# SEATTLE DEPARTMENT OF TRANSPORTATION

# CITYWIDE PAID PARKING STUDY TECHNICAL REPORT

This report along with the *Citywide Parking Data Report* are available at <a href="http://www.seattle.gov/transportation/parking/paidparking.htm">http://www.seattle.gov/transportation/parking/paidparking.htm</a>



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#### **INTRODUCTION**

Recent studies in other cities have found that vehicles circling for low-priced on-street parking in areas of high parking demand can account for up to 30 percent of all traffic. This limits access to businesses, impacts mobility, and leads to undesired carbon emissions. Parking that is more effectively priced to meet demand is still well-utilized yet customers and visitors can find an available space near their destination.

In 2009, Seattle started to move away from a single citywide rate for hourly on-street paid parking. Three different hourly rates were established: one rate for downtown (\$2.50/hour) and two for areas outside downtown (\$2.00/hour and \$1.50/hour). During the City Council's consideration of the proposed 2011 budget in late 2010, Council and the Mayor worked collaboratively to move towards an outcome-based, data-driven process to set on-street parking rates starting in 2011. In adopting the 2011 budget, Council provided additional resources for parking data collection and passed two Statements of Legislative Intent (SLI) 118-3A-1 and 118-5A-1.

The new policy objective is for visitors to neighborhood business districts to be able to find a parking spot near their destination. A measurable, outcome-based approach would be used to help retail business, provide more consistent parking availability, and reduce congestion and greenhouse gas emissions. The primary tool to accomplish the objective is the ability for SDOT to both raise and lower parking rates in neighborhoods as appropriate to meet parking occupancy targets.

The first SLI asked SDOT to collect citywide parking data and to report back to Council by January 15, 2011 with the outcomes of the data collection and how that data would be used to set parking rates to achieve the policy objective of an average of one or two open spaces per block. The second SLI asked SDOT to report back by July 15, 2011 on the policy and technical feasibility of pricing parking not just by neighborhood but by time of day, and of adjusting rates as often as quarterly to achieve the policy objective.

In response, the Seattle Department of Transportation (SDOT) collected citywide parking data in November 2010 and used that data to establish neighborhood-specific parking rates.

This new approach is consistent with SDOT's established objectives for managing on-street paid parking:

- Support neighborhood business districts by making on-street parking available and by encouraging economic development
- Maintain adequate turnover of on-street parking spaces and reduce incidents of meter feeding in commercial districts

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- Encourage an adequate amount of on-street parking availability for a variety of parking users, efficient use of off-street parking facilities, and enhanced use of transit and other transportation alternatives
- Reduce congestion in travel lanes caused by drivers seeking on-street parking

# **ORGANIZATION**

This report summarizes the citywide parking study completed in November 2010 and explains the analysis behind the 2011 paid parking rates. The *Citywide Parking Data Report* provides tables and charts of the data collected.

#### PARKING STUDY PURPOSE AND DESCRIPTION

# Study Methodology

The purpose of the Citywide Paid Parking Study was to collect on-street paid parking data in all areas of the city where paid parking currently exists so as to better understand parking occupancies on a neighborhood basis by time of day. The data are being used to inform the 2011 neighborhood paid parking rates.

Seattle currently has approximately 13,500 on-street paid parking spaces, controlled by over 2,200 multi-space pay stations. Paid parking generally operates from 8 AM to 6 PM, although many arterial corridors have morning and/or afternoon peak period restrictions.

Table 1 shows the number of blocks and spaces within the data collection areas. The study areas were determined based on location of paid parking and a walking route such that data could be collected within a one-hour time period. Over 7,800 paid parking spaces (approximately 60% of total spaces) along 990 blockfaces were counted within the study areas. These nineteen neighborhood business districts have a total of approximately 13,500 paid parking spaces.

For smaller neighborhoods where it was possible to do so, data was collected for all paid parking spaces. Because of their size, data were sampled in several larger neighborhoods, such as the Commercial Core, Belltown and Denny Triangle. Some neighborhoods were broken into sub-areas for efficient data collection purposes. These include the commercial core (into five areas) and South Lake Union (east and west). These areas are further broken out in the *Citywide Parking Data Report*.

