

# RELIABILITY OF HIGHWAY TRUST FUND REVENUE ESTIMATES

---

(109-64)

HEARING  
BEFORE THE  
SUBCOMMITTEE ON  
HIGHWAYS, TRANSIT AND PIPELINES  
OF THE  
COMMITTEE ON  
TRANSPORTATION AND  
INFRASTRUCTURE  
HOUSE OF REPRESENTATIVES  
ONE HUNDRED NINTH CONGRESS  
SECOND SESSION

---

APRIL 4, 2006

---

Printed for the use of the  
Committee on Transportation and Infrastructure



---

U.S. GOVERNMENT PRINTING OFFICE

28-279 PDF

WASHINGTON : 2006

---

For sale by the Superintendent of Documents, U.S. Government Printing Office  
Internet: bookstore.gpo.gov Phone: toll free (866) 512-1800; DC area (202) 512-1800  
Fax: (202) 512-2250 Mail: Stop SSOP, Washington, DC 20402-0001

## COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE

DON YOUNG, Alaska, *Chairman*

THOMAS E. PETRI, Wisconsin, <i>Vice-Chair</i>	JAMES L. OBERSTAR, Minnesota
SHERWOOD L. BOEHLERT, New York	NICK J. RAHALL, II, West Virginia
HOWARD COBLE, North Carolina	PETER A. DeFAZIO, Oregon
JOHN J. DUNCAN, Jr., Tennessee	JERRY F. COSTELLO, Illinois
WAYNE T. GILCHREST, Maryland	ELEANOR HOLMES NORTON, District of Columbia
JOHN L. MICA, Florida	JERROLD NADLER, New York
PETER HOEKSTRA, Michigan	CORRINE BROWN, Florida
VERNON J. EHLERS, Michigan	BOB FILNER, California
SPENCER BACHUS, Alabama	EDDIE BERNICE JOHNSON, Texas
STEVEN C. LATOURETTE, Ohio	GENE TAYLOR, Mississippi
SUE W. KELLY, New York	JUANITA MILLENDER-McDONALD, California
RICHARD H. BAKER, Louisiana	ELIJAH E. CUMMINGS, Maryland
ROBERT W. NEY, Ohio	EARL BLUMENAUER, Oregon
FRANK A. LoBIONDO, New Jersey	ELLEN O. TAUSCHER, California
JERRY MORAN, Kansas	BILL PASCRELL, Jr., New Jersey
GARY G. MILLER, California	LEONARD L. BOSWELL, Iowa
ROBIN HAYES, North Carolina	TIM HOLDEN, Pennsylvania
ROB SIMMONS, Connecticut	BRIAN BAIRD, Washington
HENRY E. BROWN, Jr., South Carolina	SHELLEY BERKLEY, Nevada
TIMOTHY V. JOHNSON, Illinois	JIM MATHESON, Utah
TODD RUSSELL PLATTS, Pennsylvania	MICHAEL M. HONDA, California
SAM GRAVES, Missouri	RICK LARSEN, Washington
MARK R. KENNEDY, Minnesota	MICHAEL E. CAPUANO, Massachusetts
BILL SHUSTER, Pennsylvania	ANTHONY D. WEINER, New York
JOHN BOOZMAN, Arkansas	JULIA CARSON, Indiana
JIM GERLACH, Pennsylvania	TIMOTHY H. BISHOP, New York
MARIO DIAZ-BALART, Florida	MICHAEL H. MICHAUD, Maine
JON C. PORTER, Nevada	LINCOLN DAVIS, Tennessee
TOM OSBORNE, Nebraska	BEN CHANDLER, Kentucky
KENNY MARCHANT, Texas	BRIAN HIGGINS, New York
MICHAEL E. SODREL, Indiana	RUSS CARNAHAN, Missouri
CHARLES W. DENT, Pennsylvania	ALLYSON Y. SCHWARTZ, Pennsylvania
TED POE, Texas	JOHN T. SALAZAR, Colorado
DAVID G. REICHERT, Washington	JOHN BARROW, Georgia
CONNIE MACK, Florida	
JOHN R. 'RANDY' KUHL, Jr., New York	
LUIS G. FORTUÑO, Puerto Rico	
LYNN A. WESTMORELAND, Georgia	
CHARLES W. BOUSTANY, Jr., Louisiana	
JEAN SCHMIDT, Ohio	

## SUBCOMMITTEE ON HIGHWAYS, TRANSIT AND PIPELINES

THOMAS E. PETRI, Wisconsin, *Chairman*

SHERWOOD L. BOEHLERT, New York  
HOWARD COBLE, North Carolina  
JOHN J. DUNCAN, JR., Tennessee  
JOHN L. MICA, Florida  
PETER HOEKSTRA, Michigan  
SPENCER BACHUS, Alabama  
STEVEN C. LATOURETTE, Ohio  
SUE W. KELLY, New York  
RICHARD H. BAKER, Louisiana  
ROBERT W. NEY, Ohio  
FRANK A. LOBIONDO, New Jersey  
JERRY MORAN, Kansas  
GARY G. MILLER, California, *Vice-Chair*  
ROBIN HAYES, North Carolina  
ROB SIMMONS, Connecticut  
HENRY E. BROWN, JR., South Carolina  
TIMOTHY V. JOHNSON, Illinois  
TODD RUSSELL PLATTS, Pennsylvania  
SAM GRAVES, Missouri  
MARK R. KENNEDY, Minnesota  
BILL SHUSTER, Pennsylvania  
JOHN BOOZMAN, Arkansas  
MARIO DIAZ-BALART, Florida  
JON C. PORTER, Nevada  
TOM OSBORNE, Nebraska  
KENNY MARCHANT, Texas  
MICHAEL E. SODREL, Indiana  
DAVID G. REICHERT, Washington  
JEAN SCHMIDT, Ohio  
DON YOUNG, Alaska  
(*Ex Officio*)

PETER A. DeFAZIO, Oregon  
NICK J. RAHALL II, West Virginia  
JERROLD NADLER, New York  
GENE TAYLOR, Mississippi  
JUANITA MILLENDER-McDONALD,  
California  
ELIJAH E. CUMMINGS, Maryland  
EARL BLUMENAUER, Oregon  
ELLEN O. TAUSCHER, California  
BILL PASCRELL, JR., New Jersey  
TIM HOLDEN, Pennsylvania  
BRIAN BAIRD, Washington  
SHELLEY BERKLEY, Nevada  
JIM MATHESON, Utah  
MICHAEL M. HONDA, California  
RICK LARSEN, Washington  
MICHAEL E. CAPUANO, Massachusetts  
ANTHONY D. WEINER, New York  
JULIA CARSON, Indiana  
TIMOTHY H. BISHOP, New York  
MICHAEL H. MICHAUD, Maine  
LINCOLN DAVIS, Tennessee  
BEN CHANDLER, Kentucky  
BRIAN HIGGINS, New York  
RUSS CARNAHAN, Missouri  
ALLYSON Y. SCHWARTZ, Pennsylvania  
JAMES L. OBERSTAR, Minnesota  
(*Ex Officio*)



# CONTENTS

## TESTIMONY

	Page
Carroll, Robert, Deputy Assistant Secretary for Tax Analysis, U.S. Department of Treasury .....	3
Marron, Donald, Acting Director, Congressional Budget Office .....	3
Siggerud, Katherine, Director, Physical Infrastructure Issues, U.S. Government Accountability Office .....	3

## PREPARED STATEMENT SUBMITTED BY A MEMBER OF CONGRESS

Carnahan, Hon. Russ, of Missouri .....	23
--	----

## PREPARED STATEMENTS SUBMITTED WITNESSES

Carroll, Robert .....	24
Marron, Donald .....	35
Siggerud, Katherine .....	52



## **RELIABILITY OF HIGHWAY TRUST FUND REVENUE ESTIMATES**

---

**April 4, 2006,**

COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE,  
SUBCOMMITTEE ON HIGHWAYS, TRANSIT AND PIPE-  
LINES, WASHINGTON, D.C.

The committee met, pursuant to call, at 2:00 p.m., in Room 2167, Rayburn House Office Building, Hon. Thomas E. Petri [Chairman of the committee] presiding.

Mr. PETRI. The Subcommittee will come to order.

I would like to welcome our members and our witnesses to today's hearing on the Reliability of Highway Trust Fund Revenue Estimates. This hearing is a follow-up to a hearing that this Subcommittee held in February on the status of the Highway Trust Fund and the President's fiscal year 2007 budget. During that hearing, the Department of Transportation's Assistant Secretary for Budget and Policy, Phyllis Scheinberg, testified on how the President's budget request would affect the implementation of SAFETEA-LU.

Unfortunately, scheduling conflicts prevented the Treasury witness from testifying at that hearing. As a result, we rescheduled today's hearing and have invited Treasury and CBO to discuss their Highway Trust Fund revenue estimates. We have also invited GAO to provide an analysis of the two sets of revenue estimates.

The President's 2007 budget, using Treasury's revenue estimates, shows a negative balance of \$2.3 billion in the highway account of the Highway Trust Fund at the end of 2009. The Congressional Budget Office's current revenue estimates for the highway account do not show a negative balance until 2010.

When Congress passed SAFETEA-LU last summer, it was done with the expectation that the guaranteed funding levels prescribed in the bill would be fulfilled for budget year 2005 through 2009. One of the purposes of this hearing is to determine whether or not the differences between Treasury and CBO's estimates are unusual. The hearing will also explore the accuracy of revenue estimates four and five years into the future. The reliability of revenue estimates is an important issue for this Committee, as projected negative balances in the Highway Trust Fund may impact guaranteed funding levels authorized in SAFETEA-LU.

Robert Carroll, the Deputy Assistant Secretary for Treasury Analysis, with the Treasury Department, is with us today. Mr. Carroll will describe the methodology that underlies Treasury's revenue forecasts as well as recent trends in the highway-related excise taxes.

Donald Marron, the Acting Director of the Congressional Budget Office, will provide a description of the economic model that CBO uses to project revenue and deposit it into the Highway Trust Fund. Mr. Marron will also address why CBO is projecting higher levels of revenue for the Highway Trust Fund and the Treasury Department.

Katherine Siggerud, the Director of Physical Infrastructure Issues for the U.S. Government Accountability Office, will provide a basic overview of the Highway Trust Fund. She will also compare and contrast the models that Treasury and CBO use for estimating highway trust fund revenues and compare Treasury and CBO's estimated receipts to actual receipts for recent years.

We look forward to your testimony and I would now yield to Mr. Blumenauer for any opening statement he may have.

Mr. BLUMENAUER. Thank you, Mr. Chairman. I look forward to hearing from our witnesses. I think it is important for us to get a handle on the range of resources. It seems clear to me that the guaranteed funding levels will in fact be impacted.

But more important, it sorts of sets the stage, I think, for all of us to deal with reality, whether it is 2008, 2009, 2010. We have a real problem in terms of financing infrastructure in this Country. The more that we can help people understand the nature of the problem, how we're in a downward spiral, how we're going to have to deal not just, in my judgment, indexing for inflation, but to find alternative sources of revenue that deal with the level of infrastructure investment that we want to make, not just tied to fuel taxes, is important.

I think this conversation today is an important start on that. I look forward to hearing from our witnesses.

Mr. PETRI. Thank you. Any other opening statements. Mr. Mica?

Mr. MICA. Mr. Chairman, I just want to say thank you for conducting this important hearing. It is critical that we have the reliable Highway Trust Fund revenue estimates. Some of the information that we are getting today shows that we not only have a crisis in funding transportation, and particularly our highway and transit systems, but we may be bankrupt by the year 2009 in our Highway Trust Fund.

We have conflicting estimates as to how much money we will actually have during this important period. It is absolutely critical that we find what the accurate amounts were and be able to have a reliable fund and funding sources for building our Nation's infrastructure.

So this is a very important hearing, not to mention the challenge that we faced in finding a means of funding over the short and long term our highway transit, transportation and infrastructure projects, which we also have right now serious problem in the current structure and level of funding and means of raising funds. I thank you for conducting this hearing. I look forward to the testimony and yield back.

Mr. PETRI. Thank you.

Mr. BOOZMAN, any comments?

Mr. BOOZMAN. I appreciate you, Mr. Chairman, for having the hearing. I would just echo the other two opening statements that



this is certainly very timely and that we certainly need to understand these projections.

Also, I think one of the real challenges that the Committee is going to have, and I know we are going to show leadership in this area, is trying to figure out how we come up with alternative means of funding in the future.

Thank you.

Mr. PETRI. Thank you.

We will begin now with our witnesses and we will start with Mr. Carroll, the Deputy Assistant Secretary for Tax Analysis, U.S. Department of Treasury.

**TESTIMONY OF ROBERT CARROLL, DEPUTY ASSISTANT SECRETARY FOR TAX ANALYSIS, UNITED STATES DEPARTMENT OF TREASURY; DONALD MARRON, ACTING DIRECTOR, CONGRESSIONAL BUDGET OFFICE; KATHERINE SIGGERUD, DIRECTOR, PHYSICAL INFRASTRUCTURE ISSUES, UNITED STATES GOVERNMENT ACCOUNTABILITY OFFICE**

Mr. CARROLL. Thank you very much, Mr. Chairman and distinguished members of the Subcommittee. I appreciate the opportunity to discuss with you today the Administration's forecast of highway related excise taxes. My testimony today focuses on recent trends in these taxes, describes the methodology that underlies our forecast and relates our forecasts over the past several years to actual receipts. This testimony also compares our forecast for the fiscal year 2007 budget to the forecast prepared by the Congressional Budget Office.

I would like to spend a few moments summarizing the major points. First, the Administration's forecast of highway related excise taxes for the fiscal year 2007 budget is somewhat higher than the forecast for the fiscal year 2006 mid-session review even after excluding the effects of the SAFETEA-LU legislation enacted last summer. Indeed, excluding the effects of SAFETEA-LU, our forecast is about \$2.3 billion higher than previously forecast for the period of fiscal year 2005 through fiscal year 2009, with more than one half of this increase falling into 2005.

Treasury estimates indicate that the Highway Bill enacted last summer will increase the level of receipts dedicated to the Highway Trust Fund by nearly \$1.1 billion through fiscal year 2009, an amount similar to the Joint Committee on Taxation's estimates for this legislation.

Second, the changes between the fiscal year 2006 mid-session review and the fiscal year 2007 budget are within what might be called a typical range when viewed in the context of historical differences between forecast highway related excise tax receipts and actual receipts. Differences arise from a number of reasons, including changes in economic conditions, energy prices and the underlying relationships between taxes collected and these macroeconomic variables.

Third, the Administration's forecast and CBO's forecast are not dissimilar when viewed from the perspective of historical differences between forecast highway related excise tax receipts and actual receipts. To be sure, the Office of Tax Analysis and the Congressional Budget Office rely on different economic assumptions,

use their own models and make their own judgments. OTA relies on a quarterly model while CBO's model is based on annual data. OTA uses reconciled data on excise tax liability in their models, while CBO relies more heavily on data from the IRS certifications. OTA's models tend to be more sensitive to changes in oil prices, while CBO's models tend to be more dependent on changes in economic growth.

Nevertheless, the assumptions in models used remain broadly similar and produce similar forecasts. Again, when viewed against the backdrop of the differences between OTA's forecasts and actual receipts spanning more than a decade, the current difference between the Administration's and CBO's forecasts are not statistically important.

Moreover, both the Administration and CBO project that the highway account will be exhausted at roughly the same time, towards the end of 2009. While these are our best estimates, the data of exhaustion is somewhat uncertain and depends not only on the receipts that flow into the highway account, but also depend crucially on disbursements from the highway account. I understand this is an issue that the Department of Transportation addressed in their testimony to the Subcommittee in February.

Fourth, I want to emphasize that the Congressional Budget Office and the Office of Tax Analysis work very closely together on receipts forecasts generally, across all tax sources, including the various excise taxes. There is an open and ready dialogue and a variety of modeling issues for data and other technical issues, and a broad array of information is routinely shared.

Looking ahead, both organizations will learn a great deal about how consumption patterns respond to energy prices. Price sensitivity is an important aspect of estimating the taxes associated with all revenue sources. What future energy prices imply for future energy consumption, and excise tax receipts are something that both the Administration and I am sure the CBO will be paying very close attention to. Over time, we can expect individuals and businesses to use energy more efficiently.

There were also a number of compliance provisions in the SAFETEA-LU legislation. As of yet, we have not seen the full effect of these provisions, but we look forward to learning how effective these provisions will be toward improving compliance and will re-evaluate their effects once the relevant data becomes available.

Thank you.

Mr. PETRI. Thank you.

Mr. Marron.

Mr. MARRON. Thank you, Mr. Chairman, members of the Subcommittee. It is a pleasure to be here this afternoon to discuss CBO's revenue projections for the Highway Trust Fund and in particular, its highway account.

My testimony will cover three main points. The first is that CBO projects that revenues to the highway account will fall short of outlays over the next few years, four or five years. As a result, balances in the account will decline and may be exhausted either in 2009 or 2010, depending on what assumptions you make about spending.

Second, the revenue projections that go into those estimates depend on a variety of economic and technical factors about which there is significant uncertainty. Given that uncertainty, exhaustion of the highway account balances may come either sooner or later than our baseline projections would indicate.

Third, the current differences between the Administration's revenue projections and CBO's revenue projections are within kind of a typical range of error that you would see within CBO's own projections. So from our point of view, the revenue projections aren't that far apart, given the levels of uncertainty that exist in projecting these kinds of revenues.

Let me elaborate on each of those three points quickly here. In its current baseline, CBO projects that revenues to the highway account will total about \$146 billion over the next four years, 2006 through 2009. Future spending from the highway account will of course depend on decisions made by the Congress and the Administration regarding both whether to spend at the levels that are specified in the obligation limitations and whether or not to implement many of the scheduled RABA adjustments. Assuming, as the Administration does, that a RABA adjustment would be made for 2007, CBO projects that the balances in the highway account would be exhausted some time in 2010.

In our written testimony, we also do a scenario in which we assume the RABA adjustments would also happen in 2008 and 2009. In that case, the level of outlays would be higher, and the highway account would be exhausted in 2009.

I will describe our revenue projections in just a little more detail. As you know, the Highway Trust Fund receives revenues from a variety of taxes on motor fuels, new truck and tire purchases, and truck usage. To estimate future revenues from gasoline and related fuels, CBO projects future purchases of those fuels and then multiplies the number of gallons by the tax rate.

CBO models the growth in fuel purchases over time as depending on the pace of economic growth, changes in fuel prices and changes in fuel efficiency. Economic growth leads to higher fuel purchases, not surprisingly, and tax revenues, whereas higher fuel prices and higher fuel economy lead to both lower fuel purchases and lower revenues.

As we look out over the next few years, what we see is a pattern in which gasoline tax revenues, the growth of them, will slow down as time passes. The primary reason for that is that in CBO's economic forecast, we project that the growth rate of the economy is going to slow. We are still a little bit recovering from the cyclical downturn we had at the beginning of this decade, and then in addition, as we get into future years, labor force growth is going to slow, and therefore the growth rate of the economy will slow, and therefore revenues from gasoline taxes will slow.

To estimate revenue from diesel fuel taxes, CBO similarly projects purchases of diesel fuel and multiplies by the diesel tax rate. To estimate diesel purchases, CBO relies on their historical relationships to real economic activity. Over a long period of time, the number of gallons of diesel fuel consumed has grown at a slightly faster rate than the economy as a whole. CBO expects that relationship to continue into the next 10 years. So we use that as

the basis for projecting diesel fuel revenues. Those again grow at a declining rate as we go out into future years, again because the growth rate of the economy is expected to slow.

Finally, CBO also projects truck related sources of trust fund revenue based on their relationship to overall economic activity. Those revenues are expected to grow slightly more slowly than real GDP on average, as they have done in recent years, and again, their growth rate will slow as we go forward.

As this description of the projection process suggests, there are several important sources of uncertainty in the revenue projects that CBO puts out. First, there are uncertainties related to the key economic variables, CBO's economic forecast of GDP of oil prices. To the extent those differ from what we expect, revenues from the Trust Fund will deviate.

Second, there are uncertainties about the key technical assumptions that relate economic activity to revenues. How much do people respond to changes in fuel prices, how fast do fuel purchases changes as the economy grows. There is uncertainty about those variables and therefore, again, there is uncertainty about our revenue projections.

We have analyzed our revenue projections going back to about 1991. We found that as you look out several years in the future, it would be typical to have an error, a miss, that is somewhere in the neighborhood of about 4 to 6 percent. So if you are thinking about a program in which annual revenues are in the \$40 billion range, an annual miss of somewhere between \$2 billion and \$3 billion would not be surprising.

As Bob has described, the Administration has somewhat lower projections than we do. We have worked together to try to analyze why we differ. We identified the same reasons that Bob identified, somewhat different technical assumptions about how purchases respond to changes in the size of the economy and fuel prices. If you look at the difference between our two forecasts, we are about 3 percent apart. So again, from our point of view, that is a typical range of error that you would see in these kinds of projections, and therefore, shouldn't view the projections as being that far apart.

With that, thank you.

Mr. PETRI. Thank you.

Ms. Siggerud?

Ms. SIGGERUD. Thank you, Mr. Chairman, members of the Subcommittee. I do have a few slides that we will be showing her as we start.

Let me say that I appreciate the invitation to testify on important Highway Trust Fund issues. Six weeks ago, your DOT budget hearing focused on the future declining balance that has been predicted for the Highway Trust Fund. You asked us then to undertake work about how these balances are estimated.

My statement today will cover three points: first, the role of estimates in calculating the receipts to and disbursements from the Trust Fund; second, how the most recent Highway Trust Fund estimates made by the Department of Treasury and the CBO compare; and third, how Treasury's and CBO's estimates compare with actual tax receipts in recent years.

