

**THE JOINT PROGRAM OFFICE'S  
MANAGEMENT OF THE INTELLIGENT  
TRANSPORTATION SYSTEMS PROGRAM  
NEEDS TO BE IMPROVED**

*Research and Innovative Technology Administration*

*Report Number: AV-2009-040*

*Date Issued: March 11, 2009*



**U.S. Department of  
Transportation**

Office of the Secretary  
of Transportation  
Office of Inspector General

# Memorandum

Subject: **ACTION:** The Joint Program Office's  
Management of the Intelligent Transportation  
Systems Program Needs To Be Improved  
Research and Innovative Technology  
Administration  
Report Number AV-2009-040

Date: March 11, 2009

From: Lou E. Dixon   
Assistant Inspector General  
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Reply to: JA-10  
Attn. of:

To: Research and Innovative Technology  
Administrator  
Director, Intelligent Transportation Systems  
Joint Program Office

In November 2007, the Administrator of the Research and Innovative Technology Administration (RITA) expressed concerns to our office about the Joint Program Office's (JPO) management and oversight of the Intelligent Transportation Systems (ITS) program. In particular, he questioned the JPO's ability to measure project results, manage program costs, and fulfill departmental goals.

Within the Department of Transportation (DOT), the JPO is under the direction of RITA but is administratively supported by the Federal Highway Administration (FHWA). The JPO serves as the primary advocate for the ITS program and is responsible for general program and budgetary oversight. The purpose of the ITS program is to improve transportation safety, mobility, and productivity by investing Federal funds in research initiatives.

Our audit objective was to assess whether the JPO is effectively managing and overseeing the ITS program by (a) tracking project results and outcomes, (b) managing the ITS budget and overseeing contracts, and (c) providing direction and cross-modal coordination. We conducted the audit from February 2008 through December 2008 in accordance with generally accepted government auditing standards prescribed by the Comptroller General of the United States. Exhibit A details our audit scope and methodology.

## BACKGROUND

Congress established the ITS program in 1991 and, at DOT's recommendation, the JPO in 1994. The JPO's early mission was to provide DOT-wide research, development, and operational testing of ITS systems. In 1998, Congress earmarked over \$900 million to deploy hundreds of ITS applications.<sup>1</sup> In support of this effort, Congress directed the JPO to develop guidance for evaluating the results of these deployments, collect safety and technical data, and make this information available via an electronic clearinghouse.

In 2005, Congress provided the JPO with an annual budget of \$110 million through fiscal year 2009.<sup>2</sup> In doing so, Congress directed the JPO to establish research initiatives in the following areas: (1) traffic management, (2) incidents, (3) transit, (4) freight, (5) road weather, (6) toll collection, (7) traveler information, (8) development of highway operations systems, and (9) remote sensing products. In 2006, the Secretary of Transportation added a 10th major initiative to the JPO's portfolio—the Urban Partnership Agreement program—a \$100 million, 3-year project using ITS technologies to relieve highway congestion in 6 major cities.

With a staff of 17 authorized positions, the JPO relies on contractors to conduct ITS research, and support contractors to assist in technical management, oversight, and program assessment.<sup>3</sup> For instance, the JPO uses support contractors to perform various administrative and oversight services, including evaluating programmatic results, collecting performance data, and managing publicly available ITS databases. Other contractors conduct project-specific activities, including system planning, design, execution, and testing.

## RESULTS IN BRIEF

Since its creation, the JPO has overseen the allocation and expenditure of more than \$3 billion for deploying ITS applications and researching new technologies. This investment has led to widespread use of various ITS systems, such as electronic tolling and centrally controlled traffic signals. During our review, senior DOT officials commended the JPO's new leadership and its efforts to coordinate various ITS research initiatives across the Department since being installed a year ago. Nevertheless, we identified three key areas for improvement in the JPO's management of the ITS research program. While the JPO recognizes

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<sup>1</sup> Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21), Pub. L. No. 105-178 (1998), provided funding for deploying over 700 ITS applications. In December 2007, Congress rescinded unused deployment funds for nearly 200 of these applications.

<sup>2</sup> Safe, Accountable, Flexible, Efficient Transportation Equity Act - A Legacy for Users (SAFETEA-LU), Pub. L. No. 109-59 (2005).

<sup>3</sup> Modal partners also assist in administering and overseeing ITS research and deployment projects. In some cases, daily oversight and project management are executed by modal administration staff in coordination with the JPO.

the need to address these areas and is taking corrective actions, much more remains to be done.

**First, the JPO needs to strengthen its assessment program for measuring ITS project results and eliminate costly, duplicative support contractor services.**

After Congress earmarked hundreds of ITS deployment projects in TEA-21 in 1998, the JPO established a project assessment program relying on the use of support contractors. These contractors generated ITS project evaluations and summaries for annual obligated costs averaging \$7.4 million. However, we found that the JPO had not provided adequate oversight of the assessment program. As a result, support contractors were producing evaluations and project summaries that were incomplete, costly, and outdated. These support contractors also provided duplicative services, such as resubmitting products written by other contractors and overseeing each other's work.

In addition, the JPO has been slow to downsize the assessment program even though the number of new ITS systems requiring evaluations has declined since earmarked deployments were discontinued in SAFETEA-LU in 2005. After we brought these issues to her attention, the JPO Director stated that she plans to restructure support contracts in 2009 to streamline operations and eliminate duplicative services. The JPO also recently hired a certified project management professional to oversee the restructured assessment program. Such actions, if properly implemented, should go far to improve oversight of the assessment program and reduce duplicative services; however, additional work will be needed to improve the quality of project evaluations and summaries.

**Second, the JPO needs to strengthen its budget management process by ensuring financial procedures and internal controls are fully documented and implemented.** The Office of Management and Budget (OMB) requires documented budget execution and internal control procedures to increase assurance that agency financial reports are reliable and operations are effective and efficient. During our audit, however, we found several areas where the JPO either had no procedures in place or had not documented them. For instance, the JPO had not documented procedures for overseeing and managing various budget activities. As a result, the JPO budget officer failed to conduct monthly financial reconciliations (a basic control procedure) during a 5-month period.

In addition, the JPO lacked internal controls governing the allocation of year-end funds, which have averaged nearly \$24 million, or over one-fifth of the entire JPO budget, for the last 5 fiscal years. Leaving large amounts of unallocated funds idle rather than assigning them to specific projects increases the risk that they could be improperly redirected or rescinded. Since we identified these issues, the new JPO Director has hired a consultant to assist the budget manager in documenting budget procedures and conducting financial reconciliations. The Director has also

implemented procedures for allocating year-end funds. While these procedures are good steps, the JPO still needs to document them to ensure its staff adheres to the new procedures instead of relying on previous practices.

We also found that the JPO lacks documented procedures for coordinating with FHWA to annually identify and prioritize the closure of old contracts and agreements with large remaining balances. Since 1999, DOT policy has emphasized the need to annually review contracts and agreements to ensure remaining funds were not left idle after projects were completed, canceled, or reduced in scope. We sampled 120 old contracts and agreements<sup>4</sup> and identified nearly \$20 million that needs to be de-obligated and put to better use or returned to the Treasury. This includes one project that was approved in June 2003, with \$1.78 million obligated, but canceled 3 months later. Although the JPO officials advised us that they subsequently asked FHWA to de-obligate these funds, more than 5 years later, the DOT accounting system showed the entire \$1.78 million was still obligated. The JPO, therefore, needs to coordinate with FHWA to identify and review old ITS contracts and agreements and de-obligate nearly \$20 million in unneeded funds.

**Third, the JPO needs to improve ITS project direction and coordination by adopting uniform project management standards, conducting benefit-cost analyses, and eliminating conflicts of interest among its contractors.** These steps would have reduced the risk of delays and cost overruns that have affected several ITS initiatives. For instance, in 2004, the JPO began its largest research program, Vehicle Infrastructure Integration (VII).<sup>5</sup> However, VII did not undergo several steps that standardized project management would have required, such as development of a project management plan. This plan would have required the VII program to have a clearly defined scope, deliverables, funding requirements, and milestones at project initiation. Instead, VII started with an unrealistically low budget estimate of \$49 million, which has risen to over \$100 million. Moreover, the program's proof-of-concept phase<sup>6</sup> encountered a schedule delay of nearly 1 year and a cost overrun of \$7.3 million. An early benefit-cost analysis would have helped the JPO provide a more realistic cost estimate for VII as well as determine the likelihood of a positive return on investment. The JPO is now restructuring VII to better define deliverables and establish clear milestones and is working with Volpe to identify anticipated benefits and costs.

We also found that the JPO needs to address conflicts of interest among its support contractors. These conflicts raise questions about the support contractors' abilities to render impartial advice and services to the ITS program. For instance, Citizant

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<sup>4</sup> These included interagency, cooperative, and grant agreements.

<sup>5</sup> The VII program is developing an advanced information infrastructure to be installed at intersections and in vehicles with the goal of improving safety and mobility by providing early warning to reduce vehicle crashes.

<sup>6</sup> "Proof of concept" establishes that an idea, invention, process, or business model is feasible.

provides technical support to Integrated Vehicle Based Safety Systems (IVBSS)<sup>7</sup> but is also involved in contract management and the JPO assessment program. Similarly, a new JPO-funded project, Safe Trip-21,<sup>8</sup> is being both administered and overseen by the Volpe Center. According to DOT Order 2300.8, Volpe cannot oversee projects that it administers. This situation creates a conflict of interest for Volpe and sets a troubling precedent because no other ITS research project is exempted from JPO oversight.

After we began this audit, the JPO initiated several corrective actions. For example, the JPO now requires monthly status reporting for all ITS projects. The JPO is also establishing a Program Management Office (PMO) to develop and enforce uniform standards for project management and contractor oversight. While these are good steps, follow through will be needed to ensure past project management weaknesses do not continue.

