

STATE AUDITOR'S OFFICE PERFORMANCE AUDIT



Washington's Tolling Program: Lessons Learned from Project Delays

August 2, 2013

Report No. 1010219



Washington State Auditor

Troy Kelley

Table of Contents

Executive Summary3

Introduction6

Audit Results 11

Audit Recommendations 25

Agency Response 26

Appendix A: Initiative 900 30

Appendix B: Scope & Methodology 31

Appendix C: WSDOT’s Tolling System 32

Washington State Auditor’s Office Contacts 33

Executive Summary

Delays creating a statewide all-electronic tolling system



State Route 520 Bridge

Washington is one of just a handful of states that have successfully established a statewide all-electronic tolling system. The system is fully operational, and through March 2013, has collected more than \$67 million to help pay for the new SR 520 bridge. However, Washington began collecting tolls nine months behind schedule, a delay that represents a lost opportunity to collect an additional \$40 million in tolls. Project delays and issues creating the new system caused public confusion.

We found the Washington State Department of Transportation (WSDOT) faced challenges managing a complicated project that involved collaboration across the department, where roles and responsibilities were unclear, including who made decisions, who was accountable, and how the vendor was to be managed.

WSDOT has taken some steps to address these issues, and it is important it continues to take action to resolve these challenges because tolling is central to the department's ability to pay for large construction projects. The Legislature has authorized additional tolling projects on SR 99, I-405, and the I-5 Columbia River Crossing, and others will be considered in the future.

Pressure points magnified the project's challenges

Three factors created a high level of risk to the project's success.

Technology barriers – WSDOT wanted a statewide system that would be easy for customers to use on multiple highways and bridges. However, because Washington state law requires precise accounting to track tolls collected at each facility, the system needed more advanced accounting elements than those already used in other states. These elements went beyond what the tolling industry had previously delivered.

Disagreements about needs – WSDOT project stakeholders disagreed about whether they should treat project deliverables as if they were purchasing a service, or an IT product. WSDOT's vendor did not immediately realize, nor did WSDOT recognize the vendor's lack of understanding of the accounting system needs until several months into the project, which complicated project planning and vendor management.

Tight deadline pressure – The Federal Highway Administration paid for the new tolling system under a grant designed to support innovative methods to ease traffic congestion. These grants were intended for projects that could be completed quickly. The grant agreement included a specific SR 520 tolling start date. WSDOT feared that failing to meet that date would result in the loss of federal funding. Although the Federal Highway Administration extended the deadline several times to meet WSDOT's needs, the deadline pressure affected WSDOT's project management decisions.

ISSUES CREATING A NEW STATEWIDE TOLLING SYSTEM



- Technology barriers
- Disagreement about needs
- Tight deadline
- Unclear & ineffective management

CONSEQUENCES



Project delays



Lost opportunity to collect \$40 million



Public confusion

RECOMMENDATIONS



Secretary ensures clear expectations for future tolling projects



The Toll Division needs clear decision-making authority



The Toll Division establishes policies and procedures for managing complex projects

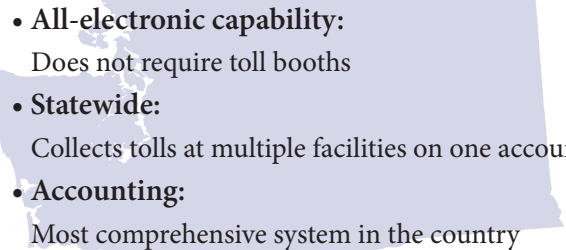
Unclear management approach complicated an ambitious project

WSDOT did not fully follow the requirements outlined in the State Administrative and Accounting Manual including adequately planning for and managing project risk, proactively managing the project, and holding the vendor accountable throughout the project.

WSDOT created the Toll Division while this project was under development in 2009 to manage its tolling program and collaborate across the department with multiple divisions and offices on tolling projects.

For this project, WSDOT's Toll Division lacked the executive support, decision-making authority, and the policies and procedures needed to develop the statewide all-electronic tolling system and start tolling the SR 520 Bridge on schedule. These management challenges were magnified by an ambitious project, uncertainty about its demands, and a tight deadline tied to a \$154 million federal grant.

Washington's tolling system is unique

- 
- **All-electronic capability:**
Does not require toll booths
 - **Statewide:**
Collects tolls at multiple facilities on one account
 - **Accounting:**
Most comprehensive system in the country

"The authority for full decision-making has never been given to the Tolls Division."

– Tolling Expert Review Panel Report, August 2011

Incorporating risks – Although WSDOT identified numerous risks to the project's success, it did not fully integrate those risks into project development and management, and its vendor selection process. For example, all vendors received low overall scores and WSDOT selected a vendor that scored very low on its proposed technical accounting approach, a known high-risk area. When the vendor subsequently struggled to perform, WSDOT was not prepared with contingency plans.

Managing the project – WSDOT struggled to proactively manage both the project and the vendor. It developed a sound project management plan, but did not always follow the plan and did not update it to reflect changes. Some internal stakeholders disregarded the plan by communicating directly with the vendor. When the project management structure was changed, the plan was not updated and the vendor received conflicting direction, causing further delays.

Holding the vendor accountable – As the vendor struggled to understand project requirements and meet project deadlines, WSDOT conducted less project oversight as it became more involved in the vendor's work. Because WSDOT's primary goal was to have an operational system, it delayed assessing damages and did not apply all available financial penalties for poor performance. As the system neared completion, WSDOT reduced vendor payments to cover additional costs caused by the delay. Once it started collecting tolls on SR 520, WSDOT reached a financial settlement with the vendor.

Summary recommendations

To improve WSDOT's management of future tolling projects and to minimize the risk of project delays, we recommend:

1. The Secretary ensure roles, responsibilities, and decision-making authority are clear for projects managed by the Toll Division.
2. The Assistant Secretary for Tolling establish policies and procedures to guide the development and implementation of tolling projects.
3. The Department of Transportation report on its progress implementing these recommendations to House and Senate Transportation Committees and the Office of Financial Management, as required in the 2013-2015 transportation budget.

Timeline of events, 2007-2012

Date	Event
April 2007	WSDOT and its partners applied for a grant from the Federal Highway Administration (FHWA)
August 2007	FHWA reached agreement with WSDOT and its partners to pay for the new tolling system for the SR 520 Bridge, the agreement required SR 520 Bridge tolling to start by September 30, 2009
Summer 2008	WSDOT started writing requests for proposals to provide customer services and develop a statewide all-electronic toll collection system
February 2009	WSDOT hired a Quality Assurance team to advise them on project development and management
April 2009	Legislature authorized tolling the SR 520 Bridge; WSDOT asked FHWA to extend the toll start date to October 15, 2010
May 2009	WSDOT convened a peer state workshop, WSDOT submitted an Investment Plan to the Information Services Board
June 2009	The Information Services Board approved the Investment plan; WSDOT issued the request for proposals
August 2009	WSDOT asked FHWA to move SR 520 tolling start date to June 30, 2011
September 2009	An Expert Review Panel engaged by the Joint Transportation Committee made preliminary recommendations to WSDOT to revise its request for proposals; WSDOT received proposals from five vendors
November 2009	At WSDOT's request, the five vendors submitted their Best and Final Offer based on a tolling start date of March 19, 2011
December 2009	WSDOT signed a contract with the winning vendor with a tolling start date of March 19, 2011; Expert Review Panel issues final report - saying that extending the project completion date is a good solution
Summer 2010	Vendor told WSDOT it will develop accounting software, later decided it will purchase and customize an 'off the shelf' package, then decided it had to develop the software; Vendor was late with its deliverables and the project schedule started to slip
July 2010	Toll Division hired General Toll Contractor to assist with its tolling projects
October 2010	Vendor sent letter to WSDOT proposing to adjust to a phased implementation approach with the Customer Service Center operating by January 18, 2011 and SR 520 Bridge tolling starting by April 2, 2011; WSDOT decided to no longer review Detailed Design Documents to give vendor more time to finish its work
January 2011	WSDOT sent vendor a letter noting deficiencies that must be corrected before the Customer Service Center could start operating
February 2011	Vendor opened the statewide Customer Service Center one month late and took over electronic toll collection on the Tacoma Narrows Bridge, significant system defects were found
March 2011	WSDOT changed its project management structure to four directors reporting to the Toll Division Director
April 2011	WSDOT sent the vendor a letter listing its specific issues with Customer Service Center operations and tolling infraction notices on the Tacoma Narrows Bridge
May 2011	WSDOT and vendor signed contract change order #3 - delaying SR 520 Bridge tolling start date from April 2, 2011, to July 9, 2011, and reducing vendor payments to cover costs WSDOT incurred due to delays; WSDOT Deputy Secretary became more involved in managing the project
June 2011	WSDOT cancelled Tacoma Narrows Bridge infraction notices, and assigned more staff to help resolve vendor issues; WSDOT reconvened the Expert Review Panel to get advice on completing the project; WSDOT sent vendor "Notice of Default and Request for Cure" letter; WSDOT asked FHWA to extend the SR 520 tolling start date from June 30, 2011, to no later than September 30, 2011
July 2011	WSDOT informed vendor it would request damages if the project was not completed on time
August 2011	The Expert Review Panel recommended WSDOT continue the project with existing vendor and pursue concessions rather than damages for non-performance
September 2011	WSDOT requested additional extension of SR 520 tolling start date from FHWA to December 31, 2011
December 2011	Tolling started on SR 520 bridge, photo tolling was added to the Tacoma Narrows Bridge
June 2012	WSDOT signed a settlement agreement with vendor

Introduction

The Washington State Department of Transportation (WSDOT) developed a statewide all-electronic toll collection system to collect tolls on the State Route (SR) 520 Bridge, on other existing toll facilities, and future toll facilities. WSDOT hired a vendor to provide the information technology system needed to implement all-electronic tolling and to provide customer services.

