

**CRUMBLING INFRASTRUCTURE: EXAMINING THE
CHALLENGES OF OUR OUTDATED AND OVER-
BURDENED HIGHWAYS AND BRIDGES**

HEARING

BEFORE A

SUBCOMMITTEE OF THE
COMMITTEE ON APPROPRIATIONS
UNITED STATES SENATE

ONE HUNDRED THIRTEENTH CONGRESS

FIRST SESSION

SPECIAL HEARING

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¹Died on June 3, 2013.

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**CRUMBLING INFRASTRUCTURE: EXAMINING
THE CHALLENGES OF OUR OUTDATED AND
OVERBURDENED HIGHWAYS AND BRIDGES**

THURSDAY, JUNE 13, 2013

U.S. SENATE,
SUBCOMMITTEE ON TRANSPORTATION AND HOUSING
AND URBAN DEVELOPMENT, AND RELATED AGENCIES,
COMMITTEE ON APPROPRIATIONS,
Washington, DC.

The subcommittee met at 10:19 a.m., in room SD-124, Dirksen Senate Office Building, Hon. Patty Murray (chairman) presiding.
Present: Senators Murray, Collins, and Boozman.

OPENING STATEMENT OF SENATOR PATTY MURRAY

Senator MURRAY. This subcommittee will come to order. And today we are going to hear from three witnesses, two from the Department of Transportation, Polly Trottenberg, the Under Secretary for Policy, and Victor Mendez, Administrator of the Federal Highway Administration. And our third witness is here from the Government Accountability Office (GAO), Phil Herr, Managing Director of Physical Infrastructure Issues.

Before we get started, I just want to mention that I just got off the phone a bit ago with Secretary Ray LaHood. He had some great news from my State and told me that the Department of Transportation is releasing the rest of the emergency funds needed to repair the Skagit River Bridge. Obviously, this is a huge help to the State of Washington as we have been going through this nightmare, knowing that the Federal Government is at our back and they are going to be there to fund this.

So we owe a great deal of gratitude to him and all of the Department for moving that along.

With that, I want to welcome all of our witnesses. Thank you all for being here this morning. Each of these witnesses today can speak to the importance of investing in our infrastructure. They know these investments ensure our safety and the safety of our families, and they are well aware that investments in infrastructure are fundamental to improving our economy and increasing our economic competitiveness.

Unfortunately, I know all too well what happens when our infrastructure fails. A few weeks ago, in my home State I saw firsthand the devastation that was caused when an entire section of Interstate 5 collapsed into the Skagit River. And you can see behind me, that's the main highway that goes through Washington State, I-5

corridor. And unfortunately, this is the kind of disaster we can expect to happen more often when our roads and bridges fall into disrepair.

It certainly should be the wakeup call that we need to invest in repairing and rebuilding our aging roads, bridges, and highways. Thankfully, in this tragedy no one was critically injured, and work has now begun on the temporary and long-term repair. As I said, the Secretary announced this morning that the Federal Government will do the reimbursement, which we're grateful for.

But I can tell you that I've firsthand seen that the local economy and small businesses and the livelihoods of a lot of families has been seriously disrupted without this very critical artery open for travel.

In the United States, we have built an incredible transportation system. Our highways, our railroads, our transit systems connect people across towns and across the country. Literally, they keep families together. They connect workers to their jobs. They create a productive environment for American businesses to grow over the long term.

But we can't take our transportation infrastructure for granted, because like everything else, it doesn't last forever. We've got to invest in the infrastructure we have built by repairing the damage that has occurred over decades, replacing the infrastructure that is outdated and beyond repair, and expanding capacity where it is needed to support a growing population and economy.

Our families want assurances that the roads and bridges that they drive on are safe. And our communities need a reliable infrastructure to thrive and grow. For more than a generation, there was bipartisan agreement on the need for smart infrastructure investment. Sometimes, I worry that bipartisan consensus is now eroding. Recently, we have seen more and more lawmakers here in Washington, DC, who have focused on the shrinking short-term budget, regardless of its impact on jobs and economic growth, which has led to attempts that have been too often successful to really choke off the investments today that will make such a difference down the line.

The fact is that if we slash our investments in infrastructure, like our roads and our bridges, we aren't really saving any money at all. We are actually making things worse. We're stifling economic growth. We're putting public safety at risk. And congestion is taxing families' time with painfully long commutes and causing health-threatening pollution. Roads are eventually going to need to be fixed. Bridges will have to be strengthened before they collapse. And waiting will only make the work more expensive and more difficult when it eventually has to be done.

So, what happens in the meantime? When a bridge deteriorates at some point, it's no longer safe for heavier traffic, such as emergency vehicles or large trucks, and eventually has to be closed to traffic altogether. And when roads are filled with potholes, it makes the traffic worse and it makes driving more dangerous.

So our families are less safe and our businesses can't move goods as quickly all because of short-term cuts. It's shortsighted and doesn't make sense. We have to remember: if we don't make investments now, we'll be stuck with a much bigger bill down the road.

The American Society of Civil Engineers recently released its latest report card for America's infrastructure. Our country got a D+. More than 70,000 of our bridges across the country have been deemed structurally deficient. And the average age of a typical American bridge is 42 years. We are not keeping up with repairs; we haven't for years, and much less accounting for the growth of our country's population.

This is an area where we see agreement today from the U.S. Chamber of Commerce, major labor groups like AFL-CIO, and economists and policy experts across the political spectrum. They all recognize that investing in infrastructure creates jobs today; it makes our families safer and lays down a strong foundation for strong economic growth.

We're going to be hearing more about the importance of transportation infrastructure investments from our witnesses today. But this is a clear case where investment cuts or short-term budget deficit look better on paper, but cost us more in the long run and make other deficits worse, in this case our infrastructure deficit.

In the case of the Skagit Bridge collapse, we were very lucky that the damage wasn't worse. By this fall, Washington State expects to be finished with the repairs, returning traffic to normal. But until then, in the busy summer season, commuters and families traveling on their vacations can expect to encounter delays when traveling that part of the interstate.

I talked to a young woman last week who had a 10-minute commute to her job a few weeks ago. Today it's well over 2 hours because she has to go around. Local businesses are continuing to feel the impact of the bridge collapse, and businesses far and wide that rely on Interstate 5 to move goods are going to find it takes a lot longer to get their products to customers.

This collapse illustrates just how much we rely on our roads and bridges, and I look forward to hearing the perspective of our two witnesses today. Based on their leadership and experience at the Department of Transportation, they can help us understand the current condition of our Nation's infrastructure and how much additional investment it requires. I hope to hear from them what these conditions mean for public safety and the economic competitiveness of our communities. I'm also interested in having a conversation about how recent policy changes will affect our investments.

MAP-21, the most recent highway authorization law, included new requirements for State departments of transportation to develop performance targets and put together plans to explain how they are going to reach those targets. It also consolidated many of our highway programs so there's no longer a dedicated source of funding for bridge projects.

These policy changes were meant to improve investment decisions and grant States more flexibility. But when there are limited resources, as we experienced today, how these decisions are actually made is critical. I want to hear how DOT is implementing these new provisions and how our States are responding.

I'm particularly interested in understanding how States prioritize the projects that they fund. This is especially important when you look at a bridge where even if the likelihood of failure

is low, the result can be catastrophic. What tools are available to States to help them make these kinds of decisions? And I want to hear about how the Department of Transportation is managing its relationships with our State and local governments.

PREPARED STATEMENT

Our transportation system requires collaboration among all levels of government. It is a shared responsibility, as we have recently seen, as we've worked together on the Skagit River Bridge. And we have to make sure that safety is everyone's top priority. So I really appreciate our witnesses' being here. I look forward to this discussion.

[The statement follows:]

PREPARED STATEMENT OF SENATOR PATTY MURRAY

The subcommittee will come to order.

Today, we will hear testimony from three witnesses. Two from the Department of Transportation (DOT):

- Polly Trottenberg, the Undersecretary for Policy; and
- Victor Mendez, Administrator of the Federal Highway Administration.

And our third witness is here from the Government Accountability Office:

- Phil Herr, Director of Physical Infrastructure Issues.

I want to welcome all of our witnesses, and thank you for being here this morning. Each of these witnesses can speak to the importance of investing in our infrastructure. They know that these investments:

- ensure our safety; and
- the safety of our families.

And they're well aware that investments in infrastructure are fundamental to:

- improving our economy; and
- increasing our economic competitiveness.

Unfortunately, I know what happens when our infrastructure fails. Last month, in my home State, I saw firsthand the devastation caused when an entire section of Interstate 5 collapsed into the Skagit River. Unfortunately, this is the kind of disaster we can expect to happen more often when our roads and bridges fall into disrepair. And it should certainly be a wake-up call that we need to invest in repairing and rebuilding our aging roads, bridges, and highways.

Thankfully no one was seriously injured in the Skagit bridge collapse, and work has already begun on a temporary and long-term repair. But the local economy, small businesses and the livelihoods of families are seriously disrupted without this critical artery being open for travel.

In the United States, we have built an incredible transportation system. Our highways, railroads and transit systems connect people across town and across the country. They keep families together, connect workers to jobs, and create a productive environment for American businesses to grow over the long term. But we cannot take our transportation infrastructure for granted. Like everything else, it does not last forever.

We need to reinvest in the infrastructure we have built by:

- repairing the damage that has occurred over decades;
- replacing the infrastructure that is outdated and beyond repair; and
- expanding capacity where it is needed to support a growing population and economy.

Our families want assurances that the roads and bridges they drive on are safe, and our communities need a reliable infrastructure to thrive and grow.

For more than a generation, there was a bipartisan agreement on the need for smart infrastructure investment. But that bipartisan consensus seems to have eroded. Recently, more and more lawmakers here in Washington, DC, have focused on shrinking short-term budgets, regardless of the impact on jobs and economic growth. This has led to attempts, too often successful, to choke off the investments today that could make a real difference down the line. The fact is that if we slash our investments in infrastructure like roads and bridges, we aren't really saving money at all.

We are making things worse.

We are stifling economic growth, we are putting public safety at risk, and congestion is taxing families' time with painfully long commutes and causing health-threatening pollution.

Roads are going to need to be fixed eventually, bridges will need to be strengthened before they collapse, and waiting will only make the work more expensive and more difficult when we eventually do it.

And what will happen in the meantime?

When a bridge deteriorates, at some point it is no longer safe for heavier traffic such as emergency vehicles or large trucks. Eventually, it has to be closed to traffic altogether. When roads fill with potholes it makes traffic worse and driving more dangerous.

So our families are less safe, our businesses can't move their goods as quickly, all because of short-term cuts.

It's shortsighted and it just doesn't make sense. We have to remember that if we don't make investments now, we'll be stuck with a much bigger bill down the road.

The American Society of Civil Engineers recently released its latest Report card for America's Infrastructure, and our country got a D+. More than 70,000 of our bridges across the country have been deemed "structurally deficient," and the average age of the typical American bridge is 42 years. We're not keeping up with the repairs, and haven't for years, much less accounting for the growth of our country's population. This is an area where you see agreement from:

- the U.S. Chamber of Commerce;

- major labor groups like the AFL-CIO; and

- economists and policy experts across the political spectrum.

They all recognize that investing in infrastructure creates jobs today, makes our families safer, and lays down a strong foundation for long-term economic growth.

We are going to be hearing more about the importance of transportation infrastructure investments from our witnesses.

But this is a clear case where investment cuts make our short-term budget deficit look better on paper, but cost us more in the long run, and make other deficits worse, in this case, our infrastructure deficit.

In the case of the Skagit bridge collapse, we were very lucky that the damage was not worse. By the fall, Washington State expects to be finished with repairs, returning traffic to normal. And I'm continuing to work with the Department to make sure we're reimbursing Washington State for eligible repairs. But until then, commuters and families traveling on their vacations can expect to encounter delays when traveling that part of the interstate.

Local businesses continue to feel the impact of the bridge collapse, and businesses far and wide that rely on Interstate 5 to move goods will find it takes longer for their products to reach customers.

The collapse illustrates just how much we rely on our roads and bridges.

I look forward to hearing the perspective of our two witnesses today. Based on their leadership and experience at the Department of Transportation, they can help us understand the current condition of our Nation's infrastructure and how much additional investment it requires. I hope to hear from them what these conditions mean for public safety and the economic competitiveness of our communities.

I am also interested in having a conversation about how recent policy changes will affect our investments.

MAP-21, the most recent highway authorization law, included new requirements for State departments of transportation to develop performance targets and put together plans to explain how they will reach those targets. It also consolidated many of the highway programs, so that there is no longer a dedicated source of funding for bridge projects.

These policy changes were meant to improve investment decisions and grant States more flexibility. But when there are limited resources, as we experience today, how these decisions are actually made is critical.

I want to hear about how DOT is implementing these new provisions, and how States are responding. I am particularly interested in understanding how States prioritize the projects they fund. This is especially important when you look at a bridge, where even if the likelihood of a failure is low, the result can be catastrophic. What tools are available to States to help them make these kinds of decisions?

And I want to hear about how the Department of Transportation is managing its relationships with State and local governments. Our transportation system requires collaboration among all levels of government. It's a shared responsibility, one in which ensuring safety is everyone's top priority.

I look forward to our discussion today.

With that, I now turn it over to my partner, Senator Collins, for her opening statement.

Senator MURRAY. And I want to recognize my ranking member, Senator Susan Collins, who has just been a leader and a forward-looking Republican counterpart who understands this as much as I do. And I really appreciate your work on this. Thank you.

STATEMENT OF SENATOR SUSAN M. COLLINS

Senator COLLINS. Thank you very much, Chairman Murray. I want to join you in welcoming our witnesses. And I very much appreciate your scheduling this hearing so that we can discuss in very concrete terms, no pun intended, the needs of our Nation's crumbling infrastructure.

The terrifying bridge collapse that occurred in Senator Murray's State just 3 weeks ago once again highlights the importance of maintaining our Nation's highways and bridges. Our national highway system contains too much infrastructure that is now well beyond its useful life. Some bridges are more than 100 years old. Many are unable to accommodate today's traffic volumes.

In fact, one in nine of the Nation's bridges are rated as structurally deficient, and the average age of our Nation's more than 600,000 bridges is 42 years old. The Federal Highway Administration (FHWA) estimates that we must invest more than \$1 billion at all levels of government each year just to maintain our highways and bridges over the next 15 years. Improving the system to meet future demands will require \$170 billion annually.

This will prove extremely difficult, given that the revenues collected for the Highway Trust Fund already do not support the current level of Federal spending.

The math is clear: The trust fund collected \$40 billion in revenue last year, but spent close to \$50 billion. This is not a new problem. There has been a shortfall every year for the past 5 years. By the end of next year, Congress will have transferred nearly \$54 billion in general funds into the Highway Trust Fund in order to ensure its solvency. In order for States and localities to plan for and build long-term projects, they must have guaranteed funding to support the critical infrastructure investments.

Transportation, as Chairman Murray has pointed out, is one of the largest sectors of our economy, representing nearly 10 percent of the Nation's gross domestic product (GDP) and is one of the largest generators of high-paying jobs. Improving the efficiency and reliability of the Nation's transportation system is vital to the movement of people and freight, yet every State has a backlog of transportation needs.

