

# **Parking Inventory**

for the Central Puget Sound Region

PUGET SOUND REGIONAL COUNCIL / NOVEMBER 2004

### **Abstract**

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REPORT: Parking Inventory for the Central Puget Sound Region, 2004

PROJECT TITLE: Forecasts and Databases

SUBJECT: Spring 2004 survey of all off-street parking for the CBDs of

Seattle, Bellevue, Tacoma, Everett, and Bremerton, the

University District, and 3 ferry terminals: Bainbridge, Kingston and Southworth. Information collected included number of stalls, occupancy rates and cost to park for 0-2 hours, daily and

monthly.

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During the months of March through June, 2004, the Puget Sound Regional Council inventoried all off-street parking in the Central Business Districts (CBDs) of Seattle, Bellevue, Tacoma, Everett and Bremerton, the Seattle First Hill and lower Queen Anne neighborhoods, the University District, and some selected ferry terminals: Bainbridge, Kingston and Southworth. Information was collected on the number of stalls, occupancy and parking costs of each lot inventoried. The types of lots inventoried included off-street public and private parking, free and pay, carpool and vanpool, motor pool and customer parking.

The Regional Council has been conducting the parking survey since the late 1980s. The CBDs of Seattle and Bellevue were first surveyed in 1987; First Hill and lower Queen Anne were added to the inventory in 1989. The CBDs of Seattle and Bellevue, and First Hill and lower Queen Anne areas were all surveyed in 1992, 1994, 1996 and 1999. In 2002, the CBDs of Tacoma, Everett and Bremerton, the University District and the ferry terminals were added to the survey because of improvements to the travel demand forecasting models and the need for incorporation of a larger study area. Few modifications were made to the existing areas in 2004 with the exception of the University District and Bremerton CBD expanding to match Urban Center boundaries.

The Regional Council conducts this survey to provide a database of parking availability, utilization, and costs to support both regional and local planning needs. The parking data is used as an input to the Council's regional travel demand forecasting models. Data presented in this report include parking availability (stalls), occupancy, cost (hourly, daily, monthly) and type of parking (Customer, Employee and Other). Current study area data are compared to data from past surveys. Please note that some of the data may not match past reports due to recent revisions. In addition, the University District and Bremerton CBD boundaries changed between 2002 and 2004. However, the 2004 numbers in the executive summary do not include the expanded study areas due to comparability purposes.

#### Findings

#### **Parking Availability**

Within the 11 study areas, a total of 169,709 parking stalls were counted. The Seattle and Bellevue CBDs had the greatest amount of stalls with 54,035 and 35,346 respectively. Two ferry terminals, Bainbridge and Southworth, had the largest total percent change in parking stalls between 2002 and 2004, with an 18.8 percent gain (Table E-1). However, these areas had the least number of available stalls, along with Kingston, which gained 13 percent.

Table E-1: Parking Stalls by Study Area, 2002-2004					
	•		Annual %	Total %	
Study Area	2002	2004	Change	Change	
Seattle CBD	54,998	54,035	-0.9%	-1.8%	
First Hill	10,748	10,213	-2.5%	-5.0%	
Queen Anne	17,218	15,959	-3.7%	-7.3%	
Bellevue CBD	32,623	35,346	4.1%	8.3%	
Tacoma CBD	17,993	18,336	0.9%	1.9%	
Everett CBD	12,517	13,577	4.1%	8.5%	
University District	16,776	16,926	0.4%	0.9%	
Bremerton CBD	3,665	3,302	-5.1%	-9.9%	
Bainbridge	1,030	1,224	9.0%	18.8%	
Kingston	353	399	6.3%	13.0%	
Southw orth	330	392	9.0%	18.8%	
Study Area Total	168,251	169,709	0.4%	0.9%	

Seattle decreased available parking between 2002 and 2004 by 1.6 percent. Other study areas that experienced a decrease in available stalls were First Hill, Queen Anne and the Bremerton CBD. Decreases within these areas most commonly have to do with ongoing construction or lots converting to residential parking, a type of parking no longer covered in this survey.

Bellevue, Bremerton and Bainbridge parking densities are more than 60 stalls per acre (Figure E-1). The Seattle CBD comes in fourth, with 54 stalls per acre. The Tacoma and Everett CBDs and the University District all have very low densities of parking.

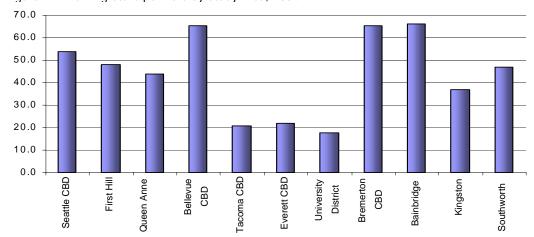


Figure E-1: Parking Stalls per Acre by Study Area, 2004

#### **Parking Occupancy**

Seattle's First Hill neighborhood had the highest occupancy rate within the selected study areas (Table E-2). Seventy-seven percent of the stalls within this study area are being utilized. First Hill had the third largest increase in occupancy between 2002 and 2004, with a total change of 7 percent. This area contains several key medical facilities within the region, which could contribute to the higher occupancy levels.

The First Hill study area is just one of several that gained occupancy between 2002 and 2004. Tacoma. **Everett and Bremerton CBDs all** experienced gains in occupancy levels. The Bremerton CBD had the largest percent gain with a total of 9.8. Tacoma also had a significant gain with 8.2 percent. Everett gained 1 percent. The remaining study areas decreased in occupancy between 2002 and 2004. Southworth had the largest occupancy decrease with a loss of 25.4 percent, going from an occupancy rate of 63.9 percent in 2002, to 47.7 percent in 2004. Queen Anne had the second largest decrease in occupancy with a total reduction of 17.1 percent.

Table E-2: Parking Occupancy by Study Area, 2002-2004				
			Annual %	Total %
Study Area	2002	2004	Change	Change
Seattle CBD	73.9%	63.9%	-7.0%	-13.5%
First Hill	72.0%	77.0%	3.4%	7.0%
Queen Anne	56.2%	46.6%	-8.9%	-17.1%
Bellevue CBD	59.6%	57.5%	-1.8%	-3.5%
Tacoma CBD	46.0%	49.7%	3.9%	7.9%
Everett CBD	52.0%	52.5%	0.5%	1.0%
University District	63.8%	60.0%	-3.0%	-6.0%
Bremerton CBD	65.1%	71.5%	4.8%	9.8%
Bainbridge	76.9%	74.4%	-1.6%	-3.3%
Kingston	46.6%	41.4%	-5.7%	-11.2%
Southw orth	63.9%	47.7%	-13.6%	-25.4%
Study Area Total	59.9%	56.2%	-3.1%	-6.2%

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Despite Seattle's occupancy rate, the number of unoccupied stalls within this study area was fairly high. Seattle had a total of 19,502 unoccupied stalls (Figure E-2). Almost half of Bellevue's parking stalls were not utilized. Bellevue Square is a major contributor to this, with a large parking garage that is not at capacity unless it is the peak shopping season. Total occupied stalls amount to 93,852.

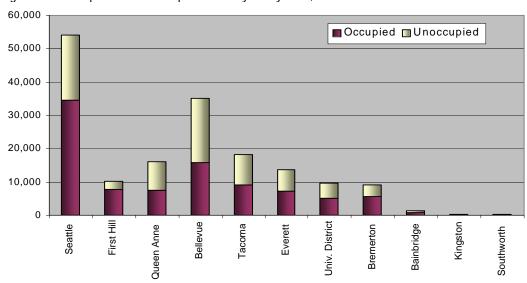


Figure E-2: Occupied and Unoccupied Stalls by Study Area, 2004

#### **Parking Costs**

The Seattle CBD has the highest parking costs in all cost categories of all the study areas. Between 2002 and 2004, the Seattle CBDs hourly cost did not change, however, daily and monthly costs both increased. The only study area that increased in hourly cost during this time period was the Bellevue CBD (Table E-3). Bellevue CBD hourly cost increased by a total of 7.7 percent, an addition of 0.40 cents.

The study area that recorded the largest decrease in its hourly rate was the Tacoma CBD. Tacoma CBD hourly parking cost decreased by a total of 26 percent between 2002 and 2004, a loss of more than a dollar. The second largest loss in hourly cost occurred in the Everett CBD. Everett hourly rates decreased from \$2.36 per hour in 2002 to \$1.97 per hour in 2004, a reduction of 12.9 percent. The other study areas had fairly minimal losses.

Table E-3: Average Hourly Parking Costs by Study Area, 2002-2004

			Annual %	Total %
Study Area	2002	2004	Change	Change
Seattle CBD	\$7.40	\$7.40	0.0%	0.0%
First Hill	\$3.70	\$3.53	-2.4%	-4.7%
Queen Anne	\$4.64	\$4.51	-1.4%	-2.8%
Bellevue CBD	\$5.15	\$5.55	3.8%	7.7%
Tacoma CBD	\$3.92	\$2.90	-14.0%	-26.0%
Everett CBD	\$2.26	\$1.97	-6.7%	-12.9%
University District	\$3.79	\$3.74	-0.8%	-1.5%
Bremerton CBD	\$3.66	\$3.43	-3.2%	-6.3%
Bainbridge	n.a.	\$7.10	n.a.	n.a.
Kingston	n.a.	n.a.	n.a.	n.a.
Southw orth	n.a.	n.a.	n.a.	n.a.
Study Area Total	\$5.75	\$5.88	1.1%	2.2%
Tacoma CBD Everett CBD University District Bremerton CBD Bainbridge Kingston Southw orth	\$3.92 \$2.26 \$3.79 \$3.66 n.a. n.a.	\$2.90 \$1.97 \$3.74 \$3.43 \$7.10 n.a. n.a.	-14.0% -6.7% -0.8% -3.2% n.a. n.a.	-26.0% -12.9% -1.5% -6.3% n.a. n.a.

Note: n.a. represents those areas that have fewer than 3 lots with costs associated with them.



Unlike hourly costs, daily parking costs in the majority of the study areas rose between 2002 and 2004 (Table E-4). The Bellevue CBD again had the largest increase in cost, with a total increase of 12.5 percent, adding on \$0.08 per day. The University District increased in cost by 9.5 percent and the Everett CBD by 7.7 percent.

Only two study areas within the survey decreased daily costs, the Bremerton CBD and Bainbridge ferry terminal. Bremerton decreased cost by a total of 24.8 percent and Bainbridge lost 2.7 percent.

Table E-4: Average Daily Parking Costs by Study Area, 2002-2004

Study Area	2002	2004	Annual % Change	Total % Change
Seattle CBD	\$14.93	\$15.72	2.6%	5.3%
First Hill	\$12.72	\$13.32	2.3%	4.7%
Queen Anne	\$6.71	\$6.79	0.6%	1.3%
Bellevue CBD	\$11.62	\$13.07	6.0%	12.5%
Tacoma CBD	\$8.76	\$9.01	1.4%	2.9%
Everett CBD	\$7.20	\$7.75	3.8%	7.7%
University District	\$6.38	\$6.98	4.6%	9.5%
Bremerton CBD	\$6.95	\$5.23	-13.3%	-24.8%
Bainbridge	\$7.84	\$7.63	-1.3%	-2.7%
Kingston	n.a.	n.a.	n.a.	n.a.
Southw orth	n.a.	n.a.	n.a.	n.a.
Study Area Total	\$12.31	\$12.34	0.1%	0.2%

Note: n.a represents those areas that have fewer than 3 lots with costs associated with them.

In the monthly parking cost category, the study area with the largest increase between 2002 and 2004 was First Hill (Table E-5). This area had a total cost change of 40 percent, from \$94.32 per month in 2002 to \$132.33 per month in 2004. The Tacoma CBD experienced a 13.2 percent increase, the second largest increase of the study areas. Tacoma added \$11.64 to its monthly cost, an average of \$5.82 per year.

Two study areas experienced reductions in monthly costs, Queen Anne and Bellevue. The Queen Anne area decreased its monthly cost by 26.8 percent. This was a reduction of \$29.19 between 2002 and 2004. The Bellevue CBD experienced a decrease in monthly cost at an annual average rate of 2.9 percent, a total change of 5.7 percent. Bellevue lost a total of \$8.17.

Table E-5: Average Monthly Parking Costs by Study Area, 2002-2004

			Annual %	Total %
Study Area	2002	2004	Change	Change
Seattle CBD	\$205.99	\$213.52	1.8%	3.7%
First Hill	\$94.32	\$132.33	18.4%	40.3%
Queen Anne	\$109.05	\$79.86	-14.4%	-26.8%
Bellevue CBD	\$142.30	\$134.13	-2.9%	-5.7%
Tacoma CBD	\$88.41	\$100.05	6.4%	13.2%
Everett CBD	n.a.	\$67.42	n.a.	n.a.
University District	\$62.32	\$66.18	3.1%	6.2%
Bremerton CBD	\$92.16	\$97.00	2.6%	5.3%
Bainbridge	n.a.	n.a.	n.a.	n.a.
Kingston	n.a.	n.a.	n.a.	n.a.
Southw orth	n.a.	n.a.	n.a.	n.a.
Study Area Total	\$165.38	\$145.33	-6.3%	-12.1%

Note: n.a represents those areas that have fewer than 3 lots with costs associated with them.

#### Parking Type

Parking type within the inventory study areas consists of Customer (C), Employee (E) and Other (O). The parking type that holds the majority of parking stalls across the survey study areas is



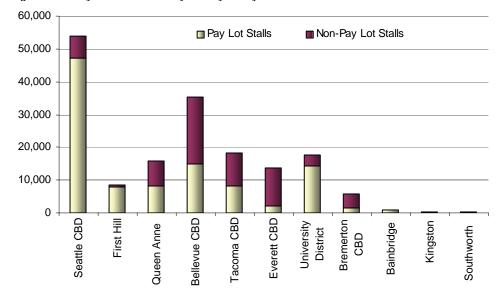
Other (Table E-6). This classification includes any mixed use lots and those that charge to park. Customer lots are in abundance in the Bellevue CBD. Many of these stalls come from the Bellevue Mall parking garage. Both Bainbridge and Kingston have parking stalls classified only as Other.

Table E-6: Parking Type by Study Area, 2002-2004

		2002			2004		To	otal % Chang	je
Study Area	С	Е	0	С	Е	0	C	Е	0
Seattle CBD	1,397	2,580	48,803	1,208	3,680	49,147	-13.5%	42.6%	0.7%
First Hill	480	1,225	9,043	301	1,391	8,521	-37.3%	13.6%	-5.8%
Queen Anne	1,706	4,310	11,598	1,600	3,713	10,646	-6.2%	-13.9%	-8.2%
Bellevue CBD	11,287	953	20,383	13,884	1,512	19,795	23.0%	58.7%	-2.9%
Tacoma CBD	413	1,423	16,157	2,325	2,114	13,897	463.0%	48.6%	-14.0%
Everett CBD	1,752	2,423	8,342	1,446	2,389	9,742	-17.5%	-1.4%	16.8%
University District	79	425	16,272	861	1,379	15,149	989.9%	224.5%	-6.9%
Bremerton CBD	64	93	3,462	66	254	2,982	3.1%	173.1%	-13.9%
Bainbridge	0	0	1,030	0	0	1,224	0.0%	0.0%	18.8%
Kingston	0	16	337	0	0	399	0.0%	-100.0%	18.4%
Southw orth	0	22	308	0	48	344	0.0%	118.2%	11.7%
Study Area Total	17,178	13,470	135,735	21,691	16,480	131,846	0.0%	22.3%	-2.9%

The majority of the Seattle CBD, First Hill and University District parking stalls are pay lots. More than 87 percent of the stalls within the Seattle CBD and more than 91 percent of the stalls in the First Hill area have costs associated with them. The percentage of pay lots in the University District is 80.4 percent. The Bellevue, Tacoma, Everett and Bremerton CBDs all had less than 50 percent of their parking stalls classified as paid parking. Everett had the lowest with 16.6 percent.

