



REPORT HIGHLIGHTS

OFFICE OF CITY AUDITOR – SEATTLE

August 13, 2008

City Should Take Steps to Enhance Pedestrian and Cyclist Mobility Through and Around Construction Sites

Why We Did This Study

Seattle City Councilmembers, in response to citizen complaints and their own observations, asked the Office of City Auditor to assess whether the City of Seattle was doing everything it could to minimize the duration and impact of street and sidewalk closures on pedestrians and cyclists. They were particularly interested in alternative solutions for better pedestrian access, given the current volume of construction activity in the City’s downtown core.

Background

In the City of Seattle, a street use permit is required for any work or occupation in the public right-of-way. In 2007, the Seattle Department of Transportation (SDOT) issued approximately 19,000 street use permits. In 2007, SDOT’s Street Use Division had a budget of \$12,012,943 and 64.5 FTEs (full-time equivalent positions). Its staff included supervisors, plan reviewers, permit issuers, inspectors, and data managers.

What We Found

We found that several factors were critical to SDOT’s ability to effectively manage construction activity in the City’s right-of-way: the use of a traffic control plan for construction sites which impact arterial streets, the coordination of multiple construction sites in the same area, and inspection and enforcement. In addition, clear and current communication with the public about planned and ongoing sidewalk, lane and street closures can help ease pedestrian, driver and cyclist frustration.

Recommendations

We identified four main recommendation areas:

1. Making Pedestrian and Cyclist Mobility a Priority,
2. Coordinating Multiple Projects Located in the Same Area,
3. Improving Inspection and Enforcement, and
4. Communicating with the Public.

The Office of City Auditor and SDOT agreed to six action items covering the four recommendation areas.

Summary of Action Plan Items	
1.	Develop a set of preferred and alternative methods for pedestrian protection based on the Washington D.C. model.
2.	Enforce Americans with Disabilities (ADA) accessibility standards for pedestrians.
3.	Dedicate a street use inspector to coordinate multiple construction projects located in the same area.
4.	Develop a policy for waiving inspections.
5.	Require applicants for street use permits to submit a notification plan.
6.	Make information on sidewalk closures and alternative routes available on SDOT’s website.

How We Did Our Work

Our field work consisted of interviews with SDOT officials, field observations and meetings with stakeholder organizations. We also gathered information from seven municipalities: Denver, New York (Manhattan), San Jose, Toronto, Tucson, Vancouver, B.C., and Washington, D.C.

A copy of the Office of City Auditor’s full report can be obtained at the office Web site at <http://seattle.gov/audit> or by calling (206) 233-3801. Please direct any questions or comments regarding this report, or suggestions for future audits, to Susan Cohen, Seattle City Auditor, at (206) 233-3801 or susan.cohen@seattle.gov.

Best Practices

Our review of best practices indicated that other cities including New York, Washington D.C., Toronto, and Vancouver B.C. prioritize maintaining pedestrian sidewalk access during construction whenever safely possible. These cities make extensive use of covered pedestrian walkways. If the sidewalk cannot remain open, pedestrian traffic may be safely routed into a traffic lane to maintain pedestrian access on the same side of the street. Closing the sidewalk is considered only if these alternatives cannot be accomplished safely.

Washington D.C.'s Department of Transportation spent almost one year meeting biweekly with members of the development and construction

community to develop a set of preferred and alternative methods for pedestrian protection for each phase of construction. For details of Washington D.C.'s approach, go to www.ddot.dc.gov/ddot and search for "Pedestrian Protection by Phase of Construction." These procedures were based on a policy directive to "minimize disruption to the normal pedestrian pathways while providing adequate protection for citizens."

Currently, SDOT discusses with contractors the option of using covered pedestrian walkways to maintain pedestrian sidewalk access. However, there is currently no documentation of the City's preferred methods of pedestrian protection.



New York City pedestrian walkway at 1330 Avenue of the Americas, between 53rd and 54th Streets. Photo: David W. Dunlap/The New York Times



Two current covered pedestrian walkways in Seattle.

Office of City Auditor

**City Should Take Steps to Enhance Pedestrian and
Cyclist Mobility
Through and Around Construction Sites**

August 13, 2008

City of Seattle
Office of City Auditor

Susan Cohen, City Auditor





Our Mission:

To help the City of Seattle achieve honest, efficient management and full accountability throughout City government. We serve the public interest by providing the Mayor, the City Council, and City department heads with accurate information, unbiased analysis, and objective recommendations on how best to use public resources in support of the well-being of the citizens of Seattle.

Background:

Seattle voters established our office by a 1991 amendment to the City Charter. The office is an independent department within the legislative branch of City government. The City Auditor reports to the City Council and has a four-year term to ensure his/her independence in selecting and reporting on audit projects. The Office of City Auditor conducts financial-related audits, performance audits, management audits, and compliance audits of City of Seattle programs, agencies, grantees, and contracts. The City Auditor's goal is to ensure that the City of Seattle is run as effectively and efficiently as possible.

How We Ensure Quality:

The office's work is performed in accordance with the Government Auditing Standards issued by the Comptroller General of the United States. These standards provide guidelines for staff training, audit planning, fieldwork, quality control systems, and reporting of results. In addition, the standards require that external auditors periodically review our office's policies, procedures, and activities to ensure that we adhere to these professional standards.



City of Seattle
Office of City Auditor

August 13, 2008

The Honorable Greg Nickels
Seattle City Councilmembers
City of Seattle
Seattle, Washington 98104

Dear Mayor Nickels and City Councilmembers:

Attached is our report City Should Take Steps to Enhance Pedestrian and Cyclist Mobility Through and Around Construction Sites. The primary objective of the review was to assess whether the City of Seattle is doing everything it can to minimize the duration and impact of street and sidewalk closures on pedestrians and cyclists. To identify opportunities for improvement, we examined the City's current policies, procedures and practices used to manage the City's right-of-way and researched best practices in other jurisdictions. Based on this work, the Office of City Auditor and the Seattle Department of Transportation (SDOT) agreed to six action items:

1. Develop a set of preferred and alternative methods for pedestrian protection based on the Washington D.C. model;
2. Enforce Americans with Disabilities (ADA) accessibility standards for pedestrians;
3. Dedicate a street use inspector to coordinate multiple construction projects located in the same area;
4. Develop criteria and policy guidance for waiving street use permit inspections;
5. Require applicants for street use permits to submit a notification plan; and
6. Make information on sidewalk closures and alternative routes available on SDOT's website.

We appreciate the excellent cooperation SDOT provided us during this review. SDOT provided formal, written comments on a draft of this report, included in the report as Appendix G. I would also like to acknowledge the audit staff who worked on this project: Jane Dunkel, David Jones, and Claudia Gross-Shader. If you have any questions regarding this audit, please feel free to call Jane (684-7892), David (233-1095), Claudia (684-8038) or me (233-1093).

