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NEW ROUTES FOR FUNDING AND FINANCING HIGHWAYS AND TRANSIT

HEARING

BEFORE THE

COMMITTEE ON FINANCE
UNITED STATES SENATE

ONE HUNDRED THIRTEENTH CONGRESS

SECOND SESSION

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NEW ROUTES FOR FUNDING AND FINANCING HIGHWAYS AND TRANSIT

TUESDAY, MAY 6, 2014

U.S. SENATE,
COMMITTEE ON FINANCE,
Washington, DC.

The hearing was convened, pursuant to notice, at 10:07 a.m., in room SD–215, Dirksen Senate Office Building, Hon. Ron Wyden (chairman of the committee) presiding.

Present: Senators Rockefeller, Stabenow, Nelson, Menendez, Carper, Cardin, Bennet, Casey, Warner, Hatch, Grassley, Crapo, Thune, and Isakson.

Also present: Democratic Staff: Joshua Sheinkman, Staff Director; Michael Evans, General Counsel; Todd Metcalf, Chief Tax Counsel; Ryan Abraham, Senior Tax and Energy Counsel; and Todd Wooten, Senior Tax and Energy Counsel. Republican Staff: Chris Campbell, Staff Director; Tony Coughlan, Tax Counsel; Jeff Wrase, Chief Economist; and Nicholas Wyatt, Tax and Nominations Professional Staff Member.

OPENING STATEMENT OF HON. RON WYDEN, A U.S. SENATOR FROM OREGON, CHAIRMAN, COMMITTEE ON FINANCE

The CHAIRMAN. The Finance Committee will come to order. The Finance Committee is here today to discuss how to meet the country's extraordinary need for investment in roads and highways and other infrastructure projects.

My bottom line is, you cannot have a Big League quality of life, and you certainly cannot have Big League economic growth, with Little League infrastructure. The status of our roads and highways affects all Americans, from commuters to exporters to rural Americans who drive long distances for just about everything. And, in the global competition for investment in jobs, the condition of our infrastructure is a major determinant of how the outcome plays out.

By any calculus, our investments in infrastructure lag way behind the competition. China, for example, invests 8.5 percent of its gross domestic product in infrastructure, and in some parts of Canada, they invest 10 percent. The U.S. invests only 1.7 percent. No American can be happy with the prospect that it is easier to move goods from a Chinese factory to a Chinese port than from an American factory to an American port. That is what is at risk here.

The American Society of Civil Engineers, the trusted gurus, so to speak, of infrastructure, write an annual report card that grades our country's roads and highways. In 2013, we earned a D-plus, not exactly anybody's definition of success. The report found that nearly a third of our roads are in disrepair, and nearly half of our highways around cities suffer from congestion. Americans waste millions of hours and more than a billion gallons of gasoline sitting in traffic every year. That is what has to change.

Now, there are two priorities to consider. The first is reauthorizing and fixing the Highway Trust Fund, which feeds money into transportation projects. Unfortunately, it has less money coming in than it has going out. Fixing it in the short term will require $10 billion to keep the fund solvent through the calendar year. Getting through fiscal year 2015 will take another $8 billion.

What happens if the authorization expires, or the fund dries up? According to one report, 6,000 projects grind to a halt, putting many thousands of construction workers out of a job and causing headaches, what I call “traffic migraines,” from one end of the country to the other.

Then for the longer term, Congress needs to find a sustainable source of funds that will keep this crunch from happening again. It would be a tragic mistake to let highway funding become another stop-and-go extender like Medicare physician payments and many other important tax incentives have been. Relying on short-term policies, emergency patches, and temporary extensions makes forward-looking strategies impossible. And when it comes to infrastructure, our business community advises that planning ahead is absolutely essential.

Some proposals offered over the last few months, like using new tolls on existing roads, or charging motorists based on the number of miles they drive, in my view raise questions about privacy and feasibility that would need to be answered. We are going to examine them thoroughly.

It is going to take $100 billion just to keep the Highway Trust Fund solvent for 6 years. Meeting that bar will give the States a chance to think ahead, and construction workers will not have to worry about being laid off because of Washington inaction. And while the Congress develops fresh, long-term policies for the trust fund, it should also consider ways to encourage Americans to use the cleanest and most efficient fuels. But we ought to face it. Fixing the trust fund is just the bare minimum in terms of the investment needed. It is time to aim higher and to do it on a bipartisan basis.

That is where the second priority comes in: getting private capital off the sidelines and into this effort. There are a whole host of innovative proposals. I see Senator Warner is here, and Senator Blunt, Senator Bennet, Senator Schumer, a number of my colleagues, have bipartisan proposals for the long term. And the only place you have to look to find proof that you can get private capital off the sidelines is the Build America Bonds program. The Build America Bonds program had been proposed by Democrats and Republicans for years and years when it was finally included in the Economic Recovery Act.

In this very hearing room, colleagues, Senators hoped—we hoped—that it might generate $5 to $10 billion worth of infrastructure projects over its lifetime. By the time the Recovery Act period was over, Build America Bonds had helped to finance more than $180 billion worth of projects in my home State and from one end of America to another.

So the lesson is clear. There are hundreds of billions of dollars in private capital sitting on the American sidelines. Some of that can surely be invested in American infrastructure. So I would like to aim higher and do everything possible to build a bipartisan coalition for policies that generate $1 trillion in American infrastructure.

From a purely commercial standpoint, investing that capital in critical American infrastructure projects certainly has the potential to be more profitable and improve more lives than a number of the alternatives. It is important not to punt investments further into the future. Maintaining a good-quality road is cheaper than rebuilding a failing one, especially—especially—while interest rates are low. And it is tougher to invest in new transportation projects if the country's roads and highways are falling into disrepair. The price tag for a strong national infrastructure is only going to grow in the future, so it is time to get to work.*

[The prepared statement of Chairman Wyden appears in the appendix.]

The CHAIRMAN. Finally, before I recognize Senator Hatch and introduce our colleague, the chair of the Environment and Public Works Committee, who has been a passionate advocate for transportation, fortunately, I want to take a moment to recognize the unfortunate passing of our former colleague, Jim Oberstar. Jim Oberstar spent his entire career working on transportation policy, first as a staffer who worked on the legislation that created the Department of Transportation in the 1960s, then during the years that he represented Minnesota's 8th district for more than 3 decades in the House. He was a titan of transportation policy, especially in aviation. All who fly in America should be grateful to Jim Oberstar, and I would just like to say, because I think some colleagues did not get to serve with him, I did not get a chance to serve with anyone more decent and caring than the late Congressman Jim Oberstar, and I just wanted to recognize his passing this morning.

Senator Hatch?

OPENING STATEMENT OF HON. ORRIN G. HATCH, A U.S. SENATOR FROM UTAH

Senator HATCH. Well, thank you, Mr. Chairman. I share your viewpoint with regard to Jim Oberstar. He was a fine, fine man and a great member of Congress.

I thank you for holding this hearing. I also want to thank the chair of the Senate Committee on Environment and Public Works, Senator Boxer, for joining us today. Welcome. We are grateful to have you and your advice.

I think we can all agree that a long-term surface transportation reauthorization is an important goal, most notably because it will allow States to plan for the long term when it comes to funding infrastructure programs. However, the old admonition that there is no such thing as a free lunch still holds, which is why this hearing is so important.

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*For more information, *see also,* "Overview of Selected Tax Provisions Relating to the Financing of Surface Transportation Infrastructure,"Joint Committee on Taxation staff report, May 5, 2014 (JCX–49–14),*https://www.jct.gov/publications.html?func=startdown&id=4599*.

According to current estimates, the Highway Trust Fund will be unable to meet obligations sometime this summer. This is the result of what is becoming a longstanding problem when outlays from the trust fund are greater than the receipts from the dedicated Federal excise taxes.

When it comes to paying for all or some of the highway bill, a number of ideas have been floated, some good, some bad. One of the ideas I have heard most often is the proposal to raise revenue by taxing overseas earnings of U.S. global corporations. Now, this idea, sometimes referred to as "the repatriation proposal," is, in my view, not a very good one.

As we all know, under current law the U.S. defers taxes on earnings companies make overseas until the money is brought back into the country. And because the U.S. has the highest corporate tax rate in the developed world, many companies prefer to keep their money offshore for long periods of time. We simply have to attack that problem. Some have suggested that we change the rules of international taxation in order to immediately subject those funds to U.S. taxes so that we can use the revenue to, among other things, shore up the Highway Trust Fund.

Make no mistake. I believe we should have a robust discussion as to how our tax system should deal with overseas earnings. However, given the economic implications of any changes to this system, that discussion should take place in the context of a broader debate about tax reform, not as a part of an ad hoc effort to pay for a highway bill.

Now, I hope that today's discussion does not simply devolve into a debate about the wisdom of the repatriation proposal. That said, we do face a near-term problem in that reimbursements to the States will likely be impacted if the trust fund is not shored up in the very near future. Neither the chairman nor I wants to see a slowdown in payments. Let us keep in mind that, however we deal with the immediate shortfall in the Highway Trust Fund, the long-term funding problem will still loom before us.

I am more than willing to have a discussion about long-term financing options such as bond proposals and public-private partnerships, but we should remember that, in this committee, we are dealing with a funding problem more than a financing problem with a system that was created based on a user-pays model, where certain Federal excise taxes, such as the gas tax, were intended to serve as proxies for use of certain resources, such as the Federal highway system. Personally, I would like to preserve the user-pays system and prevent our Federal infrastructure programs from becoming another tax extender, dependent every year or two on an infusion of cash from the general fund of the Treasury.

In addition, while it is wholly appropriate and necessary for us to thoroughly examine the revenue side of the funding equation, we should also have a complete examination of the spending side. Since its inception in the 1950s, the Highway Trust Fund has been called upon to fund an increasingly broad scope of activities, such as bike paths and other so-called enhancements, in quotes. Additionally, there are many requirements and regulations that increase the costs of Federal highway projects. So, if we are going to talk about revenues, we should also talk about reforms that will address costs as well as outlays.

Now, Mr. Chairman, I look forward to working with you to examine the short- and long-term issues we face when dealing with this important part of our infrastructure. And I look forward to working with our other colleagues on this committee and throughout the Senate as well and having a robust discussion of all of these issues during today's hearing.

I want to thank you again, Mr. Chairman, for holding this hearing.

[The prepared statement of Senator Hatch appears in the appendix.]

The CHAIRMAN. Thank you, Senator Hatch. And we are going to be working on this in a bipartisan fashion, and we are going to work with the Environment and Public Works Committee in a bipartisan way.

I am very pleased that the chair of the committee, Senator Boxer, is here, and I just would like to note that virtually every time that Senator Boxer and I have talked about this over the years, initially with Jim Inhofe but now with Dave Vitter, Senator Boxer has emphasized how important it is that these issues are addressed in a bipartisan way.

So we welcome the chair of the Environment and Public Works Committee. We will make your prepared remarks a part of the record, and you may proceed as you like.

STATEMENT OF HON. BARBARA BOXER, A U.S. SENATOR FROM CALIFORNIA

Senator BOXER. Thank you. Senators, thank you. All my friends, I am just so happy to be here, and I want to talk to you straight from the heart and straight from the shoulder, because where we are is in a very difficult place. And, if we are going to succeed, Mr. Chairman and Ranking Member, you are both right in that we have to examine everything. We have to do it in a bipartisan way. People who travel on the roads, people who cross the bridges, every political party—this is something that must bring us together.

I want to say, first of all—because you know how I am, very direct—I think a short-term extension really leads to a major problem. It extends uncertainty. And uncertainty is a death knell for our States. So whatever you do—and I know how hard it is—we really need to push for a multi-year solution.

I come here in friendship. I want you to know that Senator Vitter and I have—I know how Senator Vitter and I argue on the environment issues, but on public works we have been joined at the hip. We, our Big Four—along with Senators Carper and Barasso—have agreed in principle on a highway bill, and we are closing it out today, and we should mark it up next week. And I want to say, particularly to Senator Hatch, it includes reforms. So did MAP–21. And believe me, we all came away a little bruised and battered because we had to make these compromises. But we did it.

Our bill will be based on current levels plus inflation. So, Senator Wyden, I know your vision, which I share, is for a much larger look at this. But our committee, in order to just save the Highway Trust Fund, has come up with a proposal that is based on current spending plus inflation. Also, we move around some funds within. Considering what Senator Hatch said, there are some things we think we can move away. And we came up with some good funds to do some interesting things.

Now, I just want you all to know this very straightforwardly: the trust fund runs out of money in the summer. Let me say it again. The trust fund runs out of money in August. And we need, in order to fix this bill, to keep it just to its current level plus inflation, we need you, with our help and support, to figure out how to pump $18 billion into the Highway Trust Fund.

I share Senator Hatch's view. It should be a user-pays situation, because we do not want that uncertainty that you talked about.

Now, I am going to just be very brief, because I have 2 minutes left. I want to give you some quotes, and I see Senator Isakson here. According to Georgia's Department of Transportation, if Federal funding is cut, I quote, "We would not be able to fund any new projects." They say it is a potential disaster for a State that is very dependent on the Federal transportation dollar.

In Iowa, I say to Senator Grassley, the Iowa DOT described the impacts of going 1 full year without a Federal highway program. They said, "For the Iowa DOT, this will result in cutting our anticipated construction program in half for 2015. This will have an impact on local jurisdictions, and they will not be able to begin any new construction projects that involve Federal funding." And I could have done this for every one of your States, but I did do it for Oregon. [Laughter.] Oregon DOT said it would be hit hard because it might be forced to delay or cancel a large number of highway projects. Quoting them: "Basically, our entire capital construction program could be affected."

I am going to hold up a picture for you. You are going to wonder, "What is she thinking?" But it is a photograph of a Super Bowl stadium, and 100,000 people fit in there. We have 800,000 construction workers who are out of work. That is eight of these stadiums. Just to put it into perspective, at the height of the recession, we had 2 million unemployed, so we had—how many of those? Twenty. So we are down to eight. But we cannot go back to those days. And this does not count the thousands of businesses, both small and large, that would be affected.

Now, there are lots of solutions. In my 30 seconds, a gas tax rise is supported by the Chamber of Commerce. A lot of us do not support it at this point. President Obama does not support it at this point. It is a problem. But it should be looked at.

Now, what the Governor of Virginia did and what the Governor of Michigan is doing right now is, they are supporting a plan that would take away the gas tax at the pump and replace it with a sales tax on the wholesale price of gasoline and diesel. This is a Republican Governor who signed that into law, I want to say to my colleagues, and a Republican Governor looking at it. It is an easy solution. You do away with the gas tax. You replace it with this sales tax. It brings in the money that you need, and you can adjust it, depending on what it is that you want to accomplish.

So I am going to put my statement in the record, and I will include a letter from the Governors of a whole slew of States, including, Senator Bennet, Colorado and South Dakota and Pennsylvania and Maryland, and lots of other States that are represented here, saying, please do not fail us.

I will close with this. Colleagues, failure is not an option for us. We need to do this. It is our time to figure it out. And I want to be there for you. I know Senator Vitter feels the same way. And we will stand by. We will help you in any way with technical support—not that your staff needs it, but we are there.

Thank you so much for this opportunity.

[The prepared statement of Senator Boxer appears in the appendix.]

The CHAIRMAN. I thank the chair of the Environment and Public Works Committee, and I think that is an ideal closing to say "failure is not an option." And I would also like to note that I have very much appreciated your effort to try to do some serious streamlining in terms of getting these projects through the regulatory hoops. And I think that also is a step towards bringing both sides together.

I think at this point, Senator Hatch would like to read a statement, I believe, from the ranking minority member, Mr. Vitter. Is that correct?

Senator HATCH. Yes, he has asked me to read his statement.

Senator BOXER. I would like to stay for that.

Senator HATCH. Well, you do not have to, but I do not blame you if you want to. [Laughter.]

Well, I want to thank you, Senator Boxer, a great chairman in this area. Unfortunately, Ranking Member Vitter was unable to join us this morning, but I do have a letter from him that he would like me to read, if I can, or at least put part of it in the record.

His letter reads: "Thank you, Chairman Wyden and Ranking Member Hatch, for holding today's hearing. Highway infrastructure is a critical component of our Nation's economy and our quality of life. A first-class infrastructure is fundamental to connect people in communities and is a critical building block in developing, sustaining, and growing an economy—something we must all remember and prioritize as we move forward.

"Putting such a structure on sound footing will restore the stability and certainty in the Highway Trust Fund, which is so vital to economic growth in this country. I am mindful of the comments of several Finance Committee members from the last markup on highway funding. I would like to tell my friends on my side that I am sensitive to the principles laid out at that time. A bipartisan solution to this problem is the only way forward.

"So, as we work toward such a solution, we must again adhere to the following principles. We must work to maintain the user-based system. We should avoid spending down the balance of the trust fund and work to keep a healthy cushion to ensure against funding crises and disruption. We should provide for as long a multi-year authorization as possible to minimize uncertainty. And finally, we should preserve investment levels and not increase the overall tax burden on taxpayers.

"If we are going to be successful at putting such a structure back on a sustainable course and deliver on the economic promise of sound infrastructure investment, we must work to put trust back in the Highway Trust Fund. Adhering to the principles I have laid out will bolster our efforts toward rebuilding that trust and finding a bipartisan solution.

"Again, I thank Chairman Wyden and Ranking Member Hatch for holding this hearing. Sincerely, Senator Vitter."

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you, Senator Hatch.

Senator HATCH. I would like this letter——

The CHAIRMAN. Without objection, it will be entered into the record at this point.

[The letter from Senator Vitter appears in the appendix on p. 83.]

The CHAIRMAN. It is very clear that the chair and the ranking member of this committee and the chair and the ranking member of the Environment and Public Works Committee, we are all going to work very closely together. And to you, Chairman Boxer, a special thanks for your energy and your passion. That is what it is going to take to make this happen.

Senator BOXER. Thank you very much, everybody.

The CHAIRMAN. Thank you.

Let me now announce the witnesses for the panel. I do want to let Senator Warner introduce the witness from Virginia.

Our first witness will be Dr. Joseph Kile, who is the Assistant Director of the Microeconomic Studies Division of the Congressional Budget Office.

Then we have Mr. Aubrey Layne, Secretary of Transportation for the State of Virginia. Senator Warner will give him a formal introduction.

Our third witness will be Jay Dhru, who is the senior managing director of corporate and infrastructure ratings for Standard and Poor's Ratings Services.

Our fourth witness will be Ms. Samara Barend, who is the senior vice president and public-private partnership (P3) development director for AECOM Capital.

And our final witness will be Mr. Chris Edwards, who is director of tax policy studies for the Cato Institute.

Senator Warner, why don't you introduce Mr. Layne?

Senator WARNER. Thank you, Mr. Chairman. I want to introduce my good friend, Aubrey Layne, who is the Secretary of Transportation for Virginia. Under Governor McAuliffe, Aubrey Layne was sworn in as Secretary of Transportation just recently, in January of this year. He oversees an agency with 10,000 employees with a combined budget of more than $5 billion—something that I paid a great deal of attention to while I was Governor.

Aubrey has served on our oversight board prior to being Secretary—the Commonwealth Transportation Board. He began his career as a CPA with KPMG. He was active in the private sector. He was president of a very successful public-private initiative in the education space. And what I think he is going to talk about beyond the concerns about what happens to the Highway Trust Fund is that Virginia, actually over the last 20 years, has been really a leader in public-private initiatives. I think he is going to give a shout-out for the bipartisan initiative that we have created, the

BRIDGE Act* that has five Republican and five Democratic cosponsors. And I think he will make the point, while this is a useful tool in the toolbox, it is not the silver bullet, that you have to have that permanent funding source. You can leverage private capital, but, if you do not have that permanent funding source, you are not going to be able to get things done.

So, Mr. Chairman, I really appreciate the fact that we have the Secretary of Transportation here. He can also comment, as was mentioned by Senator Boxer, on some of the changes we have made in Virginia transportation recently. Thank you.

The CHAIRMAN. Thank you, Senator Warner.

I thank all of our witnesses. It is customary here that your prepared statements are made a part of the record, and that will be done. If you could use your 5 minutes or so to summarize, you can see there are a host of Senators here who would like to ask questions. That will be helpful. Let us begin with you, Dr. Kile.

STATEMENT OF JOSEPH KILE, Ph.D., ASSISTANT DIRECTOR FOR MICROECONOMIC STUDIES, CONGRESSIONAL BUDGET OFFICE, WASHINGTON, DC

Dr. KILE. Thank you, Chairman Wyden, Senator Hatch, and members of the committee. I appreciate the opportunity to be here today to talk about the status of the Highway Trust Fund and options for financing highway construction.

In 2013, about $156 billion was spent to build, operate, and maintain highways in the United States. Another $60 billion was spent on transit systems. About one-quarter of that total came from the Federal Government, mostly through the Highway Trust Fund.

Although the trust fund's balances were stable or growing for several decades, since 2008 lawmakers have transferred $54 billion from the general fund of the Treasury to the trust fund. With its current revenue sources, the Highway Trust Fund cannot support spending at the current rate. By the end of this fiscal year, CBO estimates that the balance in the highway account of the trust fund will fall to about $2 billion, and the balance in the transit account will fall to about $1 billion. Because of those declining balances, the Department of Transportation will probably delay payments to States at some point this summer.

In 2015, CBO estimates that the shortfall will be about $13 billion, as future spending from the trust fund outpaces revenue collected. If lawmakers do not act to address that shortfall, all of the receipts credited to the fund during the next year would be needed to meet obligations made during or before 2014. Beyond that, if nothing changes, the shortfall in the trust fund would steadily accumulate in subsequent years.

Lawmakers have three broad options to address the projected shortfalls in the trust fund. One option would be to reduce Federal spending on highways and transit projects. If lawmakers choose to address the shortfall entirely by cutting spending, the authority to obligate funds from the highway account would have to decrease by more than 30 percent over the next decade, and similarly, the au-

*The Building and Renewing Infrastructure for Development and Growth in Employment Act.

thority to obligate funds from the transit account would need to decline by about 65 percent compared with CBO's baseline.

A second option would be to increase the revenues credited to the trust fund. For instance, one approach would be to increase the existing taxes on gasoline and diesel fuel. The staff of the JCT estimated that a 1-cent increase in the tax on gasoline and diesel fuel would raise about $1.5 billion each year. As such, increasing those taxes by 10 to 15 cents per gallon would eliminate the projected shortfall. Another approach for increased revenues would be to impose new taxes on using the highway system such as one based on vehicle miles traveled.

A third option for addressing the shortfall would be to continue to transfer money from the general fund to the Highway Trust Fund. Unless spending were cut or revenues were increased, that would require a transfer of $18 billion in 2015 and between $13 and $18 billion every year thereafter through 2024.

The projected shortfall in the trust fund has generated interest in greater use of borrowing by State and local governments, sometimes in conjunction with the private sector. The Federal Government encourages such borrowing through tax preferences that provide a subsidy for highway financing projects. In addition, the Federal Government offers direct loans that encourage State and local governments and the private sector to borrow money for highways. Through both of those channels, though, the Federal Government bears some of the cost of such financing.

Despite some prominent examples, the experience with private financing in the United States is very limited. In particular, highway projects that have used private financing have accounted for about one-half of 1 percent of all spending for highways over the past 25 years. Some of those projects have failed financially because the total revenues for the projects were overestimated. Perhaps because of that experience, projects that are still under construction rely less on tolls as a revenue source. More commonly, private partners are compensated from a State's general fund, thus limiting the risk that the private partner will not be repaid. As a result, the risk of lower-than-expected revenues stays with the public sector.

Regardless, however, borrowing is only a mechanism for making future tax revenues or future user fees available to pay for transportation projects today. It is not a new source of revenues. Borrowing can augment the funds readily available for highway projects today, but revenues that are committed to repaying borrowed funds will be unavailable for new transportation projects or other government priorities in the future.

Thank you very much for your time, and I would be happy to answer any questions that you might have.

[The prepared statement of Dr. Kile appears in the appendix.]

The CHAIRMAN. Thank you very much, Dr. Kile.

Our next witness will be Mr. Aubrey Layne.

STATEMENT OF HON. AUBREY L. LAYNE, JR., SECRETARY OF TRANSPORTATION, COMMONWEALTH OF VIRGINIA, RICHMOND, VA

Mr. LAYNE. Good morning. I would like to thank Chairman Wyden, Ranking Member Hatch, and Senator Warner for the opportunity to speak with you today on a vitally important matter that concerns our Nation.

As Senator Warner mentioned in my introduction, prior to being appointed by Governor McAuliffe, I served on the Commonwealth Transportation Board for 5 years, where I was very involved in the funding for transportation projects in Virginia. I was introduced at that time to the three As of transportation: appropriation, allocation, and authorization.

Now, as Secretary of Transportation, I certainly understand there is a fourth A, and that is accountability, as I see myself as a primary fiduciary for the taxpayers of the Commonwealth and our country. I oversee and set policy for the Commonwealth's seven transportation agencies, with an annual budget of close to $5.5 billion.

Now, I think I am the only panelist today who is directly responsible for implementing policy and delivering projects. As a State that recently tackled some of the big issues that you are looking at here today, I have a few points I would like for you to consider.

First of all, the Federal Government has a strong role in surface transportation. This is a partnership with the States, and we need a strong, reliable partner. Many States are stepping up or have stepped up, but we can only do so much. We need the Federal Government to do its part. And the solutions that we come up with here should include all modes of transportation—highways, transit, and rail—and should be long-term in nature.

And last but not least, the conversation here today should also be about growth of the system. It is not enough simply to patch holes. We have to discuss how we invest at what levels to support sustained economic growth.

I can give you a few examples of how this has worked in Virginia. As you may know, last year the Republican-led General Assembly and Republican Governor worked across the aisle with Democrats to pass the first long-term solution to transportation funding in Virginia in over 25 years. The compromise raises almost $3 billion over 6 years for State-wide revenues, and it has multiple parts. One, we converted the cents-per-gallon tax to a wholesale sales tax. We also increased the general sales tax, and a portion of the existing general sales tax was transferred to transportation, and we also increased the motor vehicle sales tax.

The key here is, in the State of Virginia we increased both general fund revenues and non-general fund revenues. This needed funding provides Virginia with approximately $1.1 billion annually in revenue available for transportation projects such as highway, rail, transit, aviation, and ports.

We combined these State-wide revenues with the $1.1 billion we have traditionally received from the Federal Government to help fund projects ranging from freight rail improvements, large highways, public-private partnerships, to passenger rail expansion.

To fund many of these projects, we work hard to leverage our government funding. So, in addition, we look to other sources of revenue such as Transportation Infrastructure Finance and Innovation Act loans, private activity bonds, contributions from developers and local governments, State bonds, toll revenues, and loans and lines of credit from the Virginia Transportation Infrastructure

Bank. Basically, if there is an option to invest in infrastructure in Virginia, we have explored it. But even with all our efforts, the Federal Government remains a critical partner. The Federal program represents more than half of our expenditures that are available for our annual capital revenues.

As you know, the Federal Highway Trust Fund is facing an impending insolvency. If nothing is done, the consequences will be dire. In Virginia, we expect our construction program will grind to a halt this October and imperil our ability to pay contractors for existing contracts. We ask Congress to act to shore this up.

Now, there are lots of options that have been outlined in the past for how this can be accomplished. But the option of how to best solve this Federal revenue problem is for this committee and other members of Congress to decide.

However, the trust fund is not the only pending emergency. Key transportation programs are left out of the trust fund and go through the appropriations process. TIGER grants,* new starts, and passenger rail are just as important to us as Federal trust fund revenues. Unfortunately, we do not know from year to year whether these programs will exist or how much will be funded.

Now, I understand there is a lot of debate going on about the type of investments, and, as you consider these questions, I would ask that you remember that transportation is not an end in itself. The focus should be on how an investment achieves an outcome, how we help move people and goods efficiently, improve the economy, and spur economic growth.

Now, finally, as I said, we are looking at every way to leverage funds, and I know the committee is examining some of these options. We strongly support the BRIDGE Act, but I want to address the misconception that I continually hear. Public-private partnerships and financing are helpful, but they are not silver bullets and cannot solve all the transportation problems. Financing in P3s of large-scale projects is necessary, but it is only a part of the procurement process. And I will remind the committee that there are two Ps before partnership: public and private. And without those funds, we could not have P3.

So, just wrapping up here, the problems that we face are significant, and we ask Congress to act in a bipartisan manner to get this resolved. We look at transportation as underpinning our economy and, quite frankly, underpinning our freedoms. So we think that this solution is necessary, not only to support projects, but the quality of life in our Nation.

Thank you very much.

[The prepared statement of Mr. Layne appears in the appendix.]

The CHAIRMAN. Thank you very much, Mr. Layne.

Mr. Dhru?

STATEMENT OF JAYAN DHRU, SENIOR MANAGING DIRECTOR, CORPORATE AND INFRASTRUCTURE RATINGS, STANDARD AND POOR'S RATINGS SERVICES, NEW YORK, NY

Mr. DHRU. Chairman Wyden, Ranking Member Hatch, and members of the committee, my name is Jay Dhru, senior managing di-

* The Transportation Investment Generating Economic Recovery grant program.

rector with Standard and Poor's. As a leading provider of credit ratings, research, and analytics, our teams of analysts assess risk and assign credit ratings to public-private partnership projects, or P3s, such as the I–95 Express Lanes managed lanes project in Virginia, the Goethals Bridge replacement in New York, and the Ohio River Bridges Project.

Thank you for the chance to share our views on the challenges and opportunities involved in addressing what we believe to be a $200-billion annual gap in funding for the repair and new construction of critical U.S. infrastructure.

We all agree that reliably moving people and goods is essential to reaching any nation's economic potential. My testimony will focus on how the needs of infrastructure can be financed through a range of investment sources, including the government and private sectors.

With governments tightening their belts and banks repairing their balance sheets, funding the $200-billion annual gap is daunting. At the same time, providers of public infrastructure spending—Federal, State, and local governments—have pulled back. From 2008 to 2010, States cut spending as revenues declined by 12 percent in order to balance their budgets. Similarly, new debt issuance by State and local governments declined by $64 billion over the last 5 years, 60 percent of which was simply used to refinance existing bonds.

While public funds for new projects and existing infrastructure repair decidedly are under pressure, who fills that void? Our analysis has found that institutional investors, such as insurance companies, pension funds, and other non-bank lenders, are well-positioned. In fact, infrastructure has many advantages for investors, including higher yields, the tolerance and need for long-term investments, and diversification. S&P has estimated that institutional investors would like to target about 4 percent of their portfolio to infrastructure, higher than their current levels of 2 percent. If achieved, this would provide an estimated $200 billion in additional global infrastructure funding each year—nearly $3.2 trillion by 2030.

The CHAIRMAN. Can you just, on that number, give your analysis of what it would provide for investing in American infrastructure?

Mr. DHRU. I do not have that breakdown, but I can get that for you.

The CHAIRMAN. Would you?

Mr. DHRU. Yes, absolutely.

The CHAIRMAN. Thank you.

Mr. DHRU. We believe two important steps can be taken towards unlocking this investment. First, standardize project finance and enhance transparency, information, market visibility, and predictability. The success of P3s in the United Kingdom, Canada, and within certain U.S. States has grown in recent years due to just these types of reforms. Second, minimize political and regulatory risk. Institutional investment thrives on certainty, and having a clear vision of how expenditures are recovered is vital to increased investor participation.

P3s allow investors to design, build, and operate public infrastructure, lending their expertise and sharing in the risk of delivering transportation projects on time and within budget. As an example, take the I–595 expansion project in Florida, the State's first P3. It was completed in 5 years, 15 years ahead of the State schedule, and at a cost of $1.8 billion, $275 million lower than estimated.

As for the public benefits of P3, governments are able to replace or build new infrastructure while shifting substantial risks over to private investors, including cost overruns and penalties.

While in the U.S. P3s are still relatively new, elsewhere in the world they are being used more extensively to build public transit, airports, schools, and hospitals. According to the European Public-Private Partnership Expertise Center, 80 European P3 transactions closed in 2013, totaling $16.3 billion. The challenge in the U.S. is how to increase P3 accessibility. We put forward the following steps that could encourage P3 growth.

First, establish mechanisms for the Federal Government to help States adopt best practices and innovation standards. Although 33 States and Puerto Rico have enabled P3, only a handful of States—notably, Virginia, Texas, Florida, Indiana, and Colorado—have used them in a significant way. Standardization of the P3 procurement and documentation process has been a driver of activity in Canada, where contract forms are consistent across provinces.

Second, expand the use of Federal "magnet" and bond programs such as the TIFIA program and the private activity bonds. These funding sources attract private capital by lowering overall project costs, and TIFIA offers favorable repayment terms.

Third, provide near-term funding certainty and predictability. The current surface transportation and transit funding program is often seen as an insufficient time horizon for the planning, design, and construction of large-scale projects and programs that often take years to plan, build, and manage.

And finally, increase the transparency and availability of construction and performance data. This will enable the public and private sector to gain a better understanding of the costs and benefits to private investment.

In summary, we believe the actions outlined here would greatly reduce the funding gap through incentivizing and strengthening private investment. And, in the spirit of just-in-time, the U.S. estimate is about half of the $200-billion shortfall, about $100 billion.

Thank you very much for the opportunity to speak before you today on this important topic, and I look forward to answering any questions you may have.

[The prepared statement of Mr. Dhru appears in the appendix.]

The CHAIRMAN. Thank you. We will have some questions in a moment.

Ms. Samara Barend, thank you.

STATEMENT OF SAMARA BAREND, SENIOR VICE PRESIDENT, AECOM CAPITAL, NEW YORK, NY

Ms. BAREND. Chairman Wyden, Ranking Member Hatch, and members of the committee, it is a real pleasure to be with all of you today.