First, a little background. Receipts from the Federal gasoline tax constitute the largest source of revenue to the Trust Fund, but other fuels are also taxed. These receipts are allocated as shown between the highway and the mass transit accounts. Taxes related to large trucks, such as on truck and tire sales, are also an important source of revenue. These are deposited only in the highway account.

Estimates are used for several purposes, as receipts are obtained and Federal aid is distributed to the States. This chart illustrates the process. Excise taxes are paid by businesses semi-monthly. For example, oil companies typically pay a per gallon tax when their fuel is loaded into tanker trucks or rail cars for delivery. Because these and other excise taxes are paid to the Treasury without identifying the type of tax, Treasury must estimate based on past tax receipts the amount to deposit into the Highway Trust Fund.

At the end of each quarter, businesses file tax forms that identify the amount and type of taxes they paid, and IRS certifies this information. On this basis, Treasury adjusts the initial transfer to the Trust Fund about six months after the end of each quarter. The annual RABA calculation is also influenced by estimates of tax receipts. While OMB and DOT make the RABA calculation, CBO's and Treasury's estimates are part of the formula.

Finally, because consumers generally do not pay these taxes directly, DOT must annually estimate the amount to be distributed to each State based on such data as fuel consumption. Of course, one of the most important uses of the estimates is to predict future tax revenues, so Congress can make decisions about appropriate levels of authorization and appropriation.

Turning now to the Trust Fund balance, both CBO's estimates from January of this year and Treasury's estimates as reflected in the President's budget show similar trends over the next five years. As you can see, both show a negative balance occurring during that time. To derive these balances, CBO predicts both receipts and outlays, while the President's budget combines estimates of tax receipts from Treasury with outlay estimates from DOT.

The main difference between these forecasts of the Trust Fund is their estimates of tax receipts. As these graphs show, CBO estimated somewhat higher levels of receipts from the six year period than Treasury did. Projections of outlays are generally similar, although CBO has just estimated new outlay levels that are higher.

We view these differences as minor, but there are several reasons for them. First, CBO and Treasury both use assumptions about the economy, fuel prices and other factors, but these assumptions can differ. Second, there differences in the way these models are constructed. As these models are used for estimates further into the future, even small differences between them tend to move the estimates farther apart.

The reason that both CBO and the President's budget project a negative balance in the highway account is straightforward. Estimated outlays are greater than estimated receipts for each year. CBO and Treasury predict that the annual tax receipts will grow on average between 2 and 3 percent annually over this period. At the same time, outlays are expected to grow an average over 4 percent annually.

We looked at the historical accuracy of these estimates over a seven year period and found their accuracy is similar. Either an agency is consistently closer, Treasury's estimates have been closer to actual receipts in some instances, and CBO's in others. We compared Treasury's and CBO's estimates with actual Highway Trust Fund receipts, and forecasting estimates of what will occur within a year or two are generally more accurate than estimates of what will occur several years later. Because the longer the period involved, the greater the opportunity for missions to change in unexpected ways.

Therefore, we focused our analysis on Treasury's and CBO's one and two year estimates, for example, what the Agency has projected in 2002 as their expected Highway Trust Fund receipts in 2003 and 2004. On average, the two agencies were nearly identical in the degree to which their one year estimates predicted actual results, and Treasury's two year estimates were slightly closer than CBO's. This chart shows that both Treasury's and CBO's one year estimates differ from actual receipts by an average of about 5.7 percent. This translates to an average difference between estimates and actual receipts of about \$1.99 in each year.

For the two year period, Treasury's estimates differed from actual receipts on average by about 6.8 percent, while CBO's estimates differed by about 7.6 percent.

In conclusion, while CBO's and Treasury's estimates of future Trust Fund balances are different, the trend they identify is similar. We view these differences as minor. While events during the next five years could result in changes in the economy and consumer behavior, it is clear that the trend of Trust Fund outlay as exceeding receipts is a significant one that is likely to lead to dwindling Trust Fund balances.

Thank you.

Mr. PETRI. Thank you. Thank you all for the testimony. I would like to thank any associates you had at your agencies in helping to prepare the written testimony and graphs and so on. We appreciate it.

Any questions? Mr. Blumenauer?

Mr. BLUMENAUER. I was curious if you have the capacity to go back into the 1970s when we had more aggressive energy price spikes and supply problems, to be able to get a sense of what the potential disruption can be in modifying behavior.

Mr. MARRON. In trying to assess some of the technical factors I mentioned, such as how people respond to changes in energy prices, we do indeed go back to that time period to try to get a sense. Clearly today is different from then, but we do our best to learn from that episode.

Mr. BLUMENAUER. Do you have sufficient data that you can extrapolate from it?

Mr. MARRON. In terms of overall consumption of gasoline, we observed changes in prices, yes.

Mr. BLUMENAUER. How is it different, how do you posit it being different today despite what it appeared to be, more erratic swings, not insignificant amount in fuel prices? Do you have a sense of any differences?

Mr. CARROLL. There is empirical literature in the economics research on the relationship between changes in energy prices, gas prices, and consumption of gasoline. Typically what is found is the responsiveness of gasoline consumption, fuel consumption to prices in the short term is fairly small, it is fairly price insensitive in the short run. In the longer run, it is much more price sensitive.

So the changes we are seeing right now in prices at the pumps are not really being reflected in large swings and consumption patterns. It takes a fair amount of time for that response to occur, as individuals and businesses change their behavior, change their modes of production and seek out more efficient use of energy in the decisions that they are making.

Mr. BLUMENAUER. To what extent do either of your models in the short term deal with changes in technology, your anticipating a shift to more energy efficient vehicles or alternative uses of fuel?

Mr. MARRON. In our longer run estimates those certainly account for what we have observed in the past history of what kinds of technological changes that people have adopted. So to the extent that past is prologue, we attempt to build those into our projections of how people respond to fuel price changes.

In addition, we also specifically try to incorporate technological changes that may come from regulatory changes. The Administration, for example, has just recently released fuel economy standards for light trucks. As we go into the summer, when we construct our baseline projections this summer, we will do our best to incorporate those and the implications of those for the mix of light trucks and their impact on fuel consumption.

Mr. BLUMENAUER. Okay. Any thoughts about impact that our moving to having a negative account balance, I am just curious what impact that has on projects, what impact if any that would have on projects already under construction?

Ms. SIGGERUD. Perhaps I can address that, Mr. Blumenauer. To the extent that the Congress responds to a negative balance by decreasing, making it policy to decrease outlays in some way, I guess, I am sure you are aware that States do plan five and six year transportation programs based on anticipated Federal aid revenue. They also do bonds based on anticipated Federal aid revenues.

So to the extent that that were a change in policy, some States might see an effect on some current and definitely some future projects.

Mr. BLUMENAUER. Thank you, Mr. Chairman.

Mr. PETRI. Mr. Brown, any questions?

Mr. BLUMENAUER. Excuse me—

Mr. PETRI. Yes, sir.

Mr. BLUMENAUER. If I could just make one comment, I see Mr. Mica is not here. But his notion about the Trust Fund going bankrupt in four or five years, I don't hear anything from the testimony that any of you have given that suggests that the Trust Fund goes bankrupt. It may move to a negative balance, but there is a huge flow of money that is still going through.

Do any of you feel—am I missing something? Do you feel that we are on the verge of bankruptcy in the Trust Fund?

Mr. MARRON. I will take a stab at that. Sir, the situation is that outlays are above revenues now, and would be likely to persist in

that regard. I won't take a position on whether or not to characterize it as bankrupt. But the account balance would go negative under these projections.

But your point that there is a significant stream of money beyond that moment is absolutely true.

Mr. BLUMENAUER. Thank you, Mr. Chairman.

Mr. PETRI. Mr. Brown.

Mr. BROWN. Thank you, Mr. Chairman, and I apologize to the panel for not being here during the testimony. I hope this question has not been resolved so far.

Let me just give you this question, to Mr. Carroll if I might, and anybody else that might want to respond. After Hurricanes Rita and Katrina disrupted all the gas production in the Gulf, there was a significant spike in fuel prices this fall. Many analysts predicted that the high cost of fuel would cause people to drive less and would result in a decrease in revenue to the Trust Fund. In reality, the revenue estimates actually increased between this past summer and the release of the President's budget in February.

What does this tell us about the effect of gas prices and demand of gas? Is there any correlation between price and demand?

Mr. CARROLL. Let me take a stab at that. The increase in highway-related tax receipts that we saw in 2005 really reflected a strengthening of the overall economy. Also, the summer driving season, which is a period when gasoline revenues tend to be fairly strong, was pretty much over by the time the hurricanes arrived.

Moreover, the hurricanes and their effect on energy prices really represented a short term shock to the price of gasoline. What we tend to see in the literature is that in the short run, gasoline consumption tends to be fairly insensitive to price, so we wouldn't really expect a substantial response in terms of gasoline consumption.

Over the longer term, if there's a sustained period of elevated fuel prices, we would expect a much more substantial response in terms of gasoline consumption.

Mr. MARRON. I just agree with what Bob said.

Mr. BROWN. So when do you see the consumption starting to ease off? Is it \$3 a gallon or \$3.25 or \$4? Where do you see the sensitivity line actually starting to click in?

Mr. CARROLL. I think it is, where we will see the sensitivity is that there is a prolonged period of elevated gasoline prices over a prolonged period of time as opposed to more of a short term, a temporary shock.

Mr. BROWN. Thank you, Mr. Chairman.

Mr. PETRI. Thank you.

Mr. Davis, any questions?

Mr. DAVIS. Mr. Chairman and Ranking Member, in 1980, I decided that I would run for the Tennessee State legislature. Unfortunately or fortunately, whatever the situation may be, I was elected. When I went to Nashville, I left being mayor of a small town. We had pretty dire need for development of our roads, potholes every place. We had an 8 cent, 7 cent gasoline tax, and I think a 1 cent probably service tax per gallon of gasoline. A lot of things changed in 1981 through about 1986 in Tennessee and throughout this Nation.



We saw a receding of the consumption of gasoline in our tax based on per gallon usage rather than on actual per dollar usage, as you see a consumption tax in most cases is based on what you spend, rather than the number of items that you consume. It's the cost of the item.

When I look at the predictions of the 2007 budget and realize that there is an expectation in the outer years of \$2 billion or \$3 billion or more deficit in the Trust Fund, it kind of puzzles me as how in four or five or six months we could see this dramatic change, almost like overnight. I do understand that as prices go up, as they did in the 1970s, as consumption recedes then revenue streams obviously will recede with those. But there were several adjustments made in the 1980s on the Federal level and the State level.

The question I want to ask you is, Mr. Carroll, you are with the Treasury Department. You are the tax experts. How would you handle the situation? What do you recommend that Congress does to be sure that this deficit doesn't occur?

Mr. CARROLL. As the other witnesses have indicated, the long-term imbalance in the Trust Funds is really related to the issue of the growth rate in outlays exceeding the growth rate in revenues. That is an issue that I think the Congress will need to deal with.

My function at the Treasury Department at the Office of Tax Analysis is really to focus on the receipts estimates, estimates of highway related excise tax receipts and making the deposits into the Trust Funds. An important piece of the puzzle is what happens on the outlay side and disbursements from the Trust Funds. That is really something that the Department of Transportation would need to speak to.

Mr. DAVIS. I realize this as being a Congressman from one of the extremely rural areas, one of the fourth most rural residences of a Congressional district in America, that without a good education, which provides a liberating influence for an individual in a rural area or urban as well, without good roads, then the foundation for America's economy, I think, is undermined.

Again what I am asking you is, I don't sense that I get a response that would be the Administration's position of how we resolve this issue if we starting having a shortfall in our Highway Trust Fund. How do we resolve that? Do we cut dollars for roads that provide the safety net and the foundation for economic growth? What do we do?

Mr. CARROLL. I think the balance of the Trust Funds really does again depend on the relationship of outlays to receipts. Outlays are outpacing receipts, as the other two witnesses have indicated. In 2009, according to our estimates of receipts combined with the Department of Transportation's estimates of outlays, the highway account will be exhausted in 2009.

The extent to which it is exhausted is about \$2.3 billion. That is, in the context of the errors that we have had in estimates in the past, it is not a large amount. Nevertheless, that is our best estimate given the information we have available to us.

Mr. DAVIS. That seems to conform to the budgetary principles of this Congress the last few years, and this Administration. So I

guess deficits is what you are saying we are going to look forward to in the Highway Trust Fund as well.

I yield back the rest of my time.

Mr. PETRI. Mr. Shuster?

Mr. SHUSTER. Are we on statements or questions?

Mr. PETRI. Questions.

Mr. SHUSTER. Thank you, Mr. Chairman. I know the Chairman has been very involved in trying to figure out new ways, new revenue streams. I think it is something we are going to have to obviously deal with in the future, in the near future, whether we look at equity investments or bonds or other things. I don't think that there is the will up here on the Hill at this point to raise the user fee or the gas tax.

A couple of questions I have. First, I just wanted to know, how long does it take the Treasury Department to certify projections versus what we have actually taken in into the Treasury with the gas tax?

Mr. CARROLL. The taxpayers file returns quarterly, they file their excise tax returns quarterly. Those returns are due one month after the end of the quarter. It takes about five months for the IRS to process—

Mr. SHUSTER. How long?

Mr. CARROLL. It takes the IRS about five months from that point in time to process the returns and certify the amounts.

Mr. SHUSTER. Is there anything we can do to modernize?

Mr. CARROLL. We have had a dialogue with the IRS to see how they might streamline and perhaps improve that. One of the issues is some taxpayers do file past the due date, if they have—they are given waivers if they have a reasonable cause for, can show reasonable cause for filing beyond the due date. So there is an issue of how easy it would be for taxpayers to comply with perhaps stricter guidelines on insuring that they file by the due date.

Mr. SHUSTER. And with technology, is there any technology we can employ that we are not using?

Mr. CARROLL. There are about 4,000 or 5,000 excise tax returns that are filed. It is a fairly small group of taxpayers. We have had some discussions along those lines in the past. There is I think a question that the Congress and others would need to face, whether balancing the potential taxpayer, increasing potential taxpayer burdens by requiring more electronic filing.

Mr. SHUSTER. Could one or all three of you comment on your thoughts on issuing bonds versus equity financing? I believe it was Indiana and I think Illinois or around the City of Chicago recently sold or are in the process of selling a stretch of road to some investors. Is that something you have taken a look at? Is that a viable way, from your perspective, to raising the funds to build new infrastructure?

Mr. CARROLL. That's not something I myself have looked at. I know others at Treasury have, who have dealt in the tax-exempt bond financing area have been focused on issues related to that. We would be happy to get back to you on that.

Mr. SHUSTER. Okay. Would either of the other two of you care to comment?

Mr. MARRON. CBO has done some research in the past on alternative ways of doing tax exempt financing, in general, if it is transportation, as one possible application. The takeaway there being that the use of tax credit bonds instead of tax exempt bonds might be on the one hand a more efficient way of essentially providing subsidy of the projects and get them going. But on the other hand, the way they are currently structured tends to be more expensive, the way tax credit bonds have traditionally been done, the Federal Government in essence picks up the whole interest cost rather than just a piece.

But at least in principle, there is a way to marry those two and have something that could potentially be a more efficient way of encouraging those kinds of projects. To the best of my knowledge, we haven't done anything recently on the equity financing part. We would be happy to look at that for you.

Mr. SHUSTER. How old is that information?

Mr. MARRON. Since I testified before Ways and Means Subcommittee on it about a couple of months ago.

Mr. SHUSTER. So it is relatively new information?

Mr. MARRON. Yes.

Ms. SIGGERUD. GAO also testified on the relative cost to the Government of tax credit and tax exempt bonds a few years ago, Mr. Shuster. That is certainly some information I can provide to you or your staff, if that is useful.

Mr. SHUSTER. I would appreciate any and all that information. What about equity financing? Have any of you looked at any of that? Basically you said you were dealing with bonds.

Ms. SIGGERUD. Right.

Mr. CARROLL. Right.

Mr. SHUSTER. Okay. And tolls, allowing more tolling? Is that something anybody has looked at?

Ms. SIGGERUD. In the work that GAO did last year, in what we call the 21st Century Challenges work, we looked at the transportation sector, we encouraged the use of tolls, both as a possibility at the Federal and at the State and local level, as an alternative way of financing infrastructure. We also have some ongoing work that we report out later this year on that topic.

Mr. SHUSTER. Okay. The CBO has not looked at it?

Mr. MARRON. There is nothing I have seen at CBO recently on the tolling issue. It is definitely worth consideration, but not something we have worked on.

Mr. SHUSTER. Okay. I see that my time has expired. Funding for highways is going to be a problem for us into the future. I see that some projections here say that by, I guess it is CBO, that by 2010 we are going to be in a negative balance. My guess is it is going to be sooner than that. I don't know how much you have factored in cars that are more fuel efficient or the use of hybrids and those types of things.

But my guess is it will be sooner than 2010. That is something that, as I said, I know the Chairman has looked at and something we have to deal with very seriously here in the next couple of years, or we are going to find ourselves in—excuse the pun, but a bigger pothole than we already see out there.

So I thank you for testifying and I yield back—I don't have any time left, I guess.

Mr. PETRI. Mr. Baird.

Mr. BAIRD. I thank the Chair and I thank the panelists.

My recollection is before the most recent Highway Bill, we actually came in with much higher estimates after several years of hearings for the need, what the projected need for transportation would be, that estimates were much higher than the actual bill. How should we approach that? [Remarks off microphone.]

Mr. CARROLL. It is really, again, I can only speak to the receipt side of the equation, being from the Treasury Department. It is really an issue that I would have to defer to my colleagues over at the Department of Transportation, in terms of how they would handle the disbursement side if and when the highway account and the mass transit account are fully exhausted.

Ms. SIGGERUD. My understanding is that DOT officials have said that one solution would be to reduce the obligation limitation going into the future to try to cut back on the outlay side of the equation. The effect on that obviously would be to reduce funding to some of the core Federal aid highway programs, and therefore would affect States in their ability to plan and how to finance projects.

Mr. BAIRD. Would this presumably apply, as you know, under this last bill, some projects are ready for funding very quickly. Others would receive their funding down the road in the cycle. Would we presumably see those that were funded early in the cycle get full funding that was allocated and then later on, a reduction so those that are later in the queue just in terms of when they might be ready might be actually funded at a lower level?

Ms. SIGGERUD. I haven't actually done that analysis, but I think that is probably an accurate assumption.

Mr. BAIRD. So one of the questions I would have is, if we have already got, back to the original premise I started with, if we have already got a bill that is funded at less than at least some of our hearings led us to believe it should have been funded at, as you know, the House mark was a good bit higher originally, would that not follow that that is just further exacerbating an infrastructure deficit in terms of projects not completed?

Ms. SIGGERUD. Again, I haven't done that analysis exactly. But it is clear that as States plan their highway projects, they count on Federal aid as they put the financing packages together for those projects. This would clearly have an impact on the ability to get those started as quickly or to complete them as quickly.

Mr. BAIRD. Have you given any thought or have any of you given any thought to, I am thinking out loud with you a little bit, but if we needed to amend in some way the revenue structure based on the gas tax, what that might look like and when it might happen? It seems like the alternatives are either, change that portion of where we get revenue or transfer some from the general fund into that, which we tend to try to avoid.

Any thoughts about that choice and what it might look like?

Ms. SIGGERUD. We have not done that analysis or run those scenarios. We would be happy to work with the Subcommittee if that makes sense.

Mr. BAIRD. I guess one of my questions is at what point would we need to take an action like that? In other words, given some of the uncertainties you have identified, and given the somewhat lag time in terms of when we actually have a sense of how much money we get in, and parenthetically, I have to say this, I'm on the Budget Committee and this is just a marvel to me that the Federal Government gets pools of money and they don't know where they come from. Then down the road a way, they look backward and say, hey, where did all this money come from? We ought to address that.

But it seems like we face that in transportation funding as well. But at what point would we know, if we don't act by point X, then down the road soon, with some reliable level of confidence, we are going to need more money? In other words, that we could take some action. Can you give us an estimate of that, a date by which we had better be looking at this again and see what we need to do?

Ms. SIGGERUD. I would ask to defer to my colleagues on this, if they have a view. GAO has not done that estimate.

Mr. MARRON. I will chime in at this moment. The first observation I would make, to try to figure out the nicest way to say this, as I understand it, the current financing and outlay structure for the highway account, in particular, was structured in such a way that running out the balances was inevitable. There was just simply an issue of roughly, would that be 2010, 2009.

To be honest, there hasn't been that much change from where we sit today relative to where we were last summer when this was negotiated. So I don't think there is actually that much news in the numbers we are bringing. But since it has moved slightly toward there possibly being, running out sooner, I just kind of highlight the issue that this was built in inevitably as it was.

From CBO's point of view, we are not really in a position to provide guidance on how one might address that. Our role is to sort of help you, you give us the ideas, we help you understand what the implications would be. I can't really do much better, except to repeat what my colleagues have said, that clearly there is an issue of either ratcheting down outlays from the highway account, increasing revenues or, if you are focused on highways, there are other portions of the Highway Trust Fund. In principle, you could reach over there. I understand politically that might—

Mr. BAIRD. Can I ask one more brief on this? Let's suppose that the numbers of the shortfall you estimated are accurate. And as we approach that shortfall, it looks like, yes, indeed, this is coming up. How much would we have to change the gas tax, for example, if we were to solely look at gas tax in order to make up that revenue and fully fund? Did you do that calculation? I haven't had a chance to look at it. I'm sorry.

Mr. MARRON. We haven't done that calculation. We would be happy to crack at it on the back of the envelope and respond.

Mr. BAIRD. That would be really helpful to us as we look ahead, and people are trying to make business plans, et cetera. We make a mistake, if we see these things coming down the pike and then we just drop it on somebody, versus looking ahead and saying, look, several years out we project we may fall short. You need to prepare

for the possibility of X adjustment in whatever program it is, so people can make business plans according to that or personal plans. So maybe we could work together, Mr. Chairman, to look at that on this Committee.

