
Office of Inspector General

Audit Report

REFINEMENTS TO DOT'S MANAGEMENT OF THE HIGHWAY TRUST FUND'S SOLVENCY COULD IMPROVE THE UNDERSTANDING AND ACCURACY OF SHORTFALL PROJECTIONS

Department of Transportation

Report Number: CR-2012-071

Date Issued: March 6, 2012





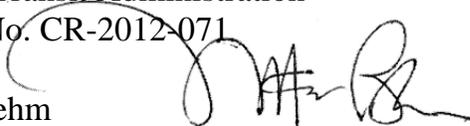
Memorandum

U.S. Department of
Transportation

Office of the Secretary
of Transportation
Office of Inspector General

Subject: **ACTION:** Refinements to DOT's Management of the Highway Trust Fund's Solvency Could Improve the Understanding and Accuracy of Shortfall Projections
Office of the Secretary of Transportation
Federal Highway Administration
Federal Transit Administration
Report No. CR-2012-071

Date: March 6, 2012

From: Mitch Behm 
Assistant Inspector General
for Rail, Maritime and Economic Analysis

Reply to
Attn. of: JA-50

To: Assistant Secretary for Budget and Programs and Chief Financial Officer
Chief Financial Officer, Federal Highway Administration
Associate Administrator for Budget and Policy, Federal Transit Administration

In recent years, the Highway Trust Fund (HTF), comprised of the Federal Highway Administration's (FHWA) Highway Account (HA) and the Federal Transit Administration's (FTA) Mass Transit Account (MTA), has confronted solvency concerns as its outlays have significantly outpaced its excise tax receipts. An insolvency event in HTF could have severe consequences across the economy, possibly causing States to suspend billions of dollars in highway projects and transit agencies to suspend public transportation services. At the end of fiscal years 2008 and 2009, HA faced possible shortfalls,¹ and Congress transferred \$8 billion and \$7 billion, respectively, from the General Fund. In fiscal year 2010, Congress made another General Fund transfer to HA of \$14.7 billion and \$4.8 billion to MTA. As a result of these infusions, HA and MTA avoided the shortfalls that both were projected to experience by early fiscal year 2011. While DOT is responsible for the management of HA and MTA's balances, it does not control the amount and timing of revenues and outlays.

¹ A cash shortfall occurs when HA's balance falls below a predetermined threshold. If the balance crosses the threshold, FHWA implements cash management procedures that reduce outlays with the prolonging, proration and, ultimately, suspension of payments to States.

HTF ended fiscal year 2010 with a balance of \$29.2 billion—its largest since fiscal year 2001—suggesting that the Fund’s financial condition is stable. However, this balance results primarily from Congress’s General Fund cash infusions and a decline in outlays due in part to the roughly \$36 billion that the American Recovery and Reinvestment Act of 2009 (ARRA) provided to States for highway infrastructure and mass transit projects. Once States expend their ARRA funds, DOT projections suggest that HTF’s outlays are expected to return to higher levels. Furthermore, recent data indicate that the Fund’s expenditures exceed its excise tax receipts and that this condition will continue for the foreseeable future.

The former Ranking Member of the Senate Budget Committee requested that we identify and assess (1) the procedures that FHWA and FTA use to monitor HA and MTA’s balances and identify and manage possible shortfalls in those accounts, and (2) DOT’s methods of communicating with Congress and recipients regarding possible shortfalls in HA and MTA. The requester also asked us to review the Federal Aviation Administration’s (FAA) Airways and Airport Trust Fund (AATF) because it is similar to HTF but has not experienced similar solvency problems. Accordingly, we reviewed the practices that FAA uses to manage AATF to assess whether they would be useful to FHWA and FTA.

To conduct our work, we interviewed officials from FHWA, FTA, Office of Secretary of Transportation (OST), FAA, and key industry groups. We also surveyed or visited several State departments of transportation and transit authorities. We conducted this performance audit from May 2010 through January 2012 in accordance with generally accepted Government auditing standards. The attachment to this report contains a detailed briefing of our results, which are summarized below.

SUMMARY

As a result of HA’s 2008 shortfall, both FHWA and FTA (the OAs) instituted cash tracking procedures to forecast shortfalls, and FHWA instituted additional procedures to adjust when necessary the amount and timing of HA’s outlays to States. While these forecasts are accurate over the long term, they do not account for revenue variances and short-term outlay deviations, which makes it difficult to predict the specific date on which a shortfall will occur. The OAs use a weekly cash analysis tool to monitor HA and MTA’s balances and estimate the magnitudes and timing of possible cash shortfalls. This tool uses revenue projections from the Department of the Treasury (Treasury) and OAs’ historical spending patterns (outlay rate tables)² to project outlays and determine when the accounts may experience shortfall. While this tool has merit, we identified three

² Outlay rate tables use historical spending patterns to capture the rates at which States and transit agencies execute projects and submit related reimbursement requests. FHWA uses a 9-year rate table to project HA’s outlays, while FTA uses a 6-year rate table to project MTA’s outlays.

areas of concern regarding the accuracy of its estimates. First, the accounts' revenue and outlay projections are established by the President's annual budget. Therefore, outside of the mid-session review, which is conducted once each year, FHWA and FTA do not revise their projections to account for revenue and outlay variances. Second, while the long-term outlay projections derived from historical outlay data are reasonable, the tool does not allow the OAs to identify short-term deviations in outlay trends.³ Finally, for MTA, it is particularly difficult to determine accurate short-term outlay estimates because FTA uses a single 6-year rate table to project outlays for the 16 diverse programs funded through MTA. Since funds for some of these programs are spent very quickly (within 12 to 15 months) while others are spent more slowly (over 10 years or more), the 6-year outlay projection used may not be as precise as it could be. Once a shortfall appears imminent, FHWA invokes procedures, such as payment delays and proration, to reduce HA's cash burn rate. FTA, however, has no stated procedures to reduce MTA's cash burn rate in the event of a foreseeable cash shortfall. While it has not yet faced a shortfall, FTA's projections suggest that MTA would have experienced one by early fiscal year 2011 without the General Fund infusion in fiscal year 2010. FTA has indicated that it will adopt management procedures similar to those used by FHWA in the event of a foreseeable shortfall. For further details, please see slides 11 through 22 of the attachment.

While DOT communicates regularly with Congress regarding HA and MTA's balances and possible shortfalls, it does not inform recipients of its management procedures—information that would provide context for the accounts' balances. OST briefs Congress biannually on HA and MTA's balances and outlooks, concurrent with the President's annual budget release and the Administration's subsequent mid-session review. OST also provides weekly updates to congressional staff through briefings and emails. To inform recipients and other stakeholders of HTF's status, FHWA posts HA and MTA's balance data on the FHWA Website every month. However, the Website does not include FHWA's cash management procedures or the minimum balance levels that would trigger use of those procedures—context that could help recipients evaluate HA's financial position and determine the likelihood and timing of shortfalls. Since FTA has not yet confronted an MTA shortfall, it has not developed procedures to communicate possible shortfalls to recipients. Rather, FTA relies on FHWA to post the MTA balance information on the FHWA Website along with the HA postings. For further details, please see slides 23 through 28 of the attachment.

FAA's AATF has certain fail-safe funding mechanisms that are unavailable to HTF. However, FAA employs some practices for tracking of AATF's outlays

³ For example, over the last 10 years, HA's annual outlays have been, on average, 2 percent higher than projected. MTA's annual outlays for the 6 year period since SAFETEA-LU's enactment (fiscal years 2005 through 2010) were, on average, 4 percent lower than projected. Over that same period, HA's annual outlay variances have ranged between -10 percent and 18 percent, and MTA's annual variances have ranged between -27 percent and 19 percent.

which, if adopted by HTF's managers, could improve the accuracy of HTF's short-term outlay estimates. For example, to project outlays, FAA uses multiple rate tables that align with different expense categories and allow for more precise outlay estimates. FAA also closely tracks outlay trends on a project-level basis. This project-level approach to tracking outlays would benefit both FHWA and FTA because it would allow them to validate the spend-out rates they use to generate their outlay projections. For further details, please see slides 29 through 31 of the attachment.