Figure E-3: Pay lots and Non Pay lots by Study Area, 2004



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#### **About the Survey**

This is the eighth regional inventory of off-street parking conducted by the Puget Sound Regional Council. The inventory began in 1987 and has been conducted every two to three years since. The 1987 survey covered only Seattle's Central Business District (CBD). Since then, the survey study areas have increased. Beginning in 1989, the study was expanded to include portions of both First Hill and lower Queen Anne. These areas remained consistent until 2002 when seven new study areas were added. These study areas included the CBDs of Tacoma, Everett and Bremerton, the University District and three ferry terminals; Bainbridge, Kingston and Southworth. Map 1 on the following page shows the extent of the inventory area.

For all areas included in the survey, data were collected beginning mid March through the end of June of 2004. The inventory was conducted Monday through Thursday between 9:30 a.m. and 11:30 a.m., and between 1:30 p.m. and 3:30 p.m. The types of parking surveyed included:

- Off-street parking, both public and private
- Free and pay parking
- Carpool and vanpool lots
- Motor pool parking, both private and government
- Hotels and motels
- Short-term customer parking such as convenience stores and restaurants

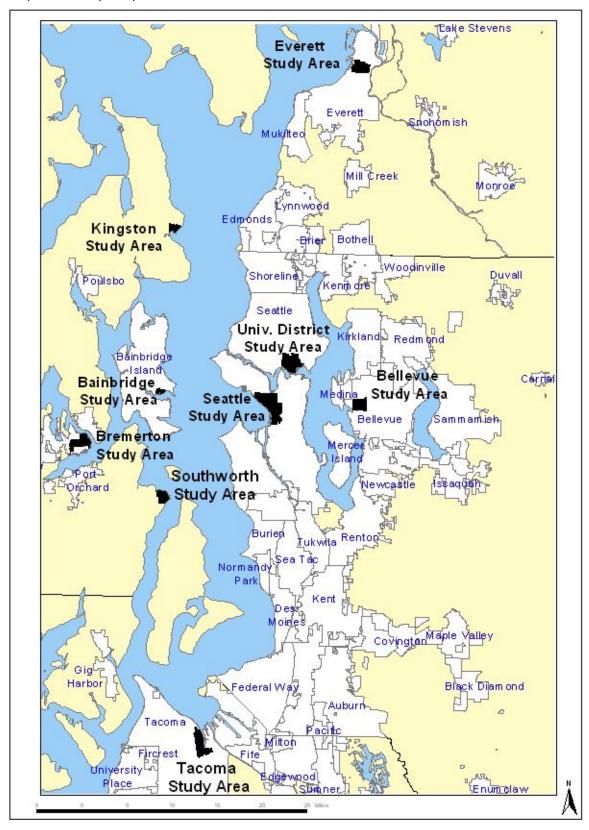
Attributes collected for each parking lot consisted of 2000 census tract and block number, owner or tenant, address, total stalls, morning and afternoon occupancy (number of cars in a lot at a given time), cost to park for 0-2 hours, daily and monthly and type of parking (Customer, Employee and Other). Other data collected but not utilized in the report included number of handicap stalls and early bird specials, including price and time. Where it was not possible to physically count the spaces and cars in a particular lot, information was obtained from parking attendants, if present, or from the owner of the lot. For large parking facilities such as the University of Washington and Bellevue Square, the parking database was supplemented from information obtained directly from those facilities.

This report summarizes the number of stalls, occupancy, cost and type of parking by zone within each study area. Occupancy is calculated by averaging a morning and afternoon count of the same lot based on the numbers of stalls within that lot. Costs are weighted by total number of stalls but are based on only those lots that have costs associated with them. All costs within this report are adjusted to 2004 constant dollars unless specified otherwise. Parking type includes three classifications: Customer, Employee and Other. For a more detailed description of the analysis and classification descriptions, please refer to Appendix A. The 2004 results are compared with results from previous inventories beginning in 1996. The Regional Council plans to continue updating the inventory database on a two-year cycle.

#### Why the Regional Council conducts this survey

The Regional Council conducts this survey to provide a database of parking availability, utilization, and costs to support both regional and local planning needs. Parking is considered to be a major urban land use. Its location, supply and pricing influences development, property

Map 1: Inventory Study Area



values and urban form.<sup>1</sup> Parking affects the level of trips that are attracted to an area, so the parking data is used as an input to the Council's regional travel demand forecasting models, particularly in estimating choice of travel mode. These models provide estimates of the amount and types of travel we can expect in the years ahead, and allow policy makers to examine the impacts of alternative transportation policy decisions. Parking costs are a key factor in modeling mode choice, trip destination choice and trip frequency, for both work and non-work trips.

#### How the Parking survey can be utilized

This report is intended to support the needs of individuals working with parking policies and parking supply management. The federal Clean Air Act and state Commute Trip Reduction Act require that local governments and large employers take a closer look at commuter travel to and from our central business districts and formulate policies to reduce the environmental impacts of commuting. The state's Commute Trip Reduction Law requires certain jurisdictions in the region to review their parking policies and, where appropriate, revise them to support commute trip reduction. For these reasons, planners and policy makers can benefit from the information provided by this survey.

Because more than half of the air pollution in the central Puget Sound region comes from motor vehicles, it is important to manage the parking supply<sup>2</sup>. With federal and state mandates to reduce air pollution, the region is seeking ways to encourage people who are currently driving alone to use transit, carpools or some other mode of travel. Parking supply management is one of the more effective ways to influence travel behavior. Parking supply management can involve several strategies including setting aside desirable parking spaces for carpools or vanpools, establishing area wide parking caps and reducing the amount of parking developers are required by zoning codes to provide, among many others. Managing parking effectively can result in air quality benefits from travelers choosing alternative methods over single occupancy vehicle travel.

This report is divided into nine sections covering each study area:

Section one: Seattle CBD

Section two: Seattle's First Hill neighborhood,

Section three: Lower Queen Anne area

Section four: Bellevue CBD,Section five: Tacoma CBDSection six: Everett CBD

Section seven: University DistrictSection eight: Bremerton CBD

• Section nine: Three ferry terminals; Bainbridge, Kingston and Southworth.

Each chapter includes a description of the study area and the findings. The findings include data from the 1996, 1999 and 2002 inventories. Appendix A describes the methodology of the survey in more detail and Appendix B contains some additional data not included in the body of the report.



<sup>&</sup>lt;sup>1</sup> Transportation Research Board. Parking Management and Supply. 1995

National Transportation Library. The Link Between Driving and Air Pollution. Available at: http://ntl.bts.gov/DOCS/taq2.html

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#### **Study Area**

The Seattle Central Business District (CBD) is the largest study area in the survey, encompassing over 1,000 acres. It is bounded by Elliot Bay to the west, Denny Way to the north, Interstate 5 to the east and Royal Brougham Way to the south (Map 2). The area is made up of 13 zones and these zones in turn are grouped into three subareas: Pioneer Square/International District (zones 1-3), Downtown Core (zones 4-8) and Denny Regrade (zones 9-13). The Pioneer Square/International District is comprised of 323 acres, the Downtown core, 319 acres and Denny Regrade, 359 acres.

#### **Parking Availability**

The availability of off-street parking in the Seattle area has decreased between 2002 and 2004 (Table 1). In 2004, the Seattle CBD had a total of 54,035 parking stalls, approximately 53.9 stalls per acre. However, this was a 1.6 percent decrease from 2002, which had 54,998. Several factors could have contributed to this decrease. Areas undergoing redevelopment may build on an existing surface lot or parking could be converted to residential only, which is a parking type that is no longer included in this survey. Zone 11, for example, had the largest decrease in parking stalls between 2002 and 2004. This zone decreased by more than 46 percent, with a loss of 1,536 stalls. These losses were primarily due to garages becoming residential parking only. The 2002 survey included residential in zones 1-13, however, those off-street lots have since been removed from the database.

Zone 8 had the largest increase in stalls with an addition of 1,284 spaces between 2002 and 2004. Other zones that experienced increased in parking stalls include Zones 1, 2, 3, 7 and 12. However, these increases were not enough to offset the losses within the entire study area. Zones 1 and 2 have been increasing steadily since 1996. These two areas have undergone significant changes since 1996, especially Zone 1. With the demolition of the Kingdome and the addition of Qwest and Safeco fields, it was essential for this study area to add parking supply. Although Safeco is not in any of the survey zones, its adjacency to Zone 1 creates parking impacts.

	Table 1: Seattle	CBD	Parking	Stalls,	1996-2004
--	------------------	-----	---------	---------	-----------

			Annual	Total		Annual	Total		Annual	Total
			Change	Change		Change	Change		Change	Change
Zone	1996	1999	96-99	96-99	2002	99-02	99-02	2004	02-04	02-04
1	3,700	3,940	2.1%	6.5%	5,280	10.3%	34.0%	5,805	4.9%	9.9%
2	1,452	1,501	1.1%	3.4%	1,626	2.7%	8.3%	1,661	1.1%	2.2%
3	1,663	1,651	-0.2%	-0.7%	1,689	0.8%	2.3%	1,723	1.0%	2.0%
4	7,136	7,311	0.8%	2.5%	7,136	-0.8%	-2.4%	6,840	-2.1%	-4.1%
5	4,790	4,866	0.5%	1.6%	4,790	-0.5%	-1.6%	4,631	-1.7%	-3.3%
6	1,763	1,816	1.0%	3.0%	1,763	-1.0%	-2.9%	1,515	-7.3%	-14.1%
7	6,682	7,292	3.0%	9.1%	6,682	-2.9%	-8.4%	6,786	0.8%	1.6%
8	6,283	7,439	5.8%	18.4%	6,283	-5.5%	-15.5%	7,567	9.7%	20.4%
9	4,270	3,771	-4.1%	-11.7%	4,342	4.8%	15.1%	4,002	-4.0%	-7.8%
10	1,600	1,593	-0.1%	-0.4%	1,600	0.1%	0.4%	1,221	-12.6%	-23.7%
11	3,276	3,062	-2.2%	-6.5%	3,276	2.3%	7.0%	1,740	-27.1%	-46.9%
12	4,817	4,811	0.0%	-0.1%	4,817	0.0%	0.1%	5,392	5.8%	11.9%
13	5,714	5,010	-4.3%	-12.3%	5,714	4.5%	14.1%	5,152	-5.0%	-9.8%
SeattleCBD										
Total	53,146	54,063	0.6%	1.7%	54,998	0.6%	1.7%	54,035	-0.9%	-1.8%

Map 2: Seattle CBD Study Area 75/9/<sub>0</sub> 11 Denny Triangle 13 12 Belltown 10 Westlake Center Convention H Center CBD 5 Yesler Way Elliot Bay \$ Jackson St International District Qwest Field Royal Brougham Way Safeco Field



0.25

0.25

0.5

0.75

1.25

1.5 Miles

The Seattle CBD has a total of 53.9 parking stalls per acre (Table 2). Zone 8 has the highest number of parking stalls per acre with a total of 108.2. Other zones that have an abundant supply of parking include Zones 4 and 5, with 91.6 and 97.3 stalls per acre, respectively.

#### **Parking Occupancy**

Despite the economic boom in the late 1990's, the Seattle CBDs occupancy rates have been decreasing since 1996 (Table 3). Between 1996 and 1999, a period of vigorous economic growth, occupancy rates within the Seattle CBD decreased slightly. Occupancy continued to decrease between 2002 and 2004, with an average annual loss of 7 percent. Some of the largest decreases occurred in Zones 4, 8 and 12.

Table 2: Sea	ttle CBD St	alls per ac	re, 2004
			Stalls per
Zone	Acreage	Stalls	Acre
1	186.6	5,805	31.1
2	74.9	1,661	22.2
3	62.0	1,723	27.8
4	74.7	6,840	91.6
5	47.8	4,631	96.8
6	46.7	1,515	32.4
7	80.1	6,786	84.7
8	70.0	7,567	108.2
9	101.2	4,002	39.5
10	43.0	1,221	28.4
11	59.1	1,740	29.4
12	78.8	5,392	68.4
13	77.7	5,152	66.3
Seattle			
CBD Total	1002.4	54.035	53.9

Zone 12 had the largest decrease in occupancy with an average annual loss of 12.9 percent, a total loss of 24.1 percent. Zone 12 is located in the northern portion of the study area, near the lower Queen Anne neighborhood. The zone that had the largest increase in occupancy was Zone 10. This zone increased from a 60.3 percent occupancy rate in 2002, to 68.4 percent in 2004, a total increase of 13.4 percent. Overall, only three zones experienced an increase in occupancy, Zones 2, 10 and 13. This trend is similar to the one that happened between 1999 and 2002. During this time period, only 2 zones experienced an increase in occupancy rates, Zones 7 and 8.

Table 3: Seattle CBD A	Average Parking	Occupancy,	1996-2004
------------------------	-----------------	------------	-----------

		orago ra	Annual	Total		Annual	Total		Annual	Total
			Change	Change		Change	Change		Change	Change
Zone	1996	1999	96-99	96-99	2002	99-02	99-02	2004	02-04	02-04
1	57.6%	42.2%	-9.9%	-26.7%	38.4%	-3.1%	-8.9%	33.2%	-7.1%	-13.7%
2	62.7%	72.2%	4.8%	15.2%	64.7%	-3.6%	-10.4%	67.4%	2.1%	4.2%
3	72.2%	84.7%	5.5%	17.3%	76.8%	-3.2%	-9.3%	73.0%	-2.5%	-5.0%
4	86.6%	87.8%	0.5%	1.4%	86.6%	-0.5%	-1.4%	68.4%	-11.1%	-21.0%
5	85.5%	85.9%	0.2%	0.5%	82.3%	-1.4%	-4.2%	75.0%	-4.6%	-8.9%
6	77.2%	71.0%	-2.8%	-8.0%	70.3%	-0.3%	-1.0%	66.4%	-2.8%	-5.5%
7	88.9%	82.5%	-2.5%	-7.2%	84.7%	0.9%	2.6%	74.2%	-6.4%	-12.4%
8	90.4%	74.2%	-6.4%	-17.9%	82.8%	3.7%	11.6%	64.8%	-11.5%	-21.8%
9	74.2%	76.3%	0.9%	2.8%	72.3%	-1.8%	-5.2%	62.2%	-7.3%	-14.0%
10	67.9%	80.6%	5.9%	18.7%	60.3%	-9.2%	-25.2%	68.4%	6.5%	13.4%
11	84.4%	81.4%	-1.2%	-3.6%	72.0%	-4.0%	-11.6%	67.2%	-3.4%	-6.7%
12	74.5%	79.3%	2.1%	6.4%	73.4%	-2.5%	-7.4%	55.7%	-12.9%	-24.1%
13	80.0%	85.6%	2.3%	7.0%	70.5%	-6.3%	-17.7%	70.6%	0.1%	0.2%
Seattle CBD										
Total	80.3%	78.2%	-0.9%	-2.6%	73.9%	-1.9%	-5.5%	63.9%	-7.0%	-13.5%

Most zones within the Seattle CBD have more than 50 percent of their parking stalls occupied (Figure 1). Zone 1 is the only exception with only 33.2 percent of stalls occupied. Zone 1 had 1,927 occupied stalls and 3,879 unoccupied stalls. This zones proximity to large event centers lowers occupancy on non-event days. Zone 5, which had the highest occupancy rate, had a total of 3,471 occupied stalls and 1,160 unoccupied stalls.

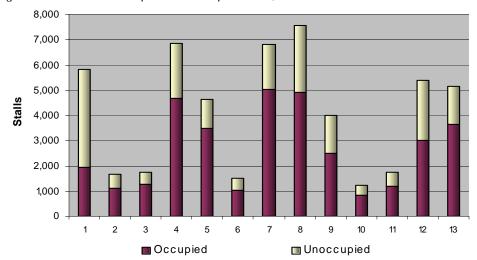


Figure 1: Seattle CBD Occupied & Unoccupied Stalls, 2004

#### **Parking Costs**

Overall, the average hourly off-street parking rate in the Seattle CBD has remained the same between 2002 and 2004, with a cost of \$7.40 (Table 4). However, there were still some zones that decreased in hourly parking costs. Zones 6, 7, 9, 10, and 12 experienced a decrease in hourly costs between 2002 and 2004. The zone with the largest percent reduction was Zone 9. Zone 9 experienced a 19.6 percent loss, a decrease from \$6.40 per hour in 2002, to \$5.14 per hour in 2004.