Our recommendations to the JPO include (1) strengthening the ITS assessment program to effectively measure and report the results of ITS research (i.e., benefits, costs, and lessons learned); (2) restructuring support contractor services to reduce costs and eliminate duplicative services; (3) documenting procedures to ensure effective budget execution, contract closeout, and de-obligation of prior-year funds; (4) coordinating with FHWA to de-obligate nearly \$20 million in unneeded funds on old contracts and agreements; and (5) strengthening project management by requiring uniform procedures, performance data, and benefit-cost analyses and eliminating conflicts of interest. We also recommend that the RITA Administrator transfer oversight of the Safe Trip-21 project from Volpe to the JPO to comply with DOT Order 2300.8. We are making a total of 10 recommendations, which are listed at page 19.

## **FINDINGS**

While ITS initiatives have achieved DOT-wide support, we found weaknesses in how the JPO measures project results, executes budget and contract procedures, and manages ITS research. Specifically, the JPO has not ensured that ITS project assessments—essential information for Congress and other decision makers—have been useful, timely, or complete. Without adequate oversight, the JPO's assessment program contractors were also producing costly, duplicative work. In addition, we found the JPO has historically operated without documented budget procedures, which offers little assurance that ITS project funds are expended effectively. As a result, ITS financial reports were not consistently reconciled in 2008, more than one-fifth of the JPO's annual budget was left unallocated for the

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<sup>7</sup> IVBSS is intended to demonstrate that vehicles equipped with warning sensors can help drivers avoid the most common types of deadly crashes.

<sup>8</sup> Safe Trip-21 is a demonstration project designed to prevent motor vehicle crashes by providing real-time safety warnings to drivers.

last 5 years, and nearly \$20 million in unneeded funds was left on old contracts and agreements. We also found that adopting uniform project management standards and benefit cost analyses may have mitigated cost overruns and delays experienced by several ITS initiatives.

To correct these issues, the JPO must restructure its assessment program, document budget procedures, and ensure unneeded funds are identified and de-obligated. In addition, the JPO must clearly define project management standards to reduce the risk of delays and cost overruns and ensure its contractors do not create conflicts of interest in the services they provide.

### **The JPO's Assessment Program Is Not Effectively Measuring ITS Project Results**

In 1998, Congress expanded the JPO's mission by funding hundreds of earmarked ITS deployment projects. Congress also required the JPO to develop guidance for evaluating the results of these deployments, collecting safety and technical data, and making this information available via an electronic clearinghouse. In addition to developing evaluation guidelines, the JPO established an extensive assessment program using six support contractors<sup>9</sup> at an annual cost of approximately \$7.4 million. According to the JPO, the assessment program had to rely on significant contractor support due to limited JPO staff resources (only 1 of 17 staff positions was assigned to oversee the assessment program) and the large number of required evaluations.

Under the assessment program, JPO support contractors produce evaluation reports<sup>10</sup> and project summaries of ITS deployments and distribute the resulting information on several contractor-operated websites or the National Transportation Library. Evaluation reports document the results of ITS project testing, and project summaries are synopses of the evaluation reports or other ITS-related documents.<sup>11</sup> The JPO issued a procedures guide in 2001 for completing evaluations. According to this guide, evaluations should address how ITS technology has improved safety, mobility, efficiency, productivity, or energy and the environment.

However, we found that support contractors' evaluations typically did not measure or report in compliance with the JPO guidelines. According to JPO officials, this was due in part to the difficulty in measuring the effects of deployed ITS technology and the many factors that can influence test results. Nevertheless, the

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<sup>9</sup> With a staff of only 17 positions, the JPO came to rely on six support contractors (i.e., Battelle, Citizant, Noblis, Oak Ridge, SAIC, and Volpe) to carry out its assessment program.

<sup>10</sup> In addition to evaluations produced by its support contractors, the JPO also receives self-evaluations from the recipients of ITS deployment funds.

<sup>11</sup> Thirty-seven percent (196 of 529) of ITS projects have been evaluated since 1998. Of those projects evaluated, less than half (87 of 196) have reports stored in the National Transportation Library.

JPO needs to provide closer oversight of contractor evaluation efforts, reinforce its own guidance to fulfill the congressional intent for the ITS program, and restructure its assessment program to eliminate costly, duplicative contractor services.

### *Assessment Program Support Contractors Are Not Producing Quality Evaluations and Summaries*

Many of the support contractors' evaluation reports and project summaries were too general or outdated to be useful or to justify the sizeable cost. Also, we found that these work products did not clearly show how ITS technologies may have improved safety, mobility, efficiency, productivity, or energy and the environment. As the following examples show, the absence of measurable and reportable results increases the burden on decision makers to determine which projects merit continued funding and whether congressional goals for the ITS program are being achieved.

- Under the Metropolitan Model Deployment Initiative, the New York Metropolitan area received a Federal grant of \$10.4 million to fund Trips 123, a web-based traveler information service. In 1998, a pre-deployment evaluation report criticized project management and highlighted breakdowns in communication between participants. However, when Trips 123 was finally deployed 7 years later in 2005, no final report was ever written. Without measurable and reportable results, any benefit from the \$10.4 million invested remains unknown.
- In June 2008, the JPO obligated \$500,000 for contractors to develop 60 new project summaries. Over a 3-month period, the support contractor, Noblis, delivered only 26 summaries. These summaries were too brief and did not provide a sufficient level of detail to be of value. Further, the summaries were based on previously published reports or journal articles that were otherwise available and merely restated general information from the source; no unique analysis was included, and several summaries were redundant. In fact, 4 of the 26 summaries were written from just one source document.

Because none of the summaries was based on new information and the quality was poor, we asked the JPO to clarify its criteria for reviewing and accepting Noblis's work. Rather than respond to us, the JPO directed our questions to a second support contractor, SAIC, who failed to provide evidence that the JPO possessed any criteria for acceptance or had even reviewed the summaries in question.

We also questioned Noblis about its project summaries, specifically the numbers of summaries produced in a performance period, and Noblis's tracking of labor hours associated with each summary. A Noblis official responded that its contract

is based on level of effort (i.e., billable hours) and that the JPO had not modified the contract to specify a level of performance. We subsequently reviewed a \$200,000 modification to this contract and found the contractor's claim to be accurate. The contract modification did not add any new deliverables or increase the scope of the contract's work. Without specifying what additional work was required, it is unclear what services or products the JPO received for the \$200,000, let alone whether these services or products were of any value.

Because of the large number of billable hours (i.e., 1,750) and the small number of summaries, we also asked Noblis to show evidence that hours billed were in fact spent working on those summaries. The contractor replied that it does not track labor hours against the number of summaries produced. In our view, JPO managers need to increase their oversight of products delivered by support contractors.

Without requiring useful information from its contractors, the JPO cannot know whether it has paid too much for project summaries. This type of situation is precisely why the OMB warns that a labor hours contract is not appropriate when it is possible to estimate the extent or duration of work.<sup>12</sup> Because the JPO can and does estimate the number of summaries, funding requirements, and completion timeframes, it has the ability to move to a performance-based contract structure and should consider doing so.

### *JPO Assessment Program Support Contractors Are Engaged in Duplicative Work*

We found that the JPO's assessment program support contractors provided services that were frequently duplicative—services that the JPO continues to pay for and should eliminate:

- First, multiple support contractors are summarizing evaluation reports written by other support contractors. This is unnecessary because each evaluation report already includes an executive summary written by the team that performed the evaluation.
- Second, ITS evaluations are stored in and made publicly available through DOT's National Transportation Library; yet, two JPO support contractors have created and maintained multiple databases to store the same project summaries. To help reduce costs, the JPO could explore the feasibility of storing all ITS information in the National Transportation Library.
- Third, multiple support contractors are reviewing the others' evaluations and project summaries. Since JPO managers are also responsible for reviewing

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<sup>12</sup> OMB Circular A-11 "Preparing, Submitting, and Executing the Budget," June 26, 2008.

their work, the support contractors' reviews are unnecessary. For example, Volpe project summaries are submitted to Noblis for review before being reviewed again by the JPO.

Further, we found several instances of multiple summaries produced from the same source documents. For example, SAIC evaluated a product called Advanced Parking Management Systems developed by the private sector that identifies empty parking spaces in garages. SAIC's report includes an executive summary, and the full report is available electronically through DOT's National Transportation Library. Nevertheless, Noblis summarized the SAIC report three times, posting its summaries to two Noblis-maintained ITS websites. Volpe produced four more summaries of the SAIC report, which were posted to a third Noblis-maintained ITS website. Finally, Oak Ridge summarized the SAIC report and posted it to an Oak Ridge-maintained ITS website. Since the full SAIC report is available from DOT's National Transportation Library, we found no compelling reason for eight additional summaries or for the JPO's continued support of multiple contractor-operated ITS websites.

During our review, we raised concerns about the assessment program support contractors' difficulty in producing measurable and reportable results and their duplicative services. JPO officials agreed with our concerns, noting that in May 2008 they had tasked Volpe with determining the benefits of the \$3 billion invested in ITS research and deployments since 1991. JPO officials also noted that they plan to restructure their support contracts as they begin expiring in 2009. The JPO also recently hired a certified project management professional to oversee the restructured assessment program. Such actions, if properly implemented, should go far to improve oversight of the assessment program and reduce duplicative services; however, additional work will be needed to improve the quality of project evaluations and summaries.

### **The JPO Lacks Documented Procedures for Managing Its Budget and Ensuring Funds Are Not Left Idle on Old Contracts and Agreements**

We found that the JPO needs to strengthen its budget management process in two key areas: (1) documenting procedures for budget management and internal controls and (2) identifying and prioritizing ITS contracts and agreements that need to be closed and have unneeded funds that should be de-obligated. OMB requires these budget management procedures to increase assurance that agency financial reports are reliable and operations are effective and efficient. For instance, when the previous JPO budget manager left in May 2008, the new manager had significant difficulty with budget management and execution due to a lack of documented procedures. As a result, the budget manager was unable to reconcile monthly financial reports—a basic control procedure required by OMB.