CONCLUSION

Each year, HTF provides a significant percentage of the funding for highway and transit projects. Consequently, an HTF insolvency event could result in severe consequences across the economy, including suspension of billions of dollars in State highway projects and scaling back or suspension of public transportation services. While the OAs' projections of the magnitudes and timing of shortfalls are reasonable, improvements to their projection methodology could enhance the accuracy of their shortfall estimates and enable them to implement, at the earliest possible date, shortfall management and communication procedures. HTF does not currently face a solvency concern. However, because it receives less in excise tax receipts than it expends, eventually the Fund will again be threatened by shortfalls, and Congress and recipients will need reliable and timely information on its Fund's status.

RECOMMENDATIONS

We recommend that FHWA:

1. Provide in its weekly report to Congress a range of time, rather than a specific date, when a shortfall is projected to occur to better reflect possible variances in a shortfall's timing.
2. Conduct a periodic assessment of the outlays associated with a representative sample of projects to identify deviations in outlay trends and adjust shortfall projections accordingly.
3. Publicize on its Website its cash management procedures and the events that trigger its use of these procedures to allow stakeholders to better evaluate HA's financial position.

We recommend that FTA:

4. Provide in its weekly report to Congress a range of time, rather than a specific date, when a shortfall is projected to occur to better reflect possible variances in a shortfall's timing.

5. Conduct a periodic assessment of the outlays associated with a representative sample of projects to identify deviations in outlay trends and adjust shortfall projections accordingly.
6. Develop procedures to manage MTA's cash balance to exercise more control over MTA's cash flows when a shortfall appears imminent. Publicize on its Website MTA's cash balance and management procedures and the events that trigger its use of these procedures.

AGENCY COMMENTS AND OFFICE OF INSPECTOR GENERAL RESPONSE

We provided DOT a copy of our draft report on January 11, 2012, and received its response—included in its entirety as an Appendix to this report—on February 21, 2012. FHWA concurred with Recommendation 1 and partially concurred with Recommendations 2 and 3. Similarly, FTA concurred with Recommendation 4 and partially concurred with Recommendations 5 and 6.

For Recommendations 1 and 4, we consider FHWA and FTA's proposed actions to be sufficient, and therefore, consider these recommendations resolved but open pending completion of the planned actions.

For Recommendations 2 and 5, both FHWA and FTA acknowledge the need to periodically validate their respective outlay rate assumptions, however, they believe the methodology we recommended may not be the most resource efficient way of conducting such an evaluation. Consequently, both OAs have requested flexibility to explore more efficient alternative methodologies for validating their outlay rate assumptions, prior to selecting a methodology of choice. We are open to alternative methodologies so long as they address the concerns highlighted in our recommendation. FHWA and FTA have provided a target action date for conducting this evaluation and selecting a methodology. However, they have not provided a target action date for conducting the periodic assessments themselves. Accordingly, we are requesting that FHWA and FTA provide us with those target action dates.

For Recommendations 3 and 6, FHWA and FTA concurred with the need to provide additional information on their websites relating to cash management procedures the OA's might invoke in the event of a shortfall. However, they are hesitant to reveal specific procedures and when the procedures will be implemented, since DOT leadership has the discretion to modify its cash management procedures in response to the events that may trigger their use. Furthermore, FTA has agreed to develop basic internal procedures for the management of shortfalls in MTA. We consider FHWA and FTA's proposed

actions to be sufficient, and therefore, consider these recommendations resolved but open pending completion of the planned actions.

ACTIONS REQUIRED

In accordance with follow-up provisions in Department of Transportation Order 8000.1C, we request that FHWA and FTA provide information and documentation demonstrating actions that they plan on taking to implement the methodology selected to address Recommendations 2 and 5 respectively. We request that FHWA and FTA provide this additional documentation and response within 30 days. We appreciate the courtesies and cooperation of OST, FHWA, FTA and FAA's representatives during this audit. If you have any questions concerning this report, please call me at (202) 366-1995, or Yana Hudson, Program Director, at (202) 366-2985.

#

Attachment

cc: Lana Hurdle, OST, B-2
Laura Ziff, OST, B-10
Audit Liaison, OST, M-1
Audit Liaison, FHWA, HAIM-10
Audit Liaison, FTA, TBP-02
Audit Liaison, FAA, ABU-100

APPENDIX. AGENCY COMMENTS



**U.S. Department of
Transportation**
Office of the Secretary
of Transportation

Memorandum

Subject: **ACTION:** Management Response to OIG Draft Report on
Management of the Highway Trust Fund

Date: February 21, 2012

From: Chris Bertram 
Assistant Secretary for Budget and Programs
And Chief Financial Officer

Reply to
Attn. of:

To: Calvin L. Scovel
Inspector General

The Highway Trust Fund (HTF) serves an essential role in funding maintenance and improvements to the nation's surface transportation infrastructure. The Department works closely with the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) to closely monitor the status of the Fund, the receipts coming into the Trust Fund, and the expenditures from the Trust fund to ensure prudent financial management. Over the last several years, revenues into the highway trust fund have declined, which when combined with the spending rates enumerated in the prior authorization, led to some well known imbalances and potential shortfalls.

During these events, the Department enhanced communication with Congress, and developed what is now a routine communication with applicable Congressional Committees. The Department's close monitoring of HTF balances continues to provide both the Department and Congress with useful information regarding the status of the trust fund. The Department is ready to take proactive steps to manage the cash flow should the balance of the Highway Account fall below what we believe to be a prudent balance. Under these procedures we would continue to obligate funds for surface transportation programs, but payment of some bills may be delayed. As past short-falls have affected only the Highway Account, FHWA has well- established procedures for handling these situations. In the event that future shortfalls may affect the somewhat different operations of the Transit Account, FTA is now reviewing best practices, and will prepare similar contingent procedures and processes.

We remain hopeful that Congress, in its ongoing work on surface transportation authorization, incorporates new approaches to stabilizing the trust fund with long term funding solutions combined with sustainable funding flows. Such actions could obviate the need for the cash management processes and actions that are the focus of this report.

Appendix. Agency Comments

RECOMMENDATIONS AND RESPONSE

OIG Recommendations to FHWA

Recommendation 1: Provide in its weekly report to Congress a range of time, rather than a specific date, when a shortfall is projected to occur to better reflect possible variances in a shortfall's timing.

FHWA Response: Concur. The analysis used for these reports was originally conceived as an internal tracking and decision tool within the Department. As such it was understood that there was no intention to imply a level of precision to a specific week. In fact, the color coding used in the table is intended to convey a sense of the range of estimates. Inasmuch as this internal tool is now used outside the Department, FHWA and FTA will work together to ensure that the table clearly conveys a sense of the level of specificity with regard to the range of uncertainty for dates. FHWA anticipates completing this action by July 1, 2012.

Recommendation 2: Conduct a periodic assessment of the outlays associated with a representative sample of projects to identify deviations in outlay trends and adjust shortfall projections accordingly.

FHWA Response: Concur in part. FHWA tracks and analyzes actual outlays compared to historical trends on a monthly basis and is able to determine monthly variation from projected amounts. The current methodology of estimating outlays from the Federal-aid highway program has historically been very accurate and within approximately 2 percent of the estimates, although we recognize FY 2010 was an exception due to unique circumstances. Variance for FY 2011 was .01 percent. FHWA recognizes the need to periodically validate outlay rate assumptions and make appropriate adjustments, if necessary, in its model. However, it is not clear that the suggested method for completing such assessment offers the most resource efficient method of achieving the intended result. By December 31, 2012, FHWA will evaluate the potential methodologies available for assessing outlay rates, and determining the effect on the HTF model, and identify a method for accomplishing periodic assessment.

Recommendation 3: Publicize on its Website its cash management procedures and the events that trigger its use of these procedures to allow stakeholders to better evaluate HA's financial position.

FHWA Response: Concur in part. FHWA will provide general information on its website by July 1, 2012 relating to the potential for cash management procedures, and events that may trigger their use. This information can provide general discussion of the types of circumstances that might give rise to the use of cash management procedures but cannot specify procedures that may be implemented under any particular circumstances. Specific procedures will depend on a multitude of factors surrounding the situation and must leave room for the application of appropriate discretion by departmental leadership.

Appendix. Agency Comments

OIG Recommendations to FTA

Recommendation 4: Provide in its weekly report to Congress a range of time, rather than a specific date, when a shortfall is projected to occur to better reflect possible variances in a shortfall's timing.

