THE COST OF DOING NOTHING: WHY INVESTING IN OUR NATION'S INFRASTRUCTURE CANNOT WAIT

(116–1)

HEARING

BEFORE THE

COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE HOUSE OF REPRESENTATIVES

ONE HUNDRED SIXTEENTH CONGRESS

FIRST SESSION

FEBRUARY 7, 2019

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Committee on Transportation and Infrastructure
U.S. House of Representatives
Washington, DC 20515

Peter A. DeFazio Chairman	Sam Graves Ranking Member
Katherine W. Dedrick, Staff Director	Paul J. Sass, Republican Staff Director

FEBRUARY 1, 2019

SUMMARY OF SUBJECT MATTER

TO:	Members, Committee on Transportation and Infrastructure
FROM:	Staff, Committee on Transportation and Infrastructure
RE:	Full Committee Hearing on "The Cost of Doing Nothing: Why Investing in Our Nation's Infrastructure Cannot Wait"

PURPOSE

The Committee on Transportation and Infrastructure will meet on Thursday, February 7, 2019, at 9:30 a.m. in HVC 210, Capitol Visitor Center, to receive testimony related to "The Cost of Doing Nothing: Why Investing in Our Nation's Infrastructure Cannot Wait." The purpose of this hearing is to examine the current State of our roads, bridges, transit systems, clean water systems, ports and inland waterways, and airports; and receive testimony on what will happen if we do not begin to address the backlog of infrastructure needs. The Committee will hear from the Governor of Minnesota, the Mayor of Los Angeles, a former Secretary of Transportation, and representatives of Amtrak, the Aerospace Industries Association, Spokane International Airport, Charlotte Water, UPS Freight, Pacific Northwest Waterways Association, and the Transportation Trades Department, AFL–CIO.

BACKGROUND

THE IMPORTANCE OF INFRASTRUCTURE INVESTMENT

America's infrastructure network is essential to the quality of life of our citizens and the productivity of the nation's economy. This expansive national network provides all Americans—from those living in the largest cities to the smallest towns—with extraordinary freedom of mobility and unprecedented opportunity. Infrastructure provides the backbone of the U.S. economy that facilitates economic growth, ensures global competitiveness, and creates family supporting American jobs.

Our infrastructure, once the envy of the world, is losing its battle against time, growth, weather, and wear. It is suffering from decades of underinvestment, and the costs are staggering: according to the American Society of Civil Engineers, we face an approximate $2 trillion investment gap over the next 10 years to fix the infrastructure we have, meet future needs, and restore our global competitiveness.[1]

In the coming decades, the Nation's infrastructure will continue to be under immense pressure and face significant challenges. America's population is expected to grow to approximately 400 million by 2050.[2] Freight volumes will continue to soar as freight movements are expected to increase by 40 percent over the next 30

[1] American Society of Civil Engineers (ASCE), "Infrastructure Report Card," 2017.
[2] U.S. Census Bureau, "Projections of the Size and Composition of the U.S. Population: 2014 to 2060," 2015.

years.[3] Infrastructure will also need to be modernized in order to meet current and future needs, to be stronger and more resilient to withstand natural disasters and other catastrophic events, and to incorporate technology and innovation.

AVIATION

U.S. airports have an estimated total of $100 billion in infrastructure needs to keep up with current demand and plan for passenger growth between 2017 and 2021 (or $20 billion per year), based on the Airports Council International-North America's infrastructure needs survey. This amount far exceeds current Federal funding for airport improvement projects. U.S. airports are concerned that without an increase in airport infrastructure investment, they will not be able to accommodate passenger growth expected in the coming years. This will have ripple effects throughout the aviation industry, which supports more than $1 trillion in economic activity.

U.S. Airports: The Federal Aviation Administration (FAA) has identified 3,321 airports as public-use facilities that are important to national air transportation and consequently qualify for Federal assistance through Airport Improvement Program (AIP) grants.

Capital Needs: The U.S. air transportation system transported 965 million passengers in 2017. The FAA notes that the majority of U.S. airports now have sufficient airfield capacity for current traffic levels. However, the agency also notes there are a small number of the largest airports that are capacity constrained with chronic delays. Such delays regularly occur with cascading effects on the entire air transportation system. The FAA has continued efforts to enhance airport capacity and reduce delays through infrastructure development and technological advancements. During the next decade, the FAA forecasts that passengers on U.S. airlines alone will increase to more than one billion annually.

Airport capital needs are growing and significantly exceed available Federal funding. The FAA estimates that between 2019 and 2023, AIP-eligible projects will total $35.1 billion (or $7 billion per year), an increase of $2.6 billion over the FAA's last estimate for 2017–2021. This annual figure is more than the $3.35 billion per year that Congress will provide over that same period (2019–2023), despite a one-time increase in AIP funding of $1 billion for certain small airport projects enacted last year. When combining both AIP-eligible and non-AIP-eligible projects, the total infrastructure need for U.S. airports increases to $100 billion between 2017 and 2021, according to an industry survey by the Airports Council International-North America.

Airport Funding: Airports cover operating expenses and pay for improvement projects from four funding sources, listed in order of 2016 revenue totals (largest to smallest): aeronautical revenue, including gate leases and other airfield charges to airlines or general aviation ($11.4 billion); nonaeronautical revenue, including parking and concessions revenue, State or local grants, and interest revenue ($9.7 billion); AIP grants disbursed by the FAA ($3.2 billion); and revenue from passenger facility charges (PFCs) ($3.2 billion). Airports also use different financing mechanisms for capital needs, including using tax-exempt municipal bonds backed by airport revenues or different types of public-private partnership agreements.

AIP: The AIP was established by the Airport and Airway Improvement Act of 1982 (P.L. 97–248). Funds obligated for the AIP are drawn from the Airport and Airway Trust Fund, which is primarily funded from excise taxes imposed on domestic airline tickets, cargo waybills, and aviation fuel sales. The AIP generally funds projects that are needed to enhance airport safety, capacity, security, and noise mitigation. Congress has maintained level AIP funding of $3.35 billion annually for the past 7 years, and the FAA Reauthorization Act of 2018 (P.L. 115–254) continues the same funding level through fiscal year 2023. The Federal Government has maintained flat airport funding for 12 years.

Passenger Facility Charge: To provide additional resources for airport improvements, the Aviation Safety and Capacity Expansion Act of 1990 (P.L. 101–508) permitted airports to assess a charge on enplaning passengers called the passenger facility charge (PFC). The PFC is a federally authorized user fee that an airport sponsor, subject to FAA-approval, may choose to levy on most enplaned passengers. Three hundred sixty-one airports currently collect PFCs, including 98 of the busiest 100 airports. PFC revenues may be used for a wider variety of projects than AIP grants; most notably, PFC revenues are commonly used for terminal development projects that are unlikely to be funded through the AIP because AIP grants are typi-

[3] U.S. Department of Transportation, Bureau of Transportation Statistics, "DOT Releases 30-Year Freight Projections," 2016.

cally used for higher priority airside projects. PFC revenue is also used to secure municipal bonds for airport projects and may be used to make principal and interest payments on the debt.

Airports may impose a maximum $4.50 PFC on enplaning passengers, up to a maximum of $18 on a roundtrip ticket. The PFC is not indexed to the cost of inflation, and Congress has not increased the cap on the PFC since 2000, when the Wendell H. Ford Aviation Investment and Reform Act for the 21st Century (P.L. 106–181) increased the original PFC from $3 to $4.50.

HIGHWAYS AND TRANSIT

HIGHWAY TRUST FUND

Federal highway, transit, and highway safety programs are administered by the Federal Highway Administration, the Federal Transit Administration, the Federal Motor Carrier Safety Administration, and the National Highway Traffic Safety Administration. While these agencies provide financial and technical assistance and administer programs at the Federal level, States and local governments select projects, enter into contracts, oversee construction, and carry out the programs.

Federal surface transportation programs are currently authorized by the Fixing America's Surface Transportation Act (FAST Act) (P.L 114–94). Enacted on December 4, 2015, the FAST Act provided $281 billion in funding for highway, transit, and highway safety programs and reauthorized Federal programs for 5 years. The FAST Act is set to expire on September 30, 2020.

Federal surface transportation investments are funded through Federal excise taxes levied on motor fuels and on related products such as tires, which are deposited into the Highway Trust Fund (HTF). Congress has not adjusted the motor fuel excise taxes since 1993, and the purchasing power of these taxes have fallen over 40 percent in the last 25 years. Improved vehicle fuel efficiency has further eroded Federal revenues. As a result, revenues coming into the HTF have not kept pace with expenditures from authorized programs. Congress has had to transfer $144 billion from the General Fund and other funds to keep the HTF solvent since 2008. The Congressional Budget Office (CBO) estimates that over the next 10 years, the HTF will fall $159 billion short based on continuing currently authorized highway, transit, and safety program levels. An additional $5 billion is necessary to ensure that there is a prudent balance in the HTF, which brings the shortfall to $164 billion. This does not include any higher investment levels to meet growing surface transportation needs.

SURFACE TRANSPORTATION INVESTMENT NEEDS

Federal investment has not kept pace with surface transportation needs in recent years. One in three interState U.S. bridges have repair needs and nearly 10 percent of the nation's bridges are structurally deficient.[4] One out of every five miles of highway pavement is in poor condition nationwide, and more than two out of every five miles of America's urban interStates are congested.[5]

According to the U.S. Department of Transportation's (DOT) 2015 Conditions & Performance Report, there is an $836 billion backlog of unmet capital investment needs for highways and bridges. DOT estimates that all levels of government need to invest approximately $143 billion per year to improve the conditions and performance of our roads and bridges. We currently underinvest in highways by $37.3 billion per year at all levels of government. The cost of bringing the Nation's rail and bus transit systems into a State of good repair is estimated at $90 billion, and we would need to invest a minimum of $26.4 billion per year on maintenance and to accommodate future transit ridership growth. We currently underinvest by approximately $9.5 billion per year at all levels of government on transit capital investments.

This underinvestment is taking its toll on commuters and the economy. In 2017, congestion, directly and indirectly, cost drivers $305 billion, or an average of $1,445 per driver, and motorists spent an average of 41 hours a year in traffic during peak hours.[6] Driving on roads in need of repair costs motorists $130 billion in extra vehicle operating costs—or $599 per driver.[7] The American Society of Civil Engineers

[4] ARTBA Bridge Report, 2018.
[5] ASCE Report Card, 2017.
[6] INRIX 2017 Global Traffic Scorecard.
[7] TRIP, "Bumpy Road Ahead: America's Roughest Rides and Strategies to Make our Roads Smoother," October 2018.

estimates that if we continue status quo funding, each American household will lose $3,400 each year in disposable income due to poor infrastructure.[8]

RAILROADS

Amtrak Authorization: Amtrak was authorized through fiscal year 2020 as part of the Fixing America's Surface Transportation (FAST) Act, which was signed into law on December 4, 2015. The bill authorized a total of $1.7 billion for Amtrak in fiscal year 2019 and $1.8 billion for Amtrak in fiscal year 2020.

Northeast Corridor: The Northeast Corridor (NEC) is 457 miles of rail line extending from Washington, DC, to Boston, MA, and runs through eight States and the District of Columbia with 260 million people traveling the corridor per year.[9] Taken as a whole, the NEC region is the fifth largest economy in the world with a GDP of $3 trillion.[10] Amtrak owns and controls 363 miles of this track, with States controlling portions of the route north of New York City. Each weekday, the NEC carries nearly 2,000 commuter trains, 60 freight trains, and 148 Amtrak trains, including the Acela Express, which operates at speeds up to 150 miles per hour and is the only high-speed train in the United States.

This heavy usage, combined with the age of bridges and tunnels—many of which date back to the period between the Civil War and the New Deal—has led to major needs in maintenance and capital infrastructure improvements to remove bottlenecks and increase capacity along the corridor. As of July 2018, the Northeast Corridor Commission estimates that nearly $24 billion remains unfunded for major rail infrastructure projects along the NEC alone. Some of these projects include: the Baltimore & Potomac Tunnel ($4.3 billion project, with $4.25 billion unfunded), which was built in 1873 and requires replacing the Civil-War era tunnel with a newer curve-moderated tunnel; replacement of the swing-span Portal North Bridge ($1.6 billion project, with $953 million unfunded) over the Hackensack River; and replacement of the Susquehanna River Bridge ($1.7 billion project, with $1.6 billion unfunded).[11] The Northeast Corridor Commission estimates that service disruptions caused by infrastructure failures, rail traffic congestion, and other factors costs the U.S. economy $500 million per year in lost productivity, and that a loss of all NEC services for just 1 day would cost the economy an estimated $100 million.[12]

National Network[13]: Amtrak's 15 long-distance routes and the 29 State-supported routes comprise the National Network. Outside of the NEC, Amtrak operates on tracks owned, maintained, and dispatched by various host freight and commuter railroads and pays host railroads over $142 million annually for use of these tracks.[14] The Americans with Disabilities Act (ADA) required that all stations in the intercity rail transportation system be made accessible to and usable by individuals with disabilities no later than 2010.[15] Amtrak has sole or shared financial responsibility to bring 383 stations into compliance with ADA requirements and estimates that it will over $1 billion to complete this work.

Grants: The FAST Act authorized three rail infrastructure grant programs through fiscal year 2020 that are administered by the Federal Rail Administration:

- The Consolidated Rail Infrastructure and Safety Improvements (CRISI) program supports projects that improve the safety, efficiency, and reliability of passenger and freight rail. CRISI is funded at $592.547 million total in fiscal year 2018 omnibus. In response to the July 2018 notice of funding opportunity for $318 million in fiscal year 2018 funds, FRA received applications for 109 projects totaling more than $913 million. FRA is currently reviewing applications.
- Federal-State Partnership for State of Good Repair discretionary grants support capital projects that repair, replace, or rehabilitate qualified railroad assets to reduce the State of good repair backlog and improve intercity passenger rail performance. The program is funded at $250 million in the fiscal year 2018 omnibus. FRA issued a notice of funding opportunity for fiscal year 2017 and fiscal

8 ASCE, "Failure to Act," 2016 report.
9 https://nec.amtrak.com/about-the-nec/
10 https://nec-commission.com/app/uploads/2018/04/NEC-American-Economy-Final.pdf
11 http://nec-commission.com/app/uploads/2018/04/NEC-Capital-Investment-Plan-19-23.pdf
12 https://nec-commission.com/app/uploads/2018/10/NEC-One-Year-Plan-FY19.pdf
13 The National Network includes long-distance and state-supported routes.
14 https://media.amtrak.com/wp-content/uploads/2018/10/Amtrak-Host-Railroad-Report-Card—FAQ—Route-Detail-2018-10-15.pdf. This compensation is for the incremental cost (rather than a negotiated market cost) associated with operating intercity passenger services over freight railroad tracks.
15 42 U.S. Code § 12162.

year 2018 money totaling $272.25 million on Nov. 16, 2018. Applications for funding are due March 18, 2019.

- Restoration and Enhancement grants fund operating assistance grants for initiating, restoring, or enhancing intercity rail passenger transportation. The program is funded at $20 million in the fiscal year 2018 omnibus.

WATER RESOURCES AND ENVIRONMENT

Clean Water Infrastructure Needs

America's water infrastructure is in need of renewed Federal investment. According to the American Society of Civil Engineers 2017 Infrastructure Report Card, America's wastewater treatment infrastructure receives a grade of D+, which is only a slight improvement from its previous grade of D in the 2013 Report Card.

Currently, municipalities face a backlog of more than $40 billion in clean water infrastructure projects and, according to the Environmental Protection Agency, these communities need at least $271 billion of investment over the next 20 years [16] to bring their systems to a State of good repair.

The need for greater Federal investment in our Nation's water infrastructure is clear, and the benefits are numerous. Investing in clean water creates thousands of domestic jobs in the construction industry and reduces the overall costs of operating and maintaining that infrastructure. According to the National Utility Contractors Association, every $1 billion invested in our Nation's water infrastructure creates or sustains 27,000 jobs in communities across America, while improving public health and the environment at the same time.

Federal Clean Water Investment: Clean Water State Revolving Fund

For close to 80 years, Congress has provided Federal funds to municipalities to address local water quality challenges, including sewage treatment needs. Initially, this assistance was provided as direct grants to municipalities (covering 55 to 75 percent of the total costs of the projects). However, in 1987, Congress converted the direct grant program to a Clean Water State Revolving Fund ("Clean Water SRF") authority that provides funding directly to States which, in turn, provide below-market rate loans to communities to finance local wastewater infrastructure needs (required to be fully repaid over a 30 year term).

Although the authorization of appropriations for the Clean Water SRF expired after 1994, Congress continues to fund this critical investment in our Nation's wastewater infrastructure—providing more than $43 billion in Federal capitalization assistance to States since 1987. In turn, this infusion of Federal capital to State revolving funds has leveraged over $120 billion in direct assistance to communities over this period.

Over the past few Congresses, legislation has been introduced to reauthorize and increase Federal appropriations for the Clean Water SRF program, as well as address the cost of wastewater service to low-income customers and households. In January 2019, a coalition of 91 utility, engineering, contractors, and conservation groups cosigned a letter [17] to Congress urging that water infrastructure be included as part of any infrastructure package approved in the 116th Congress.

Harbor Maintenance Needs

According to the U.S. Army Corps of Engineers (Corps), fully dredged navigation channels at our Nation's busiest 59 ports are available less than 35 percent of the time—and the conditions of our midsize and emerging harbors are far worse. With the opening of the expanded Panama Canal in June 2016, larger container ships will increasingly call on East and Gulf Coast ports, and the dredging needs of our ports will continue to grow.

In January 2017, the Corps estimated the total cost to achieve and maintain constructed widths and depths of all Federal navigation projects is $20.3 billion over the next decade. This estimate includes:

- $11.0 billion—to achieve full dimensions in the next 5 years ($2.2 billion annually); and
- $9.3 billion—to maintain these dimensions for an additional 5 years ($1.9 billion annually).

Moreover, total navigation needs are likely higher. The Corps' $20.3 billion estimate includes additional expenses related to navigation (e.g., construction of

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[16] https://www.epa.gov/cwns/clean-watersheds-needs-survey-cwns-2012-report-and-data.

[17] https://www.wef.org/globalassets/assets-wef/5---advocacy/legislation-and-regulation/legislative-and-regulatory-affairs/water-sector-letter-to-congress-on-infastructrure-package-jan2019.pdf.

dredged material placement facilities). However, this estimate does not likely include all necessary jetty and breakwater work or other needs identified by ports to maintain and expand harbor use nationwide.

THE HARBOR MAINTENANCE TAX AND TRUST FUND

In 1986, Congress enacted the Harbor Maintenance Tax to recover the operation and maintenance dredging costs for commercial ports from maritime shippers. The Harbor Maintenance Tax is directly levied on importers and domestic shippers using coastal or inland ports as a 0.125 percent ad valorem tax on the value of imported cargo (e.g., $1.25 per $1,000 value)[18] and is typically passed along to U.S. taxpayers on the purchase of imported goods or services. These revenues are deposited into a Harbor Maintenance Trust Fund within the U.S. Treasury from which Congress currently appropriates funds to the Corps for harbor maintenance dredging.

The Harbor Maintenance Trust Fund collects far more revenues from shippers than Congress has appropriated to the Corps to maintain our harbors, with approximately $9 billion in already collected revenues sitting idle in the U.S. Treasury. As a result, shippers continue to honor their commitment to pay for promised maintenance activities that the Federal Government then has not carried out. To be clear, there are sufficient funds in the Trust Fund to meet the maintenance dredging needs of all federally authorized ports. The Water Resources Reform and Development Act of 2014 (WRRDA14) (P.L. 113–121) created discretionary appropriations targets for expenditures from the Trust Fund, increasing each year, so that by fiscal year 2025 and beyond, 100 percent of the funds collected for harbor maintenance purposes go toward required operation and maintenance activities. In recent fiscal years, appropriations from the Trust Fund have exceeded the discretionary targets outlined in WRRDA14; however, the Congress has not yet achieved the goal of full-utilization of Trust Fund collections.

The Committee on Transportation and Infrastructure, on a bipartisan basis, has twice approved legislation[19] to fully utilize Harbor Maintenance Tax collections for the intended purpose of maintenance dredging; yet this provision has yet to be enacted into law. Enactment of such a provision honors our long-term commitment to U.S. shippers and taxpayers, maintains and improves the competitiveness of U.S. businesses and industry, and creates and sustains thousands of additional construction jobs and jobs dependent on a vibrant and efficient marine transportation system.

WITNESSES

PANEL I

- The Honorable Tim Walz, Governor, State of Minnesota, *on behalf of the National Governors Association*
- The Honorable Eric Garcetti, Mayor, city of Los Angeles, *on behalf of the United States Conference of Mayors*
- The Honorable Ray LaHood, Cochair, Building America's Future, Former Secretary, United States Department of Transportation

PANEL II

- Mr. Richard Anderson, President and Chief Executive Officer, Amtrak
- The Honorable Eric K. Fanning, President and Chief Executive Officer, Aerospace Industries Association
- Mr. Larry Krauter, Chief Executive Officer, Spokane International Airport
- Ms. Angela Lee, Director, Charlotte Water
- Mr. Rich McArdle, President, UPS Freight, *on behalf of the U.S. Chamber of Commerce*
- Ms. Kristin Meira, Executive Director, Pacific Northwest Waterways Association (PNWA)
- Mr. Larry Willis, President, Transportation Trades Department, AFL–CIO

[18] The Harbor Maintenance Tax initially applied to both imported and exported goods; however, in 1998, the U.S. Supreme Court unanimously held that imposition of the tax on exported goods was a violation of the U.S. Constitution.

[19] Section 108 of H.R. 5303, the Water Resources Development Act of 2016 (RH), and Section 102 of H.R. 8, the Water Resources Development Act of 2018 (RH).

THE COST OF DOING NOTHING: WHY INVESTING IN OUR NATION'S INFRASTRUCTURE CANNOT WAIT

THURSDAY, FEBRUARY 7, 2019

HOUSE OF REPRESENTATIVES,
COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE,
WASHINGTON, DC.

The committee met, pursuant to notice, at 9:53 a.m. in HVC 210, Capitol Visitor Center, Hon. Peter A. DeFazio (Chair of the committee) presiding.

Mr. DEFAZIO. Now, finally, we will move on to substance. Please stay in your seats, so to speak.

Oh, wait a minute. I have to recognize—I hate scripts—Rep. Carbajal for a unanimous consent request.

Mr. CARBAJAL. Thank you, Mr. Chair. I ask unanimous consent to authorize the chairman to declare recess during today's meeting.

Mr. DEFAZIO. OK, the committee will come to order, and we will begin the hearing momentarily, as soon as we do this.

[Disturbance in hearing room.]

Mr. DEFAZIO. OK, that is enough. Don't—it is not an evacuation drill. That is the alarm sounding for America's infrastructure.

[Laughter.]

Mr. DEFAZIO. So today we are holding the first hearing. And, you know, we are starting off by, I think, really having a four-alarm situation in front of us.

For years we have held hearings on, you know, why it is important. We have had a lot of expert witnesses that would come in and talk about the deterioration documented year after year after year. And you know, we now have run up a bill that the investment gap over the next 10 years, according to the American Society of Civil Engineers, is two trillion—T, trillion—dollars.

The surface gap alone is over $1 trillion. Water, port, and related infrastructure, $249 billion. For airports, ACI estimates over the next 5 years they will require an investment of $100 billion, more than $20 billion a year.

But highlighting these needs has not spurred action by Congress. So I am going to focus on the cost of inaction. It has incredibly serious consequences that far, far exceed the cost, were we to belly up and suck it up a little bit and put up the money we need and put in place the policies we need to bring things up to a state of good repair and begin to build out a 21st-century infrastructure.

The more we defer, the more it costs. A Cornell University study says if we see maintenance that is needed today on a bridge, if we defer it, it costs an extra $4 or $5 4 to 5 years down the road, five times the cost. So prudent people a lot talk about let's run the Government like a business. Well, I don't think businesses would run things to the point of failure and increase the costs so dramatically, nor should we.

You know, if you look around the country, there are critical projects like the Brent Spence Bridge between Ohio and Kentucky. Every year we delay that project, the price tag, which is about $2.6 billion—it is a big and critical project—goes up about $100 million a year.

If the tunnels under the Hudson River were to fail—and they came close to failure during Hurricane Sandy. They are tremendously deteriorated. We are going to take a committee trip up there. Amtrak has a neat little glass car, we can go through the tunnel and you can actually see it. I mean you might want to wear your life jacket, but it is a mess.

And if those tunnels would fail, it will cost the economy of the United States of America $100 million a day, by conservative estimates. That is $36–$37 billion a year if we let that go to failure. It costs $11 billion. That is a lot of money. But probably, on an emergency basis, it would take us 5 years to build a tunnel. So just multiply 5 times 37. You are up to $180 billion. So why aren't we making these investments? We have to make them.

You know, the Business Roundtable says inadequate infrastructure costs U.S. businesses $27 billion per year in extra transportation costs. The estimates are we will lose $4 trillion in GDP between 2016 and 2025 without upgrading our infrastructure. Families lose $3,400 a year, according to the American Society of Civil Engineers.

You know, we are wasting 3.1 billion gallons of fuel, idling in congestion, because we have a system that is congested, inadequate, and stupid. It doesn't incorporate smart, new, and 21st-century technology.

The U.S. Travel Association says that soon the traffic volumes we have seen on Labor Day—think of some of your great family vacations on Labor Day. I have had some of those, and you are sitting there, and kids in the back seat aren't too happy. That will become a daily occurrence for 60 percent of Americans within 10 years if we fail to act.

Congestion is affecting air travel. U.S. airports have more than $10 billion in unmet infrastructure needs. All of you here and all of you in the audience have had the experience of the pilot saying, "Great news. We are here early. Bad news, we are waiting for a gate." Or, "we are here on time, but we have got to wait for a gate."

Many airports—and we will hear from this in further hearings—are bonded out. We haven't allowed an increase in the passenger facility charge in 20 years. It is time to act there.

And then, of course, the Federal investment overall in infrastructure has declined steadily over 15 years. Gas and diesel taxes have been stagnant since 1993—I was going to say 2003—which means that they have about 40 percent of the buying power they had back then, maybe less.

A lot of States and localities have bellied up to the bar to attempt to—so, anyway, they have done it. And I just want to let everybody know there have been no political consequences. No one has lost their election in an all-red State when they raised the gas tax. In fact, the only two senators in New Jersey to lose were Republicans who voted against the gas tax increase. Probably coincidental, but they were the only two who lost. And, you know, Minority Leader McCarthy put a referendum on the ballot in California to repeal their gas tax. It was going to be a great strategy, and it backfired. And Californians overwhelmingly rejected it. There is not a danger in increasing the user fee for the first time in 26 years.

If anyone has got a better alternative, let me know. But we have to make these investments. The Federal Government has to become a better partner. You can't have a coordinated national system in the 21st century and say the States are going to do it, as was proposed in DJ Gribbin's plan for President Trump last year. We cannot devolve the duty to have a modern, 21st-century, resilient transportation system that can compete in the world economy and move people and goods more effectively on a State-by-State basis. We have to be there with them, and coordinate it, and invest in it.

So, you know, there is incredible innovation out there. We will get into this in future hearings. Every subcommittee will hold a hearing looking at climate change resilience, their mode of transportation and what we can do to make it less fossil fuel dependent.

What can we apply to the existing system now to mitigate congestion? I had a company in my office the other week who has invented smart traffic lights. Guess what? So you won't be sitting there cursing at the red light while no one is going the other way for 2 minutes. How much would that help with congestion and mobility?

As we rebuild the Eisenhower legacy system we have got to build it to accommodate the coming of autonomous vehicles and/or driver-assisted vehicles. I think we should also build it to accommodate an electric backbone, because I think the future of surface transportation—for both passenger and freight—is going to be in electric. I have seen the Tesla truck, it is phenomenal. We need better batteries, you know, and—but this is something that is coming. So we have to be able to try and anticipate those things.

We don't get to generate the revenues on this committee for ways and means, but we have to make the case in a way that it is irrefutable to all our colleagues and the American people that if we don't make these investments we are going to pay a heck of a lot more down the road.

That is it, bottom line.

[Mr. DeFazio's prepared statement follows:]

Statement of Hon. Peter A. DeFazio, a Representative in Congress from the State of Oregon, and Chair, Committee on Transportation and Infrastructure

Today, we hold the Transportation and Infrastructure Committee's first hearing of the 116th Congress. We are starting off by sounding the alarm bells—investing in America's infrastructure cannot wait.

For years, we have held hearings on why infrastructure investment is important. We have rationally made the case about why roads, bridges, public transportation, airports, water and sewer systems cannot be left to crumble. We have shown how infrastructure keeps the economy humming, creates jobs, connects communities, moves people and goods, and ensures reliable access to clean water.

We know that our infrastructure investment needs are massive: according to the American Society of Civil Engineers (ASCE), we have an investment gap of $2 trillion over 10 years to fix what we have, meet future needs, and restore our global competitiveness. The investment gap in surface transportation alone is over $1 trillion. The gap for water, port, and related infrastructure is $249 billion. Further, the latest capital needs survey by the Airports Council International (ACI) estimates that, over the next 5 years, airports will require total investment of $100 billion—more than $20 billion a year.

Unfortunately, highlighting needs has not spurred Congress to action. So let me be clear that the question is not whether we will need to invest, but when we will invest. Inaction has serious consequences and the cost of delay is high.

Every day that we ignore our ballooning infrastructure deficit, the problem becomes more expensive to fix and more pronounced; our constituents lose time and money; and we increase the risk of failure of these increasingly fragile systems. We must also act now to mitigate the effects of climate change, and build stronger, more resilient infrastructure that will withstand extreme weather events.

Deferring projects increases costs:

- Maintaining infrastructure now saves money down the line. According to a Cornell University study, every $1 of deferred maintenance on roads and bridges costs an additional $4–$5 in future repair needs. Not keeping our assets in good repair in all modes of infrastructure increases the total cost to taxpayers down the line.
- Delaying the known replacement of an asset adds further cost. As an example, for the $2.6 billion Brent Spence bridge project, every year the start of construction is delayed means $75 to $85 million per year in additional costs due to inflation alone.

The economic effects of infrastructure failure are significant:

- When infrastructure assets fail, the impacts to the economy and mobility can be staggering. The Northeast Corridor Commission estimates that a shutdown of the Northeast Corridor would paralyze the region and have an economic impact of $100 million per day. If either the Hudson River tunnels or the Portal Bridge failed, it would shut down the Northeast Corridor. These two critical assets as part of the Gateway project cost $14.6 billion to replace; but doing nothing would result in $36.5 billion per year in economic losses if these assets fail.

Poor infrastructure is costing our citizens and businesses money:

- According to the Business Roundtable, inadequate infrastructure costs U.S. businesses $27 billion per year in extra transportation costs.
- Between 2016–2025, the economy will lose almost $4 trillion in GDP if we do not upgrade our infrastructure, resulting in a loss of 2.5 million jobs, according to ASCE. American families will lose $3,400 each year in disposable income due to the infrastructure deficit if we do nothing.
- According to INRIX, in 2017, congestion cost drivers $305 billion, or an average of $1,445 per driver. Motorists spent an average of 41 hours a year in traffic during peak hours.
- The Texas Transportation Institute's 2015 Urban Mobility Scorecard found that congestion caused urban Americans to travel an extra 6.9 billion hours and purchase an extra 3.1 billion gallons of fuel in 2014. The same study found that wasted fuel will increase to 3.8 billion gallons in 2020.

Crippling congestion is becoming the norm and affecting travel:

- According to the U.S. Travel Association, traffic volumes seen on Labor Day will become the norm on the average day on certain corridors, and nearly 60 percent of Americans say they would significantly alter their travel habits if that were the case. If travelers eliminate an average of one automobile trip per year, the U.S. economy would lose $23 billion.
- This congestion is affecting the air travel experience as well. ACI reports that U.S. airports now have more than $10 billion each year in unmet infrastructure needs. Passenger terminals across the United States, many of which were constructed in the 1960s or 1970s, are outdated and cannot accommodate expected passenger growth; and airports do not have the gates necessary to accommodate current airline departures and arrivals, let alone for welcoming new service for communities. This often means passengers go outside onto the tarmac to board their aircraft, or sit on the tarmac upon landing until a gate is available. U.S. airports are doing the best they can to find ways to meet their ballooning infrastructure needs, but this leads to local communities paying twice as much and waiting twice as long for upgrades.

How did we get to this point? Federal investment in infrastructure, as a share of total investment, has steadily declined in the last 15 years. In some cases, we have not adjusted user fees for far too long. Gas and diesel taxes that fuel the Highway Trust Fund have been stagnant for 25 years, causing purchasing power for road, bridge, and transit projects to fall by over 40 percent. The Passenger Facility Charge—a local fee assessed on passengers for airport projects has been capped for 20 years. In other cases, we have let user fees we have collected be directed away from their intended uses, as with the Harbor Maintenance Trust Fund.

Declining Federal funding has forced States and localities to raise more revenue locally in an attempt to meet their growing infrastructure needs. In the last two election cycles, localities passed ballot measures to raise more than $240 billion in transportation funds with a passage rate above 70 percent. Despite their efforts, the U.S. continues to experience a degradation of infrastructure.

Congress must act to provide significant Federal dollars to invest in U.S. infrastructure. Raising revenues is the only sustainable way to increase infrastructure investment. We must answer the tough question of how to sustain investments for future generations and to dig out from the effects of this chronic underinvestment.

America's infrastructure is at a crossroads. We need a reinvigorated Federal role and a commitment to public infrastructure, and a 21st-century vision for transportation policy that will meet the needs of the next generation of Americans and vehicles. We can't just maintain what we have, we also need to modernize how we plan and build transportation projects. We have a tremendous opportunity to complete critical projects, create family wage jobs here in the U.S., and support U.S. industry.

We are in a time of unprecedented acceleration in innovation, and we must harness the power of technology to reduce congestion and emissions, and increase safety. Infrastructure we build today must be able to integrate technological advances, such as autonomous vehicles, as they become a reality. We must also take steps to increase the use of electric vehicles, build an electric backbone for our highway system to move people and goods, and invest in resilient infrastructure, to respond to climate change.

But all of this will only become a reality if we get serious about finding the money. I am open to any sustainable revenue solution, and will work closely with our colleagues on the Committee on Ways and Means, as well as the President. However, I have proposed three bills that provide real investment as a starting point in the discussion:

- "A Penny for Progress" provides approximately $500 billion for infrastructure investment to put our Nation's highways, bridges, and public transit systems on a path to good repair. We can achieve this level of investment by indexing the gas and diesel tax and bonding off the indexation revenues and bringing those revenues forward. We are also exploring ways to take into account growing electric vehicle use in the future.
- "Unlocking the Harbor Maintenance Trust Fund" by amending current budgetary controls to allow the Army Corps of Engineers to spend the funds collected in the Trust Fund each year, thereby providing more than $18 billion for our Nation's coastal and inland harbors over the next decade without raising taxes or increasing the deficit.
- "Rebuilding America's Airport Infrastructure" will generate billions of dollars each year to help our airports rebuild and rehabilitate aging terminals, runways, and taxiways and keep pace with increasing demand in the 21st century—without raising taxes—by eliminating or raising the cap on the passenger facility charge (PFC).

As you will hear from today's witnesses, the costs of doing nothing are far too great. It is long past time for Congress to step up to the plate and make significant investment in our Nation's infrastructure.

Mr. DEFAZIO. With that, I yield back the balance of my time, and I would yield to the ranking member.

Mr. GRAVES OF MISSOURI. Thank you, Chairman DeFazio. I want to reiterate that I am looking forward to working with you and all the members of the committee to provide America with the modern infrastructure needs in our growing economy.

In recent years our two sides have worked closely to pass important legislation, which included the FAST Act, FAA reauthorization, and disaster program reform law, multiple WRDA and Coast Guard laws, pipeline safety, passenger rail laws, and many more things, and I am optimistic that we can carry on that tradition, a results-driven tradition of our committee to develop an infrastructure package, a surface transportation reauthorization, the next WRDA, and other bills.

And you and I have already had good conversations about working together. It is extremely encouraging that after Tuesday's State of the Union Address we know infrastructure is a priority of the President's. Republicans and Democrats in both House and Senate want to get something done, and the President's leadership and eagerness for bipartisanship on this effort gives us a green light to move forward. And I have to stress that we can't waste this opportunity.

Today's hearing on infrastructure investment is a very good place to start. Before we get underway I want to raise a few key points.

First of all, we can't address our long-term funding issues without finally fixing the Highway Trust Fund. We have kicked this can down the road so many times already that pretty soon we are going to kick it right off the map. Congress is going to consider a number of options to address the problem.

I believe the only viable future lies in a transition to VMT, or vehicle miles traveled. I see this as the best way to ensure that everyone contributes—everyone contributes—to the trust fund, and helps maintain and improve our surface transportation system. VMT is already being applied at the State level, and it is time to pursue this solution nationally.

And I want to point out that we are not talking about the Government tracking our every move. Protecting Americans' privacy is critical, and we can do a VMT program without intruding upon people's privacy.

Another key to investing in our infrastructure for the long term is continuing to look for ways to carry out projects more efficiently. Time is money, and so any delay in a project delivery process consumes valuable and limited resources that could be used for other potential improvements. Streamlining project delivery, while continuing to protect the environment, is a priority for the administration. It is going to continue to be a priority for me.

And finally, I want to stress that America will never have the infrastructure system it needs and deserves if we don't do a better job of incorporating technology. Compared to other countries, our infrastructure is falling behind. And in some cases it is simply falling apart.

Technology is rapidly developing, but our infrastructure doesn't always reflect many of those advancements, and that has to change. There is a tremendous potential for technology to make our infrastructure safer and less costly, to reduce congestion, improve the efficiency of the entire network, and even alleviate the growing demands of our infrastructure.

In his address on Tuesday I was happy to hear the President recognize the necessity for technology to be a part of our long-term infrastructure solution. However, as we look to integrate technology, safety has to remain the top priority. And, as we know, an accident or set-back opens the door for Federal Government to come in and, with the heavy hand of regulation, potentially stifle all of those innovations that we talk about. We have to strike the right balance between private-sector ingenuity and safety regulation.

Fundamentally, we can't overlook the importance of technology in the context of an infrastructure package or any other legislation, for that matter. And I agree with Chairman DeFazio that we can't afford to do nothing. But we also can't afford to miss this opportunity to enlist innovation in a way that can slingshot our infrastructure and our economy into the future.

We have a number of witnesses here today, and they represent the traditional infrastructure stakeholder community. And I am interested to hear all of their viewpoints.

I have one request as we start this discussion. Let's not be shortsighted in the solutions that we propose. With any legislation that comes out of Congress, whether it is an infrastructure package, a surface transportation reauthorization, or other bills, we just can't think of it as business as usual.

Some of our Federal infrastructure programs do work very well. But in others we have clearly fallen behind. And it is time to be transformative in our approach, because the future of the infrastructure simply depends on it.

[Mr. Graves's prepared statement follows:]

Statement of Hon. Sam Graves, a Representative in Congress from the State of Missouri, and Ranking Member, Committee on Transportation and Infrastructure

Thank you, Chairman DeFazio. I want to reiterate that I'm looking forward to working with you and all the members of the committee to provide America with the modern infrastructure it needs for our growing economy.

In recent years, our two sides have worked closely to pass important legislation, including the FAST Act, an FAA reauthorization and disaster program reform law, multiple WRDA and Coast Guard laws, pipeline safety and passenger rail laws, and more.

I'm optimistic that we can carry on the bipartisan, results-driven tradition of our committee to develop an infrastructure package, a surface transportation reauthorization, the next WRDA, and other bills. You and I have already had good conversations about working together.

It's also extremely encouraging that, after Tuesday's State of the Union Address, we know infrastructure is a priority for the President. Republicans and Democrats in both the House and the Senate want to get something done, and the President's leadership and eagerness for bipartisanship on this effort gives us the green light to move forward.

I must stress that we can't waste this opportunity.

Today's hearing on infrastructure investment is good place to start our work. Before we get underway, I want to raise several key points.

First of all, we can't address our long-term funding issues without finally fixing the Highway Trust Fund.

We've kicked this can down the road so many times already, pretty soon we're going to kick it completely off the map.

Congress is going to consider a number of options to address this problem, but I believe that the only viable future lies in a transition to a Vehicle Miles Traveled (or VMT) program.

I see this as the best way to ensure that everyone contributes to the Trust Fund and helps maintain and improve our surface transportation system. VMT is already being applied at the State level, and it's time to pursue this solution nationally.

I want to point out that we're not talking about Big Brother tracking our every move. Protecting Americans' privacy is critical, and we can absolutely do a VMT program without intruding upon people's privacy.

Another key to investing in our infrastructure for the long term is continuing to look for ways to carry out projects more efficiently.

Time is money, so any delay in the project delivery process consumes valuable and limited resources that could be used for other potential improvements. Streamlining project delivery—while continuing to protect the environment—is a priority for the administration, and it will continue to be a priority for me.

Finally, I want to stress that America will never have the infrastructure system it needs and deserves if we don't do a better job of incorporating technology. Compared to other countries, our infrastructure is falling behind, and in some cases falling apart.

Technology is rapidly developing, but our infrastructure doesn't always reflect those advancements. That needs to change.

There is tremendous potential for technology to make our infrastructure safer and less costly, reduce congestion, improve the efficiency of the entire network, and even alleviate the growing demands on our infrastructure.

In his address on Tuesday, I was happy to hear the President recognize the necessity for technology to be part of our long-term infrastructure solution.

However, as we look to integrate technology, safety has to remain the top priority. As we know, an accident or setback opens the door for the Federal Government to come in with the heavy hand of regulation—potentially stifling innovation. We have to strike the right balance between private-sector ingenuity and safety regulation.

Fundamentally, we can't overlook the importance of technology in the context of an infrastructure package or any other legislation.

I agree with Chairman DeFazio that we can't afford to do nothing. But we also can't afford to miss this opportunity to unleash innovation in a way that can slingshot our infrastructure, and our economy, into the future.

We have a number of witnesses here today that represent the traditional infrastructure stakeholder community, and I'm interested to hear their input.

I have one request as we start this discussion—let's not be shortsighted in the solutions we propose. With any legislation that comes out of Congress—whether that's an infrastructure package, a surface transportation reauthorization, or other bills—we can't just think of it as "business as usual." Some of our Federal infrastructure programs do work well, but in others we've clearly fallen behind.

It's time to be transformative in our approach, because the future of our infrastructure depends on it.

Mr. GRAVES OF MISSOURI. With that, I yield back. I look forward to hearing from our witnesses.

Mr. DEFAZIO. I thank the gentleman for his statement. I would now like to welcome the witnesses, first panel. The Honorable Tim Walz, Governor, State of Minnesota, on behalf of the National Governors Association, also a former esteemed colleague. The Honorable—yes, let's give Tim a hand.

[Applause.]

Mr. DEFAZIO. Congratulations, Tim.

The Honorable Eric Garcetti, mayor, city of Los Angeles, on behalf of the United States Conference of Mayors.

The Honorable Ray LaHood, cochair, Building America's Future, former Secretary, United States Department of Transportation.

Thanks to you all for being here today. We look forward to your testimony. Without objection, your full statements will be in the record.

But before we hear from the witnesses, I recognize Rep. Craig to introduce her fellow Minnesotan, Governor Walz.

Mrs. CRAIG. Thank you, Mr. Chairman. I am so honored to be given the privilege today to introduce the first member of our panel, first of all my friend, former congressman, and new Minnesota Governor, Tim Walz.

Not too long ago, Governor Walz was right here, looking out for the transportation needs of his expansive First Congressional District, and also a congressional district that is pretty rural. The work he did here in Congress to replace the Winona I–90 Interstate bridge is a perfect example of why we are so proud of him, and why I think he is an ideal panelist for today.

You know, the mayor of Winona said that that work set an example of how Government can work collaboratively to get things done, and the importance of investing in infrastructure.

Governor Walz, thank you so much for taking the time to come to Washington to share your priorities and testify before this committee. I look forward to hearing your testimony, working with you, as well as my colleagues here today on this important issue. Thank you, Governor Walz.

Mr. DEFAZIO. And with that we would now have Rep. Napolitano introduce Mayor Garcetti.

Mrs. NAPOLITANO. Thank you, Mr. Chairman. And welcome to our House, Mayor.

Mr. Chairman, I am very honored to introduce my old friend, Mayor Garcetti of the great city of Los Angeles, and also happens to be the son of my old friend, Gil Garcetti.

Mayor Garcetti has been a forward-looking mayor and great champion of infrastructure, not only for his city, but for the Greater Los Angeles County and for southern California in transportation, having supported Measure M, Measure R, and doing a great job of it, so we were able to successfully pass it.

He has also led efforts to pass major infrastructure in transportation and initiatives in Los Angeles County, invested billions of dollars in modernization of Los Angeles Airport with the new terminals—thank you, they are very nice—and surface transportation improvements, and supported the returning of Ontario Airport to local control, and has improved operations at one of the most productive ports in the Port of Los Angeles, which, by the way, provides multimodal freight benefits for the entire country.

Mayor Garcetti, welcome. Thank you for being here, and thank you for all you do for our area. And I look forward to your testimony.

Thank you, Mr. Chair.

Mr. DEFAZIO. Thank you, Representative. As I said earlier, without objection, their full statements are in the record.

Your written statements are a part of the record. I have actually read them; I assume some other Members have, too.

So, if you can summarize your most cogent and interesting points in 5 minutes and get everybody's attention, that would be great.

I had a question about what this is [indicating document]. This is failed—everybody has got this handout. This was in Mayor Garcetti's testimony. Unfortunately, the AV system here is not working. We will see if they can fix that before the next hearing. So that answers that question.

And with that, I believe that Governor Walz is the first witness.

TESTIMONY OF HON. TIM WALZ, GOVERNOR, STATE OF MINNESOTA, ON BEHALF OF THE NATIONAL GOVERNORS ASSOCIATION; HON. ERIC GARCETTI, MAYOR, CITY OF LOS ANGELES, CALIFORNIA, ON BEHALF OF THE UNITED STATES CONFERENCE OF MAYORS; AND HON. RAY LAHOOD, COCHAIR, BUILDING AMERICA'S FUTURE, FORMER SECRETARY, U.S. DEPARTMENT OF TRANSPORTATION

Mr. WALZ. Well, thank you, Chairman DeFazio and Ranking Member Graves, and all the members of this great committee. Congresswoman Craig, thank you for the kind introduction.

As many of you know, I served on this committee for a number of years. But today I am here as a representative of the National Governors Association. This Nation's 50 States and 5 Territories, the Governors have made infrastructure their top priority.

On February 23rd, all of those Governors will gather here in DC for a roundtable focusing on infrastructure. It is the foundation that the States are built on. Governors have taken action to enhance infrastructure, including creating new and increasing existing funding streams, addressing regulatory delays, improving transparency, and promoting innovation.

I would like to highlight just a couple of things for you today.

Governors understand that no single stream of revenue or approach to financing will address all the gaps. States need a comprehensive approach that allows for leveraging a variety of funding sources and the flexibility to match the right tool with each project. States succeed when there is certainty and stability in long-term Federal resources, ensuring workforce and economic vitality.

We need to fix and expand existing infrastructure, invest in resiliency for security and climate change. We must build a robust, multimodal system to fit our growing populations. We must attend to needs across our rural, urban, and suburban areas.

Infrastructure encompasses more than roads and bridges, as you well know. It includes everything from sea ports and airports to the Upper Mississippi River locks and dams, biking trails, and, in our State, investments in electric vehicle charging networks. We have to see how all these pieces fit together.

A few weeks ago I was in Hallock, Minnesota. That is on the northwest frontier of Minnesota. You might be familiar with it, because it was near a place that reached 70 degrees below zero last week, and caught a lot of people's attention. That is not only hard on people, it is hard on infrastructure.

But also there are resilient people doing great things that understand how infrastructure improves their lives. Sitting outside of Hallock is a really successful liquor distillery called Far North Spirits. And it sits on a gravel road. It has spotty internet service. The owner of that says, "Better infrastructure means I can get folks to and from this, and the ability to be able to communicate makes us so that we are more competitive."

But she also mentioned the need to invest in transit, like light rail in Minneapolis and St. Paul, where 97 percent of her product is sold, and people need to move. So, as Hallock goes, so does Minneapolis-St. Paul. And as Minnesota goes, so does the rest of the country. Governors understand that our interconnectedness and our thoughtfulness of providing those opportunities is what grows our economy.

This hearing was titled, "The Cost of Doing Nothing," and you heard Chairman DeFazio talk about what happens in idling, what happens in repair bills, what happens when we can't get products moved to us and that cost is passed down to consumers. Sometimes it comes a lot faster than that, and sometimes it comes tragically.

Many of you on this committee were sitting here on a hot August day in 2007, while in Minneapolis 111 cars sat in traffic on the I–35W bridge across the Mississippi River during rush hour. Filled with people going about their business, they were headed to a Twins game, they were picking their kids up for soccer. There were several buses bringing kids from a field trip. They weren't thinking about infrastructure, because they don't want to have to think about infrastructure. But at 6:05 p.m. their lives changed forever when our inability to keep up with infrastructure needs resulted in the catastrophic failure of that bridge: 13 people lost their lives and 145 more were seriously injured.

Minnesota has the fifth-largest road system in the United States, although we have 22nd in population. Connecting people in rural areas as well as urban areas is something we pride ourselves on, because it builds resiliency into our economy. It also gives people the opportunity to choose where they want to live.

But Minnesota's roads need investment. Our State's most recent State highway improvement plan identified $18 billion in shortfalls over the next 24 years, just to maintain what we have. That doesn't include all the other modes of transportation.

Minnesotans are willing to pay their fair share, when they know it is going to good use, like roads, bridges, transit. And for all of you in here, there are many different funding streams, but it must be dependable. It must be there.

And one of the things is—and for better or worse—the gas tax and the Highway Trust Fund is the way we did that. So I made no bones about it. I don't know for—each of you have all run for office. It is usually pretty good advice, don't run on raising people's taxes, except in the instance of infrastructure. We ran a campaign talking about investing in that. We ran about telling them that we needed to have those dedicated funding. And not only did they respond to that, they responded overwhelmingly that this is something they believed in.