The data collection effort represents the largest parking occupancy study SDOT has ever conducted. By documenting utilization of 7,800 of the city's 13,500 paid parking spaces in every neighborhood where paid parking currently exists, the study provides a reasonably accurate representation of how parking is currently being utilized in all paid parking neighborhoods.

**TABLE 1: Total Number of Parking Spaces Counted in Each Area** 

	Studied Blockfaces	Studied Spaces	Total Paid Spaces <sup>2</sup>
12th Ave	17	101 <sup>1</sup>	75
Ballard	28	197	383
Belltown	181	1,397	2,096
Broadway	33	298	336
Cherry Hill	6	60	60
Denny Triangle	62	427	808
Commercial Core	115	707	1,339
First Hill	115	783	1,180
Fremont	12	80	80
Green Lake	18	118	118
Chinatown/ International District	78	443	477
Pike-Pine	50	395	676
Pioneer Square	34	247	578
Roosevelt	12	93	93
South Lake Union	98	935	2,178
University District <sup>3</sup>			931
Uptown	80	684	709
Uptown Triangle	33	322	322
Westlake Ave N	14	389	407
TOTAL	986	7,676	46

<sup>&</sup>lt;sup>1</sup> Several blocks of paid parking on 12<sup>th</sup> Avenue between E Pine and E Union Sts were collected in the 12<sup>th</sup> Ave study but actually are part of the Pike-Pine area.

As shown in Table 2, parking data were collected on several Tuesdays, Wednesdays, or Thursdays in mid-November 2010 from 10:00 AM to 8:00 PM with sweeps of study areas every hour. The time period of 10:00 AM to 8:00 PM captures hours of peak parking in most study areas and includes both paid parking and unpaid hours. The study primarily focuses on paid

<sup>&</sup>lt;sup>2</sup> The Total Paid Spaces in this table are less than 13,500 because it does not include spaces that have combined parking regulations.

<sup>&</sup>lt;sup>3</sup> The University District area has 931 paid spaces. Data there was collected separately in October 2010 as part of SDOT's Community Parking Program.

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parking, and, the "total parking supply" refers to the total supply of paid parking. It does not include loading zone spaces or other unpaid spaces.

Data were collected for areas in Seattle on the following dates, shown in Table 2:

**Table 2: Data Collection Dates** 

Tuesday, November 9, 2010	Belltown, Denny Triangle, South Lake Union, Uptown, Uptown Triangle
Wednesday, November 10, 2010	12th Avenue, Broadway, Cherry Hill, First Hill, Pike-Pine
Tuesday, November 16, 2010	Downtown, Pioneer Square, Western Avenue, Westlake Avenue North
Wednesday, November 17, 2010	Ballard, Fremont, Green Lake, Chinatown/International District, Roosevelt
Thursday, November 18, 2010	First Hill, Pike Pine

The following data were collected:

- In each area, the total number of vehicles parked in paid parking spaces by blockface
- In certain areas, total number of vehicles parked in paid parking spots with disabled parking permits (placards, vehicle license plates, or tabs)
- In certain areas, total number of vehicles parked in paid parking spaces with Restricted Parking Zone (RPZ) permits

#### **DATA RESULTS**

Table 3 summarizes the peak parking occupancy for all study areas. In some cases, there were several peak hours during the 10 AM – 4PM time period, as noted. The study also indicated that three areas (Commercial Core, First Hill, and Pioneer Square) are highly utilized. Several areas had relatively low peak occupancy: Belltown, Denny Triangle, Uptown, and the Uptown Triangle. These are large areas where parking demand is not as great as the nearby Commercial Core. In general, daytime occupancy peaks around the lunch time. In most areas, occupancy tends to increase throughout the day and into the early evenings, especially in areas with a higher proportion of restaurants and nighttime destinations, as well as residents returning home seeking parking.

