



August 17, 2011

TO: Paula J. Hammond, P.E.
Secretary of Transportation

FROM: Jeri Sivertson, CFE *JKS*
Assistant Director of Internal Audit

SUBJECT: TNB Traffic & Revenue Reconciliations
Preliminary Recommendations & Follow Up Audit Work

We provided Dave Dye a draft report on August 3, 2011, documenting the results and recommendations of the work we completed, as of that date, on the Phase I Tolling Audit engagement. The draft report covered the TNB Traffic & Revenue Reconciliations through June 30, 2011. As a result of the discussion that Dave and Steve McKerney had regarding the draft report, Steve sent an email to Dave on August 5, 2011, outlining additional information we need to obtain, preliminary recommendations from the August 3, 2011, draft report, and our proposed timeline for completing additional work, as requested.

Below is the information that Steve provided to Dave Dye in his August 5 email.

Additional Information Needed

First, we agreed on a number of additional items that will be important to gather to ensure our report on TNB Tolling –Traffic and Revenue Reconciliations will include the information necessary for context, and to recognize work performed in the interim reconciliation process beyond our June 30, 2011, scope date.

1. Additional understanding of the interim traffic and revenue reconciliations (AVI and Non-AVI transactions), including recent changes in the last three weeks. We are going to determine what additional information we can add to the report to describe this interim reconciliation process.
2. Additional information on the contract requirement for ETCC to make WSDOT whole for acts or omissions related to collecting tolling revenue. This will also include gathering information on how ETCC has been held liable for aged transactions that are not collectable, WSDOT costs, and other credits issued to WSDOT.

3. Additional information on the dollar value of violation transactions, compared to the total revenue for TNB tolling for the same period, to help address the issue of materiality
4. Additional information about the Report Workshops that WSDOT and ETCC are conducting to develop the standard reports that will help automate and better support the traffic and revenue reconciliations.

Preliminary Recommendations

Also as discussed, based on audit work to date, here are our preliminary recommendations.

1. We recommend the WSDOT tolling project team accelerate the development and implementation of the standard reports and the query tool/facility identified in the contract. As an initial step in this process, the project team will need to clarify specific requirements for reports and data extractions needed for TNB reconciliation steps.
2. We recommend WSDOT work with ETCC to review the logic and workflows used in current ad hoc data queries, spreadsheets, and associated stopgap reconciliation procedures. The current data queries and spreadsheets are a stop gap measure to support WSDOT critical financial reporting needs, pending completion of the standard reports. To clarify, ad hoc reports and queries are, as implied, created and performed on an as-needed basis, and may be tested and run in a relatively informal way, whereas “standard reports” are part of the system – designed, tested, approved, and managed as integrated production-level software.
3. We recommend the Tolling project team continue to work with ETCC to finalize and communicate formal policies and procedures for the reconciliation of operational and financial data capture, processing, and reporting. Improvements should be made in the document publication process, particularly in version naming controls, to differentiate between versions.

Further, it will be important to address the recommendations above before beginning tolling on the SR520 Bridge, as the current traffic and revenue reconciliation effort does not appear reliable or scalable to the larger volume of transactions expected for SR520.

4. We recommend that, during the life of the contract, that WSDOT senior management regularly verify that the vendor is fulfilling the terms of the contract with regard to performance of reconciliation steps, and that the WSDOT finance team is performing only the monitoring and oversight functions.

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Timeline

I promised a timeline to complete the additional work. Based on the items and additional information we will be gathering, we estimate that we will have a revised draft report available to discuss with you by August 31, 2011. This revised timeline will also push out our previous time line to complete the Phase 1 work of this engagement.

While our work continues to provide you an independent and objective view of the topics we audit, input on our draft report was quite valuable in this case to help us provide context for our results and recommendations for the current tolling audit assignment.

With regard to the timeline that Steve provided Dave on August 5, 2011, Steve and I met with Dave on August 11, 2011, to discuss constraints we are encountering which will impede our being able to meet the August 31 deadline. Dave reaffirmed that we needed to work around these constraints and understood that this would delay the timeliness of our reporting. Dave, Steve, and I have a meeting set for August 26, 2011, to discuss the status of our work.