Sincerely,

Susan Cohen
City Auditor

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Table of Contents

Introduction.....	1
Background.....	1
Recommendations.....	2
Table I. Summary of Street Use Policies, New Efforts and Action Plans.....	2
Table II. Description of Current Street Use Policies, New Efforts and Action Plans.....	3
Detailed Action Plan.....	9
Action Area: Improve Pedestrian Mobility During Construction.....	9
Develop a Set of Preferred and Alternative Methods for Pedestrian Protection.....	10
Action Area: Improve Real-Time On Site Course Corrections.....	11
Dedicate a street use inspector to coordinate multiple construction projects.....	11
Action Area: Enhancing Enforcement.....	12
Action Area: Improve Communication with the Public Before and During Construction.....	12
Require applicants for street use permits to document their notification activities.....	13
Make information on sidewalk closures and alternative routes available.....	13
Office of City Auditor Follow Up on Action Plans.....	14
 <u>Appendices</u>	
Appendix A: Methodology.....	15
Appendix B: Challenges and Tools in Developing and Approving Traffic Control Plans.....	16
Appendix C: Sidewalk/Right-of-Way Improvement Permit Process Improvement Project – Action Items and Work Plan.....	18
Appendix D: Identifying Improvements and Innovations from Other Cities.....	19
Appendix E: Suggested Performance Measures for Assessing Action Item Impact.....	23
Appendix F: Washington, D.C. Model for Developing a Set of Preferred and Alternative Methods for Pedestrian Protection.....	25
Appendix G: SDOT Response.....	29

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Introduction

Seattle City Councilmembers Richard Conlin, Nick Licata, and Tom Rasmussen, in response to citizen complaints and their own observations, asked our office to assess whether the City of Seattle is doing everything it can to minimize the duration and impact of street and sidewalk closures on pedestrians and cyclists. They were particularly interested in alternative solutions for better pedestrian access, given the current high volume of construction activity in the City's downtown core. Our audit reviewed all aspects of the City's current street use permitting process. We interviewed Seattle Department of Transportation (SDOT) officials, examined the City's legal authority, conducted field observations with SDOT street use inspectors, and studied SDOT's recent business process improvement efforts in this area. In addition, we met with pedestrian and business stakeholder groups and conducted a review of best practices for sidewalk closures in other jurisdictions (see Appendix D). We conducted this performance audit in accordance with generally accepted government auditing standards. (See Appendix A for more information.)

Background

In the City of Seattle, a street use permit is required for any work or occupation in the public right-of-way¹. Examples include construction by private contractors or public agencies, vending, and neighborhood block parties. Construction may include, but is not limited to sewer, storm, or water extensions or repairs, utility work, or work on driveways, sidewalks, curbs and gutters, structures, landscaping, trees, street lighting, paving or any other excavation or pertinent installation in the right-of-way.

To provide for the health, safety and well-being of citizens, and to ensure the integrity of its streets and the appropriate use of the right-of-way, SDOT strives to keep the City's right-of-way in a state of good repair and free from unnecessary encumbrances. SDOT's Street Use Division accomplishes these goals by managing activities and construction occurring in the right-of-way through permit issuance, inspection, project coordination, enforcement, public outreach, utility record keeping, and plan review.

In 2007, SDOT issued approximately 19,000 street use permits. In 2007, SDOT's Street Use Division had a budget of \$12,012,943² and 64.5 FTEs (full-time equivalent positions). Its staff included supervisors, plan reviewers, permit issuers, inspectors, and data managers among others.

¹ The one exception to this is that SDOT does not obtain permits for its street paving and maintenance work. Further, the utilities are not required to obtain site-specific permits for temporary work that does not damage the infrastructure.

² Approximately \$1.5-2 million of the 2007 budget was to cover the cost of implementing the Right-of-Way Management Improvement Project.

Recommendations

We found several factors were critical to SDOT’s ability to effectively manage construction activity in the City’s right-of-way: the use of a traffic control plan for construction sites which impact arterial³ streets, the coordination of multiple construction sites in the same area, and inspection and enforcement. In addition, clear and current communication with the public about planned and ongoing sidewalk, lane and street closures can help ease pedestrian, driver and cyclist frustration.

Based on our audit review, we identified four main recommendation areas:

1. Making Pedestrian and Cyclist Mobility a Priority
2. Coordinating Multiple Projects
3. Improving Inspection and Enforcement
4. Communicating with the Public

Table I below provides a description of the recommendation areas. In some cases we identified areas that require no change to the existing process. We also noted areas in which SDOT has recently made or is undergoing a process improvement listed as “New Process” or “New Resource.” Some of the recommendation areas correspond to one of four Action Plans for improvement that were developed jointly by SDOT and the Office of City Auditor.

Table I. Summary of Street Use Policies, New Efforts and Action Plans

Recommendation Area	Status
<i>Making Pedestrian and Cyclist Mobility a Priority</i>	
SDOT’s Traffic Control Plan	No Action Needed
SDOT’s Improvements to the Street Use Application Process	New Process
Pedestrian Mobility During Construction	Action Plan #1
<i>Coordinating Multiple Projects</i>	
Current Methods: GIS Map, Monthly Utilities Coordination Meetings, Street Use Inspectors, SDOT Capital Project Managers	No Action Needed
Recent Improvements: Construction Coordination and Mapping Tool	New Resource
Real Time On-Site Course Corrections	Action Plan #2
<i>Improving Inspection and Enforcement</i>	
New Procedures Implemented in 2007	New Process
New Policies and Procedures Being Developed	New Process
Develop Policy for Waiving Inspections	Action Plan #3
<i>Communicating with the Public</i>	
Current City Requirements	No Action Needed
Possible Improvements: Enhance Notification Efforts to Local Businesses and Residents, Information Available on the Web	Action Plan #4

³ An arterial street is a major thoroughfare that serves as a major traffic way for travel between and through a municipality.

Table II. Description of Current Street Use Policies, New Efforts and Action Plans

Recommendation Area	Status
<i>Making Pedestrian and Cyclist Mobility a Priority</i>	
<p>SDOT’s Traffic Control Plan SDOT’s traffic control plan is a key tool in managing the public right-of-way. All applicants for street use permits whose work will impact an arterial street must submit a traffic control plan at application intake. A traffic control plan is a plan for safety in the public right-of-way. It provides safe and effective work areas and warns, controls, protects and expedites vehicular, bicycle, and pedestrian traffic. SDOT’s client assistance memos (CAMs) 2110 and 2111 (December 2007 http://www.seattle.gov/transportation/stuse_docs.htm) describe the process applicants must follow to obtain an approved traffic control plan. In addition, upon request, first-time applicants are offered guidance and assistance from SDOT staff in preparing their plans.</p> <p>Traffic control plans must conform to the City of Seattle’s Traffic Control Manual for In-Street Work (SDOT Traffic Management Division: 2005), which is based on the U.S. Department of Transportation Federal Highway Administration’s Manual for Uniform Traffic Control Devices⁴ (MUTCD).</p> <p>Traffic control plans are reviewed by a team of plan reviewers from SDOT’s Traffic Management Division. (See Appendix B for a summary of the challenges and tools used by the plan reviewers.) SDOT Street Use Division personnel who process permit applications check the Hansen database to verify the completion of an approved traffic control plan before approving the final street use permit. One internal control in place is that the Hansen system will not allow staff to approve a permit unless an approved traffic control plan is on file.</p>	No Action Required
<p>SDOT Efforts to Improve Street Use Application Process <u>Step 1:</u> In March 2008, the SDOT unit that reviews traffic control plans obtained an additional staff member to help reduce their backlog of plans waiting to be reviewed and provide quicker turnaround for plan review. According to SDOT managers, as of April 2008, the turnaround time had</p>	New Process or Resource

⁴ The *Manual on Uniform Traffic Control Devices*, or **MUTCD** defines the standards used by road managers nationwide to install and maintain traffic control devices on all streets and highways. The MUTCD is published by the Federal Highway Administration under 23 Code of Federal Regulations (CFR), Part 655, Subpart F.