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In the Citywide Parking Data Report, the following metrics were calculated for each study area:

- Hourly Parking Supply: number of available paid spaces in data collection area. Since onstreet spaces are not typically individually marked, the actual number of spaces in use varies depending on vehicle sizes. Consequently, parking occupancy can exceed 100% of the estimated supply based on an assumed average vehicle length.
- Total Parked Vehicles: total number of vehicles parked during one-hour time interval
- Total Parking Meter Transactions: number of vehicles parked in the area based on SDOT's parking pay station system payment transaction data for this day in this area
- Percent Occupied Parking: percent of total spaces physically occupied
- Percent Available Parking: percent of total spaces vacant
- Percent Occupied from Meter: spaces that were occupied based on pay station system
  parking transaction data. Paid parking occupancy is typically less than actual occupancy
  because not all parkers are legally required to pay (e.g., disabled parking permits) and
  because of payment non-compliance
- Percent Disability Permit Parking: percent of vehicles with disabled parking permit placards or license plates
- Percent RPZ Parking: percent of parked vehicles with Restricted Parking Zone permits, where applicable

**Table 3: Summary of Peak Parking Occupancy Results** 

	Summa	ry of Peak Parking Occup	pancy by Time Perio	od and Location		
	10:00 AM - 4:00 PM		4:00 PM	- 6:00 PM	6:00 PM-8:00 PM	
Neighborhood	% Peak Occupancy	Peak Hour	% Peak Occupancy	Peak Hour	% Peak Occupancy	Peak Hour
12th Avenue	79%	2 PM - 3 PM	90%	5 PM - 6 PM	100%	6 PM - 7 PM
Ballard	48%	Multiple times	51%	5 PM - 6 PM	82%	7 PM - 8 PM
Belltown	47%	12 PM - 1 PM	54%	5 PM - 6 PM	86%	7 PM - 8 PM
Broadway	70%	12 PM - 1 PM	67%	5 PM - 6 PM	121%	7 PM - 8 PM
Cherry Hill	78%	Multiple times	53%	4 PM - 5 PM	85%	7 PM - 8 PM
Denny Triangle	41%	2 PM - 3 PM	43%	5 PM - 6 PM	57%	7 PM - 8 PM
Commercial Core	84%	12 PM - 1 PM	80%	5 PM - 6 PM	88%	7 PM - 8 PM
Financial Area	89%	12 PM - 1 PM	79%	4 PM - 5 PM	93%	7 PM - 8 PM
Madison to Yesler	86%	1 PM - 2 PM	84%	5 PM - 6 PM	76%	6 PM - 7 PM
Pacific Place	82%	10 AM - 11 AM	85%	5 PM - 6 PM	104%	6 PM - 7 PM
Pike Place Market	82%	12 PM - 1 PM	75%	4 PM - 5 PM	88%	7 PM - 8 PM
Western Avenue	82%	1 PM - 2 PM	89%	5 PM - 6 PM	109%	7 PM - 8 PM
First Hill	95%	10 AM - 11 AM	80%	4 PM - 5 PM	103%	7 PM - 8 PM
Fremont	73%	1 PM - 2 PM	73%	5 PM - 6 PM	101%	7 PM - 8 PM
Green Lake	42%	12 PM - 1 PM	39%	5 PM - 6 PM	102%	7 PM - 8 PM
Chinatown/ ID	73%	12 PM - 1 PM	62%	5 PM - 6 PM	86%	7 PM - 8 PM
Pike-Pine	67%	12 PM - 1 PM	72%	5 PM - 6 PM	117%	7 PM - 8 PM
Pioneer Square	66%	2 PM - 3 PM	62%	4 PM - 5 PM	57%	7 PM - 8 PM
Roosevelt	60%	1 PM - 2 PM	61%	5 PM - 6 PM	92%	7 PM - 8 PM
South Lake Union - 2 hr	51%	12 PM - 1 PM	50%	5 PM - 6 PM	67%	7 PM - 8 PM
South Lake Union - 10 hr	66%	11 AM - 12 PM	49%	4 PM - 5 PM	46%	6 PM - 7 PM
University District 1						
Uptown	45%	12 PM - 1 PM	44%	5 PM - 6 PM	79%	7 PM - 8 PM
Uptown Triangle	22%	1 PM - 2 PM	14%	4 PM - 5 PM	23%	7 PM - 8 PM
Westlake Ave N	44%	3 PM - 4 PM	46%	4 PM - 5 PM	39%	7 PM - 8 PM

<sup>&</sup>lt;sup>1</sup> University District data was collected separately in October 2010 as part of SDOT's Community Parking Program.