Maine's roads and bridges are among the worst in the Nation's rural transportation system. According to the FHWA, 32 percent of Maine's bridges are deficient, which is more than the national average of 25 percent. In fact, there are nearly 800 deficient bridges in my State. The Maine Department of Transportation estimates that its annual required investment to maintain good repair for our highways and bridges would cost \$355 million, which is \$110 million above the current level.

Senator Murray referred to the American Society of Civil Engineers, which puts out a report card evaluating each State's infra-

structure. And I've studied the one for my State. Overall for infrastructure, which goes beyond transportation, Maine receives a grade of C-. It is notable that our roads receive a grade of a D. And the society indicates that Maine motorists spend an average of \$299 extra per year in vehicle operating costs because of the poor condition of many of our roads. Our bridges, similarly, receive a C-.

Eventually, the lack of infrastructure funds leads to bridges and roads that are simply unsafe for travel by many vehicles. For example, the bridge displayed here is used to connect Lebanon, Maine, and Milton, New Hampshire. And as you can see, it has been completely closed, thus severing the link between those two towns via this bridge. It was deemed unsafe and forced to be closed.

The fact is that virtually every entrance into the State of Maine is deteriorating and requires substantial investment. And when repairs are put off to the last minute, State departments of transportation are forced to spend far more time and resources than would have been necessary if they were repaired or replaced at an earlier stage.

Now, clearly, Maine is not unique in having these problems, which affect not only the traveling public, but also the local and State economy as well.

This hearing brings much-needed attention to our outdated and overburdened highways and bridges. Now, the transportation bill that we passed last year, MAP-21, was a step in the right direction. But so much more needs to be done. And that's why I am a strong supporter of the Transportation Investment Generating Economic Recovery (TIGER) Grants Program.

I have supported the Maine DOT's successful efforts to obtain funding to replace the Memorial Bridge linking Maine and New Hampshire, the bridge between two rural communities, Richmond and Dresden, and the Martin Memorial Bridge in Rumford. These bridges were long past their expected lives and needed replacement, like so many other bridges not only in Maine, but across the Nation.

It's clear that additional investments are necessary. The President has requested \$50 billion in immediate transportation investments to spur economic investment and rebuild America. But I must say that I was disappointed that the President's plan is not supported by a serious proposal to finance it.

I so share the administration's belief that investment in transportation is critical to the health of our economy and to our economic recovery. Such investments create jobs, provide lasting assets, move commerce, and establish the foundation of future growth. But clearly, in these difficult fiscal times, it's going to be a challenge for us to find the funds necessary for these investments.

PREPARED STATEMENT

But as our chairman said, we need to think about not only the extremely troubling deficit that we have overall in our Federal budget, but also our deficit in investing in transportation, as well. Thank you, Madam Chairman.

[The statement follows:]

PREPARED STATEMENT OF SENATOR SUSAN M. COLLINS

Thank you, Chairman Murray. Welcome, Under Secretary Trottenberg, Administrator Mendez, and Mr. Herr. I appreciate your testifying before us today as we discuss the needs for our Nation's crumbling infrastructure.

As the Chairman mentioned, we are here today, in part, due to the horrific Interstate bridge collapse that occurred in Washington just 3 weeks ago. Fortunately, no one was killed, but this incident once again highlights the importance of maintaining our Nation's highways and bridges.

Our National Highway system contains infrastructure that is now well over its useful life. Some bridges are over 100 years old, and many are unable to accommodate today's traffic volumes. In fact, one in nine of the Nation's bridges are rated as structurally deficient, and the average age of the Nation's 607,000 bridges is 42 years old.

The Federal Highway Administration (FHWA) estimates that we must invest more than \$101 billion at all levels of government each year just to maintain our highways and bridges over the next 15 years. Improving the system to meet future demands will require \$170 billion annually. This will prove difficult given that revenues collected for the Highway Trust Fund already do not support the current level of Federal spending.

The math is clear: the Trust Fund collected \$40 billion in revenue last year, but spent close to \$50 billion. This is not a new problem; there has been a shortfall every year for the past 5 years. By the end of next year, Congress will have transferred nearly \$54 billion in General Funds into the Highway Trust Fund in order to ensure its solvency. In order for States and localities to plan for and build long-term projects, they must have guaranteed funding to support the critical infrastructure investments.

Transportation is one of the largest sectors of the U.S. economy, representing nearly 10 percent of the Nation's GDP, and is one of the largest generators of high-paying jobs. Improving the efficiency and reliability of the Nation's transportation system is vital to the movement of freight and people, yet every State has a backlog of transportation needs.

Maine's roads and bridges are among the worst in the Nation's rural transportation system. According to the FHWA, 32 percent of Maine's bridges are deficient, which is more than the national average of 25 percent. In fact, there are nearly 800 deficient bridges in Maine. Maine's Department of Transportation (DOT) estimates that its annual required investment to maintain good repair for our highways and bridges would cost \$355 million, which is \$110 million above its current level.

Eventually, the lack of infrastructure funds leads to bridges that are simply unsafe for travel by many vehicles. For example, the bridge displayed here used to connect Lebanon, Maine, and Milton, New Hampshire. As a result of limited funding, this bridge was deemed unsafe and forced to be closed. Virtually every entrance into Maine is deteriorating and requires substantial investment. And when repairs are put off to the last-minute, State DOTs are forced to expend far more time and resources to maintain them. Clearly, Maine is not unique in having these problems which affect not only the traveling public, but also the local and State economy as well.

This hearing brings much needed attention to our outdated and overburdened highways and bridges. The Moving Ahead for Progress in the 21st Century Act (MAP-21) was a step in the right direction providing reforms designed to simplify the program structure. It also improved upon project delivery to bring the benefits of highway and bridge investments to the public sooner. An important component of MAP-21 was expanding innovative financing programs, such as the Transportation Infrastructure Finance and Innovation Act (TIFIA). It is programs like TIFIA that produce a greater return for taxpayers and encourage private sector investment in our transportation system.

In addition to supporting TIFIA, I continue to advocate for the Transportation Investment Generating Economic Recovery (TIGER) program. I have supported Maine DOT's successful efforts to obtaining funding to replace the Memorial Bridge linking Maine and New Hampshire, the bridge between Richmond and Dresden, and the Martin Memorial Bridge in Rumford. These bridges were past their expected lives and needed replacement, like so many other bridges across the Nation.

It is clear that additional investments are necessary. While the President has requested \$50 billion in immediate transportation investments to spur economic investment and rebuild America, I was disappointed that this was not supported with a serious funding proposal.

I share the administration's belief that investment in transportation is critical to our economy. Such investments create jobs, provide lasting assets, move commerce and establish the foundation for future growth. But we must balance this commitment with other pressing needs, and it is equally important to our economic future that we rein in Federal spending and keep our national debt under control. We must address our skyrocketing national debt, which is rapidly approaching \$17 trillion.

These are all challenging issues that require Congress and the administration to work together to find solutions. I appreciate the leadership at the Department of Transportation and look forward to continuing to work together with you and the Government Accountability Office.

Senator MURRAY. Thank you very much.

With that, we're going to turn to our witnesses. We'll first hear from the Department of Transportation, Secretary Trottenberg. And then we will turn to Mr. Herr from the GAO. Thank you.

**STATEMENT OF HON. POLLY TROTTEBERG, UNDER SECRETARY FOR
POLICY, DEPARTMENT OF TRANSPORTATION**

**ACCOMPANIED BY HON. VICTOR MENDEZ, ADMINSTRATOR, FEDERAL
HIGHWAY ADMINISTRATION, DEPARTMENT OF TRANSPORTATION**

Ms. TROTTEBERG. Chairman Murray, Ranking Member Collins, thank you for granting me and Administrator Mendez the opportunity to appear before you today on behalf of the Obama administration to discuss our Nation's transportation infrastructure challenges.

The Skagit River Bridge collapse has clearly prompted a necessary conversation about the current state of our infrastructure, and, Chairman Murray, as you've noted, thankfully, the collapse did not cause any loss of life or serious injuries, but clearly is going to continue to have a major effect on the mobility and economic productivity of the region.

We are proud that the Department was able to act quickly to help Washington State. Within hours of the collapse, Federal Highway engineers were on site. We were able to provide \$1 million in emergency funds right away. You've talked to the Secretary; we'll be continuing to support the State's efforts to replace the bridge.

The Department will continue to stand by Washington State. And Senator Murray, we want to thank you and the delegation for all your leadership.

Despite the I-5 incident, the overall condition of our Nation's highways and bridges has improved a bit in recent years as a result of significant investment, improved project design and construction, and better condition monitoring. The percentage of bridges classified as deficient has dropped slightly in recent years. But there is still an enormous backlog of over 150,000 deficient bridges, with an estimated replacement cost of \$240 billion, clearly outstripping the available resources at all levels of government.

Over the past few years, the Department has received hundreds of requests through the TIGER program and our Transportation Infrastructure Finance and Innovation Act (TIFIA) loan program to repair or replace obsolete and deficient bridges, clearly demonstrating a big demand. As a result, DOT has awarded 19 TIGER grants for bridge projects totaling \$326 million. Senator Collins mentioned the bridges in Maine and also the Milton-Madison

Bridge in Kentucky, South Park Bridge in Seattle. We've done a lot of terrific bridge programs.

We've also seen a lot of interest in the TIFIA program. We've heard from the Tappan Zee Bridge in New York and the Gerald Desmond Bridge in Los Angeles, a critical freight connection to the ports of Los Angeles and Long Beach.

TIGER and TIFIA are helping to address the need, but clearly there is far more demand for these programs than we have funds available. That raises the difficult question of what is the right level of public investment in our Nation's transportation system to ensure continued safety, foster economic growth, and increase mobility choices for our citizens and businesses. How can we at the Federal, State, and local level ensure that we're building, maintaining, and operating this system as safely, efficiently, and cost-effectively as possible?

At the Department, we are very focused on the looming funding crisis that Senator Collins mentioned in our surface transportation programs and how we can wring more productivity and efficiency out of our existing system and continue to improve its performance. We are grateful for MAP-21, which provided us with 2 years of stable funding, and we consider MAP-21's focus on performance one of the most exciting and challenging areas of the legislation. We're working with key stakeholders all over the country to develop performance measures in areas such as safety, pavement and bridge conditions, system performance, congestion, and freight.

MAP-21 also focused on accelerating project delivery and built upon some of the groundbreaking work that Administrator Mendez has done at Federal Highways, with his transformational Every Day Counts initiative. For example, one of the things Every Day Counts has done is promulgate the greater use of innovative technologies like assembling bridges from prefabricated elements, as is being done with the I-5 bridge. These proven, more efficient technologies can build infrastructure faster for far less money, less disruption to the traveling public and businesses, and less impact on the environment.

Thanks in large part to MAP-21 and to the TIGER program, we've also stepped up our efforts to work with States and localities to produce better economic analysis, including expanded use of asset management to ensure that every public dollar is well spent. But as the subcommittee knows and Senator Collins mentioned, MAP-21 is only a 2-year bill instead of the traditional 6-year bill, because we were unable to find further funding. The Highway Trust Fund will be nearly depleted at the end of the life of the bill. And we've been using general funds to keep the program going. This is clearly fiscally and politically unsustainable.

In this time of severe budgetary challenges, we are going to need to find political consensus on how to sustainably fund surface transportation over the long term. The President has proposed using the savings from the military draw-downs in Iraq and Afghanistan as a source of funding and supports programs such as TIGER and TIFIA and an infrastructure bank that would help leverage additional public and private funds. Others have different proposals, and a number of States in this region and around the

country have also started to achieve political consensus on new funding for critical transportation infrastructure.

We know this is one of the many important issues that leaders on this subcommittee and throughout Congress will be grappling with in the months to come, and the administration looks forward to seeking a shared solution to sustainably fund surface transportation and keep our bridges, our roads, and our rails safe for the traveling public.

PREPARED STATEMENT

Thank you for having us here today. And Administrator Mendez and I are happy to answer any questions you have.

[The statement follows:]

PREPARED STATEMENT OF HON. POLLY TROTTEBERG

Chairman Murray, Ranking Member Collins, and members of the subcommittee, thank you for the opportunity to appear before you today to discuss our Nation's transportation infrastructure challenges. With me is Victor Mendez, our Federal Highway Administrator.

The I-5 Skagit River Bridge collapse has prompted a necessary conversation about the current state of our Nation's transportation infrastructure and how such incidents can be prevented in the future. Thankfully, the May 23 collapse did not cause any serious injuries or loss of life, but it has had, and will continue to have, a major effect on the region's mobility and economic productivity.

RESTORING INFRASTRUCTURE

As Chairman Murray noted, the I-5 bridge is a vital transportation link for international commerce, carrying an estimated 71,000 vehicles each day, including commuters, between Seattle and Vancouver, British Columbia. As much as \$14 billion in freight travels to and from Canada along this busy north-south corridor each year as well.

While it is too early to calculate the full economic impact of the downed bridge, storm-related closures of I-5 in 2007 resulted in more than \$47 million of lost economic output. Businesses in Mount Vernon and Burlington, communities adjacent to the bridge, are already reporting sales decreases of 50 to 80 percent since the bridge collapsed.

According to the Burlington Chamber of Commerce, a local coffee shop typically teeming with customers now experiences hours without any business. One local, small bank has not opened a single account since the bridge collapsed. On the freight side, a large trucking company is rescheduling pickup and delivery times to accommodate congestion-related delays at an estimated loss of \$21,000 per week.

The National Transportation Safety Board (NTSB) is taking the lead in the investigation, working with staff from our Federal Highway Administration's (FHWA) headquarters and Washington Division Office. Within hours of the bridge collapse, FHWA engineers from our Washington division were on-site to provide technical expertise to NTSB investigators. Additionally, FHWA Deputy Administrator Greg Nadeau visited the bridge site on May 28 and helped expedite a U.S. Army Corps of Engineers permit to quickly complete debris removal just days after the bridge collapse.

I am proud that the Department acted quickly to minimize economic consequences by making both financial and staffing resources available to Washington State. We immediately provided \$1 million in Emergency Relief program funds to help install a temporary bridge over the river and make permanent repairs.

For the short term, Washington State DOT will put in place an innovative, pre-fabricated temporary bridge, expected to open next week. The bridge will be constrained in its use and capacity, with a reduced speed limit, and oversized vehicles will have to use a detour route.

The construction of the permanent replacement span of the bridge will also use innovative methods. The permanent replacement span is expected to be fabricated on-site. When construction is complete, the temporary bridge will be removed and the new span will be moved into its permanent location. With FHWA's assistance, Washington State DOT expects to have the permanent repairs complete and the restored bridge open to traffic by October 2013.

And I note that Washington State DOT is the first beneficiary of the Moving Ahead for Progress in the 21st Century Act's (MAP-21's) categorical exclusion expediting the delivery of critical transportation projects in emergencies. The Department will continue to stand by Washington State and provide any assistance needed until all repair efforts are completed and this key link in the Nation's highway network is fully operational again.

IMPROVING OUR NATION'S BRIDGES

Despite increased use, the condition of our Nation's highways and bridges has improved overall in recent years, as a result of new technology and techniques used in the design and construction of projects, as well as condition monitoring.

