

Bicycle and Pedestrian Counts

In October 2010, PSRC counted bicyclists and pedestrians at 331 locations throughout the region. The information gathered will be used as part of a validation data set for the regional travel demand model as well as for bicycle and pedestrian planning applications.

Previous discussion of bicycle and pedestrian information from PSRC’s household activity surveys (highlighted in a 2009 *Trend*) described increases in trips by both modes of travel. The results of the recent count further indicate that a significant number of trips are being made by bicyclists and pedestrians. High volumes of bicycles were observed on dedicated bicycle facilities and high volumes of pedestrians were observed on sidewalks. For both travel modes, areas with high levels of bicycling and pedestrian activity were associated with major regional activity centers, although high volumes of bicycle use occurred at different locations than those observed for pedestrians.

Information gathered at the count locations included the number of bicyclists, an indication of helmet use, the number of pedestrians and the number of bicycles observed being transported on buses. The count locations were chosen to represent access points to regional growth centers, major nonmotorized facilities, access to transit centers and connections between urban villages. The counts were conducted in the AM (6-8:59 a.m.) and PM (3-4:59 p.m.) peak periods on Tuesdays, Wednesdays and Thursdays. In all but one of the days, which had slight precipitation, the weather was sunny with moderate temperatures.

The timing of the counts was intended to coincide with national guidance from the National Bicycle and Pedestrian Documentation Project, the Documentation Project efforts conducted by the Washington State Department of Transportation, and other count efforts at the cities of Bellevue and Seattle. The early fall is considered a useful time to conduct counts because the weather is moderate and people have settled back into a routine — e.g., schools are back in session. The morning and evening peaks are considered representative because, taken together, they represent the majority of bicycle and pedestrian travel.

The counts were dispersed across the region and varied by roadway facility types (Table 1). At each of the 331 count locations, all potential movements were recorded, resulting in information being available on 1,181 roadway segments.

Table 1. Number of Count Locations by County and Facility Type

Facility Type	King	Kitsap	Pierce	Snohomish	Total
Principal Arterials	232	20	71	41	364
Minor Arterials	202	7	80	21	310
Collector	111	13	61	19	204
Local	144	12	41	33	230
Non-Motorized	63	1	6	3	73
Total	752	53	259	117	1181

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In all, 13,611 bicyclists were observed. Although the average number of bicyclists per location was just below 41, a few locations greatly exceeded the mean while the majority fell far below it (median count value is 13). The locations with the highest number of observed bicycles are not surprising. The high bicycle volume locations represent dedicated bicycle facilities which connect or access activity centers. See Table 2 below for the top 10 highest bicycle use locations.

Table 2. Top 10 Highest Bicycle Use Locations

Bicycles	Location	City	Time
704	Burke-Gilman Trail under I-5	Seattle	AM
578	Fremont Bridge	Seattle	AM
563	Burke-Gilman Trail @ 25 th Ave NE	Seattle	AM
514	Burke Gilman Trail & NE 65 th St	Seattle	PM
445	3 rd Ave NW @ NW 39 th St (Fremont)	Seattle	AM
444	Burke-Gilman Trail @ 35 th Ave NE	Seattle	AM
407	Dexter Ave N @ Galer St	Seattle	AM
378	Dexter Ave N @ Denny Way	Seattle	AM
376	North Creek Trail @ Sammamish River Trail	Bothell	PM
322	S Dearborn St @ 12 th Ave S	Seattle	PM

For the persons observed bicycling, use of helmets was high (92%), although this still represents slightly over 1,000 people who did not use helmets. There is no apparent pattern for lack of helmet use across locations and time periods.

The locations of high bicycle use do not necessarily correlate with locations of high pedestrian activity (Figure 1). While the highest observed values for both groups corresponded with locations representing centers of activity, the highest volume bicycle use facilities were located in different activity centers and locations than the highest volume pedestrian use facilities (Table 3). The ways in which the two groups accessed the facilities was different as well. For example, high values of cyclists were observed on separated paths, while high volumes of pedestrians were observed near schools and transit centers — particularly on sidewalks.