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For each area, charts in the *Citywide Parking Data Report* illustrate overall parking utilization, number and percent of disabled parking permits (where applicable), and number and percent of RPZ parking (where applicable). In addition, maps display the average utilization from 10 AM to 6 PM, from 6 PM to 8 PM hourly parking utilization, and percentage of disabled parking permit and RPZ permit (both where applicable).

As an example, and a guide to navigating the *Citywide Parking Data Report*, the 12<sup>th</sup> Avenue paid parking area is described here in more detail. There were 100 paid parking spaces in the 12<sup>th</sup> Avenue study area, along 12<sup>th</sup> Avenue between East Pine and East Jefferson Streets. The average occupancy from 10AM to 8 PM was 76%, and, in the time period between 10 AM and 6 PM, the average occupancy was 71%. The peak hour parking occupancy at 79% was between 2 p.m. and 3 p.m. Occupancy increased over the course of the day to 90% between 4 p.m. and 6 p.m. and was 100% at between 6 PM and 8 PM. In 12<sup>th</sup> Avenue, paid occupancy for this day averaged 58%, about 20% less than the actual occupancy observed, due to permit use, payment non-compliance, etc.

Note that for the purposes of determining paid parking rates, several boundaries were moved and parking results were re-calculated. These include the blockfaces in the 12<sup>th</sup> Avenue study area along 12<sup>th</sup> Avenue between East Pine Street and East Madison Street, which were evaluated as part of the Pike-Pine area. In South Lake Union, with both 2-hour and 10-hour paid parking, results were presented with that distinction. This is because the walking routes of the parking study areas were different in a few areas compared to the City's neighborhood paid parking boundaries.

**Comparison of Paid Parking Occupancy with Physical Occupancy**: The study compared actual parking occupancy with occupancy according to paid parking (meter) receipts on the day that data were collected. Table 4 shows the comparison.

Table 4: Comparison of Physical Occupancy and Paid Occupancy

Neighborhood	Average Physical Occupancy	Average Paid Occupancy
12 <sup>th</sup> Avenue	71%	58%
Ballard	44%	37%
Belltown	43%	n/a
Broadway	60%	44%
Cherry Hill	67%	32%
Denny Triangle	40%	27%
Commercial Core	79%	53%
First Hill	87%	32%
Fremont	53%	53%
Green Lake	38%	30%
Chinatown / International District	58%	33%
Pike-Pine	62%	48%
Pioneer Square	60%	39%
Roosevelt	45%	35%
South Lake Union – Short-term	46%	n/a
South Lake Union – Long-term	57%	n/a
University District <sup>1</sup>		
Uptown	40%	32%
Uptown Triangle	18%	12%
Westlake Avenue North	41%	20%

<sup>&</sup>lt;sup>1</sup> University District data was collected separately in October 2010 as part of SDOT's Community Parking Program.

**Disabled Parking Permit Issues**: Parking data results in First Hill and Commercial Core highlight the extent of non-revenue generating parking that occurs in paid parking areas. Actual parking occupancy includes those vehicles that are parked but not paying, including vehicles with disabled parking permits, government vehicles, and vehicles with Restricted Parking Zone permits. In the Commercial Core and First Hill, percentages of non-revenue generating parking occupancy approach 40%. In the Commercial Core area (five sub-areas within the overall area bounded by Stewart Street, Yesler Way, Elliott Bay, and Interstate 5), there were approximately 700 non-revenue generating spaces counted in the study out of the approximately 1,350 existing paid spaces. In the five data collection sub-areas, an average of 18% of vehicles parked

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displayed a disabled parking permit. In the Financial District / Government building area, the percentage was higher, with an average of 25% of vehicles displaying disabled permits between 10 AM and 5 PM. Previous SDOT studies in downtown have noted disabled parking permit use approaching 30%.

# **Data Analysis**

SDOT used the parking study data to inform parking rates for implementation in 2011 on a neighborhood by neighborhood basis. A new rate-setting model was created using existing neighborhood rates, observed occupancies, and estimated supply and demand elasticities to establish new rates for each neighborhood. The rate-setting model incorporates the peak observed occupancies with adjustments for boundaries, core areas, and seasonality as described below.

This section describes several components of the parking data in terms of how the data were used to inform the rate-setting model.