Thank you very much.

Mr. PETRI. Mr. Larsen, any questions?

Mr. LARSEN. Thank you, Mr. Chairman. Sorry for being late, and I don't want to repeat what anyone has said.

Mr. Marron, I don't want to misinterpret what you said, but when you said there's not much news in these numbers, I guess perhaps what Mr. Baird was getting at and what I would get at, and this isn't just from a Washington State perspective, but probably from other members as well. If you were to go talk to City A in my district or the State DOT or whoever, it is enough news to them that it is causing them a lot of concern about planning for the future. So I guess maybe just a note of caution about making comments that could be construed as not attaching as much concern to it as perhaps we are hearing from people that we represent. I'm great for advice, that's about as much as I can give.

I wasn't here earlier and I haven't had a chance to go through the testimony, but I look forward to that. I don't want to have too much repetition, but can you all give me a synopsis of why there are differences in estimates?

Mr. CARROLL. Sir, the content of our testimony has been largely that the estimates are not very large. First, I would point out that—

Mr. LARSEN. The differences aren't that large?

Mr. CARROLL. The differences between the Congressional Budget Office, CBO's estimates and OTA's estimates are not very large in the context of the errors that, the pattern of errors or the differences between our level of forecasted receipts over the last 10 years or so and the actual receipts that have come into the Highway Trust Fund. The current difference between CBO's projects and OTA's or the Administration's forecasts are not very large from that vantage point.

The other thing I would point out is relative to the mid-session review, moving from the mid-session review to the January budget, the Administration's, at least on the receipt side, has actually forecast a higher level of receipts for the Highway Trust Fund.

Mr. LARSEN. Just some quick math, in my mind, highway cash balance at the end of the year 2009 is the \$2.3 billion shortfall. That is still larger than any difference, though, isn't it? Whether using Treasury's or CBO's, there would still be a negative cash balance?

Mr. CARROLL. Yes, as I understand Donald's comments, they are fairly consistent with our own. Both CBO and the Administration projections indicate that toward the end of 2009, it is likely, based on our best estimates today that the highway account will be fully exhausted.

Mr. MARRON. If I could elaborate on that—

Mr. LARSEN. I'm sorry, not just fully exhausted but we will be looking for money to help pay commitments. Fully exhausted just makes it sound like we are just going to bring it down to zero. But either we will be looking for money to make commitments, or as

Mr. Baird said, we will be telling people that we won't be building things.

Mr. CARROLL. As I understand it, once they become fully exhausted, then on the outlay side, the disbursement side, the Department of Transportation would need to perhaps make adjustments.

Mr. MARRON. In comparing our analyses projections, there is obviously the revenue component and then the outlay component. On the outlay side, a key issue is to what extent you want to build in the future RABA adjustments. So we have the obligation limitations, both of us take those as written. Both of us in our analyses take the Administration's 2007 RABA request and build that in.

If you just ran out kind of the mechanisms, those would imply additional RABA adjustments upwards and outlays in 2008 and 2009. In that scenario, which we cover in our written testimony, we do indeed have a negative balance arising in 2009. If to do kind of apples to apples to what the Administration has you just do 2007 RABA alone and not the future ones, we do actually have a positive balance at the end of 2009 and then it goes negative in 2010.

It is a small—in a program with \$150 billion of revenue, the difference is just a few billion dollars over that period. But it does affect the timing.

Mr. LARSEN. With regard to CBO analysis, are you required to incorporate the RABA adjustments or not? Usually when you're at CBO, it is whatever the current policy is, we play that out. So it seems to me there's only one analysis. But you are telling me you can do more than one analysis?

Mr. MARRON. This is one of the challenges of being the Acting CBO Director, is I periodically have to explain what it is we do. You are right, for our baseline budget projections, we go through one particular exercise, which to be honest, in certain cases, bears not as much relation to reality as one might like. This is one of those cases.

So in our baseline we do something completely different, which I won't explain, because it would just confuse things.

Mr. LARSEN. I understand.

Mr. MARRON. Then for purposes, when people ask us specifically questions about the trust funds, what we do is we do a separate standalone analysis, not bound by those rules, where the key inputs are. The revenue projections are the same, I should emphasize, between our baseline and these analyses.

Mr. LARSEN. But the outlays will change?

Mr. MARRON. But the outlays will change, depending on what we are asked to assume about obligations and about RABA.

Mr. LARSEN. Thank you.

Mr. PETRI. I don't know if any of you, you are all experienced in dealing with this data in this corner of the world. How soon do you think the people of the Department of Transportation or OMB will need to start adjusting downward contract authority or the program in order to take this into account so that we don't run into a kind of a cliff or disruption? You would think there would have to be a paring back of a program at some point earlier than you run into a negative balance. They need a certain working balance above zero anyway.

Do you have any ideas? You were talking about 2009, 2010 negative balance. But we are talking about 2007, 2008, if you have a built-in factor, as a cushion. And then if you need a glide path, you have to start making adjustments before you run into that negative balance, don't you? So we are talking about starting to pare back construction below what was planned in the TEA-LU, maybe not in the current budget, in the next year's budget. Am I wrong? Tell me if that's right.

Ms. SIGGERUD. My understanding is that if Congress does not choose to address the revenue side of this equation that in addressing the contract authority side, that moving sooner is better than moving later, because as contract authority is spent out over a number of years, and therefore an action sooner is able to have an effect on outlays that is lower, a stronger effect on outlays.

Mr. PETRI. Well, and isn't it, if you are running a State program, if you are alert and you see this coming, you say suddenly they are going to cut this down and maybe we had better get ahead of the queue and accelerate as best we can and get as much of this in our State as possible, so you are going to get a run toward the exits like a run on a bank if we are not careful. Then that would make the problem even worse. Because they will try to front load their programs in order to avoid being caught in the cutbacks a little later. If they have any kind of flexibility like that, I suppose it varies a lot, depending on where it is.

Now, just kind of standing back from all this, a friend of mine mentioned that when Eisenhower set up the Federal interstate program, and that kind of got settled on during his administration, about a nickel a gallon Federal gas tax, if they had indexed that back in 1956 or thereabouts, the Federal gas tax would be about 25 cents a gallon today instead of the 18.3. If that is at all close to true, we have as a Federal Government been actually financing a smaller and smaller portion of the Federal transportation needs over a number of years.

But the Country and the economy is going to require some kind of transportation investment. If politically we don't have the will at the national level or we are having problems doing it for one reason or another, don't you think—it is sort of rhetorical—but don't you think we have some kind of obligation to at least get out of the way, so if a particular State or region wants to invest in its infrastructure, they are not constrained by the Federal Government? In other words, shouldn't we loosen up? Logically, if we are not willing to maintain the investment at the national level, and if the economy requires it to be efficient, we are really not going to save any money by not investing, because we will have less revenue because of inefficiency if we don't make the investment.

It is not as though it is a zero sum game, in other words. If we have no roads, no one will have any income so there will be no Government tax revenue. If you look at development in India or anywhere in the world, it is not money in, it is the ability to produce money in the economy. They come out way ahead investing in infrastructure than they do giving tax breaks and things like that. Because people are willing to pay taxes if they can make money. They can't make money if they don't have infrastructure.



So we are not talking about as though in a vacuum, we are talking about trying to have a productive and competitive economy here in the United States. China is building as many roads, they have built 17,000 miles of interstate in the last 10 or 15 years, and it is not, people are not going to thank us or this Congress or future Congresses if we do not maintain. They are planning on doubling that in the next 15 years. That is going to pay off in terms of their productivity.

If we under-invest as a country, it will hurt us in terms of our productivity. UPS and FedEx, people like this are already running into the weekend with their deliveries because of capacity constraints in our economy.

So all I am saying is, if we think at the Federal level that we are helping our economy by under-investing in transportation, I think we are sorely mistaken. At the very least, don't you think we ought to help encourage regions and States to invest more if they want to through bonding, selling it to foreigners, tolling, new kinds of electronic based taxes and all the rest? Or do you think that gosh, this is a waste, this is a deficit, this is terrible, let's cut out, we should then cut the tax? Why 18 cents? Why not 5 cents? Why not spend nothing? We will just make it a wonderful world.

My theory is that we are going to have to spend money one way or another. We are going to spend money on repairs, delays, inefficiencies, or we spend money up front and we get something in terms of greater efficiency in the overall economy from that investment. Some of this analysis is a little sort of two-dimensional from my point of view and does not take into account the benefits of making this sort of investment.

So I don't know if you have any reaction to that, but it is clear if we stand back from this and look at it narrowly, oh, we have to do this or that at the Federal level, if we aren't going to, and if the history of the last 40 years is that despite occasional gas tax increases, the Federal investment in transportation infrastructure has actually declined, shouldn't our strategy then to be maybe we figure out how to pare back the Federal role and free up the State and local economies to do the investment that's required?

Mr. MARRON. If I could pick up on just one portion of what you mentioned, without casting an opinion whether it would be a good idea or bad idea, the potential role of tolling as a way to help finance new roads and also to in essence influence their usage to the extent that there's congestion problems, something that economists have long believed is worth further study, further experiments and may be beneficial.

One particular benefit is the extent to which you can get roads that are partly or fully financed by potential tolling revenue, that is an indication that the road in question is one that is of value to the economy. The linkage between the gasoline tax and the projects that are ultimately built, it is a user fee in some sense, but that is a relatively weak link. Whereas the link between tolling and similar mechanisms and the use of particular constructed roads is much tighter. Things along that line therefore offer the potential at least of efficiency advantages about identifying projects that are particularly worthy of construction.

Ms. SIGGERUD. Mr. Petri, you raised the important question of the Federal role in financing highway infrastructure. You are correct that the Federal investment as a percent of overall State spending has decreased over time. I would hope that the commissions that you created in SAFETEA-LU will consider what the future role of the Federal Government is in terms of advancing the national interest in highway building as part of the work that they do.

GAO has also been on record that to the extent that the Federal contribution is declining in terms of State investment in highways that encouraging States to use innovative financing, tolling and other approaches makes some sense.

Mr. PETRI. One other, when we did this bill, there was a lot of discussion and talk and a certain amount of money that was anticipated to be achieved for the Trust Fund through eliminating waste, fraud and abuse, and tax evasion and so on. Is there any indication in any of your analysis that that has produced any revenue?

Mr. CARROLL. I think at this stage it is still a little early to say. I expect that some time in the next several years we will be getting the data and information that we would need to begin to evaluate the effectiveness on the compliance side of the SAFETEA-LU provisions.

Mr. PETRI. Mr. Blumenauer?

Mr. BLUMENAUER. Mr. Chairman, I appreciate the gist of your comments a moment ago in terms of more for us than for our witnesses, who appropriately are saying, you guys deal with policy, we will talk numbers. But I do think that what you are doing with this hearing and helping members of this Committee look at the big picture is pretty important. Because even though it sounds like a long time frame it is the twinkling of the eye in terms of Government budgeting and if we are going to be making any substantive changes in policy, either to replace revenues or ramp things down, that is going to take several years.

So I think this is the time for us to get on with those questions. I would welcome if the Subcommittee would be able to entertain witnesses from some of the more substantive policy making arms to talk about the implications. I would welcome it. I think this helps set the table, and it extraordinarily helpful.

And I sympathize with your comments, Mr. Chairman. I think if we don't do a good job with the Federal investment, we short-change everybody. And I think it has a pretty dramatic ripple effect. I have two questions that I don't need answers to now, but I would direct to our witnesses. One, I have been under the impression that we are spending roughly \$2 trillion a year on transportation infrastructure in this Country, transportation infrastructure. Only 10 percent of that is Government expenditure and maybe 3 percent of that is Federal.

Could you, through your various good offices help us with what those ballpark figures are? I think you each in your own way have access to information. I think it would be useful for me and perhaps for other members of the Committee to sort of get in mind what we are talking about in terms of overall transportation expenditures on an annual basis in the economy, the amount that is Government, the amount that is Federal.

The second is, I am sorry our colleague Mr. Baird left, he was asking about ways that potentially we could close the gaps, what it would take. I had been reviewing in anticipation of this hearing a document I saw, I think it was several months ago, from the National Chamber Foundation, there was a study that was prepared by Cambridge System Metrics. I wondered if you folks could offer up a critique about the accuracy of the projections in terms of the revenue fixes that they talk about, in terms of indexing, for instance, the gas tax back at various points in time, and the amount of the gap that is filled either in terms of maintaining the existing program or for the projections that are made in terms of what it would take to actually improve the transportation system.

If it is possible, to critique that methodology and conclusion. Again, I am not talking about the policy. But if CBO or GAO, perhaps the Department of Treasury if they are interested, could just give us a reality check as to, and this was done some months ago, so there may be modest adjustments. But that would be useful, I think, in terms of getting at what Mr. Baird was talking about and giving us a running start about just what the range of choices might be.

Thank you, Mr. Chairman.

Mr. PETRI. Thank you.

We tend to focus on what is in front of us, and that is expenditures. You don't really measure your effectiveness or whether you are accomplishing something by how much you are spending, it is by how much you are getting done at the end of the day. There are lots of ways, I suppose, of increase the efficiency of the system or improving its throughputs, other than just adding lanes or investing money. We may be doing that quite well as a society and it may be under-investing is forcing us to find other ways and make the system more efficient that will serve us better in the long run. I don't know if that is true or not.

I do know that companies like Schneider, in my region, and Hunt and these UPSs and FedExs that are more and more into logistics argue that the percentage of our GNP that is consumed by logistics expenses, transportation expenses, dropped from about, I may get the numbers slightly wrong, but something in the neighborhood of 16 percent down to about 8 percent, almost identically how much of the pie has grown in health care.

So we have actually paid for the increase in health care as a society, something has to go, it has to total 100 percent. So if health care has gone up to 15 percent, what has gone down? Transportation.

It is not just because we are spending a smaller percentage of the pie on transportation, but we are. With the whole manufacturing resolution and just in time and cutting out a lot of storage and delay in the system and making the whole logistics system more efficient, we have reduced the amount of capital and money that needs to be tied up in that system. It has made us more productive. But there have to a lot of further opportunities for efficiency and standing back and looking at how to move more by rail, for example, if it can be done efficiently, rather than on highways.

Instead of just looking at, well, we've tolled this road and therefore it will reduce the use, maybe if you could move things off the

road onto, maybe that will help do it, if you raise tolls, move to other modes or whatever. We clearly can't just ignore it and underfinance it. If we are going to cut back or not increase funding, we had better increase our thinking about it in ways of marshaling resources, if not financial, then I don't know what, planning, computing, other ways of doing things. Because the economy is going to have to move goods and people somehow. And at increasing rates, if it is going to continue to grow.

So we appreciate your preparing these statements and talking to us. We are trying to figure out how to do our job with the next reauthorization and really adjusting for the current one. If you have any closing comments, we would be eager to hear them.

Ms. SIGGERUD. Mr. Petri, I just wanted to agree with a couple of things that you said that we have highlighted in some recent GAO work. We feel it is extremely important to know more about the importance of the transportation system in the United States. The performance measures that we have are often about the condition of the pavement, things like that, that don't really tell us about the mobility, how well people and freight are moving in the United States.

So focusing on that problem, I think, will help enormously in the reauthorization as well as making the case for whether increasing transportation investment makes sense.

I also wanted to focus on the point that you raised about doing more modal tradeoffs. Clearly the structure of these programs makes it very difficult to do that, moving in that direction, having more flexibility there I think is also extremely important in the goals that you outlined.

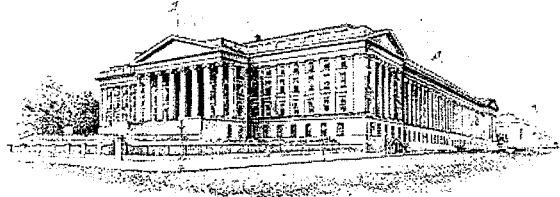
Mr. PETRI. Thank you all. This hearing is adjourned.

[Whereupon, at 3:16 p.m., the subcommittee was adjourned.]



**Congressman Russ Carnahan (D-MO)**  
**House Transportation Committee**  
**Subcommittee on Highways, Transit, and Pipelines**  
**Hearing on Reliability of Highway Trust Fund Revenue Estimates**  
**Opening Statement**  
**April 4, 2006**

- Thank you, Mr. Chairman, for scheduling this hearing to provide information on the reliability of the revenue estimates for the Highway Trust Fund.
- When Congress passed the reauthorization of our nation's highway programs, SAFETEA-LU, it did so with the expectation that the funding levels in the bill would be met through Fiscal Year 2009. However, the Department of Treasury projects that Highway Account balances will drop below zero in the last year of the SAFETEA-LU authorization period.
- SAFETEA-LU is an important investment in our nation's transportation and I am deeply concerned about the projected shortfalls.
- I look forward to hearing the testimony today. Thank you.



**U.S. TREASURY DEPARTMENT  
OFFICE OF PUBLIC AFFAIRS**

**EMBARGOED FOR RELEASE UNTIL 2:00PM: April 4, 2006**  
**Contact: Sean Kevelighan (202) 622-2910**

**Testimony of Robert J. Carroll, Deputy Assistant Secretary**  
**Tax Analysis**  
**U.S. Department of the Treasury**

**Before the Subcommittee on Highways, Transit, and Pipelines**  
**Committee on Transportation and Infrastructure**  
**Hearing on Reliability of Highway Trust Fund Revenue Estimates**

**April 4, 2006**

Mr. Chairman, Ranking Member DeFazio, and distinguished members of the Subcommittee, I appreciate the opportunity to discuss with you the Administration's forecast of highway-related excise taxes. I will focus my remarks on recent trends in these taxes, describe the methodology that underlies our forecast, and relate our forecasts over the past several years to actual receipts. I will also compare our forecast for the FY 2007 Budget to the forecast prepared by the Congressional Budget Office (CBO).

My testimony makes four main points:

- The Administration's forecast of highway-related excise taxes for the FY 2007 Budget is somewhat higher than the forecast for the FY 2006 Mid-Session Review, even after excluding the effects of the Surface Transportation Extension Act of 2005, Part V, with regard to the tax treatment of gasohol and related fuels (SAFETEA-LU).
- CBO's forecast of highway-related excise taxes is somewhat higher than the Administration's forecast, but the differences are not large, and are attributable to a number of factors, such as differences in underlying economic assumptions and methodology.

- All of these forecasts are well within what would be regarded as conventional confidence intervals for these estimates based on prior differences between forecasted receipts and actual receipts over the past decade and a half.
- Uncertainty in the forecast arises from a variety of factors, such as changing economic conditions, changes in energy markets and energy usage, and shifts in the relationship between economic variables and tax liabilities. The recent differences in estimates, whether comparing the Administration's FY 2006 Mid-Session Review and the FY 2007 Budget forecasts, or the Administration's and CBO's forecasts, may well be less important than the inherent uncertainty in these types of estimates.

#### Overview of Highway Related Excise Taxes

The Treasury Department's Office of Tax Analysis (OTA) is generally responsible for forecasting tax receipts for the President's Budget. The highway-related excise taxes are estimated using the Administration's economic forecast together with a wide range of economic models and recent data on tax collections and reported tax liabilities. The Administration's economic forecast is jointly formulated by the Troika, which consists of the Council of Economic Advisors, the Office of Management and Budget, and the Department of the Treasury. The Administration's economic forecast is used in conjunction with separate models for each of the five dedicated Highway Account excise tax sources: (i) Gasoline and related fuels, (ii) Diesel and other fuels, (iii) Trucks, (iv) Highway-type tires, and (v) Heavy vehicles. The Administration's forecast and recent historical data on actual tax receipts for each of these five excise taxes are provided in Tables 1 and 2.<sup>1</sup>

Highway-related excise taxes have grown in the past year from \$29.8 billion to \$32.9 billion, an increase of 10.5 percent. Most of this growth is attributable to statutory changes made to the gasoline tax, the largest of the highway-related excise taxes, under the Surface Transportation Extension Act of 2004, Part V (Public Law 108-357). This Act changed the tax treatment of gasohol and related fuels. The tax on diesel fuel and the retail tax on trucks also contributed to the growth in highway-related excise taxes, reflecting the recent strength in the economy, increased product shipments, higher equipment investment, and a recovery of the heavy truck market.

The balance and overall health of the Highway Trust Fund depends on both incoming receipts and outgoing disbursements. Treasury is responsible for collecting and reporting tax receipts and forecasting future tax receipts. The Department of Transportation is in the best position to respond to questions concerning disbursements from the Highway Trust Fund to meet the various obligations. Nevertheless, according to Administration estimates, the highway account will be exhausted by 2009 (i.e., the highway account will have a negative cash balance of \$2.3 billion at the end of 2009). CBO estimates indicate the highway account will be exhausted one year later. The difference in the timing of when the highway account is exhausted is due to differences in the Administration's and CBO's receipt forecasts. I will discuss the Administration's estimates and how they relate to CBO's.

<sup>1</sup> The 2000 through 2005 figures are actual receipts drawn from the Highway Trust Fund Income Statement while the 2006 through 2011 figures are projections from the President's FY 2007 Budget.

### How Receipts Get to the Highway Trust Fund

Highway-related excise taxes are deposited to the Highway Trust Fund and other trust funds established in the Internal Revenue Code in a multi-step process starting with estimated tax payments made to the Internal Revenue Service (IRS), allocations to the trust funds made by OTA, the filing of excise tax returns by taxpayers, and a final certification of the trust funds by the IRS.

The process begins when motor fuel, which accounts for more than 90 percent of trust fund receipts, is taxed as it moves out of the bulk transportation and storage network and into tanker trucks at the terminal rack. The fuel is taxed or it is dyed if it is diesel or kerosene intended for nontaxable purposes. The owner of the fuel, the registered position holder, is liable for payment of the tax as it passes the terminal rack. Taxpayers with more than \$2,500 in net excise tax liability are required to make semi-monthly estimated payments and typically rely on safe harbor rules in determining the amount to deposit.<sup>2</sup> These deposits are typically made via the Electronic Federal Tax Payment System and are initially deposited in the Treasury's General Fund.

