and Oregon Walks (then, the Willamette Pedestrian Coalition), the Police Bureau amended their procedures for reporting crashes, resulting in more of the crashes involving a person riding a bicycle being reported. Because of this lowered threshold for reporting, reported bicycle crashes no longer offer an "apples to apples" comparison to bicycle crashes reported prior to 2008.

Reported crashes in 2012 and 2013 (the last two years for which this data is currently available) show an increase compared to earlier years.

Census Commute Data

Commute data from the U.S. Census Bureau's American Community Survey one-year survey for 2013 shows that the number of Portland commuters increased by 40,354 to 311,588 since the decennial census in 2000. Though the reports use different methodologies, this suggests an increase of 15 percent. Most of that increase in commute trips were taken by bicycle (34 percent). The second largest category was "worked at home" (26 percent), followed by "drove alone" at 16 percent. The data is displayed in the Appendix (*Portland commuters: change in mode 2000-2013)*. Together, bicycle transportation and working at home did the most to minimize the potential for increased automobile congestion on Portland's streets related to the city's growing population.

Appendix: Graphs, Charts and Maps

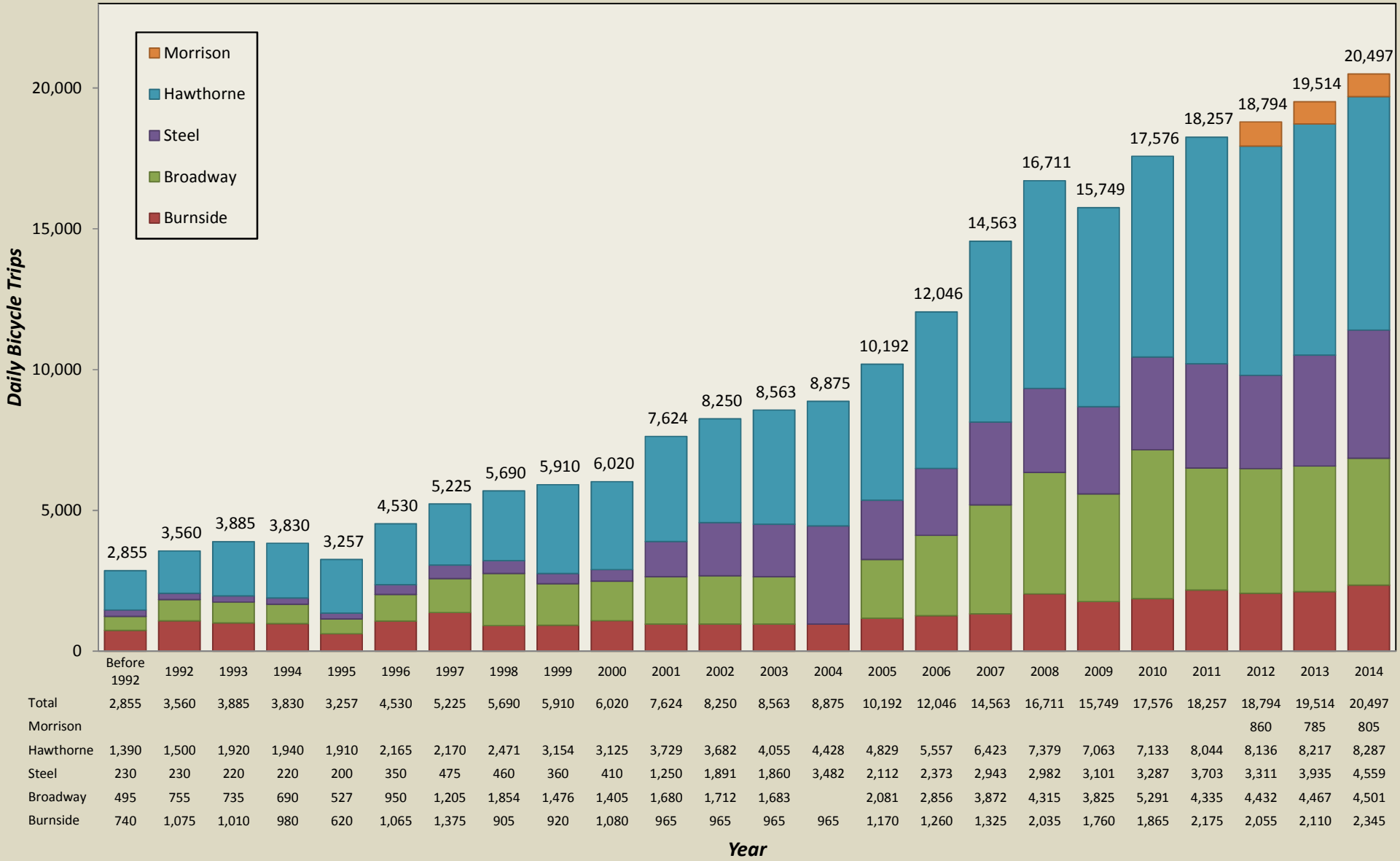
Summer Bridge Traffic (before 1992-2014)
Bridge Bicycle Traffic vs. Bikeway Miles (Five Main Portland Bridges)
Bridge and Non-Bridge Traffic
City of Portland Bicycle Counts: Annual Growth 2007-2014
Daily Bicycle Traffic pre 2000 (or 2000/2001), 2006, 2009-2014
- Inner SE Portland pt. 1
- Inner SE Portland pt. 2
- Inner NE Portland
- North Portland
- East Portland
- SW Portland (not incl. City Center)
- NW Portland (not incl. City Center)
- City Center

Daily Bicycle Traffic Neighborhood Greenways
- SE and NE
- N, NW, SW and E
- 500 daily trips and more
- Fewer than 500 daily trips

Gender by Year (1992-2014)
Gender by Sector 2013
Gender by Sector 2014
Helmet Use by Year 1992-2014
Helmet Use by Sector 2013
Helmet Use by Sector 2014
Helmet Use by Gender and Sector 2013
Helmet Use by Gender and Sector 2014
2013 Bicycle Count Locations by Daily Bicycle Traffic (map)
2013 Bicycle Count Locations by Percentage of Women (map)
2013 Bicycle Count Locations by Percentage of Helmet Use (map)
2014 Bicycle Count Locations by Daily Bicycle Traffic (map)
2014 Bicycle Count Locations by Percentage of Women (map)
2014 Bicycle Count Locations by Percentage of Helmet Use (map)
Daily Bicycle Trips on the Hawthorne Bridge 2013
Daily Bicycle Trips on the Hawthorne Bridge 2014
Bicycle Bridge Traffic vs. Bicycle Crashes
Portland commuters: change in mode 2000-2013

Summer Bridge Traffic

before 1992-2014



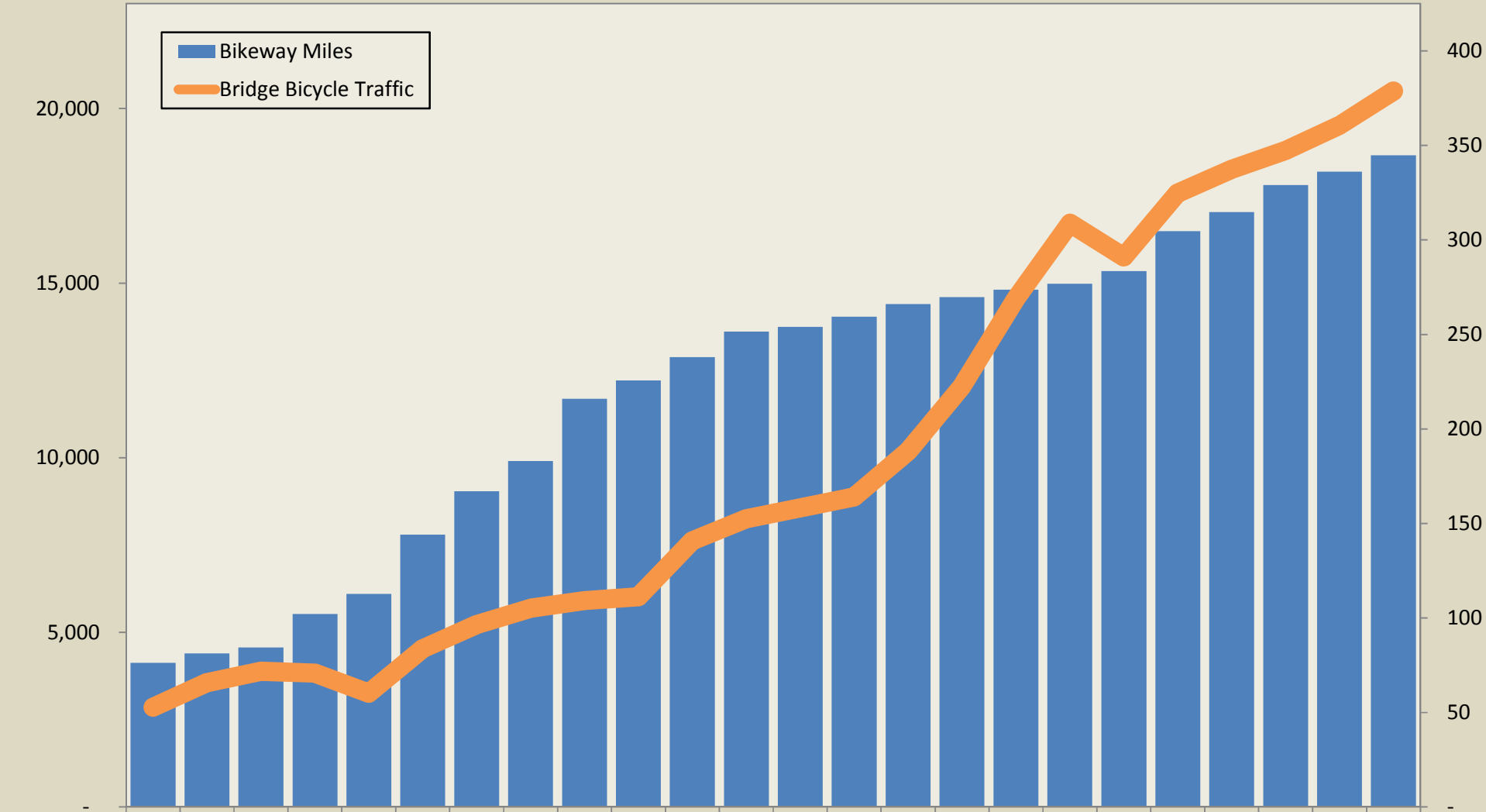
	Before 1992	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Total	2,855	3,560	3,885	3,830	3,257	4,530	5,225	5,690	5,910	6,020	7,624	8,250	8,563	8,875	10,192	12,046	14,563	16,711	15,749	17,576	18,257	18,794	19,514	20,497
Morrison																						860	785	805
Hawthorne	1,390	1,500	1,920	1,940	1,910	2,165	2,170	2,471	3,154	3,125	3,729	3,682	4,055	4,428	4,829	5,557	6,423	7,379	7,063	7,133	8,044	8,136	8,217	8,287
Steel	230	230	220	220	200	350	475	460	360	410	1,250	1,891	1,860	3,482	2,112	2,373	2,943	2,982	3,101	3,287	3,703	3,311	3,935	4,559
Broadway	495	755	735	690	527	950	1,205	1,854	1,476	1,405	1,680	1,712	1,683		2,081	2,856	3,872	4,315	3,825	5,291	4,335	4,432	4,467	4,501
Burnside	740	1,075	1,010	980	620	1,065	1,375	905	920	1,080	965	965	965	965	1,170	1,260	1,325	2,035	1,760	1,865	2,175	2,055	2,110	2,345

Based on either 24-hour hose counts or extrapolated from 2-hour peak counts.
* Broadway Bridge closed for construction during time of 2004 count.

** 2012 was the first year that the Morrison Bridge bikeway was open all summer to bicycle traffic.

Bridge Bicycle Traffic vs. Bikeway Miles

(Five Main Portland Bridges)



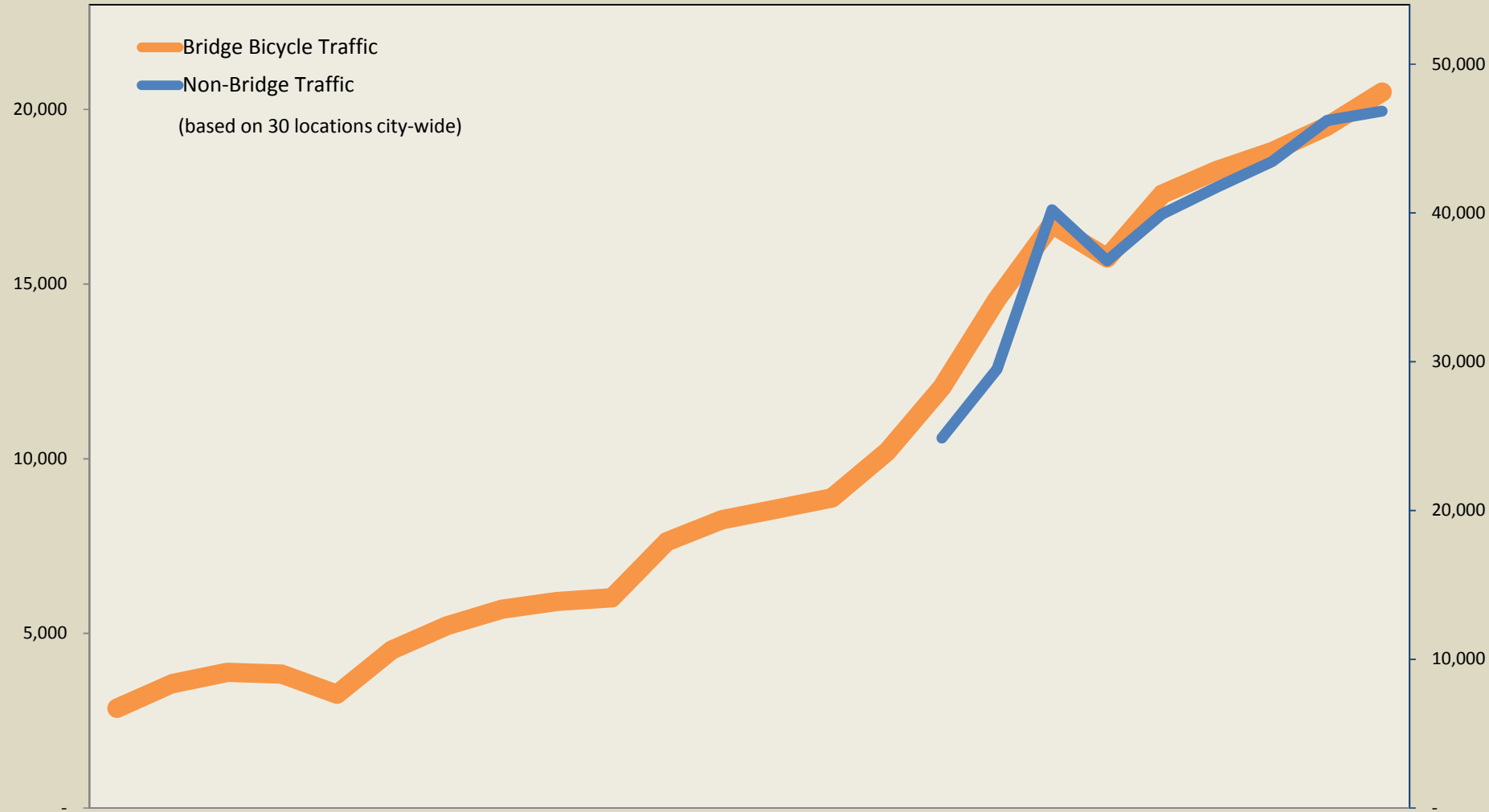
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Bikeway Miles	76	81	84	102	113	144	167	183	216	226	238	252	254	259	266	270	274	277	283	305	315	329	336	345
Bridge Bicycle Traffic	2,855	3,560	3,885	3,830	3,257	4,530	5,225	5,690	5,910	6,020	7,624	8,250	8,563	8,875	10,192	12,046	14,563	16,711	15,749	17,576	18,257	18,794	19,514	20,497