I am Sam Barend, and I serve as development director for AECOM Capital, the investment arm of AECOM, and AECOM is a global engineering and construction firm. We have about 45,000 employees around the world, many of them in your States. AECOM has participated in about 60 percent of all the P3 projects that have been delivered in the country, and we also serve as an investor. And a few of those projects include the Port of Miami Tunnel project in Senator Nelson's State, the I–595 project, the Long Beach Courthouse, and others.

Mr. Chairman, the topic you have selected for this hearing is pivotal. I would like to recognize the leadership of your State, Oregon, in spearheading the creation of the West Coast Infrastructure Exchange, which has been connecting private investors with much-needed public infrastructure projects.

For the past 7 years, I have approached public-private partnerships, or P3s, from both the public and private sectors, so I come before you with considerable passion on this topic and an understanding of the significant role that the Federal Government must play in catalyzing private investment in public infrastructure.

With that said, my goal today is to leave you with three thoughts. First, we must expand performance-based infrastructure delivery opportunities, such as public-private partnerships. It is essential that we stretch the limited Federal and State funds we have to deliver projects faster, cheaper, and with greater accountability and performance over the long term. Second, Federal and State funding has played and continues to play an essential role in advancing P3 projects. And finally, but most important, we must level the landscape between low-cost tax-exempt financing and higher-cost taxable financing to catalyze private investment in public infrastructure.

Since 2008, the use of performance-based P3s has fast-tracked the delivery of 16 projects, worth $18 billion, across the country. For example, Florida's I–4 Managed Lanes project, which actually is in the process of reaching a financial close right now, is going to be delivered 20 years sooner through a public-private partnership than if the State had utilized traditional methods of financing and delivery.

Now, for Florida, this P3 approach has enabled the State to leverage future revenue streams while eliminating the need for multiple procurements and full up-front funding. P3s have also allowed the States to transfer key risks to the private sector, as Mr. Dhru mentioned, which has ensured complex projects are delivered on time and on budget with greater performance over the long term.

Even more, cities and States, and really all of us taxpayers and the Federal Government, are the beneficiaries of these public-private partnerships because we are saving a significant amount of money. The Denver FasTracks P3 has saved $300 million. The Port of Miami Tunnel project has saved the State of Florida $750 million in one project—50 percent below the original engineer's estimate. And the Goethals Bridge project saved the State of New York $150 million. These are real savings. This is real money back to taxpayers.

That said, private finance can never replace State and Federal funding; rather, it serves as a means of stretching the very limited but essential public funding. U.S. P3 projects have combined numerous sources of public and private capital, such as State highway funds, TEA–21 dollars, low-cost TIFIA loans, and private activity bonds, alongside private debt and equity. The combination of such Federal funding has been utilized for high-profile new-toll-revenue projects such as Texas's North Tarrant Expressway and Virginia's I–495 Managed Lanes projects, where public investment has been effective in capping tolls and future toll increases.

The role for Congress in advancing P3 projects, however, does not end with funding highways and transit. In 2005, Congress authorized a pilot program that created $15 billion in new transportation exempt facility bonds. This program is so significant because it truly leveled the playing field between private investment and tax-exempt financing. It truly served as a catalyst for opening the doors for private investment in public infrastructure.

Since 2008, exempt facility bonds or private activity bonds, as they are otherwise called, have facilitated at least $12 billion, if not more, in transportation P3 projects in the country. And of note, every U.S. P3 project that has moved forward has been undertaken and utilized with either these exempt facility bonds or TIFIA, or a combination of both.

Just to close, I really believe this is an opportunity in the upcoming reauthorization for the Senate Finance Committee to continue this trend of public-private partnerships and performance-based P3s, to open the doors to private finance, and to not allow this authorization for private activity bonds to expire as it is expected to in the next year.

Thank you very much for the opportunity to testify.

[The prepared statement of Ms. Barend appears in the appendix.]

The CHAIRMAN. Thank you very much.

Colleagues, here is what we will do. We will have a vote at 11 o'clock. We will hear from Mr. Edwards, and then we will take hopefully about a 10-minute break, and we will come right back to questions.

So, Mr. Edwards, welcome, and I know about our history working on tax reform, so we welcome your remarks.

STATEMENT OF CHRIS EDWARDS, DIRECTOR OF TAX POLICY STUDIES, CATO INSTITUTE, WASHINGTON, DC

Mr. EDWARDS. Thank you very much, Chairman Wyden and members of the committee. The Nation certainly faces challenges in upgrading its highways, bridges, and other infrastructure. Nonetheless, I am skeptical of some of the doom and gloom coming from some of the groups that are pushing for large increases in Federal infrastructure spending.

There is some data showing that our infrastructure has been gradually getting better. The share of Federal bridges that are structurally deficient has actually plunged over the last couple decades. The quality, the surface quality of our interstate highway system, has actually improved over the last couple decades. So there is some good news with infrastructure.

It is true that congestion is a big problem in many parts of the country, and I share the chairman's concern that America have the best infrastructure in the world. I do not think that more Federal aid is the right answer for infrastructure, though.

For one thing, Federal aid is often misallocated. It is certainly not allocated as efficiently as it could be. The Highway Trust Fund creates winners and losers. Some of the long-time loser States in the Highway Trust Fund are actually some of the States with more need. So, for example, Texas and Florida, fast-growing States, have long gotten the short end of the stick from the Highway Trust Fund. Academic studies have shown that the Highway Trust Fund actually distributes money from lower-income States to higher-income States, which makes no sense to me either.

I think Federal aid distorts State and local decision-making. So, for example, with transit, for many decades the Federal Government has subsidized the capital costs of urban transit systems but not the operating costs. So I think that has biased many cities to go toward expensive rail systems with high capital costs, because they can get the Federal subsidies, rather than more efficient bus systems. So I think Federal aid does create some distortions to be concerned about.

So what should we do about the Highway Trust Fund? Well, a straightforward solution would be to phase down spending over a period of time to match the lower level of revenues. I think State governments should be free to respond to that void in any way that they would like—raising fuel taxes, adding electronic tolling to highways, and more privatization and P3s. I think Congress can reduce some of the costly mandates that Senator Hatch mentioned, such as the Davis-Bacon rules. And I also think Congress—and I agree with President Obama here—should lift the ban on tolling of the interstates. For me it is a federalism issue. The interstate highway system is owned by State governments. I think we ought to free up State governments' ability to be able to respond to infrastructure needs in any way they can, such as electronic tolling on some of the interstate system.

I think a good way to cut the Highway Trust Fund—and I know it is not going to be popular with some Senators—would be to reduce Federal spending on transit. Do you know that before the 1960s, the great majority of urban transit in America was provided by private, for-profit companies in the Nation's cities? That ended with one fell swoop with the introduction of Federal aid to local government-operated transit systems. That eliminated within a couple of years a century of investment by private companies in urban transit systems. So that is an example of the way Federal aid can create distortions, in my view.

So I think the answer to America's infrastructure challenges is not more Federal aid, but more innovation by the States. I am a big fan of P3s. And also, where we can, full privatization is also possible for some infrastructure projects. If you look around the world, seaports are private in Britain, private and unsubsidized. All the major airports in Canada are private, nonprofit corporations, unsubsidized. Air traffic control in Britain and Canada is run by private, nonprofit corporations, unsubsidized by governments. I think those are good models we need to look at.

You can even privatize highways and bridges in some cases, and there are examples, even in the United States. The Dulles Greenway in Virginia, for example, was privately built, unsubsidized, a 14-mile toll highway. I know some people, such as Representative Frank Wolf, grumbled about the Greenway, but I think it is a good project.

Elsewhere in Virginia, last year a private company financed and built a $140-million bridge over the Elizabeth River in Norfolk, again, completely unsubsidized by government. That company, FIGG Engineering, is actually expected to start construction this year on a $200-million bridge, called the Cline Avenue Bridge, in East Chicago—again, completely unsubsidized by government.

So hopefully we can bring more entrepreneurial efforts like that into America's infrastructure. We have big challenges, and we need both the public and more private-sector participation.

A last note, I think relevant to this committee, is that it is interesting if you look at Department of Commerce data, the vast majority of infrastructure in America is actually provided by the private sector. If you add up the total amount of annual investment in things like, you know, refineries and pipelines and cell-phone towers, private investment in infrastructure in the United States is 4 times larger than all Federal, State, and local investment combined. So a simple way to increase infrastructure investment in the United States would be to slash the corporate income tax. And I know that is something the committee is working on.

With that, I will end my comments. Thank you very much.

[The prepared statement of Mr. Edwards appears in the appendix.]

The CHAIRMAN. Thank you very much, Mr. Edwards.

So we have a 15-minute reprieve here, so we will start, colleagues, and just see if we can keep it going.

Here is my question for the panel: Mr. Dhru provided us with a bit of good news this morning. Mr. Dhru said that, in his view, there was potentially available significant private-sector funding for transportation, which could be up to $100 billion per year, to help meet our Nation's infrastructure needs. So that clearly is a constructive step, but yet it only meets a portion of the country's infrastructure needs. So what is needed, what our challenge is, is to come up with a complete solution, and certainly that means that there has to be an innovative Federal role here as well.

What I would like to do—we will spare you today, Dr. Kile, from the Congressional Budget Office—is kind of have a little bit of a lightning round on transportation. I would like each one of you to give me your best idea for the short term and your best idea for the long term. We will just take you four for purposes of my opening round. We have lots of colleagues who would like to get into this, so let us start with you, Mr. Layne—best idea short-term, best idea long-term.

Mr. LAYNE. Best idea short-term is to fund the trust fund. Our State has relied on those obligations in putting forth contracts, so to let that go insolvent would have a significant impact to the State of Virginia for the short term.

Long-term, it needs to be multimodal in focus and not just deal with simply the current situation, but be able to grow, have a sustainable revenue source that is tied to the future. I recognize the current Federal fuel tax is regressive and it is static. CAFE standards are getting higher. But some type of percentage of economic activity—for instance, we tied it to the motor fuels wholesale tax that allows for increases as economic activity goes up.

So those are a couple of ideas. But to think that it is going to be one, the answer, I think it is going to take a pragmatic approach of a lot of different tools to be used. All the things mentioned I would agree with today except for cutting the government input into transportation revenues. But I think it is going——

The CHAIRMAN. Very good. Mr. Dhru, one of each—short-term, long-term.

Mr. DHRU. I would say, actually, short- and long-term would be the same thing, which is to take the uncertainty out of the market. You know, every 2 years renewing it actually adds to a significant amount of uncertainty. So I think that is an opportunity.

The CHAIRMAN. And I gather that, with respect to the private side, you do think that streamlining in some of the areas that reduce uncertainty would help to boost that private side.

Mr. DHRU. Absolutely.

The CHAIRMAN. All right, very good. Let us hear from Ms. Samara Barend. Two ideas—short-term, long-term.

Ms. BAREND. Short-term, as I mentioned, just particularly speaking on performance-based P3s, the authorization for exempt facility bonds is likely to expire very soon, so that will really put a wrench in all of the private development and private investment we have seen. It is fundamental for this committee to expand that, at least expand it temporarily. If not, in the long term you should really provide a sustainable mechanism through long-term funding of private activity bonds and potentially TIFIA that does incentivize States and cities to utilize P3s, because currently the option of just tax-exempt financing makes it very difficult to move forward a project with private finance.

And you know, also, another option, in terms of the long term, is equipping States with the tools necessary to understand how to advance a public-private partnership project. As Mr. Dhru mentioned, only about eight to ten States are really in the process of moving forward these projects.

The CHAIRMAN. Good. Staff also, colleagues, gave me a note that, according to the estimates, we know that more than a quarter of transportation projects were financed with Build America Bonds during the program between 2009 and 2010, so your point, Ms. Barend, that certainly the role of bonding can be a factor, is a good one.

We will wrap up with you this round, Mr. Edwards.

Mr. EDWARDS. In the short term, I think the reality is that Congress is going to fill the hole in the Highway Trust Fund with general fund revenue. I mean, I do not see any other option. President Obama's corporate tax proposal is not going anywhere this year, and few people seem to favor raising the gas tax.

In the longer term, I think, again, Congress ought to free up the hands of States. States can raise gas taxes anytime they want. But I think a lot of transportation economists are kind of gelling around the idea of using new modern electronic tolling on more highways. It makes a lot of sense. You can raise a lot of revenue and you can reduce congestion, so you can kill two birds with one stone.

I encourage the States to experiment with electronic tolling. It is much lower-cost than the old-fashioned tolling with toll booths, and it makes a lot of sense, again, to reduce congestion.

The CHAIRMAN. So, as a little bit of a libertarian, I am concerned about those privacy issues in some of those things, so we will talk about that.

Senator Hatch?

Senator HATCH. Well, thank you, Mr. Chairman.

Dr. Kile, can you tell me that some Federal highway account spending is for non-highway purposes?

Dr. KILE. Yes, a share of the spending from the Highway Trust Fund is for transit projects and for other projects related to safety.

Senator HATCH. What percentage is that?

Dr. KILE. The spending in 2014 for the transit account is about $8 billion.

Senator HATCH. All right. Assuming a Federal role in highway financing is maintained, could we not decide to spend highway account dollars on highways alone, thereby funding more road work than occurs currently?

Dr. KILE. That would obviously be a choice for you and your colleagues, but that is one possibility, and that would address part of the shortfall in the trust fund.

Senator HATCH. How would eliminating the Federal role in the funding of highways lead to more efficiency in highway spending?

Dr. KILE. If the Federal Government were to be less involved with highway funding, there would probably be fewer highways built in the United States. How much less would depend on how States offset that, and I think beyond that, State and local governments would make the decisions that they felt in their best interest.

Senator HATCH. Well, as I understand it, a 6-year reauthorization proposal maintaining current spending levels plus inflation would require new offsets totaling $94 billion over the 6-year period. CBO's website indicates that every cent of motor fuels tax increase yields about $1.5 billion per year. We have heard that testimony here today.

Now, as I read your testimony, if the new funding were offset with a motor fuels tax increase, it would amount to more than 10 cents per gallon, likely 10 to 15 cents per gallon by 2015. Now, to a lot of people, that is a serious motor fuels tax increase.

Now, would it not be the largest Federal motor fuels tax increase in modern times if we did that?

Dr. KILE. I do not have in front of me the history of increases in the tax for the gas tax. But, yes, those numbers that you cited, which were produced by the Joint Committee on Taxation, are correct.

Senator HATCH. Well, some people think we should pause here, and before you accept the notion of a 6-year funding proposal, I am trying to find out what we can do and what is reasonable with the current Congress.

Mr. Dhru and Mr. Edwards, what I often hear when the word "infrastructure" is used, is how many jobs a given project will create. Now, how trustworthy do either of you believe are the estimates of how many jobs will follow from a given amount of spending on a road or a bridge or a bike path? Do you think the estimates are scientific, precise, and reliable?

Mr. DHRU. We just published a report yesterday, in fact, where we said a $1.3-billion investment in real terms in 2015 could create up to 29,000 jobs in the construction sector. When you are commenting on the future, obviously you make some assumptions, but I think the fundamental point remains. There is a significant opportunity for jobs growth.

Senator HATCH. Mr. Edwards?

Mr. EDWARDS. I do not think we ought to look at the infrastructure issue with respect to jobs. If private companies with P3s can do infrastructure more efficiently, they can build highways and bridges more efficiently, it means that they are going to use less labor, not more. So, you know, what society wants in general is a net return. They want to have a minimal cost for the maximum amount of benefit, so the issue is investment efficiency, I think, and not jobs.

Senator HATCH. All right. Dr. Kile, as I understand it, the 6-year reauthorization proposal maintaining current spending levels plus inflation would require new offsets totaling $94 billion over the 6-year period. Now, your testimony indicates that, even if the 6-year reauthorization proposal were enacted and offset, Congress would find itself facing the same problem in just a few years.

It looks to me like we have a permanent structural deficit problem in the Highway Trust Fund. Now, do you disagree? And, if we want the Highway Trust Fund to have an identity as a trust fund, do we not need to have a permanent solution to these various problems?

Dr. KILE. It is correct that spending is outpacing revenues for the foreseeable future—for the period of our projection through 2024.

Senator HATCH. All right. My time is up, Mr. Chairman.

The CHAIRMAN. Thank you, Senator Hatch.

Senator Stabenow?

Senator STABENOW. Thank you, Mr. Chairman, very much. First, I want to join you in sending condolences to Jim Oberstar's family. I worked with him extensively in the House. He was a wonderful man and truly a champion for transportation infrastructure for our country.

Welcome to all of you. This is a critically important discussion. I have a couple of comments first, and I just have to say, coming from Michigan where it has been very difficult to get the legislature, despite the Governor's actions, to try to take action in terms of what needs to be done in Michigan, Mr. Edwards, when you say things are getting better, come to Michigan. We have several missing persons reports of people who found the potholes, and we have yet to find them. So we certainly would say, at least on our end, that things are not getting better. They are actually getting worse.

At this point, one of the things, I guess, Mr. Chairman, that is concerning to me is the big picture in a global economy. I spoke 2 years ago in Beijing at a global auto leaders summit, and they were talking about building 20 new airports, state-of-the-art airports, as we are struggling to try to make sure we have infrastructure in place. And now back closer to home in Michigan, we have the largest, the busiest northern border crossing in the country between

Detroit and Windsor into Canada. We desperately need a second bridge—the Homeland Security Secretary was with us on Friday at the bridge—both for commerce, with over $1 billion a day back and forth, but also from a homeland security standpoint.

Canada has stepped up to fully finance the bridge because the United States of America, the greatest country in the world, cannot do its part. And we are trying to just come up with the money for a Customs plaza on our side of the bridge. I think this is embarrassing to us as a country.

Build America Bonds have been extraordinary. I strongly support them going forward. But when we look at, right now, $357 a person in auto repairs and costs for everybody in Michigan with what is happening right now, Lord knows we ought to be able to do better than this.

So I guess the first question I would ask is to Dr. Kile. When we look long-term, the State highway transportation officials have said, spend a dollar to keep a road in good condition or $6 to $14 a person to rebuild the same road. Most people would say that is kind of crazy and that we ought to talk about efficiency, we ought to be on the front end of that.

I wonder if you could talk a little bit more about the long-term cost if we pass a transportation bill just at current levels or levels limited to the trust fund revenues.

Dr. KILE. Senator, there is general agreement among economists that there would be benefits to additional infrastructure spending. I am sorry I do not have any additional information as to what that would be at this time, but there is general agreement on that point, despite general improvement in the quality of roads and highways and bridges.

Senator STABENOW. All right. Thank you.

On P3s, I wanted to hear a little bit more, Ms. Barend. And, Mr. Dhru, Secretary Layne, you mentioned P3s as well. And I am wondering, in your experience, starting with Ms. Barend, what types of projects are the best choice for P3s? How do you think we could design programs better, with TIFIA or infrastructure banks, to encourage more partnerships?

Ms. BAREND. Senator Stabenow, it is a pleasure to be with you. I actually testified twice in Michigan on the new international trade crossing, and I am a huge proponent of that project and the way that the Governor is actually moving it forward. I think that project is a perfect project for a P3 because, you know, it is a tricky, sticky, complex, challenging project—you know, international. Those are the types of projects that are very suited to P3s, not, you know, your typical $50-million road repair, widening projects. It is for really large, complex projects that, but for a public-private partnership, probably would not move forward, like the Port of Miami Tunnel project in Florida that, you know, the Florida State DOT says there is no way they would have been able to finance given the amount of risks that are involved in it.

So this is essentially allowing the State of Michigan and Canada, really Ontario, to know for a certainty that the project will be delivered on time, on budget, and over the course of probably about 35 years, that the performance will be maintained. So, you know, those are the best types of projects for P3s.

And in addition, what you all can do from the Senate Finance Committee—I mentioned the private activity bonds, and those have been just really fundamental. And TIFIA has also been truly fundamental, the two of those combined. The key to improving them is, as Mr. Dhru said, increasing the certainty. You know, as the private activity bonds dwindle down, there is less certainty in financing. So a number of projects are probably going to be put on the sideline as this expires in the next year. So that means, for the private sector, all the financing that they are interested in investing in States that are lining up to do all the due diligence that goes into these projects will be put on the sideline.

So I think we need more predictability, less political input in terms of the decision-making on which projects go forward. I think there has been a huge amount of advancement at USDOT in this regard. But there could still be more improvement on the TIFIA side. But private activity bonds continue to be really useful.

Senator STABENOW. Well, I would also mention Port Huron is another very important project for us to look at.

And, Mr. Chairman, I know we are out of time. I do not know if we have time to hear from others on this question.

The CHAIRMAN. I am calling more audibles. We are just going to keep going.

Senator STABENOW. Yes, thank you.

The CHAIRMAN. Senator Carper is next, and, colleagues, I think with a little luck, depending on when the vote starts, we can go, we can come back. But I know this is a subject that interests lots of Senators. Senator Carper?

Senator CARPER. Thanks, Mr. Chairman. Thanks to all of you for joining us today and for your thoughtful comments and your willingness to respond to our questions. I spent a lot of my life in Virginia as a kid, growing up in Danville and Roanoke. Our son went to William and Mary, my youngest son, so, Mr. Layne, I am going to pick on you, going back to my roots.

You described in your testimony how Virginia has recently overhauled its entire transportation funding system, and your State has also been a leader in developing innovative financing tools and public-private partnerships. In your opinion, can we replace Federal formula grant funding for transportation with financing tools and public-private partnerships?

Mr. LAYNE. No. In the State of Virginia, about 15 percent of our projects would qualify as P3s. It is basically a procurement method. It is about sharing risk with our private partners, and that risk is over a continuum. And, of course, the private partners want to be paid for that risk.

So you have to take into account public policy in addition to determining what is a P3—as I said, about 15 percent, the larger projects. But I would point out that in every one of those projects, besides private equity and expertise, there was a host of not only State but Federal additional funds put in. Only about 10 percent of the project really was private equity and expertise.

So these projects would not come forward without TIFIA loans, low-cost financing, and State participation. So it is not a substitute. It is a powerful procurement tool, though, when the project meets those criteria.

One other point on that is, to think that these private partners do not come back time and time again once the deal is done, when things do not go well, is just not accurate. It is a partnership, and so it is a continuing—because these are complex projects, their negotiations go on and on. So, when you look at the risk, you have to make sure you are considering what the public policy is and what the risk is to the taxpayers ultimately in the transaction.

Senator CARPER. Good. Thank you.

Let me just ask for a show of hands. Do any of you on our panel think that financing tools are a substitute for program funding? If you do, would you raise your hand? [Mr. Edwards raised his hand.] Thank you.

I am going to continue to pick on you, Mr. Layne, if you do not mind, but would you just take a moment and tell us how the Federal Government can best support Virginia in achieving the mix of transportation modes that you have prioritized in your State.

Mr. LAYNE. Well, there are two things that the Federal Government can do. Number one is to be a reliable funding partner. I agree with Mr. Dhru that the uncertainty in this process makes transportation funding more difficult. We work closely with the private industry in the Commonwealth of Virginia about letting contracts, and not having certainty costs us additional monies as we have to stop and start projects. So being a reliable partner would be number one.

And then, number two, certainly the BRIDGE Act, those financing tools, those innovative things, are very helpful to help us leverage our money. So we would encourage the passage of things like that in order to be able to continue to leverage monies from all sources.

Senator CARPER. What about freight investments?

Mr. LAYNE. Yes, sir, freight——

Senator CARPER. When it comes to freight, what are Virginia's priorities? Are they mainly on the highways? Or are there other projects that would offer shared benefits for freight travel on the highway system?

Mr. LAYNE. Certainly, particularly in the Port of Virginia, freight is very important to us, the efficient movement into and out of our port to other parts of the Commonwealth and the east coast. We use State rail enhancement funds to help private parties dealing with more efficient movement of freight. Obviously we have programs to help get freight off the roads to reduce congestion. We have barges that go between the Port of Virginia and the Port of Richmond.

So we look closely, and the major component of whether or not we decide to help with freight is if we get the freight off the highways to help reduce congestion. That is the highest scoring in there.

Senator CARPER. In my State, if Congress does not act to stabilize the Highway Trust Fund, we would see about half of our transportation budget disappear. What would be the impact in Virginia if we failed to find revenues to support the program through the next several years?

Mr. LAYNE. Senator, it would be very similar. Over half of our construction budget comes from the Federal Government. Projects like 149 bridges, 44 smaller transit systems, more than 300 projects—just mainly bread-and-butter construction—175 transit vehicles would not be bought, and 2,000 lane miles of pavement would not be done.

And I would like to point out here that Virginia is continually recognized as one of the top places to do business, and CNBC traditionally ranks us there. But several years ago, we dropped, and they specifically pointed out that our inability to fund our transportation was the reason why we dropped. And that was a very big impetus on why this funding of transportation got done last year, because, if we are going to be open for business, we have to have an efficient transportation system.

Senator CARPER. Thank you.

The CHAIRMAN. Colleagues, if we are lucky, we can get Senator Warner and Senator Casey in before the vote. I am going to run over and vote, and you two, if you both take your 5 minutes, I will try to get right back.

Senator WARNER [presiding]. Thank you, Mr. Chairman. I would note for the record that Virginia was still ranked number one for business when a certain Governor was there. [Laughter.]

Senator Carper, I would be happy to go into great detail about Virginia's innovative transportation system.

I just want to make a couple comments very briefly. Since a lot of members are not here, maybe staff could listen up. I think concerning the BRIDGE Act, which is a financing tool, I would agree with what Senator Carper and Secretary Layne have said. This does not replace our permanent funding source. You have to have dollars to leverage, and private dollars have to be paid back. But let me make a couple comments.

One, the U.S. Treasury Department right now has an office to advise pension funds how to invest in European infrastructure, but there is no such office to advise American pension funds how to invest in America. That makes no sense at all.

We actually have restrictions in FIRPTA, the Foreign Investment in Real Property Tax Act, that prevent foreign pension funds from doing the kind of dramatic investing in American infrastructure that is needed. And I would simply make the case for members, there are three reasons why we need to use this financing tool.

One is, you need long-term capital, the assuredness that comes with 25- to 35-year money, that you cannot find even with a fully funded highway transportation fund.

Secondly, you do need some ability through Build America Bonds, TIFIA, or through a financing authority, to have that government backstop that can lower by up to 200 basis points the interest costs, and that can save hundreds of millions of dollars over a long-term project.

Third is, smaller States—Virginia is doing this, Florida, Texas. Smaller States do not have the capacity right now to figure out how to do these P3s. You need to have that expertise in a single place, and, as Secretary Layne has mentioned, if you do not have that expertise to go toe-to-toe with Wall Street, you get snookered at times.

We have highlighted the projects in Virginia that we have done well. We have not highlighted the projects that we might say "oops" on. And, if you do not have the expertise—and as good as State infrastructure banks may be, if you do not have that kind of ability to have project financing expertise at a national level to leverage States' ability, I think you are not going to come out always a winner.

So I completely concur that we have to have a permanent funding source, that P3s are not free, they are going to expect to be paid back, and they are going to expect to be paid back with an ability to make a profit. As some of the witnesses have said, the ability to perhaps leverage faster approval processes and more innovative ways to finance projects can drive down cost, but if you do not have that expertise, you cannot go in eyes wide open.

So I thank the chair in absentia for letting me do this, Secretary Layne, for your good work, and I look forward to working with all of my colleagues on trying to get this done.

There are 2 minutes left.

Senator CASEY. Thank you, Senator Warner, especially for that first commercial that you gave us. It was nice. We are grateful for your leadership on these issues in the State of Virginia and here in the Senate.

I wanted to ask, Secretary Layne, in Pennsylvania, in fiscal year 2014, we received roughly the same number that Virginia received, and I know it is difficult to precisely extrapolate the job impact, but to the extent that you can, in maybe even a broad framework, if the trust fund were to become insolvent, what would that mean to Virginia in terms of the job loss? Do you have a job impact——

Mr. LAYNE. We have done some preliminary work looking globally across the country. We think it is upwards of 60,000 or 70,000 jobs. That is just talking about if we——

Senator CASEY. Nationally?

Mr. LAYNE. Nationally. And in Virginia, it looks like it would be somewhere around 10 percent of that, and that is just a back-of-the-envelope calculation based on projects that we have going. We have some very large projects going that are dependent upon Federal reimbursement.

Senator CASEY. So certainly thousands of jobs, maybe not in the double figures.

Mr. LAYNE. Yes, sir.

Senator CASEY. So I would assume that, in our State, it would be a similar number, just at a time when in a lot of States, including Pennsylvania, the unemployment numbers have been going down. So that is not a place that we want to get to.

I wanted to ask you as well about kind of a related issue. We hear a lot about uncertainty. We heard about it on a pretty frequent basis, especially from folks in the business community, and I think it is a real threat, and I think it is kind of a clear and present danger to a lot of businesses.

The biggest uncertainty sometimes is what does not happen here. It is not some piece of legislation that is out there or action that is taken. Sometimes it is the inaction of Washington, the gridlock, the partisanship, however you describe it.

But I do think that when I talk to folks in Pennsylvania, that particular kind of uncertainty and, therefore, the holding back that takes place, can have an adverse economic impact. Is there any way for you to comment on that in terms of this case, the particular kind of uncertainty that results from our holding back—not the failure to enact a transportation bill at the Federal level, but doing what we did recently, which is a short-term extension, which will expire September 30th. So can you comment on that in terms of the business folks whom you encounter?

Mr. LAYNE. Yes, sir. As I mentioned, we have a great relationship with the private business partners in Virginia, and these projects take a long time to develop, many of them do, particularly a major bridge project that we talked about here today.

When you have uncertainty and you enter into a long-term project and you do not know if the money is coming, you will sometimes make other decisions to counteract what may be coming down there. For instance, we will look at, we have certainly looked at, what happens if the Federal Government does not give us the money, and it is pretty dire.

But the real problem is that, when you go back to talk with that partner about another project, you have lost some credibility. There is a reputational risk in that regard.

So certainly—and I know Mr. Dhru mentioned this in his comments—putting in a sustainable level that we could depend upon will certainly help our confidence in moving forward, and hopefully—Senator Warner mentioned some of the projects that potentially did not go as we planned, and that was a result of trying to make a P3 process work somewhere where it did not, when we had insufficient funds to do so.

So I think the uncertainty just puts into the process a greater risk that is not necessary.

Senator CASEY. I appreciate that. I now have to go to vote, and I know for this time the committee will be in a short recess.

[Whereupon, at 11:31 a.m., the hearing was recessed, reconvening at 11:41 a.m.]

The CHAIRMAN. The Finance Committee will come to order, and our patient and thoughtful friend, Senator Isakson, is at his post, and let us recognize him.

Senator ISAKSON. Thank you, Mr. Chairman.

Dr. Kile, you made reference in your testimony to vehicle miles traveled, I think, as one source of potential future revenue. Is that correct?

Dr. KILE. Yes.

Senator ISAKSON. Was there not a test—and I believe it was the State of Oregon. Did they not do a test on vehicle miles traveled?

Dr. KILE. Yes, that is my understanding, that Oregon does have an experiment.

Senator ISAKSON. Do you know whether there has been a determination as to whether it is going to be successful or not?

Dr. KILE. I am not terribly knowledgeable about the specifics of that program or whether it has been a success. But that is an alternative to the gasoline tax that fits with the user-pays principle of financing highway use.

Senator ISAKSON. And as we expand miles-per-gallon in terms of our vehicles and the Federal CAFE standards, we are buying less gasoline, but we are using more highways, and we have to find ways to fill that gap.

Dr. KILE. That is correct.
Senator ISAKSON. And that is one of the ways to do it.
Dr. KILE. That is an option, yes.
Senator ISAKSON. Mr. Layne, I want to make sure I understand your wholesale sales tax. You converted this year to a wholesale sales tax on gasoline and diesel fuel.
Mr. LAYNE. Yes, sir.
Senator ISAKSON. Is that a certain number of cents per gallon, or is it a percent per gallon?
Mr. LAYNE. It is a percent per gallon. We used to be on a cents per gallon tax, and the point, Senator, is that that was a declining revenue source because it was based simply on the number of gallons being purchased, not on the wholesale value. So it is now a 3.5-percent tax at the wholesale level with the caveat that there is also a floor. And thankfully that floor is in place, because gasoline today is 60 cents less per wholesale gallon than it was when the legislation went in.
Senator ISAKSON. Well, that was going to be part of my question. How did you protect yourself on the downside? And how did you protect the consumer on the upside?
Mr. LAYNE. On the downside, there was a floor. But the theory on the upside was that gas prices would rise with the economy, and, therefore, this particular vehicle would participate on that upside. We would change from being a static or declining revenue source to one that would expand with economic activity.
Senator ISAKSON. So you have a 3.5-percent sales tax on wholesale sales of diesel and gasoline.
Mr. LAYNE. Yes, sir—not diesel. Diesel I believe is——
Senator ISAKSON. On gasoline.
Mr. LAYNE [continuing]. Six percent. Yes, sir.
Senator ISAKSON. What was the percent—what was the cents per gallon tax that you used to have?
Mr. LAYNE. It was 17.5 cents per gallon.
Senator ISAKSON. So you substituted 17.5 cents per gallon for 3.5 percent of the retail—or the wholesale——
Mr. LAYNE. Wholesale price, yes, sir. And it is still collected the same way it was before, so there was no more additional administrative burden put on the system.
Senator ISAKSON. Are you the one who pulled that off?
Mr. LAYNE. No, sir. I was an advocate for it, but it was actually the McDonnell administration and working across with the other side, the Democrats. I would say, Senator, it was a compromise in which a lot of people did not like certain particular provisions, but in total, two-thirds of both the Houses passed it. So it got very good bipartisan support.
Senator ISAKSON. It really solved some big problems. It was a good solution.
Mr. LAYNE. Yes, sir.
Senator ISAKSON. Mr. Edwards, I take it from your testimony you were pointing out the losers and the winners in terms of redistribution of the Federal gas tax to donor States versus recipient States. There was a proposal when I was on the House Transportation Committee about 10 years ago that was talked about, where the Federal Government would let the States keep the Federal tax that

was levied and administer all of it at the State level. Are you a proponent of something like that?

