

ALASKAN WAY VIADUCT PROGRAM PARKING MITIGATION STRATEGIES

INTRODUCTION

Construction activities have commenced for the State Route (SR) 99 Alaskan Way Viaduct Replacement Program (AWVR Program) and will continue through 2018. The construction of these projects will result in the relocation and removal of on-street parking along the Central Waterfront and in Pioneer Square for SR 99 tunnel construction. Parking under the viaduct near the sports stadium was removed for construction of the new south mile of SR 99, which is already underway.

Businesses operating along the Central Waterfront and Pioneer Square areas will be impacted because workers, shoppers and tourists alike will not be able to park and access these areas to work, shop and play. The loss of short-term parking (spaces that are restricted to four hours or less) are most likely to affect those who make discretionary trips to these areas—trips that could go elsewhere or not occur at all if they are too difficult to make. Therefore, it is critical that loss of short-term paid parking be mitigated to minimize the impact to businesses.

The Final Environmental Impact Statement (EIS) for the AWVR Program was published in July 2011 and the Record of Decision was signed by the Federal Highway Administration (FHWA) in August 2011. There is a commitment in the Final EIS for the Washington State Department of Transportation (WSDOT) to provide up to \$30 million to mitigate the loss of parking during project construction. WSDOT and SDOT are working together to develop and implement mitigation strategies to off-set the loss of short-term parking in the Central Waterfront and Pioneer Square areas.

What is the goal of the Parking Mitigation Plan?

Retain customers of the Central Waterfront and Pioneer Square businesses by making sure that short-term parking is:

- *Available*
- *Affordable*
- *Safe, and*
- *Proximate*

What mitigation strategies were evaluated?

Parking mitigation strategies that meet the goals of the program—available, affordable, safe, and proximate—were evaluated and discussed with the Stakeholder Advisory Workgroup. The following lists the strategies that were evaluated; these are discussed later in this report.

AVAILABLE: Increase Parking for Customers

- Build a new parking garage
- Buy or lease an existing garage
- Use pricing strategies to encourage short-term parking and discourage long-term parking
- Shuttle employees and/or customers between key destinations and parking
- Implement “stacked” or “tandem” parking with valets
- Inform customers about available parking with technologies such as e-Park and smart phone applications
- Change policies related to on-street parking (e.g., longer duration, Sunday restrictions, disabled permit restrictions)
- Provide temporary metered parking on Alaskan Way where feasible after traffic is detoured under the Viaduct
- Create new permanent metered street parking

AFFORDABLE: Make short-term parking affordable for customers

- City controls parking facility and can set desired rate
- Pay private garage operators to achieve desired rate
- Increase turnover through marketing to reduce cost of desired rate
- Implement validation program to reduce the cost to customers

SAFE: Make customers feel safe within parking facilities and along routes between the facilities and key neighborhood destinations

- Improve walking routes to and from parking facilities
- Improve lighting in garage and along walking routes
- Increase security personnel and/or equipment at parking facilities and vicinity
- Increase activity at parking locations

PROXIMATE: Reduce travel time to find parking facility and reach ultimate destination

- Provide motorist wayfinding signs to find parking facilities
- Provide tools to help customers research parking locations before leaving home
- Provide pedestrian wayfinding from parking facilities to key neighborhood destinations
- Use valet services that have a drop-off/pick-up location close to businesses

1. Partner with private garages to provide a low, short-term parking rate

Strategy Objective: *Reduce the price to park short-term (less than four hours) in off-street parking facilities that are proximate to Pioneer Square and the Central Waterfront. Set a uniform hourly parking rate that is competitive with on-street parking.*

Description: This strategy would encourage short-term parkers to use off-street parking by offering a parking fee that is competitive with the price of on-street parking. Many customers may now avoid using off-site parking because of high short-term parking rates, uncertainty about rates when entering a garage, or confusion since each garage sets its own rates. This program is intended to create a uniform rate for stays of four hours or less to improve affordability and predictability—the target rate at program implementation is \$3 per hour (inclusive of parking taxes). The program can then be marketed to increase customer awareness of off-street parking opportunities.

