



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

The Inspector General

Office of Inspector General
Washington, DC 20590

June 24, 2009

The Honorable Judd Gregg
Ranking Member
Committee on the Budget
United States Senate
Washington, DC 20510

Dear Senator Gregg:

This report is in response to your May 28, 2009, request that we evaluate the Department of Transportation's recent projection of an imminent cash shortfall in the Highway Account of the Highway Trust Fund (HTF). Such a shortfall, if unaddressed, would result in delayed or reduced reimbursements to the States for costs incurred under the Federal-aid Highway Program.

Our specific review objectives were to evaluate (1) the basis for the Department's projection of the magnitude and timing of a Highway Account cash shortfall, (2) how that projection would vary under different assumptions, and (3) the triggers the Department uses to decide that the risk of insolvency for the Highway Account requires action by the Administration and Congress.

To conduct this work, we interviewed officials from the Department of Transportation's Office of the Secretary and Federal Highway Administration (FHWA), the Congressional Budget Office, and the American Association of State Highway and Transportation Officials. We analyzed financial data, budget documents, and analyses from the Department regarding the Highway Account as well as related reports, statutes, and studies. We completed this work in a 4-week timeframe and ensured the evidence we obtained during this analysis provided a reasonable basis for our findings and conclusions, which are summarized below. A more extensive discussion of our findings and conclusions can be found in the enclosed presentation.

Basis for the Department's Projected Cash Shortfall

The Department used a reasonable methodology to project the magnitude and timing of a cash shortfall. However, some of its assumptions were outdated as the

Department did not use actual year-to-date data to adjust total revenue or outlay estimates. This could yield a margin of error in those projections of up to \$1 billion in magnitude and 2 weeks in timing.

The Department has issued three cash shortfall projections that reflect the different cash needs to meet anticipated payments for different time periods. These projections are based on actual data available through June 12, 2009, and the assumptions reflected in the President's fiscal year (FY) 2010 Budget, issued May 7, 2009, including the baseline spending assumptions for FY 2010. The Department projects the following shortfall amounts will need to be transferred into Highway Account:

- \$5.1 billion to pay anticipated bills through the end of FY 2009 and maintain a "prudent balance" of \$4 billion.
- \$7.0 billion to make payments through the week ending December 11, 2009, and maintain a \$4 billion cash balance.
- \$14.6 billion to make payments through the end of FY 2010 and maintain a \$4 billion cash balance.¹

The Department's current estimate of the magnitude of the shortfall continues to reflect the outlay and revenue projections in the President's FY 2010 Budget. The Department projects the shortfall will occur (i.e., that State reimbursements will have to be changed from a weekly to a bi-weekly basis) during the week ending August 21, 2009. This timing estimate is based on historical trends in the monthly variation in outlays and historical reimbursement data from the Treasury Department.

The Department revisits its cash shortfall projection weekly. However, while actual outlays through May 2009 were \$216.5 million more than what was projected (a variance of 0.9 percent), the Department did not adjust its monthly outlay projection for the remainder of FY 2009 because it considers this difference to be within the margin of error. Similarly, actual revenues through May 2009 were \$287 million less than what was projected. However, the Department increased its monthly revenue projection for the remainder of FY 2009 to make up for this under-collection. The Department did this because it is locked into an assumption that the total revenues reflected in the President's Budget will be collected during the fiscal year. As a test of its projections, the Department and FHWA informally perform "what if" analyses to gauge the probability that their shortfall estimate is off significantly. The Department decided based on these analyses that the possible margin of error in its

¹ The Department has presented these estimates colloquially as \$5 billion to \$7 billion is needed for FY 2009 and another \$8 billion to \$10 billion is needed for FY 2010. The difference between \$5 billion and \$7 billion is the time period covered, not uncertainty by the Department in its estimate. The difference between the \$8 billion and \$10 billion requirement is whether \$5 billion or \$7 billion is provided in FY 2009.

projections was not enough to change its basic message about an impending cash shortfall in the Highway Account.

Sensitivity of the Department's Cash Shortfall Projections to Assumptions

The cash balance forecasts vary largely due to factors outside the Department's control. While the accuracy of the Department's projections could be incrementally improved, the range of defensible values for the factors influencing those projections makes it difficult to estimate precisely either the magnitude or timing of the cash shortfall. As such, the Department could take steps to better manage expectations of its ability to manage the Highway Account's cash balance within precise limits and timeframes. It could also improve transparency regarding how Highway Account revenues vary according to different assumptions to help facilitate independent judgments of the accuracy of these projections in light of changing economic circumstances.

We requested, but were unable to obtain in the short timeframe available to us, a detailed sensitivity analysis of the key assumptions underlying Treasury's revenue estimating models for HTF receipts. However, Treasury indicated that the two key drivers of revenues for the Highway Account are real gross domestic product (GDP)—a measure of economic growth—and oil prices. The real GDP assumption used to project revenues is more optimistic than other private forecasts. In addition, oil prices through June 8, 2009, are about 20 percent higher than full calendar year prices projected in April. Together, these factors indicate that revenues are likely to fall short of the projection used in the Department's cash shortfall analysis.