Mr. EDWARDS. There is actually a proposal now, I think by Senator Lee on the Senate side, to reduce the Federal gas tax and Federal spending, the idea being that States could fill that gap however they want with their own gas tax increases. I mean, there is nothing preventing any State now from raising the gas taxes or doing something different and innovative like Virginia has done, and I think that makes sense.

I think to the layman out there, you know, they pay their gas tax at the pump. It goes to Washington, and some of it then comes sprinkling back to the State. Why not just keep the money in the State? Yes, the Federal Government has some roles like with the interstate highway system, obviously, but generally I think it makes sense to a lot of people, when they think about it, why not just keep the gas tax money within the State where it is raised? States that are fast-growing like Texas and Florida and Georgia can raise money, spend it locally, and they know where the money should go efficiently.

Senator ISAKSON. You know, one of my favorite things to do at hearings is to watch body language of other witnesses while one of them is testifying. I just have to ask Mr. Layne if he would like to comment on that. [Laughter.]

Mr. LAYNE. I guess my body language gave me away, but, no, I do not agree with that. That is an unfunded mandate back to the States, and with devolution comes less dollars. We experience it when we look from the State back to the cities. I do believe it is an integrated network. Commerce does not stop, whether it is local or State or federally supplied transportation infrastructure. It supports our economy, and I think all government levels need to participate.

Senator ISAKSON. Thank you all for your testimony.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you, Senator Isakson.

We are joined by the chairman of the Commerce Committee.

Senator ROCKEFELLER. Thank you, Mr. Chairman.

This is to me one of the wonderments of the post-Egyptian pharaoh world, our sort of national illiterate, bipartisan commitment and lack of will to keep ourselves from dropping into rivers and rolling over bridges that no longer are there, blowing up our cars in potholes—you know, this kind of thing. And it is an American characteristic that you do not do anything which displeases the voters because you always have to get re-elected here. And if you have it in your head that you cannot do anything that would displease the voters, then by definition you are an anathema to every single one of you sitting there.

And I do not understand why that is. I understand part of it. It has to do with—for some it is just we do not want anything good to happen under this President because he is the wrong color. For some it is the Tea Party. For some it is just a fear of their own re-election prospects. There is nothing sadder to me than a Republican or a Democrat who does not dare do something or vote for something that he or she believes in, and we know that he or she believes in it, but they are afraid of what it might do to their close election. And so you get that kind of deer in the headlights of a car. You know they know they are not doing what they should be doing. They know that they are not doing what they should be doing. But they do not have the guts to overcome it.

So I am just going to ask one of those particularly dumb questions which will elicit hopefully furious answers from some of you.

Some have said—and this may have been asked, Mr. Chairman, and I apologize for that—that what we ought to do is just go ahead—you know, this chart on the gas tax and the Highway Trust Fund is just absolutely astounding. It is astounding. I mean, I am just trying to figure what happens on August 29th and 30th when we are scattered all over the world. You know, it will be the ultimate in misrepresenting our people if they are then dealing with a cessation of Federal projects—and there is always a Federal match of the States. They both interact, and so they start shutting stuff down. Hundreds of thousands of people get laid off if we do not take action on it. And it infuriates me at myself—at myself—why I have not been more up-front about this in previous sessions. We have all seen this coming.

So to me, things like a gas tax and, frankly, a whole range of revenue raisers are not a matter of getting elected or not getting elected, because in the long run—this is an awful thing to say—somebody getting elected or re-elected is less important than the country surviving in a structural sense. And if you have—what is it?—60 percent of our bridges——

Mr. LAYNE. Sixty-three thousand in the country——

Senator ROCKEFELLER. Yes, 63,000 are in jeopardy. I come from West Virginia, and I know every one of those bridges. Some of them are still one lane, if you can believe it. Then you have these 200,000-pound water trucks going over them so they can go help build a platform for natural gas drilling, and they cannot make a right or a left turn because they are so huge, so they just go right through people's yards. It is a study in a slow-motion spiral downwards on something so basic.

And so I am just going to ask you: some people say, well, you know, the Highway Trust Fund is a big deal, and we will find some way to do something. But let us suppose we do not. We are going to be gone during August. It is now May. That sort of equals June, getting close to July, getting close to August. The place is not going to do much legislating because of the politics of this year.

What would be the result—and I have used up all my time in asking my question and making my speech, but I feel very good about it—if, in fact, the Highway Trust Fund simply did run out of money? And how long would it take for—it is like when you have a certain kind of disease, your body just begins to shut down organ by organ. And that is what I think about when I think of the Highway Trust Fund with no money and us with no will.

So can you give me, just from your own points of view, what the consequences of this would be for our future in this country? I am going to start with you, Mr. Layne, because you and I are looking right at each other eye to eye.

Mr. LAYNE. Yes, sir, and I have mentioned this before. It would be easy and politically convenient to say that it would not be a big deal, but that is just not accurate. The consequences would be dire in the State of Virginia. We would have to redirect State money off of other projects to fulfill obligations that have already been made to us by the Federal Government. I quoted earlier that if this persisted in the next year, we would have 149 bridges that would not be replaced, 44 smaller transit systems would cease to operate, 300 projects, just bread and butter, would be stopped across the State, 170 transit vehicles would not be replaced, and more than 2,000 lane miles of pavement would not be repaired.

You know, I was in Stanton at a public hearing, and we actually had two of your residents, Senator, from West Virginia come over and petition our hearing for a road that connects our two States, a road, exactly as you said, that did not really meet the criteria for either State to really put a lot of attention to. But for those individuals living there, it was a dangerous and an unacceptable situation. So public policy would really take a significant back seat.

I used to be in the real estate business, and what I learned in that was that—as you say it is with politics, it is the same with real estate—everything is local. That is the same way with transportation. People's lives would be impacted, and that is not to overstate the obvious, but the consequences would be dire. Our transportation program would be cut in half, and that would disrupt our economy and the quality of life for our citizens.

Senator ROCKEFELLER. And the Federal funds that you are referring to—and, Mr. Chairman, I apologize. All you have to do is turn off my red button, and then you will be in good shape. These Federal funds you are talking about have already been clobbered by the sequester. You know, in West Virginia we had a situation where our Governor cut eight children's programs and then used part of that money to give the Greenbrier Hotel a gigantic tax cut. That kind of mentality scares me terribly about the future of our country. And I think I had better stop talking.

The CHAIRMAN. Well, I very much share Chairman Rockefeller's view, so I am glad that he made that point.

Senator Menendez is next.

Senator MENENDEZ. Thank you, Mr. Chairman. This is an incredibly important hearing, and I view our Nation's infrastructure as a significant sense of economic strength and a quality-of-life issue for citizens of this country. And the world-class network that we have built comes from decades of sound investment, bipartisan political leadership, and recognition that infrastructure is the backbone of our economy.

Yet for too long stagnant Federal funding has made it difficult to maintain this competitive edge. In recent years we have allowed our roads and bridges to crumble, our transit systems to deteriorate. MAP–21 maintained a flat level of funding, and certainly it appears that that funding level will not be good enough to keep the trust fund solvent even through the end of this bill.

So my plea here as a member of this committee, Mr. Chairman, and as the chairman of the Transit Subcommittee over in the Banking Committee, is that we look to be more aggressive and more long-term.

You know, until the Internet can deliver product to your home, even it needs the ability to have an infrastructure in the country that can ultimately provide the transportation system that allows product to get to market. And so I think we overlook that. And in a post-September 11th world, I can tell you from my experiences of that fateful day, multiple modes of transportation, are critical in a post-September 11th world. When the bridges were closed, when the tunnels were closed, ferry systems ultimately got people out of Lower Manhattan into New Jersey to be triaged at hospitals.

So inter-city travel, multiple modes of transportation, is not only a question of economy and quality of life, it is also, in the new paradigm in which we live, a security question as well.

So I have only seen the state of good repair backlog for our transits grow from $80 billion to $86 billion since 2010. And I know that there has been some discussion, there always is some discussion, about whether transit should be part of the highway bill. Well, the national transit systems of this country generate 10 billion—billion—trips per year. That is critical. That is critical.

And so I look forward to working with you, Mr. Chairman, and other members to get to a funding solution that is far better than what we have right now. And, as you think about innovative opportunities, I want to highlight a quote from a recent Deloitte study which examined the growing use and potential of real estate investment trusts as a funding mechanism for infrastructure projects. They noted that REITs represent a well-understood vehicle to access capital markets and allow the public to participate in owning qualifying infrastructure assets, aspects which may be attractive to both the public and private sector.

So, in addition to the critical need to reform FIRPTA rules to bolster commercial real estate in America, I think we can look at it as an aggregate investment in U.S. infrastructure.

So with that as a preface—and I am feeling just as good as Senator Rockefeller was about giving my preface—let me ask Dr. Kile two questions—actually, I am sorry, Secretary Layne. Do you believe that continuing the flat funding model that Congress used for MAP–21 is sufficient to bring roads, bridges, and transit systems up to a state of good repair?

Mr. LAYNE. No, sir. Just continuing the current investment without significantly more investment from the States or other sources will not remedy the problem. We in the State of Virginia go through a prioritization process each year. We are trying to be good stewards, obvious fiduciaries with our monies, and prioritize those projects that require the most need and return the best results to the taxpayers of Virginia, not just financially but in their quality of life and how we rank.

We have significant unmet needs, and even with this funding, with P3 projects—and I am a very, very big supporter of P3 projects—there continues to be a very big unmet need.

Senator MENENDEZ. And that is also a challenge to economic competitiveness, is it not?

Mr. LAYNE. Yes, sir. As I testified before, we believe it is the underpinning of our economy. The thing we look at is how we are supporting economic activity in addition to the things you mentioned, Senator.

Senator MENENDEZ. Now, let me ask you: many Virginians rely on WMATA, which is one of the transit agencies with a significant state of good repair backlog that makes up the $86 billion in need.

Do you believe an increase in Federal transit capital investment would help mobility and safety in your State?

Mr. LAYNE. Yes, sir, I do. The PRIIA, or the Passenger Rail Investment and Improvement Act funds, are very critical to the State. We partner with the Federal Government, particularly with WMATA. We put up 50 percent, and the Federal Government puts up 50 percent. If, in fact, those monies were not there, it would be a significant impact to that transportation system.

Senator MENENDEZ. Mr. Chairman, I have a final question for Dr. Kile here.

The CHAIRMAN. Yes.

Senator MENENDEZ. Dr. Kile, since 2008, the trust fund has been dependent on $54 billion in general fund transfers, creating uncertainty about the Federal commitment to infrastructure investment. It now appears that the funding level of MAP–21 was insufficient to even get us, as I previously said, to the 2-year window that was envisioned by Congress.

What is the impact of continued Highway Trust Fund instability on the ability of States and local communities to deliver transportation projects?

Dr. KILE. Going forward, the funding levels are $13 billion less than commitments for next year from the trust fund, and that is an amount that grows to $18 billion by the end of 2024. That would limit the ability of the Department of Transportation to pay funds to State and local governments. I cannot particularly speak to the impact on the State since I do not represent that perspective.

Senator MENENDEZ. But it would be easy to extrapolate from your statement that if you do not have the monies flowing to the States, either one of two things will have to happen: either they will have to make it up on their own or, in the absence of that, some of those projects might simply not proceed.

Dr. KILE. That is correct. If there was less spending, there would be less in total, and perhaps some of that would be made up by State and local governments.

Senator MENENDEZ. Thank you, Mr. Chairman.

The CHAIRMAN. Thank you, Senator Menendez. And we will certainly be working closely with you, as you and I have talked about. New Jersey was one of the significant users of the Build America Bonds program, so there are plenty of ideas to follow up on.

I want to pick up on Chairman Rockefeller's question, because I think it highlighted an important point. Essentially, Chairman Rockefeller, in discussing what happens, what are the consequences of inaction, Mr. Layne said that the consequences would be dire. Those are your words, not mine.

Mr. LAYNE. Yes, sir.

The CHAIRMAN. Dr. Kile, I think the number you gave us is that inaction would result in a cut of 30 percent in terms of the Federal highway program, in terms of spending. That, I think, would result in no new starts at all in 2015.

So my question is then to you, Mr. Dhru, so we can compare what our government witnesses are saying to what our private-sector witnesses are saying. It sounds to me like what we have heard from the government witnesses in terms of the real consequences of the inaction would be—to really use the parlance of the private sector, it would be a significant drag on the private economy. Is that generally accurate?

Mr. DHRU. Absolutely.

The CHAIRMAN. All right. Very good. Any——

Mr. DHRU. If I can just——

The CHAIRMAN. Go ahead, please. Yes, please.

Mr. DHRU. If I can just add to that, we were talking earlier about jobs creation, and I mentioned the $1.3 billion number. That was the $1.3 billion creating 29,000 jobs, approximately. But the impact of that also, because of the multiplier effect, is that the investment would likely add $2 billion to real economic growth per year and about $200 million in Federal deficit reduction. So the impact of these investments will be substantial.

To the earlier question that Senator Menendez had, if the status quo were maintained, we already see a $200-billion annual gap. So with the status quo, there is a $200-billion annual gap. So it is absolutely a fair way to say that this is a significant issue.

The CHAIRMAN. I very much share your view. I do think, in the interest of fairness, Mr. Edwards, did you want to say anything with respect to these kinds of assessments? You are not required by law to do it.

Mr. EDWARDS. It would be very disruptive, absolutely no doubt about it. I mean, from my point of view, it is part of the problem of everyone being too dependent on Federal aid, and we saw a similar problem with our air traffic control system during sequester. Because the air traffic control system is dependent on the Federal subsidies, you get disruptions when you folks up here cannot get together on bipartisan bills.

So, again, part of the solution, I think—Canada has a private, nonprofit corporation that runs its air traffic control, which is not dependent on the Federal budget. It runs independently, separate from the government budget. So I think those sorts of solutions are the way to go.

The CHAIRMAN. And I think, as much as anybody over the years, I have been one who has championed a significant role for the private sector around here. We have made it bipartisan. Mr. Dhru gave us some very good ideas today with respect to the private sector. The chair of the Environment and Public Works Committee, Senator Boxer, has taken a lot of flak for being willing to streamline efforts in the private sector. I just feel very strongly—and this is something we can respectfully disagree on—you also need a very significant Federal role here. You need a Federal partner, and I have heard that from Virginia, I have heard it from Oregon, we have heard it from West Virginia, we have heard it across the country.

So I want to see if my colleagues—because I asked an additional question—if Senator Hatch or Senator Carper or Senator Rockefeller want to ask an additional question, they are welcome to do so, and then we will wrap up. Do any of my colleagues want to ask anything else? Senator Hatch? Senator Carper?

Senator CARPER. I want to come back to a couple of things you mentioned and Senator Menendez just mentioned, about multiple modes. This is one of the questions I gave to Secretary Layne. I have been pushing hard as an authorizer on the Environment and

Public Works Committee, chair of the Transportation Infrastructure Subcommittee, pushing hard for us to include in our authorization bill a freight title. And one of the things I have heard repeatedly is—I do not care if it was from UPS or FedEx, I do not care whether it was from railroads, I do not care if it was from other major players in our economy—almost everybody says it is not enough just to fund highways. You have to find a way to help us move goods. And it is not just by moving them on the highways, because a lot of the goods that need to be moved do need to move on highways, but then they need to be on a barge or they need to be on a boat or they need to be on a train. And the important part is that, as we fund a transportation bill, that we also provide for the funding of these multi-modal approaches. Could somebody just elaborate on that just a little bit? I just think it is something we need to underline and put an exclamation point after. Does anybody want to speak to it?

Mr. LAYNE. I would be happy to. Again, we devote State dollars to rail enhancement funds to that very fact, to try to make this intermodal, particularly, again, around our port or around our airports. To the extent we can cut out—for instance, if we can go ship to rail, that takes trucks off the highway. But you have to have an infrastructure around it, because not everything can go on rail. Some has to go by truck, the bulk of goods. And so you have to have the infrastructure to get those trucks out of the port. And that is where the road networks come in. That is why we have made significant investments in the Hampton Roads region around the Port of Virginia.

So we do see them as related, Senator, not only from an economic standpoint but in terms of helping mitigate some of the traffic congestion and other delays that we face, particularly around these large economic generators, like airports and ports.

Senator CARPER. Ms. Barend?

Ms. BAREND. I would also just add, the Port of Miami Tunnel project, which is opening in Miami, has been a significant economic boon for that area. I had alluded to it earlier. This is a project that, but for the private sector and the innovation brought through a performance-based delivery approach, would not have moved forward. It is generating billions and billions in economic activity, and it has actually saved the State quite an amount of money in using the delivery approach.

Senator CARPER. Thanks.

Mr. Chairman, I would just like to mention in closing, a number of years ago I was trying to get to Mackinac Island in the northern part of Michigan, out in the middle of one of the Great Lakes. I left my house. I walked out to my car. I drove to the train station, the Wilmington train station. I took a train to BWI, and I walked off the train, got onto a shuttle, which took us into the terminal. I took a people mover to our gate and got on an airplane that flew to Traverse City, MI; got off there, rode a bus to a ferry, took a ferry across the water, landed in Mackinac Island, and got in a horse-drawn carriage which took us to our hotel. [Laughter.]

It worked, and it was cost-effective.

The CHAIRMAN. Trains, planes, automobiles, and horse-drawn carriages.

Senator CARPER. All of the above.

The CHAIRMAN. Wonderful. Thank you.

Senator Rockefeller had an additional question.

Senator ROCKEFELLER. Two.

The CHAIRMAN. Two.

Senator ROCKEFELLER. I just have to respond, Mr. Edwards, to this idea of, not privatizing the FAA but, you know, getting in outside groups—and I chair the committee that oversees that, and we have to fight desperately to get bills, reauthorization bills, desperately. They are growing so fast in passenger use: 700 million people went on airplanes this year; 1 billion Americans will do so in 5 to 8 years. They are filled with people who—we are not talking about pilots. We are talking about people who are mechanics, people who do logistics, people who coordinate activities, people who look out into the future, people who simply are up in the air control towers, they see two planes, both trying to land, and, you know, we have not built our modern landing system, which we have pledged that we would do, which is actually law that we do, but we have not done it.

And then I think about the situation in Virginia where—and Mark Warner was on Commerce, and I made him chairman of the Transportation Subcommittee, and I said, "But there is only one condition. You have to solve the Loudoun County problem." And he immediately appeared on the Finance Committee and was not on the Commerce Committee anymore.

But, I mean, that is so typical. In other words, you have a line, a beautiful train line that goes right on out. We have the same thing in West Virginia with roads, 4-lane roads which go, and then they stop, and then there is 15 miles of grass, and then they pick up again, because the Federal money was not there, the matching money was not there.

It is the same thing in Loudoun County. People do not want to pay in any way to support that, putting the train through the county, and Dulles is probably one of two or three of the most important airports in the entire country.

And all I am saying is that it makes people feel good to say, if we could just get the Federal Government out of this, we could do it better. The only thing is that the Federal Government can raise the revenue, which the private sector cannot do and will not do and would not do and should not do. To cooperate, yes, to partner, yes, but to be responsible for, no. The Federal Government has its role. I agree with the chairman. And there are so many examples. Corridor H is something we are very familiar with in West Virginia. That is an Appalachian regional highway thing which has been going on for 30 years. If it finished and we hooked up—Frank Wolf is no longer there, so we could probably hook up with I–66. And that would change two-thirds of the economy of the State of West Virginia, two-thirds of the State of West Virginia's land mass would be changed for the better by the economy. But, no, we do about 2 or 3 miles every 2 or 3 years, and it is just—I am sorry. And I have the ease of the fact that I am not running again. And I was just telling the chairman it makes me even madder at myself that I was not screaming and yelling earlier. When I was Governor, West Virginians were the heaviest smokers in the entire country.

We pay a terrible price for it, along with black lung. And I raised the tax on cigarettes to the point where there were no more cigarettes to buy in West Virginia. Everybody was just going to Ohio and Virginia and Kentucky and Maryland to get their cigarettes. And, you know, that was all right with me, because we got a lot of money out of that and they could not, you know, decide to kill themselves on our behalf.

So I am sort of militant about this subject, and I want to see something break loose, Mr. Chairman, either here or—we have Secretary Foxx coming in tomorrow at the Commerce Committee. Barbara and I are going to work all of this stuff together with you. And we have just got to have the money to do something, or else we are going to fade away.

The CHAIRMAN. Well said, and we are going to be doing this in a bipartisan way and in all three of those committees, and I look forward to it.

Senator Nelson has joined us.

Senator NELSON. Thank you. I am quite intrigued, Mr. Layne, by what you all did in Virginia in replacing the gas tax, and so I would like to ask Dr. Kile, if the Federal gas tax were replaced with a sales tax, do you know what approximately that would have to be to bring in the same amount of revenue? And how would you adjust that sales tax for the future so that you could have additional revenue in the future?

Dr. KILE. Senator, I am sorry, but that is not a proposal that we have yet analyzed, and I believe that the estimate would actually come from the Joint Committee on Taxation. We would be happy to work with you and your staff to explore that.

Senator NELSON. All right. I would like to do that because, you know, anything that has anything to do with taxes, makes people get apoplectic around here. And yet, what we have seen is, the gas tax was set way back in the 1990s, and those sources of revenue are just not meeting the transportation needs of the country. So I think it is very interesting that the Commonwealth of Virginia got very visionary and decided they were going to start shifting.

Would either one of you comment about the viability of a sales tax in supplying the revenue for transportation needs as opposed to the gas tax?

Mr. LAYNE. Virginia's experience is that we looked at—our gas tax was 17½ cents a gallon, and a computation was made, what would be relatively the same level of sales tax, a wholesale-level sales tax, to make that revenue-neutral in the first year, with the thought being, as gas prices increased or usage increased, economic activity increased, that that would no longer be a static tax; it would be one that would rise with economic activity.

Senator, you mentioned, and you are right, that on strictly a cents-per-gallon basis, CAFE standards are getting higher, so that is a regressive or a declining type of tax.

The one thing we did do was put a floor in to make sure it did not fall below the level that we were already getting from the 17½ cents a gallon tax, and it was good that we did that because, right now, the wholesale price of gasoline is 60 cents below where it was when the legislation went in.

So what we think we have done is put in place something that will rise with economic activity in the future, whether it is for the price of gasoline or the usage of more gasoline, so that it would be a little more indexed to inflation or economic activity.

It does not meet all our needs. In addition to that, we did raise monies in the general fund through additional sales taxes that were transferred to transportation. But the combination of those helped fill a significant gap in the Commonwealth of Virginia's funding.

But also, Senator, we continue to be big proponents of P3 projects, alternative financings like the BRIDGE Act, trying to leverage those monies into more uses for transportation across the Commonwealth. So we believe that could be the basis, but it needs to be part of a package that, when you add all the elements up— and some of them, Senator, are grants; some of them are very competitive. But we do also believe in being good stewards and making sure these projects are well-vetted.

So we understand that there is a need to be good fiduciaries, but even with that, we have a lot of unmet needs. So that has been our experience, Senator.

Senator NELSON. All right. Thank you.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you, Senator Nelson.

Senator Rockefeller?

Senator ROCKEFELLER. Just a quickie. In preparing for this, which I did 2 days ago, I think I read that the American Academy of Civil Engineers said that it is going to take $2.3 trillion over the next couple of decades to bring us, in terms of general infrastructure—that is not just roads and bridges, but the general situation—back to where we need to be. Do we not have to look at all of this with that as a prospect? Anybody. Why don't you answer that, Ms. Barend?

Ms. BAREND. Sure. To your point, this is why, you know, the Federal funds that are available continue to be quite scarce, and the need for Congress to act and to increase the funding is of the utmost importance given the need. But also I think the onus of responsibility is also on Congress and the States to figure out how we maximize this funding to the best extent possible.

The time for cost overruns and schedule delays in projects, big dig projects, we cannot afford that anymore in this country. We just simply do not have the money. So we need to maximize every dollar that is spent and make sure that we are incentivizing States and cities to use delivery approaches that really push performance. And that is really, you know, figuring out how to use the best of the private sector together with the public sector to generate these cost savings that a number of States are realizing.

Senator ROCKEFELLER. So I think it is safe for me to say then, other than Mr. Edwards—and I respect you greatly, sir—that none of you would quit your positions or run off to Canada or Nova Scotia or something in a fury if we were to raise some taxes to pay for what this country has to do? Do you think you could survive that emotional trauma and we would actually have a train that went out to Dulles airport? Because what we have now is a train that goes nowhere. It is a wonderful train, but until the Loudoun

County issue is solved, it has no use. That may be an overstatement, but it is not to me.

Mr. LAYNE. Well, the intention is, as you know, the TIFIA loan was approved, the largest in the Nation's history, to fund the extension of the Silver Line out to the airport.

Senator ROCKEFELLER. Yes.

Mr. LAYNE. Yes, sir.

Senator ROCKEFELLER. Thank you.

Thank you, Mr. Chairman.

The CHAIRMAN. Thank you, Senator Rockefeller.

I am going to give you one question for the record, Ms. Barend, particularly on the balance and interaction between tax-exempt financing and the private-sector issue, because you clearly were raising questions about how that relationship would work, particularly for the private sector. So we will get that in writing.

[The information from Ms. Barend appears in the appendix on p. 50.]

The CHAIRMAN. Here is where we are, and we are going to conscript you all into this debate in terms of how we move forward. This strikes me as a position almost akin to what Winston Churchill said many years ago about our country, and the great phrase he used is, "Americans always get it right." And then he paused in that inimitable way, and he said, "After they have tried everything else."

And my sense is, we are sort of at that position now, and we are going to be talking to you about the steps ahead, and my sense is that we are going to need something akin to an all-in strategy. We are going to need an effective government/private sector approach. We have explored some ideas about that. I am very pleased about Chairman Rockefeller's question, which I tried to build on. Mr. Layne, you have said the situation for your State would be dire. Mr. Dhru, representing the private sector—and I quote here—said that this would be a "significant drag" on the private economy. So we have gotten a strong message today from the government and from the private sector about the consequences of inaction. And I think Senator Boxer, the chair of the Environment and Public Works Committee, summed it all up, which is, failure is simply unacceptable.

So we are going to operate on that kind of theory. We will be calling on you, taking some of your nights and weekends here, as we try to deal with this promptly.

We thank you for your patience, and with that, the Finance Committee is adjourned.

[Whereupon, at 12:22 p.m., the hearing was concluded.]

APPENDIX

ADDITIONAL MATERIAL SUBMITTED FOR THE RECORD

Testimony of Samara Barend, Senior Vice President, AECOM Capital
Before the U.S. Senate Committee on Finance
Hearing on "New Routes for Funding and Financing Highways and Transit"
May 6, 2014

Chairman Wyden, Ranking Member Hatch, and Members of the Committee, it is a pleasure to be with you today. Thank you affording me the opportunity to speak with the Committee.

My name is Sam Barend, and I serve as Senior Vice President and Development Director for AECOM Capital, the investment arm of AECOM, a global engineering and construction firm with 45,000 employees and an investor and leader in public-private partnerships (PPPs). AECOM has participated in over 60% of the U.S. PPP projects delivered to date, such as the Port of Miami Tunnel, the Texas North Tarrant Expressway, and California's (George Deukmejian) Long Beach Courthouse.

Mr. Chairman, the topic you have selected for this hearing is pivotal as Congress considers an upcoming transportation reauthorization bill. I would like to recognize the leadership of your state, Oregon, in spearheading the creation of the West Coast Infrastructure Exchange, an innovative non-profit organization that brings together leaders from California, Oregon, Washington State, and the province of British Colombia to connect private capital from pension funds and other institutional investors with much-needed public infrastructure projects.

I have practically lived and breathed PPPs nonstop for the past 7 years, in roles with both the public and private sectors, so I come before you with considerable passion for this topic and understanding of the significant role the federal government can play in spurring private investment in public infrastructure.

With that said, my goal today is to convey three key messages:

First, we must expand performance-based infrastructure delivery opportunities– such as PPPs. It is essential that we stretch the limited federal and state funds we have to deliver projects faster, cheaper, and with greater long-term accountability. Second, I want to highlight the essential role federal and state funding has played and must continue playing in advancing such PPP projects. And, finally, but perhaps most importantly, we must find a way to level the investment landscape between historically low-cost tax-exempt financing and the higher-cost taxable debt and equity capital to facilitate private sector innovation in PPP projects.

Importance of Performance-Based Infrastructure
Over the past 6 years, the use of performance based PPPs has fast tracked the delivery of 16 projects, worth $18 billion, across seven States[1]. PPPs have played a crucial role in accelerating projects by eliminating the need for full, upfront public funding, leveraging future revenue streams, and eliminating multiple procurements and mobilizations. PPPs also include financial incentives and strong lender oversight to ensure projects are delivered on schedule and under budget. As an example, the Florida I-4 Managed Lanes project will be delivered 20 years sooner than if the state had utilized traditional design-bid-build delivery and tax-exempt financing[2].

In addition to accelerating delivery, PPPs have been particularly important in delivering challenging, complex projects that entail a significant degree of risk and where the potential for cost overruns and schedule delays is high. Unlike a traditional delivery approach, which includes 100% tax exempt debt financing, a PPP requires the private sector to take on substantial risks, such as fixed price and schedule certainty along with guaranteed operations and maintenance performance throughout the project lifecycle. Consequently, by shifting such key

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[1] *U.S. Transportation DBFOM Concessions, 1993-2013, Public Works Financing Newsletter, January, 2014.*
[2] *Florida Department of Transportation, Office of the Comptroller.*

risks to the private sector for the duration of the asset's performance life, states are realizing tremendous savings. For instance, the State of Florida saved approximately 50% of its expected costs, or $750 million, by delivering the Port of Miami Tunnel project under a PPP model rather than a traditionally financed and delivered approach[3].

Such savings are largely attributable to the alignment of goals that this performance-based approach achieves between the private developer and investor, and the public owner. In a PPP approach, the private sector is given greater freedom to deliver technical innovations which reduce costs. Additionally, the financial incentives inherent in a PPP project agreement provide the public owner with assurance that the next enormously over budget project will not occur on their watch. And, if a project does exceed budget or incurs schedule delays, the costs of those events are borne by the private sector. Such financial incentives are spelled out through strict performance specifications, are bid upfront, and are locked in place by a developer with its own investment capital at risk. In each of the 16 projects referenced earlier, those performance commitments included a set completion date, guaranteed price, and long-term asset condition benchmarks. If any of these standards are not met, the payments due to the private developer by the public owner is either reduced or not paid.

This sort of public sector hammer, which ensures long-term accountability, is a direct result of private risk-taking and private financing essential to PPP projects. Without the inclusion of such private finance, the ability of the public sector to incentivize long-term performance would be greatly reduced.

Role of Federal/State Funding in PPPs

Private finance can never replace the need for federal and state funding. Rather, it serves as a means of stretching very limited, but essential, public funding into results-oriented projects that achieve earlier completion coupled with enhanced accountability and performance. Each of the 16 projects referred to earlier has included an essential investment of public sector "seed capital" in order to attract private investment. In fact, the most successful projects have combined numerous sources of public and private capital such as – state highway funds, federal TEA-21 dollars, low-cost TIFIA loans, tax-advantaged Private Activity Bonds and private debt and equity. This funding and financing combination creates truly balanced PPPs that yield attractive "value for money" to the public sector.

The combination of such federal funding and financing has been utilized for high-profile new-toll-revenue projects such as Texas' North Tarrant Expressway and Virginia's I-495 Managed Lanes projects, where public investment has been effective in capping required tolls and future toll increases. In addition, there is a new wave of essential projects that have no ability to raise incremental revenue, such as Pennsylvania's new Rapid Bridge Replacement Program where a PPP is being used to replace nearly 600 short span bridges across the Commonwealth. In that case the Pennsylvania Department of Transportation is replacing existing bridges with an average age of over 80 years, with new modern bridges that will be designed and constructed within 42 months. To attract the private investment community, PennDOT is offering a series of "Availability Payments," delivered over the life of the PPP concession, and subject to reductions for insufficient performance by the private sector. Absent an appropriate balance of state and federal funding, many such projects otherwise attractive to both public and private participants, will never leave the drawing board. Clearly, the market has proven its appetite for such performance risk transfer, and daily commuters, commercial interests and state taxpayers are all enjoying the benefits of these projects.

Impact of Tax Exempt Financing on Private Investment

The role of Congress, however, does not end with just providing essential funding for highways and transit networks. Some of you may be among those questioning how the nation might access the deep pools of private capital – upwards of $250 billion according to recent reports – that is "sitting on the sidelines.[4]" Fortunately, this

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[3] *Port of Miami Tunnel Availability Pay, New Ground for PPPs, Jeffrey A. Parker Associates, November 2009.*

[4] *The Benefits of Private Investment in Infrastructure, Sphere Consulting, July 2011.*

Committee can make its single greatest impact in moving this money off the sidelines by addressing the current effect of tax exempt financing in crowding out private investment in public infrastructure.