<p>decreased from approximately thirteen days to approximately eight days.</p> <p><u>Step 2:</u> In December 2007, SDOT hired a consultant to perform a one week “rapid process improvement” exercise for the review and approval of traffic control plans related to the street use permitting process. Key improvements that emerged from this project include a streamlined, quicker process and consistent recording of mobility impacts. According to SDOT managers, the Street Use Division has implemented the improvements produced by the exercise, and SDOT staff meet weekly to assess how things are going and what, if any, further enhancements are needed.</p> <p><u>Step 3:</u> In January 2008, the City launched the Sidewalk/Right-of-Way Improvement Permit Process Improvement Project (Sidewalk/ROWI), an interdepartmental effort prompted by the passage of a City Council ordinance that lowered the sidewalk requirement threshold for proposed new development (Ordinance 122615 was adopted by the City Council on December 17, 2007). The goals of the Sidewalk/ROWI project were to achieve a less costly, timelier, and better experience for customers (i.e., contractors and developers). For a description of the ROWI/Sidewalk action items and work plan, see Appendix C.</p>	
<p>Pedestrian Mobility During Construction</p> <p>We recommend that the Mayor and City Council consider taking further steps to make pedestrian access a public policy priority by directing SDOT to work with the development and contractor community to create a matrix of preferred alternatives for keeping sidewalks open and/or pedestrian routes accessible during construction. Policy should be adopted that requires written justification for diverging from these alternatives. See Appendix D, Summary of Best Practices from Other Jurisdictions, for more information.</p> <p>In addition to meeting pedestrians’ needs, SDOT should ensure that steps to address the needs of cyclists and persons with disabilities are included in approved traffic control plans, and emphasized with applicants.⁵ Options for addressing these needs are found in the City’s Traffic Control Manual for In-Street Work, the Manual for Uniform Traffic Control Devices, and the Americans with Disabilities Act.</p>	Action Plan Area #1
<i>Coordinating Multiple Projects Located in the Same Area</i>	
<p>Current methods</p> <p>SDOT currently has the following systems in place to coordinate multiple construction projects located in the same area:</p>	No Action Required

⁵ SDOT’s work in developing the Pedestrian Master Plan includes efforts targeted toward ensuring the City has a good understanding of the special needs community (e.g., visually or mobility impaired) and that the Plan incorporates elements designed to address these needs.

<p>1. GIS Mapping System SDOT staff responsible for approving traffic control plans and street use permit applications use a Geographical Information System (GIS) to identify and map other permitted projects in the same area. Based on this information, they can take additional steps to help ensure that the right-of-way is not unduly impacted by these projects. For example, they might ask the project managers at adjacent sites to stagger the delivery of supplies and materials, make changes to their work schedule, or change where things are stored on their construction site. Knowing where other projects are going to occur can also help with the development of traffic control plans. For example, if traffic control plan reviewers have knowledge of future projects in the same area, they could change where (within the right-of-way) contractors place hoists and/or cranes to better facilitate mobility.</p> <p>2. Monthly Utilities Coordination Meetings Representatives from SDOT’s Street Use, Capital Projects, and Street Maintenance Divisions, public and private utility companies (Seattle Public Utilities, Seattle City Light, Puget Sound Energy, Seattle Steam, Comcast, Qwest, and Broadstripe) and King County Metro meet monthly to discuss and coordinate upcoming work in the City’s right-of-way.</p> <p>3. Street Use Inspectors SDOT street use inspectors assigned to monitor construction sites in specific areas of the city (inspection districts) do some coordination while in the process of conducting their daily inspections, if their schedules allow and they are alerted to the need for such coordination.</p> <p>4. Project Managers for SDOT Capital Projects Project managers assigned to SDOT capital projects coordinate activity in the area impacted by their project.</p>	
<p>Recent improvements to long-term planning: The Construction Coordination and Mapping Tool (CCM) This tool is the culmination of a three to four year effort to improve SDOT’s coordination of construction projects and the projects’ attendant effects on the public right-of-way. CCM is still being developed and is in test mode. Data in the system still needs to be monitored for quality control. SDOT expects to have the CCM system fully operational by September 2008.</p> <p>CCM uses Capital Improvement Project construction data estimates from City (e.g., SDOT, Seattle Public Utilities, Seattle City Light, Parks) and non-City sources (e.g., King County, Washington State Department of Transportation) and plots the projects on a map that can be displayed for different locations in the City and over different periods (i.e., “time and space analysis”). The tool also contains data on detours. Currently, it includes data on planned projects as far in the future as 2018.</p>	<p>New Process or Resource</p>

<p>One of the tool’s most important features is its ability to display “hot spots,” or locations in the right-of-way that have overlapping construction projects. Identifying such locations before the start of the construction projects should prompt concerned officials, such as project managers, to talk to one another and plan project coordination to lessen the impact on the right-of-way. CCM should also allow construction and utility project managers to coordinate their work and thereby reduce the need for additional street cuts.</p>	
<p>Real Time On-Site Course Corrections</p> <p>We found that, despite the use of the GIS Map and potential use of the CCM technology, there is still a need for hands-on coordination of multiple construction sites’ use of the right-of-way in the same area. This is influenced by two factors:</p> <ol style="list-style-type: none"> 1. Some construction work that occurs in the right-of-way is not captured in the GIS Map. For example, the City issues annual vehicle permits to agencies, companies, or individuals who will frequently be performing work at multiple locations and for short durations in the City of Seattle right-of-way. These types of permits are often used by utility companies, both public and private, who need to access utility lines for brief periods. Because annual vehicle permits are intended to cover work that is scheduled on a daily and hourly basis, annual vehicle permit holders’ use of the right-of-way is not entered into the GIS Mapping System. This is because the administrative cost of keeping this data up-to-date would be too high. However, annual vehicle permit holders must still employ traffic control “set-ups” which conform to the City of Seattle Manual for In-Street Work. An on-site street inspector could ensure that these traffic control set-ups comply with City regulations and could enhance coordination of this work with other projects. 2. Construction sites, especially sites that are large and complex, are “dynamic”—i.e., by nature, the timing of some of the variables that affect work progress at these sites cannot always be controlled. For example, delivery of key materials, such as concrete for laying the foundation, may not occur when expected, or unanticipated soil or ground conditions may be identified after work has begun, requiring additional stabilization measures and adding to the project’s timeline. <p>We found that SDOT Street Use Division district inspectors’ schedule of daily inspections does not always allow them the flexibility and time needed to take on the additional task of hands-on coordination. In times and areas of high construction activity, an additional street use inspector dedicated to the task of coordinating construction projects could result in better coordination of projects in a given area and thereby enhance mobility.</p>	<p>Action Plan Area #2</p>

This additional inspector could also monitor City streets, lanes and sidewalks to ensure that all work in the public right-of-way is permitted and permit conditions are being followed.