WSDOT and its vendor experienced challenges in developing the new system that created significant delays in tolling the SR 520 Bridge resulting in a lost opportunity to collect an estimated \$40 million in tolls. Washington now has a statewide all-electronic toll collection system that meets the contract's requirements, but the delays and other problems with the project frustrated customers, the public, and the Legislature. To help avoid similar issues with future tolling projects, our audit was designed to answer the following question:

What lessons can be learned from WSDOT's development and implementation of statewide all-electronic tolling?

Background

Washington returned to transportation tolls in 2007

Between 1930 and 1985, Washington financed 14 bridges with bonds repaid with tolls. The state began collecting tolls again in 2007 to pay for construction projects and reduce traffic congestion. **Exhibit 1** shows the three facilities with tolls in Washington: the new Tacoma Narrows Bridge, the SR 167 High Occupancy Toll (HOT) lanes, and the SR 520 Bridge. Except for the Tacoma Narrows Bridge, where it is still possible to pay cash at a toll booth, all tolls are collected electronically through a Good to Go! transponder or through photo tolling linked to the vehicle's license plate. **Appendix C** describes how all-electronic toll collection works.

WSDOT created a new, separate division to manage toll projects

In 2009, WSDOT created the Toll Division to manage all tolling systems and projects. The division is responsible for all toll system development and procurement, operations, and strategic financial planning. These responsibilities require the Toll Division to coordinate with multiple WSDOT administrative divisions, including finance and accounting, information technology, engineering, and communications and government relations. The Toll Division also works with the project offices responsible for building tolled projects by providing tolling services and equipment. **Exhibit 2** on the following page shows the organization structure of WSDOT and the placement of the Toll Division at the time of its creation.

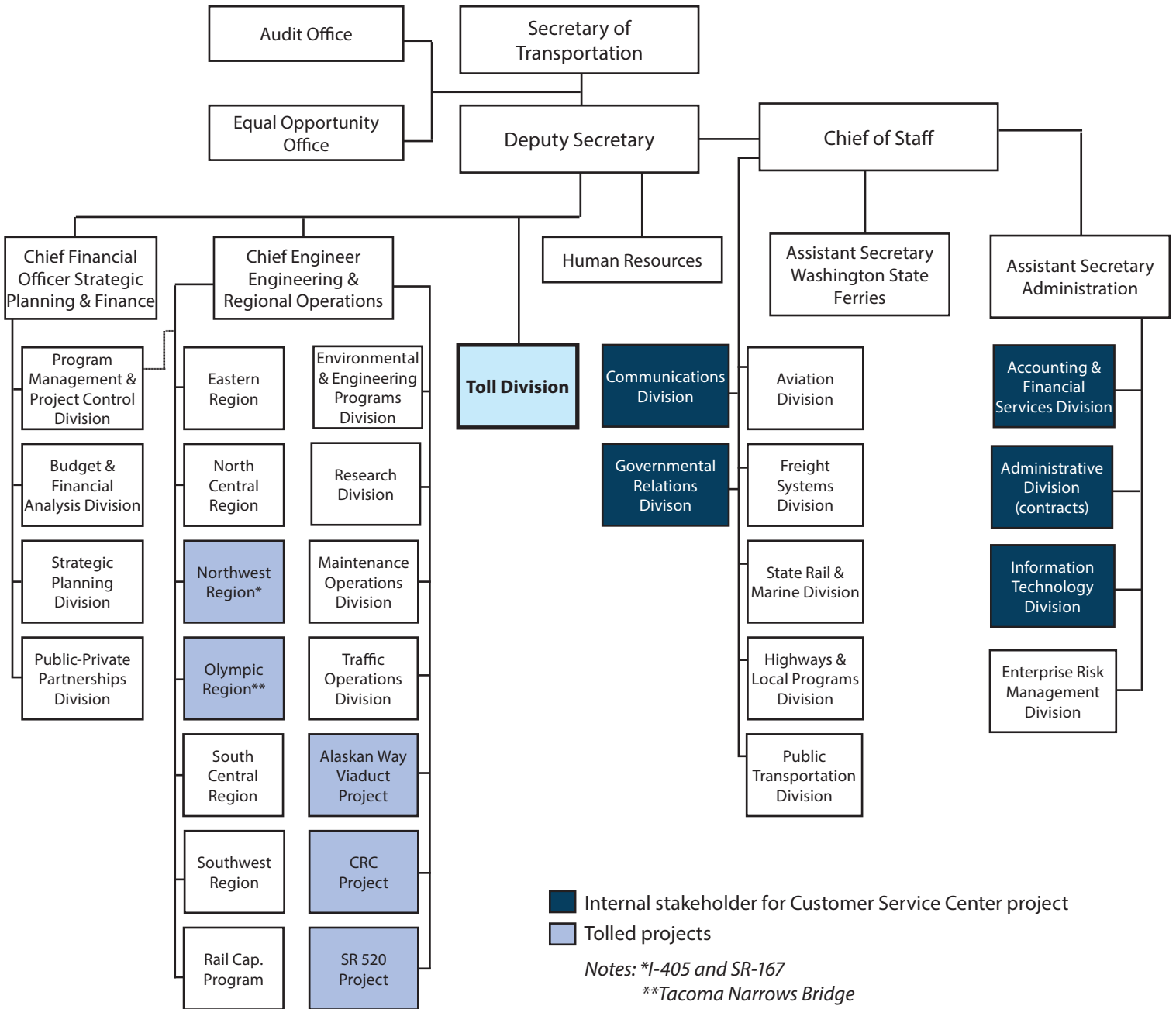
Exhibit 1
WSDOT's tolled facilities



Source: WSDOT

Exhibit 2

Washington State Department of Transportation organization chart



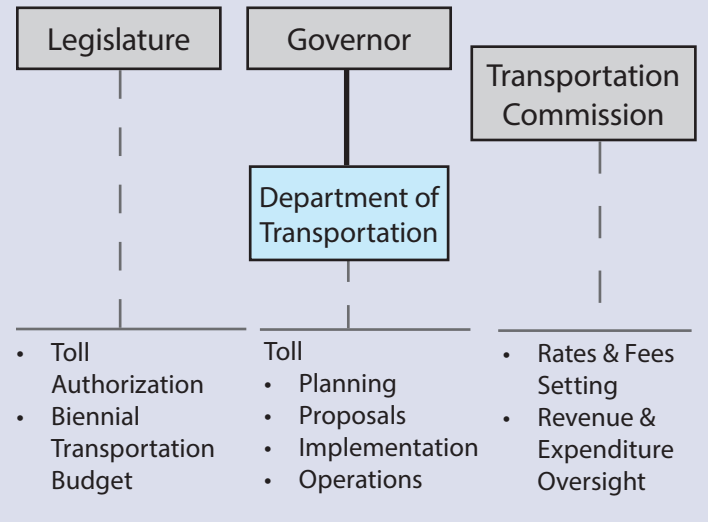
The Legislature and the Transportation Commission also influence tolling decisions

WSDOT is responsible for building, operating, and maintaining toll facilities, but as shown in **Exhibit 3**, the Legislature and Transportation Commission also make decisions about when to use tolls and how much to charge.

The Transportation Commission is responsible for setting toll amounts and ferry fares, and for developing the statewide transportation plan. The Commission is appointed by the Governor and operates separately from WSDOT.

The Legislature sets state tolling policy by authorizing which highways or bridges may charge tolls. The Legislature has authorized tolling on the three existing tolled facilities, as well as the I-405 HOT Lanes, the SR 99 Tunnel, and the I-5 Columbia River Crossing. The Legislature requires that any tolls collected must be accounted for separately and only used to support the construction, operation, and maintenance of that particular facility.