In a few weeks myself and Governors across this Nation will be introducing their budgets. In Minnesota we will propose a comprehensive transportation package addressing all modes of transportation to improve the lives of Minnesotans.

Now, I want to be clear. Not all Governors in the NGA agree on a gas tax. But all of those Governors agree that if we choose to not invest, the cost will go up, the safety needs of our citizens will be put at risk, and we will continue to fall further and further behind in trying to move forward into the 21st century.

I look forward to your questions, and thank you for the time.

[Mr. Walz's prepared statement follows:]

Prepared Statement of Hon. Tim Walz, Governor of Minnesota, testifying on behalf of the National Governors Association

Chairman DeFazio, Ranking Member Graves, and members of the House Committee on Transportation and Infrastructure, thank you for inviting me to testify today on behalf of the National Governors Association (NGA) and the people of Minnesota. I had the privilege of serving on this committee for years.

Governors made investing in our Nation's infrastructure a top priority in 2019 and for the 116th Congress.

Infrastructure is the foundation States are built upon. It impacts everything from economic development and global competitiveness, to our quality of life, safety, environment and resiliency. Governors have taken action to enhance infrastructure, including creating new and increasing existing funding streams, advancing public-private partnerships, addressing regulatory delays, improving transparency and promoting innovation.

I'd like to highlight several important points this morning:

- No single stream of revenue or approach to financing will address all the gaps. States need a comprehensive approach that allows for leveraging a variety of funding sources and flexibility to match the right tool with each project. States succeed when there is certainty and stability in long-term Federal resources ensuring workforce and economic vitality.
- We must fix and expand existing infrastructure and invest in resiliency and security to modernize it for future generations. We must attend to needs across our rural, urban and suburban areas. Infrastructure encompasses more than roads and bridges. It also includes city and community development, transit, seaports and airports, inland waterways and electric vehicle charging networks. It involves water and wastewater, the energy system, electricity grid and power plants, public buildings and advanced communications networks. Investments in projects of regional and national significance advance overall global competitiveness.
- We must recognize how all these pieces fit together. I was in Hallock a few weeks ago—a town of less than 1,000 people in the far northwest corner of Minnesota. In the middle of a field off a dirt road, there is something you wouldn't expect to see: a liquor distillery. The owner of this distillery talked to me about the importance of repairing roads and bridges in her area, but also about the need for good transit in the cities for her urban customers to buy her product. She knows that when the Twin Cities thrive, Hallock thrives, and when Hallock thrives, the Twin Cities thrive.
- Governors support Federal actions that streamline project delivery, reduce approval and completion times, and increase transparency, but also achieve the intent that underlies critical environmental, planning, design, and procurement reviews. States believe that Federal infrastructure program reforms are the most effective when they promote State flexibility by omitting unnecessary Federal requirements.
- Governors believe that innovative technologies should be embraced to achieve resiliency, security and efficiency. Infrastructure should incorporate new capabilities related to increasing connectivity, autonomy, digital information and electrification. States are leading the way in embracing new practices and technologies that provide innovative solutions to traditional infrastructure needs; Federal investments should be integrated and reward positive, evidence-based outcomes.
- I am here today to highlight needs and planning efforts that we have underway in Minnesota, and to ask Congress to pass an infrastructure package that provides States with the certainty needed to budget and plan for the future. We also ask that Congress provide States with the flexibility needed to determine how best to use the Federal dollars that we receive.

THE STATE OF INFRASTRUCTURE IN MINNESOTA

TRANSPORTATION

On August 1, 2007, 111 cars sat in traffic on the I–35W bridge over the Mississippi River in Minneapolis during the evening rush hour. They were filled with people going about their everyday lives, unconcerned about the infrastructure surrounding them. They were headed out for a night of fun at a Minnesota Twins game; they were schoolkids returning from a summer field trip; they were folks just trying to get home from work.

At 6:05 p.m., their lives changed forever when our inability to keep up with our infrastructure needs resulted in the catastrophic collapse of the bridge. Thirteen people lost their lives that day, and 145 more were injured.

Despite this highly visible, utterly obvious signal that we needed to do something to repair and replace our transportation infrastructure, it took a veto override from the legislature to pass a 5-cent State gas tax increase the following year. It was nonsensical then, and it shouldn't take another tragedy for us to take care of our infrastructure needs now.

Minnesota has the fifth largest road system in the United States, despite being ranked 22nd in population. We pride ourselves on our wide expanses of wilderness, farmland, our regional centers, and our metropolitan area—but there's a lot of roads connecting everything that makes Minnesota great.

But Minnesota's roads are in rough shape. Our most recent State Highway Improvement Plan identified billions of dollars in needs—Over the next 20 years, Minnesotans will need to come up with $13.44 billion to maintain our pavements; $2.65 billion to maintain our bridges and $3.35 billion for all the culverts, drainage ditches and signage that make our transportation system work. That doesn't even consider all modes of transportation—our transit, bicycle and pedestrian infrastructure that's growing in need.

Minnesotans are willing to pay their fair share when they know it is going to good use—like their roads, bridges, and transit. I saw it over the past 2 years while working to win Minnesotans' trust and become Governor. I unapologetically told Minnesotans over and over that we need to raise the gas tax, and that it would be a top priority for me if I took office.

In a few weeks when I unveil my budget as other Governors will also, I will propose a comprehensive transportation finance package, addressing all modes of transportation, and improving the lives of all Minnesotans. We'll spend that increased revenue responsibly—benefiting the greatest number of people while keeping an eye on how efficiently we maximize our resources, and constantly looking for innovative ways to improve our infrastructure as we move toward new ways of financing our transportation system.

Minnesotans know they get what they pay for, and I am confident they will support this measure to improve our roads, ensure businesses can get their goods to market, and prevent a tragedy like the 35W Bridge collapse from ever happening again.

THE COSTS OF DOING NOTHING AND A PATH FORWARD

While not all of my perspectives are universally shared by all the Nation's Governors, we do all agree that the Federal Government can be a great partner, especially when it comes to efficiencies and innovation. Federal programs and funding should provide maximum flexibility to the States for implementation and innovation because of our diversity of geography, population and priorities.

The National Governors Association looks forward to continuing to engage with our Federal partners and will be highlighting the need for infrastructure investment throughout the year. In fact, later this month on February 23, we will be hosting a roundtable discussion on infrastructure during our annual Winter Meeting, which brings together the Nation's 55 Governors to discuss the most pressing issues facing the States and Territories.

On behalf of the Nation's Governors and the people of Minnesota, thank you for the opportunity to testify.

I would be happy to answer questions at the appropriate time.

Mr. DEFAZIO. Thank you for observing the time limits, and good statement.

Mayor Garcetti?

Mr. GARCETTI. Thank you very much, Mr. Chairman, Ranking Member, and thank you so much to Grace Napolitano for the kind introduction and the friendship over many years. Great to be with so many friends, new and old, that are here.

I wear two hats today, both as mayor of a great American city, Los Angeles, but also as chair of the U.S. Conference of Mayors Task Force on Infrastructure, and a member of the National League of Cities, here with a clear message from America's local communities that it is time to pass an infrastructure package, comprehensive and now.

I think for most people this isn't about miles paved, this isn't about statistics. This is about stories, and lives, how much time we spend with our children, whether or not we can drink clean water from our taps, whether we have a smooth commute to work. And this Congress has an amazing chance to make history, to be able to reignite homegrown industries here, and also create great middle-class jobs we can't export away from this country.

Two years ago we heard two Presidential candidates talk about hundreds of billions of dollars of infrastructure investment, and America is still waiting. But the same night that we elected a new President, America's cities passed $230 billion of voter-approved measures from Georgia to Ohio to Washington State, including $120 billion in my own city, my own county, Los Angeles, which was the largest measure times two in American history, one that also creates 787,000 jobs for Americans, building that middle class.

No matter where we live, no matter who we are, Americans feel very clear that it is time to improve our communities. And that is why, a year and a half ago, I formed with a group of State leaders, local leaders, business leaders, and labor leaders a group called Accelerated for America. It is a nonprofit that is keeping infrastructure moving in this country.

And what you have on your tables is a bipartisan poll that we conducted at the end of the year, and it showed that the top two issues that Americans want this Congress to work on were health care and then infrastructure. That was above immigration, climate change, even jobs and the economy. Number two was infrastructure.

So, in 2019, believe it or not, 80 percent of Americans agree on something, and that is the need to move forward with infrastructure. Fifty years from now I want to look back on this Congress and this committee and say that you were the ones who brought about that turning point. This Congress transformed the foundation upon which this country is built. And our country needs you.

Nations across the world are planning for 50- and 100-year plans for infrastructure, while we are limping forward with 2- and 5-year Band-Aids. It is time for us to think about that long term to win that future. And that is why I am submitting in today's testimony a plan that the U.S. Conference of Mayors has approved for a $1 trillion infrastructure plan supported by our local communities, urban and rural, north, south, east, west, red and blue. And $612 billion of those dollars are directly under the jurisdiction of this committee.

So today let me ask you to consider three things as you look at infrastructure: one, encourage leverage; two, reward innovation; and three, consider the long-term maintenance of our infrastructure.

First, leverage. Leverage local government, leverage State government. And yes, leverage the private sector with P3s that we are showing in Los Angeles work without giving away public assets, but that accelerate how quickly and how cheaply we can get infrastructure built.

Second, reward innovation. When you consider the needs of our roads and our bridges, our railway, and our airports, ask that you can look at the speed at which we are innovating. In L.A., which is known as America's car capital, we are the headquarters of Hyperloop, home to the electric scooter revolution; a new boring company; new technologies that are excavating tunnels faster than ever; electric cars that are reducing emissions. And we want these things not to just be invented in America, but exported from America.

As we redo our port in Los Angeles, we don't have a single American company that re-does port equipment. We don't have a single American company that does rail equipment. So that requires flexibility from Federal Government to look not only at technologies today, but to put in this legislation technologies that will evolve tomorrow.

And third, consider maintenance. We tend to fixate on future projects that we can get in the ground. But at a time when people died on the DC Metro, when New York subways don't run on time, when passengers had to kick their way out of smoking cars in Boston, we need to look at lasting revenue streams without sacrificing social service programs, so we can maintain infrastructure.

Our program in Los Angeles is an evergreen tax. To your point, I ran 3 months later and got 81 percent reelection. This is something voters want, and you can take the risk of putting something permanently forward. Twenty-seven States have passed a gas tax to preserve roads and fix crumbling bridges, and our measure will never sunset in Los Angeles because we know after it is built it needs to be maintained.

Americans want the peace of mind of the history that you will make in this committee, and we are there behind you. We are there to run ads, to help campaign for the passage. Our nonprofit will make sure that that moves forward.

So, on behalf of local communities across America we are here to tell you we will do everything in our power to help you make that history and to write a great chapter for this country. The time is now.

Thank you, Mr. Chair.

[Mr. Garcetti's prepared statement follows:]

Prepared Statement of Hon. Eric Garcetti, Mayor, City of Los Angeles, California, testifying on behalf of the United States Conference of Mayors

Chair DeFazio, Ranking Member Graves, and members of the committee—my name is Eric Garcetti, and I serve as mayor of Los Angeles and as chair of the U.S. Conference of Mayors' Infrastructure Task Force.

I am honored to appear before you and this committee on behalf of my city and the Greater Los Angeles region—a true infrastructure capital in America—home to the biggest port complex in the Western Hemisphere, the country's busiest origin and destination airport, and the largest local transportation investment in U.S. history, times two. In L.A., we understand that our infrastructure is the foundation for not only how we move goods, cars, and families, but for the long-term strength of our economy.

I am proud to add my perspective as a mayor, as a representative of local leaders who live where we work; who see the impact of our policies and our actions in our own neighborhoods every day; who deal with the current state of America's infrastructure on our own streets—whether that means filling potholes, repairing bridges, expanding mass transit, or securing a clean and reliable water supply. Mayors are responsible for all of it, and we are willing and eager to be your partners in realizing our shared vision.

We come together this morning at an exciting moment for infrastructure. Fifty years from now, when we look back on what we did and achieved for our constituents, I truly believe we will remember this time as a turning point, and this Congress as the body that finally set us on course to developing the 21st-century infrastructure our Nation needs and our people deserve.

But we also have to recognize that seizing this moment is about more than roads, bridges, trains, pipes, broadband, and treatment systems. It is about building our physical infrastructure while giving birth to homegrown industries and creating well-paid, middle-class jobs that don't require an advanced degree, can't be outsourced, and don't disappear in the event of a recession or economic downturn.

And if we want to do this right, there are clear ways to maximize our resources and meet our common goals. Congress should reward innovation, ensuring new technologies for reducing traffic, cutting emissions, improving goods delivery, facilitating the arrival of scooters, boring tunnels, and bringing electric and autonomous vehicles to our streets are all developed here in the United States.

The Federal Government should leverage its sizable role in the marketplace and in infrastructure development, utilizing local dollars and engaging private-sector partners, to extend our investments in urban and rural areas nationwide.

What's more, every one of us in public life—in the U.S. Capitol and the White House, in State legislatures, and in city halls—must never lose sight of the long haul. That means focusing on immediate maintenance of our subways, rail lines, pipelines, and more, while keeping a keen eye on how we can establish steady, lasting revenue streams so our infrastructure does not fall into dire disrepair in the future, with no rapid way to fix it.

Los Angeles and cities in nearly every region have started to take this approach, looking not at 1- or 2-year projects, but 50- or 100-year timelines in how we address our transportation needs.

Many of us are a part of the nonprofit Accelerator for America, an outfit that brings local innovators, businesses, and unions together around smart ideas to strengthen people's economic security and foster infrastructure development. This organization recently surveyed 1,000 Americans and found that infrastructure ranks third in importance behind health care and job creation, and it moves up to second among problems the public wants us to solve together, Democrat and Republican, in a bipartisan way.

All of us are prepared to be this committee's best allies in making this a national cause, so we can strengthen our middle class, ensure better and faster goods movement, and improve the quality of life for all Americans.

THE NEED FOR ACTION—AND THE CONSEQUENCES OF DELAY

Our task should begin with the creation of a National Infrastructure Program, which would help usher in a new era of prosperity, innovation, and economic health for our Nation. And it would ensure the United States of America retains its economic leadership and prosperity in the 21st century.

Failing to make long-term investments has serious consequences. A recent assessment by the Los Angeles County Metropolitan Transportation Authority showed that a 1-year delay results in cost increases of at least 3.5 percent for capital projects. That translates to $35 million of increased costs for every billion in planned spending for highway and transit projects. The Los Angeles Metro's Fiscal Year 2019 Budget includes over $2 billion in capital funds for transit expansion, regional rail, and highway projects. If there was even a 1-year delay on these projects, it could increase costs by $70 million.

At the end of the day, that is $70 million that Federal and local taxpayer dollars will have to make up—one way or the other. The bottom line is this: once a project is shovel-ready—having cleared all local, State, and Federal rules and regulations—the key decision is how rapidly we can move these projects into their construction phase. The more these projects are delayed, the more they will cost.

The financial implications of delays are not the only risk. Throughout the West, we face rising temperatures, longer and more frequent droughts, and more intense wildfires in the wildland-urban interface. We see the impacts of climate change firsthand and know that innovative infrastructure investment will help us mitigate and adapt. Our water, housing, and energy futures demand it.

This is why many of America's cities are already taking action.

In Los Angeles, we are accelerating our transportation infrastructure with *Twenty-Eight by '28*, an initiative to deliver 28 major transportation projects by the 2028 Olympic and Paralympic Games. *Twenty-Eight by '28* is about building a countywide transportation network that includes subway, light rail, bike facilities, and highway bottleneck improvements. We will need the Federal Government to partner with us so we can deliver all these projects by 2028. This will require securing Federal New Starts grants, low-interest loans like TIFIA, and other financing strategies that have proven to be effective. But we will not ask for Federal construction with an empty hat. We will bring money to the table to help leverage every Federal penny to maximize the *Twenty-Eight by '28* program.

Los Angeles is also investing $2.6 billion to upgrade its port's infrastructure to accommodate new and larger classes of container ships, and to accommodate increased cargo volumes. But our port, the Nation's largest, is part of an intricate, national supply chain and freight system—which needs access to a robust, dedicated funding program. The case for Federal investment here is clear: U.S. global competitiveness requires sustained investment in an efficient and reliable multimodal freight system that connects our Nation's production centers, both urban and rural, to markets around the globe.

But our freight system is underfunded. In the southern California region, there is a $2 billion-a-year freight infrastructure funding gap. The American Association of Port Authorities estimates $66 billion in unmet port land-side and water-side infrastructure needs nationwide. The costs of ignoring investment in our ports and freight system are increased congestion, declining productivity, and lost jobs.

A strong Federal partnership can address much of this. Discretionary programs like BUILD and INFRA are well spent on our maritime gateways because of their national economic impact and ability to attract non-Federal investment. We also know that full and strategic use of funding sources like the Harbor Maintenance Tax can unlock the potential of the Nation's ports, both large and small, donor ports and traditional dredge ports.

In my city, the Port of Los Angeles is spending aggressively on a multimodal transportation and digital infrastructure, using a combination of private and State funding, as well as its own shipping revenues. A strong Federal partnership can leverage more investment in these areas and ensure our ports continue to operate efficiently with minimal environmental impact.

We are investing more than $14 billion at LAX to upgrade every terminal and to completely reconfigure access to our airport, which will include a seamless connection to our Metro Rail system. Still there is more that we can do to ensure LAX is ready to welcome the World to the 2028 Olympics. Passenger Facility Charges (PFCs) are extremely flexible and versatile, and they can be used to fund airfield, terminal, and ground access projects. A $4 PFC increase would provide for $1.5 billion in additional capital development projects at LAX, such as reducing aircraft taxi times and thus reducing emissions. We are already extended on our collection of PFC's through 2046 for projects that have already been completed or are underway. We urge Congress to approve a reasonable increase in the PFC cap now.

L.A. will invest $15 billion in the next 10 years in water treatment, storage, and distribution. We will clean up our groundwater, build out our recycled water systems, and provide incentives for businesses and residents to capture and reuse. By 2035, 50 percent of L.A.'s water will be local. If you know anything about California water politics and conveyances, you know this is an ambitious and necessary directive—one that will increase L.A.'s resilience to climate change and earthquakes.

Angelenos and Americans across the country recognize that clean and reliable water is a top priority. This past November, the residents of L.A. County voted to support Measure W—a parcel tax which will raise $300 million a year for local water projects that capture stormwater, clean up rivers, and green our communities.

And we are already at work executing our $120 billion infrastructure plan—to create a truly comprehensive rail network, ease congestion on our freeways, and fix our local roads.

This kind of Nation-leading investment isn't just happening in L.A.

In 2016, voters in Austin, Texas, passed "Proposition 1" to upgrade their transportation system. Charleston County in South Carolina gave their "transportation initiative" a green light, and voters approved the "Sound Transit 3" ballot measure in Seattle, Washington.

In 2018, according to the Eno Center for Transportation, voters considered at least 314 transportation-related measures totaling $50 billion in transportation investments for roads, bridges, transit, airports, seaports, cycling, and pedestrian paths. The biggest were in Broward County, Florida, which approved a 30-year, $16 billion measure to support road, bus, and rail upgrades, and Hillsborough County, Florida, which approved a $9 billion package for transit.

Altogether, since 2016, cities, regions, and States have voted to invest nearly $250 billion to modernize their infrastructure. Some say that this is evidence the Federal Government does not need to play a role—that cities and regions are just fine on their own. That conclusion is misguided. This local investment means that there has never been a better time for Federal partners to take action on nationally significant projects. Matching those local dollars with an increased Federal investment and creating an environment for public-private partnerships will ensure that we can reach our goals and reverse the decline that has plagued us for too many years.

But there are cities across America that still rely on decades-old infrastructure that was wholly or substantially funded by the Federal Government through initiatives like the Works Progress Administration and the Interstate Highway System. We know this infrastructure, which fueled decades of growth, is aging and requires drastic improvement.

As we seek to upgrade this infrastructure, we should also seek to create a new model for Federal infrastructure spending that incentivizes local and regional funding commitments, invests in the future, and fosters innovative new approaches. I call this "I–3"—incentivize, invest, and innovate.

I–3 is one viable path to achieving a truly robust national infrastructure program. This is something that every American can rally around, and will benefit from—including urban, suburban, and rural areas.

First, we must *incentivize*.

Existing Federal programs such as New Starts and INFRA are already combining with local funding streams to build, accelerate, and expand projects. These programs prove that the local-Federal partnership model can be successful, and must be maintained. They are the foundation upon which a national infrastructure policy must be built.

We must also expand direct Federal infrastructure funding.

Local entities cannot do this critical work of expanding access to mass transit and upgrading our Nation's roads, freeways, and bridges on our own. A national infrastructure package can further incentivize local entities to generate more of their own revenue—and not just for the sake of spending the way that we've funded infrastructure for the last 50 years.

Second, we must *invest* to build our projects so they perform in the long term. Too often we only care about ribbon-cuttings and groundbreakings. The Federal Government should reward States and cities for ensuring their assets perform to the level that the public expects—focusing on longer term lifecycle needs, and using innovation and new technology to deliver results whenever possible.

Last, we must *innovate*.

Public-private partnerships, in many cases, are a particularly good way to deliver ongoing performance, and they also allow the public sector to leverage private funding to help deliver projects sooner and more efficiently with performance guarantees. Project delivery approaches such as design-build-operate-maintain and CM/GC can reduce costs and deliver projects faster, while public tools like TIFIA and RIFF will be critical to many P3 projects.

While P3s will not be a viable delivery strategy for many projects, a National Infrastructure Program must not be too prescriptive; rather, it should help cities and regions take innovative approaches.

I look forward to working with this committee to help deliver that future for the American people, and cities across this country.

MEASURE M—AN UNPRECEDENTED TRANSPORTATION INFRASTRUCTURE PROGRAM

Measure M is the largest transportation initiative in the history of the United States—times two. Measure M is expected to generate $860 million a year in 2017 dollars. It will help expand our rail and rapid bus transit system, accelerate rail construction, and improve our system connectivity throughout the County of Los Angeles. It will stitch together the rail network needed to connect every resident in the L.A. area. A total of 15 rail and bus rapid transit projects will be built under Measure M. These projects include the acceleration and completion of our Purple Line subway extension, light rail connections in the San Fernando and San Gabriel Valleys, and the vital connection to LAX. The Purple Line extension would connect the two largest job centers in the State of California, downtown Los Angeles to the UCLA/Westwood area, and the project will be ready by 2027, a year before the arrival of the Olympic and Paralympic Games.

Measure M also funds projects to build and fix 14 major highway projects. It aims to tackle some of the most congested corridors and roadway bottlenecks in the Nation. For example, the measure will help modernize Interstate 710 Long Beach Freeway, a vital transportation artery that links the Ports of San Pedro Bay to major distribution centers. Thousands of trucks use this corridor every single day. The construction of this project will improve air quality, enhance traffic safety, and accommodate future economic growth to address our Nation's freight movement needs.

Another important feature of the Measure M program is the local return program. Local return pays back all 88 cities in the county so streets are repaved, potholes are repaired, and traffic signals are modernized through synchronization. When designing the program, it was important to us that neighborhood streets and intersections would benefit.

But Measure M is not just about infrastructure transportation improvements. Measure M will add 466,000 new jobs across the entire Los Angeles County region. These are high-level and well-paying construction and technical jobs. I want to point out that these are not one-off gigs; they're career jobs that can support a family.

Local ballot measures are critical, but cannot meet our needs alone. A National Infrastructure Plan only works when the Federal Government is at the table.

MEASURE W

Measure W, a countywide stormwater measure, passed in November 2018 with 69.5 percent of the vote. It is a parcel tax based on square footage of impervious surface that will raise $300 million per year. Half the funds will be distributed to large, regional multi-benefit projects that can demonstrate a water quality, water supply, and community benefit. Forty percent of funds will be distributed to cities in the same proportion generated for water quality projects aimed to assist with Federal Clean Water Act municipal stormwater requirements. The remaining 10 percent is intended for administration, oversight, and technical support. The Measure was championed by L.A. County and the city of Los Angeles.

KEEPING EXISTING FEDERAL PROGRAMS AND MAXIMIZING DIRECT FEDERAL FUNDING

Both the FAST ACT and MAP–21 have been incredible resources for both highway and transit projects for many cities and jurisdictions around the country. And we should keep all the current funding programs in place.

The Los Angeles County Transportation Authority, also known as Metro, has benefited from the Federal Transit Administration's Capital Investment Grant Program, also known as New Starts. Over the last 5 years, we have matched over $3 billion in Federal New Starts grants with an equal amount of local Los Angeles County taxpayer dollars to build effective and efficient rail projects. The Federal Government should continue to support and fully fund the New Starts program—which has proven to be an outstanding steward of the American tax dollars. In my considered opinion, any effort to block future New Starts grants would be misguided and compromise a program that has proven its effectiveness over the last decade.

Los Angeles Metro has used nearly $2 billion in TIFIA loans to leverage Los Angeles County taxpayer dollars to finance four major transit projects over the past 5 years. The TIFIA program—which costs the Federal Government very little to maintain—has been essential in helping Metro and other transportation agencies across the Nation take highway and transit projects from the drawing board to their construction phases.

Metro has been a national leader in matching TIGER grant funds with local dollars in order to maximize the impact of these valuable Federal funds. Whether it was Metro's Rosa Parks Blue Line Transit Station—which secured a $10.2 million TIGER grant or the $15 million TIGER grant Metro recently secured to fix one of the most dangerous grade crossing projects in California (Rosecrans/Marquardt Grade Separation Project)—the TIGER grant program is a great example of how Federal funds can be used to leverage local and State dollars. Congress would be wise to continue funding the TIGER grant program—which has benefitted both rural and urban cities across the Nation since it was first authorized in 2009.

These programs have worked well in Los Angeles and many cities across the U.S. Do no harm is what I call it, meaning, it is essential that existing sources and uses of funds are not changed or eliminated. This means building on what we have and using the tools we have available. And, for many cities and their regions, the Surface Transportation Block Grant is vital to an expanded Federal-local partnership going forward, delivering even more resources directly to Metropolitan Planning Organizations and regional planning agencies to advance necessary highway improvements benefiting cities and their regional economies.

NEXT STEPS TO CRAFT A NATIONAL INFRASTRUCTURE PROGRAM

Undoubtedly, all Americans share the view that we must upgrade our Nation's infrastructure and that we must build and maintain projects on-time and on-budget. We agree that cutting red tape and streamlining projects is good to bring benefits to the public sooner. But for the U.S. to have the robust infrastructure we all envision and to be competitive at the global stage, a significant amount of new Federal funding is necessary. That is why Congress should identify and allocate new Federal funds to yield greater returns and outcomes.

Los Angeles is not coming to the table empty-handed. We are fronting our own funding and asking for a stronger Federal partnership. A program that incentivizes localities across the country to pass their own bonds and/or funding efforts, in the way L.A. and other cities have done, will create an incredible catalyst for a major infrastructure program. This means creating significant leverage by incentivizing infrastructure owners to secure and commit to their own revenue measures, bond programs, and other financing sources that will go well beyond traditional Federal-State funding splits.

As mentioned before, there are tools that can help stretch every Federal program, such as the Build America Bonds, TIFIA, and even a National Infrastructure Bank, which offer complementary frameworks. However, cities and States can do more with innovative public-private partnerships, and we welcome opportunities for us to partner with the Federal Government to leverage what localities are doing.

So as Congress gets closer to finalizing our funding strategy, we look forward to working with you to forge a new Federal-local partnership that will create jobs, improve commute times, and build livable communities.

CONCLUSION

As I stated at the outset, this is a remarkable time for the cause of transportation and infrastructure. And as women and men who feel the impact of our investments firsthand, you can count on America's mayors to rally and campaign for whatever this country demands now and into the future. We will continue to stand united, across party lines, across State boundaries, across the business community and labor unions, around what is needed to get us over the finish line and toward an era of modern infrastructure.

Thank you once again, Chairman DeFazio and Ranking Member Graves for allowing me to be here today. I look forward to working with you to identify innovative ways to address our Nation's infrastructure needs.

Mr. DEFAZIO. Thank you for excellent and, again, on-time testimony, Mayor.

Now we will turn to Secretary LaHood.

Ray, go right ahead.

Mr. LAHOOD. Thank you, Mr. Chairman. First let me offer my congratulations to you. For those of you on the committee, when I started my career in Congress in 1995 I started on this committee. And it only took Peter 30 years to become chair of the committee.

[Laughter.]

Mr. LAHOOD. So Mr. Pence, there is hope. And I recognize you, sir, because I sat in the chair that you sat in when I first joined the committee in 1995. And this is a great committee, because it is a bipartisan committee.

And to the ranking member, congratulations. I think it only took you 20 years to reach where you are. But it is because people want to be on this committee and serve on this committee, because it is so bipartisan.

I think the timing is absolutely perfect. I think the stars are aligned for a big infrastructure bill. It has got to be big, and it has got to be bold. It can't be chintzy. The American people are waiting. And I know that just about every one of you that ran for office ran on the idea that you were going to do something about fixing infrastructure in your communities. I watched your campaigns, and I know that when many of you were elected—you now have to go back home and explain to people what you are doing to fix infrastructure in your communities. And so I think the timing is perfect, and this is the committee that can do it.

When we served—I served for 6 years on Transportation and Infrastructure with Peter and others. We passed two 6-year bills. We had 75 members on the committee. All 75 members voted for those bills. We had extraordinary leadership from then-Chairman Bud Shuster, and we made it happen. This committee can do that, and I think you will.

Everybody knows what the problem is. America is one big pothole. My home State is Illinois, and we have had another brutal winter. And all over Illinois there are potholes. All over America there are potholes. And you can only do so much by continuing to fill potholes year in and year out. The interstates are crumbling. Today there are now 60,000 structurally deficient bridges all over America. And those have been designated by engineers. So you know what the problems are.

You come from the communities, you come from the States. And the issue is not knowing what to do, the issue is how do we pay for it. Why hasn't Congress passed a transportation bill? Because we can't come to grips with the idea of how to pay for it.

And I want to suggest to you today that you raise the gas tax, you put a big, bold plan out there, give it to the Ways and Means Committee, and ask them to raise the gas tax. I say 10 cents a gallon. I know there is a plan out there for more. I heard President Trump one time in the Oval Office say 25 cents a gallon. Hooray, do it. And when you do it, index it to the cost of living. In 1993, if Congress had indexed the gas tax to the cost of living, we wouldn't have this debate. We would have the resources.

But I say couple it with public-private partnerships. I say couple it with tolling. I say couple it with vehicles miles traveled, which I know the ranking member is very excited about. You can't fix America's problems with infrastructure with just tolling, with just VMTs, with just public-private partnerships. You have to create a big pot of money.

We have the best interstate system in the world, and it was funded through the Highway Trust Fund. That fund is depleted, it is broke. And that is why America now looks like a third-world country when it comes to infrastructure. So you got to come to grips with this.

Now, I will tell you this. Fourteen States are this year considering an increase in the gas tax. Twenty-six States since 2013 raised their gas tax, and not one politician got thrown out of office. Not one. They did it because they stopped waiting for Washington to act. And they needed money.

And so you don't need to worry about the threat of some kind of a reverberation from your constituents if you raise the gas tax. For every $1 billion increase in Federal investment in transportation, 27,800 jobs are created. Think of this as a jobs bill. This money doesn't stay in Washington. Where does it go? It goes to your friends and neighbors, who engineer roads, who build roads, who work on the roads, who fix the roads up. The money goes back to your communities. It goes back to your States. This clearly is a jobs bill. This clearly will get America moving again.

And it is just absolutely so critical. You put together a bold plan, give it to the Ways and Means Committee, raise the gas tax, couple it with VMTs, tolling, vehicle miles traveled, boom, America is back in the transportation business again. And we haven't been in it for a long, long time.

Finally, let me say this. Safety is very important. One of the things we emphasized, and one of the things that Chairman Shuster emphasized when he was chair is safety. And Chairman Young did too, when he was chair. Our roads are not safe today. The death rate on roads today is up. Why? Because they are not safe.

So make safety a part of whatever big, bold plan you put together. If you build new roads, if you reconstruct roads, safety has to be one of the top priorities. And I think that is something we emphasized while we were at DOT. It is emphasized in the States. And I think you send a good message if you emphasize it in whatever program you put together.

Thank you for including me, Mr. Chairman. It is good to be back to the committee.

[Mr. LaHood's prepared statement follows:]

Prepared Statement of Hon. Ray LaHood, Cochair, Building America's Future, Former Secretary, U.S. Department of Transportation

Chairman DeFazio, Ranking Member Graves and members of the committee, thank you for the opportunity to testify before you on the importance of America's infrastructure and how the lack of investment is impacting the country's economic growth and quality of life.

I appear before you today as a former U.S. Secretary of Transportation, a current cochair of Building America's Future (BAF) and a senior advisor at DLA Piper. BAF is a bipartisan organization cofounded by former Governors Ed Rendell and Arnold Schwarzenegger and former New York Mayor Mike Bloomberg. We represent a diverse coalition of State and local elected officials working to advance smart infrastructure investment to promote economic growth, global competitiveness and better quality of life for all Americans.

We are two decades into the 21st century and America's infrastructure is falling apart and our Nation's economic competitiveness is falling behind. Decades of neglect and paltry investment has dropped the economic competitiveness of our transportation infrastructure to number nine in the world. In 2005 we were ranked number one. But the travails of our ailing infrastructure are not a recent development. It has gradually happened over time.

In the 1930s, 4.2 percent of the Nation's GDP was spent on infrastructure investment. But by 2016 the number fell to 1.5 percent of GDP. When it comes to investment in transportation infrastructure the picture is even more dismal with the U.S. spending 0.6 percent of GDP—less than nearly all of the G7 nations according to the OECD. Of those nations, Australia has the highest investment rate at 1.4 percent of its GDP. Put another way, the Congressional Budget Office reports that U.S. public spending on infrastructure fell by 8 percent between 2003 and 2017.

We are here today to examine the impact of inaction due to lack of infrastructure investment. The consequences of inaction to Americans' daily lives may be slow to develop but the evidence shows the impacts are as real as they are costly.

Our roads and bridges are struggling to accommodate the growing volume of traffic. The Bureau of Transportation Statistics shows that from 2000 to 2015, road infrastructure increased 5.2 percent while traffic volume increased 14 percent.

Potholes abound on our streets and the cost to drivers is real when tires are blown out or a vehicle is knocked out of alignment. The disrepair of our roads costs the average driver $599 in extra vehicle repairs. But in some areas the costs are even higher with drivers in Jackson, MS, paying $944 and drivers in Cleveland paying $887.

Americans are wasting more time and fuel sitting in traffic. Rising from 16 hours in 1982 to 42 hours in 2014 at a cost of $960 per driver. This will only get worse in the coming years as the number of miles driven by cars and trucks will continue to increase.

The U.S. Travel Association reports that within the next 5 years, Labor Day-like traffic will plague our roadways on a daily basis. A survey conducted by the group showed that 38 percent of travelers would avoid between one and five trips per year if congestion continues to grow at its current pace. If travelers avoided just one auto trip per year, the impact to the U.S. economy would be $23 billion in lost spending that would directly support 208,000 jobs.

Consumers increasingly expect same day deliveries which could become more difficult to achieve with rising traffic volumes. The Federal Highway Administration reports that 947,000 hours of vehicle delay can be attributed to delivery trucks double parked in dense urban areas. Trying to drive in any major city is almost like navigating an obstacle course with delivery trucks and other vehicles double parked on both sides of the street. Our city streets have almost become impassable.

There has been much hype in recent years about driverless cars and how they may eventually replace car ownership for significant portions of the population. Attention is mostly focused on the new opportunities this can bring but this can only be possible if our transportation infrastructure is in a good state of repair. For AVs to be successful, roads must be properly marked and free of potholes. ITS technologies must be deployed so that vehicles can communicate with each other and their surrounding infrastructure. The investment in these key parts of infrastructure are sorely lacking.

Almost 40 percent of our bridges were built over 50 years ago when traffic volumes were less. There over 54,000 structurally deficient bridges in the U.S. and if placed end to end, the length of them would stretch 1,216 miles or nearly the distance between Miami and New York City. While progress has been made in recent years reducing the number of structurally deficient bridges, that gives little comfort if you are one of the 174 million daily trips across one of the these bridges.

It's not just our surface transportation network that is being challenged with lack of investment. It is our ports—both sea and air.

The economy heavily relies upon ports and the network of infrastructure that serves the ports. Every day $6 billion worth of goods and materials move through America's ports and U.S. port activities generate $4.6 trillion in economic activity annually as well as support 23 millions jobs. However, the lack of infrastructure investment in America's ports could result in $4 trillion in potential GDP loss by 2025 and $575 billion in costs to businesses and households by 2025.

With the expansion of the Panama Canal completed in 2016, it is forecasted that post-panamax vessels will comprise 62 percent of total container ship capacity by 2030. Yet only four east coast ports are dredged deep enough to accommodate this new reality. While Baltimore is one of those ports, it is struggling with its landside infrastructure and a nearly 125-year-old rail tunnel that is not tall enough to allow trains double-stacked with containers to pass through creating a cargo bottleneck and impacting the efficiency of the port.

The Harbor Maintenance Trust Fund's purpose is to support harbor maintenance such as dredging by the Army Corps of Engineers. Since 2003, the HMTF has collected more in revenue that it expends and has accumulated a roughly $9 billion surplus. Despite the need to address the backlog in port dredging projects, Congress has chosen to limit annual appropriations from the HMTF so that the Trust Fund can help to mask the Federal deficit. Without adequate investment, the American Association of Port Authorities estimates $14 billion in added costs of traded products due to shallow harbors by 2040. It is time to ensure that the HMTF's revenues are used for their intended purposes.

When it comes to air travel, our skies are approaching gridlock and our World War II-era air traffic control system can't keep pace with the demand. According to the U.S. Travel Association, within the next decade, 25 of the Nation's top 30 airports will suffer the same level of congestion as the day before Thanksgiving at least 2 days each week. Last year, 1.7 billion passengers arrived at or departed from U.S. airports. This number will only grow in the coming years which means that unless it's addressed, the cost of congestion at our airports will rise from $24 billion in 2012 to $63 billion by 2040.

The passenger experience at airports can vary widely as some airports have been able to better modernize their facilities and expand their capacity but others are struggling to keep up. The Airports Council International—North America has estimated that the total capital development needs of U.S. airports are nearly $130 billion through 2023. This is a 28-percent increase over the 2017 estimate and a 70-percent increase in 4 years. The American Society of Civil Engineers reports that by 2020, unmet airport needs would result in cumulative losses from our economy of $54 billion in export value and $580 billion in overall business sales. With the Passenger Facility Charge having remained capped for nearly 20 years, its purchasing power has decreased by 50 percent. It's time to modernize this important financing tool.

While Washington remains mired in dysfunction, State and local officials have stepped up and made the hard choices by proposing legislation to increase the fuel tax, replacing the gas tax with a sales tax on fuels, or ballot initiatives seeking to raise revenue. Since 2013, 26 States have increased their gas taxes. This has occurred in red, blue and purple States. The electoral impacts of these actions were minimal as a vast majority of them have won their reelection races. According to ARTBA, voters in 12 States reelected 93 percent of the 530 State lawmakers who supported a gas tax increase between 2015 and 2018 and ran for reelection in 2018.

However, when it comes to the gas tax, it is clear that as a long-term solution, it is not a sustainable source of revenue and other options must be further explored and tested. A number of States—most notably Oregon, California, Colorado and Washington—have moved forward with pilot programs to test the feasibility of replacing the gas tax with a charge based on the mileage. The FAST Act included a $95 million program that has also provided grants to other States examining this concept. If it has not been already, legislation will soon be reintroduced to increase the gas tax and then transition to mileage-based system.

The success rate for ballot initiatives seeking to raise revenue for transportation from 2009 to 2018 is 78 percent. This tracks well with the 79-percent success rate of such initiatives during 2018. A critical reason for the high success rate is that voters were clearly informed about which projects would be built should the ballot initiative be approved.

Addressing our infrastructure challenges can seem daunting. But it is not impossible. It will take all of us working together—Republicans with Democrats, the House with the Senate, and both ends of Pennsylvania Avenue. It will take a commitment of funding from all levels of Government and the private sector.

Americans have grown impatient waiting for our Nation's policymakers to stop the bickering and address the challenges facing our Nation. A majority of voters—68 percent—say that infrastructure investment was an important factor in deciding who to vote for in the 2018 midterm elections.

According to the American Society of Civil Engineers, the continued failure to act will result in American families losing $3,400 in disposable income each year—or $9 each day—due to our infrastructure inadequacies. Further, the cost to our economy will be the loss of $4 trillion in GDP and 2.5 million jobs in 2025. The cost of inaction is simply unacceptable.

Let's go big and bold. Building America's Future calls on Congress and the Trump administration to put forth and approve a robust and comprehensive infrastructure package that includes sustainable funding to get America's infrastructure back to that number-one ranking. This package should be bipartisan and something that can receive support in the Senate and the White House. A great place to start is to find a sustainable solution for the Highway Trust Fund, Modernize the Passenger Facility Charge and address the limitations on the Harbor Maintenance Trust Fund.

It's time. The future can't wait—it's time to build.

Thank you, Mr. Chairman. I look forward to answering the committee's questions.

Mr. DeFazio. Thank you, Mr. Secretary. I appreciate your remarks.

In fact, I will begin my questions and I am going to—everyone will get 5 minutes. And I recognize myself, and I will stick to the 5 minutes. You run the clock, please. I am not taking that prerogative, because a lot of people want to ask questions.

With the first to Governor Walz, on just—can we just go back one more time? Because I am trying to overcome inertia around here.

You actually campaigned for Governor advocating an increase in the gas tax?

Mr. Walz. That is correct, Mr. Chairman. And my thinking was on this is if you are going to propose and tell people, they know what is aging, they know what needs to be done. They are stuck, and we have the data on congestion in the Twin Cities. We understand about—especially down to our township bridges—in a very rural State, as I said, we have the fifth highest amount of road miles of any place in the country—that we had to do that.

And I thought it was disingenuous not to do that, so I ran on this. And, ironically enough—well, I guess maybe not ironically enough. Pretty predictably enough—the irony came in this—the attack ads running against me were that I was going to raise the gas tax. My numbers went up as those ads were running, because the public was saying, "Do something. Come up with a plan."

And I think the ranking member said it, you said it, Mr. Chairman. You heard the mayor and the Secretary say it. We are open for anything that is out there. But this stumbling along time to time makes planning impossible.

And I don't care what you call it, we are seeing changes in storms, flooding, intense cold that is adding to the cost of the maintenance of these roads and the building of it, at the same time we are trying to figure out—and the States—again, I ask you, give us the flexibility to innovate as we move towards renewables and plug-in vehicles.

But there is no—nobody out there is thinking that we can do this without investing. And nobody has put a plan forward who said, "Well, there is plenty of money out there, you are just spending it in the wrong place." That is fundamentally untrue, especially in the States. And the Governor's budgets will reflect that.

Mr. DEFAZIO. Thank you, Tim.

Mayor, you mentioned a number of tragic and difficult instances with transit. This is a point I would just like to emphasize because, with a $106 billion backlog to bring existing transit up to a state of good repair, let alone the new transit you are building in L.A., I think this is critical. Because if things break down, people can't be at work at times, their lives are actually endangered, they are not using it.

Mr. GARCETTI. Absolutely, Mr. Chair. And I think lots of times people think about cities as places they don't represent. When, in reality, we know, for instance, in Long Beach, Mr. Lowenthal's district, and Los Angeles, 43 percent of the goods that come into America to every single one of your districts comes through those ports. Same thing with making sure that New York functions and Boston functions and that the Washington area functions.

When Washington's Metro system was breaking down, Accelerated for America came in, helped the three jurisdictions of Virginia, Maryland, and the District get something done. But it is a tougher thing to go to voters later and say, "Hey, we want you to raise taxes" to maintain something. We expect we should have already been doing that. And that is why it is so critical the Federal Government be that place that we can also come to and partner with.

We have stepped up. We are not coming here with empty hats in hand. They are at least half filled. We are asking you to fill it up to the top.

Mr. DEFAZIO. All right. And Secretary LaHood, you were very impassioned about the need for additional funding. I appreciate that.

But you made the point about all the people who—all the local jurisdictions and States have raised it, and have pending raises. So does the Fed really need to do anything, if all those States are doing it? Can't they just do it on their own?

Mr. LAHOOD. Well, of course not. And the idea that the Federal Government is going to get out of the business of building roads and bridges goes against the issue that I raised about safety. We have to have high—good safety standards.

And we also have to have a commitment—when people go to Europe and ride the trains, they come back scratching their head. Why don't we have this in America? Because the Federal—Europe invested in trains. What did we do?

Eisenhower had a vision. Connect America. And what happened? He signed the interstate bill. Fifty years later we have the best interstate system in the world because the Federal Government made the investment. Let's don't let that deteriorate to the point where—and the States don't have any money. I am—my home State is Illinois. We are broke. We are broke. And a lot of States are struggling. And then infrastructure just takes a much lower level.

We set the standard here in Washington, and we set the standard for safety, and we set the standard for funding. Let's get back into that business again.

Mr. DEFAZIO. OK, Mr. Secretary, my time has expired. I yield to Ranking Member Graves.

Mr. GRAVES OF MISSOURI. Thank you, Mr. Chairman. And I want to welcome all the panelists here. Mayor, thanks for being here. My two former colleagues—Governor Walz, Tim, congratulations. It is good to have you here. And really, my question is for another one of my former colleagues, Secretary LaHood.

I very much appreciated the opportunity yesterday to catch up with you and our mutual friend, Tom Oakley. And I would like to take just a minute to acknowledge Tom Oakley's work on infrastructure matters over the years, as you are well aware, including as the leader of the Tri-State Development Summit. A lot of what we are discussing today stems from those conversations, Tom. You and I have worked together and I have always appreciated your counsel. And thank you for being here today.

With that, Mr. Secretary, just a real quick question. Given the fact that you have sat both in the House and as Secretary of Transportation, I would just ask what advice you would have for us when it comes to reaching a bipartisan agreement that the House can agree on, the Senate can agree on, and the President will sign.

Mr. LAHOOD. I think try and get—try and really get a message. Try and get a signal from the White House, what they would be agreeable to.

Mr. Ranking Member, I would say this. You can have all the big, bold plans you want. But if you don't have the White House on board—because I think this. I think the House has the ability to pass a big, bold plan. I think the Ways and Means Committee will try and find the money for you. But if President Trump is not with you on this, then it is going to be very difficult to pass in the Senate. If he is with you, you pass the bill, Ways and Means comes up with the money, President Trump is on board. I believe he will help sell it in the Senate. And if that happens, boom, America is back in the business of building roads and bridges. So I think you need a good signal from the White House.

And I think the relationship that you and the chairman have is extraordinary. What a way to start off the year. And you know, I don't think it is just talk. I think the two of you have a good relationship. If you two continue to talk to one another, and he incorporates—I know you are very big on vehicle miles traveled. And I think it is a good program. And I think Peter is willing to listen to you on that. If the two of you continue to talk, get a signal from the White House, boom. I think something is going to happen.

But we have a very short window here. This is it. If it doesn't happen this year, folks, it is not going to happen until another Presidential campaign takes place.

Mr. GRAVES OF MISSOURI. Thank you, Mr. Secretary.

Thank you, Mr. Chairman.

Mr. DEFAZIO. I think we are going to move on. But first I am going to ask unanimous consent—there was a letter received yesterday addressed to Senator McConnell, Senator Schumer, Representative Pelosi, and Representative McCarthy from 150 groups talking about the urgency for the need of the Federal Government to enhance investment in infrastructure. And it is quite a diverse grouping of associations, and obviously includes labor and others.

Without objection, that will be part of the record.

[The letter follows:]

Letter from ACI–NA et al. Submitted for the Record by Mr. DeFazio

FEBRUARY 6, 2019.

Hon. MITCH MCCONNELL
Majority Leader, U.S. Senate

Hon. CHARLES SCHUMER
Minority Leader, U.S. Senate

Hon. NANCY PELOSI
Speaker, U.S. House of Representatives

Hon. KEVIN MCCARTHY
Minority Leader, U.S. House of Representatives

DEAR MAJORITY LEADER MCCONNELL, SPEAKER PELOSI, AND MINORITY LEADERS SCHUMER AND MCCARTHY:

We are a broad coalition of associations and organizations working with all levels of government to address our nation's long-standing infrastructure deficit. As this challenge persists and worsens, we encourage you to develop and advance a bipartisan infrastructure investment package that will improve the safety, reliability and efficiency of our nation's infrastructure.

Substantial and long-term investments in all kinds of infrastructure are needed to expand our economy, grow jobs and compete globally. We appreciate strong bipartisan support for various infrastructure initiatives over the years—including in the past Congress—and hope this momentum can lead to a more substantial commitment this year to meet the growing needs of our economy.

During this period of divided government, we urge Republicans and Democrats to unite to develop and pass a bipartisan infrastructure bill that addresses these key priorities:

- Significantly increases direct federal investments in a broad range of infrastructure sectors,
- Fixes chronic challenges and addresses reoccurring shortages in key federal infrastructure accounts such as the Highway Trust Fund,
- Complements and strengthens existing tools, such as municipal bonds, that successfully deliver infrastructure investments at the federal, state and local levels,
- Facilitates opportunities for private investment in U.S. infrastructure,
- Creates efficiencies such as accelerating the federal permitting process, while continuing to provide environmental protections, and;
- Encourages active participation among all levels of government and between public and private sectors without shifting federal responsibilities because no single partner can deliver a well-functioning, national U.S. infrastructure network driven by a long-term vision and funding stability.

The time is now to pass a bipartisan, comprehensive package that transforms U.S. infrastructure systems beyond the status quo and maintains U.S. competitiveness in a 21st century economy. We urge you to work across the aisle to develop a proposal that ensures U.S. infrastructure is second to none.