For instance, prior to the initiation of the Private Activity Bond program under SAFETEA-LU , public sponsors considering a PPP were forced to address the inequity of 100% private capital – raised in the taxable debt and equity markets – versus the traditional low-cost tax-exempt financing available for traditionally delivered design-bid-build projects. Despite the value for money and performance advantages of the PPP methods described earlier (cost and schedule certainty, along with long-term risk transfer and life cycle cost benefits), most public officials felt compelled to choose the traditionally delivered, tax-exempt financed, project approach for fear of public backlash. This was the case even in the face of evidence that the significant cost and schedule benefits of PPPs, when weighed over the project lifecycle, can often outstrip the near-term cost of capital advantage of tax-exempt finance.

By authorizing qualified Private Activity Bonds for transportation projects through the Safe, Accountable, Efficient Transportation Equity Act: A Legacy for Users (SAFTEA-LU) legislation in 2005, Congress negated the traditional cost of capital advantage and aligned the incentives of states to undertake an innovative PPP approach for all public transportation projects. A new category of Transportation Exempt Facility Bonds was created which allowed public transportation projects to combine tax exempt financing with private financing, thereby lowering the overall cost of financing for PPP projects.

Unlike other categories of Exempt Facility Bonds, those authorized for surface transportation are for projects used by the public, and are government owned. By enabling the combination of tax-exempt financing with private financing, Exempt Facility Bonds have lowered the overall cost of projects for states and cities in advancing public-private partnership projects. For the federal government, Exempt Facility Bonds for PPP infrastructure projects are appealing because these projects are generally financed with 10-40% private financing, thereby reducing the total amount of tax exempt debt issued, and new revenue is generated from PPP projects from taxes paid by the private sector participants.

Furthermore, evidence has proven that the "multiplier effects" of delivering such projects years earlier than under traditional methods, will provide states with enhanced budget flexibility down the road as regional economic activity increases.

Since 2008, tax-exempt facility bonds have facilitated more than $16 billion in innovative transportation PPP projects in the country. And of note, every U.S. PPP transportation project that has been undertaken has utilized either TIFIA or Exempt Facility Bonds, or a combination of both[5]. Clearly these federal financing tools are key drivers of successful PPPs.

The impact of Exempt Facility Bonds is highlighted by the fact that at least 34 states have PPP enabling legislation for transportation. In comparison, the public building sector (which includes K-12 schools, hospitals and justice facilities, among other areas of "vertical construction") has no ability to utilize Exempt Facility Bonds, and has seen only one project move forward – the (George Deukmejian) Long Beach Courthouse. Many other attempts to advance PPPs for facility projects, such as a $700m state laboratory project in New York and a $400m justice complex in Austin, Texas, have been sidelined, largely due to this cost of financing issue.

The $15-billion pilot surface transportation infrastructure Exempt Facility Bond authorization will soon be exhausted, proving the value of this essential tool in spurring attractive PPPs. If this program expires, the pipeline of PPP transportation projects (currently estimated at nearly $30 billion)[6] will likely not move forward or, if they are advanced, would likely do so through a traditional, but less cost-effective, approach. The

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[5] *PPP Project Financing Leverages State Funds, Public Works Financing, April, 2014.*

[6] *Nossaman LLP Projects Database, Public Works Financing, February 2014.*

traditional approach would cost the nation much more in total cost than overall issuance of tax exempt bonds and expose public sector project sponsors to a far greater degree of cost and schedule delay risk. The Senate Finance Committee should propose that this pilot program be expanded by no less than $5 billion per year.

Conclusion

In closing, performance based PPPs have played a critical role in advancing major U.S. transportation projects. Since 2008, eight projects alone have saved over $3.2 billion[7] while generating billions more in economic activity. Time and time again this has proven true across the country in projects such as: the Denver FasTracks project which is stimulating 2,500 jobs and more than $3 billion in economic activity, the Port of Miami Tunnel project which has generated 176,000 jobs and $17 billion in economic output, and the Ohio River Bridges project which is producing 15,000 jobs annually and $87 billion in regional economic impact.

This Committee can continue this trend by ensuring the Exempt Facility Bond authorization for transportation is expanded in the upcoming transportation reauthorization. As part of this legislation, the Committee can also use this this opportunity to enable the creation of a new category of Exempt Facility Bonds for Public Buildings.

Thank you for holding this important hearing and allowing me to testify before you today.

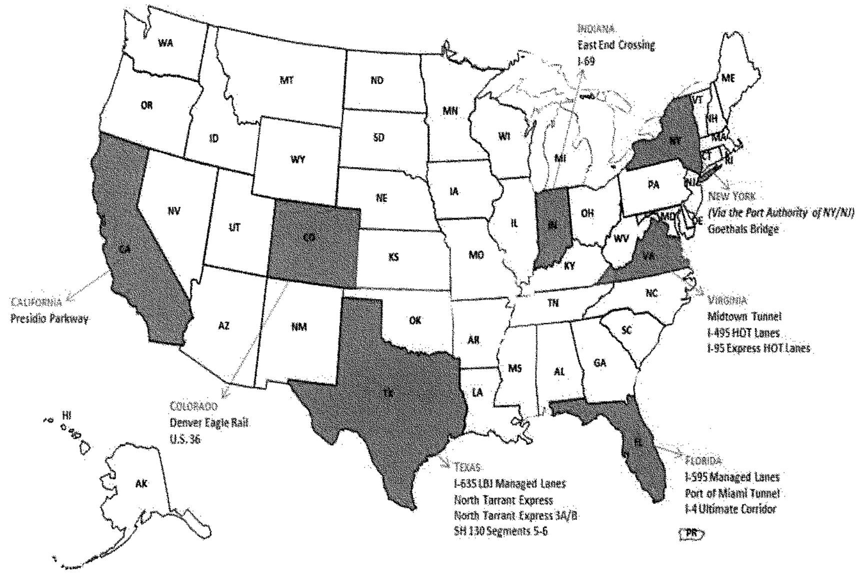
[7] *RTD FasTracks Eagle P3 Project Lessons Learned, August 31, 2011.*
Concession Agreement for I-595 Corridor Roadway Improvement Project between FDOT and I-595 Express, LLC, March 3, 2009.
Port of Miami Tunnel Availability Pay, New Ground for PPPs, Jeffrey A. Parker Associates, November 2009.
Further details on East End Crossing FC, Infrastructure Journal, April 2, 2013 (http://www.ijonline.com/Articles/83849).
Texas SH-130 Toll Road First PPP In Texas, PWF, February 2008.
Analysis of Delivery Options for the Presidio Parkway Project, CTC Project Proposal Report Submission, February 2010.
Press Release Article, Port Authority of New York & New Jersey, April 24, 2013 (http://www.panynj.gov/press-room/press-item.cfm?headLine_id=1774).
Financial Analysis and Modeling Overview, Washington Joint Transportation Committee, September 29, 2011 (http://www.leg.wa.gov/JTC/Documents/Studies/P3/Sept29_PWG/WA%20JTC%20-%20PWG%20Workshop%20-%20Financial%20Slides.pdf).

Addendum

The Advantages of PPP Project Delivery vs Traditional Methods

Project	Accelerated Delivery	Cost Savings	Job Creation/Economic Impact	Project Status
Denver FasTracks EAGLE, Colorado	Expected completion date ***11 months earlier*** than under traditional procurement methods.	***$300 million*** (14% below Owner's original estimate)	More than ***1,000 direct jobs and 1,500 indirect jobs*** created during construction, more ***than 300 permanent jobs***, and ***2,573 yearly O&M jobs***. More than ***$3 billion*** will be added into the economy over the next decade.	Commercial & Financial close reached August 2010; ***scheduled to open in 2016***.
I-595, Florida	Provided capacity improvements ***15 years earlier*** than traditional pay-as-you-go funding approach.	***$500 million*** (46% below Owner's original estimate)	Over ***275 local companies*** employed on the project and averaged over ***2,000 employees per month*** working directly on the project. Averaged over ***$17 million*** in monthly construction expenditures"	Commercial & Financial close reached March 2009; ***opened to traffic March 2014***, *and accepted final acceptance by summer 2014*.
Port of Miami Tunnel, Florida	Undetermined – likely would not have moved forward without a PPP approach.	***$750 million*** (50% below Owner's original estimate)	***968 direct employees*** have been hired since the beginning of the tunnel project, ***80% are Miami-Dade County residents***. 6,728 people have worked on the tunnel project indirectly. ***831 companies*** (subs, vendors, suppliers) have done business with the tunnel, ***442 companies are Miami-Dade County*** businesses that have shared in over ***$300 million in local contracts***.	Commercial/Financial close October 2009; expected final ***acceptance by August 2014***.
Ohio River Bridges (East End Crossing), Indiana/ Kentucky	Expected completion ***242 days*** earlier than under traditional procurement methods.	Approximately ***$228 million*** (22.7% below Owner's original estimate)	More than ***15,000 jobs over a 30-year period***. Economic impact of ***$87 billion***.	Commercial close reached December 2012; ***substantial completion expected by October 2016***.
Long Beach Courthouse, California	Completed ***30 months earlier*** than under traditional procurement methods.	***$52 million*** (15% below Owner's original estimate)	***450 construction jobs*** and between ***50 and 100 management positions*** created. Over ***6.1 million*** construction man-hours employed.	Commercial & Financial close reached December 2010; ***occupancy readiness achieved August 2013***.
Goethals Bridge, New York	Expected completion ***6 months earlier*** than under traditional procurement methods.	***$150 million*** (10% below Owner's original estimate)	More than ***2,250 direct construction jobs*** ($224 million in wages). ***$872 million*** in economic activity.	Financial close reached November 2013; ***substantial completion expected in 2018.***

U. S. Transportation Performance Based PPPs Projects From 2008 – 2014 16 Projects worth $18 billion



PPP Project Financing Leverages State Funds (4/14)

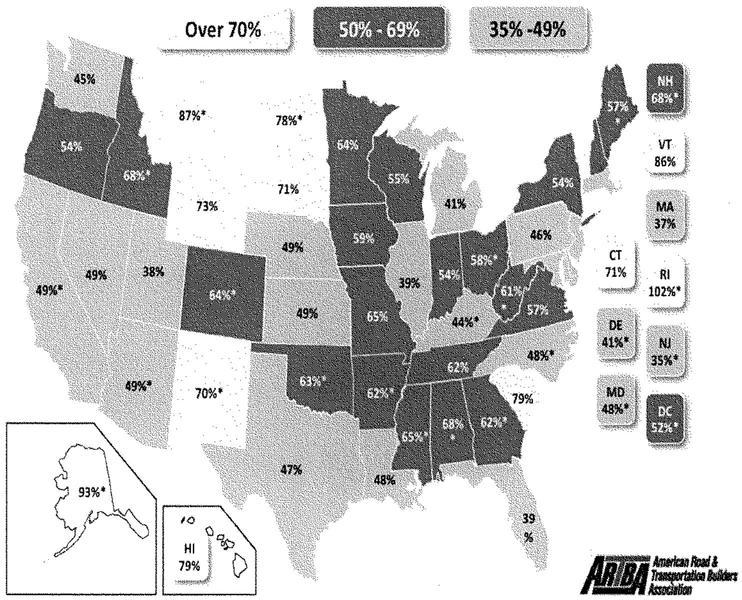
	Public Financing ($ millions)		*PPP Project Financing* ($ millions)				
	State/Local*	**TIFIA ****	**PABs**	**Bank Sr. Debt**	**Equity**	**Total**	**Close**
91 Express Lanes, CA (TR)	0	0	0	100	30	130	7/93
Dulles Greenway, VA	0	0	0	298	80	378	9/93
So. Bay Express, CA (TR)	0	140	0	400	160	700	5/03
I-495 Express, VA (TR)	409	589	589	0	350	1,937	7/08
SH 130 seg. 5+6, TX (TR)	0	430	0	686	210	1,326	3/08
I-595, FL (AP)	0	603	0	781	208	1,592	2/09
Port of Miami Tunnel, FL (AP)	100	341	0	342	80	863	10/09
No. Tarrant Express, TX (TR)	573	650	400	0	426	2,049	12/09
LBJ Expressway, TX (TR)	490	850	615	0	672	2,627	6/11
Denver Eagle rail, CO (TR)	1,312!	280	396	0	54	2,042	8/10
Jordan Bridge, VA (TR)	0	0	0	0	120	120	1/12
Midtown Tunnel, VA (TR)	731	422	675	0	272	2,100!!	4/12
Presidio Parkway, CA (AP)	0	60+90°	0	167	45	362	6/12
I-95 HOT Lanes, VA (TR)	83	300	253	0	280	916	12/12
East End Bridge, IN (AP)	392	0	677	0	82	1,151	3/13
No. Tarrant Exp. 3A/B, TX (TR)	0	531	274	0	430	1,235	9/13
Goethals Bridge, NY (TR)	456	474	457	0	113	1,500	11/13
US 36 Managed Lanes, CO (TR)	26	60	20	0	20.6	208	2/14
Total	**$4,572**	**$7,055**	**$4,356**	**$2,774**	**3,632**	**$21,233**	

(TR) Toll revenue risk financing
(AP) Availability payment financing

* excludes public development costs
** excludes capitalized interest
! Federal grant (FTA FFGA), sales tax revenue, revenue bond proceeds

Source: *Public Works Financing* (4/14)

Federal fund, on average, provide 52% of annual State DOT capital outlays for highway & bridge projects

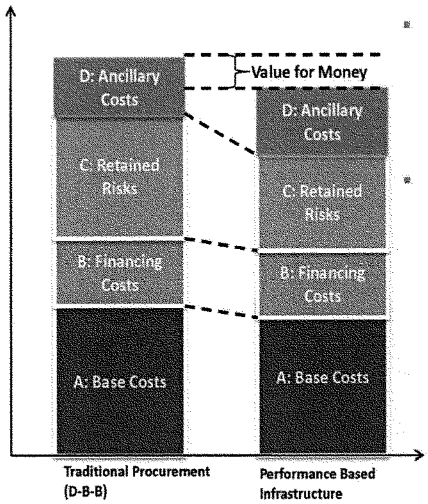


Source: ARTBA analysis of "FHWA Highway Statistics" data, total 10-year average 2001-2011 from Tables SF-1 and SF-2. The percent is the ratio of federal-aid reimbursements to the state and total state capital outlays and is indicative of the importance of the federal-aid program to state capital spending for highways and bridges. Does not include local capital spending. Federal highway reimbursements are primarily used for capital outlays, including construction, right-of-way acquisition and engineering, but are also used for debt service for GARVEE bonds.

* States that have issued GARVEE bonds before 2011.

What is Value for Money?

- An analytical tool to compare project delivery by traditional construction vs. P3 approach
- Includes total project costs including risk of a facility over the contract period
- Normally conducted by an independent firm



- Base Project costs include; construction, operations & life cycle costs
  - Competitive P3 procurement creates a driving force for innovation in construction techniques and operating efficiencies
- Retained Risk costs include additional costs incurred related to omissions in the original delivery strategy

Where is Value for Money Generated?

Drivers of savings:

- Optimal allocation of risks
- Design and construction efficiencies
- Focus on whole life cycle costs
- Integrated planning and design
- Private sector management and control

SENATE COMMITTEE ON FINANCE
"New Routes for Funding and Financing Highways and Transit"
May 6, 2014
Questions for the Record

Ms. Samara Barend, Senior Vice President and P3 Development Director, AECOM Capital, New York, NY

From Senator Ron Wyden

1. Ms. Barend, in your testimony you discussed tax exempt finance and the private sector. Can you please explain in more detail the balance and interaction between tax exempt finance and getting private capital off the sidelines?

The existence of tax-exempt financing has long crowded out opportunities in the U.S. for private investment in public infrastructure. For instance, prior to the creation of transportation exempt facility bonds, public owners considering a public-private partnership (PPP) for a highway or bridge project resisted undertaking this new approach because the financing utilizes taxable money, whereas a traditional method of delivery could utilize 100 percent tax-exempt financing, which provides a lower cost of money. Despite the value of a PPP (cost and schedule certainty, along with long-term risk transfer and life cycle cost benefits), most public officials chose a traditionally tax-exempt financed approach largely due to the public's lack of understanding that a project can have higher financing costs while still delivering much greater value through higher performance and savings through the transfer of long-term operations and maintenance costs over the long-term.

Consequently, as long as tax exempt financing exists, Congress must create an incentive to spur the use of private investment in public infrastructure. In so doing, Congress can reduce the overall use of tax exempt financing, while motivating the delivery of critical projects faster, cheaper, and with greater long-term accountability.

In 2005, Congress authorized a pilot program that created $15 billion in new Transportation Exempt Facility Bonds. This new category of transportation exempt facility bonds has allowed public transportation projects to combine tax exempt financing with private financing, thereby lowering the overall cost of financing for PPP projects. Consequently, these bonds significantly negated the cost of capital advantage of tax-exempt financing and aligned the incentives of states and cities to undertake an innovative PPP approach for public transportation projects. For the federal government, this new category of transportation exempt facility bonds is appealing because it has reduced the amount of tax exempt financing used by stimulating private equity investment in projects.

The impact of these transportation Exempt Facility Bonds is further highlighted by the fact that 38 States now have PPP enabling legislation for transportation. Since 2008, tax-exempt facility bonds have facilitated more than $16 billion in innovative transportation PPP projects in the country. And of note, every U.S. PPP transportation project that has been undertaken has utilized either TIFIA or Exempt Facility Bonds, or a combination of boths. Clearly these federal financing tools are key drivers of PPP projects.

In comparison, the public building sector (which covers schools, hospitals, justice facilities, etc) has no ability to utilize an Exempt Facility Bond and has seen only one project move forward – the Long Beach Courthouse. Many other attempts to advance PPPs for facility projects, such as a $700m State laboratory project in New York and a $400m justice complex in Austin, Texas have been sidelined due to this cost of financing issue.

The Senate Finance Committee can continue catalyzing the use of private investment in public infrastructure by ensuring the Exempt Facility Bond authorization for transportation is expanded in the upcoming transportation reauthorization. As part of this legislation, the Committee should also use this opportunity to enable the creation of a new category of Exempt Facility Bonds for Public Buildings.

From Senator Robert Menendez

1. Build America Bonds:

Ms. Barend, I was made aware of piece you wrote in 2013 in which you stated: "So in order to meet these [infrastructure] needs, not only do we need funding but we also need innovation in how we finance and deliver our projects. We need more tools in the toolbox right now."

- Do you believe that some variation of tax credit bonds, such as the former Build America Bonds program, could be an effective new tool in financing and delivering infrastructure projects?

As I noted in my testimony, the existence of tax exempt financing tends to crowd out private investment in public infrastructure. Consequently, financing tools must be created to incentivize such investment by negating the cost of capital advantage of tax-exempt financing and aligning the incentives of states and cities to undertake public-private partnership projects. The development, however, of these new financing tools should not be created simply to spur such investment but must consider the extent to which it can motivate a more innovative project delivery approach. This delivery approach should offer taxpayers increased cost savings and greater accountability from the private sector.

None of the Build America Bonds were sold as tax credit bonds but paid a direct subsidy to the bond issuer by the Federal treasury. Furthermore, Build America Bonds specifically could not be used for projects with private long-term investment. However, the creation of Exempt Facility Bonds for transportation in 2005 facilitated more than $16 billion in innovative transportation PPP projects in the country. The $15 billion allocation of Exempt Facility Bonds authorized for transportation projects in 2005 will likely expire this year. In addition, Exempt Facility Bonds require no government subsidy since this is simply enabling the use of tax exempt financing with private financing for the delivery of public infrastructure projects. And the Federal treasury benefits since the private sector pays tax on its return on its equity investment in the project.

The Senate Finance Committee can continue catalyzing the use of private investment in public infrastructure by ensuring this authorization is expanded in the upcoming transportation reauthorization. As part of this legislation, the Committee can also use this opportunity to enable the creation of a new category of Exempt Facility Bonds for Public Buildings.

- By allowing the Build America Bond program to expire, would you agree that there has been an opportunity cost to the country where we have fewer infrastructure projects either finished or underway today than if we had extended the program?

Build America Bonds proved (BABs) to be an effective tool in facilitating the delivery of critical infrastructure investment and minimizing financing costs for states and cities. Leveraging the benefits of the taxable debt market, BABs served to decrease average borrowing costs by 54 to 84 basis points compared to standard municipal bonds while saving public agency borrowers about $20 billion. From 2009 through the program's expiration in 2010, BABs financed one third of all new state and local long-term debt issuances.

A key concern with BABs, however, is that they could not be used to advance public-private partnership projects due to provisions included in the authorizing legislation concerning private participation and ownership. If the Senate Finance Committee moves to renew such bonds in the upcoming transportation legislation, language should be included that enables the use of BABs for public-private partnership infrastructure projects across sectors.

2. <u>Sustainable Water Infrastructure Act:</u>
Senator Crapo and I have worked together on legislation to exclude water and wastewater projects from private activity bond (PAB) volume caps. Seems to me that creating private sector jobs to ensure American families have reliable access to clean water would be a win for our workers, taxpayers, and the communities we live in.

- Do you see the $500 billion dollar investment funding gap for our water systems to be a crisis for American communities? And do you think expanding the Private Activity Bond program so it can fund desperately needed water projects is a good example of the public private partnerships that you believe are necessary to lead us out of the current infrastructure funding crisis we are now in?

I agree that the existing $500 billion funding gap for water infrastructure presents a real crisis confronting U.S. states and cities. Private finance, serves as a means of stretching very limited, but essential, public funding into results-oriented projects that achieve significant cost savings, coupled with enhanced accountability and performance. Absent an appropriate balance of state and federal funding, however, many such projects otherwise attractive to both public and private participants, will never leave the drawing board.

Expanding the use of Private Activity Bonds for water, by removing them from the state volume cap, would serve to open the doors more widely for private investment in public water infrastructure. Currently, there is little incentive for States and Cities to utilize an alternative delivery approach for water projects because access to PABs is difficult under the state volume cap as water projects must compete with numerous other categories that are eligible to receive allocation, such as public housing. Since the creation of a new category of transportation PABs in 2005, more than $16 billion in innovative transportation public-private partnership (PPP) projects have moved forward in the country. It could be argued that many of these projects would still be on the shelf in planning stages had PABs not existed to facilitate the PPP approach. Such development could be occurring in the water sector if similar financing tools existed to spur PPP development.

From Senator Robert Casey

1. During your testimony you mentioned the importance of additional tools to help advance transportation and infrastructure projects. You also highlighted the success of the Build America Bond program.

   Do you think that if a direct subsidy bond program similar to the Build America Bond program was implemented again but at a lower rate that it would be a useful tool for municipalities to help them finance projects and create jobs?

During my testimony I highlighted the importance of Exempt Facility Bonds, or Private Activity Bonds (PABs), as a means of catalyzing public-private partnerships for transportation and public building projects. As the track record with the transportation sector has demonstrated, such bonds have been instrumental in advancing more than $16 billion in transportation projects since 2008. The difference between PABs and Build America Bonds is that the PABs motivate state and local governments to deliver infrastructure in the most efficient, cost effective manner that provides long-term accountability to taxpayers along with guaranteed performance standards. The authorization for transportation PABs, included in the 2005 SAFETEA-LU bill, will expire in the next year and the upcoming pipeline of transportation PPP projects will likely be halted. For instance, Colorado's High Performance Transportation Enterprise is advancing the I-70 East project, estimated to cost $1.7 billion, through a PPP approach this year and will likely need PABs to move it forward.

The attractiveness of Build America Bonds resided in the high subsidy rate of 35%. If this subsidy was decreased the bonds would be much less attractive to government issuers and potential bond buyers. Furthermore, public agency borrowers may be wary of using a Build America Bonds program after the reduction of the subsidy due to sequestration.

From Senator Michael Bennet

1. The American Society of Civil Engineers estimates that the U.S. faces a gap of over $1.6 trillion between the funding we have available, and the funding we actually need just to keep our existing roads, airports and other infrastructure in good working order. We aren't even maintaining our existing assets, much less building a better, stronger America for our kids and our grandkids. And that's one reason Senator Blunt and I introduced the Partnership to Build America Act in the U.S. Senate earlier this year, which would create a national infrastructure bank, cosponsored by seven Republicans, five Democrats and one Independent. An infrastructure bank is one essential financing tool that could help us address this challenge. Does the panel agree we should be concerned about that gap between our national infrastructure needs, and our available funding? What role can something like an infrastructure bank play in addressing this gap?

America's infrastructure – from water, to roads and bridges, to our public buildings and energy distribution network – is in a dire state of underinvestment, threatening our safety, quality of life, economic growth, and competitiveness among other nations. According to the American Society of Civil Engineers, U.S. spending must increase by about $450 billion to bring our infrastructure up to a reasonable level by 2020. Continued underfunding in this arena over the coming years will cost businesses a trillion dollars in lost sales and the nation millions in lost jobs. Such underinvestment is befuddling as numerous studies have demonstrated that spending on physical infrastructure in the U.S. returns an average of about $1.92 for each $1.00 spent on nonresidential construction.

An infrastructure bank will not replace the significant need for increased funding for our transportation, energy, water, and public building needs. An infrastructure bank could be useful in consolidating talent in one place to oversee federal financing tools for infrastructure across assets. For instance, there is no clear agency, other than Treasury, to oversee financing tools for state and municipal public buildings. In addition, now that WIFIA has been created and the use of TIFIA will likely be expanded given its success, the need for a single entity with institutionalized knowledge and an ability to expedite the administration of such programs is critical. Such consolidation could save considerable money while accelerating the delivery of projects and financing.

Further, an infrastructure bank that focuses on catalyzing the delivery of major infrastructure projects through alternative, innovative approaches such as design-build, design-build-finance, and design-build-finance-operate-and maintain (otherwise known as PPP), could make a huge impact. But if this entity simply provides more cheap financing and does not incentivize alternative methods of delivery – that stretch the limited funding we have to do more with less – then the impact will be reduced. Access to low cost financing is not the main issue for states and cities grappling with unending infrastructure needs. Rather, a larger concern is how private investment can be unlocked to fast track complicated projects with less risk and more innovation.

2. As the witnesses have pointed out, the highway trust fund faces a shortfall of at least $12 billion just over the next year, and a cumulative shortfall in excess of $160 billion over the next decade. Rather than pass legislation to meet our long-term needs, Congress has chosen instead to pass a series of short term extensions and general fund transfers barely sufficient to keep the highway trust fund afloat. It's a textbook example of Washington's tendency to lurch from crisis to crisis. If the funding shortfall isn't fixed, and fast, Colorado stands to lose about $200 million in highway and transit funding just next year, massively disrupting transportation projects throughout the state. Could the panel speak a bit about the effect that this looming threat of insolvency has on a local government or private business's ability to plan for the future? And can you assess the economic benefits we could expect from a dedicated revenue stream sufficient to keep the trust fund solvent over the long-term?

If the highway trust fund is allowed to go insolvent this summer, most state and local Departments of Transportation will need to rebuild their entire five year program and defer or cancel all future projects for which there are no signed contracts. In addition, the $30 billion pipeline of public-private partnership projects would be halted. A dedicated revenue stream to fund the Highway Trust Fund would have an enormous impact in enabling states and cities to make long-term plans for advancing their major infrastructure needs.

3. Ms. Barend, as you pointed out in your written testimony, the Denver Eagle P3 is ahead of schedule, under budget, and on track to inject billions of dollars into the local economy over the next decade, creating thousands of jobs. The centerpiece of this project is a modern commuter rail line that will run from our airport to a newly renovated Denver Union station. But Congress hasn't always made these partnerships easy. Over the past two years, sequestration slashed investments in infrastructure across the country. Eagle P3, a model of public and private efficiency, with $486 million in private financing, wasn't spared. How has the unpredictability of the federal budget process, and the threat of an insolvent highway trust fund, affected prospective private investors in infrastructure projects? Is it fair to say that Congress has made your job harder?

   Alternative delivery approaches and PPPs cannot be entered into unless a local government has a revenue stream to afford the long-term payments. Budgeting for a long-term project agreement that a PPP requires, however, is extremely difficult due to the short-term infrastructure funding approach taken in Congress. In addition, the procurements for these projects take a few years so if there is a question as to whether funding will be available, private sector participants will not bid on the project. Unlike traditionally delivered projects, PPPs require considerable upfront expense and due diligence by the private sector. Consequently, due to the unpredictability of federal funding, many States and Cities will defer much needed improvements or often opt for a less cost effective approach to advance complex projects that utilizes traditional design-bid-build delivery since they can stop if necessary funding does not become available.

From Senator John Cornyn

1. *Ms. Barend* – In your testimony, you outline the important role innovative, public-private partnerships, so-called "P3s," can play in the delivery of complex transportation projects. In Texas, the TIFIA Program (Transportation Infrastructure Finance and Innovation Act) in particular has been a valuable tool for financing large, complex P3 projects. According to the Texas Department of Transportation, the $4.2 billion in TIFIA assistance provided to Texas since the program's inception has supported over $13 billion in total project funding, at a substantial savings when compared with traditional formula funding mechanisms.

   MAP-21, the most-recently enacted highway law, sought to substantially alter the Program by: 1) increasing its resources; 2) eliminating administrative discretion too-often used to advance vague and subjective priorities such as "livability;" and 3) requiring strict deadlines throughout the review process to provide certainty and transparency. However, project applicants have found that some reforms have taken too long to implement or simply been ignored.

   a. Do you think the private sector, as well as public applicants, would benefit from a strict adherence to deadlines throughout the project review process, rather than at the convenience of USDOT and the Program Office?

I agree that TIFIA has been instrumental in catalyzing PPP projects across the country, and Texas is one of the largest beneficiaries. Given TIFIA's unique ability to leverage scarce state and federal funding, while harnessing the ingenuity of the private sector, it is imperative that we ensure the program's impact is maximized and that administrative issues are quickly overcome. Strict adherence to deadlines throughout the project review process would enable states and cities to know early on whether TIFIA can be part of their procurement process and financial plan for bidders, while allowing the preferred bidder to proceed in a timely manner to financial close. Such knowledge is often key in determining affordability. Leaving this critical issue a question mark throughout the procurement process leads to uncertainty and can result in significant project delays. This lack of predictability in the TIFIA program has caused public sponsors, such as the State of Indiana (Ohio River Bridges project), to abandon the application process for fear that waiting for TIFIA could delay the project start by at least a year. Governments that include TIFIA in their PPP procurement processes (with their financial plan contingent on TIFIA financing) can have a tough time demonstrating to bidders an early TIFIA commitment from USDOT and the ability to reach financial close on a TIFIA loan shortly after a preferred bidder is announced.

b. Under MAP-21, the TIFIA-eligible project share was increased from 33% to 49%. Do you think TIFIA assistance is capable of taking on a greater share of project costs, as envisioned by Congress? If so, why have we not seen such proposals approved?

TIFIA assistance is capable of taking on 49% of the project costs. Numerous private and public sector leaders in the PPP industry were among those calling for this increase in eligible share for TIFIA. We advocated for the increase because we knew it could make a huge impact in lowering total project costs and thereby increasing affordability for states and cities. Projects such as Tappan Zee Bridge, have applied for the maximum 49% financing but have not received approval. DOT is likely adopting this position due to the significant backlog of projects awaiting TIFIA approval and the desire to spread funding to more projects. The demand for this financing grows exponentially every year while the Congressional approval for expanded funding continues to be uncertain as short-term extensions replaced a long-term authorization.

Statement of Senator Barbara Boxer
Senate Finance Committee Hearing on New Routes for Funding and Financing Highways and Transit
May 6, 2014

Thank you so much for holding this crucial hearing on the need to keep the Highway Trust Fund solvent, thus preserving 3 million jobs and thousands of businesses.

I come here in friendship to tell you that I will do everything I can to work with you in any way as you look at various ways to approach this crisis.

As Chairman of the Environment and Public Works Committee, I am glad to say that Senator Vitter and I, as well as Subcommittee Chairman Carper and Ranking Member Barrasso, have reached an agreement in principle. Our bill is fiscally sound – current funding plus inflation and using every dollar wisely.

According to both the Congressional Budget Office (CBO) and the U.S. Department of Transportation, the Highway Trust Fund will run out of funds this summer, which would be devastating for the construction industry, which has an unemployment rate of 9.4 percent. Currently there are 796,000 unemployed construction workers – enough to fill 8 Super Bowl stadiums. At the height of the recession there were 2 million unemployed construction workers and we must not go back there. Colleagues, it is in our hands.

Many states have already announced that they are postponing or canceling critical transportation projects due to the fear that Federal funds will be delayed or cut off. This will have a domino effect that will be felt throughout the economy. For example:

- According to Georgia's Department of Transportation, if federal funding is cut, "we wouldn't be able to fund any new projects. It's a potential disaster for a state that is very dependent on the federal transportation dollar."

- Iowa DOT described the impacts of going one full year without a Federal highway program: "For the Iowa DOT, this will result in cutting our anticipated construction program for fiscal year 2015 in half. This will also have an impact on local jurisdictions as they will not be able to begin any new construction projects that involve federal funding."

- Oregon DOT said it would be hit hard, because it might be forced to delay or cancel a large number of highway projects: "Basically our entire capital construction program could be affected."

States, cities, and businesses involved in transportation need the certainty from a long-term bill -- a short-term patch is not sufficient. In my Committee, we have heard of a number of bipartisan revenue options that could fund a long-term bill. Some of these options include:

- Replacing a cents-per-gallon gas tax with a sales tax on the wholesale price of gasoline and diesel, as Virginia has done. This plan was signed by a Republican Governor;

- Indexing and increasing the federal gas and diesel taxes, which have not been raised in over 20 years. This is supported by the U.S. Chamber of Commerce, AAA, and the American Trucking Association; and

- Using revenue generated from reform of the tax code.