FTA Response: Concur. FTA will work with FHWA to modify the table as appropriate to convey a range of dates when a shortfall may occur. FTA anticipates completing this action by July 1, 2012.

Recommendation 5: Conduct a periodic assessment of the outlays associated with a representative sample of projects to identify deviations in outlay trends and adjust shortfall projections accordingly.

FTA Response: Concur in part. FTA recognizes the value of validating its current outlay modeling even though outlay projections have been accurate. FTA will determine the most effective and practical approach for accomplishing this objective by December 31, 2012.

Recommendation 6: Develop procedures to manage MTA's cash balance to exercise more control over MTA's cash flows when a shortfall appears imminent. Publicize on its Website MTA's cash balance and management procedures and the events that trigger its use of these procedures.

FTA Response: Concur in part. FTA will develop basic internal procedures to manage a shortfall in the MTA. It anticipates completing these procedures by December 31, 2012. In addition, FTA will add a link, by July 1, 2012, from its website to the FHWA website which currently reports the transit account's cash balance. FTA, like FHWA, will provide general information on its website relating to the potential for cash management procedures by July 1, 2012. Specific procedures will depend on a multitude of factors surrounding the situation and must leave room for the application of appropriate discretion by departmental leadership.

AUDIT OF HIGHWAY TRUST FUND'S SOLVENCY CONCERNS



BRIEFING TO SENATE BUDGET COMMITTEE-MINORITY

U.S. DEPARTMENT OF TRANSPORTATION OFFICE OF INSPECTOR GENERAL

January 19, 2011



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Highway Trust Fund (HTF) Overview

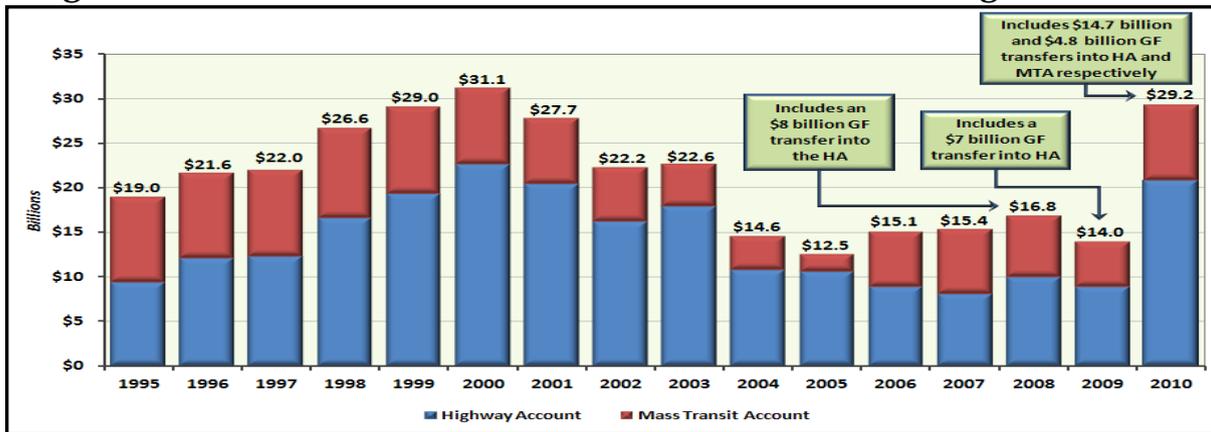
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- HTF consists of the Highway Account (HA) administered by the Federal Highway Administration (FHWA) and the Mass Transit Account (MTA) administered by the Federal Transit Administration (FTA).
- HTF is funded through excise taxes on motor fuels (roughly 88%) and taxes on truck and tire sales (roughly 8%).

Historical Perspective on HTF's Solvency

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Figure 1. HTF's Historical Cash Balance in (FY 1995 through FY 2010)



Source: OIG analysis of HTF data.

- HTF's cash balance increased steadily though the late 1990s—peaking at \$31 billion at the end of FY 2000.
- Beginning with Transportation Equity Act-21's (TEA-21) enactment in FY 1998 and continuing with Safe, Accountable, Flexible, Efficient Transportation Equity Act-A Legacy for Users (SAFETEA-LU) enactment in FY 2005, outlays outpaced receipts, resulting in a decrease in HTF's cash balance.
- An unforeseen decline in vehicle-miles traveled in FY 2007—due to high fuel prices and a lagging economy—accelerated the decline in HTF's balance and led to HA's ongoing solvency concerns.
- Since FY 2008, HTF has received a total of \$34.5 billion in General Fund transfers to maintain its solvency.

Audit Objectives

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- The former Ranking Member of the Senate Budget Committee requested that the DOT Office of Inspector General (OIG) identify and assess:
 - 1) The procedures that FHWA and FTA use to monitor HA and MTA's balances and identify and manage possible shortfalls in the accounts and
 - 2) DOT's methods of communication with Congress and recipients regarding possible shortfalls in HA and MTA.
- The requester also asked that we review the Federal Aviation Administration's (FAA) Airways and Airport Trust Fund (AATF)—because it is similar to HTF but has not experienced similar solvency problems—and assess whether the FAA has any practices that would be useful to FHWA and FTA.
- We conducted this performance audit from May 2010 through January 2012 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.

Audit Methodology

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- **To conduct our audit work:**
 - We interviewed officials from FHWA, FTA, the Office of the Secretary of Transportation (OST), FAA, the American Association of State Highway and Transportation Officials (AASHTO), the American Public Transportation Association (APTA), and the Association for General Contractors (AGC).
 - We surveyed a judgmental sample of nine states and nine transit agencies (TA), and visited two states and three TAs:
 - States: California,* Texas,* Florida, New York, Illinois, Ohio, North Carolina, New Jersey and Oklahoma.
 - TAs: South Eastern Pennsylvania Transportation Authority,* Los Angeles County Metro Transit Authority,* Rochester-Genesee Regional Transit Authority, Spokane Transit Authority, Cedar Rapids Transit, City of Bozeman, Erie Metro Transit Authority, State of Arizona and New Jersey Transit.*
 - We obtained FHWA's projections related to HA's FY 2009 cash shortfall projections and assessed the impact of revenue and outlay variances on the accuracy of these projections.

* Conducted site visits with these States and TAs.

Current View of HTF's Solvency

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- **The short-term solvency outlook for HTF is stable due to:**
 - **General Fund infusions in HA of \$8 billion and \$7 billion respectively at the end of FY 2008 and 2009. Furthermore, HA and MTA received \$14.7 billion and \$4.8 billion respectively during FY 2010 to avoid possible shortfalls¹ in those accounts;**
 - **\$36 billion in incremental funding provided by the American Recovery and Reinvestment Act (ARRA) of 2009 in support of various highway infrastructure and mass transit projects that led states to reduce HA outlays during FYs 2009 through 2011; and**
 - **A lack of a long-term reauthorization, which has depressed MTA outlays as TAs have hesitated to pursue new capital projects given uncertain funding levels.**

¹ A cash shortfall or insolvency occurs when HA or MTA's balance dips below the predetermined threshold, requiring FHWA or FTA (also referred to as the OAs) to implement cash management procedures that reduce outlays by prolonging, prorating and ultimately suspending reimbursements.