The upcoming Mid-Session Review of the President's Budget will update current revenue and outlay forecasts, which will impact projected Highway Account cash flows. The Department expects to receive revised Mid-Session revenue forecasts by the end of June and plans to use them internally for cash management purposes. The Mid-Session updates could provide critical information if the timing of their public release corresponds to congressional consideration of legislation to address the FY 2009 and FY 2010 Highway Account cash shortfalls.

The Department's Triggers and Communication Strategy

The Department relies on cash balance forecasts to trigger formal notification to Congress and the States of a potential insolvency in the Highway Account. While the Department greatly increased the amount of data publicly available regarding the balance of the Highway Account, until recently it has lacked a consistent and easily understood message regarding the timing and magnitude of a cash shortfall. The Department could improve the current trigger by providing a simple, public interpretation of the data and projections on a more regular basis.

The Department has triggers for both a communications and a cash management strategy that are keyed off of a \$1 billion cash balance, as follows:

- The Department plans to formally notify Congress and the States when it projects to be approximately 8 weeks away from reaching a \$1 billion cash balance in the Highway Account (this is sometimes referred to as a \$4 billion trigger because at this point in the fiscal year it would take about 8 weeks to spend down the cash balance from \$4 billion to \$1 billion).
- The Department would shift from daily to weekly reimbursements to the States 1 week prior to reaching a \$1 billion cash balance and from weekly to bi-weekly reimbursements once a \$1 billion cash balance is reached.

Since its May 20, 2009, announcement, the Department has provided extensive congressional briefings on this topic, which have recently included forecasts of the Highway Account cash balance for each week through the end of FY 2010. Earlier in the process, however, the Department was less clear in its message regarding a cash shortfall. For example, the cash balance forecast informally released in November 2008 and the presentation in the FY 2010 President's Budget issued in May 2009 required a technical understanding of the Highway Account. Neither document included an explicit statement of an impending cash shortfall. Similarly, the year-to-date financial data made public on the FHWA website clearly show a downward trend in the cash balance, but no explicit interpretation is provided with the data regarding the implications for the magnitude or timing of a cash shortfall.

Concluding Observations

The Highway Account will have insufficient cash to pay all anticipated FY 2009 bills. The magnitude of the shortfall could be up to \$1 billion more than the Department's \$5.1 billion FY 2009 cash shortfall estimate, and the timing of the shortfall could be accelerated from the Department's projection by up to 2 weeks. In addition, the Highway Account faces an ongoing cash flow problem created by an imbalance between revenues and outlays. Transferring the minimum projected cash requirement into the Highway Account for FY 2009 will result in a new cash shortfall early in FY 2010.

Further, the Department's cash management responsibility for the Highway Account is at times not well served by its reliance on official revenue projections that are only updated twice a year. The accuracy of the Department's cash balance projections could be incrementally refined if explicit adjustments to these official revenue forecasts were made based on actual year-to-date data throughout the year.

Finally, even with these incremental improvements, there is a mismatch between the inherent difficulty in projecting revenue and outlays on a monthly basis and the

expectation for precision in these projections. The Department needs to consider managing expectations regarding the degree of precision possible in its projections.

We provided Department officials with a draft of this report and made technical adjustments where appropriate in response to their comments. We appreciate the cooperation of the Department during this review. If I can answer any questions or be of further assistance in this matter, please contact me at (202) 366-1959 or David Tornquist, Assistant Inspector General for Amtrak, High Speed Rail, and Economic Analysis, at (202) 366-1981.

Sincerely,

A handwritten signature in cursive script that reads "Calvin L. Scovel III". The signature is written in black ink and is positioned above the typed name.

Calvin L. Scovel III
Inspector General

Enclosure

Highway Trust Fund Solvency

Department of Transportation
Office of Inspector General
Requested by Senator Judd Gregg
Ranking Member, Senate Budget Committee



June 24, 2009

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Issue

- On May 20, 2009, the Department informally notified key congressional staff that the Highway Account of the Highway Trust Fund (HTF) would have insufficient cash to continue regular reimbursements to the States for highway expenditures in mid-August.
- Absent congressional action to increase deposits into the Highway Account, reimbursements to the States will be delayed and reduced.

Request Details

- Senator Judd Gregg, Ranking Member of the Senate Budget Committee, has requested that the Office of Inspector General (OIG) evaluate:
 - The basis for the Department's projection of the magnitude and timing of a Highway Account cash shortfall;
 - How that projection would vary under different assumptions; and,
 - The triggers the Department uses to decide that the risk of insolvency for the Highway Account requires action by the Administration and Congress.