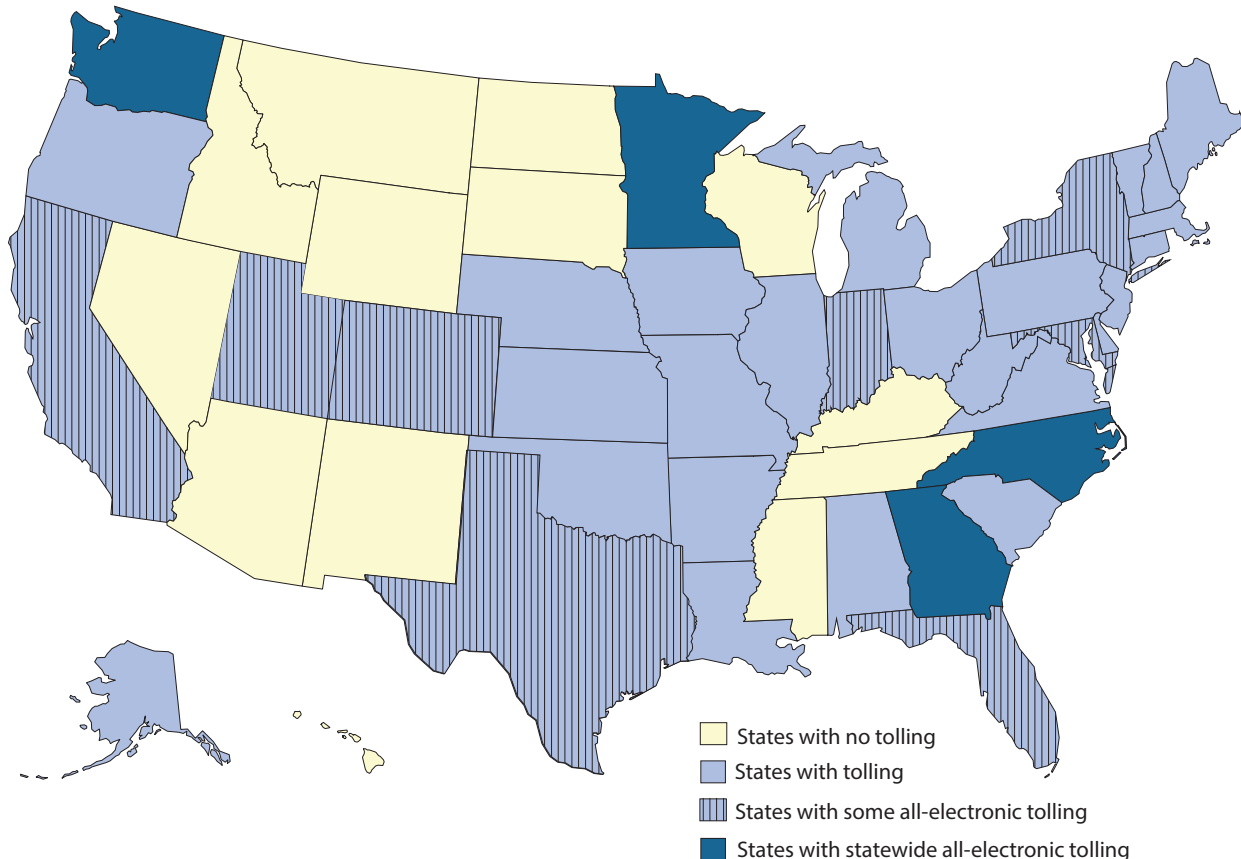
**Exhibit 3
Tolling in Washington is overseen by several government entities**



Washington is one of only four states relying on statewide all-electronic tolling

In 2012, 35 states operated a total of 227 bridges or highways with tolls. As shown in **Exhibit 4**, of those states, a smaller group of 12 used all-electronic tolling on 43 facilities. In addition to Washington, only three other states – Minnesota, North Carolina, and Georgia – use a unified statewide tolling program that relies on all-electronic tolling.

**Exhibit 4
States relying on all-electronic tolling**



Conditions of a federal grant shaped Washington's tolling system

In August 2007, WSDOT received a \$154 million Urban Partnership Agreement grant to reduce congestion across Lake Washington and help pay for a new SR 520 bridge. Of the \$154 million, \$86.1 million was designated for development of tolling systems for the SR 520 bridge and active traffic management strategies on SR 520 and I-90.

The U.S. Department of Transportation's Federal Highway Administration (FHWA) created the grant program as part of its National Strategy to Reduce Congestion on America's Transportation Network. The grant program supported projects that brought state and local governments together to use technology, transit, telecommuting, and tolling to improve traffic flow. Federal officials responsible for managing these grants told us Washington's project was the most complicated and innovative project funded through the program.

The grant required all-electronic, variable tolling for the SR 520 Bridge. All-electronic tolling allows tolls to be paid without stopping to keep traffic moving. Variable tolling encourages transit use and off-peak driving by raising tolls during peak travel times.

WSDOT's existing electronic toll collection system could not handle the increased volume of tolls and was not designed to accommodate photo tolling, so WSDOT needed to implement a new statewide back-office system to facilitate all-electronic tolling. WSDOT selected this approach based on lessons from other states that use all-electronic tolling and have multiple systems which require drivers to have multiple accounts and transponders. WSDOT wanted to provide its customers a consistent experience with one account and one device for all tolls.

The grant's deadlines created challenges. FHWA designed the grant program for projects that could be completed quickly and revoked grant funding from other states when tolling was not approved. The project's complexity and need to receive Legislative approval made those deadlines difficult to meet. Although FHWA granted several extensions to the timeline, WSDOT feared that failing to meet the SR 520 Bridge tolling start date would put the funding at risk.

Washington developed a proposal for a unique all-electronic statewide tolling system

In June 2009, WSDOT issued two requests for proposals to engage vendors to develop and implement its all-electronic toll collection system. The Customer Service Center request for proposals is the subject of this report. It covered the back-office functions required to collect tolls and the customer service center's operations. A separate request for proposals covered the roadway equipment needed to collect tolls.

The Customer Service Center proposals were expected to include customer service operations for the State Route 520 Bridge, the Tacoma Narrows Bridge, and the SR 167 High Occupancy Toll (HOT) lanes, and any other state toll facilities authorized by the Legislature during the life of the contract. The request required the tolls to be collected electronically with transponders and photo-tolling technology, and tolls on the SR 520 Bridge to vary by time of day.

The request specified several other requirements. Proposals had to include the staff and facilities for day-to-day operation of the Customer Service Center, including three walk-in storefronts. They also had to include the back office software application and related services and systems needed to collect tolls through transponders or photo tolling, as well as all associated processing and account management. That system also had to interface with the toll collection equipment, WSDOT's financial systems, and other software systems for external services such as credit card service providers, financial institutions, and the Washington Department of Licensing.

WSDOT sought a much more comprehensive accounting system than other states were using

WSDOT needed a more comprehensive accounting system than those used in other states because Washington state laws require it to prepare annual balance sheets and financial statements for each toll facility and to ensure all tolls collected on each tolled facility are only used for that facility.

The Customer Service Center request for proposals required an accounting system that complied with Generally Accepted Accounting Principles and a subsidiary accounting system to track toll transaction details, neither of which is standard for the all-electronic tolling industry.

Audit results

Every state contract is expected to meet state requirements

Developing the back-office functions and Customer Service Center for WSDOT's statewide all-electronic toll collection system depended heavily on information technology solutions. Industry experts estimate the failure rate for complex information technology projects to be as high as 50 percent. The state provides requirements to state agencies on how to procure, manage, and monitor contractors, and guidance on how to increase the probability of success for such projects. WSDOT was required to follow applicable state requirements and guidance for procurement and contractor managing and monitoring.

Washington State's Office of Financial Management requires state agencies to follow the *State Administrative and Accounting Manual* when selecting contractors, managing and monitoring contractor performance, and holding contractors accountable to fulfill the requirements of the contract.

WSDOT used an information technology purchased service contract for the Customer Service Center project. State guidance for these contracts advises purchasers to also include personal services contract provisions from Chapter 15 of the *State Administrative and Accounting Manual*¹ as needed. Because the tolling project contract included elements of both purchased and personal services, WSDOT was expected to follow the requirements of Chapter 15.40 of the manual for this project, specifically:

- Take a risk assessment approach to contracting by identifying and planning for risks associated with the project and with the contractors
- Proactively manage and monitor the contractor
- Hold the contractor accountable to the requirements of the contract

The State Technology Manual provides guidance to help state agencies assess the value of their planned information technology investments, to identify and plan for risks, and to increase the success of their acquisitions. The manual outlines the critical indicators of success that agencies should ensure are present when developing and procuring information technology projects. These critical indicators include having strong executive management support, an experienced project manager, skilled staff, a formal project management process, effective contractor management, and a realistic project scope.

The Institute of Internal Audit's Global Technology Audit Guides provided specific guidance for auditing information technology project management. *Guide 7: Information Technology Outsourcing* provides guidance on how to recognize and balance the benefits and risks of outsourcing projects through vendor selection and contractor management by clarifying roles and responsibilities, defining key contract terms, and establishing a process to monitor progress. *Guide 12: Auditing IT Projects* includes information on project management methods, and states that success requires:

- Having documented milestones for project tasks
- Clear roles and responsibilities
- A process for consistently monitoring project performance against a consistent set of deliverables and performance metrics
- Performing project risk assessments
- Developing mitigation actions and contingency plans to proactively manage and resolve identified risks.

1. As of January 1, 2013, the Department of Enterprise Services eliminated Chapter 15 of the *State Administrative and Accounting Manual*, and is developing new policies and procedures to guide the contracting activities.

Unclear roles and inadequate policies contributed to delays

WSDOT has successfully established a statewide all-electronic toll system that accommodates variable tolling on SR 520 as required by its federal grant. The system allows customers to use all state tolled facilities with a single pass and account. It is one of just a few statewide all-electronic tolling systems in the nation, and the first one to demand the comprehensive accounting functionality needed to track toll transactions by facility.

Developing and activating this system, however, proved challenging for the department. Washington's system became fully operational nine months behind schedule, on December 29, 2011, when it began collecting tolls on the SR 520 Bridge. In determining what lessons could be learned from the SR 520 tolling delay, we found WSDOT did not adequately address risks, proactively manage the project, or hold the vendor accountable to the terms of the contract. WSDOT identified numerous risks, but did not fully incorporate those risks into the project. The department did not always follow its project management plan or update it to reflect changes, and delayed applying damages for the vendor's poor performance.

Identifying and incorporating project risks

When WSDOT was preparing its request for proposal, all-electronic tolling technology and implementation procedures were not well developed, and few all-electronic systems in the United States handled the volume of traffic – over 100,000 trips a day – WSDOT expected on the SR 520 Bridge. As a result, the project presented inherent risks because the industry did not have experience designing such complex systems. **Exhibit 5** on the following page illustrates the complexity of WSDOT's requirements.

WSDOT used a Quality Assurance team, a workshop with other states that had developed all-electronic tolling systems, and a required investment plan to identify risks. Despite these efforts to identify risk, however, the knowledge gained was not fully incorporated into the request for proposals, the vendor selection, or project management.