Sincerely,

ACI-NA
Aerospace Industries Association
Air-Conditioning, Heating, and Refrigeration Institute
Aluminum Association
American Apparel & Footwear Association
American Association of Port Authorities
American Association of State Highway and Transportation Officials
American Petroleum Institute
American Bakers Association
American Beverage Association
American Coatings Association, Inc.
American Coke and Coal Chemicals Institute
American Composites Manufacturers Association
American Concrete Pavement Association
American Concrete Pipe Association
American Council of Engineering Companies
American Farm Bureau Federation
American Forest & Paper Association
American Foundry Society
American Frozen Food Institute
American Gas Association
American Highway Users Alliance
American Home Furnishings Alliance
American Institute of Architects
American Investment Council
American Iron and Steel Institute
American Planning Association
American Public Power Association
American Public Transportation Association
American Public Works Association (APWA)
American Road & Transportation Builders Association
American Society of Civil Engineers
American Soybean Association
American Supply Association
American Traffic Safety Services Association
American Wind Energy Association
American Wire Producers Association
American Wood Council
AMT-The Association For Manufacturing Technology
Asphalt Roofing Manufacturers Association
Associated Equipment Distributors
Associated General Contractors of America
Association for the Improvement of American Infrastructure (AIAI)
Association of Equipment Manufacturers
Association of Metropolitan Planning Organizations
Bakery Equipment Manufacturers & Allieds (BEMA)
Bond Dealers of America
BPC Action
Brick Industry Association
Building America's Future
Coalition for America's Gateways & Trade Corridors
Common Good
Composite Panel Association
Concrete Reinforcing Steel Institute
Construction Management Association of America
Copper & Brass Fabricators Council
Council on Federal Procurement of Architectural and Engineering Services (COFPAES)
Fabricators and Manufacturers Association, International
Geosynthetic Materials Association
Global Cold Chain Alliance
Government Finance Officers Association
Hydraulic Institute
INDA, The Association of the Nonwoven Fabrics Industry
Independent Lubricant Manufacturers Association
Industrial Fasteners Institute
Industrial Minerals Association-North America

Institute of Makers of Explosives
Institute of Scrap Recycling Industries, Inc.
Interlocking Concrete Pavement Institute
International Association of Fire Chiefs
International Association of Plastics Distribution
International Bottled Water Association
International Bridge, Tunnel and Turnpike Association (IBTTA)
International Housewares Association
International Union of Operating Engineers
Irrigation Association
Juvenile Products Manufacturers Association
Laborers Int. Union of North America (LIUNA)
League of American Bicyclists
Metal Powder Industries Federation (MPIF)
Metal Treating Institute
Metals Service Center Institute
National Association of Bond Lawyers
National Association of Clean Water Agencies (NACWA)
National Association of Counties
National Association of County Engineers
National Association of Manufacturers
National Association of Regional Councils
National Association of Trailer Manufacturers
National Association of Wholesaler-Distributors
National Concrete Masonry Association
National Corn Growers Association
National Electrical Contractors Association
National Grain and Feed Association
National Ground Water Association
National Hispanic Construction Association (NHCA)
National League of Cities
National Lime Association
National Lumber and Building Material Dealers Association
National Marine Manufacturers Association
National Mining Association
National Oilseed Processors Association
National Precast Concrete Association
National Railroad Construction & Maintenance Association (NRC)
National Ready Mixed Concrete Association (NRMCA)
National Retail Federation
National Society of Professional Surveyors
National Stone, Sand & Gravel Association
National Tank Truck Carriers, Inc.
National Utility Contractors Association
National Waste & Recycling Association
National Wooden Pallet and Container Association
Non-Ferrous Founders' Society
North American Association of Food Equipment Manufacturers (NAFEM)
North America's Building Trades Unions
Outdoor Power Equipment Institute
Plastic Pipe and Fittings Association
Plastics Industry Association
Plastics Pipe Institute
Plumbing Manufacturers International
Portland Cement Association
Power Transmission Distributors Association
Precast/Prestressed Concrete Institute
Rail Passengers Association
Railway Engineering-Maintenance Suppliers Association (REMSA)
Railway Supply Institute
Railway Tie Association
Resilient Floor Covering Institute
Retail Industry Leaders Association (RILA)
RV Industry Association
Security Industry Association
Security Industry/Financial Market Association (SIFMA)
Steel Manufacturers Association
STI/SPFA (Steel Tank Institute/Steel Plate Fabricators Association)

The Adhesive and Sealant Council
The Design-Build Institute of America
The Fertilizer Institute
The Linen, Uniform, and Facility Services Association (TRSA)
The United States Conference of Mayors
Travel Goods Association (TGA)
Treated Wood Council
U.S. Tire Manufacturers Association
U.S. Travel Association
US Water Alliance
Valve Manufacturers Association
Vinyl Institute
Water Infrastructure Network (WIN)
Waterways Council, Inc.
Wood Machinery Manufacturers of America

Mr. DEFAZIO. And at this point we are—Ms. Norton is recognized for 5 minutes.

Ms. NORTON. Thank you, Mr. Chairman. And I think you have made the theme of this hearing exactly how we need to open this session of our committee.

The theme of my questions really goes to the elephant in the room, the one that has been discussed by all of you, to one extent or the other, and that is the failure since 1993 to raise the gas tax.

At the end of this session, when even at this opening hearing we have laid out what amounts to an emergency and needs for infrastructure, at the end of this session, if we haven't gotten over this hurdle, we will simply be repeating ourselves yet again.

Look, the cost of gas has gone down for the American people when they go to the pump.

I guess I am going to ask you, Mr. LaHood, because you focused on how you think the time has come. What makes you believe that if—the only people I know that don't get—believe the time has come sit in this Congress. What makes you believe that Americans are so ready for an increase at the pump that we could convince Members of this Congress to increase the gas tax? What is there about the American people, which must be who they are afraid of?

Mr. LAHOOD. Thank you, Ms. Norton. I think because we just had an election, and it looks to me like everybody that ran for election, particularly a lot of the new Members, ran on fixing infrastructure. And the Governor just said he ran on it, had ads run against him on it, and he still won. He told me back when we were sitting back in the anteroom there that as they ran more ads against him, his poll numbers went up. You know why? Because people are sick and tired of lousy roads, unsafe bridges, and they want more.

Ms. NORTON. Well, actually, I am going to ask both Governors to comment on this.

Now, of course, Mr. Garcetti has recent experience, because apparently there was a proposition to keep you from raising the gas tax. And I would like both of you to describe how you were able to overcome that so Members who sit here, where the gas tax has to be raised, would understand there is nothing to be afraid of.

Mr. GARCETTI. Well, there really is nothing. Voters in California rejected it by almost 60 percent, just under 60 percent, a rolling back of what the legislature had done.

As I mentioned, in the city of L.A. we passed—it is a full cent sales tax that was—I am not suggesting at the national level——

Ms. NORTON. Well, what were the salient—for both of you, what were the salient arguments used against it that had to be overcome?

Mr. GARCETTI. Sure. I will let the Governor continue, but we made it about human beings. People know how long they wait to see their kids, and whether they can tuck them into bed. They know they have to draw a line in my city around the radius that they think they can go on a date, so their dating pool either contracts or expands, based on the traffic. They know that the jobs they can consider are based on the commute that they have. They know this in human terms, and we always said that.

And secondly, we said it about the jobs. I loved what Secretary LaHood said: This is a jobs program. Here, let me restate the numbers: 787,000 jobs in one American county, 787,000 middle-class jobs. And these are not just one-off jobs for a couple years. This is a career, now, that we are aligning our community colleges with, that we are training people for. You don't need a degree. They might have put bombers together on the assembly lines in South L.A. in the past to win World War II after the Cold War was over. Now they are able to put together trains on those assembly lines, dig those tunnels, do things that give them a pension and a decent quality of life.

So—and a note of personal privilege here. My grand-nephew is going to be at my house, Meredith's son, in about 2 days. So much love from him, as well.

Ms. NORTON. Yes. And Governor Walz?

Mr. WALZ. Yes?

Ms. NORTON. You too seemed to have run on raising the gas tax. I am interested in you Governors who run on raising the gas tax, get elected, and the message doesn't get here to the Members here in the Congress of the United States.

Mr. WALZ. Voters are smart. And to be clear about this, people are not begging you to raise their taxes, but the way I framed it was what is your alternative? It is not as if not raising their taxes gives them extra money in their pocket, because they know they are spending it anyway. And they look out and see a crumbling infrastructure. And my frame was—is—and I am open to this—what is another alternative?

And I want to be clear. As we move to electrification, as CAF standards go up, the gas tax doesn't hold as big a punch.

I also want to be clear—is we are trying to adjust for it in working family tax credit, because it is regressive to families. So that is a part of this conversation.

But the—I think, listening to the Secretary tell you this, the country—you know this, you just ran—the country is ready for that bold take. It is not the gas tax alone. But I will tell you, as a Governor, the gas tax is a reliable funding stream that allows us to plan and get things done. But all of your other bold ideas of moving out, we should be thinking about them.

Ms. NORTON. Thank you very much.

Mr. DEFAZIO. Thank you. The gentlelady's time is expired.

Representative Gibbs?

Well, that is—I don't know, Don. They give me—I don't know why they gave me that. What happened to Don?

[Laughter.]

Mr. DEFAZIO. Sorry, Don, they just didn't notice you. You have only been here for 45 years.

[Laughter.]

Mr. DEFAZIO. Sorry. I would go to the Dean of the House of Representatives, the esteemed and good-natured Don Young from Alaska.

[Laughter.]

Mr. YOUNG. Thank you, Mr. Chairman. And it is indeed a pleasure. This is one of the bright spots of this Congress, is this committee. As you know, I was chairman of this committee, and what I am hearing is what we heard when I was chairman. We did a little better. We did get—George Bush offered $216 billion.

I wanted to raise the tax 5 cents on the gas and index it. Gas was $1.39 then, and I got shot down by the President and, very frankly, by our leadership. But I got $285 billion for the system. If they had done what I wanted to do at that time, we would never have had a recession, we would have infrastructure in place because we would have indexed it. An 18.5-cent buying power in 1992 or 1993 is now 8 cents. So that is our big challenge.

And this Congress has to rise to that occasion. And I happen to agree with the Governor—welcome back—that the public will pay for it if they know it is going into highways and transportation. Let's face it, we want to move products and people efficiently, and make us not a nation that has come to a grinding halt. So I know this committee can do it, I expect to work with you, Mr. Chairman.

There is a dispute about the gas tax. I am a big supporter of the gas tax, but I am also a supporter of a mileage fee because we are successful. We have got about 3 million electric cars on the highway today not paying their share. And I think they ought to pay their share. That could be the mileage fee. Combine them all. And when people get into, like you said, the private-public partnership, fine. But this is the best committee to actually have a good, sound piece of realistic legislation, Mr. Chairman. And with the ranking member I am confident we can do it.

So it is not—this has never been a partisan committee, and I hope it doesn't start now. I want us to understand this is an issue for America, and we can solve that issue together, as one. That is my goal, to work with you and with the ranking member and other Members to try to achieve that goal to make sure we leave the legacy behind.

I had—the TEALU was a good bill, did a lot of work. It just didn't go far enough because they wouldn't let me raise the tax 5 cents. I am glad you say 10 cents. I might go 15 cents, just as long as it goes into the highways.

And I want to thank the panel. You did well. And I am here to work, buddy. And I will do it.

[Applause.]

Mr. YOUNG. All right. Thank you very much. I yield back.

Mr. DEFAZIO. All those years, and he has still got it.

I will say that the list we got was passed over from the Republican side. We can perhaps do handwriting analysis and find out who wrote it and why you were omitted.

Mr. YOUNG. Don't worry about it. It just is—that was a—I know why it happened, it won't happen again. Thank you very much.

[Laughter.]

Mr. DEFAZIO. With that, I would recognize the gentlelady from Texas, Eddie Bernice Johnson.

Ms. JOHNSON OF TEXAS. Thank you very much, Mr. Chairman. And let me say good morning and thank you to all of the witnesses that have come.

I have been perplexed and frustrated that we have not been able to get the money we need for the infrastructure throughout the Nation. And I have heard conversation about public-private partnerships.

Now, I am from a city in Dallas that—we have a lot of public and private partnerships, but not for highways and water systems and all of the other public uses. And yet I keep hearing about some type of private investment. What is the likelihood—we have been talking about this, but I haven't seen anything structurally done in legislation. What do you feel is the likelihood that we will have private dollars going into the infrastructure, crumbling infrastructure throughout this Nation, or crumbling water systems for drinking water?

All of you.

Mr. GARCETTI. Sure, I will start with that. Thank you very much, Madam Representative. P3s, let's be clear what they do and what they don't do, and how you should and shouldn't do them. At their best, they do leverage dollars that come in, accelerate, and can sometimes cheapen the cost of infrastructure, but usually in transportation. You asked about water, and I think America's cities are very clear that there is very little capital for water projects from the P3s. So let's not expect that to step up.

Second, I say with P3s there is D4: Don't Do Dumb Deals. And we have seen a lot of them. We have seen folks who have, in Chicago, leveraged their future parking meters, and they have to raise parking rates, and people taking baseball bats to those parking meters because they have to meet Wall Street's expectations for a deal that the last administration did before a new mayor came in. We have seen toll roads that are highly unpopular.

But where we put things forward, we have—the director of our L.A. Metro system, a man named Phil Washington, used to run Denver's program. That train that now takes folks from downtown Denver to the airport was a P3, one of the first successful ones in the country that lessened by about 25 percent the amount of time, and reduced the cost in about half of that system getting built.

As we look at 15 rapid transit lines getting ready for the 2028 Olympics coming to Los Angeles, we are seeing a lot of interest and a lot of people willing to put capital, while we retain the ownership of what that asset will be.

When it comes to water, though, this is something that the Government is going to have to step up and do, because there simply isn't the marketplace to make water clean in America's cities to do stormwater, et cetera. So P3s are primarily in transportation, and not in the water space.

Ms. JOHNSON OF TEXAS. Thank you.

Mr. LAHOOD. Let me—there is a lot of money that is waiting to be invested in public-private partnerships. The classic public-private partnership that has been very successful here in Washington, DC, is the finishing of the Metro system, the silver line, which will deliver people from downtown Washington along a corridor into northern Virginia to Dulles Airport. It is a classic public-private partnership. While I was at DOT we put some money in, but there is a lot of private investment in that. And it is very successful.

Almost all of them are successful. There are a lot of investors waiting for a signal for projects that they can invest in. And they are primarily transit projects, and they are primarily projects that don't involve highways, although some have. The mayor mentioned some toll roads. Some have worked and some haven't.

But the truth is there is a lot of money waiting to be invested. What the investors want is a signal from Congress that you are serious about infrastructure, that you are going to put your share in, that there is going to be a big, bold plan that they can then begin to invest in.

The tunnels between New York and New Jersey, that can turn out to be a fabulous model for public-private partnership, but it has got to have the investment of the national Government. This is a national project. It is not just for New York and New Jersey.

And you know, the truth is there is a lot of money, and the investors are waiting for Congress.

Mr. WALZ. I would echo the sentiments that were said. And I especially appreciate the mayor talking about the State revolving fund on these—water infrastructure. This is a huge bill that is coming due. The States need to be there.

Again, our State prides itself on a very high credit rating, fiscal stability. Investors, as the Secretary said, are waiting for that. But I can't tell you again I—this is my shameless plug to all of you. Let's don't get into a shutdown situation, because the crisis gets so tight on the States—and I am going to make the case on this—especially in infrastructure.

In our indigenous—we have 11 sovereign nations of indigenous people in our State. That pain was really real, and it went right—they were laying off people on infrastructure projects right and left.

So there are possibilities here, but it is that no one is going to invest unless they see the stability. But I think water is the future for us, certainly, as some of these P3s.

Ms. JOHNSON OF TEXAS. Thank you very—expired?

Mr. DEFAZIO. Oops, pushed the wrong button. It said private. OK, I am not used to this side.

Now, we would turn to the esteemed Representative Gibbs, in proper order.

Mr. GIBBS. Thank you, Mr. Chairman. And I can feel your pain, because my first year in Congress I was a subcommittee chair on this committee, and I inadvertently overpassed the chairman—the distinguished chairman emeritus, and never—it will never happen again.

[Laughter.]

Mr. GIBBS. He is right about that.

Congratulations, Governor Walz. It was a pleasure working with you. I think we were both on the Committee on Agriculture and the Committee on Transportation and Infrastructure together. I appreciate that.

You know, we do have a big issue here, we all know that and you see that. And I just want to emphasize a little bit more a year from this September, September 2020, the FAST Act, the current highway bill, runs out of funding. During a Presidential year that would be an interesting discourse, I think.

But there is no doubt, you know, that the gas tax, the gas user fee has been declining because cars are more efficient and less cars don't run on that. And I do believe, whatever we do short term, that is probably the best option. But I think we have to somehow couple something else, because we have too many vehicles not paying their share, then. So it is an inequity. It is a fairness issue.

And another thing I was just thinking here, sitting here, we are talking about public-private partnerships, and we talk about other infrastructure, water. You know, these things I have talked about in the past, there is lots of things we can do. And I know in highways we always say that might be a tough thing, but I got thinking about this. Technology, the Government, we are so far—we are light years behind the private sector when it comes to technology.

You know, I see what is going on in some—Amazon and some of these companies, the retail sector, what they are doing, where you can go in and check out of a store without even checking in, essentially. You know, we probably ought to be building partnerships, Mr. Chairman, with some in the private sector, where the technology is, when we move forward.

But I guess a question is—I guess the—Governor Walz, since he is representing the National Governors Association, if we move forward with a VMT or whatever that program is, a pilot program maybe on the commercial vehicles first, and move forward, what do you see the States doing? Do you see some States moving forward now? Or do you see States—if the Federal Government moves forward, what are the States going to do?

Because, you know, we have the one system, they collect money through the same system we do, Federal and State. And so can you maybe give us your thoughts about what would happen?

Mr. WALZ. No, thank you, Mr. Gibbs. Well, again, I—what the States are asking for, too, in the National Governors Association—give us the flexibility and give us the ability to innovate. States are looking at this. We are looking at ways to do that. We are going to build out our recharging stations and our electrification systems, but we understand that, too, that you got a lot of folks on the road that should be paying their fair share. And I think States are willing to innovate with it.

The thing is, if you do it and you go big, it sends such a strong signal. It lets us move forward. It gives us the capacity to do it. Because the States are going to innovate. We are going to invest. But I think, like Secretary LaHood said, is the bulk of our funding, a big chunk of it—because these are still federally funded—that federally funded, State-administered attitude worked really well, and States are stepping up.

So I do see them doing that. We would really like you to leave us that room to innovate, but send some signals that the help is going to be there, there is some consistency there, and that we can plan on the future of it being there.

Mr. GIBBS. OK. Mr. LaHood, did you want to comment on what you see? Because you are representing the—cochair of—Building America's Future. Do you see that the best option is to address the gas user fee, and then, at the same time, put something in motion moving forward? Because I think, long term, you know, that has to go away at some point.

Mr. LAHOOD. I think it has to be a package of many different alternatives: tolling, VMTs.

Expanding VMTs, there are some pilot programs going on now, and I think they have been successful. The thing about VMTs, you are going to have to put some language in the bill, and hopefully that language will incorporate that you are going to—be a lot of cooperation with the States, who are going to have to implement this, and collect whatever fees are going to be collected from the VMTs. So that is going to require some significant language to make that happen.

And looking at the pilot programs, and then public-private partnership, it needs to be a combination. But without a big pot of money, with the Highway Trust Fund going broke, there is no confidence that the Federal Government is going to uphold its responsibility to take care of the interstate system and to fix 60,000 structurally deficient bridges.

Mr. GIBBS. Yes. Thank you.

I yield back, Mr. Chairman.

Mr. DEFAZIO. I thank the gentleman. With that we turn to Mrs. Napolitano.

Mrs. NAPOLITANO. Thank you, Mr. Chair.

To Mayor Garcetti, there was a list of infrastructure needs, and I am talking about water. Americans rank infrastructure as the most important investment, since water is part of a great need that we have.

What does investment in water infrastructure for the city of Los Angeles and for the Nation—what does it mean, investing more in a—looking out, trying to build up the infrastructure that has long been decaying, and be able to help small communities deal with—especially State revolving fund?

Mr. GARCETTI. It was interesting. When we did the poll that we shared with you—and I am happy to share the whole poll with the committee, we can submit that.

Mrs. NAPOLITANO. For the record?

Mr. GARCETTI. When it was put forward and people said, "What in infrastructure do you want Congress to work on first?" the thing that, by far, was number one was clean water.

Mrs. NAPOLITANO. Yes.

Mr. GARCETTI. People get this at a visceral level, even deeper than a pothole that they drive over. They really get it.

In the city of Los Angeles, we passed the stormwater bond that was the largest in the country about a decade ago that I authored, and we just passed in the county the largest one, as well. So again, we are coming having done work—States have done that, too—but we have mandates that literally can take so much out of our general fund that they can bankrupt cities and States today without any help and any money from the Federal Government.

We have been looking at the Los Angeles River. You have been a great help to that. The Army Corps of Engineers, we have authorization for $375 million, but no plan really to ever have that money allocated right now. So we are stepping up spending, literally, hundreds of millions of our own dollars to do the work, hoping that the Federal Government will be there.

But that—everybody knows that whiskey is for drinking and water is for fighting out in California. We have all sorts of controversy around water. We have plenty of water. We need help to reengineer water, to recycle——

Mrs. NAPOLITANO. Recycle.

Mr. GARCETTI [continuing]. To reuse. And that is what we are going to do to capture that water when it is there, to put it back into the ground, to reinfiltrate it, and to use less of that.

But, you know, the Federal Government stepping up to do that would be immensely helpful to us.

Mrs. NAPOLITANO. Well, and that leads to the State revolving fund, which hasn't been reauthorized for 32 years. Unfortunately, our communities, we are almost—the full cost of cleaning the water.

Mr. GARCETTI. Yes.

Mrs. NAPOLITANO. How important is it to the communities that SRF be reauthorized? And what more can Congress do to assist?

Mr. GARCETTI. Without that reauthorization, we will not have clean water in America. You will have certain cities that can step up and do part of that, like in cities like Los Angeles. But there—it isn't just Flint. We have hundreds of American communities that have contaminated water in America in 2019.

Mrs. NAPOLITANO. Well, and now that one of our partners here mentioned the three Ps, public-private partnership——

Mr. GARCETTI. Yes.

Mrs. NAPOLITANO [continuing]. Why is water not being included?

Mr. GARCETTI. There is really no revenue stream back to the private sector, oftentimes, for P3s. This is a public health issue, more than anything else. Unless we are going to privatize our water system and see water rates go way up, it is a very difficult thing for the private sector to put any private monies in.

That is why I think the leverage here isn't between public and private partnerships; it is really between local, State, and Federal Government. I think there is occasional places where the private sector will step in with dollars. But primarily, we have seen the National League of Cities, U.S. Conference of Mayors—we are usually spending, on average, about 89 percent of all the water money expenditures by Government in America.

Mrs. NAPOLITANO. Well, one of the other things that I would like to press upon you is the passenger facility charge.

Mr. GARCETTI. Yes.

Mrs. NAPOLITANO. Can you discuss the need to increase it in Los Angeles, and why is it important for the growth of Los Angeles Airport?

Mr. GARCETTI. Well, we are spending the most on LAX of any airport in America right now, $14 billion, and we will probably add two more terminals on top of that, bringing public transportation, creating tens of thousands of jobs.

This is a great thing for Congress, because you are not asking to raise any tax, you are just allowing us to have a user fee that goes up—again, never been indexed for inflation. It would allow us to make that passenger experience and the safety—right now, the safety of passengers around American—not just LAX is endangered if we can't spend money in our airports, and raising that would allow us to do that.

We strongly support that, the U.S. Conference of Mayors and National League of Cities. We have waited a long time for that. And anybody who has been to LAX recently knows you will have a better experience flying through if we are able to spend that money.

Mrs. NAPOLITANO. Governor Walz?

Mr. WALZ. Well, I would come back on this issue of water. And again, you hear that cities like L.A. can do it. The real crisis is in rural America. It is too difficult for small towns. They cannot raise property taxes high enough to take care of these water treatment plans.

We in Minnesota, this is—we are—see ourselves as stewards of 20 percent of the world's freshwater, of drinking water.

And so communities care deeply about this. Businesses care deeply about getting it. But the infrastructure has fallen behind. We had a big boom in the 1970s, where we were able to build these up. They are simply aging out. Smaller communities have a low tax base. These are expensive propositions.

What I would ask is give us the certainty, but give us the stability to implement these rules, set the standards where you need to set them, but let the States find the way to get to them.

But again, I think the mayor is exactly right, and we have looked at this. It is very difficult, and—nor do I believe—and this is philosophical—nor do I believe water should be privately traded, where some people get it and some don't. But the fact of the matter is now, depending on where your zip code is, water is different, and quality of it is different.

Mrs. NAPOLITANO. Thank you. I would yield back.

Mr. DEFAZIO. I thank the gentlelady. With that, Mr. Webster?

Mr. WEBSTER. Thank you, Mr. Chairman. Congratulations to you.

And, let's see, Secretary LaHood. I have a question about maybe the quality of the roads that are constructed. Does your group that you represent consider resiliency as an important part of the construction standards for roads?

Mr. LAHOOD. Yes, sir.

Mr. WEBSTER. In what way?

[Laughter.]

Mr. LAHOOD. Well, when——

Mr. WEBSTER. We just had the Governor say that it was 70 below. That same day in my area it was 70 degrees. So a little bit different. But in some places there is going to be a need for some kind of resiliency. In Florida it is a little different. We can get away with things maybe and the Northeast can't.

So anyway, that would be my question.

Mr. LAHOOD. Well, for example, when there are national disasters and roads need to be rebuilt, we want them built to the highest possible standards and to some kind of resiliency so that if another hurricane or tornado or national calamity happens, they can withstand that. And that wasn't the case with some of these roads that were built 50 years ago.

Mr. WEBSTER. Well, it seems like——

Mr. LAHOOD. And that goes to the whole issue of——

Mr. WEBSTER. We wanted to build more, not necessarily the most long term and expensive, but the short-term inexpensive. It seems like that. And I just wondered if there is a push to move to a standard that is higher.

Mr. LAHOOD. Absolutely.

Mr. GARCETTI. May I jump in on this?

Mr. WEBSTER. Yes.

Mr. GARCETTI. Thank you, sir. One of the things we experienced in America's cities is we have very little money. You pave it with something cheap. You slurry seal, you might do the pothole repair, but you can't do the fundamental reconstruction of main roads and highways without the proper funding in place. So resilience really comes from how much money you put forward.

Second, resilience is many different things. The heat island effect in our cities right now is part of what is happening with climate change. Literally, the most calls I get on anything we have ever done in Los Angeles from other cities is we are testing a white pavement that isn't concrete, it is asphalt. But it is—the private sector has brought new stuff, and we get calls from cities around the world because it reduces the temperature by about 10 degrees in our cities. So that resilience of using technology is very important.

Third point, I have spoken to President Trump about this, personally. As somebody who has been involved in construction, and as a developer, he is actually very keyed in on that question. And we spent a good deal of time talking about that, having to do with the freeways in my city, and he is talking about the concrete grade, and how we can really invest in the better stuff that will last longer. So I think you can engage the White House on this issue of resilience, as well.

Mr. WEBSTER. Since you are talking about it, is there a safety issue there, too? I mean is the road temperature a factor?

Mr. GARCETTI. Absolutely. It can be, and especially in our hotter cities, when it gets so hot that it is not only a health issue for the people that are around there, seniors and others, but for the cars themselves, and what it does when those streets are too hot. Absolutely.

Mr. WALZ. Congressman Webster, your question is really good. And from the Governors' perspective on this, you are hitting on something of—it is not always one size fits all. There needs to be a standard, as the Secretary talked about.

But giving us the ability to be able to innovate in those extreme climates, be able to innovate as we look at these issues come together—one of the issues we have in Minnesota is, because of the ice on our roads, we have to use a lot of salt to remove them. Then that becomes a water quality issue. It becomes everything else.

So by giving us some flexibility in some of the planning money or some of the ability to allow folks to innovate into—we now use bio-based, corn-based products on the roads before it snows—that makes sure that the——

Mr. WEBSTER. Can you do that now?

Mr. WALZ. Yes, yes, to a certain degree. But one of the things, as you are moving forward and we think about what does this modern infrastructure look like, how much flexibility needs to be there, I think you should hold us, as States, to the high standard that—expectations where it should be, but give enough flexibility in there that States in—the roads in Florida are going to look different than they do in Hallock, Minnesota.

Mr. WEBSTER. Yes. So, well, let me ask you a question. Do you use—extensively do you use toll roads, or you don't use them at all, or—is there——

Mr. WALZ. We don't. We use HOV lanes that are metered, but we don't in Minnesota.

Mr. WEBSTER. Secretary LaHood, just real quick here, this just popped into my mind. Are there any prohibitions about using tolled new lanes on interstate highways anywhere?

Mr. LAHOOD. Yes, of course. And while I was Secretary we received some proposals to do that very thing. And there are prohibitions, yes.

Mr. WEBSTER. Thank you.

I yield back.

Mr. DEFAZIO. Thank you.

Mr. Sires?

Mr. SIRES. Thank you, Mr. Chairman.

Governor, nice to see you. We came to Congress together, and we always appreciate your hard work that you did here, especially for veterans. Thank you very much. And I know that you will serve Minnesota well.

Mayor, nice to have you here. My daughter and her husband voted for you. They live in Los Angeles.

[Laughter.]

Mr. SIRES. And Secretary LaHood, I want to thank you for being here. When you were Secretary you were very fair. It wasn't easy. You were in many projects in my district, and I always appreciated the fact that you were a very fair Secretary of Transportation. So thank you for being here.

You know, we have three very experienced individuals here.

I come from a district that is one big transportation hub. I represent New Jersey's Eighth Congressional District, which represents the Lincoln Tunnel, the Holland Tunnel, the Bayonne Bridge, and obviously, the ports and part of the airport. I mean, transportation, it is big.

It is probably the most densely populated, per square mile in the country. The town that I live in is 1 square mile and it has 52,000 people in it. Hoboken, New Jersey, another square mile, has 52,000 people. And many of those people work in the city. So going into the city is very important.

This project, the Gateway Tunnel, it is key to the survival of the Northeast. When you look at 200,000 commuters travel this route daily back and forth, this accounts—this whole region accounts for 20 percent of America's GDP in this area. So—this Northeast Corridor. So you can imagine how important this project is, the Gateway Tunnel.

The other day the Governor took us on the train ride into this tunnel. And what happens is, if you have a piece of cement that falls off and goes on the track, they stop the train and they have to remove the cement. So it backs everything up.

And when we talk about funding, New Jersey, under Governor Christie raised the gas tax 23 cents. Governor Murphy raised it 4 cents. So we have done our share, and we have committed almost $7 billion to this project. But sometimes partisanship gets in the way of some of these projects.

I remember last year, when the President wanted to kill the TIGER grants. Luckily, you know, the Congress put it back. I remember how hard—had to fight to get some money for this project.

We just have to come together. There are many ways to fund projects, whether it is private partnership, public partnerships, but we have to get this mentality that we are doing the right thing for America. And yes, so far this project is very important to me. But I am sure there are other projects in other parts of the country that we could be working on if we ever come together on a funding and stop this nonsense that we just can't seem to work together.

You know, I have been in this committee now 10 years. And I have been working on this tunnel for all this time, and—but, you know, I don't know what it is going to take. And we don't seem to be coming together, quite frankly. Everybody talks about how important it is. I sat here many times, and everybody talks how important it is that we fund this, that we fund that, that America—that we should be embarrassed how America is falling behind other countries. But yet we don't take the step of working together.

So we can come up with many ways of trying the funding, whether it is a gas tax or mileage tax or whatever. But, hey, the real problem here is trying to get everybody to work together. You know—and Governor?

Mr. WALZ. Well, if I could comment, and thank you, Congressman, here is what I would say. And I think you see the cities, the mayors coming together.

Speaking on behalf of the National Governors Association, this is the bipartisan side of things. We have our Republican Governors Association and Democratic Governors Association. This is all of us together. I can tell you that we speak as—as the Governor of Minnesota, I support the project in New Jersey, because I know it is good for my economy, too. I know it builds the State.

And that is what we are asking for. If we can get us together here to give us some of that certainty, you will see us work together on this.

And I think your point is well taken. We have got to start seeing—"Oh, I got money for my project, that is good enough." If that tunnel doesn't work, our economy will be slowed down. So we stand with you, and the NGA stands with you as partners.

Mr. DEFAZIO. OK.

Mr. SIRES. My time has run out. Thank you very much, Chairman.

Mr. DEFAZIO. Thank you. With that, we would turn to Representative Meadows.

Mr. MEADOWS. Thank you, Mr. Chairman, and I want to thank you and Ranking Member Graves for your willingness to work in a bipartisan manner to, hopefully, tackle this big problem.

Governor Walz, you know, it is great to see you. Congratulations. I was mystified by you saying that you got elected because of running on taxes. You told me if I didn't endorse you, you guaranteed that you could get elected. And I held true to that. You got elected in spite of our friendship. I want to say congratulations.

Here is what I—we are talking about doing anything bold and making sure we have a plan. I don't know that a gas tax is bold, because, quite frankly, it is a short-term solution. We all know it. Every one of you at the table, you know that a gas tax is a short-term solution.

Now, I am willing to look at—I am willing to put in the political capital to make sure that we have proper funding. But what we have to do is do something that is truly bold.

I can tell you my voters in North Carolina could care less whether he has a tunnel in New Jersey, and that is the sad truth about it. So we have to come up with something that works for both rural and urban areas, where—the other thing that we have to do—and this is where I would ask your help—the only thing long term about this particular topic is not the funding source, it is the permitting process. And we have to make sure that we streamline the process so we are actually building roads and bridges and the infrastructure that we talked about.

You—I am willing to take a tough vote, but if I take a tough vote and a bridge gets built 15 years from now, one, it is hard to do that.

And so I guess, Governor, here is what I would ask from you, from the National Governors Association. How many of your Governors are in favor of increasing the gas tax? We need to know that. I mean truly, we—if you can report back to this committee, are you willing to do that?

Mr. WALZ. Yes, Congressman. And I want to make sure that—I don't speak for all of them, but what I can tell you is that we are in agreement with you on this. We are looking, too, for streamlining of the process. We are not looking to cut corners, but we are in agreement it should not take that long to deliver it. That is added cost and added frustration. So we will report back to you those numbers.

They have not taken a position on it, but we have taken the position that one funding stream alone will not do it. And I don't disagree with you on this, that this is not the overall long-term solution. But when you are out in the States, this is the one we have, and this is the one that makes a difference as we start to—I think you are right—think bolder. But we will get back to you.

Mr. MEADOWS. Thank you, Governor.

And I guess, Secretary LaHood, you know, when you come and say, well, let's put all these things together, you know, gas tax, toll roads, those kinds of—let me just tell you. It is nails on the chalkboard to a lot of folks when you say that.

I would rather take one tough vote now to do—and fix this long term. And I guess what I would ask is, from your group, if you would come up with something that is long term, whether it is miles-driven, which has inherent problems, as well—you know, I know the chairman wants a carbon tax. All of—there is only about five different funding mechanisms.

But we have to come to a solution on any bold transportation measure that does that. I am willing to do that, I am willing to invest. But I also agree with you. If we don't do it in the next 6 months, it isn't going to get done under this administration. And yet this President, I think, is committed to doing something bold and big on infrastructure. And so can you get back to this committee on what an ultimate solution might be for a long-term funding stream?

Mr. LAHOOD. Yes, sir.

Mr. MEADOWS. All right. Thank you.

I yield back.

Mr. DEFAZIO. Just to correct the record, I am not aware that I am a sponsor of a carbon tax.

Mr. MEADOWS. No, I am—you were more—your side was more open to that. I didn't mean the chairman, personally.

Mr. DEFAZIO. Well, I would relate that our former colleague, Jay Inslee, the Governor of Washington, has had some extensive experience with carbon tax. It has failed twice in Washington. Jay is greener than anybody I know, and he is saying it is time to move on because it is not going to happen if it can't happen in Washington State. But anyway, that is just a comment.

With that, I would turn to Mr. Garamendi.

Mr. GARAMENDI. Thank you, Mr. Chairman. I would love to continue the discussion about taxes, but let's not.

Mr. Garcetti, Mayor, welcome. Sorry I missed your earlier testimony. But I do have a question for you. We seem to have many folks, some of whom are in this room and others who are not, that seem to want to ignore the issue of manmade climate change. And really, it is my view—and perhaps it is yours—our Nation cannot wait to address this critical challenge.

The recent fires in California, including the campfire which was the deadliest up in the Paradise area and very near my congressional district, we have seen firsthand that. We have seen it in your community. Well, just outside your community.

So my question, Mr. Mayor, is would you please speak to how your city and the municipalities across California are making investments in more resilient infrastructure, and how important this is for the municipal and county governments to have a Federal Government as a real partner in that process of creating resiliency in the area of climate crisis?

Mr. GARCETTI. Absolutely. There is no question that, from Houston to the Florida Panhandle, California, we are seeing that impact. I mean I always say forget what your ideological perspectives are, talk to a firefighter about whether climate change is actually happening. Talk to a rescue worker about whether it is happening. Something is happening out there with extreme weather. I think we know the science. But that said, we have had firefighters die in the line. We have had roads that are inadequate access.

We have rethought infrastructure in California—certainly Los Angeles. We use now resilience not just as an issue area for a few specialists, but really a prism for all of our infrastructure. When we repave a street, it is a complete street. We think about the water drainage, we think about the trees that we are going to plant and the heat island effect and what sort of tree canopy we are going to have. We think about the color of the streets, we think about the long-term maintenance of that street. We think about the emergency access. And to the chairman's point, what lights we are going to put on and how smart they are going to be to get emergency vehicles in and out quickly.

It has fundamentally made us rethink everything, because the loss of life and the loss of property makes human beings do that.

And I think we have a pretty good package that we can share with the committee of some of those elements of how we look at infrastructure in a resilient way.

And when I said that second piece of innovation, I would also look at in this legislation what can you do to reward innovation and resilience in infrastructure. Even if it is a very small piece to carve out, I think that the technology is changing enough and the appetite is there, as well as the real innovation in States and the local governments, which are the laboratories of democracy.

Mr. GARAMENDI. Thank you.

Mr. LaHood, Mr. Secretary, I enjoyed our time together when you were on that side of the table. I guess I am still on this side.

Something that I have dealt with over my career, half of the National Park Service's deferred maintenance backlog, some $6 billion, is in the transportation and infrastructure projects. The last major transportation bill, the 2015 FAST Act passed by Congress, funded the Federal Lands Transportation Program for national parks and all Federal public lands at about $300 million. In California alone our national park transportation infrastructure backlog exceeds $800 million.

So, Mr. Secretary, while we ponder transportation funding here, why is that funding so critical in our national parks? And if it is, should it be included in legislation?

Mr. LAHOOD. Well, it is critical because of the fact that so many of our citizens use the national parks. And they are very important to the people of America who want to enjoy those parks. And it is a Federal responsibility, should be. And obviously, the money to keep up our national parks should be included in the program.

Mr. GARAMENDI. Excuse me for interrupting, but having spent a wonderful 10-day period in the parks in the Southwest I would also suggest, from my own personal experience, it is a significant economic engine for those regions.

Mr. LAHOOD. Totally.

Mr. GARAMENDI. And so that is another piece of that puzzle.

Mr. LAHOOD. Right.

Mr. GARAMENDI. Beyond——

Mr. LAHOOD. Right.

Mr. GARAMENDI [continuing]. Protecting these very special assets.

Mr. LAHOOD. Right.

Mr. GARAMENDI. I want to call you my colleague, Tim, Governor. Would you like to comment on either of these two questions in the remaining 13 seconds?

Mr. WALZ. Well, I would go on the park piece, and I would—it is an economic driver. And this is another one where there is some great bipartisanship available. We all care about these resources.

Cynthia Lummis, the former congresswoman from Wyoming, and I did the National Park Stewardship Act that did some public-private partnerships to bring in and make some capacity to do that. We know the backlog is huge. We have to tackle it. When we do that, we increase our quality of life, we increase our economic growth.

So we are supportive. States would welcome that, those who are home to national parks.

Mr. GARAMENDI. With that I will yield back, Mr. Chairman.

Mr. DEFAZIO. I thank the gentleman. With that I turn to Mr. Babin.

And I do note that Secretary LaHood previously informed us that he would have to leave at 11:30. So if he leaves, it is not because your question insulted him.

[Laughter.]

Dr. BABIN. Did he call on me?

Mr. DEFAZIO. Mr. Babin?

Dr. BABIN. Yes, sir. Thank you, Mr. Chairman. I appreciate it very much.

And thank you, you expert witnesses. And thank you for your service and throughout your careers, all three of you.

Mr. LaHood—Secretary LaHood, I should say—your written testimony noted that we have a sustainable source of revenue over the long term to successfully address our infrastructure needs. And you have elaborated a little bit on that, as—the other two gentlemen have, as well—and options that we have for raising funds. And Mr. Meadows had mentioned it, as well, and I think everybody up there, including both sides of the aisle here.

But I would ask that—my district, 36 in Texas, we have had a number of disasters that have really harmed our infrastructure: highways, rails, you name it. The fact that the North American rainfall record is in my district, 52 inches of rain in one event with some unofficial records of—or measurements of over 60 in mine and also in my colleague, Randy Weber's district, amazing amounts of rainfall. And yet, after every storm we always seem to have to reinvent the wheel to get these funding streams to get back and start fixing our infrastructure back from the damages.

And we would like to have a simplified—in some way—simplified funding stream so that we don't have to address each storm, each event, each disaster in a unique fashion. We ought to have it set, a set way to do these things, whether it be a fire or hurricane or an earthquake, or whatever, depending on where we are in the country.

Do you have any suggestions? And I am going to ask you other two gentlemen the same thing about how we can address this terrible problem, because we still have people living in temporary housing in my district for a hurricane that is almost 2 years ago, Hurricane Harvey.

Mr. LAHOOD. Yes, sir. I think one of the advantages serving on this committee that certainly I found when I served on it, and others have, too, is issues like this can be addressed in a transportation bill.

Dr. BABIN. Right.

Mr. LAHOOD. Language can be included to streamline whatever rules and regulations are hampering the ability of a community to have access to Federal resources or expertise. And while we were at DOT we streamlined permitting, and we took our lumps for it. But we did it in response to the idea that some of these things take too long.

My suggestion to you, sir, is when this bill is written, work with the ranking member and his staff to include language that will help accommodate your ability to get the resources so that people don't have to wait 5 years in order to get a road back in place, or whatever it might be.

Dr. BABIN. You mentioned the bridge collapse in Minnesota, you know. I think it was 2007. You know, we have—Texas is actually in pretty good shape, compared to many other States. We are not broke, like—like you said—Illinois was. But we have got our share of problems. We got bridges that need to be fixed. And, you know, some of them are in pretty bad shape.

And so I would hope that I could work with the ranking member and the chairman, as well, so that we could simplify, streamline, and eliminate this problem, where we have to reinvent the wheel after every single event that hits us.

Thank you very much.

And Mayor, how about—or Governor, you go next.

Mr. WALZ. I was just going to respond, Congressman, and you are absolutely right. Every Member of Congress who has been through a disaster knows how this goes. And you have a constituent that it breaks your heart, you are trying to get things done. We know those things were put in place to prevent fraud, waste, and abuse, but many times those things make what happens worse than the fraud, waste, and abuse, if it is possible.

But I do want to give that bridge as an example. Some of you here remember this. We were on the floor within 2 weeks, voted for the money. That bridge was up within 9 months. Gone through here, passed the bill, went through Ways and Means, was appropriated, was built, the contractor was there, came in under time, was done, and it is standing today and done right. This can be done, if we choose to do it.

Dr. BABIN. All right, thank you.

Mayor?

Mr. GARCETTI. I would echo that, too, and thank you for the question. I mean, a Republican is just a Democrat who hasn't been through the NEPA process.

Dr. BABIN. Yes.

Mr. GARCETTI. All of us, as mayors, know, whether it is CEQA, which is California's Environmental Quality Act, when I was trying to redo the airport and we had to choose—is it FAA, FTA? There are two different agencies, just to get a train into the airport, and we had to kind of simplify which one. This would be music to our ears.

And remember the 1994 earthquake in Los Angeles?

Dr. BABIN. Yes, sir.

Mr. GARCETTI. We had to rebuild the collapsed freeway in a matter of months, something that would have taken years. So the human being is absolutely capable of this. Enabling language especially after disasters would be welcome to us, especially after the fires and stuff that Mr. Garamendi spoke about.

Dr. BABIN. Thank you very much. As a former mayor, I appreciate what you said. Yes, sir.

I yield back, Mr. Chairman, thank you.

Mr. DEFAZIO. Thank you.

Ms. Titus?

Ms. TITUS. Thank you, Mr. Chairman. You know, I am honored to be chairing the subcommittee that oversees FEMA. And if ever there was an example of the cost of doing nothing, it is in the case of resiliency. So it is great for me to hear, especially from my colleagues across the aisle, this recognition of the dangers and the damages caused by climate change, and the need to address that, moving forward. So we will be working together on those issues, thank you.

My question to this very distinguished panel—and I thank you all for being here—has to do with priorities. As we have heard among the questions, everybody has got a project they really care about, whether it is a tunnel or a bridge or a water project or responding to some kind of disaster. In Nevada it is the highways, I–15. It is like a parking lot from my district to yours, Mayor. The extension of I–11 from Las Vegas to Phoenix.

We have seen a number of studies that show that if we don't do something about expanding access, those roads are going to be like Labor Day every day. And if they are, people are going to travel less, which will affect the economy, which will hurt jobs, and will certainly hurt Las Vegas that depends on that kind of travel for our tourism economy.

We don't have earmarks, unfortunately. I wish we did. You might want to comment on that, too. But then, because of that, we are going to have to set some priorities in this committee.

Now, the Building America's Future has a call for a national infrastructure strategy. We have a national strategy for moving freight, for a highway program. Would it be a good idea to have a national strategy that looks at perhaps by State projects, maybe priorities some of those so that they will maybe move up the list for things that should be built, and can be more competitive for funding, and will put us with a more national reach, rather than just having to compete for little pieces? Would you address that, Mr. Secretary, and all of you?

How could we come up with a strategy that makes this work? When we have the money, where do we put it, and when do we put it?

Mr. LAHOOD. I think you can put language in the bill that is not earmarked language, but is language that gives priority to projects where there is intergovernmental cooperation, where there is interstate cooperation, where there is opportunities for States to cooperate, cities to cooperate. You could certainly make that a priority and include that as language.

I just want to say this about earmarks, and I am sorry to take the time to do it. One of the reasons I left the Transportation Committee and got on the Appropriations Committee is so that I could help my district out. I never dreamed up one earmark on my own. All the earmarks that I ever got from my district came from constituents who came to me and said, “Hey, we need a new health clinic,” or, “We need this,” or, “We need that.” This idea that these things are dreamed up in Washington is nonsense.

And if you don’t have earmarks, then you are going to have bureaucrats or people running these departments deciding where the money goes unless you put language in the bill that says where there is cooperation, where there is collaboration, maybe they ought to have a higher priority for funding.

Ms. TITUS. Thank you. I am glad to hear you say that.

Mr. GARCETTI. I think America’s mayors would support that, as well as earmarks, because we know the democratic process by which they come up. But absolutely, think about across State borders and think about regions, because oftentimes there are small towns that are part of larger regional cities and counties. When they work together—we see this in Minnesota—we got that passed when we did the Los Angeles County measure that I mentioned. I think there should be some sort of reward on that leverage piece.

And three or four Members have now said it: let’s not be parochial. Let’s care about that bridge, you know, that is in somebody else’s district. We in Long Beach and L.A. have a port that is important for America. And, you know, we spent—we get about $200 million that we generate from that Harbor Maintenance Trust Fund, and we get about $4 million back. So we are contributing greatly to all—every other harbor inland, on the coast, et cetera. So when we stop being parochial, we actually will move America forward because we are intertwined with each other.

Mr. WALZ. Well, the National Governors Association shares that. I can’t speak for all of them on earmarks. I can speak from being there. And what the Secretary said is, “I put them all online. I had requests from city managers, and a very conservative newspaper said, ’Well, we are usually against earmarks, except for these, because they are really good,’ because local community put them in.”

I trust you to make the decisions. You are the professionals. Go to your mayors, as I know you do. Bring those things forward.

And then all of us have the courage here—we have in States where we prioritize projects. You can do that, too. If I were asking for money from my congressional district, and New Jersey made the case and it was a stronger one, maybe I am on next year.

But I think Governors are already collaborative, working together. We are prioritizing projects. Those locks and dams on the Upper Mississippi River carry the bulk of this Nation’s agricultural product. It is in all of our best interests that we are investing. That is not a Minnesota, a Wisconsin, Illinois project. It is a U.S. project.

So I agree with you on that. I wish you would have the conversation about how do you make sure you are overseeing this money in a smart way. Certainly, as a Governor, I want to come to Congressman Stauber and ask him about the Twin Ports Interchange and why we need to get that done, and how that impacts this Nation's economy. That is a better way to do business.

Ms. TITUS. Thank you.

Thank you, Mr. Chairman.

Mr. DEFAZIO. Mr. Rouzer?

Mr. ROUZER. Thank you, Mr. Chairman, and I am very appreciative to have such a distinguished group of—or two fine gentlemen here before us. And unfortunately, I see we lost our Secretary.

But I have got a question for you, and I am searching for answers. And this ties into infrastructure and what we do as a Congress as we move forward. You have a tremendous amount of population shift from the Northeast into the Southeast, for example.

I represent southeastern North Carolina. Of course, southeastern North Carolina, if you will recall, during the fall we had Hurricane Florence, which ripped right through the middle of my district. I have nine counties. All nine were federally declared disasters. Eight of the nine were under water and in some areas, in some places still under water, tremendous devastation. And, of course, a flood takes a long, long time to recover from. Folks lose everything. And soon, many people have their entire life savings, all their wealth creation in their house. And when they lose it, it is gone. It is a very, very sad situation for many.