Scope and Methodology

- ❑ To conduct this work, we interviewed officials from the Department of Transportation's Office of the Secretary and Federal Highway Administration, the Congressional Budget Office, and the American Association of State Highway and Transportation Officials.
- ❑ We analyzed financial data, budget documents, and analyses from the Department regarding the Highway Account as well as related reports, statutes, and studies.
- ❑ We completed this work in a 4-week timeframe and ensured that the evidence we obtained provided a reasonable basis for our findings and conclusions.
- ❑ We requested, but were unable to obtain in the short timeframe available to us, a detailed sensitivity analysis of the key assumptions underlying Treasury's revenue estimating models for HTF receipts.

Summary of Findings

- ❑ The Department used a reasonable methodology to project the magnitude and timing of a cash shortfall. However, some of its assumptions were outdated as the Department did not use actual year-to-date data to adjust total revenue or outlay estimates. This could yield a margin of error in those projections of up to \$1 billion in magnitude and 2 weeks in timing.
- ❑ The cash balance forecasts vary largely due to factors outside the Department's control. While the accuracy of the Department's projections could be incrementally improved, the range of defensible values for the factors influencing those projections makes it difficult to estimate precisely either the magnitude or timing of the cash shortfall.
- ❑ The Department could also improve transparency regarding how Highway Account revenues vary according to different assumptions to help facilitate independent judgments of the accuracy of these projections in light of changing economic circumstances.

Summary of Findings

- ❑ The Department relies on cash balance forecasts to trigger formal notification to Congress and the States of a potential insolvency in the Highway Account. While the Department greatly increased the amount of data publicly available regarding the balance of the Highway Account, until recently it has lacked a consistent and easily understood message regarding the timing and magnitude of a cash shortfall.

HTF Background:

History of the Highway Trust Fund

- ❑ The HTF was created by the Highway Revenue Act of 1956 to account for highway-user tax receipts that are collected by the Federal Government.
- ❑ These receipts support state highway infrastructure, safety projects, and mass transit.
- ❑ The HTF consists of a Highway Account, administered by the Federal Highway Administration (FHWA), and a Mass Transit Account administered by the Federal Transit Administration (FTA).

HTF Background:

HTF Receipts and Disbursements

- Receipts into the HTF are derived from two main sources:
 - Federal excise taxes on motor fuels, i.e., gasoline and diesel fuel (accounts for roughly 88% of total receipts from fiscal year [FY] 2005 to FY 2008)
 - Truck-related taxes, i.e., taxes on truck and trailer sales, truck tires, and use of heavy-vehicles (accounts for roughly 8% of total receipts over the same period)
- Most receipts from motor fuel taxes (roughly 84% of gasoline and 88% of diesel) are deposited in the Highway Account, with the remainder deposited in the Mass Transit Account. All truck-related taxes are allocated to the Highway Account.

HTF Background:

HTF Receipts and Disbursements

- ❑ Disbursements (or outlays) from the Highway Account flow from spending levels (contract authority) that are specified in multi-year authorization acts (the most recent being SAFETEA-LU¹) and are subject to obligation limitations contained in annual appropriation acts.
- ❑ FHWA distributes the Federal-aid Highway Program obligation limits among the States based on a multi-step process specified in law.
- ❑ Disbursements occur when FHWA reimburses the States based on vouchers submitted for work completed. As a result, the States largely determine the pace of disbursements from the Highway Account.

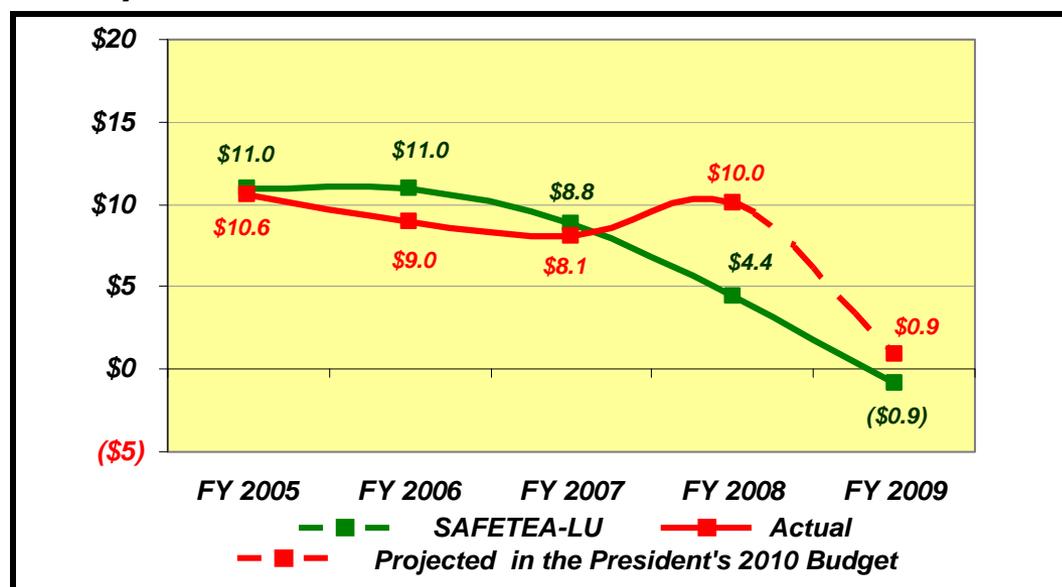
¹ The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users or SAFETEA-LU was signed into law on August 10, 2005, and is due to expire at the end of FY 2009.