Until short-term demand increases—through marketing and customers becoming familiar with off-site facilities—parking facility operators would likely lose money by reducing their current short-term parking rate to the preferred rate. Therefore, the operators will likely require an incentive to adopt a rate that is less than their current rate structure. Targeted facilities include:

Location	Spaces
1st & Columbia	70
Watermark Tower	40
Pike Place Market	100
Merrill Place	50
Pioneer Square Garage	45
Occidental Square Lot	15
Bell Street Garage	70
Total	390

Cost Estimate: Incentive payments for each garage will vary and depend on whether the facility has capacity available or if long-term parking would need to be displaced to accommodate short-term parking. The latter would likely require a higher incentive payment since garage operators would lose existing income associated with displacement and may need to re-market those spaces once the program ends.

Total **Annual** Cost for 390 spaces = \$500k to \$1M

Agreements will be negotiated annually with facility operators based on results (see performance measures below). Facilities can also be added or eliminated.

Implementation Steps:

1. Execute contracts with off-street parking facilities to secure short-term parking (4 hours or less) at a rate of \$3/hour inclusive of sales and commercial parking taxes.
2. Design internal and external sign programs and obtain approval from Pioneer Square Preservation Board, as needed.
3. Add program garages to the “Your Spot is Here” marketing campaign and maps.

Tracking Measures:

- Spaces in program, total cost of program, cost per space, cost per increase in demand
- Distribution of spaces to serve the Pioneer Square and Central Waterfront neighborhoods
- In-person intercept surveys to determine if Pioneer Square and Central Waterfront customers use these facilities
- Net change in parking demand for stays of 4 hours or less (measured quarterly)

2. Marketing (Placeholder)

Strategy Goal: *Support “business as usual” by retaining existing customers of the businesses and destinations in Pioneer Square, along the waterfront, and to the sports stadiums during construction of the SR 99 bored tunnel and its associated projects.*

[This page is a place-holder for the Marketing component of the Alaskan Way Viaduct Placement Program’s Marketing Plan. A separate effort is underway to develop the components, which will be included here once developed.]

Description:

Budget Estimate:

Implementation Steps:

Tracking Measures:

3. Make physical improvements to facilities and key walking routes

Strategy Objective: *Make physical improvements within key facilities and to walking paths that access facilities to increase safety and enhance the customer experience.*

Description: This strategy would include improvements to both private facilities and walking routes along public right-of-ways. Elements could include the following:

- At 1st and Columbia Garage: make upgrades to elevators, lobbies and stairwells to improve aesthetics and lighting. Enhance security and customer service.
- All program facilities: Install signs tied to the marketing to promote the facility and program elements such as the affordable parking rate.
- At the Pike Place Market Garage: Construct new and upgrade existing pedestrian walkway linking Alaskan Way to the garage elevator; add pedestrian and motorist wayfinding signage; add pedestrian-scale lighting.
- Add pedestrian-scale lighting at corners of intersections under Viaduct where temporary signals will be located during construction:
- On University Street: Add pedestrian scale lighting along north sidewalk between Alaskan Way and Western Avenue (ped lights can be added to existing street light poles). Improve crosswalk markings at the University Street/Western Avenue intersection. Add wayfinding elements and public art.
- On Columbia Street: add pedestrian-scale lighting along south side between Alaskan Way and 1st Avenue (attach lights to side and underside of SR 99 ramp). Consider murals or other art in the section adjacent to the 1st & Columbia Garage. During holiday season, consider installing holiday-themed lighting along key walking routes.

Budget Estimate: Costs will not be known until detailed engineering design is performed. Also, there are different level of improvements that could be made. Therefore, for planning purposes, this strategy will start with a budget target of \$500,000 to \$1,000,000.