Well, in these States where you have such a huge increase in the population growth, you have extra roads, new bypasses. As part of an infrastructure package you will be having a lot of repair. New interstates, designated interstates, et cetera.

And then, on top of that, you got all these new homes that are built. And many of them today are built, literally, where you would take one hand and you would touch one, and the other hand you can touch the other. I mean hardly 6 feet between the homes. And now, when it rains, all that rain hits those homes, it hits that surface, that hard surface, goes straight into the river.

And we are approaching a point in North Carolina where, if you have a 5-inch rain in Raleigh, you are going to end up having the magnitude of a Hurricane Matthew or Hurricane Florence flood further east.

So my question to you, and what I am searching for, are what are the things that are being done nationwide in various parts to mitigate flooding of that nature, just because of the sheer population growth that you have.

North Carolina, as everybody knows, has really grown tremendously in the last 20 years. It is going to continue to grow tremendously in terms of population growth. So I would like to know if you have some examples of what has been done around the country to help mitigate this really, really tremendous problem.

Mr. WALZ. Well, I will speak on one in Minnesota/North Dakota, the Red River diversion project. Many of you have probably seen on TV where it is hard to imagine a flatter area where the flooding comes from. Those are the areas where it is the worst.

And what I can tell you on this, Congressman, is these are emotional issues because of the reasons you stated. They are also emotional because, many times, the mitigation impacts others. So in the case of the Fargo-Moorhead diversion, we are going to route that river around the cities, which is, of course, going to flood farm land of families that were never impacted by flooding that may be now. And these are hard decisions we are going to have to make, as 500-year floods now become, as you said, 5-year floods.

And I think, as a Nation, we are going to have to have this conversation about how do we send resources equitably. I say this as a State, that Minnesota is 47th in the return of Federal dollars. We spend, of—our tax dollars go out more than almost any other State, then come back to us. But our recognition is if that is going to States to improve the life and quality of North Carolina, as long as there is a recognition back with us—I think we have to think collaboratively on this, and cooperative in a way we haven't, because the real challenge for me is you are right, where you have more people and more concentration, there is going to be more infrastructure.

What happens on that final mile? This is the reason that I don't have broadband in many parts of my State, because the private sector does a wonderful job of providing it out until that final mile, where there is no economy of scale and no return.

So I think a new way of approaching this, a new way of looking at it, a new way of mitigating—but understand the mitigations are going to come with their own problems. They are going to come with the political problems, they are going to come with are you—every flood wall we build to protect floods the city downrange, downstream. And that becomes an issue.

Mr. GARCETTI. Thank you for the question, Congressman. And people don't think of Los Angeles as flooding, but we do. It is the reason the river—if you have ever seen Terminator 2 or Greased Lightning, it is actually a concrete channel, because it used to kill people whenever—it follows half the distance of the Mississippi in 51 miles that the Mississippi takes 2,000 miles. So it is a very violent river.

We changed our ordinances to look at something called low-impact development of requiring permeable surfaces. So to your point of when you have—put more concrete down and it creates more flooding, you can actually change how homes are built. And you could put something in legislation that looks at that.

Second, the zoning. This comes to Mr. Garamendi's questions on fires, too. We have let developers build right by fire areas, and—because they are going to make their buck, they are going to be gone. Same thing happening right now in flood-prone areas. We saw that in Houston. And I think the Federal Government can play a role saying no, there are certain places homes shouldn't be built, because we all, as taxpayers, wind up spending hundreds of billions of dollars mitigating what happens afterwards. Instead, encourage density where it should be, and reward that perhaps in some of the legislation.

Mr. ROUZER. Thank you, Mr. Chairman.

Mr. DEFAZIO. Thank you. We now go to Ms. Brownley.

Ms. BROWNLEY. Thank you, Mr. Chairman. And to Governor Walz, congratulations. It was an honor to serve with you over the last 6 years. And I know the Minnesotans were absolutely right in electing you Governor. So job well done.

And Mayor Garcetti, I want to thank you for your bold leadership, really, at the national level on the issue of climate change.

And I know your Mayors National Climate Action Agenda has really set a very high bar for others to follow, in terms of making Los Angeles a leading city, globally, on the issue of climate action and climate change.

So, as you know, the State of California has passed legislation to require that, beginning in 2029, all new buses must be clean, green, zero-emission buses. So my question is a little bit more specific than some of the previous questions.

But can you tell us what you think Congress and the Federal Government can do to help you with these goals? And do you think California's law would be a good law, nationally, as well?

Mr. GARCETTI. Absolutely. You know that half of the world's buses will be electric in the next decade. That is not driven by the United States of America right now, it is driven by China. And they have shown within a year or two, completely electrifying certain cities' bus fleets. The technology is there. I would like to see this be an American industry, because much of the technology on batteries and even some of the vehicles has been innovated here, even though it is being applied in other countries much more aggressively.

In Metro, the system that I am a part of in Los Angeles County, we have made that pledge to, hopefully, by the time the Olympics come back to America in 2028, to be 100 percent electric. We said 2030, but I think we are going to rewind that a couple years by the time we do this.

Where we need Federal help is on financing, quite frankly. I was an electric vehicle driver from 1997. I saved money in my pocket after the first 6 months. And we know that we can amortize this quickly, but it is a huge infrastructure build on the upfront piece. So what we need is a financing mechanism. This is one place where we don't need just grants, but we would love to see that in R&D, and keep that industry growing here.

We could flip probably the entire system in a matter of 3 or 4 years—maybe 5, because it is America and we move a little slower than other places. But we could do that within half a decade if we had the financing.

And so, rewarding that—so both the electric grid, the charger infrastructure, and then the loans for the buses—we, as an agency, would pay that back 100 percent. I am 100 percent sure of that. Private companies are offering that to us right now. We would rather do it, I think, through Federal Government because the companies may be around or may not be around. Some of them are foreign companies, some of them are domestic. But we would get electric buses in L.A. in a matter of 5 years, I think.

Ms. BROWNLEY. Thank you for that. And another question that I wanted to ask, as well, is you have been doing a lot of work on workforce development and manufacturing. You have made reference to that earlier in your testimony.

Can you tell the committee more about these economic development initiatives, and how you think they tie into our transportation future?

Mr. GARCETTI. Yes, it is great. I mean we have seen a hollowing out of the middle class in much of America, in American cities. We see this as kind of the come-back, the central pillar of that.

When I said the 787,000 jobs that are created by one measure alone, we didn't want to just say that it is going to happen passively. We don't want them to just come from other places. We are now putting our community college district in line to do that training with our unions and some of our contractors.

We are inviting folks—we are starting the first school, the high school, for kids that will be transportation careers, a public high school in Los Angeles, based on one that exists in New York City right now. So we really could see this as not only just expanding that infrastructure, but the human infrastructure and the way we benefit from this.

Congresswoman Bass's legislation to hire locally, which I know can be controversial, but you see a subway coming through your area and nobody from your neighborhood working on it, that is a problem. We should be able to reward that, especially in cities where you have the pipeline for just as good workers as anywhere else.

We have seen folks who are ex-offenders—I told this story in my State of the City Address of a woman who was arrested when she was young for a drug charge. She came out, she was trained. She is an African-American woman, there is not many in the building trades. She is now working on the Crenshaw line in South Los Angeles, and her son gets to visit Mom three blocks from where they live, working and building a great thing that will make her proud for the rest of her life.

Ms. BROWNLEY. Thank you, Mr. Mayor. And again, thank you for your leadership. And Governor, thank you for yours. And I yield back, Mr. Chairman.

Mr. DEFAZIO. Thank you.

Mr. Westerman?

Mr. WESTERMAN. Well, technical difficulties down here, but thank you, Mr. Chairman. And thank you also for such a great title for today's hearing. I think maybe, instead of just the statement, the cost of doing nothing, it is more of a question to us, is what is the cost of doing nothing, because we all know there is a cost to doing nothing.

Being a professional engineer and having done many projects in life, we never looked at an alternative project where we didn't first evaluate the cost of doing nothing. And there always is a cost of doing nothing. And we are seeing the cost of that in our infrastructure across the country.

Now, I appreciate the gentleman from California, Mr. Garamendi, mentioning the forest. I think that is a great parallel to what we are seeing with infrastructure across our country. If we let our forests continue to grow and overpopulate, eventually there is going to be a day of reckoning when the forest catches on fire. We can apply sound scientific principles to that forest, and we can manage it, and we can make it more resilient, and life is better when we do that.

But as we look at infrastructure and we think about this cost of doing nothing, I have a couple of areas I want to focus on, on the water side of things.

First off, I want to go back to clean water. We have talked about that a little bit. And as I understood your testimony and understand the way the process works, with large cities and larger urban areas, with municipal bonds you can pretty much handle those projects. We see that where I live in Arkansas. I know it is all across the country.

But also in my district I have a lot of rural areas. And you mentioned even with the fund to help give below-market loans for those projects, it sounds like there still needs to be more done to help these rural areas that just don't have the tax base to put clean water systems in.

Could you elaborate a little bit more on what else needs to be done on top of the revolving fund?

Mr. WALZ. Yes, thank you, Congressman. And again, we see this more and more every year. And it is like many of them are reaching their life expectancy at about the same time.

And you are exactly right where the problem is. And we do bond for it. We are talking about it, and we do some of this State bonding. But then it becomes the picking winners and losers amongst a—numerous small municipalities. It is just having more into that fund, I believe, the capacity to do it. It is us understanding that this is going to take a pretty big investment.

And this is that hidden infrastructure that you don't see. But for example, a small town that—maybe their entire city budget is $10 to $12 million, the replacement of one of these water treatment plants is now $15 million. And there is just simply no way property taxes quadruple overnight.

So in the State we are looking at ways we can be of assistance. I think the revolving fund—of making sure it is there, making sure there is some flexibility for us—again, I think that came up in numerous conversations.

I don't think there is a lot of disagreement across political spectrum on this. There needs to be standards to do these things, but some of that flexibility helps us out. So some of these things are it takes too long to build them, they become a little more expensive, and having access to those funds. But in many cases we are going to have to do more than just loans to these, because these communities don't have the capacity to pay them back.

Mr. WESTERMAN. And on the water thing, but shifting gears a little bit, Minnesota, you utilize the navigational waterways, inland waterway systems, quite a bit. I have been doing a lot of indepth study on that. And there is billions of dollars of work that need to be done on those systems. They are out of mind, out of sight.

Mr. WALZ. That is right.

Mr. WESTERMAN. I think I have got a lot of them in my district, and I don't know that people even realize they are there a lot of times. But if one of those locks and dams fails, people will realize very quickly when they see all the additional trucks on the interstates.

We move a tremendous amount of ag products down the Mississippi River through our inland waterways. It is the cheapest mode of transportation. It takes less fuel per mile than any other mode of transportation. It gives us a competitive advantage in rural areas for our ag products.

These investments and these projects have returns of 10 to 16 to 1, is what the literature says. So even if you went into debt to fix these inland waterways, you would be money ahead in the long run. And in 10 seconds would you like to comment on that?

Mr. WALZ. I will say amen on that, and the national debt matters. When I bought my home as a teacher, I was making $40,000 a year. I bought a $120,000 home. I was 300 percent of GDP in debt and it was the best investment I ever made. In this country—what Congressman Westerman said—is our infrastructure on the locks and dams, we are one accident away at that lock. That 75-year-old lock at St. Louis will shut down 83 percent of the exports of this country.

This is not Mark Twain's Mississippi. This is hundreds of times more important even than it was then for the moving of products. And this is a crisis situation.

Along with that we talked WRDA for many years here. Big WRDA. If you can do it, go for it.

Mr. DEFAZIO. OK, thank——

Mr. WESTERMAN. Thank you, I yield back.

Mr. DEFAZIO. Thank you. Thanks for raising that issue. We are not just here for surface today, so there are other areas that need critical investment.

And with that, Representative Payne.

Mr. PAYNE. Thank you, Mr. Chairman.

And Governor, it is good to see you back here. We miss you already. The people of Minnesota were very bright to bring you back home full-time.

You know, I just want to echo something that you said, and I think we have the same philosophy on it. Getting into the specific projects that are important to our districts—and we are here to support our constituents and our areas, but we are the Transportation and Infrastructure Committee of the United States of America. So we have to have a broader outlook on other projects that don't necessarily always just pertain to our districts.

And so I feel it is very shortsighted of some of our colleagues at times to make a statement, just, well, my—the people in my district could care less about a tunnel in New York and New Jersey. Well, that may be very well and true, but it is—I feel it is part of your job to articulate and bring understanding to why it is important to the Nation.

If that tunnel crumbles, transportation on the eastern seaboard is shut down between Boston and Washington, DC. And I can remember being in New York with the Member from North Carolina, and I am sure he took the train through that tunnel to get from North Carolina to that meeting we were in in New York. So it has an impact.

And so, as you said that you were 47th in your return on those monies, and—but you understand how important it is. So I wanted to thank you for that.

And Mr. Mayor, in your testimony you discuss some of the investments and changes that have improved the Port of Los Angeles. You also mentioned investments that need to be made at ports across the Nation. I represent the Port of Newark, which is part of Port of New York and New Jersey and it is the busiest container port on the eastern seaboard.

Could you unpack some of the technologies and investments that need to be made at our major ports across the country, and speak about how Congress can make sure our ports continue to be productive, while creating good-paying jobs?

Mr. GARCETTI. Well, thank you, and thank you for your leadership in Newark and for the Nation, because we know even in Los Angeles, Newark is an important port for us, and vice versa.

You know, we need full utilization of, I think, a fair and equitable framework that takes care of our ports as a system, because they really are tied together. And I support—there is an approach that has been put forward by the American Association of Port Authorities—both of our cities are members of—that looks at funding for each region of the country, but also looking at small, emerging harbors. So it is not an either-or, it is a both, and for donor and energy transfer ports.

As I mentioned before, we collect about $200 million from the Harbor Maintenance Trust Fund each year, the Port of L.A. And about $3 to $5 million of that is returned. Think about that for a second: $200 million we collect, $3 to $5 million returned. And yet, what we are doing there, together with Long Beach, 40-plus percent of the goods that come into America come through those ports.

We are looking at a zero-emissions port, because usually communities of color live right by there, and they have the worst air quality. People forget one of those huge ships is the equivalent of tens of thousands of cars. So as we look at resilience and climate change, that is a great place to make an impact. And we take a very bold step in Long Beach and L.A. saying we will be the first zero-emission port not in the United States, but in the world. We are going to need some help on the technologies. We are working with private sector, those trucks, everything like that.

Second, we are looking at new technologies. It is a great American export. Working with GE Capital, for instance, to predict which containers are coming in, match them up with the trucks before they get there, and now we are licensing that to other ports around the world, taking a cut of that, bringing it back to America. That is like American know-how.

So again, the innovation around ports on logistics, on rail, on-dock rail, new generation of electric locomotives so that we can have zero-emission locomotives for those communities of color and those communities that are around ports, all of those things would be great to see, and a more equitable use.

I hear loud and clear what Mr. Westerman said. I would love to see us take those harbor funds and help the entire system that ties together. We already do that. I would be willing to share some of that. But we need to get back more than 1 or 2 percent of what we generate to do the good things for America and to make it work.

Mr. PAYNE. Thank you, Mr. Chairman. I yield back.

Mr. DEFAZIO. Thank you.

Mr. Gallagher?

Mr. GALLAGHER. Thank you, Mr. Chairman.

Governor Walz, you mentioned electric vehicle charging networks, ports, locks, dams, water systems, and other infrastructure. The modern versions of this would, in many cases, be equipped with smart technology, meaning internet connectivity, in many cases.

What guidance exists in your State to protect smart infrastructure, new infrastructure from cyber attacks?

Mr. WALZ. Well, thank you for the question, Congressman. In fact, my second Executive order was issued yesterday, forming a blue ribbon panel on this very issue, on looking at over-the-horizon technology challenges, making sure—and we saw it this week—when temperatures—the things I was monitoring on a minute-by-minute basis—when temperatures get to 70 below, an interruption in power generation or gas delivery is life and death. And so, when we had blitz and seeing things on the map going red, meaning we were losing some of that, trying to understand where it was. Some of those were switching issues, some of them were small issues. And the good news was it all came back up.

But it highlighted the fact, again, that a sure way to attack this country at a time—is to attack infrastructure. And so we are starting to think forward. We are bringing in all the folks who are cutting edge on the front end of this, but thinking of where we haven't been yet.

Because, again, if we move to autonomous vehicles, which we are trying to do some of these test projects, how protected are they? Because the havoc that can be caused by cyber terrorism, whatever it might be, as well as just an outage. So we are thinking about it, we have raised it to that level of importance that it will permeate all the decisions we make. And I think many of the States are looking for that again.

This is one of those cases where I think the States are great innovators. We are looking at other States that have moved ahead—protecting the Port of Los Angeles I am sure the mayor will talk about—but we are going to need some help doing it, because we see it as a threat.

Mr. GALLAGHER. And a similar question to Mayor Garcetti, but maybe comment specifically on whether cities are aware of the cyber vulnerabilities posed by Chinese technology companies, particularly Huawei and ZTE, and whether there is extant guidance about purchasing technology that could wind up in smart technology in the future from those companies.

Mr. GARCETTI. Yes. So we established the Los Angeles Cyber Lab. We think it is probably the best of any municipality in the country. It is now 4 years old. DoD, DOJ, HSD are involved in it.

We have the busiest port in the Americas, the number-two airport in the country, and the largest utility owned by any municipality. So we have got vulnerabilities many, many places.

We have also brought in the private sector with this, as well. Remember when the hack happened to Sony? The rest of the companies were like, phew, I am glad that didn't happen to me. Our enemies collaborate to share how they are going to attack us. But we, as friends, never share, especially in the private sector, because we see each other as competitors. We are breaking that down in Los Angeles.

So we are—essentially, we have formed something from the smallest business that is vulnerable to the biggest company in our own enterprises to share that information right away, and to give patches and fixes in real time that we get from one company giving to another one. So people are signing up, and we would love to share that with you.

In terms of the Chinese technology and other technologies, that is a part of what we talk about. Maybe we can talk about that a little bit more offline. But that is absolutely a piece of what we keep our eyes on.

Mr. GALLAGHER. I would love to. And I just—for either of you or both, I mean, are States or municipalities aware of how much Huawei and ZTE products—they may have already purchased, or may be on——

Mr. GARCETTI. We don't purchase either of them.

Mr. GALLAGHER. Any of them? Yes.

Mr. WALZ. At this time I don't know, Congressman. We need to—our cities and the larger cities—on how those purchases were made. That is one of the reasons why forming this task force, so there is an alignment of both goals and protections that go into it, because I think a lot of it is what you are asking. We don't talk to one another, and we may not know.

Mr. GALLAGHER. Sure. And my simple concern is that, as we contemplate spending potentially $1 billion of Federal money on smart infrastructure, we want to make sure we are not building back doors into which our enemies could disrupt us in the future.

And the final thing I would say for Governor Walz is go, Packers.

[Laughter.]

Mr. DEFAZIO. Thank you.

Mr. Lowenthal?

Dr. LOWENTHAL. Thank you, Mr. Chair, and thank you, my—both our witnesses, my former colleague and dear friend, Tim Walz, and the great mayor of the city of Los Angeles, who I have great respect for. And I will come back and ask you a question in just a second.

But I really want to preface my statement by, all of you, we have talked about the funding gap and what we need. But I don't think we have really spent enough time on the overall freight situation, and what we are talking about, in terms of freight.

You mentioned, Mayor Garcetti, in your written testimony that we have over $2 billion in a freight funding deficit. That means more congestion, more emissions in our local communities. But it also means a delay in goods that really impacts both consumers and the manufacturers getting there. And as you pointed out, 43 percent of these goods come through the—our joint ports of Los Angeles and Long Beach.

Soon I am going to—this is my public, you know, statement. I am going to be reintroducing my National Multimodal and Sustainable Freight Infrastructure Act, which I have introduced before, have had a lot of support. It is a bipartisan legislation which creates a dedicated revenue stream to specifically finance sorely needed freight improvements, from the ports to wherever they are going, throughout the Nation.

And so I really think in part—it is important because, as has been pointed out by all of you, we are not going to have a single funding source. But the Federal Government needs to come up with creative sources. And I think creatively also in terms of targeting certain needs, and making sure that those, as we have learned with the highway gas tax, that we protect those monies.

Especially I want to point out—I want to thank Chair DeFazio, Representative Napolitano, who is the chair of our Water Resources and Environment Subcommittee, for their leadership in making sure that we spend all the Harbor Maintenance Fund, and also that we then also begin to look at the relationship between the donor ports and the other ports.

I think those are—because, as we pointed out, ports across the country—as my colleague, Mr. Payne, has pointed out—need to build the infrastructure that connects the maritime transportation system to the surface transportation system, and it is one real system. Even though we frequently think of them as separate, we are really talking about one system.

And I hope we make tremendous—in the next 7 months—improvements in those areas.

But Mayor Garcetti, I want to ask you a question I think that Representative Brownley talked about, and my preface to that is that, you know, we talk a lot about infrastructure investments that create good family jobs and sustainable jobs. But it often takes an extra effort to make sure those investments benefit the local communities. And you talked about that, how the city of L.A. and L.A. Metro have set ambitious local hiring goals, and you took advantage of, as you pointed out, this Federal pilot project to allow for local hires that was put into our federally funded projects.

You mentioned a little bit—I would like—there are three parts to this question. I would like you to spend a little time, if you can—whatever is left—what was your own experience with this? And maybe, more importantly, what happened as a result of DOT's decision not to continue? And what would you like this committee to do? That is the most important about this issue.

Mr. GARCETTI. Well, thank you so much, Congressman, for the question. I mean what Member of Congress doesn't want to deliver jobs back to his or her own district——

Dr. LOWENTHAL. Right.

Mr. GARCETTI [continuing]. For his or her own constituents? I mean it is a question, I think, that has an easy answer.

Now, in the past there has been those who say, well, we don't have enough of a workforce here, we have to bring them in from other places, other States, even. In Los Angeles we have people coming in from Ms. Titus's district and other places. Shame on us. Those are great workers, but shame on us for not growing them up.

And the companies get a little bit lazy about just saying, well, we don't want to do it. We should be offering help to partner and pay for their trainee costs with our WIOA dollars. We have done that in Los Angeles, and the pilot was extremely successful. We have a generation of people now growing up that will have lifelong employment in the building trades and do significant things that they will look back on with their kids and their grandchildren and say Mom or Dad built that.

Second, though, in a way we suddenly went back to companies saying, "Hey, we don't have to do this," and these programs started to have problems. Now, we have so much infrastructure going, we can control that—at the airport, we are doing things on our Los

Angeles River, the ports, et cetera, that we can put some of those folks to work.

But I think it would be a real legacy of this committee and of this Congress to say not only are we going to put that in place, we are going to think through how training occurs, work with our community colleges, work with our unions and our trades to be able to put that forward.

And for a Congress that just adopted historic criminal justice reforms, it is a great place to put people to work who are not going to go back to school and get a degree, but who do want to be contributing members of American society. And we had a huge percentage—I would say about 40 percent of the folks that are working now at the airport, on Metro, came out of serving some time, and this has changed their lives.

Dr. LOWENTHAL. Thank you.

Mr. GARCETTI. Thank you.

Dr. LOWENTHAL. And I yield back.

Mr. DEFAZIO. Thank you.

Mr. Davis?

Mr. DAVIS. Thank you, Mr. Chairman. I appreciate your friendship, your leadership on this committee. I look forward to working with you.

And I also want to thank my leader, our Republican leader, Mr. Graves, for in a weak moment naming me the ranking member on the Highways and Transit Subcommittee. I don't think many people in this room know what you were thinking there, but thanks, buddy, I appreciate it.

And hello, Governor. Good to see you again. Football meeting, the congressional football game is next week. We hope that you plan on coming to play again, even in your new capacity. Absolutely, we need you. We will beat the guards this time.

And Mayor, great to see you again. I am a little disappointed that you did not nudge Secretary LaHood like I texted you to do earlier in this hearing. And I am sorry I missed my good friend, Secretary LaHood, because I had some questions for him.

But all three of you, I think, bring a unique perspective. And we all see the need, Republicans and Democrats, to figure out how to pass an infrastructure bill. This can be the committee of bipartisanship. And many of the comments that each of you have made as I have been in and out of the hearing are very appropriate to our concerns.

We have to have revenue. I am for diversification. How in the world do we create a 401(k) of funding sources to lower the volatility of just—like we currently have just one source now? Those are the debates that we should have in this room. But the cost of doing nothing actually also includes the regulatory environment.

Now, as the Governor of a State, mayor of one of our largest cities, what can we do in this committee to reduce the cost of infrastructure investment on the regulatory side that you may not have addressed already? I will start with either one of you, whoever wants to go first.

Mr. WALZ. Well, I will get on this. This is a place of, I think, great collaboration that can happen in here that—none of us are saying that—of unfunded mandates that end up on the States, of regulatory burdens, as we were discussing earlier. We know that this can be done.

The mayor talked about a freeway that was reconstructed after an earthquake. I talked about the I–35W bridge that was debated, voted on, funded, and built, and the ribbon cut within a matter of months. That is out there. I think it is working together to make the case.

When people say that they are worried about a regulatory burden, not assuming that means they want to get out of something to make more money or to not follow the rules, it means that they see it as a regulatory burden. And those who say, "But we are not willing to put people at risk," I think we can come to some common ground.

The Governors, the National Governors Association, would welcome anything that you would do to help us be able to speed those things. Set the standard for us, keep it there, but give us at least enough flexibility that, in these changing circumstances, we are able to reach our goals, but not undermine or add costs to it.

So we are in agreement with you, Mr. Davis. And I think this is the perfect time to do it. As you are talking revenues, ask for those changes that make this easier, and you will find support amongst the National Governors Association for it.

Mr. DAVIS. Thank you, my friend. Great to see you again, too, Tim.

Mr. GARCETTI. Great to see you, Congressman. And, don't worry, Secretary LaHood is coming out to L.A., so I will give him a punch for you when he comes out next week.

A couple specifics to answer. One is I would give incentives for how quickly people get things done. Because not just Federal regulation, sometimes State and local. And everybody loves a deadline.

So if there is a piece of this funding that says it has deadlines that are shortened, trust me, States and local government will adjust. Those bureaucrats that work for us will say, OK, I got 30 days now to do it, and we will find a way to get to yes, instead of just slow it down to no. So that is one suggestion.

Second is I think that we all want the truly environmental protections to be there. But what now is called environmental law is so often a way for people who are NIMBYs to slow things down, full stop. We know that, and this unifies us, whether we are Democrats or Republicans. There is—you know, sometimes unions will do it, sometimes businesses will do it, sometimes residents will do it.

And people should have a way to petition their Government, but it all should be narrow windows, the cost of doing that should be at least something that people can't just, for a nickel, put in endless appeals. And where the Federal Government, again, either requires that States and localities align their laws to be that way, or if you have jurisdiction to put that down in these, that would be helpful.

So those are two concrete suggestions, I guess pun intended, that we could get this stuff moving forward.

Mr. DAVIS. I appreciate both of your comments. And we want to get things done here to make it easier for States and localities to be able to invest in the infrastructure improvements that we want to partner with you on.

I wish Secretary LaHood was still here. He and I have talked about this before. The biggest impediment that I see for infrastructure investment is the discussion of impeaching the President. Ray LaHood has a unique perspective on the last impeachment proceedings that took place in the 1990s. He was in the chair of those proceedings. And I asked him at an event recently how many bipartisan agreements did you pass in Congress during the impeachment of President Clinton? Zero.

We have got to come together as a Congress in a bipartisan way to put infrastructure on the forefront. I am glad Chairman DeFazio is doing it today, and I thank you for your time.

And I have no time to yield back.

Mr. DEFAZIO. Representative Lynch?

Mr. LYNCH. Thank you. Thank you, Mr. Chairman. Just as far as the previous comments go, I think Congress can do a couple things at once, if we need to.

But Governor, Mr. Mayor, we appreciate your testimony, as well as Secretary LaHood. You do have a great perspective. Good to see you back, Tim. We miss you. But you are in a good place.

We are in a very important juncture right now, and it is a great opportunity, because, while Chairman DeFazio is trying to cobble together, you know, a major infrastructure bill, we are also on the Committee on Financial Services, where we are trying to address the next iteration of our National Flood Insurance Program. And both of those, Chairwoman Napolitano and the flood insurance effort, really look at climate change and the impacts it is having on our communities.

Los Angeles has a similar profile as Boston does, in my district. But there is a disconnect. There is a disconnect.

I am a former iron worker. I was an iron worker for almost 20 years. Strapped on a pair of work boots every day. Built bridges, basically. And high-rise towers. And right now, in my State, I have 483 bridges that are deficient. And that is a disgrace, to me, as an iron worker, you know? And you worry about your families traveling over those bridges, the ones that are still open.

In my role as a Member of Congress, I talk to my Governor. He is a Republican, Charlie Baker. I ask him what his priorities are. I go to my mayors, Marty Walsh, Joe Sullivan, Tom Koch, Bob Hedlund, and I say, "What are your priorities, as mayors," because they are on the ground. They have a real keen sense of what the priorities should be, and where the money would do the most good.

I honestly think that the big question here is going to be on how do we get people behind the funding issue, if it is for raising the gas tax or whatever it is. And I think the way to link that up and to win the campaign for an increase in funding, you know, to put the trust back in to the Highway Trust Fund, is really to link those up. I would support a proposal that said earmarks are not going to come from Congress any more. Earmarks have to come from my board of selectmen, my town manager, my mayor, my Governor, my State reps and senators. It has to come from the local community.

And then, of course, we have competing needs in all our communities, they have to come—those requests have to come to Congress and, obviously, would have to be the arbiter of what gets funded, in terms of need and the priorities that come from the States and local governments.

So, you know, I just—is that a way—I would like to have your thoughts, because you are sort of at the so-called tip of the spear on all of this. You are hearing the complaints, you are dealing with this stuff. You know, if a bridge has got to be closed down for one lane because it can't handle the weight of two lanes of traffic, you know, it is the Governor and the mayor that are dealing with that.

I would just like to hear your thoughts on trying to reconfigure what we are doing here, so that we take the distaste away from earmarks and restore, as I said, you know, that trust that I think has been lost because of some of these other projects that have, you know, been talked about in the press extensively about the misuse of power and resources.

Mr. WALZ. Well, I share your approach, Congressman. I trust mayors. They know best. They bring you these projects.

We did something—some of you weren't here long enough—we used to have these Member-directed projects, earmarks. And one of the things that cleaned up a lot of this was just put them on the internet, put them out there, show who requested it, and allow for citizen comments.

You can do these things, we can prioritize these things, and then come up with a way to deliver it. It is just a way, I think, of better accountability. I think it brings faith back into the system. People will—if they see where their tax dollars are going, it makes a big difference. And I think you have to bring faith back into it. And that does start to get at this funding piece on how you get there. And I think it starts by—you listening to your mayors makes a difference. That is who I listen to.

Mr. LYNCH. Yes.

Mr. Mayor?

Mr. GARCETTI. I think it is a wonderful idea. I think that you got to trust democracy. It is either—small d, democrats, all of us are not. You think that people know what is best on their block and in their community.

And using, I think, elected bodies at the State and local level are proof that Washington trusts democracy across America. It would be, I think, a big show of faith. So I think that would be a great way to do it. We would love to work with you at the U.S. Conference of Mayors, and maybe see about how that could be done, and how—you know, there is always going to be some cases in which, well, maybe my local body completely disagrees with me. But I think there are ways to work that, so you have multiple——

Mr. LYNCH. Yes.

Mr. GARCETTI [continuing]. Ways to input that.

But, you know, specific projects get done. The American people need to know that specific projects get done. Who do you want deciding that, somebody who is not elected, who is a selected bureaucrat, or somebody who is an elected Representative? I think that is an easy answer.

And I appreciate your restraint in not talking about football. Thank you.

[Laughter.]

Mr. LYNCH. I yield back my time.

Mr. DEFAZIO. Thank you.

Mr. Balderson?

Mr. BALDERSON. Thank you, Mr. Chairman. I would first like to begin this afternoon, now, by thanking Chairman DeFazio and Ranking Member Graves for holding this important hearing.

It is critical that we invest in transportation and infrastructure today so Americans can prosper tomorrow. I am really excited about being on this committee and having the opportunity to work in a bipartisan manner and get something done.

I am particularly excited to sit on this committee during a period in which it will likely consider a comprehensive infrastructure plan, as the President mentioned in his State of the Union Address just this week.

I will move forward with my questions. And I, like several others here, I am sorry to see Secretary LaHood leave. But Governor, thank you for being here today, and these questions are directed to you.

Having come from a perspective of being at the Federal Government and then going down to the States, where a lot of work does get done—and having served in the State legislature, I know that we move forward with a lot of projects. But I would like your insight on how Congress can expand and promote the development of the public-private partnerships, so that States can enhance this innovation.

Mr. WALZ. Well, thank you, Congressman. Congratulations for being here. And you are right, you are on the right committee here. And we do trust you. This entire conversation is about building the trust it is going to take to get this done.

One of the things is—and you heard the mayor talk about that—a lot of those public-private partnerships, and rightfully so, are predicated on how safe they are, the return on investments that they make. So it is important for us to know that our Federal partner is there.

I can't stress enough, again, just—so in the State of Minnesota, when the shutdown happened, we have a revolving fund where we pay our contractors forward and you reimburse us for it. The State of Minnesota is $120 million that we had floated, with no idea where we are getting it. We were losing our partners who wanted to work with us, because they didn't know how we were going to be able to do that.

So one of the things is give us that consistency, give us some of the capacity to innovate and build and experiment. If you truly trust the States as laboratories of democracy, give us that capacity to do that. You hear the mayor talking about amazing things they are doing at the Port of Los Angeles. The States can do the same things. And then give us that ability to work across jurisdictions with other States a little bit to get some of those things done.

Again, the stable funding stream, can't stress it enough; some capacity to be flexible and make sure that we are not having unfunded mandates. Let us be able to show our private-sector partners that we are good operators in this, and we can get this done.

And the mayor did bring up something important. Some of those—the carrot works a lot better than the stick a lot of times.

Get this project done in this amount of time, and there will be a bonus for you. Give us some flexibility to be able to do that.

I am not asking you to capitulate all your oversight, I am not asking you to block grant everything to us. But I am asking you to trust us as partners to deliver for you. And when you can go back to your constituents and say, "You know what? We allocated this money, and not only did I get a good project in my State, I got one in Mr. Stauber's district," and that would be helpful.

Mr. BALDERSON. OK, thank you. The next question I have for you, Governor, is my district contains urban and suburban areas. It also encompasses a very vast rural area. How do you ensure communication between your office, the Minnesota Department of Transportation, and rural areas to make sure that your constituent needs are being met?

Mr. WALZ. Well, this was central to my campaign for Governor. I ran on an idea of one Minnesota. I am the first Governor in over 30 years that comes from what we call Greater Minnesota, the rural areas of the State. But I think the way we facilitate it is that understanding of much of the conversation we are having here, we are in this together.

As the Port of Los Angeles goes, so goes the Port of Duluth. As Mankato, Minnesota goes, so goes Marquette. Wherever it might be, making sure that we understand our interconnectedness, we are making sure to be very clear about this.

One of the things that we are talking about is how we fund a little differently our rural communities, with an understanding—I talked about this. I was a high school teacher before I came to Congress. Fair isn't always equal. And for us to have that very difficult conversation, it doesn't mean dollar for dollar in some places. It is more difficult in some places. That means that there is going to be issues that take a broader investment in an urban core, because of density, and it also means sometimes it takes a broader investment to get up to Hallock, Minnesota.

And I think, again, what you can help us—is to be good stewards of those taxpayer dollars, but give Governors the flexibility to be able to adjust to those differing needs between rural, urban.

And I think the thing that gets forgotten in here—and I hear this a lot—that is suburban. And when I go to folks in Minnesota, when I got out to Hallock, they say there is urban, there is suburban, there is exurban, there is rural, and then there is frontier. We are the frontier. That is a different thing. And they were not even, you know, facetiously saying that; it is true.

So I think what you can do is help us see that overall picture, give us that consistency, but then allow us to build those coalitions that show that it matters.

Mr. BALDERSON. Thank you. And thank you both for being here. I appreciate your time.

Mr. WALZ. Thank you, Congressman.

Mr. DEFAZIO. I would now recognize the vice chair, OK, Representative Carbajal.

Mr. CARBAJAL. Thank you, Chairman DeFazio.

And welcome to both of you, former colleague Walz and Mayor Garcetti, who I had the privilege of serving with on President Obama's climate action task force.

I come from local government. I served as the county supervisor for many years. So I come with that perspective.

Mayor Garcetti, as you know, 45 percent of the Nation's transportation infrastructure is owned by local governments. Today, in Santa Barbara County, in my district, we have a pavement condition index of 57 out of 100. And in San Luis Obispo County, which is the other major part of my district, it is 64 PCI. Just a decade ago, the PCI in Santa Barbara County was 70.

But I know we are not alone in this accelerated degradation of our infrastructure and our roads. Local governments across the Nation experience this same challenge, and will continue to experience it in the future.

How can we better partner with local governments to maintain a good state of repair of our Nation's infrastructure, one?

And two, what are the advantages and disadvantages of creating a dedicated funding source to directly allocate resources to local governments for the improvement and maintenance of local roads and bridge infrastructure in America?

And I ask that from your service as a local elected official, more than anything.

Mr. GARCETTI. Absolutely. Let me start with the second one. And great to see you, Congressman, and thank you for your amazing service here to the country and to California.

You know, it always drove me crazy—I work now with Chair Waters—when CDBG grant dollars went out there. That is Federal dollars, but I always said thanks to the Councilman Blank and Mayor Blank. And we changed in Los Angeles the policy so it actually thanks the Member of Congress now, because those funds come from all of you. They come from the American people first, but you enable them.

And I think, you know, the idea of this road funded by the Federal Government—and it is a road that people are going to use 90 percent of the time more than an interstate highway—is a beautiful idea, and one that would be embraced, and one that—there should be some sort of leverage to encourage local governments.

Accelerated for America, the 501(c)(3) that I mentioned, we are on the ground helping folks from Florida to Ohio, Texas, Washington pass local infrastructure packages on transportation. At least half of that is always for road paving. So we are stepping up to do that, and we would love to see Federal Government, because that network doesn't work if we don't have the feeder, first mile/last mile roads, into there.

And I think there has always been this strange disconnect. Why is that not Federal? And why, vice versa, do we have no responsibilities for the highways that go straight through our cities, where we could put cleaning crews, we could help folks there, we could take care of graffiti. It is kind of like, "Don't touch that, that is either State or Federal; local government does that stuff over there."

So I think we would be very interested in a dedicated funding resource that came to local governments, and it would be spent well. We know how to do that. And I know my number, too—because we went down every year until we were 61 when I became mayor. Now we are at 68. For the first time in decades we are going up. We have paved enough to go halfway around the world. I got 4 years left. I said I want to pave the equivalent of a street all the way around the world by the time I leave, as mayor. So I think that that would be very well received.

And then how we can do this together, it is going to be very important for, I think, cities to be at the table, and States. Some cities are the size of States. But for us to have that, and writing this together—and the chairman has been really wonderful, and inviting us to be a part of that through the National League of Cities and the U.S. Conference of Mayors.

But I think that we are going to need to see—looking at streets, not just as a place that you drive over them. There are people who—there are electric scooters now, there are people who walk on them. There is heat that comes off of them, there is water that goes through them. There are street trees that are important, there are curbs that are important. That is part of American infrastructure working.

So we welcome the opportunity to help you cowrite that, and really value your perspective as a former local official in making that happen.

Mr. CARBAJAL. Thank you, Mayor. To conclude, I wanted to ask if you feel that the Federal Government incentivizes or recognizes self-help municipalities who have taxed themselves and gone out on a limb. Residents have identified these types of measures as a top priority. Does the Federal Government, in your opinion, recognize that enough?

Mr. GARCETTI. If I can quote the Governor, he said no, we punish that. And it is quite the opposite actually, where we step up—and I get it. There are certain places that can't help themselves on things like water. But when people say, well, L.A. is a rich town, you can do that, we have 24 percent poverty. It is actually a high poverty town, too. Poor people are voting to tax themselves to get this stuff done. So let's erase that.

No, we get punished for it, not helped. We should get rewarded. Not 100 percent, because you can't leave certain places behind. But there absolutely should be.

The one place where there has been good, and I hope that we can, in the legislation, move forward is New Starts, because there has kind of been a walking away in the administration from New Starts. It is critically important. And there is almost a punishment, well, you are already paying for it. If we want those subways to be open by the Olympics in 2028, when we show America off to the world, we are going to need to continue that. We expect that. We budgeted that. We are always told that. But we need to ensure it.

Mr. CARBAJAL. Thank you, Mayor. I yield back my time.

Mr. DEFAZIO. Thank you. We move now to Representative Spano.

Mr. SPANO. Thank you, Mr. Chairman. And I very much look forward to serving under your leadership, so thank you for having me. And to the ranking member, thank you, as well, for your leadership.

Thank you so much for being here, Governor and Mayor, we appreciate your time and your expertise. I represent a district that runs from East Tampa to west of Orlando. So, as you can probably imagine, that is a very, very rapidly growing area of the country.

As a matter of fact, by some estimates, the most rapidly growing area in the country in the next 20 years. So obviously, infrastructure and transportation issues are very, very important to us and to my constituents.

I have a couple questions, if I have time. First of all, I understand it has been referenced here—I think on at least a few occasions—the need for long-range, proactive-type planning, as it regards infrastructure and transportation. And what I think about, however, is the rapidly changing pace of technology, right?

So you have those two things on either side. So talk about balancing the need for proactive, long-range planning with the need to be light on our feet, and nimble, and to be able to respond and react with new technologies that come on board.

Mr. GARCETTI. So that is a wonderful question. It gets to the heart of what I talked about at the beginning, in terms of rewarding innovation. Don't pass a 20th-century package here for the 21st century. You should be thinking beyond that.

And we have tried to make Los Angeles a platform for innovation. A company comes in with a new product, somebody has an idea inside one of our departments or bureaucracies, we say yes, let's try it. Instead of being future-phobic, instead of being future-resistant or future-passive, we try to be future-guiding.

And when I gave you that list, like, Hyperloop may move goods before it moves people. I don't know if people want to get in the tube and go 800 miles an hour, but I bet goods have no problem with that. Moving that from a port to get to a district like Ms. Titus's and other places, to move more quickly, we need to have funds that can help innovate and move that forward.

The Boring Company that Mr. Musk is doing, we have, you know, a gondola that is going to go up to Dodger Stadium, the most popular place to watch sports in the world, in terms of numbers of fans that go there each year. Scooters that we didn't even know about—if we were doing this a year ago, even here, we would be like, "What is an electric scooter?" Now they are everything. Some think they are the scourge, some think they are the answer.

But we need to create an America that is a platform for innovation, and legislation that says if you are willing to innovate we are going to let you test, try, and then scale up what works. Right now we have old categories of things.

We are very protective. Federal Government says let the local governments try it first. Local governments say, "I don't want to be first, let that city figure it out before I do." In L.A., when we put ourselves at the front of the line, we have really reaped the bounty. When I talk about that GE Capital project, for instance, we are earning money off of containers being moved in other ports in other countries now that we can put back into our port.

So I think that that is a great piece: reward the innovation, the research behind that, and people are willing to take a risk.

Mr. WALZ. Yes, thank you, Congressman. It is a great question. My brother is a constituent, by the way.

The Governors—when I first got in this and started looking at it, one of the people I went to—this seemed very odd, but there is a school of thought out there—the futurists, and asked them to think about this as we started to go.

One of the problems we all know is you want us to be really good stewards of taxpayer dollars, just like you are. We are so risk averse that, in business, you know, the old adage for a generation now is fail fast, but innovate on that and those things are going to happen. We are so risk averse and so, I think, brow beaten. If we take a risk and make a mistake we are punished for that.

I am not advocating, you know, risky behavior to the edge with taxpayer dollars, but there has got to be some incentive for us to try some of these pilot projects for us to do autonomous vehicles to run from Rochester to the Twin Cities, where we have massive amounts of freight and people come in.

We have got a town in southern Minnesota that is 100,000 that is home to the Mayo Clinic that 2½ million people come to, and FedEx flies hundreds of thousands of packages to every day. You have got to give us some capacity, and we, as the States, have to be able to innovate to make sure we are thinking the way you are talking about. Because when folks come to me asking for money in our public sector, or our—in our safety sides of things, they are coming and asking for technology upgrades for fingerprint readers.

I don't know at this point in time if fingerprint readers are even going to be around with facial recognition technology. Who is making those big decisions here? Who is thinking about that? And who is talking about making sure, if Hyperloop is working there, how are we going to be able to try and do some of that?

So your question is right. I think it comes with flexibility, it comes with allowing us to take some risk, and it comes with having a little bit of patience with us to try and get there. And I think you will get some of these breakthroughs.

Mr. SPANO. Thank you both. I only have 15 seconds left, but I will ask this, and if you have time to answer it, great.

If not, I understand, Mr. Chairman.

But you mentioned resilient infrastructure, right? I mean give me, like, a practical example of what that is. I understand the concept, but give me a practical example of it.

And are there any estimates that have been done, in terms of what the additional cost would be, right, over and above the traditional infrastructure approach that we can be looking at, if we want to pursue that direction?

Mr. GARCETTI. Sure. I mentioned white pavement before, because of heat. Plastic pipes, a lot of places you can't do plastic pipes. We have earthquakes and stuff like that. There are great American manufacturers of them, but they are usually banned because of old regulations. There is all sorts of stuff on resilience, whether it is earthquakes, whether it is floods.

The zoning, you know, that is not a requirement, but it is more of a zoning thing where you say we shouldn't be building in certain places where we are all going to pay the price. I think those are ways to make resilience a central prism for everything you refract in this bill.

Mr. DEFAZIO. OK? Do you have a quick one, Tim, or do you——

Mr. WALZ. No——

Mr. DEFAZIO. OK, OK, good. All right.

Representative Brown, Maryland.

Mr. BROWN. Thank you, Mr. Chairman, and it is a real privilege and honor to be able to serve with you and our colleagues on the Transportation and Infrastructure Committee during the 116th Congress.

I want to return to public-private partnerships, or—I like to refer to them as private investments in public infrastructure, with the emphasis on public infrastructure. But also let me start by thanking both of you for being here, and thanks for your service in State and local government.

In Maryland we have a number of examples of successful public-private partnerships. I agree with, you know, that school of thought, that you can't use P3s to finance every infrastructure project. Where you have revenue generating facilities, it is probably more likely that you will have a successful project.

We have, for example, on I–95 travel plazas, and the revenue is the retail sales that support the lease payments made by the vendors at those plazas. We have also had successful public-private partnerships at the Port of Baltimore, and the user fees that support the port operators and their lease payments to the State. So that has been a successful one.

And while Secretary LaHood mentioned the silver line to Dulles, we have got the purple line in Maryland, which we think—the jury is still out, but that should be a successful public-private partnership. And there, that is an example—and I know, Mayor, you suggested that water infrastructure may not be a candidate for public-private partnership, but I would suggest that it probably is, because as long as there are rates and there are some infrastructure facilities where user fees and rates don't cover the cost of operating that—that is true for transit, for example, fare box ratios rarely cover the cost—then there is some public subsidy, and availability payment can be made. And that is what we are doing on the purple line.

But my question is—and it may be a followup to one of the questions that was already asked—is there more that the Federal Government can do and should do to really encourage public-private partnerships where they make sense?

Most States, not all, have set up a public-private partnership statutory regime, where the private sector has confidence to make the investments, the public has confidence that there is transparency and accountability, but not every State has. Is there more that the Federal Government can do to encourage States?

And the final part of that question is—and I will just—Mayor, I notice there is something called the West Coast Infrastructure Exchange, a consortium, California, Oregon, Washington, and British Columbia, and are, like, encouraging things like those regional exchanges.

So what do you think we could do better or more of?

Mr. GARCETTI. Absolutely. Starting at the end, that has been a very successful forum to bring best practices together and to come up with the governance models for this stuff. And it has helped to really accelerate the Western United States as becoming kind of the P3 capital of America, that we want to see that happen in other places, too.

You know, it is funny that we talk about P3s like it is something new. The New York subway system was not even P3, it was P1, because they were private when they started, and they became public later because the maintenance piece became too expensive for the private sector, so the public bought them. And I think there is a lesson there to be learned of how we can share that over the long term.

In transit it is the ripest place to do this, especially where the Federal Government—your question was can you do more. Yes, you can write into, I think, this bill allowing it in a protective way that would still keep these public assets, ways that there is some sort of reward for at least having that as an option. I don't think you want to reward P3s over non-P3s, because that is going to be a decision locally. But places that don't even entertain that are missing at least the options on the table.

We have two lines right now that we have had, you know, about 10 different companies come forward to bid on. Some of them want to design it, some of them want to maintain it, some of them want to fund it, some of them want to operate. And as much of those as they can have, the cheaper they can make it, they say.

On the flip side, some people worry, well, if you are operating and maintaining it, is that loss of union jobs? Does that mean, you know, we don't get to build it? So there is real tough political things to wrestle with. But I think at least mandating that folks that are applying for New Starts in transit should have a P3 office is a great way to start that, and to push that forward and give that.

Second, TIFIA loans and the loan piece, as interest rates go up, we will look back at how we are going to finance this. And if we can be cheaper than the private sector, that is another place I think the Federal Government, without losing money, but, you know, loaning it, can be helpful in accelerating P3s.

Mr. WALZ. Well, the mayor's example—and I think giving us the capacity—and the National Governors Association, trying to find creative ways, the Upper Midwest, the Great Lakes regions, of making sure anything you do statutorily allows us to be able to use some of these funds across State lines, working together, beyond the typical ones that are intercity passenger rail, things we are trying to enhance.

But there is a lot of border areas that we share on infrastructure that I think States—again, going back to the question Mr. Carbajal had, I think it is a really, really important one.