Year

Extrapolated from peak period counts

Bridge and Non-Bridge Traffic

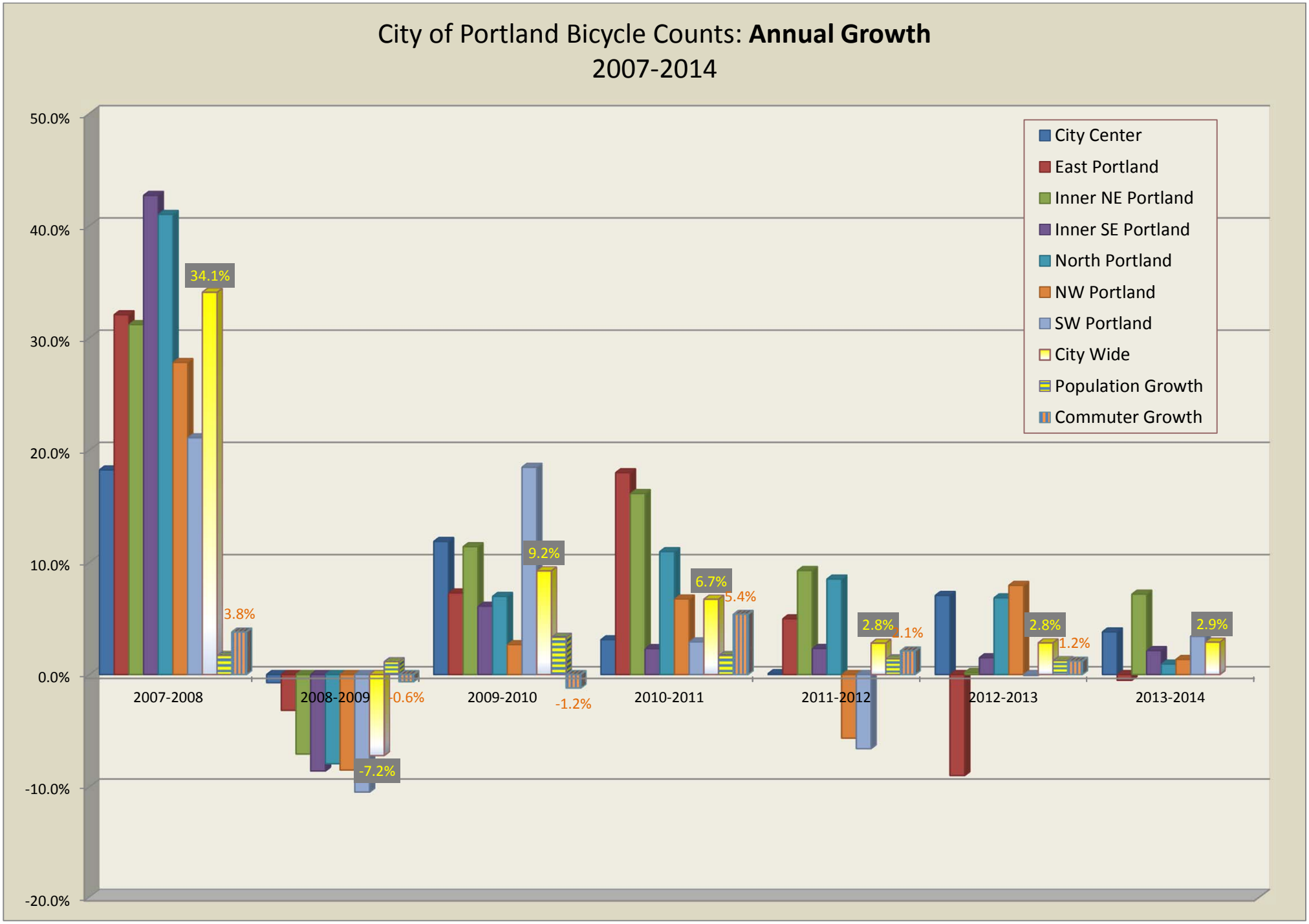
Bridge Bicycle Traffic



	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Bridge Bicycle Traffic	2,855	3,560	3,885	3,830	3,257	4,530	5,225	5,690	5,910	6,020	7,624	8,250	8,563	8,875	10,192	12,046	14,563	16,711	15,749	17,576	18,257	18,794	19,514	20,497
Non-Bridge Traffic																24,875	29,500	40,205	36,780	39,935	41,745	43,450	46,225	46845

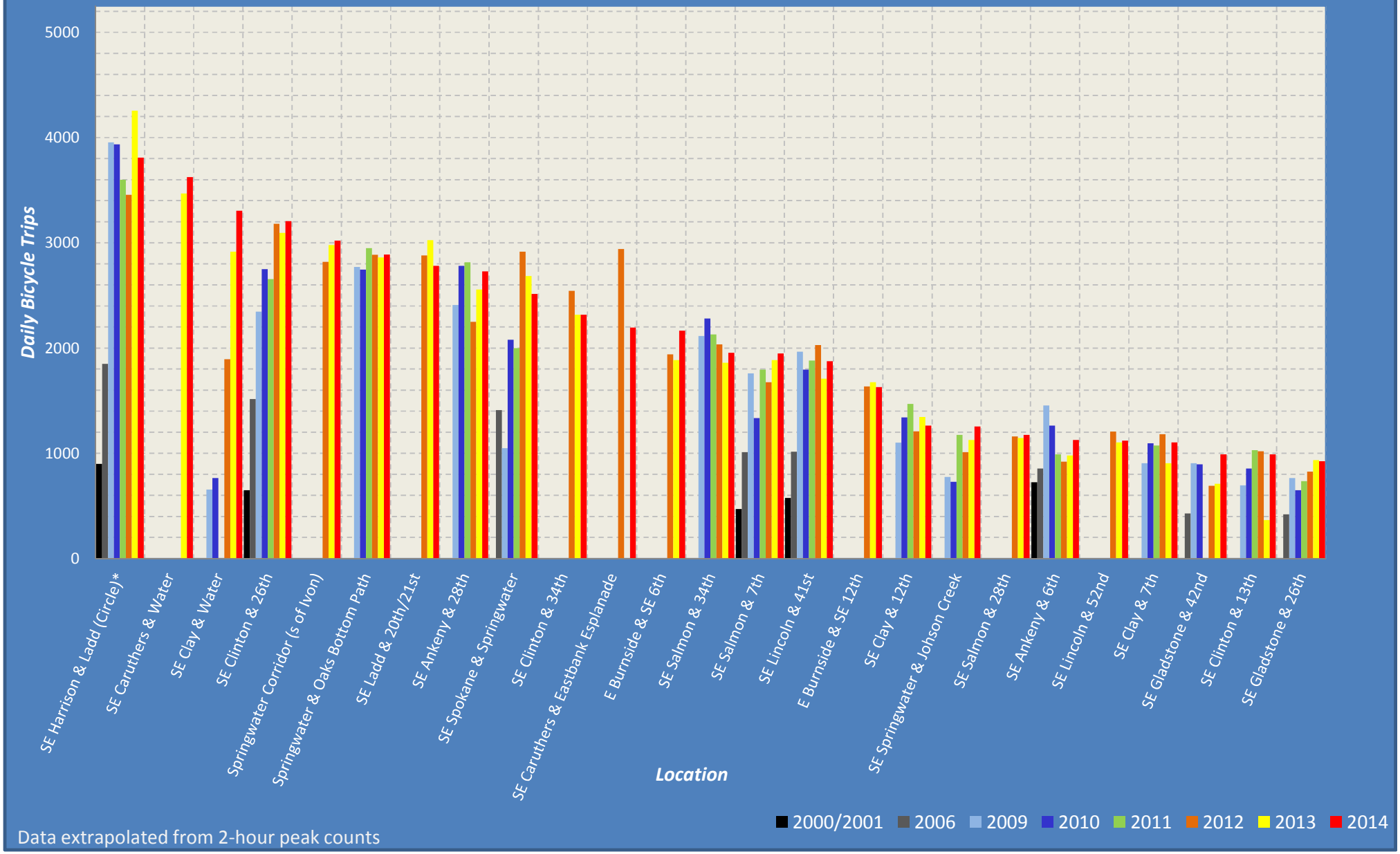
Year

Based on 24-hour hose counts or extrapolated from peak period counts.


City of Portland Bicycle Counts: **Annual Growth**
2007-2014
50.0%
40.0%
30.0%
20.0%
10.0%
0.0%
-10.0%
-20.0%
City Center
East Portland
Inner NE Portland
Inner SE Portland
North Portland
NW Portland
SW Portland
City Wide
Population Growth
Commuter Growth
34.1%
3.8%
-7.2%
-0.6%
9.2%
-1.2%
6.7%
5.4%
2.8%
1.1%
2.8%
1.2%
2.9%
2007-2008
2008-2009
2009-2010
2010-2011
2011-2012
2012-2013
2013-2014