In January, 17 governors, including those from Oregon, North Carolina, South Dakota, Colorado, Washington, Pennsylvania, and Maryland, wrote a bipartisan letter to House and Senate leaders urging Congress to stabilize the Highway Trust Fund's revenue sources for the long-term. "This situation is creating great uncertainty about the viability of our long-term transportation improvement plans," the governors wrote. "And if remedial action is not taken in a timely manner, the consequences would harm the economy of every state."

It is critical for our nation to continue investing in our aging infrastructure and we must work together to find the sweet spot for a dependable, bipartisan source of funding for the Highway Trust Fund.

You have a critical task before you, and I stand willing to help in any way to ensure that we continue to fund highway and bridge projects in a bipartisan manner. Much depends on us, and our states are looking to us to act now. Failure is not an option, and our committees must lead the way.

NATIONAL
TRANSPORTATION
COALITION

January 30th, 2014

The Honorable John Boehner
Speaker
U.S. House of Representatives
Washington, D.C. 20515

The Honorable Harry Reid
Majority Leader
U.S. Senate
Washington, D.C. 20510

The Honorable Nancy Pelosi
Democratic Leader
U.S. House of Representatives
Washington, D.C. 20515

The Honorable Mitch McConnell
Republican Leader
U.S. Senate
Washington, D.C. 20510

Dear Representatives Boehner and Pelosi and Senators Reid and McConnell:

A reliable and efficient national surface transportation network is essential for increasing U.S. economic competitiveness, creating jobs, and enhancing the quality of life for all Americans. Maintaining and updating this vital system is a shared responsibility of all levels of government. In fact, federal investment has comprised nearly half of the total funding for surface transportation improvements nationwide in recent history.

To that end, we appreciate your leadership in passing a resoundingly bipartisan reauthorization of the federal highway, public transportation and safety programs in 2012. We are very concerned, however, that the reauthorization did not provide a long-term revenue solution to address the growing shortfall between revenue going in the Highway Trust Fund and the amount necessary even to maintain current federal investment levels for these programs.

This situation is creating great uncertainty about the viability of our long-term transportation improvement plans. And if remedial action is not taken in a timely manner, the consequences would harm the economy of every state.

States across the nation are undertaking a variety of approaches to provide sufficient resources to fund our state transportation programs. We urge you to act as soon as possible to stabilize the Highway Trust Fund's revenue situation for the long-term so the successful federal-state partnership that created the Interstate Highway System can deliver the national surface transportation network our nation requires.

Sincerely,

Governor John A. Kitzhaber, MD

Governor Pat McCrory

NATIONAL
TRANSPORTATION
COALITION

Governor Neil Abercrombie

Governor Dennis Daugaard

Governor Mike Beebe

Governor Maggie Hassan

Governor Steve Bullock

Governor John Hickenlooper

Governor Lincoln Chafee

Governor Jay Inslee

Governor Tom Corbett

Governor Martin O'Malley

Governor Jack Dalrymple

Governor Patt Quinn

Governor Mark Dayton

Governor Peter Shumlin

Governor Scott Walker

Testimony of Jayan Dhru
Senior Managing Director, Corporate & Infrastructure Ratings
Standard & Poor's Ratings Services
Before the Senate Committee on Finance
New Routes for Funding and Financing Highways and Transit
May 6, 2014

Chairman Wyden, Ranking Member Hatch and members of the Committee, my name is Jay Dhru, Senior Managing Director with Standard & Poor's (S&P), a leading provider of credit ratings, research and analytics. In the infrastructure space, our teams of analysts assess risk and assign credit ratings to public-private partnership projects, or P3s, such as the I-95 Express Lanes managed lanes project in Virginia, the Goethals Bridge replacement in New York, and the Ohio River Bridges project.

Thank you for the chance to share our views on the challenges and opportunities towards addressing what we believe to be a $200 billion annual gap in funding the repair and new construction of critical U.S. infrastructure. How will America pay to build, and in many instances rebuild, the physical infrastructure needed to underpin economic growth for the future? This is one of the most important questions facing policymakers, yet one of the most intractable.

We can all agree that transportation infrastructure, reliably moving people and goods, is essential to reaching any nation's economic potential, and which faces a crisis in terms of the reality and scale in the previously mentioned funding gap. My testimony before the Committee today will outline several straightforward, private and public sector actions that would unlock substantially more private capital to shoulder some of the funding burden. More importantly, it will focus on how the needs of infrastructure can be financed through a range of investment sources, including the government and private sectors.

State of National Infrastructure

According to the Federal Reserve Bank of St. Louis, overall government spending on U.S. public infrastructure has fallen to a 20-year low of 1.7% of GDP. This is substantially lower than we see in most developed countries and more than five times lower in relative terms to what is spent in Canada. This figure underscores the conventional wisdom that the U.S. is falling behind on its infrastructure needs and that the funding gap continues to grow.

The World Economic Forum's Global Competitiveness Report for 2012-13 ranks the quality of U.S. roads as 20th in the world. The American Society of Civil Engineers rates U.S. roads and transit a 'D', our ports a 'C', and our bridges a 'C+'. The National Bridge Inventory released in March 2013 by the Federal Highway Administration indicated that 10% of the country's more than 600,000 bridges are structurally deficient.

Further, the National Surface Transportation Infrastructure Financing Commission suggests that just maintaining the existing conditions and performance of U.S. roads and transit would require a 50% increase in current funding levels. But with governments tightening their belts and banks, the traditional mainstay of private sector funding for big projects, repairing their balance sheets, this task is daunting.

At the same time, providers of public infrastructure spending – federal, state and local governments– have pulled back due to budgetary pressures. From 2008 to 2010, states cut spending as revenues declined by 12% in order to balance their budgets. In 2011 capital spending, of which transportation is the largest driver, dropped by nearly 3%. Similarly, new debt issuance by state and local governments declined by $64 billion over the last five years, more than 60% of which was used to refinance existing bonds, not to fund new projects.

The Role of Institutional Investors

While transportation funding has largely been left to the government, public funds for new projects and existing infrastructure repair are decidedly under pressure. This begs the question, who fills that void? Our analysis has found that institutional investors such as insurance companies, pension funds, and other non-bank lenders are well positioned to fill that void. In fact, infrastructure has many advantages for investors, including higher yields, the tolerance for long-term investment, and diversification. S&P has estimated that institutional investors would like to target about 4 percent of their portfolio to infrastructure, higher than their current levels of 2%. If achieved, this would provide an estimated $200 billion in additional infrastructure funding each year – nearly $3.2 trillion by 2030. We believe policymakers can take two important steps towards unlocking this investment:

1. Standardize project finance and enhance transparency, information, market visibility and predictability. The success of P3s in the United Kingdom, Canada and within certain U.S. states has grown in recent years due to just these types of reforms.
2. Minimize political and regulatory risk. Institutional investment thrives on certainty and having a clear vision of how expenditures are recovered, is vital to increased investor participation.

Public-Private Partnerships (P3)

In a P3, a group of private investors comes together to design, build and operate public infrastructure, lending their expertise and sharing in the risk of delivering transportation projects on time and within budget. Take for example the I-595 expansion project in Florida, the state's first P3 project financed with a Transportation Infrastructure Finance and Innovation Act (TIFIA) loan from the U.S. Department of Transportation, a bank facility and private equity. The $1.8 billion project was completed in 5 years, 15 years ahead of the state's schedule and at a cost of $275 million lower than state estimates.

P3 Financing

As for the public benefits of P3, governments are able to replace dangerously aging infrastructure or build new infrastructure to support economic growth much sooner than would otherwise be the case, while offering an opportunity to shift substantial risks over to private investors. It is the private investors in most P3s who absorb the risk of construction delays and cost overruns. Investors face steep penalties or even removal if not able to keep the projects on time and in operating condition.

In the U.S., P3s are still relatively new, being deployed in only a handful of states and principally for road transportation projects. Elsewhere in the world, the P3 model is being used more extensively to build schools, hospitals, public transit, court houses, prisons, and airports. According to the European Public-Private Partnership Expertise Centre, 80 European P3 transactions closed in 2013 totaling $16.3 billion.

The challenge in the U.S. is how to increase P3 accessibility. We put forward the following steps that would encourage P3 growth:

1) Establish mechanisms for the federal government to help states adopt best practices and innovation standards. Although 33 states and Puerto Rico have enabled P3, only a handful of states, notably Virginia, Texas, Florida, Indiana, and Colorado, have used them in a significant way. As an example, standardization of the P3 procurement and documentation process has been a major driver of high volumes of activity in Canada, where contract forms are consistent across provinces.

2) Expand the use of federal "magnet" and bond programs such as the TIFIA program and Private Activity Bonds (PAB). These funding sources attract private capital by lowering overall project costs and TIFIA offers favorable repayment terms.
3) Provide near-term funding certainty and predictability. A true partnership involves a long-term commitment and risk sharing on both sides of the public-private relationship. The current surface transportation and transit funding program, MAP-21, is a two-year program - an insufficient time horizon for the planning, design and construction of large-scale projects and programs that often take years to plan, build and manage.
4) Increase the transparency and availability of construction and performance data. This will enable the public and private sector to gain a better understanding of the costs and benefits to private investment in public assets from construction through the end of any given project.

In summary, we believe the actions outlined here could greatly reduce the funding gap through incentivizing and strengthening private investment. If nothing else, it is important to emphasize the importance of institutional investors in infrastructure financing.

Thank you for the opportunity to speak before you today on this important topic and I look forward to answering any questions you may have.

Senate Finance Committee Hearing
"New Routes for Funding and Financing Highways and Transit"
May 6, 2014
Questions for the Record

Mr. Jayan Dhru, Managing Director, Corporate & Infrastructure Ratings, Standard & Poor's Ratings Services, New York, NY

From Senator Michael Bennet

1. The American Society of Civil Engineers estimates that the U.S. faces a gap of over $1.6 trillion between the funding we have available, and the funding we actually need just to keep our existing roads, airports and other infrastructure in good working order. We aren't even maintaining our existing assets, much less building a better, stronger America for our kids and our grandkids. And that's one reason Senator Blunt and I introduced the Partnership to Build America Act in the U.S. Senate earlier this year, which would create a national infrastructure bank, cosponsored by seven Republicans, five Democrats and one Independent. An infrastructure bank is one essential financing tool that could help us address this challenge. Does the panel agree we should be concerned about that gap between our national infrastructure needs, and our available funding? What role can something like an infrastructure bank play in addressing this gap?

ANSWER TO QUESTION 1:
Senator Michael Bennet, thank you for your question about the role an infrastructure bank can play in addressing the infrastructure funding gap that the United States currently faces. As you are well aware, as the U.S. economy enters the fifth year of economic recovery, the infrastructure funding gap persists and is growing. Increasingly, as the United States serves as the world's leading agriculture exporter, we believe it is critically important to ensure that roads, bridges, airports, and ports are properly maintained, so that farmers can continue to deliver agricultural goods without impairment or delay. The state of disrepair of our infrastructure puts at risk a supply chain that in our view is critical to the continued economic growth of the entire U.S. economy as well as the industries that support and rely on the agriculture industries.

Additionally, we believe that the under investment in infrastructure will likely continue to push costs forward and grow in the form of deferred maintenance on aging assets, particularly as the lack of deferred maintenance causes potentially bigger problems like collapsing bridges, roads, etc. In our opinion, the United States' growing infrastructure funding deficit threatens economic competitiveness at local, state and national levels, while increasing risks to public safety and security.

An infrastructure bank is one of the many tools that can be utilized to help address the U.S. infrastructure funding gap, depending on its structure and operating practices. We believe that the following features, if incorporated, would likely stimulate private investment in public infrastructure, which could offer alternative financing sources and substantially close much of the funding gap.

a. Providing low-interest (government-issue rate) loans and standby lines of credit to lower overall project borrowing costs,

b. Providing "patient capital" by taking a first-loss position cushioning senior lenders and absorbing a project's temporary funding shortfalls if they occur,

c. Providing or at least influencing standards for loan documents and project contract language,

d. Providing project finance expertise in assisting state and local governments develop, close and monitor viable projects.

Features such as these are present in other successful federal lending programs such as the U.S. Dept. of Transportation's TIFIA, the U.S. Dept. of Agriculture's Rural Utility Service, as well as state revolving funds.

2. As the witnesses have pointed out, the highway trust fund faces a shortfall of at least $12 billion just over the next year, and a cumulative shortfall in excess of $160 billion over the next decade. Rather than pass legislation to meet our long-term needs, Congress has chosen instead to pass a series of short term extensions and general fund transfers barely sufficient to keep the highway trust fund afloat. It's a textbook example of Washington's tendency to lurch from crisis to crisis. If the funding shortfall isn't fixed, and fast, Colorado stands to lose about $200 million in highway and transit funding just next year, massively disrupting transportation projects throughout the state. Could the panel speak a bit about the effect that this looming threat of insolvency has on a local government or private business's ability to plan for the future? And can you assess the economic benefits we could expect from a dedicated revenue stream sufficient to keep the trust fund solvent over the long-term?

ANSWER TO QUESTION 2:
Senator Bennet, thank you for your question about the potential impact of an insolvent highway trust fund on local government and private businesses. From a capital market perspective, we see quantifiable value in market certainty and assurances of funding for programs like the Highway Trust Fund as well as longer time frames for reauthorization terms. We believe that maintaining funding through a dedicated revenue stream would help protect the credit quality of the highway and mass transit sectors and diminish the risk of reduction in future funding, increasing uncertainty and inability to plan for comprehensive large scale programs.

As I am sure you are aware, many local governments and businesses have to plan more than just a few months or even a year in advance, and without being able to rely on a steady funding stream, many local governments and private businesses will likely find themselves in a state of limbo where they may not be able to benefit from best pricing competition and transparency in project planning. Additionally, we believe that if the highway trust fund was reauthorized for only a short period, local governments may be unable to complete the kind of comprehensive large-scale infrastructure projects that we believe they desperately need to start planning.

We are already seeing this type of impact under MAP-21, which was only a two year authorization in contrast to earlier highway bills which ranged from four to seven years in duration. We believe that uncertainty over funding will likely dampen economic activity and this, in turn, will likely hurt transportation agencies that operate based on passenger demand. The combination of reduced or unpredictable federal support and sluggish demand would also likely result in the deferral of maintenance projects that would keep transportation infrastructure in good repair.

As discussed in the question above, deferred maintenance costs not only may create public safety and security issues, but they raise even bigger economic concerns if the lack of proper maintenance leads to total disrepair (i.e. shutting down main corridor roads or bridges in order to conduct repairs). In addition, these deferrals could also impair credit ratings if capital costs escalate or system closures cut into transactions, which ultimately puts more cost pressure on projects in the long-term.

On the positive side, our Chief U.S. Economist Beth Ann Bovino, reported in her analysis dated May 5, 2014, that investment in infrastructure yields long-term economic benefits as well as short-term benefits like job creation. She reported that large projects can enhance efficiency and allow goods and services to be transported more quickly and at lower costs -- a longer-term reward.

In her analysis, she found that a $1.3 billion investment in 2015 would likely add 29,000 jobs to the construction sector and will add even more jobs to other infrastructure-related industries. Additionally, her research indicates this investment would also likely add $2.0 billion to real economic growth and reduce the federal deficit by $200 million for that year.

Historically, the results of infrastructure spending speak for itself. In the U.S., the most telling example is the U.S. Interstate Highway System, championed by President Dwight Eisenhower, who signed the Federal Aid Highway Act of 1956. While the direct economic benefits of the system are difficult to quantify, we think it's a safe bet that the world's second-longest highway system, with an inflation-adjusted price tag of $400 billion to $500 billion, has added more to U.S. GDP in the past half-century than has been spent on it. Given that an estimated one-quarter of all vehicle miles driven in the U.S. are on the interstate system, we believe the efficiencies it provides are self-evident.

Rethinking Federal Highway and Transit Funding

Statement of Chris Edwards, Cato Institute,

to the Senate Finance Committee

May 6, 2014

Mr. Chairman and members of the committee, thank you for inviting me to testify today regarding the federal role in highway and transit funding.

Federal policymakers are considering ways to close the large funding gap in the Highway Trust Fund. One option would be to reduce spending and downsize the federal role in transportation. That approach would encourage state governments to pursue their own innovative solutions for highways and transit, such as new types of user charges, public-private partnerships, and privatization.

Federal aid programs for highways and transit have many shortcomings. Aid redistributes transportation funds between the states in ways that are unfair and inefficient. Aid can get misallocated to low-value projects, and it distorts efficient decisionmaking by state and local governments. Also, federally funded projects are known for mismanagement and cost overruns.

Many advocacy groups support increases in federal transportation spending, but a better policy approach would be to ensure that the nation's investments are financed, constructed, and managed more efficiently. My testimony discusses why we should decentralize transportation infrastructure to the extent possible.

The Good News about Highways

Congress faces important decisions regarding the Highway Trust Fund (HTF), which currently has a large gap between revenues and spending. At the same time, the nation faces challenges in upgrading its aging highways, bridges, and other infrastructure.

Nonetheless, I am skeptical of the doom and gloom from many groups that want to increase federal infrastructure spending. Here are a few salient points:

- Most of America's infrastructure is provided by the private sector, not governments. In fact, private infrastructure spending—on factories, freight rail, cell towers, pipelines, refineries, and other items—is four times larger than federal, state, and local government infrastructure spending combined.[1] Thus, a straightforward way to boost infrastructure spending across the board would be to slash our high corporate income tax rate.

- The federal gas tax rate was last raised in 1993 and its real value has eroded since then. But the gas tax rate was more than quadrupled between 1982 and 1994 from 4 cents per gallon to 18.4 cents.[2] Thus, looking at the whole period since 1982, federal gas tax revenues have risen at a robust annual average rate of 6.1 percent.[3] It is true that revenues have stagnated in recent years, but the HTF gap was caused by spending getting ahead of revenues.

- With fears about falling down bridges and the like, some pundits have portrayed our infrastructure as if it were in a deep crisis. However, some data indicate that our infrastructure is getting better. Federal Highway Administration (FHWA) data show that the nation's bridges are improving in quality.[4] Of the nation's more than 600,000 bridges, the share that is "structurally deficient" has fallen from 22 percent in 1992 to 10 percent in 2012. The share that is "functionally obsolete" has also fallen.

- The surface quality of the Interstate Highway System has steadily improved. A study by Federal Reserve economists examining FHWA data found that "since the mid-1990s, our nation's interstate highways have become indisputably smoother and less deteriorated."[5] And the economists concluded that the interstate system is "in good shape relative to its past condition."[6] Better highway conditions and other factors have led to substantial declines in highway fatality rates over the past two decades.[7]

- Urban traffic congestion seems to have peaked in 2005 and dipped since then, according to the Texas Transportation Institute.[8] Total vehicle miles traveled also peaked around the same time and has leveled out in recent years. These indicators are expected to increase in the future, but recently there has been a pause.

Despite these items of good news, it is true that America faces many transportation challenges. Highway congestion in many regions imposes a large cost on individuals and the economy. Highways and bridges are aging, and the gas tax will fall short as a highway financing mechanism in the years ahead. So it is important for policymakers to consider major changes in the way that our infrastructure is managed and financed.

Problems with Federal Transportation Spending

There are frequent calls for increased federal spending on highways and other types of infrastructure. But there are many shortcomings of federal aid that should be considered:

- **Investment is misallocated.** Federal highway aid is not based on marketplace demands. The program creates winner and loser states, and the losers are often states that have higher needs. Some states with growing populations—such as Texas and Florida—consistently get the short end of the stick.[9] A recent study by Pengyu Zhu and Jeffrey Brown looked at highway aid in recent decades and found that it has been biased against states that have larger highway systems and more highway use, thus biased against states with greater needs.[10] We see similar problems with other types of federal infrastructure spending, such as Amtrak investment.[11]

- **Federal redistribution is unfair.** Some of the loser states in the HTF, such as Texas, tend to lose year after year. In recent years, Texas has accounted for an average 9.2 percent of taxes paid into the highway account, but only 7.7 percent of funding from it.[12] The Zhu-Brown study found that the HTF tends to redistribute money from lower-income to higher-income states, which seems particularly unfair.[13] The study also found that states which are "better represented on the four key congressional committees generally benefit from redistribution" in the federal highway program.

- **Aid spending is often mismanaged**. Federal agencies do not have strong incentives to ensure that infrastructure projects are completed efficiently. Federally funded highway, airport, and air traffic control projects often have large cost overruns.[14] The Big Dig in Boston—which was two-thirds funded by the federal government—exploded in cost to five times the original estimate.[15] For state governments, federal highway aid comes with a very small state match so it seems like "free money," which encourages waste. Studies have found that privately financed infrastructure projects are less likely to have cost overruns than traditional government projects.[16]

- **Aid distorts state and local decisionmaking**. Federal aid for urban transit covers about 40 percent of capital costs, on average, but just 6 percent of operating costs.[17] That bias has tilted local governments toward expensive transit options, such as rail systems, and against more flexible and efficient bus systems.[18] High-speed rail is another federal effort to induce states to spend money on uneconomical infrastructure.[19] Without federal aid, the states would rely on their own funding for transportation, and they would make more efficient decisions based on local needs.

- **Federal rules raise costs and preempt state solutions.** Federal aid comes with strings attached. Federal Davis-Bacon labor rules, for example, raise the cost of building state and local infrastructure. At the same time, federal rules prevent states from raising revenue in an efficient manner. For example, tolling is generally banned on the Interstate Highway System, but modern electronic tolling on heavily trafficked highways would allow states to raise funds while reducing congestion.

- **Federal aid breeds bureaucracy and lobbying.** Federal aid is not a costless injection of funding to the states. Federal taxpayers pay the direct costs of the grants, but taxpayers at all levels of government are burdened by the costly bureaucracy needed to support the system. The aid system engulfs government workers in unproductive activities such as report writing and regulatory compliance. And transportation has long been one of the top areas of lobbying in Washington.[20]

While advocacy groups claim that more federal aid would boost economic growth, these sorts of problems suggest otherwise. Transportation expert Clifford Winston of the Brookings Institution recently noted that current "transportation policy is so inefficient that infrastructure spending fails to generate the large promised benefits."[21]

A mistake that advocates of transportation aid often make is to assume that common problems are automatically "national priorities" that need federal action. But as a believer in constitutional federalism, President Reagan noted the fallacy of those sorts of claims in a 1987 executive order:

> It is important to recognize the distinction between problems of national scope (which may justify federal action) and problems that are merely common to the states (which will not justify federal action because individual states, acting individually or together, can effectively deal with them).[22]

It is true, for example, that traffic congestion is a problem facing many cities across the nation. It is a common problem. But that does not mean that there has to be a top-down solution imposed from Washington.

Downsizing the Federal Role in Highways and Transit

Congress faces important decisions regarding the Highway Trust Fund (HTF). Under the Congressional Budget Office baseline, combined revenues to the highway and transit accounts will be about $39 billion in coming years, while outlays are $53 billion this year and rising after that.[23] That leaves a large gap of at least $14 billion in annual funding.

In the past, such gaps have been filled with federal fuel tax increases, and some groups are proposing that approach this time around. The Obama administration has proposed a short-term transportation funding fix based on corporate tax revenues. Others have proposed a new federal transportation tax based on vehicle miles traveled.[24]

However, increasing federal taxing and spending is the wrong way to go. That approach would exacerbate the current problems of federal aid, and it would probably make the Byzantine sprawl of top-down mandates and complex allocation formulas even worse. Also, "fixing" the HTF by raising federal revenue would miss an opportunity to empower the states and private sector to pursue their own transportation solutions.

A bipartisan commission created by Congress produced a report in 2008 called "Transportation for Tomorrow."[25] A minority statement from that report by former Secretary of Transportation Mary Peters and two other commissioners made the case for reducing the federal role in transportation, not increasing it:

> increased financial participation will come with additional procedural requirements, greater delays in project decision-making, more special interest programs and projects and unjustified federal involvement in issues that are best treated as local policy matters. In contrast, revenues collected at the state and local levels allow greater flexibility, responsiveness, and accountability to local transportation consumers. Planning and construction flexibility is much greater without the onerous

> procedural requirements and 'one size fits all' approach that come with federal funds.
>
> Accountability is also improved by state and local funds because those agencies have a stronger incentive to be accountable to their voters than to the federal government, which can often be blocked from acting through political intervention. Taxpayers are less inclined to hold state and local officials accountable for the careful spending of federal funds, in part because these funds are perceived (often incorrectly) to come from outside the state.[26]

Secretary Peters and her colleagues hit the nail on the head. Reducing federal intervention should be seen as a positive shift for transportation, not a negative one. They were right to argue that it is our ". . . federal-centric funding and regulatory structure that stifles creativity and innovation at the state and local levels."[27]

A straightforward solution to the HTF funding gap would be to reduce spending to match current revenues. State governments would be free to fill the void as they choose—by adjusting their state budgets, raising their fuel taxes, adding electronic tolling to some highways, or pursuing more privatization of their transportation systems. Many transportation experts think that the future of highway financing involves systems that charge users based on vehicle miles traveled, and the states should be free to experiment with such approaches.[28]

Congress can help the states improve their highway finances by reducing costly regulations, such as repealing Davis-Bacon rules. A 2011 Joint Economic Committee study found that these rules inflate wages on highway construction projects by an average of 22 percent, while also slowing projects and piling paperwork on contractors.[29] Congress should also lift the ban on tolling of the Interstates—which, after all, are owned by state governments.[30] The administrative costs of modern electronic tolling are a small fraction of the costs of old-fashioned toll booths.[31]

A good way to cut HTF spending to close the gap with revenues would be to end federal aid for transit and other non-highway spending. Transit formula grants from the HTF are about $9 billion annually.[32] The idea behind the Highway Revenue Act of 1956, which established the HTF, was that federal fuel taxes would be user charges to fund the building of the Interstate Highway System. But from the 1970s onward, fuel taxes have been siphoned off for non-highway purposes, particularly with the creation of the transit program in 1982. About one-quarter of HTF spending today is for non-highway purposes.[33]

Historically, citizens strongly approved of the state gas taxes that funded the early automobile roads because they could clearly see the benefits.[34] But the link between user benefits and road charges has partly broken down today. With the diversion of federal gas taxes to transit, bicycle paths, and many other non-highway uses, the public is more skeptical about gas tax increases.[35] As Mary Peters and colleagues noted: "The fact that the public has overwhelmingly opposed an increase in federal fuel taxes since 1993 represents a lack of investor confidence in current transportation policy."[36]

Solutions for America's urban transit should be found at the state, local, and private levels. Before the 1960s, most urban bus and rail services in America were privately owned and operated. But that ended with the passage of the Urban Mass Transportation Act of 1964. The Act provided subsidies only to government-owned bus and rail systems, not private systems.[37] That prompted state and local governments across the country to take over the private systems, swiftly ending more than a century of private transit investment in America's cities.

That is unfortunate because government-run bus and rail systems miss out on the innovations and cost savings that entrepreneurs could bring. Removing federal aid from the transit equation would have the beneficial effect of encouraging cities to experiment with private transit options. It would also remove current distortions that federal aid creates for local decisionmaking about transit.

After dealing with the immediate HTF funding gap, Congress should consider the approach taken in the Transportation Empowerment Act proposed by Senator Mike Lee and Representative Tom Graves. The bill would devolve most surface transportation taxing and spending to the states by cutting the federal gasoline tax from 18.4 cents to 3.7 cents over five years. The federal role in transit aid would be eliminated, and federal aid would be focused on the Interstates and roads owned by the federal government.

Such a devolution would be an opportunity to create a more efficient transportation system.[38] Transportation expert Robert Poole notes that "a key rationale for devolution is that the funding approach developed to build the Interstate system is now obsolete. That approach transfers large sums from larger and faster-growing states to smaller and slower-growing states . . . That is exactly backwards of what a real user-fee system would do—which is to generate and spend large sums in the places with huge problems of congestion and insufficient highway capacity."[39]

Privatizing Transportation

The answer to America's infrastructure challenges is not greater federal intervention, but more innovation by the states, including greater use of privatization and public-private partnerships (P3s).

There has been a worldwide trend toward infrastructure privatization, and hundreds of billions of dollars of assets have been privatized in high-income nations.[40] What spurred the trend? The Organization for Economic Cooperation and Development (OECD) says that concern about public infrastructure being misallocated and mismanaged has "led to a reconsideration of the role of the state in infrastructure provision."[41]

P3s differ from traditional government contracting by shifting various elements of design, finance, operations, maintenance, and project risks to the private sector. In a 2011 report, the OECD found a "widespread recognition" around the world of "the need for greater recourse to private sector finance" in infrastructure.[42]

Unfortunately, the United States lags behind nations such as Canada, Britain, and Australia in P3s and privatization. Few of the top firms doing transportation P3s around the world are American, and only a couple dozen projects out of hundreds are in the United States.[43]

If we were to embrace P3s and privatization, there would be a large amount of private capital available to aid state governments in upgrading their transportation infrastructure. The Congressional Research Service said "it is widely believed that there are hundreds of billions of dollars of private monies available globally for infrastructure investment, such as surface transportation."[44]

A number of U.S. states have moved ahead with P3s, including Texas, Florida, California, and Virginia.[45] In Virginia, a partnership of Transurban and Fluor built and is now operating electronic toll lanes along 14 miles of the Capitol Beltway (I-495). Virginia kicked in one-fifth of the project's $2 billion cost, and the rest was financed with debt and private equity.[46] The lanes were completed on time and on budget in 2012. A government official overseeing the project lauded the private firms for their efficient and nonbureaucratic project management, which is "not the way government works typically."[47]

Full privatization is also possible for some transportation projects. The Dulles Greenway, for example, is a privately owned toll highway in Northern Virginia completed in the mid-1990s with $350 million of private debt and equity.[48] The highway did not receive government subsidies, and today the owners even pay local property taxes and the costs to police the 14-mile artery.

Elsewhere in Virginia, FIGG Engineering Group and partners financed and constructed the $142 million South Norfolk Jordan Bridge over the Elizabeth River. The bridge opened in 2012, and its cost will be paid back to investors over time with toll revenues.[49] FIGG had approached the local government to say that they could tackle the project without any federal, state, or local government funds. FIGG raised the money, built the bridge, and has worked hard to partner with the local community with such activities as walking and jogging events across the bridge.

FIGG is an interesting company, known for its innovative bridge designs. It is expected to start construction this year on another fully private bridge—the Cline Avenue bridge in East Chicago.[50] The firm will be raising up to $250 million in private funds for the bridge, and then will pay off the cost with electronic toll revenues over time.

Hopefully, such entrepreneurial efforts can play a greater role in America's transportation future because there are many advantages of partial and full privatization. When private businesses are taking the risks and putting their profits on the line, funding is more likely to be allocated to high-return projects and completed in the most efficient manner.

Foreign experience indicates that P3s are more likely to be completed on time and on budget than traditional government projects. An Australia study compared 21 P3 projects in that country with 33 traditional projects and found: "PPPs demonstrate clearly superior cost efficiency over traditional procurement . . . PPPs provide superior performance in both the cost and time dimensions, and . . . the PPP advantage increases (in absolute terms) with the size and complexity of projects."[51]

A Canadian expert testified in April to the House that the large P3 effort in that country has "focused primarily on transferring construction and asset availability risks to the private sector concessionaire, in an attempt to stem the trend of infrastructure mega-projects being plagued by endemic cost overruns and delays."[52] So far, the effort has been a success: "Canadian PPPs have a strong reported record of projects coming in on time and on budget."[53]

At the April House hearing, the head of one of the provincial P3 agencies in Canada said that "competition and the profit motive can lead to startling results, where the winning proposal provides solutions that the public owner never contemplated. This happens over and over again."[54] He said Canadian experience shows that P3s create more discipline in the planning stages of large projects, they are more likely to be completed on time and on budget, and they generate benefits from life-cycle asset management.

On the last point, a Brookings Institution study noted that traditional government projects decouple construction from the future management of facilities, resulting in contractors having little incentive to build projects that minimize long-term costs.[55] But P3s "bundle construction, operations, and maintenance in a single contract. This provides incentives to minimize life-cycle costs."[56]

The publisher of *Public Works Financing,* William Reinhardt, notes that the "contracting approach used in P3s guarantees the construction price and project completion schedule of large, complex infrastructure projects that often befuddle state and local governments."[57] He says that P3s can experience capital cost savings of 15 to 20 percent compared to traditional government contracting.

Looking ahead at U.S. transportation challenges, "the problem is not how to raise a certain level of revenue, but rather how to develop a policy framework that will unleash efficient capital investments, empower consumers, reduce congestion, stimulate technology improvements, improve America's quality of life, and support the increased productivity of American businesses."[58]

The way to do that is to reduce hurdles to entrepreneurship and more private investment. Private infrastructure is not a new or untried idea. Urban transit services in America used to be virtually all private.[59] And before the 20th century, private turnpike companies built thousands of miles of toll roads.[60] The takeover of so much infrastructure by governments in the 20th century was a mistake, and policymakers should focus on correcting that overreach.

Thank you for holding these important hearings.

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[2] The Highway Trust Fund is supported by the 18.4 cent per gallon gasoline tax, a 24.4 cent diesel tax, and other charges on trucks and tires.

[3] Author's calculations over 1982-2012 based on data in William McBride, "Federal Gas Tax Hikes Proposed by Senator Carper," Tax Foundation, April 30, 2014.

[4] Federal Highway Administration data is available at www.fhwa.dot.gov/bridge/deficient.cfm.

[5] Jeffrey R. Campbell and Thomas N. Hubbard, "The State of Our Interstates," Federal Reserve Bank of Chicago, July 2009.

[6] Jeffrey R. Campbell and Thomas N. Hubbard, "The State of Our Interstates," Federal Reserve Bank of Chicago, July 2009.