<u>Peak Hour Occupancy</u>: SDOT used the peak hour occupancy in each neighborhood business district to set 2011 paid parking rates. The peak was used, instead of the average, because it better represents the neighborhood parking conditions. If the average occupancy figure (which generally was lower due to the lower morning occupancy) were to be used, then the goal of one to two available spaces would not be met for the busiest times of the day.

<u>Neighborhood Boundary Adjustments</u>: SDOT adjusted the parking study results in two ways for the rate setting process: 1) to correspond to paid parking neighborhood boundaries and 2) to account for significant concentrations of parking demand that sometimes occur in and around the business and retail core of large paid parking areas. Table 5 shows the neighborhoods affected.

In several areas, the parking study data for more than one neighborhood were collected along a single walking route, so data results needed to be associated with the proper area. This affects the Commercial Core, Pike-Pine, and 12<sup>th</sup> Avenue paid parking areas. Several blocks of paid parking on 12<sup>th</sup> Avenue between East Pine Street and East Union Street were collected in the 12<sup>th</sup> Avenue study but actually are part of the Pike-Pine neighborhood area. In the Commercial Core, the paid parking boundaries were set at Stewart Street/ Olive Way to the north, I-5 to the east, and Yesler Way to the south.

To address differences in occupancies at the north and south end of the large Belltown area, SDOT split Belltown at Battery Street into Belltown North and Belltown South. The same was done in the Denny Triangle, where the area south of Lenora Street and west of 8<sup>th</sup> Avenue became Denny Triangle South and the area north and east became Denny Triangle North.

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Especially in larger areas, an average for a neighborhood can smooth over higher and lower demand sub-areas. In a large neighborhood like Ballard, the demand for and utilization of parking is especially high near the retail and business core at 20<sup>th</sup> Avenue NW and NW Market Street, but diminishes as one moves further away.

SDOT reviewed the parking study results in all 18 paid parking areas to determine whether there existed a concentrated subarea of high utilization associated with a concentrated business and retail core. Six areas met these conditions: Ballard, Capitol Hill, Green Lake, Pike-Pine, Pioneer Square, and Westlake Avenue North. In these six areas, SDOT used the peak occupancy in the business and retail core to establish the hourly rate.

<u>Seasonality Adjustment</u>: Since these data were collected in November, the results need to be adjusted for seasonality because historically November is one of the lowest paid occupancy months. In developing a seasonality factor, SDOT used paid parking revenues by area by month as a proxy for occupancy. The months of November 2009 through October 2010 were used and adjusted for actual paid parking days each month. An average revenue month was developed. From there, it was determined that a November month was 7% lower than the average citywide, recognizing some areas have a higher seasonality factor than others.

Table 5 shows the areas where adjustments to the boundaries or peak hour occupancies were made.

Table 5: Neighborhoods with Occupancy Adjustments due to High-Demand Core Area and Boundary Changes

	Seasonally Adjusted Peak	Seasonally Adjusted Core Peak	Target Occupancy Used for	
Neighborhood	Occupancy	Occupancy	Rate Setting	Difference
12th Avenue	86%	80%	78%	Study Route included 12th Avenue between Pine and Union Streets that is part of Pike-Pine neighborhood: Study results from these blocks moved to Pike-Pine study results
Ballard	55%	68%	68%	Peak of the core along NW Market Street and NW 56th Street between 24th Avenue NW and 20th Avenue NW
Belltown	54%	46% / 65%	58% / 65%	To address differences in occupancies at the north and south end of area, split Belltown into Belltown North and Belltown South at Battery Street
Capitol Hill	77%	89%	78%	Peak of the core along Broadway between Mercer and Olive/John
Commercial Core	91%	97%	78%	Adjusted commercial core boundaries to include some data from Belltown, Denny Triangle and Pioneer Square
Denny Triangle	48%	42% / 71%	58% / 71%	To address differences in occupancies at the north and south end of area, split Denny Triangle into North and South at 8th Avenue and Lenora Street
Green Lake	49%	64%	64%	Peak of the core between Green Lake and Woodlawn Avenue NE
Pike-Pine	74%	85%	78%	Study Route included 12 <sup>th</sup> Avenue between Pine and Union Streets that is part of Pike-Pine neighborhood: Study results from these blocks moved to Pike- Pine study results
Pioneer Square	73%	91%	78%	Peak of the core between 1st and 3 <sup>rd</sup> Avenue, and South Main and South Washington Streets
University District <sup>1</sup>				<b>V</b>
Westlake Ave N	51%	61%	61%	Peak of the core along Westlake Avenue North roadway between McGraw and Galer Streets

University District data was collected separately in October 2010 as part of SDOT's Community Parking Program.