Daily Bicyle Traffic: **Inner SE Portland pt. 1**

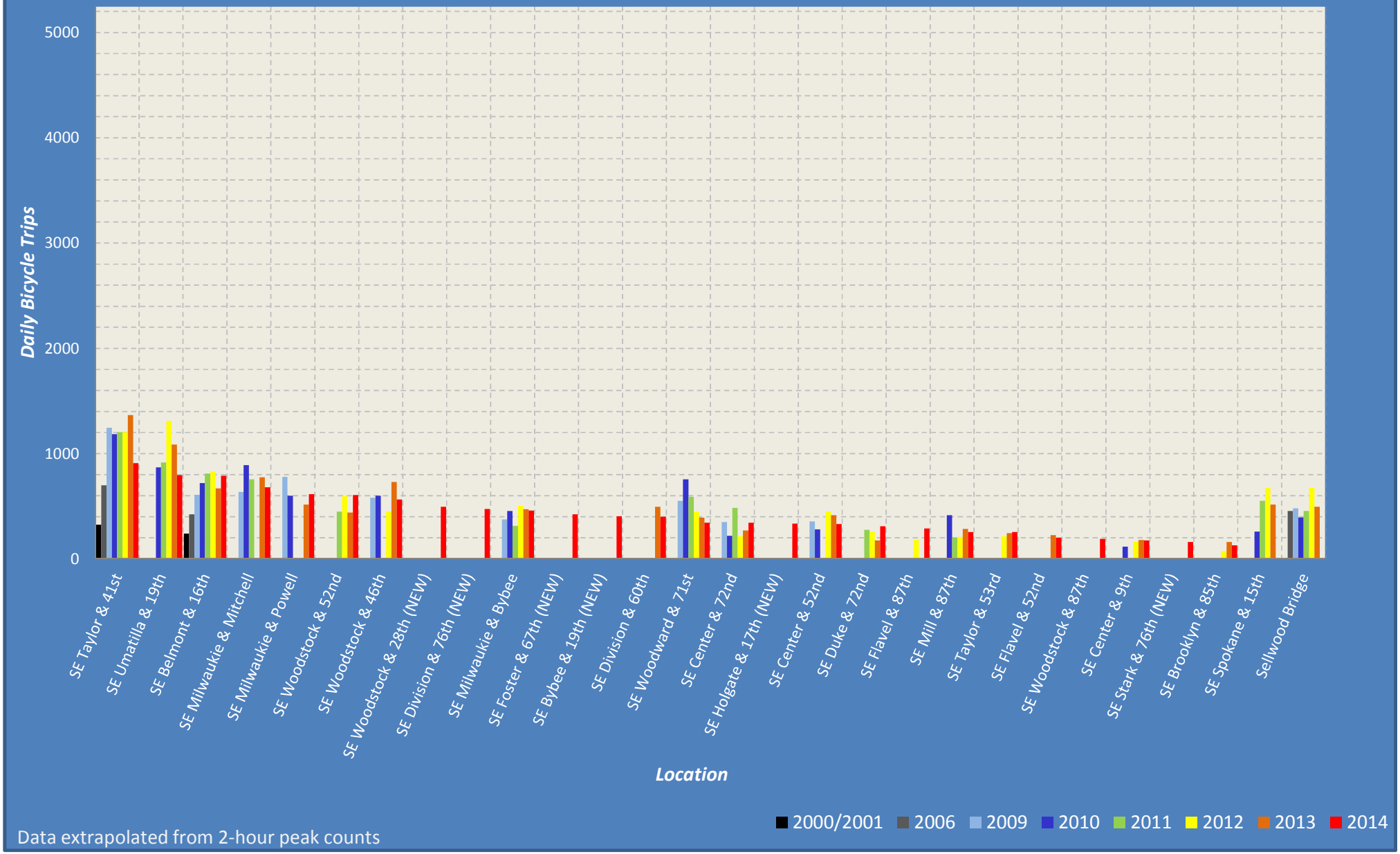
2000/2001, 2006, 2009-2014



Data extrapolated from 2-hour peak counts

Daily Bicyle Traffic: **Inner SE Portland pt. 2**

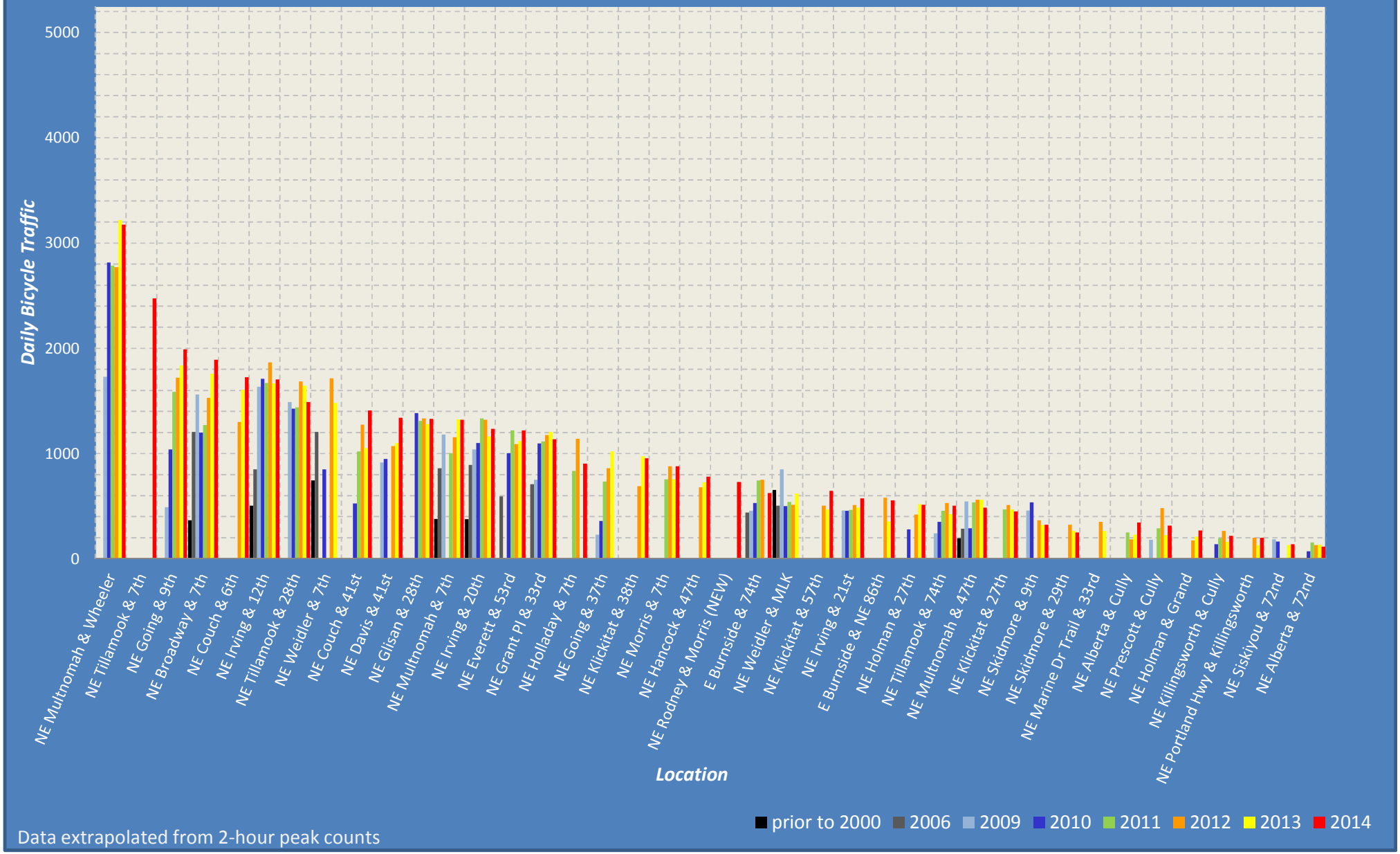
2000/2001, 2006, 2009-2014



Data extrapolated from 2-hour peak counts

Daily Bicyle Traffic: **Inner NE Portland**

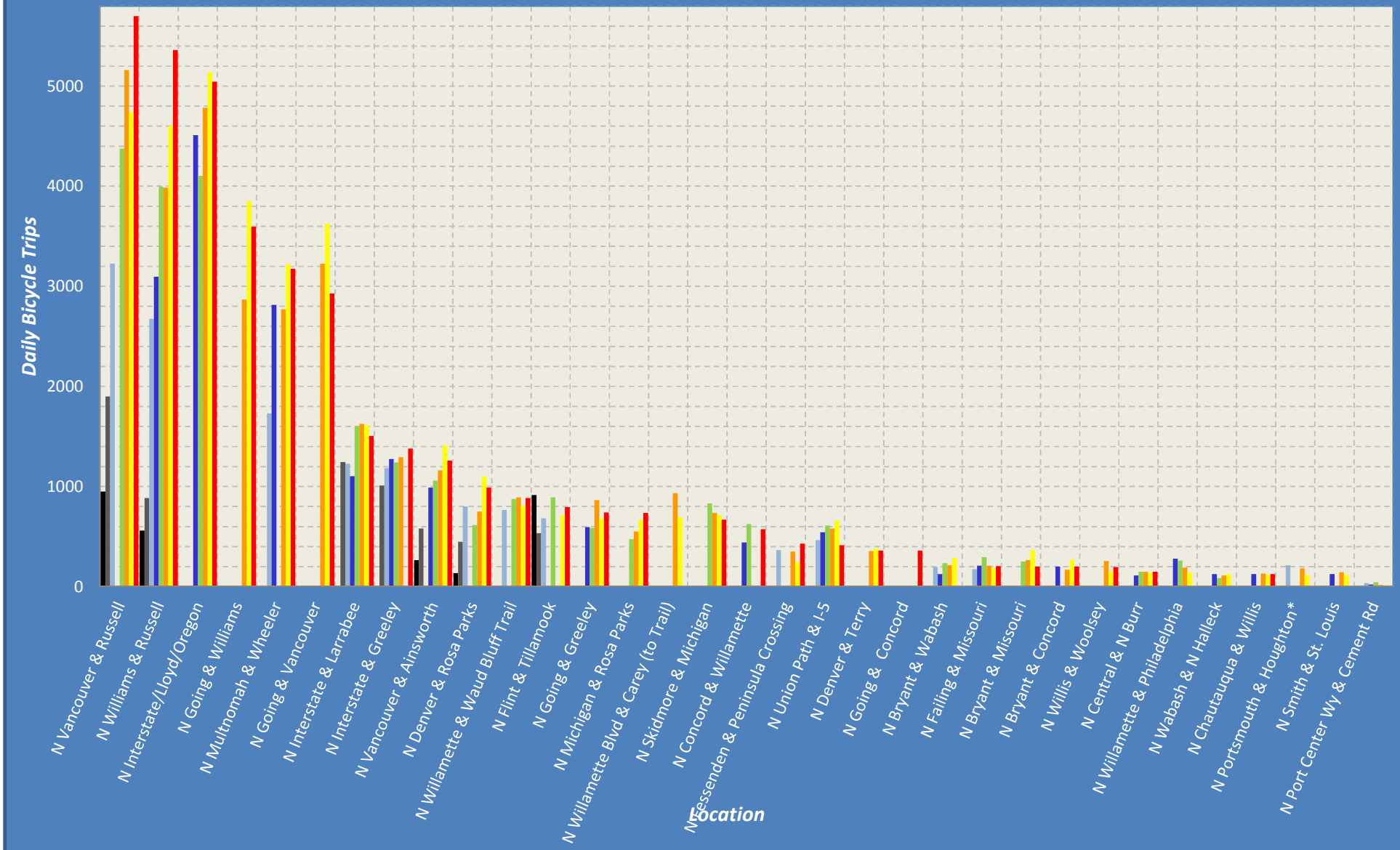
pre-2000, 2006, 2009-2014



Data extrapolated from 2-hour peak counts

Daily Bicyle Traffic: **North Portland**

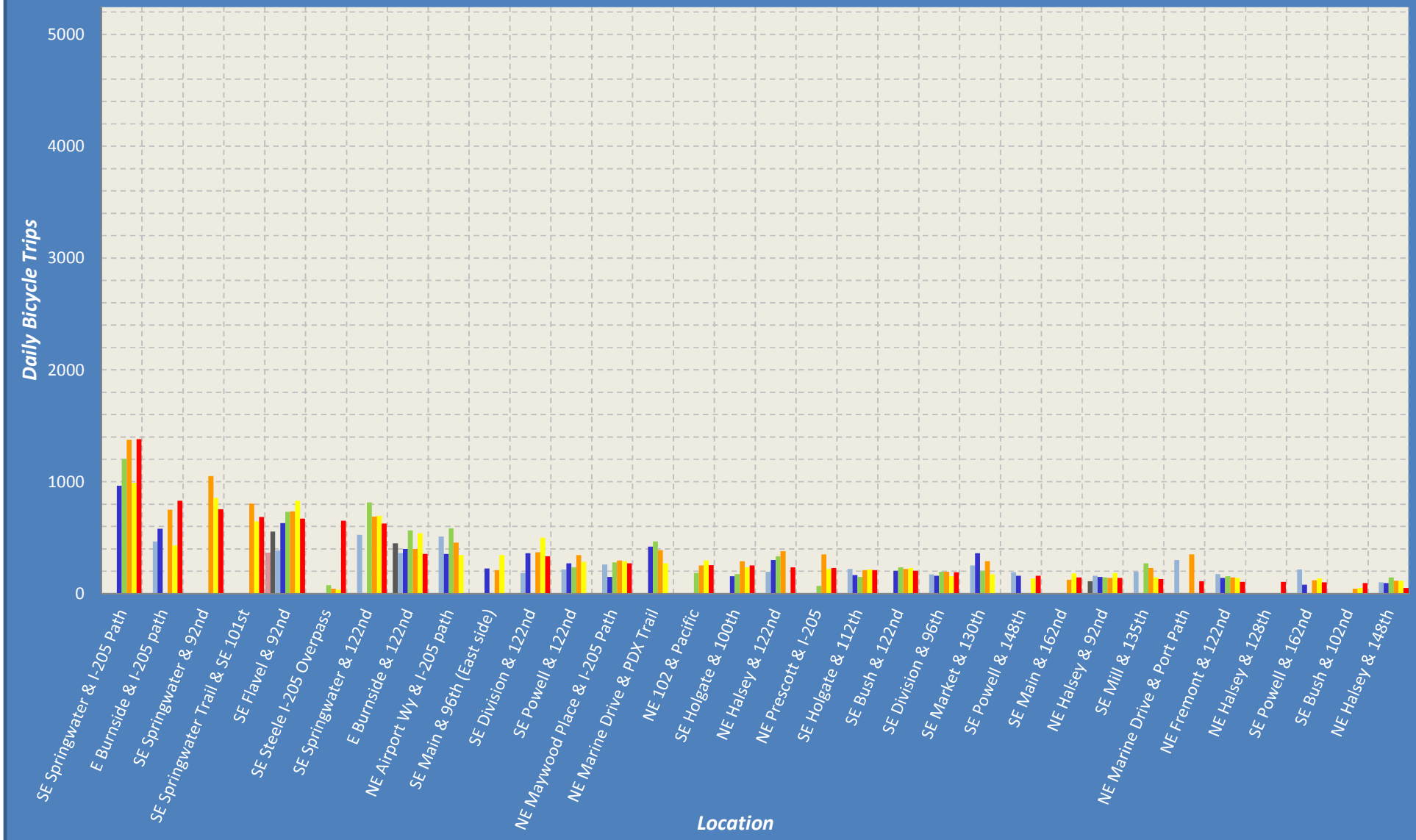
2000/2001, 2006, 2009-2014



Data extrapolated from 2-hour peak counts

Daily Bicyle Traffic: **East Portland**

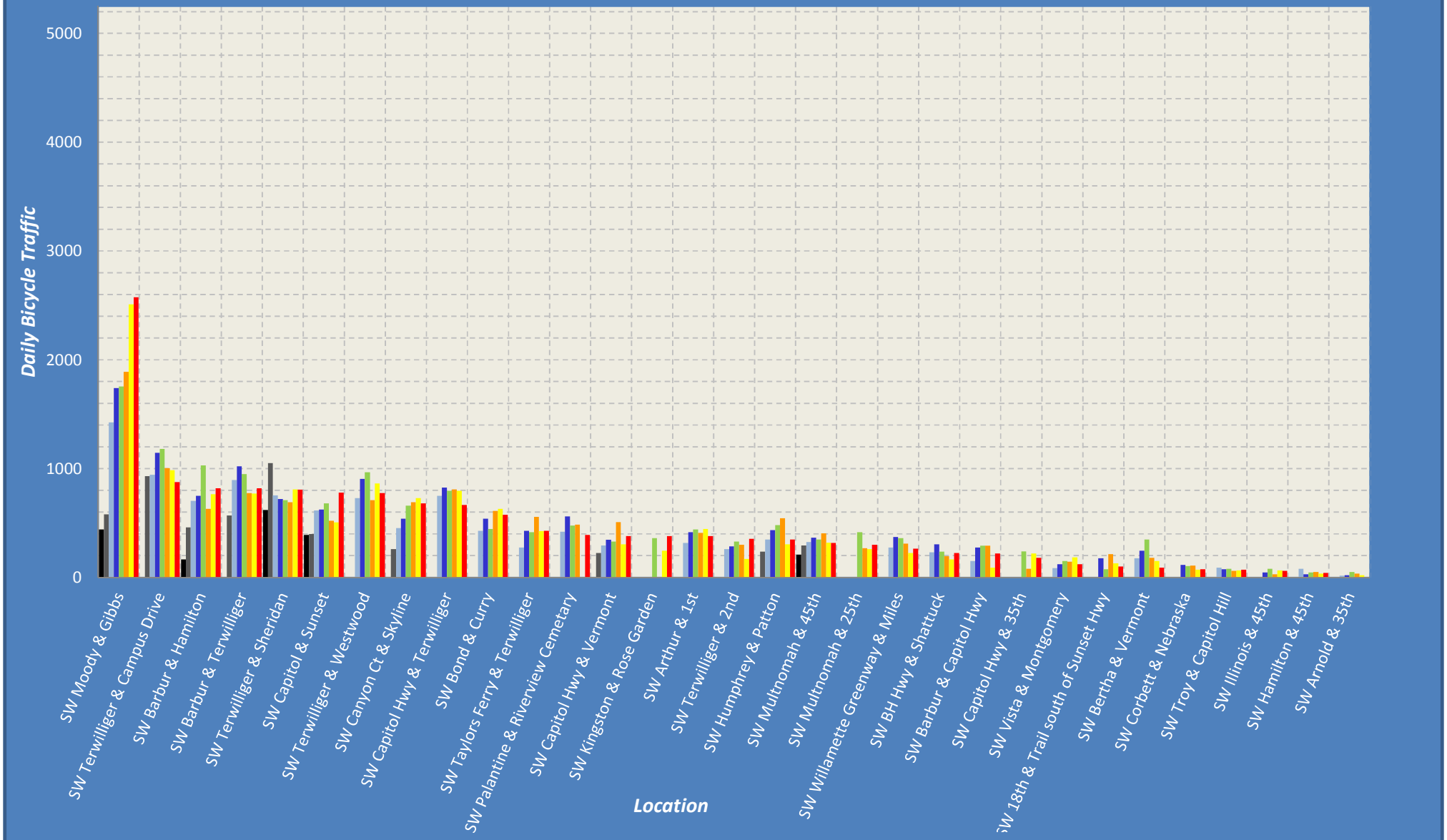
pre-2000, 2006, 2009-2014



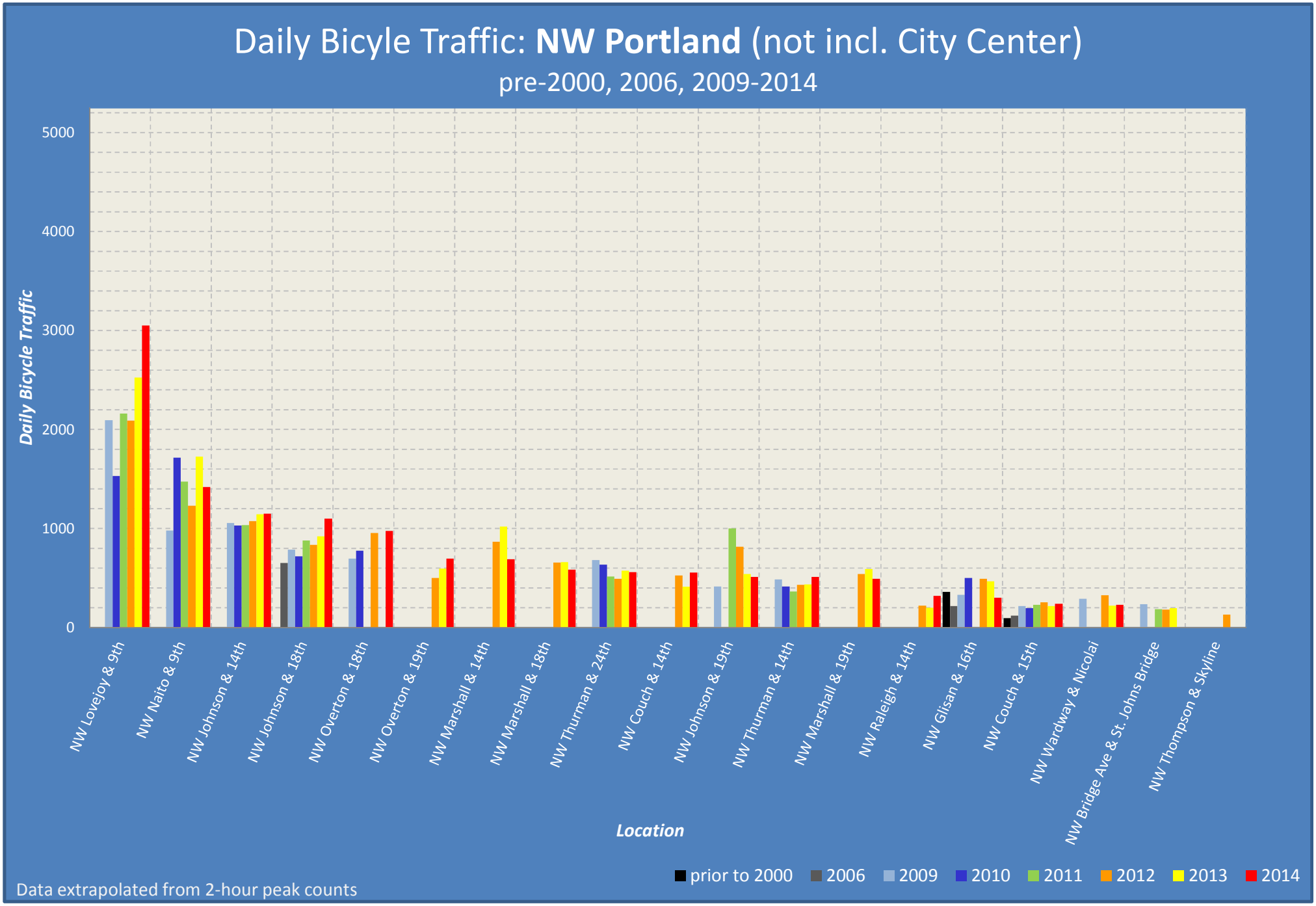
Data extrapolated from 2-hour peak counts