Implementation Steps:

1. Include facility upgrades in partnership agreements with private parking operators
2. Form design team of WSDOT and SDOT staff to design improvements in public right-of-way
3. Coordinate with Pike Place Market public improvements and wayfinding program
4. Create or amend construction contracts to complete improvements.

Tracking Measures:

- Pedestrian counts along key walking routes
- Public perception through customer and intercept surveys

4. Create temporary on-street parking

Strategy Objective: *Temporarily increase parking supply within public right-of-way on Alaskan Way where possible during construction.*

Description: During construction, it may be possible to create temporary on-street parking in portions of the Alaskan Way right of way. It is estimated that between 50 and 150 parking spaces could be provided at different times throughout construction, mostly north of Colman Dock.

Up to 70 spaces could be provided by removing former waterfront trolley tracks and paving this portion of the Alaskan Way right-of-way between Spring Street and Pike Street. These spaces would be either parallel or diagonal parking depending on the width of the remaining right-of-way between the travel lanes and the pedestrian-bicycle path. These metered, 4-hour-limit spaces would be in place until late 2013 when this part of the Alaskan Way right-of-way is expected to be needed for Elliott Bay Seawall construction activities.

The Elliott Bay Seawall project is still in the design and environmental review phase. Seawall construction may provide additional opportunities to provide short-term parking in the Alaskan Way right-of-way. As design progresses in 2012 these opportunities will be further defined.

Cost Estimate:

Temporary short-term parking prior to Seawall construction is currently estimated at \$310,000. This estimate is based on initial scoping, and may be altered by further design.

It is too early to generate costs estimates for temporary parking during Seawall construction. Additional design and potential construction staging is needed to provide accurate costs.

Implementation Steps:

1. Complete design and permitting for temporary short-term parking on Alaskan Way between Spring Street and Pike Street.
2. Requests bids for the temporary scope, award and begin construction.
3. As Seawall design progresses, identify potential quantity and cost of additional temporary short-term parking.

Tracking Measures:

- Number of spaces provided
- Cost per space for time available
- Utilization

5. Shuttle visitors between key destinations and parking

Strategy Objective: *Make it easier for visitors to park once and reach multiple destinations in Pioneer Square and the Central Waterfront. Also allows visitors to park further from these destinations, which increases available supply for visitors.*

Description: This strategy would connect key destinations in Pioneer Square and along the Waterfront via a shuttle, including underutilized parking facilities. It would allow customers to park once and then use a shuttle to reach multiple destinations.

Route and Operating Assumptions: Potential routes for the shuttle were discussed with the Stakeholder Advisory Workgroup. These included long routes that would extend from Safeco Field to the Space Needle, and loop routes that would use portions of both Alaskan Way and 1st Avenue. The Workgroup favored an initial route that was relatively short and directly connected Pioneer Square to the Sculpture Garden. This option is depicted below. Alternative routes or future extensions would be considered during detailed planning. The Workgroup also favored having very frequent service (10-minute headways between consecutive shuttles), and limiting the service to the peak Summer and holiday seasons. The operating assumptions are shown in the table below.

Figure 1. Initial Shuttle Route Concept



Operating Dates (beginning 2013)	Operating Hours	Headway
May 1 through September 30 *	10:00 A.M. to 10:00 P.M.	10 minutes
November 17 – January 1	12:00 P.M. to 7:00 P.M.	10 minutes

* For the inaugural year, it is recommended that the shuttle service begin in early to mid April to allow time to work out operational issues.

Cost Estimate: The annual operating cost for the shuttle is based on the above seasonal service days and headways. It is expected that the shuttle would operate 153 days during the summer plus 45 days during the holidays, for a total of about 2,150 hours of service. Three (3) shuttles would need to be in service simultaneously to achieve 10-minute headways. Private shuttle operations are estimated to cost roughly \$50 per operating hour. Therefore, the annual costs are estimated at about \$325,000 per year.