We also found that for the past 5 years, the JPO ended each fiscal year with significant amounts of unallocated funds. Yet, it had no documented internal controls to govern how those funds would be allocated to specific project accounts. Allocating year-end funds to specific accounts is necessary to reduce the risk of improper redirection later or exposing the funds to potential rescission. Additionally, DOT policy requires that old contracts and agreements be reviewed annually. However, we found the JPO lacks procedures for consistently identifying old ITS contracts and agreements that need to be closed out and have funds requiring de-obligation. Based on our sample, we identified nearly \$20 million in unneeded funds remaining on old contracts and agreements.

*The JPO Has Not Documented Procedures and Internal Controls To Reconcile Expenditures and Ensure Year-End Funds Are Obligated*

During our review of the JPO's budget management, we identified several key areas that would benefit from improved documentation and internal controls.

**First, we found that the JPO did not conduct monthly financial system reconciliations over a 5-month period.** According to OMB, monthly financial system reconciliation is a basic control procedure needed to ensure expenditures and obligations do not exceed an agency's budgetary authority and are accurate and reliable. Since May 2008, when its budget manager left, the JPO had not done reconciliations between Delphi and its Financial Management System. Recognizing this shortcoming, the JPO recently hired an experienced consultant to help train the new budget manager, develop a budget guide, and help reconcile fiscal year 2008 accounts. One positive outcome to date has been the identification of nearly \$13 million in unallocated funds that can now be put to better use on ITS projects. This situation demonstrates why documented control procedures are necessary to prevent the waste, loss, or misuse of JPO research funds.

**Second, we found that the JPO has not documented its policies for governing use of unobligated prior-year funds.** Instead of allocating remaining year-end funds, until recently, the JPO had been transferring the funds into a general account (a "contingency" fund) where funds were held until obligated to JPO projects. From fiscal years 2004 through 2008, this account averaged nearly \$24 million, or over one-fifth of the JPO annual budget (see table 1 on the next page). Allocating year-end funds to specific accounts is necessary to reduce the risk of the funds being improperly redirected or rescinded.

After we brought this issue to the JPO's attention, the Director began allocating unobligated funds to specific ITS research projects. The Director has also limited the contingency fund to approximately 10 percent of the JPO's annual budget (i.e., \$10 million). According to the Director, the contingency fund is needed to cover unanticipated new projects or funding shortfalls. While these steps represent improvements, the JPO still needs to ensure these procedural improvements are documented and consistently applied in the future.

<b>Fiscal Year</b>	<b>Dollar Amount</b>	<b>Percent of Annual Budget (\$110 million)</b>
September 2004	\$20,987,373	19.1%
September 2005	\$9,349,057	8.5%
September 2006	\$28,892,418	26.3%
September 2007	\$25,938,421	23.6%
September 2008	\$34,608,421	31.5%
5-Year Average	\$23,955,138	21.8%

Source: ITS JPO Financial Management System

**Third, we found that the JPO needs to improve its adherence to existing internal controls and document them so that funds are not obligated and expended without proper approval.** The RITA Administrator requires multiple RITA signatures, including his own, on purchase requests to commit JPO funds. However, the JPO made a \$200,000 obligation on May 2, 2008, to fund an Assessment Program task order without getting approval from the RITA Administrator or his designee. This was disconcerting because the Administrator had previously disapproved a \$475,000 request for this same Assessment Program task order just 3 months earlier.<sup>13</sup>

Upon further review, we found JPO managers had acquired the \$200,000 for the Assessment Program by authorizing an equal amount to be de-obligated from a different JPO account. According to the JPO Director, the Administrator's disapproval did not apply to reallocating previously obligated funds. Nevertheless, we believe that because the JPO was aware the Administrator had disapproved additional spending on this particular task order, JPO managers should have acquired RITA's approval before transferring the \$200,000.<sup>14</sup> Because the JPO budget manager was able to approve this purchase request without written senior management approval, this situation demonstrates the need for documented internal controls. The JPO Director stated that she now has a policy requiring that all purchase requests either have her or her deputy's signature. However, as with the other examples discussed above, this policy is not documented, and the JPO must do so to ensure the procedure is enforced.

<sup>13</sup> On January 31, 2008, the RITA Administrator disapproved a \$475,000 request for this task order. Two weeks later, he approved only \$300,000. The May 2, 2008, obligation of \$200,000 increased the total for this task order to \$500,000—more than the amount the Administrator originally disapproved.

<sup>14</sup> The JPO submitted a purchase request in October 2008 to obligate \$200,000 to replace the funds transferred from the first JPO account.

### *The JPO and FHWA Are Not Ensuring the Timely De-Obligation of Unneeded Funds on Old Contracts and Agreements*

We found that the JPO lacked procedures for identifying and prioritizing old ITS contracts and agreements that need to be closed by FHWA and have remaining funds that should be de-obligated. As a result, we estimated that nearly \$20 million remains on idle projects that could be de-obligated and put to better use or returned to the Treasury.

**The JPO and FHWA need to conduct annual reviews to close old contracts and agreements with large remaining balances.** Since 1999, DOT policy has emphasized the need to annually review contracts and agreements to ensure remaining funds were not left idle after projects were completed, canceled, or reduced in scope.<sup>15</sup> However, we found that neither the JPO nor FHWA were ensuring this policy was fully implemented. For example, while the JPO has requested that some old contracts and agreements be closed, FHWA has not always been responsive due to a large backlog of old FHWA and ITS contracts and agreements. As a result, significant amounts of funds remain on old contracts and agreements. The JPO, therefore, needs to follow up to ensure that it and FHWA consistently identify and prioritize for closure those old contracts and agreements with large remaining balances.

**The JPO needs to coordinate with FHWA to de-obligate nearly \$20 million on old ITS contracts and agreements.** Without regular, annual reviews of contracts and agreements, ITS funds are being left idle instead of being redirected to other ITS priorities or, after exceeding the appropriation period, returned to the Treasury. We reviewed a sample of 120 old ITS contracts and agreements (i.e., 3 or more years) and found that 56 should be deemed inactive.<sup>16</sup> We analyzed the 56 inactive contracts and agreements and found that more than \$11.7 million of \$46.8 million (or 25 percent) obligated was unneeded (see exhibit B for a list of these contracts and agreements).

For example, one project was approved in June 2003 with \$1.78 million obligated, but it was quickly canceled in September 2003. Although JPO officials stated that they subsequently asked FHWA to de-obligate these funds, more than 5 years later, the DOT accounting system showed the entire \$1.78 million was still obligated. Moreover, because the contracts and agreements we analyzed were part of a statistically valid sample selected from the entire universe of 447 active ITS contracts and agreements, we can project that there is an additional \$7.5 million in unneeded funds. The JPO needs to work with FHWA to ensure the timely de-obligation of all unneeded funds remaining on old contracts and agreements.

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<sup>15</sup> DOT Policy Memorandum "Validation of Obligations," December 28, 1999.

<sup>16</sup> Our sample was pulled from a universe of 447 active ITS contracts and agreements, some more than 10 years old.

In addition, we could not analyze six of the old contracts and agreements in our sample because FHWA Acquisition staff could not find the files. According to Delphi, these contracts and agreements are active and have a total of about \$734,600 still obligated (see exhibit C for a list of these contracts and agreements).

However, after a search in June 2008, FHWA reported it was unable to find the files. By December 2008, FHWA had still not located the files. Without contract files, FHWA cannot show that the obligations in Delphi were still needed. Thus, the JPO also needs to work with FHWA to de-obligate the \$734,600 unless it can find the missing files and verify the funds are still needed. Overall, we estimate nearly \$20 million is unneeded and should be de-obligated and put to better use or returned to the Treasury (see table 2).

<b>Category</b>	<b>Amount</b>
OIG Verified	\$11.7 million
OIG Statistical Inference	\$7.5 million
Miscellaneous	\$0.7 million
<b>TOTAL</b>	<b>\$19.9 million</b>

Source: OIG Analysis

**The JPO and FHWA need to validate \$3.9 million in questionable reimbursements.** While analyzing old agreements, we learned the Federal Transit Administration (FTA) drew down \$3.9 million in obligated funds from five old ITS agreements. For example, FTA made electronic draws on one agreement totaling \$581,406 in June 2008, even though the agreement file showed this project was canceled 3 years earlier in May 2005. Because the timing of the \$3.9 million in draws coincided with our review of the old agreements, we asked FTA to demonstrate that these draws were done in accordance with policy, rather than from concern that our office would recommend the funds be de-obligated. FTA officials responded that these draws were valid because they were reimbursements for previously paid invoices. However, FTA did not provide evidence that the invoices were associated with these five agreements or that the work occurred within the performance periods of the agreements. In fact, one of the agreements was canceled in 2005, the performance periods for the other four expired between 2004 and 2006, and each agreement had been idle without payment activity for 2 or more years.

If FTA considered these agreements active and expected to continue to draw funds, the Agency had ample opportunity to extend the performance periods via formal modifications during the years the agreements were idle. However, our review of agreement files shows no indication that FTA attempted to extend the performance periods before drawing the \$3.9 million. Instead, on June 30, 2008, FTA wrote to FHWA in an attempt to extend the performance periods after we identified the agreements as idle. Unless FTA can provide supporting documentation that the \$3.9 million is related to invoices showing work during the

performance period and associated with the five agreements, FTA should return these funds. Further, the JPO, as provider of the funds, and FHWA, as initiator of the agreements, need to carefully review any documentation FTA provides. If the documentation does not support the draws, FHWA needs to recover the \$3.9 million from FTA.