The Quality Assurance team identified disagreements over nature of project

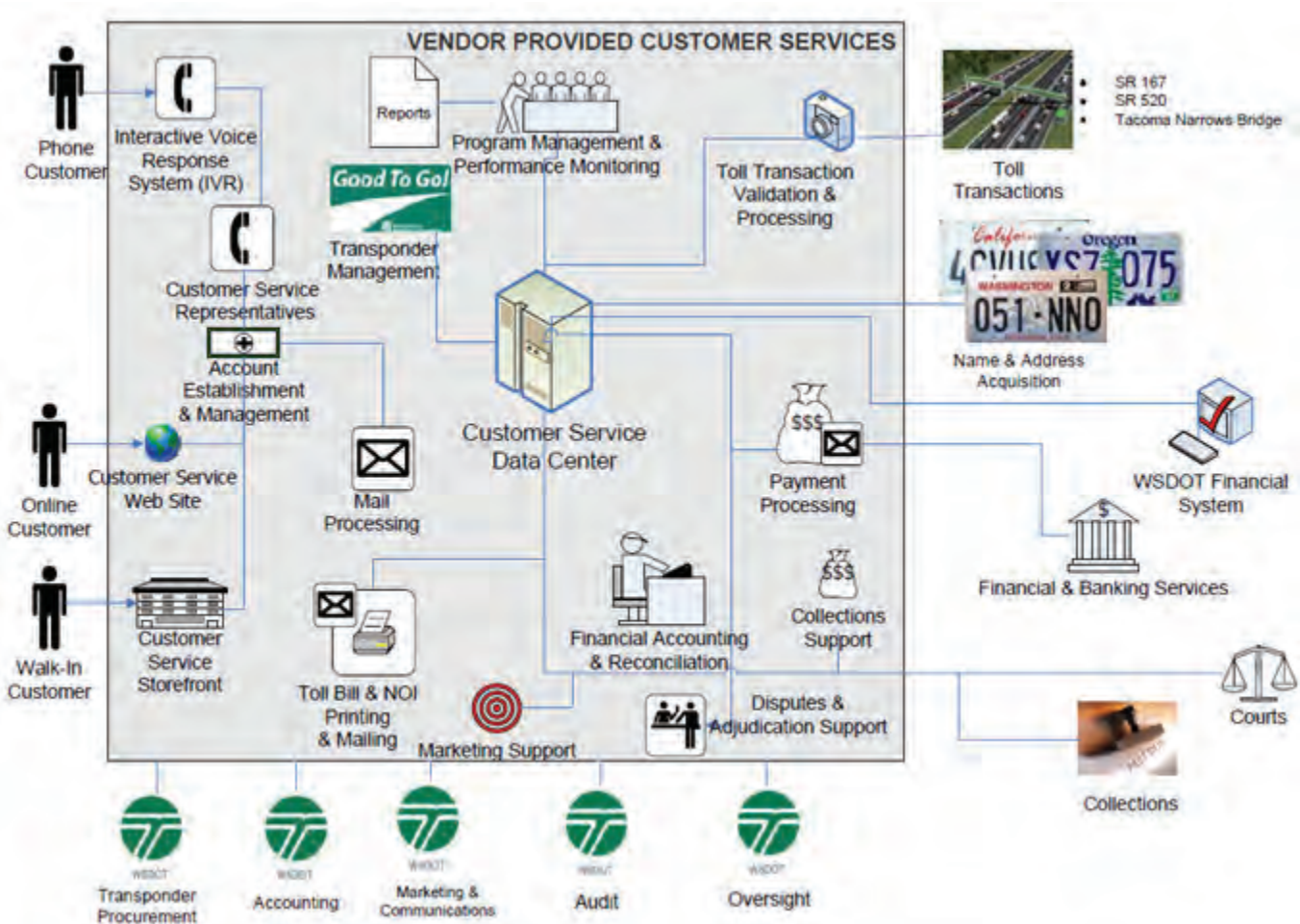
WSDOT hired a Quality Assurance team with expertise in information technology, tolling, and project management processes. The team started its work in March 2009, as WSDOT developed its request for proposals. The Quality Assurance team continually assessed the state of the project by comparing deliverables against established standards for quality, identifying project risks, recommending management strategies, and providing input. The Quality Assurance team identified some initial projects risks for WSDOT:

- The project lacks a clear project vision and objectives from the project sponsor.
- The request for proposals is being managed as an engineering services project – inappropriate because this is an information technology project.
- Project sponsorship is not inclusive of those that have an vested interest in project outcome as the project is perceived as compartmentalized within engineering even though it contains substantial information technology and business processes components.
- Requirements are not consistent in their level of detail as there seems to be a lack of agreement on what is needed for the finance and accounting component of the system.

The Quality Assurance team gave WSDOT monthly reports that noted when issues had been resolved. They also acknowledged the positive actions taken by WSDOT project managers to continue to move the project forward despite its many challenges.

Exhibit 5

WSDOT's request for proposals illustrated the project's complexity



Source: WSDOT's customer service center request for proposals.

Peer states highlighted the need for accounting expertise, clear communication

WSDOT held a workshop with peers from other states to learn from their experiences establishing and operating all-electronic tolling customer service centers. The workshop took place in May 2009 just before WSDOT issued the request for proposals. The group included representatives from the Florida Turnpike Authority, the Miami-Dade Expressway Authority, Colorado's E-470 Public Highway Authority, and the Texas Department of Transportation. Participants focused on accounting, reporting, and revenue recognition needs and pointed to many risks associated with all-electronic toll collection accounting systems. Workshop participants told WSDOT they needed to ensure:

- The system meets Generally Accepted Accounting Principles, which will be a challenge as the industry is more focused on operational processing rather than financial accountability
- The vendor has experience in governmental accounting
- There is clear communication between WSDOT departments, and between WSDOT and the vendor, to effectively establish business rules and implement processes
- WSDOT does not rely on the vendor's accounting expertise

WSDOT's Investment Plan identified the project's severity

WSDOT developed an Investment Plan outlining its project proposal and risks as required by the State Technology Manual and submitted it to the Information Services Board. The Board approved the plan before WSDOT issued its request for proposals in June 2009. The Investment Plan explained that WSDOT would be contracting with a vendor to provide services based on the vendor's existing systems, and that WSDOT would not own or design the system. WSDOT expected that vendors had all-electronic toll collection software that could be easily and quickly modified to meet their needs, which did not prove to be the case.

The Board assessed the project against its criteria and gave it a 'Level 2' rating for high severity and medium risk. In its Investment Plan, WSDOT suggested the project was 'high severity' because the system would interact with citizens, process sensitive data, was of interest to the Legislature, and failure to complete the project would result in the loss of federal funding, and 'medium risk' because it was based on proven technology, had strong executive sponsorship, and agency and vendor staff had a strong ability to mitigate project development risks.

Expert Review Panel identifies concerns

The Legislature recognized the inherent risk of developing a new all-electronic tolling system and WSDOT's limited experience with all-electronic tolling. Therefore it hired an Expert Review Panel to review WSDOT's strategies and request for proposals. The Expert Review Panel began its work after WSDOT released its request for proposals in June 2009. The panel's preliminary recommendations in September 2009 said the request for proposals had incomplete business rules, an extremely aggressive schedule, and too much reliance on post-pay toll enforcement rather than pre-paid accounts. As a result, WSDOT delayed the SR 520 Bridge tolling start deadline by five months and made other changes to incorporate the panel's feedback.

Despite clear indications of risk, WSDOT failed to fully address them

The results of these actions to identify risks to the project were not fully incorporated into the request for proposals or the process used to select a winning vendor. Disagreement among the project stakeholders over whether they were purchasing a toll collection service or developing a new technology system contributed to this omission. The belief that a system existed that would meet the department's unique needs proved to be a significant misjudgment with implications for the completion of the project.

Vendor selection process did not fully incorporate risks

WSDOT evaluated five vendor proposals. At the time, it was aware of many risks associated with the project, including the aggressive timeline and the need to hire a vendor with governmental accounting and information technology experience. Had WSDOT weighted high risk areas and better incorporated the advice of its risk area experts, the process could have resulted in the selection of a different vendor.

A vendor with a very low score in a high-risk area won the contract, in part by having the lowest price, as shown in **Exhibit 6**.

Exhibit 6
Vendor evaluation did not fully incorporate risks

Category	Maximum points	Winning vendor
Qualifications	100	25
Program Delivery Approach	350	42
Technical Approach (350 total)		
Toll Operations	87.5	22
Customer Service	87.5	13
Accounting/Finance	87.5	4.5
Information Technology	87.5	35
Subtotal	800	141.5
Price	200	200
Total	1,000	341.5

High risk areas were not given added weight in scoring.

Vendor scoring was not weighted according to risks

The proposal evaluation process split the points evenly among various technical components of the request for proposals. It was not weighted according to risks. As a result, the number of points assigned to high-risk areas was too low to significantly impact the overall score of any proposal. For example, while WSDOT identified the high risks associated with accounting, that area represented less than 10 percent of the total score.

Consensus scoring reduced the influence of subject area experts

WSDOT’s five-person vendor evaluation team included three members of the Toll Division, and one representative from information technology and one from accounting, two high risk areas. However, the consensus scoring method used to evaluate each proposal minimized the influence of the subject area experts.

Using consensus scoring, each member evaluated all aspects of each proposal and provided a score for the six categories. The team then agreed on a consensus score for each category of each proposal. Team members said it was very difficult to reach consensus on vendor scores, in part because the reviewers had very different backgrounds. Team members also stated that using consensus scoring led to lower scores for all proposals.