Capital costs may also be incurred for items such as pedestrian landings at stops, signage, fare collection equipment, a wrap on the shuttle to enhance visibility and market presence, and other items. The actual costs of these elements will not be known until further design and planning is performed; a placeholder capital budget of \$500,000 will be assumed.

Implementation Steps:

1. Determine operator and authority issues
2. June 2012 Workgroup Shuttle workshop to develop shuttle operations plan including route, stop locations, span of service, headway and layover locations, fare collection plan
3. Engage City Council and Metro in a discussion about shuttle intent and operations; initiative legislative process, if needed.
4. City (or other entity) to draft RFP bid documents for private shuttle vendor
5. Advertise RFP, review proposals, select vendor
6. Execute contract
7. Make physical improvements at stop locations (curb pullout, pedestrian landings, signage, etc.)

Tracking Measures:

- Ridership
- Cost per rider
- Public awareness and perception about the shuttle service via interviews at key destinations

6. Build a new parking garage

Strategy Objective: *Increase parking supply.*

Description: This strategy would construct a new public parking garage. There are many potential sites that could be considered within the study area for a garage; most of which are now occupied by surface parking. Preliminary feasibility analysis has been performed for a prototypical site located along the Central Waterfront. Within existing zoning envelopes, a full-block site in this neighborhood could accommodate between 370 and 480 parking spaces depending on whether rooftop or below-grade parking are provided. Surface parking eliminated from that size site could be up to 130 spaces; therefore the net gain in parking would be between 240 and 350 spaces. Several development options were also considered and each would have different cost and financial implications. These include:

- Constructing a stand-alone parking garage that is publically owned and operated. The City Land Use Code would likely require ground-floor retail as well as some intervening (non-garage) uses on upper floors of the garage.
- Constructing a garage that is part of a mixed-use development built on top of the garage podium. Parking in the garage would need to be shared with those land uses which would reduce the amount of parking available for the public. Office and residential uses would likely require the most parking; a hotel use would generate its peak parking demand overnight, providing more parking during daytime hours for the public.

Cost Estimate: Preliminary analysis for the above scenarios was performed to determine full facility costs as well as an “equity contribution” that could make a public parking break even within the third year of operation. These are:

- Full cost of a mixed-use parking garage with all above-grade parking = \$29.6 million
- Equity contribution needed to make a mixed-use facility with above-grade parking break even = \$7.4 million
- Equity contribution needed to make a mixed-use development break even with one below-grade parking level= \$10.4 million

Implementation Steps:

1. Perform additional feasibility studies including researching site opportunities
2. Update garage pro forma analysis for potential sites
3. Evaluate public-private partnership opportunities

Tracking Measures:

- Number of net new parking spaces for public use
- Cost per space
- Proximity to Pioneer Square and Central Waterfront destinations

7. Improve wayfinding to destinations and parking

Strategy Objective: *Improve ability for motorists and pedestrians to reach destinations and parking in Pioneer Square and along the Central Waterfront.*

Description: *Design a comprehensive wayfinding system that adds to, supplements and or replaces existing wayfinding efforts to connect visitors with neighborhood destinations and parking. Include e-Park as the parking wayfinding element for motorists. Inventory existing wayfinding elements, identify out-of-date or inaccurate signs for correction or removal, and develop new strategies and signs. Include sign maintenance and re-evaluation in implementation scope.*

Cost Estimate/Budget:

- Plan: \$70,000; three to four month effort for inventory, stakeholder involvement, planning, design, cost estimates
- Implementation Budget: TBD
 - Temporary signs for summer 2012
 - Pedestrian wayfinding poles, signs and map updates
 - Sign removals
- Maintenance: TBD
 - Annual evaluation for map content, sign accuracy

Implementation Steps:

1. Scope development (1 month)
2. Consultant selection (1-2 months)
3. Plan design and community process (3-4 months)
4. Implementation