With over 600,000 bridges, the percentage of bridges classified as deficient—meaning that they were either structurally deficient or functionally obsolete—dropped from slightly more than 30 percent in 2001 to 26.5 percent in 2009.

As bridge conditions improve, it is still critical to monitor the condition of the Nation's bridges and frequently assess the load-carrying capacity of those bridges that are showing signs of deterioration. The Department's National Bridge Inspection program relies on Federal and State bridge inspectors every day to monitor bridge conditions and ensure critical safety issues are identified and remedied to protect the traveling public. Safety inspections are conducted at least once every 2 years on highway bridges that exceed 20 feet in total length, and many bridges are inspected more frequently.

One of the newer technologies aiding in bridge condition monitoring is the use of acoustic emission (AE) equipment. Some bridges are being fitted with the AE instruments that listen to the sounds that a bridge makes and can detect the sound energy produced when a crack occurs or if a crack expands. This information is transmitted back so that continuous bridge condition monitoring is possible.

Despite the Department's rigorous oversight of bridges, a huge backlog of structurally deficient bridges remains. As of December 2012, bridges on the National Highway System (NHS) totaled 117,485, or about one-fifth of the 607,380 bridges inventoried nationwide. Of those NHS bridges, 5,237, or 4.5 percent, were considered structurally deficient. That represents a reduction of 1.4 percent from 2002, when 6,712 out of 114,544, or 5.9 percent, of NHS bridges inventoried were structurally deficient.

Over the past few years, the Department received hundreds of requests through the Transportation Investment Generating Economic Recovery (TIGER) and Transportation Infrastructure Finance and Innovation Act (TIFIA) programs to repair or replace obsolete and deficient bridges, which resulted in 19 TIGER awards totaling more than \$326 million. For example, the Milton-Madison Bridge Replacement between Kentucky and Indiana restored an important link for the surrounding economically distressed communities that was estimated to have less than 10 years of serviceable life left. Similarly, the Muldraugh Bridge Replacement replaced two deteriorating freight rail bridges that reached the end of their useful life. In Washington, a \$34 million TIGER award helped King County repair the South Park Bridge that was closed to traffic due to its rapidly deteriorating condition.

Several other nationally significant bridges approached the TIFIA program for credit assistance to replace and rebuild failing bridges. The New York Thruway Authority is currently negotiating for loan support to replace the Tappan Zee Bridge across the Hudson River. The Port of Long Beach is also looking to TIFIA to help reduce the cost of replacing the vital Gerald Desmond Bridge, which provides a critical freight connection to the port. These projects will help repair a few of the Nation's significant bridges, but there is far more demand for investment than we have funds available.

INFRASTRUCTURE DEBATE

The I-5 bridge collapse has spurred debate about the state of American transportation infrastructure. To me, the fundamental question is not so much whether our transportation infrastructure is crumbling and even collapsing, which fortunately only happens in fairly rare circumstances.

Rather, what is the right level of public investment in our Nation's transportation system to ensure continued safety, foster economic growth, and increase mobility choices for our citizens and businesses? And how can we at the Federal, State, and local level ensure that we are building, maintaining and operating the system as efficiently and cost-effectively as possible?

At DOT, we are very focused on the looming funding crisis for our surface transportation programs and on how we can wring more productivity and efficiency out of our existing system and continue to improve its performance.

We are grateful that Congress passed MAP-21 last summer. After 10 extensions of the previous law, MAP-21 provided 2 welcome years of stable funding—\$105 billion—for our highway, transit and safety programs and a lot of good programmatic and policy reforms.

We consider MAP-21's focus on performance one of the most exciting and challenging parts of the legislation. We are working with our stakeholders to develop performance measures in key areas such as safety, pavement and bridge condition, system performance, congestion and freight. Setting performance measures will help decisionmakers and the public identify cost-effective policies and investments needed to maintain and improve the national transportation system.

MAP-21 also focused on accelerating project delivery and built upon the work that my colleague Administrator Mendez has led at FHWA with his Every Day Counts initiative. Every Day Counts was designed to further increase innovation and improve efficiency, effectiveness, and accountability in the planning, design, engineering, construction and financing of transportation projects.

For example, Every Day Counts has promoted the greater use of technologies—like assembling bridges from prefabricated elements as is being done to rebuild the I-5 bridge—that allow critical infrastructure to be built faster, for less money, and with much less disruption to the traveling public and businesses and less impact on the environment.

We are working with our sister agencies to reduce the Federal permitting review process timeline for project sponsors, generating tremendous savings of time and money. We are also implementing the President's directive to cut aggregate timelines for major infrastructure projects in half, while also improving outcomes for communities and the environment. We are likewise encouraging cost-effective innovation and creative new approaches to construction, operations and project delivery.

Thanks in large part to the TIGER discretionary grant program that this subcommittee has created and supported, and now MAP-21, DOT has greatly stepped up its efforts to work with States and localities to produce better economic analysis, including expanded use of asset management, to ensure that every public dollar is well spent.

Repairing our existing infrastructure is a central component of President Obama's "Fix-It-First" program in the fiscal year 2014 budget proposal, which would direct \$40 billion toward reducing the backlog of deferred maintenance on highways, bridges, transit systems, and airports nationwide and put U.S. workers on the job, along with \$10 billion for innovative transportation investments.

The President also proposed a Partnership to Rebuild America to attract private capital to upgrade what our businesses need most: efficient roads, rails, mass transit systems, waterways, and ports to move people and goods, and safe and modern energy and telecommunications systems.

MEETING FUTURE DEMAND AND FUNDING SUSTAINABLE INVESTMENT

But as this committee knows, MAP-21 is only a 2-year authorization, instead of the traditional 6-year authorization, because that was all the funding available.

By the end of 2014, the Highway Trust Fund will be nearly depleted and Congress will have transferred nearly \$54 billion in General taxpayer Funds into the Highway Trust Fund to keep the program afloat. We will need an additional \$85 billion in General Funds over the next 6 years just to keep the program at current levels, let alone grow it. This is clearly fiscally and politically unsustainable.

Meanwhile the demands on our Nation's transportation infrastructure will only increase. By 2050, the U.S. population is expected to grow by 100 million people, with many of them projected to live in already congested metropolitan areas.

In this time of severe budgetary challenges, ultimately we need to find political consensus on how to sustainably fund surface transportation over the long term. It will not be easy.

The President has proposed using the savings from the military drawdowns in Iraq and Afghanistan as a source of funding for transportation, and supports programs such as TIFIA, TIGER and an infrastructure bank that would help leverage additional public and private funds for transportation.

Others may have different proposals, and many States, including Virginia, Maryland, Wyoming, New Hampshire, and Pennsylvania have recently achieved political consensus on new funding for critical transportation infrastructure.

I know this is one of the many important issues that the leaders on this committee and throughout Congress will be grappling with in the months to come. The administration looks forward to seeking a shared solution to sustainably fund sur-

face transportation so that we can maintain our economic competitiveness and States and localities can plan for and build long-term projects.

Senator Murray, I commend your leadership on addressing our transportation challenges. I thank you and this subcommittee for your fiscal year 2014 budget proposal, which seeks to provide the necessary resources to build and maintain our Nation's transportation system.

The President has called on us to create an America built to last. We have a long way to go to upgrade our Nation's highways, bridges, and transit systems, but we owe it to future generations to make it happen.

Thank you, and Administrator Mendez and I are happy to answer any questions you may have.

Senator MURRAY. Thank you very much to both of you.
Mr. Herr.

STATEMENT OF PHILLIP R. HERR, DIRECTOR, PHYSICAL INFRA-STRUCTURE ISSUES, GOVERNMENT ACCOUNTABILITY OFFICE

Mr. HERR. Chairman Murray and Ranking Member Collins, I'm pleased to discuss GAO's work on the Nation's bridges. Surface transportation is critical to the economy and affects the daily lives of most Americans. The collapse of the section of the Interstate 5 bridge in Washington reminds us of the economic impact that a bridge failure can have.

Today I will discuss the current state of the Nation's bridges and Federal funding programs, and recent changes to surface transportation programs for MAP-21, along with key financial challenges.

Turning first to bridge conditions, while there's been limited improvement over the past decade, a substantial number remain in poor condition, as we've discussed. Of the approximately 607,000 bridges on the Nation's roadways in 2012, 1 in 4 was classified as deficient. Since 2002, the number of bridges has increased by about 16,000, and the number of deficient bridges has decreased by about 23,000.

The impact of the Federal investment in bridges is difficult to measure. While FHWA tracks a portion of bridge spending, the data do not include State spending on bridges located on local roads and most local government spending. The lack of comprehensive information on State and local bridge spending makes it impossible to determine the impact of Federal bridge investments. This is important not only to understand the outcomes of past spending, but also to determine how to sensibly invest future resources.

Turning to more recent changes to surface transportation programs, there has been progress in clarifying Federal roles and linking programs to performance. In 2008, we recommended that the Federal Bridge Program needed clearer goals and performance measures. MAP-21 moved transportation programs toward a more performance-based highway and bridge program, as well as established a framework to address freight challenges. However, the two key programs will fund bridge construction, replacement, and rehabilitation and place bridge projects in competition with other eligible projects and activities such as road needs.

Our prior work recommended the DOT incorporate best tools and practices, some of which were discussed today, in the Federal Bridge Program. While MAP-21 referenced performance-based bridge management systems to assist States in making investments, it did not require States to use them.

MAP-21 requires the Secretary of Transportation to consult with States and others to establish performance measures and goals and report their progress. MAP-21 also links funding to performance by requiring States to take corrective action should progress toward targets be insufficient and to spend a portion of their annual Federal funding to improve bridges should conditions fall below minimum standards.

While sharpening the Federal focus to the 220,000-mile national highway system is important, calls for increased investments in bridges and other aging infrastructure come when traditional funding sources such as the gas tax have lost purchasing power. As the Nation's bridges built in the 1960s and early 1970s age, the number in need of repair or rehabilitation is increasing. Additionally, some large-scale bridge projects, often the most traveled on the interstate, are too expensive to be implemented with Federal funds alone.

Without agreement on a long-term plan for funding surface transportation, fiscal sustainability remains a challenge. In closing, it's important to emphasize that there's been progress in clarifying Federal goals and establishing a framework to link Federal surface transportation programs to performance. However, a long-term plan for funding surface transportation is needed as well.

As we noted in our 2013 High-Risk update, continuing to augment the Highway Trust Fund with general revenues may not be sustainable given competing demands and the Federal Government's fiscal challenges. We believe a sustainable solution is based on balancing revenues to, and spending from, the Highway Trust Fund. Ultimately, major changes in transportation spending, revenues, or both will be needed to bring the two into balance.

PREPARED STATEMENT

Chairman Murray, Ranking Member Collins, thank you. This concludes my prepared statement, and I'm happy to answer questions.

[The statement follows:]

PREPARED STATEMENT OF PHILLIP R. HERR

Chairman Murray, Ranking Member Collins, and members of the subcommittee: Thank you for this opportunity to discuss GAO's work examining the Nation's highways and bridges. The surface transportation system is critical to the U.S. economy and affects the daily lives of most Americans, moving both people and freight. The May 23, 2013, collapse of a section of the Interstate 5 bridge over the Skagit River, north of Seattle, Washington, underscores the importance of maintaining the Nation's infrastructure and the economic impact that a bridge failure, such as this one, can have on a region. According to Federal Highway Administration (FHWA) information, the Skagit River Bridge is a major commercial route between the United States and Canada and serves an average of 71,000 vehicles per day. Commercial truck traffic comprises about 11 percent of these vehicles, transporting goods between the two countries. Overall, there are over 600,000 bridges in the U.S. surface transportation system. However, the system—including bridges—is under growing strain, and the cost to repair and upgrade it to meet current and future demands is estimated in the hundreds of billions.

My testimony today describes: (1) the current condition of the Nation's bridges and effects of Federal funding for bridges and (2) a preliminary look at the recent changes to the surface transportation and bridge program made by the Moving Ahead for Progress in the 21st Century Act (MAP-21), along with key financial challenges. This statement is drawn from prior work that we completed from 2008

through 2010 regarding surface transportation programs.¹ The reports and testimonies cited in this statement contain more detailed explanations of the methods used to conduct our work. We conducted our work on these products in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives.

BACKGROUND

Bridges vary substantially in their size and use, including daily traffic volumes. In 2012, there were 607,380 bridges in the United States, which carried the Nation's passenger car, truck, bus transit, and commercial vehicle traffic over waterways, highways, railways, and other road obstructions. Bridge ownership is fairly evenly split between States (48 percent) and local government agencies (50 percent). State agencies are responsible for 77 percent of the Nation's bridge deck area. The Federal Government owns less than 2 percent of the Nation's bridges, primarily on federally owned land.

Bridge safety emerged as a high-priority issue in the United States in the 1960s, following the collapse of the Silver Bridge between Ohio and West Virginia, which killed 46 people. That collapse prompted national concerns about bridge condition and safety and highlighted the need for timely repair and replacement of bridges. Congress responded by establishing the National Bridge Inspection Program (NBIP) to ensure periodic safety inspection of bridges and the Highway Bridge Program was established to provide funding and assist States in replacing and rehabilitating bridges.

The NBIP established the National Bridge Inspection Standards, which detail how bridge inspections are to be completed and with what frequency.² After inspection, a bridge may be classified as deficient for one of two reasons: the bridge has one or more components in poor condition (classified as "structurally deficient") or the bridge has a poor configuration or design that may no longer be adequate for the traffic it serves (classified as "functionally obsolete").³ Structurally deficient bridges often require maintenance and repair to remain in service. In contrast, functionally obsolete bridges do not necessarily require repair to remain in service and therefore are unlikely to be State transportation officials' top priority for rehabilitation or replacement.⁴ Bridge sufficiency ratings are calculated using a formula that reflects structural adequacy, safety, serviceability, and relative importance. Based on an inspection, each bridge is assigned a sufficiency rating from a low of 0 to a high of 100.⁵ For example, in the National Bridge Inventory, the Skagit River Bridge was classified as functionally obsolete with a sufficiency rating of 46. According to the Federal Highway Administration (FHWA), classifying a bridge as deficient does not necessarily mean that it is likely to collapse or that it is unsafe. If proper vehicle weight restrictions are posted and enforced, deficient bridges can continue to serve most traffic conditions. If a bridge is determined to be unsafe, it must be closed to traffic.⁶

President Obama signed MAP-21⁷ into law in July 2012, consolidating a number of existing highway programs, including the Highway Bridge Program. Bridge projects are now funded through the National Highway Performance Program (NHPP) or the Surface Transportation Program (STP). MAP-21 divides each State's total annual Federal-aid apportionment principally between NHPP (64 percent) and

¹GAO, Highway Bridge Program: Condition of Nation's Bridges Shows Limited Improvement, but Further Actions Could Enhance the Impact of Federal Investment, GAO-10-930T (Washington, D.C.: July 21, 2010), and GAO, Highway Bridge Program: Clearer Goals and Performance Measures Needed for a More Focused and Sustainable Program, GAO-08-1043 (Washington, D.C.: Sept. 10, 2008).

²23 C.F.R. part 650.