Until the JPO completes steps to document all budget procedures and internal controls and increases its efforts to close contracts and agreements with large remaining balances, decision makers will not have assurance that the JPO's budget is being effectively executed, financial reports are accurate, or that funds remaining on old contracts and agreements are still needed.

### **The JPO's Ability To Provide Effective Direction and Coordination of ITS Activities Is Hampered by Management Weaknesses**

The JPO's ability to effectively direct and coordinate ITS projects has been hampered by management weaknesses. Specifically, the JPO lacks uniform project management standards that would prevent projects from being approved without critical elements such as clearly defined statements of work, deliverables, and plans. Further, by not requiring benefit-cost analyses (BCAs) before new projects are approved, the JPO has either undertaken projects without determining the likelihood of a positive return on investment or significantly underestimated future costs. Additionally, the JPO has not provided sufficient oversight of its support contractors to prevent potential conflicts of interest. To address these weaknesses, the JPO needs to adopt uniform project management standards, require benefit-cost analyses where feasible, and ensure its contractors do not create conflicts of interest in the services they provide.

#### *The JPO's Effectiveness Is Hampered by a Lack of Uniform Project Management and Tracking Procedures*

The JPO lacks a comprehensive process for managing and tracking ITS research initiatives. In 2004, we reported on similar project management weaknesses at the Volpe Center, which is also part of RITA.<sup>17</sup> In response to our report, Volpe adopted a uniform approach advocated by the Project Management Institute. This guidance, which is published as the "Project Manager's Body of Knowledge," is generally recognized as good project management practices. To improve project management and tracking, the JPO needs to adopt a uniform project management process, similar to the process implemented by Volpe.

The JPO's largest research initiative, VII, is an example of a program that would have benefited from a uniform project management process. This program was

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<sup>17</sup> OIG Report Number SC-2004-100, "Volpe's Project Management Oversight," September 30, 2004. OIG reports are available on our website: [www.oig.dot.gov](http://www.oig.dot.gov).

initiated without undergoing several standardized project management steps, including development of a project management plan. Such a plan would have required the VII program to have a clearly defined scope, deliverables, funding requirements, and milestones at project initiation. Instead, VII began with an unrealistically low budget estimate of \$49 million, which has risen to over \$100 million. Moreover, the program's proof-of-concept phase encountered a schedule delay of nearly 1 year and a cost overrun of \$7.3 million. The significant growth in program costs, plus recognition that VII's deployment plan was not realistically affordable, led to JPO's recent decision to restructure the program. According to JPO officials, the VII restructuring will lead to developing a clear set of deliverables, an end date for research, and a realistic deployment plan. A uniform project management approach would have required these steps much earlier in the program.

The JPO could also benefit from requiring uniform performance reporting by its contractors. For example, some JPO contractors provide quarterly performance reports while others report their progress monthly. Regular contractor performance reporting is of critical importance to JPO managers because these reports provide status and trend data on projects and deliverables; further, these reports often *are* the deliverables that determine whether contractors should be paid. If a contractor bills monthly but provides quarterly reports, the JPO manager overseeing the project may not have all the information needed to make a good determination about payment. For example, during our review, we noted that one contractor's invoices were paid in July and August of 2008, but the quarterly progress report describing the work accomplished for these payments was not delivered until October 2008. At the time of payment, the JPO reviewing official had no indication of what was received in return.

About a year ago, the JPO—under new leadership—recognized that the current project management process was neither systematic nor uniform. To strengthen project management, the JPO established monthly project status tracking and reporting in early 2008. Previously, JPO project managers were not required to produce monthly status reports tracking cost, schedule, and performance data for JPO managers or other decision makers. The JPO is also establishing a program management office, or PMO. The PMO will help to standardize procedures, project documentation, performance data, and contract management. Finally, the JPO has hired a certified Project Management Professional and plans to certify several other managers.

Overall, to address project management weaknesses, the JPO needs to continue its progress toward increased uniformity, complete VII restructuring, and conclude the PMO contractor selection process. While we support the PMO in concept, we are concerned that the statement of work does not fully define staff roles and

responsibilities. We are also concerned that the PMO contract will be based on billable hours rather than performance. Because the JPO has not closely overseen other support contractors paid on billable hours, we believe the JPO should clearly define the duties, roles, and responsibilities of the PMO staff and use a performance-based contract to ensure the PMO costs are identified at the outset.

### *The JPO Does Not Conduct Benefit-Cost Analyses Before Initiating New ITS Research Projects*

Currently, neither DOT nor the JPO require a benefit-cost analysis, or BCA, before initiating a new ITS research project. However, OMB suggests using BCAs at key project decision points, as well as including alternative approaches to achieving project goals.<sup>18</sup> For example, a BCA could calculate the benefits and costs of replacing versus repairing an old bridge or funding another alternative, such as a tunnel. DOT's Chief Economist also supports the use of BCAs to justify investment in new projects (including ITS research) before senior decision makers commit DOT funding to a project.

According to the JPO Director, because research projects tend to be less defined than construction projects, it may prove more challenging to complete a BCA. Nevertheless, it is important that such efforts be taken whenever feasible. Given the sizeable DOT investment in ITS research, the JPO needs to conduct BCAs on all major ITS research projects as early in the process as possible and at key decision points. As noted by DOT's Chief Economist, such information will allow the JPO and senior DOT officials to make well-informed decisions on all future ITS research investments.

Problems with the JPO's largest research program, VII, demonstrate the importance of conducting BCAs for all major ITS research initiatives before investing significant resources. In 2005, the JPO commissioned the Volpe Center to conduct a BCA of the VII program—which had been initiated 1 year earlier. The decision to do a BCA was based on the realization that VII technology would cost more than \$1 billion per year to deploy. The JPO also needed to demonstrate to senior decision makers and stakeholders that projected benefits would exceed costs. After nearly 3 years, Volpe's draft BCA projected more than \$44 billion in benefits (e.g., reduced travel time, accidents, and injuries) versus \$30 billion in estimated deployment costs.<sup>19</sup> Unfortunately, this information came some 4 years after VII was approved, with a budget that is now more than \$100 million. Recognizing the significant funding challenges to VII, the JPO is working to restructure the program.

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<sup>18</sup> OMB Circular A-11 "Preparation, Submission and Execution of the Budget," June 26, 2008.

<sup>19</sup> Volpe's BCA for the VII program was titled: "Vehicle-Infrastructure Integration (VII) Initiative Benefit-Cost Analysis, April 2008. According to the JPO Director, this BCA underestimates the benefits and overestimated the costs for this program and is being reworked.

With the expiration of SAFETEA-LU and the resulting reauthorization in 2009, the JPO will be proposing new research initiatives as well as updating its 5-year ITS strategic plan. To assist decision makers and avoid costly mistakes, the JPO should make BCAs mandatory at all key decision points for future high-dollar ITS initiatives and particularly before committing significant DOT funds.

*The JPO Has Not Ensured Its Support Contractors Are Free of Conflicts of Interest*

Because the JPO has only a small number of staff, it relies heavily on contractors to provide a wide variety of technical and support services.<sup>20</sup> Government agencies typically use support contractors to obtain special knowledge and skills that may not be available through their existing Federal staff. In doing so, however, agencies must adhere to OMB guidelines, which prohibit support contractors from performing overlapping tasks that create conflicts of interest or that could be considered inherently governmental activities.<sup>21</sup>

During our review, we found that the JPO needs to address conflicts of interest among its support contractors.<sup>22</sup> These conflicts raise questions about the support contractors' abilities to render impartial advice and services to the ITS program. Since FY 2005, the JPO provided \$83 million to its six main support contractors for assessment, technical, and management support activities. Of this amount, the JPO expended \$22 million on program assessments. The amount of funding involved provides little incentive for these contractors to identify problems or cost savings in ITS projects while they are also benefitting by providing other technical and management support. For example:

- Noblis is involved in a variety of activities for which it provides both technical and management support for the VII and Cooperative Intersection Collision Avoidance System (CICAS) programs. However, Noblis is also involved in program assessment support, an activity that requires independence and objectivity. Examples of Noblis support services include preparing annual work plans, budgets, spending plans, and statements of work; evaluating contract proposals; monitoring contracts; and reviewing technical reports.
- Citizant is also involved with the assessment program, even though it provides contract management services, oversees other contractors' performance, and provides technical support to VII and IVBSS.

<sup>20</sup> The JPO is authorized 17 full-time equivalent staff. During our review, 3 positions were vacant.

<sup>21</sup> OMB Policy Letter 92-1 "Inherently Governmental Functions," September 23, 1992. An "inherently governmental function" is one so intimately related to public interest as to mandate performance by Government employees.

<sup>22</sup> OMB Policy Letter 93-1 "Management Oversight of Service Contracting," May 18, 1994. Under this policy, agency officials must ensure that any actual or potential conflicts of interest are identified and that appropriate steps are taken to avoid, neutralize, or mitigate them. Service contracts are not to be awarded to any individual or organization that is unable, or potentially unable, to render impartial advice or assistance to the Government.

- Volpe is involved in the assessment program while also supporting VII and managing and overseeing Safe Trip-21.<sup>23</sup> Also, Volpe has a vested interest in the VII program (providing technical and management support); yet, Volpe conducted the BCA, which should be conducted by an independent party.

In each of these cases, the contractor is expected to simultaneously provide objective and independent advice to the JPO while also receiving significant funds for overseeing and managing various JPO projects and activities. To avoid potential conflicts of interest, the JPO needs to ensure a clear separation of duties among the various support contractors so that those contractors involved in project assessment are not also involved in related ITS research activities. Moreover, because the JPO is defining the roles, responsibilities, and duties of its new Project Management Office contractor, it needs to ensure that it does not create additional conflicts of interest.