Daily Bicyle Traffic: **SW Portland** (not incl. City Center)

pre-2000, 2006, 2009-2014

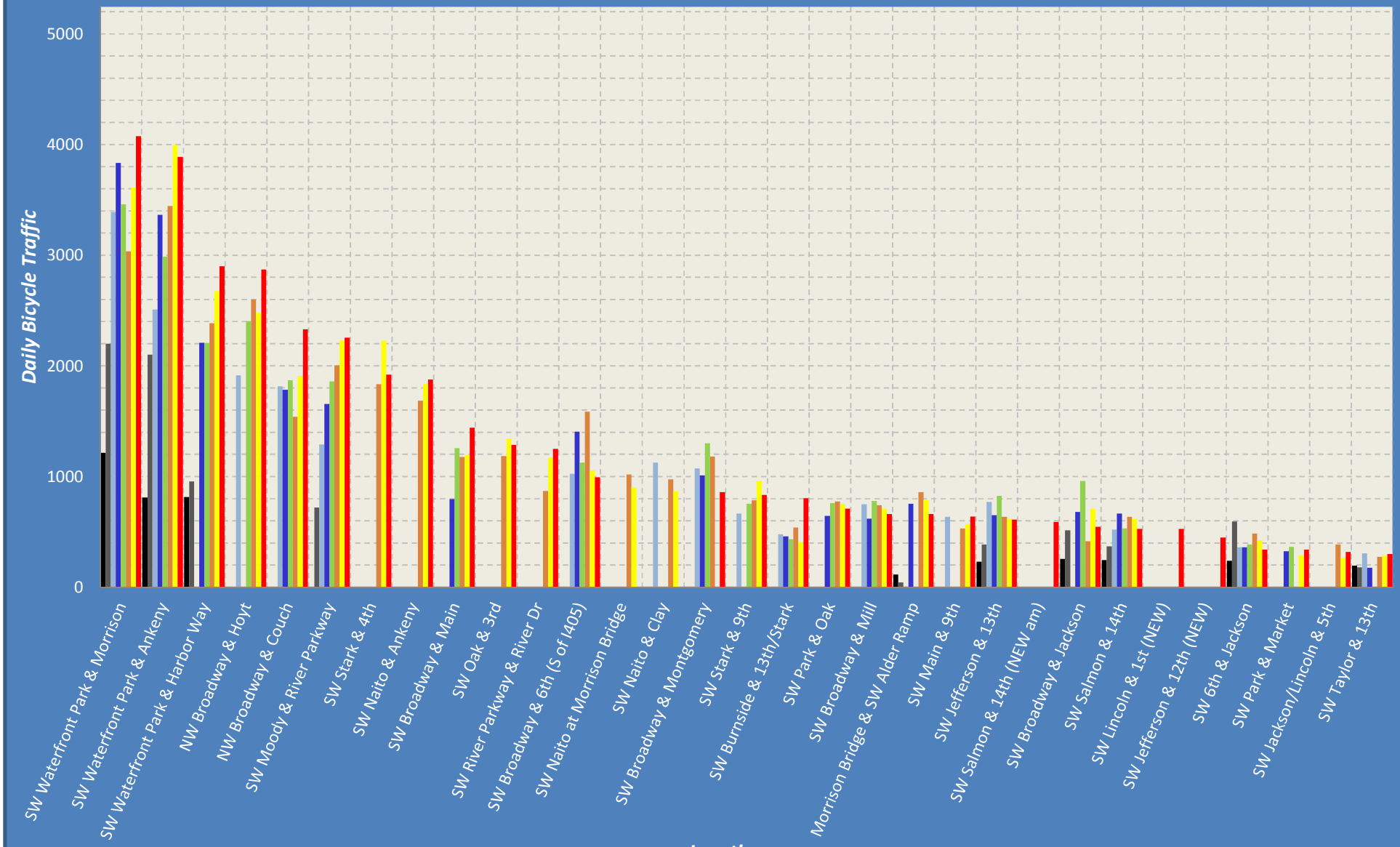


Data extrapolated from 2-hour peak counts


Daily Bicyle Traffic: NW Portland (not incl. City Center)
pre-2000, 2006, 2009-2014
Daily Bicycle Traffic
5000
4000
3000
2000
1000
0
NW Lovejoy & 9th
NW Naito & 9th
NW Johnson & 14th
NW Johnson & 18th
NW Overton & 18th
NW Overton & 19th
NW Marshall & 14th
NW Marshall & 18th
NW Thurman & 24th
NW Couch & 14th
NW Johnson & 19th
NW Thurman & 14th
NW Marshall & 19th
NW Raleigh & 14th
NW Glisan & 16th
NW Couch & 15th
NW Wardway & Nicolai
NW Bridge Ave & St. Johns Bridge
NW Thompson & Skyline
Location
prior to 2000
2006
2009
2010
2011
2012
2013
2014
Data extrapolated from 2-hour peak counts

Daily Bicyle Traffic: **City Center**

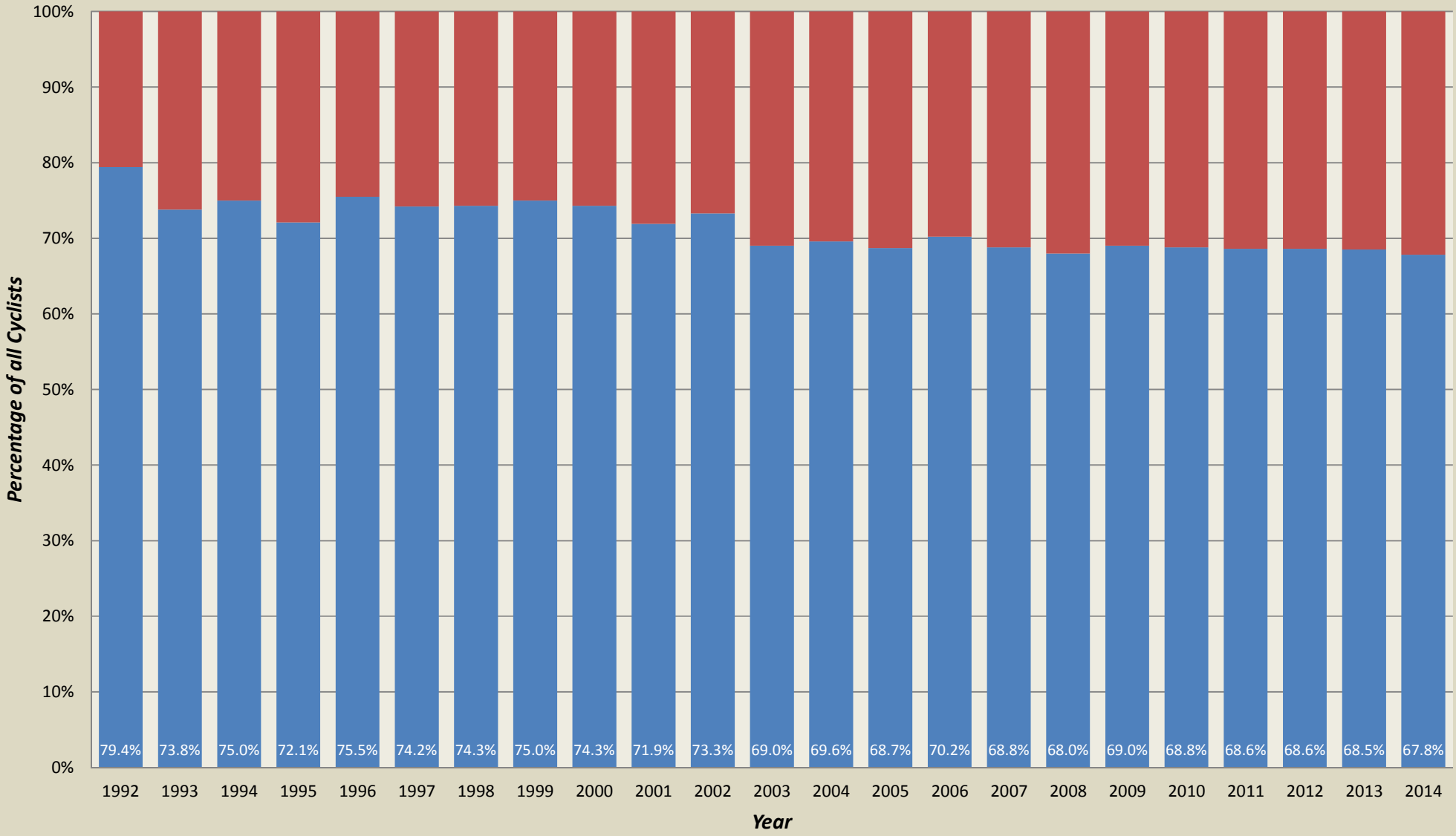
pre-2000, 2006, 2009-2014



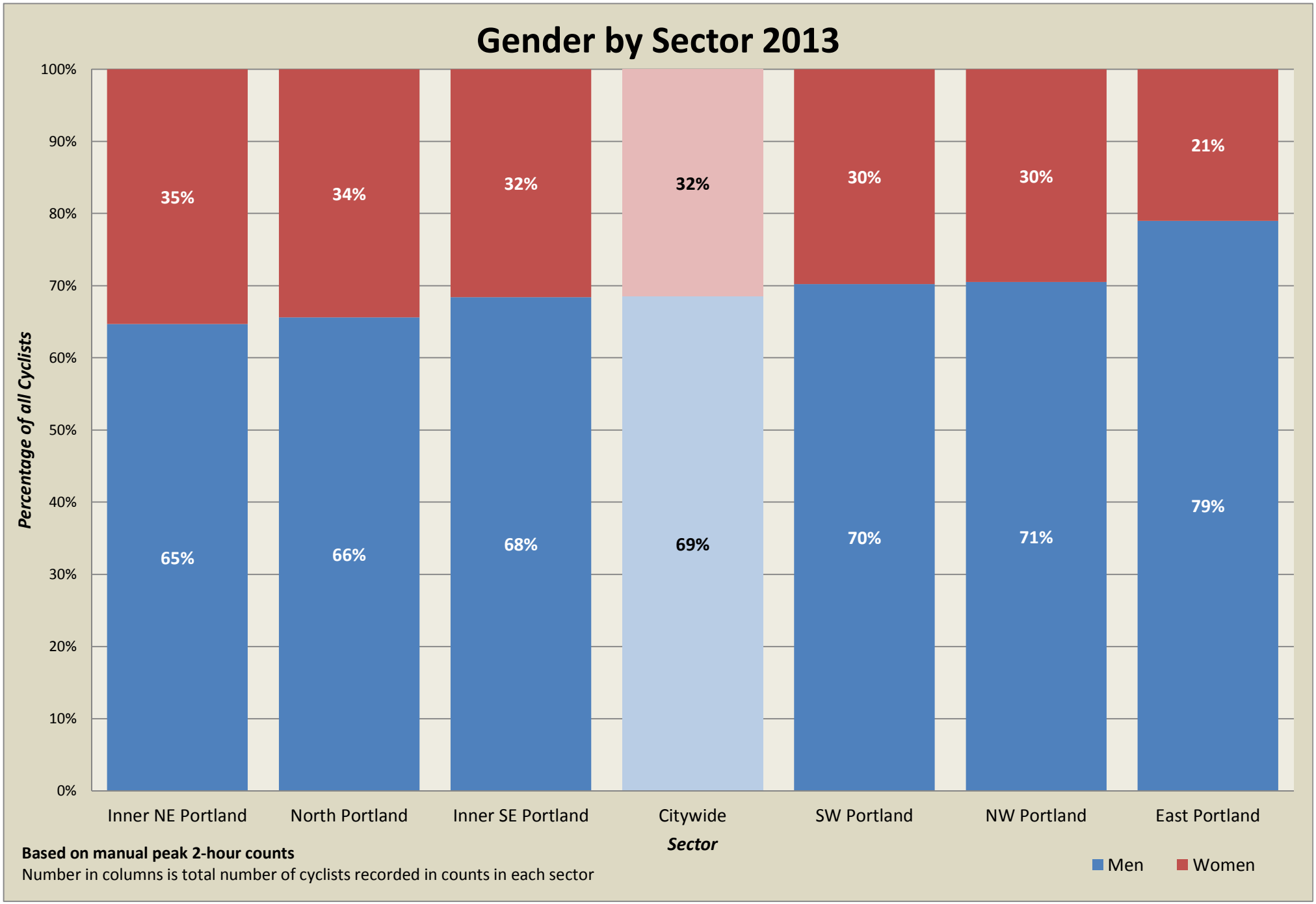
Data extrapolated from 2-hour peak counts