Table 4: Seattle CBD Average Hourly Parking Costs, 1996-2004

Tubic 1. ocu		.,	Annual	Total		Annual	Total		Annual	Total
			Change	Change		Change	Change		Change	Change
Zone	1996	1999	96-99	96-99	2002	99-02	99-02	2004	02-04	02-04
1	\$3.69	\$4.51	6.9%	22.2%	\$5.77	8.5%	27.9%	\$6.38	5.1%	10.5%
2	\$2.51	\$2.51	0.1%	0.3%	\$5.85	32.6%	132.9%	\$6.36	4.3%	8.7%
3	\$3.74	\$5.01	10.3%	34.2%	\$4.83	-1.2%	-3.6%	\$5.07	2.5%	5.0%
4	\$6.13	\$7.60	7.5%	24.1%	\$8.68	4.5%	14.2%	\$9.22	3.1%	6.2%
5	\$8.17	\$9.27	4.3%	13.6%	\$9.79	1.8%	5.6%	\$10.22	2.2%	4.4%
6	\$5.89	\$6.28	2.2%	6.7%	\$7.17	4.5%	14.1%	\$6.29	-6.3%	-12.2%
7	\$6.75	\$7.45	3.3%	10.3%	\$9.01	6.5%	20.9%	\$8.52	-2.8%	-5.5%
8	\$5.90	\$6.79	4.8%	15.1%	\$6.66	-0.6%	-1.9%	\$6.82	1.2%	2.4%
9	\$3.84	\$5.99	16.0%	55.9%	\$6.40	2.2%	6.9%	\$5.14	-10.3%	-19.6%
10	\$5.63	\$6.14	2.9%	9.1%	\$6.06	-0.4%	-1.3%	\$5.71	-2.9%	-5.7%
11	\$5.31	\$5.65	2.1%	6.4%	\$5.14	-3.1%	-8.9%	\$5.16	0.2%	0.4%
12	\$4.81	\$5.48	4.5%	14.1%	\$6.45	5.6%	17.6%	\$6.27	-1.4%	-2.8%
13	\$4.34	\$6.25	12.9%	44.0%	\$6.17	-0.4%	-1.2%	\$6.35	1.5%	2.9%
Seattle CBD	•	•		•	•	•		•		•
Total	\$5.68	\$6.77	6.0%	19.1%	\$7.40	3.0%	9.3%	\$7.40	0.0%	0.0%

Seattle's average daily parking rate rose by 5.2 percent between 2002 and 2004 (Table 5). This was an increase of \$0.79. Zone 8 had the greatest increase in daily cost with 22.9 percent, a dollar increase of 3.48. Zone 13 also had a large increase, with 22.2 percent. The zone with the largest

decrease in daily cost was Zone 9. This zone decreased by 18.6 percent between 2002 and 2004, a loss of \$2.28

Table 5: Seattle CBD Average Daily Parking Costs, 1996-2004

		.,	Annual	Total		Annual	Total		Annual	Total
			Change	Change		Change	Change		Change	Change
Zone	1996	1999	96-99	96-99	2002	99-02	99-02	2004	02-04	02-04
1	\$5.17	\$9.19	21.1%	77.6%	\$9.17	-0.1%	-0.2%	\$10.38	2.1%	13.2%
2	\$3.91	\$5.21	10.1%	33.4%	\$13.50	37.4%	159.2%	\$14.21	0.9%	5.2%
3	\$7.24	\$9.89	10.9%	36.5%	\$10.90	3.3%	10.3%	\$11.73	1.2%	7.6%
4	\$12.88	\$17.62	11.0%	36.8%	\$18.03	0.8%	2.3%	\$18.96	0.8%	5.1%
5	\$16.00	\$20.15	8.0%	25.9%	\$21.34	1.9%	5.9%	\$22.99	1.3%	7.8%
6	\$10.66	\$12.58	5.7%	18.0%	\$15.55	7.3%	23.5%	\$15.11	-0.5%	-2.8%
7	\$14.10	\$17.65	7.8%	25.2%	\$18.70	1.9%	5.9%	\$17.21	-1.4%	-8.0%
8	\$13.54	\$20.21	14.3%	49.2%	\$15.21	-9.0%	-24.7%	\$18.69	3.5%	22.9%
9	\$8.47	\$13.28	16.2%	56.7%	\$12.23	-2.7%	-7.9%	\$9.95	-3.4%	-18.6%
10	\$9.60	\$10.89	4.3%	13.4%	\$10.77	-0.4%	-1.1%	\$10.52	-0.4%	-2.3%
11	\$9.42	\$9.62	0.7%	2.2%	\$9.84	0.8%	2.3%	\$9.94	0.2%	1.0%
12	\$9.61	\$12.41	8.9%	29.1%	\$12.55	0.4%	1.1%	\$12.62	0.1%	0.6%
13	\$6.95	\$12.24	20.8%	76.2%	\$10.60	-4.7%	-13.5%	\$12.95	3.4%	22.2%
Seattle										
CBD Total	\$11.20	\$15.72	12.0%	40.4%	\$14.93	-1.7%	-5.0%	\$15.72	0.9%	5.2%

Average monthly parking cost in the Seattle CBD has risen by 3.7 percent since 2002 (Table 6). The zone that saw the largest increase was Zone 8, with a total percent increase of 4.3. Zone 10 had the lowest recorded monthly cost with \$76.08. This zone lost 49.3 percent between 2002 and 2004, a total decrease of \$74.06. Although overall monthly costs have risen, the majority of the zones in the Seattle CBD experienced a decrease.

Table 6: Seattle CBD Average Monthly Parking Costs, 1996-2004

			Annual	Total		Annual	Total		Annual	Total
			Change	Change		Change	Change		Change	Change
Zone	1996	1999	96-99	96-99	2002	99-02	99-02	2004	02-04	02-04
1	\$74.61	\$151.10	26.5%	102.5%	\$140.36	-2.4%	-7.1%	n.a.	n.a.	n.a.
2	\$57.94	\$75.97	9.4%	31.1%	\$140.32	22.7%	84.7%	\$130.71	-3.5%	-6.8%
3	\$109.76	\$123.80	4.1%	12.8%	\$157.19	8.3%	27.0%	\$163.11	1.9%	3.8%
4	\$158.20	\$201.54	8.4%	27.4%	\$229.51	4.4%	13.9%	\$235.80	1.4%	2.7%
5	\$174.98	\$220.78	8.1%	26.2%	\$258.73	5.4%	17.2%	\$259.84	0.2%	0.4%
6	\$137.93	\$171.67	7.6%	24.5%	\$197.16	4.7%	14.9%	\$177.92	-5.0%	-9.8%
7	\$161.94	\$211.26	9.3%	30.5%	\$227.51	2.5%	7.7%	\$229.45	0.4%	0.9%
8	\$173.44	\$213.47	7.2%	23.1%	\$229.87	2.5%	7.7%	\$239.79	2.1%	4.3%
9	\$74.19	\$113.68	15.3%	53.2%	\$173.67	15.2%	52.8%	\$169.91	-1.1%	-2.2%
10	\$109.31	\$137.10	7.8%	25.4%	\$150.14	3.1%	9.5%	\$76.08	-28.8%	-49.3%
11	\$101.87	\$129.32	8.3%	27.0%	\$149.76	5.0%	15.8%	n.a.	n.a.	n.a.
12	\$136.45	\$172.01	8.0%	26.1%	\$210.11	6.9%	22.2%	\$165.20	-11.3%	-21.4%
13	\$103.82	\$166.95	17.2%	60.8%	\$162.17	-1.0%	-2.9%	\$117.35	-14.9%	-27.6%
Seattle										
CBD Total	\$147.10	\$189.59	8.8%	28.9%	\$205.99	2.8%	8.6%	\$213.52	1.8%	3.7%

Between 1996 and 2004, the average monthly cost category has increased more than the other categories (Figure 2). Monthly cost has been on a steady incline since 1996. Average daily cost, however, has had some downturns. Between 1999 and 2002, average daily cost experienced a decrease, and then began to rise again between 2002 and 2004. Hourly cost has been on a steady increase until 2002, where it leveled off between 2002 and 2004.

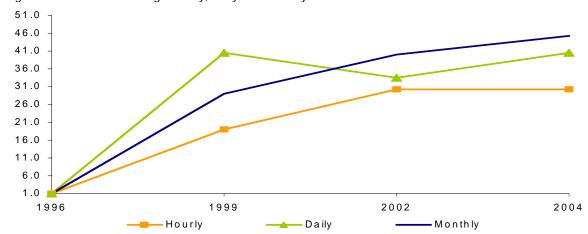


Figure 2: Seattle CBD Average Hourly, Daily and Monthly Cost Growth: 1996-2004

#### **Parking Type**

The Seattle CBD study area is made up of 2.2 percent Customer parking, 6.8 percent Employee and 91 percent Other parking (Table 7). Zone 8 has the largest share of other type of parking, which is typically pay parking, with 7,542 stalls. The zone with the largest share of Employee parking is Zone 9. Employee parking in the Seattle CBD has grown by 42.6 percent since 2002. Customer parking is most abundant in Zone 12.

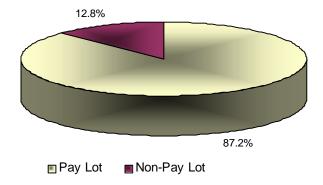
Table	7:	Seattle	CBD	Parking	Type,	2002-2004

		2002			2004		To	tal % Chan	ge
ZONE	С	Е	0	С	Е	0	С	Е	0
1	67	257	4,834	17	82	5,706	-74.6%	-68.1%	18.0%
2	324	224	1,072	284	237	1,140	-12.3%	5.8%	6.3%
3	87	88	1,493	35	167	1,521	-59.8%	89.8%	1.9%
4	20	182	6,233	20	812	6,008	0.0%	346.2%	-3.6%
5	0	22	4,543	15	161	4,455		631.8%	-1.9%
6	22	74	1,395	0	74	1,441	-100.0%	0.0%	3.3%
7	17	24	6,948	0	55	6,731	-100.0%	129.2%	-3.1%
8	36	4	8,558	8	18	7,541	-77.8%	350.0%	-11.9%
9	74	442	3,204	61	879	3,062	-17.6%	98.9%	-4.4%
10	0	121	1,167	21	98	1,102		-19.0%	-5.6%
11	119	320	1,218	96	476	1,168	-19.3%	48.8%	-4.1%
12	435	339	3,933	453	254	4,685	4.1%	-25.1%	19.1%
13	196	483	4,205	198	367	4,587	1.0%	-24.0%	9.1%
Seattle CBD									
Total	1,397	2,580	48,803	1,208	3,680	49,147	-13.5%	42.6%	0.7%

Note: Total stalls will not necessarily add up to total parking stalls due to the inability to classify all lots

The majority of parking within the Seattle CBD is pay parking. Eight-seven percent of parking stalls have costs associated with them. Only 12.8 percent of parking within the Seattle CBD study area is free. Seattle has a high number of garages, which all charge to park. Seattle is also the largest employment center in the region and contains several major sports facilities, accounting for the abundance of parking.

Figure 3: Seattle CBD Percentage of Pay Lots and Non-Pay Lots, 2004





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#### **Study Area**

The First Hill study area consists of 212 acres and is bordered by E. Pine Street to the north, Broadway to the east, Alder Street to the south and I-5 to the west (Map 3). First Hill is made up of three zones, 14, 15 and 16. Only that portion of First Hill that provides parking for the CBD or includes the major medical complexes is included in the study area. This study area contains some of the major medical facilities in the region including Swedish Hospital (Zone 16), Virginia Mason Hospital (Zone 14) and Harborview Medical Center (Zone 15).

THE Pine St Pi

Map 3: First Hill Study Area

#### **Parking Availability**

Parking stalls within the First Hill study area decreased by an average annual rate of 2.5 percent between 2002 and 2004, a total change of 5 percent (Table 8). This continued the trend seen between 1999 and 2002, when the First Hill area lost a total of 7.7 percent of its parking stalls.

The zone that experienced the largest decrease in parking stalls between 2002 and 2004 was Zone 14. This zone lost 14.2 percent, amounting to a total of 565 stalls. Zone 16 was the only zone in the First Hill study area to gain stalls between 2002 and 2004, with an increase of 2.9 percent. However, this zone had been losing parking options between 1996 and 2002.

Table 8: First Hill Parking Stalls, 1996-2004

		<i>J</i> ,	Annual Change	Total Change		Annual Change	Total Change		Annual Change	Total Change
Zone	1996	1999	96-99	96-99	2002	99-02	99-02	2004	02-04	02-04
14	3,742	4,299	4.7%	14.9%	3,969	-2.6%	-7.7%	3,404	-7.4%	-14.2%
15	3,577	3,547	-0.3%	-0.8%	3,925	3.4%	10.7%	3,871	-0.7%	-1.4%
16	3,009	2,868	-1.6%	-4.7%	2,854	-0.2%	-0.5%	2,938	1.5%	2.9%
irst Hill Total	10,328	10,714	1.2%	3.7%	10,748	0.1%	0.3%	10,213	-2.5%	-5.0%

The First Hill study area has a total of 48.2 parking stalls per acre (Table 9). Zone 15 has the highest density of parking stalls per acre of the three zones with 55.5. Zone 16 has the lowest with 39.9

Table 9: First I	Hill Parking	g Stalls p	
			Stalls per
Zone	Acreage	Stalls	Acre
14	68.6	3,404	49.6
15	69.7	3,871	55.5
16	73.7	2,938	39.9
First Hill Total	212.1	10,213	48.2

#### **Parking Occupancy**

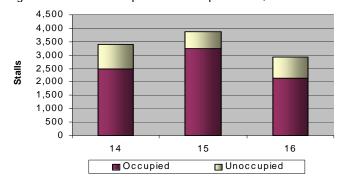
The number of utilized stalls within the First Hill study area increased between 2002 and 2004 by a total of 7 percent (Table 10). Zone 15 was the leader of this change, increasing by a total of 18.1 percent. In 2002 this zone had an occupancy rate of 70.8 percent; in 2004 the rate jumped to 83.7. Zone 14 also increased in occupancy with a total rate of 2.1 percent. Zone 16 decreased in occupancy by 1.9 percent.

Table 10: First Hill Average Parking Occupancy, 1996-2004

			Annual	Total		Annual	Total		Annual	Total
			Change	Change		Change	Change		Change	Change
Zone	1996	1999	96-99	96-99	2002	99-02	99-02	2004	02-04	02-04
14	77.0%	67.9%	-4.1%	-11.8%	71.3%	1.6%	5.0%	72.8%	1.0%	2.1%
15	76.9%	89.3%	5.1%	16.1%	70.8%	-7.4%	-20.7%	83.7%	8.7%	18.1%
16	74.4%	74.4%	0.0%	0.0%	74.5%	0.1%	0.2%	73.1%	-0.9%	-1.9%
First Hill Total	76 00/	76 70/	0.20/	0.70/	70.00/	2.40/	6.00/	77.00/	2 40/	7.00/
First Hill Total	76.2%	76.7%	0.2%	0.7%	72.0%	-2.1%	-6.2%	77.0%	3.4%	7.0%

Zone 15, the zone with the highest occupancy rate, had 3,239 occupied stalls and 632 unoccupied stalls (Figure 4). From the chart it is evident that all First Hill zones had occupied stalls amounting to more than 50 percent of total stalls.