### *Current Oversight of Safe Trip-21 Represents Both an Infringement of JPO Responsibilities and a Conflict of Interest*

In October 2007, the RITA Administrator became concerned about the JPO's project management weaknesses as well as the cost of VII. The Administrator then directed the Volpe Center, not the JPO, to both manage and provide technical oversight for Safe Trip-21, a new ITS demonstration project administered by Volpe and funded by the JPO (i.e., \$10 million). Safe Trip-21 is designed to prevent motor vehicle crashes by providing real-time safety warnings to drivers.

This creates a troubling precedent because no other JPO-funded research project is exempted from JPO oversight. Moreover, by directing Volpe to manage Safe Trip-21 without JPO oversight, Volpe is overseeing itself, a violation of DOT Order 2300.8.<sup>24</sup> According to this order, the customer is responsible for activities such as (1) preparing statements of work, (2) defining desired outcomes, (3) overseeing the project, and (4) reviewing deliverables. While JPO officials told us that the RITA Administrator performed the above functions, we question whether the Administrator or his staff had the time or specific technical knowledge to adequately oversee Volpe's performance on Safe Trip-21.

To address project management weaknesses overall, the JPO needs to adopt a uniform approach to project management, require benefit-cost analyses for all new high-dollar projects when feasible, and increase contractor oversight. In particular, adopting uniform project management standards will make the JPO more effective because it will increase discipline among its project managers. The

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<sup>23</sup> Although Volpe is housed within RITA, we consider its operations and support to the JPO as being comparable to a contractor. Much like a contractor, Volpe is a fee-for-service organization, earning its revenue by performing various technical and support services for clients both within and outside DOT.

<sup>24</sup> DOT Order 2300.8. Financing Activities at the Department of Transportation/Research and Innovative Technology Administration's Volpe National Transportation Systems Center, September 27, 2007.

RITA Administrator also needs to transfer oversight responsibility for the Safe Trip-21 project to the JPO to avoid inherent conflicts of interest with Volpe's handling of this project and to comply with DOT Order 2300.8.

## **RECOMMENDATIONS**

To improve the effectiveness of ITS program management, we recommend that the JPO Director:

1. Strengthen the ITS assessment program and require that support contractors more effectively measure and report on the ITS research project results (i.e., benefits, costs, and lessons learned).
2. Restructure assessment program support service contracts to reduce costs and eliminate duplicative activities.
3. Establish and document procedures for ensuring effective budget execution, contract and agreement closeout, and de-obligation of prior-year funds.
4. Coordinate with FHWA to identify and review old ITS contracts and agreements and de-obligate nearly \$20 million in unneeded funds.
5. Coordinate with FHWA to review documentation supporting FTA's questionable \$3.9 million in reimbursements on five expired agreements and seek recovery of those funds that cannot be verified.
6. Strengthen project management by requiring uniform procedures, documentation, performance data, and timely benefit-cost analyses.
7. Ensure support contractor tasks are clearly defined and sufficiently separated to avoid any conflicts of interest.
8. Ensure the PMO's duties, roles, and responsibilities as well as deliverables are clearly defined in the contract.
9. Use performance-based (versus billable hours) contracts for all future support services where it is possible to estimate the extent or the duration of the work.

We also recommend that the RITA Administrator:

10. Transfer oversight of the Safe Trip-21 project from Volpe to the JPO to avoid conflicts of interest and to comply with DOT Order 2300.8.

## AGENCY COMMENTS AND OFFICE OF INSPECTOR GENERAL RESPONSE

We provided RITA and the JPO with our draft report on January 9, 2009. On January 15, 2009, RITA provided us with its formal response to our recommendations, which is included in its entirety in the appendix to this report. In addition, the JPO provided several technical comments, which we have addressed as appropriate in our final report.

RITA concurred with all 10 recommendations, and the JPO has begun corrective actions. While most of these actions are responsive, we are requesting additional information from the JPO to ensure all planned actions meet the intent of our recommendations.

The JPO has begun addressing recommendations 1 through 6. Specifically:

- To strengthen the ITS assessment program, the JPO has restructured the ITS organization and appointed a new team leader to oversee the program. To restructure support contractor services, the JPO is reviewing databases, support, and services associated with the assessment program to identify those that can be consolidated (recommendations 1 and 2).

We request that the JPO clarify how the assessment program will now more effectively measure and report ITS research results. In addition, the JPO's response stated that its contractors were not duplicating evaluations; however, this did not pertain to our finding, which focused on a separate product (contractors' duplicative *summaries* of these project evaluations).

- The JPO has begun documenting its financial processes and plans to complete this effort over the next several weeks. The JPO has not yet validated the \$20 million dollars we identified but is working with FHWA's Office of Acquisitions Management (HAAM) to close out old contracts and prioritize needed de-obligations. The JPO also verified that all five FTA reimbursements *are* old ITS JPO projects and will develop a process to address all charges in a timely manner. We consider these actions responsive to recommendations 3, 4, and 5.
- To implement uniform program management, the JPO is establishing a Project Management Office (PMO) for the entire research portfolio. The JPO has also hired a PMP-certified team leader for the Program Evaluation team. Finally, the JPO agreed to use benefit-cost analyses at appropriate points in the life of a research project. We consider these actions responsive to recommendation 6.

RITA and the JPO also cited planned actions to address recommendations 7 through 10:

- To correct its contract practices, the JPO will strengthen existing conflict of interest clauses that already apply to some contractors. In addition, the JPO will consult with HAAM to better identify potential conflicts of interest among its contractors. The JPO will also serve as the approving authority for the new PMO contractors' roles and responsibilities. We consider these actions responsive to recommendations 7 and 8.

Furthermore, the JPO will consult with HAAM to pursue performance-based contracts where they apply to the specific contract type (recommendation 9). We request that the JPO clarify how it will use performance-based contracts, given OMB's guidance that a labor hours contract is not appropriate when it is possible to estimate the extent or duration of work. Because the JPO can make such estimates for most projects, it has the ability to move to a largely performance-based contract structure and should consider doing so.

- The JPO stated that it will begin the update of the interagency agreement with Volpe to transfer oversight of Safe Trip-21 to the JPO in January 2009. This action is responsive to recommendation 10.

## **ACTIONS REQUIRED**

We consider the JPO's corrective actions for recommendations 3, 4, 5, 6, 7, 8, and 10 to be responsive; however, these recommendations will remain open pending completion of the actions. In accordance with DOT Order 8000.1C, we request a more detailed response from the JPO regarding recommendations 1, 2, and 9. We also request that the JPO provide target dates for completing all corrective actions and notify us when they are complete.

We appreciate the cooperation of RITA and JPO representatives during this audit. If you have any questions regarding this report, please contact me at (202) 366-0500, or Darren Murphy, Program Director, at (206) 220-6503.

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cc: RITA Acting Administrator  
RITA Audit Liaison  
Chief, FHWA Acquisitions  
FHWA Audit Liaison

## **EXHIBIT A. SCOPE AND METHODOLOGY**

We conducted this audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives. We conducted the audit between February 2008 and December 2008 and included such tests of procedures and records as we considered necessary, including those providing reasonable assurance of detecting abuse and illegal acts.

During the audit, we met with numerous DOT and non-DOT officials involved in the ITS program. Specifically, we interviewed key JPO officials, including the current Director and her two predecessors, the Deputy Director, the current and former Budget Managers, and various program and project managers. Within RITA, we interviewed the Administrator, Associate Administrator in the Office of Administration, Chief Counsel, and Chief Financial Officer. Within FHWA, we interviewed the Chief Financial Officer, Chief of Contracts Division, Chief of Acquisitions Division, and the Contracting Officer and Agreements Officers responsible for various ITS contracts and agreements. Within OST, we interviewed the Deputy Assistant Secretary for Transportation Policy, the Senior Budget Examiner, and Chief Economist. We also interviewed various DOT officials within FTA, the Maritime Administration, and the National Highway Traffic Safety Administration (NHTSA). Finally, we interviewed the JPO's six main support contractors: Citizant, Battelle, Noblis, Oak Ridge National Laboratory, Science Appliance International Corporation (SAIC), and the Volpe Center. We also interviewed ITS America, Washington State DOT, and the National Oceanic and Atmospheric Administration (NOAA).<sup>25</sup>

To assess the JPO's ability to track project results and outcomes, we reviewed relevant laws, regulations, policies, and memoranda of understanding. We reviewed the organizational structure of JPO's assessment program and interviewed key participants, including representatives from each of the six main support contractors. We reviewed and analyzed documents from the National Transportation Library, as well as project summaries and evaluation reports from support contractor databases. We also gathered and analyzed numerous project- and contract-related documents, contractor performance reports, and JPO monthly status reports.

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<sup>25</sup> Once completed, the JPO's Clarus program will be transferred to the National Weather Service, an agency within NOAA.

To assess the JPO's ability to manage the ITS budget, we reviewed budget, financial, and internal control policies. We analyzed financial documents from Delphi and the JPO's financial management system, funding memos, purchase requests, invoices, and relevant supporting documentation. To verify the accuracy of financial data, we compared and analyzed financial reports used to track budgeted, obligated, and expended funds.

To assess the effectiveness of JPO's contract oversight, we selected a statistical sample of 120 active contracts and agreements more than 3 years old to determine whether obligated funds were needed. From this sample, we identified and analyzed 56 contracts and agreements that either had expired or showed no payment activity for at least 3 years. From this list of the 56 contracts and agreements, we reviewed relevant files and interviewed JPO, FHWA, and FTA officials to verify what funds were no longer needed and required de-obligation.