Future View of HTF's Solvency

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- **Without congressional intervention to increase receipts or reduce outlays, HTF will eventually face solvency challenges again because:**
 - HTF outlays are expected to rebound to earlier higher levels once ARRA funding is expended;
 - HTF outlays continue to exceed excise tax receipts; and
 - Once a new surface transportation reauthorization is enacted, states and TAs will likely increase their spending levels, thus expanding the difference between HTF outlays and receipts.
- **An insolvency event in HTF could have severe consequences across the economy, possibly causing states to suspend billions of dollars in highway projects and TAs to scale back or suspend public transportation services.**

Key Observations

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- **As a result of HA's 2008 shortfall, both FHWA and FTA instituted cash tracking procedures to better forecast HTF shortfalls**
 - OAs' cash tracking procedures provide a reasonable basis for estimating shortfalls over the long-run; but they do not accurately account for the accounts' revenue and outlay variances in the short-term.
- **Once a shortfall appears imminent, FHWA employs cash management procedures to adjust the amount and timing of HA outlays to states. FTA, however, does not have any procedures to reduce MTA's cash burn rate in the event of a foreseeable cash shortfall.**
- **While DOT communicates regularly with Congress regarding HA and MTA's balance and possible shortfalls, it does not inform recipients of its cash management procedures which would provide context for the accounts' balances.**
 - OST provides weekly updates to Congress regarding the accounts' balances and possible shortfalls.
 - FHWA posts HA and MTA's balances on its Website but does not include its cash management procedures or when they are triggered, context that could help recipients evaluate HA's status.
 - FTA does not post MTA's balance on its Website.
- **FAA employs some practices for tracking AATF's outlays which, if adopted by HTF's managers, could improve the accuracy of HTF's outlays estimates.**

Objective 1: Monitoring Balances and Estimating Shortfalls

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- OAs use a weekly cash analysis tool [See figure 2 on slide 12] to project HA and MTA's balances and estimate the magnitude and timing of possible cash shortfalls over a rolling 2-year period—the remainder of the current fiscal year as well as for the upcoming fiscal year.
- The tool uses the Department of Treasury's (Treasury) revenue projections and OAs' outlay projections to estimate when the accounts' balances may dip below their respective minimum thresholds and trigger a cash shortfall.
- While the tool is updated weekly to reflect year-to-date data, the updates do not allow revenue and outlay variances to be recognized in the end-of-year revenue and outlay numbers.
 - Accounts' revenue and outlay projections are established by the President's annual budget and are updated only once each year as a part of the mid-session review.
 - Outside of the mid-session review, FHWA and FTA do not revise their projections to account for revenue and outlay variances.
 - Revenue variances result from an increase or decrease in excise tax collections relative to what was previously projected.
 - Outlay variances result from states and TA's control over magnitude and timing of reimbursement requests; and external events such as ARRA, economic recession, etc.

Objective 1 (cont'd.): Weekly Cash Analysis Tool



Figure 2. Example of OAs' Weekly Cash Analysis Tool

Note: Inserted for Illustrative Purposes

Projected revenues adjusted to reflect variances from Treasury's projections

Revenue and outlay projections per President's budget that can only be revised once per year (at the mid-session review).

Highway Account of the Highway Trust Fund - All Modes (BPD, FHWA, FMCSA & NHTSA)
Weekly HTF Cash Flow and Payment Projection Analysis-Summary

As of 6/5/09	BPD/All Modes Beginning Weekly Cash Balance	+	Weekly BPD Net Receipts	-	All Modes Weekly Actual/Projected Outlays	=	BPD and All Modes Ending Weekly Balance
FY '09							
2/6/2009	5,553,926,223.72		1,339,000.00		(484,736,484.91)		5,070,526,738.81
2/13/2009	5,070,526,738.81		1,201,038,000.00		(364,765,518.39)		5,906,799,220.42
2/20/2009	5,906,799,220.42		893,470,000.00		(512,695,350.08)		5,394,103,870.34
2/27/2009	5,394,103,870.34		-		(862,098,752.91)		5,425,475,117.43
3/6/2009	5,425,475,117.43		-		(440,764,313.87)		4,984,710,803.56
3/13/2009	4,984,710,803.56		1,206,189,000.00		(511,836,943.26)		5,679,062,860.30
3/20/2009	5,679,062,860.30		-		(501,279,364.16)		5,152,597,644.14
3/27/2009	5,152,597,644.14		1,158,299,000.00		(518,569,050.57)		5,792,207,593.47
4/3/2009	5,792,207,593.47		1,877,000.00		(484,475,554.35)		5,309,309,039.12
4/10/2009	5,309,021,638.10		1,237,596,000.00		(554,413,516.48)		5,992,204,121.62
4/17/2009	5,992,204,121.62		-		(602,743,063.85)		5,389,461,057.77
4/24/2009	5,389,461,057.77		1,402,504,000.00		(448,081,047.65)		6,343,884,010.12
5/1/2009	6,343,884,010.12		-		(646,821,923.95)		5,697,062,086.17
5/8/2009	5,697,062,086.17		1,414,080,000.00		(650,764,418.98)		6,460,377,667.19
5/15/2009	6,460,377,667.19		-		(693,075,493.18)		5,767,302,174.01
5/22/2009	5,767,302,174.01		(136,806,000.00)		(895,180,421.34)		4,735,315,752.67
5/29/2009	4,735,315,752.67		1,143,569,000.00		(691,017,972.35)		5,187,856,780.32
6/5/2009	5,187,856,780.32		5,000,000.00		(687,314,509.60)		4,505,551,870.72
6/12/2009	4,505,551,870.72		1,390,141,000.00		(921,556,469.03)		4,974,136,401.69
6/19/2009	4,974,136,401.69		-		(917,556,469.03)		4,056,579,932.66
6/26/2009	4,056,579,932.66		1,292,077,297.62		(921,556,469.03)		4,427,100,761.25
7/3/2009	4,427,100,761.25		-		(917,556,469.03)		3,509,544,292.22
7/10/2009	3,509,544,292.22		1,452,077,297.62		(921,556,469.03)		4,040,065,120.80
7/17/2009	4,040,065,120.80		-		(917,556,469.03)		3,122,508,651.77
7/24/2009	3,122,508,651.77		1,452,077,297.62		(921,556,469.03)		3,653,029,480.36
7/31/2009	3,653,029,480.36		-		(917,556,469.03)		2,735,473,011.33
8/7/2009	2,735,473,011.33		-		(1,188,667,580.14)		1,546,805,431.19
8/14/2009	1,546,805,431.19		915,889,297.62		(1,184,667,580.14)		1,278,026,148.67
8/21/2009	1,278,026,148.67		-		(1,188,667,580.14)		89,358,568.53
8/28/2009	89,358,568.53		1,447,077,297.62		(1,154,667,580.14)		351,788,286.00
9/4/2009	351,788,286.00		-		(1,177,167,580.14)		(825,389,294.14)
9/11/2009	(825,389,294.14)		1,701,577,297.62		(1,173,167,580.14)		(296,389,576.66)
9/18/2009	(296,389,576.66)		-		(1,177,167,580.14)		(1,474,157,156.80)
9/25/2009	(1,474,157,156.80)		1,567,491,214.29		(1,173,167,580.14)		(1,079,833,522.65)
FY '09 Total			29,295,000,000.00		(40,387,190,000.00)		