HTF Background:

SAFETEA-LU's Role in the Cash Shortfall

- The Highway Account balance increased steadily through the late 1990s, reaching a peak of \$23 billion in FY 2000.
- However, starting with TEA-21,² outlays outpaced receipts and led to an erosion in the cash surplus.
- SAFETEA-LU increased contract authority over TEA-21 with the intention of spending down the cash surplus over its authorization period.

Figure 1. Comparison of Projected Cash Balance per SAFETEA-LU to Actual (\$ in Billions)



Note: SAFETEA-LU Projections per CBO's Estimate (April 2006)

Note: FY 2008 actual and FY 2009 projected ending balances reflect the \$8 billion transfer in September 2008 from the General Fund not anticipated by SAFETEA-LU.

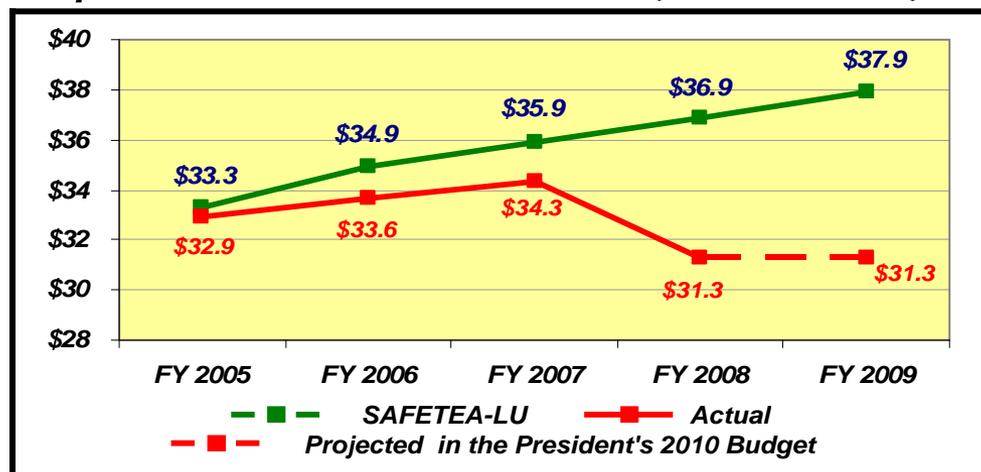
² The Transportation Equity Act for the 21st Century or TEA-21 was signed into law on June 9, 1998, and was the authorization act that preceded SAFETEA-LU.

Basis of Department's Projections:

FY 2008 Cash Shortfall

- ❑ The combined effect of higher fuel prices and the lagging economy driving down vehicle miles traveled caused the Highway Account balance to decline more than anticipated over the authorization period.
- ❑ The Department provided a 3-week notice to the States that it intended to move to weekly, and possibly pro-rated, reimbursements.
- ❑ In early September, Congress transferred \$8 billion from the General Fund to the Highway Account, temporarily alleviating the problem. The \$8 billion amount reflected estimates of funds previously transferred out of the Highway Account and did not reflect an assessment of the resources needed to avoid another shortfall in FY 2009.
- ❑ The Department internally recognized at the start of FY 2009 that the Highway Account remained at risk of another shortfall.

Figure 2. Comparison of Projected Revenues per SAFETEA-LU to Actual (\$ in Billions)



Note: SAFETEA-LU Projections per CBO's Estimate (April 2006)

Note: Actual revenues do not reflect the impact of \$8 billion General Fund transfer during FY 2008.

Basis of Department's Projections:

Estimate of Cash Shortfall

- The Department has issued three estimates of the potential cash shortfall, each covering a different time period:
 - \$5.1 billion to get through FY 2009
 - \$7 billion to get through the beginning of December 2009
 - \$15 billion to get through the end of FY 2010

- While the Department has recently recommended an 18-month extension of the current reauthorization that will replenish the HTF, it has not released details, including amounts.

Basis of Department's Projections:

FY 2009 Cash Shortfall

- Based on actual data through June 12, 2009, the Department is projecting that the Highway Account will experience a \$5.1 billion cash shortfall during FY 2009.

