**Budget Methodologies Study**

# executive

# summary

*prepared for*

**State of Washington Joint Transportation Committee**

*prepared by*

**Cambridge Systematics, Inc.**

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July 2006

# Executive Summary

## BACKGROUND

In the early 1990s, the Washington State Legislative Transportation Committee (LTC) conducted the Programming and Prioritization Study (PAPS) to examine the programming process used by the Washington State Department of Transportation (WSDOT). The topics addressed in that study included the over-all program structure used for the highway program; the prioritization methods used to select projects within different program categories; the capital program and budget process; and the degree to which WSDOT was complying with Legislative requirements, particularly the requirements set forth in the Revised Code of Washington (RCW) Section 47.05. As a result of that effort, significant changes were made to RCW 47.05 and to the approach used by WSDOT for highway capital programming and budgeting. These changes included a simplified program structure, a revised prioritization process, and a stronger emphasis on performance measurement and accountability.

Since the conclusion of the PAPS, the transportation budget process in Washington has continued to evolve. This evolution has been driven by a variety of factors, including: WSDOT's programming and budgeting implementation efforts; the passage of two very significant new revenue packages (Nickel and TPA) that added $11 billion to the transportation program over a period of 16 years; natural turnover in the legislature; changes to the legislative staff structures that support the transportation committees; and most recently, the transition of WSDOT to a cabinet agency. In light of these changes and with continued interest in the transportation budget process, funding was identified in the 2005 Legislative Session and included in the Transportation Budget for the Joint Transportation Committee (JTC) to conduct an analysis of the methodology used to structure, develop, and communicate the Transportation Budget for Washington State. In September of 2005, the JTC issued a request for proposals for a Budget Methodologies Study of the Washington State Department of Transportation. Cambridge Systematics, Inc. was selected for this work.

**This executive summary presents the Study's key findings and recommendations, for which additional support and discussion can be found in the complete version of the final report.**

## STUDY OBJECTIVE AND APPROACH

The objective of the Budget Methodologies Study of WSDOT was to identify specific and practical steps that can be taken to strengthen the transportation budgeting process' role in defining, evaluating, and communicating critical

policy issues that confront Washington. The specific areas addressed by this study included:

- **Program Structure –** Are there changes to the current program structure that will improve the budgeting process, better highlight key policy choices, and better communicate the core objectives and rationale for the transportation budget?

- **Budget Process –** Are there changes to the budget process that both address the Legislature's desire for accountability and enable the Governor's Office and WSDOT to manage and deliver the transportation program more effectively?

- **Communication –** Are there changes to the organization and presentation of WSDOT's budget that will help the Legislature and the public better understand it?

The findings and recommendations detailed in this study are the result of a variety of research activities, including: interviews with approximately 20 individuals from WSDOT, the Office of Financial Management (OFM), committee chairs, ranking and other members, and staff of both House and Senate Transportation committees, the Washington Transportation Commission, and the Legislative Evaluation and Accountability Program (LEAP). The findings and recommendations also are based on a comprehensive review of existing Washington State Transportation Budget material, as well as other related studies; and a review of the budget practices in a number of peer agencies - primarily the Departments of Transportation in Arizona, Colorado and Wisconsin.

It should be noted that as required by legislation, the budget methodologies study was coordinated with a number of other efforts that either overlapped with, or were otherwise closely related. These other efforts included: WSDOT's Critical Applications Replacement Design (CARD) Project; WSDOT's Statewide Program Management (SPM) effort; Washington State's Transportation Performance Audit Board's (TPAB) Study of Transportation Goals, Benchmarks and Ten-Year Investment Criteria and Process; and OFM's Roadmap Project.

## PROGRAM STRUCTURE

This portion of the study was designed to evaluate the effectiveness of WSDOT's current program structure as a framework for resource allocation and budget decisions. Specifically:

- Does the program structure facilitate policy and budget decision-making;

- Is the program structure useful as a tool for communicating budget decisions; and

- Does the program structure provide a reasonable basis for budget implementation and program delivery?

An effective program structure addresses these management needs while supporting transparency in budget decision-making and accountability for subsequent program expenditures.