The Federal highway system, interstate system, State highways, the bulk of my folks on the roads are out there clear down to the township levels. And their ability to be able to participate is hard. And that is where I don't know at that point.

I think your question is really good. How do we use public-private partnerships in some of these things that aren't these big marquee projects, but they are more things that we need to get done?

Mr. BROWN. Thank you, Mr. Chairman.

Mr. DEFAZIO. Thank you. With that, I would turn to Representative Pence.

Mr. PENCE. Chairman DeFazio and Republican Leader Graves, it is an honor to serve alongside you here on the Transportation and Infrastructure Committee. It is why I came here and ran for office.

Governor Walz and Mayor Garcetti, thank you for being here today. I am grateful for your time.

I am a businessman by background, and I came to Congress to address the challenges facing our critical infrastructure, both in the short term and the long term.

Indiana is proud to be known as the crossroads of America. The infrastructure in our State has contributed to the prosperity of not only Hoosiers, but, as was mentioned by the Governor, all Americans benefit from this.

In Indiana we recognize the importance of modernizing and investing in our aging infrastructure, and we have made progress that we are very proud of. At home we are hoping to build a new shipping port on the Ohio River near Lawrenceburg, Indiana, which will be our State's fourth port. If we are to remain a logistics and manufacturing and transportation hub, we must make infrastructure investment a top priority. We must strengthen existing partnerships with the private sector, reduce the regulatory burden, and give States the flexibility to address the unique needs of their communities.

As members of this committee, I am looking forward to embracing technology and innovation, as you mentioned, Mayor, to address some of our infrastructure challenges. I am optimistic that we can work across the aisle to craft a bill that uses Federal dollars as a hand up instead of a hand out, giving more flexibility to State and local governments.

I have traveled Interstate I–70 my entire life, and just as soon as I cross the State line there is a world of difference in the quality of roads. It is no secret that some States have prioritized their infrastructure needs better than others. And I believe there is a role to be played by the Federal Government to encourage States to make these long-term investments that are so desperately needed. We must ensure that we are rewarding forward-thinking States like Indiana, who continue to be judicious when spending Federal tax dollars.

To the Governor and the mayor, I ask how can we better not punish, as you just mentioned, and encourage and reward States like Indiana, who continue to think strategically and made long-term investments in their infrastructure, versus States that did not?

Mr. WALZ. Well, thank you, Congressman. And I appreciate your passion for the issue, and understand how it does impact our States.

I think we have to do a better job in the States—and I think you see Governors across this Nation doing that—of providing measurable feedback, and in terms of metrics on when we are doing things. This is across the board, whether it is in human services or whether it is in transportation. Things that the public can see, things where they can have dashboards of seeing how much mileage are we getting out of this road, what is the life expectancy on it, how was the planning done, and show that.

Because, again, people want to be reassured that their tax dollars are being spent wisely. We need to do a better job of showing that. And I think the mayor brought up a really good point—is reward innovation. Reward folks who are getting it done in a timely manner. Reward folks who are coming up with new ways of planning this, that are showing good project management, that you can measure those things.

Some States are—not all States are created equal. Some do it better than others, as you stated. Make sure you are rewarding those folks, but at the same time helping those States understand what they can do better to get it up. Because again, it does us no good—and I know it is a—Governors do this all the time, we rank ourselves against others. It does me no good to say I am ranked here, and to heck with what is happening down here, trying to lift everyone up. But it should be done on the merits of how well we are doing, what are the results we are getting for, and can that be replicated elsewhere.

And then learning. I know, as a Governor of this, my first thought is when my folks come to me with a plan—is somebody else doing this right now? And who is doing it better? Go learn from them.

Mr. GARCETTI. Thank you, Congressman Pence. I am proudly married to a Hoosier, and it is my probably second State, so I think I have some in-laws that are in your district, and glad to answer your question and to be here.

I would say three things. One is put some shared funds aside. This is a pool that mandates that it be shared between local, State, and the Federal Government.

Second is make sure it is a fair match. I think previously we had a plan that was going to put a 20/80 match, so 80 percent from local or State, and 20 percent from Federal Government. That was just a dog that won't hunt, it won't go anywhere. We are not going to be able to see that leverage. It has to be a fair match of something, whether that is 50/50 or not.

And then third, don't grandfather people out who have already stepped up to pass local and State measures, because that is going to be very important. Don't make the poor poorer and the rich richer, but don't also punish those. So whatever legislation, don't just encourage people to pass it in the future. Make sure they are not grandfathered out if they have done it in the recent past.

Mr. DEFAZIO. OK, thank you.

Mr. PENCE. Thank you. I yield my time, Mr. Chairman.

Mr. DEFAZIO. Great. Thank you. And now the Representative from New York, Representative Espaillat.

Mr. ESPAILLAT. Thank you, Mr. Chairman. As this is the first opportunity I get to speak before the committee, I want to thank you. I look forward to working with all the Members on these very pressing issues.

Governor, Mayor, welcome, and thank you for your testimony.

First I want to say that, as New York City's only member in this committee, we have great needs in the city of New York for infrastructure and transportation projects. I represent Harlem, East Harlem, Northern Manhattan, and the Northwest Bronx. And I like to take this time to highlight some of those priorities.

First and most importantly, the mass transportation system. As you know, New York City's mass transportation system is really the heart, the engine of economic activity in the city, including our financial services community, which is, I think, in many ways the heart and soul of our revenue-producing machinery in the State.

And so, in order for us to remain competitive, in order for the city of New York to continue to be a leading city in many sectors of our national economy, we must have a state of the art—we must have a reliable and competitive transportation system.

And, of course, much has been said about our airports. We all know the line from Vice President Biden, when he landed at LaGuardia Airport. He thought he landed in some other country. And of course, Penn Station is a living nightmare.

I happen to be pushing for the extension of the Second Avenue subway, which is a transit desert in my part of the district in East Harlem. We already have the first phase. That is a project that has been around for 100—literally, 100 years. We were able to do this before, but now, all the sudden, we are wrestling with how to do it. And obviously, it is all about the money. So that is why I am happy to be part of this committee and advocate for the Second Avenue subway, for additional funding for the MTA, and the subway system.

The subway system is, in many ways, a wear-and-tear system and a deep pocket issue. It is like your brake pads, you know? You can't drive your car for 100,000 miles and think that you are never going to have to change your brake pads. You have to. And if you don't, guess what? You have to pay for it, right? Because you are going to lose your front end, right?

And so this is important. Penn Station, as I said. The Gateway project is an important one, not only for New York City, but for the region. And so these are some real challenges in infrastructure and transportation. I dare to say that we got to be bold and creative when we talk about infrastructure and transportation.

Infrastructure is also a public housing system, because we are the landlords, right? Infrastructure is also a broadband and 5G. And if we are really going to build infrastructure, we are going to do this major infrastructure bill with $1 trillion. I Googled trillion, and I didn't get anything back that I could understand.

But we got to do it green. It is not just about doing it. How could we do it and we could feel proud about it in the rest of the world? You have all traveled across the world. It is kind of scary and sorry, you know, what we have in our country. We are no longer the leaders in infrastructure. We got to be the leaders. And in order for us to be the leaders, we not only got to build, we not only got to pass the infrastructure bill, but we got to do it the right way. And the green way is the right way. And it will provide jobs, opportunities, and it will be resilient, as well.

So I think these are the things that we are going to have to debate in this committee, obviously. And how do we get the money, I think, is the bottom line.

But I thank you, and I have some questions, but I think I—New York, we all know how—you know, leave it to a New Yorker, we will overextend ourselves. I won't have much to say, but that I am the Mariano Rivera of this committee. I will probably be the last one, but I will close the game down if you give me an opportunity. All right, thank you so much for your testimony.

Mr. GARCETTI. Could I say one quick thing in the 30 seconds?

Mr. DEFAZIO. OK.

Mr. GARCETTI. Link housing dollars to transportation dollars. Our Governor just did that, and he said, "You are not going to get transportation dollars in our State if you are not building the housing that is required," because we know when housing isn't close, that is what causes traffic, and it is the wear and tear on infrastructure. So anything you do to put that message through would be very forward-thinking.

Mr. ESPAILLAT. Thank you. Thank you both.

Mr. DEFAZIO. Thank you. Making an announcement here, the mayor has to leave at 1 o'clock. There are a number of Members that have been waiting to ask questions. If you don't get to ask a question of this panel, you will be first on the next panel. By—you know, in lieu of having been inconvenienced.

[Laughter.]

Mr. DEFAZIO. So, with that, I would move on quickly to Representative Katko.

Mr. KATKO. Thank you, Mr. Chairman, and thank you for this hearing today. It has been terrific.

And Governor, it is nice to see you again. We have had a lot of conversations in the locker room over the years, and it is—I miss those, and I congratulate you on your new position. And thank you, as well, Mr. Mayor. You have both been terrific witnesses. As you can see, this is a gigantic committee. And the way you have hung in there and been very professional and thorough in your answers is greatly appreciated.

The conversation today makes it clear to me that infrastructure is badly needed, infrastructure reform, and sweeping infrastructure reform. It is also clear to me that it is going to take political courage from both sides of the aisle. So I challenge my colleagues to do just that in the next few months, and to get something done and get something really done for the American people.

Last term, Governor and Mr. Mayor, myself and Elizabeth Esty, the former congresswoman from Connecticut, drafted a thorough report from the Problem Solvers Caucus, which is an equal number of Democrats and Republicans—which I think is exactly what this is going to be about, bipartisanship—about infrastructure reform. And it really had three buckets to it.

One was streamlining the administrative processes and the funding processes that are so costly and ridiculously burdensome to Governors and local municipalities.

The second thing was to have reform within the highway bill, the highway fund.

And then it touched on the other things, such as the Harbor Maintenance Trust Fund, the airport fund, rural broadband, and all those things that need to be done. One of the overarching themes of that is that if you have a fund, it should be a fund that is not raided. If you have a fund, it should be a stand-alone fund.

But with all those things, I think it is apparent to me that the highway fund is where you start. And with the highway fund we are plugging huge deficits that are getting bigger every year, because we have not properly funded it for decades. So that is where I want to focus on today.

And in my report—and I commend it to both of you, and I ask you to take a look at it—and I commend to all my colleagues, by the way—in that report we look at three things within the highway fund: number one is the adequacy of the current gas tax; number two are there alternatives to look at for the vehicles on the road, such as, you know, trucks and freight, and how that should be handled; and, number three, the hybrid issue and now the emerging electric issue, with vehicles that are going to be riding the roads and not paying anything if they are not gasoline powered.

So I guess my question to you is we all agree—and we have been dancing around the elephant in the room—is tell us what it is that you would suggest if you could wave a wand and say, "Here is how I would fix the highway fund." Tell me what you would do with some specificity on how to fund it. We all know we need it. Tell us how you would fund it.

Mr. GARCETTI. I think I would—I don't speak for every mayor, other—the U.S. Conference of Mayors and the National League of Cities, I believe, as well, has endorsed the gas tax. We would—I would put in a gas tax, find a formula to get a pilot in for vehicle miles traveled, and then wean from the first to the second over time, as we electrify every vehicle in this country, which is going to happen. I mean I think there will be some niche, other vehicles, but 20 years from now we will say, "Huh? What were we thinking?" Everything is going to be moving towards that, I believe.

I would also then—one thing I would add to that, too, is I would start—I think as has been discussed—who are the willing partners on vehicle miles traveled? I think that is in the private sector. I think that is with the trucking industry and others, who are saying that they would be willing to do that.

And then, as we wean, I think it will be, at the same time, the technology changes, as well. So probably, you know, a good 5 to 10 years of continuing gas tax, but have a formula that really looks at how much do we want to have, and works backwards, and allows you to have the triggers to move more quickly if the technology is moving, or to slow it down if it is not.

Mr. KATKO. And I will just reinforce what you are saying. When we were formulating our report I was stunned by talking—we talked to hundreds of stakeholders in all different areas. And the trucking industry in particular is the biggest advocate for that, because they have done studies which show if we pay more—but it would be offset by the monies saved from the maintenance and wear and tear on our vehicles. So you are right about that.

Mr. WALZ. Well, Congressman, thank you for doing the report, and thank—you have got a long-time reputation here of trying to find solutions, rather than find the divisions. And I am grateful for that.

This is one example of that. I think the mayor laid this out. The National Governors Association doesn't have a hard position on this. Their position is there are multiple funding streams, asking these questions you are asking.

As a Governor of Minnesota, gas tax is a piece of it. I think the momentum of moving towards electric vehicles, we are looking at it. And, you know, one of the things was we wanted to encourage people to buy electric vehicles, so we used to give tax rebates and some of the offsets. Now we are thinking about do we charge them more when we register their vehicle? That is a good thing, because we have evolved where there is more on the road.

But I think your approach to this, and the way you are all thinking about it is this is going to be multifaceted. It needs to be fair, and it needs to be forward-looking.

What I will say on this is that this is going to take us time to get to that point. The gas tax is still fundamental and core at this point. It won't be in the future, but it has to be part of this discussion.

Mr. KATKO. Thank you, gentlemen.

Mr. DEFAZIO. Thank you.

Representative Stanton?

Mr. STANTON. All right. Thank you very much, Mr. Chair. I am excited to serve on this committee. The work of this committee is going to be incredibly important. Passing an infrastructure bill, investing in America's infrastructure is critical to cities and communities all across the country. And we can't accomplish our goals as a country, we can't accomplish our goals in terms of job creation, economic development, we can't accomplish our goals when it comes to climate change and fighting the impacts of climate change, and climate change adaptation unless this committee successfully does its work and reaches bipartisan agreement in passing a significant infrastructure bill.

You know, before I was elected to Congress just a few months ago I served as a mayor. I was a big-city mayor, mayor of Phoenix, Arizona, the fifth largest city in America. And I had the honor to work closely with Mayor Garcetti in the U.S. Conference of Mayors. And I can tell you, just as he has shown off today as he always does, he is one of the most well-respected mayors in the United States of America, a leader among the mayors.

So, Mayor, thank you for being here and all you do to support cities like Phoenix across America with your great work.

In the city of Phoenix we understand this concept, that it is tough to go it alone. The Federal Government in the last few years has not been supportive of cities and communities. We had to go it alone. As mayor I put on the ballot a significant infrastructure investment, 35-year, $32 billion investment in light rail and road improvements, in dial-a-ride, in buses, and walkability and bikeability, without the expectation of Federal support.

Mayor Garcetti did come and visit me in Phoenix when we opened our northwest extension of our light rail line, which is a great extension. Not a single Federal dollar in that line. The reality is that is good, but not good enough. Federal Government needs to be a partner with our local governments if we are truly going to be successful. A city like Arizona—Phoenix in Arizona, the fourth fastest growing State, we need that Federal partnership.

And, of course, when it comes to water and water infrastructure, we are in a drought. It is a significant drought. And the ability to move water more efficiently is critically important. We are going to need Federal partnership to get her done. So I can't wait to work in a bipartisan way to get it done. It will not be easy. It will not be inexpensive.

So, Mayor, I want to ask you. You know, U.S. Conference of Mayors, you personally have been involved in helping to build support. But I still think we haven't done a good-enough job of making the case to the American public as to why this investment is so important. Advise about how you and other mayors in particular—because mayors are still the most well-respected level of Government, cities and mayors—what they can do to help kind of build the case with the American people to support the work that this committee is going to do.

Mr. GARCETTI. Well, thank you. And you look great up here, Greg. It is great to see you, Congressman. It has been so much fun serving with you as a mayor, and I am so excited we have one of America's great mayors now serving in this United States House of Representatives.

I also want to give my apologies to the front three here, Ms. Davids, Mr. García, Mr. Rouda, because I have to meet with—my great other passion on homelessness—with Chairwoman Waters, which is why I am going to be—unfortunately, have to leave a little early, before your questions. But if you didn't hear, you are going to be first on the queue for the next ones, if not.

Make it visceral is the answer. I will tell you a quick story with Measure M. We raised $10 million to run a campaign to pass this transportation infrastructure initiative in Los Angeles. We ran 2 weeks of ads. We need two-thirds vote in California. You might think of us as a liberal State, but we are very conservative when it comes to passing taxes; you need a two-thirds vote. And we were polling at about 63, 64, 65 percent, so we knew it was going to be a tough lift.

We ran 2 weeks of ads that were the typical infrastructure ads. Look at all these people paving streets, moving. Look at all the jobs. We are going to reduce your commute. Trains, roads, all that stuff. And 2 weeks into spending $5 million, we went down to 61 percent. And I said, "Oh, no. This thing is going down." Put all my political capital on the line, built that up for 4 years, raised more money, called in every favor from everybody I ever knew.

And my campaign consultant said, "Let's try this differently. Let's get in your car and just drive. No script, and I will just film you."

And there we were, on Saturday afternoon in Los Angeles, and I said, "Here we are in rush hour traffic," and I turned the camera. It was stopped traffic. The only problem is it is Saturday afternoon. And everybody in Los Angeles got that. It wasn't about the politician saying trust us, this miles, this much, it was like they got being stuck in traffic.

And what I said when I opened I will close with, as well. We offer help on this. We are raising also hundreds of thousands. It will be in the millions of dollars to help support you, Mr. Chairman, Ranking Member, this entire committee, get the message out throughout America in districts. America's mayors are ready to do that. Accelerated for America, which is State, local officials, it is the private sector, it is Republicans, it is Democrats, it is labor, we will get this done.

So whatever you put out there, we are going to be some wind behind those sails. But keep it visceral, keep it human. Don't talk about policies and statistics. Get those done in here. But when we start selling this, make it a human issue.

Mr. WALZ. If I could, Mr. Chairman, I would echo that, too, Congressman. Leverage us. This Nation's 55 mayors of the States and Territories will be here on the 23rd of February at a roundtable with the sole purpose of saying we are ready for you to do this, we are there to get your back, we are there to cover it and take the message. So we can do this.

Now is your time. I think I heard it in here. Be great. You have got the opportunity to do it.

Mr. DEFAZIO. Tim, thanks. I am going to interrupt, because we are going to have one more question from that side.

Mr. Graves?

Mr. GRAVES OF LOUISIANA. Thank you, Mr. Chairman.

Good to see you. Did you get your miles in this morning?

[Laughter.]

Mr. GRAVES OF LOUISIANA. Oh, gosh, sorry about that. All right. Well, congratulations and welcome, Mayor. Thank you for being here.

I wanted to bring up three topics and just ask you to respond whichever you feel you have the most expertise.

Number one, the Federal Government today, we have infrastructure programs related to drinking water, wastewater, internet and broadband, housing programs, energy programs, disaster response, navigation, roads and bridges, you name it. We have an infrastructure program for everything. And the reality is that we come to the table and we prioritize in a very dynamic manner.

You may have an administration that likes something one year, you may have a Congress that likes something the next. It changes. We are not a reliable Federal infrastructure partner, because we have so many programs.

So first question is do you believe that we should look at which programs truly have a Federal nexus, prioritize those, divest ourselves of some of the others and perhaps let States and local governments be the reliable partner, reliable leader on those other things?

Second issue is oftentimes, as this hearing notes, we believe that money is the solution to problems. And in some cases, it is. But in other cases—Mayor, as you have done a great job discussing—you have regulatory processes, you have planning processes.

Our project development and delivery process is flawed at the Federal level, and we spend an awful lot of money going through that, and it doesn't ultimately deliver projects. In many cases, we are working on projects now that were conceived in the 1970s and 1980s. We are building projects—we are building solutions for the 1980s. You both talked about how we need to be looking forward, not looking backwards.

And we are not taking advantage of maximizing the efficiency of existing infrastructure, and using the smartest planning mechanisms.

Number three, the idea here is that there is a cost of inaction. And so, presumably, there would be a return on investment for action. You have both made reference to P3s. And how do we best allow for monetizing the investments, monetizing that success to where we can expand upon or incentivize P3s to be a complementary partner to the Federal Government in the projects that we build?

Mayor, you and I served on a panel on infrastructure last year some time, and I made a statement there and I am going to say it again: Good projects are already paid for. And what I mean by that is that we are spending money that could be building the projects, but oftentimes the money is being spent on inefficiency, on waste, higher fuel cost, as Mr. Katko noted, maintenance, and other things. So——

Mr. GARCETTI. A few things. One, the categories, yes. Streamline them. Everybody is for that until you take their category away.

Now, the reality is there is a lot of stuff that already is devolved to State and local government. Water, as we talked about, is one of those things. We are overwhelmingly—I think it might even be higher than 89 percent. Most of that is just done at the local, the State level, already.

When it comes to transportation, I always worry a little bit about that, because it is like, well, maybe transit we shouldn't be in the business of, but the reality is in America's big cities we won't get transit done without that Federal match staying in there, and New Starts, and other things.

So, in general, yes to the first piece. But specifically, we would have to look at that. And if you have proposals, we are more than happy to give you that feedback. There are probably some things we could kill off to add more to other places, especially as technology has changed.

Secondly, we have said it and we will say it again and again. Whatever you can do to streamline processes, absolutely. That time is money. Anybody in the construction trades knows that that is probably the single biggest factor that is in our control. Other things, like the state of the economy, how much we have to pay our workers, all that, is really not always in our control. But our bureaucracy and our processes are. So I think both those are very important.

Third, with the P3s, I would say that you are right, good projects attract a lot of attention. But the way we have made it work is we have tried to make sure that we have an honest and sober approach. We know there are certain lines and things that we are doing that are very attractive to the private sector. They love to run or own airports. They love to do certain transit lines when they know that there is a match. And there are other things that they won't touch, because they think it is the wrong neighborhood, or it is the wrong mode, or it is too rural, or it is too urban, or whatever it is.

So I think as long as we have it as one of the arrows in our quiver, and we really expand—that we need every municipality, every State to have an office that can do P3s, that is the right thing to put out there, rather than mandating certain modes always need to be P3s, or we need to look at those first. Giving us that flexibility, but mandating potentially that we all have to have that somewhere in our arsenal is probably the best way forward.

Mr. WALZ. I will just add one closing thought, Congressman. And again, the—yes on the streamline. Yes, make it easier.

The mayor said something really profound when he was talking about housing and transportation. One of the things about being a Governor is you get to do the budget. And the other thing is it has to be balanced. So you get to be really smart, and you can't silo up. So I asked my education department here if I can't spend any more money I can't have kids coming to school who sleep in cars, 17 percent of them, the night before. So how does our housing budget impact our education budget? How does our education budget impact our corrections budget? And start thinking across the lines like that.

So you are right on this. All those funding streams, I think, could—again, if we take it away from—what I want is one thing. But if it works holistically, do it that way. Saves time. You came here to make a big difference. You have an opportunity in this transportation bill to do it.

Mr. DEFAZIO. OK, I thank the panel. Thank you, Mayor. Thank you, Governor. I appreciate it. I appreciate you staying a few minutes over to accommodate some complaints from the other side.

We will stand in recess for 5 minutes while the next panel assembles.

[Recess.]

Mr. DEFAZIO. The committee will come back to order. And we want to expedite things for this panel, so we want to get going.

I want to thank you for coming to testify. I have on this next panel Mr. Richard Anderson, president and CEO of Amtrak; the Honorable Eric K. Fanning, president and chief executive officer, Aerospace Industries Association; Mr. Lawrence J. Krauter, chief executive officer, Spokane International Airport; Ms. Angela Lee, director, Charlotte Water, on behalf of the Water Environment Federation and the National Association of Clean Water Agencies; Mr. Rich McArdle, president, UPS Freight, on behalf of the U.S. Chamber of Commerce; Ms. Kristin Meira, the executive director of the Pacific Northwest Waterways Association; and, last but not least, Mr. Larry I. Willis, president of the Transportation Trades Department of the AFL–CIO.

With that, the first witness, which is Mr. Anderson, would be recognized.

TESTIMONY OF RICHARD ANDERSON, PRESIDENT AND CHIEF EXECUTIVE OFFICER, AMTRAK; HON. ERIC K. FANNING, PRESIDENT AND CHIEF EXECUTIVE OFFICER, AEROSPACE INDUSTRIES ASSOCIATION; LAWRENCE J. KRAUTER, A.A.E., AICP, CHIEF EXECUTIVE OFFICER, SPOKANE INTERNATIONAL AIRPORT; ANGELA LEE, DIRECTOR, CHARLOTTE WATER, ON BEHALF OF THE WATER ENVIRONMENT FEDERATION AND THE NATIONAL ASSOCIATION OF CLEAN WATER AGENCIES; RICH MCARDLE, PRESIDENT, UPS FREIGHT, ON BEHALF OF THE U.S. CHAMBER OF COMMERCE; KRISTIN MEIRA, EXECUTIVE DIRECTOR, PACIFIC NORTHWEST WATERWAYS ASSOCIATION (PNWA); AND LARRY I. WILLIS, PRESIDENT, TRANSPORTATION TRADES DEPARTMENT, AFL–CIO

Mr. ANDERSON. Thank you, Chairman DeFazio, Ranking Member Graves, and all the members of the committee. I am Richard Anderson. I have the privilege of serving as the CEO of Amtrak. I am here on behalf of about 32 million people that use Amtrak every year, and 20,000 employees.

Obviously, infrastructure investment is core to the Federal Government and its role in our constitutional system, so we appreciate your leadership.

Amtrak provides vital infrastructure services. We own, on behalf of the Federal Government, the Northeast Corridor, the railroad from Washington, DC, to Boston and out to Springfield. We also own and operate critical rail infrastructure around the United States.

On the Northeast Corridor we serve 8 commuter agencies, from Virginia up to Massachusetts, that support 800,000 trips a day, people going to work, visiting their families, and otherwise supporting 20 percent of the GDP of the United States up and down the corridor.

In addition, Amtrak, we think of ourselves as the vascular system of rail transportation in America. If you look at all the services and infrastructure we provide around the United States, we support 300 million intercity and commuter rail customers in 46 States, and serve 500 cities across the Nation.

We cover about 95 percent of our operating costs—probably the most efficient passenger railroad in the world—with the goal of becoming break-even on operating income in the next 2 years. But we must have investment on parity with other transportation modes in the United States for rail infrastructure.

Investment in intercity passenger rail infrastructure is really going to become—it already is in many places, like San Diego to L.A. and New York to Washington, but it is going to play a greater and more critical role in solving the congestion problems in major metropolitan areas. If you look at the demographics of America, our preferences are changing. Ninety percent of millennials live in 11 megaregions of the United States, and they use ride sharing and mass transit, not individual cars. We see this when we see Amazon picking its headquarters in locations where there is significant commuter rail. That is because it is the most efficient and environmentally sensitive way to move people in dense urban areas.

We are already seeing these changes: 85 percent of our ridership is in dense metropolitan areas. And our highway system cannot and will not support the 100 million additional people that will live in the United States by 2050. We have 57,000 miles of interstate highway and, over time, we can't really add to corridors like I–95, I–90, and I–5.

So the bottom line is, along with the infrastructure investment in surface transportation, we must include rail, because we are the most efficient way, in partnership with cities and States, for trips around 150 to 300 miles.

We serve multiple stations, as we do up and down the corridor, and as we do in dense corridors like Milwaukee to Chicago, San Diego to Los Angeles, where, because of traffic congestion, we have become the preferred mode of transportation. The best example of that is New York City to Washington, where our market share versus air has grown from 37 to 76 percent of the combined market.

So the bottom line is we urge you, as part of your deliberations, to include passenger rail on parity with the other surface transportation investments, as we are the most efficient way to really provide efficient transportation in the 100- to 300-mile megaregions around the United States.

In fiscal year 2018 we made about $1.4 billion in capital investments. But the biggest infrastructure need on our network is the Northeast Corridor. We have approximately $30 billion of backlog of investment. Our youngest major asset on the Northeast Corridor is the Bush River Bridge, and we put it in operation in 1913. We have gotten our money's worth out of all these assets, and it is critical that we now undertake the major investments to replace the Hudson River Tunnels and the important bridges up and down the Northeast Corridor.

We need a new paradigm for Federal investment infrastructure with our host railroads and our partners in State and local governments.

And, most importantly, please ride Amtrak. Thank you.

[Mr. Anderson's prepared statement follows:]

Prepared Statement of Richard Anderson, President and Chief Executive Officer, Amtrak

INTRODUCTION

Good morning, and thank you Chairman DeFazio, Ranking Member Graves, and all of the members of this committee for holding this important hearing to discuss the urgent need to invest in our Nation's infrastructure.

My name is Richard Anderson, and I serve as the president and chief executive officer of Amtrak. I started as CEO in 2017 and prior to that I served as the CEO for Delta Air Lines, CEO for Northwest Airlines, and the president of Commercial Business at United Health Group. It is my pleasure to testify before you today on behalf of our 20,000 dedicated employees.

Today, I am going to discuss why we should not delay investment in intercity passenger rail and the consequences if we do wait; I will describe some of the major infrastructure, equipment, and stations projects Amtrak plans to advance over the next 5 years; and I will provide context for why intercity passenger rail has a bright future if we make smart investments and decisions as we prepare for the next generation.

THE COST OF DOING NOTHING

Unseen by many, and unconsidered by most, the structures and assets that make up America's infrastructure lie at the heart of our economy and enable every one of us to live our lives in safety and comfort. Without our transportation, energy, and communication networks, we would not enjoy the freedom and convenience to raise our families, conduct our businesses, and live our lives as we do.

We owe a great debt to generations past for making significant investments of time, talent, and treasure to build these networks. Americans across the country are relying on Federal leaders in Washington to help maintain and, where necessary, expand these networks to protect and improve the Nation's economic and social health and our collective defense. Generations to come are depending on us to be careful stewards of these assets.

As the American Society of Civil Engineers observed in its last report card, passenger rail service, like nearly all modes of transportation, depends on some portion Government funding for its capital needs. As an asset-intensive industry with long-lived infrastructure, capital funding is the key ingredient for reliable service and effective networks. Yet, steady, reliable capital funding is precisely what America's intercity passenger rail network does not have, and that shortcoming is at the root of the problems I plan to cover in remarks today.

Without this sort of reliable funding over the five decades of Amtrak's existence, significant portions of our infrastructure, stations, and rolling stock have become outdated and aged beyond their useful lives. At the same time, the network's assets are now being asked to accommodate far more traffic than they were designed to handle, making it more difficult to ensure safe, reliable, on time service.

In an era where perpetual highway congestion and environmental concerns highlight rail's compelling advantages, we should be discussing the significant upgrades to achieve speeds and levels of service found around the world today. To do that, we need adequate and stable funding to address our insufficient and outdated passenger car fleet and the railroad bridges, tunnels, and supporting systems that date back to the 1930s, the 1910s, or even 1873 and are in clear need of replacement.

Every day that goes by without a funded plan to address these projects brings us 1 day closer to a having an irrelevant transportation system stymied by unreliable structures creating reduced speeds and capacities, resulting in prolonged commute times and travel delays. These disruptions will impose significant costs—to individuals, to neighborhoods and cities, and to the Nation—all when the use of intercity passenger rail should be increasing across our country.

The Northeast Corridor (NEC) is a prime example of the benefits of intercity passenger rail, as well as illustrate why delayed investment can have a profoundly negative impact to the region. The NEC rail network between Washington, DC, and Boston, Massachusetts is an engine of economic activity for the United States in the delivery of workers to jobs, businesses to clients, goods to market, and people to their friends, family, and leisure activities. The NEC region is home to more than 51 million people and four of the ten largest metropolitan areas in the country. The NEC connects interdependent markets that collectively are a national and global force. Its economy is the fifth largest in the world, ahead of France and just behind Germany. Its commuter rail and Amtrak intercity services provide 820,000 trips each day, moving a workforce that contributes more than $50 billion annually to the national economy. Job density is even greater around the NEC's rail stations. Within 1 mile of the NEC stations, the average employment density is 680 times higher than the U.S. average. Rail connections not only provide residents of outlying communities with access to a broader range of jobs, but it also provides them with access to better paying jobs. Commuter rail riders on the NEC earn, on average, approximately twice the national average.

Passenger rail is a vital artery for this region. Amtrak carries more intercity passengers within the Northeast than all airlines combined. Service disruptions on the NEC caused by infrastructure failures, rail traffic congestion, and other factors already cost $500 million per year in lost productivity. Without higher levels of capital investment, those losses are likely to grow. An unexpected loss of the NEC for 1 day alone could cost the Nation nearly $100 million in transportation-related impacts and productivity losses, roughly the daily economic output of cities like Winston-Salem, North Carolina, Portland, Maine, or Boulder, Colorado. Expert analysis suggests that should the NEC not receive the necessary investments to accommodate anticipated growth by 2025, the country will bear an annual $1.2 billion cost in additional costs for the highway and aviation systems. If long-term, sustained, NEC investments are made, they will repay us with an annual $8.2 billion gained by 2040 in savings for the highway and aviation systems.

All one needs to do is visit New York Penn Station, Chicago Union Station, or Los Angeles Union Station at rush hour to see how infrastructure enables careers, fuels businesses, and fosters opportunity. Yet at the same time, we have seen how an infrastructure failure can dramatically impact these major centers of economic activity. For example, a 2017 track failure in New York Penn Station caused a low-speed derailment, and subsequent investigation led Amtrak to launch a significant work program. For decades, Amtrak has maintained and repaired this aging infrastructure, some of which dates to the 1970s, while the demands placed on it have grown significantly. The 2017 examinations made it clear that full replacement was required. During the summer of 2017, Amtrak kicked off its Infrastructure Renewal at New York Penn Station, and continues it to this day. The Infrastructure Renewal program is one element of Amtrak's plan to modernize stations, infrastructure, and equipment on the NEC. I am proud to say Amtrak completed this work so far on schedule, on budget, and with no significant injuries.

As important as the NEC is for Amtrak, the hub for our national network is Chicago, which is our fourth busiest station, with 3.3 million boardings and alighting in FY2018. Eight of our 15 Long Distance routes and nine of our 29 State-Supported routes start or end in Chicago. Combined, this represents about 55 trains per day there and these trains carried 5.2 million people in FY2018. These customers are dependent on the smooth functioning of our facilities in Chicago, whether or not they actually travel in or out of the station.

Intercity passenger rail delivers many similar benefits to cities outside of the NEC, too. Turning to Chicago, where Amtrak has joined with the U.S. Department of Transportation (USDOT), the State of Illinois, the city of Chicago, Metra, and the Nation's freight railroads to form a first-of-its-kind partnership: the Chicago Region Environmental and Transportation Efficiency Program (CREATE). Since 2003, the CREATE Partners have worked to enhance the quality of life for Chicago area residents and the economic health of the Nation by investing in critically needed improvements to improve the efficiency of the region's commuter, passenger and freight rail infrastructure while mitigating community impacts. CREATE calls for $4.4 billion in infrastructure investment that over a 30-year period will generate an estimated $31.5 billion in economic benefits. Some of these benefits are already being realized with the projects constructed to date.

Further west, rail has become an increasingly integral part of California's transportation system and will play a key role in accommodating the required growth in the coming years. Amtrak operates more than 70 intercity passenger trains per day in California, serving 5.6 million boardings annually, up from 3.6 million a decade ago and now starting to approach our *Northeast Regional* service passenger counts. Additionally, California commuter rail ridership, some of which is operated by Amtrak, grew to nearly 33 million trips in 2016, up more than 50 percent from 21.6 million trips a decade earlier. These rail services connect to California's urban transit systems, which provided 1.5 billion trips in 2014.

To gain a sense of the scope and importance of our State supported trains, it is worth remembering that Amtrak partners with 21 agencies in 18 States to operate 29 State supported routes. In 2008, Section 209 of PRIIA (spell out if necessary, depending on where this goes) required States to fund all routes less than 750 miles in length using a single, jointly developed, standardized cost-sharing methodology. This methodology became effective in October 2013. Together, State supported carry 15 million passengers annually, almost half of all our customers. This number has grown by two-thirds over the last 20 years, and this growth shows every sign of continuing.

The trains that we operate under these agreements can be found across the country, from west coast where you can find the Cascades service in Oregon and Washington, and in California the *Capitol Corridor*, *Pacific Surfliner*, and *San Joaquins*. In the Midwest, Illinois and Wisconsin support the *Hiawatha*, Illinois and Missouri support the *Lincoln Service*, Illinois operates the *Carl Sandburg*, *Illini*, *Illinois Zephyr*, and the *Saluki*, Indiana supports the *Hoosier State*, Michigan supports the *Blue Water*, *Pere Marquette*, and *Wolverine*, and Missouri runs the *Missouri River Runner*. Further south, Oklahoma and Texas combine to run the *Heartland Flyer*.

In the Northeast, the *Downeaster* runs from Maine down to Boston, Vermont and Massachusetts support the *Vermonter*, Vermont and New York run the *Ethan Allen Express*, Massachusetts and Connecticut cooperate on service to Springfield, and New York operates the *Adirondack*, *Empire Service*, and *Maple Leaf*. Moving south, Pennsylvania operates the *Pennsylvanian* and the *Keystone Corridor*, Virginia supports trains that run from DC down to Newport News, Norfolk, Richmond, and Roanoke. Finally, North Carolina supports both the *Carolinian* and the *Piedmont*.

This growing network has seen recent extensions in Virginia and increased frequencies in Connecticut, Maine, Massachusetts, and North Carolina. Additional growth in 2019 is planned in California, Massachusetts, Oregon, Virginia, and Washington. A little further out, we anticipate expanding in Illinois, Kansas, Oklahoma, Pennsylvania, Texas, Vermont, and Wisconsin, and restoring service to the gulf coast between Mobile and New Orleans.

Beyond that, there are numerous markets where either the introduction or expansion of service makes sense and significant local interest has been expressed. Examples include Coachella Valley, the Front Range, Illinois's Quad Cities, the Twin Cities, Indiana, and south of Richmond to Raleigh.

PLANNING FOR THE FUTURE

In addition to the infrastructure challenges discussed today, our transportation system is facing unprecedented strains from several other important factors, including: population growth and urbanization, changing travel habits and demand, technological disruption, limited capacity, and network inefficiencies. Amtrak and intercity passenger rail can help, but to do so, Amtrak must modernize our passenger equipment, update our products, and expand our network. With a stronger foundation, we can provide more value to the Nation.

If you look at today's Amtrak route map, it looks eerily similar to the one created in 1971. Yet, this Nation has grown and changed during this time period, and this is expected to continue, and in fact accelerate, for several reasons. Population and economic growth, and the continuous trend over the last 20 years towards urbanization, are driving congestion and demand in major metropolitan areas and the corridors that connect them. In particular, the millennial generation, set to become the majority of the U.S. population this year, is changing the overall travel landscape with their preference for flexibility, constant connectedness, and affordability. While highways and air capacity is limited and performance is likely to get worse for these modes, intercity passenger rail can help provide a solution for these future travel demands. This pressure appears to be inevitable.

It is projected that the Nation's population will grow to between 400 million and 450 million by 2050. It is anticipated that much of this growth will be in urban areas. We have already seen this growth trend begin in the 20th century; for example, the population of rural America has stayed relatively flat, but the urban population has exploded during this same, increasing as a percentage of the total population from 45.6 percent in 1910 to 80.7 percent in 2010. To be clear, this urban growth is not limited to the Northeast; it is actually happening at higher rates in metro areas outside the Northeast like the South, Mountain West and West.

Unfortunately, many of these "megaregions" are underserved by intercity passenger rail. Just look at a map and you can see glaring gaps in Amtrak service to cities like Atlanta, Houston, Dallas, Orlando and Tampa, Denver, Salt Lake City, Las Vegas, Phoenix, Nashville, Austin, Cincinnati, New Orleans, and Birmingham. While some of cities are served by Amtrak, they only receive daily or tri-weekly service as part of our Long Distance network. These trains can only provide limited utility connecting such major population centers to adjacent cities and towns within intercity passenger rail's "sweet spot" of 400-mile corridors or less because of the limited frequencies, often uncompetitive trips time, and very poor on-time performance, which only average 50 percent, owning to poor performance over many of our host freight railroads. The demand is clearly there for additional short corridor service throughout the U.S, which includes both additional frequencies for existing routes and establishing new routes between city pairs.

This is reinforced when you look at where Amtrak is most successful today. Approximately 85 percent of Amtrak's ridership comes from the top 100 metro areas. Further, approximately 96 percent of Amtrak trips are less than 750 miles in length. In fact, the vast majority of our riders' trips are less than 250 miles. The present network simply does not fit the future.

I mention this because in order for Amtrak to grow corridor service and better serve the Nation, we must confront several challenges head on. First, investment in infrastructure, equipment, and stations, similar to what has been discussed today, is critical to growth of intercity passenger rail. Second, the current process of negotiation with our host railroads has often made it very difficult for Amtrak to add frequencies and new routes; this too must be addressed if passenger rail is to respond to the growing demand. The reauthorization of the Fixing America's Surface Transportation (FAST) Act creates both the opportunity and the necessity to rethink the role of intercity passenger rail in the national network. We want a strong partnership with Congress and other stakeholders and later this year Amtrak plans to propose a comprehensive reauthorization proposal for your committee to consider. Together, there is a bright future ahead for intercity passenger rail in the United States.

Now, as America needs more from its rails than ever before, I need you to consider these structures, to grasp their necessity, to learn their limitations, and to work with us to envision a new generation of infrastructure that will serve the country for future generations.

Having tried to convey the importance of this topic, let me shift to a review of the sorts of assets Amtrak requires to fulfill its mission. When railroaders speak of infrastructure, we usually include three categories in that term: fixed assets like bridges, tunnels, and our rights of way; rolling stock made up of our locomotives, passenger cars, and trainsets; and our stations. For many outside of our industry, fixed assets are the most easily understood category, so I will start there.

FIXED-ASSET INFRASTRUCTURE

Amtrak owns and/or manages infrastructure nationwide with an estimated replacement value of $75.6 billion. Amtrak owns and operates 363 route-miles (or 1,169 "track-miles") of main line infrastructure on the NEC main line connecting Washington, DC; Philadelphia, Pennsylvania; New York, New York; and up to the Massachusetts/Rhode Island border. Amtrak also owns branch lines of the NEC, is the responsible infrastructure manager for long-term leased infrastructure on the Empire Line, and Amtrak is also responsible for track infrastructure assets nationwide, including the segment between Porter, Indiana and Kalamazoo, Michigan; in Hialeah, Florida, and yard tracks and sidings in cities across the country.

This portfolio of assets has served the region and the country well. Nonetheless, Amtrak's funding levels over the years has never been sufficient to address all of the capital needs that come along with a physical plant that is in many places at or beyond its useful economic life. Congress took an important step in addressing this chronic shortfall with the Passenger Rail Investment and Improvement Act of 2008 (PRIIA). Section 212 of that legislation established the Northeast Corridor Commission and charged it with developing a formula to allocate NEC capital and operating costs based on usage, making recommendations to Congress, and facilitating collaborative planning. The Commission is made up of 18 members, including representatives from each of the eight NEC States, the District of Columbia, Amtrak, and the USDOT. Amtrak, States, and commuter railroads will contribute approximately $3.1 billion over the next 5 years through the NEC Commuter and Intercity Rail Cost Allocation Policy, helping create a reliable source of funding for the capital renewal of basic infrastructure assets. The NEC has hundreds of miles of aging track bed, hundreds of century-old small bridges, over a dozen century-old major bridges and tunnels, and power supply and signal systems that still rely on 1930s technology.

Unfortunately, Amtrak and the States alone do not have the funds to reduce the NEC state of good repair (SOGR) backlog, let alone address many of the major projects that are so critical to the region and the Nation. Simply put, these infrastructure projects are perfect examples of why we cannot wait to invest in our infrastructure.

Portal North Bridge

The century-old Portal Bridge is a two-track swing bridge over the Hackensack River in New Jersey that rotates open for maritime traffic several times per month. 450 trains cross the bridge as they travel between Newark, New Jersey, and New York Penn Station every day. The bridge is a major bottleneck and source of delay for Amtrak and NJ Transit (NJT) trains—the aging mechanical and electrical components sometimes malfunction while opening and closing, causing a cascade of delays. It carries more passenger trains than any other rail bridge in the Western Hemisphere.

The Pennsylvania Railroad constructed Portal Bridge in 1907 and began revenue operations in November 1910. The bridge earned the name "Portal," because it leads the NEC rail line to the "portal" of the North River Tunnel, located just 3 miles away. It consists of seven spans and totals 960 feet in length. The middle span is 300 feet long and pivots to open for marine traffic.

The swing span and special "miter rail" configuration pose maintenance and operational challenges. Due to age and fragility, trains are restricted to a maximum of 60 miles per hour over the bridge. Only 23 feet of clearance separate the Hackensack River and the bottom of the bridge.

Fully designed and permitted, early construction work on this project began in the summer of 2017. This work is funded by a Transportation Investment Generating Economic Recovery (TIGER) grant to NJT and includes the realignment of two 138kV transmission poles, the installation of new fiber optic cable poles, the installation of a construction access structure known as a finger pier, a steel bridge structure over the Jersey City Municipal Utility Authority water main, and a retaining wall just west of the Frank R. Lautenberg Station at Secaucus Junction.

Funding for approximately 50 percent of the estimated project cost has been committed by funding partners Amtrak and NJT including up to $600 million of bond proceeds by the State of New Jersey. The project was accepted into the Federal Transit Administration's Capital Investment Grant (CIG) Project Development pipeline in July 2016. Construction of this nationally significant project can start as soon as a Federal financial commitment is in place. The new Portal North Bridge is estimated to cost approximately $1.6 billion. A financial plan and request to enter the next phase of the CIG process have been submitted to the U.S. Department of Transportation, so construction can proceed as soon as possible.

Hudson Tunnel Project

The Hudson Tunnel Project is intended to preserve the current functionality of Amtrak's NEC service and NJT's commuter rail service between New Jersey and New York Penn Station by repairing the existing North River Tunnel. It will also strengthen the NEC's resiliency and ability to support reliable service by providing redundant capacity under the Hudson River for Amtrak and NJT trains. These improvements must be achieved while maintaining uninterrupted commuter and intercity rail service and by optimizing the use of existing infrastructure. The project involves design and construction of a new rail tunnel under the Hudson River as well as the rehabilitation and modernization of the existing 108-year-old North River Tunnel.

The roughly 10-mile section of the NEC between Newark, New Jersey, and New York Penn Station is the busiest stretch of railroad in North America. Every day, 450 trains carry passengers making 200,000 intercity and commuter rail trips over just two tracks that cross the century-old Portal Bridge and traverse the North River Tunnel en route to a space-constrained New York Penn Station. In October 2012, Super Storm Sandy significantly damaged the North River Tunnel when both tubes (each containing one track) were inundated with millions of gallons of brackish sea water. The water was pumped out, but salts and chemicals left behind continue to degrade systems including the track structure and the concrete bench walls that line both sides of the tunnels. Through these bench walls pass critical high-voltage cables and other infrastructure that powers NEC trains and the New York Penn Station terminal complex.

While the existing tunnel is safe for use, certain elements of tunnel infrastructure remain in poor condition as a result of the storm damage and have required emergency maintenance that disrupts service for hundreds of thousands of rail passengers throughout the region. Despite ongoing maintenance, the damage can only be addressed through a comprehensive reconstruction of the tunnel.

The benefits of completing this project are immense—it will preserve existing NEC service, improve reliability, add resiliency and system redundancy, and offer substantial environmental benefits. Not tackling this project invites disaster. A closure of just one tube of the North River Tunnel could reduce capacity by as much as 75 percent and force tens of thousands of commuters and travelers onto already congested bridges, tunnels, and highways in both New York City and New Jersey. The resulting congestion would lead to degradation of air quality throughout the region. The movement of people and goods to and from the Nation's largest regional economy would be severely constrained, putting 10 percent of America's gross domestic product at risk.

Prior to issuing funding for the Hudson Tunnel Project, the Federal Railroad Administration (FRA) must consider the environmental effects of the Project in accordance with the National Environmental Policy Act (NEPA). On behalf of the local partners, NJT prepared and submitted an Environmental Impact Statement (EIS) to evaluate the Hudson Tunnel Project. Amtrak, in partnership with the PANYNJ, is conducting the preliminary engineering.

Work on the EIS was completed by the local partners on an accelerated 24-month schedule, roughly half the time a project of this magnitude would normally require. The EIS has been under review by FRA and USDOT since February 2018. A Record of Decision (ROD) is required to move the project forward and meet the project schedule.

In June 2018, as the 24-month period for advancing through the Project Development phase of the CIG process was ending, the PANYNJ transmitted a letter to the Federal Transit Agency (FTA) in which it reaffirmed the $5.5 billion in financial commitments by the Project Partners and assumed the role of NEPA Project Sponsor. The Final EIS/ROD is the next needed element to advance through the CIG process. While it was originally on track for completion in March 2018, it is currently still pending. An updated draft of the Final EIS was transmitted to FRA in December 2018 and remains under review with no additional timeline given.

East River Tunnel

The East River Tunnel (ERT) is actually made up of four single-track tubes that extend from the eastern end of New York Penn Station under 32nd and 33rd Streets in Manhattan and cross the East River to Long Island City in Queens. The tracks carry Long Island Rail Road (LIRR), which make up 72 percent of the 810 trains that move through them daily, Amtrak trains travelling to and from New York Penn Station and points to the north and east (17 percent), and out-of-service NJT trains moving to and from Sunnyside Yard (11 percent).

Following the inundation caused by Hurricane Sandy, Amtrak has conducted through analyses to ascertain the tunnels' conditions. While some cracks predated the storm, the urgency has accelerated post-Sandy as corrosion (and the associated steel expansion) likely increased due to saturation of various structural elements. Accordingly, the Final Design phase includes a specific Task for the prioritization and design of intermediate repairs that can be implemented as needed between now and the full reconstruction outages to maintain safe operating conditions within the tunnels. The FRA and Amtrak inspection personnel are eager to resolve the spalling concrete, leaks, and deflecting splice chambers within the ERT, which are in all likelihood contributing to increased electrical or signal system faults.

The scope of the full reconstruction will include demolishing all interior components and systems of ERT 1 and 2 down to the concrete liner and rebuilding with modern electric traction, signals, and security systems, Direct Fixation Track, improved drainage, and a one-high-one-low benchwall layout for improved egress and equipment access. This approach will improve safety, reliability, and resiliency by creating a modernized egress path, maintaining dryer conditions within the trackbed, and moving critical equipment out of the tunnels.

