City of Seattle
Seattle Department of Transportation
Peter Hahn, Director

August 19, 2013

Ms. Jane Dunkel
Assistant City Auditor
Seattle Municipal Tower
700 5th Ave, SMT 2410
Seattle, WA 98124-4729

Dear Ms. Dunkel:

Thank you for the opportunity to comment on the Seattle Department of Transportation (SDOT) Operational, Management, and Efficiency Analysis – Phase I. SDOT appreciates the collaborative working relationship with the Office of the City Auditor and the Interdepartmental Team, and your commitment to make this a meaningful report.

Effective and prudent use of our resources has been critical over the last several years given the economic downturn, significant budget cuts and the need to do more with less. As you and the consultant have noted, SDOT has already made numerous improvements in operations that have allowed us to do work faster, better, and cheaper and to leverage city resources so that they go further. We believe a strong commitment to innovation, best practices and continuous quality improvement furthers our goal to be one of the most productive, effective and efficient transportation departments in the country. We welcome the opportunity to identify additional potential program efficiencies that might provide long-term benefits to the department and Seattle community.

Regarding the report, SDOT offers the following comments:

1. **Signal Timing**

   Consultant Comment:
   Historic Underinvestment in Infrastructure Maintenance - "Analysis of the costs and benefits of retiming signals more frequently. Develop alternatives for securing additional temporary and contracted resources. Explore strategies for teaming with adjacent public sector entities to perform this work on a coordinated basis. Analyze costs and benefits of a holistic maintenance approach." *(Executive Summary, Key Issues for Further Analysis, page xvii)*

   "Based on an existing SDOT inventory of approximately 1,073 signals and using the minimal (more signals per person) staffing guidelines, SDOT should have approximately 11 traffic engineers and 22 technicians to support its signal retiming program. In comparison, SDOT actually has 3.5 engineering FTE devoted to this activity and approximately 14 technician FTE. This resource deficiency gap contributes to the department's ability to retime signals

on a more frequent basis resulting in increased congestion and longer travel times." *(Traffic Management, Signal Timing Activities, pages 81-82)*

SDOT's Response:

SDOT agrees with the consultant's attention to this topic. The traffic signal system (especially in the center city area) was last upgraded in 1985, and its technological limitations lead to the kinds of observations and conclusions made by the consultant. We concur that staffing levels are too low, and that the skill level is inadequate either for the antiquated system or for a more modern system.

However, on the specific consultant recommendations on how to address the system's limitations, SDOT suggests an alternative approach.

With respect to the first Audit Comment above, securing additional temporary and contracted resources and teaming with adjacent public sector entities to perform this work are not particularly good strategies for the following reasons:

- Retiming signals is an ongoing full-time activity, it is not something that gets done over a short period of time through a lot of intensive effort and then nothing is done for several years. It does not lend itself to consultants or temporary staffing and we believe that Local 17 would take issue with contracting this work out since it is ongoing work.
- SDOT is the jurisdiction that other agencies approach for assistance when it comes to traffic signal systems. We are not aware of jurisdictions that have excess capacity nor is there value to doing this on a coordinated basis unless we are talking about a continuous corridor such as Lake City Way or Aurora. We already do this on these corridors, and it is SDOT that has the expertise to do this.
- More significantly, adding staffing to compensate for the limitation of a 1985 vintage traffic control system is not the best approach. SDOT has engaged a traffic control systems consultant to evaluate the existing system and to identify how the system can be upgraded to a more recent standard. This was done in anticipation of the unprecedented construction for the balance of this decade and the need to accommodate future growth on city streets that cannot be expanded for more vehicular capacity. This Next Generation Intelligent Transportation Systems (ITS) Study provides a roadmap for a gradual system upgrade of equipment and staffing (number and skill level). The SDOT ITS study is tailored for Seattle's specific conditions and traffic and provides more customized and complete information than the Consultant's report that used generalized, national standards and benchmarks to identify a staffing level need of 33 FTEs.

2. **Employee Individual Performance Evaluations**

Consultant Comment:
SDOT's Street Maintenance Division (SMD) – "Agency managers and personnel not held accountable for tangible and measurable goals which contribute to the overall mission of SDOT." *(Executive Summary, Opportunities for Improving Efficiency and Effectiveness page v and Employee Evaluations page 41)*

SDOT's Response:
Consistent with department standards, SMD creates individual workplace expectations for employees annually. The workplace expectations are divided into the following categories, and are modified based on the specific individuals work assignments within the division:

- Accomplishment of job tasks
- Personal working relationships
- Communication
- Job reliability
- Job initiative
- Safety
- Race & social justice
- Supervision and management

The employee evaluations are based on the division's goals and work expectations. SMD employees participate in a rigorous hands-on yearly performance review process that includes a mid-year check in and an end of year evaluation, as well as constant review of project performance measures for each section. Managers each have tangible goals for work outcomes for their various maintenance activities, and are evaluated based upon their year-end results. A system is in place that awards merit leave to managers who exceed their goals.