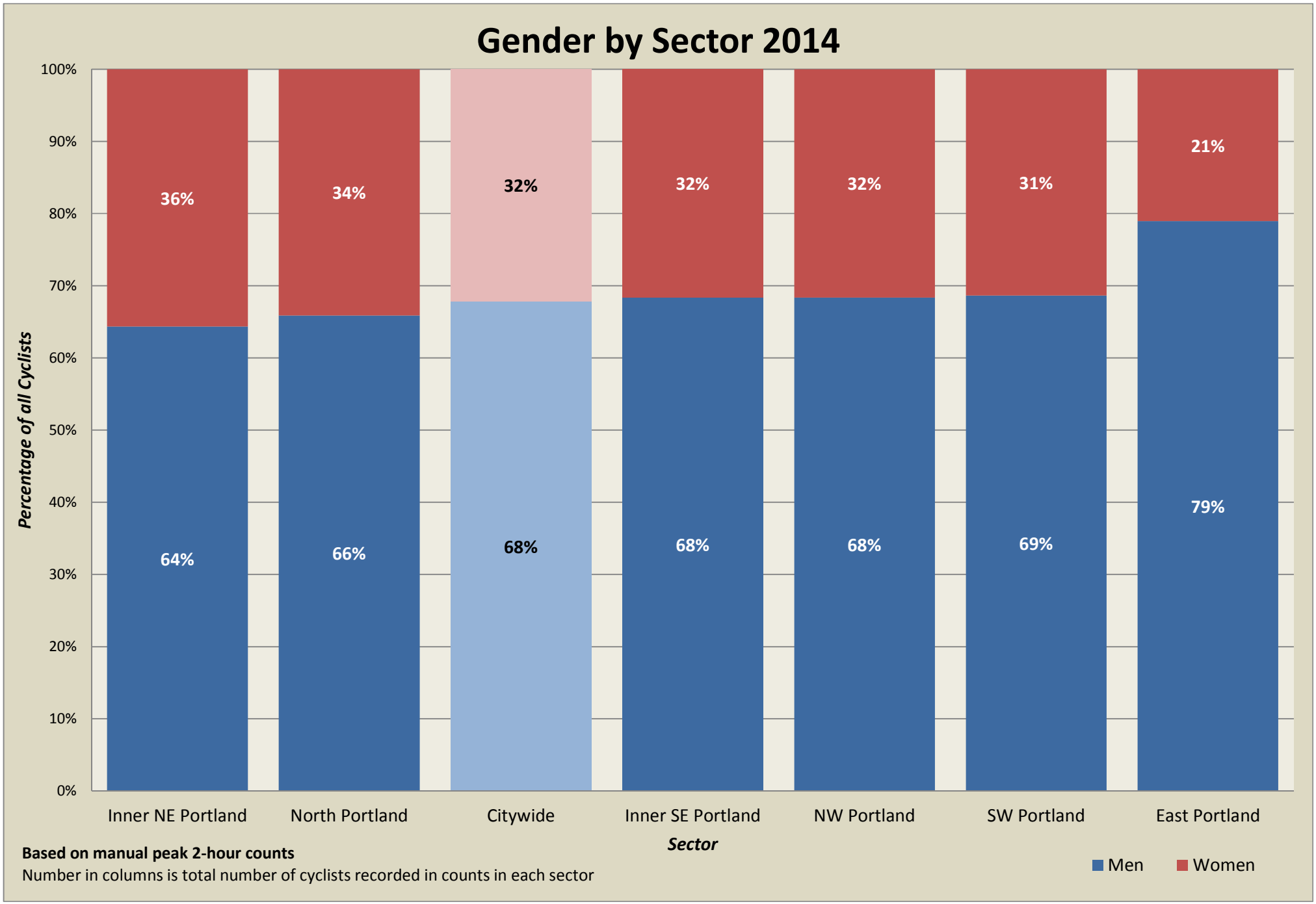
Gender by Year

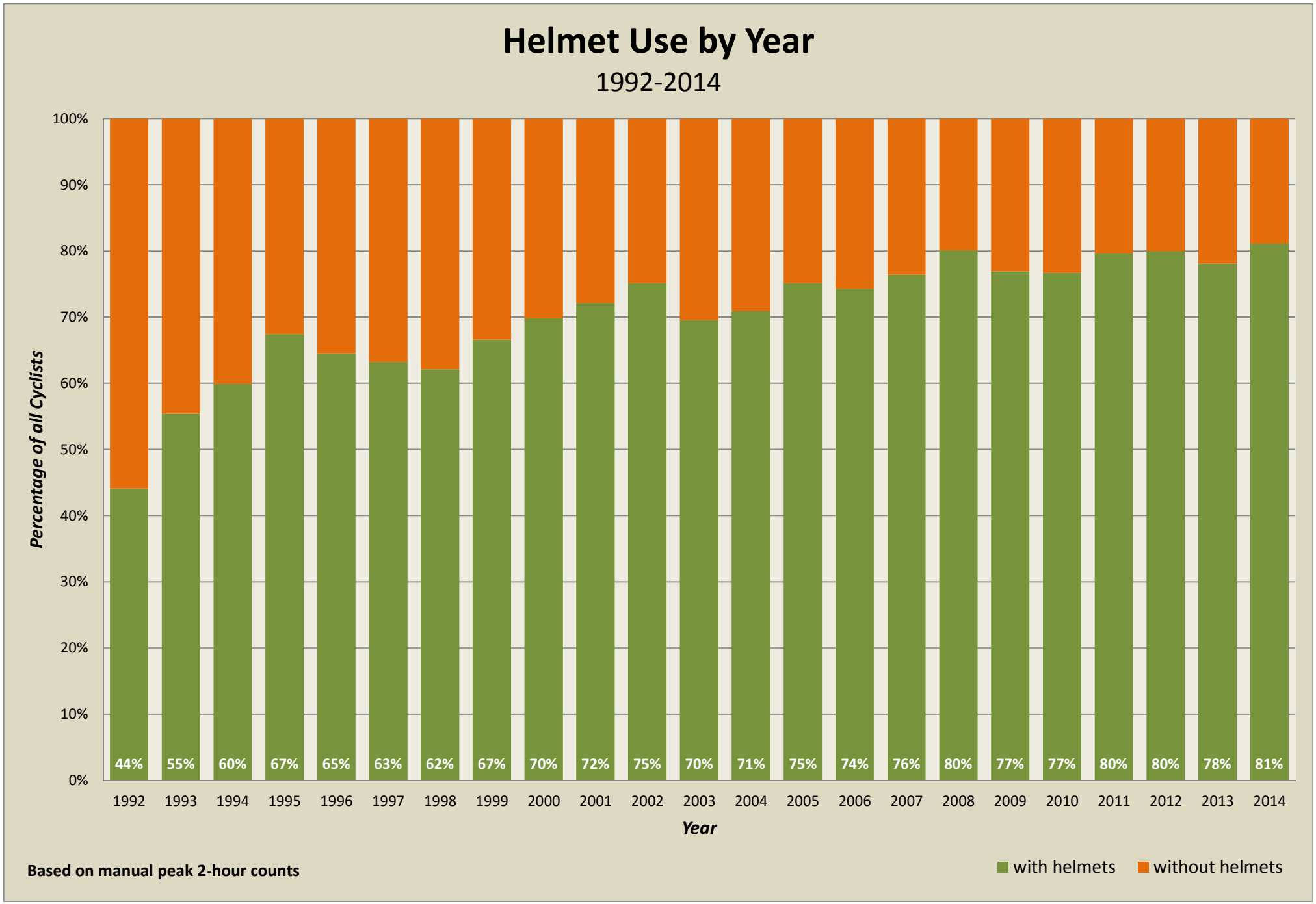
1992-2014

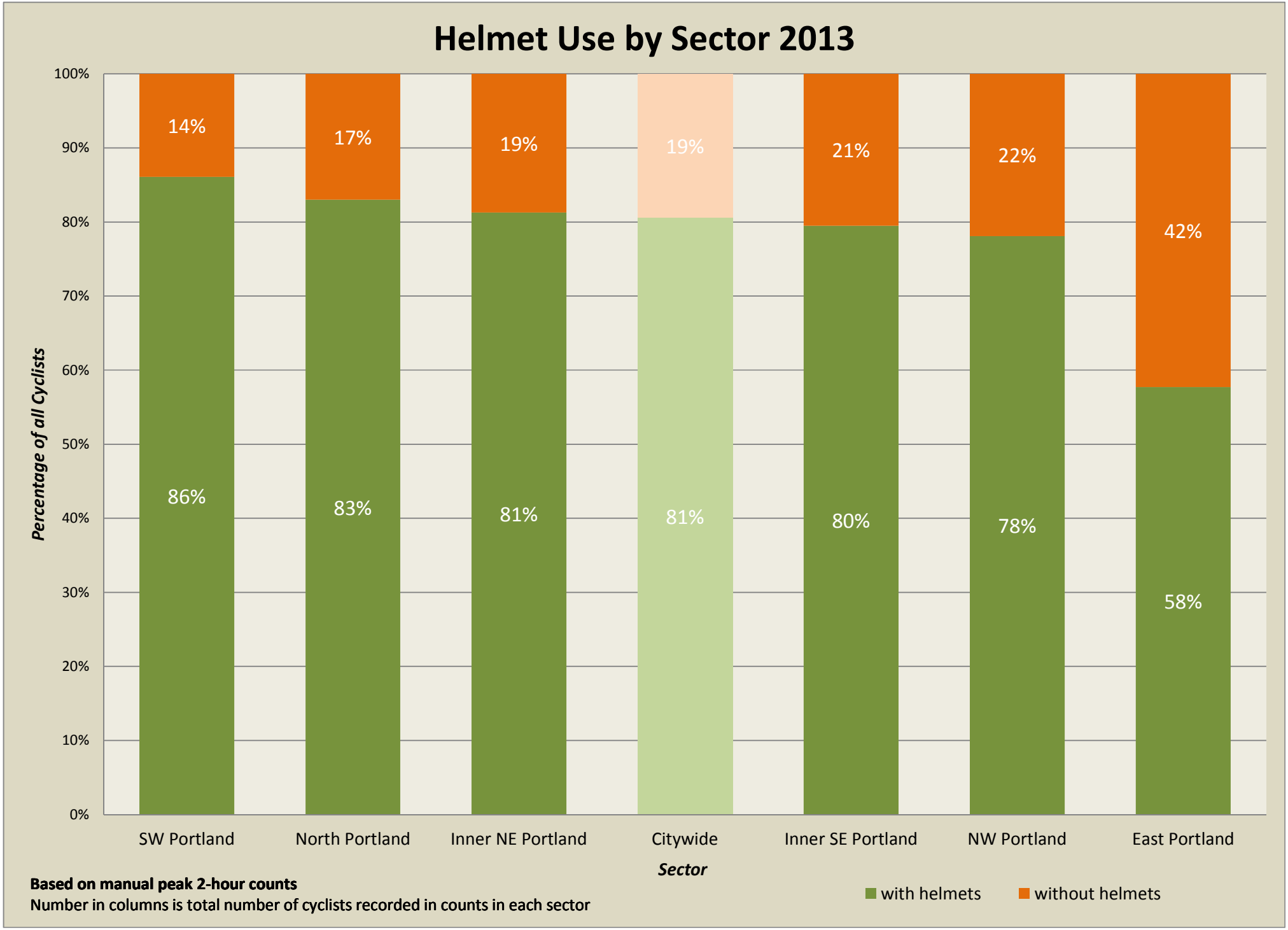


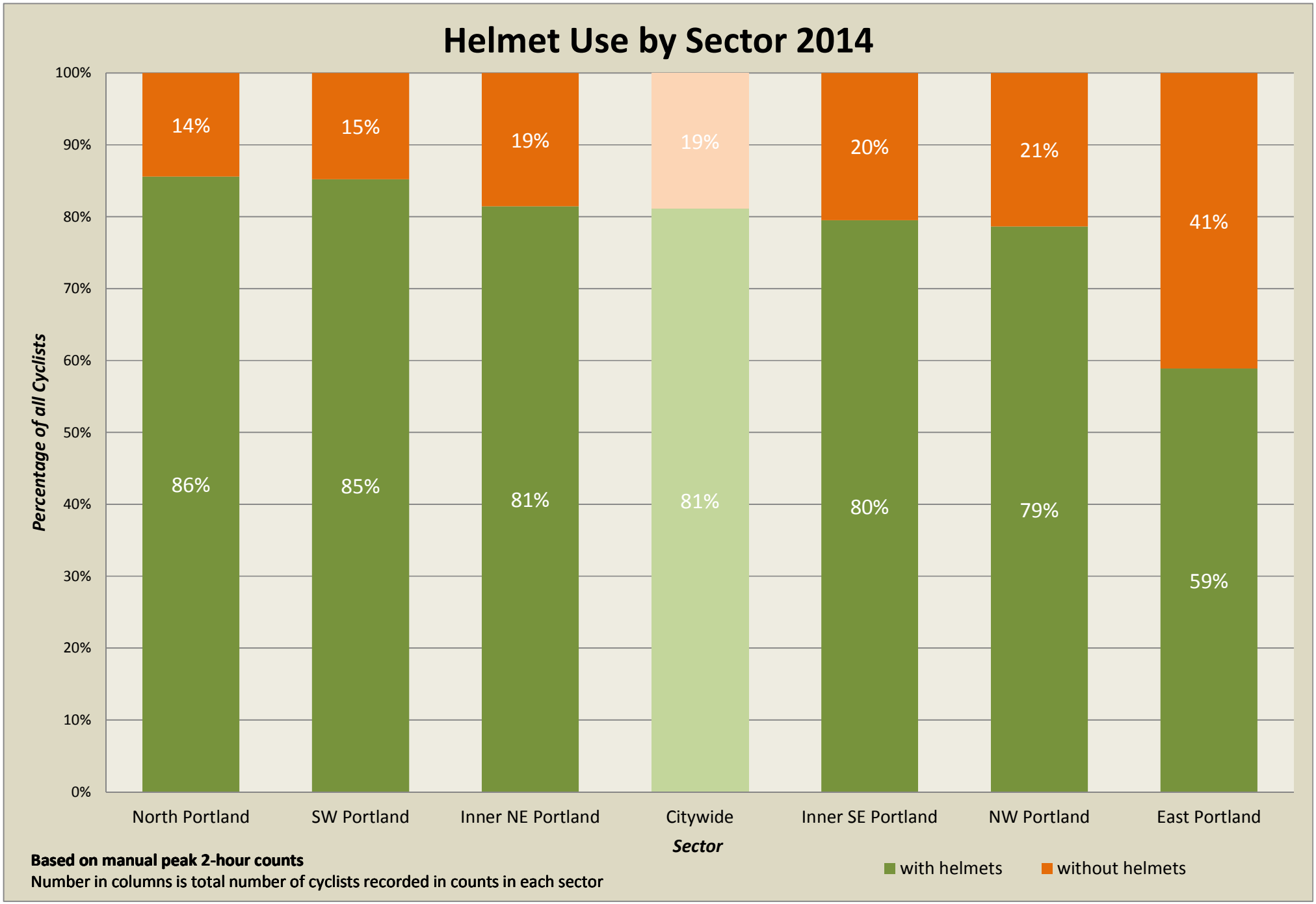
Based on manual peak 2-hour counts

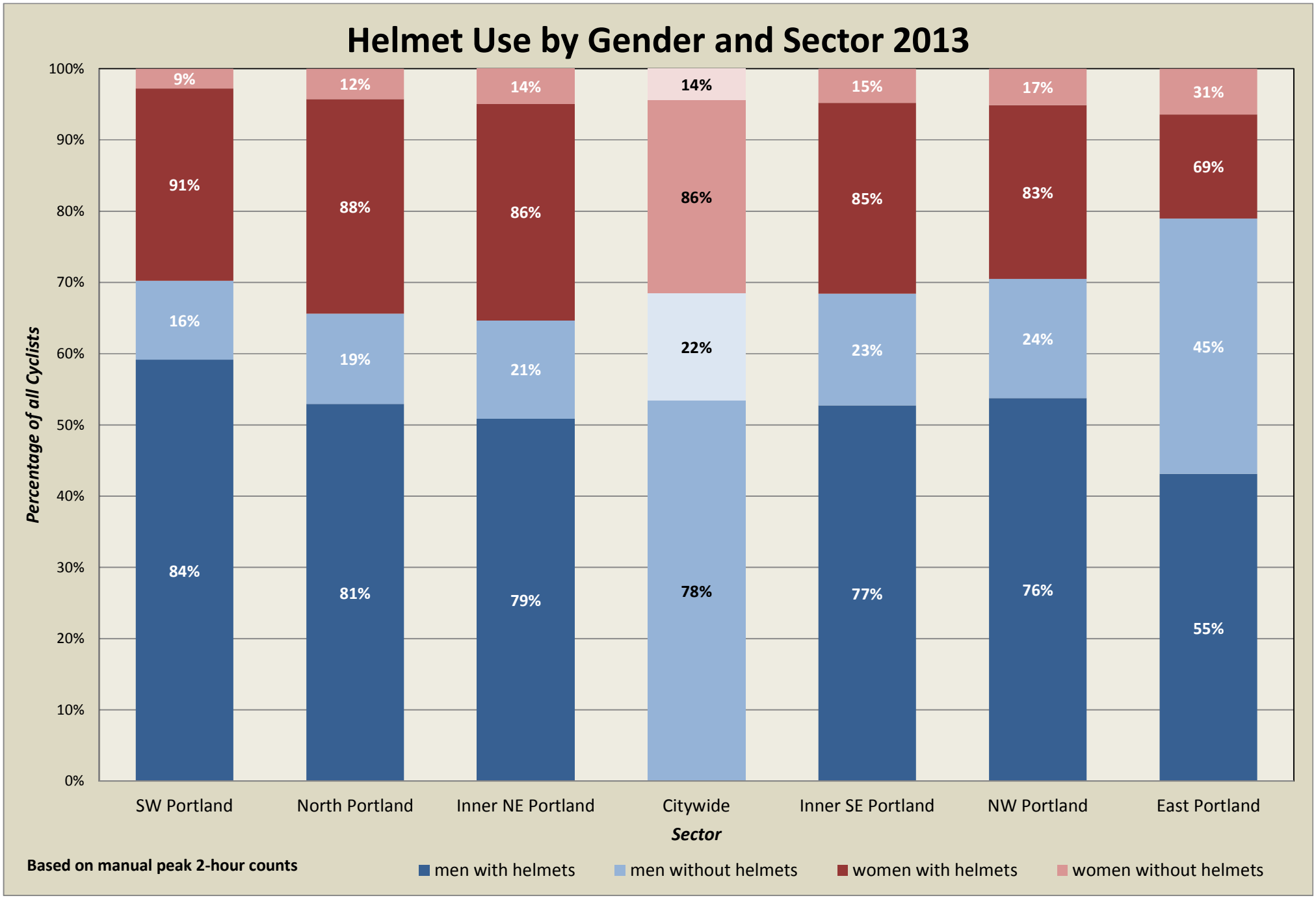

Gender by Sector 2013
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Percentage of all Cyclists
35%
34%
32%
32%
30%
30%
21%
65%
66%
68%
69%
70%
71%
79%
Inner NE Portland
North Portland
Inner SE Portland
Citywide
SW Portland
NW Portland
East Portland
Sector
Based on manual peak 2-hour counts
Number in columns is total number of cyclists recorded in counts in each sector
Men
Women