Table 1. Department's Proposal for FY 2009 Highway Account Cash Shortfall (\$ in Billions)

<i>FY 2009 Ending Cash Balance^a</i>	<i>\$0.9</i>
Less: <i>Projected October 2009 Treasury Reimbursement^b</i>	<i>\$2.0</i>
<i>Projected Fiscal Year End 2009 Actual Cash Available</i>	<i>(\$1.1)</i>
Add: <i>Minimum Cash Requirement^c</i>	<i>\$4.0</i>
<i>Estimate of Cash Shortfall</i>	<i>\$5.1</i>

^a Ending cash balance per the President's FY 2010 Budget.

^b The final cash deposit from Treasury of FY 2009 revenues, which occurs in October, is included in the Highway Account's year-end balance for accounting purposes. The funds are not available for disbursement during the current fiscal year.

^c The \$4.0 billion minimum cash requirement approximates a peak month cash outlay from the Highway Account. DOT has determined this to be the prudent minimum balance.

- The Department currently projects it would need to move from daily to weekly payments during the week ending August 14, bi-weekly payments during the week ending August 21, and prorated payments during the week ending September 4.

Basis of Department's Projections:

FY 2010 Cash Shortfall

- The Department is projecting that the Highway Account will experience an additional \$9.6 billion cash shortfall during FY 2010.

Table 2. Department's Proposal for FY 2010 Highway Account Cash Shortfall (\$ in Billions)

<i>Beginning Balance^a</i>	<i>\$4.0</i>
Add: <i>Projected FY 2010 Receipts</i>	<i>\$32.6</i>
Less: <i>Projected FY 2010 Outlays^b</i>	<i>\$42.2</i>
<i>Projected Fiscal Year End 2010 Actual Cash Available</i>	<i>(\$5.6)</i>
Add: <i>Minimum Cash Requirement</i>	<i>\$4.0</i>
<i>Estimate of Cash Shortfall</i>	<i>\$9.6</i>

^a Assumes a \$5.1 billion General Fund Transfer in FY 2009.

^b Assumes an obligation limit of \$41.1 billion per the President's 2010 Budget.

- The timing of any FY 2010 cash shortfall will depend on the amount of funds provided to address the FY 2009 cash crisis as well as economic and fuel price trends and FY 2010 spending levels.
 - A \$5.1 billion inflow suggests an immediate cash crisis at the beginning of FY 2010.
 - A \$7 billion inflow will provide a slight cash cushion to the Highway Account and delay the cash crisis to the beginning of December.

Basis of Department's Projections:

Basis for Department's Shortfall Estimate

- ❑ The Department's estimate of the magnitude and timing of the cash shortfall reflects Treasury's estimate of receipts into the Highway Account. These receipt estimates were calculated in conjunction with the preparation of the President's FY 2010 Budget.
- ❑ The cash shortfall estimate also reflects the Department's estimate of outlays from the Highway Account
- ❑ As discussed in the following section, the cash shortfall and the revenue and outlay estimates depend upon key assumptions that may vary with changing economic conditions.

Basis of Department's Projections:

Basis for Department's Shortfall Estimate

- The Department performs a weekly analysis of the Highway Account's cash flows to project the timing of the shortfall.
 - In this analysis, outlay projections are reviewed in light of actual year-to-date data. However, to date, the Department has not altered its projected outlays for the remainder of FY 2009 because they are considered to be within the margin of error.
 - The Department's weekly analysis **does not** align its estimate of receipts for the remainder of FY 2009 with actual data.
 - The Department continues to use the most current estimates provided by Treasury, i.e., from the President's FY 2010 budget released in May.
 - As a result, the projections for the remainder of FY 2009 do not consider the impact of the reduced year-to-date receipts. Instead, receipts for the remainder of the fiscal year are **adjusted upward** (altered in the wrong direction) to meet the original projection.

Sensitivity of Projections to Key Assumptions:

Basis for Revenue Projections

- ❑ The Treasury Department's Office of Tax Analysis (OTA) forecasts tax receipts for the Highway Account.
- ❑ The highway-related excise taxes are estimated using the Administration's economic forecast, a wide range of economic models, and recent data on tax collections and reported tax liabilities.
- ❑ OTA uses five separate models for each of the five dedicated Highway Account excise tax sources:
 - Gasoline and related fuels
 - Diesel and other fuels
 - Truck and trailer sales
 - Truck tires
 - Heavy vehicle usage
- ❑ These models estimate the historic relationship between key macroeconomic variables and excise tax collections.

Sensitivity of Projections to Key Assumptions:

Basis for Revenue Projections

- ❑ The two key macroeconomic drivers for projecting revenues into the Highway Account are real gross domestic product (GDP)—a measure for economic growth—and oil prices.
- ❑ The revenue projections related to the Highway Account are updated twice a year in the President's Budget and the Mid-Session Review.
- ❑ Transfers into the Highway Account from the Treasury Department are based on the Administration's most current revenue projection (i.e., the President's Budget or Mid-Session Review estimates) because actual excise tax receipt amounts are not immediately available.
- ❑ Once a quarter, the Treasury Department reconciles the payments made into the Highway Account to actual excise tax receipts. This process, referred to as a "true-up," can increase or decrease the cash in the Highway Account and typically occurs 5 months after the end of a quarter.