Figure 1. Bicyclist and Pedestrian Volumes Across Count Locations

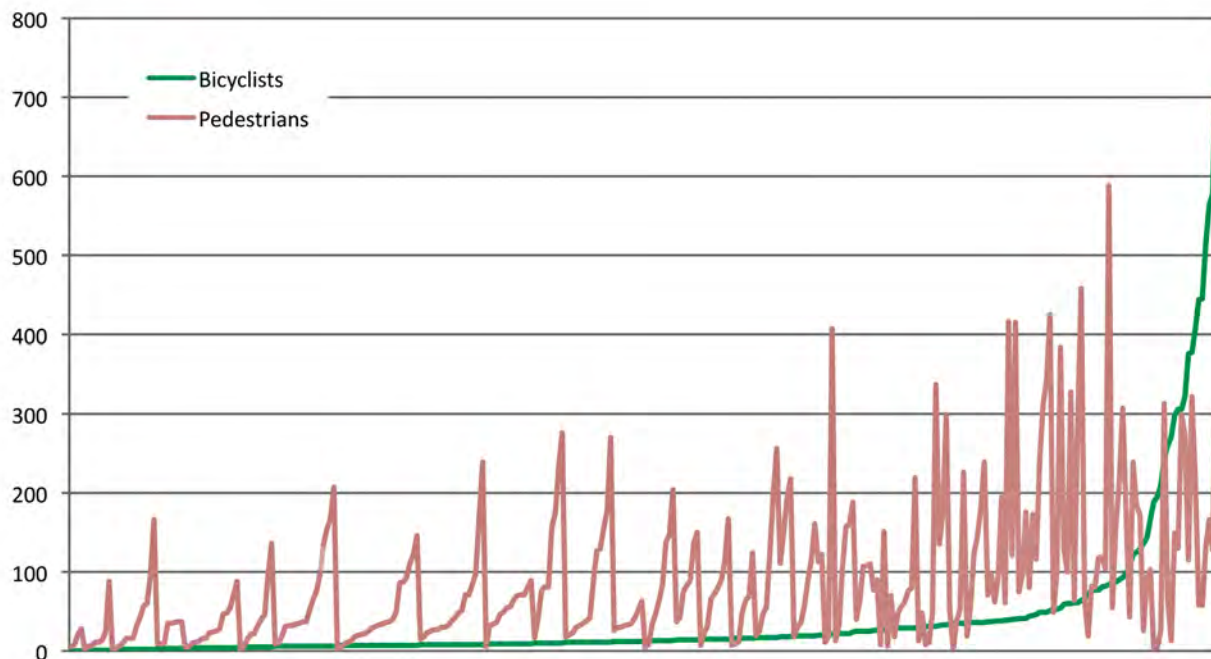


Table 3. Top 10 Highest Pedestrian Use Locations*

Pedestrians	Location	City	Time
588	Eastlake Ave E @ Denny Way	Seattle	PM
458	Denny Way @ Queen Anne Ave N	Seattle	AM
425	Denny Way @ 1 st Ave N	Seattle	AM
416	4 th St @ Pacific Ave	Bremerton	PM
415	California Ave SW @ Fautleroy Way SW	Seattle	PM
407	S 9 th St & Commerce St. next to bus hub	Tacoma	PM
384	Meridian Ave N @ N Northgate Way	Seattle	PM
343	E Union St @ 15 th Ave	Seattle	AM
337	15 th Ave NE @ NE 65 th St	Seattle	AM
328	156 th Ave NE @ NE 40 th St	Redmond	PM

* The number of pedestrians at the promenade to the Bellevue Transit Center was exceptionally high and was beyond the ability of the observer to accurately count.

Copies of this *Puget Sound Trend* can be obtained from the Information Center at 206-464-7532 or info@psrc.org, or from the PSRC website, psrc.org. For questions regarding the data presented in this article, contact Alon Bassok at 206-464-7091, abassok@psrc.org.