



# City of Seattle

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## Office of City Auditor

May 30, 2013

TO: City Councilmember Tim Burgess  
City Councilmember Tom Rasmussen

FROM: David G. Jones, City Auditor *David G Jones*

### **Seattle Department of Transportation Issue Identification Paper**

You asked our office to review the Seattle Department of Transportation (SDOT) to:

- Identify any short-term efficiency measures that could result in General Fund savings; and
- Identify issues that should be included in the SDOT operations management and efficiencies analysis that began in October 2012 and is currently being conducted by a consultant.

We shared this report with the City's consultant (Talbot, Korvola & Warwick, LLP) to consider for their work on the SDOT operations management and efficiencies analysis.

This memo focuses on the six SDOT programs that rely most heavily on the General Fund.<sup>1</sup> We found three areas within these programs for which additional work may result in General Fund savings or increased revenue: 1) leaf pick-up, 2) disabled placard abuse, and 3) credit card transaction fees. We also identified seven longer term issues for inclusion in the ongoing SDOT operations management and efficiencies analysis. In addition, we worked with SDOT to identify efficiency measures they have taken over the last several years, which they estimate resulted in annual savings of approximately \$4.7 million.

Below you will find summaries of the three potential efficiency areas, the seven issues identified for the SDOT operations management and efficiencies analysis, and SDOT's efficiency measures. In Appendix A, you will find a discussion about abuse of disabled parking placards.

If you have questions or would like more information, please feel free to contact me at 233-1095, or Assistant City Auditor, Claudia Gross Shader, at 684-8038.

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<sup>1</sup> These six areas are 1) Commuter Mobility, 2) Parking, 3) Traffic Signals, 4) Street Cleaning, 5) Street Repair, and 6) Urban Forestry (Arborist Services and Tree and Landscape Maintenance).

**Three New Efficiency Areas** – During this review, we identified three potential efficiency areas that could result in General Fund savings or increased revenue. SDOT is currently pursuing these in cooperation with several other City departments.

Area	Description	Status
1. Leaf Pick-Up	SDOT’s annual costs for leaf pick-up are \$363,000. A portion of these costs may be legitimately shifted from the General Fund to Seattle Public Utilities’ (SPU’s) Drainage Fund. These are costs associated with leaf pick-up on closed-contoured streets where the service provides a benefit to the drainage utility.	SDOT and SPU tracked the amount of leaf pick-up that occurred on closed-contoured streets during the 2012 leaf season. They will provide an update to our office in 2013.
2. Disabled Placard Abuse	Abuse of disabled parking placards can result in fewer spaces being available for the disabled and decreased vehicle turnover in parking spaces near businesses. Parking data collected by SDOT shows high disabled placard use in Downtown, First Hill, Pioneer Square, Cherry Hill and Chinatown-International District. For Downtown and First Hill alone, there is an estimated annual revenue loss of over \$1.3 million. Yet City disabled placard enforcement efforts have significantly decreased since 2011.	Appendix A describes some actions the City could take to reinvigorate enforcement for disabled placard abuse.
3. Credit Card Transaction Fees	Fees associated with credit card processing for parking payments totaled approximately \$1.7 million in 2012. In 2011 SDOT and the Department of Finance and Administrative Services (FAS) negotiated rate reductions with Wells Fargo, the credit card processing vendor, saving approximately \$140,000 annually. As result of our review, SDOT and FAS negotiated another change in the rate structure that will yield additional incremental savings.	SDOT and FAS will monitor the effect of the new rate structure on credit card transaction fees. In addition, the City will not incur transaction fees for the pay-by-phone project. <sup>2</sup> SDOT and FAS will also track the decrease in credit card transaction fees resulting from pay-by-cell phone.

<sup>2</sup>See description of the pay-by-phone project at <http://www.seattle.gov/transportation/parking/byphone.htm>

**Issues for the SDOT Operations Management and Efficiencies Analysis** – The Seattle City Council, in partnership with the City Budget Office (CBO) and our office, selected a consultant to analyze SDOT’s organizational structure and operations. This will result in a comprehensive analysis of all aspects of SDOT’s operations in order to achieve operational efficiencies and budgetary savings. This review began in mid-October 2012 with an initial phase that will conclude in summer 2013, and a second phase that will explore key issues raised in phase one in further depth.