³During an inspection, bridge inspectors rate bridge components using a numerical system to describe the condition of the component. Using the data collected by State and local governments during bridge inspections, FHWA classifies bridges in two key ways, by determining whether bridges are not deficient or deficient and by calculating a sufficiency rating.

⁴Bridges are typically classified as functionally obsolete as a result of changing traffic demands or changes in design standards since construction and are not structurally unsound.

⁵FHWA assigns each bridge in the national bridge inventory a rating between 0 and 100, indicating its sufficiency to remain in service. A rating of 100 represents an entirely sufficient bridge, while a rating of 0 represents an entirely insufficient bridge. FHWA documents state that sufficiency ratings are not intended to be an accurate representation of priority for bridge replacement or rehabilitation projects.

⁶DOT, 2006 Status of the Nation's Highways, Bridges, and Transit: Conditions and Performance (Washington, D.C., Jan. 22, 2007).

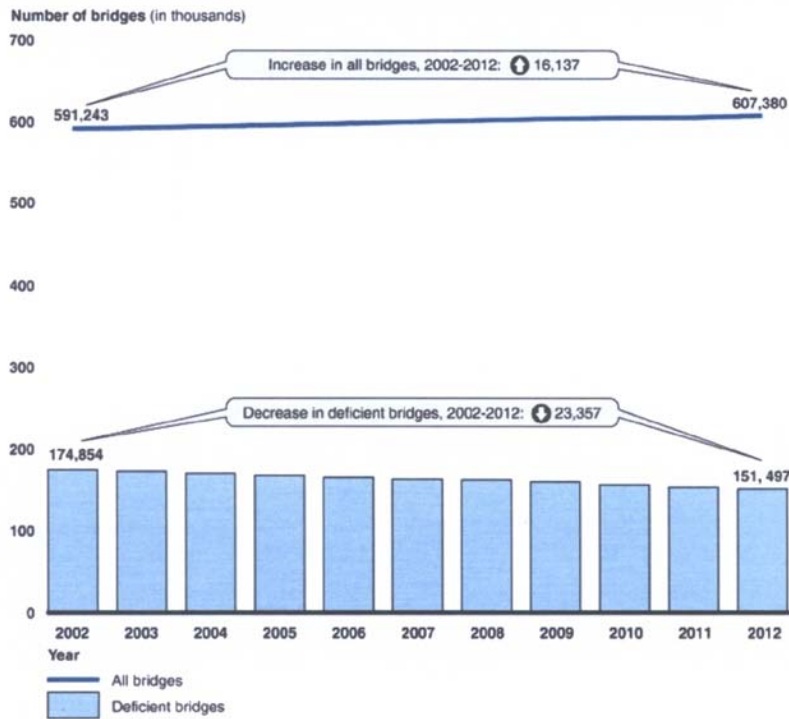
⁷Public Law 112-141. 126 Stat 405 (2012).

STP (30 percent).⁸ Estimated funding authorized under MAP-21 in fiscal year 2013 are over \$21 billion for NHPP and about \$10 billion for STP.

Bridge Conditions Show Limited Improvement, but the Impact of Federal Investment Is Difficult To Determine

There has been limited improvement in bridge conditions in the past decade, but substantial numbers of bridges remain in poor condition. Of the 607,380 bridges on the Nation’s roadways in 2012, 1-in-4 was classified as deficient. Data indicate that the total number of deficient bridges decreased since 2002, even as the total number of bridges increased. From 2002 to 2012, the number of bridges increased from 591,243 to 607,380. During that same time period, the total number of deficient bridges decreased by 23,357. (See fig. 1.) In our prior work, we found that the average sufficiency rating of all bridges—including both deficient and non-deficient bridges—also improved slightly. Specifically, the average sufficiency rating for all bridges increased from 75 to 79 on the sufficiency rating’s 100-point scale from 1998 to 2007.⁹

Figure 1: Trends in Number and Condition of Bridges, 2002 through 2012



Source: GAO analysis of FHWA data.

Note: Deficient bridges include both structurally deficient and functionally obsolete bridges.

Our prior work has found that the impact of the Federal investment in bridges is difficult to measure.¹⁰ For example, while FHWA tracks a portion of bridge spending on a State-by-State basis, the data do not include (1) States’ spending on bridges located on local roads and (2) most local governments’ spending on bridges, thus making it difficult to determine the Federal contribution to overall bridge expenditures. This lack of comprehensive information on State and local spending

⁸ Codified as positive law at 23 U.S.C. sections 104(b), 119(d)(2).

⁹ In that same period, the amount of bridge deck that is deficient increased by 39 million square feet, or 4 percent.

¹⁰ GAO-08-1043.

makes it impossible to determine the impact of the Federal investment in bridges. Understanding the impact of the Federal investment is important not only to understand the outcomes of past spending but also to determine how to sensibly invest future Federal resources.

Progress Has Been Made in Clarifying the Federal Government's Surface Transportation Focus and Linking Programs to Performance Measures, but Challenges Remain

There has been progress in clarifying Federal goals and linking Federal surface transportation programs to performance. In 2008, we reported that the Federal bridge program needed clearer goals and performance measures to create a more focused and sustainable program. We recommended that the Department of Transportation (DOT) work with Congress to identify specific goals in the national interest. Subsequently, DOT worked with Congress which adopted provisions in MAP-21, including provisions that move toward a more performance-based highway and transit program. MAP-21 also specified that NHPP funds may only support eligible projects—including bridge projects—on the National Highway System.¹¹ However, for both NHPP and STP, funding for bridge construction, replacement, and rehabilitation projects is listed among a broader category of eligible highway projects and activities that must be identified in a State transportation plan. Our prior work had also recommended that DOT incorporate best tools and practices into the Federal bridge program. MAP-21 described the importance of using performance-based bridge management systems to assist States in making timely investments; however, it does not require States to do so.¹²

MAP-21 also required the Secretary of Transportation, in consultation with States and others, to establish performance measures for bridge conditions, among other areas, and required States and other grantees to establish performance targets for those measures and to report their progress in achieving the targets.¹³ In addition, MAP-21 links funding to performance by requiring States to take corrective action should progress toward their targets be insufficient and to spend a specified portion of their annual Federal funding to improve bridge conditions should conditions fall below minimum standards set by the Secretary.

Although there has been progress in clarifying Federal goals and linking Federal surface transportation programs to performance, Congress and the administration need to agree on a long-term plan for funding surface transportation. As we noted in our 2013 High Risk Update related to financing the surface transportation system,¹⁴ continuing to fund a Highway Trust Fund shortfall through general revenues may not be sustainable given competing demands and the Federal Government's fiscal challenges.¹⁵ We believe a sustainable solution is based on balancing Highway Trust Fund revenues to and spending. New revenues from users can come only from taxes and fees. Ultimately major changes in transportation spending, revenues, or both, will be needed to bring the two into balance.

Calls for increased investments come at a time when traditional transportation funding sources are eroding. Funding is further complicated by the Federal Government's financial condition and fiscal outlook. Meanwhile, the Nation's inventory of bridges continues to age, including some considered to require costly, large-scale bridge projects. As many of the Nation's bridges built in the 1960s and 1970s age, the number in need of repair or rehabilitation is expected to increase.¹⁶ Additionally, in our previous work, some State officials explained that certain large-scale bridge projects—often the most traveled, urban bridges on interstate corridors—are too expensive to be implemented with bridge program funds alone.¹⁷ For example, Washington State DOT officials explained that costly “mega projects”—those that

¹¹The National Highway System is a 220,000-mile network of rural and urban roads serving major population centers, international border crossings, intermodal transportation facilities, and major travel destinations. It includes the Interstate System, the Strategic Highway Network, and others.

¹²A bridge management system is a system of formal procedures and methods for gathering and analyzing bridge data to predict future bridge conditions, estimate maintenance and improvement needs, determine optimal policies, and recommend projects and schedules within budget and policy constraints.

¹³Performance measures are also required for areas such as pavement conditions, injuries and fatalities, and congestion.

¹⁴GAO, High-Risk Series: An Update, GAO-13-283 (Washington, D.C.: February 2013).

¹⁵Most funding authorized under MAP-21 is drawn from the Highway Trust Fund.

¹⁶In our prior work, we reported that the average age of bridges in 2007 in the National Bridge Inventory was approximately 35 years, that the average age of bridges with a sufficiency rating of 80 or less was 39 years, and that the average age of bridges with a sufficiency rating less than 50 was 53 years. See GAO-08-1043.

¹⁷GAO-08-1043.

have an estimated total cost greater than \$500 million—that emerge as top priorities through their prioritization process may be delayed by a lack of funds. Transportation officials in Washington State and other States we visited acknowledged that existing bridge mega projects could easily exhaust a State’s entire Federal-aid apportionment for many years, potentially to the detriment of all other bridge needs in that State. Without agreement on a long-term plan for funding surface transportation, program fiscal sustainability remains a challenge.

Chairman Murray, Ranking Member Collins, and members of the subcommittee, this concludes my prepared statement. I would be happy to respond to any questions you may have.

ATTACHMENT, HIGHLIGHTS OF GAO–13–713T

TRANSPORTATION INFRASTRUCTURE

Limited Improvement in Bridge Conditions Over the Past Decade, but Financial Challenges Remain

Why GAO Did This Study

The May 23, 2013, collapse of a section of the Interstate 5 bridge over the Skagit River, north of Seattle, Washington, underscores the importance of maintaining the Nation’s infrastructure and the economic impact that a bridge failure can have on a region. This testimony addresses (1) what is known about the current condition of the Nation’s bridges and impact of Federal funding for bridges and (2) a preliminary look at recent changes to the surface transportation and bridge program made by the Moving Ahead for Progress in the 21st Century Act (MAP–21). The act consolidated a number of highway programs, including the former Highway Bridge Program. This testimony is based on prior Government Accountability Office (GAO) reports, updated with publicly available bridge data and information.

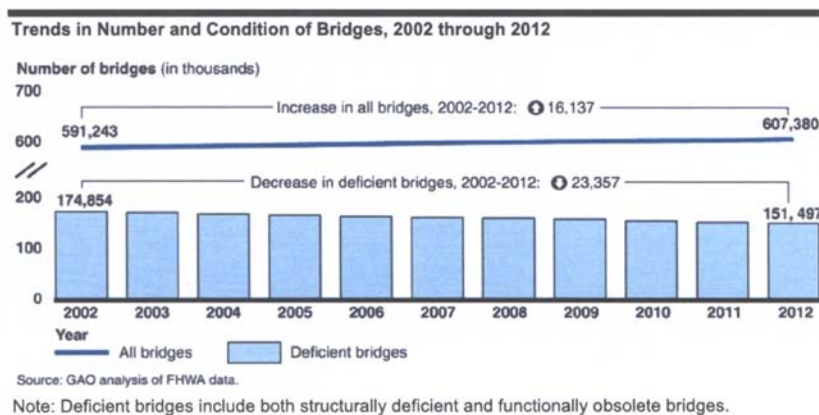
What GAO Recommends

GAO is not making any new recommendations. In 2008, GAO recommended that the Secretary of Transportation work with Congress to identify and define national goals for the Federal bridge program, develop and implement performance measures, identify and evaluate best tools and practices, and review and evaluate funding mechanisms to align funding with performance. GAO closed this recommendation as implemented based on the provisions contained in MAP–21.

What GAO Found

There has been limited improvement in bridge conditions in the past decade, but a substantial number of bridges remain in poor condition. Of the 607,380 bridges on the Nation’s roadways in 2012, 1-in-4 was classified as deficient. Some are structurally deficient and have one or more components in poor condition and others are functionally obsolete and may no longer be adequate for the traffic they serve. Data indicate that the number of deficient bridges has decreased since 2002 even as the number of bridges has increased. The impact of the Federal investment in bridges is difficult to measure. For example, while Department of Transportation (DOT) tracks a portion of bridge spending on a State-by-State basis, the data do not include state and local spending, thus making it difficult to determine the Federal contribution to overall expenditures. Understanding the impact of Federal investment in bridges is important in determining how to invest future Federal resources.

There has been progress in clarifying Federal goals and linking Federal surface transportation programs—including bridges—to performance. DOT worked with Congress which adopted provisions in MAP–21, including provisions that move toward a more performance-based highway program. MAP–21 specified that National Highway Performance Program funds may only support eligible projects—including bridge projects—on the National Highway System. The act also required the Secretary of Transportation, in consultation with States and others, to establish performance measures for bridge conditions. However, although there has been progress in these areas, Congress and the administration need to agree on a long-term plan for funding surface transportation. As we noted in our 2013 High Risk Update, continuing to fund a Highway Trust Fund shortfall through general revenues may not be sustainable without balancing revenues and spending from the fund.



PROCESS OF REHABILITATION

Senator MURRAY. Thank you very much to all of you.

I go home to Washington State every weekend. And I'm hearing from friends, neighbors, businesses, everyone about the impact of the Skagit River Bridge closure on their daily lives. We've got local stores who are losing a dramatic loss of business that they're reporting. Our large companies that move goods up and down that highway have had to divert shipments. And all of this is happening right in the middle of our tourism season, which is so important to that region, too.

Crews have now removed the debris, I understand, and the temporary detours are all in place, impacting a lot of businesses around there. But we need a long-term fix if possible.

Mr. Mendez, if I could start with you, can you tell us, what is the process and where are we in getting a temporary replacement and then the permanent repairs?

Mr. MENDEZ. Certainly. Thank you for the opportunity. Let me begin by saying that, just like you, we're very thankful that there were no casualties during this incident. And I do have to mention that we understand there are a lot of issues out there, a lot of bridges that are in need of replacement and repair. But I think it's important for me to reiterate that, in fact, at the State level—and by the way, in case you're not aware, I used to be the State DOT director in Arizona. So I used to be running a program.

I can assure that if we identify a bridge that is unsafe, we will take immediate action at the State level or the Federal level, whether that means we restrict it or close it, those are decisions that are made at the front line. With respect to the collapse on I-5, the Skagit River Bridge, things are moving forward.

GOVERNMENT INTERVENTION

This is a great example of how Government came together at the State, Federal, and local levels. They came together to serve the needs of the citizens. Obviously, you and the congressional delega-

tion were right there from day one, minute one, I should say, supporting our efforts to get everything back on track.

I would like to recognize that Governor Inslee and Washington State DOT, WSDOT, as they call themselves, Secretary Peterson and her staff were right there. Within an hour, I believe, some of WSDOT's staff were at the scene. National Transportation Safety Board (NTSB) Chairman Hersman and her staff, along with one of our engineers, on Friday morning were in an airplane on their way to take a look at the situation.

At USDOT and FHWA, my staff in the State of Washington were on the scene within 3 hours looking at the situation, working with WSDOT. My staff here at headquarters—and I've got one of our engineers here with us, a structural engineer—were on top of this from day one.

And as I mentioned, that following morning, one of our engineers from headquarters was in flight with NTSB. And then our Central Federal Lands staff, they were also looking at potential scenarios to be able to get the temporary bridge on track. So we're looking at some very unique situations there.

We also faced some unique situations with respect to the Corps of Engineers. And I'd simply have to say thanks to the Corps. We worked very hard to get through those issues to be able to move forward on the temporary solution.

With that, let me tell you where we are with respect to the progress today. A couple of days ago, WSDOT moved into place one of the temporary bridges. There will be two temporary bridges that will be in place by June 20.