Figure 4: First Hill Occupied & Unoccupied Stalls, 2004



#### **Parking Costs**

Average hourly cost within the First Hill study area decreased by 4.7 percent between 2002 and 2004. In 2002, the area charged an average of \$3.70 per hour and in 2004 that cost dropped to \$3.53, a change of \$0.17. This is the first time since 1996 that the First Hill area experienced a decrease in hourly cost. Between 1996 and 1999, the study area gained 24.7 percent, and between 1999 and 2002, 5.9 percent. Two out of the three zones saw the decrease, zones 14 and 16.

Table 11: First Hill Average Hourly Parking Costs, 1996-2004

			Annual	Total		Annual	Total		Annual	Total
			Change	Change		Change	Change		Change	Change
Zone	1996	1999	96-99	96-99	2002	99-02	99-02	2004	02-04	02-04
14	\$3.00	\$3.58	6.1%	19.6%	\$4.34	6.6%	21.1%	\$4.04	-3.5%	-6.9%
15	\$2.62	\$2.82	2.5%	7.6%	\$3.34	5.9%	18.6%	\$3.45	1.7%	3.3%
16	\$2.68	\$3.94	13.8%	47.3%	\$3.03	-8.4%	-23.1%	\$2.93	-1.8%	-3.6%
Seed I DI Tedel	ФО 00	<b>#2.50</b>	7.00/	0.4.70/	<b>#0.70</b>	4.00/	F 00/	<b>Ф</b> О <b>Г</b> О	0.40/	4.70/
First Hill Total	\$2.80	\$3.50	7.6%	24.7%	\$3.70	1.9%	5.9%	\$3.53	-2.4%	-4.7%

Unlike hourly cost, First Hill's average daily parking cost rose by a total of 4.7 percent. This was an increase of \$0.60 from 2002. Zone 15 was the leader in this cost increase, gaining a total of 18.4 percent. This zone went from \$11.51 in 2002 to \$13.63 in 2004, a gain of \$2.12. Zone 14 also experienced gains in daily cost with an increase of 14.5 percent. Zone 16, however, decreased its average daily parking cost rate by 22.6 percent between 2002 and 2004.

Table 12: First Hill Average Daily Parking Costs, 1996-2004

			Annual	Total		Annual	Total		Annual	Total
			Change	Change		Change	Change		Change	Change
Zone	1996	1999	96-99	96-99	2002	99-02	99-02	2004	02-04	02-04
14	\$7.51	\$13.03	20.2%	73.6%	\$13.56	1.3%	4.1%	\$15.53	2.3%	14.5%
15	\$7.51	\$11.51	15.3%	53.4%	\$11.51	0.0%	0.0%	\$13.63	2.8%	18.4%
16	\$7.11	\$11.22	16.4%	57.8%	\$12.88	4.7%	14.8%	\$9.96	-4.2%	-22.6%
First Hill Total	\$7.38	\$12.17	18.1%	64.9%	\$12.72	1.5%	4.5%	\$13.32	0.8%	4.7%

Average monthly parking cost within the First Hill study area increased by 40.3 percent. In 2002, monthly cost for the entire area averaged \$94.32, and in 2004 they averaged 132.33, a growth of \$38.01. Zone 15 experienced a significant increase in monthly cost between 2002 and 2004, rising 95.6 percent. Average monthly cost in 2002 amounted to \$75.52 and in 2004 was \$147.74, a gain of \$72.22.

Table 13: First Hill Average Monthly Parking Costs, 1996-2004

			Annual	Total		Annual	Total		Annual	Total
			Change	Change		Change	Change		Change	Change
Zone	1996	1999	96-99	96-99	2002	99-02	99-02	2004	02-04	02-04
14	\$86.28	\$128.30	14.1%	48.7%	\$113.33	-4.1%	-11.7%	\$188.76	29.1%	66.6%
15	\$68.71	\$74.64	2.8%	8.6%	\$75.52	0.4%	1.2%	\$147.74	39.9%	95.6%
16	\$74.36	\$75.97	0.7%	2.2%	\$81.49	2.4%	7.3%	\$103.48	12.7%	27.0%
		4			4			4		
rst Hill Total	\$76.27	\$97.30	8.5%	27.6%	\$94.32	-1.0%	-3.1%	\$132.33	18.4%	40.3%

Average hourly cost increased between 1996 and 2002 and then dipped slightly between 2002 and 2004 (Figure 5). Daily cost increased sharply between 1996 and 1999, but then experienced a slower rate of growth between 1999 and 2004. Average monthly cost increased between 1996 and 1999, experienced a slight downward decline between 1999 and 2002, and then increased sharply between 2002 and 2004.

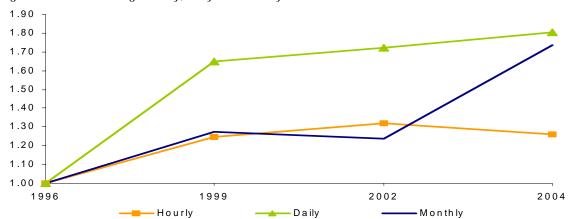


Figure 5: First Hill Average Hourly, Daily and Monthly Costs Growth: 1996-2004

#### Parking Type

Parking type within First Hill is predominantly Other (Table 14). This category had a total of 8,521 stalls in 2004 and represented 83.4 percent of the parking within the First Hill study area. Customer and Employee parking made up 2.9 and 13.6 percent of the stalls, respectively.

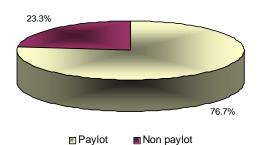
Table 14: First Hill Parking Type, 2002-2004

		2002			2004		Total % Change			
ZONE	ONE C E O				Е	0	С	Е	0	
14	73	185	3,711	140	130	3,134	91.8%	-29.7%	-15.5%	
15	0	986	2,939	8	914	2,949	n.a.	-7.3%	0.3%	
16	407	54	2,393	153	347	2,438	-62.4%	542.6%	1.9%	
First Hill										
Total	480	1,225	9,043	301	1,391	8,521	-37.3%	13.6%	-5.8%	

Note: Total stalls will not necessarily add up to total parking stalls due to the inability to classify all lots

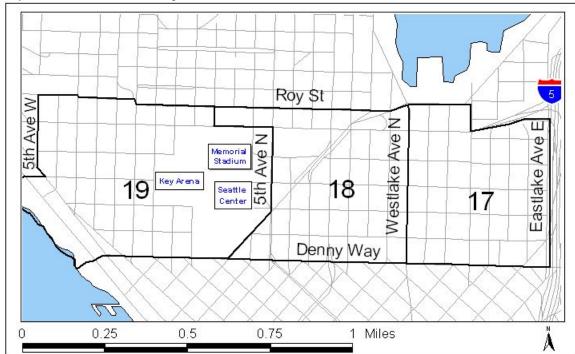
A large percentage of pay lots exist in the First Hill study area (Figure 6). More than 76 percent of the stalls have costs associated with them. Only 23.3 percent of the parking stalls in the First Hill area are free.

Figure 6: First Hill Percentage of Pay Lots and Non-Pay Lots, 2004



#### Study Area

Map 4 shows the lower Queen Anne study area. This area is made up of three zones, 17, 18 and 19, and extends from I-5 on the east to Elliott Bay on the west, Denny Way on the south to Roy, Valley and Mercer streets on the north. Lower Queen Anne includes Seattle Center, the Key Arena and Memorial Stadium, facilities that require abundant parking supplies.



Map 4: Lower Queen Anne Study Area

#### **Parking Availability**

The lower Queen Anne study area had a total of 15,959 parking stalls in 2004 (Table 15). Overall, this study area had a total of 43.8 stalls per acre (Table 16). Available parking stalls, however, have decreased since 2002 by 7.3 percent. All three Queen Anne zones experienced a loss in parking stalls.

Table 15: Lower Queen Anne Parking Stalls, 1996-2004

Table 15. Lo	wer Quee	II AIIIC I	Annual	Total	2004	Annual	Total		Annual	Total
			Change	Change		Change	Change		Change	Change
Zone	1996	1999	96-99	96-99	2002	99-02	99-02	2004	02-04	02-04
17	4,289	4,108	-1.4%	-4.2%	4,406	2.4%	7.3%	4,240	-1.9%	-3.8%
18	5,830	5,819	-0.1%	-0.2%	5,830	0.1%	0.2%	5,561	-2.3%	-4.6%
19	6,810	6,555	-1.3%	-3.7%	6,982	2.1%	6.5%	6,158	-6.1%	-11.8%
Queen Anne										
Total	16,929	16,482	-0.9%	-2.6%	17,218	1.5%	4.5%	15,959	-3.7%	-7.3%



Zone 19 had the largest decrease with 11.8 percent. The other two zones, 17 and 18, experienced moderate losses with 3.8 percent and 4.6 percent, respectively.

Of the three zones, zone 19 had the highest number of available parking stalls per acre with 70.3. Zone 17 had only 31.8 parking stalls per acre and Zone 18 had only 38.9, both significantly lower than Zone 19.

Table 16: Lower Queen Anne Stalls per acre, 2004

Stalls p

				Stalls per
	Zone	Acreage	Stalls	Acre
	17	133.5	4,240	31.8
	18	143.1	5,561	38.9
	19	87.6	6,158	70.3
,	Queen			
	Anne Total	364.1	15,959	43.8

#### Parking Occupancy

Occupancy levels in the Queen Anne area have been decreasing since 1999 (Table 17). Between 1999 and 2002, the Queen Anne area occupancy rate decreased by 5.2 percent and between 2002 and 2004, it decreased by 17 percent. This amounted to a total of 7,443 occupied and more than 8,000 unoccupied stalls (Figure 7). Overall, occupancy rates have decreased in the Lower Queen Anne study area by 21.4 percent since 1999.

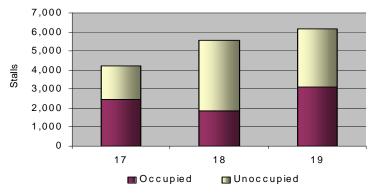
Zone 18 had the largest decrease between 2002 and 2004 with a loss of 37.4 percent. This zone went from a 53.3 percent occupancy rate in 2002, to a 33.4 percent rate in 2004. The other two zones in the Queen Anne area lost occupancy, but not at such a high rate. Zone 17 decreased by 3.6 percent and Zone 19 decreased by 9.5 percent.

Table 17: Lower Queen Anne Average Parking Occupancy, 1996-2004

			Annual	Total		Annual	Total		Annual	Total
			Change	Change		Change	Change		Change	Change
Zone	1996	1999	96-99	96-99	2002	99-02	99-02	2004	02-04	02-04
17	61.1%	65.3%	2.2%	6.9%	60.6%	-2.4%	-7.1%	58.4%	-1.8%	-3.6%
18	55.8%	48.7%	-4.4%	-12.7%	53.3%	3.0%	9.4%	33.4%	-20.9%	-37.4%
19	57.8%	64.9%	3.9%	12.3%	55.8%	-4.9%	-14.0%	50.5%	-4.9%	-9.5%
Queen Anne										
Total	58.0%	59.3%	0.7%	2.2%	56.2%	-1.8%	-5.2%	46.6%	-8.9%	-17.0%

Zone 18 had a total of 1,855 occupied stalls and 3,706 unoccupied stalls, amounting to an occupancy rate of only 33.4 percent (Figure 7). Zone 19 had half of its stalls occupied. Zone 17 had the highest amount of occupied stalls of the three zones with 2,478.

Figure 7: Lower Queen Anne Occupied & Unoccupied Stalls, 2004



#### **Parking Costs**

Average hourly cost in the Queen Anne area has been declining, however this has been occurring over a longer period of time. Between 1996 and 2004, hourly cost has declined by 11.2 percent. This amounts to a total loss of \$0.57, over the last 8 years (Table 18). Between 2002 and 2004, the Lower Queen Anne area saw an hourly cost decrease by 2.7 percent. Two of the three zones in this study area, 18 and 19, reduced hourly cost. Cost in zone 17, however, rose more than 38 percent. This zone went from an average hourly cost of \$2.92 in 2002, to \$4.04 in 2004, a gain of \$1.12.

Table 18: Lower Queen Anne Average Hourly Parking Costs, 1996-2004

			Annual	Total	.,	Annual	Total		Annual	Total
			Change	Change		Change	Change		Change	Change
Zone	1996	1999	96-99	96-99	2002	99-02	99-02	2004	02-04	02-04
17	\$2.20	\$2.42	3.3%	10.3%	\$2.92	6.4%	20.4%	\$4.04	17.6%	38.2%
18	\$6.33	\$5.35	-5.5%	-15.5%	\$5.18	-1.1%	-3.2%	\$4.98	-2.0%	-3.9%
19	\$4.36	\$5.19	5.9%	18.9%	\$5.15	-0.2%	-0.7%	\$4.59	-5.6%	-10.9%
Queen Anne										
Total	\$5.08	\$4.92	-1.1%	-3.2%	\$4.64	-1.9%	-5.6%	\$4.51	-1.3%	-2.7%

Daily parking cost rose by 1.3 percent between 2002 and 2004 in the Queen Anne area (Table 19). Two out of the three zones, however, decreased in average daily cost. Zone 17 was the only zone that experienced an increase. This zone increased by 13.6 percent, adding a total of \$0.76. The remaining zones, Zones 18 and 19, decreased by 0.4 percent and 4.4 percent respectively.

Table 19: Lower Queen Anne Average Daily Parking Costs, 1996-2004

			Annual	Total		Annual	Total		Annual	Total
			Change	Change		Change	Change		Change	Change
Zone	1996	1999	96-99	96-99	2002	99-02	99-02	2004	02-04	02-04
17	\$2.94	\$5.73	25.0%	95.1%	\$5.56	-1.0%	-3.0%	\$6.32	2.2%	13.6%
18	\$7.23	\$6.24	-4.8%	-13.8%	\$5.90	-1.8%	-5.4%	\$5.88	-0.1%	-0.4%
19	\$7.57	\$8.17	2.6%	7.9%	\$8.27	0.4%	1.2%	\$7.90	-0.8%	-4.4%
Queen										
Anne Total	\$7.02	\$6.98	-0.2%	-0.5%	\$6.71	-1.3%	-3.9%	\$6.79	0.2%	1.3%

Average monthly cost in the lower Queen Anne area decreased the most of the three cost categories (Table 20). Between 2002 and 2004, monthly cost was reduced by 26.8 percent. Most of this decrease came from Zone 18, which declined by 28 percent, an average annual rate of 15.1 percent. Zone 17 increased monthly cost by an average annual rate of 11.1 percent.

Table 20: Lower Queen Anne Average Monthly Parking Costs, 1996-2004

		Annual	Total		Annual	Total		Annual	Total
		Change	Change		Change	Change		Change	Change
1996	1999	96-99	96-99	2002	99-02	99-02	2004	02-04	02-04
\$39.46	\$55.97	12.4%	41.9%	\$92.99	18.4%	66.1%	\$114.68	11.1%	23.3%
\$52.79	\$60.87	4.9%	15.3%	\$65.74	2.6%	8.0%	\$47.34	-15.1%	-28.0%
\$71.56	\$99.83	11.7%	39.5%	n.a.	n.a.	n.a.	\$96.19	n.a.	n.a.
\$61.58	\$78.38	8.4%	27.3%	\$109.05	11.6%	39.1%	\$79.86	-14.4%	-26.8%
	\$39.46 \$52.79 \$71.56	\$39.46 \$55.97 \$52.79 \$60.87 \$71.56 \$99.83	Change 1996 1999 96-99 \$39.46 \$55.97 12.4% \$52.79 \$60.87 4.9% \$71.56 \$99.83 11.7%	1996         1999         Personant of the persona	Change         Change           1996         1999         96-99         96-99         2002           \$39.46         \$55.97         12.4%         41.9%         \$92.99           \$52.79         \$60.87         4.9%         15.3%         \$65.74           \$71.56         \$99.83         11.7%         39.5%         n.a.	Change         Change         Change         Change           1996         1999         96-99         2002         99-02           \$39.46         \$55.97         12.4%         41.9%         \$92.99         18.4%           \$52.79         \$60.87         4.9%         15.3%         \$65.74         2.6%           \$71.56         \$99.83         11.7%         39.5%         n.a.         n.a.	Change         Change         Change         Change         Change         Change         Change         Change         Percentage         Percentage<	Longe         Change         P99-02         2004         2004         P99-02         2004         P99-02         2004         P99-02         2004         P99-02         P99-02         2004         P99-02         P99-02	Change         O2-04         O2-04

Note: n.a. represents those areas that have fewer than 3 lots with costs associated with them.