Figure ES.1 illustrates WSDOT's existing top-level programs along with the funding initially appropriated for the 2005-2007 budget by the passage of Engrossed Substitute Senate Bill 6091. The existing programs have been classified according to whether they are considered operating programs or capital programs or a combination of operating and capital programs.

### Figure ES.1  Existing WSDOT Program Structure
*Capital and Operating Programs*

| Capital Programs | Capital and Operating Programs | | Operating Programs | |
|---|---|---|---|---|
| Washington State Ferries Construction $261.4M , 5.8% | Facility Maintenance, Operations, and Construction $36.0M, 0.8% | Program Delivery Management and Support $49.7M, 1.1% | Toll Operations and Maintenance $8.6M, 0.2% | Transportation Planning, Data, and Research $50.3M, 1.1% |
| Improvements (Highway) $2,303.8M , 51.0% | Traffic Operations $77.7M, 1.7% | Economic Partnerships $1.0M, <0.1% | Information Technology $66.8M, 1.5% | Public Transportation $65.0M, 1.4% |
| Preservation (Highway) $649.0M, 14.4% | Rail $124.1M, 2.7% | Highway Maintenance $302.4M, 6.7% | Transportation Management and Support $27.8M, 0.6% | Charges from Other Agencies $45.4M, 1.0% |
| | Local Programs $85.5M, 1.9% | Marine (Puget Sound Ferries) $354.1M, 7.8% | | Aviation $9.0M, 0.2% |

Source:    Engrossed Substitute Senate Bill 6091, Washington State Legislature, approved May 2005.

The existing WSDOT program structure is logical from the point of view that it effectively subdivides WSDOT's overall program into a mixture of modes and primary and supporting activities. It is clearly well aligned with both the way in which WSDOT is organized and how it actually manages its work. With that said, in comparing WSDOT's program structure to the three peer agencies and based upon the stakeholder interviews a number of key themes emerged and are summarized herein.

- **A Higher-Level Roll-Up of the Existing Program Structure Should be Implemented** - With a total of 18 programs, WSDOT's current top-level program structure is significantly broader than the top-level structures used by each of the Arizona, Colorado and Wisconsin departments of transportation, which have four, five and 10 top-level categories respectively. Without exception, all of the stakeholders interviewed during the course of the study indicated that a higher-level categorization of the programs would be helpful. The major benefits of such a higher-level roll-up would be i) to improve the ability to connect budget priorities to overall policy goals, and ii) to communicate the contents and objectives of the transportation budget to the legislature and the general public.

- **The Ability to Differentiate Capital and Operating Expenses Should be Maintained** - Regardless of how prominent this distinction might be in the selected higher-level roll-up of programs, it is believed that maintaining the ability to distinguish between operating and capital components of the budget is critical.

- **The Existing Level of Detail must be Maintained and Expanded in the Areas of Ferries and Rail** - Not withstanding the interest in a higher-level categorization of the existing programs, the study also confirms that it is critical that the program structure supports the ability to incrementally drill-down to increasing levels of detail. This characteristic was observed in the program structures of each of the three peer agencies considered. There is no question that the legislature, OFM and other interested parties want to be able to view the level of detail currently provided (i.e., beneath whatever high-level categorization that might be used initially). Furthermore, in the areas of Ferries and Rail, it is perceived that the current program structure should be extended in order to improve understanding of the different types of expenditures in these areas.

## Program Structure Conclusions

WSDOT's existing program structure includes too many top-level programs. The number (18) of top-level programs makes providing a succinct description of its overall program objectives difficult, if not impossible. Furthermore, by using the existing program structure as the starting point for communicating the budget, WSDOT effectively overwhelms many of the people that are interested in understanding it (including the general public, OFM and the Legislature). Finally, the mixture of modes and primary and supporting activities in the top-level programs makes creating/observing direct linkages between the program structure and the Governor's Priorities of Government initiative or WSDOT's own strategic initiatives challenging.