Sensitivity of Projections to Key Assumptions:

Basis for Revenue Projections

- High gas prices and the downturn in the economy resulted in significant negative true-ups to the Highway Account during FY 2008 and year-to-date FY 2009:
 - The FY 2008 true-ups ranged from negative \$46 million to negative \$783 million.
 - Two true-ups to date in FY 2009 – negative \$149 million in February and negative \$139 million in May.
 - As a result, cash available to the Highway Account through May 2009 was \$288 million less than projected.

Sensitivity of Projections to Key Assumptions:

Sensitivity of Revenue Projections

- The real GDP growth assumption used to project the revenues for the Highway Account in the President's FY 2010 budget is more optimistic than comparable estimates.

Table 3. Comparison of GDP Estimates

Source of GDP Estimate	CY 2009 Real GDP	4 th Quarter CY 2009 Real GDP
President's FY 2010 Budget (May 2009)	-1.2 %	0.3 %
CBO (March 2009)	-3.0 %	-1.5 %
Blue Chip Consensus (April 2009)	-2.6 %	-1.3 %
Macro Economic Advisors (May 2009)	Not Available	-1.7 %

- Higher real GDP translates into higher revenues for the Highway Account.
- Actual receipts into the Highway Account for the remainder of FY 2009 and FY 2010 may be less than the amounts the Department incorporates into its shortfall estimate.

Sensitivity of Projections to Key Assumptions:

Sensitivity of Revenue Projections

Table 4. Comparison of Energy Information Administration's (EIA) Estimates to Actual Energy Commodity Prices

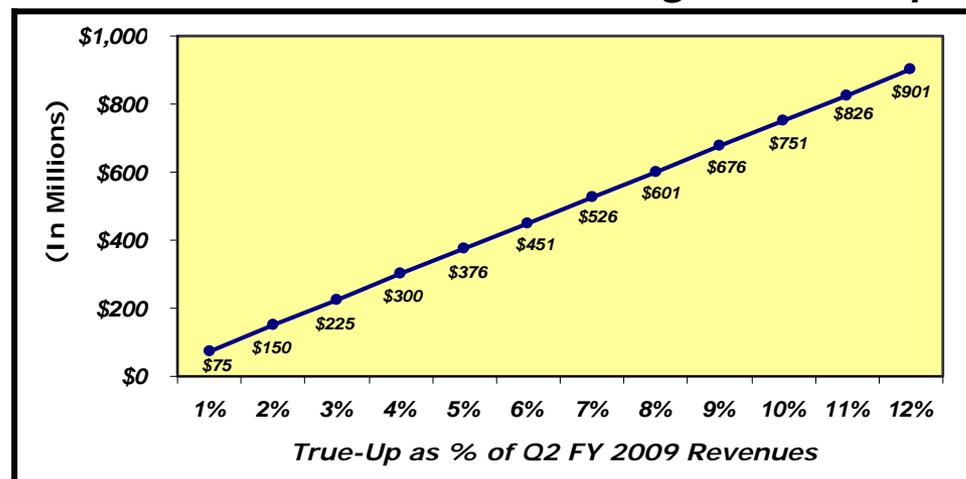
Energy Commodity	EIA Estimate CY 2009 (April 2009)	Actual CY 2009 (Thru June 8)
Light Crude Oil (price per barrel)	\$40.52	\$48.28
Motor Gasoline (price per gallon)	\$1.90	\$2.10

- ❑ Higher gasoline prices translate into lower revenues for the Highway Account.
- ❑ The energy price projections used in the Administration's HTF model are not publicly available.
- ❑ However, the EIA projections are significantly lower than the actual year-to-date figures. This coupled with the recent rise in oil prices suggests that actual Highway Account revenues may underperform projections.

Sensitivity of Projections to Key Assumptions:

Sensitivity of Cash Shortfall Projections to Changes in Revenue

Figure 3. Sensitivity of the Magnitude of FY 2009 Cash Shortfall to August True-Up



Note: Highway Account had gross receipts totaling \$7.51 billion during Q2 FY 2009.

- Figure 3 shows the range of impact the August true-up will have on the Department's shortfall estimate.
- The size of the true-up could accelerate the timing of when FHWA has to move to a bi-weekly payment schedule (i.e., when the cash balance of the Highway Account dips below \$1.0 billion) by up to 1 week. The August true-up is scheduled for August 18.
- The true-up will affect the magnitude of the projected cash shortfall and consequently the cash available for disbursement to the States.
- Recent revenue true-ups have ranged between **(1.4)%** in February 2009 (compared to Q4 FY 2008 projections) and as high as **(11.3)%** in May 2008 (compared to Q1 FY 2008 projections). The most recent revenue true-up in May 2009 was **(2.3)%** compared to Q1 FY 2009 projections.