We have identified seven issues that would benefit from additional analysis by the consultant. The table below summarizes these seven issues and offers questions for the consultant to include in their analysis.

Area	Issue/Description	Questions for Organizational Review
Street Repair	<p><b>1. Preventive Maintenance</b> –Studies show that \$1 spent on preventive maintenance of pavement in fair or better condition can save \$6-\$14 on future rehabilitation.<sup>3</sup> However, preventive maintenance has been historically underfunded in SDOT.</p>	<ul style="list-style-type: none"> <li>• What are the leading practices for balancing preventive maintenance, rehabilitation, and reconstruction/repair work?</li> <li>• Should SDOT consider establishing performance targets (e.g., WSDOT’s performance target is that 90% of highway pavement is in fair or better condition)? If so, what are the appropriate targets for Seattle?</li> </ul>
Sidewalk Construction and Repair	<p><b>2. Sidewalk Construction/Repair Performance</b> – SDOT’s Sidewalk Safety Repair Program could benefit from benchmarking and improved performance measures such as:</p> <ul style="list-style-type: none"> <li>• Streamlining management reporting to allow for easier visibility to on-time and on-budget performance;</li> <li>• Establishing multi-year strategic goals for sidewalk construction and repair; and</li> <li>• Developing performance measures that easily allow SDOT to benchmark with other jurisdictions and with past</li> </ul>	<ul style="list-style-type: none"> <li>• What are appropriate performance targets for sidewalk construction and repair?</li> <li>• What steps can SDOT take now to ensure that it meets those performance targets?</li> <li>• To what extent are other jurisdictions tracking on-time and on-budget completion on a job-by-job basis and at the program level?</li> <li>• What steps can SDOT take to promote early response to potential cost and schedule overruns?</li> </ul>

<sup>3</sup> See page 28 of [Rough Roads Ahead](http://roughroads.transportation.org/RoughRoads_FullReport.pdf) a report by the American Association of State Highway and Transportation Officials [http://roughroads.transportation.org/RoughRoads\\_FullReport.pdf](http://roughroads.transportation.org/RoughRoads_FullReport.pdf).

Area	Issue/Description	Questions for Organizational Review
	performance.	
Urban Forestry	<p><b>3. Contracting Out Analysis</b> – SDOT’s Urban Forestry Division has raised efficiency concerns about the use of SDOT staff for summer watering of the 123 acres that comprise SDOT’s landscape inventory. Conversely, they have efficiency concerns about contract costs for pruning trees in proximity to overhead power lines.</p>	<ul style="list-style-type: none"> <li>• How have other jurisdictions balanced efficiency concerns and labor issues in their urban forestry programs?</li> <li>• What are other jurisdictions doing to gain efficiencies in landscape maintenance?</li> <li>• What additional analyses are needed to make informed decisions about these urban forestry functions?</li> </ul>
Parking	<p><b>4. Replacement of Parking Pay Stations</b> – SDOT has about 1,400 older model parking pay stations that will begin to reach the end of their functional life in 2014.<sup>4</sup> Their credit card reading capability is already compromised, and they require ongoing graffiti abatement.</p>	<ul style="list-style-type: none"> <li>• How are other jurisdictions approaching replacement of their pay parking infrastructure?</li> <li>• What opportunities for cost savings and ensuring continued functionality should SDOT consider? Examples include: comparing different lease/purchase models with the 2004 bond funded purchase; updating-street deployment options to require purchase of fewer pay stations; considering the cost/benefit of other technologies and payment capabilities (e.g., smart single-space meters; pay-by-space on-street; higher adoption of pay-by-phone technology); researching pay stations that have more “plug and play” (e.g., non-proprietary) components; and revising warranty conditions and assumptions<sup>5</sup>.</li> </ul>
Parking	<p><b>5. Performance-Based Pricing</b> – Consistent with recent City Council guidance, SDOT has developed a performance-based system for setting on-street parking rates, and is collecting data on actual usage and using that data to adjust rates to achieve the policy objective in the Seattle Municipal Code of an average of one to two available spaces per blockface.</p>	<ul style="list-style-type: none"> <li>• Is there a more efficient means to gather the data (whether actual on-street data or combined with pay station transaction data) to effectively inform decisions about rates?</li> <li>• Is the current annual schedule for collecting data and adjusting the rate/hours the most efficient and effective?</li> </ul>

<sup>4</sup> Pay stations are dependent upon internet connectivity, which is subject to increasingly dynamic cell phone network changes (e.g., decommissioning of 2G network to provide increased spectrum for 3G or LTE). 1,200 pay stations will be affected by this in 2013 by the decommissioning of the Mobitex network, and the remaining (both older and newer pay stations) will be affected in the next 2-4 years when AT&T decommissions their 2G network. SDOT has begun a project to replace all non-AT&T 2G modems, which will be completed in May 2013.

