

Draft Recommendation # 1: Demand- and Geographic-based Pricing Strategy

Purpose: Based on data results, there is a need to look within a neighborhood at the high and low parking demand areas for a more refined and effective strategy.

Description: Adopt demand- and geographic-based strategy for parking rate adjustments and adjust target occupancy criteria.

Implementation Timeframe and Area: 2012; Citywide. Actual impact will be in the higher and lower demand areas. Rate and time-limit adjustments should be made annually based on analysis.

Data Needs:

- Continue annual data collection methodology currently in place and continue to build a historical database of parking utilization by area
- Quarterly or bi-annual surveys of areas exceeding targeted occupancy
- Provide a standardized report that tracks changes to parking utilization in high and low demand parking in response to pricing adjustments to senior SDOT departmental staff

Enabling Technologies: n/a

Communications Elements:

Since this is pricing strategy can be applied in multiple areas, communication elements are similar to a performance-based parking program-wide effort. These would include:

- Development of a program brand, logo, and related program collateral materials
- Program website – (see *SFPark* site configuration as another example):
 - Project Overview
 - “How it works”
 - FAQs
 - Resources
 - Featured News
 - Contact Us
- Project overview video
- Simple and easily read program policies and benefits posted on project web site
- Collaboration/Information sessions with neighborhood business district associations and interested/impacted agencies
- Launch Press Kit

**Draft Recommendation # 2:
Add Pay-By-Cell Phone as a New Parking Payment Option**

Purpose: Provide alternative payment options to enhance the ease and convenience of paying for parking

Description: Add Pay-By-Cell Phone as a new parking payment strategy citywide. Primary objectives include:

- Provide a new payment option that will bring real and tangible customer benefits related to the ease of parking and improved customer convenience. Examples include:
 - Pay for parking in your car when it is raining
 - Receive text message notifications that your meter is about to expire
- Improve the customer parking experience
- Enhance parking information and communications

Implementation Timeframe and Area: 2012; Citywide

Data Needs: N/A

Enabling Technologies: Seattle Police Department parking citation equipment must have Wi-Fi communications enabled, and there may also be back-office intergration work completed for effective enforcement purposes.

Communications Elements:

An ongoing and broad-based system of communication to inform patrons that pay-by-cell is available must be implemented. This should be a cooperative marketing and information campaign between the City, the selected vendor, and the neighborhood business district associations.

Marketing and ongoing initiatives to enhance utilization and pay-by cell adoption rate:

- Create a buzz and educate businesses, residents, and visitors via:
 - Social media (Twitter, Facebook, etc.)
 - Business cards and posters at neighborhood businesses and community gathering places
- Create stickers to be placed in citation envelopes
- Create banner ad with registration link on SDOT website
- Pitch local media with pay-by-phone parking technology story (TV, radio, and local newspapers)
- Forge partnerships with local tourist attractions and business districts

Draft Recommendation # 3: Implement a Time-of-Day Performance Pricing Pilot Program

Purpose: Adjust rates where patterns are different during the day, for instance, in areas with high lunchtime and late afternoon peak parking.

Description: Implement a time-of-day pricing pilot by analyzing demand patterns and creating time bands based on peak usage.

Implementation Timeframe and Area: 2012; consider following neighborhoods based on data that shows patterns of peak usage:

- Roosevelt
- 12th Avenue
- Chinatown/International District
- Ballard Locks
- Fremont

Data Needs:

- Annual parking utilization studies can inform this strategy. Assess whether paid parking occupancy from pay stations could be used as a proxy for manual parking utilization studies.
- Each current parking district will be analyzed based on changes in demand within each time band from the previous utilization study compared to the current study to identify trends.

Enabling Technologies: The city's current pay station equipment poses limiting factors on implementation. With time-of-day rates, a pay station must be able to charge different rates at different times of day. Stelio Pay and Display equipment cannot handle this function. Strada Pay and Display equipment is able to implement this strategy. Newer generation pay stations offer improved communications options.