## Program Structure Recommendations

1. WSDOT should reduce the number of top-level program categories used in its initial budget presentation;

2. Maintain the ability to distinguish between operating and capital expenditures; and

3. Add subprograms beneath the existing programs for Ferries and Rail.

# BUDGET PROCESS

Most of the issues raised in this area focused on the complexity of the transportation budget, the difficulties in tracking and communicating project changes, and the key policies, or policy context, that drive budget decisions. The basic budget process and the budget schedule were not identified as issues. While it was anticipated that the shift of WSDOT to a cabinet agency in 2005 might have significant implications for the budget process, during the time that this study was occurring, the shifting roles among WSDOT, OFM, the Legislature, and the Transportation Commission were still evolving and therefore could not be evaluated.

While most of the participants in the transportation budget process express frustration with some aspects of the process, there also is a clear willingness to consider some changes to the existing process to improve its effectiveness. Based on the interviews conducted as part of this project and a review of the large amount of budget-related materials available, the key to improving the existing budget process lies in developing the right balance between the Legislature's desire for oversight and its need to establish accountability, and the Governor's Office and WSDOT's need to manage and deliver the budget and the State's transportation program effectively. With this context, the budget process section of the study focused on three main areas: i) project versus program appropriations; ii) tracking project scope, budget and schedule; and iii) the policies that guide the budget development process.

## Project versus Program Appropriation

The manner in which funds are appropriated in the budget process can have a significant impact on the complexity of the budget, how accountability for project delivery is established, and on WSDOT's ability to manage both program delivery and the use of funds from different revenue sources. Prior to the 2003 - 2005 biennium, Washington State's transportation budget was appropriated by program. The peer agency review conducted as part of this study revealed that in general, appropriating transportation funding at the program level appears to be the most common approach, although other agencies also include specific project references in some cases.

The passage of the Nickel and TPA revenue packages in 2003 and 2005, with their associated lists of projects and project costs, represented a significant shift in the State's appropriation approach. Many stakeholders felt that the identification of the specific projects to be constructed with the new revenue was critical to passing the legislation. It also provided the Legislature with an opportunity to strengthen

its role in assuring accountability for delivering these projects. On the other hand, the project appropriation process also has created additional limitations on fund transfers and the use of different funding sources, which could adversely impact WSDOT's flexibility to manage the project and program delivery process. Table ES.1 summarizes the impacts of different appropriation approaches. Please note that the "Resulting Ability To" values are in the context of the appropriation approach only and in each case there are other ways to achieve these results.

### Table ES.1    Evaluation of Appropriation Options

| Level of Appropriation | Resulting Ability To: | | | |
|---|---|---|---|---|
| | Gain Public Support for Revenue Increase | Manage Change | Manage Funds Use and Make Transfers | Monitor Delivery |
| Program | Low | High | High | Low |
| Groups of Projects | Medium | Medium | Medium | Medium |
| Projects | High | Low | Low | High |

## Tracking Project Scope, Budget and Schedule

Accountability for project delivery is a critical factor in establishing and maintaining support for Washington's transportation program and budget and is a concern for all projects not just Nickel and TPA projects. Reflecting the importance of project delivery accountability a working group with representation from WSDOT, OFM, and the Legislature continues to meet and work together to establish and improve a variety of performance and accountability reporting mechanisms and systems. However, despite significant efforts to address this issue, changes in project scopes, schedules, and budgets are the single biggest cause of frustration with the budget process. Unfortunately, information (especially cost) is provided in support of the transportation budget, even though this information is often provided very early in the project development life cycle, which all but guarantees it will change.

This study identified and investigates three key dimensions to this problem:

- Inherent uncertainty and risk in the project development process;

- Variations in the specific elements or geographic extent of projects that cause confusion and raise questions about the reliability of information; and

- Limitations, or a lack of integration and consistency, among the information systems that support project development, monitoring and reporting during different project phases.

This study can report that all of these issues are well known by the participants in the budget process and significant work is occurring to address them.

## Policies that Guide the Budget Development Process

There was some discussion about the policy context for the budget. This discussion was related to the following observations:

- **Legislative Involvement** - The first observation, that was raised by a number of legislative (members and staff) stakeholders, is the recognition that legislative involvement in the project selection process increased in the recent new revenue packages (Nickel and TPA). As noted previously, the identification of specific projects in these revenue packages was widely viewed as key to their passage, however, whether or how this is consistent with the legislatively mandated project prioritization process is unclear. Ultimately, because the projects included in the revenue packages were selected from a WSDOT provided prioritized lists of candidate projects, none of the stakeholders questioned that the selected projects were/are not all good investments on the merits.