If you have any questions, please let me know.

JAS:ds

cc: Dave Dye, MS 47316
Steve Reinmuth, MS 47316
Steve McKerney, MS 47320
File



To: David Dye, P.E.
Deputy Secretary, Chief Operating Officer

From: Steven P. McKerney, CPA
Director of Internal Audit

Date: August 3, 2011

Subject: Consulting Engagement Report No. xxx-xxx
Tacoma Narrows Bridge Tolling – Traffic and Revenue Reconciliations

Background

In May 2011, the tolling vendor's Customer Service Center (CSC) issued approximately 18,000 Notices of Infraction (NOIs), as part of processing a backlog of toll transactions, which began in mid-March, a month after the Electronic Transaction Consultants Corporation (ETCC) took over processing of tolls for the Tacoma Narrows Bridge (TNB). Complaints from customers quickly began to gain attention from legislators and the media, with many customers complaining that their accounts were not being automatically replenished through credit cards and other means. Research by WSDOT and ETCC teams ensued to identify the causes and solutions to this problem.

WSDOT senior executives also requested an internal audit of the financial transactions around TNB tolling. Pursuant to that request and as part of the 2011 Internal Audit Work Plan, we are reviewing the internal controls over the financial transactions from tolling operations at the Tacoma Narrows Bridge (TNB). **This report contains our preliminary results, focused solely on reconciliation processing for traffic and revenue transactions. We have included recommendations in this report to assist with tolling for the TNB and help preparations for future tolling on SR520. We anticipate issuing additional reports as we complete the remaining aspects of our internal audit work.**

This report is intended solely for the use of the Washington State Department of Transportation (WSDOT) management and should not be used for any other purpose. This restriction is not intended to limit the distribution of this report, which, upon acceptance by the Office of the Secretary, is a matter of public record.

Scope

Our internal audit work addressed in this report focused on reconciliations of the reported traffic volumes with billing and collections and with TRAINS, the WSDOT accounting system. This activity is referred to as *Traffic and Revenue Reconciliations*. Our work covered the period of February 12, 2011, through June 30, 2011.

We did not test or validate the reconciliation data and/or performance, as the development of regular, repeatable reconciliation processes and procedures has not yet been completed. Further, we did not include other reconciliations in this portion of our work, such as: Bank Reconciliations, Inventory Reconciliations, and Accounts Receivable (A/R) Reconciliations, or End of Shift Reconciliations. We obtained our understanding of the reconciliation processes through inquiry of WSDOT Tolling Division and Accounting and Financial Services staff, as well as discussions with vendor management representatives (ETCC, and the TNB operations contractor, TransCore). We reviewed the CSC contract, relevant change orders and supporting documents¹, and documentation of the reconciliation process.

We conducted this engagement in accordance with the *International Standards for the Professional Practice of Internal Auditing*.

Engagement Results and Recommendations

Reconciliation Processes

Regular and consistent reconciliations are fundamental control activities for the tolling process. They should provide management assurance that tolling transactions are recorded and reported in a manner that is complete, accurate, and timely. The reconciliation process should be well-defined, tested, documented, and communicated across organizational boundaries, to help ensure its success. A complete set of reconciliation reports and objectives are specified in the Statewide CSC contract and supporting contract documents.

We spoke with key members of WSDOT, ETCC, and TransCore staff regarding the capture, transmission, and processing of TNB tolling data as it relates to the reconciliation process.

We found the processes in place over reconciliation activities do not adequately ensure that all financial data for TNB tolling will be recorded and reported accurately and timely.

Reports and data reporting capabilities provided by ETCC do not appear meet the requirements of the statewide CSC contract. The contract specifies a set of reports sufficient to “*audit, reconcile, and monitor the financial performance of the Statewide CSC.*” Further, the contract specifies tools supporting WSDOT creation of ad hoc queries and reporting of the CSC database. These components are not yet available and are expected in future project phases. Current capabilities do not support and sustain mechanized analysis and substantiation of reported traffic volumes and financial results.