Senator MURRAY. One north and one south.

Mr. MENDEZ. One north and one south that will carry two lanes in each direction. It will be restricted in terms of speed, I believe. The speed limit will be restricted to 35 miles per hour. But a lot of things are in play to make this happen by June 20.

We also, as you mentioned, are very engaged in providing financial support to move forward with both the temporary work that needs to be done and the permanent solution. Everybody, again, is very engaged. We used very innovative ideas to move this forward. Under Secretary Trottenberg mentioned earlier, we have used innovative technology to move the temporary bridges into place.

We also used an innovative approach, design build, to move the procurement for the permanent replacement bridge forward. And that's a concept we are moving forward on a national basis as well.

And then I do want to recognize that under MAP-21, Congress provided the ability for us to use categorical exclusions under emergency situations. And WSDOT was the very first, this situation was the very first utilization of that provision in MAP-21. So that was very helpful, and I'm glad you did that under MAP-21.

With respect to the permanent replacement, we are very committed to making that happen by October 1. The innovations that I just talked about and the collaboration among local, State, and Federal governments is what's getting us there. This is a great example of people coming together and really addressing the community needs. As you mentioned, the collapse has had a major impact to the quality of life, the economy in the region, and we intend to get that resolved as quickly as possible.

Senator MURRAY. Yeah. And we, everybody, really appreciates everybody coming together, working together. You said that the temporary replacement would be down to 35 miles an hour. Understandable, because it's narrow. But that is going to still have a serious consequence on a major corridor. When do you expect the permanent bridge to be in place?

Mr. MENDEZ. October 1. That's our deadline. We're all focused on that, and we intend to meet that deadline.

FRACTURE-CRITICAL BRIDGES

Senator MURRAY. Okay. Appreciate that. You know, the collapse of this bridge really was a huge reminder that our Nation's infrastructure is aging, I think to all of us. But the recent news reports have really highlighted the fact that some of our bridges are considered what's called fracture-critical. And there's risk associated with the bridge design that is non-redundant.

Mr. Mendez, can you help us understand what those two phrases mean? And how does the Department of Transportation prioritize and address those risks?

Mr. MENDEZ. Fracture-critical, that's a very interesting concept. So let me try and address a couple of issues that I think are very important. The fact that a bridge may have been designed as fracture-critical does not mean that the bridge is unsafe. As I said earlier, if we determine either at the State, local, or Federal level that something is unsafe, we will take immediate action to deal with that.

With respect to the design concept of fracture-critical, there are a couple of elements in place that have been in place, actually, for decades to address this concern. For example, I believe this occurred maybe a couple of decades ago. As some of these bridges were in fact being designed, and in fact are being designed today. So I want to make sure we understand that.

ENSURING SAFETY OF BRIDGES

There are a couple of things that we put into place to make sure that these are safe bridges. First and foremost, there was a fracture control plan, an approach that was actually implemented in concert with the American Association of State Highway and Transportation Officials (AASHTO) and FHWA about two decades ago.

That places an extra level of rigor on the safety aspects and elements of the fracture-critical structure. It puts responsibility on steel manufacturers, the designers, the fabricators, the welding inspectors, and the quality control and quality assurance personnel to ensure that a bridge is of high quality, that it's safe, reliable, even though it may be a non-redundant bridge.

Senator MURRAY. And "non-redundant" means?

Mr. MENDEZ. "Non-redundant" means that there are structures that do have redundant elements, if you will, such that when you're looking at a bridge, it's designed to take all the forces that are placed upon the bridge and through the members translate the forces into a foundation.

Senator MURRAY. So basically, if something is fracture-critical or non-redundant, it doesn't mean it's not safe to drive on? You have safety measures in place to assure that they are safe?

Mr. MENDEZ. That is correct.

Senator MURRAY. Okay.

Mr. MENDEZ. And can I add one more element?

Senator MURRAY. Sure.

Mr. MENDEZ. Because I think this is important for all of us to understand, because you raised the issue of fracture-critical.

When you look at fracture-critical bridges, there are four elements that are very, very important as they are being designed and as they are in operation. First and foremost, as I mentioned, they add an extra layer of safety in the design to account for fatigue. With respect to the materials end of it, they increase the steel toughness. On the fabrication, specifically the welding part of it, they put extra effort into that and extra quality assurance on the welding components because that is very important.

And then once it's in operation, a fracture-critical bridge, we then have an enhanced inspection process, a more hands-on approach to ensure that we're looking at all these fracture-critical elements.

Senator MURRAY. Okay. I appreciate that. And NTSB has been onsite and expect to have their report out. We'll be looking very closely at that to determine what happened with this bridge. And I apologize for going over, and I turn it over to my colleague, Senator Collins.

Senator COLLINS. Thank you, Madam Chairman.

HIGHWAY TRUST FUND SOLVENCY

Under Secretary Trottenberg, the Congressional Budget Office (CBO) projects that the Highway Trust Fund will become insolvent in fiscal year 2015. The administration, as part of its budget, has proposed using funds that won't be spent as a result of the draw-downs of the war in Iraq and Afghanistan to help finance some of our infrastructure needs.

Those funds, which are called overseas contingency operations (OCO) funds here on the Hill, are being targeted for virtually everything. They've been mentioned by Senator Reed, for example, as a way to lessen the impact of sequestration. They've been mentioned by former Senator Kyl as a means of improving the position reimbursement under Medicare, the so-called "doc fix."

This reminds me very much of a few years ago when there was a pot of money called "customs fees" that were being spent over and over and over again. And obviously, this is money that is not really being budgeted. It's money that's not going to be spent. So it's not as if there's even really a pot of money out there.

So my question to you is, has the administration identified other potential means of meeting what are truly huge infrastructure requirements in this country?

Ms. TROTTEBERG. Thank you, Senator Collins. Certainly I recall from my own time on Capitol Hill when a good source of revenue came along, it could potentially be claimed many times over.

Obviously, from the administration's point of view, I think we wanted to make a priority in saying we were going to engage in some nation-building here at home and that funds we had been

spending overseas we want to invest. But we recognize many on the Hill have different ideas about how those funds should be spent.

I think if you look at the past two times that Congress has come up with revenue sources for transportation, it has been part of a larger, overall budget negotiation, where we've addressed a number of different things, "doc fix," you name it.

I think I can say that the White House, the administration, we have some other ideas, potentially, about different ways we could fund transportation. But clearly, it's going to need to be part of a larger bipartisan discussion that we have in the context of a budget and tax overhaul deal that's done here on the Hill.

Senator COLLINS. Would you like to share with us today any of those alternative financing main—

Ms. TROTTERBERG. Well, I think I'm probably not the person to do that. I think, obviously there have been a number of good ideas that the States have been pursuing that have been talked about here on the Hill, different ways, potentially, you can look at upstream revenue sources in terms of petroleum. I think there are a lot of good ideas on the table.

My administration hasn't yet come out publicly for any of those. But I think that the President has clearly signaled an interest in wanting to work with Congress and find a good solution to, obviously, what we all know is a pressing need to find revenues for surface transportation.

Senator COLLINS. Mr. Herr, this is an issue that I think GAO has taken somewhat of a look at. You mentioned the gas tax, which is never popular to increase, but has been a traditional source.

What other sources of revenue would be available? Are there any innovative approaches being tried by the States? Has GAO looked at alternative funding?

TRANSPORTATION FUNDING ISSUES

Mr. HERR. Yes. Thank you for the question, Senator Collins.

We did a report last year looking at what is called vehicle miles traveled (VMT) as one potential option. Vehicle miles traveled refers to assessing a fee based on the number of miles driven in a given year. In that report, we looked at different international experiences as well to see how it's been done, for example, in Germany.

VMT is something that maybe does not resonate widely with people. I think there are questions about privacy that are associated with that approach that still need to be addressed.

TIFIA PROGRAM

Another area that was mentioned earlier was the TIFIA program. With TIFIA, one of the things that people seem to accept in terms of tolling are bridge tolls. People seem to understand intuitively the idea of needing to get from point A to point B, crossing a body of water or something similar. So, we were encouraged to see in MAP-21 that TIFIA funding had expanded there, too.

Senator COLLINS. I was going to ask one of the two of you to explain the TIFIA program, because it was substantially expanded by MAP-21. I believe that we authorized \$750 million for this year

and \$1 billion for next year, and that it's estimated that \$1 billion in TIFIA funding could leverage \$10 billion in actual lending capacity.

But I don't think most people understand how this program works. Could you give us a little tutorial on the TIFIA program?

Ms. TROTTEBERG. Yes. Thank you. We are very grateful that MAP-21 so greatly expanded the TIFIA program and we've been getting a lot of interest around the country.

But I think one thing we always want to make clear is TIFIA is a financing program. We lend money out, and we can lend it out at very favorable rates. I was just looking yesterday, I think the TIFIA interest rate now is 3 point something percent. We can lend the money at very favorable terms. The borrowers don't have to pay us back for a number of years.

But they do have to pay us back, so they are going to need a revenue source to pay us back. As Mr. Herr noted, tolling is one of the ways that people can pay us back. Sometimes, they can do some other type of a tax like a sales tax. That's what Los Angeles is doing to build up their metro system. Or it can be an availability payment, which is essentially a stream of appropriations from a State or local legislature.

The program offers very favorable lending terms, but it is not like TIGER. It is not a grant program, or like our regular formula programs. For communities and projects where there is a willingness to pay for tolls, it can be a terrific program.

But I think, writ large around the country, one of the things we're still struggling with is, there are a lot of places where people don't want to pay tolls, particularly potentially for existing facilities where they've been using them for free for many years. And as you know, Senator Collins, in the rural parts of your State, it's hard to generate enough toll revenue to cover the cost of replacing a very old bridge.

Senator COLLINS. Absolutely.

Ms. TROTTEBERG. So it's a terrific tool in the toolbox. It is not the complete answer to our infrastructure challenges.

Senator COLLINS. Are TIFIA funds available to private-sector organizations that want to build or take over a toll road?

Ms. TROTTEBERG. They have to partner with a public-sector entity. We are seeing a lot of that. And the public sector—one thing Administrator Mendez was talking about some of the more innovative things we're trying to do in contracting with design build. We are looking for ways to get the private sector to help us bring more efficiency in terms of building and operating projects. That can really help drive down costs, and that's very, very important. But they do, for TIFIA, have to work with a public-sector entity. It could be a State DOT or a transportation agency of some sort.

Senator COLLINS. Thank you.

Senator MURRAY. Senator Boozman.

Senator BOOZMAN. Thank you, Madam Chair.

Again, thank all of you all for being here, and I really do appreciate your hard work.

Ms. Trottenberg, with the huge shortfalls in the Highway Trust Fund, there is broad agreement that we must make our infrastructure investments more efficient. I also serve on the Environment

and Public Works Committee. And in MAP-21, Chairman Boxer, Ranking Member Inhofe worked with members to take a balanced and thoughtful approach to project delivery reforms. Our bill contained numerous provisions designed to increase innovation, improve efficiency, effectiveness, and accountability in the planning, design, engineering, construction, and financing of the transportation projects.

PROJECT DELIVERY DEADLINES

Expediting project delivery is one area where we can make significant improvements. MAP-21 as measured and bipartisan National Environmental Policy Act (NEPA) reforms are a step in the right direction, I believe. According to the inspector general of DOT, DOT has not set any deadlines for the implementation of MAP-21's critical NEPA reforms.

Is there a reason that the Department has not established the deadlines for this important responsibility under the law?

Ms. TROTTEBERG. Thank you, Senator. I want you to know, we agree the MAP-21 has provided us with a lot of good ways of improving project delivery, speeding up the permitting process, looking at a lot of innovations, and the performance measures. That is an area that the Obama administration was working on even prior to the passage of MAP-21. We've created an interagency task force, essentially, to try and speed up the transportation permitting process and get a lot of those permits from different agencies like the Army Corps of Engineers and Fish and Wildlife Service to move concurrently.

I think one thing Administrator Mendez testified about a little earlier, before you came in, is that we've actually gotten some of those categorical exclusions already out and operating. The Skagit River Bridge is taking advantage of now that you can get a categorical exclusion to rebuild when there's been an emergency.

So I think we've got some of them out. I'm going to turn to the Administrator here. I think we do have some deadlines on some of the upcoming ones.

Senator BOOZMAN. Yes. So, Administrator, when is it going to get done?

Mr. MENDEZ. Yes, sir. I think what the report that you're referring to means is that we don't have interim statutory deadlines. We do have a schedule in place for all the various activities under MAP-21 that need to be accomplished, either in rulemaking or guidance and things like that. We do have targets for that.

We internally have some targets that are not public. And I believe that may be what they were referring to. We don't have those interim statutory deadlines, but we in fact do have internal schedules.

Senator BOOZMAN. So, can you make them public now? When are the NEPA reforms going to get—

Mr. MENDEZ. Well, there are several of them. I think it would probably best if maybe we can coordinate and send you a list.

Senator BOOZMAN. Again, I appreciate it. We've all been fighting this battle for years. This is not the first time that this administration or the former administrations have realized that we've got a problem.

ENVIRONMENTAL COMPLIANCE DELAY

In your testimony, Ms. Trottenberg, you talk about by the end of 2014, the Highway Trust Fund will be nearly depleted. We all understand that. We already transferred \$54 billion over from the General Taxpayer Fund. We'll need an additional \$85 billion in general funds over the next 6 years just to keep the program afloat at current levels, which is important because, as you point out with the bonding, the States are depending on current levels so that they can pay those bills back.

But I think we all agree—and again, Senator Inhofe, Senator Boxer disagree on a whole bunch of stuff. This is something that our subcommittee, this is something that I think almost every Member of Congress, not to circumvent the environmental challenges, but to get the agencies talking together at the same time and get this done is really important.

Now, can you all tell me what percentage of project costs are associated with environmental compliance delay? Not doing the right thing, but making a decision? How much is costing our current—

Ms. TROTTEBERG. We've spent a lot of time looking at this question, Senator. I think one thing that is worth remembering, although it often doesn't seem apparent, is the vast majority of transportation projects qualify for categorical exclusions or they qualify for environmental assessments, a much lower level of environment work.

That said, there are some pretty big and complicated projects where environmental work can take up a lot of time. I think we've tried to do our best to analyze what's happened there, and that's part of why we've created, again within our administration, an interagency, what we call a rapid response team to try and untangle some of the issues.

I'll give you one that we've discovered because it's very relevant to this discussion on bridges. The Coast Guard used to be a part of the Department of Transportation. It's now part of the Department of Homeland Security. One of the Coast Guard's primary legislative mandates is to ensure that they maintain as many navigable waterways as they can for boats of as large a size as they can.

This can often be a conflict that we have in terms of, we're responsible for building bridges, building them quickly, and building them in the most cost-effective way possible. Well, those two mandates can often be in conflict. I think one thing we've discovered around the country is we were in a lot of conflict on a lot of bridge building projects. I can think of one in Senator Murray's State.

So one of the things we've done, Administrator Mendez sent one of his top bridge engineers over to be actually embedded, and he can talk about this, with the Army Corps to try and help untangle what are some pretty deep-seated and complicated hold-ups on some of these projects.

Mr. MENDEZ. Well, let me just reiterate that I used to be State DOT director in Arizona. So I've been on the delivery end.