Improving Inspection and Enforcement

New Procedures for Street Use Inspectors Implemented in November 2007

In October 2007, in anticipation of the implementation of the Hansen database's use in the field to manage inspections, the Operations Section of SDOT's Street Use Division developed a new set of procedures. These procedures cover field inspections, including how to generate daily reports and record information in the field using portable laptop computers, guidelines for consistently processing non-permit uses, administrative review and input of inspection data into the Hansen database, how to post and remove Stop Work orders, the standard process for major inspections, and the basic flow for weekly status reports for inspector leads and supervisors (inspection oversight).

After these procedures have been in place for a year, SDOT intends to evaluate how well the Operations Section has complied with them and the extent to which they have improved internal controls over the inspection process.

Street Use is Developing New Policies and Procedures to Ensure Consistent Application of Permit Fees

Based on its work for the Right of Way Improvement /Sidewalks Process Project (see **SDOT Efforts to Improve Street Use Application Process** above), the Street Use Division is in the process of documenting and assessing how street use permit fees are implemented. According to the Operations Section Manager, once this is completed, SDOT intends to revise their policies and procedures, including:

1. Requiring one street use permit holder for each construction site (currently multiple subcontractors, as well as the prime contractor, may obtain permits for the same site);
2. Defining requirements for how long a site must be shut down before one permit is closed and another opened for that same site; and
3. Ensuring that street use permit holders obtain extensions if their permits go beyond their approved period, or penalties and use fees are charged consistently in cases where this does not occur.

After these new policies and procedures have been in place for a year, the Operations Section will evaluate their impact.

New Process or Resource

<p>Develop Policy for Waiving Inspections The Street Use Division also plans to develop criteria and policy guidance describing the circumstances under which street use permit inspections may be waived. Currently, inspectors prioritize inspections that involve public safety first, and secondly, inspections that involve permanent improvement to the right-of-way. Having a written policy and providing training to inspectors on the policy would better ensure that the conditions of street use permits are consistently enforced.</p>	<p>Action Plan Area #3</p>
<p><i>Communicating with the Public</i></p>	
<p>Current City Requirements Street use permit applicants are currently required to notify all potentially affected residents and businesses at least one week before starting work in the public right-of-way (SDOT Client Assistance Memo 2109.)</p> <p>In addition, the City of Seattle provides on line information on vehicular traffic congestion and current City construction projects at the following website: www.seattle.gov/html/citizen/traffic.htm.</p>	<p>No Action Required</p>
<p>Communication with the Public Before and During Construction To enhance communication with the public regarding sidewalk, street, and lane closures, SDOT plans to:</p> <ol style="list-style-type: none"> 1. Research the benefits of: <ol style="list-style-type: none"> a) developing a list of acceptable methods of notification (flyers, electronic notification, in-person meetings), b) providing staff training on this requirement, including the notification options and importance of emphasizing this requirement with applicants before permit approval, and/or c) requiring applicants to complete a checklist documenting how they intend to comply with this requirement before their permit is approved. 2. Make information on sidewalk closures and alternative routes available on SDOT’s website. 	<p>Action Plan Area #4</p>

Detailed Action Plan

The Office of City Auditor and SDOT agreed to the following 6 action items covering the 4 Action Plan areas:

Table III. Summary of Action Plan Items

Description
Action Plan Area #1
1. Develop a set of preferred and alternative methods for pedestrian protection
2. Enforce Americans with Disabilities (ADA) accessibility standards for pedestrians
Action Plan Area #2
3. Dedicate a street use inspector to coordinate multiple construction projects
Action Plan Area #3
4. Develop policy for waiving inspections
Action Plan Area #4
5. Require applicants for street use permits to submit a notification plan
6. Make information on sidewalk closures and alternative routes available on SDOT's website

Below are further details on each Action Plan item.

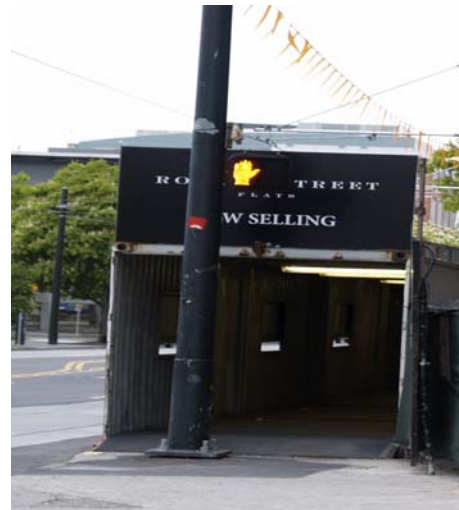
Action Area: Improve Pedestrian Mobility During Construction

Our review of best practices (see Appendix D) indicated that other cities including New York, Washington D.C., Toronto, and Vancouver B.C. prioritize maintaining pedestrian sidewalk access during construction whenever safely possible. These cities make extensive use of covered pedestrian walkways. If the sidewalk cannot remain open, pedestrian traffic may be safely routed into a traffic lane to maintain pedestrian access on the same side of the street. Closing the sidewalk is considered only if these alternatives cannot be accomplished safely.



New York City pedestrian walkway at 1330 Avenue of the Americas, between 53rd and 54th Streets. Photo: David W. Dunlap/The New York Times

Currently, SDOT discusses with contractors the option of using covered pedestrian walkways to maintain pedestrian sidewalk access. However, there is currently no documentation of the City's preferred methods of pedestrian protection.



Two current covered pedestrian walkways in Seattle.

Action Item 1: Develop a Set of Preferred and Alternative Methods for Pedestrian Protection

Washington D.C.'s Department of Transportation (DDOT) spent almost one year meeting biweekly with members of the development and construction community to develop a set of preferred and alternative methods for pedestrian protection for each phase of construction. These preferred and alternative methods represent the general policy of DDOT. However, a site-specific modification may be allowed if submitted in writing by the developer or construction firm along with the traffic control plan, explaining the

modification and the site-specific conditions that require the modification. (For details of Washington D.C.'s approach, go to: Pedestrian Protection by Phase of Construction [http://www.ddot.dc.gov/ddot/cwp/view,a,1250,q,643044,ddotNav_GID,1756,ddotNav,34319\].asp](http://www.ddot.dc.gov/ddot/cwp/view,a,1250,q,643044,ddotNav_GID,1756,ddotNav,34319].asp)). These procedures were based on a policy directive to “minimize disruption to the normal pedestrian pathways while providing adequate protection for citizens.” See also:

<http://www.ddot.dc.gov/ddot/frames.asp?doc=/ddot/lib/ddot/information/temp-traffic-ctrl/pedestriansafety/departorder.pdf>)

Proposed Action: *SDOT will work with the contractor community and relevant City managers⁶ to develop a set of preferred and alternative methods for pedestrian protection based on the Washington D.C. model. The preferred and alternative methods will be clearly described in documents available to the public on SDOT's public website and to contractors developing traffic control plans. Any deviations from the preferred method will have to be requested in writing and approved by SDOT.*

Action Item 2: Enforce Americans with Disabilities (ADA) Standards

All pedestrian walkways must meet federal safety and accessibility standards, including the standards of the Americans with Disabilities Act. In addition, maximum effort must be made to provide clear and safe bike routes “when work encroaches on a bike lane, bike trail, or a road or sidewalk commonly used by bicyclists.” (See the City of Seattle’s Traffic Control Manual for In-Street Work, pgs. 26-7 and 31). SDOT traffic control plan reviewers and street use inspectors will ensure that these standards are met by both public and private entities in the development and implementation of any new traffic control plans.