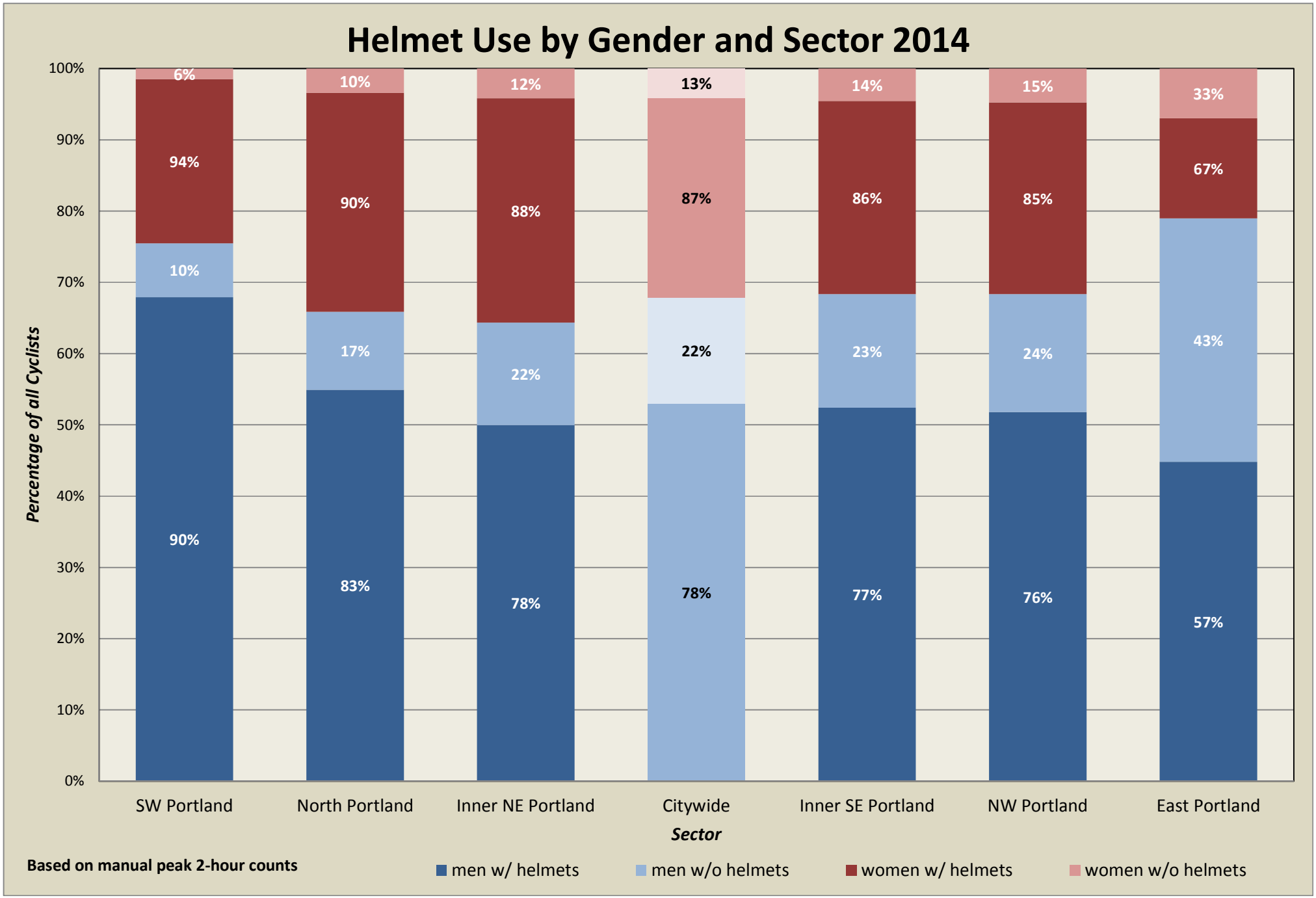

Gender by Sector 2014
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Percentage of all Cyclists
36%
34%
32%
32%
32%
31%
21%
64%
66%
68%
68%
68%
69%
79%
Inner NE Portland
North Portland
Citywide
Inner SE Portland
NW Portland
SW Portland
East Portland
Sector
Based on manual peak 2-hour counts
Number in columns is total number of cyclists recorded in counts in each sector
Men
Women


Helmet Use by Year
1992-2014
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Percentage of all Cyclists
44%
55%
60%
67%
65%
63%
62%
67%
70%
72%
75%
70%
71%
75%
74%
76%
80%
77%
77%
80%
80%
78%
81%
1992
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
2014
Year
Based on manual peak 2-hour counts
with helmets
without helmets

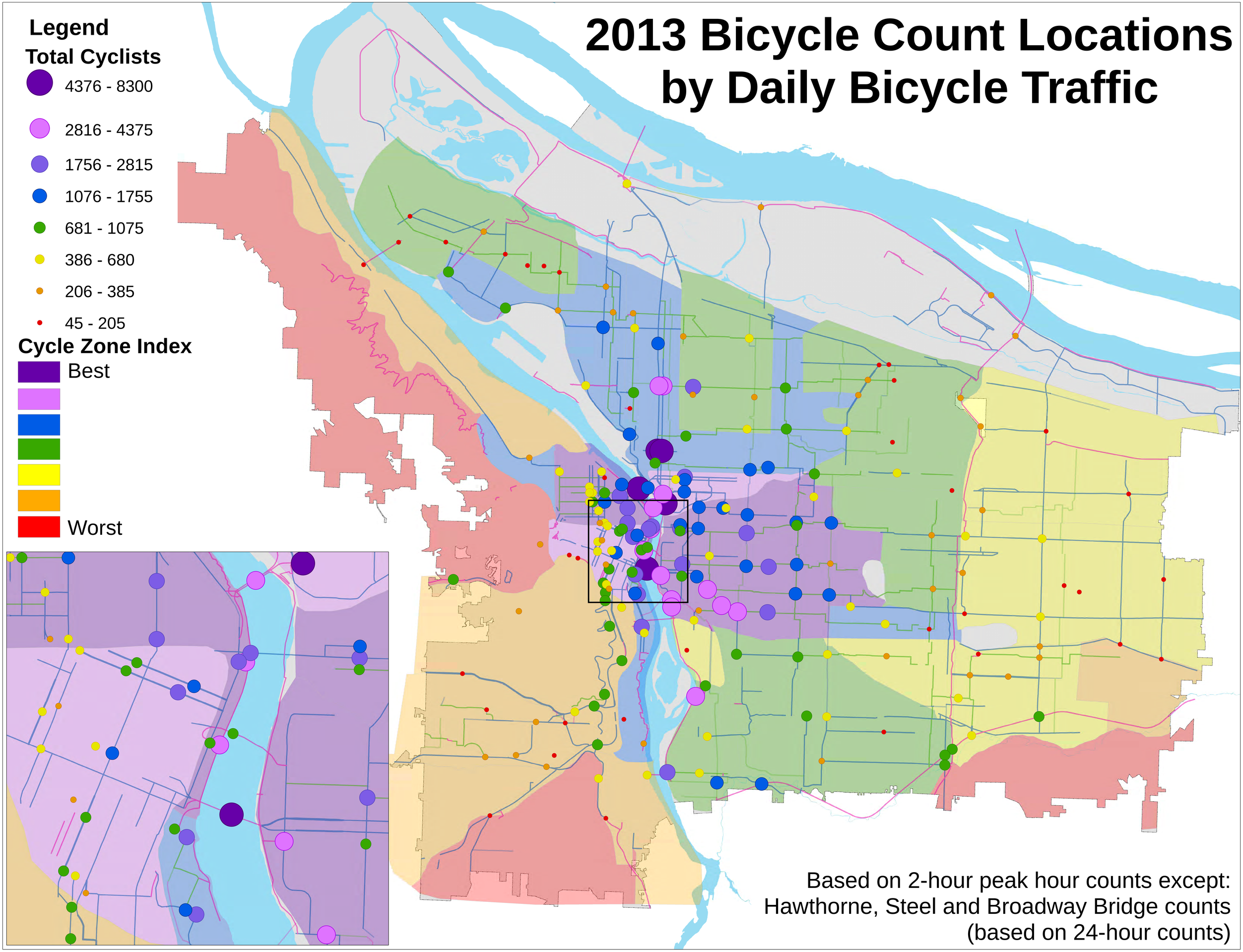

Helmet Use by Sector 2013
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Percentage of all Cyclists
14%
17%
19%
19%
21%
22%
42%
86%
83%
81%
81%
80%
78%
58%
SW Portland
North Portland
Inner NE Portland
Citywide
Inner SE Portland
NW Portland
East Portland
Sector
with helmets
without helmets
Based on manual peak 2-hour counts
Number in columns is total number of cyclists recorded in counts in each sector


Helmet Use by Sector 2014
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Percentage of all Cyclists
14%
86%
15%
85%
19%
81%
19%
81%
20%
80%
21%
79%
41%
59%
North Portland
SW Portland
Inner NE Portland
Citywide
Inner SE Portland
NW Portland
East Portland
Sector
with helmets
without helmets
Based on manual peak 2-hour counts
Number in columns is total number of cyclists recorded in counts in each sector

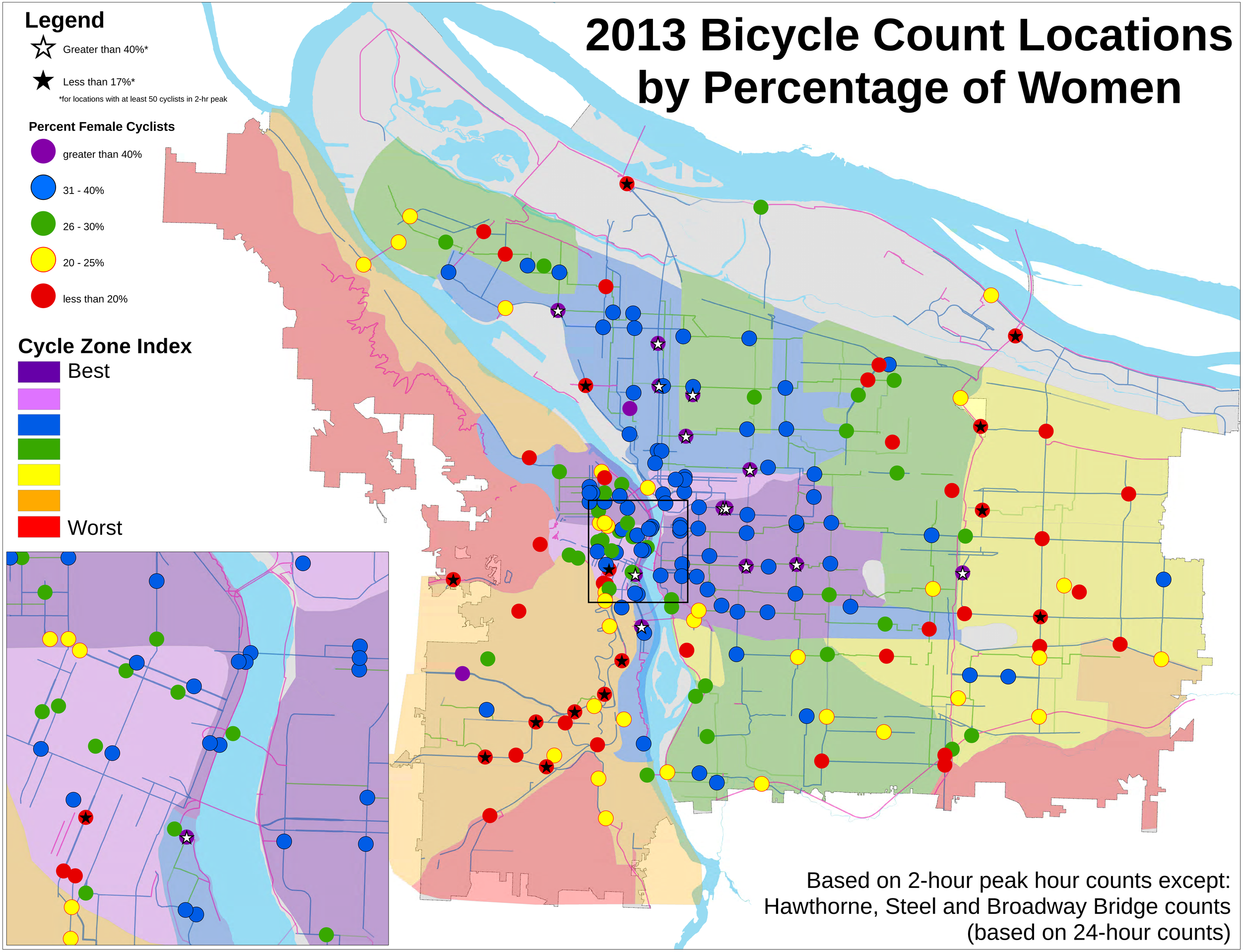

Helmet Use by Gender and Sector 2013
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Percentage of all Cyclists
9%
91%
16%
84%
12%
88%
19%
81%
14%
86%
21%
79%
14%
86%
22%
78%
15%
85%
23%
77%
17%
83%
24%
76%
31%
69%
45%
55%
SW Portland
North Portland
Inner NE Portland
Citywide
Inner SE Portland
NW Portland
East Portland
Sector
Based on manual peak 2-hour counts
men with helmets
men without helmets
women with helmets
women without helmets


Helmet Use by Gender and Sector 2014
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Percentage of all Cyclists
6%
94%
10%
90%
10%
17%
83%
12%
88%
22%
78%
13%
87%
22%
78%
14%
86%
23%
77%
15%
85%
24%
76%
33%
67%
43%
57%
SW Portland
North Portland
Inner NE Portland
Citywide
Inner SE Portland
NW Portland
East Portland
Sector
Based on manual peak 2-hour counts
men w/ helmets
men w/o helmets
women w/ helmets
women w/o helmets