Communications Elements:

- Distribute rate information via SDOT website and other media
- Display rate information on multi-space meters, possibly supplemented with additional signage that illustrates time bands
- Develop simple and easy to read policies and program benefits to post on project web site
- Host collaboration/information sessions with neighborhood business district associations and interested/impacted agencies
- Launch Press Kit

**Draft Recommendation # 4:
Change Rates in Areas with Dramatic Seasonal Affects**

Problem Statement: Several business districts and other areas with paid parking in Seattle have dramatic differences in parking demand between seasons.

Description:

- Analyze demand patterns and create time bands based on utilization data by time of day.
- Document levels of demand by months in the year and consider attendance records for activity areas such as at the Ballard Locks. Apply pricing based on utilization levels for different months.

Implementation Timeframe and Area: 2012; Specific areas to consider are the Ballard Locks paid parking area and Green Lake

Data Needs: Parking occupancy by month

Enabling Technologies: n/a

Communications Elements:

- Signage and different rate displays on multi-space meters
- Website with pricing zones and parking rates
- Coordination with area venues and community centers activities

Draft Recommendation # 5: Develop an Event Overlay Parking Pricing Strategy

Problem Statement: Major events can significantly impact neighborhood districts and create parking dynamics that are very different than a typical day.

Description: Develop an Event Overlay Parking Pricing Strategy

- Tailored to specific areas of downtown neighborhood districts impacted by major events
- Goals could include:
 - create more event parking by increasing on-street rates but eliminating time limits that make on-street parking not an option due to the length of the events.
 - keep on-street spaces available for other businesses during game days.
- Understand the number and nature of the events in a district to develop the strategy and the impacts. In Pioneer Square/CID, the number of “events” could equate to: over 150 event days total in a year.
- Event overlay could be integrated into other pricing approaches intended to manage “typical day” demands in a geographic area or time of day approach.

Implementation Timeframe and Area: 2012-2013; Specific neighborhood parking districts impacted by major events.

Data Needs: Data collection on event days by location and hour will be required.

Enabling Technologies: It may be possible to effectively estimate parking demands by analyzing photographs taken from elevated positions, especially if the block face and parking lot inventories are already documented.

Communications Elements:

- Signage and rate displays on multi-space meters
- Website with pricing zones and parking rates and accompanying data sharing effort to support private development of mobile applications
- Coordination with event venue(s)
- Print or radio/television ads and other media

Draft Recommendation # 6: Pilot Progressive Pricing in Combination of Extending Time-Limits

Purposes:

1. Provide more flexibility in on-street parking options to accommodate the wide variety of trip purposes of parking customers
2. Extend or eliminate time limits and combine with “progressive pricing” to provide a balance between creating more flexibility of time stays with the need for turnover

Description: Progressive Pricing in Combination with the Elimination (or Extension) of Time Limits

- Benefits businesses that need either shorter or longer duration stays than the typical two-hour time limit.
- Could include lower rates for the first 30 – 60 minutes, where rates increase for any period over two hours.

Implementation Timeframe and Area: 2012-2013; following areas are good candidates:

- Pike-Pine
- Cherry Hill
- Commercial Core
- Pioneer Square
- Chinatown/International District

Data Needs: N/A

Enabling Technologies: Selected pilot areas will likely require new upgraded pay stations

Communications Elements:

- Progressive rate structure and time limit change notifications will be accomplished via pay station rate displays (ideally using the new City Pal units due to enhanced graphic and display capabilities supplemented with new signage).
- Leveraging the SDOT website as a communications vehicle combined with a specific educational campaign focused on the selected pilot district is recommended. Collaboration with the neighborhood business district and merchant groups is also recommended.
- Mobile application for parking pricing information by area/time of day.