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[8] Texas A&M Transportation Institute, "Annual Urban Mobility Report," 2012, Tables 9 and 10. Available at http://mobility.tamu.edu/ums/.

[9] Ronald Utt, "Federal Highway Program Shortchanges More Than Half the States," Heritage Foundation, April 18, 2011.

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[11] Tad DeHaven, "Privatizing Amtrak," Cato Institute, June 2010, www.downsizinggovernment.org/transportation/privatizing-amtrak.

[12] Author's calculation for 2005 to 2009 based on Table 1 in Robert S. Kirk, "The Donor-Donee State Issue in Highway Finance," Congressional Research Service, June 13, 2011.

[13] Pengyu Zhu and Jeffrey R. Brown, "Donor States and Donee States: Investigating Geographic Redistribution of the U.S. Federal-Aid Highway Program 1974-2008," Boise State University, January 1, 2013.

[14] Chris Edwards, "Government Cost Overruns," Cato Institute, March 2009, www.downsizinggovernment.org/government-cost-overruns.

[15] For background, see the *Boston Globe*'s "Easy Pass" series of reports by Raphael Lewis and Sean Murphy, www.boston.com/globe/metro/packages/bechtel.

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[17] Bipartisan Policy Center and Eno Center for Transportation, "The Consequences of Reduced Federal Transportation Investment," September 2012, p. 17.
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[19] Randal O'Toole, "High-Speed Rail," Cato Institute, June, 2010, www.downsizinggovernment.org/transportation/high-speed-rail.
[20] See "Issues" under "Lobbying" at www.opensecrets.org.
[21] Clifford Winston, "We Don't Need Another 'Bridge to Nowhere'," *Boston Globe*, April 13, 2014.
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[24] For example, the National Surface Transportation Infrastructure Financing Commission of 2009 proposed adding a federal vehicle miles tax to raise funds. See http://financecommission.dot.gov/.
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[26] National Surface Transportation Policy and Revenue Study Commission, "Transportation for Tomorrow," January 15, 2008, http://transportationfortomorrow.com. See "Minority Views."
[27] National Surface Transportation Policy and Revenue Study Commission, "Transportation for Tomorrow," January 15, 2008, http://transportationfortomorrow.com. See "Minority Views."
[28] For example, see Richard Geddes, Cornell University and American Enterprise Institute, Testimony to the House Committee on the Budget, April 24, 2013. And see Randal O'Toole, "Ending Congestion by Refinancing Highways," Cato Institute Policy Analysis no. 695, May 15, 2012.
[29] Republican staff of the Joint Economic Committee, "Highway Robbery: The Davis-Bacon Act Increases Costs, Decreases Employment," March 31, 2011.
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[32] Additional transit grants are provided from federal funds. See *Budget of the U.S. Government, Analytical Perspectives* (Washington: Government Printing Office, March 2014), Table 29.1.
[33] Testimony of Robert Poole, Reason Foundation, before the House Committee on the Budget, April 24, 2013.
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STATEMENT OF HON. ORRIN G. HATCH, RANKING MEMBER
U.S. SENATE COMMITTEE ON FINANCE HEARING OF MAY 6, 2014
NEW ROUTES FOR FUNDING AND FINANCING HIGHWAYS AND TRANSIT

WASHINGTON – U.S. Senator Orrin Hatch (R-Utah), Ranking Member of the Senate Finance Committee, today delivered the following opening statement at a committee hearing examining funding options for highways and transit:

Thank you Mr. Chairman for holding this hearing. I also want to thank the Chair of the Senate Committee on Environment and Public Works, Senator Boxer, for joining us today.

I think we can all agree that a long-term surface transportation reauthorization is an important goal, most notably because it will allow states to plan for the long-term when it comes to funding infrastructure projects. However, the old admonition that there is no such thing as a free lunch still holds, which is why this hearing is so important.

According to current estimates, the Highway Trust Fund will be unable to meet obligations sometime this summer. This is the result of what is becoming a long-standing problem when outlays from the trust fund are greater than the receipts from the dedicated federal excise taxes.

When it comes to paying for all or some of the highway bill, a number of ideas have been floated, some good, some bad. One of the ideas I've heard most often is the proposal to raise the revenues by taxing overseas earnings of U.S. global corporations. This idea – sometimes referred to as the repatriation proposal – is, in my view, not a good one.

As we all know, under current law, the U.S. defers taxes on earnings companies make overseas until the money is brought back into the country. And, because the U.S. has the highest corporate tax rate in the developed world, many companies prefer to keep money offshore for long periods of time.

Some have suggested that we change the rules of international taxation in order to immediately subject these funds to U.S. taxes so that we can use the revenue to, among other things, shore up the Highway Trust Fund.

Make no mistake, I believe we should have a robust discussion as to how our tax system should deal with overseas earnings. However, given the economic implications of any changes to this system, that discussion should take place in the context of a broader debate about tax reform, not as part of an ad hoc effort to pay for a highway bill.

I hope that today's discussion does not simply devolve into a debate about the wisdom of the repatriation proposal.

That said, we do face a near-term problem in that reimbursements to states will likely be impacted if the trust fund is not shored up in the very near future. Neither the Chairman nor I wants to see a slow-down in payments.

Let's keep in mind that, however we deal with the immediate shortfall in the Highway Trust Fund, the long-term funding problem will still loom before us.

I am more than willing to have a discussion about long-term financing options such as bond proposals and public-private partnerships, but we must remember that, in this Committee, we are dealing with a funding problem more than a financing problem with a system that was created based on a user-pays model, where certain federal excise taxes, such as the gas tax, were intended to serve as proxies for use of certain resources, such as the federal highway system.

Personally, I would like to preserve the user-pays system and prevent our federal infrastructure programs from becoming another tax extender, dependent every year or two on an infusion of cash from the general fund of the Treasury.

In addition, while it is wholly appropriate and necessary for us to thoroughly examine the revenue side of the funding equation, we should also have a complete examination of the spending side.

Since its inception in the 1950s, the Highway Trust Fund has been called upon to fund an increasingly broad scope of activities, such as bike paths and other so-called "enhancements." Additionally, there are many requirements and regulations that increase the costs of federal highway projects. So, if we're going to talk about revenues, we should talk about reforms that will address costs and outlays as well.

Mr. Chairman, I look forward to working with you to examine the short- and long-term issues we face when dealing with this important part of our infrastructure. I look forward to working with our other colleagues as well and to a robust discussion of all of these issues during today's hearing.

Thank you, once again, Mr. Chairman.

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United States Senate

COMMITTEE ON ENVIRONMENT AND PUBLIC WORKS

WASHINGTON, DC 20510-6175

May 6. 2014

Dear Chairman Wyden and Ranking Member Hatch,

Thank you Chairman Wyden and Ranking Member Hatch for holding today's hearing

Highway infrastructure is a critical component of our nation's economy and our quality of life. A first-class infrastructure is fundamental to connect people and communities, and is a critical building block in developing, sustaining, and growing an economy, something that we must all remember and prioritize as we move forward.

Putting such a structure on sound fiscal footing will restore the stability and certainty in the Highway Trust Fund, which is so vital to economic growth in this country.

I'm mindful of the comments of several Finance Committee members from the last markup on highway funding. I'd like to tell my friends on my side that I'm sensitive to the principles laid out at that time.

A bipartisan solution to this problem is the only way forward. So as we work towards such a solution, we must again adhere to the following principles:

- We must work to maintain the user-based system
- We should avoid spending down the balance of the Trust Fund and work to keep a healthy cushion to ensure against funding crises and disruption
- We should provide for as long a multiyear authorization as possible to minimize uncertainty
- And finally, we should preserve investment levels and not increase the overall tax burden on taxpayers

If we are going to be successful at putting such a structure back on a sustainable course and deliver on the economic promise of sound infrastructure investment, we must work to put trust back in the Highway Trust Fund.

Adhering to the principles I have laid out will bolster our efforts towards rebuilding that trust and finding a bipartisan solution. Again, I thank the Chairman Wyden and Ranking Member Hatch for holding this hearing.

Sincerely,

David Vitter
United States Senator

PRINTED ON RECYCLED PAPER

Congressional Budget Office

Testimony

The Status of the Highway Trust Fund and Options for Financing Highway Spending

Joseph Kile
Assistant Director for Microeconomic Studies

Before the
Committee on Finance
United States Senate

May 6, 2014

This document is embargoed until it is delivered at 10:00 a.m. (EDT) on Tuesday, May 6, 2014. The contents may not be published, transmitted, or otherwise communicated by any print, broadcast, or electronic media before that time.

CONGRESS OF THE UNITED STATES

Contents

Chairman Wyden, Senator Hatch, and Members of the Committee, thank you for the invitation to testify on issues related to the status of the Highway Trust Fund and on options for financing highway improvements and construction.

Summary

In 2013, governments at various levels spent $156 billion to build, operate, and maintain highways, and they spent $60 billion on mass transit systems. For both types of infrastructure, most of that spending was by state and local governments; about one-quarter of that total came from the federal government, mostly through the Highway Trust Fund. For several decades, the trust fund's balances were stable or growing, but more recently, annual spending for highways and transit has exceeded the amounts credited to the trust fund from taxes collected on gasoline, diesel fuel, and other transportation-related products and activities. Since 2008, in fact, lawmakers have transferred $54 billion from the U.S. Treasury's general fund to the Highway Trust Fund so that the trust fund's obligations could be met in a timely manner.

Moreover, with its current revenue sources, the Highway Trust Fund cannot support spending at the current rate. The Congressional Budget Office (CBO) estimates that, at the end of fiscal year 2014, the balance in the trust fund's highway account will fall to about $2 billion and the balance in its transit account will be only $1 billion. Spending for highways and transit will be $45 billion and $8 billion, respectively. By comparison, revenues collected for those purposes are projected to be $33 billion and $5 billion, respectively. The Department of Transportation (DOT) has indicated that it will probably need to delay payments to states at some point during the summer of 2014 in order to keep the fund's balance above zero, as required by law. Then, if nothing changes, the trust fund's balance will be insufficient to meet all of its obligations in fiscal year 2015, and it will incur steadily accumulating shortfalls in subsequent years. If lawmakers do not take action, all of the receipts credited to the fund in 2015 would be needed to meet obligations made before that year; none would be available to cover any new commitments that would be made in 2015.

Several options (or combinations of those options) could be pursued to address projected shortfalls in the Highway Trust Fund:

- *Spending on highways and transit could be reduced.* If lawmakers chose to address the projected shortfalls solely by cutting spending, no new obligations from the fund's highway account or its transit account could be made in fiscal year 2015; that would also be the case for the transit account in fiscal year 2016. Over the 2015–2024 period, the highway account would see a decrease of more than 30 percent in the authority to obligate funds, and the transit account's authority would decrease by about 65 percent, compared with CBO's baseline projections.

- *Revenues credited to the trust fund could be increased*—for example, by raising existing taxes on motor fuels or other transportation-related products and activities or by imposing new taxes on highway users, such as vehicle-miles traveled (VMT) taxes. The staff of the Joint Committee on Taxation (JCT) estimates that a one-cent increase in taxes on motor fuels—primarily gasoline and diesel fuel—would raise about $1.5 billion each year for the trust fund. If lawmakers chose to meet obligations projected for the trust fund solely by raising revenues, they would need to increase motor fuel taxes by an amount between 10 cents and 15 cents per gallon, starting in fiscal year 2015.

- *The trust fund could continue to receive supplements from the Treasury's general fund.* Lawmakers could maintain funding for surface transportation programs at the average amounts provided in recent years, but to do so they would need to transfer $18 billion in 2015 and between $13 billion and $18 billion every year thereafter through 2024. Spending resulting from such general fund transfers could be paid for by reducing other spending or by increasing broad-based taxes, or such transfers could add to deficits and thus increase federal borrowing.

The projected shortfalls in the Highway Trust Fund have generated interest in greater use of borrowing by state and local governments to finance highway projects. In particular, state and local governments (and some private entities) can use tax-preferred bonds that convey subsidies from the federal government in the form of tax exemptions, credits, or payments in lieu of credits to finance road construction. Similarly, some of those governments make use of direct loans from the federal government to finance projects.

Federal policies that encourage partnerships between the private sector and a state or local government may facilitate the provision of additional transportation infrastructure, but a review of those projects offers little evidence that public-private partnerships provide additional resources for roads except in cases in which states or localities have chosen to restrict spending through self-imposed legal constraints or budgetary limits.

Only a small number of highway projects in the United States have involved public-private partnerships with private financing. Some that have been financed through tolls have failed financially because the private-sector partners initially overestimated their revenues and as a result have been unable to fully repay their projects' debts. Perhaps as a response, projects that are still under construction rely less on tolls as a revenue source; more commonly, private partners are compensated from a state's general funds, thus limiting the private risk of not being repaid and leaving the risk of lower-than-expected revenues to the public partner.

Regardless of its source, however, borrowing is only a mechanism for making future tax revenues or user fee revenues available to pay for projects sooner; it is not a new source of revenues. Borrowing can augment the funds available for highway projects, but revenues that are committed for repaying borrowed funds will be unavailable to pay for new transportation projects or other government spending in the future.

Spending for Highways and Mass Transit

Almost all spending on highway infrastructure and transit projects in the United States is funded publicly. Although the private sector participates in building, operating, and maintaining projects, the federal government and state and local governments typically determine which projects to undertake and how much to spend on them. Despite several prominent examples, private spending on highway projects constitutes only a small fraction of the total.

Almost three-quarters of all public spending on highways is by state and local governments: In 2013, state and local governments spent $110 billion, and the federal government spent $46 billion. Almost all federal highway spending is capital spending, which is used to build and improve highways; by contrast, about 40 percent of the total for state and local governments is capital spending and 60 percent is for operations and maintenance. Real (inflation-adjusted) total spending on highways by federal, state, and local governments increased in the 1980s and 1990s, but it has fallen off since then. Public-private partnerships that involve private financing have accounted for about one-half of one percent of all spending on highways during the past 25 years. Spending on transit programs is much less than for highways but has generally grown—especially spending by state and local governments—during recent decades (see Figure 1).[1]

The Highway Trust Fund

The federal government's surface transportation programs are financed mostly through the Highway Trust Fund, an accounting mechanism in the federal budget that comprises two separate accounts, one for highways and one for mass transit. The trust fund records specific cash inflows from revenues collected through excise taxes on the sale of motor fuels, trucks and trailers, and truck tires; taxes on the use of certain kinds of vehicles; and interest credited to the fund. The Highway Trust Fund also records cash outflows for spending on designated highway and mass transit programs, mostly in the form of grants to states and local governments.

Spending from the Highway Trust Fund is controlled by two types of legislation:

- Authorization acts that provide budget authority (which allows the government to incur financial obligations that will result in immediate or future outlays of federal funds), mostly in the form of contract authority (which permits the government to enter into contracts or to incur obligations in advance of appropriations), and
- Annual appropriation acts, which customarily set limits on the amount of contract authority that can be obligated in a given year.

The Moving Ahead for Progress in the 21st Century Act of 2012 (MAP-21) is the most recent law authorizing highway and transit programs; its authorizations expire on September 30, 2014, at the end of the current fiscal year. MAP-21 provided a total of about $51 billion in contract authority for highway and transit programs in 2014; the 2014 obligation limitations total about $50 billion.

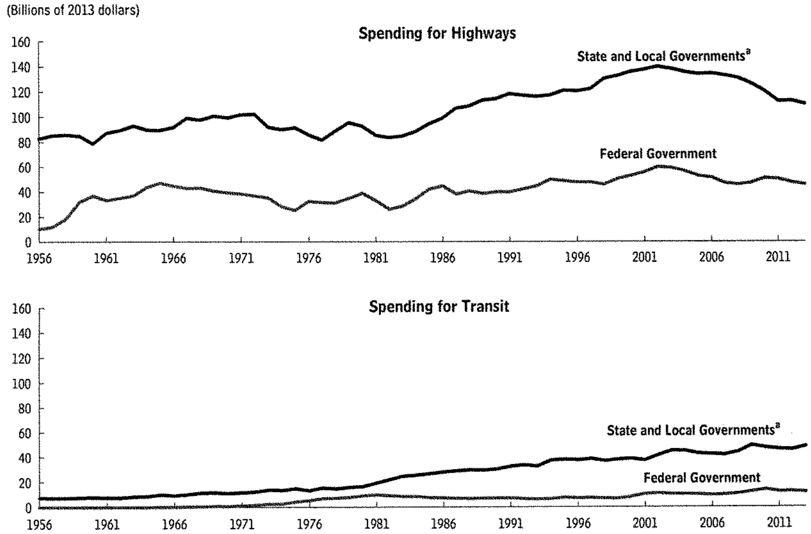
Excise taxes on motor fuels account for 87 percent of the Highway Trust Fund's revenue, mostly from the tax of 18.4 cents per gallon on gasoline and ethanol-blended

1. For more information on infrastructure spending, see Congressional Budget Office, *Public Spending on Transportation and Water Infrastructure* (November 2010), www.cbo.gov/publication/21902.

Figure 1.

Spending for Highways and Transit, by Level of Government

(Billions of 2013 dollars)



Source: Congressional Budget Office based on information from the Office of Management and Budget, the Census Bureau, the American Public Transportation Association, and the Bureau of Economic Analysis.

Note: The amount of spending for highways and transit shown differs from the amounts shown in Table 2 because some federal spending in those areas does not involve the Highway Trust Fund. In particular, the totals in Table 2 do not include about $28 billion from the American Recovery and Reinvestment Act of 2009 (ARRA) for highways or amounts periodically appropriated to assist state and local governments in rebuilding highways after natural disasters. Similarly, the transit account of the Highway Trust Fund does not fund the Capital Investment Grant program, which primarily supports new rail transit programs, or the operations of the Federal Transit Administration. Those amounts come from general funds, as did about $8 billion in spending from ARRA and $221 million from the 2013 legislation that provided funds for relief and recovery from Hurricane Sandy.

a. For 2011 through 2013, state and local spending was estimated by updating prior-year spending to account for changes in spending as reported in monthly surveys of highway and transit construction projects.

fuels.[2] Receipts from the gasoline tax now constitute almost two-thirds of the fund's total revenues (see Table 1). Under current law, all but 4.3 cents per gallon of that tax is set to expire on September 30, 2016. If that occurs, its remaining receipts will no longer be credited to the trust fund but instead will go into the Treasury's general fund. The second-largest share, accounting for about one-quarter of the fund's revenues, comes from the diesel fuel tax of 24.4 cents per gallon. The remainder comes from other taxes and from a very small amount of interest that is credited to the fund. Most of the revenue from motor fuel taxes is credited to the highway account of the trust fund, but 2.86 cents per gallon goes into the mass transit account, which receives about 13 percent of the trust fund's total revenues and interest.

2. The total gas tax is 18.4 cents per gallon. Of that, 18.3 cents is credited to the Highway Trust Fund, and 0.1 cent goes to the Leaking Underground Storage Tank Trust Fund. (The Omnibus Budget Reconciliation Act of 1993 increased the gas tax by 4.3 cents, from 14.1 cents to 18.4 cents; the added receipts were not initially credited to the trust fund but instead went into the Treasury's general fund.)

Table 1.

Estimated Revenues Credited to the Highway Trust Fund, by Source, 2014

(Billions of dollars)

	Highway Account	Transit Account	Total	Share of Total Trust Fund Revenues and Interest[a] (Percent)
Gasoline Tax	20.1	3.7	23.8	63
Diesel Tax	8.1	1.1	9.1	24
Tax on Trucks and Trailers	3.5	0	3.5	9
Use Tax on Certain Vehicles	1.0	0	1.0	3
Tire Tax on Trucks	0.4	0	0.4	1
Total	**33.2**	**4.8**	**38.0**	**100**

Source: Congressional Budget Office.

b. In 2014, CBO estimates, a small amount of interest will be credited to the Highway Trust Fund, in keeping with provisions of the Hiring Incentives to Restore Employment Act of 2010.

History of the Trust Fund's Balances. For several decades, the balances in the highway account were relatively stable or growing, but since 2001, receipts have consistently fallen below expenditures.[3] (The transit account was not established until 1983 and, until 2006, it had a different accounting treatment that makes historical comparisons inapplicable.) During the 1980s and the first half of the 1990s, balances in the highway account held steady in the vicinity of $10 billion. The most recent increase in the gasoline tax occurred in 1993, and after the Taxpayer Relief Act of 1997 redirected 4.3 cents of that tax from the general fund to the Highway Trust Fund, the unexpended balance in the highway account began to grow rapidly, reaching almost $23 billion in 2000. In 1998, the Transportation Equity Act for the 21st Century (known as TEA-21) authorized spending that was sufficient to gradually draw down those balances. As a result of that legislation and the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), which was enacted in 2005, outlays have generally exceeded revenues since 2001.

Since 2006, when certain accounting changes specified in TEA-21 took effect, spending from the transit account has grown and, since 2008, has exceeded revenues credited to the account. TEA-21 and SAFETEA-LU authorized spending from the account that has exceeded revenues credited to the fund by between $3 billion and $4 billion every year.

Because of looming shortfalls, since 2008 lawmakers have enacted legislation to transfer a total of more than $54 billion to the trust fund—mostly from the Treasury's general fund. Those intragovernmental transfers have allowed the fund to maintain a positive balance, but they did not change the amount of receipts collected by the government. Despite those transfers, at the end of fiscal year 2013, the trust fund's balances totaled only $6 billion.

Projections of Outlays and Revenues in 2014. According to CBO's estimates, the highway account will end fiscal year 2014 with a balance of $2 billion—at the end of 2013, that balance was $4 billion (see Table 2). By CBO's estimates, outlays from the highway account will total $45 billion in 2014, but revenues and interest earnings will amount to just $33 billion for the year. To bridge most of the gap, MAP-21 transferred $10 billion of general funds to the highway account in 2014 (following a $6 billion transfer in 2013).

The situation is similar for the transit account, which will end fiscal year 2014 with a balance of $1 billion, CBO estimates, down from $2 billion a year earlier. Revenues and interest earnings are projected to amount to $5 billion in 2014, but outlays are expected to total more than

3. In 2010, the trust fund saw a significant decrease in outlays because states spent funds from the general fund of the Treasury that were appropriated in the American Recovery and Reinvestment Act of 2009. That act did not require states to match federal funds or even to contribute funds to projects, and the same projects that were eligible for funding from the Highway Trust Fund were eligible for funding under the act.

Table 2.

Projections of the Highway Trust Fund's Accounts Under CBO's April 2014 Baseline

(Billions of dollars, by fiscal year)

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
						Highway Account						
Start-of-Year Balance	10	4	2	a	a	a	a	a	a	a	a	a
Revenues and Interest[b]	32	33	34	34	34	34	34	34	34	34	34	34
Intragovernmental Transfers[c]	6	10	0	0	0	0	0	0	0	0	0	0
Outlays[d]	43	45	45	45	45	46	46	46	47	48	48	49
End-of-Year Balance	4	2	a	a	a	a	a	a	a	a	a	a
						Transit Account						
Start-of-Year Balance	5	2	1	a	a	a	a	a	a	a	a	a
Revenues and Interest[b]	5	5	5	5	5	5	5	5	5	5	5	5
Intragovernmental Transfers[c]	0	2	0	0	0	0	0	0	0	0	0	0
Outlays[d]	7	8	8	8	8	9	9	9	10	10	10	10
End-of-Year Balance	2	1	a	a	a	a	a	a	a	a	a	a
Memorandum:												
Cumulative Shortfall[a]												
Highway account	n.a.	n.a.	-10	-21	-32	-43	-55	-67	-79	-92	-106	-120
Transit account	n.a.	n.a.	-2	-6	-9	-13	-18	-22	-27	-32	-38	-44

Source: Congressional Budget Office.

Note: n.a. = not applicable.

a. Beginning in fiscal year 2015, CBO projects, revenues credited to the highway and transit accounts of the Highway Trust Fund will be insufficient to meet the fund's obligations. Under current law, the trust fund cannot incur negative balances nor is it permitted to borrow to cover unmet obligations presented to the fund. Under the Deficit Control Act of 1985, however, CBO's baseline for highway spending must incorporate the assumption that obligations incurred by the Highway Trust Fund will be paid in full. The cumulative shortfalls shown here thus are estimated on the basis of spending that is consistent with obligation limitations contained in CBO's April 2014 baseline—adjusted for projected inflation—for highway and transit spending. To meet obligations as they come due, the Department of Transportation estimates, the highway account must maintain cash balances of at least $4 billion, and the transit account must maintain balances of at least $1 billion. As a result, under CBO's baseline projections, the highway account will probably have to delay some of its payments during the summer of 2014.

b. Some taxes that are credited to the Highway Trust Fund are scheduled to expire on September 30, 2016—among them the taxes on certain heavy vehicles and tires and all but 4.3 cents of the federal tax on motor fuels. Under the rules that govern CBO's baseline projections, however, these estimates reflect the assumption that all of those expiring taxes would be extended.

c. The Moving Ahead for Progress in the 21st Century Act required certain intragovernmental transfers, mostly from the U.S. Treasury's general fund, to the Highway Trust Fund. Those amounts totaled about $18 billion. CBO's baseline does not reflect an assumption that additional transfers from the general fund would occur.

d. Outlays include amounts that are transferred between the highway and transit accounts. CBO estimates that those amounts will total about $1 billion annually.

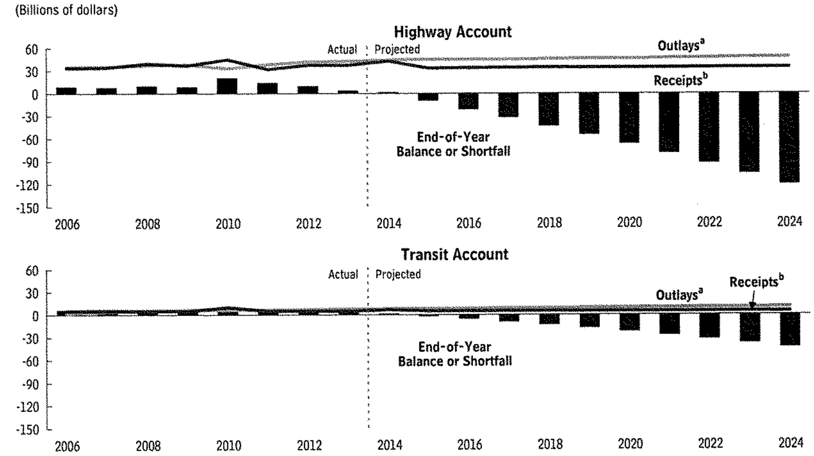
$8 billion. MAP-21 transferred $2 billion of general funds to the transit account in 2014.

Unless additional funds are provided (either through an increase in revenues or through additional transfers to the general fund), the disparity between the receipts credited to the fund and outlays from the fund will require DOT to delay its reimbursements to states for the costs of construction. CBO estimates that such a delay would probably take effect sometime during the summer of 2014 for projects funded from the highway account and sometime in the first half of 2015 for transit projects. Such a slowdown in payments occurred in 2008 when DOT announced that balances in the highway account had fallen below what it needed to reimburse states for the bills presented to the fund. Because deposits into the fund are made only twice each month, DOT has testified that it would need to delay payments if cash balances

Figure 2.

Receipts, Outlays, and Balance or Shortfall for the Highway Trust Fund Under CBO's April 2014 Baseline

(Billions of dollars)



Source: Congressional Budget Office.

Notes: Under current law, the Highway Trust Fund cannot incur negative balances nor is it permitted to borrow to cover unmet obligations presented to the fund. Under the Deficit Control Act of 1985, however, CBO's baseline for highway spending must incorporate the assumption that obligations incurred by the Highway Trust Fund will be paid in full.

a. Projections of outlays are calculated by adjusting the obligation limitations set for the current year to account for projected inflation.

b. Projections of receipts are based on market conditions, and they incorporate an assumption under CBO's April 2014 baseline that some taxes (including taxes on certain heavy vehicles and tires and all but 4.3 cents of the federal tax on motor fuels) that are credited to the Highway Trust Fund but scheduled to expire on September 30, 2016, would be extended.

The receipts line includes revenues credited to the Highway Trust Fund and intragovernmental transfers, mostly from the U.S. Treasury's general fund. Since 2008, those transfers (including amounts transferred in fiscal year 2014) have totaled about $54 billion.

fell below $4 billion in the highway account or below $1 billion in the transit account.[4]

Projections of Outlays and Revenues From 2015 Through 2024. CBO's baseline projections reflect the assumptions that expiring excise taxes would be extended and that obligations from the trust fund would grow at the rate of inflation. Under those assumptions, CBO projects, shortfalls in both accounts of the trust fund would grow steadily larger over the next decade because revenues from the excise taxes are expected to grow very little, but spending would continue to rise (see Figure 2).[5] By 2024, the cumulative shortfalls would total about

4. Department of Transportation, Office of Inspector General, *Refinements to DOT's Management of the Highway Trust Fund's Solvency Could Improve the Understanding and Accuracy of Shortfall Projections*, CR-2012-071 (March 2012), p. 22, www.oig.dot.gov/node/5736.

5. CBO constructs its baseline in accordance with provisions set forth in the Balanced Budget and Emergency Deficit Control Act of 1985 and in the Congressional Budget and Impoundment Control Act of 1974.

$120 billion for the highway account and about $44 billion for the transit account, CBO estimates.

Revenues generated by excise taxes and credited to the Highway Trust Fund are projected to rise from about $38 billion in 2014 to about $39 billion in 2024, mostly because annual increases in revenues from taxes on the use of diesel fuel and on truck sales are expected to be largely offset by annual declines in revenues from the tax on gasoline. Tax revenues from diesel fuel and truck sales are projected to increase, on average, by about 3 percent annually over the 2014–2024 period. In contrast, revenues from the tax on gasoline are projected to decline at an average annual rate of 1 percent over that period, mainly because of mandated increases in corporate average fuel economy standards.[6]

If lawmakers do not address the projected shortfalls, all revenues credited to the Highway Trust Fund in 2015 will be used to meet obligations made before that year. (Most obligations involve capital projects that take years to complete. The Federal-Aid Highway program, for example, typically spends about 25 percent of its budgetary resources in the year funds are first made available for spending; the rest is spent over the next several years.) Most of the trust fund's current obligations will therefore be met using tax revenues that have not yet been collected. At the end of 2013, for example, $66 billion in contract authority for highway programs had been obligated but not yet spent and another $28 billion was available to states but not yet obligated. As a result, if states were given no further authority to spend, another three years' worth of motor fuel taxes would need to be collected just to meet the highway account's obligations at the end of 2013 plus any new obligations from contract authority made available before 2014. Tax receipts dedicated to the highway account are projected to be about $34 billion per year over the next three years. For the transit account, collections of almost five years' worth of taxes, at about $5 billion per year, would be needed to meet current obligations and any new obligations from contract authority made available before 2014.[7]

6. For more information, see Congressional Budget Office, *How Would Proposed Fuel Economy Standards Affect the Highway Trust Fund?* (May 2012), www.cbo.gov/publication/43198.

Options for Addressing Projected Shortfalls in the Highway Trust Fund

Lawmakers have three primary options for addressing the projected shortfalls in the Highway Trust Fund:

- Reduce spending on highways and transit,
- Increase taxes dedicated to the trust fund, or
- Transfer general revenues to supplement the trust fund.

Of course, many combinations of such changes are possible.

Reduce Spending From the Trust Fund. Policymakers might want to address projected shortfalls by limiting federal spending for highways and mass transit to the amount of revenue generated by users. That reduction in spending would probably have significant negative consequences for the condition and performance of the nation's highway and mass transit infrastructure. In addition, unless some other federal spending was increased or federal taxes lowered, the reduction in federal spending would slow economic growth and employment during the next few years relative to what it would otherwise be. Over the longer term, the smaller amount of infrastructure would impose a drag on economic performance, but the smaller amount of federal debt stemming from the lower level of spending would provide an economic boost.

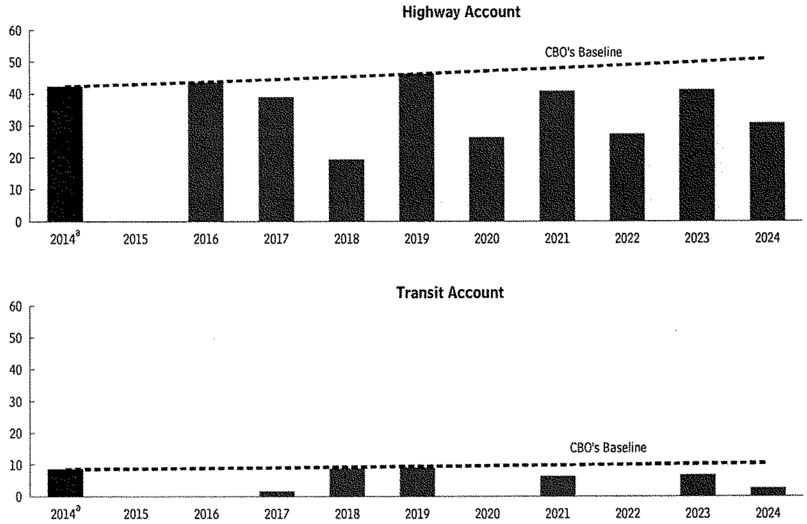
If lawmakers chose to avert projected shortfalls solely by cutting spending, then the trust fund would be unable to support any new obligations in 2015, probably significantly delaying investment in infrastructure and halting numerous transportation projects across the country. Neither the highway account nor the transit account would be able to support new obligations in 2015 because reimbursements to states for multiyear projects already under way would be expected to exceed the estimated revenue collections for that year. The highway

7. See Office of Management and Budget, *Budget of the U.S. Government, Fiscal Year 2015: Appendix* (April 2014), www.whitehouse.gov/omb/budget/Appendix. At the end of fiscal year 2013, the balance in the transit account was about $2 billion, but unspent contract authority for transit programs totaled $14 billion in obligated balances and $9 billion in unobligated amounts.