HA's actual year-to-date balance that reflects actual revenues and outlays

Projected outlays adjusted to reflect variances from OAs' projections

HA's balance dips below \$4 billion

HA's balance dips below \$1 billion

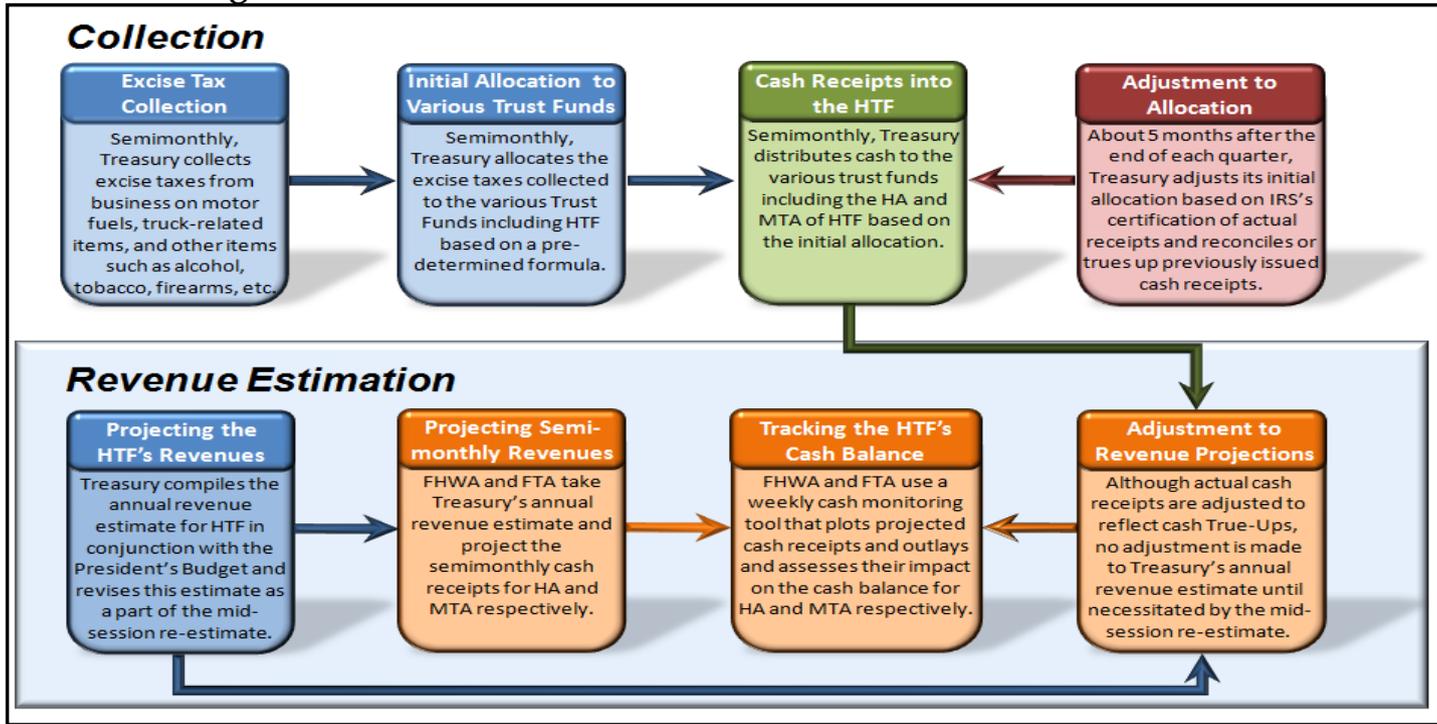
HA's ending cash balance

Source: Office of the Secretary of Transportation data with OIG explanations.

Objective 1 (cont'd.): HTF's Revenue Process

13

Figure 3. Illustration of Revenue Collection and Estimation



Source: OIG analysis.

Objective 1 (cont'd.): HTF's Revenue Estimation Process

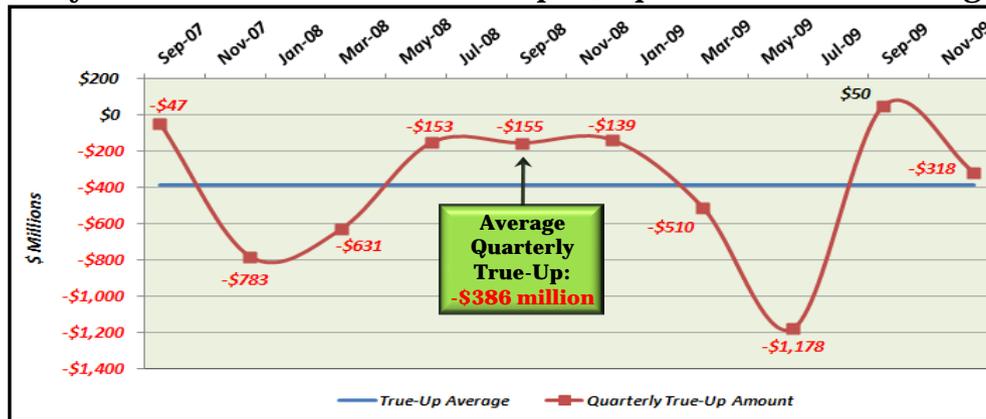
14

- Treasury estimates and allocates HTF's excise tax receipts.
 - Treasury projects HA's and MTA's cash receipts when it projects revenues for the U.S. government as part of compiling the President's annual budget (President's budget).
- Treasury uses a statutory formula to determine the semimonthly cash allocations to HA and MTA.
- Roughly 5 months after the end of each quarter, Treasury increases or decreases HA's and MTA's receipts after it confirms the amount of HTF excise taxes actually collected. The resulting adjustments are referred to as positive or negative "true-ups."
 - When true-ups occur, the OAs acknowledge these variances in their year-to-date actual data, but they must increase or decrease the revenue projections for the remainder of the fiscal year so as to match year end revenue projections set by the President's budget.
- Thus, if a shortfall occurs before or immediately following the mid-session review, these variances could influence the accuracy of the OAs' estimates of the magnitude and timing of possible shortfalls.

Objective 1 (cont'd.): Impact of Revenue Variances

15

Figure 4. Analysis of HA's Revenue True-Ups (September 2007 through December 2009)

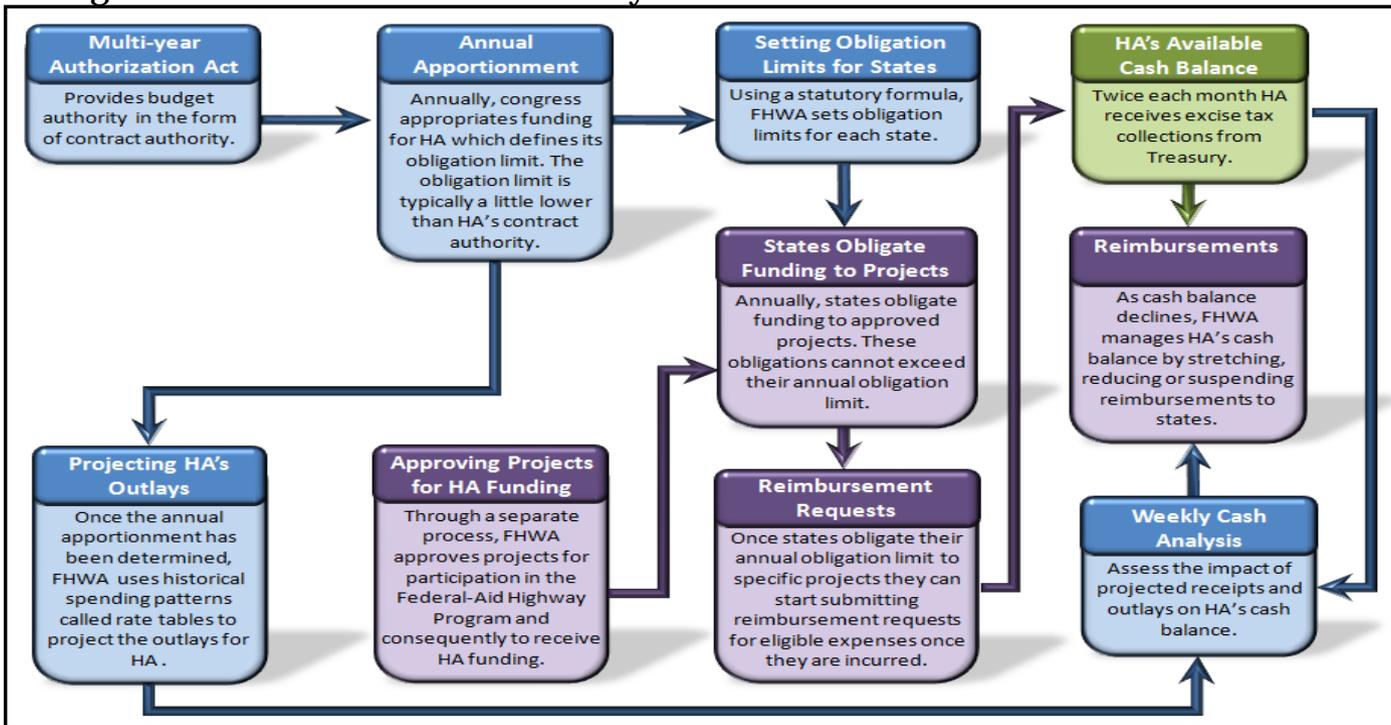


Source: OIG analysis of FHWA data.

- Between September 2007 through December 2009, HA noted true-ups ranging from \$50 million to **-\$1.2 billion**.
 - The average true-up for this period was **-\$386 million**.
 - The largest true-up was **-\$1.2 billion** (-16.2% of revenues) with the second largest being **\$783 million** (-11.6% of revenues).
 - The sole positive true-up was in the amount of \$50 million (0.5% of revenues).

Objective 1 (cont'd.): HA's Outlay Process

Figure 5. Illustration of HA's Outlay Estimation and Reimbursement Process



Source: OIG analysis.