Preliminary Design was initiated in Spring 2015 and culminated in a 30-percent Design Milestone in November 2016. The Final Design Notice to Proceed (NTP) was issued on July 31, 2017, and design will continue into early 2020, contingent upon receiving the important required outages for engineering observations, geodetic survey, LiDAR 3D-scanning, and material sampling that are essential to enable the design to progress. While tunnel track and station outages are always in demand for ongoing inspections, regular and emergency maintenance, and an increasing number of impacting projects and development, this project is a high priority for Amtrak and the region. Intermediate deliverables have already begun with a Value Engineering Workshop and Report. A Draft Repair Prioritization Report is expected in October to guide Amtrak on the priority and design of near-term repairs that can be implemented on an as-needed basis up to the time of full reconstruction. The cost of Final Design is approximately $20 million, in addition to the $3.25 million that has already been spent to date on Preliminary Engineering.

The timing for these critical full-tunnel outages is under study by a Tri-Venture group consisting of Amtrak, LIRR, and NJT. Operations analyses are ongoing to evaluate the required level of schedule modifications for each carrier under various scenarios that mostly involve interaction with the East Side Access Project. Outage durations for ERT 1 and 2 are estimated at roughly 2 years each, excluding preparatory work.

The latest cost estimate for the tunnel repair project is over $1 billion, depending on a variety of factors including when the project commences.

Baltimore & Potomac Tunnel Replacement

The Baltimore & Potomac (B&P) Tunnel is a two-track railroad tunnel running beneath central Baltimore City between Baltimore Penn Station and the West Baltimore Maryland Area Regional Commuter (MARC) station. This busy section of the NEC is used by Amtrak and MARC passenger trains, as well as Norfolk Southern Railway (NS) freight trains.

Built just after the Civil War in 1873, the B&P Tunnel is among the oldest infrastructure along the NEC. Due to its age, the tunnel is approaching the end of its useful life. Its obsolete design creates a low-speed bottleneck on this high traffic section of the NEC. Both the constriction of tunnel volume from four tracks to two tracks, as well as the tunnel's tight curvature, require trains to reduce speeds to 30 miles per hour, placing limitations on all train traffic. The tunnel requires replacement or will have to be taken out of service for significant rehabilitation to extend its useful life. Any closure of the tunnel will greatly jeopardize the intercity, commuter and freight rail traffic that relies upon the tunnel to move people and goods throughout the region.

The B&P Tunnel system is approximately 1.4 miles long and is comprised of three shorter tunnels: the John Street Tunnel, the Wilson Street Tunnel; and the Gilmor Street Tunnel. The narrow, single-bored, double-track tunnel was originally constructed out of brick and stone masonry, though repairs have added additional building materials over time. Electrification was added in the 1930s, and the tunnel was rehabilitated in the 1980s. That work was not intended as a permanent fix and continuously increasing maintenance is required to address water infiltration and masonry repairs on the aging structure.

The B&P Tunnel Project will improve service reliability and help make Amtrak and MARC less susceptible to maintenance-related delays. Its aging condition has resulted in increased maintenance needs. One such example is the high saturation of water in the soil beneath the tunnel; this causes the tunnel's aging floor slabs to slowly sink, forcing Amtrak to make repeated repairs. Amtrak performs thorough inspections and vigilant maintenance to ensure ongoing safety standards.

The existing tunnel does not provide sufficient capacity to meet projected passenger and freight rail demand through 2040 and beyond. When completed, this project will create new capacity to support additional Amtrak, MARC, and freight operations. New tunnels could free the existing tunnels for renewal and other uses.

The existing tunnel is not suited for modern high-speed train operations due to tight clearances and sharp curves, which limit train speeds. Replacement of the B&P Tunnel will allow for increased speeds through the Baltimore region. This improvement would contribute to unlocking the current bottleneck which now impedes operations along the most heavily traveled rail line in the country.

The FRA, Maryland Department of Transportation (MDOT), city of Baltimore and Amtrak have cooperated on an EIS for a replacement tunnel as required by the NEPA.

Funding is now needed to refine and finish design and start construction of the approximately $5 billion new tunnel system. Funding will be pursued through a combination of USDOT grant programs, funding for Amtrak, and local matches.

Susquehanna River Bridge

Amtrak's existing two-track Susquehanna River Bridge crosses the Susquehanna River between the city of Havre de Grace and the Town of Perryville in Maryland—roughly mid-way between Wilmington, Delaware and Baltimore, Maryland. The highly used bridge serves Amtrak, MARC, and NS to carry passenger and freight trains across the Susquehanna River.

Owned by Amtrak, the Susquehanna River Bridge is the longest moveable bridge on the NEC and is a critical link for intercity, commuter, and freight connectivity in the Mid-Atlantic. Built in 1906, the bridge is approaching the end of its service life and will need to be replaced with a new structure to maintain future rail services across the Susquehanna River. The age of the bridge and its constriction from four to two tracks limits the speed and number of trains that can use the bridge. The replacement of the Susquehanna River Bridge is necessary to preserve reliability and allow the future expansion of both commuter and intercity service. The project will also significantly improve the navigation channel for maritime users.

The Susquehanna River Bridge was constructed in 1906 as a 4,000-foot multi-span truss bridge. The limited number of tracks across the river, combined with the wide variety of trains utilizing the bridge and the need for continual maintenance, results in tightly managed and restrictive operations. While regular, major repairs have occurred on the bridge since the 1960s, few repairs and/or inspections can be made without disrupting rail operations. The existing bridge's movable swing span causes train delays when opening is required for marine traffic, and large crews are needed to operate the span because work must be done quickly. Each bridge opening introduces risks of significant train delays if a breakdown of the operating mechanisms were to occur.

In addition to passenger rail, the bridge provides critical freight connectivity to the Ports of Baltimore, Maryland and Wilmington, Delaware, moving manufacturing, agricultural and raw materials throughout the region, Nation and around the globe.

The benefits of pursuing this project are similar to the other projects discussed today—more reliable, flexible, and faster service, expansion of future freight, commuter, intercity, and high-speed rail operations, improved maritime navigation and safety, and enhanced trade connectivity for economic growth.

With significant growth in passenger and freight rail service expected by 2040, the replacement bridge is being designed to accommodate future capacity needs. The new bridge design includes two new high-level, fixed bridges with a total of four tracks—doubling capacity compared to the current two tracks.

One of the new bridges would be built primarily to serve high-speed trains operating at speeds up to 160 miles per hour. With 60 feet of vertical clearance, the new fixed bridges will support better maritime uses along the river by maintaining navigation and eliminating the need to open and close for tall vessels.

Amtrak, the FRA, and MDOT have cooperated on an Environmental Assessment (EA) for a new replacement bridge, as required by the NEPA.

Funding is now needed to finish design and construct the estimated $1.7 billion new bridge. Funding will be pursued through a combination of Federal grant programs, funding from Amtrak, and other State and local matches.

ROLLING STOCK

Amtrak's equipment includes the railroad's fleet of passenger locomotives, railcars, and trainsets. The equipment is used to carry customers on the railroad's three intercity rail passenger service lines: Northeast Corridor, State Supported, and Long Distance. A significant portion of Amtrak's fleet is at or nearing the end of its useful service life.

As of late 2018, the active fleet includes some 262 road diesel locomotives, 66 electric locomotives, 1,408 passenger cars, and 20 high-speed trainsets. Additionally, Amtrak and various State partners own fleets of seven Talgo trainsets and 49 Alstom Surfliner railcars, with Amtrak owning 29 Talgo car equivalents and 39 Surfliner cars. Amtrak operates an additional 196 locomotives and railcars owned wholly by State partners.

With the railcar fleet averaging nearly 33 years of age, diesel locomotives averaging nearly 21 years of age, and a long lead-time to procure any replacement units, Amtrak is focused on the continued modernization of its passenger car, locomotive, and trainset fleets. Railcars in North American mainline passenger service typically have a service life between 30 to 50 years. Road diesel locomotives typically have a shorter lifespan than railcars, as do high-speed trainsets. Where exceptions to such average lifespans exist, it is because equipment is rebuilt at considerable expense and/or the equipment accrues fewer annual miles than most Amtrak equipment.

Amtrak plans to build upon our recent refleeting efforts to launch and/or complete nine major fleet initiatives to modernize Amtrak's passenger car, trainset, and locomotive fleets, which will largely feature replacement of most locomotives and railcars in Amtrak service today. Descriptions of each of the efforts follow, although more detailed explanations of all of them can be found in Amtrak's 5-Year Equipment Asset Line Plan.

New Acela Trainsets

First, as *Acela Express* nears its twentieth anniversary of service, replacement has become necessary for the fleet. Worldwide, high-speed trainset fleets typically have shorter service lives than conventional equipment. Further compounding the need for replacement is the insufficient capacity available on *Acela Express* on peak trips. In FY2016 Amtrak placed an order with Alstom for 28 Avelia Liberty trainsets to replace the existing *Acela Express* fleet while expanding capacity to meet future demand. Twenty *Acela Express* trainsets with 304 seats each will be retired when the 28 new trainsets with 380 seats each arrive, most in FY2021–FY2022. The additional sets allow for additional frequencies, including hourly New York-Boston service and half-hourly New York-Washington service during peak periods. The Alstom Avelia platform is a proven design currently operating in France and Italy, among other countries.

New Diesel Locomotives

Second, Amtrak's fleet of 200 P40 and P42 locomotives, currently used on all Long Distance routes and most State-Supported routes, is rapidly approaching the end of its useful life. Additionally, the units were ordered before the Environmental Protection Agency (EPA) impose'd locomotive emissions standards and are noncompliant with modern emissions standards. Amtrak has launched its own process for acquiring new diesel locomotives to replace the P40/P42 fleet and following a request for proposal (RFP), on December 20, 2018, announced the contract award to Siemens for a base order of 75 Charger locomotives for Long Distance routes, plus additional options to permit order growth to address the long-term needs of the network pending Congress' reauthorization of Amtrak in FY2020 and the completion of the Amfleet I procurements described below, which could influence locomotive quantity requirements. Factors that will impact the specific quantity of locomotives required are discussed in more detail in our 5-year Equipment Asset Line Plan.

Replacement of Amfleet I

Third, Amtrak's 457 active Amfleet I cars and 16 ex-Metroliner cab control coaches that support our *Northeast Regional* trains and many State Supported services are at the end of their commercial and useful service lives. In FY2018 Amtrak launched an Amfleet replacement RFI. To survey the greatest possible number of qualified vendors, technologies, and products in the global marketplace, Amtrak has expressed interest in solutions including, dual-powered, diesel or electric multiple units (MUs), unpowered trainsets, and single cars. While Amtrak's current fleet is mostly made up of individual railcars today, the global marketplace for intercity corridor rail passenger equipment since the 1970s has shifted towards trainsets with cabs at both ends, which eliminate the need to loop or wye equipment between trips. Amtrak's RFI was designed to determine how the railroad can best tap into this global marketplace of products and expertise. Amtrak issued an RFP for Amfleet I replacement equipment on January 18, 2019, using information learned from the RFI process and a performance-based specification developed by Amtrak and other stakeholders. Amtrak plans to make a contract award for base orders of one or more equipment solutions to replace Amfleet I and ex-Metroliner equipment, with options for additional fleet expansion in FY2019. Deliveries of Amfleet I replacement units will likely occur during the early-to-mid 2020s, following deliveries of Avelia Liberty high-speed trainsets. As part of this procurement, one of the most significant service improvements that Amtrak is seeking from refleeting is the elimination of engine changes for trains which travel on both the NEC and State-Supported routes. Should Amtrak obtain a dual-power capability for through trains between the NEC and State corridors, Amtrak would realize several benefits, including scheduled trip times reductions of 15 to 30 minutes (a reduction that would cost billions to achieve through right-of-way improvements), a decrease in locomotive movements and platform capacity utilization in busy terminals, an increase in on-time performance as the delay risk of locomotive changes was eliminated, and passengers would not lose lighting, climate control, or working toilets during engine changes. This more attractive service would be less labor-intensive, needing less mechanical and yard-to-station transportation work and less total travel time which train crews must work to complete a given trip. At this time, some 20 train consists switch between diesel and electric power each day on the affected routes, which translates into a need for approximately 25 new trainsets or dual power locomotives (including spare ratios) to convert existing through trains to dual power. The plans of Amtrak's State partners Virginia and North Carolina to expand through service from the NEC to their respective State corridors would benefit from additional dual power consists. The dual power method chosen, and base and options quantities of dual powered equipment purchases, will be determined during FY2019 as part of Amtrak's review of Amfleet replacement RFP responses and selection of a technology, and with the concurrence of relevant State partners. Dual power operations may commence by the mid-2020s along the affected routes.

Multilevel Fleet

Fourth, Amtrak currently operates a multilevel fleet of 242 Superliner I railcars built in 1979–1981 and 184 Superliner II cars built in the mid-1990s. These cars are used primarily on western Long Distance trains and on a few State corridors. Additionally, Amtrak operates a fleet of 49 Surfliner cars built around 2000 that is jointly owned by Amtrak and Caltrans and used exclusively on the *Pacific Surfliner*. Amtrak's California State partners also own 78 California I and II railcars that were built between 1993 and 2001; these cars are used exclusively on California State corridors. As this fleet is insufficient for current services, let alone future growth, Amtrak Superliners, Horizon/Amfleet equipment, and Comet IB railcars Caltrans acquired from NJT are also currently used to meet California State corridor service needs. California has seven Siemens Viaggio trainsets on order for use on the *San Joaquin* corridor but will need additional equipment to meet planned California State corridor growth in the coming decade. As a result of the age profile of Amtrak and California's multilevel fleets, a "sweet spot" appears between FY2026 and FY2031 for an optimally timed multilevel railcar replacement acquisition to standardize, modernize, and expand equipment on current multilevel routes. Such a procurement process would need to be begun early in the next decade and a key topic for the next Federal reauthorization of Amtrak is the future of the Long Distance routes that use this equipment. Congress will need to make decisions about the long-term prospects of these routes and provide sufficient associated funding levels so that Amtrak can procure appropriate types and quantities of this custom rolling stock.

Single-Level Long Distance Coaches

Fifth, while the current acquisition process focuses initially on the replacement of the Amfleet I and ex-Metroliner car fleets, Amtrak also has a smaller fleet of 139 active Amfleet II railcars that is also approaching the end of its useful service life. Built in the early 1980s, Amfleet II railcars are primarily used on Long Distance routes originating at clearance-constrained New York Penn Station and also on a few State corridor routes. Amfleet II replacements may either be procured as options to the Amfleet I replacement procurement, or as a later separate procurement, depending on the Amfleet I replacement product chosen.

Refresh and Reconfiguration

Sixth, Amtrak moved rapidly in FY2018 to refresh its Amfleet I and *Acela Express* fleets with new seat cushions, carpeting, lighting, and other passenger-facing features to help modernize passengers' experiences on board. Even with the significant and wholesale replacements of many car fleets recommended in this plan, equipment in additional car fleets will require refresh, and some car fleets will require a more comprehensive reconfiguration in order to provide a consistent, modern passenger experience. Amtrak intends that such refresh and reconfiguration work will continue, particularly for the following fleets: Amfleet II coaches to be refreshed in a manner similar to Amfleet I upgrades; Superliner I and II coaches and sleeping cars need refreshed passenger seating, light emitting diode (LED) lighting, and surfaces, while restrooms and plumbing systems may require more substantial work; and Horizon cars in a program similar in scope to Amfleet I, with a focus on carpet and seat appearance.

Mechanical Facilities

Seventh, in the 35–40 years since Amfleets and Superliners were procured, many global rolling stock manufacturers have entered the market to service and maintain their manufactured fleets. Amtrak has taken advantage of original equipment manufacturer (OEM) expertise in the maintenance of *Acela Express* and has expanded the use of such capabilities to the ACS–64 and forthcoming Siemens Charger locomotives through Technical Services and Spares Supply Agreements (TSSSAs). In addition, Amtrak has signed a contract with OEM General Electric to replace most overhauls with Lifecycle Preventive Maintenance (LCPM) on the P40/P42 locomotive fleets. Further fleet procurements will likely continue this trend. As Amtrak moves further away from traditional heavy overhauls and towards smaller, more frequent component changes with increased vendor participation in maintenance, Amtrak's needs regarding back shops and terminal facilities will change. Amtrak currently operates three major back shops where heavy overhauls and restoration of damaged equipment occur: Wilmington, Delaware, which specializes in locomotives; Bear, Delaware, which specializes in Amfleet equipment; and Beech Grove, Indiana, which specializes in off-NEC equipment. With the wholesale refleeting of Amtrak over the next decade, a cross-functional team will examine Amtrak's future mechanical facility and terminal needs following refleeting and the expanded use of TSSSAs and LCPM.

The cost of outstanding fleet acquisitions will be significant and could approach some $3.5 billion through FY2024. This figure includes both Amtrak's cost of acquisitions and the full anticipated costs allocable to State partners under the PRIIA 209 Methodology that governs Amtrak and State cost sharing on State-Supported routes. It also includes some $525.1 million in nonpassenger fleet acquisition expenses, such as track inspection and maintenance equipment.

In addition, Amtrak must secure funding to pay for its upcoming orders of locomotive options, Amfleet I replacement equipment, and single- and multi-level State Supported and Long Distance fleet replacement. While the exact quantities and product types chosen for Amfleet I and multi-level refleeting are still under development, Amtrak believes that the replacement of existing Amfleet equipment alone could approach some $1.4 billion through FY2024. Amtrak expects that a significant portion, to be determined, of the cost of the Amfleet I replacement equipment will be reimbursed to Amtrak by its State partners.

Beyond FY2024, Amtrak estimates that an additional $1.0–$1.5 billion may be necessary to complete the replacement of Amfleet I and Superliner I equipment and any related diesel locomotive options necessary to support such procurements, with costs to be allocated between Amtrak and its State partners. The costs of work necessary to convert mechanical facilities to support trainsets; replace Amfleet II and Superliner II fleets; and acquire additional equipment in to-be-determined quantities for service expansion have not yet been determined but will be included in future 5-year plans.

Amtrak must also continue to perform necessary work on its existing fleet of locomotives and railcars until they are retired. To that end, Amtrak anticipates completing some 2,089 car and locomotive unit overhauls through the end of FY2024, at an estimated cost of some $1.380 billion; a large portion of which will be reimbursed by Amtrak State partners under the PRIIA 209 Equipment Capital Use Charge.

STATIONS

The Amtrak network is currently made up of over 500 stations across 46 States, the District of Columbia, and three Canadian provinces. Each station is unique to the community served, spanning small towns to the Nation's largest metropolitan areas, and provides the point of entry, resources and support to Amtrak's Northeast Corridor and National Network services, along with other transportation service. Amtrak is investing in critical projects that will enhance the passenger experience, sustain the national passenger network, provide much-needed additional capacity and improve reliability and safety.

Amtrak is the owner and manager of a nationwide portfolio of assets including over 8 million square feet of station and maintenance facilities and five of our top 10 busiest stations. The asset portfolio is aging, suffers from decades of deterioration and needs modernization to meet growing demands. Despite these challenges, Amtrak's stations are community hubs and the surrounding markets present opportunities to extract value from our assets from commercial real estate development or partnerships with area institutions and the private sector.

At the five Amtrak-owned stations with the highest ridership (Major Stations)—New York Penn Station (No. 1 in ridership), Washington Union Station (No. 2), Philadelphia William H. Gray III 30th Street Station (No. 3) (Philadelphia 30th Street Station), Chicago Union Station (No. 4), and Baltimore Penn Station (No. 8), Amtrak has commenced Major Station Asset Development Programs. In these major urban markets, the challenges and opportunities facing Amtrak's asset portfolio are heightened. Projected ridership growth and regional economic growth create a substantial and increasing demand on Amtrak's Major Stations that will only exacerbate SOGR needs. However, there is high potential to attract investment for transit-oriented development that enhances intermodal connections and integrates stations with surrounding neighborhoods to create an exceptional station experience, one which will retain and grow a loyal customer base.

Between now and FY2024, we plan to spend more than $1.8 billion on stations. This includes safety and mandates ($554.3 million), normalized replacement ($277.4 million), major backlog ($86.7 million), and improvements ($953.9 million). A large portion of the capital investments are directed towards major facilities that Amtrak owns. Work at many stations and facilities falls within more than one of these categories. While Amtrak is making good progress and has a strong 5-year plan to invest in its stations, the needs far outweigh the available resources. Let me describe some of the major projects Amtrak is working to advance.

New York Penn Station

New York Penn Station is the busiest rail station in America and by far the most important in Amtrak's national intercity network. Amtrak leases space in the station to the LIRR and NJT, two of the Nation's busiest commuter rail systems for which this facility is also the most important station. It serves more than 10 million Amtrak passenger trips annually, as well as over 100 million LIRR and NJT passenger trips. New York Penn Station accounts for more than $1 billion annually in Amtrak passenger revenue. These revenue and ridership totals are double those of any other station in the Amtrak network.

New York Penn Station's physical plant sees very heavy utilization, hosting about 1,300 daily trains between the three railroads and about 650,000 daily rail and subway passenger trips. Yet the station's passenger amenities, core capacity, track, platform, and vertical circulation were not designed for these high volumes and have not been substantially expanded as volumes have increased over the years. Its limited capacity and lack of long-term strategic planning and investment have limited Amtrak's opportunities to sustain ridership and revenue growth and has left key components of New York Penn Station's infrastructure in a state of disrepair.

Even with today's crowded conditions, New York Penn Station ridership is increasing and is projected to expand substantially by 2040. Increased passenger volumes will further stress the station's inadequate capacity on concourses and for customer circulation, retail, and back-of-house facilities. Amtrak is continuing a series of short-term, customer-focused capital improvements; beginning the transformation of station facilities related to the relocation of major Amtrak passenger-facing and back-of-house services to the Moynihan Train Hall, opening in 2021; and preparing for an expected master developer solicitation for Penn Station.

Longer term, New York Penn Station must be expanded to provide additional tracks and platforms. The track and platform expansion is included in the Gateway Program's terminal expansion phase.

Baltimore Penn Station

The multiyear development and SOGR program addresses critical structural and building system repairs (including roof and building envelope); improves the customer experience with improvements to amenities, better ADA access and security; ensure capacity for ridership growth; and facilitates development of Amtrak-owned real estate assets at and near the station. Amtrak designated Penn Station Partners (PSP) in November 2017 as its master developer partner to implement the program. The scope of the master development project includes the creation of a master plan, critical SOGR of the historic headhouse, commercial development of the upper vacant floors of the headhouse, station expansion needed to meet passenger growth, a mixed-use development of adjacent Amtrak-owned parcels, and ongoing life cycle and asset preservation maintenance of the headhouse and station expansion areas.

Philadelphia William H. Gray 30th Street Station

The development and SOGR program at Philadelphia 30th Street Station will improve the customer experience and make the station future-ready by addressing station modernization and infrastructure needs while facilitating redevelopment of valuable assets at the station, including the retail concourse and office towers. In June 2016, Amtrak completed a master plan known as the 30th Street Station District Plan which envisions station improvements that will double its capacity and improve station amenities and develop 10 million square feet at the station and above the adjacent rail yards. Amtrak initiated a search for a master developer partner to undertake redevelopment of the station with the release of a request for quotation (RFQ) on May 1, 2018. The master development project, as defined in the RFQ, includes Station modernization and SOGR improvements, ongoing life cycle and asset preservation maintenance of the station building, office redevelopment, retail renovation, and operations and maintenance (O&M) management as near-term priorities, with concourse expansion and plaza improvements as potential future phases.

Chicago Union Station Master Plan

The purpose of the multiyear Chicago Union Station Master Plan program (Program) is to advance near-term improvements to address the most demanding of station capacity, accessibility, service, and safety issues. This Program is informed by the Chicago Union Station Master Plan, led by Chicago Department of Transportation (CDOT) in 2012 and was developed further under the Master Plan Phase 1A work led by Amtrak, with support from CDOT, Metra, and the Regional Transportation Authority (RTA) (Project Partners) that has advanced preliminary design and planning across a suite of projects. The Project Partners are currently working together to establish a cost-sharing methodology and to identify funding to advance the program to final design.

Washington Union Station

The Washington Union Station Second Century Program will improve SOGR, increase passenger and rail capacity, improve the passenger experience to sustain a loyal, existing customer base and attract new riders, create a safe and secure facility for all users, and integrate a new air rights development above the rail terminal at Amtrak's second busiest station. At Washington Union Station, Amtrak owns the tracks, platforms, and related infrastructure north of the station while the USDOT is the owner of the station and parking garage, which is managed by the Union Station Redevelopment Corporation (USRC). Amtrak has a sublease for space in the Claytor Concourse.

In the near term (FY2019 to FY2026), the Second Century Program will redesign and expand passenger concourses, increase capacity, and improve operations in the station. Specifically, the near-term work will deliver a modernized and reconfigured concourse, improved station support spaces, as well as address key life safety issues. It will also advance construction of improvements to tracks and associated infrastructure and support facilities in the rail terminal such as a new crew base and satellite commissary.

In the longer term (FY2026 and beyond), the Second Century Program will provide for new tracks and platforms integrated into an expanded station with development above to accommodate future demand and capture associated ticket revenues, while also addressing SOGR, accessibility, and life safety issues. Currently the long-term program is advancing the ongoing Union Station Expansion Project EIS in coordination with the project sponsor, USRC, as well as related studies for the long-term expansion and reconstruction of the station.

Moynihan Train Hall

The Moynihan Train Hall expands the Nation's busiest train station, New York Penn Station, across 8th Avenue into the historic James A. Farley Post Office Building, the major component of a mixed-use redevelopment of the entire block. The Moynihan Train Hall will offer enhanced passenger facilities for Amtrak's Northeast Corridor, State-Supported, and Long Distance travelers in a grand concourse featuring a dramatic sky lit atrium.

Amtrak's Train Hall program goal is to reinvent the station experience to offer the best in customer amenities, technology, and operational efficiency. Amtrak's program includes several major initiatives: platform ventilation, back of house, ticketed waiting room, Metropolitan Lounge, subbasement improvements, construction support, and implementation. Several work streams have been formed to advance implementation planning including addressing agreements, wayfinding and customer information, security and policing, concourse and operations, engineering, communications and marketing and information technology.

The Moynihan program requires extensive daily collaboration with a broad set of both internal and external stakeholders across a variety of disciplines on dozens of related initiatives. Amtrak is providing for the needs of Acela 2021 customers in New York City, Amtrak's most important market, while assuring pleasant, reliable, and efficient operations for all customers and employees. Capital improvements for Moynihan Station are included in the Acela 21 program described in the following section.

Among the challenges in developing a plan to manage Amtrak's station assets are: working with other stakeholders, such as States, cities and host railroads that own many of the stations we utilize, and State DOTs and commuter agencies that either own or utilize stations served by Amtrak and have their own service goals; making improvements that align with new Amtrak guidelines for station aspects such as branding and signage so as to provide consistent and recognizable products and services; managing station roll-outs of technological updates such as ticketing and baggage handling upgrades; and coordinating Amtrak station management plans with our asset development and monetization initiatives.

CONCLUSION

As I hope my testimony makes clear, the United States cannot wait any longer to invest in intercity passenger rail; the cost of doing nothing is simply too great for this Nation to bear.

Amtrak's mission, given to us by Congress, is to provide efficient and effective intercity passenger rail mobility consisting of high-quality service that is trip-time competitive with other travel options. Our mission is consistent with, and is ultimately dependent upon, sufficient investment in our Nation's infrastructure. Therefore, Amtrak cannot do it on its own; we need Congress to take action, whether it is through an "infrastructure bill" that increases Federal funding into existing authorized programs or by establishing new Federal policies and grant programs through the forthcoming reauthorization of surface transportation programs. If Congress tackles the challenges I outlined today, I am confident Amtrak will provide safe, reliable, convenient, and comfortable service that will be a "game changer" for Americans across the Nation.

I look forward to working with each of you. While the challenges described today are difficult, they can be overcome. At Amtrak, we owe our customers, and your constituents, nothing less.

Thank you for the opportunity to appear before you today, and I welcome your questions.

Mr. CARBAJAL [presiding]. Thank you, Mr. Anderson.

We will proceed next with Secretary Fanning.

Mr. FANNING. Thank you, Mr. Chairman, Ranking Member Graves, members of the committee. Thank you for the opportunity to be here. I am Eric Fanning, president and CEO of the Aerospace Industries Association, representing a workforce of 2.4 million people and an annual economic output of $865 billion.

AIA is celebrating its 100th year as not only the voice for America's aerospace and defense industry, but also a bipartisan convener, where people can come together to get things done on important topics, like infrastructure.

Before I begin, I wanted to assure everyone here that, despite our name, our industry relies on everything my fellow panelists are advocating for today. We know the importance of investing in our infrastructure.

We also know that our Nation's infrastructure is outdated. Congestion is at record highs, and environmental concerns are growing as people spend more time in their vehicles than ever before.

While we recognize the need to address these issues, we also have a vision for the future that will change how we conceptualize infrastructure. Part of this involves unmanned aircraft systems, UAS, or drones. But the other part is rethinking the way people move through urban air mobility, or UAM.

UAM is a concept that will change the way people connect with each other and travel through on-demand passenger transportation services. Imagine how much simpler a daily commute would be if you could bypass traffic, potholes, and construction by flying over them. And imagine how many more options those who are elderly or disabled would have with this new technology. The benefits are not only evident, but expansive, improving the lives of millions.

UAM will also supplement existing transportation, giving urban areas another option to help ease congestion, reduce infrastructure strain, and provide environmental benefits.

Last year the average commuter in DC spent 82 hours in traffic, and our national roads and bridges wore down even more. They now need about $800 billion in repairs and then another $150 billion per year for upkeep. What if a considerable amount of traffic was lifted up into the sky? That is the potential relief UAM could provide to our infrastructure and the amount we spend to maintain it.

UAM is not a new concept. Over the decades the technology has advanced through cooperation between industry and Government. Congress has played an important role, passing the longest FAA reauthorization in recent history, and working with the FAA on the rewrite of part 23, which modernized how aircraft can be certified. And future UAS rulemaking will pave the way for safe aerospace integration of technologies like UAM.

Today more than 70 companies have alone begun work in this area, and over $1 billion was invested in 2018. And we are seeing the results. Last month Bell Helicopter released its design concept for their new tilt-rotor Nexus air taxi. Boeing also made headlines this year with their first public-announced UAM test flight. Embraer released a concept for an electric air taxi capable of rooftop service during the 2018 Uber Elevate Summit.

There are many other examples, and not just in the U.S. In the competitive global aviation market, other nations from Saudi Arabia to Brazil are investing to gain the technological and market advantage in this emerging sector. The European Aviation Safety Agency has already released a draft special condition for a path to aircraft certification for vertical takeoff and landing. Unless we act, the Europeans could define the regulations the world follows, not the U.S.

Now is the time to ensure UAM becomes a reality with America leading the way. But there are major steps needed to get there. I have included many more in my written testimony, but I will focus on three here.

First, we must continue to work on a regulatory path forward for UAM. AIA applauds efforts to ease the regulatory burden on businesses, but the so-called one-in, two-out rule makes it difficult for any agency to release new regulations, even if they are needed to usher new technology into the marketplace, or help address the Nation's surface transportation gridlock.

Second, future standards should be performance-based, establishing a level of performance achieved through the aircraft's design for both the aircraft operations and design. This would keep industry innovating without feeling constrained by regulations in place.

Finally, we must integrate unmanned aircraft system traffic management, which covers airspace under 400 feet, with air traffic management, which covers above 400 feet. There is only one airspace to share, regardless of the height at which an aircraft, manned or unmanned, operates. Full integration of the two systems is the only way to ensure safety.

These are urgent recommendations, because the future of American infrastructure is coming. Whether through urban air mobility or any of the other incredible innovations coming from our industry, we look forward to not only continuing our partnership, but strengthening it over the next 100 years and beyond. Thank you.

[Mr. Fanning's prepared statement follows:]

Prepared Statement of Hon. Eric K. Fanning, President and Chief Executive Officer, Aerospace Industries Association

Chairman DeFazio, Ranking Member Graves, and the rest of the committee, thank you for the opportunity to be here today. I am Eric Fanning, president and CEO of the Aerospace Industries Association (AIA).

AIA represents the dynamic aerospace and defense (A&D) industry that keeps our Nation secure and has been moving, connecting, and inspiring people for over a century. It's an industry that brings different interests together, fostering the bipartisanship that leads to real action. Like you, we understand that aerospace and defense is at the heart of the American economy, generating $865 billion in sales and a trade surplus of $86 billion in 2017—the largest of any U.S. exporting sector. Moreover, our industry is supported by 2.4 million dedicated employees—representing nearly 20 percent of the Nation's manufacturing workforce—who are responsible for the continuous stream of innovations that improve American lives. We're proud that modern life is and will always be shaped by the innovation we create.

INTRODUCTION

AIA is celebrating its 100th year as not only the voice for America's aerospace and defense, but also a bipartisan convener where people—from different regions, backgrounds, and yes, even political parties—can come together to get things done on a number of important topics, including today's focus on infrastructure.

It is no secret that our Nation's infrastructure is outdated. In 2017 the American Society of Civil Engineers gave America's roads a D, bridges a C+, and infrastructure overall a D+.[1] Congestion is at record highs. Environmental concerns are growing with the record number of cars and trucks idling and with people spending more time in their vehicles than ever. Our infrastructure is failing our Nation's citizens, so I applaud the committee for taking on this essential issue.

As all of today's panelists know, we need to redouble our investments in traditional infrastructure. While some may not expect aerospace to be a voice for this investment, our industry also relies on roads, rail, airports and bridges every day. We know the importance of building and maintaining our traditional infrastructure networks.

But we also have a vision for the future that will change the way people will move—and change how we conceptualize infrastructure. Going forward, the definition of infrastructure must extend beyond roads, rail, airports and waterways to include our National Airspace System (NAS)—to include the skies above us.

We have considered aviation infrastructure before, but historically it has been limited to improving airports, creating and implementing systems like NextGen, and modernizing air traffic control systems generally. These are critical to keeping planes on time and our airspace safe. But the next innovation in the way goods and people move through the air has been in the works for years and is now edging toward reality.

As you know, part of this involves Unmanned Aircraft Systems (UAS)—or drones—which will soon be integrated into the NAS. We are already using drones in a number of ways, from news imagery to responding to forest fires. But companies are on the cusp of the next step of this new technology, and in the coming years, it will be commonplace to use drones for delivering goods, maintaining and repairing pipelines, and surveying damage during natural disasters.

But the not-so-far-off future will also require us to rethink the way that people move as well, and that is what I will focus my testimony on today.

Urban Air Mobility (UAM) is a concept that will change the way people connect with each other and travel through on-demand passenger transportation services. Imagine how much simpler a daily commute could be if you could bypass traffic, potholes, and construction by flying over them. Now imagine how many more options those who are elderly or disabled will have with this new technology. The benefits are not only evident, but expansive—improving the lives of millions.

In addition to the benefit of increased mobility for its users, UAM will also supplement our existing mode of surface transportation and provide urban areas an important option that will help ease congestion on our roadways (which costs more than 1 percent of GDP globally)[2], reduce strain on existing public transportation networks, and provide environmental benefits.

Last year, the average commuter in Washington, DC, spent 82 hours sitting in traffic.[3] During that same time, our roads and bridges became more worn down. As this committee well knows, the U.S. Department of Transportation estimates that our roads and bridges need an estimated $800 billion in repairs and then an additional $150 billion per year for upkeep.[4]

Now what if a considerable amount of traffic was lifted, literally, up into the sky. That's the potential relief UAM can mean for our infrastructure, not to mention the amount we spend on upkeep. So while UAM will not replace traditional means of transportation it will serve to complement it in highly congested urban areas.

HOW DID WE GET HERE?

UAM is not a new concept, and the technology to allow for it has slowly advanced—through cooperation between industry and Government—over the decades.

In 1941, the helicopter hit full scale production. This technology revolutionized the concept of "Vertical Takeoff and Landing" or VTOL.

In the 1950s, the U.S. began to implement the most complex air traffic control system in the world, now known as Air Traffic Management (ATM). This system measured all aerospace above 400 feet and changed the way people were able to move around the country. It still allows the Federal Aviation Administration (FAA)

[1] "America's Grades." *ASCE's 2017 Infrastructure Report Card*, American Society of Civil Engineers, www.infrastructurereportcard.org/americas-grades/.

[2] Bouton, Shannon, et al. "Infrastructure for the Evolution of Urban Mobility." McKinsey & Company, www.mckinsey.com/business-functions/sustainability-and-resource-productivity/our-insights/infrastructure-for-the-evolution-of-urban-mobility.

[3] Anderson, Tom. "Endless Commutes Cost You $960 a Year." CNBC, 10 Aug. 2016, www.cnbc.com/2016/08/09/commuters-waste-a-full-week-in-traffic-each-year.html.

[4] "The State of U.S. Infrastructure." Council on Foreign Relations, www.cfr.org/backgrounder/State-us-infrastructure.

to safely handle over 43,000 flights per day[5] and means more new technologies can be safely tested.

Since then, industry has embraced the challenge of making UAM a reality, and today more than 70 companies worldwide are working on it.

More recently, NASA and the FAA have laid the ground work for an air traffic system under 400 feet with the Unmanned Aircraft System Traffic Management concept (UTM). The FAA built on this work with the Low Altitude Authorization and Notification Capability (LAANC) system, making the approval process easier for airspace authorizations on unmanned systems. These two systems—working together with the ATM—will ensure that all aircraft are managed safely and efficiently. This is an example of agencies seeing the need before the technology was available and then starting the work to get us there—it's that kind of drive that defines American ingenuity and success.

Congress has played an important role, working with the FAA on the rewrite of regulations under CFR part 23. The part 23 rewrite means that manufacturers of aircraft could use consensus standards to meet airworthiness standards, ensuring that certification will not only be cheaper, but also possible for new types of aircraft. In addition, while the FAA Reauthorization Act of 2018 may not have addressed UAM specifically, it did address critical topics like integration of new technologies into the NAS, push DOT forward with regulations on systems for UTM, and begin to look at new regulatory concepts for emerging technology.

Future UAS rulemakings will also pave the way for safe airspace integration of emerging technologies like UAS and UAM. New rulemaking on "Remote ID" will allow UAS to be tracked in real time. Rules on "Operations Over People" and "Beyond Visual Line of Sight" are also critical to ensuring that UAS—and eventually UAM—will be fully integrated into the NAS and able to operate freely, safely, and securely.

All of these partners working together have laid the groundwork for this new addition to aviation.

WHAT IS HAPPENING TODAY?

Today, many regions of the world—facing surface congestion and infrastructure strain—are focused on making UAM a reality. As mentioned above, more than 70 companies have begun work in this area, with newer startups joining traditional aviation companies—like Bell Helicopter, Boeing, and Embraer[6]—to push the boundaries of what is possible. In 2018, over $1 billion was invested in UAM[7], and companies have announced partnerships with various cities and States around the world. While there are differences among various business models, they are all focused on getting this technology operational as soon as safely possible, and as soon as the regulatory environment allows them to do so.

Every day there seems to be another exciting news story on the topic. For example, last month, Bell Helicopter released its design concept for their new tilt-rotor "Nexus" air taxi.[8] It features six tilting rotors to take off and carry it through the air. Bell hopes to have this design in place for widespread release to the public by the mid-2020s. Boeing also made headlines this year with their first public unmanned UAM test flight. Their all-electric aircraft has a range of 50 miles.[9]

While these are just two recent examples, there are many more just like them—and not just in the U.S. In the incredibly competitive global aviation market, other nations and their industries are investing time, resources, and money to gain the technological and market advantage in this emerging sector of aviation.

Unfortunately, right now the United States is lagging behind much of the world. For example, the European Aviation Safety Agency (EASA) has already released a draft "special condition" for a path to aircraft certification for eVTOL.[10] Unless we

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[5] "Air Traffic By The Numbers." *FAA Seal*, 26 Nov. 2018, www.faa.gov/air_traffic/by_the_numbers/.

[6] See example photos attached to this statement.

[7] Wolfe, Frank. "Vertical Flight Society: More Than $1 Billion Already Invested in EVTOL Companies." Rotor & Wing International, 3 Jan. 2019, www.rotorandwing.com/2019/01/03/vertical-flight-society-1-billion-already-invested-evtol-companies/.

[8] Lavars, Nick. "Bell Bounces into CES with a Tilt-Rotor Air Taxi Concept." New Atlas—New Technology & Science News, 8 Jan. 2019, newatlas.com/bell-nexus-tilt-rotor-air-taxi/57921/.

[9] Banse, Tom. "Boeing Subsidiary's Self-Flying Air Taxi Makes First Flight." Oregon Public Broadcasting, Boise State Public Radio/Idaho Public Television, 28 Jan. 2019, www.opb.org/news/article/self-flying-taxi-boeing-company-aurora-flight-sciences/.

[10] "Proposed Special Condition for VTOL." EASA, www.easa.europa.eu/document-library/product-certification-consultations/proposed-special-condition-vtol.

take action, it could be the Europeans defining the regulations the world follows, not the United States.

There are also many companies currently conducting test flights throughout Europe and partnering with cities through the European Union's UAM Initiative of the European Innovation Partnership on Smart Cities and Communities (EIP–SCC).[11]

Starting in 2017, Dubai tested both UAS flights beyond visual line of sight and even Aerial Taxi flights.[12] They're working to roll out UAM by 2020.[13]

Singapore is also recognizing the potential benefits of UAM. In March 2017, their Ministry of Transport revealed that they would begin conducting test flights with the hope of having them ready by 2030.[14]

And in 2017, Brazil launched an on-demand helicopter pilot program to test the demand and promise of UAM.[15]

These are just a few examples of the many nations taking a forward leaning approach toward this new technology.

In the United States, companies have conducted many test flights, and multiple cities have announced plans to partner with companies to facilitate a UAM roll out in the near future. These cities have also begun to study and invest in infrastructure improvements that will allow UAM operations to take place. Various companies have also announced aggressive timelines showing when they expect to roll out the technology to consumers.

These announcements are exciting, but there is still no national regulatory framework in place for UAM operations. While the United States may be taking a more calculated approach to certification and integration of UAM into the NAS, moving too slow risks other nations staking claim to global leadership in this area.

As I mentioned before, industry and Government have worked together as partners to lay the groundwork for advancement in this area. For example, AIA and the General Aviation Manufacturers Association (GAMA) have worked closely with the FAA to build on the agency's current work on UAS. We believe U.S. industry and Government are up to the task and will continue to work together on crafting technology-based standards on UAM. But now is the time to take the next step and ensure UAM becomes a reality with America leading the way.

HOW DO WE GET THERE?

Full integration of UAM is not an "if," but a "when." There are still some major steps needed to get there, particularly if we intend to continue leading the world.

First, it is essential that we continue to modernize the airspace's critical infrastructure, along with roads, transit systems, airports and waterways.

Second, we need to continue to work on a regulatory path forward for UAM. As I've mentioned, there is no framework currently in place. This will take collaboration between industry and all levels of Government. Today's regulatory environment is also a challenge. AIA applauds efforts to ease the regulatory burden on businesses, but the so-called "one in, two out" rule[16] makes it difficult for any agency to release new regulations, even if they are needed to usher new technology into the marketplace or assist in addressing the Nation's surface transportation gridlock.

Third, we must also ensure that technology is not stifled by regulations. Any future standards should be performance-based—establishing a level of performance that must be achieved through the airplane's design—for both the operations of the aircraft and the design. This would allow industry to continue to innovate, without being unnecessarily constrained by regulations.

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[11] Butterworth-Hayes, Philip. "Urban Air Mobility Takes off in 64 Towns and Cities Worldwide." *Unmanned Airspace*, 17 Dec. 2018, www.unmannedairspace.info/urban-air-mobility/urban-air-mobility-takes-off-63-towns-cities-worldwide/.

[12] Butterworth-Hayes, Philip. "Roland Berger: 'Close to 100,000 Passenger Drones Flying by 2050.'" *Unmanned Airspace*, 23 Nov. 2018, www.unmannedairspace.info/urban-air-mobility/roland-berger-close-100000-passenger-drones-flying-2050/.

[13] Butterworth-Hayes, Philip. "Urban Air Mobility Takes off in 64 Towns and Cities Worldwide." *Unmanned Airspace*, 17 Dec. 2018, www.unmannedairspace.info/urban-air-mobility/urban-air-mobility-takes-off-63-towns-cities-worldwide/.

[14] Amour-Levar, Christine. *How Airbus' Flying Taxis Could Be The Next Great Idea For Singapore's Congested Roads*. Forbes Magazine, 5 Feb. 2018, www.forbes.com/sites/christineamourlevar/2018/02/04/singapore-air-show-airbus-flying-taxi/#7848ce0a1bd2.

[15] Fuller, S.L., and S.L. Fuller. *Brazilians Might Soon Hail a Helicopter Like an Uber With New Airbus Start-Up*. Rotor & Wing International, 24 Aug. 2017, www.rotorandwing.com/2017/04/06/airbus-a3-launches-beta-urban-air-mobility-helo-service-brazil/.

[16] "Presidential Executive Order on Reducing Regulation and Controlling Regulatory Costs." *The White House*, The U.S. Government, www.whitehouse.gov/Presidential-actions/Presidential-executive-order-reducing-regulation-controlling-regulatory-costs/.

The FAA's aviation standards were developed before UAM was even an idea, which is why it is hard to fit UAM into any specific FAA box as it exists today. There are also many unanswered questions that must be addressed. For example, how will these aircraft be categorized—will they be rotorcraft, fixed-wing aircraft, or something else? What performance standards will they need to be considered certified? These are just two examples, but they underscore the need for the strong partnership between the Government and industry to continue this discussion and reach proper decisions.

Future UAS rulemakings will be critical to ensuring operations of UAM as well, especially the rules on "Remote ID," "Operations Over People," and "Beyond Visual line of Sight." These will set standards that enable UAS and UAM to operate as safely and securely as possible. AIA urges this committee to carefully monitor the status of these rulemakings and ensure the administration moves swiftly forward with the rules to enhance operations of these emerging technologies in the NAS.

Fourth, integration among UTM and ATM systems is needed. There is only one airspace to share, regardless of the height at which an aircraft—manned or unmanned—operates. Once UAM is fully operational, aircraft will need to constantly broach the airspace dividing line between UTM and ATM control systems (currently 400 feet altitude). Full integration of the two systems is the only way to ensure the safety of the aerospace, pilots, and passengers.

Fifth, industry also needs certainty when it comes to spectrum allocations. Regardless of the design or external features, these aircraft will require spectrum to operate—not to mention some form of traditional aviation safety equipment. The aviation industry is excited about the promise of 5G, but it must be rolled out in a safe way for both traditional and emerging forms of aviation.

For example, AIA and our members are concerned with the possibility of the 3.7–4.2 GHz spectrum band being reallocated for 5G, because of the high potential for interference with aircraft radio altimeters. This critical aviation system, that operates in the adjacent 4.2–4.4 GHz frequency band, is vital to providing altitude data for safe landings not only for every commercial aircraft, but also for many helicopters and private aircraft. Prior to any reallocation of spectrum, the FCC and industry must work together to test the impacts of the new devices on both that specific band as well as any adjacent spectrum band.

Finally, there must be collaboration between all levels of Government for UAM to succeed. Industry will continue to work with the Federal Government to set the standards and rules that will govern operations. However, local governments and their partners also have a key role in that process. Cities and States will need to update their infrastructure to allow for takeoffs and landings of the aircraft. Buildings, parking garages, and other surfaces could be repurposed to allow for UAM operations, but only with the active involvement of local governments. Before there is widescale operational use of UAM, cities will also need to work with industry and focus on developing emergency landing sites and other safety procedures. To take advantage of these emerging technologies, we ask States, cities, and counties to begin these analyses in their local areas. While widespread UAM flights may be a few years away, cities and States must begin preparing for them now.

Because the future of American infrastructure is coming—and sooner than you think—through airbuses that provide an alternative to our commuter rails and rush hour drives; the new line of ambulances that arrive faster and more safely because they can fly over traffic; and the long-distance air transportation that connects rural and urban communities like never before.

CONCLUSION

The aviation industry is on the verge of a technological innovation that will revolutionize the way we move goods and people. Much like Henry Ford did with the Model T and the Wright Brothers did with the first flight, UAM technologies will change people's lives—and our world—for the better.

And UAM is just part of this new world. I've already mentioned the role UAS and drones will play, but there are so many other new innovations with their own impact, from the supersonic planes that will be managed by new and improved air traffic systems to the commercial space flights that will make us rethink airports around the world—and beyond.

This vision is not theoretical; it will happen. But in order for America to be the leader that gets us there, we must recommit to our partnership between industry and Government, including of course, the U.S. Congress.

Industry and Congress have a historic relationship based in bipartisan cooperation. Just look to the formation of NASA's precursor, the National Advisory Committee for Aeronautics. Created in 1915 by an act of Congress, the committee worked with industry leaders—like Orville Wright, a founding member—toward achieving one shared mission: the advancement of aerospace science, an innovation to benefit our country.

Over 100 years later, we have a new Congress and new industry leaders, but our mission is still the same: to imagine, to innovate, and to create the next generation of aerospace technology that will build a better world for the American people. Whether through Urban Air Mobility or any of the other incredible innovations coming from our industry, we look forward to not only continuing our partnership, but strengthening it over the next 100 years and beyond.

Thank you.

EXAMPLE PHOTOS:

Bell Helicopter Nexus Air Taxi

Boeing Passenger Air Vehicle

Embraer Air Taxi

Mr. CARBAJAL. Thank you, Secretary Fanning.

Mr. Krauter, you may proceed.

Mr. KRAUTER. Thank you. Good morning, Chairman DeFazio, Ranking Member Graves, and members of the committee.

Spokane International Airport is the primary commercial service airport for the intermountain Northwest. We are proud to serve approximately 4 million passengers a year who come to us across the State of Washington, Oregon, Idaho, Montana, and several Canadian provinces. It is my privilege to appear before you today to explain what the cost of doing nothing looks like for my airport and others like it across the country.