Sensitivity of Projections to Key Assumptions:

Basis for Outlay Projections

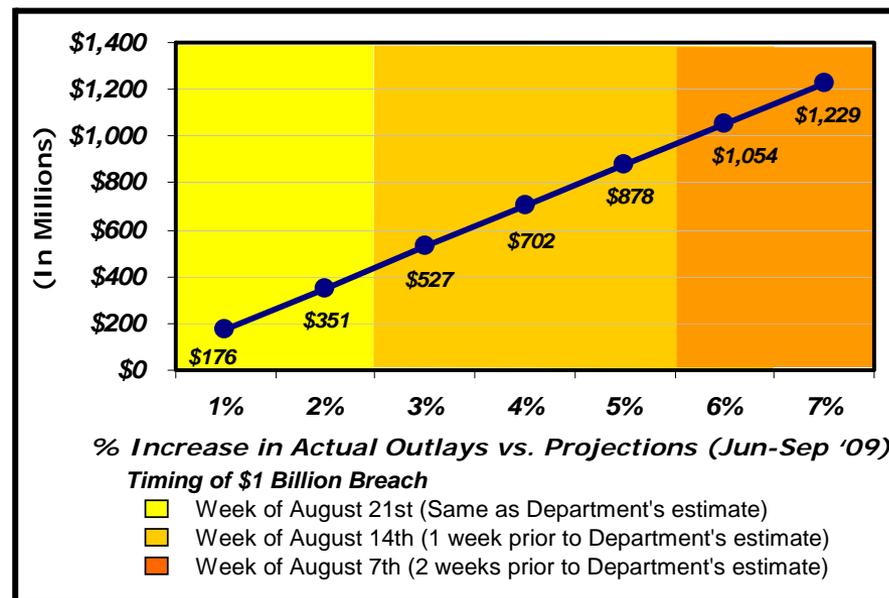
- ❑ The annual outlays for Highway Account-funded programs are projected on the basis of historical spending patterns for these programs. For example, Federal-aid Highway Program projects are projected to outlay over 8 years with 27% of funds outlayed in year 1.
- ❑ The annual outlays are broken down into monthly outlays that factor in seasonality (outlays are typically higher for the summer and fall months) and the timing of state reimbursement requests.
- ❑ FHWA revalidated the Federal-aid outlay rates last fall.
- ❑ In FY 2007 and FY 2008, outlay projections have exceeded actual outlays by an annual average of 1.9%. In FY 2009 through May, actual outlays have exceeded projections by 0.9%, or \$217 million.

Sensitivity of Projections to Key Assumptions:

Variability of Monthly Outlay Projections

- The monthly outlay projections used to determine the timing of the cash shortfall have at times been significantly off.
 - For example, actual outlays were 19% lower than projected for March 2009 whereas December 2008 outlays were 11% higher.
 - Monthly variations in outlays are caused by the unpredictability associated with the timing of the States' reimbursement requests.
 - Anything greater than a 2.6% variance from projected outlays will affect the timing of \$1.0 billion breach.
 - The size of the variance could affect the magnitude of the projected cash shortfall and consequently the cash available for disbursement to the States.
 - Figure 4 shows the range of impact that underestimated outlays will have on the Department's shortfall estimate.

Figure 4. Sensitivity of the Magnitude and Timing of FY 2009 Cash Shortfall to Increase in Outlays



Note: The Department is projecting outlays of \$17.6 billion between June and September 2009.

Sensitivity of Projections to Key Assumptions: Reasonableness of Shortfall Projections

- The Department uses stale revenue projections (currently, from the President's budget) in estimating the magnitude and timing of the cash shortfall.
 - The Department does not consider the impact of either the prior negative true-ups or the impact of current energy prices and economic trends.
 - To the extent that actual revenues differ from Treasury's projections, that difference is added (or subtracted) to occur later in the fiscal year so that total fiscal year revenues remain the same.
- The Department expects to receive the Mid-Session Review updates by the end of June and will adjust its analysis for internal cash management purposes accordingly at that point.

Sensitivity of Projections to Key Assumptions:

Reasonableness of Shortfall Projections

- A combination of the following factors could yield a margin of error in the Department's shortfall projections of up to \$1 billion in magnitude and 2 weeks in timing:
 - Downward revisions to projected receipts in the Mid-Session Review
 - A significantly large negative August true-up
 - Variance of weekly outlays from projection (due to timing of the States' reimbursement requests)
- Another factor that could affect the magnitude and timing of cash shortfall is the States' authority to seek higher advance construction reimbursements. While we have seen no evidence of a "run on the bank," in the event that one does occur, outlay projections could be underestimated.