Taxpayers are not required to itemize which excise taxes they are depositing. Taxpayers simply indicate that the payment is for excise taxes, which can be for any of the approximately 50 different excise taxes. Even taxpayers that exclusively owe taxes on motor fuel are likely to have tax liability for a combination of gasoline, diesel, kerosene, and possibly various alternative fuels. These fuels are taxed at different rates and distributed in different proportions to the Highway Trust Fund and the Leaking Underground Storage Tank Trust Fund. Estimates of allocations to the trust funds are needed because the initial deposits are not distinguished by type of excise tax.

The OTA is required by Section 9601 of the Internal Revenue Code to estimate and allocate excise tax receipts to the Highway Trust Fund and other trust funds established in chapter 98 of the Internal Revenue Code. The semi-monthly transfers made by OTA to the trust funds are estimates based on the historical allocation of the excise taxes to the trust funds.

The quarterly excise tax returns filed by taxpayers serve as the basis for a final reconciliation and certification of the excise taxes to the trust funds. Taxpayers report and itemize most excise taxes quarterly on Form 720, due one month following the close of the quarter. For example, taxpayers report on Form 720 the number of gallons of each type of fuel and the tax due, and claims of nontaxable use of the fuel. Any balance due or overpayment is also settled when the Form 720 is filed. Liability for the heavy vehicle use tax is reported on Form 2290 and the liability must be paid in full with the return.

The IRS uses the Form 720 and Form 2290 returns, together with taxpayer payment records, to calculate the Highway Trust Fund Certification of taxes collected for the quarter. After processing an excise tax return, the IRS compares the reported tax liability with the deposits received from a taxpayer. In cases where taxpayers have reported tax liability exceeding their deposits, deposits are allocated based on their prorated reported liability to assure that certified amounts equal tax collections. On the quarterly certification, IRS reports the total prorated

<sup>2</sup> For example, safe harbor rules permit taxpayers to make deposits of one-sixth of their tax liability from the quarter that occurred two quarters prior to the current quarter.

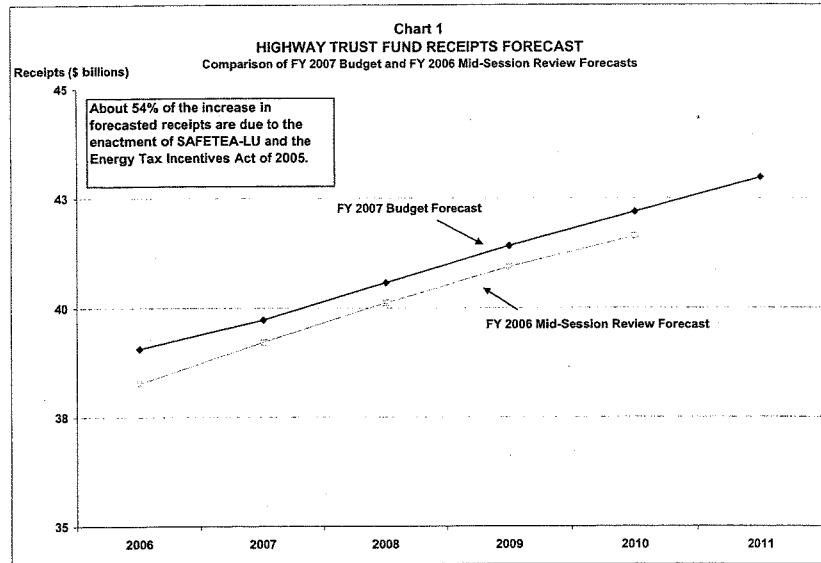


liability for the quarter. In order to allow time for late filing by taxpayers, amended returns, or adjustments from examinations, the certification is issued approximately four and a half months following the due date of the return. The certified amount is then compared to the amounts transferred by OTA and the IRS makes reconciling adjustments to the trust fund accounts for differences between the certified amounts and the amounts previously transferred.

#### Forecast of Future Excise Tax Receipts

OTA uses a set of models to estimate the tax receipts dedicated to the Highway Trust Fund. Each of the models estimates the historic relationship between macroeconomic variables from the Administration's economic forecast and excise tax liability. The general structure of the models draw on relationships reported in the economics literature and include macroeconomic variables such as real gross domestic product (GDP) and oil prices to establish the historic relationship between tax liability and the economic variables. The estimated relationship from these models is then used with the Administration's economic assumptions to project tax liability over the budget period. OTA also uses recent tax collection data to further calibrate and adjust the models. Each of the models is continually evaluated in the light of new economic research and data.

The Administration's forecasts from the Fiscal Year 2006 Mid-Session Review and the Fiscal Year 2007 Budget are compared in chart 1 (see below). As illustrated, the forecast of receipts dedicated to the Highway Trust Fund over the budget period increased from the FY 2006 Mid-Session Review to the FY 2007 Budget. The increase is due to both enacted legislation (54 percent) and technical and economic changes (46 percent). Changes in the Administration's forecast of real GDP, oil prices and several other macroeconomic variables explain the economic changes. The technical changes primarily reflect OTA's recalibration of the models to recent tax collection data and refinements to the models used to project tax liability.

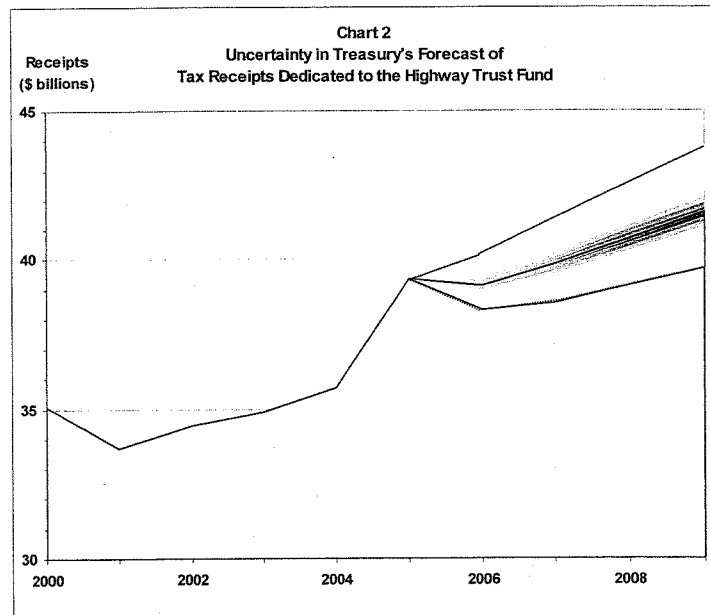


As depicted in Chart 1, the Administration projects steady growth in highway-related excise tax receipts. Net receipts in FY 2006 are projected to increase by 3.1 percent as compared to FY 2005. Average annual growth is forecast to be 2.3 percent annually through 2009, slightly above the 2.2 percent average annual growth forecast for the FY 2006 Budget. In the FY 2007 Budget, the Administration forecasts net Highway Account excise tax receipts to be \$39.1 billion in FY 2006 and \$41.4 billion in 2009.

From 2006 through 2009, gallons of gasoline and gasohol fuels consumed are projected to grow at an average of 2.1 percent per year (net of the statutory change in the treatment of gasohol fuels). For the same period, gallons of diesel and related fuels consumed are projected to grow at an average of 1.7 percent per year. The truck related excise tax receipts are projected to grow more quickly than fuel receipts. From 2006 to 2009, receipts from the retail tax on trucks, the tax on highway type tires, and the heavy vehicle use tax are projected to grow at an average of 5.3 percent, 6.2 percent, and 4.2 percent per year, respectively.

OTA's estimates represent our best estimates based on the Administration's economic assumptions and our underlying models. To provide some perspective for how well our forecasts predict actual tax receipts, we have analyzed the difference or deviation between prior forecasts of receipts and actual receipts. From these deviations, we have constructed confidence intervals around our current forecast shown in Chart 2 (see below) to indicate the uncertainty of our estimates.

The confidence intervals were constructed based on a statistical analysis of Treasury's historical forecasting errors from 1995 to 2005.<sup>3</sup> The size of the confidence intervals widens over the projection period reflecting the greater uncertainty over time. Given past experience, no changes in the tax law, and the current baseline forecast, FY 09 receipts are expected, with 90 percent confidence, to be between \$39.0 billion and \$43.8 billion (with the most likely outcome to be \$41.4 billion).



#### Comparison of Congressional Budget Office and Office of Tax Analysis Forecasts

Over the FY 2006 – FY 2009 period, CBO projects that excise tax receipts deposited to the Highway Trust Fund will total \$167.2 billion. OTA projects that excise tax receipts deposited to the Highway Trust Fund for the same period will total \$160.8 billion; a difference of \$6.4 billion or 4 percent with the CBO forecast. CBO projects that excise tax deposits to the Highway Account of the Highway Trust Fund will exceed amounts forecast by OTA by about 4 percent, or \$5.4 billion. The largest excise tax sources dedicated to the Highway Trust Fund, the excise tax on gasoline and diesel fuels and trucks, account for most of the difference in these projections.

While OTA and CBO generally use a similar methodology to estimate receipts dedicated to the Highway Trust Fund, several factors explain the differences in the most recent baselines.

<sup>3</sup> Basing the confidence intervals on past experience, of course, presumes that future errors will be similar to past errors. Forecasts with the greatest likelihood are those closest to the time of the receipts forecast.

Differences in the economic assumptions used by CBO and OTA in preparing their respective forecasts of Highway Trust Fund excise taxes account for part of the difference in revenue projections. The major economic drivers of the forecasting models of excise taxes dedicated to the Highway Trust Fund used by CBO and OTA are GDP growth and oil prices. Higher economic growth translates into higher overall receipts, while higher oil prices lower overall receipts. Currently, the Administration is forecasting somewhat slower economic growth and lower oil prices than CBO through the FY 2006 – FY 2009 budget period.

The impact of the differences between CBO's and the Administration's economic assumptions on the receipts forecasts also depends on the relative responsiveness of the models to the forecasts of real GDP growth and oil prices.<sup>4</sup> In projecting diesel fuel consumption, OTA's model tends to be more sensitive to changes in oil prices than CBO's, while CBO's model is more responsive to real GDP growth than OTA's. On net, the differences in economic assumptions used by CBO and OTA combined with the greater sensitivity to oil prices in the OTA model cause the Administration's forecast of diesel fuel excise taxes to be somewhat lower than CBO's. CBO and OTA have an open dialogue regarding this model. The differences in the model reflect different choices and judgments by the two organizations.

In projecting gasoline and gasohol consumption, both OTA and CBO incorporate income and price effects. Both incorporate responses of fuel consumption to prices in the short term, as people drive fewer miles, and in the longer-term, as people purchase more fuel-efficient vehicles. However, OTA assumes a larger response to prices in the longer term than CBO, and OTA assumes a relatively lower response to income than CBO. Thus, compared with OTA's model, CBO's model puts greater weight on the revenue-increasing effects of projected higher incomes and less weight on the revenue-decreasing effects of recent increases in oil prices. The net result of the interaction between the "economic" and "technical" (modeling) differences between CBO and OTA's forecasting models is higher CBO forecasts of gasoline and gasohol excise taxes that diverge over the FY 2006 – FY 2009 Budget period.

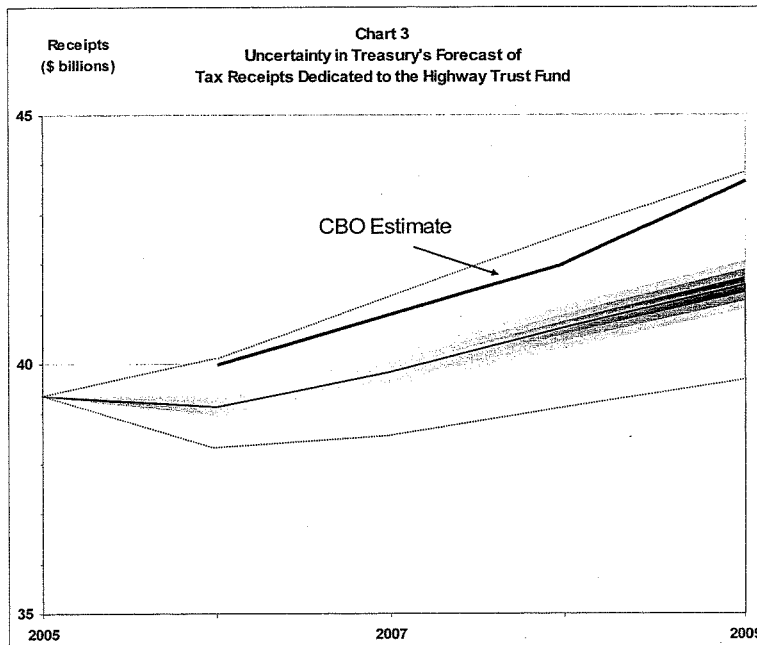
Discussions between OTA and CBO have revealed that there are other technical modeling differences between the two offices that also contribute to the difference in forecasts of excise tax deposits to the Highway Trust Fund. CBO and OTA use different variables to forecast gasoline, gasohol, and diesel fuel consumption and use different historical periods to estimate their models. In both the gasoline and gasohol model and the diesel model, OTA uses the price of crude oil in a model of consumption after accounting for state and federal taxes. Also, in the model used to establish the historical relationship between taxes and the macroeconomic variables, OTA uses tax liability updated by the IRS to account for when taxes are accrued as opposed to processed.<sup>5</sup> Tax liability defined on an accrual basis will be more directly related to the underlying economic activity determining fuel consumption and rely on a more accurate depiction of seasonal behavior and trends. OTA and CBO also make different assumptions regarding future fuel efficiency of the vehicle fleet. While these differences exist, the assumptions used by both CBO and OTA are consistent with the range of results cited in the

<sup>4</sup> In addition to different modeling assumptions about the responsiveness of Highway Trust Fund excise taxes to GDP growth and oil price changes, differences in assumptions made regarding the timing of tax payments with respect to recent liability years can impact forecasts of excise tax deposits to the Highway Trust Fund. In the short-run, the difference in the "base" year of the forecast causes CBO's projection to be higher than OTA's throughout the projection period.

<sup>5</sup> These data are reported to OTA monthly in the Treasury-92 Supplemental Report.

economic literature and, as shown in Chart 3 (see below), produce estimates that are close when viewed from the perspective of historical deviations in the forecasts and the corresponding confidence intervals.

In contrast to fuel taxes, OTA forecasts higher excise taxes on the sale of retail trucks than CBO (by \$0.9 billion over the FY 2006 – FY 2009 period.) The Administration's and CBO's economic forecasts of equipment investment are similar during this period, thus the differences are largely technical in nature.



In summary, the Administration's forecast of highway-related excise taxes have increased since the FY 2006 Mid-Session Review, reflecting the enactment of SAFETEA-LU and the Energy Tax Incentives Act of 2005, changes in underlying economic conditions, and refinements to our methodology. Although there are differences between OTA's and CBO's forecasts, these are reflective of differences in the economic outlook and minor differences in the underlying methodology. An analysis of historical deviations between OTA's forecasts and actual tax receipts indicates that the differences between the Administration's forecast and CBO's both fall within the 90 percent confidence interval. This indicates that each forecast is just as likely to occur 90 percent of the time, thus suggesting that the differences are not statistically material.

As in the past, OTA and CBO continue to work closely to understand differences between the models, and incorporate new research and data into the forecasts.

Conclusion

I thank you for the opportunity to testify before the Committee today and look forward to your questions.

Table 1  
Forecast Excise Tax Receipts to the Highway Account of the Highway Trust Fund

	Actual 2000	Actual 2001	Actual 2002	Actual 2003	Actual 2004	Actual 2005	Forecast 2006	Forecast 2007	Forecast 2008	Forecast 2009	Forecast 2010	Forecast 2011
Highway Account												
Gross Transfers												
Gasoline	19,262	18,441	19,273	19,600	19,929	21,181	22,038	22,361	22,696	23,027	23,337	23,628
Diesel & other fuels	7,427	7,158	7,366	7,531	7,883	8,426	8,558	8,631	8,817	9,000	9,148	9,299
Retail tax on Trucks	3,321	1,489	1,266	1,710	1,847	2,993	3,128	3,287	3,487	3,679	3,864	4,075
Highway-type tires	442	343	351	403	446	467	560	556	569	587	607	629
Heavy vehicle use tax	921	610	982	940	945	1,090	1,094	1,155	1,217	1,282	1,351	1,422
Gross HA Transfers	31,373	28,041	29,238	30,184	31,050	34,157	35,378	35,990	36,766	37,575	38,307	39,053
Less Aquatic Resources	209	215	353	360	373	383	371	380	391	402	412	423
Net HA Transfers	31,164	27,826	28,885	29,824	30,677	33,774	35,007	35,610	36,395	37,173	37,895	38,630
Less HA Refunds	831	925	919	878	908	880	956	965	984	1,005	1,024	1,044
Net Highway Account Receipts	30,333	26,901	27,966	28,946	29,769	32,894	34,051	34,645	35,411	36,168	36,871	37,586
Year-to-Year Changes												
Gross Transfers												
Gasoline	-821	832	327	329	329	1,252	857	323	335	331	310	291
Diesel & other fuels	-269	208	165	352	352	543	132	73	186	183	148	151
Retail tax on Trucks	-1,832	-223	444	137	1,146	135	159	159	200	192	185	211
Highway-type tires	-99	8	52	43	21	93	-4	13	18	20	22	22
Heavy vehicle use tax	-311	372	-42	5	145	4	61	62	65	69	71	71
Gross HA Transfers	-3,332	1,197	946	866	866	3,107	1,221	612	796	789	732	746
Less Aquatic Resources	6	138	7	13	10	-12	9	11	11	11	10	11
Net HA Transfers	-3,338	1,059	939	853	853	3,097	1,233	603	785	778	722	735
Less HA Refunds	94	-6	-41	30	-28	76	9	19	21	21	19	20
Net Highway Account Receipts	-3,432	1,065	980	823	3,125	1,157	594	766	757	703	715	715
Year-to-Year Percentage Changes												
Gross Transfers												
Gasoline	-4.3%	4.5%	1.7%	1.7%	1.7%	6.3%	4.0%	1.5%	1.5%	1.3%	1.3%	1.2%
Diesel & other fuels	-3.6%	2.9%	2.2%	4.7%	4.7%	6.9%	1.6%	0.9%	2.2%	2.1%	1.6%	1.7%
Retail tax on Trucks	-55.2%	-15.0%	35.1%	8.0%	62.0%	4.5%	5.1%	5.1%	6.1%	5.5%	5.0%	5.5%
Highway-type tires	-22.4%	2.3%	14.8%	10.7%	4.7%	19.9%	-0.7%	2.3%	2.3%	3.2%	3.4%	3.6%
Heavy vehicle use tax	-33.8%	61.0%	-4.3%	0.5%	15.3%	0.4%	5.6%	5.6%	5.4%	5.3%	5.4%	5.3%
Gross HA Transfers	-10.6%	4.3%	3.2%	2.9%	10.0%	3.6%	1.7%	1.7%	2.2%	2.1%	1.9%	1.9%
Less Aquatic Resources	2.9%	64.2%	2.0%	3.6%	2.7%	-3.1%	2.4%	2.9%	2.8%	2.9%	2.7%	2.7%
Net HA Transfers	-10.7%	3.8%	3.3%	2.9%	10.1%	3.7%	1.7%	1.7%	2.2%	2.1%	1.9%	1.9%
Less HA Refunds	11.3%	-0.6%	-4.5%	3.4%	-3.1%	8.6%	0.9%	2.0%	2.1%	1.9%	1.9%	2.0%
Net Highway Account Receipts	-11.3%	4.0%	3.5%	2.8%	10.5%	3.5%	1.7%	2.2%	2.2%	2.1%	1.9%	1.9%

Note: The FY 2000 through FY 2005 figures are based on the end-of-year Highway Account Income Statement reported by the Bureau of Public Debt. The FY 2006 through FY 2011 figures are forecasts made by the Office of Tax Analysis, Department of the Treasury for the FY 2007 Budget.