Objective 1 (cont'd.): Basis for HA's Outlay Estimates

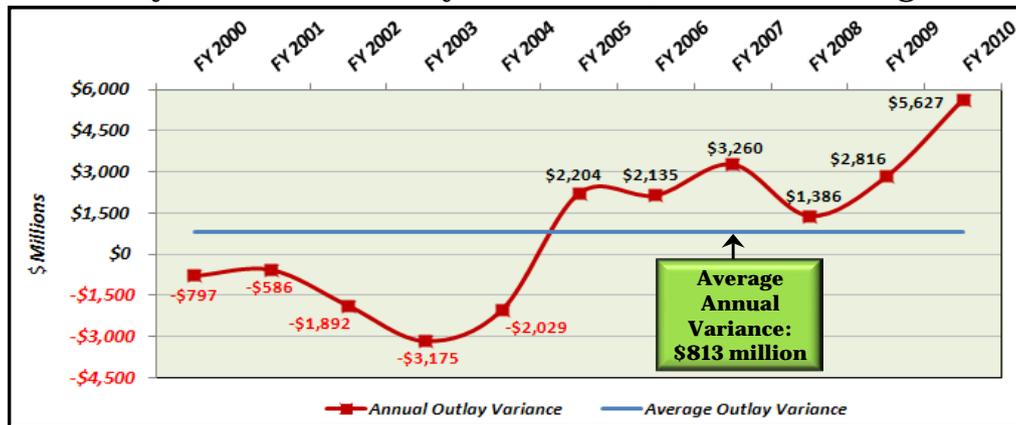
17

- The outlay estimation process begins with Congress setting HA's spending limit through the annual appropriations process.
- Once HA's annual appropriation is determined, FHWA uses historical spending patterns called "Outlay Rate Tables" to project the rate at which states (or recipients) will execute their HA funded projects and submit related reimbursement requests.
 - FHWA uses only one outlay rate table to project HA's outlays because HA administers one major program—the Federal Aid Highway Program (FAHP) that accounts for roughly 99% of its outlays.
 - FHWA's outlay rate table assumes that roughly 84% of reimbursements on eligible projects occur over the first 3 years, whereas only 16% of reimbursements occur over the final 6 years.
- Additionally, using a statutory formula, FHWA determines the obligation limits for each state, thereby making those funds accessible to them to obligate to approved FAHP projects of their choosing.

Objective 1 (cont'd.): Impact of HA's Outlay Variances

18

Figure 6. Analysis of HA's Outlay Variances (FY 2000 through FY 2010)



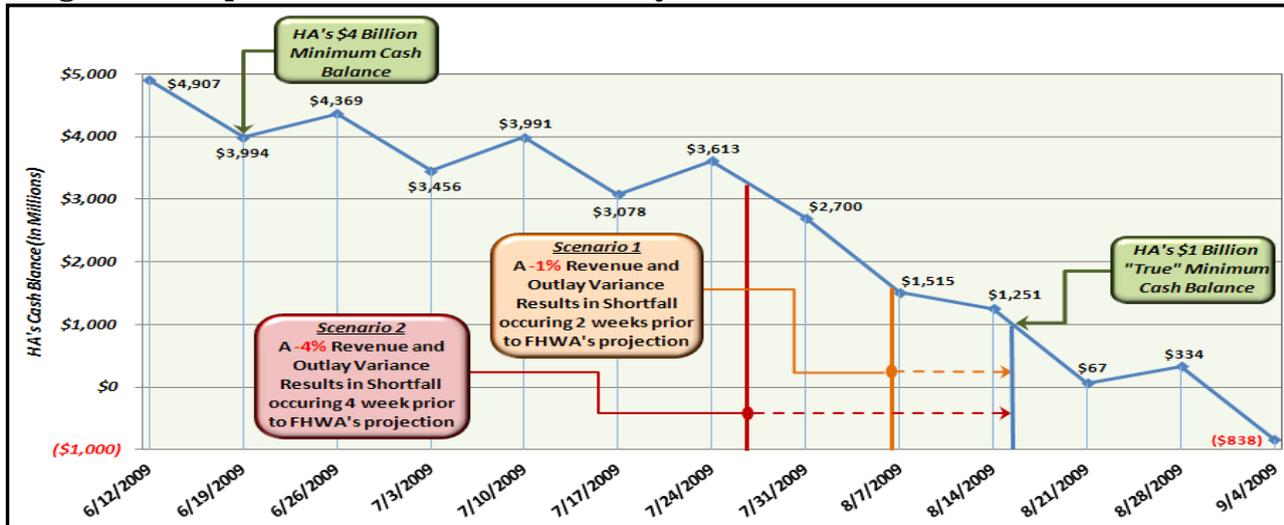
Source: OIG analysis of FHWA data.

- HA's outlay rate table provides a reasonable basis for projecting outlays over the long-term—HA outlays have varied by only \$813 million (2.2%) over the past 10 years.
- However, short-term outlay projections have not been as accurate—disregarding FY 2010 outlays (when outlays were \$5.6 billion lower than projected due to ARRA funding)—over the past 10 years outlays have varied between **-\$3.2 billion (-9.9%)** for FY 2003 and **\$3.3 billion (9.3%)** for FY 2007.

Objective 1 (cont'd.): Collective Impact of Variances

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Figure 7. Impact of Revenue and Outlay Estimates on HA's FY 2009 Shortfall



Source: OIG Analysis of FHWA Data

- A **-1%** variance in both revenues and outlays would have increased HA's cash burn by \$532 million, causing the FY 2009 shortfall to occur 2 weeks earlier than projected. (See Scenario 1, Figure 7 above)
- Similarly a **-4%** variance would have increased HA's cash burn by \$2.1 billion, causing the shortfall to occur 4 weeks earlier than projected. (See Scenario 2, Figure 7 above)

Objective 1 (cont'd.): MTA's Outlay Estimates

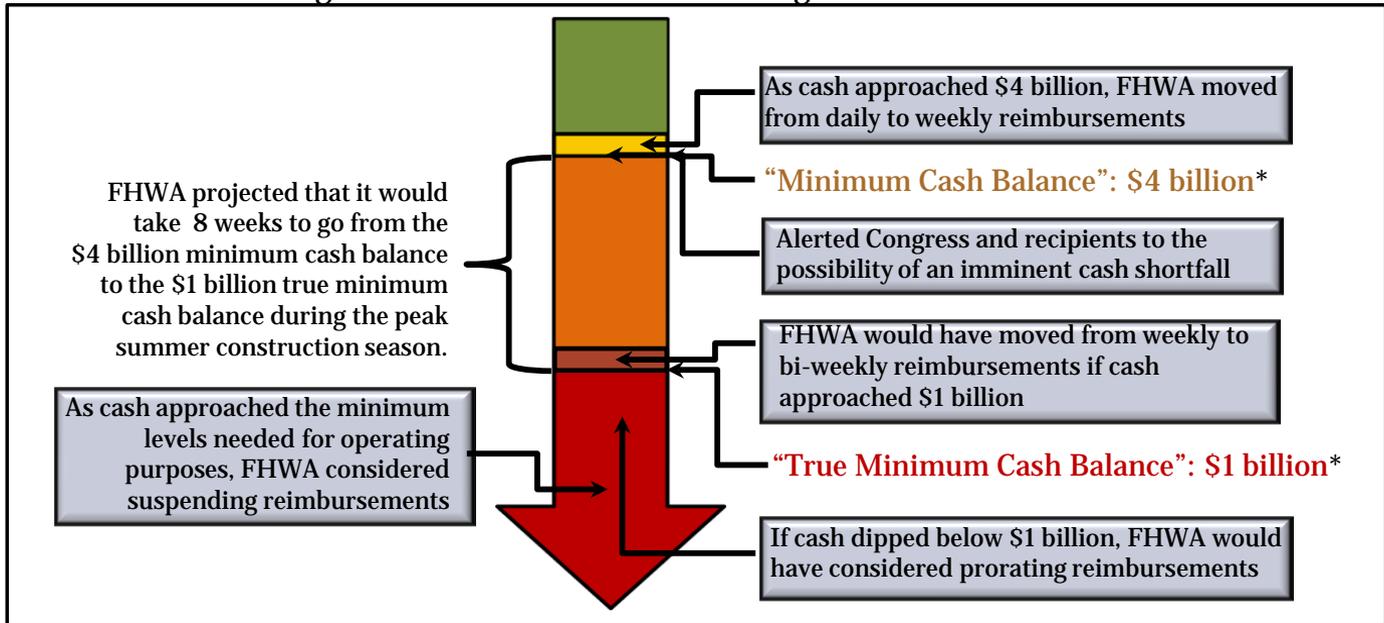
20

- MTA funds 16 different programs but FTA uses one 6-year outlay rate table to project MTA's outlays, a practice that could affect the accuracy of those projections.
 - Programs administered through MTA cover a wide range of expense categories ranging from maintenance expenses, which typically occur over 12 to 15 months, to capital expenditures which can occur over 5 to 6 years or longer.
 - The 6-year rate table used to project MTA's outlays attempts to estimate the rate at which recipients submit reimbursement requests related to each of these expense categories.
- As noted with FHWA, FTA's outlay rate table provided a reasonable basis for projecting MTA's outlays over the long-term (MTA's outlays have varied by **-4.1%** over the last 6 years).
- Short-term outlays have varied drastically (MTA outlays have varied between **-26.5%** and 19.3% annually over the same period).
- Outlay variances can result from recipients' control over magnitude and timing of reimbursement requests; and external events such as the lack of a long-term reauthorization, economic recession, etc.