Action Area: Improve Real-Time On Site Course Corrections

We found that, despite the use of on-line mapping technology such as the Geographic Information System (GIS) Map and the Construction Coordination and Mapping (CCM) Tool, there is still a need for hands-on coordination of multiple construction sites’ use of the City’s right-of-way when the sites are located in the same area. There are three reasons for this: 1) some construction work that occurs in the right-of-way is not captured by either the GIS Map or the CCM Tool, 2) construction sites are dynamic, and work at these sites does not always proceed as planned, and 3) street use inspectors’ schedules of daily inspections do not always allow them the flexibility and time needed to take on the additional task of hands-on coordination.

Action Item 3: Dedicate a street use inspector to coordinate multiple construction projects

⁶ These should include, at a minimum, managers responsible for traffic control plans, street use permit inspections, compliance with ADA requirements, utility work in the City’s right-of-ways, and members of the Pedestrian and Bicycle Advisory Boards.

In light of the high level of construction activity in Seattle, an additional street use inspector dedicated to the task of coordinating construction projects could result in better coordination of projects in a given area and thereby enhance mobility.

Proposed Action: *SDOT has requested budget authority for an additional inspector for coordination and to monitor enforcement of permit requirements and conditions. This will be a 1-2 year pilot project, after which SDOT will assess what benefits, if any, have accrued from it and whether it is worthwhile to continue to fund the position as part of its overhead cost.*

Matter for SDOT Consideration:

Based on future need, SDOT should consider convening on a one-year trial basis a downtown project group to conduct monthly status meetings on ongoing and planned projects. Members of this group could include representatives from SDOT's Street Use and Traffic Management Divisions, the Washington State Department of Transportation, the Seattle Police Department, the Seattle Fire Department, King County Metro, the Mayor's Office, project managers from SDOT's Capital Projects Division, project managers of private projects, local civic organizations, and the City's Special Events Coordinator. At this regular meeting, the participants could share information regarding travel restrictions. The cities of Tucson, Arizona, Denver, Colorado, and San Jose, California use a similar system and have found it very effective. See Appendix D for more information.

Action Area: *Enhancing Enforcement*

Action Item 4: Develop Policy for Waiving Inspections

We found that SDOT's Operations Unit does not have a policy defining and/or prioritizing how and when scheduled street use inspections should or may be waived. Currently, inspectors prioritize inspections that involve public safety first, and secondly, inspections that involve permanent improvement to the ROW. However, having a written policy and providing training to inspectors on the policy would better ensure that the conditions of street use permits are consistently enforced.

Proposed Action: *SDOT's Street Use Division plans to develop criteria and policy guidance describing the circumstances under which street use permit inspections may be waived, and to train inspectors on how to implement these criteria.*

Action Area: *Improve Communication with the Public Before and During Construction*

Many of the stakeholders we interviewed, including members of the Pedestrian Advisory Board and the Downtown Seattle Association, told us that providing current, detailed information to the public about the timing and duration of street, lane, and sidewalk closures, along with suggestions for alternative routes, would help ease the public's frustration with the impact of

these closures. Based on input from other jurisdictions, SDOT managers, and others, and our own observations, we identified the following two areas where public communication about right-of-way closures could be improved.

Action Item 5: Require applicants for street use permits to document their notification activities

SDOT street use permit notification requirements to local residents and businesses for street use permit applicants are listed on the permit under *Traffic Control Requirements*, 3) *Access to Business*, and state:

Access to all businesses shall be maintained during construction. At least one week prior to starting work within the public right-of-way, Permittee shall notify all potentially affected residents and businesses.

Based on our research on best practices from other jurisdictions (see Appendix D), we found that SDOT could take additional steps to strengthen the notification process.

Proposed Action: *SDOT will take additional steps to ensure that public notification requirements are being met for each permit holder. These efforts may include: 1) developing a list of acceptable notification methods, 2) providing staff training in enforcing this requirement, and/or 3) requiring applicants to complete a checklist documenting the notification methods they used as a condition of permit approval.*

Action Item 6: Make information on sidewalk closures and alternative routes available on SDOT's website

The City of Seattle currently provides online information on vehicular traffic congestion and current City construction projects at the following website: www.seattle.gov/html/citizen/traffic.htm. Our review of best practices from other jurisdictions found that some jurisdictions also use the internet to provide information about sidewalk closures and the impact of private construction projects on the City's right-of-way. To ease public frustration with right-of-way closures, SDOT plans to make more comprehensive traveler information, including sidewalk closures and alternative routes, available to the public via the internet.

Proposed Action: *SDOT plans to address this issue in 2009 by forming a team to consolidate several separate development efforts into one unified public communication tool. These separate efforts include collecting and reporting data on: 1) traffic congestion and real-time traffic incidents, 2) street, lane and sidewalk closures (from the Street Use and Urban Forestry's Hansen database), 3) parking availability, and 4) long-term capital projects (from SDOT's Construction Coordination and Mapping Tool [CCM]). The content and user interface of this web-based public communication tool is still to be determined. SDOT has targeted this new tool to be online by the end of 2009.*

Office of City Auditor Follow Up on Action Plans

As part of our standard audit protocol, the Office of City Auditor plans to follow up on SDOT's development and implementation of the action plan items and new policies and procedures listed in Table IV below. Our office will provide the City Council with periodic updates describing the status of these items.

Table IV. Nine Follow Up Items for the Office of City Auditor

Description	Type
1. Develop a set of preferred and alternative methods for pedestrian protection	Action Plan Area #1
2. Enforce Americans with Disabilities (ADA) accessibility standards for pedestrians	Action Plan Area #1
3. Dedicate a street use inspector to coordinate multiple construction projects	Action Plan Area #2
4. Full implementation of the Construction Coordination Mapping and Tracking Tool	New SDOT Process or Resource
5. Develop policy for waiving inspections	Action Plan Area #3
6. Implementation of new business procedures for street use inspection scheduling, tracking and oversight	New SDOT Process or Resource
7. Development and implementation of new policies and procedures related to consistent application of street use permit fees and penalties	New SDOT Process or Resource
8. Require applicants for street use permits to submit a notification plan	Action Plan Area #4
9. Make information on sidewalk closures and alternative routes available on SDOT's website	Action Plan Area #4

Appendix A: Methodology

To understand the current policies, procedures and practices the Seattle Department of Transportation (SDOT) uses to manage use of the City's right-of-way, we:

- Interviewed SDOT officials from the Street Use and Urban Forestry, and Traffic Management Divisions,
- Examined the City's legal authority,
- Observed SDOT staff working at the Street Use Permit Counter,
- Attended a preconstruction meeting with SDOT officials and a private contractor, and
- Conducted field observations with SDOT street use inspectors and a SDOT traffic control plan reviewer.