Senator BOOZMAN. So you understand—

Mr. MENDEZ. Absolutely.

Senator BOOZMAN [continuing]. The statement about, and again I'm not being argumentative.

Mr. MENDEZ. No.

CUTTING DELIVERY TIME

Senator BOOZMAN. I don't know how long the average major project takes now. But it's many years. And many of those years are involved with this process. And I think we all agree, and I know that you, unless your State is very different than my State, that you've been very frustrated with the process. And unless something has changed dramatically, which I don't think it has, and yet this law would help change it significantly, it's still taking a very, very long time in your State to get things done.

Mr. MENDEZ. Yeah. We have implemented, since I've been here, an innovation initiative. We call it Every Day Counts. My goal under Every Day Counts is to cut project delivery by one-half, and then to also utilize technology and innovation to move our delivery process forward. Within MAP-21, Congress provided some very good directives for us to implement to address the issue that you're talking about.

For example, Congress once again provided the option for States to take responsibility for the NEPA process. California did it, and the last time we checked, I believe they were saying they have actually, through a few projects that they've done under that process, they've saved anywhere between 18 to 21 months.

Texas, we're working with them very closely. We believe they will be the next State to utilize this authority. So we're doing everything we can to address exactly what you're talking about. We need to streamline the delivery process while maintaining the environmental protections that are important for all of us.

And, as Under Secretary Trottenberg mentioned, using the rapid response team and bringing all those Federal agencies together enabled us to get the permit for the Tappan Zee Bridge in New York in less than a year. That could never have happened if we had done it the normal process, as you're describing.

President Obama has issued several Executive orders on permitting, project delivery, and eliminating rules and regulations that inhibit the delivery process for infrastructure. So we're doing everything we can to implement not only what Congress directed us to do under MAP-21, but also administratively a lot of things that we're doing under innovation to move the project forward.

Senator BOOZMAN. Thank you, Madam Chair.

Could we as a subcommittee, because I really do think that this is important in the sense of moving with the reforms, could we ask that we have a report on meeting the deadlines of MAP-21, which are in the bill, in the sense of the reforms?

Senator MURRAY. Okay. I will ask my staff and see what the best way of getting that information is.

[The information follows:]

FHWA has made significant progress in implementing all of MAP-21, including rulemakings required by Subtitle C—Acceleration of Project Delivery. With respect to statutorily required rulemakings with deadlines under Subtitle C, we have completed one of the required rulemakings (section 1315) and have met the statutory deadline for issuing a notice of proposed rulemaking (NPRM) for two other

rulemakings (sections 1316 and 1317). We have developed schedules for drafting all statutorily required rulemakings, and we are managing to those schedules.

The Department must comply with the Administrative Procedure Act (APA). The APA requires that agencies provide notice and the opportunity for the public to comment. This applies to all rulemakings regardless of whether they are statutorily required or initiated by the Department. Agencies are required to consider all comments before determining the next step in the rulemaking process. After considering all comments, the Department may decide to proceed with a final rule, issue a supplemental NPRM, withdraw the rule, or combine some of those actions. It is the Department's practice not to establish completion dates for final rules for which an NPRM has not been issued or for which the comment period is still open. However, we have developed rulemaking schedules for the NPRM stage for all rulemakings required by MAP-21, and we are developing schedules for the next appropriate rule-making action soon after the NPRM comment period closes.

The Department engaged stakeholders and the public early and often in the life of MAP-21 and has considered the input received during these outreach sessions when drafting rulemaking. However, most contacts with people outside of the Federal Government are prohibited during a rulemaking. This limits our ability to collaborate with State officials and other stakeholders during the rulemaking process, which is currently underway for all project delivery and environmental rulemakings with a statutory deadline.

Additionally, the Department works to keep the public informed about the status of our rulemakings. Each month, the Department issues an Internet report that updates the public on our progress on significant rulemakings. Information about the Department's rulemakings can be found at: <http://www.dot.gov/regulations>.

The Department has acted early and aggressively to complete required MAP-21 rulemakings and will continue to do so. The table below charts the Department's progress with the MAP-21 rulemakings.

MAP-21 REQUIRED RULEMAKINGS WITH STATUTORY DEADLINES

Section	Title	Deadline	Status
1106 ...	National Highway Performance Program	04/01/14 (Final Rule) ...	On Schedule (Drafting Underway).
1111 ...	National Bridge and Tunnel Inventory and Inspection Standards.	10/01/15 (Final Rule) ...	On Schedule (Drafting Underway).
1112 ...	Highway Safety Improvement Program	10/01/13 (NPRM)	On Schedule (Drafting Underway).
1203 ...	National Goals and Performance Management Measures.	04/01/14 (Final Rule) ...	On Schedule (Drafting Underway).
1313 ...	Surface Transportation Project Delivery Program.	06/28/13 (Final Rule) ...	Behind Schedule (Drafting Underway).
1315 ...	Categorical Exclusions in Emergencies	10/30/12 (NPRM)	Completed (Final Rule Issued 02/19/13).
1316 ...	Categorical Exclusions for Projects within Right-of-Way.	02/28/13 (NPRM)	On Schedule (NPRM Published 02/28/13; Drafting Underway for Final Rule).
1317 ...	Categorical Exclusions for Projects of Limited Funding Assistance.	02/28/13 (NPRM)	On Schedule (NPRM Published 02/28/13; Drafting Underway for Final Rule).
1318 ...	Programmatic Agreements and Additional Categorical Exclusions.	01/29/13 (NPRM)	Behind Schedule (Drafting Underway).
1405 ...	Highway Worker Safety	11/30/12 (Final Rule) ...	Behind Schedule (Drafting Underway).
1525 ...	State Autonomy for Culvert Pipe Selection ..	03/30/13 (NPRM)	Completed (Final Rule Issued 01/28/13).

Senator BOOZMAN. Okay. Again, like I said, we're concentrating on bridges and things. When you look at the reports, the infrastructure is terrible throughout the country. And yet, with the fiscal crisis, we simply have to identify ways that I think we all agree on that can lessen the costs as we go forward. And I think this is an important thing.

So again, I'd just like to know, kind of the implementation dates of the law and just making sure that we're getting that done. And then if we need to be of help in getting that sorted out, what can we do as a subcommittee to help you get the information that you need or the resources to get it done? Thank you.

Senator MURRAY. Very good. And I appreciate that request very much.

COLUMBIA RIVER CROSSING PROJECT

And speaking of the bridge you were just speaking about, in terms of running into the Corps and the Coast Guard, after a very long time, it's the I-5 bridge, part of that same corridor that the Skagit River Bridge went down is the I-5 span that goes over the Columbia River between Vancouver, Washington, and Portland, Oregon. It's called the Columbia River Crossing (CRC) Project. I know you're familiar with it. We call it the CRC out there. I actually started discussing this with former Senator Hatfield, the Republican from Oregon, more than 20 years ago. So I understand, Senator Boozman, when you're talking about takes a long time to get anything done.

But it is a critical piece of infrastructure on the I-5 corridor. Needs to be replaced. It's an old bridge. It is a major bottleneck along that corridor, and it needs to be shored up for a lot of different reasons. We look at the bridge north of it in Skagit and see what happens, and the dynamics that would occur on that corridor are just incredibly difficult to think about.

Secretary Trottenberg, I just wanted to ask you, What would a bridge collapse like the one on the I-5 corridor between two very large cities, Vancouver and Portland, occur on the regional economy if that were to collapse because we didn't get it done?

Ms. TROTTEBERG. Clearly, Chairman Murray, I think the results there would be catastrophic and something I think we greatly fear.

I do want to reiterate, though, what Administrator Mendez has said, which is, obviously we've had the tragedy of the Skagit River Bridge. But I think in general, we've worked pretty closely with States to do—I mean, one thing I think in part because of some of the good guidance of GAO and just good work over the years with the States, we have really improved year by year our bridge inspection regime.

Look, obviously, sometimes accidents do happen. But I think, particularly on big, important crossings like that one that have a huge effect on the economy and commuting times and you-name-it, we're engaged in pretty rigorous oversight and inspection.

But clearly, this is what we're seeing in the TIGER and TIFIA programs, some major bridge programs, major projects that have really what we would consider being national significance coming to us, wanting Federal assistance.

Senator MURRAY. Well, this is clearly a project that we don't want to be shut down because one of those of maintenance says, "No more." So we've been working on it for a very long time. It's a very complex project. It's two different States, two different cities, very different communities, very complex.

And we've now spent more than a decade just working to secure the State and Federal funds. We've conducted scores of reviews, working very hard to meet all of the permit requirements. And the Federal Government has really done its part. It's been remarkable on the level of Federal funds and commitment to this project. And the State of Oregon has done their part. We are now waiting on State legislators in my State, in Olympia, to do their share.

Madam Secretary, can you talk about the need for Washington State legislators to step up at this time?

Ms. TROTTEBERG. Chairman Murray, you know our own Secretary has been out a couple of times to visit with your legislators. I know Administrator Mendez has been there and Administrator Rogoff from the Federal Transit Administration. I think DOT has conveyed the message about what an important project we think this is.

We've, as you say, put a lot of Federal resources in and I think put a lot of time and effort into working through what were some very, no question, complicated environmental and operational issues. We hope to extend in continued partnership with you all and members of your legislature.

Senator MURRAY. We do, too. So, thank you. Working very hard on that.

Mr. Herr, GAO has placed funding the Nation's service transportation system on its list of high-risk areas. That list also includes things like acquiring defense weapons systems, managing information on terrorism, and protecting Federal computer systems against cyber attacks.

Can you tell us why GAO considers the financing of Federal transportation programs to be as critical to our country as those issues?

LONG-TERM INFRASTRUCTURE INVESTMENT PRIORITIES

Mr. HERR. Yes, it's been one of the recurring themes through the hearing today. The debate about infrastructure revolves around the need to make investments now as well as for aging assets, some of which were damaged as the bridge crossing you were just discussing in Washington State. It's been a problem for 20 years. It takes time to get these prioritized, it takes time to get them funded, and then additional time to get them built.

We also see the competition that the Highway Trust Fund faces with general revenues. Congress is always looking for an additional revenue source and offsets. Because of that, we felt that it rose to the prominence of putting it on the high-risk list as a national priority. The Comptroller General felt very strongly about that.

Senator MURRAY. Okay. Mr. Mendez, I wanted to ask you, before the Skagit River Bridge collapsed, it was not scheduled for replacement for years and years to come. Other bridges in our State were considered a much higher priority for significant repairs and even replacement.

I'm interested in asking you how States prioritize their work. If the I-5 bridge over the Skagit River was not high on the priority list, it's now collapsed, then what kinds of conditions can we expect to find on bridges that do make it to the top of the list for significant overhauls?

Mr. MENDEZ. Let me try and run briefly through the prioritization process that is in place. And in fact, under MAP-21, with the implementation of performance management concepts, we believe there actually is more flexibility built in for the States to help make those decisions.

However, we, as I've advised all of our personnel within FHWA, even though we do support the efforts that are underway, we don't

make project selections. That's left up to the local and State governments. We do have an influence to play in how they prioritize.

BRIDGE INSPECTION PROCEDURES

Now, we don't make final selection. But it's important, and again, maybe it's part of my background, that the decisions that are made at the front line because States know best about a lot of the issues and the factors that are happening within the State. It would be very difficult, and I've been in that position, to have somebody in Washington, DC, try to establish a priority for the State of Washington.

I believe the decisionmakers, with the bridge management systems that are in place that we promote, a lot of the procedures that are in place in terms of the inspections of bridges, and that level of information, really have all information that is used to arrive at a priority.

We also at the Federal level have a national bridge inventory that is a snapshot, once a year, that we compile of the bridge inspection information from all the States. But again, that's only a snapshot. A lot of the information that is kept at the State level is in addition to what's in the bridge inventory. And I think taking all of that information together, plus the oversight that we provide on the bridge inspections and the bridge program overall, helps the States determine what are the best priorities for them.

Senator MURRAY. Well, the Federal Aid Highway Program is based on the principle that States own and operate the National Highway System. That means even though the Federal Government provides funding for capital programs, the States set their own priorities for these.

ADDRESSING CRITICAL CORRIDORS

So, Secretary, how can we make sure the Federal funds address problems along our most critical transportation corridors such as our interstate roads?

Ms. TROTTEBERG. Chairman Murray, I think that's really one of the fundamental challenges that faces American transportation in the way our system is designed. I know it's something the GAO has written extensively and very thoughtfully on, because we have the creative tension, which you're hearing here. The Federal Government puts in a lot of funding, and Congress wants to put their own priorities and policy stamp on the work. But there is a system that has largely stayed on.

And as Mr. Mendez says, we do try and work with States and let them also set their priorities at the State and local level, because we can't dictate everything out of Washington; that wouldn't work.

So it is a fundamental tension in our system. I think again, as we've talked about today, MAP-21 is going to give us a great opportunity to achieve some consensus throughout the transportation community. The Federal Government, working with States and localities, on how we can improve performance and how we can take what are increasingly scarce Federal dollars and put them toward national priorities and use data to help us figure out what those priorities should be.

It will always be, I think, in the transportation space, it will be a process where a lot of stakeholders have to be brought along. We are not going to be heavy-handed at the Federal level. But Congress has clearly given us a mandate to go out and work with our stakeholders and try and transition to a more performance-based system. We are very excited. We think it's a great challenge. We really look forward to working with our partners to try and make sure we're putting our investments where they're most needed, critical bridges and highways and transit systems around the country.

Senator MURRAY. Senator Boozman.

Senator BOOZMAN. Thank you, Madam Chair.

DEPARTMENTAL APPROACH

In following up on that, and again, I know this is difficult, I'd like to start with you, Mr. Herr, in the sense that in your report titled "Key Issues and Management Challenges for DOT" that came out, you found that the DOT's program oversight has generally been process oriented rather than outcome oriented. MAP-21, however, required DOT to transition to a goal-oriented performance-based approach for highway programs. The GAO noted that "DOT faces institutional barriers implementing these performance-based programs." And I think that's what Ms. Trottenberg was alluding to, the fact that we have States involved. We have congressmen involved.

Do you believe that DOT is now prepared to make the transition? And when should Congress expect some results? So why don't we start with you, Mr. Herr? If you can just comment on that. And then, Director Mendez, and Director Trottenberg, if you all would just comment on that. And then, as you said, Ms. Trottenberg, in relation, you can comment on the kind of as you see it from the outside. But if you all would comment on the problems, doing that, I think that would be real helpful.

Mr. HERR. Sure.

Senator BOOZMAN. But I think it is something we definitely need to get done.

MAP-21 TRANSITION CHALLENGES

Mr. HERR. Yes. Thanks for the question. As discussed here, we think MAP-21 offers an important framework for the transition at DOT. In fact, at this point there are timelines in the law that need to be met for implementation and performance measures that need to be established.

That said, and it's been reflected in the discussion, the relationship between DOT and the States, with the States setting their priorities, is one where it's going to require a different approach in the sense that there will be deadlines that will be missed at the State level. There will be goals that will be missed. And how DOT and the Federal Government comes back and says, "Hey, it's time to shift resources because this particular target hasn't been met" would be a change in the culture of how this program has been operated over the years.