Objective 1 (cont'd.): FHWA's Cash Management Procedures

- As the FY 2009 shortfall approached, FHWA invoked various cash management procedures to reduce HA's cash burn rate as outlined in Figure 8 below:

Figure 8. HA's FY 2009 Cash Management Procedures



Source: OIG analysis of FHWA data.

* Established by DOT but subject to change.

Objective 1 (cont'd.): FTA Lacks Cash Management Procedures

22

- **Because MTA has not yet faced a cash shortfall, FTA has not established shortfall management procedures.**
 - FTA has set MTA's minimum cash balance at \$1 billion but has no procedures for reducing MTA's cash burn as the balance approaches this threshold.
 - FTA has indicated that it will adopt shortfall management procedures similar to those used by FHWA in the event an MTA cash shortfall appears imminent.
- **However, FTA's projections suggest that MTA would have had a shortfall by early FY 2011 if it had not received the \$4.8 billion General Fund infusion in April 2010.**

Objective 2: DOT's Communications with Congress

23

- **The Office of Secretary of Transportation (OST) is responsible for communicating regularly with Congress regarding HA and MTA's status.**
- **OST uses two primary communication strategies to achieve this:**
 - OST briefs Congress on HTF's balance and outlook at least twice per year—at the release of the President's budget and at the mid-session review.
 - OST sends weekly emails to various congressional committees (including House Appropriations and Senate Budget committees) containing HA and MTA balance updates and projections of possible shortfalls for the current and upcoming fiscal year generated by the weekly cash analysis tool.
- **Any additional communications with Congress that may be deemed necessary are made at the behest of the Secretary of Transportation and/or the White House.**

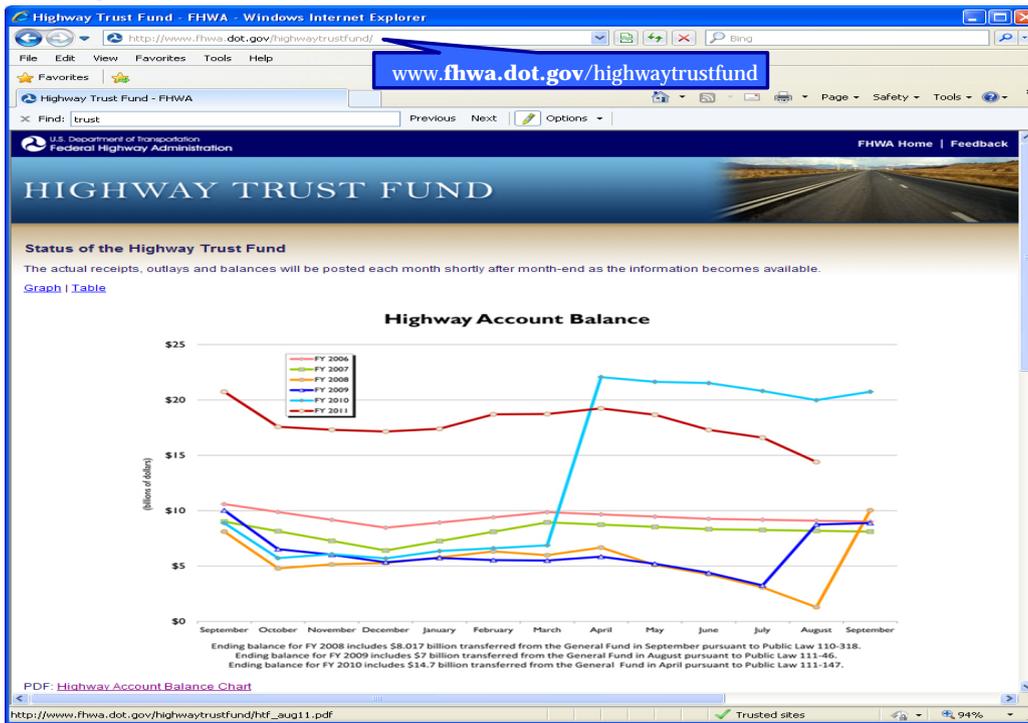
Objective 2 (cont'd.): FHWA's Communications with Recipients and Stakeholders

24

- **FHWA employs two mechanisms to communicate with recipients and stakeholders:**
 - FHWA posts HA's year-to-date and historical balance data on its Website and updates these data monthly (See Figure 9 and 10 on the slides 25 and 26).
 - FHWA provides a significant amount of information on its Website. However, the site does not include FHWA's cash management procedures or the minimum balance levels that would trigger the use of those procedures.
 - In 2009, FHWA notified states when cash dipped below the minimum cash threshold (set at \$4 billion), which FHWA estimated would provide recipients with as much as an 8-week notice of an imminent shortfall to take the necessary remedial actions.

Objective 2 (cont'd.): Information Available on FHWA's Website

Figure 9. HA Balance Data Available on FHWA's Website



Source: FHWA's Website

Objective 2 (cont'd.): Information Available on FHWA's Website (cont'd.)

Figure 10. HA Balance Data Available on FHWA's Website (cont'd.)