¹ Request for Proposal, Statement of Work

The lack of sufficient reconciliation processes and tools is a fundamental problem that continues to plague WSDOT's operational and financial management teams, by the lack of timely, reliable, and accurate information essential to monitor the revenue stream, manage customer accounts, and maintain the tolling system operations. Specific issues with the reconciliations we reviewed are described below.

- We found that work performed to date by the combined WSDOT and ETCC financial teams to complete the TNB traffic and revenue reconciliations has not been performed with the required Standard Reports, but rather through ad hoc data-queries and spreadsheets, developed by ETCC analysts to gather and report data from their system. The logic in these tools has been created and modified iteratively to extract and summarize the toll transaction data needed to meet WSDOT reconciliation requirements. The results were evaluated by WSDOT manual review and analysis, with significant work from both groups to resolve variances and exceptions in each period.

The risk with relying on ad-hoc queries to this extent is that while they have been important work-around tools, the actual extraction and processing logic contained in these tools has not been captured in a formal and rigorous software management environment. The queries and spreadsheets have not been subjected to a thorough testing and user approval regime that such an environment would entail, so that there is limited assurance that all features are vetted by all interested parties. The queries and spreadsheet tools are not necessarily linked to the change management controls of the system as a whole, so that even approved system changes may affect the sources, content, and structure of the ad hoc tools' results without the users' knowledge. Finally, without the access protections of a software management process, the ad hoc tools are subject to unmanaged or undetected alteration, or accidental loss.

- We found, in addition to the completeness issues identified above, TNB traffic and revenue reconciliations were extensively delayed because of inadequate reporting tools. One effect of these delays and inadequate reporting tools was that the delayed processing in the toll violations subsystem and transaction backlog were not clearly presented as such to ETCC and WSDOT management. Automated tolling at TNB converted to ETCC on February 12, 2011. By the time reconciliation work identified the discrepancies, and analysis found their causes in late April, the violation backlog had grown to over 100,000 tolling violations (of over 5.4 million trips across the bridge in the same period). Another effect was that financial reporting requirements were put at risk of being incomplete or late.
- We found written policies and procedures for reconciliations remain in draft form, as ETCC's understanding of WSDOT business rules and reporting requirements evolves.

Recommendations

We recommend the WSDOT tolling project team accelerate the development and implementation of the standard reports and the query tool/facility identified in the contract. As an initial step in this process, the project team will need to clarify specific requirements for reports and data extractions needed for TNB reconciliation steps. These requirements would be similar if not identical for both permanent and the current temporary reconciliation processes.

We recommend WSDOT work with ETCC to review the logic and workflows used in current ad hoc data queries, spreadsheets, and associated stopgap reconciliation procedures. The current data queries and spreadsheets are a stop gap measure to support WSDOT critical financial reporting needs, pending completion of the standard reports. To clarify, ad hoc reports and queries are, as implied, created and performed on an as-needed basis, and may be tested and run in a relatively informal way, whereas “standard reports” are part of the system – designed, tested, approved, and managed as integrated production-level software.

We recommend the Tolling project team continue to work with ETCC to finalize and communicate formal policies and procedures for the reconciliation of operational and financial data capture, processing, and reporting. Improvements should be made in the document publication process, particularly in version naming controls, to differentiate between versions.

Strong consideration should also be given to breaking the Policies portion of the document away from the Procedures portion. Procedures are typically site-specific step-by-step instructions, which must evolve to fit changing circumstances, and Policies tend to be the expression of longer-term intent, governance principles, and senior management guidance.

Further, it will be important to address the recommendations above before beginning tolling on the SR520 Bridge, as the current traffic and revenue reconciliation effort does not appear reliable or scalable to the larger volume of transactions expected for SR520.

We recommend that, during the life of the contract, that WSDOT senior management regularly verify that the vendor is fulfilling the terms of the contract with regard to performance of reconciliation steps, and that the WSDOT finance team is performing only the monitoring and oversight functions.

Mr. Dye
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Management Response

We received the following responses from Department Management:

Here we present management's response in italics.

cc: Paula Hammond
Steve Reinmuth
Craig Stone
Amy Arnis
Bob Covington
Grant Rodeheaver

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