<u>Time of Day</u>: Table 6 shows parking occupancy by time of day. There are peaks and valleys throughout the day that begin to inform a discussion of whether rates should be varied during different times of day. Several areas such as Cherry Hill, Green Lake, Uptown, and First Hill had similar morning and afternoon peaks. In many areas, parking occupancies increase in late afternoon and even more so in the evening. In part this is due to paid parking ending at 6 p.m.

**Table 6: Parking Occupancy by Time of Day** 

	Morning Peak 10 AM – 12 PM	Afternoon Peak 12 PM – 4 PM	Late Afternoon 4 PM – 6 PM	Evening 6 PM – 8 PM
12th Avenue	61%	79%	90%	100%
Ballard	40%	48%	51%	82%
Belltown	41%	47%	54%	86%
Capitol Hill	62%	70%	67%	121%
Cherry Hill	78%	78%	53%	85%
Denny Triangle	41%	41%	43%	57%
Commercial Core - Financial Area	88%	89%	79%	93%
Commercial Core - Madison-Yesler	73%	86%	84%	76%
Commercial Core - Pacific Place	82%	76%	85%	104%
Commercial Core - Pike Place	80%	82%	75%	88%
Commercial Core - Western Ave	63%	82%	89%	109%
First Hill	95%	91%	80%	103%
Fremont	38%	73%	73%	101%
Green Lake	40%	42%	39%	102%
Chinatown / International Distrct	58%	73%	62%	86%
Pike-Pine	54%	67%	72%	117%
Pioneer Square	62%	66%	62%	57%
Roosevelt	33%	55%	61%	92%
South Lake Union – Short-term	47%	51%	50%	67%
South Lake Union – Long-term	66%	62%	49%	46%
University District <sup>1</sup>				
Uptown	42%	45%	44%	79%
Uptown Triangle	19%	22%	14%	23%
Westlake Ave N	41%	44%	46%	39%

<sup>&</sup>lt;sup>1</sup> University District data was collected separately in October 2010 as part of SDOT's Community Parking Program.

#### **RATE-SETTING PROCESS**

SDOT used the parking study data to inform parking rates for implementation in 2011 on a neighborhood by neighborhood basis. The goal is to achieve an average of one to two available spaces per block, providing an adequate turnover of parking for local businesses and more reliable access to on-street parking for customers.

To establish the 2011 neighborhood-specific rates, SDOT created a new rate-setting model using observed and seasonally adjusted occupancy (see Table 7) and estimated supply and demand elasticity factors to determine a rate that either increases or decreases the actual parking occupancy towards the target occupancy. The rate-setting model incorporates the peak occupancies with adjustments for boundaries and core areas as described above.

Setting rates to achieve targeted occupancies will be an iterative process. While rates will only change once in 2011, SDOT will monitor actual and paid parking occupancies on a monthly basis after the new rates are implemented. In addition, SDOT will conduct another citywide paid parking neighborhoods study in late spring 2011. This more robust data collection effort will better inform future adjustments to rates to achieve the policy objective and target occupancies, as the city moves forward on a more data-driven, outcome-based approach to setting paid parking rates.

The 2011 rate setting process included the following assumptions:

# Timing of Implementation

- Changes in rates will occur once in 2011
- Expected rollout begins February 1, 2011 and concludes by March 30, 2011
- Evening paid parking is expected to roll out starting in April 2011 and continue through September 2011

# **Demand Elasticity**

- Assume elasticity rates similar to previous revenue modeling used for the 2011-2012 budget development process
- Generally, changes in paid parking rates are assumed to be relatively inelastic, although higher elasticities were assumed with larger rate changes
- Rates in the four areas with the lowest occupancies will receive decreases from current rates; \$0.50/hour decrease in Uptown, Belltown North and Denny Triangle North and \$1.00/hour decrease in Uptown Triangle. These neighborhoods will be monitored throughout the year to see how parking performs and whether peak occupancies increase significantly or remain relatively unchanged.