Figure 3.

Estimated New Commitments That Could Be Accommodated by the Highway Trust Fund With No Changes in Receipts

(Billions of dollars)



Source: Congressional Budget Office.

Note: The figure shows the new commitments that could be provided from the highway and transit accounts of the Highway Trust Fund as long as the minimum balance in the highway account was at least $4 billion and the minimum balance in the transit account was at least $1 billion and the obligation limitation for each account did not exceed the amounts projected in CBO's April 2014 baseline.

a. Data for 2014 represent the obligation limitations contained in the Consolidated Appropriations Act, 2014, and contract authority that is exempt from those limitations.

account would be able to support new obligations in 2016, but the transit account would not (see Figure 3). Such sudden shifts in the amount of annual spending authority would probably make program administration and planning difficult for DOT as well as for state and local grant recipients.

Over the 2015–2024 period, the highway account would see a decrease in obligational authority of more than 30 percent, relative to CBO's baseline, and such authority for the transit account would decrease by about 65 percent. For example, such a cut would reduce obligations for highway programs from current projections of about $45 billion per year, on average, to about $32 billion per year, on average, from 2015 through 2024. Similarly, such a cut would reduce obligations for transit projects from current projections of about $10 billion per year, on average, to about $4 billion per year, on average, for the 2015–2024 period.

The consequences of such reductions in federal spending could be ameliorated, at least in part, if state and local governments responded to the reduction in federal funds by increasing their own spending through some combination of raising additional revenues, shifting spending from other purposes, and borrowing.

If total funding for investment in highways and mass transit was significantly reduced, then it would be especially important to allocate the remaining funding, and to use that infrastructure, in the most effective way. Specifically, the negative consequences of a substantial reduction in funding could be partly alleviated if the remaining spending was focused on projects with especially large benefits and if people's use of highways and mass transit was focused on the highest-value uses (for example, through taxes on vehicle-miles traveled or congestion pricing).[8] In addition, the economic efficiency of each dollar of funding could be improved if the federal government limited its support to projects (such as the Interstate highways) that offer significant benefits to more than one state, leaving state and local governments to fund projects with more localized benefits. If the people who benefit from a project bear its costs, the likelihood is diminished that too large a project (or too many projects) will be undertaken or that too many infrastructure services will be consumed relative to the resources needed to provide them.

Increase Taxes Dedicated to the Trust Fund. Another approach to bringing the trust fund's finances into balance would be to increase its revenue—for example, by raising the taxes on motor fuels or by imposing mileage-based, or VMT, taxes.[9] Increasing the charges that highway users pay also could promote more efficient use of the system. Economic efficiency is enhanced when highway users are charged according to the marginal (or incremental) costs of their use, including the external costs that their highway use imposes on society. A combination of a fuel tax and a VMT tax that accounts for the type and weight of a vehicle and the location and time of its use could provide incentives for reducing driving's social costs and could generate funds for federal spending on highways. But generating additional funds that way would raise questions of fairness, including, for example, whether the structure of user charges would impose relatively greater burdens on low-income and rural users.

Fuel Taxes. Excise taxes credited to the Highway Trust Fund come primarily from taxes on gasoline, ethanol-blended fuels, and diesel fuels. Those excise taxes were last increased in 1993, and their purchasing power is about 40 percent below that in 1993. If those taxes had been adjusted to keep pace with the consumer price index, for example, the tax on gasoline, which is currently 18.4 cents per gallon, would be about 30 cents per gallon, and the tax on diesel fuel, currently 24.4 cents per gallon, would be about 40 cents per gallon.

According to JCT's estimates, a one-cent increase in the taxes on motor fuels, effective October 1, 2014, would raise about $1.5 billion annually for the Highway Trust Fund over the next 10 years.[10] If lawmakers chose to meet obligations projected for the trust fund solely by raising revenues, they would have to increase the taxes on motor fuels by between 10 cents and 15 cents per gallon, starting in fiscal year 2015. (That increase would return fuel taxes to roughly the level they were in 1993, after adjusting for the effects of inflation.)

Fuel taxes offer a mix of positive and negative characteristics in terms of many people's conception of equity. They satisfy a "user pays" criterion—that those who receive the benefits of a good or service should pay its cost. But they also can impose a larger burden relative to income on people who live in low-income or rural households because those people tend to spend a larger share of their income on transportation. Fuel taxes impose a burden even on households that do not own passenger vehicles by raising transportation costs, which are reflected in the prices of purchased goods.

Fuel taxes have two desirable characteristics that are related to economic efficiency: They cost relatively little to implement (the government collects taxes from fuel distributors, and users pay the taxes when they purchase fuel), and they offer users some incentive to curtail fuel use, thus reducing some of the social costs of travel. However, a fuel tax discourages some travel too much and

8. For a comprehensive discussion of the benefits and challenges of congestion pricing, including options for its design and implementation for highways, see Congressional Budget Office, *Using Pricing to Reduce Traffic Congestion* (March 2009), www.cbo.gov/publication/20241.

9. See Congressional Budget Office, *Alternative Approaches to Funding Highways* (March 2011), www.cbo.gov/publication/22059.

10. Because excise taxes reduce the tax base of income and payroll taxes, higher excise taxes would lead to a reduction in revenues from income taxes and payroll taxes. The estimates shown here do not reflect those reductions. Those reductions would amount to about 25 percent of the estimated increase in excise tax receipts.

other travel too little, because it does not reflect the large differences in cost for use of crowded roads compared with uncrowded roads or for travel by trucks that have similar fuel efficiency but cause different amounts of pavement damage. Moreover, for a given tax rate on fuels, the incentive to reduce mileage-related costs diminishes over time as more driving is done in vehicles that are more fuel efficient.

VMT Taxes. VMT taxes provide stronger incentives for efficient use of highways than fuel taxes do because VMT taxes are better aligned with the costs imposed by users. Most of those costs—including pavement damage, congestion, accidents, and noise—are tied more closely to the number of miles vehicles travel than they are to fuel consumption.

For VMT taxes to significantly improve efficiency, however, they would need to vary greatly according to vehicle type, time of travel, place of travel, or some combination of such characteristics. For example, because pavement damage increases sharply with vehicle weight but decreases with the number of axles on a vehicle, the portion of VMT taxes assessed to maintain pavement could be small or nonexistent for passenger vehicles but substantial for heavy-duty trucks, particularly those with high weight per axle. Similarly, VMT taxes could be higher for any travel on crowded urban roads during peak hours than for travel in off-peak hours or on roads that are less congested.

In fact, a system of VMT taxes would not need to apply to all vehicles on every road. There already exist less comprehensive systems of direct charges for road use: Toll roads, lanes, and bridges are common in the United States, and several states and foreign countries place weight-and-distance taxes on trucks. Expansion of existing systems could focus on highly congested roads or on entry points into congested areas, and such targeted approaches would cost less to implement if they required relatively simple equipment to be placed in vehicles. Alternatively, the focus could be on specific vehicle types: Although trucks (excluding light-duty trucks), for example, constitute only 4 percent of all vehicles in the United States, they account for roughly 25 percent of all costs that highway users impose on others, including almost all of the costs associated with pavement damage.

The costs of implementing VMT taxes include capital costs for equipment and operating costs for metering, payment collection, and enforcement. The cost to establish and operate a nationwide program of VMT taxes is uncertain and difficult to estimate because projections so far are based mainly on small trials that have used a variety of evolving technologies and because the cost would depend on whether VMT taxes would vary by time, place, or type of vehicle. Although the costs of charging drivers are declining with improvements in technology, the costs remain higher than those for collecting revenues through the motor fuel taxes. The idea of imposing variable VMT taxes also has raised concerns about privacy: The collection process could give the government access to specific information about when and where individual vehicles are used.

Transfer Money From the General Fund. Lawmakers could choose to continue to supplement the Highway Trust Fund with general revenues, thus providing more money for highways and transit systems than is collected from excise taxes dedicated to those purposes. To continue funding for surface transportation programs at the average amounts provided in recent years, adjusted for inflation, lawmakers would need to transfer $18 billion to the Highway Trust Fund in 2015, CBO estimates. That transfer would cover a projected cumulative shortfall in the Highway Trust Fund of $13 billion and allow the trust fund to maintain cash balances of at least $4 billion in the highway account and at least $1 billion in the transit account. Subsequently, lawmakers would need to transfer $13 billion in 2016; such transfers would need to increase gradually to $18 billion by 2024 to maintain current spending, adjusted for inflation. At that pace, by 2024, CBO projects, general fund transfers would account for about one-third of the receipts credited to the Highway Trust Fund.

Spending that resulted from such transfers could be paid for by reducing other spending or by increasing broad-based taxes, such as income taxes; or it could add to deficits and thus increase federal borrowing. Reductions in other spending would mean that the benefits of the spending on transportation would be at least partially offset by a reduction in whatever benefits that other spending would have provided. Boosting the already-high federal debt would have long-term negative effects on the economy.

Increasing broad-based taxes would offer advantages and disadvantages compared with raising taxes on highway users. Two arguments can be made in support of using such a source of funding for highways. First, some benefits of better highway infrastructure are distributed more broadly than to just highway users. For example, reducing transportation costs for suppliers and customers increases efficiency by allowing businesses to specialize more in terms of the products and services they produce and the materials they use. Second, large amounts could be raised through small changes in tax rates. JCT has estimated that raising all tax rates on ordinary individual income by 1 percentage point would yield an average of $69 billion per year from 2014 to 2023—more than all of the current Highway Trust Fund taxes combined.[11] Moreover, funding highways through broad-based taxes does not impose a larger burden relative to income on rural or low-income users (unlike some taxes on fuel use).

In other respects, however, the use of general revenues poses disadvantages. In particular, the approach gives users no incentive to drive less or to use less fuel, and it does not satisfy the principle that a user-pays system may be fairest and most efficient. Moreover, even a small increase in existing tax rates would hamper economic efficiency by discouraging work and saving and by encouraging people to shift income from taxable to nontaxable forms and to shift spending from ordinary to tax-deductible goods and services.

Financing Highways

The projected shortfalls in the Highway Trust Fund have generated interest in increasing the amount of spending that can be sustained in the near term by encouraging state and local governments to rely more heavily on debt financing. Most highway projects now are paid for with current state or federal revenues. Apart from increasing their own taxes or cutting other spending, state and local governments or other public entities could finance additional spending on highways in a number of ways, including one or more of the following:

- Issuing tax-preferred government bonds,
- Obtaining federal loans or loan guarantees, or
- Joining with a private partner to obtain private financing.

11. See Congressional Budget Office, *Options for Reducing the Deficit: 2014 to 2023* (November 2013), p. 106, www.cbo.gov/budget-options/2013/44687.

Tax-preferred government bonds include tax-exempt bonds (among them private activity bonds, or PABs) and tax credit bonds, both of which transfer some of the cost of borrowing from state and local governments and the private sector to the federal government in the form of forgone federal tax revenues. Investors are generally willing to accept a relatively low rate of return on tax-preferred bonds because interest income is exempt from federal (and many state) taxes and because those bonds are backed by the taxing authority of the public entity.

Federal loans or loan guarantees can reduce state and local governments' borrowing costs, depending on the terms of the loan, in part because the federal government assumes the risk that would be borne by a lender and paid for by a borrower in the form of higher interest rates. A current federal loan program offers state and local governments an opportunity to borrow money for highways and certain other transportation projects at interest rates that are based on the long-term Treasury rate.

Assessments of the experience with private financing of highways in the United States suggest that turning to a private partner does not typically yield additional financing, although doing so may speed the provision of financing and make new roads available sooner than they would have been otherwise. Private financing can provide the capital necessary to build a new road, but it comes with the expectation of repayment and a future return, the ultimate source of which is either tax revenues collected by a government or fees from road users, like tolls—the same sources that are available to governments. All told, the total cost of the capital for a highway project, whether that capital is obtained through a government or through a public-private partnership, tends to be similar once all relevant costs are taken into account. Regardless of its source, financing is only a mechanism for making future tax or user fee revenues available to pay for projects sooner; it is not a new source of revenues.

Tax-Preferred Bonds

The federal government provides several types of tax preferences to subsidize infrastructure financing. *Tax-exempt bonds* use the well-established tax preference of paying interest that is not subject to federal income tax. Such bonds can be issued to finance the functions of state and local governments or, in the case of PABs, certain types of projects undertaken by the private sector. A second, more recently developed type of tax preference for infrastructure financing is associated with *tax credit bonds*. Such bonds come in two basic forms: those that provide a tax credit to the bondholder in lieu of paying interest and those that allow the bond issuer to claim a tax credit. (For issuers with no tax liability, the credit in the second scenario takes the form of a payment from the Secretary of the Treasury. Such bonds are known as direct-pay tax credit bonds.) Tax-exempt and tax credit bonds alike transfer some of the cost of borrowing from state and local governments and the private sector to the federal government, either in the form of forgone federal tax revenues or, in the case of direct-pay tax credit bonds, a federal outlay.

Tax preferences provide federal support for infrastructure financing while generally allowing state and local governments to exercise broad discretion over the types of projects they finance and the amount of debt they issue. However, tax preferences are not governed by the annual appropriation process, so lawmakers exercise less oversight over their continuation and use than is applied to federal grant and loan programs. Also, because forgone revenues are not identifiable in the federal budget, the use of tax preferences can mask the full scope of the government's financial activities. Using some types of tax-preferred bonds can be an inefficient way to deliver a federal financial subsidy to state and local governments. With a tax exemption for interest income, for example, state and local borrowing costs (and the costs of the private entities that make use of PABs) are reduced by significantly less than the amount of forgone federal revenues; the remainder of that tax expenditure accrues to bond buyers in the highest income tax brackets. Subsidizing borrowing through the use of payments made directly to borrowers can be more efficient—in terms of the benefits to state and local governments per dollar of federal cost—and more conducive to budgetary review and control.[12]

Tax-Exempt Government Bonds. Federal tax exemptions for interest income from government bonds (and qualified PABs) allow issuers of such debt to sell bonds that pay lower rates of interest than do taxable bonds. Because purchasers of tax-exempt bonds demand a return that is at least as high as the after-tax yield they could obtain from comparable taxable bonds, the amount by which the return from tax-exempt bonds is lower than the yield on comparable taxable debt depends on the income tax rate of the marginal (or market-clearing) buyer of tax-exempt bonds. Thus, the amount of subsidy that state and local governments receive by issuing tax-exempt bonds is determined not by an explicit decision of the federal government, but indirectly by the federal tax code and the financial circumstances of potential investors.

JCT estimates that the tax exemption for state and local debt resulted in $32 billion of forgone federal revenues in 2012; for the subsequent five years, it estimates that tax-exempt debt will reduce revenues by an additional $191 billion. According to data from the Internal Revenue Service, tax-exempt bonds issued between 1991 and 2011 to finance highway and other transportation projects (both for new construction and to refund existing transportation debt) accounted for between about one-eighth and one-fifth of the total value of tax-exempt bonds issued that can be classified by the type of project financed. Thus, a rough estimate of the tax expenditure for transportation bonds in 2012 would be between $4 billion and $6 billion. Data from proprietary sources suggest that highway bonds may account for as much as one-half of all tax-exempt debt issued to finance transportation projects.[13]

Private Activity Bonds. Private activity bonds are tax-exempt bonds that typically are used to finance large infrastructure and other projects primarily undertaken by a private entity. Thus, PABs essentially provide financing to private businesses or individuals; a qualified governmental unit serves as a conduit between those entities and the purchaser of the bond. Only certain PABs are tax exempt. Bonds that meet the necessary criteria are known as qualified private activity bonds and may be issued to finance a wide range of infrastructure (and other) projects, including those for transportation.

SAFETEA-LU allowed tax-exempt PABs to be issued for certain surface transportation projects, but the law placed a cap of $15 billion on the issuance of such bonds. According to DOT (as of April 18, 2014), bonds with a

12. For more information, see Congressional Budget Office and Joint Committee on Taxation, *Subsidizing Infrastructure Investment with Tax-Preferred Bonds* (October 2009), www.cbo.gov/publication/41359.

13. See Joint Committee on Taxation, *Estimates of Federal Tax Expenditures for Fiscal Years 2012–2017*, JCS-1-13 (February 2013), p. 40, http://tinyurl.com/kasohdx; Internal Revenue Service, Statistics of Income, "Table 2. Long-Term Tax-Exempt Governmental Bonds, by Bond Purpose and Type of Issue," http://tinyurl.com/pvw7znq; and Thomson Reuters, "Transportation Highlights," *The Bond Buyer Yearbook* (various issues).

value of $4.6 billion have been issued for 11 projects in all since 2005. DOT allocated another $5.2 billion of that $15 billion to projects that, although approved, have not started and could use PABs in the future; roughly 30 percent of that amount has been allocated during the past 12 months. That leaves slightly more than $5 billion available for future applicants. However, the almost $10 billion in bonds currently issued or allocated under the $15 billion cap may overstate the amount of PABs that those projects will use eventually, because some projects that received a PAB allocation have switched to other forms of financing. For example, in May 2013, DOT allocated about $4.4 billion from PABs to seven projects that had not yet issued bonds. By April 2014, however, only five of them had issued PABs, all for amounts that were significantly less than originally allocated.

Giving private entities access to the tax-exempt market using PABs lowers the cost of capital for those borrowers and can promote infrastructure projects when state and local governments have self-imposed limits on borrowing. But, like tax-exempt government bonds, PABs result in forgone tax revenues. And, to the extent that private funding was available without PABs, albeit at a higher cost, only projects of marginal value would be unable to receive financing without them.

Because of the growing number of projects seeking to use PABs, some financial market analysts are concerned that the limit on their use will be reached soon. Development of large, complex infrastructure projects often takes years, so financial analysts are seeking certainty that PABs will be available if they choose to apply for them. In his 2015 budget proposal, the President proposed raising the cap, by $4 billion, to $19 billion. According to JCT's estimates, such an additional allocation would begin to be used sometime in 2017.

Tax Credit Bonds. Starting in the late 1990s, the Congress turned to tax credit bonds as a way to finance public expenditures. In their early form, those bonds allowed their holders to receive a credit against federal income tax liability instead of—or in addition to—the cash interest typically paid on the bonds. The amount of the credit equals the credit rate, which is set by the Secretary of the Treasury, multiplied by the face amount of the bond.

Tax credit bonds offer some advantages over other types of tax-preferred bonds, such as tax-exempt bonds. Because bondholders pay taxes on the amount of credit they claim, tax credit bonds do not result in investors in high marginal tax brackets receiving a portion of the forgone tax revenues. Rather, the revenues forgone by the federal government through tax credit bonds reduce state and local borrowing costs dollar for dollar, a more efficient use of federal resources than that resulting from tax-exempt bonds. Tax credit bonds also allow the amount of federal subsidy to be determined explicitly, rather than depending on other federal polices (such as marginal income tax rates).

The American Recovery and Reinvestment Act of 2009 authorized Build America Bonds, tax credit bonds that were sold only in 2009 and 2010. State and local governments issued the bonds either as traditional tax credit bonds or, if certain conditions were met, as direct-pay tax credit bonds (known as qualified Build America Bonds). In contrast to earlier tax credit bonds, Build America Bonds have an interest rate (or coupon) that is set by the issuer rather than by the Secretary of the Treasury. For the direct-pay bonds, the federal government provided payments directly to issuing state and local governments equal to 35 percent of the interest, in lieu of a tax credit going to the bondholder. The amount of that financing subsidy is greater than the reduction in the interest costs that those state and local governments would have realized if they had issued traditional tax-credit bonds because, in the latter case, the bond buyer claiming the tax credit would have had to be compensated with additional interest income for the resulting tax liability.

The interest subsidies provided by direct-pay tax credit bonds appear as outlays in the federal budget, making the cost more transparent and, in principle, enabling comparison with other federal outlays for the same purposes. Also, because the yields provided to holders of direct-pay tax credit bonds are similar to the yields of other taxable securities, direct-pay tax credit bonds are more attractive to tax-exempt entities than other tax credit bonds are and may therefore increase the pool of funds available to state and local governments to finance infrastructure projects and other activities.

The President's budget proposal for 2015 includes a direct-pay tax credit bond with a credit equal to 28 percent of each interest payment. By allowing state and local governments to substitute taxable for tax-exempt bonds, the proposal would increase taxable interest income, boosting federal revenues by $59 billion between 2015 and 2024, according to JCT. Because the proposal also would increase subsidy payments to state and local governments (which are recorded in the federal budget as outlays) by an estimated $64 billion, the net effect would be to increase the cumulative 10-year deficit by $4 billion.[14]

Federal Loans and Loan Guarantees

The federal government also subsidizes borrowing by state and local governments by providing and guaranteeing loans for infrastructure. Such credit assistance can reduce state and local governments' costs because it can facilitate borrowing at interest rates that are lower than otherwise might be available, and it may open additional access to the capital markets. Specifically, in providing loans and loan guarantees, the federal government assumes the risk that would be borne by a lender and paid for by a borrower in the form of higher interest rates.

The Federal Credit Reform Act of 1990 (FCRA) established rules for calculating the budgetary costs of direct loans and explicit loan guarantees issued by the federal government. The budgetary cost of federal credit assistance programs is recorded as the net present value of the cash flows to and from the government—the loan amount and the expected repayments—when the loan is disbursed to recipients.[15] That subsidy cost represents an estimate of the net cost that the government bears. In contrast, the cash flows associated with that loan between the Treasury, an agency, and borrowers occur over time and are not recorded in the budget.

An important aspect of the budgetary treatment of federal credit programs is that agencies must receive an appropriation equal to the estimated subsidy cost before they can make or guarantee a loan.[16] In the case of direct loans, FCRA specifies that loan repayments are unavailable for future spending; those repayments are already accounted for in the estimated net present value of the loan, so they are not available to "revolve" into new loans. Such a revolving fund is the model on which many state infrastructure banks are based. However, for the federal government, those repayments represent part of the financing for the original loans and are implicit in the subsidy calculation. Allowing loan repayments to be used for new loans—without any additional appropriation to cover the subsidy costs of the new loans—would raise the effective FCRA subsidy cost of the original loans to 100 percent (the same as for grants).

FCRA accounting, however, does not provide a comprehensive measure of the economic cost of credit assistance. Through its use of Treasury rates for discounting, FCRA implicitly treats market risk—a type of risk that investors require compensation to bear—as having no cost to the government. Specifically, FCRA's procedures incorporate the expected cost of defaults on government loans or loan guarantees but not the cost of risk associated with uncertainty about the magnitude and timing of those defaults. Investors require compensation—a "market risk premium"—to bear that risk. That premium on a risky loan or guarantee compensates investors for the increased likelihood of sustaining a loss when the overall economy is weak and resources are scarce; that likelihood is reflected in higher expected returns and lower prices for assets that carry more market risk. Taxpayers bear the investment risk for federal credit obligations. By omitting the cost of market risk and thereby understating the economic cost of federal credit obligations, FCRA accounting may lead policymakers to favor credit assistance over other forms of aid that have a similar economic cost.[17]

Loans Made Under the Transportation Infrastructure Finance and Innovation Act. DOT administers a loan program under the Transportation Infrastructure Finance and Innovation Act of 1998 (TIFIA) that provides credit assistance to state and local governments to finance highway projects and other types of surface transportation infrastructure. The TIFIA program offers subordinated federal loans for up to 35 years at interest rates that are based on the rate for Treasury securities of similar maturity. (On May 1, 2014, the interest rate on the 30-year Treasury bond was 3.41 percent.) TIFIA assistance may be used for up to 49 percent of a project's cost. Combined with other federal grants and credit assistance,

14. See Congressional Budget Office, *An Analysis of the President's 2015 Budget* (April 2014), www.cbo.gov/publication/45230.

15. The net present value is the single number that expresses a flow of current and future income (or payments) in terms of an equivalent lump sum received (or paid) today.

16. In contrast, no appropriations are necessary for the periodic revisions to subsidy estimates that agencies make to reflect actual experience with loans and guarantees. Permanent indefinite budget authority exists for those revisions, which are recorded in the budget as increases or decreases in outlays.

17. Moreover, subsidy rates computed under FCRA exclude federal administrative costs, even those that are essential for preserving the value of the government's claim to future repayments, such as loan-servicing and collection costs; those costs are accounted for separately in the budget. For more information, see Congressional Budget Office, *Fair-Value Accounting for Federal Credit Programs* (March 2012), www.cbo.gov/publication/43027.

TIFIA loans can be part of a package of federal assistance that funds up to 80 percent of the cost of a project.

MAP-21 made several changes to the TIFIA program, notably increasing the amount of budget authority for the subsidy cost of the program's loans from $122 million per year in the previous authorization for highway and transit programs to $750 million in 2013 and $1 billion in 2014. As of April 28, 2014, about $720 million of that budget authority was uncommitted. Since 2012, TIFIA subsidy rates for direct loans have averaged about 9 percent. If that subsidy rate continued in effect, the $1.75 billion in subsidies authorized by MAP-21 would finance more than $19 billion in loans.

MAP-21 also authorized master credit agreements and created an extra interest rate subsidy for projects in rural areas. Master credit agreements would allow DOT to make commitments of future TIFIA loans, contingent on future authorizations, to a group of projects secured by a common revenue source. Under provisions of MAP-21, rural projects receive a minimum of 10 percent of the funds appropriated and are eligible to receive loans at half the Treasury rate. Such an interest rate subsidy makes a project relatively less expensive for the sponsors and relatively more expensive for the federal government. It may result in federal loans for projects that would not otherwise generate enough revenue to cover the costs of financing the projects.

Proposals for a Federal Infrastructure Bank. In recent years, the Congress has considered several proposals for establishing a federal bank to fund infrastructure projects through loans and grants.[18] In recent years, the President's budget has included a request to create a similar entity.[19]

Whether federal credit assistance is provided through an existing federal agency or a newly created special entity, however, it would involve similar budgetary costs to the federal government. The support offered for surface transportation by most proposed infrastructure banks would not differ substantially from the loans and loan guarantees already offered by DOT through its TIFIA program. Therefore, differences between the existing TIFIA program and an infrastructure bank would primarily be operational, concerning the types of infrastructure to fund, the kinds of credit assistance to provide, the selection process for projects, the amount of leverage to provide for federal funds, and the amount of private-sector participation to encourage or require. For example, an infrastructure bank could focus on financing transportation infrastructure, or it could define infrastructure more broadly to include sewers, wastewater treatment facilities, drinking water supply facilities, broadband Internet access, or even schools. In principle, an infrastructure bank could use any of several methods to finance projects, including federal loans, lines of credit, and guarantees for private loans.

CBO has previously analyzed an illustrative federal infrastructure bank—one that is representative of certain recent proposals but that would focus on surface transportation programs.[20] That entity, which would be federally funded and controlled, would select new, locally proposed construction projects for funding on the basis of several criteria, including the projects' costs and benefits, and it would provide financing for the projects through loans and loan guarantees. To repay the loans, projects would have to use tolls, taxes, or other dedicated revenue streams. Financial assistance could be provided to any consortium of partners with an eligible project, such as a group of state and local entities or a group of nongovernmental partners. The bank could provide the subsidy amounts needed to compensate private-sector investors for benefits that accrue to the general public and to the economy at large.

Such an infrastructure bank could have a limited role in enhancing investment in surface transportation projects by providing new federal subsidies (in the form of loans or loan guarantees) to certain large projects, potentially including multijurisdictional or multimodal projects, and by allowing the benefits of potential projects to be more readily compared in a competitive selection process.

A key limitation of such a bank is that many surface transportation projects would not be good candidates for its support, because most projects do not involve toll collections or other mechanisms to collect funds directly from project users or other beneficiaries.

18. Other government programs that provide credit assistance for infrastructure projects include the Environmental Protection Agency's grants for states' revolving loan funds for water projects and states' infrastructure banks, all capitalized with federal funds and administered by states.

19. Other Congressional proposals to establish an infrastructure bank include providing bond insurance to issuers.

20. See Congressional Budget Office, *Infrastructure Banks and Surface Transportation* (July 2012). www.cbo.gov/publication/43361.

Private Financing

Only a small number of highway projects in the United States have involved public-private partnerships with private financing.[21] Assessments of those projects indicate that such partnerships may accelerate the availability of financing—for example, by circumventing states' self-imposed limits on borrowing—but they do not generally result in additional financing. Some of the projects that have been financed through tolls have failed financially because the private-sector partners initially overestimated their revenues and as a result have been unable to fully repay their projects' debts. Perhaps as a response, projects that are still under construction rely less on tolls as a revenue source; more commonly, private partners are compensated from a state's general funds, thus limiting the private risk of not being repaid and leaving the risk of lower-than-expected revenues to the public partner.

Increasingly, public-private partnerships also have replaced the funds obtained through private means (at market rates) with tax-exempt bonds or bonds that provide a credit against taxes owed. That change has brought the projects more in line with the way states typically finance infrastructure projects, lowering the private partners' costs at the expense of costs to federal taxpayers and increasing the amount of the government's implicit equity and risk. In doing so, newer projects may have diminished the incentives associated with private financing to control costs and to be completed quickly.

In addition, more recent agreements have reduced private partners' debt-service payments—that is, interest payments on any money borrowed to finance the projects—by increasing the share of financing provided by the state or locality or by the federal government. Accordingly, the financing provided by the TIFIA program or by tax-exempt private activity bonds has become increasingly prominent for highway projects that involve public and private partners.

The history of privately financed roads in the United States encompasses 29 projects that are either under way or have been completed during the past 25 years. The value of the contracts for those projects totals $24 billion, a little more than one-half of one percent of the approximately $4 trillion that all levels of government spent on highways over the period. (Both of those amounts are in 2013 dollars.) In the past few years, the number of partnerships for road projects with private financing has increased; two-thirds of the $24 billion in contracts has been committed in the past five years.

The amount of risk transferred to private partners has varied from project to project. In some instances, the financial risk was borne primarily by taxpayers, who were responsible for repaying debt incurred by the private partner. Under one program in Florida, for example, private businesses finance each project entirely with private debt that is to be repaid over a predetermined time—usually five years—with future grants from the federal government, state funds, and revenues from tolls collected from users of the completed road. The state's guarantee of repayments eliminates much of the transfer of risk that takes place with other privately financed projects. Thus, the financing is essentially public, and the structure of the public-private partnership is similar to that of an approach without private financing. In other instances, the private partner has borne more of the risk of the investment—specifically, some of the private partners' money might be lost if the project did not produce revenues as expected.

Over the past 25 years, 10 privately financed projects—of various sizes but all involving contracts of at least $50 million—have been completed (see Table 3). A review of those projects offers little evidence that public-private partnerships provide additional resources for roads except in cases in which states or localities have chosen to restrict spending through self-imposed legal constraints or budgetary limits. To varying degrees, the projects that made use of private financing were in states in which the government could have issued bonds to finance the work through traditional means. In some cases, however, the use of a public-private partnership accelerated a project's access to financing by circumventing restrictions that states have imposed on themselves and that limit their ability to issue additional debt. (Earlier financing of a road project adds value when it allows the public to enjoy the benefits of the new road sooner than would otherwise be possible.)

Several such projects are still under construction (see Table 4). New public-private partnerships have sought to reduce their borrowing costs by relying on publicly subsidized borrowing through the TIFIA program and

21. For additional information on the experience with public-private partnerships, see the testimony of Joseph Kile, Assistant Director for Microeconomic Studies, Congressional Budget Office, before the Panel on Public-Private Partnerships, House Committee on Transportation and Infrastructure, *Public-Private Partnerships for Highway Projects* (March 5, 2014), www.cbo.gov/publication/45157.

Table 3.

Completed Highway Projects That Used Public-Private Partnerships With Private Financing

	Dulles Greenway	SR-91 Express Lanes	Camino Colombia Bypass	Atlantic City–Brigantine Tunnel	Southern Connector	Pocahontas Parkway	Route 3 North	South Bay Expressway (S. Section)	SH-130 (Segments 5 and 6)	I-495 HOT Lanes
Description of the Project										
Opening Date	1995	1995	2000	2001	2001	2002	2005	2007	2012	2012
Location	Va.	Calif.	Tex.	N.J.	S.C.	Va.	Mass.	Calif.	Tex.	Va.
Revenue Sources	Tolls	Tolls	Tolls	Tolls/Taxes	Tolls	Tolls	Taxes	Tolls	Tolls	Tolls
Road Length (Miles)	14	10	22	2	16	9	21	10	40	14
Financial Structure and History										
Bankruptcy Declared	No	No	Yes	No	Yes	No	No	Yes	No	No
Public Buyout of Private Partners	No	Yes	No	No	No	No	No	No	No	No
Sources of Financing (Millions of 2013 dollars)										
Private										
Debt	462	161	96	155	260	690	506	421	737	0
Equity	59	33	19	0	0	0	0	220	227	376
Public										
TIFIA program	0	0	0	0	0	0	0	174	462	633
Other	0	0	0	300 [a]	0	0	0	0	0	1,072 [b]
Total Cost	**521**	**194**	**115**	**455**	**260**	**690**	**506**	**815**	**1,427**	**2,081**

Source: Congressional Budget Office based on data from the Federal Highway Administration.