I want to emphasize three key points from my written testimony for your consideration.

The first is the overwhelming need for investment in our Nation's airport infrastructure. In Spokane our main terminal building dates back to the 1960s. Some of our baggage handling machines are so outdated that our maintenance team has to fabricate replacement parts from scratch. You literally can't buy them anymore.

Our facilities are operating beyond capacity, even as our passengers and freight volumes continue to grow. We reached an all-time record level of passenger traffic in 2018, and have seen passenger activity increase 37 percent since 2013, with 23 percent of that growth occurring in the last 2 years.

The airport is an engine of economic growth for our surrounding region, but the reality is that it is an engine in need of repair. We are taking this on through a challenge project we call our terminal renovation and expansion program, or TREX. My written testimony details the full scope of the TREX project, but the primary elements are captured in a graphic that I have placed in front of you.

Additional gate capacity is one of the primary tasks of TREX, as well as expanded modernized security screening and baggage claim facilities, all designed to meet demand. There is no question that our airport urgently needs this project. The only question is about the most fiscally responsible way to pay for it.

That leads me to my second point, which is that the status quo is not working when it comes to funding airport infrastructure. There are two main sources of funding for airports.

The Federal Government makes grants through the Airport Improvement Program, or AIP, but AIP funding has essentially been flat for many years. In addition, AIP funds are typically directed to air-side projects, runways and taxiways, not terminal buildings or other types of improvements that are more urgently needed right now.

In 1990 this committee's forerunner wisely equipped airports with another capital development tool by authorizing a passenger facility charge, or PFC, on each enplaning passenger to fund terminal and other improvements. But the $4.50 cap on the PFC has not been adjusted since 2000, meaning that its purchasing power in today's dollars is about half of what it once was.

Many airports, including ours, have increasingly used PFCs as a crutch to make up for flat AIP and its declining purchasing power. Even so, together, AIP and PFCs are only generating about one-third of the annual funding needed to maintain and expand our country's airport system.

Flat AIP funding and a cap on PFCs that has not been adjusted in almost 20 years has created a cascading series of consequences for our airport. We have been forced to delay or restructure projects that ultimately result in greater cost and complexity. And limited funding strains our cash resources and threatens to require us to take on unsustainable levels of debt in order to make critical improvements.

The situation underscores my final point, which is to strongly urge Congress to increase the PFC cap. This would provide immediate support for capital projects at the airports across the country, and it would ultimately save money for the traveling public. Let me explain using our TREX project as an example, and a graphic that is placed in front of you.

The current PFC cap forces us to finance investments over a longer period of time, meaning that we ultimately pay almost as much in interest as we do for the project itself. If you look at the chart you will see that our TREX project is estimated at $191 million, and the interest associated with that is $151 million. So this limited funding really does strain our resources and our ability to deliver other projects that would otherwise be funded.

If you move down this table, you can see that just a modest increase in the PFC to $6.50 or $8.50 considerably reduces that interest, that interest burden, which means that we can go towards funding additional projects, and further improve the customer experience, and not pay all that interest to the bank with this locally directed user fee.

If we go up to $8.50, and a combination of pay-go and bond financing, our interest costs could only amount to $18.7 million over the term of the financing, or roughly one-quarter of what they would equal with the current cap.

As airport operators we have to ask ourselves why our passengers should pay double the actual cost of the TREX improvements, when a modest increase in the PFC could significantly reduce our total costs. Why should PFC funds go towards projects that could have been funded with AIP, had its funding level kept up? Why should a PFC that has not been adjusted for nearly two decades force us to take on an unnecessary level of debt? These are questions that airport operators should not have to ask, not when the answer is so clear.

Increasing the PFC cap is a fiscally prudent way to start improving our airports now. TREX is very important to our community, but small and mid-sized airports across the country, very likely in communities represented by Members who are here today, are working to plan, design, and build similar projects. I respectfully ask you to provide the resources we need to make these projects a reality.

I strongly urge the committee to consider increasing the PFC cap, and I welcome your questions. Thank you.

[Mr. Krauter's prepared statement follows:]

Prepared Statement of Lawrence J. Krauter, A.A.E., AICP, Chief Executive Officer, Spokane International Airport

INTRODUCTION

Good morning Chairman DeFazio, Ranking Member Graves, and members of the committee. My name is Larry Krauter and I am the CEO of Spokane International Airport. It is my privilege to appear before you today to explain what the "cost of doing nothing" looks like for my airport and others like it across the country. Like many airports, Spokane faces an overwhelming need for investment to maintain and improve our service to the public. Current funding availability is simply not sufficient to meet this need.

At the outset, I would like to thank the committee for your work on the recent FAA Reauthorization Act of 2018, which responded to a number of issues of importance to us, such as: the certainty of a 5-year authorization, the contract tower program, the contract weather observer program, and prioritization of grants to northern tier airports with short construction seasons. We are eager for the committee to build on the bipartisan, commonsense approach reflected in the reauthorization to address our country's critical infrastructure funding needs.

As members of this committee begin considering proposals to enhance our Nation's infrastructure, I urge you to adopt provisions that would help airports repair aging facilities and build critical infrastructure projects. Toward that goal, I urge you to adjust the outdated Federal cap on local Passenger Facility Charges ("PFCs")—a move that would allow airports to finance a greater share of their projects with local revenue. I also urge you to reexamine the FAA reauthorization bill and consider increasing funding for the Airport Improvement Program ("AIP") account. Adjusting the PFC cap and increasing AIP funding would help Spokane International Airport and airports around the country keep up with rising demand and increasing construction needs.

ABOUT SPOKANE INTERNATIONAL AIRPORT

Spokane is the largest city between Seattle and Minneapolis as well as between Calgary and Salt Lake City. Accordingly, we are a regional center for education, food and entertainment, finance, retail, medicine, manufacturing, transportation, and logistics for a vast area of small and rural communities. In addition, we are a popular year-round leisure destination.

Spokane International Airport is the primary commercial service airport for this region. Our market area includes eastern Washington State, northeast Oregon, north Idaho, western Montana, and the southern parts of the Canadian provinces of Alberta and British Columbia. In 2018, we handled just under 4 million total passengers, which beat our all-time high record set in 2017 and represents an increase of approximately 37 percent since 2013. In the past 2 years, our passenger activity has increased nearly 23 percent. Freight activity has increased a little over 10 percent since 2013.

Our airport is served by Alaska Airlines, American Airlines, Delta Air Lines, Frontier Airlines, Southwest Airlines, and United Airlines, which together operate approximately 60 flights per day to 16 nonstop destinations. Scheduled cargo service is provided by FedEx and UPS. Empire Airlines provides cargo service to smaller communities in the region and feeds into FedEx at Spokane International Airport.

On the passenger side, our physical infrastructure consists of two terminal buildings: the original terminal building constructed in 1965, which has 11 loading bridge gates, and a second terminal constructed in 1999, which has three loading bridge gates and four ground-loading positions. Together, the terminals offer a total of 14 gates and four ground-loading positions.

The airport is owned jointly by the city of Spokane and Spokane County and operated by the Spokane Airport Board. In 2019, our operating budget is approximately $43 million and our capital budget is approximately $51 million. We have approximately 100 full-time employees and 50 part-time employees. We do not receive general fund support from our owners and therefore rely on revenues generated by leases, fees, and concession agreements to fund our operations and capital expenditures. Consequently, PFCs are crucial element of our fiscal self-sufficiency.

OUR AIRPORT'S CAPITAL IMPROVEMENT NEEDS

After 20 years without any gate capacity improvements, Spokane International Airport has reached a point of full saturation on both the landside and airside of the terminal facilities. On the airside, we have no additional gate space to offer existing airline partners for new service and no gates available for new entrants, particularly if they want to fly at peak times. For example, Alaska Airlines recently added new nonstop service to San Diego. Due to lack of gate availability, the new route uses one of the ground-loading positions, which forces customers to go outside in all weather conditions to board the aircraft. This boarding method is both dangerous and uncomfortable and does not provide the kind of customer experience that we are striving for. The lack of gate space also requires Alaska Airlines to remote park two Q400 turbo-prop aircraft, creating additional inconvenience and inefficiencies. When I recently returned to Spokane on an Alaska Airlines flight, we had to wait on the taxilane while they pushed back an empty aircraft off of the ground-loading gate to allow us to taxi in and deplane.

Our landside facilities are equally saturated. We have a passenger-screening checkpoint in each of the terminal buildings. Both checkpoints are severely constrained as they were jammed into existing space in the terminal buildings that were not designed for the extensive physical space needed to carry out passenger screening in the post 9/11 era. Some of our baggage-claim devices are original equipment, and our maintenance staff is required to machine replacement parts from scratch in order to keep them operational. The baggage carousel that serves United Airlines dates back to the 1970s. Our legacy HVAC system is just as aged, and we have trouble keeping our passengers and workers comfortable, as our system struggles to keep up with the heating or cooling loads during peak hours of activity.

We have done an amazing job to extend the life of the terminal buildings and to make them work as best as they can; however, we now find ourselves up against both the age and capacity limits of the facility. If we do not invest now, the ability of the airport to facilitate continued economic growth of our region will be harmed. Spokane is not alone. Airports around the country are reaching their age and capacity limits. That is why it is so critical that Congress raise the Federal cap on local PFCs and provide airports with more Federal AIP funding.

SPOKANE'S TERMINAL RENOVATION AND EXPANSION PROJECT ("TREX") PLAN

Following an extensive planning process, we launched design of the TREX project to address the capacity and infrastructure issues described above. TREX is a $190 million capital improvement project focused on our most urgent needs, including security screening checkpoint capacity and configuration, baggage claim, gate capacity, legacy HVAC, IT and security systems, as well as adequate public circulation space and areas for proper configuration of law enforcement, dispatch, operations, and administrative functions. The core components of the TREX project are outlined in *Exhibit A*.

TREX will connect our two existing terminals with a new space that also provides a consolidated baggage-claim area and a new consolidated passenger-screening checkpoint. Elevated walkways will connect the two terminal buildings beyond screening in the secure area, which is something that our customers have been asking for over many years so that they do not have to exit one terminal and go through the screening process at the other terminal. An expansion of up to six loading bridge gate positions on the C Concourse is under discussion with our airline partners as part of the current preliminary design process. TREX will also create new concession space to consolidate services to second-level boarding areas that should lower costs, increase revenues, and provide a higher level of customer service. A curbside overhead canopy will also be added to provide better safety, four-season comfort for loading/unloading, and to tie the buildings together architecturally. The architectural rendering included in *Exhibit A* provides a perspective of the central baggage-claim hall and passenger security screening mezzanine.

On the airside, TREX will add a new dual taxilane to accommodate the extension of the C gates and ensure that aircraft can circulate without being trapped in the alleyway. Finally, a new skybridge will connect the terminal to the parking garage to improve passenger movement, efficiency, and safety.

The cost of the TREX project is currently estimated at approximately $191 million as shown in *Exhibit A* (in 2018 dollars). We anticipate that TREX can be constructed from 2020–2023 or later depending on project financing.

TREX represents a responsible and measured approach to resolving the issues created when aging airport terminal area infrastructure collides with growth. Coming out of the Great Recession and our Master Plan Update in 2012, we could see that our terminal buildings would need to be improved and expanded even under the most conservative growth forecast. Our two disparate terminal buildings (constructed in the 1960s and the 1990s, respectively, and in both cases before 9/11) created unique burdens both from an age and operational perspective. Ideally, an airport in a community the size of Spokane would have one terminal building instead of two. As a result of our two-terminal structure, concession operators struggle with costs as they are required to adapt to spaces that were not designed for the post-9/11 environment and split operations across two terminal buildings. The configuration also requires the airport to operate two parking garages and maintain an extensive curbside.

Because of these challenges, the Master Plan concluded that in the long-range plan it would be better to go to a new greenfield site and build the correct configuration of a unified terminal building that offered substantial flexibility. The problem with that solution was the price tag of $400 million–$500 million and, at that time, a slow economic recovery combined with volatility in air service decisions and a slow return of capacity that was removed by the airlines during the Great Recession.

As a result, we decided to take a more conservative approach and make "lemonade" out of the existing terminal complex and figure out a way to renovate and expand the buildings to accommodate projected growth—the solution reflected in the TREX project. This conservative approach required us to think about ways to make the terminal buildings work better together through a series of projects that would have independent utility but would be functionally related to the whole program. Our concern was that our air service environment had been volatile and as a result we did not want to overextend our building program and end up highly leveraged in the event that we continued to experience a slow economic recovery or that the airlines did not respond to the demand in our market with sufficient seat capacity and destinations.

There are many airports across the country that are pursuing TREX-like projects that can run anywhere between $50 million or greater depending on the scope of the needed improvements. A nearby example of that is in Missoula, Montana, which is pursuing a terminal renovation and expansion project that is estimated to cost in the $100 million range. To provide a comparison, Missoula handled over 848,000 passengers in 2018, where Spokane handled nearly 4 million total passengers. I use this to illustrate that there is a common need for airports to renovate and expand terminal facilities in response to growth and the costs of these projects for smaller airports are in a consistent range.

FUNDING FOR TREX: THE COST OF DOING NOTHING

TREX is crucial to the future of our airport and our region. However, current Federal policy with respect to AIP and PFCs creates an extremely challenging funding environment for airport development projects like this, one that unduly constrains our fiscally prudent financing options. The follow sections discuss the challenges created by each funding mechanism in turn.

AIRPORT IMPROVEMENT PROGRAM

AIP provides grant funding for certain airport capital projects, mainly related to airfield improvements. Although the FAA reauthorization bill signed into law last year was helpful in restoring stability and predictability to aviation policy, the law fell short in maintaining level funding for AIP at $3.35 billion annually. Of that amount, airports will receive approximately $3.2 billion each year after appropriations are taken to fund FAA administration, research and development, and small community programs. This amounts to less than half of the $7 billion each year through 2023 that the FAA's own 2019 National Plan of Integrated Airport Systems ("NPIAS") says is needed for AIP-eligible projects. Even then, as discussed below, the NPIAS estimate does not reflect the complete capital needs of airports, which also include projects that do not qualify for AIP funding.

As AIP funding has remained flat over the past 12 years, its effective buying power in current dollars has declined to an effective $1.8 billion. In turn, the $5 million Spokane receives annually in AIP formula funds based on passenger and cargo activity for use on eligible projects has effectively declined in value to $2.25 million. The amount of this formula funding is often insufficient to address the total cost of an eligible project, so we must compete with other airports for discretionary funding from the FAA or divide a project into multiple phases, which is inefficient and costs more. We also find ourselves having to bid projects in multiple schedules to match funding constraints and ask the contractors to hold their prices from one year to the next, which is risky for them.

An example of our situation is a current grant request that we have submitted to the FAA for reconstruction work on our runway intersection related to pavement rehabilitation, paved shoulders, drainage, and signage. Our total project request for the Runway 8–26 Improvements Project is $21 million, with $18.6 million from the FAA and $2 million from the airport in matching funds (which is, in itself, considerable). If this project were funded entirely through entitlement formula, we would be looking at obligating approximately 4 years of funding to pay for the project. As a result, we have requested discretionary funding from the FAA. At the same time, we have a need to realign our terminal building access road and prefer to use our entitlement funding for that project. If the FAA cannot come through with discretionary funding, we will have to substantially modify the runway project and/or jump over it and prioritize the roadway realignment project. This could create a considerable disruption to our Airport Capital Improvement Program that we have worked out with the FAA. Had our AIP funding been able to keep up with need, we would be able to pursue both projects without tying up our funding for several years or introducing a disruption into our capital program.

Because AIP cannot meet our funding needs for eligible projects, it causes a cascading impact of phasing or deferral of airfield projects that ultimately results in greater cost and complexity. Another example is our project to relocate a road around the end of our primary runway that is currently within the Runway Protection Zone—one of the most critical safety areas that we are charged with protecting. This project is estimated to cost upwards of $20 million and we have been seeking funding partners at the State, metropolitan planning organization, and local level to help us leverage the relatively small amount of FAA funding that we can bring to the project. We prepared an application for a BUILD grant from the U.S. Department of Transportation for this project; however, off-airport needs in our region caused us to withdraw our application in favor of another project that was critically important to the community. This is an illustration of the way in which the diminished purchasing power of AIP funding causes airports to go in search of other sources and increases pressure on overall transportation funding sources, which are struggling to keep up with demand in their own right.

PASSENGER FACILITY CHARGES

Airports also have considerable capital needs for projects that do not qualify for AIP, especially terminal construction and maintenance projects. PFCs are a crucial source of support for these projects, because their proceeds may be used for a broader range of airport development projects than AIP grants and can be bonded to finance large, multiyear projects.

Congress imposes a $4.50 per passenger per enplanement cap on PFCs, which is not indexed for inflation and has not been increased since 2000. As with AIP grants, because the PFC cap has not been adjusted since 2000, the purchasing power in today's dollars is about half of what it was. Most airports today collect the maximum PFC amount because of the need to fund terminal infrastructure projects as well as the impact of construction inflation on project costs. While this effect varies by region, it is safe to say that average construction costs have increased considerably since 2000 when Congress last adjusted the PFC cap.

In many circumstances, including Spokane's, the PFC is serving as an offset to the stagnation of AIP funding and the erosion of its purchasing power. In fact, a quick look at our PFC programs since 1993 show approximately 11 airfield-related projects totaling a little over $37 million that would have been AIP eligible had AIP been able to keep up with need. We can throw in another $54.8 million in snow removal equipment and a snow removal equipment storage building. Over 26 years, this locally directed user fee has effectively acted as supplement to stagnated AIP funding in the amount of nearly $92 million or roughly $3.54 million on average each year. Overall, the PFC has funded nearly $150 million of projects in Spokane that would otherwise have had to compete, wait, or be cancelled due to a lack of AIP funding or would have had to have been debt financed or paid directly by the airlines.

THE BOTTOM LINE

The airport industry trade associations, the American Association of Airport Executives and Airports Council International—North America ("ACI–NA"), routinely survey airports to assess their total capital needs. ACI–NA's most recent survey data indicates that annualized capital needs between 2017 and 2021 are approximately $20 billion. It is my understanding that this number will increase when the survey is next updated.

Airports collect about $3.3 billion annually in PFC revenue. Add to that the AIP funding level of $3.35 billion and we are only generating about one-third of the annual funding needed to maintain and expand our airport system. This gap acts as a significant constraint on the funding and financing options available to airports like Spokane. Could you imagine what we could do if our AIP entitlement funding was nearly doubled annually and the amount of PFC capacity that could be freed up as a result?

FUNDING FOR TREX: THE URGENT NEED FOR A PFC INCREASE

Spokane needs additional PFC funding capacity now more than ever as we head into the construction of the TREX project. This would help narrow the funding gap described above, and it would ultimately save money for the traveling public. Let me explain using the graphic in *Exhibit A*, which outlines our current and potential financing options for TREX.

Here's how a higher PFC cap would help us reduce time and costs in Spokane: The lower right quadrant of *Exhibit A* illustrates concepts of how the airport can fund the TREX project through the traditional "bond it all and build it" method and another method that we call "pay-go/borrow/bond and build." We have simplified the math to show the broad concept of the costs of doing nothing with the PFC cap and the benefits of increasing the PFC and using methods to reduce our interest costs.

If we take the current estimated cost of the TREX project at nearly $191 million and go the traditional route of bonding the full amount, the airport and its local users effectively end up paying twice for the same thing as the total project cost becomes nearly $342 million. Just for purposes of illustration, at the current PFC level of $4.50 and not counting for inflation, that would straight line to 38 years of PFC obligation if we stayed at 2 million enplaned passengers a year. And this is a current problem today for many airports that are extended decades out on their PFC obligation, paying off projects that they have already built so there is no capacity to fund new projects.

Moving down the table, we show the simplified effect of an increase of the PFC from $4.50 to $6.50, which reduces interest and brings down the PFC collection period from 30-plus years to 22 years. Then, on the bottom table, we show the impact of an $8.50 PFC level, which brings down the PFC collection period to 14 years. The reduced time that a higher PFC would create is relevant since the TREX improvements will likely have 15–20 years of life cycle before reinvestment. A higher PFC would also allow us to reduce our interest costs. Under this model, an $8.50 PFC would also allow us to reduce our interest costs from $151.2 million to $66.3 million. In other words, an $8.50 PFC would allow us to save approximately $85 million in interest costs.

The tables on the lower right of the quadrant on *Exhibit A* show an even better outcome if we collect an increased PFC for a short period of time and then use a combination of pay-go and debt financing (maybe even other than Airport Revenue Bonds if alternatives are attractive), and again we show these scenarios in increments of the current rate of $4.50 and a conceptual increase of the PFC to $6.50 or $8.50 per enplaned passenger. In that scenario, an $8.50 PFC would allow us to reduce our interest costs from $73.4 million to $18.7 million—a $54.7 million savings. An $8.50 PFC would also allow us to reduce the payoff for the debt financing from 20 years to just 7 years.

These tables are a simplified way to express the practical impact of a PFC increase as related to reduction in total project cost. Our example includes a small escalation factor in the 2018 costs. By far, the largest impact on the project cost will be the bidding environment that exists at the time. We also used a bond amortization rate of 4.25 percent. With regard to present value impact, we assume that annual bond payments are fixed at debt issuance, discounted through interest rates at the time, and paid back with funds accumulated in future years at the fixed amount regardless of diminution due to inflation of the value of a dollar in a future year.

As airport operators, we have to ask ourselves why should our passengers pay twice for a project like TREX when a modest increase in the PFC can substantially reduce that liability? Why should the PFC continue to make up for a stagnated AIP funding level that has not kept pace with demonstrated need? Why should a PFC that has not been adjusted for nearly two decades force us into an unnecessary level of debt that we would otherwise prefer not to take on? What are the impacts of losing all of our PFC capacity for decades in terms of deferred and cancelled projects? What are the impacts to our non-grant or PFC-funded capital program that is already underfunded by about $5 million a year?

Spokane's overall financial situation provides additional context for the discussion above. Spokane International Airport is currently mostly debt free with the exception of some modest very low-interest loans that we accepted from the State to construct hangars. While this is an enviable position, we were able to get there by changing our financial models to be more business-like and entrepreneurial, but we also deferred non-grant funded capital investment. Our goal was to build up our capacity in the worst-case scenario of having to go the traditional route of bonding all of the TREX project costs and paying them off over 25–30 years, as well as be able to fund other projects that are approaching that will not be PFC- or AIP-eligible, such as expanding our parking garage.

We believe that it is in the best interest of the airport to avoid debt to the greatest possible extent, and when we need to use it, to limit it. I think we can all agree that this is a good way to operate just about any organization.

Because we have a fully residual rates and charges agreement with the airlines, they also benefit by not having to support substantial levels of debt service as part of their costs. As a result of a combination of factors, our cost-per-enplanement ("CPE") ratio in Spokane is low and fluctuates between $5.00–$6.00 per passenger. This places us in the lowest quartile of airports based on CPE. Much of our financial planning in terms of the impact of decisions on our operating and capital budgets is based on the impact to our CPE and our desire to remain within a reasonable CPE range.

Given our financial discipline and policy choice to avoid debt, the airport uses its unrestricted cash to pay for capital improvement projects that are not eligible for grant or PFC funds and, in some circumstances, to advance fund planning, environmental, or design efforts needed to keep AIP or future PFC projects on schedule. It is important to point out, however, that "unrestricted" does not mean "available." Reserves are not included in the restricted definition. We look to maintain an Operations and Maintenance Reserve and Self-Insurance Reserve (Other Post-Employment Benefits, Environmental Liability, etc.) in addition to funding the aforementioned capital projects. For accounting purposes, we define available cash as that which is on hand after reserves. At this point, I must address a popular misconception. Many groups rely on FAA Form 127 to assess airport cash balances. We believe this is an error because unrestricted cash is defined as "not restricted." This can provide an inaccurate picture of cash available for use. In reality, much smaller amounts of cash are available and in the control of management. For example, in Spokane, the FAA Form 127 indicates that the 2018 forecast amount of Days Cash On Hand ("DCOH") is approximately 385 days. In reality, the number of DCOH is 198 when reserves are applied. The reality is that the revenue we raise goes to fund our operating expenses and about $6 million–$10 million to invest in non-grant funded projects and to match AIP projects (recall the $2 million match I referred to for the Runway 8–26 Improvements earlier in my testimony).

We are not sitting on piles of cash in Spokane with 6 to 8 months of available cash, but the good news is that we are not sitting on piles of debt, either. We have managed to this objective by limiting our non-grant and PFC-funded capital program, which is not in the long-term best interest of the facility. Airports across the country reported almost $92 billion in debt in 2017, which is more than six times the amount of unrestricted cash that they reported that year.

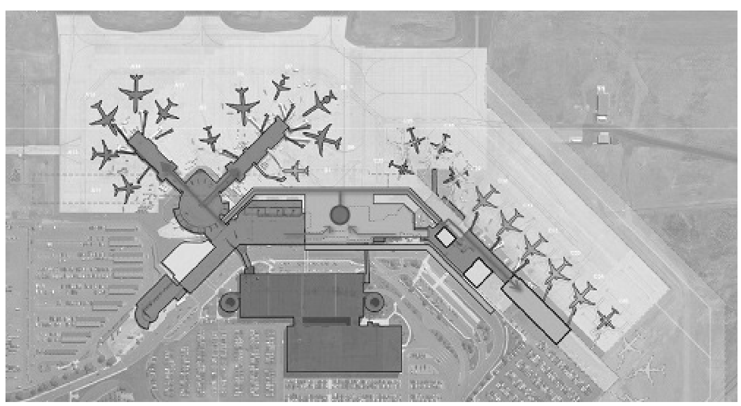
In our community, we would much prefer using a locally directed user fee to pay for projects than to incur debt that has the potential to stop us from being able to move forward on other important infrastructure projects that are not grant or PFC eligible or just saddles us with costs that drive up our CPE to unacceptably high levels.

Finally, I would point out that as a practical matter, our airline partners do not want to tie up their capital investment dollars in a place like Spokane and in the vast majority of smaller communities. We do not see that as a negative. I think that the airlines are pleased that we have kept our PFC capacity available to take on the cost of the TREX project. We are good partners and understand their corporate objectives and how their investments in other types of infrastructure benefits our community. We are realists, and we embrace the responsibility to develop our airport terminal facilities by using the best self-help mechanism available: the PFC. I ask this committee to provide communities with the best possible means by which to fund airport infrastructure by supporting an increase to the PFC as part of an infrastructure bill or other legislation.

CONCLUSION

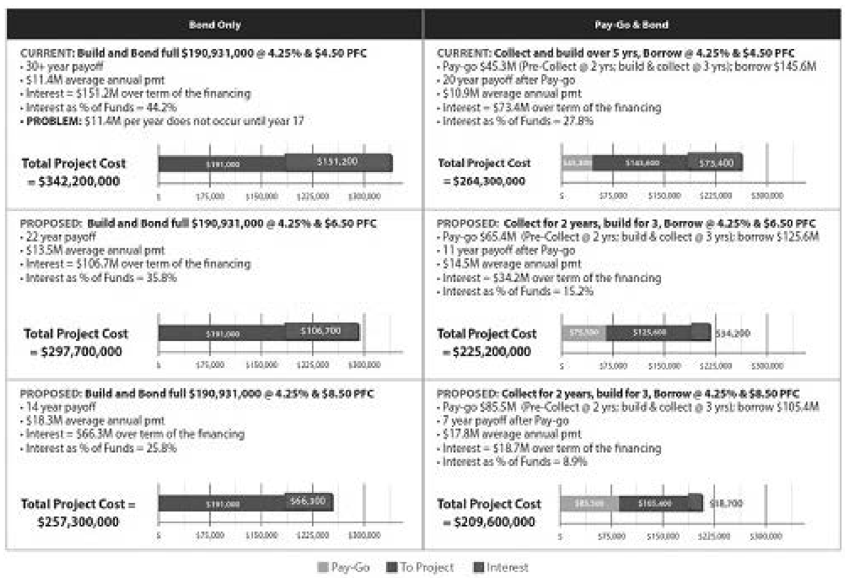
I am very encouraged that Chairman DeFazio and Ranking Member Graves are holding this hearing today to lead our country forward on addressing its infrastructure needs. Clearly, the cost of doing nothing is high, and we are already paying for it at the risk of harming the economic well-being of our community airports by underfunding AIP and artificially limiting their ability to deliver modern and efficient facilities as a result of an outdated cap on a locally directed user fee that has proven to enhance safety, efficiency, capacity, competition, and the customer experience. I strongly encourage you to consider raising this gap to provide airports like Spokane with the broadest range of funding and financing support as we work to deliver the 21st-century infrastructure that the American people deserve. I look forward to working with members of this committee as you put together an infrastructure package and future infrastructure legislation.

EXHIBIT A: TERMINAL RENOVATION AND EXPANSION ("TREX") WITH CONSOLIDATED CHECKPOINT PROJECT



Description	Approximate Area (sf)	Construction Costs (2018 $)
Central Bag Claim (Ground Level-Five Devices) ..	70,000	$33,950,000
Consolidated Checkpoint (Upper Level)	55,000	$26,675,000
Basement Under Bag Claim (Half of Ground Level Area)	35,000	$3,500,000
Terminal A/B Remodel (Old Bag Claim and SSCP)	17,500	$3,062,500
Terminal C Ticketing remodel (Old SSCP)	4,000	$700,000
Concourse C West Extension (Three Gates at End of Concourse)	50,000	$26,250,000
Concourse C West Extension (Ramp Level)	50,000	$6,250,000
Concourse C Central (East) Expansion (Three Gates Above Ground Boarding)	12,500	$7,500,000
Concourse C Central (East) Expansion (Ramp Level)	12,500	$1,562,500

Description	Approximate Area (sf)	Construction Costs (2018 $)
Concourse Connectors	17,000	$10,200,000
Curbside Canopies	....	$7,647,000
Apron For Concourse C Extension	174,700	$12,229,000
Dual Taxiline	148,500	$10,395,000
Passenger Boarding Bridges	6	$4,500,000
Skybridge from Terminal to Parking	9,750	$5,850,000
Landside Curbside Improvements	....	$3,500,000
Mechanical and Electrical Upgrades	....	$15,000,000
Airport Operations Center	38,000	$12,160,000
Total		$190,931,000



Mr. CARBAJAL. Thank you, Mr. Krauter.

Next we have Ms. Lee.

Ms. LEE. Good afternoon, Chairman DeFazio—thank you. Good afternoon, Chairman DeFazio, Ranking Member Graves, and members of the committee. I am Angela Lee, director of Charlotte Water, the drinking water and wastewater utility serving the city of Charlotte and the Greater Charlotte region in North Carolina. It is my honor to appear before the committee today to discuss the importance of the Federal role and funding and financing wastewater and stormwater infrastructure.

In addition to speaking on behalf of Charlotte Water, I am also representing the Water Environment Federation, which is the technical and professional association of clean water and stormwater professionals, and the National Association of Clean Water Agencies, the association representing clean water and stormwater agencies before Congress in the Federal Government.

Charlotte Water maintains more than 8,600 miles of water and wastewater pipeline, with nearly 280,000 active connections, countywide. We employ over 950 people, with an operating budget of over $460 million. We have a 5-year community investment program of $1.5 billion. We are not only a provider of vital services for 1.2 million people, we are also an important provider and driver of economic prosperity for our region.

Each member of this committee has at least one municipal wastewater utility in their congressional district. And many of you probably have several that are providing vital clean water services to your constituents and businesses. There are over 15,000 wastewater utilities in the United States, with 75 percent of the population, 244 million Americans, relying on well-built and maintained wastewater systems that treat 32 billion gallons—that is 32 billion gallons—of wastewater daily.

In fact, many of us washed, brushed, and flushed this morning, and it was a wastewater utility that took care of it. Without water utilities, businesses would not thrive, public health would be at risk, and our rivers and lakes and oceans would be in ruins.

I urge each member of this committee to reach out to your local water and wastewater utility and take a tour of our operations and learn how we are protecting your communities, our communities, and helping them prosper.

I respectfully urge you to read my full testimony. But for the purposes of this hearing I would like to focus on the challenges water utilities are having, and the importance Federal funding plays in helping us address them.

As a member of the Water Environment Federation and the National Association of Clean Water Agencies, I can speak for my municipal water sector colleagues and communities across this Nation, that we support improving upon and increasing funding for existing water infrastructure programs and, when appropriate, developing new funding tools. Congress has made important strides in recent years to elevate water infrastructure as a national priority. But more needs to be done to ensure the Federal Government prioritizes investments to support a strong, modern water infrastructure network, as it does for other sectors.

In 1977 Federal funding provided 63 percent of water infrastructure funding. Today only about 9 percent comes from Federal funding. There is strong support for increasing Federal funding for water infrastructure, as noted in a recent poll by the Value of Water campaign, which found that 78 percent of Americans said it is extremely important—extremely or very important that Congress develop a plan to rebuild America's water infrastructure, and that 88 percent of Americans agree that an increase in Federal funding is needed to rebuild water infrastructure.

Actions this committee and Congress should take? Reauthorize the Clean Water State Revolving Fund, and increase funding for that program. Reauthorize WIFIA and increase funding for it. Create or reestablish some target Federal programs to aid lower income ratepayers' stormwater infrastructure and workforce sustainability.

North, south, east, and west of this country, water utilities are united in protecting the environment of the communities we all serve. We all depend on water infrastructure to be dependable and operable. For without clean water, there would not be any public health, good public health. There would not be economic development and prosperity. And, most importantly, without clean water there would not be life.

Thank you for the opportunity to testify on behalf of the water sector and this committee's interest in supporting increased funding for water infrastructure. I look forward to answering your questions.

[Ms. Lee's prepared statement follows:]

Prepared Statement of Angela Lee, Director, Charlotte Water, North Carolina, on behalf of the Water Environment Federation and the National Association of Clean Water Agencies

Chairman DeFazio, Ranking Member Graves, and members of the committee:

It is my honor to appear before the committee today on behalf of Charlotte Water, in partnership with the Water Environment Federation (WEF)[1] and the National Association of Clean Water Agencies (NACWA)[2], to discuss the importance of the Federal role in funding and financing wastewater and stormwater infrastructure. I am Angela Lee, director of Charlotte Water[3], the drinking water and wastewater utility serving the city of Charlotte and the Greater Charlotte region in North Carolina. My testimony will focus upon three significant issues affecting wastewater and stormwater infrastructure:

- *Federal Funding of Water Infrastructure*—Congress should provide robust support for existing and proposed Federal funding and financing programs, ensuring water infrastructure is a national priority on part with other vital infrastructure sectors.
- *Benefits of Funding*—community prosperity, public health, and environmental protection all benefit from Federal funding.
- *Risks of Not Funding*—without appropriate investment, ratepayers, businesses, and job growth are negatively impacted and environmental quality and public health are put at risk.

[1] The Water Environment Federation (WEF) is a not-for-profit technical and educational organization of 35,000 individual members and 75 affiliated Member Associations representing water quality professionals around the world. Since 1928 WEF and its members have protected public health and the environment. As a global water sector leader, WEF's mission is to connect water professionals; enrich the expertise of water professionals; increase the awareness of the impact and value of water; and provide a platform for water sector innovation.

[2] The National Association of Clean Water Agencies (NACWA) represents public wastewater and stormwater agencies of all sizes nationwide, with more than 325 public agency members. NACWA has been the Nation's recognized leader in legislative, regulatory and legal advocacy on the full spectrum of clean water issues, as well as a top technical resource for water management, sustainability and ecosystem protection interests. The Association's unique and growing network strengthens the advocacy voice for all member utilities, and ensures they have the tools necessary to provide affordable and sustainable clean water for all.

[3] Angela Lee is the director of Charlotte Water. Lee, who previously served as the chief of operations and division manager for Charlotte Water since 2004, stepped into her new role in January 2018. She has been a city of Charlotte employee since 1988. As director, Lee is responsible for the countywide water treatment and distribution, wastewater treatment and collection, and utilities planning and management activities. Lee holds a Master of Public Administration degree from UNC Charlotte and a Bachelor of Science degree in Industrial Engineering from North Carolina State University. She was the 2017 chair of the North Carolina American Water Works Association and North Carolina Water Environment Association (NC AWWA–WEA) and is a Grade A water distribution operator. Angela has been given many water industry awards including the prestigious Warren G. Fuller Award and the Arthur Sidney Bedell Award.

INTRODUCTION

Charlotte Water maintains more than 8,600 miles of water and sewer pipeline, with nearly 280,000 active water connections countywide. Charlotte Water employs more than 950 people with an operating budget of over $460 million, and a 5-year Community Investment Program budget of $1.5 billion. We are not only a provider of vital services, we are also an important provider and driver of economic prosperity for our region.

Funding our extensive infrastructure is one of our greatest challenges as a utility. Like clean water agencies around the country, Charlotte Water has many competing pressures—including the need to reinvest in aging infrastructure, maintain and upgrade treatment processes, comply with Clean Water Act rules and regulations, make strategic long-term investments, and help support a high quality of life in our community while addressing household affordability constraints. Underlying all these challenges is the ongoing obligation to optimize our infrastructure and our performance for the protection of the public health and the environment.

In making operational and investment decisions we also need to account for changing conditions—such as precipitation patterns that affect the volume and intensity of flows through our system. As an example, during Hurricane Florence in September 2018 and its aftermath, in some communities millions of gallons of untreated or partially treated wastewater were discharged into our waterways across North Carolina; drinking water systems were overwhelmed as well. As an agency, we strive to make every effort to protect our community and our environment. Environmental circumstances like the weather are outside our agency's control but are something to which we must adapt. The water services we provide are vitally important and depend in large part on having adequate funding and financing resources at our disposal. The funding challenge for water infrastructure investments is not only an issue for Charlotte Water—it's a national challenge that warrants national attention and support.

The need for greater investment in our Nation's infrastructure, including wastewater and stormwater, is well known. This committee and congressional leaders were sent a letter on January 10, 2019, cosigned by 91 national, regional, and State organizations including WEF and NACWA urging Congress to include funding and financing for water infrastructure in the proposed major infrastructure package. The cosigners represent a wide diversity of larger, medium and small stakeholder organizations representing citizens from every corner of our Nation.

Nationally, clean water infrastructure has received a D+ grade from the American Society of Civil Engineers' infrastructure report card, and the U.S. EPA calculates national investment needs *just to fully comply with the Clean Water Act under current conditions* at approximately $271 billion over the next 20 years. Some important facts about our Nation's water infrastructure system and its needs include:

- There are an estimated 15,000 Water Resource Recovery Facilities [4] (a.k.a. Publicly Owned Treatment Works) in the U.S., with 75 percent of the US population—244 million Americans—relying upon well-built and maintained systems that treat 32 billion gallons of wastewater daily;
- There are approximately 800,000 miles of wastewater collection and conveyance pipes in the U.S., many of which were built soon after WWII to help fuel our Nation's growth and have far exceeded their 50-year design life;
- According to the most recent U.S. EPA Clean Watersheds Needs Survey *conducted in 2012*, the capital investment need for wastewater for the Nation will need $271 billion over the next 20 years. Further, the report states that the data underestimates stormwater infrastructure needs by roughly $100 billion;
- There are 6,500 communities with Municipal Separate Storm Sewer Systems (MS4) permits, covering more than 80 percent of the U.S. population. Of these, only approximately 1,500 have a dedicated revenue source for stormwater infrastructure investments, a growing cost to communities;
- Looking collectively at drinking water, wastewater and stormwater infrastructure, the U.S. needs to invest a total of *$123 billion per year* above current spending levels over the next 10 years to bring systems to a state of good repair;
- While Federal contributions to transportation infrastructure have stayed constant at approximately half of total transportation capital spending, Federal investment in water infrastructure has declined from 63 percent to 9 percent of

[4] Several years back WEF, NACWA and other organizations recognized that the staid model for treating wastewater did not reflect the tremendous opportunity that utilizing more advanced treatment processes has for recovering and using the energy, nutrients, and water resources available in wastewater. For this reason, the sector has renamed wastewater treatment facilities Water Resource Recovery Facilities (WRRFs).

total capital spending since 1977. Today, more than 90 percent of all investments in water and wastewater in our country come from States and local ratepayers;

- The combined Federal, State and local spending on water infrastructure equals about $41 billion per year, which means our national water infrastructure investment gap is $82 billion per year. If current needs are left unaddressed, the annual gap is projected to rise to $109 billion by 2026 and $153 billion by 2040, as needs from prior years accumulate.

FEDERAL FUNDING OF WATER INFRASTRUCTURE

Despite many of these challenges, as a Nation we are fortunate to have the drinking water, wastewater, and stormwater systems that we have. We sometimes forget that many countries would love to have the water systems we enjoy. We established these systems many years ago to protect our people from outbreaks of cholera and other waterborne diseases. The result has been economic prosperity, public health benefits, and environmental restoration. It has been 50 years since the infamous 1969 fire on the Cuyahoga River that lead to making environmental protection of our waters a high priority through passage of the Clean Water Act in 1972. The environmental gains since then have been significant, but they were made through strong, consistent Federal support of funding and financing of water infrastructure.

As a member of WEF and NACWA, I can speak for my municipal water sector colleagues in communities across the Nation that we support improving upon and increasing funding for existing water infrastructure funding programs and, when appropriate, developing new funding tools. Congress has made important strides in recent years to elevate water infrastructure as a national priority—but more needs to be done to ensure the Federal Government prioritizes investments to support a strong, modern water infrastructure network—as it does for other sectors. This strong support for increasing Federal funding for water infrastructure is a widely held position by a large majority of Americans, as demonstrated in a recent poll by the Value of Water Campaign [5] that found that 78 percent of respondents said it's "extremely or very important" that the President and Congress develop a plan to rebuild America's water infrastructure. The same poll found that 88 percent of Americans agreed that increased Federal funding is needed to rebuild water infrastructure.

As stated above, Federal investment in water infrastructure has declined from 63 percent to 9 percent since 1977. This decrease is partially due to the replacement of the Construction Grants Program with the Clean Water State Revolving Fund (SRF). The Clean Water SRF program is one of the most successful Federal infrastructure funding programs ever, and it is now critical that Congress reauthorize it and increase the authorized fund levels to help address our national needs. The last three fiscal years, Charlotte Water has obtained over $84 million in low-interest loans through the North Carolina SRF loan program. Below market interest rate loans help make sewer rates more affordable for our ratepayers, many of whom are low-income.

The Clean Water SRF loans are administered through State infrastructure financing agencies, which is meant to ensure that funding is going to the most critical projects in a State. Generally, this approach has worked, but there are several ways that the loans can be delivered more effectively and the Federal capitalization grant to State-run SRF programs could be maximized better. As the committee develops an infrastructure package, WEF and NACWA encourage the committee to further explore some of these approaches to improve the SRF program. WEF and NACWA also urge the committee to look hard at how the SRF, as well as other current and potential Federal funding programs, can provide more funding for stormwater infrastructure and water reuse and recycling projects.

I would also like to thank this committee and Congress for reauthorizing the Water Infrastructure Finance and Innovation Act (WIFIA) and authorizing the program to receive $50 million for each of the next two fiscal years, which is estimated to provide approximately $5 billion in Federal low-interest loans per year. The strong interest and support for the WIFIA program is evidenced by the fact that in 2018 the program received 62 letters of interest from utilities worth $9.1 billion in requests for Federal loans. Congress should continue to fully fund the WIFIA program and reauthorize it before its current authorization expires after fiscal year 2021.

While low-interest loans through the SRF and WIFIA have proven to be a practical and costeffective approach for the Federal Government, Congress needs to re-

[5] http://thevalueofwater.org/resources

store some targeted grant programs to help in several key areas, which include, but are not limited to:

Resilience—Resilience is not just building infrastructure designed to withstand the physical impacts of climate change, it also involves financial resilience, workforce resilience, technology resilience and long-term planning resilience. No other form of infrastructure will be impacted by the need for resilience more than wastewater and stormwater infrastructure—from extreme weather to population shifts to economic swings to regulatory changes. With over 17,000 wastewater utilities and 6,500 community MS4 permit holders, they must make their systems more resilient to withstand short-term and long-term challenges. Technical and funding assistance to utilities, particularly medium and smaller ones, would be Federal dollars well spent now rather than in the future in response to a disaster or crisis.

Stormwater—Communities need to make stormwater infrastructure investments in the next decade to ensure public safety and meet the requirements of the Clean Water Act. Date out of the most recent EPA Clean Watershed Needs Survey, which used 2012 data, projects a national need of $150 billion over the next 20 years for stormwater and Combined Sewer Overflow (CSO) infrastructure for communities to remain in compliance with the Clean Water Act. Communities are moving deliberately to secure sources of funding for stormwater and green infrastructure upgrades but lack funding sources and a comprehensive set of tools to construct and maintain the required improvements. Federal loans and grants for communities can help them pursue approaches to financing the required infrastructure.

Workforce Sustainability—The Brookings Institution report—Renewing the Water Workforce—estimates the entire water sector employs 1.7 million people when accounting for utility staff, consultants, manufacturing and other jobs directly associated with the water sector. A 2010 report by the Water Research Foundation found an estimated that 30 percent–50 percent of water utility workers will retire over the next decade. Just as with physical infrastructure, human infrastructure is a critical part of water infrastructure investment. Jobs in water utilities are local, careerlong, green jobs that pay family-sustaining wages with a position for everyone from a GED to a PhD. At Charlotte Water, we have initiated a workforce development program this year to grow the pool of available water sector candidates. Participants serve under experienced water and wastewater professionals, learning important career skills and transferring institutional knowledge. Increased funding for water infrastructure investments by communities will help utilities find, train and retain the next generation of water professionals helping communities to prosper and have a clean environment.

Affordability—For most communities, the most restrictive component to a utility increasing rates to pay for necessary infrastructure investments is the desire and responsibility of the utility not to overburden their lower income rate payers. Utilities in cities and rural areas with low-income populations, elderly and fixed-income populations, and jurisdictions with declining populations struggle to keep water affordable, while funding infrastructure needs to protect public health and comply with regulations. In many communities the lowest 20 percent of earners pay almost one-fifth of their income towards their water bill. Charlotte Water serves just over 285,000 accounts but provided 58,636 payment arrangements in 2018. Public Utilities may be forced to delay much needed projects to avoid overburdening customers. The committee should explore approaches to help utilities address these burdens on lower income ratepayers. The committee is commended for its important work passing legislation last Congress to codify Integrated Planning for clean water obligations, an approach through which utilities can more strategically plan their clean water investments. Policy changes such as this will play a role in helping address affordability alongside funding.

BENEFITS OF FUNDING

Strong Federal investment in clean water infrastructure is paramount as cities and communities across North Carolina and the Nation work to meet the needs of their residents and support business growth. In my community, Charlotte Water is keenly aware of the impact our utility has on growth of the region. With the influx of new businesses, multi-family units and growth in industries like healthcare and craft brewing, my utility must keep up with providing water and wastewater infrastructure for the Charlotte business region to thrive. Without adequate wastewater infrastructure in the right place, at the right time, and in adequate condition, economic development stalls, developers seek other locations to invest and create jobs.

Innovation and investments in sanitation in our country have been crucial to protecting public health by reducing the prevalence of waterborne diseases, allowing our communities to thrive and population to grow. Clean water investments not only largely eradicated life-threatening diseases from the United States, they have helped protect and restore our lakes, rivers, and coastlines—giving children the opportunity to swim outdoors, fisherman to consume their catch, ecosystems to improve and new businesses to flourish. The protection and provision of water services is a core part of the public's trust in all levels of Government, and there is a local, State, and national imperative to helping ensure these life-saving and quality-of-life services remain strong.

Having robust sources of Federal funding and financing do more than help communities make the important capital investments they need today. Reliable funding sources also help communities look to the future and do more to stretch limited dollars by investing more strategically. For example, as communities develop and implement long-term plans not only for water and wastewater but also for roads, telecom, and other utilities, communities may find opportunities for pairing various projects (the "dig once" approach) and for phasing investments strategically over time. Communities may also be better able to adapt to changing environmental conditions to ensure that investments made today will be resilient in the future. In many cases upfront investments can save long-term costs, but without access to affordable long-term funding many communities on the ground find they do not have the luxury of planning as far ahead as they may like. For example, in Charlotte, having access to various funding options provides Charlotte Water flexibility to efficiently coordinate infrastructure improvements with the local stormwater utility, transit system, State transportation department and energy providers. Right now, we are working on a project in an area where the water and wastewater infrastructure is about 70 years old that will improve water, wastewater, stormwater and pedestrian infrastructure. Several agencies are coordinating to improve the quality of life in this neighborhood and impact the residents there only once through creative construction planning. Federal funding can also help support creative solutions with multiple long-term benefits and challenge communities to innovate.

Additionally, as a sector, we are striving to make resource recovery a core element of treatment and modernization of wastewater infrastructure. Without investing in innovative and modern treatment technologies, valuable and money-saving resources such as energy, nutrients, and water recycling are being lost. Recovering these resources ensures communities are maximizing their current infrastructure investments, as well as planning for their future needs. This approach is captured in the Water Resources Utility of the Future, A Blueprint for Action [6] guide that WEF, NACWA and other water associations developed. Charlotte Water for the last 2 years has been honored by Utility of the Future Today Recognition Program for our innovative and sustainable approaches to wastewater resources recovery.

RISKS OF NOT FUNDING

Reliable and affordable clean water infrastructure is the backbone of our communities, both large and small, as they develop and grow economically. Families, businesses, schools, and hospitals need these essential clean water services to live, operate and continue to thrive. Public utilities are leaning more and more on ratepayers every year to meet these growing demands, placing strain on lower income households. The Federal Government can be an important partner in providing low-cost financing tools and funding to help ensure that protections are in place to ensure households are not at risk of losing these vital services due to cost.

Water affordability is one of the most vexing challenges facing the water sector. Nationally, the cost of clean water services has increased faster than the rate of inflation for 15 consecutive years, and these trends are anticipated to continue as infrastructure ages, communities work to address compliance obligations and new challenges emerge. For households with low or stagnant incomes, the amount they are spending on water often exceeds what EPA considers affordable. Municipalities also face significant pressure to set rates that are attainable for the often-growing percentages of low-income households in their service area—even if it means deferring investments.