Average monthly cost has been increasing in the Lower Queen Anne area from 1996 to 2002 (Figure 8). Between 2002 and 2004, monthly cost has had a somewhat sharp decline. Both hourly and daily costs have been decreasing slowly since 1996.

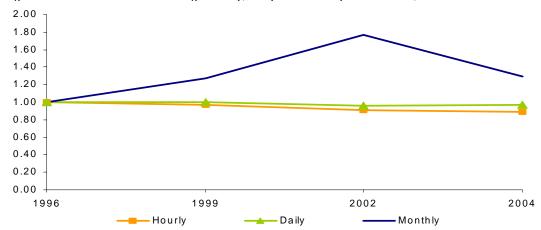


Figure 8: Lower Queen Anne Average Hourly, Daily and Monthly Cost Growth, 1996-2004

#### **Parking Type**

Parking type within the Queen Anne area is made up of 66.7 percent Other, 10 percent Customer and 23.3 percent Employee parking (Table 21). These parking types all decreased between 2002 and 2004. Employee parking decreased the most by a total of 13.9 percent. Zone 18 has the most abundant supply of Other parking with 4,145 stalls. Customer parking is the most abundant in Zone 17.

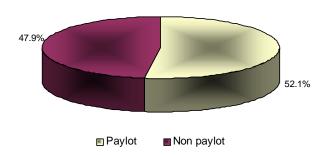
Table 21: Lower Queen Anne Parking Type, 2002-2004

	2002			2004			Total % Change		
ZONE	С	E	0	С	Е	0	С	Е	0
17	790	1,706	1,903	743	934	2,563	-5.9%	-45.3%	34.7%
18	513	815	4,954	385	1,031	4,145	-25.0%	26.5%	-16.3%
19	403	1,789	4,741	472	1,748	3,938	17.1%	-2.3%	-16.9%
Queen Anne									
Total	1,706	4,310	11,598	1,600	3,713	10,646	-6.2%	-13.9%	-8.2%

Note: Total stalls will not necessarily add up to total parking stalls due to the inability to classify all lots

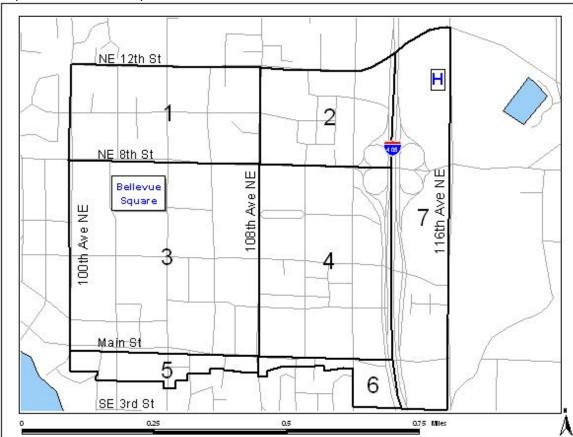
More than 52 percent of the parking stalls within the Lower Queen Anne area have costs associated with them (Figure 9). Parking stalls with no costs account for 47.9 percent. The percentage of pay lots is much lower in the Queen Anne area compared to the other two Seattle study areas.

Figure 9: Lower Queen Anne Percentage of Pay Lots and Non-Pay Lots, 2004



#### Study Area

The Bellevue CBD study area contains 539 acres. This area is bounded by 100<sup>th</sup> Ave NE to the west, NE 12<sup>th</sup> to the north, 116<sup>th</sup> Ave NE to the east and Main Street to the south. The Bellevue CBD study area contains the Bellevue Square Mall and Overlake Hospital. The survey included all businesses on the south side of Main Street that have access to that street and are an integral part of the downtown district.



Map 5: Bellevue CBD Study Area

#### Parking Availability

Available parking stalls within the Bellevue CBD have been increasing since 1999 (Table 22). Between 1999 and 2004, Bellevue added a total of 4,804 stalls, a 15.8 percent increase. Between 2002 and 2004, Zone 2 had the greatest increase in parking stalls. This zone increased by 63.2 percent, an average annual rate of 8.5 percent. This zone also had a moderately high stall to acre ratio, with 66.9 (Table 23). Zone 4 also had a high increase in stalls, at 19.3 percent. Zone 4 went from 7,089 stalls in 2002, to 8,454 n 2004, a gain of 1,365. Zone 5 had the highest decrease in stalls with a loss of 8.1 percent. This zone decreased by 58 stalls.

Table 22: Bellevue CBD Parking Stalls, 1996-2002

			Annual %	Total %		Annual %	Total %		Annual %	Total %
			Change	Change		Change	Change		Change	Change
Zone	1996	1999	96-99	96-99	2002	99-02	99-02	2004	02-04	02-04
1	3,999	3,998	0.0%	0.0%	4,076	0.6%	2.0%	4,152	0.3%	1.9%
2	2,607	2,291	-4.2%	-12.1%	2,378	1.3%	3.8%	3,881	8.5%	63.2%
3	12,558	12,985	1.1%	3.4%	14,503	3.8%	11.7%	14,324	-0.2%	-1.2%
4	7,627	7,371	-1.1%	-3.4%	7,089	-1.3%	-3.8%	8,454	3.0%	19.3%
5	872	740	-5.3%	-15.1%	718	-1.0%	-3.0%	660	-1.4%	-8.1%
6	426	456	2.3%	7.0%	487	2.2%	6.8%	485	-0.1%	-0.4%
7	3,004	2,546	-5.4%	-15.2%	3,372	9.8%	32.4%	3,235	-0.7%	-4.1%
Bellevue										
CBD Total	31,093	30,387	-0.8%	-2.3%	32,623	2.4%	7.4%	35,191	1.3%	7.9%

The Bellevue CBD has a total of 65.2 stalls per acre (Table 23). This is the second highest density in the survey study areas. Zones 3 and 4 have the highest number of stalls per acre with 89.2 and 74.5, respectively. Zone 3 contains Bellevue Square, which adds a large amount of stalls to a relatively compact area. Zone 5 had the lowest number of stalls per acre with 33.6.

Table 23: Bellevue CBD Stalls per Acre, 2004 Stalls per Acreage Stalls Zone Acre 1 81.4 4,152 51.0 2 58.0 3,881 66.9 3 160.6 14,324 89.2 113.4 8,454 74.5 4 5 19.7 660 33.6 34.5 6 14.0 485 92.8 3,235 34.9 Bellevue **CBD Total** 540.0 35,191 65.2

#### Parking Occupancy

Occupancy in the Bellevue study area has decreased by 24 percent since 2002 (Table 24). Large contributors to this decrease were Zones 2 and 3. Zone 3 contains the Bellevue Square Mall, which is usually not at capacity except during the holiday season. Occupancy data for the mall was obtained from Bellevue Square management. Differences in reporting account for the difference in occupancy rates in this zone. Data received previously from Bellevue Square were from the peak holiday period, whereas data received for this survey was from a non-peak time period. Zone 2 decreased by 44.9 percent and Zone 3 decreased by 46.5 percent. Several zones increased in occupancy in the Bellevue CBD. Zones 1,4,5 and 7 all had positive rates. Zones 4 and 5 had the largest increases with 13.6 percent and 25.9 percent, respectively.

Table 24: Bellevue CBD Average Parking Occupancy, 1996-2004

			Annual %	Total %		Annual %	Total %		Annual %	Total %
			Change	Change		Change	Change		Change	Change
Zone	1996	1999	96-99	96-99	2002	99-02	99-02	2004	02-04	02-04
1	66.7%	63.5%	-1.6%	-4.8%	48.1%	-8.9%	-24.3%	50.9%	2.9%	5.9%
2	67.9%	76.9%	4.2%	13.3%	48.2%	-14.4%	-37.3%	26.6%	-25.8%	-44.9%
3	56.6%	56.5%	-0.1%	-0.2%	70.5%	7.7%	24.8%	37.7%	-26.8%	-46.5%
4	63.2%	73.9%	5.4%	16.9%	49.3%	-12.6%	-33.2%	56.1%	6.6%	13.6%
5	48.1%	46.5%	-1.1%	-3.3%	40.4%	-4.6%	-13.1%	50.8%	12.2%	25.9%
6	54.5%	58.3%	2.3%	7.0%	40.2%	-11.6%	-31.0%	37.5%	-3.4%	-6.8%
7	66.1%	64.6%	-0.8%	-2.3%	62.9%	-0.9%	-2.6%	63.8%	0.7%	1.4%
Bellevue										
CBD Total	61.1%	63.6%	1.3%	4.1%	59.6%	-2.2%	-6.3%	45.1%	-13.0%	-24.3%

Several zones within the Bellevue CBD had less than 50 percent of their parking stalls occupied (Figure 10). Zones 2, 3, and 6 all had low occupancy rates. Zone 7 had the highest occupancy with 2,064 occupied stalls out of a total of 3,235. Zone 3 had the lowest occupancy with 5,404 occupied stalls out of a total of 14,324.

Figure 10: Bellevue CBD Occupied & Unoccupied Stalls, 2004 16,000 14,000 12,000 10,000 8,000 6,000 4,000 2,000 0 5 2 3 ■ Unoccupied Occupied

# **Parking Costs**

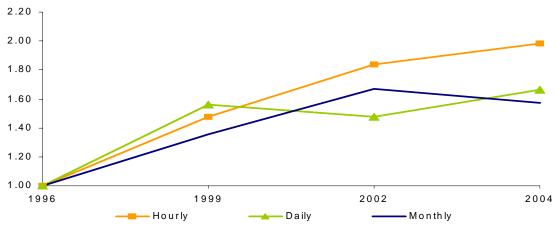
Both average hourly and daily parking costs increased in the Bellevue CBD between 2002 and 2004 (Table 25). Average hourly parking cost increased by 7.7 percent, adding an additional \$0.40. Daily cost increased by a total of 12.5 percent, increasing from \$11.62 in 2002 to \$13.07 in 2004. Monthly cost decreased slightly between 2002 and 2004, with a total reduction of 5.7 percent.

Table 25: Bellevue CBD Average Hourly, Daily and Monthly Parking Costs, 1996-2004

			Annual %	Total %		Annual %	Total %		Annual %	Total %
			Change	Change		Change	Change		Change	Change
	1996	1999	96-99	96-99	2002	99-02	99-02	2004	02-04	02-04
0-2 Hours	\$2.80	\$4.13	13.8%	47.4%	\$5.15	7.7%	24.8%	\$5.55	1.2%	7.7%
Daily	\$7.86	\$12.25	15.9%	55.9%	\$11.62	-1.7%	-5.1%	\$13.07	2.0%	12.5%
Monthly	\$85.18	\$115.25	10.6%	35.3%	\$142.30	7.3%	23.5%	\$134.13	-1.0%	-5.7%

Average hourly cost has increased steadily from 1996 to 2004 (Figure 11). Daily and monthly costs, however, have experienced some downturns during this time period. Daily cost increased between 1996 and 1999, dipped slightly in 2002, and then continued to increase between 2002 and 2004. Average monthly cost increased steadily between 1996 and 2002, and declined between 2002 and 2004.

Figure 11: Bellevue CBD Average Hourly, Daily and Monthly Cost Growth, 1996-2004



# Parking Type

In 2004, parking in the Bellevue CBD was classified as 39.5 percent Customer, 4.3 percent Employee and 56.3 percent Other (Table 26). Because of Bellevue Square, the Bellevue CBD has a large amount of Customer parking, atypical of the other CBD study areas. Zone 3 had the highest number of stalls designated Customer parking and Zone 4 had the highest number of stalls designated as Employee parking, as well as Other parking.

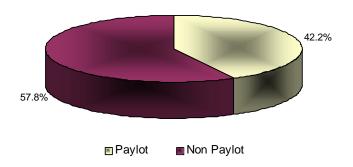
Table 26: Bellevue CDB Parking Type, 2002-2004

	2002				2004			Total % Change		
ZONE	С	Е	0	С	Е	0	С	Е	0	
1	1,028	413	2,635	1,175	344	2,633	14.3%	-16.7%	-0.1%	
2	425	0	1,953	2,052	41	1,788	382.8%	n.a.	-8.4%	
3	8,398	41	6,064	8,061	339	5,924	-4.0%	726.8%	-2.3%	
4	112	171	6,806	1,003	448	7,003	795.5%	162.0%	2.9%	
5	653	31	34	501	15	144	-23.3%	-51.6%	323.5%	
6	67	0	420	78	76	331	16.4%	n.a.	-21.2%	
7	604	297	2,471	1,014	249	1,972	67.9%	-16.2%	-20.2%	
Bellevue										
CBD Total	11,287	953	20,383	13,884	1,512	19,795	23.0%	58.7%	-2.9%	

Note: Total stalls will not necessarily add up to total parking stalls due to the inability to classify all lots

Parking stalls in Bellevue with no costs associated with them totaled 57.8 percent. Stalls that had costs amounted to 42.2 percent. This is attributable to the large numbers of Customer parking lots within the Bellevue CBD since by definition Customer parking is free.

Figure 12: Bellevue CBD Percentage of Pay Lots and Non-Pay Lots, 2004



# **Study Area**

The Tacoma CBD study area covers 876 acres, the second largest in the survey. This area is bounded by Division to the north, Thea Foss Waterway, Puyallup Avenue and J Street to the east, Interstate 5 to the south and S Yakima Avenue and S G Street to the west. It is made up of seven zones. The Tacoma CBD contains some major facilities including the University of Washington Tacoma campus, Tacoma Art Museum and Museum of Glass (zone 4), Bates Technical College (zone 2), the Tacoma Dome (zone 7) and the Rhodes Center (zone 3), which houses the State Court of Appeals, the Department of Labor and Industries, the Washington State Employees Credit Union and a large conference center (Map 6).

#### Parking Availability

Parking stalls within the Tacoma CBD totaled 18,336 in 2004 (Table 27). This was a slight increase, 4.4 percent from 2002, when 17,993 stalls were inventoried. Despite the overall increase in parking stalls, more than half the zones in the Tacoma CBD declined between 2002 and 2004. Zone 1 experienced the largest decline with a total change of 31 percent. This zone decreased by more than 400 stalls. Zone 7 was the zone that had the most abundant availability of stalls with 5,288 in 2004. This zone contains the Tacoma Dome, a facility with large amounts of parking.

Zone 3 experienced a large increase in parking stalls with 19.8 percent added between 2002 and 2004. This amounted to a total of 766 additional stalls. Zone 3 has the highest amount of parking stalls per acre with 47.9 (Table 28). This zone is primarily the downtown core of Tacoma, which explains the abundance of parking.