To assess the JPO's ability to provide direction and cross-modal coordination, we compared congressional guidance and OMB's planning criteria with the JPO's 5-year strategic plan. We attended an ITS Strategic Planning Group meeting and a cross-modal Urban Partnership Agreement coordination meeting and interviewed relevant participants. To assess the importance of uniform project management, we identified criteria from the Project Management Institute's Project Management Body of Knowledge and contacted the Volpe Center's Program Management Office. Lastly, we analyzed monthly status reports and other performance documents from the JPO, FHWA, NHTSA, and Volpe, which covered multiple ITS projects, including VII, Clarus, and Safe Trip-21.

To assess the importance of conducting benefit-cost analyses, we identified OMB criteria, interviewed the DOT's Chief Economist, and analyzed the benefit-cost analysis for the VII program.

Finally, to determine whether JPO support contractors complied with OMB policies covering inherently governmental activities and conflicts of interest, we compared OMB criteria with contractors' statements of work and progress reports.

**EXHIBIT B. CONTRACTS AND AGREEMENTS THAT NEED TO  
BE CLOSED WITH ASSOCIATED FUNDS DE-OBLIGATED**

<b>No.</b>	<b>Contract or Agreement Number</b>	<b>Year Signed</b>	<b>Remaining Obligations</b>
1	DTFH61-93-X-00017	1993	\$28,034.22
2	DTFH61-94-C-00207	1994	\$54,711.00
3	DTFH61-95-Y-00105	1995	\$130,793.11
4	DTFH61-95-Y-00105	1995	\$125,000.00
5	DTFH61-96-Y-30059	1996	\$1,057.92
6	DTFH61-96-C-00103	1996	\$11,604.47
7	DTFH61-96-C-00047	1996	\$10,000.00
8	DTFH61-96-C-00094	1996	\$23,848.74
9	DTFH61-97-Y-30124	1997	\$1,186.00
10	DTFH61-98-C-00059	1998	\$40,000.00
11	DTFH61-98-C-00073	1998	\$105,439.00
12	DTFH61-98-C-00073	1998	\$2,673.45
13	DTFH61-98-C-00073	1998	\$23,243.00
14	DTFH61-98-C-00079	1998	\$1,419.89
15	DTFH61-99-T-56009	1999	\$2,113.01
16	DTFH61-99-X-00101	1999	\$213,874.74
17	DTFH61-99-Y-30078*	1999	\$205,796.09
18	DTFH61-99-X-00101	1999	\$394,487.01
19	DTFH61-00-Y-30124	2000	\$110,000.00
20	DTFH61-00-X-00006	2000	\$93,437.00
21	DTFH61-00-X-00006	2000	\$61,113.00
22	DTFH61-00-X-00006	2000	\$52,994.00
23	DTFH61-00-Y-30106*	2000	\$537,708.88
24	DTFH61-00-Y-30014	2000	\$566,061.31
25	DTFH61-C-01-00036	2001	\$115,307.16
26	DTFH61-01-C-00181	2001	\$38,398.10
27	DTFH61-01-T-56030	2001	\$28,504.31
28	DTFH61-01-D-00105	2001	\$145,626.87
29	DTFH61-01-Y-30120*	2001	\$651,852.10
30	DTFH61-01-C-00183	2001	\$12,053.00
31	DTFH61-01-C-00005	2001	\$26,982.00
32	DTFH61-01-T-56035	2001	\$38,539.18
33	DTFH61-01-Y-30120	2001	\$275,000.00
34	DTFH61-01-T-56036	2001	\$8,929.00
35	DTFH61-02-X-00104	2002	\$266,696.23
36	DTFH61-02-X-00011	2002	\$86,339.17

(Table continues on page 24.)

**Exhibit B. Contracts and Agreements That Need To Be Closed With  
Associated Funds De-Obligated**

<b>No.</b>	<b>Contract or Agreement Number</b>	<b>Year Signed</b>	<b>Remaining Obligations</b>
37	DTFH61-03-X-30112*	2003	\$700,307.80
38	DTFH61-03-X-30125	2003	\$200,000.00
39	DTFH61-03-X-30129	2003	\$1,779,928.00
40	DTFH61-03-X-30108	2003	\$150,000.00
41	DTFH61-03-X-30103	2003	\$500,000.00
42	DTFH61-03-X-30124	2003	\$443,000.00
43	DTFH61-03-X-30128	2003	\$700,000.00
44	DTFH61-03-X-30127	2003	\$250,000.00
45	DTFH61-04-X-30063	2004	\$147,360.00
46	DTFH61-04-X-30044	2004	\$1,205,000.00
47	DTFH61-04-T-86015	2004	\$42,426.16
48	DTFH61-05-D-00002	2005	\$1,533.60
49	DTFH61-05-D-00002	2005	\$9,042.03
50	DTFH61-05-D-00002	2005	\$1,842.28
51	DTFH61-05-D-00002	2005	\$26,571.93
52	DTFH61-05-D-00002	2005	\$5,757.15
53	DTFH61-05-D-00002	2005	\$8,274.31
54	DTFH61-05-X-30050*	2005	\$352,672.47
55	DTFH61-05-X-30025	2005	\$465,065.00
56	DTFH61-05-X-30048	2005	\$250,000.00
	<b>Total:</b>		<b>\$11,729,600.69</b>

\* In addition to funds remaining on these five old agreements, we question FTA's receipt of \$3.9 million in reimbursements years after the period of performance for these agreements had expired.

**Exhibit B. Contracts and Agreements That Need To Be Closed With Associated Funds De-Obligated**

**EXHIBIT C. SIX OLD CONTRACTS AND AGREEMENTS THAT  
NEED TO BE CLOSED WITH FUNDS DE-OBLIGATED**

<b>No.</b>	<b>Agreement Number or Recipient</b>	<b>Year Signed</b>	<b>Remaining Obligations</b>
1	DTFH61-01-SA-0010	2001	\$99,632.00
2	DTFH61-03-Y-30020	2003	\$130,000.00
3	DTFH61-03-SA-0388	2003	\$250,000.00
4	DTFH61-03-Y-00001	2003	\$192,000.00
5	DTFH61-04-T-56004	2004	\$63,000.00
6	National Academy of Sciences	Unknown	\$8.19
	<b>Total:</b>		<b>\$734,640.19</b>

**EXHIBIT D. MAJOR CONTRIBUTORS TO THIS REPORT**

<b><u>Name</u></b>	<b><u>Title</u></b>
Darren Murphy	Program Director
Charles Ward	Project Manager
Deborah Kloppenburg	Senior Auditor
Diane Brattain	Auditor
Gloria Echols	Auditor
Earl Kindley	Auditor
Teri Vogliardo	Analyst
Susan Zimmerman	Auditor
Petra Swartzlander	Senior Statistician
Andrea Nossaman	Writer-Editor

## APPENDIX. AGENCY COMMENTS



U.S. Department  
of Transportation  
**Research and  
Innovative Technology  
Administration**

The Administrator

1200 New Jersey Ave. S.E.  
Washington, DC 20590

January 15, 2009

Lou E. Dixon  
Assistant Inspector General for Aviation  
and Special Program Audits  
1200 New Jersey Ave, SE  
Room W76-481  
Washington, D.C. 20590

Dear Ms. Dixon,

On behalf of the Research and Innovative Technology Administration (RITA), I would like to thank the Office of the Inspector General (OIG) for executing the baseline audit of the Intelligent Transportation Systems (ITS) Joint Program Office (JPO) and for delivering the Draft Report. In short, RITA strongly concurs with the OIG recommendations. Due to the diligence, hard work, and professionalism of the OIG staff, as well as the changes that have already been implemented within the ITS JPO, we feel confident that the ITS JPO is well-positioned to continue efforts to strengthen overall management practices and implement these OIG recommendations.

Last December, the ITS Program was directed to begin the adoption of rigorous and disciplined project management principles, restructure the Vehicle Infrastructure Initiative (VII) initiative, develop a focused safety research agenda, and restructure the organization to be better aligned to achieve these objectives. I am pleased to report that these efforts have paid dividends. For example, the ITS JPO has reorganized its entire office structure, hired new PMP-certified staff, implemented a Project Management Office (PMO) with a contract award imminent, and restructured and rebranded the VII initiative - now known as IntelliDrive. As well, the ITS JPO has developed a central focus on safety to achieve measurable improvements in safety for the general public.

The efforts of the OIG staff will be critical to the continued efforts of the ITS JPO over the next year in making needed improvements to meet their important mission. Among one of my last actions as RITA Administrator, the ITS Program has been directed to immediately begin the implementation of all the OIG recommendations.

Regards,

Paul R. Brubaker

**Appendix. Agency Comments**

**RITA Response to the Office of Inspector General Audit Draft Report dated  
January 9, 2009**

This document reflects the Intelligent Transportation Systems (ITS) Joint Program Office (JPO) response to the Draft Report prepared by the Office of Inspector General (IG).

**Executive Summary Response:**

In general, the ITS JPO strongly concurs with the overall IG recommendations. The ITS JPO fully supports the adoption of nationally-recognized project management best practices, documenting internal procedures, restructuring the program assessment area, closing out old contracts, and eliminating potential conflicts of interest, to name but a few recommendations. The ITS JPO feels that implementing these recommendations will yield substantial benefits to the ITS program and will improve overall research results. The ITS JPO would like to recognize and thank the IG staff for their dedication and hard work in completing their audit. The IG staff spent considerable time on a complex program that has spanned 17 years across three authorizing legislations, with numerous contract vehicles and projects. Due to the scope and diversity of the program, the IG staff was faced with an extremely large workload. They worked diligently to conduct numerous interviews, research vast amounts of data, and spent long hours to complete this report in a compressed timeframe.

As noted in the IG report, the ITS JPO has already begun to implement several improvements to correct a number of the issues identified in the report. Going forward, the ITS JPO will also work with the other DOT offices identified in the report to address the multi-modal financial and contractual issues. The ITS JPO looks forward to continuing efforts to address the areas for improvement highlighted in the IG report.