The procurement chair stated that if she had it to do again, she would establish a group for each technical aspect– information technology, accounting, toll operations, and customer service – to evaluate and score those specific proposal segments. This approach may have also provided better consideration of the known high risk areas.

Low scores indicated high risks

All five proposals received low scores. The highest-scoring proposals received less than 350 (35 percent) out of 1,000 points, which does not meet WSDOT's threshold for a 'very good' proposal.

The proposal that received the highest technical score came at a much higher price than all the other proposals. Because all vendors had low technical scores, the 200 points offered for price heavily influenced the overall scoring. The winning vendor received 18 percent of the possible points for its qualifications and technical approach, and 100 percent of the possible points for price. The final selection was based on the proposal scores and interviews with the vendors.

The winning vendor had its lowest score in the high risk area of accounting/financial approach: it received only 4.5 of the 87.5 possible points available. WSDOT engaged in additional discussions with the vendor to clarify these expectations. The vendor provided written confirmation that it understood the requirements and described how it would meet them.

At the time the winning vendor was selected, the Quality Assurance team noted that the low scores for all the proposals indicated a very high risk project no matter which vendor was selected, and suggested that additional schedule time would likely be needed due to the weaknesses in the proposals identified by the evaluators.

In its Lessons Learned report given to WSDOT near the end of the project, the Quality Assurance team said that low proposal scores indicate either the vendors are under-qualified, or the request for proposals is flawed. In such instances, the Quality Assurance team would recommend withdrawing the request for proposals and adjusting project expectations "...rather than moving forward with an ill-prepared and unqualified vendor." The Quality Assurance team also noted that the winning vendor drastically under-bid on its proposal, which should have indicated to WSDOT that the vendor did not fully understand the requirements, a fact that became apparent later.

The grant deadline did not allow enough time to start over

WSDOT knew the project deadline did not allow enough time to revise the request for proposals and conduct a new procurement. Rather than risk losing the federal grant funds, WSDOT signed a \$23 million contract in December 2009 with the winning vendor which included a SR 520 Bridge toll start date of March 19, 2011.

WSDOT accepted the risks associated with the low proposal score and the potential for issues with the vendor's technical accounting and finance approach. WSDOT believed the vendor could develop a system to meet its needs within the project timeline because they had created all-electronic tolling systems for other states.

Given the risks, WSDOT should have developed contingency plans, but did not

WSDOT project staff said they did not have contingency plans early on in the project because the vendor agreed it would be able to meet the requirements of the contract. The project director agreed that they did not have contingency plans. The Quality Assurance team said that given the known risks, the project team should have spent more time creating contingency plans that provided specific mitigations and triggers for when to use them.

WSDOT did include risks in its project management plan, but did not include fully-vetted alternatives to handle the most critical risks. While the project team continually tracked project risks, its efforts were not focused on contingencies. The mitigations were focused on monitoring the situation, reviewing work items, coordinating and meeting with vendor, and ensuring clear expectations.

WSDOT's proposal scoring guidance:

Excellent: 71-100%

Very Good: 41-70%

Good: 1-40%

Poor: 0%

WSDOT did not plan for the risks associated with the vendor developing a complex information technology system because it did not initially understand the gap between the vendor's existing system and what was specified in the contract. In addition, because WSDOT's Toll Division staff viewed the project as purchasing a service rather than developing an information technology system, which carries a higher level of risk, they were not as prepared as they could have been to address that level of project risk.

When the vendor began struggling to meet deadlines and showed signs it did not fully understand the accounting and finance requirements and the required level of integration with WSDOT's accounting system required by the contract, WSDOT responded to these risks on a case-by-case basis, and did not develop formal contingency plans or alternatives. The Quality Assurance team's Lessons Learned report said that WSDOT tried to mitigate risks and meet the deadline by becoming more involved in the contractor's work.

Managing the project

WSDOT did not consistently follow effective management practices

Successful project completion depends on effective and proactive project management. The State Administrative and Accounting Manual's Chapter 15 specifically required state agencies to proactively manage and monitor its contractors, and to take corrective action to hold them accountable. The Global Technology Audit Guides say effective methods to manage and monitor projects require using a defined management process to monitor progress. The defined process should include clear roles and responsibilities, clear communication and decision-making protocols, defined milestones, and a process to consistently monitor performance against deliverables and performance metrics.

The management process WSDOT established for the project included many elements required to monitor its progress. Unfortunately, WSDOT dropped or modified many of those elements when faced with the vendor's inability to complete project tasks on time and under the tight deadline. The process also lacked the detail needed to effectively monitor the vendor's progress, because it was not designed to monitor development of a complex information technology system.

Although roles and responsibilities, as well as communication and decision-making protocols, were outlined in the Project Management Plan, some internal WSDOT stakeholders did not follow them and instead communicated directly with the vendor. This created conflict within the project and resulted in sometimes contradictory direction to the vendor. WSDOT's internal conflicts and the vendor's performance problems resulted in significant project delays.

WSDOT did not follow or update its project management plan

WSDOT developed a project management process to manage the project and monitor the vendor's progress in its project management plan. The plan defined WSDOT and vendor roles and responsibilities, communication and decision-making protocols, as well as the tools to monitor progress.

A project manager with tolling industry experience was responsible for leading the project. The plan established the project manager as the primary point of contact between WSDOT and the vendor. WSDOT hired a general toll consultant to support its staff. **Exhibit 7** shows the five technical teams composed of WSDOT and consultant staff created to manage and review the vendor’s work in their specific technical area.

Project stakeholders were kept informed about project status through a series of committees established to provide project oversight and input on project decisions. For example, the Toll Executive Committee was led by the Toll Division Director and included WSDOT executives tasked with making policy decisions related to the project.

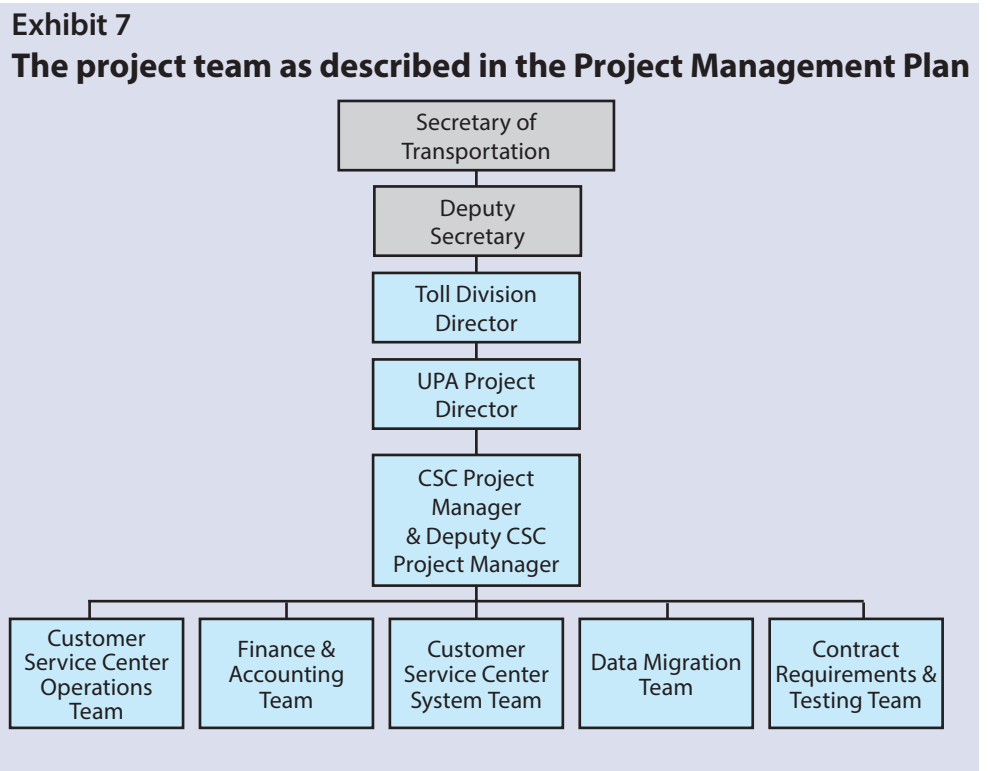
The plan established the process for monitoring the vendor’s work, including tools to track the schedule and monitor the deliverables. It also included holding weekly status meetings with the vendor to discuss the status of deliverables, potential project risks, and to develop a list of action items for WSDOT and the vendor. The results of these meetings were captured in weekly status reports.

Not following the plan created more project risks

As the project progressed and the vendor started missing deliverables dates, project staff did not always follow the plan. Project staff told us they viewed the plan as more of an outline than a strict plan. In summer 2010, as the vendor started missing deliverables dates, the vendor complained to WSDOT executives that the project team was requiring the vendor’s staff to attend too many meetings and ‘do too much.’