Zones 4 and 6 also had increases in parking stalls between 2002 and 2004. Zone 4 increased by 4.7 percent and Zone 6 by 12.6. These two zones, however, have relatively low densities of stalls per acre with 11.5 and 6.9 respectively. The four remaining zones, 1,2,5 and 7 all experienced decreases in parking stalls

Table 27: Tacoma CBD Parking Stalls, 2002-2004

			Annual %	Total %
Zone	2002	2004	Change	Change
1	1,454	1,003	-16.9%	-31.0%
2	3,742	3,690	-0.7%	-1.4%
3	3,865	4,631	9.5%	19.8%
4	1,963	2,055	2.3%	4.7%
5	574	516	-5.2%	-10.1%
6	1,021	1,153	6.3%	12.9%
7	5,374	5,288	-0.8%	-1.6%
Tacoma				
CBD Total	17,993	18,336	0.9%	1.9%

Table 28: Tacoma CBD Stalls per acre, 2004

			- 1
			Stalls per
Zone	Acreage	Stalls	Acre
1	81.6	1,003	12.3
2	103.4	3,690	35.7
3	96.7	4,631	47.9
4	179.2	2,055	11.5
5	82.1	516	6.3
6	166.6	1,153	6.9
7	166.2	5,288	31.8
Tacoma CBD			
Total	875.8	18,336	20.9

Map 6: Tacoma CBD Study Area Division Ave Commencement Bay SG 7th St Pierce County Admin Market St 5 \$ 15th St UW-Tacoma S 23rd S Pacific  $\Box$ St Yakima Ave Tacoma 6 D ome 0 0.25 0.5 0.75 Miles 1



# **Parking Occupancy**

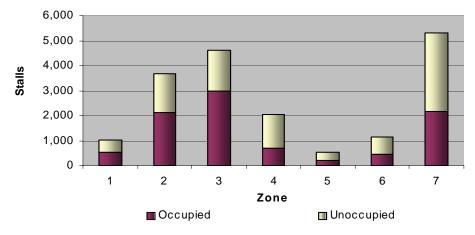
Occupancy in the Tacoma CBD increased by 8 percent between 2002 and 2004, going from an overall occupancy rate of 46 percent to 49.7 percent (Table 29). Zone 7 experienced the largest increase with 47.6 percent. This zone had an occupancy rate of 27.9 percent in 2002 and a rate of 41.2 percent in 2004. Zone 3 had the highest occupancy rate in 2004 with 64 percent. Occupied stalls within this zone amounted to 2,963 (Figure 13).

Table 29: Tacoma CBD Average Parking Occupancy, 2002-2004

Zone	2002	2004	Annual % Change	Total % Change
1	46.6%	51.7%	5.4%	11.1%
2	56.9%	57.5%	0.5%	0.9%
3	60.8%	64.0%	2.6%	5.3%
4	44.2%	33.6%	-12.9%	-24.1%
5	53.7%	41.9%	-11.7%	-22.0%
6	44.4%	37.7%	-7.8%	-15.0%
7	27.9%	41.2%	21.5%	47.6%
Tacoma				
CBD Total	46.0%	49.7%	3.9%	8.0%

Three zones within the Tacoma CBD, decreased in occupancy. Zones 4, 5 and 6 all had relatively large decreases in occupancy levels. Zone 4 had the highest decrease and the overall lowest occupancy rate of the zones. This zone lost 24.1 percent going from a rate of 44.2 percent in 2002 to 33.6 percent in 2004. Occupied stalls within this zone amounted to only 690 out of a total of 2,055. Zone 5 lost 22 percent and Zone 6 lost 15 percent.

Figure 13: Tacoma CBD Occupied and Unoccupied Stalls, 2004



# **Parking Costs**

Few zones within the Tacoma CBD had off-street lots with hourly parking costs (Table 30). Zones 1, 5, 6 and 7 all had fewer than three lots that provided hourly parking. Zones 2, 3 and 4 all had hourly costs associated with them. Average hourly cost within the Tacoma CBD decreased by 25.9 percent. This amounted to a reduction of \$1.02. Zones 2 and 3 both experienced losses. Zone 2 declined by 25.7 percent, losing \$0.55 and Zone 3 lost 32.7 percent, amounting to a reduction of \$1.74.



Table 30: Tacoma CBD Average Hourly Parking Costs, 2002-2004

Zone	2002	2004	Annual % Change	Total % Change
1	\$1.03	n.a	n.a	n.a
2	\$2.14	\$1.59	-13.8%	-25.7%
3	\$5.33	\$3.59	-18.0%	-32.7%
4	\$2.51	\$2.56	1.1%	2.2%
Tacoma				
CBD Total	\$3.92	\$2.90	-13.9%	-25.9%

Note: n.a. represents those areas that have fewer than 3 lots with costs associated with them

Average daily parking cost in the Tacoma CBD increased by 2.9 percent between 2002 and 2004 (Table 31). Those zones that could not be calculated do contribute to the overall average, which explains why the total change for the whole area is positive while the zones shown have negative results. Zone 4 had the largest loss with 16 percent. This zone went from \$6.84 in 2002 to \$5.74 in 2004, a loss of \$1.10. Zone 2 also reduced its daily cost, with a percent change of -10.7.

Table 31: Tacoma CBD Average Daily Parking Costs, 2002-2004

Zone	2002	2004	Annual % Change	Total % Change
1	\$3.39	n.a	n.a	n.a
2	\$4.99	\$4.46	-5.5%	-10.7%
3	\$11.85	\$11.46	-1.6%	-3.2%
4	\$6.84	\$5.74	-8.4%	-16.0%
7	n.a	\$9.04	n.a	n.a
Tacoma				
CBD Total	\$8.76	\$9.01	1.4%	2.9%

Note: n.a. represents those areas that have fewer than 3 lots with costs associated with them

Average monthly cost in the Tacoma CBD increased by 13.2 percent (Table 32). The one zone that cost was calculable increased by 20.9 percent. This zone went from a monthly cost of \$109.49 in 2002 to \$132.38 in 2004, a gain of \$22.89.

Table 32: Tacoma CBD Average Monthly Parking Costs, 2002-2004

Zone	2002	2004	Annual % Change	Total % Change
2	\$61.79	n.a	n.a	
_				n.a
3	\$109.49	\$132.38	10.0%	20.9%
Tacoma				
CBD Total	\$88.41	\$100.05	6.4%	13.2%

Note: n.a. represents those areas that have fewer than 3 lots with costs associated with them.

# **Parking Type**

Parking type within the Tacoma CBD is primarily Other parking (Table 33). This type makes up 75.8 percent of the parking in the study area. Employee parking makes up 11.5 percent and

Customer parking makes up 12.7 percent. Between 2002 and 2004, Zone 4 experienced some reclassification of its parking stalls from Other to strictly Customer. Overall, Zone 7 had the highest count of Other parking, Zone 2 had the most Employee parking and Zone 4 had the largest amount of Customer parking.

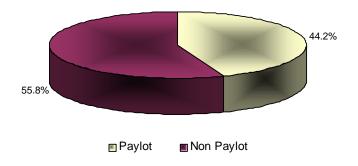
Table 33: Tacoma CBD Parking Type, 2002-2004

	2002				2004			Total % Change		
ZONE	C	Е	0	С	Е	0	С	Е	0	
1	122	89	1,243	529	82	392	333.6%	-7.9%	-68.5%	
2	143	681	2,918	354	1,020	2,316	147.6%	49.8%	-20.6%	
3	15	337	3,513	11	593	4,027	-26.7%	76.0%	14.6%	
4	3	204	1,756	912	119	1,024	30300.0%	-41.7%	-41.7%	
5	0	0	574	12	0	504	n.a.	n.a.	-12.2%	
6	0	87	934	310	143	700	n.a.	64.4%	-25.1%	
7	130	25	5,219	197	157	4,934	51.5%	528.0%	-5.5%	
Tacoma										
CBD Total	413	1,423	16,157	2,325	2,114	13,897	463.0%	48.6%	-14.0%	

Note: Total stalls will not necessarily add up to total parking stalls due to the inability to classify all lots

The Tacoma CBD has more non-pay lots than pay lots. Non-pay lots make up 55.87 percent of the study area and non-pay lots make up 44.2 percent.

Figure 14: Tacoma CBD Percentage of Pay Lots and Non-Pay Lots, 2004



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# **Study Area**

The Everett CBD study area encompasses 615 acres. The Everett CBD is bounded by 24<sup>th</sup> Street, 25<sup>th</sup> Street and Everett Avenue to the north, I-5 to the east, Marine View Drive, Gedney and Bond Street to the west and 34<sup>th</sup> and 33<sup>rd</sup> streets to the south (Map 7). Everett consists of eight zones. Major facilities located in the study area include Providence General Medical Center-Colby Campus (Zone 5), Snohomish County Courthouse and Campus and Everett Special Events Center (Zone 4) the Civic Auditorium (Zone 1) and Everett Station (Zone 7). Not included in the Everett study area is the Everett Auditorium and Events Center.

4TH St Civio Auditorium Marine View Everett Ave Colby Ave Virgina Ave Broadway **Events** Center 5 Sno. Co Campus Pacific Ave Ave Н Everett Kromer Station 6 34th St 0 0.3 0.6 Miles

Map 7: Everett CBD Study Area

## **Parking Availability**

Everett had a total of 13,577 available parking stalls in 2004 (Table 34). This amounted to an 8.5 percent increase over 2 years, adding an additional 1,060 stalls since 2002. Almost all zones within the Everett study area increased in parking stalls, with the exception of Zones 1 and 3. Zone 1 decreased by 1 percent and Zone 3 by 1.1 percent.

The greatest increase in parking stalls within the Everett CBD occurred in Zone 2. This zone increased by 33.2 percent, with a gain of 285 stalls. Zone 4 also had a significant increase in parking stalls with 25.6 percent. Much redevelopment has been occurring within this zone over the last couple of years with Snohomish County's "campus redevelopment initiative". This project added a new garage with 1200 stalls, replacing an existing garage that had only 500. Zone 4 also has the highest ratio of stalls per acres with 37.7 percent (Table 35). Total stalls per acre in Everett amount to 22.1.

# **Parking Occupancy**

Occupancy within the Everett CBD increased by 1.1 percent between 2002 and 2004 (Table 36). Half of the zones in the study area increased in occupancy, while the other half decreased. Zone 7 experienced the highest increase with 80.9 percent. This is most likely due to Everett Station and the amount of commuters now using the park and ride located there. In 2002, this zone's rate was 29.1 percent and in 2003 it was 52.6. Zone 7 had 633 occupied stalls out of a total of 1,203 (Figure 15). Zone 1 had the largest decrease with a reduction of 26.4 percent. The zone with the highest occupancy rate in 2004 was Zone 5, with 59.5 percent.

Table 34: Everett CBD Parking Stalls, 2002-2004

			Annual %	Total %
Zone	2002	2004	Change	Change
1	1,157	1,145	-0.5%	-1.0%
2	858	1,143	15.4%	33.2%
3	2,272	2,246	-0.6%	-1.1%
4	2,320	2,915	12.1%	25.6%
5	1,335	1,371	1.3%	2.7%
6	1,006	1,064	2.8%	5.8%
7	1,142	1,203	2.6%	5.3%
8	2,427	2,490	1.3%	2.6%
Everett				
CBD Total	12,517	13,577	4.1%	8.5%

Table 35: Everett CBD Stalls per acre, 2004

			Stalls per
Zone	Acreage	Stalls	Acre
1	83.9	1,145	13.7
2	50.3	1,143	22.7
3	64.1	2,246	35.0
4	77.3	2,915	37.7
5	66.4	1,371	20.6
6	92.6	1,064	11.5
7	53.9	1,203	22.3
8	126.6	2,490	19.7
Everett			
CBD Total	615.0	13,577	22.1

Table 36: Everett CBD Average Parking Occupancy, 2002-2004

			Annual %	Total %
Zone	2002	2004	Change	Change
1	62.1%	45.7%	-14.2%	-26.4%
2	42.9%	46.5%	4.1%	8.4%
3	57.2%	53.1%	-3.6%	-7.1%
4	58.6%	58.6%	0.1%	0.1%
5	61.1%	59.5%	-1.3%	-2.6%
6	55.1%	54.6%	-0.5%	-0.9%
7	29.1%	52.6%	34.5%	80.9%
8	43.7%	46.0%	2.7%	5.5%
Everett				
CBD Total	52.0%	52.5%	0.5%	1.1%

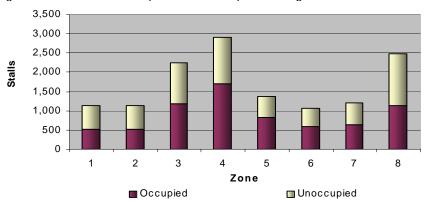


Figure 15: Everett CBD Occupied and Unoccupied Parking Stalls, 2004

# **Parking Costs**

Parking costs in Everett are not shown by zone because of their relatively few numbers. Average daily parking cost increased in the Everett CBD while hourly cost decreased and monthly was not calculable due to lack of lots charging monthly rates (Table 37). Daily cost increased by 7.6 percent, going from \$7.20 in 2002, to \$7.75 in 2004, an increase of \$0.55. Average hourly cost decreased by \$0.29 between 2002 and 2004, a total loss of 13 percent.

Table 37: Everett CBD Average Hourly, Daily and Monthly Parking Costs, 2002-2004

			Annual %	Total %
	2002	2004	Change	Change
0-2 Hours	\$2.26	\$1.97	-6.7%	-13.0%
Daily	\$7.20	\$7.75	3.7%	7.6%
Monthly	n.a.	\$67.42	n.a.	n.a

Note: n.a. represents those areas that have fewer than 3 lots with costs associated with them.

# **Parking Type**

Parking types within the Everett CBD are made up of 10.7 percent Customer, 17.6 percent Employee and 71.8 percent Other (Table 38). Zone 3 had the highest abundance of Customer parking, Zone 8 had the highest abundance of Employee and Zone 4 had the largest abundance of Other.

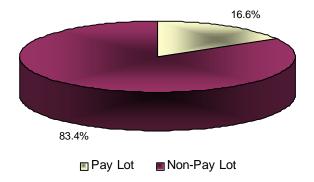
Table 38: Everett CBD Parking Type, 2002-2004

		2002			2004		То	tal % Chang	е
ZONE	C	Е	0	С	Е	0	C	Е	0
1	0	485	672	62	459	624	n.a.	-5.4%	-7.1%
2	220	34	604	414	349	380	88.2%	926.5%	-37.1%
3	39	256	1,977	426	225	1,595	992.3%	-12.1%	-19.3%
4	41	821	1,458	252	450	2,213	514.6%	-45.2%	51.8%
5	31	16	1,288	20	135	1,216	-35.5%	743.8%	-5.6%
6	90	44	872	191	25	848	112.2%	-43.2%	-2.8%
7	105	123	914	35	74	1,094	-66.7%	-39.8%	19.7%
8	1,226	644	557	46	672	1,772	-96.2%	4.3%	218.1%
Everett CBD									
Total	1,752	2,423	8,342	1,446	2,389	9,742	-17.5%	-1.4%	16.8%



Note: Total stalls will not necessarily add up to total parking stalls due to the inability to classify all lots Parking in the Everett CBD primarily consists of free parking (Figure 15). More than 80 percent of parking stalls in the study area have no costs associated with them. Only 16.6 percent of stalls have costs.

Figure 16: Everett CBD Percentage of Pay Lots and Non-Pay Lots, 2004





# **Study Area**

The University District study area was expanded this year to coincide with Urban Center boundaries. This expansion added 4 more zones, 6 through 9, and includes the University Village, an area with abundant customer parking. The University District study area is 1,198 acres. Fifty-fifth and 52nd streets bound the study area to the north, I-5 to the west, Mary Gates Memorial Drive and NE Surber Drive to the east and Pacific and NE Boat Street to the south (Map 8). Zone 5 contains the University of Washington and Zone 9, University Village.



Map 8: University District Study Area

#### Parking Availability

Between 2002 and 2004 in Zones 1 through 5, the University District added 0.9 percent parking stalls (Table 39). This was an increase of 150 stalls. This addition to the University District area increased the parking stall count to 16,926.

Zone 3 had the highest increase in parking stalls between 2002 and 2004 with 27.8 percent. This zone added more than 1,700 stalls. Zone 3 had one of the highest stall count per acre numbers with 36.9 (Table 40). Zone 1, 2 and 4 all decreased in parking stalls. Zone 1 decreased by 0.3 percent. Zone 2 had the largest decrease with 13.6 percent and Zone 4 decreased by 0.2 percent.