<sup>5</sup> SDOT indicated that very recently they were able to acquire limited consulting services of an industry expert to begin some of this work.

Area	Issue/Description	Questions for Organizational Review
Traffic Signals	<p><b>6. Deferred Maintenance</b> – SDOT has responded to recent budget reductions by reducing traffic signal maintenance frequency. Consequently, SDOT’s staffing levels for traffic signal maintenance continue to fall short of industry standards.</p>	<ul style="list-style-type: none"> <li>• Are some jurisdictions able to comply with industry standards for signal maintenance? If so, how are they able to achieve this?</li> <li>• To what extent are other jurisdictions (even internationally) extending their signal replacement cycles and what are the trade-offs?</li> </ul>
Department-Wide	<p><b>7. Field Technology</b> – Data collected by SDOT staff in the field sometimes requires duplicate handling in the office and in some cases multiple data entry into the human resources and work management systems.</p>	<ul style="list-style-type: none"> <li>• How do other transportation agencies collect data in the field?</li> <li>• Are there emerging technologies that could reduce the costs of duplicate data entry by SDOT? Does the cost benefit analysis support an investment in new field technology?</li> </ul>

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**Recent SDOT Efficiencies** – While SDOT has sustained significant budget reductions in recent years, SDOT management and staff have strived to be more efficient in their work. A summary of efficiency efforts undertaken by SDOT since 2008 is provided below. SDOT indicates that all of these efforts resulted in operational efficiencies and a quantifiable savings of \$4.7 million annually. These savings have been captured in budget reductions or redirected to provide additional capacity for SDOT programs. Note that the amounts listed below were provided by SDOT and have not been audited by our office.

Descriptions of Recent SDOT Efficiency/General Fund Savings <i>(The amounts listed here are provided by SDOT and have not been audited by the Office of City Auditor.)</i>	SDOT Estimated Annual Budget Reduction or Annual Savings Directed to Other SDOT Activities
<b>GIS Webmaps</b> - On-line maps allow for greater self-service and have reduced time required for administrative staff and street use inspectors.	\$148,200
<b>Fuel Reduction</b> - Hybrid vehicles and greater awareness have reduced costs.	\$147,000
<b>LED's in Traffic Signals</b> - Annual savings from conversion to LED lights.	\$425,000
<b>Street Sweeping</b> - Costs of the Water Quality Sweeping Program are funded by SPU; General Fund savings.	\$700,000
<b>Claims Management</b> - Consolidated database and standardized process yielded efficiencies.	\$65,168
<b>Credit Card Processing Fees</b> - Negotiated lower rate for credit card fees for on-street parking; this savings accrues directly to the General Fund.	\$140,000
<b>Paperless Processes and Document Management</b> - Five initiatives (including electronic document management of customer and vendor invoices) in accounting and payroll saved staff and supply costs.	\$346,833
<b>Capital Projects Contract Management</b> - New systems for tracking and reporting on contracts saved significant staff time.	\$207,500
<b>Accounts Payable</b> - New system for invoice tracking saves staff time and increases vendor discounts.	\$147,000
<b>Deposit Tracking</b> - Automated an accounts receivable process.	\$73,000
<b>Damage Recovery</b> - Implemented new system to recover damages to SDOT assets due to collisions; saves staff time and increases recovery amounts.	\$55,000
<b>Equipment Sharing</b> - SDOT now shares a traffic signal controller cabinet with King County, and Street Maintenance Flusher trucks are now used by SDOT's Urban Forestry Division.	\$44,000
<b>Warehouse</b> - SDOT eliminated its Charles Street warehouse.	\$77,200
<b>Street Maintenance Division Schedule Change</b> - Division changed to 4 (10 hour) workdays for 32 weeks of the year saves set-up and tear down time, and increases productivity.	\$245,000
<b>Urban Forestry Schedule Change</b> - The change to 4 (10 hour) workdays year-round saves set-up and tear down time, and increases productivity.	\$48,000
<b>Signs and Markings Crew</b> - Schedule change resulted in reduced overtime costs.	\$92,000
<b>Bicycle Lane and Sharrow Marking</b> - Bringing work in-house yielded savings.	\$500,000
<b>Work Management Process</b> - Automated system saves staff time tracking and reporting.	\$647,000
<b>Parking Studies System</b> - Automated system resulted in savings related to analysis of parking data.	\$201,000
<b>Traffic Flow System</b> - System upgrade reduced set-up and reporting costs for conducting traffic counts.	\$54,000
<b>Automated Traffic Processes</b> - Automated traffic investigations and "location files" searches reduced staff time.	\$40,000
<b>Safety Reviews and Inspections</b> - New safety review process has resulted in fewer change orders; also SDOT reduced costs for inspections by bringing it in-house.	\$276,500
<b>Total</b>	<b>\$4,679,401</b>