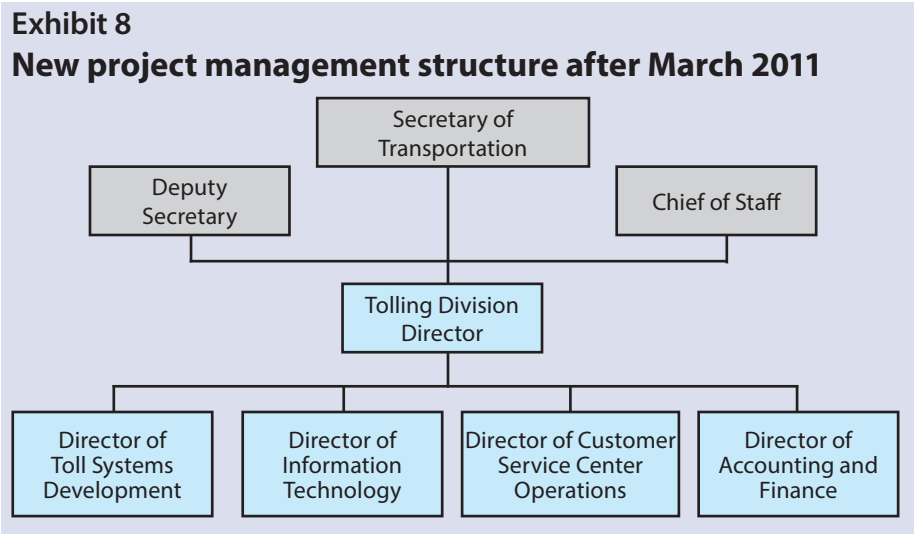
To avoid more delays, and to give the vendor more time to complete work, WSDOT started reducing its review of design documents. By September 2010, the Project Director notified the project team to stop all review of detailed design documents. Not reviewing all the critical detailed design documents can create problems by allowing the vendor to pursue software design before getting WSDOT’s approval, potentially creating the need for more work later.

The Quality Assurance team said in its Lessons Learned report that developing the plan “...was highly beneficial in setting expectations and getting alignment within the project team. Within a few months, the plan no longer reflected how the project was being carried out and the solid processes set forth in the document were not being routinely used by the team or enforced by project managers.” The Quality Assurance team concluded that not continuing to follow the project management process established in the plan had a negative impact on the management of the project.



WSDOT changed the project’s management structure

In March 2011, WSDOT changed the project’s management structure in response to continuing issues with the vendor’s performance and internal stakeholders’ concerns. **Exhibit 8** shows how the new structure elevated WSDOT’s Information Technology and Accounting and Financial Services directors into decision-making, rather than advisory, roles. The Director of Toll Systems and Development, as UPA Project Director responsible for execution of the grant projects, remained in that role. WSDOT staff explained that under this new structure, if lower level project staff could not resolve an issue, it would be elevated to the five directors shown in blue. If the directors could not resolve the issue, it would be elevated to the Deputy Secretary for resolution.



Although the purpose of this change was to help clarify expectations through more direct control of the project by internal stakeholders, WSDOT staff we talked to said the change actually caused further project delays as the vendor struggled to understand how to work within this new structure.

According to Quality Assurance team reports at the time, WSDOT staff and its consultants were actively engaged with the vendor’s staff to complete its work, and doing all they could to move the project forward. But the change in the project management structure brought new challenges as it became more difficult to get clear direction without a coordinated approach from the directors.

SR 520 Tolling delivery date was extended several times

WSDOT executives, managers, and staff involved in the project said they felt intense pressure from the aggressive schedule needed to meet the grant deadline. Because another project had lost its grant funding when it was unable to obtain tolling authority, WSDOT was concerned that its federal funds could be revoked if it did not meet the deadline.

The challenges WSDOT experienced meant that department officials had to ask the Federal Highway Administration (FHWA) for several extensions to the SR 520 Bridge toll start date. FHWA officials told us that although the grant program was designed for projects with short-term implementation schedules (around 18 months), they extended the SR 520 tolling start deadline because they understood the issues that can occur with a complex project. As long as WSDOT made progress, they told us they were willing to delay the start date.

WSDOT began collecting tolls on SR 520 on December 29, 2011, more than two years after the date in the original grant agreement.

Decision-making authority and vendor requirements not clearly established in the new process

The project plan documented the agreed-upon project management processes, but similar project management processes were not established under the new structure. For example, the plan was not updated to clarify roles and responsibilities and decision-making authority. As a result, it was unclear what decisions could be made by the new project leads. One project team leader told us that the four directors had to meet to discuss new issues that arose, and if they could not agree, they escalated them to the Toll Division Director to make the decision, which took time.

Along with this change in the project's management structure, and as system testing intensified, WSDOT stopped holding weekly status meetings with the vendor as prescribed in the plan; the vendor stopped keeping its schedule up to date as required. The lack of status meetings and schedule updates made it difficult for WSDOT to monitor the vendor's progress effectively.

The contract and project management plan limited vendor oversight

Several project team members said it was difficult to understand if the vendor was making progress. The plan was based on the high-level milestones and deliverables included in the contract, and did not have more detailed deliverables needed to monitor the development of the system's components. If the contract had been designed to develop an information technology system, it would have included more detailed deliverables.

The Project Director told us that, looking back, it would have been easier to monitor the vendor's progress had the contract been broken into more detailed deliverables with more checkpoints. WSDOT's Information Technology Director said the structure of the contract made it difficult to monitor progress because the vendor would not provide more detail on its progress when asked and would only report on progress of the milestones in the signed contract. That prevented WSDOT from seeing pieces of the system as the vendor was developing them.

Because WSDOT did not receive detailed work products, it took several months to learn that the vendor's plan to use its existing accounting technology would not work. When the vendor began to understand what was really required of the system's accounting and financial functionality, it started searching for an off-the-shelf software package it could use. When that was unsuccessful, the vendor decided it would have to develop one. This decision by the vendor was made more than six months into the contract.

Holding the vendor accountable

WSDOT did not use contract penalties effectively

The purpose of a performance-based contract is to compel the vendor to meet the requirements through effective management and monitoring of the vendor's work. WSDOT developed a performance-based contract for the project that included penalties tied to unsatisfactory or late completion of major milestones.

For example, the contract included financial damages of \$300,000 a week for each week the start of SR 520 tolling was delayed and \$10,000 a day for each day the start of Customer Service Center Operations was delayed. Had these damages been enforced, penalties could have exceeded \$12 million.

However, when the vendor started slipping on its deliverables and missing its milestones, WSDOT chose not to require them to pay the amounts stated in the contract. According to project team leaders, WSDOT's primary goal was to have an operational system to meet the grant deadline. WSDOT weighed the risks associated with applying full damages and feared that doing so would create further delay to the project's completion. WSDOT was also concerned about the vendor's financial stability because it was struggling to provide services for clients in other states. WSDOT believed the risk of not completing the project and starting tolling on SR 520 was too great for it to apply full damages.

WSDOT reduced its vendor payments to cover delay-related expenses

WSDOT reduced payments to the vendor by \$1.5 million between February 2011 and December 2011 to cover the department's expenses related to the system delays, in a contract change order agreed to by the vendor. These delay-related expenses included paying for toll enforcement, paying the previous system's vendor to extend its operation of their system for an additional period of time, and doing the vendor's work.

After the change order was signed, WSDOT delayed requiring the vendor to pay additional damages while it worked with them to complete the project. WSDOT project staff told us that they wanted to seek a reasonable settlement once the tolling system was fully operational.

In the summer of 2011, the Secretary of Transportation reconvened the Expert Review Panel to review the situation as the vendor was not meeting the contract's required schedule and deliverables. The panel recommended that WSDOT should consider options that supported its focus on completing the project and while also having a financial impact on the vendor. The panel's report said, "WSDOT should focus on getting the best possible system in the shortest time when determining damages."

WSDOT and the vendor reached a settlement

In June 2012, WSDOT signed an agreement with the vendor to settle claims associated with the project delays. WSDOT reported the value of the settlement as \$6.4 million. It included:

- Granting WSDOT the license to the system source code, software, and the background documents needed to operate the system, valued at \$4 million
- Reducing payments to the contractor by \$400,000 a year for the remaining two years of the contract, for a total of \$800,000 in reduced payments
- Reducing payments to the contractor by \$400,000 a year for four additional years if WSDOT agreed to extend the contract, for an additional \$1.6 million in reduced payments

The vendor was under pressure nationwide

After signing the contract with WSDOT to develop the system, the vendor won contracts in four other states. During this time, the vendor was also involved in lawsuits with one of its clients and subject to liquidated damages from another for failure to meet schedule and contract requirements. These pressures on the vendor resulted in reduced staff and resources for WSDOT's project and impacted the vendor's financial condition.

WSDOT lacked clear executive direction on toll project management

In establishing a statewide all-electronic toll collection system, WSDOT engaged in a complex and ambitious project that was very different from its typical construction projects. WSDOT lacked experience with this type of project, which increased the associated project risks.

WSDOT recognized it must evolve as an organization to manage such complex types of tolling projects. But it struggled with establishing clear roles and responsibilities, and determining who is responsible for making decisions about the projects. The policies and procedures needed to guide management of tolling projects, including the new division's interaction with other department divisions, had not yet been determined or established.

WSDOT establishes the Toll Division, but not clear roles, responsibilities, and decision-making authority for it

WSDOT established the Toll Division in 2009 to manage its tolling program. The new division evolved from the department's Urban Corridors Office, which had the responsibility of managing WSDOT's mega-projects. The Toll Division was tasked with toll system development and procurement, toll operations, and strategic financial planning for all toll facilities. This required it to interact with other department offices and divisions to accomplish its work.

Cross-functional collaboration in an organization requires executive leadership to provide clear expectations about desired outcomes and promote effective communication among partners. Project staff we talked to stated it was unclear what the roles and responsibilities of the Toll Division were, or how other WSDOT divisions and offices were to interact with the new division. Staff involved in the project had different views on the degree to which they were to be involved in the project, and did not know who was responsible for making decisions.

From the beginning, there was conflict among internal WSDOT project stakeholders. In October 2009, after the department established the Toll Division, the Quality Assurance team reported "...that some project team infrastructure issues remain unresolved as WSDOT shifts to the new tolling organization structure... including the need to clarify roles and shift from reactive decision-making processes to more deliberate, process-based decision-making processes, and a more strategic perspective for tolling."