**Table 2**  
**Forecast Excise Tax Receipts to the Mass Transit Account of the Highway Trust Fund**

	Actual 2000	Actual 2001	Actual 2002	Actual 2003	Actual 2004	Actual 2005	Forecast 2006	Forecast 2007	Forecast 2008	Forecast 2009	Forecast 2010	Forecast 2011
<b>Mass Transit Account</b>												
Gross Transfers												
Gasoline	3,844	3,696	3,844	3,960	4,031	4,037	4,064	4,124	4,186	4,247	4,304	4,358
Diesel & other fuels	956	957	965	1,021	1,052	1,126	1,144	1,155	1,180	1,205	1,225	1,245
Gross MTA Transfers	4,800	4,653	4,809	4,981	5,083	5,163	5,208	5,279	5,366	5,452	5,529	5,603
Less Aquatic Resources	28	29	33	35	38	39	51	53	54	56	58	60
Net MTA Transfers	4,772	4,624	4,776	4,946	5,045	5,124	5,157	5,226	5,312	5,396	5,471	5,543
Less MTA Refunds	69	70	127	136	106	126	142	144	147	149	152	155
<b>Net MTA Receipts</b>	<b>4,703</b>	<b>4,554</b>	<b>4,648</b>	<b>4,810</b>	<b>4,939</b>	<b>4,998</b>	<b>5,015</b>	<b>5,082</b>	<b>5,165</b>	<b>5,247</b>	<b>5,319</b>	<b>5,388</b>
<b>Year-to-Year Changes</b>												
Gross Transfers												
Gasoline	-148	148	116	116	71	6	27	60	62	61	57	54
Diesel & other fuels	1	8	56	31	74	18	18	11	25	25	20	20
Gross MTA Transfers	-147	156	172	102	80	45	45	71	87	86	77	74
Less Aquatic Resources	1	4	2	3	1	12	2	2	1	2	2	2
Net MTA Transfers	-148	152	170	99	79	33	33	69	86	84	75	72
Less MTA Refunds	1	57	9	-30	20	16	16	2	3	2	3	3
<b>Net MTA Receipts</b>	<b>-149</b>	<b>94</b>	<b>162</b>	<b>129</b>	<b>59</b>	<b>17</b>	<b>67</b>	<b>67</b>	<b>83</b>	<b>82</b>	<b>72</b>	<b>69</b>
<b>Year-to-Year Percentage Changes</b>												
Gross Transfers												
Gasoline	-3.9%	4.0%	3.0%	3.0%	1.8%	0.1%	0.7%	1.5%	1.5%	1.5%	1.3%	1.3%
Diesel & other fuels	0.1%	0.8%	5.8%	3.0%	3.0%	7.0%	1.6%	1.0%	2.2%	2.1%	1.7%	1.6%
Gross MTA Transfers	-3.1%	3.4%	3.6%	2.0%	1.6%	1.6%	0.9%	1.4%	1.6%	1.6%	1.4%	1.3%
Less Aquatic Resources	3.6%	13.8%	6.0%	8.6%	2.6%	2.6%	30.8%	3.9%	1.9%	3.7%	3.6%	3.4%
Net MTA Transfers	-3.1%	3.3%	3.6%	2.0%	1.6%	1.6%	0.6%	1.3%	1.6%	1.6%	1.4%	1.3%
Less MTA Refunds	1.4%	81.4%	7.1%	-22.1%	18.9%	12.7%	12.7%	1.4%	2.1%	1.4%	2.0%	2.0%
<b>Net MTA Receipts</b>	<b>-1.6%</b>	<b>2.1%</b>	<b>3.5%</b>	<b>2.7%</b>	<b>1.2%</b>	<b>0.3%</b>	<b>0.3%</b>	<b>1.3%</b>	<b>1.6%</b>	<b>1.6%</b>	<b>1.4%</b>	<b>1.3%</b>

Note: The FY 2000 through FY2005 figures are based on the end-of-year Highway Account Income Statement reported by the Bureau of Public Debt. The FY 2006 through FY 2011 figures are forecasts made by the Office of Tax Analysis, Department of the Treasury for the FY 2007 Budget.



# **CBO TESTIMONY**

**Statement of  
Donald B. Marron  
Acting Director**

## **CBO's Projections of Revenues for the Highway Trust Fund**

**before the  
Subcommittee on Highways, Transit, and Pipelines  
Committee on Transportation and Infrastructure  
U.S. House of Representatives**

**April 4, 2006**

*This document is embargoed until it is delivered  
at 2:00 p.m. (EDT) on Tuesday, April 4, 2006.  
The contents may not be published, transmitted,  
or otherwise communicated by any print, broad-  
cast, or electronic media before that time.*



**CONGRESSIONAL BUDGET OFFICE  
SECOND AND D STREETS, S.W.**

Mr. Chairman and Members of the Subcommittee, I am pleased to be here today to discuss the status of the Highway Trust Fund and its highway account. My statement focuses on the methods that the Congressional Budget Office (CBO) uses to project the revenues that are deposited into the trust fund, the reliability of those projections, and the difference between CBO's projections and those of the Administration.

My testimony has six main conclusions:

- Revenues from the various fuel and truck taxes that are credited to the Highway Trust Fund will total \$167 billion from fiscal year 2006 through fiscal year 2009, CBO projects. About \$146 billion of those revenues will go into the trust fund's highway account. Outlays from the highway account would total \$158 billion over 2006-2009 period if annual obligation limits were set at the levels authorized in 2005. As a result, balances in the highway account (currently about \$11 billion) would decline over the next three years, leading to the exhaustion of account balances by the end of 2009.
- The Administration projects somewhat lower revenues for the Highway Trust Fund (\$161 billion) and for the highway account (\$140 billion) over that period—differences of about \$6 billion and \$5 billion, respectively. Its revenue projections, when combined with its outlay estimates, also imply that the highway account will incur a shortfall in 2009.
- CBO projects higher trust fund revenues than the Administration does mainly because CBO assumes greater increases in fuel usage in the future as the economy grows and smaller reductions in fuel usage as a result of recent price increases. In addition, CBO's projections start from a higher level, based on higher estimates of recent revenues, and use some different underlying economic assumptions. Those factors, however, play a much smaller role in causing CBO's revenue projections to exceed the Administration's.
- Projections of trust fund revenues are subject to significant uncertainty. Changes in oil prices, the economy, and the fuel efficiency of vehicles can all cause future revenues to differ from current projections. Experience suggests that CBO's and the Administration's projections are subject to similar uncertainties and are comparable in their reliability.
- The difference between CBO's and the Administration's current revenue projections is smaller than the range of past differences between projected and actual revenues. Thus, the difference between those projections is not an indicator of their respective reliability.
- The uncertainty associated with both revenue and outlay projections implies that the highway account could exhaust its resources either before or after 2009.

## Overview of the Highway Trust Fund

The Highway Trust Fund is an accounting mechanism in the federal budget. It records specific cash inflows (revenues from certain excise taxes on motor fuels and trucks) and cash outflows (spending on designated highway and mass transit programs). The fund comprises two separate accounts, one for highways and one for mass transit. By far the largest component of the trust fund is the Federal-Aid Highway program (see Table 1).

Spending from the Highway Trust Fund is not automatically triggered by the collection of tax revenues. Authorization acts provide budget authority for highway programs, mostly in the form of contract authority (the authority to incur obligations in advance of appropriations). Annual spending from the Highway Trust Fund is largely controlled by limits on the amount of contract authority that can be obligated in a particular year. Such obligation limitations are customarily set in appropriation acts.

The most recent authorization law governing spending from the trust fund—the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU)—was enacted in 2005 and is due to expire at the end of 2009. SAFETEA-LU provides specific amounts of contract authority over the 2005-2009 period and authorizes appropriations for certain programs that are not funded through contract authority. It also specifies annual obligation limitations (which may be superseded each year by limitations set in annual appropriation acts).

In addition, the 2005 law includes a funding mechanism, known as revenue-aligned budget authority (RABA), that is designed to strengthen the relationship between the highway account's revenues and spending. Under RABA, the Administration estimates revenues for the highway account and compares its estimates with the revenue amounts anticipated in SAFETEA-LU and with the estimates made the previous year. On the basis of those comparisons, the Administration, as part of the President's annual budget request, is required to adjust contract authority for programs funded from the highway account. (If the current revenue estimates are higher than the revenue amounts anticipated in SAFETEA-LU, contract authority is increased. If the revenue estimates are lower than the anticipated amounts, contract authority is reduced, as long as highway account balances are less than \$6 billion.) The obligation limitations set in appropriation acts, however, do not necessarily reflect RABA adjustments.

## Balances of the Highway Trust Fund

The status of the Highway Trust Fund is generally assessed by projecting the balances in the fund, which indicate whether its expected revenues will be sufficient to cover its anticipated outlays. Those balances represent the cumulative difference between revenues and outlays over the life of the trust fund and indicate how

**Table 1.****Major Components of the Highway Trust Fund, 2006**

(Billions of dollars)

	Estimated Receipts <sup>a</sup>	Budget Authority and Obligation Limitations <sup>b</sup>	Estimated Outlays
Highway Account			
Federal-Aid Highway program	n.a.	36.3	33.7
Motor carrier safety	n.a.	0.5	0.5
Highway traffic safety	n.a.	0.8	0.6
Other	<u>n.a.</u>	<u>0</u>	<u>0.2</u>
Subtotal	34.9	37.6	34.9
Mass Transit Account			
Discretionary grants	n.a.	0.1	0.1
Trust fund share of transit programs <sup>c</sup>	<u>n.a.</u>	<u>6.9</u>	<u>0.8</u>
Subtotal	5.1	6.9	0.8
<b>Total, Highway Trust Fund</b>	<b>40.0</b>	<b>44.5</b>	<b>35.7</b>

Source: Congressional Budget Office.

Notes: n.a. = not applicable.

Numbers may not add up to totals because of rounding.

- a. Receipts are deposited in the highway and mass transit accounts but are not earmarked for specific components.
- b. Obligation limitations enacted in appropriation acts limit the amount of budget authority available to most Highway Trust Fund programs. The amounts in this column are the sum of obligation limitations and budget authority that is not subject to any such limitation.
- c. Includes only outlays from 2006 funds. Outlays from previous years' funding were recorded in those years as transfers to other budget accounts.

much the fund has available, at any particular time, to meet its current and future obligations.

In the case of the fund's highway account, most of the obligations involve capital projects, on which money is spent over a number of years. (In other words, some of the highway programs' existing obligations will be met using future tax revenues.) Therefore, existing obligations of programs paid from that account far exceed the amounts now in the account. At the end of 2005, the balance of the highway account stood at \$11 billion, whereas the outstanding obligations of highway programs totaled almost \$45 billion.

CBO has estimated the highway account's future balances by projecting revenues and outlays through 2009 (see Table 2). Revenues and outlays are estimated inde-

**Table 2.**

### **CBO's Estimate of Highway Account Balances, Assuming Funding at Levels Authorized in SAFETEA-LU**

(Billions of dollars)

	2005	2006	2007	2008	2009	Total, 2006- 2009
Federal-Aid Highway Program						
Obligation limitation	33.3	35.6	38.2	39.6	41.2	154.6
RABA adjustments to obligation limitation <sup>a</sup>	0	0	0.8	1.9	1.8	4.6
Discretionary budget authority <sup>b</sup>	1.9	0	0	0	0	0
Contract authority not subject to obligation limitations	0.7	0.7	0.7	0.7	0.7	3.0
Safety Programs (Obligation limitations)	0.9	1.3	1.2	1.2	1.3	5.0
<b>Total Funds Available for Obligation<sup>c</sup></b>	<b>36.8</b>	<b>37.6</b>	<b>40.9</b>	<b>43.4</b>	<b>45.0</b>	<b>167.1</b>
Estimated Outlays	33.1	34.9	38.1	41.4	43.2	157.6
Estimated Receipts	33.3	34.9	35.9	36.9	37.9	145.7
<b>Projected End-of-Year Balance</b>	<b>11.0</b>	<b>11.0</b>	<b>8.8</b>	<b>4.4</b>	<b>-0.9</b>	<b>n.a.</b>
Change from Previous Year's Balance	n.a.	*	-2.2	-4.5	-5.3	-11.9

Source: Congressional Budget Office.

Notes: SAFETEA-LU = Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users; RABA = revenue-aligned budget authority; n.a. = not applicable; \* = between zero and \$50 million.

Numbers may not add up to totals because of rounding.

- The 2007 figure for RABA adjustments comes from the President's 2007 budget. The figures for 2008 and later years are illustrative estimates by CBO. (The Administration is responsible for determining RABA adjustments.)
- Includes funding provided by the Transportation, Treasury, Independent Agencies, and General Government Appropriations Act, 2005 (Public Law 108-447) and by the Military Construction Appropriations and Emergency Hurricane Supplemental Appropriations Act, 2005 (Public Law 108-324) to respond to hurricanes and meet other disaster-related needs.
- CBO assumes that future appropriation acts will provide for SAFETEA-LU funding levels and any RABA adjustments.

pendently of each other because they have different bases—revenues depend on the collection of various taxes, and outlays depend largely on the obligation limitations set in appropriation acts. For those projections, CBO assumes that policy-makers will continue to control spending through such limitations. Further, the projections assume that appropriation acts will set obligation limitations equal to the amounts specified in SAFETEA-LU raised or lowered by annual RABA

adjustments.<sup>1</sup> Under those assumptions, the amounts available for obligation from the highway account would rise from about \$37 billion last year to \$45 billion in 2009.

To estimate the flow of trust fund outlays that result from the obligation limitations, CBO looks at historical spending patterns. For example, the Federal-Aid Highway program typically spends about 27 percent of its budgetary resources in the year they are provided and the rest over the next several years. If the Congress chose to set obligation limitations at the amounts authorized in SAFETEA-LU and to include RABA adjustments to the limitations for 2007, 2008, and 2009, outlays from the trust fund's highway account would gradually increase from \$33 billion in 2005 to about \$43 billion in 2009, CBO estimates. Those outlays would exceed revenues by about \$2 billion in 2007, \$4.5 billion in 2008, and more than \$5 billion in 2009. As a result, balances in the highway account would be exhausted by 2009, and the account would incur a shortfall of about \$0.9 billion in that year, by CBO's estimate.

The Administration estimates that the highway account will have a shortfall of \$2.3 billion at the end of 2009. That outcome is the result of cumulative revenues of \$140 billion and cumulative spending of \$153 billion over the 2006-2009 period. CBO's estimate of revenues over those four years is about \$5 billion higher than the Administration's, but its estimate of spending over the same period is \$4 billion higher (assuming that annual obligation limitations are set at the amounts authorized in SAFETEA-LU). The difference in projected outlays stems from two sources. First, CBO's higher estimate of revenues implies RABA adjustments that would provide about \$2 billion more in budgetary resources for highways. Second, CBO expects a slightly faster pace of highway spending over the next four years than the Administration does.

## **CBO's Revenue Projections for the Highway Trust Fund**

As a part of its annual baseline budget projections, CBO projects the amount of revenues generated by the taxes that are deposited into the Highway Trust Fund. Following the provisions of the Balanced Budget and Emergency Deficit Control Act of 1985, as amended, CBO's baseline revenue projections assume that current law remains the same, except that excise taxes dedicated to trust funds are assumed to be extended at current rates. Thus, the Highway Trust Fund taxes that

---

1. That assumption differs from the one underlying CBO's baseline budget projections, which are governed by the rules set forth in the Balanced Budget and Emergency Deficit Control Act. In its most recent baseline, CBO projected highway spending over the next decade by assuming that the budget authority and obligation limitations in each future year would equal those enacted in the 2006 appropriation act for the Department of Transportation (Public Law 109-115), adjusted for inflation. With that projection method, baseline funding levels for highways are lower than the levels specified in SAFETEA-LU.

**Table 3.****Estimated Highway Trust Fund Revenues, 2005**

Revenue Source	Billions of Dollars	Percentage of Total Trust Fund Revenues
Gasoline and Gasohol Tax	25.5	66.7
Diesel Tax	9.3	24.2
Retail Sales Tax on Trucks	2.8	7.4
Heavy-Vehicle Use Tax	1.2	3.1
Tax on Truck Tires	0.5	1.2
Refunds	-1.0	-2.6
<b>Total</b>	<b>38.2</b>	<b>100.0</b>

Source: Congressional Budget Office.

Note: Numbers may not add up to totals because of rounding.

are now scheduled to expire on September 30, 2011, are assumed to be permanently extended in CBO's baseline projections.

### How CBO Projects Trust Fund Revenues

The largest source of revenues to the Highway Trust Fund is the tax of 18.3 cents per gallon on gasoline and gasohol. It currently produces about two-thirds of the fund's total revenues (see Table 3). The second-largest source is the levy of 24.3 cents per gallon on diesel and special motor fuels, which accounts for about one-quarter of revenues. Thus, taxes on motor fuels generate about 90 percent of the trust fund's total revenues. The rest of the revenues come from a 12 percent tax on the first retail sale of a truck or trailer above a certain weight, taxes on truck tires for highway use, and an annual use tax on heavy trucks. CBO projects all five of those revenue sources separately, along with refunds on amounts paid by certain taxpayers who are exempt from the taxes.

In addition, CBO projects the amount of revenue recorded separately in the highway account and the mass transit account of the Highway Trust Fund. Revenues from the taxes on gasoline and diesel fuel are credited to the full fund, and each of the accounts receives a share.<sup>2</sup> Revenues from the three different taxes on trucks are credited entirely to the highway account. Currently, more than 85 percent of highway revenues go to the highway account.

CBO's revenue projections cover not only the current year and next 10 years (its standard projection period) but also the previous year. The previous amounts are not yet known because, when taxpayers pay their total excise tax liabilities to the

2. About 84 percent of the gasoline and gasohol revenue and 88 percent of the diesel revenue is credited to the highway account.

Internal Revenue Service (IRS), they are not required to identify the specific taxes that their payments cover. Given the delays in reporting that information to IRS and the time that IRS needs to process the information, about six months elapse after the end of a quarter before data on payments of different types of excise taxes become available. Before those data are available, the Treasury Department estimates the amount of excise taxes that should be allocated to the various trust funds. It then adjusts those allocations later when the actual data become available.

The baseline projection of revenues that CBO prepares each December is thus based on only two quarters of actual data for the previous fiscal year. For example, when it prepared its most recent outlook for trust fund revenues, in December 2005, the latest data available to CBO were from January through March of 2005. CBO must forecast the breakdown of excise taxes for the remaining two quarters. In making that forecast, CBO relies on other economic data, various extrapolation methods, and the current projections for that year from its forecasting models.

**Gasoline Tax.** To estimate future revenues from gasoline and gasohol taxes, CBO projects the number of taxable gallons of those fuels that will be purchased and multiplies that amount by the tax rate specified in law. In CBO's model, growth in fuel purchases over time depends on real (inflation-adjusted) economic growth, changes in fuel prices relative to the prices of other goods, and changes in the fuel efficiency of the total fleet of gasoline-powered vehicles. Economic growth generates increases in fuel purchases and tax revenues, whereas growth in relative fuel prices and in fuel efficiency generates reductions in fuel purchases and revenues.<sup>3</sup>

CBO develops its own projections of the inputs into its model. Its economic projection includes measures of real economic activity and prices. In addition, CBO projects fuel efficiency by looking at past and expected changes in relative fuel prices.

**Diesel Tax.** CBO projects purchases of diesel fuel by looking at their historical relationship to real economic activity. Over a long period of time, the number of gallons of diesel fuel consumed has grown at a slightly faster rate than real gross domestic product (GDP), and CBO expects that relationship to continue over the next 10 years. In CBO's model, the recent rise in fuel prices does not cause a reduction in the use of diesel fuel, except to the degree that GDP is affected. Because there are limited alternatives to shipping freight by truck that do not also use diesel fuel, businesses generally must absorb higher fuel costs or pass them along to customers.

**Truck Taxes.** Growth in the other sources of trust fund revenues—the retail sales tax on trucks, the tire tax, and the highway use tax—is also projected on the basis

---

3. Fuel prices in CBO's model largely capture the effects on the number of miles driven, and fuel efficiency separately captures miles per gallon.



**Table 4.****CBO's Current Projections of Highway Trust Fund Revenues, 2005 to 2016**

Revenue Source	Billions of Dollars					Average Annual Percentage Change		
	2005	2006	2007	2008	2009	2006-2007	2007-2008	2008-2009
Gasoline and Gasohol Tax	25.5	26.3	27.0	27.7	28.4	3.2	2.6	1.8
Diesel Tax	9.3	10.0	10.4	10.7	11.1	7.8	3.7	2.9
Retail Sales Tax on Trucks	2.8	3.1	3.1	3.2	3.3	8.5	2.4	1.7
Heavy-Vehicle Use Tax	1.2	1.2	1.2	1.3	1.3	2.6	2.3	1.6
Tax on Truck Tires	0.5	0.5	0.5	0.5	0.5	2.7	2.4	1.7
Refunds	-1.0	-1.0	-1.0	-1.1	-1.1	1.0	2.7	1.9
<b>Total</b>	<b>38.2</b>	<b>40.0</b>	<b>41.2</b>	<b>42.4</b>	<b>43.5</b>	<b>4.7</b>	<b>2.8</b>	<b>2.1</b>

Source: Congressional Budget Office.

Note: Numbers may not add up to totals because of rounding.

of historical relationships to real economic growth. Revenues from all of those taxes are projected to grow more slowly than real GDP, on average, as they have done in recent years.

**CBO's Current Projection of Revenues for the Highway Trust Fund**

The revenues credited to the Highway Trust Fund will rise over the coming decade, CBO projects, but the rate of growth will slow with time (see Table 4). Revenues are projected to increase by 4.7 percent this year—to \$40 billion from about \$38 billion last year—partly because of recent legislation that affects the tax treatment of kerosene and hence receipts from the tax on diesel. Over the next three years, trust fund revenues are projected to grow at an average annual rate of 2.8 percent, reaching \$43.5 billion in 2009. Over the 2010-2016 period, the estimated growth rate slows to an average of 2.1 percent per year.

For the trust fund's highway account, CBO projects that revenues will be sufficient to keep it solvent through 2008 (if annual obligation limitations are set at the levels specified in SAFETEA-LU). In 2009, however, the highway account is projected to incur a small shortfall.

**Gasoline Tax.** Receipts from gasoline and gasohol taxes will grow more slowly than real GDP over the next 10 years, CBO projects—at average annual rates of 2.6 percent between 2007 and 2009 and 1.8 percent between 2010 and 2016. That projection is influenced heavily by CBO's outlook for oil markets and real economic growth.

Nominal oil prices will remain relatively stable through 2007, CBO projects, and thus will decline slightly relative to other prices, which are expected to rise. After

2007, oil prices are expected to increase at about the general rate of inflation. The inflation-adjusted price of gasoline has jumped markedly from its average level of 2003, but CBO does not project further increases over the 10-year projection period. The recent price rise is expected to generate steady increases in the fuel efficiency of the nation's fleet of gasoline-powered vehicles over the next decade.

In addition, the economy is expected to continue growing in real terms, though more strongly in the earlier years of the projection period than in the later years. CBO projects real economic growth of 3.6 percent this year, 3.4 percent in 2007, and an average of 3.3 percent in 2008 and 2009. After that, growth of real GDP is projected to slow to an annual average of 2.7 percent over the 2010- 2016 period, largely because an increasing portion of the baby-boom generation will be retiring.