Listed below are the specific responses to each of the individual IG recommendations presented on page 19 of the report, along with a brief description of the planned actions to implement the recommendations. Additionally, to assist with the accuracy and thoroughness of this report, all technical corrections and clarifying information are contained in Addendum A.

**IG Recommendations Response:**

**The ITS JPO has the following response to the IG recommendations:**

**Recommendation 1: Strengthen the ITS assessment program and require that support contractors more effectively measure and report on the results (i.e., benefits, costs, and lessons learned) of ITS research.**

**ITS JPO Response: Concur with comment:** The ITS JPO concurs that the assessment program can be strengthened. Since the ITS Deployment program has been rescinded, the earmarked deployment projects will begin to come to an end during the next few years. Evaluation plans are already in place for the ITS Management Council-approved

**Appendix. Agency Comments**

major research initiatives. Also, due to technology evolution, industry trends, new national needs, and emerging issues, it is an appropriate time to reassess what data is needed to provide the most essential and relevant information to decision makers and stakeholders. Also, the JPO has restructured the entire ITS organization, and a new team leader has been selected to oversee the Program Assessment area.

**Comment:** The ITS JPO wishes to clarify our belief that the assessment program has met and exceeded the legislative requirements for evaluation and for an information clearinghouse. The ITS JPO was responsible for overseeing hundreds of projects from the earmarked ITS Deployment Program alone. The scale of work was large and federal staff was small (one full time employee). Therefore, the JPO program manager, in coordination with modal partners, developed a robust and well documented independent verification and validation (IV&V) structure of oversight by federal personnel supported by the services of contractors who were directed by Federal task managers. Because of the projects were earmarked, the ITS JPO had no influence or control over the projects, and was largely dependent on data from the earmark recipient. Thus, the assessment program attempted, to the extent practicable, to mine the most useful and relevant data possible under these circumstances and share this information with the deployment community.

**Recommendation 2: Restructure assessment support service contracts to reduce costs and eliminate duplicative services.**

**ITS JPO Response: Concur with comment:** The ITS JPO concurs that the assessment program should be restructured to reduce costs. Since the ITS deployment program has ended, there is no longer a need for as extensive contractor roles as was the case in the previous years. The ITS JPO has begun to reassess the entire Program Assessment web environment to consolidate databases, support, and services. An independent contractor will be hired to conduct a thorough review of all web content. The draft SOW for this assessment has been developed and shared with the other affected USDOT offices. The ITS JPO anticipates contract award shortly and look forward to systematically consolidating the program assessment based on the results of the independent contract tasking.

**Comment:** The ITS JPO would like to note that the assessment program support contractors were not duplicating evaluations. Rather, they were tasked to read evaluation reports (some more than 100 pages long) sent in from ITS earmarked deployment project recipients; find and extract relevant benefits, costs, and lessons learned; summarize them; and post them into a relational database. This database fulfills the legislative requirement for an information clearinghouse. These searchable databases are not duplicative of the National Transportation Library, but rather they house short summaries for use by deployment agencies.

**Recommendation 3: Establish and document procedures for ensuring effective budget execution, contract and agreement closeout, and de-obligation of prior year funds.**

## **Appendix. Agency Comments**

**ITS JPO Response: Concur in part:** The JPO strongly concurs that existing financial and contracting processes should be well documented. Work is underway to document the existing financial processes. The ITS JPO will continue these efforts over the next several weeks to complete this activity.

However, the ITS JPO is concerned about the statements that financial procedures are not in place and that internal controls are lacking. The ITS JPO has long-standing financial procedures; however, they lack documentation. This lack of documentation resulted in a five month lapse in reconciliations when the JPO financial manager left and before the new financial manager was hired and trained. Contract and agreement closeout is addressed in the response to Recommendation #4 below.

**Recommendation 4: Coordinate with FHWA to identify and review old ITS contracts and agreements and de-obligate nearly \$20 million in unneeded funds.**

**ITS JPO Response: Concur:** Whereas the ITS JPO has not had an opportunity to validate the \$20 million dollars identified in the draft report at this time, we do concur that old contracts must be closed out and remaining funds deobligated in a timely fashion. The ITS JPO has and will continue to work with the FHWA Office of Acquisitions Management (HAAM) to execute the closeouts of old contracts. The ITS JPO will consult with HAAM to attempt to prioritize the needed deobligations and to ensure the execution of the current fiscal year ITS procurement actions are not adversely impacted.

**Recommendation 5: Coordinate with FHWA to review documentation supporting FTA's questionable \$3.9 million in reimbursements on 5 expired agreements and seek recovery of those funds that can not be verified.**

**ITS JPO Response: Concur.** The ITS JPO has verified that all 5 reimbursements are, in fact, old ITS JPO projects. The ITS JPO intends to consult with HAAM and the FTA Acquisitions Office to propose a process to ensure all charges for reimbursable agreements are completed in a timely manner to avoid this issue in the future.

**Recommendation 6: Strengthen project management by requiring uniform procedures, documentation, performance data, and timely cost-benefit analyses.**

**ITS JPO Response: Concur:** The ITS JPO strongly concurs that the JPO can do more to strengthen project management processes. As noted in the report, several actions have been completed to address this issue. The ITS JPO has hired a PMP-certified team leader for the Program Evaluation team. Additionally, the JPO is actively establishing a Project Management Office (PMO) for the entire research portfolio. The contract evaluation process is completed, and the ITS JPO expects award of the PMO contract to occur imminently. We strongly concur in the appropriate use of cost-benefit analyses at appropriate points in the life of a research project when data is available. We note that, in

many cases, cost-benefit data does not exist at the start of research. Indeed, cost-benefit data is often an output of the research.

**Recommendation 7: Ensure support contractor tasks are clearly defined and sufficiently separated to avoid any conflict of interests.**

**ITS JPO Response: Concur:** The ITS JPO strongly concurs that support contractors on a specific ITS research initiative should not be in a position to also monitor the evaluation of the same initiative. Clauses are and have been in effect for some JPO support contractors, but the arrangement deserves to be revisited and strengthened. The ITS JPO will consult with HAAM to better identify potential conflicts of interest from a programmatic and acquisition perspective to avoid this issue in the future.

**Recommendation 8: Ensure the PMO's duties, roles, and responsibilities as well as deliverables are clearly defined in the contract.**

**ITS JPO Response: Concur:** The ITS JPO believes the list of deliverables and due dates in the PMO SOW meet this recommendation. Further, the first deliverable of the PMO contract is the PMO Program Plan which defines the specific roles and responsibilities of the PMO contractors. The PMO Program Plan first draft is due 30 days from contract award. The final draft is due 45 days from contract award. The ITS JPO is the final approving authority for this deliverable.

**Recommendation 9: Use performance-based (versus billable hours) contracts for all future support services where it is possible to estimate the extent or the duration of the work.**

**ITS JPO Response: Concur:** The ITS JPO agrees that performance-based contracting offers clear benefits, where applicable. Going forward, the ITS JPO will consult with HAAM to pursue performance-based contracts where they are applicable to the specific contract type.

**Recommendation 10: Transfer oversight of SafeTrip-21 from Volpe to the JPO to comply with DOT Order 2300:8.**

**ITS JPO Response: Concur:** The ITS JPO believes this is the consistent interpretation of DOT Order 2300.8. The ITS JPO will begin the update of the interagency agreement with Volpe to transfer oversight to the JPO in January of 2009.

The following pages contain textual versions of the graphs and charts included in this document. These pages were not in the original document but have been added here to accommodate assistive technology.

**The Joint Program Office’s Management of the Intelligent Transportation  
Systems Program Needs To Be Improved**

**Section 508 Compliant Presentation**

**Table 1. Joint Program Office “Contingency” Fund Balances, Fiscal Year 2004 through Fiscal Year 2008**

- In September 2004, the contingency fund balance was \$20,987,373, or 19.1 percent of the Joint Program Office’s annual budget of \$110 million.
- In September 2005, the contingency fund balance was \$9,349,057, or 8.5 percent of the Joint Program Office’s annual budget of \$110 million.
- In September 2006, the contingency fund balance was \$28,892,418, or 26.3 percent of the Joint Program Office’s annual budget of \$110 million.
- In September 2007, the contingency fund balance was \$25,938,421, or 23.6 percent of the Joint Program Office’s annual budget of \$110 million.
- In September 2008, the contingency fund balance was \$34,608,421, or 21.8percent of the Joint Program Office’s
- The 5-year average balance of the contingency fund was \$23,955,138, or 21.9 percent of the Joint Program Office’s annual budget of \$110 million.