Tracking Measures:

- Project milestones
 - Signs installed
 - Signs removed
- Public perception
- Ease of use

8. Expand e-Park Program to Pioneer Square and Central Waterfont

Strategy Objective: *Help customers find available and proximate parking through City's e-Park program, which provides parking guidance and real-time information about spaces in off-street facilities. Reduce the time a visitor would spend circulating to find parking.*

Description: The City's "e-Park" program monitors utilization at various parking facilities, and through variable message signs along key access routes into the downtown, guides customers to available parking. The system expects to promote better use of existing off-street parking in the Pioneer Square and Central Waterfont neighborhoods. By more quickly directing motorists to available off-street spaces, it will result in reduced congestion, lost time from circling for parking, and improved customer satisfaction. Parking availability data can be linked to smart phone and in-car navigation applications.

e-Park Program Details: A parking guidance system was identified in the 2008 Center City Parking Program as a key strategy to address on-street parking impacts from waterfront construction projects. e-Park was launched in September 2010 with over 4,500 spaces in six garages and five dynamic message signs (DMS). The project has so far validated the accuracy of the technology and overall ability of the program to operate in garages with different parking management software systems.

Build-out is occurring in 2012 and will incorporate approximately 10 additional parking garages (see Figure 2 below for expansion candidates). The build-out phase targets the Pioneer Square and Central Waterfont neighborhoods; approximately sixty percent of candidate garages in the built-out system are located within three blocks of parking removed for the AWVSR projects.

Costs: TBD

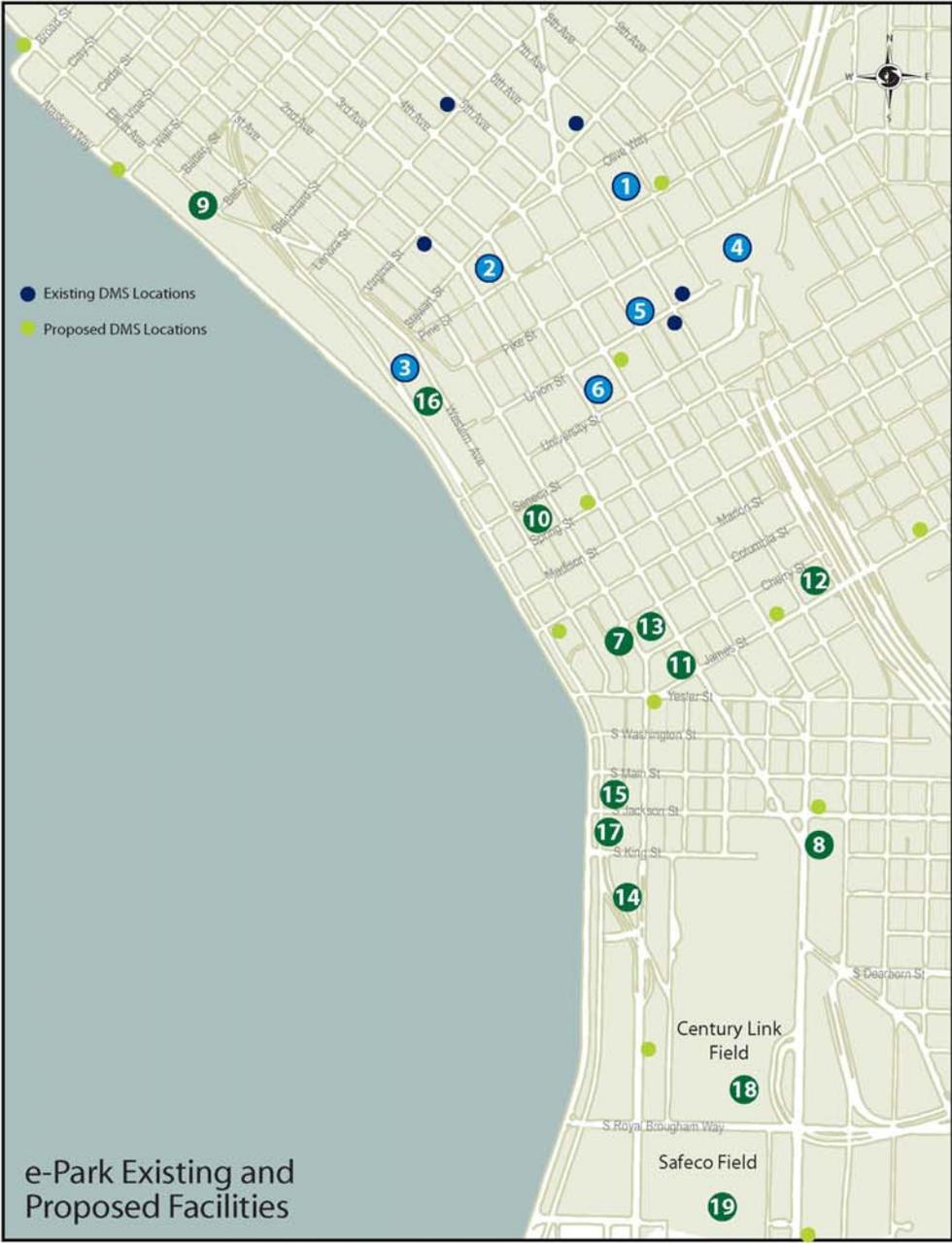
Implementation Steps:

1. Continue negotiations to incorporate waterfront and Pioneer Square parking facilities
2. Execute task order through AWV Program to support related e-Park operational costs in 2012
3. Get approval for e-Park signs (or modified signs) in historic districts
4. Install e-Park signs
5. After system is built out (end of 2012), re-evaluate proportional share based on the percentage of program garages that directly support the affected neighborhoods

Tracking Measures:

- Change in parking utilization of e-Park program garages
- Public perception

Figure 2. Candidate e-Park Locations



Existing e-Park Garages

GARAGE	ADDRESS
1 Pacific Place	1612 6th Avenue
2 3rd and Stewart	1619 3rd Avenue
3 Pike Place Market	1531 Western Avenue
4 Washington State Convention Center	800 Convention Place/ 1300 Hubbell Place
5 Washington Athletic Club	1409 6th Avenue
6 PSP/Cobb	315 Union Street

Proposed Candidates

GARAGE	ADDRESS
7 1st and Columbia	723 1st Avenue
8 Union Station Garage	820 4th Avenue S
9 Bell St. Harbor Pier	2323 Elliott Avenue
10 Watermark Tower Garage	1108 Western Avenue
11 Butler Garage	114 James Street
12 SeaPark Garage	609 6th Avenue
13 Millennium Tower	719 2nd Avenue
14 505 1st Avenue South	505 1st Avenue S
15 Pioneer Square Garage	74 S Jackson
16 Hillclimb Garage	1422 Western Avenue
17 Merrill Place	76 S King Street
18 Stadium/Exhibition Center Garage	1000 Occidental Avenue S
19 Seattle Mariners Ballpark Garage	1250 1st Avenue S

9. Change on-street parking policies and practices

Strategy Objective: *Increase on-street parking use through changes to policies and practices that optimize parking occupancy and turnover and enhance customer service.*

- *Add time-limits or paid parking on Sundays or during events to generate turnover*
- *Limit disabled placard and plate parking to 4-hours to generate on-street parking turnover*
- *Extend on-street time limits to 4-hour in lower-demand areas to allow longer visitor stays*
- *Explore variable rates for events and different times of day to achieve target occupancy*

Description: Changes to existing on-street parking policies could make parking more consistently available for short-term customers. For example, parking is currently free and unrestricted on Sundays, and is often occupied all day by downtown employees or event attendees. If paid or time-limited (but still free) parking were in effect on Sundays, those spaces could be available for customers who stay within the time limit. Another policy change that may increase short-term parking availability is a time limit for disabled-permit parking. Also, the two-hour limit may not be sufficient for every visitor trip, and some meters could be extended to a four-hour limit to facilitate this need.