- **Diffuse Legislation Includes Conflicting Priorities** - The second observation is that repeated attempts to try to clarify the transportation investment prioritization policy in the legislation has resulted in the topic being discussed in a number of places in the legislation, and in each case differently. In essence the existing legislative guidance in the area of investment prioritization is diffuse and in some cases even conflicting. This issue was well documented in the TPAB Study of Transportation Goals, Benchmarks and Ten-Year Investment Criteria and Process, which was completed shortly after the budget study commenced. The TPAB study included a number of recommendations designed to help Washington clarify its policy.

- **Future Operating and Preservation Costs of Improvements** - The third observation, that was raised by a number of stakeholders during the study, is that although the passage of the two new revenue packages was a considerable achievement, it is not clear that sufficient thought has been given to the additional operating and preservation costs that the resulting improvements will required in the future.

## Budget Process Conclusions

In an attempt to ensure WSDOT accountability, the legislature has appropriated almost 40 percent of the current WSDOT's budget at the project level, and it has put in place strict requirements and authorization procedures that control when and how adjustments to individual project 'budgets' can be made. The extent of project-level appropriations, combined with restrictions concerning the use of different funding sources (specifically the Nickel and the TPA), have curtailed WSDOT's ability to be responsive (i.e. manage its cash flow and operations) to the types of changes that are to be expected in a diverse transportation program of the magnitude of WSDOT's. There is no debate about the need for accountability or about WSDOT's, the Governor's, and the Legislature's

commitment to the delivery of the projects identified in the Nickel and TPA revenue packages. However, ensuring accountability to this commitment can be achieved without limiting WSDOT's flexibility to the extent that is presently the case, which now only permits transfers between projects within a particular revenue package.

### Budget Process Recommendations

1. Clarify process for approving transfers between Nickel projects and between TPA projects;

2. Increase flexibility to transfer funds between Nickel projects and TPA projects;

3. Increase flexibility to manage multiple dedicated funding streams. For example, allow Federal funds to be used for Nickel and TPA projects and vice versa, as long as the total budget for the Nickel and TPA projects does not drop below the approved amounts;

4. For new revenue packages, appropriate funds at the program level (with associated project lists as appropriate) or by group of projects;

5. Over time, work towards consistent reporting and fund management protocols for all projects. Currently, the requirements for Nickel and TPA projects are different from those for other projects;

6. Incorporate project development milestones into the budgeting process; and

   – For external reporting purposes, select a consistent set of milestones for all projects;

   – Always indicate the current milestone when a project's scope, budget, or schedule is listed or reported; and

   – Consider reporting cost estimate ranges for more projects.

7. Revise project status reporting.

   – Define consistent definitions for on time and on budget for all projects. Building off of the recommendations of the Transportation Working Group;

   – Establish a threshold for reporting project status. For projects above the threshold, report detailed information by milestone. For projects below the threshold, report progress as a whole (e.g., percent of projects completed on time); and

   – Ensure that Critical Applications Modernization and Integration effort results in the ability to clearly map deficiencies, projects, and contracts.

## COMMUNICATION

A significant volume of material is produced and made available to document WSDOT's budget and report on its implementation progress. However,

WSDOT's budget is still considered too complex and difficult to understand, even by many legislators that have been involved in transportation over a number of years. The central communication issue is the need to balance the size and complexity of the WSDOT budget with an appreciation of the variation in the audiences interest in the details. The communication section of the study focused on three main areas: i) the budget presentation; ii) reporting on budget implementation; and iii) budget education. Highlights from each area are provided below:

- **Budget Presentation**

  - Transportation budgets are lengthy and complex and WSDOT's is no exception;

  - Multiple budget presentations are common – these may be generated by different organizations and are intended for different purposes, but it is important to understand exactly what it is that you are looking at;

  - Different readers may prefer to see the budget presented in different ways, but the paper document centric form of existing presentations limit the extent to which this can be practically provided;

  - The distinction between capital and operating expenses is not prominent in all transportation budgets;

  - The structure used to present the budget can differ from the agencies organizational structure and/or the structure that is used to develop the budget;

  - WSDOT's initial budget presentation uses more top-level program categories than each of the peer agencies reviewed;

  - Locating information about WSDOT's budget is very straight forward; and

  - Washington's budget legislation is very consistent with WSDOT's Current Law Budget.