Although WSDOT executives and the project sponsor were aware of these conflicts from early on in the project, they never effectively dealt with them, and conflicts persisted throughout the project. In July 2010, when it first became clear that the vendor was experiencing performance problems, the Quality Assurance team reported that communication between the project team and other functional groups within WSDOT remained a challenge, despite efforts by the project sponsor and project manager to include stakeholder input in their plans and deliberations.

WSDOT changes the project's management structure to no avail

In response to the concerns of WSDOT's internal stakeholders regarding the vendor's poor performance and its impact on project timelines, WSDOT executives changed the structure of the project's management team in March 2011. The new structure placed some internal stakeholders in decision-making roles instead of advisory roles.

While the intent of this change was to ensure greater stakeholder involvement in the project, the Toll Division's ownership of the project and its authority to make final decisions were not clear or supported by WSDOT's executive management. As the vendor continued to provide inadequate resources and staff to the project, its performance was not improved by receiving sometimes conflicting direction from multiple project leaders. WSDOT project staff we talked to stated they believed the change in the project's management structure did not improve the situation with the vendor and resulted in further project delays.

In April 2011, the Quality Assurance team recommended ending the use of four directors, as it seemed to be impeding progress on the project. The team recommended a single project manager again be placed in charge of the project. They also stated that "...little progress has been made towards resolving the conflict between Toll Division and its key stakeholders."

The Quality Assurance team suggested that the frustration of WSDOT internal stakeholders was based on their view that the Toll Division did not understand what they did or their needs. These issues were partly resolved when the Deputy Secretary became more involved by acting as the primary project manager and making decisions about how to proceed.

In August 2011, the reconvened Expert Review Panel had similar things to say about WSDOT's internal management issues on the project. In its view, "The authority for full decision-making has never been given to the Toll Division." The lack of authority provided to the Director and lack of clear ownership of the project by the Toll Division contributed to internal conflicts and project delays.

Intervention from the Deputy Secretary helped, but it was a not a long-term solution, according to the Expert Review Panel. It suggested the position of Toll Division Director needed to be strengthened to allow for the level of decision-making needed, and the possibility of incorporating the information technology and accounting and finance elements into the Toll Division in the long term.

Although the role of Toll Division Director was elevated to Assistant Secretary in November 2012, Toll Division staff told us that roles and responsibilities, and the decision-making authority of the Toll Division, are still unclear. The appointment of a new Secretary of Transportation in February 2013 provides an opportunity to improve clarity.

Toll Division lacked executive support in managing the vendor

The Toll Division's lack of experience and lack of executive support had a significant impact on its ability to manage its work and complete the project on time.

For example, we found that although WSDOT did have a project management process that defined project roles, responsibilities, communication and decision-making for the project, it was not followed or supported by department executives. This made it difficult for the Toll Division to incorporate internal stakeholders into the project, and hold others to the project management process established in its project management plan.

WSDOT executives also did not always provide the support the project team needed to be successful in managing the vendor. For example, project managers stated that they saw early on the vendor was struggling with the project schedule due to a lack of resources and they raised their concerns to department executives. The executive response was that it was too early in the project to be worried, according to project managers we interviewed.

In addition, when project team leaders put pressure on the vendor to follow the deliverables schedule and meet protocols established in the project management plan, the vendor complained to WSDOT executives, who asked the project team 'to back off,' resulting in fewer meetings and less frequent review of deliverables.

In its discussions with department management, the vendor also denied that there were issues with the project as the Tolling Division project team was suggesting. One of the members of the Quality Assurance team we talked to stated that the project management team made good decisions in its interactions with the vendor, but that those decisions were repeatedly superseded by poor decisions made by WSDOT executives.

Incorporating a new entity into a mature organization like WSDOT is difficult. This was particularly true for the Toll Division, which touched so many existing administrative functions within the department. In these situations, executives need to ensure that the new division has the support it needs to effectively build partnerships early on, and the new division needs to include its internal stakeholders early and incorporate their input.

While the Toll Division deliberately established a process to inform and seek input from internal stakeholders, it struggled to build effective partnerships throughout the project. Toll Division staff we talked to also stated that this was complicated by the fact that the authority of the Division was not clear within the department. The uniqueness and complexity of the project and the lack of executive support in the Toll Division's ownership of the project resulted in internal conflicts and delay.

Audit conclusions

Delays in completing the project resulted in tolls starting on SR 520 nine months later than originally planned. Based on the original contracted date of March 19, 2011, and the actual start date of December 29, 2011, the state lost the opportunity to collect an estimated \$40 million in tolls.

In addition to lost toll collections, delays and missteps related to the transfer of operations on the Tacoma Narrows Bridge to the new vendor led to a loss of public and legislative trust in the department's ability to manage its tolling program.

Because tolling is now central to the WSDOT's ability to pay for large infrastructure projects, such as SR 99 and I-405, it is important that the department continues its efforts to resolve these issues.

Our audit was designed to determine what lessons could be learned from WSDOT's experience with the project and how they might apply to future projects managed by the Toll Division.

We determined WSDOT did not fully follow the requirements of the State Administrative and Accounting Manual, including adequately planning for and managing project risk, proactively managing the project, and holding the vendor accountable throughout the project.

WSDOT's Toll Division lacked the executive support, the decision-making authority, and the policies and procedures needed to develop the statewide all-electronic tolling system and start tolling the SR 520 Bridge on schedule in March 2011. These management challenges were magnified by an ambitious project, uncertainty about its demands, and a tight deadline.

Audit recommendations

To improve WSDOT's management of future tolling projects and to minimize the risk of project delays, we recommend:

The Secretary ensure roles, responsibilities, and decision-making authority are clear for projects managed by the Toll Division.

Specifically, the Secretary needs to address the issues caused by the cross-functional nature of tolling projects which requires input and support from multiple divisions and offices. Clarifications should be documented in writing, and communicated to and followed by WSDOT executives, managers, and staff. Further, the Secretary and the executive team need to follow and support these clarified roles and responsibilities and hold staff accountable to them. If changes are needed, those changes need to be documented, communicated, and followed.

The Assistant Secretary for Tolling establish policies and procedures to guide the development and implementation of tolling projects.

These policies and procedures need to ensure state requirements and guidance are followed, including identifying and planning for risks throughout the project, proactively managing the project and monitoring the work of the contractor, and holding the contractor accountable to the contract requirements. In addition, the Assistant Secretary needs to ensure these policies and procedures are followed by holding all parties working on Toll Division projects accountable to them. They should be in writing, agreed to by executive management, communicated to applicable WSDOT managers and staff.

The Department of Transportation report on its progress implementing these recommendations to House and Senate Transportation Committees and the Office of Financial Management, as required in the 2013-2015 transportation budget.



STATE OF WASHINGTON

August 1, 2013

The Honorable Troy Kelley
Washington State Auditor
P.O. Box 40021
Olympia, WA 98504-0021

Dear Auditor Kelley:

Thank you for the opportunity to respond to the State Auditor's Office (SAO) Performance Audit on *Washington's Tolling Program: Lessons Learned from Project Delays*, which we received on July 18, 2013. We reviewed the report and provide our formal response below.

The Washington State Department of Transportation (WSDOT) places high importance on performance audits to help ensure that we make the best use of taxpayer dollars. Ongoing improvements are a key to our success, and we appreciate this audit report's contributions to our efforts.

Since its inception, WSDOT's Toll Division has transitioned from a start-up operation to a much more stable toll operation program. WSDOT is now viewed as a leader in all-electronic tolling, with other states seeking the financial functionality and reporting levels now in use at WSDOT.

While the audit report contains valuable information, it speaks broadly about the tolling program. The audit only reviewed one portion of the tolling program: contracting for back-office functions and customer service center operations. Other portions of the program — such as the roadway toll systems, the financial plan, and the migration of nearly 150,000 existing customer accounts from the old back-office system to the new system — were implemented in a much smoother fashion.

Launching an all-electronic tolling program for the SR 520 bridge and a new statewide back-office system would have been challenging for any agency. WSDOT had an aggressive implementation schedule that was required for the \$154 million federal grant. We worked through these challenges by holding the tolling vendor accountable and by being steadfast in our commitment to the citizens of Washington in achieving an all-electronic tolling program.

WSDOT appreciates the SAO's recommendations to further enhance the tolling program. The Toll Division is developing policies and procedures to streamline and improve future toll project implementations. These improvements are especially important as toll revenue augments gas tax revenue in financing major project construction, maintenance, and preservation.

Since tolling began on the SR 520 bridge in December 2011, \$67.4 million in toll revenues have been collected. Revenue and traffic continue to be on track to providing \$1 billion in funding to replace the vulnerable SR 520 bridge.

The Honorable Troy Kelley, State Auditor
August 1, 2013
Page 2

The audit report states that WSDOT lost the opportunity to collect \$40 million in tolls. WSDOT's evaluation concluded that the delayed start date for SR 520 tolling is not expected to affect planned toll charges, which are used to pay off 30- and 40-year bonds for construction of the new bridge. With a delayed start, bond repayments will shift out the same number of months that the start was delayed. In fact, the delay had a favorable effect on the terms of the bonds issued. Had tolling started earlier, the state would not have received the lower interest rates that will result in savings over the life of the bonds.

We appreciate your work on this report and the collaborative nature in which it was conducted. We will address your recommendations to make improvements to the tolling program and to ensure WSDOT continues its mission to keep people and business moving.