Another change would be to allow variable parking rates by time of day, to better match parking price with demand. For this to be possible, new technology would need to replace existing pay stations. New pay stations would allow parking rates to change by time of day and by day of week. For example, mornings, evenings and Sundays could have a lower per-hour rate than weekday peak parking demand hours. A special rate could be set for days on which there are events.

The City's 2012 implementation of pay-by-phone technology will allow on-street parking customers to pay for their parking, and extend parking time, through their smart phones. This will be as an alternative to using the pay stations. Typically, pay-by-phone systems allow for the creation of user accounts that facilitate validation of on-street parking.

Cost Estimates:

- Sunday time-limited parking costs: \$175,000. Increases to \$215,000 if paid. Includes programming, signs and graphics; enforcement is \$1,400 per Sunday or \$72,800 for the year. Assumes Pioneer Square, the Chinatown/International District and the Commercial Core.
- Four-hour time limit for DP parking: \$50,000 for signs in Pioneer Square
- Added four-time time limit: \$38,000 for signs in Pioneer Square edge area
- New pay station technology equipment that permits variable pricing and event marketing is available for lease.

Implementation Steps:

1. Changes to policies (e.g., Sunday restrictions and changes to disabled parking) require City Council approval, and may require additional analysis. SDOT has authority to charge up to \$4 per hour and to set rates by time of day. Event rates above \$4 per hour would require a change to the Seattle Municipal Code.
2. Sunday restrictions require enforcement, and will require changes to current enforcement deployment increased personnel needs.

Tracking Measures:

- On-street parking utilization for affected periods
- Public perception

10. Implement centralized valet parking service

Strategy Objective: *Improve customer service with curb-side valet service near key destinations. Can also increase parking supply since valets can festival-park more vehicles in a parking facility than could be self-parked.*

Description: Establish a curb-side valet parking service at one or more centralized locations in Pioneer Square and/or the Central Waterfront neighborhoods. Valets would drive vehicles to and from nearby parking facilities.

Cost Estimate: Cost for the valet service at two locations was estimated using the following:

- Off-street parking would be provided in the secure basement level of the 1st & Columbia Garage. The monthly lease rate for this parking was assumed to be **\$15,000 per month**.
- Centralized valet stations would be located near Pier 56 on the Central Waterfront and on 1st Avenue near S Washington Street in Pioneer Square. Valets would need to drive one way to the garage and walk/run back to the station. Based on the distance, it is estimated that each valet could make 6 trips per hour for the Central Waterfront and 10 trips per hour for Pioneer Square.
- An estimated **8 valets** would be needed for both stations (5 at the Waterfront; 3 in Pioneer Square) to have a sufficient staff to both circulate vehicles and man the station.
- Operating hours were assumed to be 9 hours each Sunday through Thursday, and 11 hours on Fridays and Saturdays for a total of **67 hours per week**.
- A burdened hourly rate for the valet (including profit plus insurance) is **\$25 per hour**.
- **Total cost for labor and parking = \$68,600 per month.** *Note: Some costs could be recouped through parking fee.*

Implementation Steps:

1. Research existing valet programs that have been implemented in Seattle (e.g., Nordstrom, Pike Place Market, Ivar's) to determine what made them successful or not.
2. Work with neighborhoods to determine location and operating parameters for a valet service
3. Secure one or more garages for parking
4. Create RFP for valet services
5. If needed, create a passenger load/valet zone at the designated locations
6. Market valet service
7. Create signage for valet service

Tracking Measures:

- Number of vehicles served
- Cost per vehicle served
- Increase in parking supply through valet
- Customer perception