We found instances, looking at the emergency relief program, where some of the basic principles that had been laid out in the regulations weren't being followed. So, DOT went back and recov-

ered funds, in that case, about \$230 million. The law establishes an important framework, but then the devil will be in the details in terms of how that all works out.

It will take, I'm sure, some hard conversations that have to be had if some of these targets begin to be missed.

Director Mendez.

Mr. MENDEZ. Yeah. It's a very complex topic. When I first looked at the issue of performance management, I thought I had a professional opinion about what it entailed. But as we started reaching out to a lot of the stakeholders and a lot of the transportation community, it became clear that it's a very complex topic. So we're going to have to continue working on this.

And we do have the schedule, which we'll share with you, on performance management. But there is also one other element within MAP-21 that is—

Senator BOOZMAN. Can I ask one thing before we move on?

Mr. MENDEZ. Sure.

Senator BOOZMAN. And I don't mean to interrupt. But as an old State director, give me an example of some of the tension that you would have in the sense of performance.

Mr. MENDEZ. Well, I won't speak on behalf of State DOTs.

Senator BOOZMAN. No.

Mr. MENDEZ. But I'll provide my experience.

Senator BOOZMAN. Sure.

Mr. MENDEZ. I think one of the issues that you traditionally find a level of concern with is when you're using measures, immediately after we report, let's say, the first year of measures, a State will be compared to State Y and that has been a concern for a lot of States: Are we going to use performance management to actually improve the decisionmaking process within States, or to compare States? That has been a big concern. And so, we'll work on that.

I think our objective is to make better decisions, to make informed decisions, and invest limited resources wisely. And I think that's really what all of us want to do as a Nation. And so that's just one example of some of the issues that we will be facing.

Now, I did want to mention that within MAP-21 there is a provision with respect to minimum standards for certain bridges. If 10 percent or more of the total deck area of NHS bridges in a State is on structurally deficient bridges, then the State must devote funding from one program to really focus on those issues.

So Congress included a provision in MAP-21 to help us improve bridge conditions. But it is a very complex issue. We have had outreach with over 10,000 stakeholders in the past 8 months, and we're going to continue to work on it.

Senator BOOZMAN. Ms. Trottenberg.

Ms. TROTTEMBERG. Yeah. As Mr. Mendez said, I mean, it's interesting. In MAP-21 we tallied it up, and Congress gave us 100 separate legislative mandates to be implemented over a 2-year period, which is going to turn into about 50 or 60 rulemakings. I know sometimes folks on your side say we love rulemakings. Well, we get a lot of them from Congress. On the performance front, we've got nine different sets of rulemakings, not just on the highway side, but in transit and in roadway safety.

And we are, again as Administrator Mendez pointed out, working with State DOTs, MPOs, you name it. And the feedback we're getting, I could safely say, is all over the map. I take Washington DOT, which is, I think, a real leader in performance measures. They track a lot of measures. They're very excited about moving in this way. They're already starting to really target dollars where they're going to get the best performance.

Some other DOTs, perhaps in States where they are in budgetary difficulties, they don't want to track anything. They already feel that they don't have the funds they need just to keep their program up and running. They're very concerned about, is DOT going to give them now, with all these rulemakings, a complicated new regime of things to track? And so we're really walking a fine line there. We want to move everybody from where they are to a more performance-based system. But as Administrator Mendez says, we have to be careful. Every State is not in the same place. And that is a challenge for us at the Federal level.

Senator BOOZMAN. No, that's a good discussion, very helpful. Thank you.

Thank you, Madam Chair.

Senator MURRAY. Thank you.

OVERSIZE LOAD PERMITS

I wanted to go back to what happened on the Skagit River Bridge in my State. Like a lot of trucks that travel on our roads and bridges, the truck that actually hit that bridge was carrying an oversized load. When trucking companies move oversized loads, they have to get a special permit from the State government.

Administrator Mendez, can you tell me what the Federal role is in the permitting process?

Mr. MENDEZ. I think you may have raised a couple of issues. One is the weight issue, and one is the height issue.

On weight and height issues, basically, the States provide the permits for both. Specific to the height issue, we administer and publish the Manual on Uniform Traffic Control Devices, the MUTCD for short. This is a document that basically provides standards for devices on streets, highways, and bicycle trails that are open to the public. We provide a standard that low-clearance signs, warning signs, must be provided when a clearance is less than 12 inches above the State statutory vehicle height.

Now, the complication there is that every State may have different maximum vehicle heights. So, if you're a trucker going through various States, you have to be on the lookout for—

Senator MURRAY. Which you do on the I-5 corridor.

Mr. MENDEZ. Yes, you do. And so, that's our role, to ensure that through the MUTCD, we provide that level of oversight and direction.

Now, it's up to the individual States to execute the direction. And so, on the Skagit River Bridge incident, I know NTSB is still reviewing that. I do know they have a preliminary report on the Web site that provides some preliminary information. But we're going to wait until the end of their conclusions to see what next steps we need to take.

Senator MURRAY. Or if there are any recommendations.

Mr. MENDEZ. That is correct.

NEW TECHNOLOGIES TO IMPROVE SAFETY

Senator MURRAY. Okay. There's a lot of new technologies that can make it easier to access data if you're a truck driver going through different places with different regulations. Those technologies actually could help make bridge clearances more accessible to highway users.

Has the Department looked at any of those new technologies about how they could help create some better safety traffic to prevent future accidents like we had in Washington State?

Mr. MENDEZ. Actually, just this past March, we started a research project with technology to get to the exact issue I believe you're talking about.

Senator MURRAY. Describe it to us.

Mr. MENDEZ. My understanding is that it's a technology that will help identify height clearances, or opening, I think is the way it's framed, as trucks move through the bridges in this case, or tunnels. So we're looking at the technology side to see if there's a solution there.

Senator MURRAY. Okay. Well, this has been a very helpful hearing. Certainly, what happened at home in Washington State on the Skagit River Bridge has just been an eye-opener for everyone in my State. But as we have talked about here, this is not a unique challenge. There are many, many bridges in my State and across the country. Certainly, you've all talked about the funding challenge as we try to replace this aging infrastructure. And we will be looking very seriously at that in this committee as we move forward in the appropriations process.

ADDITIONAL COMMITTEE QUESTIONS

So I appreciate all of you coming here. This subcommittee will hold the record open for 1 week for any additional questions, and look forward to your comments. And again, thank you to all of you for participating.

[The following questions were not asked at the hearing, but were submitted to the Departments for response subsequent to the hearing:]

QUESTIONS SUBMITTED TO HON. POLLY TROTTENBERG

QUESTIONS SUBMITTED BY SENATOR PATTY MURRAY

Question. When trucking companies move oversized loads on the national highway system, they must obtain a special permit. What is the Federal role in the process of permitting oversized loads, with regard to both overweight and over height loads?

Answer. States are responsible for issuing oversize/overweight permits that govern truck movement on highways within the State. In some regions of the country, applicants can receive a multi-state permit. These special permits are issued based on a number of factors, including the size and weight of the load, the geometry and condition of bridges and highways on the requested route, the presence of highway construction work zones, day and time of travel, and other conditions necessary to ensure safe travel.

Federal oversight of State permitting activities is not administered on a per load basis, rather, States are required to certify annually to the Federal Highway Administration (FHWA) that State and Federal truck size and weight laws are being enforced, report on the number of citations that have been issued, and report on the

number and type of load permits that were issued. Failure to certify can trigger penalties to be applied against the State's Federal-aid highway program funds.

Question. In the case of the Skagit River Bridge, there were questions about the height of the truck and whether any height limitations were marked on the bridge. What are the Federal requirements for signage and how does the Department of Transportation (DOT) work with States on uniform standards for posting clearances?

Answer. The Federal Highway Administration issues the Manual on Uniform Traffic Control Devices (MUTCD) to establish a national standard for all traffic control devices installed on any street, highway, or bicycle trail open to public travel. The MUTCD requires the use of a low clearance sign to warn traffic of clearances less than 12 inches above the State statutory maximum vehicle height. Each State sets its own statutory maximum vehicle height. When the clearance is less than the State's legal maximum vehicle height, the MUTCD recommends that a low clearance sign be erected along with a supplemental distance plaque at the nearest intersecting road or wide point in the road at which a vehicle can detour or turn around.

Question. The Moving Ahead for Progress in the 21st Century Act (MAP-21) consolidated many of the smaller highway programs, eliminating funding dedicated to bridge projects under the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). Given this consolidation, how can DOT's rules implementing MAP-21 encourage States to spend adequate funds on the repair of existing infrastructure? How can the rules help States to set meaningful repair targets and prioritize investments to achieve a state of good repair for bridges?

Answer. MAP-21's transition to a performance and outcome-based program will provide a means to more efficient investment of Federal transportation funds. The use of performance management principles will allow States and Metropolitan Planning Organizations (MPOs) to evaluate the performance trade-offs of different investment strategies and make more informed decisions when investing in the highway network, including bridges.

MAP-21 requires each State to establish a risk-based asset management plan and a bridge management system for its National Highway System (NHS) facilities. MAP-21 also includes requirements that hold States accountable for the condition of their bridges. If, for a 3-year period, more than 10 percent of a State's NHS bridge deck area is on bridges classified as structurally deficient, then the State must reserve a portion of its National Highway Performance Program funds exclusively to address the problem. In this situation a State must also reserve a portion of its Surface Transportation Program apportionment for the improvement of bridges that are not on Federal-aid highways.

Question. Additionally, States apply a strategic and systematic process for operating, maintaining, and improving their bridges with a focus on engineering and economic analysis to arrive at an overall program of maintenance, preservation, rehabilitation, replacement, and protection actions. As part of this process, States evaluate bridge conditions and expected deterioration rates, risk factors (such as vulnerability to seismic loads, vehicular or ship impact), scour, security concerns, impact to local communities, and availability of funding. The list of considerations that ultimately lead to the selection of projects is varied and often site-specific. The overall selection of bridge projects generally supports performance targets that States have established related to conditions and functionality of their bridge inventory. By the time MAP-21 expires, Congress will have transferred tens of billions of dollars in general fund revenues to the Highway Trust Fund (HTF) to fund our transportation system. If, beginning in fiscal year 2015, outlays from the HTF were limited to match receipts, how much would overall apportionments drop?

Answer. Using estimates from the fiscal year 2014 President's Mid-Session Review (MSR) released in July 2013, FHWA could distribute \$16 billion in new obligation limitation and \$739 million in exempt funding in fiscal year 2015. This assumes that \$4.6 billion in carryover balances would be available at the beginning of fiscal year 2015 and the Highway Account of the HTF would have a zero balance at the end of fiscal year 2015.

QUESTIONS SUBMITTED BY SENATOR RICHARD J. DURBIN

HIGHWAY PUBLIC-PRIVATE PARTNERSHIPS

Question. In 2008, the Government Accountability Office (GAO) issued a report entitled "More Rigorous Up-Front Analysis Could Better Secure Potential Benefits and Protect the Public Interest." In this report, GAO noted that the Department of

Transportation (DOT) has promoted public-private partnerships (PPPs), but has done little to help State and local governments evaluate the trade-offs involved in entering a public-private partnership or determine how such partnerships can be established in a way that protects the national interest. GAO recommended that the Department develop objective criteria for identifying potential national public interests in highway public-private partnerships and identify additional legal authority, guidance or assessment tools that may be needed for the Department to play a targeted role in ensuring that such national interests are appropriately considered in the development of public-private partnerships.

The fiscal year 2013 Transportation, Housing and Urban Development, and Related Agencies Senate report included language directing the Secretary of Transportation to develop such objective criteria and identify additional legal authority, guidance or assessment tools, as recommended by the GAO.

When will DOT develop these criteria and identify additional legal authority, guidance or assessment tools and provide them to the subcommittee?

Answer. We at the Department are happy to work with Congress in order to better promote public-private partnerships and agree there is an important Federal role in not only ensuring national interests are considered, but also in providing a robust framework for State and local governments to evaluate potential tradeoffs and seek best practices in innovative project development and delivery.

Section 1534 of the Moving Ahead for Progress in the 21st Century Act (MAP-21) directs the DOT to undertake a number of activities to support the prudent use of the public-private partnership (P3) option for delivering highway projects while protecting the public interest. The Federal Highway Administration (FHWA) Office of Innovative Program Delivery is actively engaged in these development activities, which include the development of model P3 transaction contracts, the dissemination of best practices, and the provision of technical assistance to public agencies.

The P3 model contracts will help to educate public agencies and stakeholders on key provisions in highway P3 contracts, the trade-offs that have to be made, and ways to provide protections to the traveling public and State and local governments. Best practices will be developed and posted on the FHWA Web site addressing practices in each of the four key phases of a P3 project that are focused on delivering value and protecting the public interest while continuing to attract private sector investment. The model contracts will be completed by April 1, 2014, and we anticipate posting best practices starting in summer 2014.

FHWA's P3 technical assistance activities include the development of reference materials, guidebooks, primers and tools to assist in educating public sector policymakers, legislative and executive staff, and transportation professionals on P3s. FHWA recently launched a P3 Toolkit on FHWA's Web site at www.fhwa.dot.gov/ipd/p3/toolkit. The Toolkit will eventually include materials addressing Federal requirements related to P3s as well as four key phases of P3 implementation: development of legislation and policy, planning and evaluation, procurement, and monitoring and oversight.

The initial components in the Toolkit are focused on the planning and evaluation phase. A particularly noteworthy element of the tool kit is the P3 Value-for-Money Analysis To Learn and Understand Evaluation (P3-Value) tool. P3-Value is an Excel-based educational tool supported by primers, user guides and other guidebooks. Using P3-Value, practitioners will gain hands-on exposure to, and understanding of, the concepts and complex steps involved in conducting a value-for-money analysis to evaluate whether a P3 delivery option offers value in comparison to traditional delivery methods. Additional materials will be added to the broader P3 Toolkit as they are developed.

HIGHWAY PUBLIC-PRIVATE PARTNERSHIPS AND EXCESS TOLL REVENUE

Question. The same GAO report recommended DOT take action regarding public-private partnerships and excess toll revenue. The GAO report stated, "to ensure that future highway public-private partnerships meet Federal requirements concerning the use of excess revenues for federally eligible transportation purposes, we recommend that the Secretary of Transportation direct the Federal Highway Administrator to clarify Federal-aid highway regulations on the methodology for determining excess toll revenue, including the reasonable rate of return to private investors in highway public-private partnerships that involve Federal investment."

What action has DOT taken on this recommendation?

Answer. We believe that this recommendation in GAO Report 08-44 has been overtaken by changes made to the relevant statutory language in 23 U.S.C. 129 under MAP-21. First, the limitations on the use of toll revenues under 23 U.S.C. 129(a)(3) no longer include a reference to "excess" toll revenues being used for other

title 23 eligible purposes; instead, such uses are simply allowed so long as the facility is adequately maintained.

Second, the provision in 23 U.S.C. 129(a)(3) allowing toll revenue to be used for “a reasonable return on investment of any private person financing the project” was modified in MAP-21 to include the phrase “as determined by the State or interstate compact of States concerned.” In adding this language, we believe that Congress has expressed its intent that DOT should not be involved in determining whether such returns are reasonable, and we thus do not intend to issue any regulations on this topic.