**Draft Recommendation # 7:
Leverage Private Sector Investment by Providing Open Access to City Parking Data**

Purpose: Make parking utilization and other data sets available to private sector for entrepreneurial development of desktop and mobile applications, which will enhance customer experience

Description: Leverage Private Sector Investment by Providing Open Access to City Parking Data

- Develop a way to distribute data that changes on a daily basis. Currently, the City is not able to update data on the data.seattle.gov site without using additional time and technical resources.
- New York City issued a Request for Qualifications for parking and technology firms with experience in the areas of “smart parking” system development and then asked certain vendors to set up tests. Consultant team recommends Seattle consider this model. The data that the City has from several sources (pay station transaction data, parking utilization survey data, etc.) is a valuable asset that could be leveraged to create interest and potential investment by the private sector.
- Several companies have been developing on-street parking management systems, to provide the data needed to manage on-street parking in more effective ways.
- Work with other cities to consider a standard for sharing parking occupancy and transaction data.

Implementation Timeframe and Area: 2012; Citywide

Data Needs:

- Parking curb space inventory updated monthly
- Parking occupancy / pay station transactions
- Parking rates per block face per month

Enabling Technologies: N/A

Communications Elements: One of the primary goals of this strategy is to assess and potentially create partnerships with firms that can assist the City in the development of communications tools such as websites, mobile applications for parking pricing information by area/time of day, etc. The following is the type of data that potential private sector would likely request as part of a pilot project:

- Various data delivery options: API push-pull methods (REST, SOAP, or something even simpler); File-based methods (scp/ssh, ftp/sftp, http/https/WebDAV) with just about any format; or City pushes transaction file to vendor-provided location or vendor pulls from City file location
- Each of these methods can be designed to transmit a single transaction, or a batch of transactions.
- Mutually develop a method to provide the vendor with as many /attributes as possible about these Meters
- Data can be delivered in three levels of frequency: historical, daily, and real-time.

Draft Recommendation # 8: Invest in an Enhanced and Ongoing Data Collection and Analysis Program

Purpose: With all of the potential changes in rates, the city will need a robust data collection and analysis program. While “real-time” data systems are the ideal, they are not financially feasible for Seattle at this time.

Description: Invest in an enhanced and ongoing data collection and analysis program

- Continue to conduct annual parking utilization surveys and invest in quarterly or bi-annual surveys of high demand areas, unless better alternative emerge from recommended private sector pilot programs.
- Continue data analysis and in-house development of predictive algorithms using parking pay station paid parking occupancy and other data sources in conjunction with evaluating private sector collaboration options.
- Leverage these investments in data collection with potential private sector partners
- The City has already made some investment in mobile License Plate Recognition (LPR) for electronic chalking enforcement purposes. Preliminary testing of LPR as a data collection methodology has shown that the existing equipment is not able to re-produce parking studies in an accurate and effective manner.

Implementation Timeframe and Area: Ongoing

Data Needs:

- Annual comprehensive parking surveys as the primary information base
- Tracking of utilization and duration changes following rate adjustments
- Tracking of non-paid parking occupancy (disabled parking placards, government vehicles, etc.)
- Pay station transaction data
- Additional mapping elements to improve data collection from mobile LPR services

Enabling Technologies: Assess already developed private sector tools, technologies, and applications related to implementing performance-based pricing programs in an on-street parking environment

Communications Elements:

- Development of an internal data collection, assembly, analysis and distribution strategy that is understood and consistently applied by City staff
- Clear, concise and accessible data within the context of the new program brand and supports program goals
- Interaction of private sector firms, entrepreneurs, and others interested in accessing the parking data for the development of new products and applications will require the development of defined policies and protocols both from technical use and general use perspectives. The SFpark.org terms of use and API are good models for reference.

**Draft Recommendation #9:
Implement a Comprehensive Neighborhood Engagement Strategy**

Purpose: Performance-based parking pricing strategies should be developed and implemented at the neighborhood-level in conjunction with business districts and neighborhood organizations.

Description: Provide funding and staff resource support to engage downtown and neighborhood business districts on a regular basis as performance-based parking pricing strategies are implemented.

Implementation Timeframe and Area: Ongoing

Data Needs: Annual parking survey results by district

Enabling Technologies: N/A

Communications Elements: Communications and public education strategies would be program-wide, as listed in the specific pricing strategy recommendations.