# Appendix A:

## Disabled Parking Placard Abuse

Seattle City Councilmembers Tom Rasmussen and Tim Burgess requested that our office conduct a preliminary review of the Seattle Department of Transportation (SDOT) to identify potential short-term savings as well as longer term issues to be explored through a multi-year SDOT operations management and efficiencies analysis. One of the issues raised during our preliminary review was that of disabled parking placard abuse. This appendix summarizes the issue and identifies some potential next steps for the City.

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### Disabled placard abuse results in significant losses.

Washington state law (RCW 46.61.582) allows any person with a valid disabled placard to park free of charge in areas with parking meters. Unfortunately, the inappropriate use of disabled parking placards in on-street metered spaces can result in having fewer spaces available for the legitimately disabled, decreased parking turnover in business areas, and a loss of City revenue. A common type of disabled placard abuse, for example, is the misuse of a validly obtained placard (e.g., using an elderly relative's placard when she is not in the car or after she has died).

Based on previous enforcement activities, Seattle Police Department (SPD) officials estimate that about 60 percent of placards are used for inappropriate purposes. Evidence from other cities suggests that placard fraud is rampant. A series of parking stakeouts by police in Alexandria, Virginia, in 2010 found that 90 percent of observed disabled credentials were being used illegally. News media investigations in Philadelphia and Los Angeles revealed that many placard users have acquired their credentials illegally, either through a black market purchase or more commonly by using the placard of an older infirm relative.

A 2009 report by the Seattle Times<sup>6</sup> highlighted the problem in Seattle and cited a 2004 City sample that indicated that “more than 75 percent of disabled parking placards examined were being used improperly.”

SDOT officials estimate that an average of 20-30 percent of parking spots in Downtown and First Hill are occupied during paid parking

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<sup>6</sup> See article at [http://seattletimes.com/html/nationworld/2009465952\\_parking14m.html](http://seattletimes.com/html/nationworld/2009465952_parking14m.html)



hours by a vehicle displaying a placard. SPD officials indicate that they have observed an increase in the use of disabled placards in these areas since the implementation of SDOT's Performance-Based Parking Pricing <http://www.seattle.gov/transportation/parking/performancepricing.htm>. Further, SPD has seen a significant increase in the use of temporary disabled placards (red hanging placards).

Placard abuse in Downtown and First Hill is estimated at 12 percent<sup>7</sup> of the total parking available in these areas. This results in lost opportunities for legitimate disabled parking and decreased vehicle turnover of parking spots near businesses. This could represent as much as approximately \$1.4 million in revenue if the spaces were filled with paid parking customers.

**Seattle's enforcement efforts have declined sharply.**

SPD and SDOT officials who have been pursuing this issue for a number of years indicated that previous public information efforts have had only short-term effects on reducing abuse. In addition, SPD's enforcement activities have decreased significantly in the past two years. During the 2009-2010 Washington State legislative session, RCW 46.19.050: Unauthorized Use of a Disabled Placard was changed from a "traffic" infraction to a "parking" citation. A parking citation is issued to the vehicle only and does not address the individual who has used the disabled parking placard illegally. This makes it significantly more difficult to track repeat offenders. In addition, this change no longer allows SPD to confiscate the placard. SPD officials report that this change has made enforcement more cumbersome.