NON-COMPETE CLAUSES

Question. Some recent public-private partnership transactions have included “non-compete” clauses where a local government, by contract, commits itself not to build roads or transit within a corridor of a certain highway. Other deals include “compensation clauses” that require the local sponsor to pay the private entity for reduced traffic or tolls. Some of these deals involve long-term leases of 75 to 99 years in which the public owner relinquishes control of the transportation infrastructure. For example, the Indiana toll road privatization deal required the State not to build a competing highway within 10 miles on either side of the highway. Sixty percent of traffic on Indiana toll road is interstate in nature, making this a critical corridor to the national transportation network and economy.

How does DOT weight or otherwise consider the terms of non-compete clauses and their impact on the national public interest? How are non-compete clauses taken into consideration when evaluating Transportation Infrastructure Finance and Innovation Act (TIFIA) applications?

Answer. Non-compete clauses and compensation clauses are among the many factors which can impact the creditworthiness of a project. MAP-21 modified 23 U.S.C. 602(b) directing the Secretary to provide TIFIA credit assistance to projects found to be eligible according to creditworthiness standards. This statute precludes the Department from considering the impact of non-compete or compensation clauses outside of their impact on the creditworthiness of a loan.

QUESTION SUBMITTED BY SENATOR TIM JOHNSON

Question. As we discuss the critical transportation needs of our Nation, I would like to take the opportunity to ask about a narrower, but still important, potential infrastructure issue. Motorcycles are very important to my State. According to the city of Sturgis, the annual Sturgis Motorcycle Rally generates more than \$800 million in economic activity to the region from an estimated 417,000 visitors who stay an average of nearly 6 days. That’s a lot of riders, who cover millions of miles across multiple States and who experience all sorts of road conditions on their way to my State. What more can we be doing to ensure that the safety of some of our most vulnerable road users, motorcyclists, is considered as our Nation’s infrastructure is updated, repaired or maintained?

Answer. Over the last 15 years, the number and rate of motorcyclist fatalities on America’s highways have generally risen dramatically. According to crash data for 2011, 4,612 motorcyclists were killed. The Department of Transportation is engaged in a number of activities, including research, technical guidance, and partnerships with motorcycle organizations, to help States and local partners reduce the number of motorcyclist fatalities and injuries on our Nation’s roadways.

In 2011, the Department spearheaded a domestic scan focused on motorcycle safety. The scan, supported by the National Cooperative Highway Research Program, led to the issuance of “Leading Practices for Motorcyclist Safety” which highlights a broad array of effective practices that can be adopted at the State, city, and county levels to address motorcyclist safety.

In 2010, a multidisciplinary team of Federal, State, local government and association officials met with officials from five European countries to assess and evaluate infrastructure improvements designed to aid motorcyclists. The information obtained by the team included several design, maintenance, and operational changes that could be implemented in the United States to improve motorcyclist safety. As a result, the Federal Highway Administration (FHWA) is implementing Road Safety Audits (RSAs) on sites with high motorcycle crashes and will be developing a case study report that summarizes the costs, benefits, and lessons learned for each RSA. This document should provide State and local agencies with examples and advice that can assist them in implementing motorcycle RSAs in their own jurisdictions.

The FHWA is also currently conducting a Motorcycle Crash Causation Study (MCCS). The collected data will be used to study potential causes of motorcycle

crashes to help develop countermeasures. The MCCS is the most comprehensive research effort into the causes of motorcycle crashes in the United States in more than 30 years. The data collection will continue through 2014, and a final report is expected in 2015.

The Highway Safety Improvement Program (HSIP) provides Federal safety funds to States, with the primary goal of reducing fatalities and serious injuries on all public roads, including those traveled by motorcycles. HSIP funds can be used for strategies, activities or projects on a public road that are consistent with a State Strategic Highway Safety Plan and correct or improve a hazardous road location or feature, or address a highway safety problem. Example projects to improve motorcycle safety may include installing hazard warning signs, high friction pavements, and conducting motorcycle safety education campaigns.

The Department supports the use of motorcycle helmets by all riders. Motorcycle helmet laws covering all riders, often referred to as universal helmet laws, are the most effective method of increasing and maintaining helmet use and avoiding fatalities and disability due to head injuries. Yet only 19 States, the District of Columbia and Puerto Rico have universal helmet laws that require all riders to wear a helmet. In 2012, use of compliant motorcycle helmets was nearly 90 percent in States with universal laws compared to about 50 percent in States without these laws. Over the past 30 years, research has consistently shown the negative effects of weakening or repealing motorcycle helmet use laws. The weight of the evidence is that repeal of helmet use laws decreases helmet use, and that States that repeal universal helmet use laws experience increased fatalities and injuries. Conversely, States that have adopted or reenacted universal laws have experienced significant increases in helmet use and declines in motorcyclist fatalities and injuries.

The safety of all road users, including motorcyclists, is important to the Department and we will continue to help States and local partners reduce the number of fatalities and injuries on our Nation's roadways.

QUESTIONS SUBMITTED BY SENATOR MARK KIRK

Question. With the Nation facing a critical shortfall in infrastructure funding it is important that the Federal Government explore ways to encourage private investment in infrastructure projects. Private activity bonds serve as a valuable mechanism to jump start critical infrastructure development and encourage public-private partnerships.

Does the Department of Transportation believe the statutory cap for highway and freight transfer facility private activity bonds should be lifted or increased in light of this?

Answer. The President's fiscal year 2014 budget request included an increase in the statutory cap for highway and freight transfer facility private activity bonds from \$15 billion to \$19 billion. As a result of a growing interest in private activity bonds, the Department currently anticipates hitting the current \$15 billion cap in the next 2 to 3 years. The Department supports raising the cap to provide longer-range certainty to project sponsors that private activity bonds will remain a viable tool for financing public-private partnerships.

Question. Understanding that rail and bridge projects are difficult to fund, it is even more critical to improve efficiencies of current programs, such as the Railroad Rehabilitation and Improvement Financing program (RRIF), to make the program more attractive to improve our rail infrastructure. It was noted in the President's fiscal year 2014 budget request that on average RRIF loans take 695 days to process, more than seven times longer than the statutory requirement.

What is the Department of Transportation doing to improve this process and decrease the processing wait time for RRIF loans requests within the statutory requirement of 90 days?

Answer. As you know, the Department is very supportive of increasing investment in our rail freight infrastructure, and the RRIF program is a valuable tool for providing Federal credit assistance to support rail projects. As a consequence, we are working hard to identify ways to improve the application process.

First, the Federal Railroad Administration (FRA) has been working more intensively with applicants at the pre-application stage of the process to encourage more efficient review once the application is submitted. At pre-application meetings, FRA informs applicants how to demonstrate viable project and financing structures in their applications.

FRA is also taking innovative approaches to working with short lines such as partnering with State entities that support railroad applicants' projects (e.g., Ohio Rail Development Commission (ORDC)). Often, these organizations have more re-

sources or expertise in the areas of finance and/or Federal financing than the requesting railroads.

FRA is also considering a shorter review process for smaller, simpler applications.

Question. Does the Department have recommendations to improve the RRIF program and make it more attractive for private investment?

Answer. The Department of Transportation (DOT) and FRA strongly support RRIF financing coupled with private investment for rail improvements. As mentioned earlier, FRA is also considering a shorter review process for smaller RRIF applications. FRA will continue to evaluate potential program changes and would be happy to work with the subcommittee in its reauthorization efforts.

Question. Seeking alternative ways to finance transportation projects and battle growing congestion, the Value Pricing Pilot Program (VPPP) is one effort that provides States with limited authority to toll interstates to fund improvements, reduce congestion, improve air quality and rehabilitate aging roads.

Currently, the State participation in VPPP is limited to 15. In a world of constrained resources, do you believe the number of slots available to States to participate in VPPP should be increased?

Answer. As you are aware, the VPPP is an experimental program that is designed to assess the potential of different value pricing approaches for reducing congestion. Under this program, tolls may be imposed on existing toll-free highways, bridges, and tunnels, so long as variable pricing is used to manage demand. Other eligible activities under this program include pre-implementation studies and value pricing pilot projects that do not involve tolls; however, under the Moving Ahead for Progress in the 21st Century Act (MAP-21), no additional funding has been authorized for this program. Slots under the VPPP are allocated to State or local agencies; once an agency holds a slot in the program, there is no limit on the number of value pricing projects that can be implemented under the slot. At the present time, 7 of the 15 authorized slots have been permanently allocated to States that have executed agreements for tolling projects under the program. The remaining eight slots have been temporarily reserved for State agencies that are currently pursuing value pricing studies and non-toll value pricing projects; these slots may become available in the future as those activities are completed.

The Department does not have a position on whether Congress should amend the statute authorizing the VPPP to increase the number of slots available under this program.

Question. Section 1512 of MAP-21 amended 23 U.S.C. 129 to provide additional flexibility for new capacity tolling, so long as the number of free lanes does not decrease. As in previous law the legislation also authorized toll agreements for the reconstruction of a toll-free Federal-aid highway other than a highway on the interstate system. This sets up a potential situation where a State toll authority could both reconstruct an existing non-interstate Federal-aid highway and add capacity in the same project. However, converting the existing free lanes to a tolled facility under 23 U.S.C. 129 (a)(1)(F) could be interpreted to violate the requirements of 23 U.S.C. 129 (a)(1)(b).

Clearly the reconstruction and conversion of existing free non-interstate Federal-aid highways to tolled facilities is authorized under MAP-21. Can the Department confirm that projects that seek both reconstruction and expansion of additional lanes will be allowed to move forward?

Answer. The DOT agrees with your interpretation of these tolling provisions. This situation is addressed in a set of questions and answers on the section 129 tolling program that have recently been posted on the FHWA Web site, available at http://www.fhwa.dot.gov/ipd/revenue/road_pricing/tolling_pricing/section_129_faqs.htm. (See Question 13:)

“Question 13: May new lanes added to an existing toll-free non-Interstate highway, bridge, or tunnel be tolled under 23 U.S.C. 129(a)?

“Answer 13: Yes. Under 23 U.S.C. 129(a)(1)(B), a new lane that is to be initially constructed may be tolled so long as the total number of toll-free lanes, excluding auxiliary lanes, after construction is not less than the number of toll-free lanes, excluding auxiliary lanes, before construction.

“Note that if the improvement project also includes the reconstruction or replacement of the existing lanes in addition to capacity expansion, then the entire facility may be tolled pursuant to 23 U.S.C. 129(a)(1)(E) (for bridges and tunnels) or 23 U.S.C. 129(a)(1)(F) (for highways).”

QUESTIONS SUBMITTED TO PHILLIP R. HERR

QUESTIONS SUBMITTED BY SENATOR RICHARD J. DURBIN

Question. Has the Department of Transportation (DOT) taken adequate action in response to your recommendations in the 2008 report? What other actions can DOT take to better protect public interests in public-private partnership transactions?

Answer. DOT has taken action to implement provisions of Public Law 112-141, the Moving Ahead for Progress in the 21st Century Act (MAP-21), which responds to recommendation in our 2008 report that DOT better protect public interests in public-private partnership transactions (see GAO-08-44). Our report noted that highway public-private partnerships provide advantages for State and local governments, but that potential costs and trade-offs exist. We concluded that while DOT had done much to promote the benefits of public-private partnerships, it had done comparatively little to either help States and localities weigh the potential costs and trade-offs, or to assess how national and public interests might be protected in these arrangements.

MAP-21 directed the Secretary to compile and make available on its Web site best practices on how States and localities can work with the private sector on transportation projects, provide technical assistance to States and localities regarding proposed public-private partnership agreements, and develop standard public-private partnership transaction model contracts for the most popular types of transportation public-private partnerships. Through its Office of Innovative Program Delivery, the Federal Highway Administration has developed a number of primers, including a toolkit for State legislators, and recently undertook a public outreach process to inform development of standard public-private partnership transaction model contracts.

Our 2008 report also recommended that DOT clarify its regulations on the methodology for determining excess toll revenue, including a reasonable rate of return to private investors. We believe such clarification remains important to ensuring that future highway public-private partnerships that involve Federal funding meet Federal requirements that excess revenues be used only for federally eligible transportation purposes. DOT declined to implement this recommendation and DOT officials told us they believe this is a decision best left to the States.

Question. The GAO has testified that long-term leases of existing transportation assets are driven in large part by the tax benefits accrued to the private lessor of the asset. However, these tax benefits are often not part of the publicly available information regarding privatization transactions. What value would greater transparency of the tax benefits and financing details of public-private partnerships have for stakeholders in understanding of the benefits and risks of these deals?

Answer. The private sector can receive potential tax deductions from depreciation on assets involving private sector investment and the availability of these deductions were important incentives to the private sector to enter some of the highway public-private partnerships we reviewed in our 2008 report (see GAO-08-44). Federal tax law allows private concessionaires to claim income tax deductions for depreciation if the concessionaire has "effective ownership" of the property. Effective ownership may require lengthy concession periods; among other things, the length of a concession must be greater than or equal to the useful economic life of the asset. Financial and legal experts told us that this requirement contributed to the 99-year and 75-year concession terms for the Chicago Skyway and Indiana Toll Road, respectively.

Making tax benefits more transparent would help to ensure that all stakeholders have a complete understanding of the benefits and risks over the lifetime of public-private partnership arrangements. However, State and local stakeholders may not be concerned about any revenue costs to the Federal Government resulting from tax deductions.

The benefit of greater disclosure of benefits and risks is not limited to public-private partnerships. Federal law requires sponsors of federally funded projects costing more than \$500 million (or any project receiving a Transportation Infrastructure Finance and Innovation Act of 1998 (TIFIA) loan) to have financial plans designed to provide reasonable assurance that sufficient financial resources will be available to complete a project. However, DOT does not presently require States to present an estimate of the financing costs of major projects, which can be substantial. For example, in 2009, Maryland DOT officials provided us the estimated financing costs associated with the Intercounty Connector project, which were \$1.4 billion, more than half as much as the \$2.5 billion estimated cost of designing and constructing the project itself. Financing costs can consume large shares of States' Federal and other transportation funding over several years and constrain a State's transpor-

tation capital improvement program. Disclosing these costs, which we recommended in 2009 (see GAO-09-751), would help decision makers consider and make fully informed decisions about whether to approve the substantial investment of public funds that major projects require. DOT officials have told us they are planning to implement our recommendation in the fall of 2013.

Question. What practices or guidelines ensure that specific non-compete and compensation clauses are adequately considered by DOT when evaluating TIFIA applications?

Answer. The inclusion of non-compete or compensation clauses in projects with TIFIA credit assistance is a local decision. Project sponsors must determine how best to structure a contract for a project with a TIFIA component. If non-compete or compensation clauses are included, the TIFIA office considers those clauses from both a legal and a credit perspective. Specifically, the TIFIA office determines if the non-compete or compensation clauses are legally sound, and if so, how the clauses might affect a project's creditworthiness, which is a primary component of the TIFIA selection process.

CONCLUSION OF HEARING

Senator MURRAY. And with that, the hearing is recessed.

[Whereupon, at 11:34 a.m., Thursday, June 13, the hearing was concluded, and the subcommittee was recessed, to reconvene subject to the call of the Chair.]

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