To understand SDOT's recent process improvement efforts in this area, we

- Interviewed the managers responsible for these efforts,
- Observed two process improvement meetings, and
- Reviewed reports and summaries related to these efforts.

To understand the various constituent groups that are affected by street, lane and sidewalk closures and detours, we met with pedestrian, cyclist and business groups.

To obtain information on how other jurisdictions manage use of their right-of-ways during construction projects, we surveyed other jurisdictions. To identify the municipalities to survey, we worked with staff from the Transportation Research Board, conducted web research, and queried business and pedestrian advocacy groups. We also asked other cities to identify leading jurisdictions in this area. This resulted in a list of seven cities we then contacted to obtain information on best practices for sidewalk closures. See Appendix D for more information.

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Appendix B: Challenges and Tools in Developing and Approving Traffic Control Plans

SDOT's traffic control plan is a key tool in managing the public right-of-way. Traffic control plans are required of all street use permit applicants whose work will affect an arterial street. SDOT reviews and approves these plans before a street use permit can be issued. Below, we list some of the factors that SDOT managers and staff must take into account when reviewing traffic control plans, and some of the special considerations that must be taken into account in the Seattle environment.

Factors that SDOT considers when evaluating traffic control plans:

1. Ensuring that the traffic control requirements do not conflict with the requirements of Seattle's Noise Ordinance. This can be especially challenging during the demolition and excavation phases of a construction project.
2. Maintaining local access to businesses and residences during the construction process.
3. Allowing contractors the access they need to the right-of-way for sufficient periods to get their work done. There is always a trade-off between allowing street, lane and sidewalk closures, which facilitates quicker project completion, and prohibiting closures, which lengthens the construction process.
4. Inherent constraints and/or uncertainties in the construction process—for example, when the contractor can arrange to have critical materials, such as concrete, delivered to the site. Another example is the presence of hazardous material on a site, because such material, once removed, must be delivered immediately to an approved facility. Since these facilities close at night, this work can only be done during certain hours of the day.
5. The challenge of where to re-route bicyclists, especially on bridges. One particular example of this in Seattle is the University Bridge, which does not have an easily accessible alternative.
6. The need to comply with the intent of the Americans with Disabilities Act.
7. Fixed transit facilities, such as Metro's trolley coach system, and the Seattle Street Car. Metro trolley coaches cannot move more than 9 to 10 feet from their overhead lines, and Metro cannot substitute diesel coaches except on weekends. The Seattle Street Car cannot move from its rail, and any work within its space must be done during the hours it does not run.
8. Downtown traffic control zone restrictions for truck traffic. Because many of Seattle's downtown streets are steep, busy and narrow, trucks over 30 feet are required to be permitted with scripted routes during weekday daytime hours.
9. Special curb space requirements.

Special Constraints in the Seattle environment:

1. Many buildings downtown are built to the zero lot line, which doesn't leave the contractors much room to work or store materials unless they use the right-of-way.
2. Soil conditions that are very soft, wet, and unstable.
3. Steep grades and the subsequent need for shoring at many downtown sites.
4. The peculiar downtown grid system and the "wasp waist" geography (i.e., Seattle is relatively long and narrow) that funnels much of the City's north/south traffic through a congested area. Six traffic bridges cross the divide over the ship canal. West Seattle traffic must cross one of four bridges or follow a substantial reroute. One major port area is literally an island.

Tools at SDOT's disposal when reviewing traffic control plans:

1. Data on vehicle traffic volumes by date, location and time-of-day, as well as some manual vehicle and pedestrian counts.
2. SDOT's Geographic Information System Map, which contains data on all construction projects which have current street use permits on file, including projects with permits for non-emergency utility cuts, large public capital improvement projects, and planned/ongoing City street paving projects.
3. SDOT channelization⁷ plans.
4. SDOT traffic cameras at select locations.

⁷ Channelization refers to signs, markings, and devices that direct traffic in a given path.

Appendix C: Sidewalk/Right-of-Way Improvement Permit Process Improvement Project – Action Items and Work Plan

In January 2008, the City of Seattle launched the Sidewalk/Right-of-Way Improvement Permit Process Improvement Project (ROWI/Sidewalk), an interdepartmental effort prompted by the passage of a City Council ordinance that lowered the sidewalk requirement threshold for proposed new development (Ordinance 122615 was adopted by the City Council on December 17, 2007). The goals of this project were to achieve a less costly, timelier, and better experience for street use permit applicants. In April 2008 the ROWI/Sidewalk team presented the following information about the project’s results to the City of Seattle Mayor’s Executive Staff:

Table V. Status of Sidewalk/ROWI Improvement Permit Process Improvement Project Recommendations

Recommendations	Expected Results in 2008
1. Provide cost estimates for street use permit fees to applicants, and manage to them.	To be completed 2010
2. Empower/authorize the SDOT plan review analyst to act as the project manager for the life of the project for each street use permit application they review.	To be completed in 2009
3. Reduce the amount of time plans are in review, by: <ul style="list-style-type: none"> a. Reducing the number of SDOT reviewers from 16 to 5; b. Providing preliminary project review to all applicants from all affected departments; c. Providing tailored coaching prior to plan submittal for formal circulation; and d. Beginning electronic plan review. 	In process – all items to be completed in 2009
4. Provide information about the cost and status of street use permits on-line.	Completed
5. Develop a more structured and managed inspection program.	In process – to be completed in 2009
Other Action Items	
6. Provide sidewalk design alternatives (one size does not fit all).	In process
7. Develop a sidewalk-only category in the Storm Water code with appropriate requirements.	Completed
Future Work	
8. Revisit policy for utility needs in the right-of-way.	In process
9. Establish a board to resolve customer, City or interdepartmental conflicts.	To be completed by the end of 2008
10. Evaluate the feasibility of fee in lieu for sidewalk improvements.	To be completed by the first quarter 2009
11. Evaluate consistent methods for implementing Latecomer agreements for sidewalk improvements, drainage improvements, etc.	To be completed by the first quarter 2009

Appendix D: Identifying Improvements and Innovations from Other Cities

We performed a survey of other jurisdictions to identify practices that would improve the City of Seattle’s right of way management for downtown construction in the following three areas:

1. Making Pedestrian and Cyclist Mobility a Priority
2. Coordinating Multiple Projects
3. Communicating with the Public.

To identify the municipalities to survey, we worked with staff from the Transportation Research Board⁸, conducted web research, and queried business and pedestrian advocacy groups. We also asked other cities to identify leading jurisdictions in this area. Ultimately, we identified seven cities of comparable or greater size than Seattle with practices that might be considered improvements or innovations:

Denver, Colorado New York (Manhattan), New York San Jose, California	Toronto, Ontario Tucson, Arizona Vancouver, British Columbia Washington, D.C.
--	--

SDOT staff participated with us in conference calls with officials from Washington D.C., Tucson, and Vancouver, British Columbia. The following table summarizes the results of our survey.