Note: HOT = high occupancy/toll; TIFIA = Transportation Infrastructure Finance and Innovation Act.

a. The project relied on a casino's future contribution to the Casino Reinvestment Development Authority and on funds from the South Jersey Transportation Authority and the New Jersey Transportation Trust Fund Authority.

b. Sources of funding included private activity bonds (issued by or on behalf of a state or local government to finance a private project) and loans or grants from states or localities, which included their funds from federal formula grants.

through PABs issued by local municipalities; the PABs have tax advantages that lower the private partner's debt-service payments. All but one of those projects have made use of federal subsidies through the TIFIA program. That choice of financing constitutes a return to some features of the traditional approach in which the public sector—the federal government, in particular—retains greater risks, especially the risk of default. For instance, the South Bay Expressway, which had received some financing from the TIFIA program, illustrates what can happen to taxpayers as the ultimate equity holders. The project filed for Chapter 11 bankruptcy in March 2010, finally emerging in May 2011. The new financing and ownership structure required by the bankruptcy court imposed a loss of 42 percent on federal taxpayers, replacing the original TIFIA investment with a package of debt and equity worth only 58 percent of the original investment.[22] New public-private parternerships also typically secure state or local loans or grants as part of their financing. In the other cases, project managers who are responsible for a project's financing have had to take out bank loans. That source of private capital was more attractive during the recent economic downturn as interest rates fell relative to the yields for bonds in municipal bond markets (including those of PABs).

Budgetary Principles for the Treatment of Projects With Complex Financing

Under the principles that govern federal budgeting, the budgetary treatment of complex financing arrangements—those that involve an intermediary other than the Treasury raising money in private capital markets on behalf of the federal government—should depend on its economic substance: who controls the program and its budget, who selects the managers, who provides the

22. Randall Jensen, "Tollway Exits Chapter 11: TIFIA Ends Up Taking a Haircut," *Bond Buyer* (May 6, 2011), http://tinyurl.com/3fn8nvj.

Table 4.

Highway Projects Under Way That Use Public-Private Partnerships With Private Financing

	I-595 Managed Lanes	North Tarrant Express Segments 1 & 2	Port of Miami Tunnel	I-635 LBJ Freeway	I-95 HOV/HOT Lanes	Midtown Tunnels	Presidio Parkway	Ohio River Bridges East End Crossing	North Tarrant Express Segement 3A
				Description of the Project					
Start of Construction	2009	2010	2010	2011	2012	2012	2013	2013	2014
Expected Completion	2014	2015	2014	2016	2015	2017	2015	2016	2018
Location	Fla.	Tex.	Fla.	Tex.	Va.	Va.	Calif.	Ind.	Tex.
Revenue Source	Tolls/Taxes	Tolls	Taxes	Tolls	Tolls	Tolls	Taxes	Tolls/Taxes	Tolls
Road Length (Miles)	11	13	1	13	29	1	2	8	6
				Sources of Financing (Millions of 2013 dollars)					
Private									
Debt	829	0	362	0	0	0	167	0	0
Equity	231	452	85	713	280	272	46	78	413
Public									
TIFIA program	640	690	362	902	300	422	150	0	524
Private activity bonds[a]	0	422	0	643	253	675	0	677	271
Other[b]	246	609	329	520	90	719	0	395	169
Total Cost	**1,946**	**2,173**	**1,138**	**2,779**	**923**	**2,089**	**365**	**1,150**	**1,377**

Source: Congressional Budget Office based on data from the Federal Highway Administration.

Note: HOV = high-occupancy vehicle; HOT = high occupancy/toll; TIFIA = Transportation Infrastructure Finance and Innovation Act.

a. Private activity bonds are issued by or on behalf of a state or local government to finance a private project.

b. Mostly loans or grants from states or localities, which may include their funds from federal formula grants.

capital, and who owns the resulting entity.[23] Is the activity governmental (that is, initiated, controlled, or funded largely by the government for governmental purposes) or is it an initiative of the private sector (driven by market forces independent of the government)?

An investment that is essentially governmental should be shown in the budget whether it is financed directly by the Treasury or indirectly by a third party that is borrowing on behalf of the government. Activities need not be conducted by a federal agency to be classified as governmental and included in the budget. When doubt exists about whether a program should be recorded in the federal budget, those same principles indicate that "borderline agencies and transactions should be included in the budget unless there are exceptionally persuasive reasons for exclusion."[24]

Likewise, spending financed by all forms of agencies' borrowing, including debt not backed by the full faith and credit of the U.S. government, appears in the budget. However, bond proceeds or repayable equity investments are not recorded as federal receipts; they are a means of financing a project—not the ultimate source of capital, which is the income that will be generated by their operation.

23. See Congressional Budget Office, *Third-Party Financing of Federal Projects* (June 2005), www.cbo.gov/publication/16554.

24. The President's Commission on Budget Concepts, *Report of the President's Commission on Budget Concepts* (October 1967).

Congressional Budget Office

JUNE 9, 2014

Answers to Questions for the Record Following a Hearing on New Routes for Funding and Financing Highways and Transit Conducted by the Senate Committee on Finance

On May 6, 2014, the Senate Committee on Finance convened a hearing at which Joseph Kile, Assistant Director for Microeconomic Studies of the Congressional Budget Office, testified about CBO's analysis of the status of the Highway Trust Fund and some options for financing highway spending (www.cbo.gov/publication/45315). Some Members of the Committee submitted further questions for the record, and this document provides CBO's answers.

Ranking Member Orrin Hatch

Question: How much experience has there been at the federal level with highway projects involving public-private partnerships, and do you think that most or all transportation projects would fit into public-private models?

Answer: Only a small number of highway projects in the United States have involved public-private partnerships with private financing. Such partnerships have accounted for about one-half of one percent of all spending on highways during the past 25 years. Partnerships that involve financing ultimately require a source of revenue—taxes or fees collected either from users of the highway or other infrastructure project or from taxpayers. Consequently, projects for which tolls or fees can be charged are probably the best candidates for public-private partnerships that involve private financing. Currently, the potential for providing financing through such partnerships is limited because most surface transportation projects do not involve toll collections or another mechanism for collecting funds from users.

Question: Have there been public-private partnerships involving highway projects that went belly up or failed to perform as expected and where taxpayers were forced to eat losses? How could these projects have been carried out to better protect taxpayers?

Answer: Public-private partnerships that involve direct or guaranteed loans place the federal government at risk of incurring financial losses. Most such partnerships for projects that are now under way are funded in part by federal loans made under the Transportation Infrastructure Finance and Innovation Act of 1998 (TIFIA), and the federal government faces the possibility that those loans will not be repaid. One project, the South Bay Expressway in California, illustrates the risk to taxpayers as ultimate equity holders. In March 2010, the privately owned toll road operator and TIFIA borrower filed for Chapter 11 bankruptcy, finally emerging in May 2011. The new financing and ownership structure required by the bankruptcy court imposed a loss of 42 percent on the federal government, replacing the original TIFIA investment with a package of debt and equity worth only 58 percent of the original investment. Subsequent developments suggest that the federal government might ultimately recover a larger share of that investment, but whether that happens depends on toll collections from users of that expressway. The financial risk faced by the federal government in such cases would be reduced if those projects relied more heavily on financing that did not involve the government.

Senator Michael Bennet

Question: Could the panel speak a bit about the effect that this looming threat of insolvency has on a local government or private business's ability to plan for the future? And can you assess the economic benefits we could expect from a dedicated revenue stream sufficient to keep the trust fund solvent over the long-term?

Answer: The gap between the amounts the Highway Trust Fund is projected to receive in revenues and the amounts of spending from the fund—if both continue at about the current rate—would be substantial. Over the 2015–2024 period, the Congressional Budget Office estimates, reducing spending to match revenues would necessitate a decrease of more than 30 percent in the authority to obligate funds from the highway account and a decrease of about 65 percent in the authority to obligate funds from the transit account, compared with CBO's baseline projections. The possibility of such reductions—and even larger ones in some years—creates uncertainty that makes program planning difficult for state and local governments and for private contractors, and it adds to the risk that some planned projects will not be started and that work on some ongoing projects might be delayed.

If policymakers were to address projected shortfalls in the trust fund by limiting federal spending for highways and mass transit to the amounts of revenue generated by users, the reduction in spending would probably have significant negative consequences for the condition and performance of the nation's highway and mass transit infrastructure. All other things being equal, over the long term, the reduced amount of infrastructure would impose a drag on economic performance because smaller or lower-quality highway and transit systems would result in smaller profits for private businesses and lower wages for their workers as well as reducing other benefits that accrue to users of those systems but that are not captured in profits or wages. In addition, unless some other federal spending was increased or federal taxes were lowered, the reduction in federal spending would slow economic growth and employment during the next few years relative to what it would otherwise be. Over the longer term, by contrast, the smaller amount of federal debt stemming from the lower amount of spending would provide an economic boost.

Senator Michael Enzi

Question: Besides the direct cost of more than $50 billion that we have transferred from the General Fund to prop up the Highway Trust Fund, what would you identify as some of the tangible consequences to state governments, the construction industry, and the bottom lines of individual businesses that result from not providing long-term stability for the Highway Trust Fund?

Answer: The current mismatch between spending from the Highway Trust Fund and revenues credited to that fund creates uncertainty for state and local governments and for private contractors that build and maintain highways. Sudden shifts in the amount of annual spending authority would probably make program administration and planning difficult for the Department of Transportation as well as for state and local grant recipients. If, for example, policymakers were to address projected shortfalls in the trust fund by limiting federal spending for highways and mass transit to the amount of revenue currently generated by users, over the 2015–2024 period, the highway account would see a decrease of more than 30 percent in the authority to obligate funds, and the transit account's authority would decrease by about 65 percent, compared with the baseline budget projections of the Congressional Budget Office. The trust fund would be unable to support any new obligations in 2015, delaying investment in infrastructure and halting numerous transportation projects across the country. Such delays or cancellations would adversely affect the construction industry and its employees; over time, they would also affect businesses that rely on the nation's highway and mass transit infrastructure.

In addition, unless some other federal spending was increased or federal taxes were lowered, the reduction in federal spending would slow economic growth and employment during the next few years relative to what it would otherwise be. Over the longer term, the smaller amount of infrastructure would impose a drag on economic performance, but the smaller amount of federal debt stemming from the lower amount of spending would provide an economic boost.

The consequences of such reductions in federal spending could be ameliorated, at least in part, if state and local governments responded to the reduction in federal funds by increasing their own spending through some combination of raising additional revenues, shifting spending from other purposes, and borrowing. Individual states would differ in the ways they responded to such reductions, but the evidence generally suggests that if federal spending decreased, state spending would increase to offset some but not all of the reduction in federal funding. For example, the Government Accountability Office has reported that states reduced their own funding to offset roughly half of the increase in federal highway grants provided during the 1990s.[1]

1. See Government Accountability Office, *Federal-Aid Highways: Trends, Effect on State Spending, and Options for Future Program Design*, GAO-04-802 (August 2004), www.gao.gov/products/GAO-04-802.

COMMONWEALTH *of* VIRGINIA

TESTIMONY
OF
The Honorable Aubrey L. Layne, Jr.
Secretary of Transportation
Commonwealth of Virginia

Regarding
New Routes for Funding and Financing Highways and Transit

Before
The United States Senate Finance Committee

On
May 6, 2014

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Introduction

Chairman Wyden, Ranking Member Hatch, Senator Warner and other members of the Senate Finance Committee, thank you for the opportunity to provide input on the importance of sustaining and increasing federal investments in surface transportation infrastructure. My name is Aubrey L. Layne, Jr., and I serve as the Secretary of Transportation for the Commonwealth of Virginia. My testimony today addresses the implication of the pending insolvency of the Highway Trust Fund and the lack of a fully-funded, long-term surface transportation bill on the Commonwealth of Virginia.

Over the last 18 months, there have been numerous witnesses before Congressional committees and reports from the Congressional Budget Office and the United States Department of Transportation that detail the dire state of the federal Highway Trust Fund. For those reasons, I will not discuss in detail the financial status of the Trust Fund, except to say that a significant infusion of revenue is necessary to avert negative balances in the near future.

Prior to being appointed by Governor McAuliffe as Virginia's Secretary of Transportation, I served former Governors Kaine and McDonnell as a member of the Commonwealth Transportation Board for five years. I also served on the Chesapeake Bay Bridge Tunnel Commission for five years, most recently as Chairman of the Board. In these positions I was involved in several major public-private partnership projects. I have had a successful professional 30-year business career serving, as President of a large retail company, and President and Principal Broker for one of the largest privately owned multifamily real estate companies in the Mid-Atlantic region where I was responsible for all operations and financing activities. I began my professional career as an auditor and certified public accountant for KPMG after graduating from the University of Richmond with a degree in accounting. I also hold a master's degree in business administration from Old Dominion University.

As Secretary of Transportation, I oversee the Commonwealth's seven transportation agencies – the Virginia Department of Transportation, the Department of Rail and Public Transportation, the Virginia Port Authority, the Department of Motor Vehicles, the Virginia Department of Aviation, the Virginia Commercial Spaceflight Authority and the Motor Vehicle Dealer Board. Collectively, these agencies employ more than 9,700 staff and have a combined annual budget in excess of $5.7 billion.

I am also the chairman of the Commonwealth Transportation Board. This Board administers, distributes, and allocates funds in the Commonwealth's Transportation Trust Fund, which provides funding for surface transportation capital improvements and maintenance activities.

Guiding Principles

Before I outline Virginia's transportation program and the importance of the federal-aid program to the Commonwealth, there are a few key points I would like to highlight.

- The federal government has and should continue to have a strong role in surface transportation. Transportation infrastructure is critical for the movement of commerce – both people and goods. Investments made today by transportation agencies will improve the ability of people to participate in the economy.
- While states like Virginia are stepping up and raising revenues, states can only do but so much. States, MPOs and transit agencies need a strong and reliable federal partner to help address pressing transportation needs like state of good repair and congestion mitigation.
- The solutions to resolve the federal surface transportation needs must be long-term and address all modes of surface transportation – highways, transit and rail. There needs to be discussion about growth in the program – patching the hole is only a short-term solution.

Virginia's 2013 Revenue Package

Virginia has struggled with solving its transportation funding situation for a number of years. There have been a number of proposals advanced in fits and starts that were intended to address the problem for the long-term but ultimately fell short. These include the Virginia Transportation Act of 2000, the 2002 regional sales tax referendums, House Bill 3202 in 2007 and other packages that were not enacted.

As you may know, last year a major revenue package that will provide long-term benefits was enacted. It was the first of its kind in 27 years. This package was passed by a Republican-led General Assembly and Republican Governor who worked across the aisle with Democrats. The final bill contains a number of provisions and represents a compromise by all sides. While no one was happy with all of the provisions in the bill in its final form, it passed both chambers of the legislature with close to a two-thirds majority.

The bill modifies a number of statewide taxes. First, the bill eliminated the 17.5 cents per gallon tax on gas and diesel and replaced it with a sales tax, 3.5% on gas and 6% on diesel. This ultimately represented a cut in the gas tax. To ensure that a certain amount of revenues would be generated from the sales tax on fuel, a "legislative floor" for the wholesale price of gas and diesel was established for the basis of determining the sales tax on gas and diesel. This provision has turned out to by very important, as the current wholesale price of gas is approximately 60 cents less than "legislative floor" price.

The package also raised two existing sales taxes to support transportation. The statewide retail sales tax was raised by 0.3%, with 0.125% being dedicated transportation improvements and 0.175% to support the maintenance and operations of the highway network. In addition, it raises the motor vehicle sales tax by 1.15% over a period of three years. These two sources represent the bulk of the new statewide revenues generated by this package.

A portion of the existing retail sales tax is transferred from the General Fund to the dedicated transportation fund over a 4-year period. The amount to be transferred was to be up to 0.175% sales tax, however the 0.075% was contingent upon the Congress passing the Marketplace Fairness Act. At this time only 0.1% has been transferred.

The bill also establishes a structure by which if Congress enacts the Marketplace Fairness Act a majority of the sales taxes collected from online retailers would be dedicated to transportation purposes. Of the total 5.3% state sales tax, 3.05% would be used for transportation. This is significantly more than the existing retail sales tax. In the event that Congress does not enact this legislation, then the sales tax on gas will increase to 5.1% on January 1, 2015.

Lastly, the bill recognizes the importance and more complex needs of Virginia's two largest metropolitan areas – Northern Virginia and Hampton Roads. It imposes additional taxes in these regions that will be controlled and allocated by regional authorities. In Northern Virginia the bill increases the retail sales tax by 0.7%, imposes a grantor tax of $0.15 per $100 of assessed value on real estate transfers, and imposes a 2% transient occupancy tax on hotel rooms. In Hampton Roads, the bill imposes a 0.7% retail sales tax and a 2.1% sales tax on gas. While not discussed as much, the new taxes in the regions will generate more revenue for transportation improvements than the statewide tax increases.

Virginia's Transportation Program

Virginia has a multimodal Transportation Trust Fund and related accounts that help fund projects to improve all modes of transportation. In fiscal year 2015, these accounts will provide approximately $1.2 billion for projects in the Commonwealth. The 2015 Transportation Trust Fund revenues are planned to be used as follows:

- 69% is dedicated for highway construction and capital repair;
- 19.6% is dedicated for transit capital and operating support;
- 6.4% is dedicated for passenger rail capital and operating support, as well as freight rail improvements; and
- 4.9% is dedicated for port and aviation improvements.

In addition to state revenues, the Commonwealth of Virginia aggressively pursues other potential funding and financing options to help improve our transportation system. The following sources and tools have been used over the last four years:

- TIFIA loans;
- Private Activity Bonds;
- Private equity;
- Contributions from local governments;
- Contributions from developers;
- State bonds;
- GARVEE bonds;
- Toll revenues; and,
- Loans and lines of credit from the Virginia Transportation Infrastructure Bank.

The surface transportation funds, other revenues and financing tools are combined with the $1.1 billion in federal funds to develop the Commonwealth's Six-Year Improvement Program. This Program is updated every June and the current draft of the Fiscal Year 2015 to 2020 Program is $13.1 billion.

The Program outlines the planned investments of a six-year period. It includes all capital projects receiving funds. Examples include the following:

- $12.7M project to restore and rehabilitate 11 miles of pavement on I-81 in Shenandoah County;
- $31.6M freight rail improvement along the Crescent Corridor to add a double track between Nokesville and Calverton in cooperation with Norfolk-Southern;
- $2B public-private partnership to add capacity to the Midtown Tunnel, extend the MLK expressway and rehabilitate the Downtown Tunnel in Hampton Roads;

- $25M for the first year of WMATA's momentum program to improve the ability of the system to move more people through its core;
- $1.2M replacement of the Route 601 bridge over Little Walker Creek in Bland County; and,
- $95.8M project to extend passenger rail service to the City of Roanoke from the City of Lynchburg, connecting it with the Washington, DC and the entire Northeast Corridor.

Importance of the Federal Program

Even with all of the efforts and options undertaken by the Commonwealth, our program would not be what it is without our strongest partner – the federal government. Of the $2.1 billion in revenues available in fiscal year 2015 for transportation capital improvements, more than half comes from the federal government.

As you know, the federal Highway Trust Fund is facing an impending insolvency. Recent reports indicated that the Highway Account may face negative balances as soon as August and the Transit Account shortly thereafter. I want to be clear; if nothing is done to address this situation, the consequences will be dire.

In Virginia we expect the consequences of not shoring up the Trust Fund for fiscal year 2015 alone to be the following:

- 149 bridge replacements will not happen;
- 44 smaller transit systems, mostly in rural Virginia, will not have the funds to continue running;
- Over 350 other projects will ground to a halt; and
- 175 transit vehicles will not be replaced.

This outcome will impact more than 43,000 jobs across Virginia and the country. And these effects would grow over time.

In addition to these direct impacts, many states including Virginia have taken advantage of the tools provided by Congress to help advance large-scale projects through bonding backed by federal revenues. These bonds known as GARVEE are sold by a state and are to be paid back through future federal apportionments. If those apportionments are not provided then states are faced with the tough choice of canceling other projects to re-direct state revenues to pay debt service or defaulting on the bonds. States entered into these arrangements based on an understanding that future federal funds would be available.

Congress must act to shore up the federal Trust Fund. The solutions should address all modes of surface transportation, increase revenues and be long-term. The options on how this can be accomplished have been discussed at length so I will not outline them here.

The Commonwealth of Virginia will support pragmatic solutions to address this problem. The specific option of how to best address the problem should be selected by members of this Committee and other members of Congress.

I would like to note that the Trust Fund is not the only pending issue we face with regards to federal support for surface transportation. There are several key programs that are not currently included in the Trust Fund and must go through the annual appropriations process instead.

- The TIGER grant program has helped several key projects in the Commonwealth. It supported a TIFIA loan to advance the $1 billion I-95 Express Lanes project, provided $12 million to extend the life by 50 years of two structurally deficient bridges on I-64 in rural Alleghany County, and provided funds to build the first bus-rapid transit system in Virginia.

- Virginia partners with Amtrak to provide intercity passenger rail service to 23 communities across the Commonwealth. The lack of a federal partner for capital improvements hinders the ability of Virginia to expand service and meet the needs of our communities, many of which are losing air service and need connections to other parts of the Country.

- The New Starts grant program helps communities expand transit and leverages federal resources. The Dulles Rail project – arguably the most important project in Virginia and one of the largest construction projects in the country at more than $5 billion – would not be under construction without this program. Nor would my home region of Hampton Roads have its first rapid transit line – the Tide. The New Starts program provided $75 million to bring this project to fruition.

Unfortunately these programs are at risk each year and states do not know whether they will be funded in a given year. The certainty that is often discussed for the highway and transit formulas is just as important for these programs, though I find these programs are often left out of the discussion. Dedicated funding for these programs would help provide much needed certainty.

I understand there has been and continues to be a debate regarding the role of the federal government in transportation investments. As you consider these questions, I ask that the members of this Committee remember that transportation is not an end unto itself. We make investments to accomplish outcomes. A focus on whether an investment is on a particular road system or mode is not appropriate. People and goods move on all modes of transportation – not a particular road system or mode.

The focus should be on how an investment using federal funds achieves the desired outcomes. From my perspective the desired outcomes of transportation investments should be to support economic growth by more efficiently moving people and goods, and improving the ability of people to participate in the economy. At the end of the day, transportation is the backbone of our economy and investments should be considered through that aperture.

Demonstrating Public Benefit

Money alone is not the answer. There are many needs and the needs will always exceed resources. To be prudent stewards of the taxpayer funds, transportation agencies have a responsibility to ensure they can demonstrate benefit and results to the public from their investments.

The last federal reauthorization proposal, Moving Ahead for Progress in the 21st Century, started the transition towards a performance-based system. It requires states to establish targets for future performance in several areas and track performance made towards those targets.

We applaud these efforts and will take further steps in Virginia. This past legislative session, at the direction of Governor McAuliffe, I worked with the Speaker of the Virginia House of Delegates, William Howell, and other members of the House and Senate to develop legislation that will implement significant reforms for the programming of transportation funds.

The proposal signed by Governor McAuliffe requires the Commonwealth Transportation Board to develop a statewide prioritization process for capacity expansion projects. The process will establish criteria for congestion mitigation, economic development, accessibility, safety and environmental quality that will be used to rate projects. The Board will use this process to select projects for funding in our Six-Year Improvement Program.

We believe a commitment to transparency and performance is paramount. Our statewide prioritization process when up and running will help citizens of the

Commonwealth understand the benefits they will receive from transportation investments.

Financing Tools and Public Private Partnerships

As a former businessman, I understand the importance and benefits of having financing and other project delivery tools at your disposal. In Virginia we have used a wide range of financing tools and partnered with the private sector to delivery large scale transportation projects.

Federal tools like TIFIA and private activity bonds are helpful to bring large, complex projects to completion. Since 2005, Virginia has received the benefit of more than $1.4 billion in TIFIA. In 2011 an Office of Transportation Public-Private Partnerships was established to allow the Commonwealth to better partner with the private sector on projects. For this reason, I support proposals like Senator Warner's BRIDGE Act. These additional tools would help us advance projects moving forward.

However, I want to address a misconception that I have heard expressed by some. Financing and public-private partnerships are not silver bullets and cannot address many of the pressing transportation needs faced today. In fact without sustainable funding, states cannot take advantage of financing tools and would be unable to partner with the private sector.

The major benefit of public-private partnerships is the transfer of risk from the public to private partners and the private sector must be rewarded for taking on that risk. While this is possible for large-scale projects like the 495 Express Lanes in Northern Virginia, it will not work to reconstruct aging pavements on Interstate highways.

It is also important to remember that there are two "P"s before partnership in P3s – public and private. Without public sector funding the risk is too high to attract private investment. An often cited example of a successful P3 deal is the already mentioned 495 Express Lanes. However, in the initial deal only $348M of the $1.9 billion price tag did not involve some form of public support. The funding for deal is as follows:

- $495 million in federal highway trust fund and state funds;
- $589 million in TIFIA loans, publicly subsidized loans with favorable terms;
- $589 million in private activity bonds, publicly subsidized bonds through tax breaks provided to bond holders; and,
- $348 million in private equity.

Without public funding this project could not have been advanced. At the same time without the federal financial tools this project would not have been constructed

Conclusion

In closing, the problems that are faced are significant and the consequences too great to ignore. Many states like Virginia are doing their part to address this problem but we need a strong, reliable partner in the federal government.

The solutions to this problem have been identified. At this point it is a matter of Congress' willingness to take the necessary steps to implement them. Failure to do so will hinder the economic growth of this country.

The Commonwealth of Virginia and its partners – metropolitan planning organizations, transit agencies and local governments – stand ready to partner with the federal government and deliver a transportation system that will promote economic competitiveness.

I hope that over the coming months Congress will do its part and solve this problem in a cooperative, bi-partisan fashion.

Thank you again for the opportunity to address this Committee on an issue of vital importance to our nation's economy.

The United States Senate
COMMITTEE on FINANCE
CHAIRMAN RON WYDEN, D-OREGON
www.finance.senate.gov | @SenateFinance

Wyden Statement on Fixing the Highway Trust Fund and Investing in America's Infrastructure

The Finance Committee is here today to discuss how to meet the country's extraordinary need for investment in roads and highways and other infrastructure projects.

My bottom line is that you can't have a big-league quality or big-league economic growth of life with little-league infrastructure. The status of our roads and highways affects all Americans, from commuters to exporters to folks in rural areas who drive long distances for just about everything.

And in the global competition for investment and jobs, the condition of our infrastructure is a major determinant of how the outcome plays out. By any calculus, our investments in infrastructure lag way behind our competitors'. China, for example, invests 8.5 percent of its GDP in infrastructure, and in some parts of Canada, they're investing 10 percent. The U.S. invests only 1.7 percent. No American can be happy with the prospect that it's easier to move goods from a Chinese factory to a Chinese port than from an American factory to an American port. That's what's at risk.

The American Society of Civil Engineers – the trusted gurus of infrastructure – write an annual report card that grades the country's roads and highways. In 2013, the U.S. earned a D+, not exactly nobody's definition of success. The report found that nearly a third of our roads are in disrepair, and nearly half of highways around cities suffer from congestion. Americans waste millions of hours and more than a billion gallons of gasoline sitting in traffic every year. This has got to change.

There are two priorities to consider. The first is reauthorizing and fixing the Highway Trust Fund, which feeds money into transportation projects. Unfortunately, it has less money coming in than it has going out. Fixing it in the short term will require $10 billion to keep the fund solvent through the calendar year. Getting through fiscal year 2015 will take another $8 billion.

What happens if the authorization expires or if the fund dries up? According to one report, 6,000 projects may grind to a halt, putting many thousands of construction workers out of a job and causing "traffic migraines" across the country.

Then, for the long-term, Congress needs to find a sustainable source of funds that will keep this crunch from happening again. It would be a tragic mistake to let highway funding become another stop-and-go extender like Medicare physician payments and many important tax incentives.

Relying on short-term policies, emergency patches, and temporary extensions makes forward-looking strategies impossible, and when it comes to infrastructure, planning ahead is absolutely essential.

Some proposals offered over the last few months, like using new tolls on existing roads or charging motorists based on the number of miles they drive, raise questions about privacy and feasibility that would need to be answered. We're going to examine them thoroughly.

It's going to take $100 billion just to keep the Highway Trust Fund solvent for six years. Meeting that bar will give states a chance to think ahead, and construction workers won't have to worry about being laid off because of Washington inaction. And while Congress develops fresh, long-term policies for the trust fund, it should also consider ways to encourage Americans to use the cleanest and most efficient fuels.

But let's face it, fixing the trust fund is just the bare minimum in terms of investment. It's time to aim higher. That's where the second priority comes in – getting private capital off the sidelines and into this effort. There is a whole host of innovative proposals – including some from Senators Rockefeller, Schumer, Warner, Bennet and Blunt – designed to make that happen. And the only place you have to look to find proof that you can get private capital off the sidelines is the Build America Bonds program.

The Build America Bonds program had been proposed for years and years when it was finally included in a two-year bill in 2009. In this very hearing room, Senators hoped it might generate $5 to $10 billion worth of infrastructure projects over its lifetime. By the time the program ended, Build America Bonds helped finance more than $180 billion of projects in Oregon and from one end of America to the other.

The lesson is clear: there are hundreds of billions of dollars in private capital sitting on the American sidelines. Surely some of that can be invested in American infrastructure. I'd like to aim higher and do everything possible to build a bipartisan coalition for policies that generate $1 trillion in American infrastructure.

From a purely commercial standpoint, investing that capital in critical American infrastructure projects certainly has the potential to be more profitable and improve more lives than the alternatives.

It's important not to punt investments further into the future. Maintaining a good-quality road is cheaper than rebuilding a failing one – especially while interest rates are low – and it's tougher to invest in new transportation projects if the country's roads and highways are falling into disrepair. The price tag for a strong national infrastructure will only grow in the future, so it's time to get to work.

This morning I also wanted to recognize the unfortunate passing of our former colleague Jim Oberstar. Jim spent his entire career working on transportation policy, first as a staffer who worked on the legislation that created the Department of Transportation in the 1960s, then while representing Minnesota's eighth district for more than three decades in the House. He was a titan of transportation policy – especially in aviation – and all who fly in America should be grateful to Jim Oberstar.

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COMMUNICATION

May 16, 2014

Honorable Senator Ron Wyden
Chairman
Committee on Finance
United States Senate
219 Dirksen Senate Office Building
Washington, DC 20510-6200

RE: New Routes for Funding and Financing Highways and Transit (5/6/2014)

Dear Committee Members:

This statement has been written by members of the University of New Hampshire, Department of Civil and Environmental Engineering, Graduating Class of 2014. Over the past several months we have learned of the impending shortfall in the Highway Trust Fund (HTF). This matter is of great concern to us as the solvency of the HTF significantly impacts our future job prospects, not only for this summer but out into the next several years as well.

In the United States today, over half of the funding for surface transportation infrastructure comes from the HTF. Based on statements made by the New Hampshire Department of Transportation, even the threat of losing Federal funding could cause 30 percent or more of construction projects to be sidelined this summer. Based on the current landscape of infrastructure funding we expect this to be the case in most places around the country.

As graduating students we are extremely vulnerable to the consequences of a shortfall in the HTF due to our limited work experience. As construction companies and engineering consulting firms grapple with this issue it is unlikely that they will offer new positions, especially for young engineers like us. Even for those of us who plan to pursue Masters or Doctoral Degrees, our futures are in question because state departments of transportation (which receive HTF aid) fund many of our research projects.

While we feel this issue has the potential to drastically affect our careers, we also believe the HTF must be kept from going bankrupt in order to safeguard the American economy. As young engineers we can see the terrible state of our nation's aging infrastructure and we understand the effect that it has on businesses. If the HTF becomes insolvent, maintenance will continue to be deferred on essential infrastructure and the American people will continue to suffer for it.

While we recognize that this hearing is entitled "New Routes for Funding and Financing Highways and Transit", we would like to testify in support of increasing fuel taxes. When examining other transportation trust funds, such as the Harbor Maintenance Trust Fund and the Inland Waterways Trust Fund, they are alike in that they rely on user fees to support their maintenance and expansion. We believe this is an essential pillar of transportation funding because it draws revenue from the source of its damages. Currently, there are several ideas as to the most effective means of charging highway users, however we support raising fuel taxes in this instance because bankruptcy is only months away. If revenue is to be raised in the immediate future, Congress must implement a system that has been proven. In our opinion, that system is taxing gasoline and diesel fuels.

In addition to raising fuel taxes we also support adjusting them to the Consumer Price Index (CPI). According to the Congressional Budget Office, the buying power of fuel taxes has decreased by 32 percent over the last twenty years due to inflation. That amounts to 14 billion dollars today and suggests that the current funding problems would not exist had fuel taxes been indexed beginning in 1995. Furthermore, we feel that the spirit of the law is to keep taxes the same in constant dollars over time. If Congress agrees today that infrastructure needs require a certain level of taxation, we feel that the effective rate of taxation should be the same next year and the year after, regardless of inflation.

In recent years, the short term nature of infrastructure legislation has negatively affected the construction and civil engineering industries. Moving forward we believe that raising fuel taxes and indexing them to CPI will stabilize the HTF and give lawmakers time to develop new funding strategies in the wake of more fuel efficient and alternatively powered vehicles. As graduating students, we greatly appreciate your willingness to hear our point of view. Thank you very much for your time and consideration on this matter.

Most Sincerely,

Travis Adams
Joshua Bouthillier
Blaine Cardali
Devon Christen
John Connolly
Abigail Davis
Christopher Dowd
Christopher Jacques
Khoa Lee
Douglas Lockar
Graham Lockard
Matthew Macy
Ryan McMullen
Jack McTigue
Zach Paight
David Schlater
Jeffrey Sires
Kenneth Taylor
Kevin Tisdale
Andrew Wells
Kyle Westhaver

Members of the Graduating Class of 2014
Civil and Environmental Engineering
University of New Hampshire

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