Table 40: University District Stalls Per Acre, 2004

			Stalls per
Zone	Acreage	Stalls	Acre
1	93.2	1,457	15.6
2	54.2	1,650	30.4
3	52.0	1,915	36.9
4	158.9	2,910	18.3
5	552.7	8,994	16.3
6	69.1	557	8.1
7	82.1	134	1.6
8	59.1	289	4.9
9	76.9	3,344	43.5
University			
District Total	1198.2	21,250	17.7
•			

Table 39: University District Parking Stalls, 2002-2004

			Annual %	Total %
Zone	2002	2004	Change	Change
1	1,462	1,457	-0.2%	-0.3%
2	1,909	1,650	-7.0%	-13.6%
3	1,498	1,915	13.1%	27.8%
4	2,915	2,910	-0.1%	-0.2%
5	8,992	8,994	0.0%	0.0%
Zone 1-5				
Total	16,776	16,926	0.4%	0.9%
6	n.a.	557	n.a.	n.a.
7	n.a.	134	n.a.	n.a.
8	n.a.	289	n.a.	n.a.
9	n.a.	3,344	n.a.	n.a.
University				
District Total	n.a.	21,250	n.a.	n.a.

Including new zones 6 through 9, added 4,324 stalls to the University District study area. This increased the total stall count of the University District to 21,250. Zone 9 had the highest amount of stalls per acre with 43.5.

#### **Parking Occupancy**

Parking occupancy within the University District study area Zones 1 through 4, decreased by 6 percent between 2002 and 2004 (Table 41). Most zones within the study area decreased in occupancy rates between 2002 and 2004, with the exception of Zone 1. This zone increased by 5.4 percent over the two- year period.

Zone 4 had the largest decrease with a loss in occupancy of 43 percent. This zone went from an occupancy rate of 77.4 percent in 2002, to a rate of 44.1 in 2004.

Table 41: University District Average Parking Occupancy, 2002-2004

			Annual %	Total %
Zone	2002	2004	Change	Change
1	60.1%	63.3%	2.7%	5.4%
2	63.4%	62.4%	-0.8%	-1.6%
3	65.6%	56.9%	-6.9%	-13.3%
4	77.4%	44.1%	-24.5%	-43.0%
Zone 1-4				
Total	63.8%	60.0%	-3.0%	-6.0%
6	n.a.	45.9%	n.a.	n.a.
7	n.a.	67.2%	n.a.	n.a.
8	n.a.	49.0%	n.a.	n.a.
9	n.a.	43.1%	n.a.	n.a.
University				
District Total	n.a.	53.0%	n.a.	n.a.



Zone 4 contains a large amount of University of Washington permit parking and may have been counted when school was not is in session. Zone 7 had the highest occupancy rate of all the zones with 67.2 percent. This zone had a total of 90 occupied stalls out of a total of 134, the lowest number of stalls within any University District zone (Figure 17). Zone 5 is not included in the occupancy count or the occupied and unoccupied stalls due to different reporting methods by the University of Washington and the inability to create a comparable occupancy count.

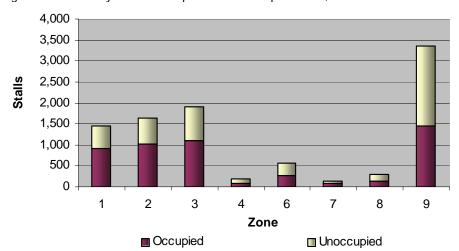


Figure 17: University District Occupied and Unoccupied Stalls, 2004

# **Parking Costs**

Average hourly cost declined by a 1.5 percent in Zones 1 through 5 between 2002 and 2004 (Table 42). Each of these zones experienced a reduction in average hourly cost. Zone 1 had the largest decrease with 16.1 percent, a loss of \$0.59. Zone 3 lost a fairly significant amount as well, with a reduction of 11.5 percent. Zones 4 and 5 both had the highest average hourly cost with \$4.00 and both decreased by 2.8 percent over the two years. Zone 9 had some costs associated with it, but not enough to calculate accurately. The University District average hourly cost total including all zones was \$3.91.

Table 42: University District Average Hourly Parking Costs, 2002-2004

			Annual %	Total %
Zone	2002	2004	Change	Change
1	\$3.66	\$3.07	-8.4%	-16.1%
2	\$3.13	\$2.82	-5.1%	-9.9%
3	\$4.12	\$3.64	-5.9%	-11.5%
4	\$4.11	\$4.00	-1.4%	-2.8%
5	\$4.11	\$4.00	-1.4%	-2.8%
Zone 1-5				
Total	\$3.79	\$3.74	-0.8%	-1.5%
University				
District Total	n.a.	\$3.91	n.a.	n.a.
Matai a a sassasa	4-41	414 1	faccon the are O. I.	-4

Note: n.a. represents those areas that have fewer than 3 lots with costs associated with them.



Average daily cost increased by 9.5 percent between 2002 and 2004 (Table 43). However, two out of the three measurable zones decreased in cost. Zone 1 experienced a decrease of 24 percent, going from \$6.87 in 2002 to \$5.22 in 2004, a reduction of \$1.65. Zone 3 was the other zone that decreased in cost with a loss of 25.9 percent. Zone 2 had the greatest percent increase with 13.6. Zone 3 had the highest average daily cost with a rate of \$8.33 in 2004.

Table 43: University District Average Daily Parking Costs, 2002-2004

			Annual %	Total %
Zone	2002	2004	Change	Change
1	\$6.87	\$5.22	-12.8%	-24.0%
2	\$6.83	\$7.75	6.6%	13.6%
3	\$11.24	\$8.33	-13.9%	-25.9%
4	\$6.17	\$7.00	6.5%	13.4%
5	\$6.17	\$7.00	6.5%	13.4%
Zone 1-5				
Total	\$6.38	\$6.98	4.6%	9.5%
University				
District Total	n.a	\$6.97	n.a.	n.a.

Note: n.a. represents those areas that have fewer than 3 lots with costs associated with them.

Monthly cost in the University District rose by 6.2 percent between 2002 and 2004 (Table 44). Zones 4 and 5 both experienced increased of 7.4 percent. Zone 1 experienced the greatest loss with 4.5 percent. Zone 2 had the highest average monthly cost with \$78.00.

Table 44: University District Average Monthly Parking Costs, 2002-2004

			Annual %	Total %
Zone	2002	2004	Change	Change
1	\$71.41	\$68.23	-2.3%	-4.5%
2	\$79.14	\$78.00	-0.7%	-1.4%
3	\$92.17	n.a.	n.a.	n.a.
4	\$60.90	\$65.44	3.7%	7.4%
5	\$60.90	\$65.44	3.7%	7.4%
Zone 1-5				
Total	\$62.32	\$66.18	3.1%	6.2%
University				
District Total	n.a.	\$66.18	n.a.	n.a.

Note: n.a. represents those areas that have fewer than 3 lots with costs associated with them.

#### Parking Type

Parking type within the University District study area is predominantly Other with a total of 17,684 stalls (Table 45). In 2004, Zone 5 had the largest amount of Other parking because of the abundance of University of Washington paid parking, with 8,994 stalls. Zone 3 had the largest abundance of Employee parking and Zone 9 had the largest amount of Customer parking.



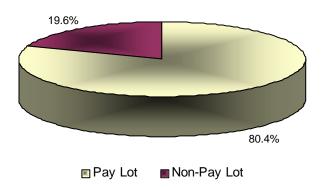
Table 45: University District Parking Type, 2002-2004

		2002			2004		То	tal % Chanç	ge
Zone	С	Е	0	С	Е	0	С	Е	0
1	47	67	1,348	262	93	1,102	457.4%	38.8%	-18.2%
2	32	0	1,877	374	195	1,064	1068.8%	n.a.	-43.3%
3	0	358	1,140	209	1,082	624	n.a.	202.2%	-45.3%
4	0	0	2,915	16	9	3,365	n.a.	n.a.	15.4%
5	0	0	8,992	0	0	8,994	n.a.	n.a.	0.0%
Zone 1-5									
Total	79	425	16,272	861	1,379	15,149	989.9%	224.5%	-6.9%
6	n.a.	n.a.	n.a.	464	58	35	n.a.	n.a.	n.a.
7	n.a.	n.a.	n.a.	60	4	48	n.a.	n.a.	n.a.
8	n.a.	n.a.	n.a.	164	6	96	n.a.	n.a.	n.a.
9	n.a.	n.a.	n.a.	969	19	2,356	n.a.	n.a.	n.a.
University District									
Total	n.a.	n.a.	n.a.	2,518	1,466	17,684	n.a.	n.a.	n.a.

Note: Total stalls will not necessarily add up to total parking stalls due to the inability to classify all lots

Parking within the University District is primarily pay parking (Figure 18). More than 80 percent of the stalls within the University District study area have costs associated with them. The large abundance of pay parking could be attributed to the University of Washington and the great quantity of student parking lots. Only 19.6 percent of parking within the study area is free.

Figure 18: University District Percentage of Pay Lots and Non-Pay Lots, 2004

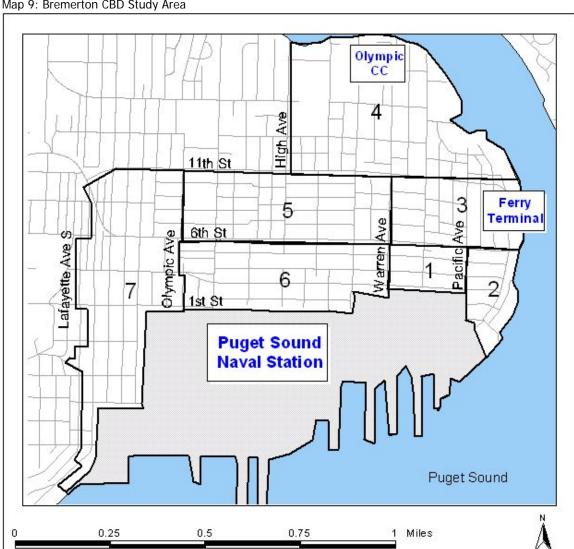


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# **Study Area**

The Bremerton CBD study area is made up of 759 acres. It was expanded for this survey to better match the Urban Center boundary. Previously, only Zones 1 and 2 comprised the study area. Expanding the Bremerton CBD study area added an additional 5 zones. This expanded study area is bounded by 6<sup>th</sup> Street to the north, Lafayette Avenue to the west, Burwell and 1<sup>st</sup> Street to the south and the ferry terminal to the east (Map 9). The Puget Sound Naval Station is not included in the survey.



Map 9: Bremerton CBD Study Area

#### Parking Availability

Bremerton Zones 1 and 2 have a total of 3,302 parking stalls in 2004 (Table 46). This is a 9.9 percent decrease from 2002. Zones 1 and 2 are the only zones that can be compared during this time period. Zone 2 had a large decrease during the two years with 19.8 percent. This zone went from a 2.105 stalls in 2002 to 1.688 in 2004, a loss of 417. Zone 1, on the other hand, gained parking stalls at a total rate of 3.5 percent. Major redevelopment has been occurring on the Bremerton waterfront. In early 2004, the city opened Bremerton Harborside, a development that includes a conference center, office space, and condominiums, among other land uses.

Of the new zones, Zone 4 has the highest number of stalls with just over 2,000. This zone also has a moderate number of stalls per acre with 18.3 (Table 47). Zone 4 contains Olympic Community College, which needs an abundant parking supply for its students but also encompasses many acres of land. The new zones added a total of 5,930 stalls to the study area.

# **Parking Occupancy**

The overall occupancy rate within Bremerton CBD Zones 1 and 2 increased between 2002 and 2004 by 9.8 percent (Table 48). Zone 1 had a total increase of 1.9 percent and Zone 2 increased by 16 percent. Zone 2 had the highest occupancy of all the zones with 68.9 percent. This amounted to a total of 1,164 occupied stalls out of 1,688 (Figure 19).

Of the new zones, 3 through 7, Zone 3 had the highest occupancy rate with 60.5 percent. Zone 5 had the lowest occupancy rate with 37.9 percent. Total occupancy within the Bremerton CBD with the new zones was 60.3 percent.

Table 46: Bremerton CBD Parking Stalls, 2002-2004

			Annual %	Total %
Zone	2002	2004	Change	Change
1	1,560	1,614	1.7%	3.5%
2	2,105	1,688	-10.5%	-19.8%
Zone 1-2				
Total	3,665	3,302	-5.1%	-9.9%
3	n.a.	1,170	n.a.	n.a.
4	n.a.	2,076	n.a.	n.a.
5	n.a.	572	n.a.	n.a.
6	n.a.	886	n.a.	n.a.
7	n.a.	1,226	n.a.	n.a.
Bremerton		•		
CBD Total	n.a.	9,232	n.a.	n.a.

Table 47: Bremerton CBD Stalls per acre, 2004

			Stalls per
Zone	Acreage	Stalls	Acre
1	81.4	1,614	19.8
2	58.0	1,688	29.1
3	160.6	1,170	7.3
4	113.4	2,076	18.3
5	19.7	572	29.1
6	14.0	886	63.1
7	92.8	1,226	13.2
Bremerton			
CBD Total	540.0	35,191	65.2

Table 48: Bremerton CBD Average Parking Occupancy, 2002-2004

Zone	2002	2004	Annual % Change	Total % Change
1	72.8%	74.2%	0.9%	1.9%
2	59.4%	68.9%	7.7%	16.0%
Zone 1-2				
Total	65.1%	71.5%	4.8%	9.8%
3	n.a.	60.5%	n.a.	n.a.
4	n.a.	57.2%	n.a.	n.a.
5	n.a.	37.9%	n.a.	n.a.
6	n.a.	57.4%	n.a.	n.a.
7	n.a.	47.9%	n.a.	n.a.
Bremerton	•			•
CBD Total	n.a.	60.3%	n.a.	n.a.

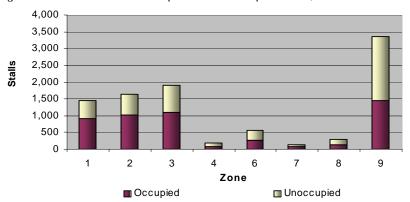


Figure 19: Bremerton CBD Occupied and Unoccupied Stalls, 2004

## **Parking Costs**

Average monthly cost was the only cost category to gain between 2002 and 2004 in Zones 1 and 2 (Table 49). Monthly cost increased by 8.5 percent, a gain of \$7.80. Both hourly and daily average costs decreased over the two-year time period. Average hourly cost decreased by 6.3 percent losing \$0.23, and daily cost decreased by 23.5 percent losing \$1.63. In Zones 3 through 7, there were no recordable hourly cost rates. Average daily cost was \$4.96 and monthly cost was \$90.26. These additional zones slightly decreased the average monthly cost in the Bremerton study area by \$2.96, while the other two cost categories remained the same.

Table 49: Bremerton CBD Average Hourly, Daily and Monthly Parking Costs, 2002-2004

			Annual %	Total %	
Cost Type	2002	2004	Change	Change	
Zones 1-2				_	
0-2 Hours	\$3.66	\$3.43	-3.2%	-6.3%	
Daily	\$6.95	\$5.32	-12.5%	-23.5%	
Monthly	\$92.16	\$99.96	4.1%	8.5%	
Zones 3-7				_	
0-2 Hours	n.a.	\$0.00	n.a.	n.a.	
Daily	n.a.	\$4.96	n.a.	n.a.	
Monthly	n.a.	\$90.26	n.a.	n.a.	
Bremerton Total					
0-2 Hours	n.a.	\$3.43	n.a.	n.a.	
Daily	n.a.	\$5.23	n.a.	n.a.	
Monthly	n.a.	\$97.00	n.a.	n.a.	

#### Parking Type

Parking type within the Bremerton CBD is mainly Other, with 4,113 stalls (Table 50). The zone with the largest amount of Customer parking in 2004 is Zone 4. Zone 4 also has the most Employee parking. Zone 2 has the highest amount of Other.