Innovation by City	Denver, CO	New York (Manhattan), NY	San Jose, CA	Toronto, Ontario	Tucson AZ	Vancouver BC	Washington DC
Have a Clear Policy Direction to Minimize Disruption to Normal Pedestrian Pathways		X		X			X
Prioritize Use of Covered Pedestrian Walkways	X	X				X	X
Hold Regular Downtown Construction Coordination Meetings with Contractors	X		X		X		
Provide Sidewalk Closure Information on the Internet					X		
Distribute Sidewalk Closure Information Widely via E-Mail			X		X		

⁸The Transportation Research Board (TRB) is one of six major divisions of the National Research Council—a private, nonprofit institution that is the principal operating agency of the National Academies in providing services to the government, the public, and the scientific and engineering communities. The National Research Council is jointly administered by the Academy of Sciences, the National Academy of Engineering, and the Institute of Medicine.

Concurrently SDOT surveyed a number of jurisdictions regarding “Best Practices on the Use and the Occupation Permitting the Public Right of Way.” SDOT received full or partial responses from Bellevue, WA; Los Angeles, CA; Minneapolis, MN; New York City (Manhattan), NY; Portland, OR; Raleigh, NC; San Francisco, CA; and Tacoma, WA. The SDOT survey results captured comparative information on such topics as permit process and requirements, fee structure, enforcement, utility coordination, and detour management.

Our survey identified five innovations among the jurisdictions.

- **Clear Policy Direction to Minimize Disruption to the Normal Pedestrian Pathways**
Officials from New York, Toronto, and Washington D.C. indicated that their transportation departments have clear policy direction from their local governments to minimize disruption to normal pedestrian pathways. Toronto officials indicated that pedestrian and cyclist mobility is prioritized in the issuance of the permit, and their city plan emphasizes pedestrian mobility over traffic. New York City officials indicated that their basic concern is the best interest of the pedestrians, and they use the letter and spirit of the federal Manual on Uniform Traffic Control Devices (MUTCD) to maintain the normal pedestrian pathway. Washington D.C. provided the most specific example of their policy directive in the form of a December 2007 departmental order⁹ that requires minimal disruption to the normal pedestrian pathways while providing adequate protection for citizens.
- **Prioritization of Use of Covered Walkways**
Denver, New York, Vancouver B.C., and Washington D.C. indicated that they prioritize the use of covered walkways whenever safely possible to keep open the normal pedestrian pathways. Among these cities, Washington D.C. has the most specifically defined priorities for pedestrian access during each phase of construction.

Washington D.C.’s priorities were developed in 2007 in a nearly year-long collaborative process between the District of Columbia government and representatives from the development and building community. District staff included the City’s policy office, inspections unit, traffic engineering unit, the pedestrian coordinator, and the Americans with Disabilities Act coordinator. External parties included developers, contractors, and scaffolding specialists. The priorities that this group developed, as shown in the table below, balance protecting pedestrians with maintaining pedestrian access. If a contractor wishes to request a variance to the pedestrian protection priorities, he or she must do so in writing with an explanation of the need for a variance.

⁹ The Washington D.C. December 2007 Departmental Order can be found at :

<http://www.ddot.dc.gov/ddot/frames.asp?doc=/ddot/lib/ddot/information/temp-traffic-cntrl/pedestriansafety/departorder.pdf>

Washington D.C.'s Pedestrian Protection by Phase of Construction

Phase of Construction	Pedestrian Protection				
	Covered Walkway - Sidewalk -	Covered Walkway - Roadway -	Open Walkway - Sidewalk -	Open Walkway - Roadway -	Sidewalk Closure
Raze					P
Facade Demolition	2†	2†			P
Sheeting and Shoring and Excavation	P*	2*	P*	2*	
Concrete or Steel Frame Construction		P			2
Skin or Façade Construction		P			2
Post Skin	P		P	2	
Sidewalk and Streetscape Work				P**	2**
Utility Work or other Work in Right-of-Way				P**	2**

P = District of Columbia Department of Transportation (DDOT) preferred method

2 = Next alternative

* For intermittent closures due to lifting overhead, a flagger should be used at both ends of the walkway

** These closures are expected to last no longer than 4 to 8 weeks

† When minimal overhead danger is present, covered walkways are the preferred method

Note: This represents the general policy of the District Department of Transportation. A site-specific modification is allowed. This request must be submitted in writing along with the traffic control plan and public space permit application; and must explain the modification and the site-specific conditions that require the modification.

Source: http://ddot.dc.gov/ddot/cwp/view_a.1250.q.643044.ddotNav_GID.1756.ddotNav.%7C34319%7C.asp

- **Regular Downtown Construction Coordination Meetings** Denver, San Jose, and Tucson hold regular meetings to better coordinate downtown construction activities. These meetings include City staff from transportation, utilities, public safety, special events and the mayor’s office, as well as state transportation officials, regional transit officials, and representatives from the private contractors engaged in construction projects in the downtown area.

These jurisdictions indicated that these meetings facilitate collaboration between multiple departments, assist with near-term trouble-shooting and responding to complaints, and help coordinate public information efforts.

- **Use of the Internet for Disseminating Information about Sidewalk Closures** San Jose and Tucson actively use the internet to disseminate information to the public regarding sidewalk closures. San Jose maintains an e-mail list of over 800 property

management firms, businesses, and organizations in the downtown area. Ten days before any sidewalk closure or disruption to the normal pedestrian pathways, this list receives an e-mail notification.

Tucson uses a similar e-mail notification system. The information that they provide includes: project owner (City, County, private), travel restriction type, emphasis that businesses are open, dates and hours of closure and information telephone line for complaints. In addition, Tucson has contracted with a public relations firm that distributes information door-to-door in the affected area, receives and directs complaints, and maintains a website called, "Know Your Way Downtown." This website includes maps and periodic updates about traffic, bicycle, transit, and pedestrian travel changes due to the many construction projects in and near downtown Tucson. It can be found at: <http://www.knowyourwaydowntown.info/>

Appendix E: Suggested Performance Measures for Assessing Action Item Impact

To assist the City Council in determining the effectiveness of SDOT's action items, we worked with SDOT managers to develop the following performance measures for each of the items.

Action Area 1: Making Pedestrian Mobility a Priority

Variations from Preferred and Alternative Methods for Pedestrian Protection

If the City chooses to develop a set of preferred and alternative methods for pedestrian protection based on the Washington, D.C. model, along with a policy requiring that requests for deviations from this policy be made in writing, the following measure could be used to track the effectiveness of this policy:

The number of approved requests for deviations from preferred and/or alternative methods divided by the total number of street use permits (with traffic control plans) issued in a given period.

This would allow SDOT to track how frequently variations from the preferred and alternative methods of pedestrian accommodation are being allowed and give an indication of whether the policy is having the intended effect. SDOT would compile this measure on a quarterly basis.