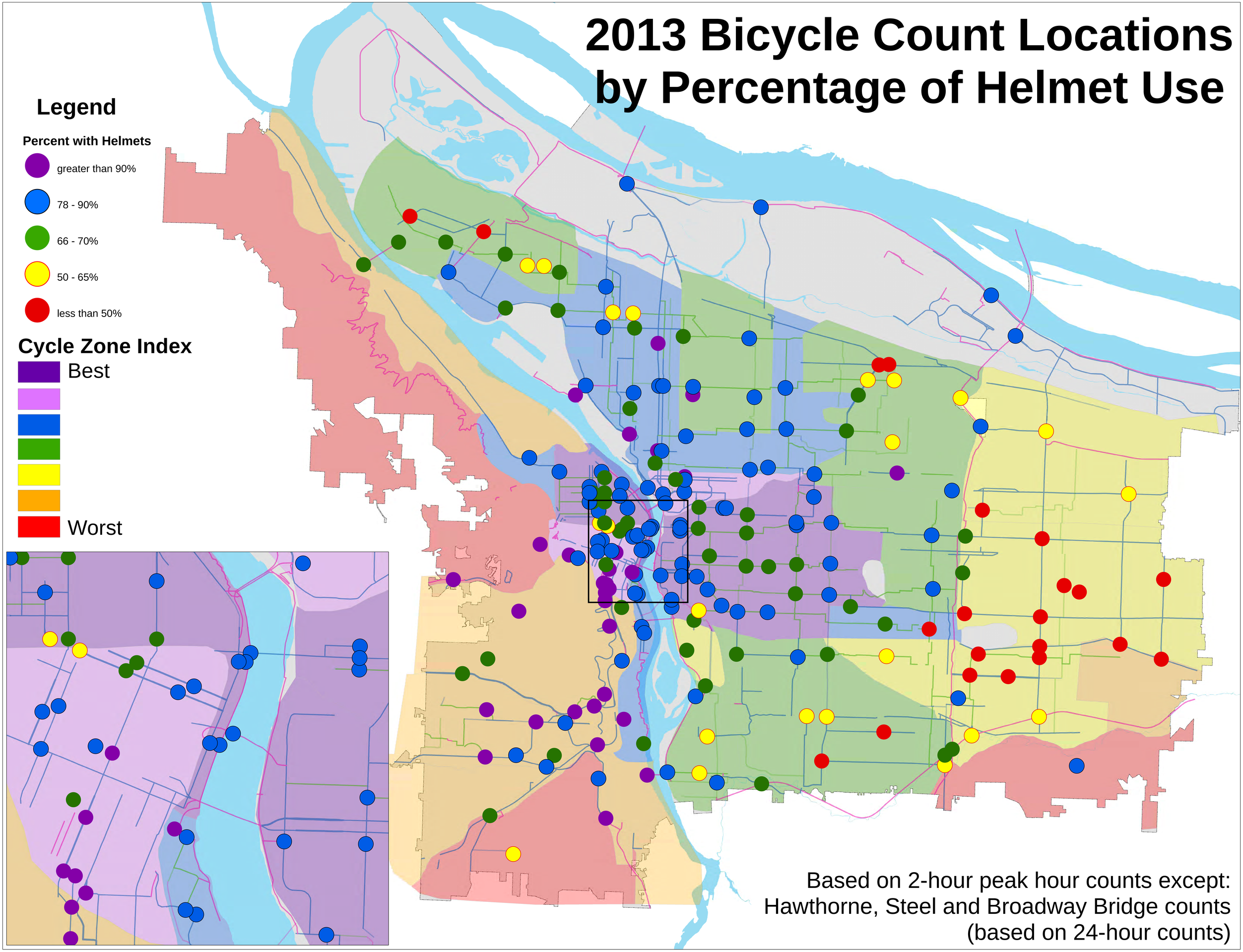
2013 Bicycle Count Locations by Daily Bicycle Traffic



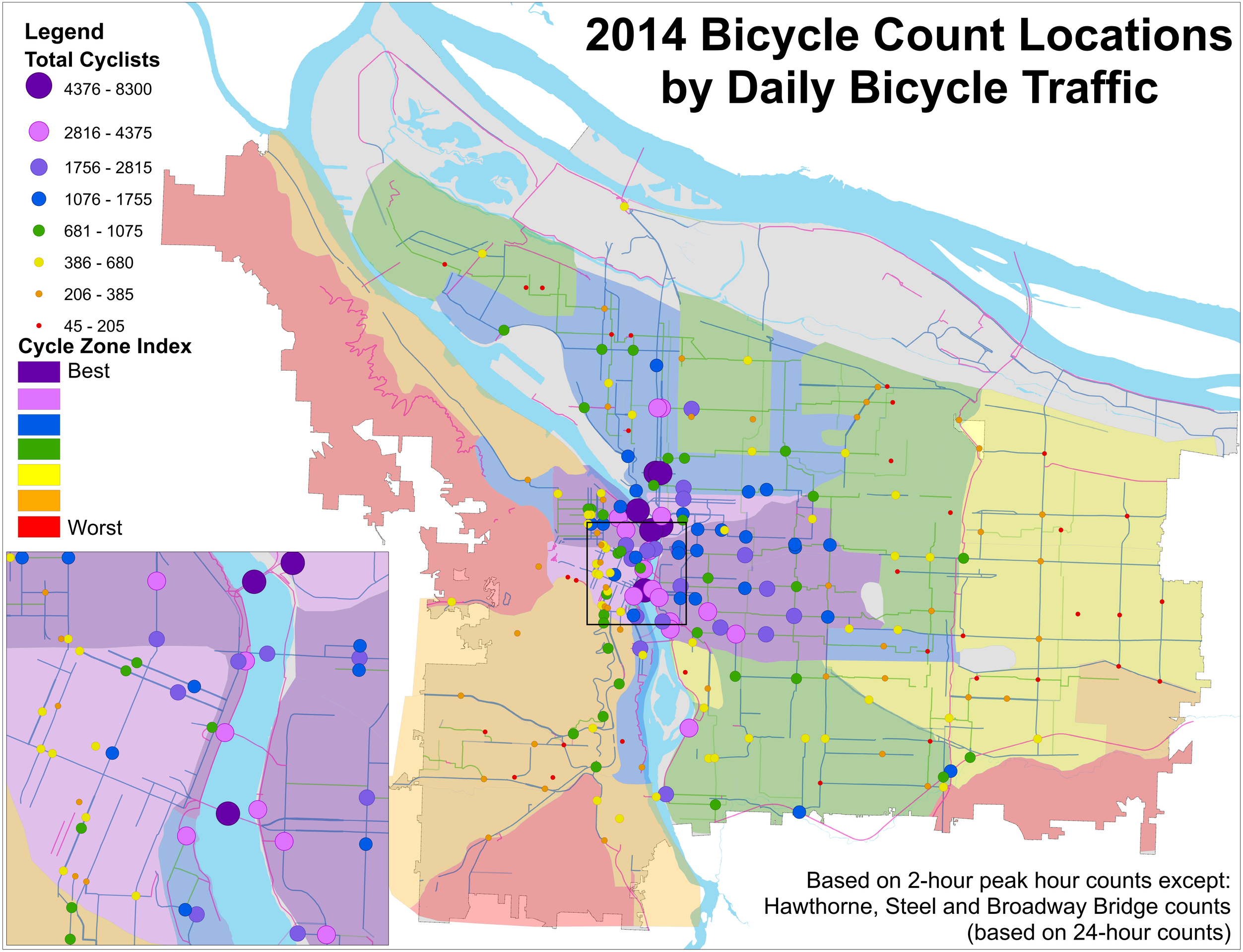
2013 Bicycle Count Locations by Percentage of Women



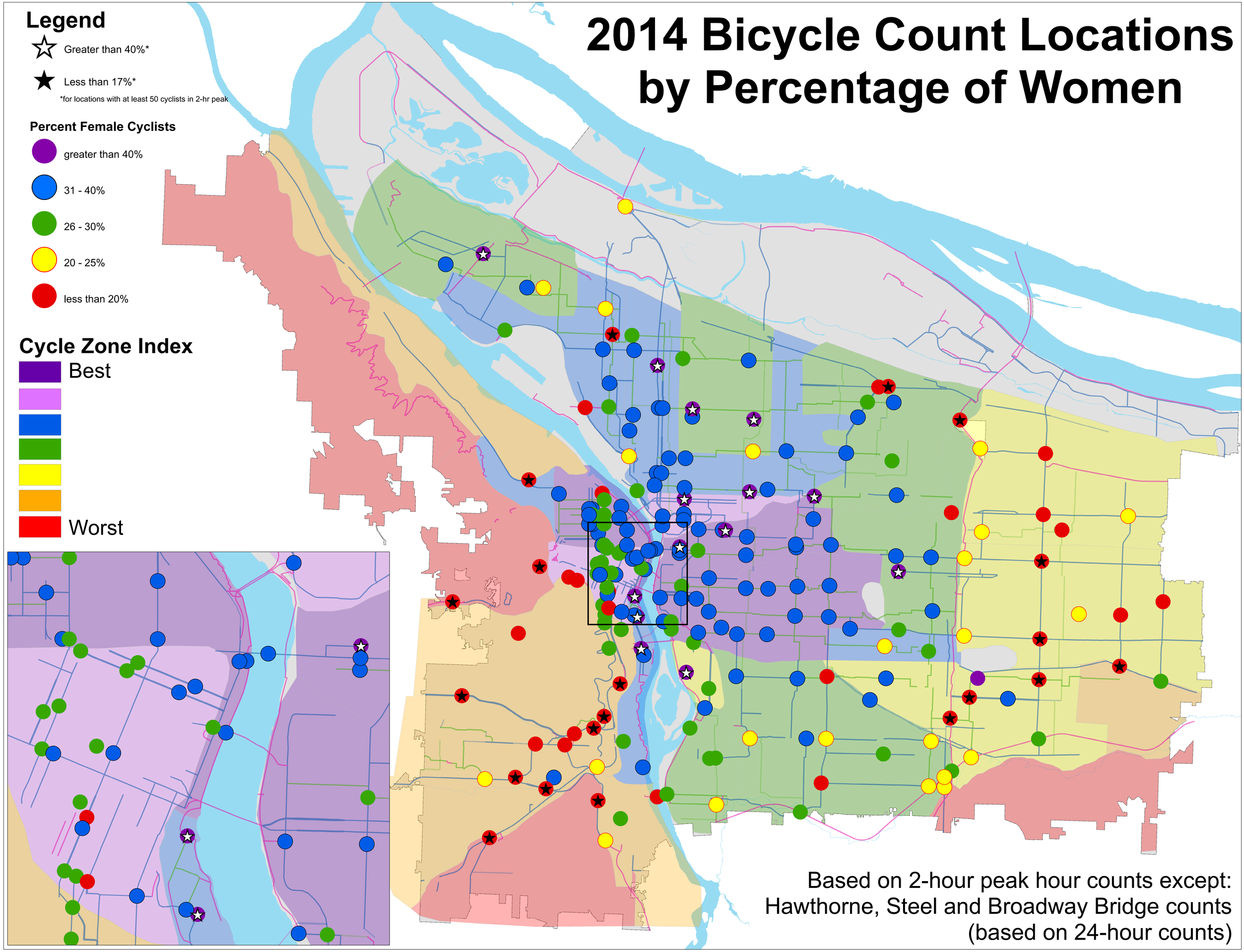
2013 Bicycle Count Locations by Percentage of Helmet Use



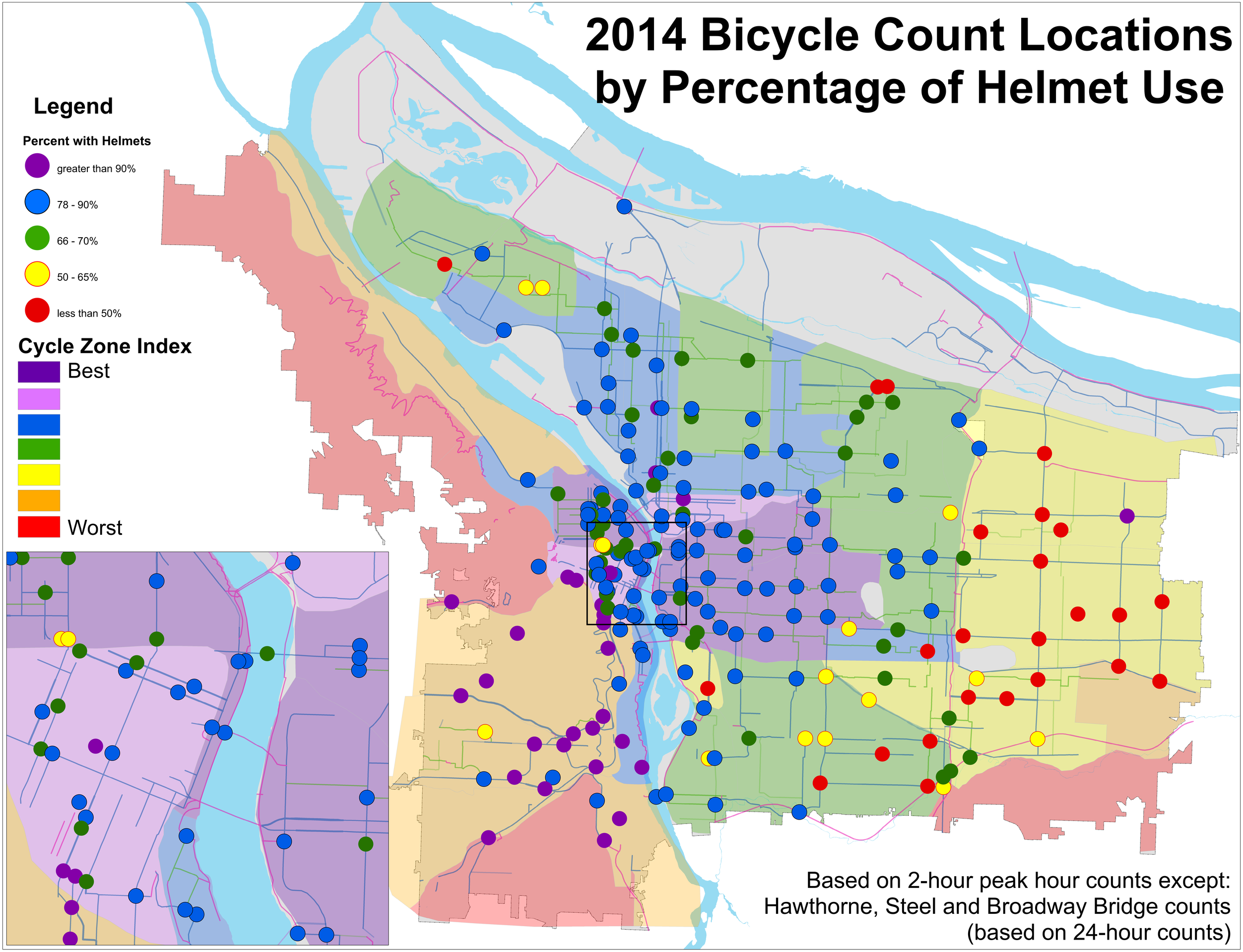
2014 Bicycle Count Locations by Daily Bicycle Traffic