www.fhwa.dot.gov/highwaytrustfund

Status of the Highway Trust Fund - Fiscal Year 2011

	HPLS-10					Table FE-1					Fiscal Year to Date	Percent Change from Prior Year		
	October 2010	November 2010	December 2010	January 2011	February 2011	March 2011	April 2011	May 2011	June 2011	July 2011			August 2011	September 2011
Highway Account														
Opening Balance	\$20,743,269,254	\$17,582,233,128	\$17,304,795,028	\$17,149,151,028	\$17,397,312,858	\$16,792,359,361	\$16,732,368,943	\$19,242,846,786	\$16,664,868,123	\$17,299,476,005	\$16,694,702,551	\$0	\$20,743,269,254	133.6%
Receipts														
Net Tax Receipts	414,306,000	2,988,949,000	2,754,244,000	2,554,392,000	3,337,597,000	2,431,260,000	2,787,159,000	2,226,363,000	2,674,733,000	2,761,360,000	2,356,649,025	0	\$27,294,301,025	6.7%
Interest Income	1,896,164	1,848,019	1,298,647	1,738,828	1,350,728	910,708	448,140	343,711	308,230	286,819	378,824	0	\$10,870,308	6.8%
Other Receipts	1,897,291	1,918,433	1,175,989	1,389,615	1,302,512	1,694,234	1,849,935	1,965,043	1,676,921	1,352,472	6,407,321	0	\$21,126,646	-99.9%
Total Receipts	417,999,445	2,960,730,452	2,756,716,516	2,567,410,144	3,340,250,239	2,433,864,938	2,789,255,176	2,228,671,754	2,676,616,152	2,763,007,991	2,361,836,270	0	\$27,326,397,977	-32.2%
Transfers														
To Mass Transit Account	-	-	50,000,000	40,879,741	2,454,242	194,721,144	84,350,969	1,642,082	102,000,711	187,681,184	149,427,534	0	\$813,224,607	0.9%
From Mass Transit Account	-	-	-	3,105,928	1,259,953	1,625,000	1,699,721	2,640,276	16,253,914	852,638	6,858,474	0	\$34,355,904	33.5%
Outlays	3,670,024,670	3,269,189,553	2,852,350,515	2,281,537,501	2,033,999,429	2,210,799,233	2,196,127,084	2,907,647,611	3,956,202,373	3,290,951,999	4,413,474,007	0	\$32,890,302,773	16.7%
Closing Balance	\$17,582,233,128	\$17,304,795,028	\$17,149,151,028	\$17,397,312,858	\$16,792,359,361	\$16,732,368,943	\$19,242,846,786	\$16,664,868,123	\$17,299,476,105	\$16,694,702,551	\$14,400,496,764	\$0	\$14,400,496,764	-27.9%
Mass Transit Account														
Opening Balance	\$8,489,337,678	\$7,941,764,384	\$7,884,016,356	\$7,671,823,826	\$7,699,307,478	\$7,798,093,908	\$7,876,164,196	\$7,936,980,347	\$7,822,739,594	\$7,429,793,199	\$7,654,116,521	\$0	\$8,489,337,678	62.9%
Receipts														
Net Tax Receipts	61,160,000	472,044,000	435,332,000	405,313,000	495,853,000	385,096,000	441,369,000	323,162,000	422,259,000	435,847,000	350,205,262	0	\$4,237,660,262	1.5%
Interest Income	766,577	822,007	583,599	783,359	597,463	434,188	188,819	136,638	129,289	131,251	175,823	0	\$4,737,961	7.8%
Other Receipts	-	-	-	-	-	-	-	-	-	-	-	0	\$0	-100.0%
Total Receipts	61,926,577	472,866,007	435,915,599	405,813,359	496,450,463	385,630,188	441,667,818	323,298,638	422,388,289	436,078,261	380,381,085	0	\$4,332,388,223	-62.8%
Transfers														
To Highway Account	-	-	-	3,105,928	1,259,953	1,625,000	1,699,721	2,640,276	16,253,914	852,638	6,858,474	0	\$34,355,904	33.5%
From Highway Account	-	-	50,000,000	40,879,741	2,454,242	194,721,144	84,350,969	1,642,082	102,000,711	187,681,184	149,427,534	0	\$813,224,607	0.9%
Outlays	609,519,951	530,808,045	796,107,430	317,323,219	400,668,315	498,556,011	482,392,916	436,540,103	901,141,473	498,484,474	965,309,665	0	\$6,359,648,802	-1.6%
Closing Balance	\$7,941,764,384	\$7,884,016,356	\$7,871,823,826	\$7,699,310,478	\$7,796,093,908	\$7,876,164,196	\$7,936,980,347	\$7,822,739,594	\$7,429,793,199	\$7,654,116,521	\$7,140,756,003	\$0	\$7,140,756,003	-10.1%

Source: FHWA's Website

Objective 2 (cont'd.): FTA's Communications with Recipients and Stakeholders

27

- Since MTA has not faced a shortfall, FTA has not developed procedures to communicate with states, TAs and other stakeholders regarding MTA's status and possible shortfalls.
- FTA does not post MTA's year-to-date and historical balance data on its Website. Rather, FTA relies on FHWA to post the MTA balance information on the FHWA Website along with the HA postings (see Figure 10 on slide 26).

Objective 2 (cont'd.): Recipients' Perspectives on DOT's Communications

28

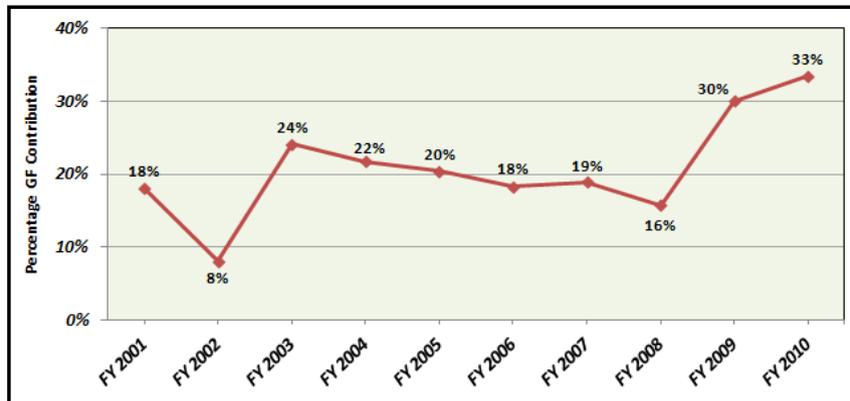
- States and TAs we surveyed informed us that without timely, accurate information on the status of the HA and MTA, they could be forced to suspend or cancel capital improvement projects and possibly scale back public transportation services.
- States and TAs that have access to alternate funding sources—by issuing bonds or accessing lines of credit, etc.—would need more than the 8-week notice currently proposed by FHWA to avoid any disruptions to their highway and transit programs.
- Additionally, states and TAs requested that they be allowed to plan for a shortfall in the accounts rather than having to react to them. However, this is only possible if they are able to anticipate shortfalls well in advance of their onset.
- Providing additional data on cash management procedures and minimum balances on OAs' Websites could help recipients better evaluate HTF accounts' financial position and the likelihood and timing of future shortfalls.

Objective 3: AATF Best Practices

29

- FAA is funded primarily by the AATF which receives revenues from a series of excise taxes paid by users of the national airspace system and receives an annual General Fund contribution, a fail safe mechanism that is not available to HTF.

Figure 11. AATF's General Fund Contribution to AATF (FY 2001 through FY 2010)



Source: FAA

- AATF provides a majority of FAA's funding and funds capital improvements to the U.S. airport and airways system.

Objective 3 (cont'd.): Short-Term Outlook for AATF's Solvency

30

- Like HTF, AATF's solvency has come under a lot of scrutiny in recent years as its uncommitted balance² declined from \$7.1 billion at the end of FY 2001 to \$360 million at the end of FY 2009 and \$770 million at the end of FY 2010.
- AATF's solvency concerns resulted in an increase in General Fund match to 30% and 33% respectively during FY 2009 and 2010 (see Figure 11 on slide 29) as compared to an average match of 18% for the previous 8 fiscal years.
- As noted above, AATF's solvency is measured in the context of its uncommitted balance. In contrast, HTF's solvency is measured in the context of whether it has the cash needed to pay obligations due within the next year or two.
- In the short-run AATF had a cash balance of \$9.4 billion at the end of FY 2010 and is not expected to confront a cash shortfall for the foreseeable future.

² The AATF's uncommitted balance is a measure of cash required to pay all of the AATF's obligations, including those that FAA will be required to pay in the future but have not yet come due.

Objective 3 (cont'd.): Key Takeaways from FAA's Management of AATF

31

- Because, AATF is not confronting a cash shortfall for the foreseeable future, it has not developed procedures to manage issues related to a cash shortfall.
- However, FAA employs some practices for projecting AATF's outlays which, if adopted by HTF's managers, could improve the accuracy of HTF outlay estimates.
 - Unlike FTA, FAA uses multiple rate tables to project AATF's outlays. These rate tables are aligned with different expense categories. Using multiple rate tables could increase the precision with which FTA is able to project MTA outlays.
 - FAA also closely tracks outlay trends on a project level basis for its Airport Improvement Program (one of the five different programs administered through AATF).
 - This project level tracking approach would benefit both FHWA and FTA because it would allow them to identify deviations in outlay trends and adjust shortfall projections accordingly.

Proposed Corrective Actions

32

- **We recommend that FHWA:**
 - Provide in its weekly report to Congress a range of time, rather than a specific date, when a shortfall is projected to occur to better reflect possible variances in a shortfall's timing.
 - Conduct a periodic assessment of the outlays associated with a representative sample of projects to identify deviations in outlay trends and adjust shortfall projections accordingly.
 - Publicize on its Website its cash management procedures and the events that trigger its use of these procedures to allow stakeholders to better evaluate HA's financial position.
- **We recommend that FTA:**
 - Provide in its weekly report to Congress a range of time, rather than a specific date, when a shortfall is projected to occur to better reflect possible variances in a shortfall's timing.
 - Conduct a periodic assessment of the outlays associated with a representative sample of projects to identify deviations in outlay trends and adjust shortfall projections accordingly.
 - Develop procedures to manage MTA's cash balance to exercise more control over MTA's cash flows when a shortfall appears imminent and publicize on its Website MTA's cash balance and management procedures and the events that trigger its use of these procedures to provide more transparency regarding MTA's status.

Major Contributors to the Briefing

33

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