**Diesel and Truck Taxes.** The projection of a slowdown in real economic growth means that revenues from the levy on diesel fuel and the other highway taxes are also expected to grow at decreasing rates over time. CBO projects that diesel fuel revenues will increase by 3.7 percent a year, on average, from 2007 to 2009 and by 2.9 percent a year, on average, from 2010 to 2016. Other sources of revenue for the Highway Trust Fund are projected to grow about 1 percentage point more slowly than diesel fuel revenues.

### **Differences Between CBO's and the Administration's Revenue Projections**

CBO projects a total of \$167 billion in revenues for the Highway Trust Fund over the 2006-2009 period. The Administration's projection, \$161 billion, is about 4 percent smaller. CBO's projection of revenues for the highway account over that period also exceeds the Administration's estimate by about 4 percent, or \$5 billion (see Table 5). More than half of that difference results from varying projections of gasoline and gasohol revenues, and less than half is from projections of diesel fuel revenues. Differences in projections of retail sales taxes on trucks offset a portion of the differences in estimates of gasoline and diesel tax revenues.

The Administration and CBO generally use similar techniques to project the revenues dedicated to the Highway Trust Fund, but their specific models differ in some ways. In examining the differences, it is useful to distinguish between economic factors and technical factors. CBO classifies differences as stemming from economic factors if they are caused by differences in underlying projections of total income and prices in the economy. CBO classifies all other differences as technical in nature; they typically reflect differences in models and varying interpretations of recent tax collections.

Technical differences, not economic ones, are the most significant factor explaining the differences in revenue projections. CBO and the Administration make different assumptions about the future fuel efficiency of the vehicle fleet, use somewhat different variables to forecast diesel fuel usage, and use different historical

**Table 5.**

### **Projections of Revenues for the Highway Account Over the 2006-2009 Period**

(Billions of dollars)

Revenue Source	CBO	Administration	Difference (CBO minus Administration)	
			Billions of Dollars	Percent
Gasoline and Gasohol Tax	92.4	88.6	3.8	4.3
Diesel Tax	37.2	35.0	2.2	6.3
Retail Sales Tax on Trucks	12.7	13.6	-0.9	-6.3
Heavy-Vehicle Use Tax	5.0	4.7	0.2	4.6
Tax on Truck Tires	2.0	2.3	-0.3	-12.3
Refunds	-3.6	-3.9	0.3	-8.5
<b>Total</b>	<b>145.7</b>	<b>140.3</b>	<b>5.4</b>	<b>3.9</b>

Sources: Congressional Budget Office and Department of the Treasury.

Note: Numbers may not add up to totals because of rounding.

periods in their models. Despite the divergence, the key elements of those models are consistent with the range of results in the economics literature.

The Administration and CBO both project that use of gasoline and gasohol will change in response to changes in their prices and as the economy grows. Differences in that estimated responsiveness, however, cause the two projections of fuel usage to diverge. CBO projects that people will increase their gasoline use to a greater extent as national income rises than the Administration does. For its part, the Administration assumes more long-term responsiveness to changes in gasoline prices than CBO does. Thus, compared with the Administration, CBO's modeling puts more weight on the revenue-increasing effects of projected income growth and less weight on the revenue-decreasing effects of the recent rise in fuel prices.

In projecting use of diesel fuel, the Administration again assumes greater sensitivity to fuel prices and less sensitivity to economic growth than CBO does. As with gasoline, those differences cause the Administration's projection of diesel fuel revenues to be lower than CBO's. Unlike the Administration, CBO does not project that the use of diesel fuel is significantly responsive to changes in its price—at least not at the price levels currently expected. In addition, although both the Administration and CBO use measures of real income as a primary input in their models, CBO's model assumes more responsiveness to changes in income. To model those income effects, CBO uses real GDP as a measure, whereas the Administration currently uses real disposable income and industrial production.

Another technical factor—which explains about 5 percent to 10 percent of the total difference in revenues over the 2006-2009 period—involves differences in estimating 2005 revenues. The Administration attributed a smaller share of total excise tax receipts in the second half of the year to highway sources than CBO did. As a result, CBO’s estimate of highway revenues in 2005 was higher than the Administration’s. That difference in the “base” year of the forecast causes CBO’s revenue projections to exceed the Administration’s throughout the projection period. (Information now available suggests that revenues for 2005 were between CBO’s and the Administration’s estimates.)

Other technical differences arise in projecting revenues from retail sales taxes on trucks. In that case, CBO projects slightly lower revenues than the Administration does (by a total of about \$0.9 billion over the 2006-2009 period). In projecting those tax revenues, the Administration uses its economic forecast of equipment investment as a key determinant, whereas CBO uses its forecast of real GDP.

Differences in economic assumptions play a relatively small role—explaining roughly 5 percent of the total difference in revenue projections over the 2006-2009 period, by CBO’s estimate. The major economic factors that determine the amount of tax revenues dedicated to the Highway Trust Fund are the overall growth of the economy and fuel prices. Currently, CBO is forecasting stronger economic growth through 2009 than the Administration, which by itself would cause CBO’s revenue projections to be higher than the Administration’s. However, CBO is also forecasting higher fuel prices through 2009, which would cause its revenue projections to be lower than the Administration’s. If CBO had used the Administration’s economic assumptions, it would have projected slightly lower revenues, narrowing the gap between the two projections.

## **Uncertainties in CBO’s Revenue Outlook**

Both CBO’s and the Administration’s projections of highway revenues face a variety of uncertainties. The economy could grow faster or more slowly than expected. Oil prices could climb higher or fall substantially. Consumers might adjust more or less to changes in fuel prices (for example, by driving fewer miles in the short term or purchasing more-fuel-efficient vehicles in the longer term). All of those changes could affect revenues.

In addition to uncertainty about the future, there is also some uncertainty about the recent past. For example, analysts still do not know the extent to which consumers reduced their use of motor fuel in response to market disruptions last fall.

## **The Accuracy of CBO’s Past Projections of Highway Trust Fund Revenues**

CBO regularly assesses the performance of its models and has tabulated the differences between its projections of Highway Trust Fund revenues and actual revenues since 1991. To properly calculate the difference between its projections and

**Table 6.**

### **Average Difference Between CBO's Revenue Projections for the Highway Trust Fund Since 1991 and Actual Outcomes**

(Percentage of actual revenues)

	Year for Which the Projection Was Made						
	Previous Year	Current Year	Budget Year	Budget Year + 1	Budget Year + 2	Budget Year + 3	Budget Year + 4
Average Difference	-0.2	1.4	*	0.1	0.3	-0.1	0.6
Average Absolute Difference	0.8	3.6	4.5	6.3	6.6	6.3	5.7

Source: Congressional Budget Office.

Notes: The comparison covers the projections made each winter since 1991. Differences are CBO's estimate of actual values minus the projected values. In calculating those differences, CBO adjusted its projections for the estimated effects of any new legislation that was enacted after a projection was made.

A positive average difference indicates that CBO underestimated the amount of revenues. Unlike the average difference, the average absolute difference indicates the distance between the actual and projected values without regard to whether the projections are overestimates or underestimates.

The current year is the fiscal year in which the projections are made; the budget year is the following year.

\* = between -0.05 percent and zero.

actual outcomes, CBO adjusted the previous projections for the estimated effects of any new legislation that was subsequently enacted. Because of a lack of available data, the analysis could be done only for the entire trust fund, not the highway account. However, the differences should be about the same, in percentage terms, in both cases because the tax bases for the two accounts (highway and mass transit) are largely the same.

Highway revenues tended to exceed the projections that CBO made through much of the 1990s because of unexpectedly strong economic growth and a rapid increase in purchases of sport utility vehicles (SUVs), which have below-average fuel efficiency. Conversely, projections made in the years just before 2002 generally turned out to be too high. The 2001 recession and the effects of the September 11 terrorist attacks caused trust fund revenues in 2001 to fall well below CBO's expectations.

The projections made since 2001 for years through 2005 have been more accurate than the average. Whether that change reflects improvements in forecasting techniques or less volatility in the revenue sources—and hence more predictability—is difficult to determine.

In absolute terms (ignoring whether a difference is an overestimate or an underestimate), the average deviation between projected and actual revenues since 1991 is increasingly large for the first three years of a projection and then declines slightly for the fourth and fifth years. For the year just completed, the average absolute deviation is relatively small—typically, less than 1 percent of actual revenues (see Table 6). That average difference rises to about 3.6 percent for the year in which the forecast is made (the “current year”), to 4.5 percent for the year after the current year (typically referred to as the “budget year”), and to 6.6 percent for the third year out (corresponding to 2009 in CBO’s latest forecast). A deviation of 6.6 percent from CBO’s current projection of revenues for 2009, \$43.5 billion, would correspond to almost \$3 billion. Deviations beyond the three-year horizon have tended to be slightly smaller, declining to 5.7 percent, in absolute average terms, for projections made five years ahead.

By CBO’s calculation, the Administration’s revenue projections for the Highway Trust Fund tend to show a similar pattern of differences from actual outcomes. Forecasts done in the early to mid-1990s underestimated revenues; those made from early 1999 through early 2001 overestimated revenues for 2001 and later years; and forecasts produced between those two periods were generally more accurate, on average. One projection by the Administration was significantly more accurate than CBO’s: the Administration’s February 2000 forecast, which was lower than CBO’s, had about two-thirds of the difference from actual outcomes of CBO’s estimate. With that projection included, the Administration’s track record has been slightly better than CBO’s. Looking at the record without that forecast and the one in which CBO performed best relative to the Administration, the overall accuracy of the two sets of projections is indistinguishable. The differences in accuracy are small and do not indicate that either organization’s methods have been superior or statistically more reliable. The performance of the two modeling approaches has been roughly comparable.

### **Possible Outcomes Based on CBO’s Past Forecasting Experience**

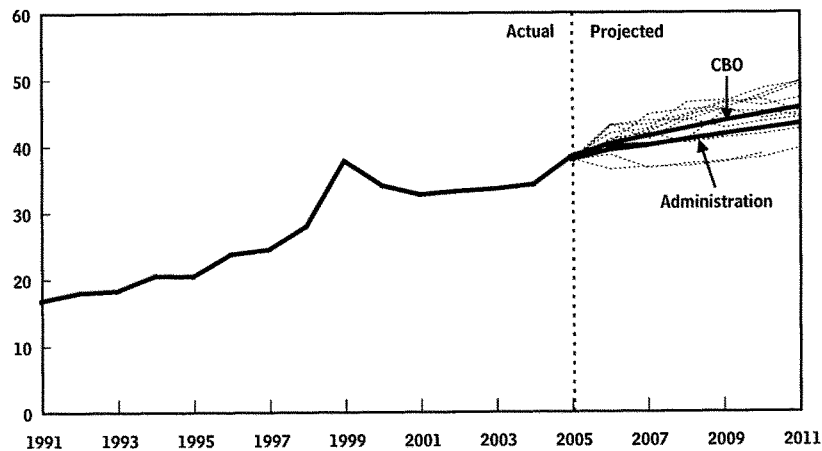
Past differences between projections and actual Highway Trust Fund revenues suggest that future projections have significant uncertainty. In fact, the range of historical uncertainty is much larger than the difference between the current forecasts by CBO and the Administration.

One way to illustrate that uncertainty is to simulate the effect that past deviations from actual outcomes would have on current projections. Using 2005 as a starting point, CBO applied the deviations from each of its past 15 projections to simulate alternative projections (see Figure 1). The alternative paths are not intended to suggest confidence bands around CBO’s current forecast; rather, they illustrate what revenues would look like in the future if CBO’s past forecasting errors recurred.

**Figure 1.**

### **Current Estimates of Highway Trust Fund Revenues Compared with Alternative Estimates Based on Differences Between CBO's Past Projections and Actual Outcomes**

(Billions of dollars)



Source: Congressional Budget Office.

Note: The dotted lines represent illustrative alternative projections of revenues for the Highway Trust Fund. CBO constructed them by applying to its current projection the differences between its past projections and actual outcomes.

History may not be a good indicator of the future for such revenue projections, of course. In particular, wide fluctuations in fuel prices may lie outside the range of experience and introduce more uncertainty. Certain unexpected developments in the past, such as the shift to SUVs in the 1990s, may or may not recur.

The distribution of illustrative outcomes indicates that the Administration's projection of revenues for the Highway Trust Fund is well within CBO's range of outcomes. The uncertainty of the revenue outlook encompasses very different forecasts.

For the trust fund's highway account, CBO projects that revenues will be sufficient to keep it solvent through 2008 (if annual obligation limitations are set at the levels specified in SAFETEA-LU). In 2009, however, the highway account is projected to incur a small shortfall. The Administration, by comparison, projects that the account will also have balances at the end of 2008 but a greater shortfall at the end of 2009 than CBO projects.

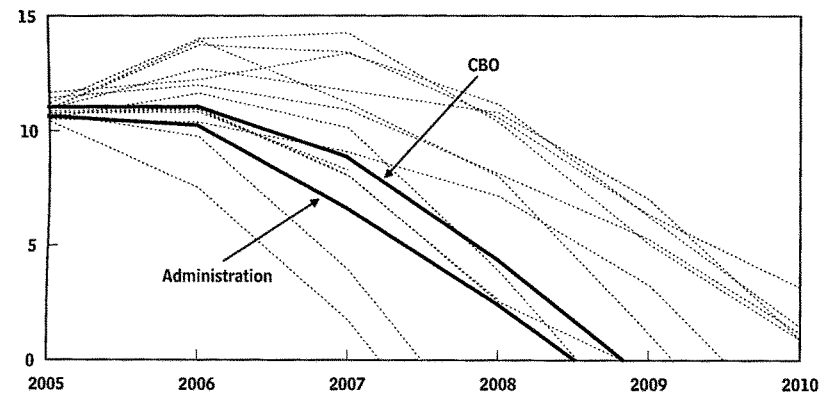
**Figure 2.**


---

**Current Estimates of Highway Account Balances  
Compared with Potential Balances Based on  
Differences Between CBO's Past Estimates and  
Actual Outcomes for Revenues**

---

(Billions of dollars)



Source: Congressional Budget Office.

Note: The dotted lines represent illustrative alternative projections of the balance in the highway account. CBO constructed them by applying to its current projection the differences between its past projections and actual outcomes. Data are for balances at the end of the year.

---

Simulations based on historical differences between CBO's projections and actual outcomes suggest significant uncertainty about when balances in the account will be exhausted, from 2008 to beyond 2010 (see Figure 2). If actual revenues fall short of projections to the extent that occurred with CBO's forecasts produced in and just before 2001, then the highway account may run out of funds as early as 2008. (That assumes, for example, that the percentage differences between the January 2001 forecast and actual outcomes for the 2001-2004 period occur for the current forecast for the 2006-2009 period.) However, if revenues exceed current projections by amounts consistent with the deviations from CBO's forecasts for the 1990s, the highway account may be in surplus for some period beyond 2009. (Some uncertainty in the outlay projections also exists, even if revenues are projected perfectly. Uncertainty about outlays is not incorporated into those simulations except to reflect RABA adjustments in response to alternative revenue paths.)

Both of those statistical exercises illustrate that a difference in the projections of CBO and the Administration is not an indicator of their reliability or of the likelihood of trust fund exhaustion. Revenue projections are subject to a great deal of uncertainty. Even if CBO and the Administration produced identical projections,



there would still be a chance that revenues would be significantly lower or higher than projected and that the highway account would exhaust its resources either before or after 2009.

United States Government Accountability Office

GAO

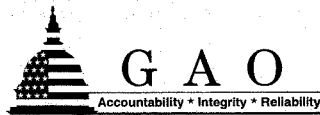
Testimony  
Before the Subcommittee on Highways,  
Transit, and Pipelines, Committee on  
Transportation and Infrastructure, U.S.  
House of Representatives

For Release on Delivery  
2 p.m. EST  
Tuesday, April 4, 2006

## HIGHWAY TRUST FUND

### Overview of Highway Trust Fund Estimates

Statement of Katherine Siggerud, Director  
Physical Infrastructure Issues



GAO-06-572T

## GAO Highlights

Highlights of GAO-06-572T, a report to Subcommittee on Highways, Transit, and Pipelines, Committee on Transportation and Infrastructure, U.S. House of Representatives

### Why GAO Did This Study

The Highway Trust Fund is the principal mechanism for funding federal highway and transit programs through receipts from excise taxes charged to highway users, such as taxes on motor fuels. The Department of Treasury (Treasury) and the Congressional Budget Office (CBO) each prepare estimates of future receipts for the Highway Trust Fund semiannually. Treasury's receipt estimates are combined with the Department of Transportation's (DOT) estimates of outlays to create an estimate of the Highway Trust Fund balance for the President's Budget; CBO also projects outlays to develop an estimate of the fund balance. The agencies' most recent estimates show that the Highway Account within the Highway Trust Fund could have a negative balance as early as 2009, raising concerns about whether funding for federal highway programs—which were recently authorized by the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users—will continue to be met. Consequently, the Subcommittee asked us to review and compare recent estimates made by Treasury and CBO. This testimony provides information on how (1) estimates are used to provide key information about the Highway Trust Fund, (2) the most recent Highway Trust Fund estimates—based on receipt estimates made by Treasury and CBO—compare, and (3) Treasury's and CBO's estimates compare to actual receipts for recent years.

[www.gao.gov/cgi-bin/getrpt?GAO-06-572T](http://www.gao.gov/cgi-bin/getrpt?GAO-06-572T)

To view the full product, including the scope and methodology, click on the link above. For more information, contact Katherine Siggerud, (202) 512-2834, [siggerudk@gao.gov](mailto:siggerudk@gao.gov).

April 4, 2006

## HIGHWAY TRUST FUND

### Overview of Highway Trust Fund Estimates

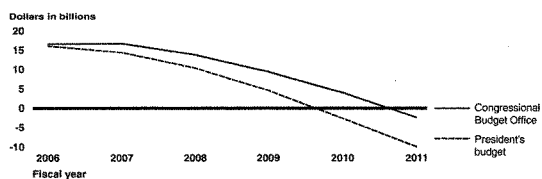
#### What GAO Found

Due to the nature of the receipts and disbursement processes of the Highway Trust Fund, estimates are used regularly not only to project the Highway Trust Fund's future balance, but also to determine its current balance. Treasury's receipts collection processes for the Highway Trust Fund rely on estimates based on historical receipts to determine how much should be transferred from the General Fund into the Highway Trust Fund on a semimonthly basis. DOT and the Office of Management and Budget (OMB) also use estimates based on future receipts in calculating annual adjustments to authorization levels, and DOT uses estimates based on historical fuel consumption to determine apportionments from the Highway Trust Fund to states. Because estimates are used throughout the process of collecting and disbursing funds for the Highway Trust Fund, it is important that estimates be as accurate as possible.

The most recent Highway Trust Fund estimates from the President's Budget and CBO show similar trends, even though Treasury and CBO use different assumptions to estimate receipts for the fund. The Highway Trust Fund balance is projected to steadily decline because estimated outlays of the Highway Account exceed estimated revenues each year from 2006 through 2011. Treasury projects lower receipts levels than CBO, and therefore the President's Budget contains estimates of negative Highway Trust Fund balances occurring one year earlier than CBO is projecting. The differences in receipts estimates developed by Treasury and CBO are caused in part by the use of different economic assumptions, such as economic growth and fuel prices.

When compared with actual Highway Trust Fund receipts, the accuracy of Treasury's and CBO's Highway Trust Fund estimates are not very different from each other. Neither agency's estimates have been consistently closer or further away from the actual amounts. For example, the estimates of the two agencies are closest or furthest from actual receipts in the same years. These comparisons of past performance should not be taken as an indicator of the future performance of the models.

#### Current Highway Trust Fund Year-End Balance Estimates



Source: GAO analysis of data provided in the President's Budget and by CBO.

United States Government Accountability Office

Mr. Chairman and Members of the Subcommittee:

We appreciate the opportunity to testify on important Highway Trust Fund issues. The Highway Account within the Highway Trust Fund is the principal mechanism for funding federal highway programs authorized by the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). SAFETEA-LU set specific annual funding levels for most federal highway programs on the basis of projected receipts to the Highway Trust Fund for fiscal years 2005 through 2009. The Department of the Treasury (Treasury) and the Congressional Budget Office (CBO) each prepare estimates of future receipts for the Highway Trust Fund biannually. Treasury's receipt estimates are combined with the Department of Transportation's (DOT) estimates of outlays to create an estimate of the Highway Trust Fund balance for the President's Budget; CBO also projects outlays to develop an estimate of the Highway Trust Fund balance. The agencies' most recent estimates show that the Highway Account within the Highway Trust Fund could have a negative balance as early as 2009, raising concerns about whether funding for federal highway programs—which were recently authorized by the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users—will continue to be met.

Consequently, the Subcommittee asked us to review and compare recent estimates made by Treasury and CBO. Accordingly, this testimony provides information on how (1) estimates are used to provide key information about the Highway Trust Fund, (2) the most recent Highway Trust Fund estimates—based on receipt estimates made by Treasury and CBO—compare, and (3) Treasury's and CBO's estimates compare to actual receipts for recent years. (All years in this statement are fiscal years. See app. I for information on our scope and methodology.)

In summary:

- Because of the nature of the Highway Trust Fund receipt and disbursement processes, estimates are used regularly to determine and project the balance of the Highway Trust Fund. Treasury's processes for allocating tax receipts to the Highway Trust Fund regularly rely on estimates based on historical receipts to determine how much should be transferred from the General Fund into the Highway Trust Fund, because Treasury does not obtain data from business taxpayers on the type of excise tax it collects. DOT and the Office of Management and Budget (OMB) also use estimates based on future receipts in calculating annual adjustments to authorization levels, and DOT uses estimates based on historical fuel consumption to determine apportionments from the Highway Trust Fund to the states. Because estimates are used to make semimonthly receipt transfers into the Highway Trust Fund, to calculate adjustments to the Fund, and to identify appropriate funding authorization levels for budget planning and legislation—like SAFETEA-LU—it is important that estimates be as accurate as possible.