Action Area 2: Additional Street Use Inspector for Coordination, Enforcement and Monitoring

Penalties

With an additional inspector in the downtown district who would be responsible for coordination, enforcement and monitoring, we would expect assessed penalties for violation of street use permit requirements¹⁰ to go up in the short-term and down in the long-term. The downturn in the long run would occur as the deterrent impact of having additional enforcement on the street takes effect. Until the new inspector position is approved and the inspector is out on the street, SDOT would continue gathering and analyzing benchmark data on assessed penalties. For example, according to SDOT, there were 19 penalties assessed in the downtown inspection district in 2007, which generated \$5,700 in revenues. Again, with the introduction of a new inspector, we would expect to see an increase in these penalties in the short-term and a reduction over time in the long-term.

Action Area 3: Develop policy for waiving inspections

Track whether a new policy for when inspections should/may be waived has been developed and implemented, and whether it is being followed. The evaluation of whether the policy is being followed, and its effectiveness, could be part of SDOT's overall evaluation of its revised Operations Section procedures.

¹⁰ These penalties are primarily assessed for lack of proper notification to SDOT for starting work in the right-of-way and unpermitted work.

Action Area 4: Communication with the Public

Take additional steps to ensure that public notification requirements are being met by each permit holder.

Determine whether SDOT has implemented any of the options listed under Action Area 4. If so, obtain feedback from SDOT and affected parties to determine how well they are working. If not, obtain explanation from SDOT as to why an option was not chosen.

Make information on sidewalk closures and alternative routes available on SDOT's website.

Determine whether this information is available and regularly updated on SDOT's website, and if so, how often this information is accessed by the public ("number of hits to the website") in a given period.

Appendix F: Washington, D.C. Model for Developing a Set of Preferred and Alternative Methods for Pedestrian Protection

We recommend that the City develop a set of preferred and alternative methods for pedestrian protection based on the Washington, D.C. model. That would entail developing (a) a framework for conducting the work which will result in (b) a clear policy, codified in the Seattle Municipal Code and a Seattle Department of Transportation Director’s Rule, stating the City’s preferred and alternate methods for pedestrian protection by construction phase.

The four tables below describe the following:

- **Table I** - The process followed by Washington, D.C.
- **Table II** – Washington, D.C.’s preferred options (the results of their work)
- **Table III** – A template for the City of Seattle to use in developing its preferred options
- **Table IV** – A template showing how the City of Seattle could display its preferred options

Table I. Washington, D.C. Process for Determining Preferred Methods of Protecting Pedestrian Safety and Enhancing Mobility

Task	Develop a list of preferred options for maintaining pedestrian access by phase of construction, based on the unique needs and conditions of the Washington, D.C. area.
Who Was Involved	Representatives from the City’s policy shop, inspections unit, engineering unit and Office of Planning, the City’s Pedestrian Coordinator, and ADA Coordinator. External parties included developers, contractors, and scaffolding specialists. Washington, D.C. officials said that next time they would include representatives from the utilities.
How often did they meet	Met biweekly; each meeting had a definitive goal and the managers in charge made sure that each meeting’s milestone was met
How long did they meet	9-10 months
Result	Draft policy mandating the use of the preferred or second alternatives, depending on the phase of construction(see matrix below)
Review	Washington D.C. Attorney’s Office

Table II. Washington, D.C.’s Preferred Methods of Protecting Pedestrian Safety and Enhancing Mobility by Phase of Construction

Phase of construction	Pedestrian Protection				
	Covered Walkway -Sidewalk-	Covered Walkway -Roadway-	Open Walkway -Sidewalk-	Open Walkway -Roadway-	Sidewalk Closure
Raze					DDOT Preferred Method
Façade Demolition	Next Alternative +	Next Alternative +			DDOT Preferred Method
Sheeting and Shoring and Excavation	DDOT Preferred Method*	Next Alternative*	DDOT Preferred Method*	Next Alternative*	
Concrete or Steel Frame Construction		DDOT Preferred Method			Next Alternative
Skin or Façade Construction		DDOT Preferred Method			Next Alternative
Post Skin	DDOT Preferred Method		DDOT Preferred Method	Next Alternative	
Sidewalk and Streetscape Work				DDOT Preferred Method**	Next Alternative**
Utility Work or other Work in Right-of-Way				DDOT Preferred Method**	Next Alternative**

*For intermittent closures due to lifting overhead, a flagger should be used at both ends of the walkway

** These closures are expected to last no longer than 4 to 8 weeks

+ When minimal overhead danger is present, covered walkways are the preferred method

Note: This represents the general policy of the District Department of Transportation (DDOT). A site-specific modification is allowed. This request must be submitted in writing along with the traffic control plan and public space permit application; and must explain the modification and the site-specific conditions that require the modification.

Source:

http://ddot.dc.gov/ddot/cwp/view,a,1250,q,643044,ddotNav_GID,1756,ddotNav,%7C34319%7C.asp

Table III. City of Seattle Model for Determining Preferred Methods of Protecting Pedestrian Safety and Enhancing Mobility

Task	Develop a list of preferred options for maintaining pedestrian access by phase of construction, based on the unique needs and conditions of Seattle.
Who will be involved	To be determined.
How often they will meet	To be determined.
How long they will meet	To be determined.
Intended Result	Policy mandating the use of the preferred or second alternatives, depending on the phase of construction (see Table IV below).
Reviewed by	To be determined.

Table IV. Preferred Methods of Protecting Pedestrian Safety and Enhancing Mobility by Phase of Construction

	Pedestrian Protection (Note: these options could vary depending on the outcome of Seattle’s process.)				
Phase of construction	Covered Walkway -Sidewalk-	Covered Walkway -Roadway-	Open Walkway -Sidewalk-	Open Walkway -Roadway-	Sidewalk Closure
Raze					
Façade Demolition					
Sheeting and Shoring and Excavation					
Concrete or Steel Frame Construction					
Skin or Façade Construction					
Post Skin					
Sidewalk and Streetscape Work					
Utility Work or other Work in Right-of-Way					



Seattle Department of Transportation

Gregory J. Nickels, Mayor

Grace Crunican, Director

July 14, 2008

Ms. Jane Dunkel
Assistant City Auditor
Office of the City Auditor
Seattle Municipal Tower
700 5th Ave. - SMT 24-10
Seattle, WA 98124

Reference: Improving Right Of Way Mobility (Street Use) Audit

Dear Ms. Dunkel:

I have received a copy of the final draft of the Mobility Audit Report and concur with the findings and recommendations. The audit was very objective and will be beneficial in assisting SDOT in ensuring mobility of the ROW.

The audit team was very professional and worked hard to understand the complexity of right of way management. Their involvement was broad and thorough; they conversed with SDOT management, staff and customers in an effort to understand their relative perspectives on the issues. Due to the collaborative nature of the audit team, we feel that it was time well spent for all involved.

ROW management is one of SDOT's primary objectives; the recommendations identified in the audit are complimentary to our efforts in achieving this goal. My staff has already begun discussing how to best implement the audit findings.

Sincerely,

A handwritten signature in black ink that reads "Grace Crunican". The signature is fluid and cursive.

Grace Crunican, Director
Seattle Dept. of Transportation