Triggers and Communication Strategy:

Lessons Learned from FY 2008 Shortfall

- ❑ In FY 2008, the Department provided only 3 weeks notice prior to the impending cash shortfall.
- ❑ Recognizing the need to communicate with stakeholders in a more timely manner, DOT developed a variety of triggers based on the Highway Account's cash balance and posts monthly cash balance data on the FHWA website to ensure that the most current trend information is available.
- ❑ While the Department agreed with Government Accountability Office's February 2009 recommendation³ that improving mechanisms to monitor Highway Accounts balance was critical, it concluded that given the minimal balance in the Highway Account, monitoring the cash balance was the best vehicle to anticipate the timing of any insolvency.
- ❑ The Department now monitors cash on a weekly basis to predict the exact timing of the shortfall. The Department performs informal "what if" analyses to gauge the probability that their shortfall estimate is off significantly.

³ Source: GAO-09-316 – Highway Trust Fund, Improved Solvency Mechanisms and Communication Needed to Help Avoid Shortfall in the Highway Account issued in February 2009.

Triggers and Communication Strategy:

Cash Monitoring and Management Triggers

- ❑ **8 weeks prior to \$1 billion cash balance** – DOT notifies both Congress and the States.
- ❑ **1 month prior to \$1 billion cash balance** – DOT moves to daily cash monitoring.
- ❑ **1 week prior to \$1 billion cash balance** – Payments to the States reduced from daily to weekly reimbursements.
- ❑ **Cash balance dips below \$1 billion** - Payments to the States reduced from weekly to bi-weekly reimbursements.

Triggers and Communication Strategy:

Cash Monitoring and Management Triggers

- ❑ The initial indication of a potential future insolvency was determined at the start of FY 2009; as a result, the Department has been monitoring the cash balance on a weekly basis.
- ❑ The Department moved from twice daily to daily reimbursements leading into last year's insolvency and continues to operate as such.
- ❑ The States will be reimbursed on a pro rata basis once there is insufficient cash on hand to make full payments.
- ❑ Finally, the Department will suspend all cash payments until new receipts come in when the cash balance approaches the minimum working capital requirement for items such as payroll, essential vendor payments, etc.

Triggers and Communication Strategy:

Reasonableness of Triggers and Communication

- Utilizing the cash balance as the basis of any triggers and monitoring the actual cash flows as opposed to some other metric is the appropriate mechanism to determine the timing of any shortfall at this late juncture.

However, consideration of current trends in the economy and fuel prices is critical to accurately project the magnitude and timing of the August true-up.

- Earlier communication of the solvency of the Highway Account is needed.
 - The Department was aware of the likelihood of a 2009 cash shortfall even after the FY 2008 \$8 billion infusion.
 - Even though people “in the know” were not surprised by the news of a 2009 shortfall, there was a lack of explicit statements about the potential shortfall until late May.

Triggers and Communication Strategy:

Reasonableness of Triggers and Communication

- ❑ The Department released a Highway Account projection to congressional staff in November 2008 that indicated the Highway Account would end the year with \$2.7 billion balance.
- ❑ The President's 2010 budget released May 7 projected the Highway Account to end the year with a \$940 million balance.
- ❑ Both of these fiscal year end estimates reflected the \$2 billion cash receipt, which is not received until October.
 - As a result, the President's budget implicitly projected a shortfall in FY 2009. However, it did not explicitly state that a bailout of the Highway Account would be required in FY 2009.
 - As such, the actual "cash" as opposed to "accounting" balance at FY end was projected to be NEGATIVE \$1.1 billion.

Triggers and Communication Strategy:

Reasonableness of Triggers and Communication

- While the Department greatly increased the amount of data publicly available regarding the balance of the Highway Account, until recently, it has lacked a consistent and easily understood message regarding the timing and magnitude of a cash shortfall.
- The Department could improve the understanding of the HTF balance by providing a simple, public interpretation of the data and projections on a more regular basis.

Conclusion

- ❑ The Highway Account will have insufficient cash to pay all anticipated FY 2009 bills. The magnitude of the shortfall could be up to \$1 billion more than the Department's \$5.1 billion FY 2009 cash shortfall estimate, and the timing of the shortfall could be accelerated from the Department's projection by up to 2 weeks.
- ❑ Transferring the minimum projected cash requirement into the Highway Account for FY 2009 will result in a new cash shortfall early in FY 2010.
- ❑ The Department's cash management responsibility for the Highway Account is at times not well served by its reliance on official revenue projections that are only updated twice a year. The Department could incrementally refine the accuracy of its cash balance projections by making explicit adjustments to these official revenue forecasts based on actual year-to-date data throughout the year.

Conclusion

- ❑ Even with these incremental improvements, there is a mismatch between the inherent difficulty in projecting revenue and outlays on a monthly basis and the expectation for precision in these projections. The Department needs to consider managing expectations regarding the degree of precision possible in its projections.