- The most recent Highway Trust Fund estimates contained in the President's Budget and those released by CBO show similar trends, with balances estimated to continue to decline into 2011. The Highway Trust Fund balance is gradually being depleted because estimated outlays of the Highway Account exceed estimated revenues each year from 2006 through 2011. Treasury estimates lower receipts levels than CBO during this period, and therefore the President's Budget contains estimates of negative Highway Trust Fund balances occurring one year earlier than CBO is projecting. The differences in receipts estimates developed by Treasury and CBO are caused, in part, by the use of different economic assumptions, such as economic growth and fuel prices.
- When compared with actual Highway Trust Fund receipts, the accuracy of Treasury's and CBO's Highway Trust Fund estimates are not very different from each other. Neither agency's estimates have been consistently closer or further away from the actual amounts. For example, the estimates of the two agencies are closest or furthest from actual receipts in the same years. These comparisons of past performance should not be taken as an indicator of the future performance of the models.

### Background

The Highway Trust Fund was established in 1956 to provide a dedicated source of federal funding for highways. In 1983, the Highway Trust Fund was divided into two accounts: the Highway Account and the Mass Transit Account. Periodically, Congress enacts multiyear legislation, such as SAFETEA-LU, authorizing federal spending for the nation's surface transportation programs—including highway, transit, highway safety, and motor carrier programs—and setting overall funding for these activities. Funding for the federal-aid highway program is provided through the Highway Trust Fund, a “pay as you go” system that uses receipts from highway user excise taxes to fund various surface transportation programs.<sup>1</sup>

Receipts for the Highway Trust Fund are derived from two main sources: federal excise taxes on motor fuels (gasoline, diesel, and special fuels taxes) and truck-related taxes (truck and trailer sales, truck tires, and heavy-vehicle use taxes). Someone other than the consumer generally pays the excise taxes directed to the Highway Trust Fund. The highway user pays the other taxes indirectly, since these taxes become part of the purchase price. Thus, the motor fuels taxes are paid by businesses rather than consumers at retail pumps. Oil companies, for example, typically pay a per-gallon tax on the motor fuels when their fuel is loaded into tanker trucks or rail cars at a terminal. Tire manufacturers pay taxes on truck tires, and retailers pay taxes on the sales price of new trucks and trailers. Owners of heavy highway vehicles—trucks weighing 55,000

<sup>1</sup>The federal-aid highways program is funded by contract authority contained in SAFETEA-LU. Appropriation acts contain an obligation limitation reflecting the authorized level, including an adjustment based on revenue. Obligations made against the Highway Trust Fund can exceed the actual cash balances up to the receipts anticipated to be collected in the following 2 years.

pounds and over—pay taxes on the use of these vehicles, making this the only highway tax directly paid by the highway user.

Receipts from the gasoline tax constitute the single largest source of revenue for the Highway Account, and approximately 84 percent of the receipts from the gasoline tax go to this account. Overall, the Highway Account receives the majority of the tax receipts for the Highway Trust Fund, including all receipts from truck-related taxes. Table 1 shows the amount of motor fuels and truck-related taxes levied for the Highway Trust Fund and how receipts from the taxes are allocated between the Highway Account and the Mass Transit Account within the fund.

**Table 1: Federal Highway User Excise Taxes and the Percentage Allocations to the Highway Account and the Mass Transit Account of the Highway Trust Fund, as of March 1, 2006**

Motor fuel taxes			
Type of Excise Tax	Tax rate (cents)	Distribution of tax	
		Highway Account	Mass Transit Account
Gasoline	18.3 per gallon	84%	16%
Diesel	24.3 per gallon	88%	12%
Gasohol	18.3 per gallon	84%	16%
Liquefied petroleum gas	13.6 per gallon	84%	16%
Liquefied natural gas	11.9 per gallon	84%	16%
M85 (from natural gas)	9.15 per gallon	84%	16%
Compressed natural gas	48.54 per thousand cubic feet	80%	20%
Truck-related Taxes - All proceeds to Highway Account			
Tires	9.45 cents for each 10 pounds (so much of the maximum rated load capacity thereof as exceeds 3,500 pounds)		
Truck and trailer sales	12 percent of retailer's sales price for tractors and trucks over 33,000 pounds Gross Vehicle Weight (GVW) and trailers over 26,000 pounds GVW		
Heavy-vehicle use	Annual tax for trucks 55,000 pounds and over GVW: \$100 plus \$22 for each 1,000 pounds (or fraction thereof) in excess of 55,000 pounds. Maximum tax: \$550		

Source: GAO analysis of FHWA data.

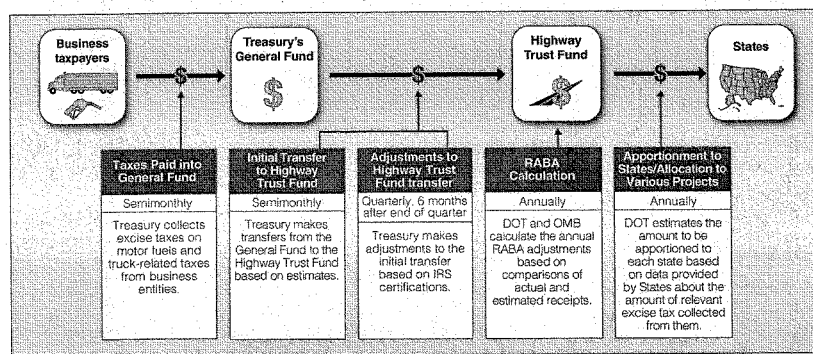
### Estimates Are Integral to Determining Highway Trust Fund Receipts and Distributions

The nature of the Highway Trust Fund's receipts collection and disbursement processes is such that estimates are needed not only to project the fund's future balance but also to determine its current balance. Changing circumstances—for example, shifts in motor fuel usage—can affect the accuracy of past estimates of receipts that will flow into the Highway Trust Fund, rendering it necessary to make regular adjustments. Treasury's estimates of Highway Trust Fund receipts are used to make these regular adjustments to the Highway Trust Fund balance, and DOT uses these estimates in turn to calculate what

is called the Revenue Aligned Budget Authority (RABA) adjustment, which can increase or decrease the levels of funding enacted by legislation and funded through the Highway Account.

The process for collecting and distributing Highway Trust Fund moneys is summarized in figure 1. As it shows, the basic process involves receiving money from business entities and individual taxpayers, passing it into Treasury's General Fund and determining how much should be transferred into the Highway Trust Fund, determining how much is available in the Highway Trust Fund for disbursement, and then distributing this money to the states or allocating it to specific projects.

Figure 1: Process for Collecting and Distributing Highway Trust Fund Receipts



**Collection and determination of Highway Trust Fund receipts.** The collection and allocation of the receipts is complex and involves several organizations. Twice a month, business taxpayers make deposits of excise taxes—including the highway user excise taxes levied for the Highway Trust Fund—generally through Treasury's Electronic Federal Tax Payment System. When these semimonthly deposits are made, Treasury does not obtain data from business taxpayers on the type of excise taxes (highway user or otherwise) that these deposits are intended to cover; therefore, the deposits flow into Treasury's General Fund. On a semimonthly basis, Treasury's Financial Management Service (FMS) and Bureau of Public Debt (BPD) use estimates made by the Treasury's Office of Tax Analysis (OTA) based on historical tax receipts certified by Internal Revenue Service (IRS) data and actual total current excise tax revenue collections to make an initial transfer into the Highway Trust Fund. Treasury later adjusts these initial deposits based on actual tax receipts, which are certified by IRS on a quarterly basis 6

months after each quarter has ended.<sup>2</sup> Information about the actual Highway Trust Fund receipts is therefore subject to a lag between when the tax is paid to Treasury by the business entity or taxpayer, when IRS certifies the receipts, and when Treasury adjusts the Highway Trust Fund accordingly.

**Determination of Highway Trust Fund monies available for disbursement.** DOT and OMB are involved in calculating an adjustment to the amounts authorized and available for obligation based on Highway Trust Fund receipts; these calculations also depend on estimates. Since fiscal year 2000, DOT and OMB have been responsible for calculating and making the annual RABA adjustment, which ties highway funding to receipt levels. To determine the RABA adjustment, DOT and OMB rely on information about past Highway Account receipts and estimates of future Highway Account receipts from Treasury. The RABA adjustment, based on a comparison of actual and estimated receipt data, can increase or decrease the guaranteed levels of funding enacted by legislation and funded through the Highway Account.

**Apportionment to states and allocation to projects.** The Federal Highway Administration (FHWA) of DOT apportions funding to the states on a formula basis using estimates of each state's relative contribution of taxes to the Highway Trust Fund. Because businesses, rather than consumers, generally pay highway user taxes, most of the federal motor fuels and truck taxes come from the handful of states where those businesses have their corporate headquarters and pay their taxes. As a result, Treasury does not provide FHWA with state-level data on highway tax receipts, and FHWA must therefore estimate these data in order to distribute highway program funds to the states. FHWA estimates state-level contributions through what it refers to as its "attribution process." Through this process, it determines each state's share of highway motor fuels usage on the basis of data about such things as gas and diesel fuel consumption from each state's records on the collection of state-imposed fuel taxes. FHWA uses these data to estimate the Highway Account receipts attributable to each state's highway users as well as other data to ultimately determine the apportioned amounts of funding that should flow to a state for highway programs funded from the Highway Account.

Because of the extensive use of estimates in determining the Highway Trust Fund balance, it is not surprising that estimates of amounts that will be available in future years may be subject to considerable change. While a future balance of the Highway Trust Fund can be calculated as the difference between receipts and outlays (spending) over the life of the fund, a determination of this future balance can change as more up-to-date information becomes available.<sup>3</sup> For example, Treasury's estimates of Highway

<sup>2</sup>IRS certifies the Quarterly Federal Excise Tax Return (Form 720) that taxpayers are required to submit to report their excise tax liability. Form 720 contains information that ultimately determines how these receipts should be distributed to government trust funds, including the Highway Trust Fund.

<sup>3</sup>Outlays during a fiscal year may be for payment of obligations incurred in prior years or in the same year. Outlays, therefore, flow in part from unexpended balances of prior year budgetary resources and in part from budgetary resources provided for the year in which the money is spent.



Trust Fund receipts for 2005 have changed every year since the initial estimate was made in 2000. Various factors, economic and otherwise, can cause them to change.<sup>4</sup> Because estimates are used in determining the initial transfer to the Highway Trust Fund, in calculating the RABA adjustment, and in identifying appropriate funding authorization levels for budget planning and legislation, such as SAFETEA-LU, it is important that estimates be as accurate as possible.

#### **Recent Highway Trust Fund Estimates Show Similar Trends, Even Though Different Assumptions are Used in Making the Estimates**

Highway Trust Fund estimates contained in the President's Fiscal Year 2007 Budget—based on receipts estimates from Treasury and outlay estimates from DOT—and those released by CBO in January 2006 project different balances, but the trends are similar. For example, the estimates show that CBO is projecting higher year-end Highway Trust Fund balances than the President's Budget for fiscal years 2006 through 2011, but both show declining balances over that period.<sup>5</sup> Both sets of estimates project a negative Highway Trust Fund balance by the end of fiscal year 2011; but the President's Budget projects the depletion of the Fund by 2010 and CBO's estimates show a negative balance occurring in 2011. More specifically, the Highway Account—which makes up the majority of Highway Trust Fund receipts—is projected to have a negative balance as early as 2009, because of the growing difference between projected receipts and outlays. The variation in economic assumptions used by Treasury and CBO, such as those for gross domestic product and fuel prices, accounts for part of the difference in Highway Account receipt estimates.<sup>6</sup>

#### Estimates Result in Similar Trends, but Diverge over Time

Both the President's Budget and CBO's estimates currently show a continuing downward trend of cash balances in the Highway Trust Fund, and both estimates show a negative balance in the Highway Trust Fund by fiscal year 2011. Differences between the estimates are greater in the later years because the uncertainty of estimates increases as the projections extend into the future. As figure 2 shows, CBO estimates higher year-end balances for every year through 2011, projecting a balance of negative \$2.4 billion at the end of 2011, while the President's Budget estimates project a negative balance occurring first in 2010 and reaching an estimated negative \$10 billion by 2011. It should be noted, however, that legislative or economic changes affecting Highway Trust Fund receipts occurring in the interim could change these projected negative balances. For example, a

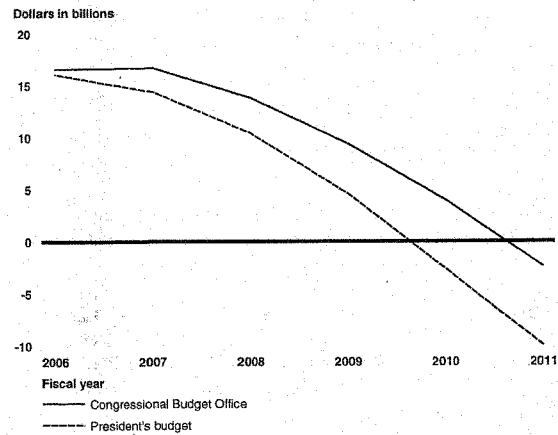
<sup>4</sup>Additionally, estimates do not include RABA adjustments, which also can have an effect on balances.

<sup>5</sup>For the purposes of this study we are using Highway Trust Fund year-end balance estimates released by CBO in January 2006 and by the President's Fiscal Year 2007 Budget in February 2006 as the current or most recent estimates.

<sup>6</sup>In 2002, in order to help determine the reasonableness of Treasury's estimates, we compared them with CBO's estimates. This comparison did not raise any questions about the reasonableness of Treasury's estimates. (See the list of related GAO products at the end of this testimony.)

number of changes, such as provisions to reduce tax evasion that provided increased receipts to the Highway Trust Fund, were adopted in the American Jobs Creation Act of 2004.

**Figure 2: Current Highway Trust Fund Year-End Balance Estimates**



The Highway Account, which makes up about 84 percent of the Highway Trust Fund receipts, is projected to have a negative balance by the President's Budget estimates in 2009 and by CBO in 2010. Projected outlays are outpacing estimated receipts, which leads to the projected negative balances in the Highway Account and ultimately the Highway Trust Fund. For example, for 2006 through 2011, the Highway Account receipts are estimated to average \$35.8 billion by Treasury and \$37.4 billion by CBO. For that same period, average outlays are estimated at \$39.6 billion by DOT and \$40.3 billion by CBO. See table 2 for receipt and outlay estimates for 2006 through 2011.

**Table 2: Highway Account Receipt and Outlay Estimates for 2006 through 2011, as of March 1, 2006**

Estimates Dollars in Billions		2006	2007	2008	2009	2010	2011	Average 2006- 2011
Treasury/DOT	Receipts	\$34.1	\$34.6	\$35.4	\$36.2	\$36.9	\$37.6	\$35.8
	Outlays	\$34.5	\$38.2	\$39.7	\$40.8	\$41.8	\$42.3	\$39.6
	Difference	-\$0.40	-\$3.60	-\$4.30	-\$4.60	-\$4.90	-\$4.70	-\$3.80
CBO	Receipts	\$34.9	\$35.9	\$36.9	\$37.9	\$38.8	\$39.7	\$37.4
	Outlays	\$34.9	\$37.9	\$40.5	\$41.7	\$42.7	\$43.8	\$40.3
	Difference	\$0.00	-\$1.94	-\$3.58	-\$3.81	-\$3.89	-\$4.07	-\$2.90

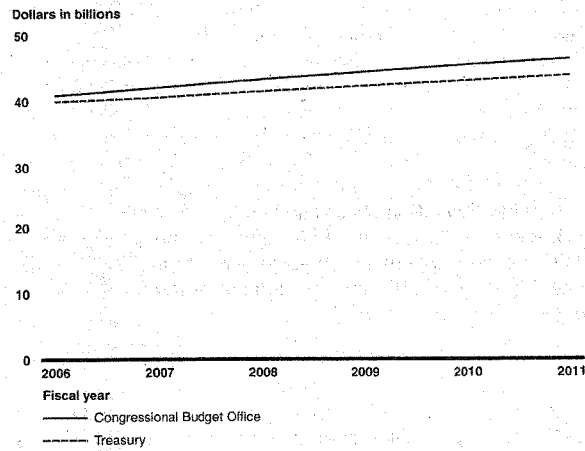
Source: GAO analysis of data provided by DOT and CBO.

In addition to the current estimates, we also reviewed Treasury's and CBO's annual estimates for 1999 through 2006. These historical estimates showed that although estimates have been further apart and closer together at different times, the projected trends have been similar. For example, in the winter 1998 estimates, both Treasury and CBO projected Highway Trust Fund receipts to decline over \$4 million between 1999 and 2000, before experiencing a steady increase from 2000 through 2003. These historical estimates also show that for the last four budget forecasts, starting with estimates for 2003, CBO has estimated higher Highway Trust Fund receipts levels than Treasury in each year.

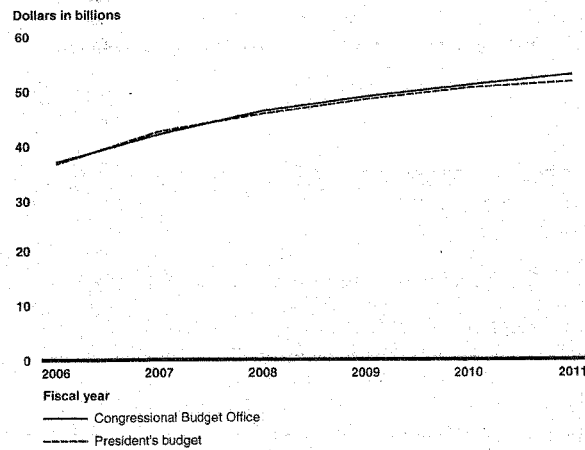
#### Differences in Estimated Balances Are Largely Due to Differing Assumptions about Future Receipts

Differences in receipts estimates, that is, the amounts estimated to be collected through federal excise taxes on fuels and truck-related taxes, appear to be the driving factor in the difference between the two estimated balances. (See fig. 3 for current Treasury and CBO receipts estimates.) Treasury and CBO officials indicated that differences in receipts estimates are not unusual, given the different economic assumptions used by each of the models.<sup>7</sup> DOT's outlays are based on currently enacted law, and CBO's are based on historical spending patterns; however, the resulting estimates are not very different. As figure 4 illustrates, estimates of outlays track much more closely than do estimates of receipts over the same period of time.

<sup>7</sup>How each organization constructs its tax models, generally referred to as technical differences, are also an important factor in the differences between Treasury's and CBO's estimates.

**Figure 3: Current Treasury and CBO Estimates of Highway Trust Fund Receipts**

Source: GAO analysis of data provided by Treasury and CBO.

**Figure 4: Current estimates of Highway Trust Fund Outlays**

Source: GAO analysis of data provided in the President's Budget and by CBO.

Treasury and CBO develop Highway Trust Fund estimates for different purposes: Treasury's estimates are used and reported in the President's Budget, and CBO's estimates aid Congress in formulating budget policy. Both agencies use models to make Highway Trust Fund estimates twice a year, once in the summer and once in the winter. Neither model predicts future regulatory or legislative changes that could affect Highway Trust Fund receipts. As a result, any changes that affect Highway Trust Fund receipts will affect the accuracy of the estimates.<sup>8</sup> Despite their differing assumptions about economic policy, the two sets of estimates are very close. For example, the President's Budget estimates show that the Highway Trust Fund year-end balance for 2006 will be \$16.1 billion, and CBO estimates it will be \$16.6 billion—a difference of about 3 percent. Treasury and CBO officials told us that, although their models and assumptions differ, their near-term estimates are generally not that different. We did not evaluate the models and assumptions used by either agency.

A major driver of Highway Trust Fund receipts is the economy and assumptions about the economy. Both receipts and outlays are affected by changes in economic conditions. This sensitivity complicates budget planning because errors in economic assumptions lead to errors in estimates. Treasury and CBO officials attributed the current differences in estimates, in part, to the economic assumptions used in the models, such as economic growth and the relative prices of fuel. For example, at the time of the 2007 President's Budget, the administration's estimate for real gross domestic product (GDP) growth—which is used in Treasury's estimates—is below CBO's for 2006 through 2009; but for 2006 through 2011, the administration and CBO project similar percent average annual growth rates (3.2 and 3.3, respectively). (See table 3 for real GDP growth rate estimates.)

**Table 3: Comparison of Real GDP Growth Rate Assumptions between 2007 President's Budget and CBO**

Real GDP assumptions	2006	2007	2008	2009	2010	2011	Average 2006-2011
2007 Budget	3.4%	3.3%	3.3%	3.1%	3.1%	3.1%	3.2%
CBO	3.6%	3.4%	3.4%	3.3%	3.0%	2.8%	3.3%

Source: 2007 President's Budget.

Treasury's estimates incorporate economic assumptions formulated for the President's Budget by the "Troika," which consists of the Council of Economic Advisors, OMB, and Treasury. The Troika's economic assumptions are used in estimates contained throughout the President's Budget and are not limited to Highway Trust Fund estimates. Several of the administration's economic assumptions, such as those for the real GDP and consumer price index, are publicly available. However, most Troika assumptions are not publicly available. The economic and technical assumptions on which Treasury's Highway Trust Fund estimates are based represent estimates of what is most likely to

<sup>8</sup>Treasury's model generally assumes that the proposals contained in the President's Budget will be enacted.

occur if the President's policies included in the Budget are enacted and implemented. Thus, they may not match the "actual" data if some of the President's policies are not enacted and implemented, if an understanding of the effects of policies or the underlying relationships is less than perfect, or if unexpected events occur. By comparison, CBO's model projects future highway excise tax receipts by looking at past and expected changes in relative fuel prices as well as historical relationships between sources of Highway Trust Fund receipts and real economic growth and by holding current law constant. For example, estimates of fuel consumption depend on estimates of economic growth, relative fuel prices, and average fuel efficiency, which are then multiplied by the current federal tax rate on fuel. CBO's estimates of Highway Trust Fund receipts are added to CBO's estimates of other sources of federal revenues in order to generate projections of total federal revenues. Both Treasury and CBO continuously update their models to incorporate legislative, economic, and other relevant changes—which are then reflected in the next forecasting exercise.