Source: ITS JPO Financial Management System

**Exhibit B. Contracts and Agreements That Need To Be Closed With Associated Funds De-Obligated**

<b>Contract or Agreement Number:</b> DTFH61-93-X-00017	<b>Year Signed:</b> 1993	Remaining Obligations Totaled \$28,034.22
<b>Contract or Agreement Number:</b> DTFH61-94-C-00207	<b>Year Signed:</b> 1994	Remaining Obligations Totaled \$54,711.00
<b>Contract or Agreement Number:</b> DTFH61-95-Y-00105	<b>Year Signed:</b> 1995	Remaining Obligations Totaled \$130,793.11

<b>Contract or Agreement Number:</b> DTFH61-95-Y-00105	<b>Year Signed:</b> 1995	Remaining Obligations Totalled \$125,000.00
<b>Contract or Agreement Number:</b> DTFH61-96-Y-30059	<b>Year Signed:</b> 1996	Remaining Obligations Totalled \$1,057.92
<b>Contract or Agreement Number:</b> DTFH61-96-C-00103	<b>Year Signed:</b> 1996	Remaining Obligations Totalled \$11,604.47
<b>Contract or Agreement Number:</b> DTFH61-96-C-00047	<b>Year Signed:</b> 1996	Remaining Obligations Totalled \$10,000.00
<b>Contract or Agreement Number:</b> DTFH61-96-C-00094	<b>Year Signed:</b> 1996	Remaining Obligations Totalled \$23,848.74
<b>Contract or Agreement Number:</b> DTFH61-97-Y-30124	<b>Year Signed:</b> 1997	Remaining Obligations Totalled \$1,186.00
<b>Contract or Agreement Number:</b> DTFH61-98-C-00059	<b>Year Signed:</b> 1998	Remaining Obligations Totalled \$40,000.00
<b>Contract or Agreement Number:</b> DTFH61-98-C-00073	<b>Year Signed:</b> 1998	Remaining Obligations Totalled \$105,439.00
<b>Contract or Agreement Number:</b> DTFH61-98-C-00073	<b>Year Signed:</b> 1998	Remaining Obligations Totalled \$2,673.45
<b>Contract or Agreement Number:</b> DTFH61-98-C-00073	<b>Year Signed:</b> 1998	Remaining Obligations Totalled \$23,243.00
<b>Contract or Agreement Number:</b> DTFH61-98-C-00079	<b>Year Signed:</b> 1998	Remaining Obligations Totalled \$1,419.89
<b>Contract or Agreement Number:</b> DTFH61-99-T-56009	<b>Year Signed:</b> 1999	Remaining Obligations Totalled \$2,113.01
<b>Contract or Agreement Number:</b> DTFH61-99-X-00101	<b>Year Signed:</b> 1999	Remaining Obligations Totalled \$213,874.74

<b>(Old Federal Transit Administration Agreement) Contract or Agreement Number: DTFH61-99-Y-30078</b>	<b>Year Signed:</b> 1999	Remaining Obligations Totaled \$205,796.09
<b>Contract or Agreement Number:</b> DTFH61-99-X-00101	<b>Year Signed:</b> 1999	Remaining Obligations Totaled \$394,487.01
<b>Contract or Agreement Number:</b> DTFH61-00-Y-30124	<b>Year Signed:</b> 2000	Remaining Obligations Totaled \$110,000.00
<b>Contract or Agreement Number:</b> DTFH61-00-X-00006	<b>Year Signed:</b> 2000	Remaining Obligations Totaled \$93,437.00
<b>Contract or Agreement Number:</b> DTFH61-00-X-00006	<b>Year Signed:</b> 2000	Remaining Obligations Totaled \$61,113.00
<b>Contract or Agreement Number:</b> DTFH61-00-X-00006	<b>Year Signed:</b> 2000	Remaining Obligations Totaled \$52,994.00
<b>(Old Federal Transit Administration Agreement) Contract or Agreement Number: DTFH61-00-Y-30106</b>	<b>Year Signed:</b> 2000	Remaining Obligations Totaled \$537,708.88
<b>Contract or Agreement Number:</b> DTFH61-00-Y-30014	<b>Year Signed:</b> 2000	Remaining Obligations Totaled \$566,061.31
<b>Contract or Agreement Number:</b> DTFH61-C-01-00036	<b>Year Signed:</b> 2001	Remaining Obligations Totaled \$115,307.16
<b>Contract or Agreement Number:</b> DTFH61-01-C-00181	<b>Year Signed:</b> 2001	Remaining Obligations Totaled \$38,398.10
<b>Contract or Agreement Number:</b> DTFH61-01-T-56030	<b>Year Signed:</b> 2001	Remaining Obligations Totaled \$28,504.31

<b>Contract or Agreement Number:</b> DTFH61-01-D-00105	<b>Year Signed:</b> 2001	Remaining Obligations Totalled \$145,626.87
<b>(Old Federal Transit Administration Agreement) Contract or Agreement Number:</b> DTFH61-01-Y-30120	<b>Year Signed:</b> 2001	Remaining Obligations Totalled \$651,852.10
<b>Contract or Agreement Number:</b> DTFH61-01-C-00183	<b>Year Signed:</b> 2001	Remaining Obligations Totalled \$12,053.00
<b>Contract or Agreement Number:</b> DTFH61-01-C-00005	<b>Year Signed:</b> 2001	Remaining Obligations Totalled \$26,982.00
<b>Contract or Agreement Number:</b> DTFH61-01-T-56035	<b>Year Signed:</b> 2001	Remaining Obligations Totalled \$38,539.18
<b>Contract or Agreement Number:</b> DTFH61-01-Y-30120	<b>Year Signed:</b> 2001	Remaining Obligations Totalled \$275,000.00
<b>Contract or Agreement Number:</b> DTFH61-01-T-56036	<b>Year Signed:</b> 2001	Remaining Obligations Totalled \$8,929.00
<b>Contract or Agreement Number:</b> DTFH61-02-X-00104	<b>Year Signed:</b> 2002	Remaining Obligations Totalled \$266,696.23
<b>Contract or Agreement Number:</b> DTFH61-02-X-00011	<b>Year Signed:</b> 2002	Remaining Obligations Totalled \$86,339.17
<b>(Old Federal Transit Administration Agreement) Contract or Agreement Number:</b> DTFH61-03-X-30112	<b>Year Signed:</b> 2003	Remaining Obligations Totalled \$700,307.80
<b>Contract or Agreement Number:</b> DTFH61-03-X-30125	<b>Year Signed:</b> 2003	Remaining Obligations Totalled \$200,000.00

<b>Contract or Agreement Number:</b> DTFH61-03-X-30129	<b>Year Signed:</b> 2003	Remaining Obligations Totald \$1,779,928.00
<b>Contract or Agreement Number:</b> DTFH61-03-X-30108	<b>Year Signed:</b> 2003	Remaining Obligations Totald \$150,000.00
<b>Contract or Agreement Number:</b> DTFH61-03-X-30103	<b>Year Signed:</b> 2003	Remaining Obligations Totald \$500,000.00
<b>Contract or Agreement Number:</b> DTFH61-03-X-30124	<b>Year Signed:</b> 2003	Remaining Obligations Totald \$443,000.00
<b>Contract or Agreement Number:</b> DTFH61-03-X-30128	<b>Year Signed:</b> 2003	Remaining Obligations Totald \$700,000.00
<b>Contract or Agreement Number:</b> DTFH61-03-X-30127	<b>Year Signed:</b> 2003	Remaining Obligations Totald \$250,000.00
<b>Contract or Agreement Number:</b> DTFH61-04-X-30063	<b>Year Signed:</b> 2004	Remaining Obligations Totald \$147,360.00
<b>Contract or Agreement Number:</b> DTFH61-04-X-30044	<b>Year Signed:</b> 2004	Remaining Obligations Totald \$1,205,000.00
<b>Contract or Agreement Number:</b> DTFH61-04-T-86015	<b>Year Signed:</b> 2004	Remaining Obligations Totald \$42,426.16
<b>Contract or Agreement Number:</b> DTFH61-05-D-00002	<b>Year Signed:</b> 2005	Remaining Obligations Totald \$1,533.60
<b>Contract or Agreement Number:</b> DTFH61-05-D-00002	<b>Year Signed:</b> 2005	Remaining Obligations Totald \$9,042.03

<b>Contract or Agreement Number:</b> DTFH61-05-D-00002	<b>Year Signed:</b> 2005	Remaining Obligations Totalled \$1,842.28
<b>Contract or Agreement Number:</b> DTFH61-05-D-00002	<b>Year Signed:</b> 2005	Remaining Obligations Totalled \$26,571.93
<b>Contract or Agreement Number:</b> DTFH61-05-D-00002	<b>Year Signed:</b> 2005	Remaining Obligations Totalled \$5,757.15
<b>Contract or Agreement Number:</b> DTFH61-05-D-00002	<b>Year Signed:</b> 2005	Remaining Obligations Totalled \$8,274.31
<b>(Old Federal Transit Administration Agreement) Contract or Agreement Number:</b> DTFH61-05-X-30050	<b>Year Signed:</b> 2005	Remaining Obligations Totalled \$352,672.47
<b>Contract or Agreement Number:</b> DTFH61-05-X-30025	<b>Year Signed:</b> 2005	Remaining Obligations Totalled \$465,065.00
<b>Contract or Agreement Number:</b> DTFH61-05-X-30048	<b>Year Signed:</b> 2005	Remaining Obligations Totalled \$250,000.00

**TOTAL REMAINING OBLIGATIONS FOR ALL OF THESE CONTRACTS OR AGREEMENTS: \$11,729,600.69.**

Note: In addition to funds remaining on the five old Federal Transit Administration agreements, we question the Federal Transit Administration's receipt of \$3.9 million in reimbursements years after the period of performance for these agreements had expired.

**Exhibit C. Six Old Contracts and Agreements That Need To Be Closed With Funds De-Obligated**

<b>Agreement Number or Recipient:</b> DTFH61-01-SA-0010	<b>Year Signed:</b> 2001	Remaining Obligations Totalled \$99,632.00
<b>Agreement Number or Recipient:</b> DTFH61-03-Y-30020	<b>Year Signed:</b> 2003	Remaining Obligations Totalled \$130,000.00

<b>Agreement Number or Recipient:</b> DTFH61-03-SA-0388	<b>Year Signed:</b> 2003	Remaining Obligations Totaled \$250,000.00
<b>Agreement Number or Recipient:</b> DTFH61-03-Y-00001	<b>Year Signed:</b> 2003	Remaining Obligations Totaled \$192,000.00
<b>Agreement Number or Recipient:</b> DTFH61-04-T-56004	<b>Year Signed:</b> 2004	Remaining Obligations Totaled \$63,000.00
<b>Agreement Number or Recipient:</b> National Academy of Sciences	<b>Year Signed:</b> Unknown	Remaining Obligations Totaled \$8.19

**TOTAL REMAINING OBLIGATIONS FOR ALL OF THESE CONTRACTS OR RECIPIENTS: \$734,640.19**