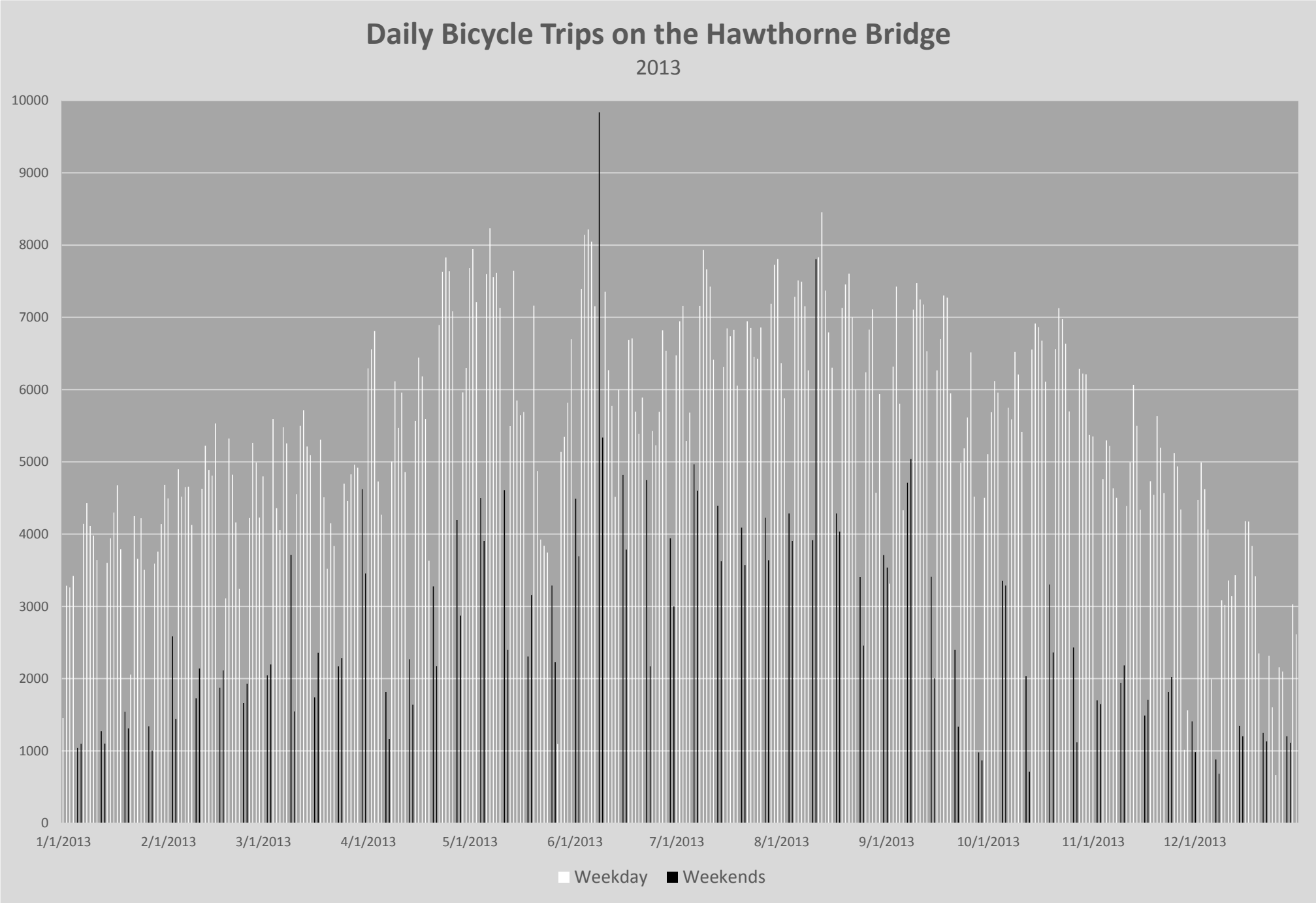


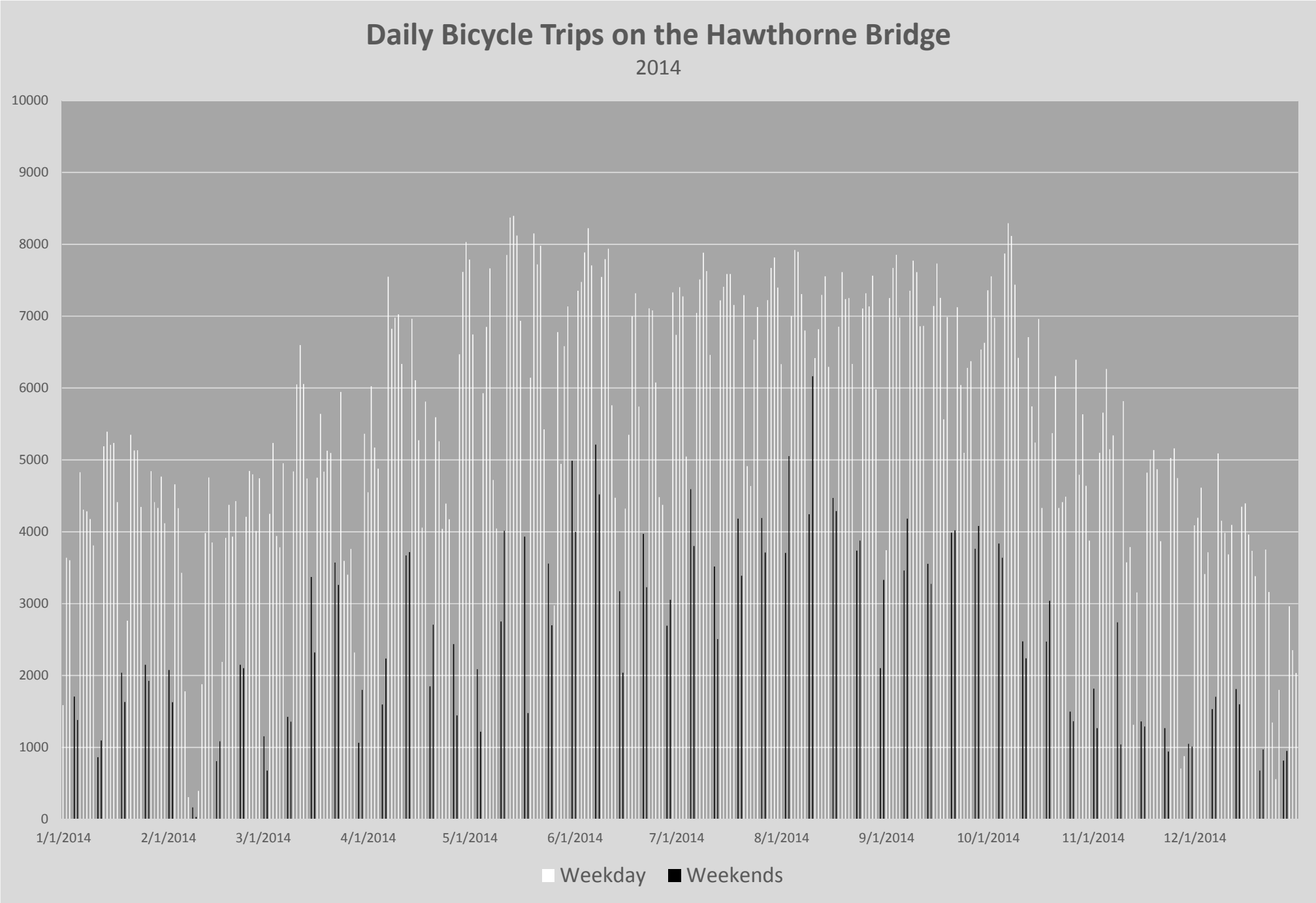
2014 Bicycle Count Locations by Percentage of Women



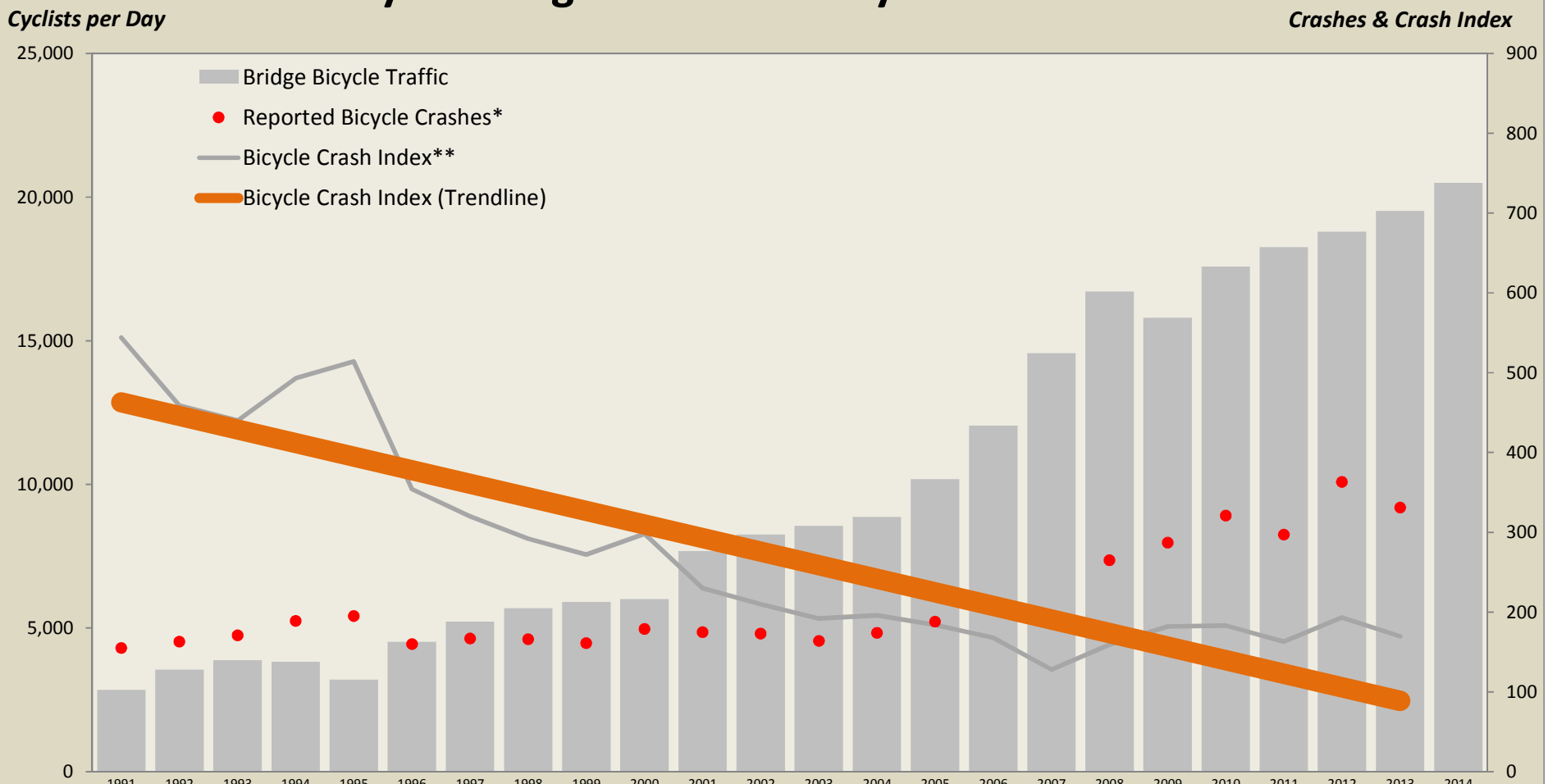
2014 Bicycle Count Locations by Percentage of Helmet Use




Daily Bicycle Trips on the Hawthorne Bridge
2013
10000
9000
8000
7000
6000
5000
4000
3000
2000
1000
0
1/1/2013
2/1/2013
3/1/2013
4/1/2013
5/1/2013
6/1/2013
7/1/2013
8/1/2013
9/1/2013
10/1/2013
11/1/2013
12/1/2013
Weekday
Weekends


Daily Bicycle Trips on the Hawthorne Bridge
2014
10000
9000
8000
7000
6000
5000
4000
3000
2000
1000
0
1/1/2014
2/1/2014
3/1/2014
4/1/2014
5/1/2014
6/1/2014
7/1/2014
8/1/2014
9/1/2014
10/1/2014
11/1/2014
12/1/2014
Weekday
Weekends

Bicycle Bridge Traffic vs. Bicycle Crashes



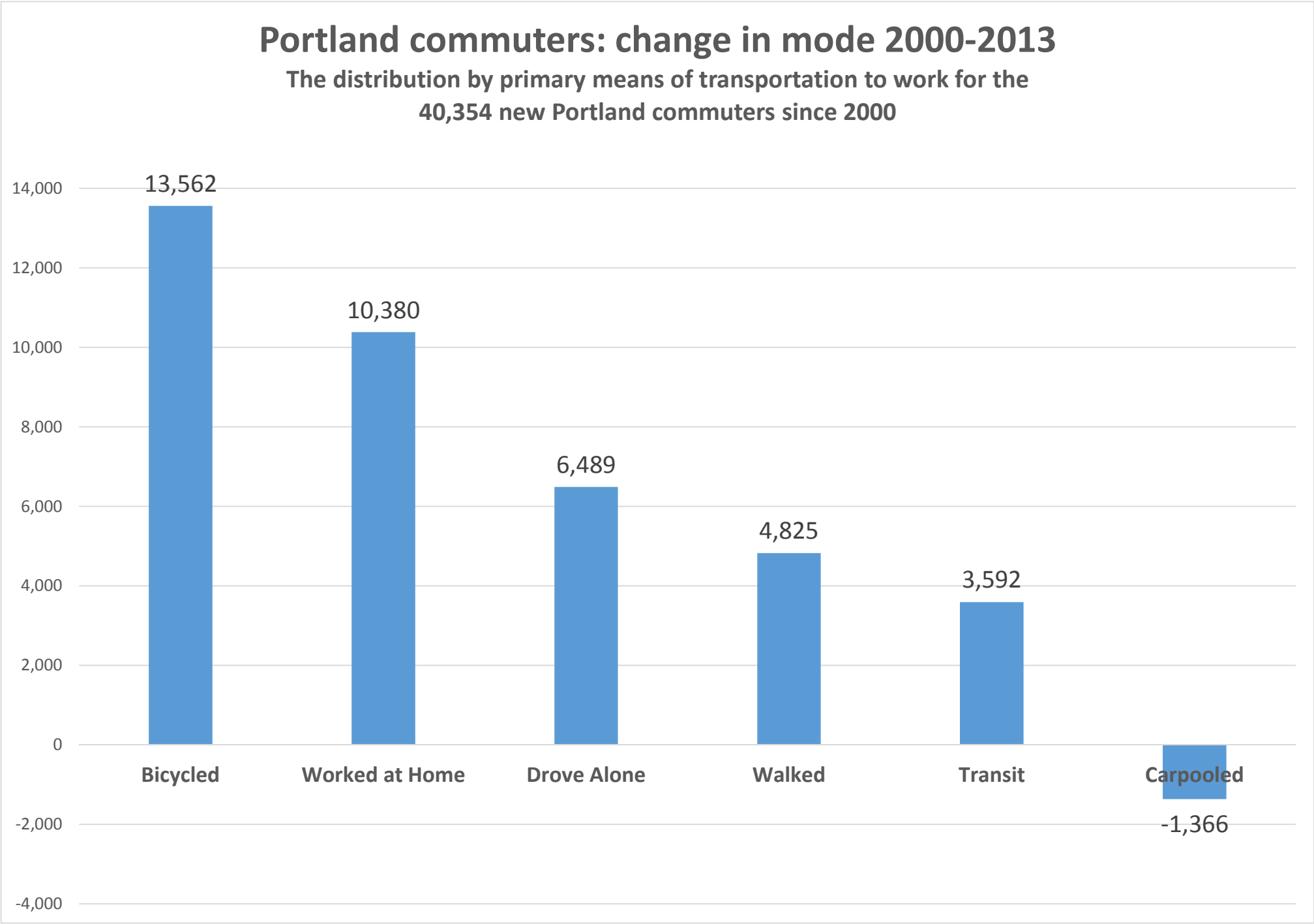
	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Bridge Bicycle Traffic	2,850	3,555	3,885	3,830	3,207	4,520	5,225	5,690	5,910	6,015	7,686	8,250	8,562	8,875	10,192	12,046	14,563	16,711	15,794	17,576	18,257	18,794	19,514	20,497
Bicycle Fatalities	2	0	4	3	2	1	5	3	0	0	5	0	4	1	4	0	6	0	4	0	2	2	1	
Reported Bicycle Crashes*	155	163	171	189	195	160	167	166	161	179	175	173	164	174	188	203	186	265	287	321	297	363	331	
Bicycle Crash Index**	544	459	440	493	514	354	320	292	272	298	230	210	192	196	184	168	128	159	182	183	163	193	170	

Year

Extrapolated from peak 2-hour counts

* Beginning January 2008, the Portland Police Bureau made a decision to lower the threshold for reporting bicycle-involved crashes. This change means that crashes that would have previously gone unreported by Portland Police are now entering the reporting system. There have been no indications in the operation of our system that leads the city to conlude that the increase in reported crashes is representative of changes in actual crash activity within the city.

**Crash Index represents an indexing of annual reported crashes to daily bicycle trips across the four main bicycle bridges.


Portland commuters: change in mode 2000-2013
The distribution by primary means of transportation to work for the 40,354 new Portland commuters since 2000
14,000
12,000
10,000
8,000
6,000
4,000
2,000
0
-2,000
-4,000
13,562
10,380
6,489
4,825
3,592
-1,366
Bicycled
Worked at Home
Drove Alone
Walked
Transit
Carpooled