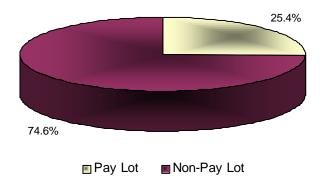
Table 50: Bremerton CBD Parking Type, 2002-2004

		2002			2004		Tot	al % Chan	ge
Zone	С	Е	0	С	Е	0	С	Е	0
1	60	32	1,468	22	179	1,413	-63.3%	459.4%	-3.7%
2	4	61	1,994	44	75	1,569	1000.0%	23.0%	-21.3%
Total	64	93	3,462	66	254	2,982	3.1%	173.1%	-13.9%
3	n.a.	n.a.	n.a.	208	207	755	n.a.	n.a.	n.a.
4	n.a.	n.a.	n.a.	473	344	1,259	n.a.	n.a.	n.a.
5	n.a.	n.a.	n.a.	57	3	512	n.a.	n.a.	n.a.
6	n.a.	n.a.	n.a.	67	133	686	n.a.	n.a.	n.a.
7	n.a.	n.a.	n.a.	233	92	901	n.a.	n.a.	n.a.
Bremerton									
Total	n.a.	n.a.	n.a.	1,038	779	4,113	n.a.	n.a.	n.a.

Note: Total stalls will not necessarily add up to total parking stalls due to the inability to classify all lots

More than 74 percent of the Bremerton CBDs parking stalls have no costs associated with them. Only 25 percent have costs. This could be due to the presence of Olympic Community College and student parking.

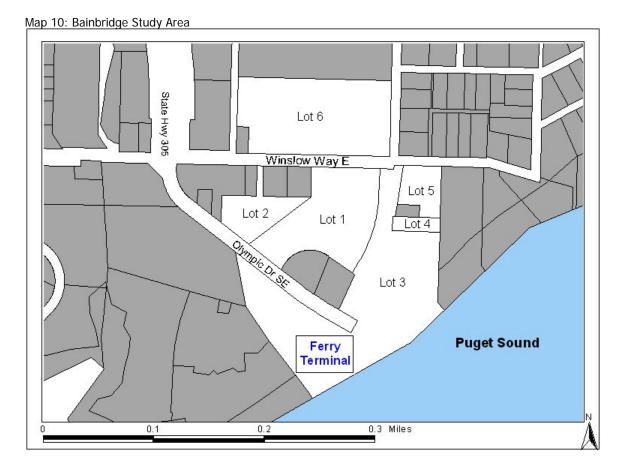
Figure 20: Bremerton CBD Percentage of Pay Lots and Non-Pay Lots, 2004



#### **Study Area**

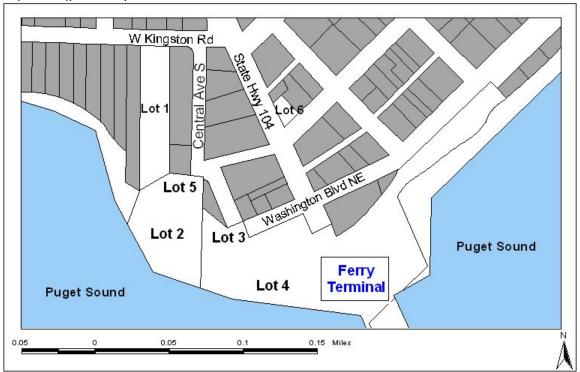
Three ferry terminals were examined for this survey, Bainbridge, Kingston and Southworth. These study areas were very small in comparison to the other survey areas. Because of their small nature, the ferry terminal areas were not assigned zones, and the surveying of these areas was conducted on a lot-by-lot basis.

The Bainbridge study area (Map 10), consists of six lots and is bounded by the ferry terminal to the southeast and Winslow Way E to the north, with one lot just to the north of this road. Total land area within this study area amounts to 18.5 acres.



The Kingston study area is made up of six lots and is the second to smallest area in the survey after Southworth (Map 11). The Kingston area contains a total of 10.7 acres. The boundaries of this study area are the ferry terminal to the south and West Kingston Road to the north.

Map 11: Kingston Study Area



The Southworth area is the smallest study area in the survey. Southworth consists of 3 lots, totaling 8.3 acres. The area is bounded by the ferry terminal to the east, Cherry Street and Sedgwick Road to the west and Southworth Drive Southeast to the south.

Puget Sound

Lot 3

Southworth Dr

Lot 1

Ferry

Terminal

Southworth Dr SE

0.06

0 0.06

0.08

0.12 Miles

# **Parking Availability**

Of the three ferry terminals Bainbridge had the highest number of available parking stalls with a total of 1,224 stalls (Table 51). Between 2002 and 2004, this study area increased in parking stalls by 18.8 percent.

The Bainbridge study area also had the highest number of stalls per acre, with 66.3 (Table 52). Southworth, like Bainbridge, had a high growth rate between 2002 and 2004. This study area increased by 18.8 percent; however, this amounted to only 62 additional stalls. Kingston also added parking stalls with an increase of 13 percent. Kingston had the lowest number of stalls per acre with only 37.1.

Table 51: Ferry Terminals Parking Stalls, 2002-2004

Ferry			Annual %	Total %
Terminal	2002	2004	Change	Change
Bainbridge	1,030	1,224	9.0%	18.8%
Kingston	353	399	6.3%	13.0%
Southw orth	330	392	9.0%	18.8%

Table 52: Ferry Terminals Stalls per Acre, 2004

Ferry		•	Stalls per
Terminal	Acreage	Stalls	Acre
Bainbridge	18.5	1,224	66.3
Kingston	10.7	399	37.1
Southw orth	8.3	392	47.0

#### **Parking Occupancy**

All three ferry terminals experienced a decrease in occupancy rates between 2002 and 2004 (Table 53). Southworth had the largest decrease with a loss of more than 25 percent. Southworth went from an occupancy rate of 63.9 in 2002 to a rate of 47.7 in 2004.

Bainbridge had the highest occupancy rates of the three terminals with 74.4 percent in 2004. Bainbridge also saw the lowest decrease with a loss of only 3.3 percent between 2002 and 2004. Kingston had the lowest occupancy rate with 41.4 percent.

Table 53: Ferry Terminals Average Parking Occupancy, 2002-2004

Ferry			Annual %	Total %
Terminal	2002	2004	Change	Change
Bainbridge	76.9%	74.4%	-1.6%	-3.3%
Kingston	46.6%	41.4%	-5.8%	-11.3%
Southw orth	63.9%	47.7%	-13.6%	-25.3%

# **Parking Costs**

Bainbridge was the only study area of the ferry terminals where costs could be calculated. Average daily cost in the Bainbridge study area grew by 0.13 percent. Hourly cost changes could not be calculated due to lack of data in 2002. No monthly costs were collected in either year.

Table 54: Bainbridge Average Hourly, Daily and Monthly Parking Costs, 2002-2004

Ferry		<u> </u>	Annual %	Total %
Terminal	2002	2004	Change	Change
Hourly	n.a.	\$7.10	n.a	n.a
Daily	\$7.62	\$7.63	0.07%	0.13%
Monthly	n.a.	n.a.	n.a	n.a

Note: n.a. represents those areas that have fewer than 3 lots with costs associated with them.



# Parking Type

Parking type within the three ferry terminals was almost entirely Other. Southworth had some Employee parking in 2004 with 48 stalls. None of the ferry terminals had Customer parking.

Table 55: Ferry Terminals Parking Type, 2002-2004

		2002			2004		To	tal % Chang	ge
Study Area	С	Е	0	С	Е	0	С	Е	0
Bainbridge	0	0	1,030	0	0	1,224	0.0%	0.0%	18.8%
Kingston	0	16	337	0	0	399	0.0%	-100.0%	18.4%
Southw orth	0	22	308	0	48	344	0.0%	118.2%	11.7%

Note: Total stalls will not necessarily add up to total parking stalls due to the inability to classify all lots



#### Scope of Study

Data for the parking study was collected beginning in mid March 2004 through June 2004. Traditionally, travel and transportation data related to commuting behavior are collected in the spring or fall, when travel patterns are more normal. The six earlier surveys were conducted in April and May and a comparable period was desired. Length of data collection had to be extended due to the expansion of study areas in 2002.

The types of parking inventoried included:

- off-street parking, both public and private
- free and pay parking
- carpool and vanpool lots
- motor pool parking, both private and government
- hotels and motels
- short-term customer parking such as convenience stores and restaurants

Types of parking excluded from the study were:

- on-street parking
- new and used auto and truck sales lots
- parking occupied by police, fire, and emergency vehicles
- car rental lots
- Metro bus and van storage lots
- parking associated with auto and truck repair shops
- residential parking

#### **Data Collection**

Study areas were split into zones to make the data collection areas smaller and easier to track. The Seattle CBD contained 13 zones (1-13), First Hill 3 zones (14-16), lower Queen Anne 3 zones (17-19), the Bellevue CBD 7 zones (1-7), the Tacoma CBD 7 zones (1-7), the Everett CBD 8 zones (1-8), the Bremerton CBD 1 zone, the University District 5 zones (1-5) and the ferry terminals all had 1 zone each. In 2002, Bellevue zones were reassigned. Correspondence of these zones is as follows:

Old	New
Zones	Zones
52	1
53	2
62	3
63	4
70	5
71	6
80	7

The data collection team surveyed the Seattle zones on foot. The Bellevue and Tacoma zones were surveyed primarily by vehicle. Everett, the University District and the Ferry Terminals were all surveyed primarily on foot. Surveys were conducted Monday through Friday between the hours of 9:30 a.m. and 11:30 am, and 1:30 p.m. and 3:30 p.m. Each lot was surveyed during one morning and one afternoon period, on the same day when possible. Each parking lot was coded to the 2000 census tract and block number in which it was located. The information collected included the lot address, owner/tenant, total number of stalls, morning and afternoon occupancy, type of parking, cost, and comments. We attempted to inventory Qwest Field, the Stadium Exhibition Center, the Seattle Center, the Washington State Convention and Trade Center and the Tacoma Dome during an "average weekday", when no special events were taking place.

#### Occupancy

Two occupancy counts were taken at each lot, one in the morning and one in the afternoon. The morning count took place between 9:00 and 11:30 am, the afternoon count 1:00 and 3:30 pm. These times were chosen because they are the times when parking utilization is most stable during a weekday. By 9 am, the morning commuter rush hour has essentially ended and shoppers have begun to arrive. After 3:30 pm, commuters begin to leave downtown. No counts were taken during the lunch hour because of high turnover at that time.

The occupancy rate is the average of the morning and afternoon counts, divided by the total number of stalls. The more counts for each lot, the more accurate the occupancy measures. A single count for each lot could introduce bias because of a difference in parking activity between the morning and afternoon. The PSRC determined that making two counts, during different parts of the day, was a reasonable compromise between accuracy and cost. These figures should be evaluated with this limitation in mind.

#### Parking Costs

Three cost figures were sought at each lot: the two-hour cost, the daily cost, and the monthly cost. Two-hour rates were used as a way to standardize short-term parking rates. These can vary greatly, with a minimum time ranging from 1/2 hour to an hour and a half. Parking lots will also charge for additional time past the minimum at increments of 1/2 hour and 1 hour. Where there was no posted 2-hour rate, the data collectors computed a 2-hour equivalent based on the minimum time plus incremental times that add up to two hours.

If the minimum time was greater than two hours, then only a daily rate was recorded, using either the posted daily rate, if any, or an equivalent daily rate based on increments of the minimum rate that add up to six hours.

Many lots in outlying areas had only monthly rates, which were not posted, and a follow-up phone call was required. When more than one monthly rate was available, either an average rate, weighted by number of stalls, was recorded, or the most predominant rate was used. Alternative rates were recorded as comments.

Special discounted rates were not included in any of the studies. These include employer subsidies, group discounts, special coupons, and "early bird" rates. Special rates for carpools and vanpools were not used unless the lots were used exclusively by either carpools or vanpools.

For the Bellevue CBD, monthly rates for many of the large parking garages were obtained from the monthly Downtown Bellevue Parking Survey conducted by TransManage. Because of the large size of the Bellevue Square parking facility, the PSRC relied on statistics concerning capacity

and usage that are maintained by Bellevue Square Management. In addition, parking garages for use by the major hospitals was obtained through hospital management.

Parking Cost averages for the study areas were computed for only those lots with some known cost, whether hourly, daily, or monthly. Costs were weighted by the number of stalls in a pay lot. In lots with mixed hourly, daily, and monthly leasing, separate weighting of costs was usually not possible. For lots with only monthly parking rates, no daily or 2-hourly cost was computed. All parking costs are reported in constant 2004 dollars.

# **Parking Type**

The 2004 study differentiated between three types of parking in the Seattle CBD:

- free short-term customer parking, such as convenience stores and restaurants
- employee parking
- other parking, primarily public pay lots and those lots with mixed types

For analysis, parking was categorized as Customer (C), Employee (E), and Other (O); the latter including public pay, employee and customer mixed lots, and tenant (non-residential) parking.

#### **Additional Data**

Additional data is provided in the tables below by study area. Presented is the total lot count by zone for each study area, the number of handicap stalls and the number of lots that provide early bird specials.

Table B-1: Seattle CBD Additional Data

	Handiaan	
	Handicap	Early Bird
Lot Count	Stalls	Special
29	84	4
51	39	2
41	18	3
28	92	13
20	67	6
18	25	5
28	130	13
25	141	9
35	55	5
31	23	7
43	25	5
78	73	24
80	97	17
507	869	113
	29 51 41 28 20 18 28 25 35 31 43 78 80	29 84 51 39 41 18 28 92 20 67 18 25 28 130 25 141 35 55 31 23 43 25 78 73 80 97

Table B-2: First Hill Additional Data

		Handicap	Early Bird
Zone	Lot Count	Stalls	Special
14	37	97	2
15	38	70	5
16	45	96	4
First Hill			
Total	120	263	11

Table B-3: Lower Queen Anne Additional Data

		Handicap	Early Bird
Zone	Lot Count	Stalls	Special
17	121	75	1
18	106	116	1
19	148	127	9
Queen			
Anne Total	375	318	11

Table B-4: Bellevue CBD Additional Data

			Handicap	Early Bird
	Zone	Lot Count	Stalls	Special
	1	58	82	2
	2	17	44	2
	3	107	250	5
	4	64	147	2
	5	27	21	0
	6	12	11	0
	7	25	152	0
В	ellevue			
CE	BD Total	310	707	11

Table B-5: Tacoma CBD Additional Data

		Handicap	Early Bird
Zone	Lot Count	Stalls	Special
1	94	24	0
2	89	93	1
3	41	98	4
4	57	61	0
5	12	9	0
6	53	21	0
7	43	115	0
Tacoma			
CBD Total	389	421	5

Table B-6: Everett CBD Additional Data

		Handicap	Early Bird
Zone	Lot Count	Stalls	Special
1	37	19	0
2	25	30	0
3	73	36	0
4	79	87	0
5	25	38	0
6	63	23	0
7	35	21	0
8	59	73	0
Everett			
CBDTotal	396	327	0

Table B-7: University District Additional Data

Table B 7. Offiversity Bistriot Maditional Bata				
		Handicap	Early Bird	
Zone	Lot Count	Stalls	Special	
1	39	48	4	
2	42	22	1	
3	47	23	1	
4	24	3	0	
5	1	no data	0	
6	32	10	0	
7	6	3	0	
8	28	7	0	
9	24	99	0	
University	·	·	·	
District Total	243	215	6	

Table B-8: Bremerton CBD Additional Data

		Handicap	Early Bird
Zone	Lot Count	Stalls	Special
1	55	32	0
2	26	43	3
3	37	25	0
4	32	50	0
5	25	19	0
6	42	32	1
7	42	30	0
Bremerton			
CBD Total	259	231	4

Table B-9: Ferry Terminal Additional Data

Ferry		Handicap	Early Bird
Teriminal	Lot Count	Stalls	Special
Bainbridge	6	31	0
Kingston	6	15	0
Southw orth	3	12	0
Ferry Total	15	58	0

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