Sincerely,



Lynn Peterson
Secretary
WA State Department of Transportation



David Schumacher
Director
Office of Financial Management

Attachment

cc: Mary Alice Heuschel, Chief of Staff, Office of the Governor
Kelly Wicker, Executive Director for Internal Affairs, Office of the Governor
Ted Sturdevant, Executive Director for Legislative Affairs, Office of the Governor
Cam Gilmour, Deputy Secretary, WSDOT
Craig Stone, Assistant Secretary, Toll Division, WSDOT
Katy Taylor, Acting Chief of Staff, WSDOT
Tracy Guerin, Deputy Director, OFM
Wendy Korthuis-Smith, Director, Results Washington, Office of the Governor
Tammy Firkins, Results Washington, Office of the Governor
Ralph Thomas, Director of Communications, OFM
Robin Rettew, Senior Budget Assistant, OFM

OFFICIAL STATE CABINET AGENCY RESPONSE TO THE PERFORMANCE AUDIT ON WASHINGTON'S TOLLING PROGRAM: LESSONS LEARNED FROM PROJECT DELAYS

AUGUST 1, 2013

This coordinated management response to the audit report received on July 18, 2013, is provided by the Washington State Department of Transportation (WSDOT) and the Office of Financial Management.

Recommendation 1: The Secretary should clarify the roles, responsibilities, and decision-making authority for future tolling projects.

RESPONSE

The roles, responsibilities, and decision-making authority within WSDOT will be reviewed to ensure that future tolling projects directed at improving the major urban transportation corridors across the state are implemented efficiently and effectively.

Action Steps and Time Frame

- The Secretary's Office will issue an executive order that officially establishes the roles and responsibilities of the Toll Division and addresses cross-functional relationships. *December 31, 2013*
 - The Secretary's Office will issue an updated executive order for delegation of authority to clearly define the decision-making authority for the Toll Division. *December 31, 2013*
-

Recommendation 2: The Assistant Secretary for Tolling should establish policies and procedures to manage future tolling projects.

RESPONSE

WSDOT supports the recommendation to establish policies and procedures, as they will further strengthen the Toll Division's ability to coordinate future toll projects. The Toll Division is in the process of establishing a program management organization (PMO). The PMO is a group within the Toll Division that defines and maintains project management standards, as well as strives to standardize processes and introduce economies of repetition in the execution of projects. Additionally, the PMO will be the source of documentation, guidance, and metrics for project management. The Toll Division's goal for the PMO is to ensure the success of each project, standardize project management practices (including risk assessments and mitigation strategies), and lower overall costs.

The Toll Division will continue to work with other divisions in WSDOT who have a part in supporting toll project delivery to establish the process and procedures for how cross-functional units will work with the Toll Division to meet project needs and requirements.

Action Steps and Time Frame

- The Toll Division will work with other divisions in WSDOT to produce a project management guide, which will outline the tools, best practices, and documentation required for project management within the Toll Division and its cross-functional efforts within WSDOT. *March 31, 2014*
 - The Toll Division will work with other divisions in WSDOT to establish standards, processes, and procedures for cross-functional efforts within WSDOT. *March 31, 2014*
-

Recommendation 3: The Department should report to the Office of Financial Management and Legislature on its implementation of these recommendations, as required in the 2013-2015 transportation budget.

RESPONSE

WSDOT will work with the Office of Financial Management (OFM) and Legislature to determine the method used for reporting and will report as required.

Action Steps and Time Frame

- WSDOT will work with OFM and the Legislature on a method to report on the status of the Department's implementation of the audit's recommendation. *October 31, 2013*
- WSDOT will report the status of the recommendation. (Ongoing as required.) *December 31, 2013*

Appendix A: Initiative 900

Initiative 900, approved by Washington voters in 2005 and enacted into state law in 2006, authorized the State Auditor’s Office to conduct independent, comprehensive performance audits of state and local governments.

Specifically, the law directs the Auditor’s Office to “review and analyze the economy, efficiency, and effectiveness of the policies, management, fiscal affairs, and operations of state and local governments, agencies, programs, and accounts.” Performance audits are to be conducted according to U.S. General Accountability Office government auditing standards.

In addition, the law identifies nine elements that are to be considered within the scope of each performance audit. The State Auditor’s Office evaluates the relevance of all nine elements to each audit. The table below indicates which elements are addressed in the audit. Specific issues are discussed in the Results and Recommendations section of this report.

I-900 Element	Addressed in the audit
1. Identification of cost savings	Yes. The audit provided insights on how to avoid delays that have the potential to produce cost savings in future projects.
2. Identification of services that can be reduced or eliminated	No. The purpose of the audit was to identify lessons learned that could be applied to future tolling projects.
3. Identification of programs or services that can be transferred to the private sector	No. The audit did not include looking at outsourcing to the private sector.
4. Analysis of gaps or overlaps in programs or services and recommendations to correct gaps or overlaps	No. The audit did not focus on gaps or overlaps in programs or services.
5. Feasibility of pooling information technology systems within the department	No. The audit reviewed lessons learned from the implementation of a new information technology system. It did not look at pooling information systems.
6. Analysis of the roles and functions of the department, and recommendations to change or eliminate departmental roles or functions	Yes. The audit looked at the roles and responsibilities of staff involved in developing and implementing the statewide all-electronic toll system, and made recommendations to the Secretary to clarify department roles and responsibilities for the department’s function and for future tolling projects.
7. Recommendations for statutory or regulatory changes that may be necessary for the department to properly carry out its functions	No. We made recommendations that did not require statutory or regulatory changes.
8. Analysis of departmental performance, data performance measures, and self-assessment systems	Yes. The audit included analyzing the department’s process to manage the project and monitor its vendor’s performance.
9. Identification of best practices	Yes. The audit used industry best practices along with state regulations and guidance to identify opportunities to improve performance of future tolling projects.

Appendix B: Scope & Methodology

The purpose of our audit was to determine what lessons could be learned from WSDOT's experience developing its statewide all-electronic toll collection system. To determine what we would have expected WSDOT to do, we reviewed state laws, requirements, and guidance relevant to procurement and contracting, and information technology system development, procurement, and contracting. We also identified and reviewed relevant industry leading practices on what constitutes effective program management practices.

To gain an understanding of the project, we examined what WSDOT did to assess and plan for project risks, select a contractor, manage the project and monitor the work of the vendor, and hold the vendor accountable to the requirements of the contract. To do this, we:

- Reviewed the project Request for Proposal and documentation related to vendor selection
- Interviewed WSDOT executives, managers, project staff, and consultants
- Interviewed members of the Quality Assurance Team and the Expert Review Panel
- Reviewed relevant studies and reports including those prepared by WSDOT, the Quality Assurance Team, and the Expert Review Panel
- Reviewed WSDOT's Project Management Plan and other plans and tools used by staff to manage the project and monitor the contractor's performance
- Reviewed WSDOT's Settlement Agreement with the vendor and related documentation

We then compared what we found to what we would have expected WSDOT to have done and drew conclusions. Where we found gaps, we looked for potential causes based on interviews and review of relevant reports and project documentation.

We provided a draft of this report to WSDOT and incorporated the agency's comments where appropriate.

We conducted the audit under the authority of state laws (RCW 43.09.470), approved as Initiative 900 by Washington voters in 2005, and in accordance with generally accepted government auditing standards, prescribed by the U.S. Government Accountability Office. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusion based on our audit objectives. We believe the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Appendix A describes the provisions of Initiative 900 and how the audit addressed these provisions.

Appendix C: WSDOT's Tolling System

Good to Go! Pass

Washington's statewide all-electronic tolling system collects tolls by reading Good to Go! passes mounted on vehicles, or by taking photos of the vehicle's license plate.



Here's how all-electronic tolling works

When a vehicle approaches a toll collection area, lasers detect its approach and activate the toll collection equipment. As the vehicle passes under the toll collection equipment, it reads the Good To Go! pass. If the vehicle does not have a pass, a photo is taken of the front license plate, and a separate photo of the rear license plate of the vehicle. Sensors in the pavement determine the how many axles the vehicle has.

The system tracks the time, date, Good To Go! Pass or license plate, and the vehicle's number of axles as one transaction and transmits it instantaneously to the Customer Service Center. For Good To Go! transactions, the system double checks the crossing time and the number of axles to determine the toll rate and automatically deducts the toll from the customer's account.

For license plate (or "pay by plate") transactions, the system reads the license plate picture to determine whether the number is linked to a pre-paid account. If it is, the system checks the crossing time and axle information to determine the toll rate and automatically deducts the toll from the pre-paid account. If not, a bill is sent by mail to the registered vehicle owner for the toll amount. The owner has up to 80 days to pay the toll bill before a notice of civil penalty is issued.

State Route 520 Bridge



Tacoma Narrows Bridge



State Route 167 HOT Lanes



Photos courtesy of WSDOT.



Contact Information

The State Auditor's Office Mission

The State Auditor's Office independently serves the citizens of Washington by promoting accountability, fiscal integrity and openness in state and local government. Working with these governments and with citizens, we strive to ensure the efficient and effective use of public resources.



State Auditor Troy Kelley

360-902-0361

Auditor@sao.wa.gov

General Information

Website: www.sao.wa.gov

360-902-0370



David Dean

Deputy Director of
Performance Audit
360-725-9735

David.Dean@sao.wa.gov



Adam Wilson

Assistant Director of
Performance Audit
360-725-9726

Adam.Wilson@sao.wa.gov



Susan Hoffman

Principal Performance Auditor
360-725-9719

Susan.Hoffman@sao.wa.gov