3. **Change Order Management**

Consultant Comment:
Capital Projects and Roadway Structures Division - "Although CAM [Construction Administration Manual] details the process for managing change, an inordinate percent of project cost in change orders on two projects was identified. Budget overruns could result if the C/O process is not managed in accordance with best practices. This is in the area of sign maintenance, sign manufacture, street striping, road stenciling, and other miscellaneous activities." *(Executive Summary, Opportunities for Improving Efficiency and Effectiveness, pages vi and xiii, Change Order Management, page 67)*

SDOT's Response:
Both projects reviewed by the audit consultants had a single substantial change order that ultimately saved the City money through a superior final product (on basis of life cycle costing, generally lauded by the consultant). This factor was not considered in this statement. Typical change order management best practice percentages do not apply for this type of situation. This analysis is incomplete.

4. **Project Delivery – Implementation**

Consultant Comment:
Capital Projects and Roadway Structures Division (CPRS) - "Tools are in place but consistent use was not apparent." *(Opportunities for Improving Efficiency and Effectiveness page vi, Project Delivery, page 61)*

SDOT's Response:
Project Management Plans, charters, scope, schedule and budget are set and tracked for all projects. CPRS is unsure how this conclusion was drawn.

5. **Document Management**

Consultant Comment:
Capital Projects and Roadway Structures Division – "Process allows for personal files to be kept and requested files were not readily available. Files can be lost or unavailable." *(Opportunities for Improving Efficiency and Effectiveness page vi, Document Management, page 63)*

SDOT's Response:
A standard electronic filing system is currently used for all projects. Consultants chose an archived (older) project, for which all information they requested was not readily available. This one, older project's documentation pre-dated the current procedures.

6. **Cost estimate development**

Consultant Comment:
Capital Projects and Roadway Structures Division – "Total project cost estimates reviewed combined design, construction, and right-of-way estimates with calculated administration costs, management reserve, construction incidentals, and miscellaneous construction elements. More accurate cost estimates provide a better cost management tool. *(Executive Summary, Cost Estimate Development, page xiii, Cost Estimate Development, page 64)*

SDOT's Response:
This analysis is based on the review of <u>one</u> archived project. Not only was it not representative of our current practices, this assessment was based solely on the Engineer's Estimate spreadsheet, which specifically covers the contract items (those that are part of a bid

package) and not the full project budget. There are numerous other costs that are part of the overall project cost estimate (for example, design, construction management, to name just two – fuller list below). To state it another way, an Engineer's Cost Estimate spreadsheet is NOT the overall project cost estimate, just one element of it.

All capital projects have cost estimates. They are initially developed at the outset/planning stage of a project, and then are updated at design milestones 30, 60, 90, 100 percent, post receipt of the bid, any major scope or schedule changes, change control triggers and Capital Improvement Program (CIP) and spending plan development. The cost estimate includes labor and direct costs for design and environmental processes, construction contract costs, labor and direct costs for construction, right of way costs, close out costs and contingencies. Once a cost estimate is developed and approved through the Project Management Plan process, it is entered into our Financial Model Database for tracking through the life of the project. Any changes to the estimate at this point are processed through our change control board.

7. **Life cycle costing**

Consultant Comment:

Capital Projects and Roadway Structures Division – "Neither the CPRS Project Delivery Manual (PDM) nor the Construction Administration Manual (CAM) reference life cycle costing. Understanding the maintenance cost implication is crucial to address funding backlogs. *(Executive Summary, Cost Estimate Development, page xiii, Life Cycle Costing, page 69)*

SDOT's Response:
Capital Projects and Roadway Structures performs life cycle costing even though it is not included in the PDM or CAM. Life cycle costing is performed in the process of the project's scope/concept development.

Life cycle costing is not a cost estimate, but a process for evaluating the appropriate design and materials for the facility by comparing the maintenance cost plus initial capital cost over the life of the facility for various options. Examples are concrete vs. asphalt; or steel vs. concrete girders. Life cycle costing is performed for pavement and bridge design during concept development in association with the asset owner. Life cycle costing is not typically done for sidewalks, signals or other facilities whose construction is dictated by other factors such as safety.

8. **Pavement Management Approach**

Consultant Comment:
Street Maintenance Division – "However, a significant leaning toward fixing the pavements in the poorest condition first occurs." *(Executive Summary, Pavement Management Approach, page x)*

SDOT's Response:
SDOT believes that the data does not support this statement. Over the life of Bridging the Gap (BTG) program, 83% of the projects by lane mile have been pavement preservation projects, not reconstruction, as would be required if the leaning was on the poorest condition first.

Again, thank you for the opportunity to provide comments on Phase 1 of the Efficiency Report and we look forward to our continued work together.

If you have questions, please let me or Deputy Director Lenda Crawford know.

Sincerely,

Peter E. Hahn
Director, Seattle Department of Transportation