- **Reporting on Budget Implementation**

  - The number, depth and breadth of reports made available by WSDOT tend to overwhelm many interested observer;

  - The narrative and discussion of projects and issues must be developed and made available, however, for external audiences it should be provided in support of clear and concise summary statistics;

  - WSDOT's web site offers significant untapped potential as a vehicle for communicating implementation performance;

  - Consistency in its reporting is key for WSDOT to maintain the highest level of credibility with and confidence of the Legislature, Governor, OFM and the general public;

- Ongoing efforts to improve the consistency of mapping projects to contracts should be pursued to the extent that it is practical;

- Until a number of critical information systems at WSDOT are replaced there will continue to be practical limitations to WSDOT's ability to provide all desired reports in a timely and consistent manner;

- Reporting on individual project delivery is critical, however, it needs to be balanced with reporting on system-level performance; and

- WSDOT must strike a balance between immediate broadcasting of issues as they are encountered versus being able to accurately ascertain the extent of a problem.

- **Budget Education**

  - Education efforts associated with the transportation budget are hampered by the existing top-level program structure (i.e., it has too many program categories);

  - Transportation is sufficiently different from other state programs that even the most effective budget materials and implementation reports must be effectively supplemented to improve a reader's understanding;

  - Consideration must be given to the limited amount of time that a reader/reviewer, including legislators, will be able to dedicate to the issue of transportation and therefore material must be summarized to a reasonable level; and

  - As the level of granularity at which the legislature appropriates transportation funding increases, so to will the level of effort necessary for effective education about the budget.

## Communication Conclusions

WSDOT produces a significant amount of budget and reporting information, which is entirely consistent with the magnitude of its programs and essential for WSDOT to effectively manage its operations. However, the existing document centric approach to presenting this material combined with the current program structure and focus on reporting by source of funds, mean that there is practically no way for a person or entity outside of WSDOT to reasonably absorb and understand the information. The World Wide Web and associated technologies were created to help organize large amounts of information and facilitate navigation through it. WSDOT already utilizes its web site to present information about its budget, programs and implementation status. However, with respect to its efforts to communicate the budget and report on its implementation, WSDOT uses its web site primarily as a means to allow people to locate PDF versions of physical documents. There is a significant opportunity to address many of the communication issues raised during this study by actually presenting material in rich web pages to supplement the existing PDF documents.

## Communication Recommendations

1. WSDOT should adopt a higher-level roll-up of its programs for the initial presentation and communication of its budget;

2. A concise summary of what the budget is designed to purchase in the context of its impact on the overall system should be included as part of the budget presentation;

3. WSDOT should either incorporate lists of project directly into the budget presentation or provide links to these lists, not simply reference one or more external lists;

4. WSDOT should consider increasing the prominence with which the debt service is explained in the budget presentation;

5. WSDOT should stop referring to programs and subprograms in budget presentations and related material by alphanumeric designator, and it should strive to make all of its program names descriptive and unambiguous;

6. WSDOT should supplement the existing paper document centric presentation of the budget by implementing a web-based system that provides multiple ways of viewing the budget, facilitates navigation around the budget, and allows the budget to be viewed in varying levels of details;

7. Review, refine, standardize, and eliminate duplication from the existing external implementation reports;

8. WSDOT should expand its use of web technology to present interactive summary program delivery statistics;

9. Consider the implementation of a WSDOT program dashboard on its web site to better communicate system and program-level performance;

10. Strengthen the existing program education sessions;

11. Supplement existing education efforts with a regular session or sessions that focuses specifically on the aspects of the transportation program that make it different than other state programs.  The material presented in this session also should be published on WSDOT's web site and in a form that can be readily printed; and

12. Consider the elimination of as many points of confusion as possible from initial budget presentations.  Three examples that might be considered include:

    – The capital/operating distinction (e.g., when does maintenance become capital preservation?  Where is the division of labor between capital and operating programs?);

    – A top-level program structure that mixes primary activities, modes, and support activities; and

    – Minimizing the extent to which project definitions change.