#### **Accuracy of Treasury's and CBO's Estimates of Receipts Has Been Comparable**

When Treasury's and CBO's estimates of receipts are compared with actual Highway Trust Fund receipts, both agencies' track records, in terms of how close their estimates come to the actual amounts, are not very different. Neither agency is consistently closer: Treasury's estimates have been closer to actual receipts in some instances and CBO's in others. However, these comparisons should not be taken as an indicator of the future performance of the models.

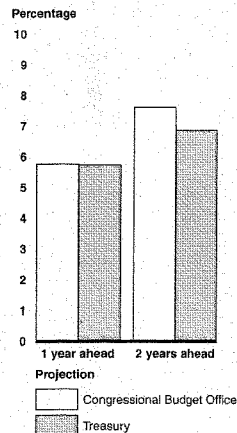
Before looking at the results, it is necessary to explain more precisely what we compared, and how. Each year, Treasury and CBO estimate Highway Trust Fund receipts for at least the next 6 years. In forecasting, estimates of what will occur within a year or two are generally more reliable than estimates of what may occur several years later, because the longer the period involved, the greater the opportunity for conditions to change in unexpected ways. We focused our analysis on Treasury's and CBO's 1-year and 2-year estimates—for example, what the two agencies estimated in 2000 as the Highway Trust Fund receipts in 2001 and 2002. We compared the annual estimates of receipts made by each agency in 1998 through 2004 to actual Highway Trust Fund receipts that were collected 1 year and 2 years after the estimates were made.<sup>9</sup>

On average, the two agencies were nearly identical in the degree to which their 1-year estimates mirrored actual results, and Treasury's estimates were slightly better in the degree to which 2-year estimates mirrored actual results. As figure 5 shows, Treasury's 1-year estimates were off by an average of 5.74 percent, while CBO's were off by 5.77

<sup>9</sup>To make the comparison, we used actual receipt data reported in the President's Budget. Our comparisons were for the entire Highway Trust Fund, including both the Highway Account and the Mass Transit Account. We were unable to assess estimates made for years after 2005 because we did not have data points of actual results for the analysis.

percent.<sup>10</sup> This translates to an average difference between estimates and actual receipts of about \$1.9 billion each year.<sup>11</sup> For 2-year estimates, Treasury's estimates differed from actual receipts, on average, by about 6.85 percent, while CBO's estimates differed by about 7.61 percent. These differences translate to about \$2.3 billion for Treasury's forecast and about \$2.6 billion for CBO's, on average, each year.

**Figure 5: Accuracy of Treasury and CBO Estimates Made in 1998-2004 for Highway Trust Fund Receipts 1 Year and 2 Years Ahead of the Estimates**



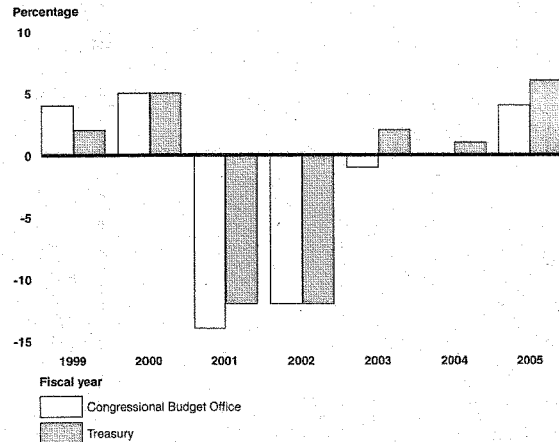
Source: GAO analysis of data provided by Treasury and CBO.

A comparison of the results for each year showed that both agencies' estimates also followed a similar pattern in how far they were off from actual amounts in any given year, and whether their estimates were too low or too high. Figure 6 shows the year-to-year results for the 1-year estimates. While there were some differences, the estimates from both agencies followed the same general trend. For example, both agencies' estimates were furthest from actual amounts in the same 2 years—fiscal years 2001 and 2002. In those years, both agencies' 1-year estimate was above the actual receipts by 12 percent or more. In those 2 years, a weakened economy led to a decline in highway excise taxes paid.

<sup>10</sup>The comparison period covered forecasts for fiscal years 1999 through 2005. The percentages are based on the absolute value of the forecast, which is the difference—regardless of whether it is positive or negative—between the actual and the forecasted values for each year.

<sup>11</sup>The dollar value represents Mean Absolute Error (MAE,) which is the average value of the difference between estimated and actual receipts, regardless of whether it is positive or negative—over the comparison period.

**Figure 6: Accuracy of Annual Treasury and CBO Estimates Made for Highway Trust Fund Receipts 1 Year Ahead of the Estimates**



Source: GAO analysis of data provided by Treasury and CBO.

These comparisons of historical performance, while interesting, should not be taken as an indicator of the future performance of the two models. However, the results tend to move in tandem, suggesting that both models are likely to predict the same kinds of results. We did not collect detailed information on factors and assumptions used in the models because some of the information used in Treasury's model is based on economic assumptions by the administration that are not publicly available. To evaluate these models, one would need to analyze and test the various components of each model—something we did not do.

### Concluding Observations

Treasury's and CBO's estimates of Highway Trust Fund receipts play an important role not only determining appropriate levels of funding for transportation programs, but also for distributing the funds to states for approved highway and transit projects. Even though the estimates from both agencies have tended to perform similarly, the estimates continue to change with each forecasting exercise, making it difficult for those relying on the estimates to anticipate future Highway Trust Fund balances. However, because changes in economic conditions or legislation are hard to foresee, there is no easy solution to this problem. While the Highway Trust Fund may not reach a negative balance within 5 years as current forecasts project, the trend of declining balances is clear, a trend that the Congress and the administration have already begun to address



through two commissions charged with reviewing and making recommendations on issues affecting the Highway Trust Fund.

Mr. Chairman, this concludes my prepared statement. I would be pleased to respond to any questions that you or the other Members of the Subcommittee might have.

**GAO Contacts and Staff Acknowledgement**

For further information on this testimony, please contact Katherine Siggerud at (202) 512-2834 or [siggerudk@gao.gov](mailto:siggerudk@gao.gov). Individuals making key contributions to this testimony were Heather MacLeod, Mehrzad Nadji, Stan Stenersen, Friendly Vang-Johnson, and Sara Vermillion.

## Appendix I

### Scope and Methodology

To identify why estimates are used to provide key information about the Highway Trust Fund, we reviewed Department of Transportation (DOT) documents and prior GAO reports on Highway Trust Fund processes. We also interviewed officials from Treasury, the Congressional Budget Office (CBO), and DOT about how estimates are involved in these processes.

To compare Treasury's and CBO's estimates, we analyzed data for fiscal years 1998 through 2006 from both agencies; Treasury's estimates of receipts were published annually in the President's Budget (which also included outlay estimates from DOT), and CBO's estimates of receipts and outlays were prepared in that time frame each year. Specifically, for the Highway Trust Fund and the Highway Account within the fund, we examined the differences in receipt and outlay estimates, the percentage difference in the estimates, and the overall trends in the forecasts. We also reviewed information from both agencies on the overall factors and assumptions that are included in the models used to prepare estimates and interviewed officials from Treasury and CBO about the factors that were most likely responsible for any differences in their estimates. We did not collect detailed information on factors and assumptions used in the models because some of the information used in Treasury's model is based on economic assumptions developed by the administration that are not publicly available. Consequently, we were not able to evaluate the reliability of Treasury's or CBO's model for preparing Highway Trust Fund estimates.

To compare Treasury's and CBO's estimates to actual Highway Trust Fund receipts, we analyzed the annual estimates of receipts made by each agency in each year from fiscal year 1998 through fiscal year 2004 and compared them to actual Highway Trust Fund receipts, as published annually in the U.S. Budget Historical Statistics. The comparisons were made for 1- and 2-year estimates for the entire Highway Trust Fund, including both the Highway Account and the Mass Transit Account. The percentage differences in estimates and actual receipts were computed on the basis of the absolute value of the differences regardless of whether the values were negative or positive. The differences in dollar value represent Mean Absolute Error (MAE), which is the average value of the difference between estimated and actual receipts, regardless of whether the value is positive or negative. These accuracy measures are general and descriptive statistics, which were not tested for statistical significance because of the relatively small number of data available.

**Related GAO Products**

*21<sup>st</sup> Century Challenges: Reexamining the Base of the Federal Government.* GAO-05-325SP. Washington, D.C.: February 1, 2005.

*Applying Agreed-Upon Procedures: Highway Trust Fund Excise Taxes.* GAO-04-213R. Washington, D.C.: November 20, 2003.

*Applying Agreed-Upon Procedures: Highway Trust Fund Excise Taxes.* GAO-03-360R. Washington, D.C.: January 23, 2003.

*Highway Financing: Factors Affecting Highway Trust Fund Revenues.* GAO-02-667T. Washington, D.C.: May 9, 2002.

*Highway Trust Fund: Overview of Highway Trust Fund Financing.* GAO-02-435T. Washington, D.C.: February 11, 2002.

*Federal Trust and Other Earmarked Funds: Answers to Frequently Asked Questions.* GAO-01-199SP. Washington, D.C.: January 1, 2001.

*Highway Funding: Problems With Highway Trust Fund Information Can Affect State Highway Funds.* GAO/RCED/AIMD-00-148. Washington, D.C.: June 30, 2000.

*Budget Issues: Trust Funds in the Budget.* GAO/T-AIMD/RCED-99-110. Washington, D.C.: March 9, 1999.

*Agreed-Upon Procedures: Highway Trust Fund Excise Taxes.* GAO/AIMD-99-71R. Washington, D.C.: February 25, 1999.

*Highway Trust Fund: Financial Condition as of September 30, 1997.* GAO/RCED-98-171R. Washington, D.C.: April 24, 1998.

*Highway Trust Fund: Possible Impact If It Had Financed All Highway Expenditures.* GAO/RCED-98-78R. Washington, D.C.: February 6, 1998.

*Surface Transportation: Regional Distribution of Federal Highway Funds.* GAO/RCED/HEHS-97-167R. Washington, D.C.: May 30, 1997.

*Highway Funding: Alternatives for Distributing Federal Funds.* GAO/RCED-96-6. Washington, D.C.: November 28, 1995.

*Highway Fund Audit.* GAO/AIMD-97-14R. Washington, D.C.: November 4, 1996.

*Highway Planning: Agencies Are Attempting to Expedite Environmental Reviews, but Barriers Remain.* GAO/RCED-94-211. Washington, D.C.: August 2, 1994.

*Surface Transportation: Tight Budget Environment Requires Sound Investment Strategy.* GAO/T-RCED-94-146. Washington, D.C.: March 8, 1994.

*Highway Demonstration Projects.* GAO/RCED-93-193R. Washington, D.C.: August 10, 1993.

*Surface Transportation: Funding Limitations and Barriers to Cross-Modal Decision Making.* GAO/T-RCED-93-25. Washington, D.C.: March 31, 1993.

*Transportation Infrastructure: Major Program Revisions Present Challenges.* GAO/T-RCED-92-93. Washington, D.C.: September 17, 1992.

*Highway Trust Fund: Strategies for Safeguarding Highway Financing.* GAO/RCED-92-245. Washington, D.C.: September 15, 1992.

*Highway Trust Fund: Revenue Sources, Uses, and Spending Controls.* GAO/RCED-92-48FS. Washington, D.C.: October 16, 1991.

*Transportation Infrastructure: Department of Transportation Highway and Mass Transit Program Reauthorization Proposals.* GAO/T-RCED-91-26. Washington, D.C.: April 18, 1991.

*Transportation Infrastructure: Federal Highway Administration FY 1992 Budget.* GAO/T-RCED-91-12. Washington, D.C.: March 5, 1991.

*Transportation Infrastructure: Flexibility in Federal-Aid Funding Essential to Highway Program Restructuring.* GAO/T-RCED-91-4. Washington, D.C.: December 10, 1990.

*Operations and Outlook for the Highway Trust Fund.* GAO/T-RCED-90-79. Washington, D.C.: May 9, 1990.

*Operations of and Outlook for the Transportation Trust Funds.* GAO/T-RCED-90-78. Washington, D.C.: May 8, 1990.

*Issues to Be Considered During Deliberations to Reauthorize the Federal-Aid Highway Program.* GAO/T-RCED-90-50. Washington, D.C.: March 19, 1990.

*The Budget Treatment of Trust Funds.* GAO/T-AFMD-90-03. Washington, D.C.: October 18, 1989.

*The Budget Treatment of Trust Funds.* GAO/T-AFMD-90-01. Washington, D.C.: October 12, 1989.

*Transportation Infrastructure: Reshaping the Federal Role Poses Significant Challenges for Policy Makers.* GAO/RCED-90-81A. Washington, D.C.: December 28, 1989.

*Transportation Infrastructure: Panelists' Remarks at New Directions in Surface Transportation Seminar.* GAO/RCED-90-81B. Washington, D.C.: December 28, 1989.

*Transportation Trust Funds.* GAO/T-RCED-89-36. Washington, D.C.: May 11, 1989.

*Highway Trust Fund: Condition and Outlook for the Highway Account.* GAO/RCED-89-136. Washington, D.C.: May 9, 1989.

*Budget Issues: Trust Funds and Their Relationship to the Federal Budget.* GAO/AFMD-88-55. Washington, D.C.: September 30, 1988.

*Deteriorating Highways and Lagging Revenues: A Need to Reassess the Federal Highway Program.* GAO/CED-81-42. Washington, D.C.: March 5, 1981.

*Why Urban System Funds Were Seldom Used for Mass Transit.* GAO/CED-77-49. Washington, D.C.: March 18, 1977.

*U.S. Transportation System—Federal Government's Role and Current Policy Issues.* GAO/RED-76-34. Washington, D.C.: October 22, 1975.

*Costs and Problems of Completing the Interstate Highway System.* GAO/RCED-76-19. Washington, D.C.: September 4, 1975.

(542088)

# Highway Trust Fund Estimates

---

Testimony before the Subcommittee on  
Highways, Transit, and Pipelines, Committee on  
Transportation and Infrastructure,  
U.S. House of Representatives

Katherine Siggerud,  
Director, Physical Infrastructure Issues

April 4, 2006

---

## Objectives of GAO's work

- How are estimates used to provide key information about the Highway Trust Fund?
- How do the most recent Highway Trust Fund estimates - based on receipt estimates made by the Department of Treasury (Treasury) and the Congressional Budget Office (CBO) - compare?
- How do Treasury's and CBO's estimates compare to actual receipts for recent years?

Background

## Receipts for the Highway Trust Fund are derived from two main sources

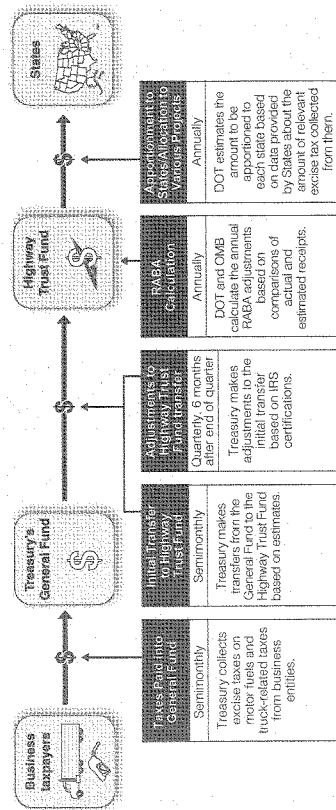
Motor Fuel Taxes		
Fuel Type	Distribution of Tax to Highway Trust Fund Accounts	
	% to Highway Account	% to Mass Transit Account
Diesel	88%	12%
Gasoline	84%	16%
Gasohol	84%	16%
Liquefied petroleum gas	84%	16%
Liquefied natural gas	84%	16%
M85 (from natural gas)	84%	16%
Compressed natural gas	80%	20%
Truck-related Taxes – All proceeds to Highway Account		
Tire Tax		
Truck and Trailer Sales Tax		
Heavy Vehicle Use Tax		

Source: GAO Analysis of FHWA data.



Objective 1: Estimates' Use

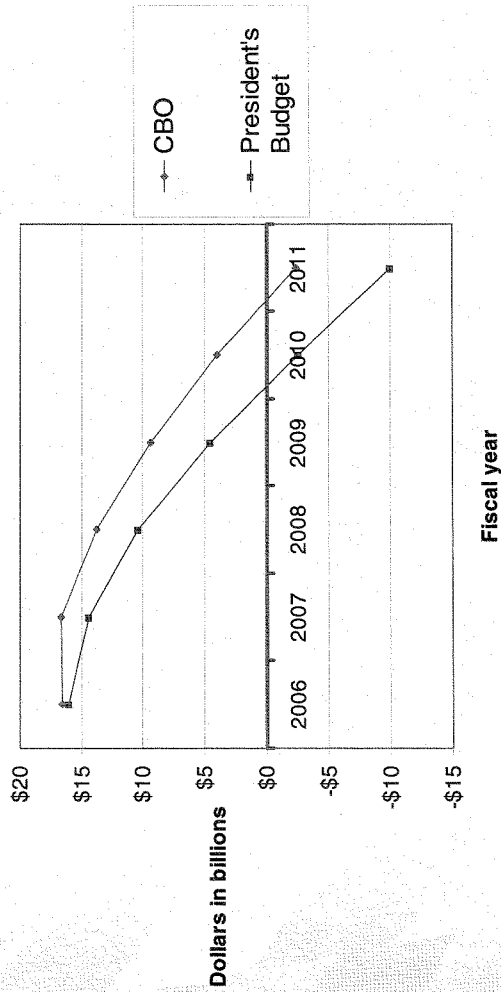
# Use of estimates in the process of collecting and distributing Highway Trust Fund receipts



Source: GAO, MAPAct.

Objective 2: Comparison of estimates

## Recent Highway Trust Fund estimates show similar trends

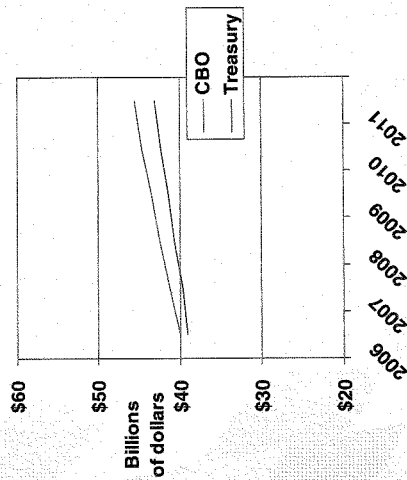


Source: GAO analysis of data provided in the President's Budget and by CBO.

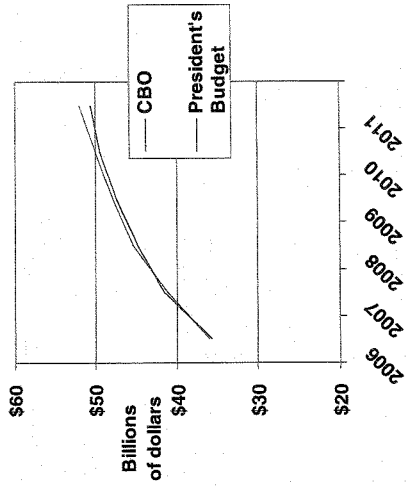
Objective 2: Comparison of estimates

# **Projected receipts appear to be a key factor in the difference between Treasury and CBO estimates**

Highway Trust Fund receipts estimates



Highway Trust Fund outlays estimates



Source: GAO analysis of data provided in the President's Budget and by Treasury and CBO.



Objective 2: Comparison of estimates

## Projected outlays are out-pacing estimated receipts, which leads to negative balances

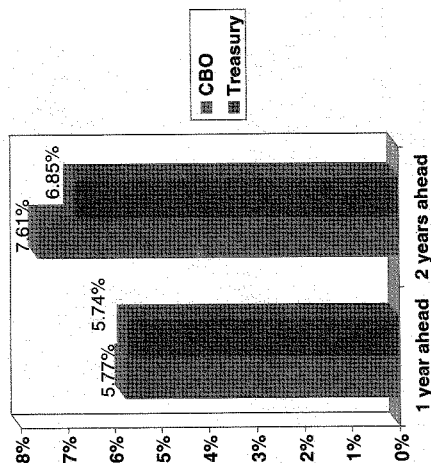
Highway Account Estimates	2006	2007	2008	2009	2010	2011	Average 2006-2011
Treasury/DOT	Receipts	\$34.10	\$34.60	\$35.40	\$36.20	\$36.90	\$35.80
	Outlays	\$34.50	\$36.20	\$39.70	\$40.80	\$41.80	\$39.60
	Difference	(\$0.40)	(\$3.60)	(\$4.30)	(\$4.60)	(\$4.90)	(\$3.80)
CBO	Receipts	\$34.90	\$35.90	\$36.90	\$37.90	\$38.80	\$37.40
	Outlays	\$34.90	\$37.90	\$40.50	\$41.70	\$42.70	\$40.30
	Difference	\$0.00	(\$1.94)	(\$3.58)	(\$3.81)	(\$3.89)	(\$2.90)

(Dollars in billions)

Source: GAO analysis of data provided by DOT and CBO.

## Accuracy of Treasury and CBO estimates of receipts has been comparable

- We compared the annual estimates of receipts made by each agency in 1998 -2004 to actual Highway Trust Fund receipts that were collected 1 year and 2 years after the estimates and concluded they were similar.
- On average, Treasury and CBO were nearly identical in the degree to which their 1-year estimates compared with actual results.
- Treasury's estimates were slightly closer when comparing 2-year estimates with actual results.



Source: GAO analysis of data provided by Treasury and CBO.



---

## Further information

---

- To view the full product, go to [www.gao.gov](http://www.gao.gov) to find report GAO-06-572T.