Until recently, SPD's Parking Enforcement unit operated a disabled parking abuse task force that issued between 30 and 40 tickets per month for Unauthorized Use of a Disabled Placard. During 2011 and 2012 all of the members of the task force were lost through either promotion or reassignment. Currently, enforcement occurs primarily in response to reports of abuse, and citations issued for this offense have declined sharply. As indicated in the chart below,

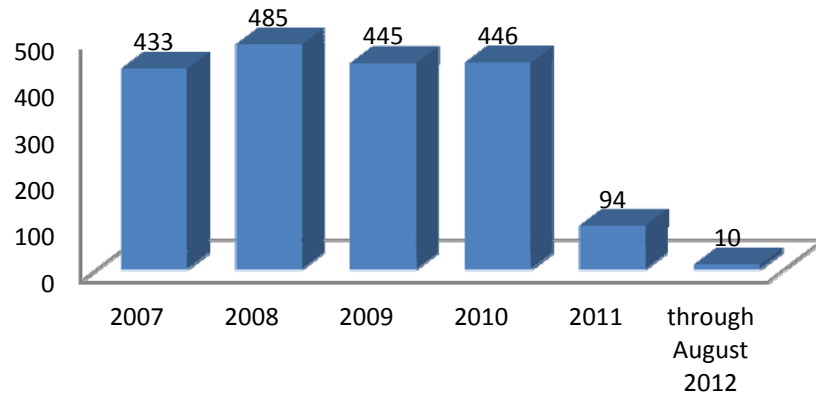
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<sup>7</sup> If one assumes that 20 percent (SDOT estimates between 20-30 percent) of parking spots in Downtown and First Hill are occupied by vehicles displaying placards, and uses SPD's estimated 60 percent placard abuse rate for these areas, you arrive at a placard abuse rate of 12 percent of parking in these areas. In 2011, parking revenues were approximately \$8.3 million for Downtown and \$3 million for First Hill. And 12 percent of the total 2011 revenues of \$11.3 million is \$1.356 million.



in 2011 there were only 94 citations issued, and only 10 had been issued in 2012 through August.

### Citations Issued for Unauthorized Use of Disabled Placards



It should be noted that SPD's Parking Enforcement Officers are still actively issuing citations for expired or invalid placards both on the street in metered spaces and in off street parking lots.<sup>8</sup>

### Revitalized efforts may curb abuse.

SPD and SDOT officials cite a number of problems with the way the placards are issued and managed by the Washington State Department of Licensing that may contribute to the potential for abuse. An effort to significantly reduce disabled parking abuse may require a thorough review and redesign of the complicated state system that relies on input from medical providers.

However, City officials agree that there are some additional steps that the City could take that may discourage the unauthorized use of disabled placards. This would primarily involve new enforcement strategies and efforts directed at large employers in the high placard-use areas.

These steps include:

- Working with large employers in the areas with highest placard abuse (including First Hill and Downtown) to discourage abuse and explore alternatives for employee

<sup>8</sup> Citations issued for expired or invalid placards in metered spaces and in parking lots were 631 in 2010; 828 in 2011; and 524 through August 2012.

parking.

- Looking into steps the City (and perhaps King County) might take with their employees who abuse disabled placards to ensure that fines are fully and timely paid.
- Working more closely with the City Attorney's Office and the Seattle Municipal Court to understand issues related to penalties for parking citations. Parking citations are issued to license plates as opposed to traffic citations, which are issued directly to the person who illegally uses a disabled parking placard. This would require an understanding of what additional information or support the City Attorney's Office and the Seattle Municipal Court need to enforce the penalties for unauthorized use of a disabled placard under the related State and City laws.
- Utilizing the Parking Enforcement Officers' (PEOs) new wireless capability in their handheld devices to check the validity of placards in the field. This technology will also allow teams of PEOs to conduct targeted enforcement and emphasis patrols to curb disabled parking placard abuse.
- Working with SDOT and the Seattle Commission for People with disAbilities to develop an informational flyer about reporting disabled placard abuse for placement on windshields by PEOs during their emphasis patrols.
- Continuing to encourage elected officials to prioritize a state legislative agenda that includes measures that can better prevent disabled parking placard abuse.