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# Rate Setting and Measured Occupancy

- Establish rates at \$0.50 intervals (rates at \$4.00/hour, \$3.50/hour, \$3.00/hour, etc.)
- Add seasonality factor (described above)
- Do not make adjustments for Restricted Parking Zone or Disabled Parking permits (nonrevenue generating parking which affects overall parking availability)
- Since rates are not being set by time of day in 2011, set rates in accordance with peak occupancy for a typical weekday between 10 AM and 4 PM. Use peak occupancy of the core business/retail area where appropriate.

<u>Target Occupancy</u>: To set rates so that one or two spaces on average are available, this objective needed to be converted to a target occupancy range. Given the average number of spaces on a blockface, a target occupancy range of 58% to 78% was established. On average, there are seven paid spaces per block in paid parking neighborhoods, though there can be substantial variation by individual block and neighborhood because of long and short-side blocks as well as irregular block sizes.

If measured occupancy is over 78%, then the goal is reach 78% by setting a higher rate. If measured occupancy is under 58%, then the goal is to reach 58% by setting a lower rate.

**Table 7: Peak and Target Occupancy** 

Neighborhood	Paid Spaces	Peak Occupancy	Target Occupancy
First Hill	1,180	100%	78%
Commercial Core	1,339	97%	78%
Pioneer Square	578	91%	78%
Capitol Hill	336	89%	78%
Cherry Hill	60	85%	78%
Pike-Pine	676	85%	78%
12 <sup>th</sup> Avenue	75	80%	78%
Chinatown/ID	477	80%	78%
Fremont	80	80%	78%
South Lake Union - Long-term	1,116	73%	73%
Denny Triangle South	201	71%	71%
Ballard – Downtown and Locks	313, 70	68%	68%
Roosevelt	93	67%	67%
Belltown South	987	65%	65%
Green Lake	118	64%	64%
University District	931	64%	64%
Westlake Ave N	407	61%	61%
South Lake Union - Short-term	1,062	58%	58%
Uptown	709	52%	58%
Belltown North	1,109	46%	58%
Denny Triangle North	607	42%	58%
Uptown Triangle	322	29%	58%

#### **2011 PAID PARKING RATES**

Table 8 shows the paid parking rates for 2011 compared to 2010 rates. There are nine areas where the rate will increase, and nine areas where they will stay the same as 2010. Four areas will see a rate decrease. There will be six different hourly rates in 2011 compared to four in 2010. Compared to current rates, about 60% of the paid parking spaces will see the same rate or a decrease in 2011.

**Table 8: 2011 Paid Parking Rates** 

Neighborhood	Spaces	Current Rates	2011 Parking Rates
	-		
First Hill	1,180		\$4.00
Commercial Core	1,339	\$ 2.50	\$4.00
Pioneer Square	578	\$ 2.50	\$4.00
Capitol Hill	336	\$ 2.00	\$3.00
Cherry Hill	60	\$ 1.50	\$2.00
Pike-Pine	676	\$ 2.00	\$3.00
12 <sup>th</sup> Avenue	75	\$ 1.50	\$2.00
Chinatown/International District	477	\$ 2.50	\$3.00
Fremont	80	\$ 1.50	\$2.00
South Lake Union - Long-term	1,116	\$ 1.25	\$1.25
Denny Triangle South	201	\$ 2.50	\$2.50
Ballard – Downtown and Locks	313, 70	\$ 2.00	\$2.00
Roosevelt	93	\$ 1.50	\$1.50
Belltown South	987	\$ 2.50	\$2.50
Green Lake	118	\$ 1.50	\$1.50
University District	931	\$ 2.00	\$2.00
Westlake Avenue North	407	\$ 1.50	\$1.50
South Lake Union - Short-term	1,062	\$ 2.00	\$2.00
Uptown	709	\$ 2.00	\$1.50
Belltown North	1,109	\$ 2.50	\$2.00
Denny Triangle North	607	\$ 2.50	\$2.00
Uptown Triangle	322	\$ 2.00	\$1.00