Federal investment in clean water can be a major economic driver for communities in meeting their growth potential. Those investments are wise economically for communities and the Nation—every $1 million invested in drinking water and wastewater infrastructure increases long-term GDP by $6.35, creates 16,000 new

[6] https://www.wef.org/globalassets/assets-wef/direct-download-library/public/03---resources/waterresourcesutilityofthefuture__blueprintforaction__final.pdf

jobs, and provides $23.00 in public health-related benefits.[7] Studies also show that the US economy would stand to gain over $200 billion in annual economic activity and 1.3 million jobs over a 10-year period by meeting its current water infrastructure needs. Without these investments, breakdowns in water supply, treatment and wastewater capacity are projected to cost manufacturers and other businesses over $7.5 trillion in lost sales and $4.1 trillion in lost GDP from 2011 to 2040.

Further, Federal investment is needed for communities to continue making the water quality gains they have made over the past several decades under the Clean Water Act. As communities deal with aging infrastructure and increasing water quality challenges, Federal resources are important in helping public utilities meet these challenges head on and ensuring residents have the clean and safe water services they deserve. We cannot risk the incredible progress on environmental and water quality gains that have been made under the Clean Water Act due to stagnant Federal investment. And we also need to pay close attention to the real health and environmental risks associated with water services becoming too costly for households to afford.

CONCLUSION

This testimony has touched upon just a few of the water infrastructure challenges we at the local government level are faced with, and some of the remedies we believe will help lessen the financial impact on our citizens, particularly those who have so little income to spare. More Federal funding through existing programs and potential new programs will help us begin to make headway towards addressing in our wastewater and stormwater infrastructure needs. The return to the Nation for increased Federal funding will be environmental, public health and economic benefits critical to the health and safety of our country.

Thank you, Mr. Chairman, Mr. Ranking Member and committee members, for your kind attention. I would be happy to answer any questions you may have.

Mr. CARBAJAL. Thank you, Ms. Lee.

Mr. McArdle, you may proceed.

Mr. MCARDLE. Well, good afternoon, Mr. Chairman, Ranking Member Graves, and to all the members of the committee. And, first of all, thank you all for your public service.

My name is Rich McArdle. I am the president of UPS Freight, which is based in Richmond, Virginia. I am here today representing the U.S. Chamber of Commerce, the world's largest business federation.

For the past 37 years I have worked for UPS, a company you to know—or one extent or another, are very familiar with. We have employees, buildings, a variety of trucks, perhaps even airplanes, back office operations, UPS stores, or other multimodal operations in every single one of your congressional districts. We probably have delivered a package to your home some time this week or some time last month.

This year represents our 112th as a company. My career parallels that of many of our senior leaders. I started loading delivery vehicles in Louisville as a part-time employee, a job that I assumed would last only until I graduated from college. One thing led to another, and I began a series of operational assignments with increasing responsibility. It led me from Kentucky to Colorado to California to South Carolina to Washington, DC, to Pennsylvania, and now down to Richmond.

I personally have experienced congestion all over the country.

As an integrated multimodal service provider, UPS engages in the movement of goods with every transportation mode represented

[7] http://thevalueofwater.org/sites/default/files/Economic%20Impact%20of%20Investing%20in%20Water%20Infrastructure__VOW__FINAL__pages.pdf

here today. And that is why I want to thank you for the opportunity to testify.

I won't spend any more time on UPS. Rather, I would like to emphasize a perspective we share with the U.S. Chamber, the American Trucking Associations, and many Americans. And that perspective—there is a cost of not addressing the infrastructure investment issue. As was mentioned many times this morning, that has already been pointed out. The cost of doing nothing is truly more than the cost of doing something. And that is what I want to discuss.

For UPS and our customers, transportation infrastructure means something very different than an ongoing discussion about small government versus big government, devolution, long-term funding solutions, or any other term that seems to avoid the real action that needs to be taken. Transportation bottlenecks, including potholes, harm all of us, all of our businesses, as well as individual commuters. They compromise our ability to serve our customers, impede our ability to grow, and cost commuters at least 42 hours a year, on average, across the country.

At UPS we pride ourselves on efficiency. However, today, in order to meet our service commitments, we may have to dispatch additional vehicles to mitigate the time spent in congestion. In doing so, like other transportation service providers, we are adding to the congestion problem.

The problem is very simple. The primary funding mechanism for the surface transportation infrastructure, the Highway Trust Fund, is underfunded and does not provide the necessary resource to maintain and keep the network in a state of good repair, let alone provide the resources we have talked about this morning—we have heard—to modernize and incorporate technology, improve the fluidity, the velocity, and, most importantly, the safety of our networks.

The annual shortfall in the Highway Trust Fund, $144 billion since 2008, is being covered by the general fund. The majority of Americans across all parties will support an increase in the Federal gas tax to pay for roads, if that means less Government borrowing, which will reduce the burden of debt on future generations.

We have to modernize our infrastructure. However, today we struggle to keep up with what we already have. Do you realize that 7 cents out of every dime is spent maintaining existing roads, 2 cents are spent adding capacity to the additional thoroughfares, and just one penny out of every dime is spent on brandnew roads?

Congress can help us. We need an infrastructure modernization plan to encourage innovation, give States and cities who manage the highway network the flexibility to incorporate technology into our highways, and to support and improve mobility, whether that is autonomous vehicles, intelligent transportation systems, connectivity among other modes of transportation, they all need to be included as we move forward.

In my written testimony I mention both the Chamber's plan and the American Trucking Associations' Build America Fund. Both staffs from both organizations are ready to go into detail of those plans with you. I think that you will find that they address innovation, they address ideas of how funds can be dedicated.

And one other thing I will mention is that later this week or next week the American Transportation Research Institute will be releasing its next updated list of the top 100 bottlenecks in America. I encourage you to take a look at that report when it comes out.

I would like to conclude, hopefully, by conveying a sense of urgency. Will this be the Congress that stabilizes the Highway Trust Fund, which has been underfunded for more than a decade? Or will the can be kicked down the road one more time? From what I heard this morning, I know that is not the intent.

Let's not allow our infrastructure that has long been the catalyst of our country's prosperity to deteriorate any further. The UPS, the Chamber, the ATA, along with other business leaders stand by ready to work with Congress to enact an infrastructure modernization bill this year.

Remember, the cost of doing nothing is more than the cost of doing something.

Thank you for your opportunity to speak with you today, and I look forward to your questions.

[Mr. McArdle's prepared statement follows:]

Prepared Statement of Rich McArdle, President, UPS Freight, on behalf of the U.S. Chamber of Commerce

THE IMPACT OF INACTION ON AN INFRASTRUCTURE MODERNIZATION PLAN

The U.S. Chamber of Commerce is the world's largest business federation representing the interests of more than 3 million businesses of all sizes, sectors, and regions, as well as State and local chambers and industry associations. The Chamber is dedicated to promoting, protecting, and defending America's free enterprise system.

More than 96 percent of Chamber member companies have fewer than 100 employees, and many of the Nation's largest companies are also active members. We are therefore cognizant not only of the challenges facing smaller businesses, but also those facing the business community at large.

Besides representing a cross-section of the American business community with respect to the number of employees, major classifications of American business—e.g., manufacturing, retailing, services, construction, wholesalers, and finance—are represented. The Chamber has membership in all 50 States.

The Chamber's international reach is substantial as well. We believe that global interdependence provides opportunities, not threats. In addition to the American Chambers of Commerce abroad, an increasing number of our members engage in the export and import of both goods and services and have ongoing investment activities. The Chamber favors strengthened international competitiveness and opposes artificial U.S. and foreign barriers to international business.

INTRODUCTION

Chairman DeFazio, Ranking Member Graves, and members of the committee—thank you for the opportunity to provide testimony before the House Transportation and Infrastructure Committee on a policy issue of the utmost importance to our Nation. My name is Rich McArdle, and I currently serve as the president of UPS Freight. I submit these written comments, and appear personally before the committee, representing the United States Chamber of Commerce.

The U.S. Chamber of Commerce is the world's largest business federation. The organization represent the interests of over 3 million businesses of all sizes, sectors, and regions, as well as State and local chambers and industry associations.

THE IMPORTANCE OF AMERICA'S TRANSPORTATION INFRASTRUCTURE

America's transportation network is a vast and complex system that connects people and places, moves goods, boosts our economy, enhances safety, and improves our daily quality of life. The country's transportation system is comprised of roads, bridges, public transit, airports, railroads, seaports, and interchanges affecting thousands of communities, multiple industries, and virtually all job sectors. Without question, this system serves as the backbone of the Nation's economy.

The current assets that make up our Nation's transportation network include:

- 4.1 million miles of public highways
- 600,000 bridges
- 11,300 miles of public transit
- 25,000 miles of navigable waterways
- 114,600 miles of rail
- 250 water ports
- 19,500 airports

Source: 2019 Bureau of Transportation Statistics Pocket Guide

By any objective measure, America's transportation infrastructure has been the envy of the world. From the transcontinental railroad to electric streetcars, from subways to the Interstate Highway System, freight rail connections to the world's most advanced aviation system, our Nation's history of providing state-of-the art transportation infrastructure is impressive, and continues to evolve.

As this committee knows, most of this system was built 60–150 years ago. The Chamber, and UPS, believe the time has come to enact a Federal infrastructure modernization plan to provide every American a 21st-century system.

THE IMPORTANCE OF NETWORKS TO FREIGHT MOVEMENT

The Nation's goods movement and freight networks continue to experience significant strain. In 2016, our Nation's transportation system moved 17.6 billion tons of goods, worth $18.1 trillion, according to the U.S. Department of Transportation. *Source: USDOT 2019 Bureau of Transportation Statistics Pocket Guide*

The Nation's supply chain is also adapting to the rapidly advancing e-commerce environment. Supply-chain fulfillment operations, including thousands that we interact with at UPS, have transitioned from an inventory based "manufacture-to-supply" model to a "manufacture-to-order" model. In fact, many of these orders are shipped directly to the end consumer. Emerging technologies such as vehicle-to-vehicle and vehicle-to-infrastructure communications and autonomous vehicles require modern infrastructure to allow these innovations to achieve the desired effects of maximizing the efficiency of the transportation network, while increasing safety for transportation workers.

THE CURRENT IMPACT OF CONGESTION

According to the American Transportation Research Institute (ATRI), congestion on the Interstate Highway System alone costs the trucking industry nearly $74.5 billion in 2016 and wasted more than 1.2 billion hours. This number, from 3 years ago, equates to 425,000 drivers sitting idle for a full working year. Today, the situation has deteriorated even further. *Source: ATRI Cost of Congestion to the Trucking Industry 2018 Update*

For UPS, this impact is real—if every UPS vehicle is delayed due to congestion 5 minutes a day, every day, it costs our enterprise $114 million annually.

For a company like UPS, this scenario has a legitimate, dramatic and daily impact, as we operate approximately 120,000 commercial vehicles and travel 2.9 billion miles in the United States each year. Ultimately, congestion requires UPS to build in operational redundancies to meet service commitments to our customers.

Practically speaking, this means that every day we have to dispatch more tractor-trailers and delivery vehicles than necessary to complete our work under optimum conditions—therefore, and ironically, adding to congestion.

A snapshot of UPS operations in the New York City metropolitan area may provide some insight into today's challenges. On average, UPS delivery drivers in New York City and northern New Jersey are delayed 16 minutes per day due to traffic congestion. Since 2011, UPS has had to dispatch an additional 62 delivery drivers, every day, to meet customer service obligations in this geographic area due to gridlock. In addition, in the same New York-New Jersey area, congestion has forced UPS to dispatch an additional 21 tractor-trailer combinations (to handle the same amount of package volume moving between UPS facilities).

Put simply—these additional vehicles only make a bad situation worse, let alone further negatively impacting the local communities in which we provide service. The average commuting time in the United States, at 48 minutes per day, is well above that of its peers due to congestion and inadequate public transit; it is 38 minutes in the United Kingdom and 31 minutes in Italy. *Source: Council on Foreign Rela-*

tions 2018 State of U.S. Infrastructure Report In addition, inadequate infrastructure also leads to vehicle damage. According to The Road Information Program, the average American experiences on average $599 of damage to their vehicle each year due to inadequate road conditions. Furthermore, congestion costs the average American an additional $960 annually meaning that the cost to the average commuter of doing nothing is over $1,500. *Source: Texas A&M Transportation Institute (TTI) 2015 Urban Mobility Scorecard*

INVESTMENT NOT MEETING INFRASTRUCTURE NEEDS

Both the American Society of Civil Engineers (ASCE) 2017 Infrastructure Report Card and the latest Department of Transportation Conditions and Performance (C&P) Report show current investment levels are not even maintaining the current infrastructure network, much less making improvements.

The 2015 USDOT C&P report highlighted the current state of good repair needed for highways and bridges at an estimated $830 billion. Of the total backlog, $156.8 billion is required for the Interstate System; $394.9 billion for the National Highway System, and $644.8 billion for Federal-aid highways. The USDOT C&P report also stated the current state of good repair needs for public transit at $89.8 billion.

The ASCE Report chart below shows the estimated investment gaps for several types of infrastructure over the next 10- and 20-year periods:

Estimated Changes in U.S. Infrastructure Sector Investment Gaps and Aggregate Investment Gap

	Cumulative Gap Estimate in 2016 *Failure to Act* Analysis (*Billions 2015$*)		Cumulative Gap Estimate Calculated for 2011–2012 *Failure to Act* Analysis (*Adjusted from Billions 2010$ to Billions 2015$*)	
	2016–2025	2016–2040	2016–2025	2016–2040
Surface Transportation	$1,101	$4,334	$908	$3,931
Water & Wastewater	$105	$152	$113	$163
Electricity	$177	$565	$212	$743
Aviation	$42	$88	$46	$82
Ports & Inland Waterways	$15	$43	$18	$42
Total	$1,440	$5,182	$1,297	$4,961

Note: Numbers may not add due to rounding.

Source: Failure to Act: Closing the Infrastructure Investment Gap for America's Economic Future, American Society of Civil Engineers

EFFORTS LAYING THE GROUNDWORK FOR BROADER INFRASTRUCTURE MODERNIZATION DEBATE

The Trump administration has been vocal about the need to rebuild and vastly improve our infrastructure, and Congress, on a bipartisan basis, has also indicated its willingness to work on solutions. This committee is taking a leadership role on this issue and should be commended. This written, we should not confuse activity with accomplishment on this vital policy initiative. The time is now for elected officials in Washington to take charge and tackle the problem with both adequate funding and a long-term plan.

For years, the U.S. Chamber of Commerce has supported meaningful action to reinforce our once-unequalled infrastructure, and we've continued to offer a slate of potential solutions to prove it.

Last year, the Chamber laid out four pillars that the administration and Congress should consider including in the infrastructure modernization debate:

- Increasing the Federal fuel user fee by 5 cents a year for the next 5 years for surface transportation projects.
- Implementing a multifaceted approach for leveraging more public and private resources.
- Streamlining the permitting process at the Federal, State, and local level.
- Expanding the American workforce through work-based learning and immigration reform.

The Chamber is urging Congress to utilize all user fee revenue in the Airport and Airway, Inland Waterway, and Harbor Maintenance Trust Funds to invest in much needed airport and water infrastructure projects.

The Chamber is also open to other ideas to provide a long-term vision for transportation infrastructure and address the funding needs. At present, the Chamber is holding a competition offering cash prizes for ideas other than an increase in the fuel tax for surface transportation from everyone—students, academics, business leaders, the builders of the system, and the users of the system—to submit the best, most viable ideas for a long-term sustainable funding source. The Chamber will consolidate and publish all of the good ideas they receive, and has recently started publicly discussing these matters as on Tuesday of this week we hosted a signature thought leadership summit event: "America's Infrastructure: Time to Invest."

HIGHWAY TRUST FUND ISSUES

As has been discussed before the committee in the past, the Federal Highway Trust Fund (HTF) will run out of money shortly after the Fixing America's Surface Transportation (FAST) Act expires in 2020. The primary reason we are underfunding our highways and transit systems is that the HTF is experiencing an annual deficit of $11.8 billion in 2018—spending $55.2 billion while only taking in $43.4 billion—which, according to the Congressional Budget Office, will increase to $25 billion in 2029. *Source: Congressional Budget Office The Budget and Economic Outlook: 2019 to 2029*

Congress has made up for this funding shortfall in two ways. First, it has transferred $144 billion into the trust fund since 2008 to prevent insolvency. Second, it has delayed and underfunded the maintenance of the country's roads, bridges and mass transit systems.

The Congressional Budget Office further estimates the trust fund will need up to $150 billion infusion to enact a 6-year reauthorization that merely maintains current spending levels.

With a growing Federal deficit, the ability for Congress to continue to inject General Fund revenue into the HTF is limited. This is one major reason the Chamber supports the budget-neutral mechanism of adjusting the Federal fuel user fee to address this issue and provide long-term stability for our highway and transit programs.

HOW TO INCREASE INVESTMENT IN SURFACE TRANSPORTATION

To rebuild and expand our roads, bridges, and transit systems, the Chamber believes it is time for a modest increase in the Federal motor vehicle fuel user fee. The user fee was last raised in 1993. Since then, inflation has eroded over 40 percent of the value of the fee. In addition, vehicles are significantly more fuel-efficient than they were 25 years ago. As a result, motorists use less fuel to drive the same number of miles, generating significantly less revenue to maintain the roads upon which they drive.

The Chamber is calling for increasing the gas and diesel taxes by 5 cents a year in each of the next 5 years for a total of 25 cents. The proposal would include indexing the tax for inflation and for future increases in fuel economy, so there would be no need to revisit this issue in the future.

The proposal would raise $394 billion over the next 10 years, which would be invested in our highways, bridges, and transit systems in a fiscally responsible fashion. When combined with State, local, and private-sector funds, this would go a long way towards modernizing the Nation's once-great interstate system.

In addition to my responsibilities at UPS Freight, I also have the pleasure of serving as a cochair of the American Trucking Associations (ATA) Infrastructure Task Force, which has explored various ways to pay for increased highway investment. Like the Chamber, ATA believes that an adjustment in the Federal fuel tax is the most efficient, equitable, and logical manner to increase transportation infrastructure investment in a budget-neutral fashion.

The ATA proposal, the Build America Fund plan, calls for a Federal fuel usage fee built into the price of wholesale transportation fuels collected at the terminal rack, phased in at a nickel per year over 4 years. The fee would be indexed to both inflation and improvements in fuel efficiency, with a 5-percent annual cap.

CONCLUSION

The bottom line is that the time to make important infrastructure investments is NOW. Delaying action only makes the decisions more difficult and projects costlier. From the business community's perspective, the question is not *if* we need to make these decisions, but *when*.

The Chamber strongly supports modernizing the Nation's infrastructure. We need a fluid, efficient multimodal national transportation network that will support the transportation needs of businesses from origin to destination across the globe, and from the factory to the corporate headquarters, to main street retailers to medical centers, to everywhere in between.

There is no single funding solution that will solve all of our surface transportation infrastructure problems. The Chamber believes communities should have a large toolkit of funding and financing options available that can be utilized to provide the infrastructure needed, not just to succeed, but to lead the world in providing economic and social mobility. Improving our current infrastructure is a necessary component of economic development for our country.

Here's the bottom line: A robust, long-term Federal infrastructure modernization program, combined with greater investment by State, local and private stakeholders, can engender the partnership necessary to ensure our Nation has a 21st-century infrastructure network. But without a serious commitment from Federal lawmakers, our Nation will not make the kind of progress demanded by the challenges we'refacing.

Enacting an infrastructure modernization plan this year would directly add demand and employment, as some 14 million workers, or 11 percent of the total U.S. labor force, are currently employed in infrastructure-related sectors, according to the Brookings Institution. Source: *"Beyond Shovel-Ready: The Extent and Impact of U.S. Infrastructure Jobs."*

Thank you for the opportunity to testify today regarding this timely and important issue. The Chamber and all UPSers look forward to working with this committee, the administration, and Congress to support this critical effort to provide the tools necessary to modernize America's highway and public transportation network, stabilize the Highway Trust Fund, and grow investment in the Nation's transportation infrastructure so each State and region can get out of the system what they need to be successful—whether that is moving goods or individuals.

Mr. CARBAJAL. Thank you, Mr. McArdle.

Ms. Meira, you may proceed.

Ms. MEIRA. Thank you. Thank you, Mr. Chairman, Ranking Member Graves, members of the committee. Good afternoon. I represent the Pacific Northwest Waterways Association, and we thank you for tackling one of the most challenging issues in our country today, and that is the status of our infrastructure. I am honored to share with you some perspectives from the ports and navigation sector.

And the Northwest region that I represent is truly a microcosm of the diverse national ports portfolio. We have big import centers, like the Ports of Seattle and Tacoma, which, together, is the third largest container gateway in the country. We have export gateways, like the Lower Columbia River, where over half of the Nation's wheat exports move out to feed the world. And we have a network of smaller ports on the Oregon and Washington coasts, which serve as commercial and recreational fishing hubs, and they home port critical Coast Guard operations. And that is just the view from the Northwest.

Across the U.S. ports generate trillions of dollars in economic activity, and support millions of American jobs. And our prosperity depends on the efficiency of our ports, and infrastructure is key.

When we think about the infrastructure needs of our coastal ports, an issue top of mind is the Harbor Maintenance Tax, or HMT. I heard it mentioned a number of times this morning at panel one, and you will hear about it a bit more from me.

The HMT is collected mostly on imported waterborne cargo. It is intended to pay for 100 percent of the operations and maintenance needs of our coastal ports and harbors. But since 2003, HMT collections have far exceeded the funds that have been passed along to the Corps of Engineers for harbor maintenance. So we now have a surplus that has grown to over $9 billion. So, rather than being fully used for critical maintenance, that money has been held back to help balance the Federal budget.

Now, our ports community has been working for years to support comprehensive HMT reform. The past few WRDA bills—and we have to say thank you for this—they had very important steps forward, including setting targets to get on the path toward full use of HMT revenues, a 10-percent set-aside for our Nation's smaller ports, and authorizing funding for donor and energy transfer ports.

As we look ahead, we continue to advocate for full use of all HMT monies collected. In our region alone, HMT dollars helped to maintain places like Grays Harbor in Washington, where traffic has increased over 400 percent in the last 15 years; Everett, Washington, where nearly $30 billion worth of U.S. goods are exported annually; and Newport, Oregon, which is the home port for NOAA's Pacific fleet.

And this fund is also important to our Nation's small coastal ports. Just one example in our region are the Ports of Ilwaco and Chinook in Pacific County, Washington. Combined, they bring in a total of 16 million pounds of fish valued at $22 million for a county of just 22,000 people. And without basic maintenance dredging, Federal dredging, the life blood of that entire community would evaporate.

We also have a significant backlog of deferred maintenance for structures like jetties, pile dikes, breakwaters, and more. And unlocking the HMT is key.

Our association also supports a broader conversation about the HMT. I mentioned earlier the Ports of Seattle and Tacoma. They are naturally deep import centers, where significant amounts of HMT are collected, yet relatively little maintenance activity is required.

And for ports that are close to a border, that can also play a role in their competitiveness. So we support an ongoing dialogue about how to support all U.S. ports, including small and donor ports.

And as we think about a broader infrastructure package beyond navigation, our ports want to be a part of that conversation, too. With the committee looking to build upon improvements made in the FAST Act, we encourage development of specific freight element in that new legislation, with programs that are truly multimodal.

Our Nation's ports also support funding for first and last mile road and rail projects to expand capacity and efficiently connect our ports to surface transportation systems. We look to continue to build on programs like BUILD, INFRA, RRIF, and others for facilitating port improvements. And for ports which operate airports, I would be remiss if I did not mention the need to increase that PFC that Mr. Krauter mentioned before. Allowing an increase in that fee will allow for critical investments at our Nation's airports.

And woven into all these priorities is the need for resiliency planning, and I hope to talk about that more during the Q&A session.

Thanks for the opportunity to share our views. We look forward to partnering with you as you get to work on modernizing our U.S. infrastructure. Thank you.

[Ms. Meira's prepared statement follows:]

Prepared Statement of Kristin Meira, Executive Director, Pacific Northwest Waterways Association

Chairman DeFazio, Ranking Member Graves, members of the committee:

Good morning. My name is Kristin Meira, and I am the executive director of the Pacific Northwest Waterways Association, or PNWA. PNWA is a nonprofit trade association that advocates for Federal policies and funding in support of regional economic development. Our membership includes over 140 public ports, navigation, transportation, trade, tourism, agriculture, forest products, energy and local government interests in Oregon, Washington, and Idaho.

Thank you for holding this important hearing. I am honored to be here today to represent ports and navigation.

PORTS DRIVE THE ECONOMY

The Northwest region I represent is truly a microcosm of the national ports community. We have significant import load centers like the Ports of Seattle and Tacoma, which together serve as the third largest container gateway in the Nation. We have export gateways like the Lower Columbia River, which ships over half of the Nation's wheat to overseas markets. And we have our smaller coastal ports, the commercial and recreational fishing hubs that provide critical access to the open ocean and house Coast Guard facilities needed to ensure the safety of all mariners.

That is just the view from the Northwest. Across the U.S., ports and harbors are the economic drivers for their local communities, their States, regions, and the Nation. Seaports account for over a quarter of the U.S. economy and generate trillions of dollars in economic activity. Cargo handling at America's seaports support more than 23 million American jobs and generate over $320 billion in annual Federal, State and local taxes. In addition, all but 1 percent of the Nation's overseas trade moves through maritime facilities. Clearly, our Nation's prosperity depends on the efficiency of our ports.

Infrastructure is key when it comes to the continued viability of our Nation's ports. Ports are often where all modes of transportation come together to provide efficient, reliable and safe movement of goods and people. Whether you are talking about highways, rail, bridges, waterways or aviation, funding port infrastructure is a smart investment and keeps America's economy moving.

UNLOCKING THE HARBOR MAINTENANCE TAX IS VITAL TO KEEPING PORTS OPEN FOR BUSINESS

When we think about the needs of our coastal ports and harbors, an issue top of mind is the Harbor Maintenance Tax (HMT). The HMT was established in the Water Resources Development Act of 1986 to help pay for Corps of Engineers maintenance needs at coastal and deep draft harbors. At the time it was established, the HMT was levied on the value of imported, exported and domestic cargo. But in 1998, the U.S. Supreme Court found that taxing exported goods was unconstitutional. Today, the HMT is levied primarily on imported waterborne cargo, and is intended to provide for 100 percent of the operations and maintenance (O&M) needs of deep draft and coastal waterways throughout the U.S. However, since 2003, HMT collections have far exceeded funds appropriated for harbor maintenance, with a surplus that has grown to over $9 billion. Rather than being used for critical channel maintenance, HMT revenues have been used to help balance the Federal budget.

The ports and navigation community has been working to support comprehensive HMT reform for a number of years. One of the key pieces of legislation in support of this effort was the Water Resources Reform and Development Act of 2014. WRRDA 2014 set important goals for the full use of Harbor Maintenance Trust Fund (HMTF) revenues each year. It also provided a 10-percent set aside for our Nation's small ports and authorized $50 million annually for donor and energy transfer ports. Because of the work of this committee, further HMT improvements were made in the Water Resources Development Act of 2016 and today coastal maintenance spending is at nearly 91 percent of HMT collections.

We continue to advocate for full use of all HMT monies collected. Full spending of the trust fund is vital to ensuring that our ports and harbors remain competitive players in the global marketplace. The monies provided to the Corps through the HMTF are critical to address annual dredging needs throughout the country. In our region alone, HMTF dollars maintain gateways like Grays Harbor, WA, where traffic has increased over 400 percent in the last 15 years, in Everett, WA, where nearly $30 billion worth of U.S. goods are exported annually and at Newport, OR, which homeports NOAA's Pacific fleet tasked with critical data collection activities to protect marine mammals, manage commercial fish stocks, and keep mariners safe.

HMTF dollars also fund maintenance of our small coastal ports. These ports are home to fishing fleets, marinas and recreational facilities, and they are critical to the economic survival of their communities. Each year, millions of pounds of fish cross the docks of small ports, bringing billions of dollars to the national economy. Just one example in our region are the Ports of Ilwaco and Chinook in Pacific County, Washington. Combined, they bring in a total of 16 million pounds of fish valued at $22 million. Think about the direct and indirect benefit that has on a county of just 22,000. Without basic maintenance dredging, the economic lifeblood of this community would be at risk. Many of these projects also have breaking bars, serve as Harbors of Refuge for commercial and recreational fishing vessels, and provide critical access for Coast Guard Search and Rescue missions.

And it is not just dredging needs that we see on the horizon. There are other elements of navigation infrastructure that often go unfunded for years, like jetties, pile dikes, breakwaters, and more. It is in the best interest of the Federal Government to take care of these repairs now, rather than add to the already significant backlog and deferred maintenance of the Corps of Engineers.

Our association also supports a broader conversation about the HMTF, to address the concerns of ports which may not need typical dredging or other maintenance, but who have other needs in order to be efficient. In the Northwest, the Ports of Seattle and Tacoma are like other naturally deep import load centers where a significant amount of HMT is collected, yet relatively little maintenance activity is required. For U.S. ports that are close to a border, this can also play a role in their competitiveness. We support the ongoing dialogue about how to support all U.S. ports, including our naturally deep water import centers.

NAVIGATION INFRASTRUCTURE INVESTMENTS IN THE NORTHWEST

In the Pacific Northwest, we've seen what happens when our Federal Government takes a proactive approach to infrastructure.

Early in the last decade, our colleagues at the Portland and Walla Walla Districts of the U.S. Army Corps of Engineers recognized that our aging locks would require strategic repairs to remain operational and reliable. Our group worked with the Corps to advocate for a strategy that would have the least impact to our regional and national economy.

It is important to remember the scale of our navigation infrastructure projects. A catastrophic failure of one of our lock gates would translate to at least a 1-year closure of that project. That is how long it takes to design, fabricate, and install a lock gate of that size. We do not have back-up locks at our projects. Allowing our locks to degrade to the point of failure simply is not an option. A closure of one of our projects creates a bottleneck for the entire system.

Beginning in 2006, the Portland and Walla Walla Districts, Northwestern Division, and PNWA partnered to discuss the highest priority repairs, funding estimates, and proposed timeline. The result of those partnering efforts was a 2007 plan for how repairs would be pursued. The goal: minimize planned and unplanned system closures.

The Corps began working with stakeholders to prepare for new downstream gates at three of our projects, and major repairs at three other locks. A tremendous amount of coordination went into what eventually was a 15-week complete closure of our inland navigation system. This type of long-term planned closure had never been done on any inland waterway in the United States.

We worked closely with the Corps for over a year to prepare growers, shippers, ports, towboaters, steamship operators, fuel companies, media, legislators, and the States of Oregon, Washington, and Idaho for this unprecedented closure. Special emphasis was placed on outreach to grain buyers overseas who were accustomed to sourcing U.S. wheat from the historically reliable Columbia Snake River System. Every moment of the 14 months leading up to the closure was necessary to ensure that both domestic and international stakeholders were prepared for the shutdown of our system.

I'm pleased to say that this effort was a complete success, and a project of which the Corps, stakeholders, and Congress can truly be proud. Because of the outstanding partnership between the Corps and its customers, impacts to our regional and national economy were minimized. The lock maintenance closure demonstrated how the Corps can efficiently deliver projects while having a minimal impact on the economy. The approach was so successful, a similar planned closure for additional repairs was carried out 6 years later. This is a great example of targeted investments which protect the continued efficiency and reliability of a navigation system.

We have also seen how navigation construction projects can lead to increased capacity and efficiency. In 2010, the region celebrated the completion of the Columbia River Channel Improvement Project. The Federal Government, the States of Oregon and Washington, and ports on the Lower Columbia River invested over $183 million to deepen the Columbia River navigation channel to 43 feet. Channel deepening solidified the Columbia Snake River System's position as one of the Nation's leading international trade gateways. Ports, grain terminals, rail lines and towboat companies up and down the Columbia/Snake made significant private investments to capitalize on the successful Federal project. The result is an increase in tonnage on the system from 44 million tons of cargo in 2010 to over 50 million tons in 2016.

Grays Harbor on the coast of Washington is another example of the benefits to the U.S. economy as a result of infrastructure investment. The Port of Grays Harbor is a deep water port with a strategic coastal location, making it one of the most important international shipping hubs in the Northwest. Marine activity at the Port includes deepwater ship and barge transfer of products from local and national manufacturers to domestic and foreign markets. More than 90 percent of Grays Harbor's shipping activity is related to exports, with more than 80 percent of their cargo arriving by rail from the Midwest and Intermountain region.

Like most ports, the Port of Grays Harbor has had a number of deepening projects over the years. The most recent Corps of Engineers deepening program commenced at the Port in October 2016. The project was completed in December 2018 and is already seeing ships loaded with 10 percent more cargo at the Port's Terminal 2, the largest soymeal export facility on west coast. The deepening, as well as continued maintenance of the Federal navigation channel, has resulted in recent private investment of more than $220M at Port terminals.

The Northwest Seaport Alliance, a marine cargo partnership between the ports of Seattle and Tacoma, is also planning for the future. As many of you know, the container business is extremely competitive and transportation costs can be the deciding factor in where to ship and source goods. We need to do everything we can to be efficient, and being "big ship ready" is key. Seattle is at the forefront of these efforts as one of the first projects in the Nation to complete the 3 x 3 x 3 planning process, culminating in a WRDA 2018 authorization for their deepening project. Tacoma also recently began planning for their deepening study this past year. Both ports are already making landside infrastructure investments to complement this effort. These deepening projects will ensure that we grow both our import and export capacity, increase the number of ships calling on U.S. ports, maintain U.S. jobs, and serve our farmers and manufacturers who depend on these ports to get their goods to market.

These are just a few examples of the ways our economy benefits when we focus on navigation infrastructure and the supply chains they serve throughout our Nation. We know there are similar success stories and similar needs all around the United States, and we can't wait to make these investments. The competitiveness of U.S. growers, manufacturers and countless industries relies on the efficiency of our ports.

PORT INFRASTRUCTURE—BEYOND THE WATER

As we think about a broader infrastructure package beyond dredging and other navigation maintenance, our ports want to be part of the conversation. As the committee works to build on improvements made in the Fixing America's Surface Transportation (FAST) Act, we would like to highlight the desire for a specific freight element in any new transportation initiative. In particular, we would like to see freight funding programs that are truly multimodal. Freight funding programs created in the FAST Act have limitations on non-highway projects. New programs that raise or eliminate caps on existing programs for multimodal projects would be helpful to our ports sector.

Our Nation's ports also support funding for first- and last-mile road and rail projects to expand capacity and efficiently connect our ports to surface transportation systems. These investments are needed to truly modernize port infrastructure and keep our Nation competitive well into the future. Our members are very appreciative of the work done by this committee in the past, to ensure that programs are in place to provide infrastructure investments. Programs like BUILD, INFRA, RRIF, and others are critical to facilitating port improvements, and we encourage the committee to build on these programs in the next infrastructure bill.

For ports which operate airports, we would be remiss if we did not mention the need to increase the passenger facility charge (PFC). Increasing this user fee could help offset the cost of building and modernizing airport infrastructure, and support much needed improvements to aviation facilities, technology and equipment. This will allow airports to better meet current air traffic demands and prepare for the future needs of the Nation's aviation transportation network.

Woven into all of these priorities is the need for resiliency planning. Investing in resilient port infrastructure should be a priority as Congress looks at not only current operations, but the ability of our ports and harbors to continue operating in the face of earthquakes, extreme weather, and other natural or manmade disasters. In the Northwest, experts have predicted the possibility of a 9.0 Cascadia Subduction Zone earthquake and tsunami along the Washington and Oregon coasts. This would devastate our entire region, wipe out portions of our coastlines, and require years, if not decades of rebuilding. With ports on the front lines of search and rescue operations, recovery efforts, and the ability to bring in medical and rebuilding equipment, it is even more important for their infrastructure to be ready when disaster strikes rather than seek relief after a catastrophic event. While we anticipate that this will be an ongoing collaboration among Federal, State and local governments, we recommend that resiliency planning be a priority as the committee evaluates infrastructure in the coming year.

As you plan your priorities for the coming year, please note that ports and navigation stakeholders in the Northwest and throughout the Nation stand ready to help in your efforts. Our ports, roads, rails and airports need to be at the forefront of conversations this year and well into the future, as we seek to modernize U.S. infrastructure and ensure our Nation remains a global leader in reliable, safe and efficient goods movement.

Thank you for the opportunity to share our views. I welcome any questions you may have.

Mr. CARBAJAL. Thank you, Ms. Meira.

Mr. Willis, you may proceed.

Mr. WILLIS. Thank you. Good afternoon. First of all, it really is an honor to be here at the first hearing of the Transportation and Infrastructure Committee. I know he stepped out, but I have to mark the chairmanship of Mr. DeFazio and Mr. Graves becoming ranking member. I am really looking forward to working with both of you. And congratulations to the new and returning members of this committee. You are on an important committee for, really, you know, critical issues for our country and for front-line workers that I am proud to represent, as the president of the Transportation Trades Department of the AFL–CIO.

In fact, more often than not, this committee has demonstrated to the American people that party affiliation in Washington can represent a wealth of good ideas, and not just lines in the sand. Your willingness to work across those lines has been proven through the recent passage of the FAA reauthorization bill, water resources, and, of course, surface transportation.

And while these were all good pieces of legislation that the labor movement was proud to support, they are simply not enough. They are not enough to meet the demands of our transportation system today. They are not enough to meet the needs of our transportation system in 10 years. And they are nowhere near enough to what we need to leave: a legacy of economic stability and world-class infrastructure for our children, the way that our parents and grandparents did for us.

Past generations, they did more than just build the Interstate Highway System, rail lines that connected New York to California and every State in between, and an aviation system that sets the global standard. They also created the middle class by ensuring that those who built this country and contributed to this economy enjoyed the benefits of a strong union contract. Sadly, today, we are well past the point where we run the risk of letting these legacies crumble away.

We know failure by the Federal Government to invest in the infrastructure hurts working families. We know that it hurts our economy and leaves good union jobs on the table. And that is why today I want to take you past GDP indicators, past the report card scores, and past the dizzying array of numbers that any of us can point to, and instead briefly focus on the ways that failing to invest in infrastructure takes a toll on individuals.

The people that I am talking about are front-line transportation workers who want to build and operate a first-class system. They are Americans from all walks of life and all corners of our country, who depend on safe and efficient transportation.

I am talking about office workers who miss out on time with their families because they are stuck in hour-long commutes to or from work; the family in Des Moines, Iowa, who cannot afford a car lives in part of the community where bus lines don't run, and must walk 2 miles just to get to the grocery store; employers in South Carolina, employers who are desperate for better transportation options so that their employees can get to work; truck drivers right here in the Port of Virginia who regularly lose out on pay because they are stuck, sometimes for hours on end, in traffic jams caused by outdated infrastructure that cannot keep up with demand; air traffic controllers, FAA inspectors and technicians, pilots, mechanics, flight attendants, transportation security agents, our aviation system that are forced to do more with less every day; the disadvantaged youth of Chicago and Minneapolis who want to work, who are qualified to work, but who have no way of getting to where the jobs are actually located.

You know, we used to pride ourselves in being a Nation that dug deeper, built higher, and went faster. But now we are holding our economy and working families hostage by failing to fund our most important projects, like Gateway in the Northeast, Soo locks in the Midwest, and jeopardizing still too often California high-speed rail.

Let me be very clear. Our members stand ready, willing, and able to drive the buses, build the roads, move freight, fly planes, and dare to dream big on projects like Gateway. The policy solutions we have talked about them already, and they are not complicated. We need to stabilize the Highway Trust Fund. That includes looking at a gas tax and VMT. We must return the Harbor Maintenance Trust Fund to its intended purposes. And Federal infrastructure investments must be paired with strong labor policies and Buy America rules, so that taxpayer dollars will be used to create good, middle-class jobs that we can be proud of.

Finally, if we want to improve transportation and infrastructure in this country, we have got to stop shutting down the Federal Government. It is embarrassing, it is counterproductive, and it is the political equivalent of shooting yourself in the foot and then wondering why you are bleeding.

By showing the courage that this crisis, our infrastructure crisis, deserves, we can leave behind a legacy better than crumbling roads, bridges, and struggling transit systems, better than congested ports and airports. Working families are ready. It is now your turn to show America that you are ready to meet this challenge head on. Thank you.

[Mr. Willis's prepared statement follows:]

Prepared Statement of Larry I. Willis, President, Transportation Trades Department, AFL–CIO

On behalf of the Transportation Trades Department of the AFL–CIO and our 32 affiliated unions, I want to first thank Chairman DeFazio and Ranking Member Graves for inviting me to testify before you today. And let me offer my congratulations to the new and returning members of this committee.

Each of you asked to serve on this committee because you recognize the incredible and important role our transportation network plays in creating and sustaining good paying jobs and facilitating the world's most advanced economy.

And, more often than not, this committee demonstrates to the American people that party affiliations in Washington, DC, can represent a wealth of good ideas, and not just lines in the sand.

Your willingness to work across those lines, which too often divide us as a country, was evident last year when you passed a long-term reauthorization of our Nation's air transportation programs and when you continued the committee's tradition of funding our water resources projects. It was also evident 3 years ago when you passed a 5-year reauthorization of our transit, highway, and rail programs.

These were not easy jobs. Nonetheless, many of you here today worked together to get them done.

Let me be clear, though: while these were all good pieces of legislation that included hard-fought provisions for America's working families, I am sad to say, they simply are not anywhere near enough.

They are not enough to meet the demands that we place on our transportation system today. They are certainly not enough to meet the demands that are going to be placed on it in 10 years. And they are nowhere near what we need to leave a legacy for our children, the way our parents and grandparents did when they had the courage to build something as impossible-seeming as the Interstate Highway System and world-class urban and rural transit systems in every part of our country. Rail lines that connected New York to California and nearly every State in between. A network of more than 900 ports through which 99 percent of overseas trade passes. And an aviation system that set the global standard for moving people and goods safely and efficiently across our skies.

Yes, past generations built a system of transportation infrastructure that inspired a Nation. But they did more than that. By demanding that working people have a voice on the job and earn living wages, our parents and grandparents helped define the American Dream. They created an economic system that allowed a middle class to grow and thrive by ensuring those who built this country and contributed to its economy enjoyed the protections and benefits of a strong union contract.

Sadly, today we are well past the point where we run the risk of letting those legacies quite literally crumble away.

We know that it hurts working families when the Federal Government fails to invest in infrastructure.

We know it hurts our economy.

We know that when the Federal Government fails to invest in infrastructure it leaves good union jobs on the table and delays the ability of goods and services to get to American manufacturers, business owners, and household consumers.

That is why, today, I want to take you past GDP indicators, past the report card scores, past the dizzying array of numbers any of us can point to, and instead, focus on the ways failing to invest in infrastructure takes a toll on working families. I am talking about the young adult who is ready and willing to work, but cannot find decent full-time employment. The single parent who burns the candle at both ends and is still barely able to scrape by. The office workers who want to spend more time with the people they love, but are held hostage by hours-long work commutes. The transit operators who, in city after city, wonder when, not if, backlogs of deferred maintenance will lead to another tragic incident. All because of our failure to invest.

The people I am describing are real people. They are the frontline transportation workers who want to operate and build a world-class system. They are the nurses, teachers, veterans, Government employees, and business professionals who depend on a safe, efficient transportation network. They are your constituents back home.

And the impacts they feel today are only going to get worse if we decide that current Federal measures are simply *good enough*.

Take for example, an Iowa family who lives in an isolated corner of Des Moines. Like many Americans, they are struggling just to make ends meet, and cannot afford a car. A lack of public transit options means this family is forced to walk for 2 miles along the shoulder of a busy highway, often in poor weather conditions and feet from speeding cars and trucks, just to get groceries. Sadly, many of their neighbors face the same problem. The local transit authority is looking at options, but tight budgets mean the authority is already struggling with existing routes.

Federal investment here could mean a safer, more reliable commute for the families of Des Moines, and the creation of good operating and maintenance jobs for the community.

Lack of reliable, affordable public transportation is not lost on business leaders, either. In Greenville, South Carolina, employers representing more than 1,000 businesses in the area called on the county and the city to come together and identify solutions to provide better public transportation. Without it, they simply will not be able to access enough workers to meet the needs of rapid economic growth in their city. Put simply: a lack of resources to provide transportation options may stifle what should otherwise be a model success story for economic growth in a small American city.

Down the road in Fort Mill, employers have hired thousands of workers across multiple sectors. But highways that are in desperate need of expansion have left commuters facing traffic headaches and safety issues so serious that they are beginning to look for work elsewhere—leaving County officials worried that the rapid growth they have enjoyed could be brought to a grinding halt.

Underinvestment is harming Americans in small and large cities alike, and takes a particular toll on those who are already underserved in so many other areas of their lives. Take, for example, Chicago, where young black adults face an unemployment crisis of startling proportions. Unemployment in Illinois is at 4.3 percent, yet 60 percent of black 20- to 24-year-old Chicago residents do not have jobs. A recent study identified lack of public transportation options as a primary reason for that. The majority of jobs in Chicago are located downtown and on the city's Northwest Side, far from Chicago's traditionally black neighborhoods. This is the very definition of what it means to be disadvantaged. The same thing is happening in Minnesota's Twin Cities, where researchers noted that disadvantaged jobs seekers are often qualified for entry-level positions located in the suburbs, but have no way of actually getting to those jobs.

Failing to invest in transportation infrastructure goes well beyond getting people to and from jobs that allow them to support their families. Just ask truck drivers at the Port of Virginia, who come face to face with America's lack of infrastructure investment on a regular basis. Surges in containers from increasingly large ships regularly put the port over capacity, creating traffic jams that can be 13-lanes wide, 10-trucks deep, and take eight hours to clear. Port congestion not only means truck drivers lose out on pay, lessening their purchasing power and placing a strain on their communities, but it means the shipment of goods and raw materials to retailers, small businesses, and farmers is severely delayed.

At our Nation's airports, the situation is not much better. At LAX, the fourth busiest airport in the world, air traffic controllers regularly work overtime because of severe staffing shortages, raising concerns about fatigue, traffic volumes, and basic quality of life. Sadly, the issues found in the LAX control tower are just the tip of the iceberg. Across the aviation system, frontline workers, including those in other types of safety sensitive positions like systems specialists and transportation security agents, are increasingly required to do more with less because of America's failure to invest. In fact, air and ground congestion at major airports has been identified as the biggest economic threat to our aviation industry, yet inconsistent funding, sequestration, and Government shutdowns have hobbled efforts designed to increase capacity.

We used to be a Nation that was not afraid to dig deeper, build higher, or go faster. But today, we have turned a blind eye to projects that will make us better. By failing to tackle some of our Nation's largest and most pressing needs, we are putting our country's entire economy on the line.

Consider the Gateway Tunnel on the Northeast Corridor. The Northeast accounts for 30 percent of all jobs in the U.S. and contributes $3 trillion annually to the U.S. economy. It is home to 51 million people—one in seven Americans—a figure expected to hit 58 million by 2040. Yet, in the busiest rail corridor in the country, we continue to move people and goods at maximum capacity through a 100-year-old tunnel that has been in dire need of expansion and modernization for the past 25 years.

At the Soo locks in Sault Ste. Marie, Michigan, only one lock—the Poe lock, built in 1896—is capable of handling the large lake freighters used on the upper Great Lakes. One hundred percent of the iron ore mined in the United States comes through this one lock. If it were to fail for 6 months or longer, the U.S. Department of Homeland Security estimates that it would have a $1.1 trillion dollar economic impact on our country and cause 11 million jobs to be lost. Yet this project is still waiting on crucial Federal funding for the construction of a second lock.

Meanwhile, America's first truly high-speed rail project, which will lead to an estimated $7.6 billion in new business sales and $3 billion in new wages, faces continuous threats by Congress.

This is what *good enough* looks like.

Our members stand ready, willing, and able to drive those buses in Des Moines and Chicago, to build those roads in Fort Mill, to modernize and move freight in and out of our ports, to make the most advanced aviation system in the world even more efficient, to build the infrastructure we need today for the electric vehicles that are coming tomorrow, and to dare to dream big with you on projects like the Gateway Tunnel and California High-Speed Rail.

And yet we sit here today, still trying to pay for a 21st-century transportation network on a 1993 budget. Still seemingly unwilling to make the difficult political choices that, frankly, we do not think are all that difficult.

The policy solutions are no great mystery.

We know that a user-fee supported system works when it generates enough revenue to meet our needs. But that is simply no longer happening with the Highway Trust Fund. Since 2008, Congress has transferred $140 billion into the Highway Trust Fund from the general treasury, and even then, it is just barely enough money to keep pace with current spending levels. Spending levels that do not even begin to address the larger investment gaps I have discussed today. Spending levels that we know must be dramatically increased if we are to compete in the world economy and provide mobility options that working families are calling for.

We have long supported efforts for a modest increase in the Federal gas tax, which remains the most efficient and reliable means to raise revenue for our surface transportation network. Yes, an extra 25 cents per gallon at the pump will increase costs for some consumers by roughly $100 per year. But this calculation overlooks the fact that investing in American infrastructure will raise household income, by a recent estimate, to the tune of $1,400 per year.

We would also support any serious effort in this Congress to lay the groundwork for a transition to a mileage based user fee. As gasoline powered vehicles become more efficient and electric vehicles become more prevalent, contributions to the Highway Trust Fund will continue to dry up, leaving us back in the same position we are today. At a minimum, Congress should spearhead an immediate effort to dramatically expand the testing of a mileage-based fee.

We should take the Harbor Maintenance Trust Fund off budget and stop raiding it to pay for other priorities. America—not one of our competitors—should be home to the best ports the world has ever known. What's more, when Congress cannot show responsibility with the money they collect for our trust funds, it harms the public's faith in your work. In a very real way, this is about the health of our democracy. I applaud Chairman DeFazio's tireless efforts to see that this happens.

I should note that if we fix our Highway Trust Fund and if we utilize the Harbor Maintenance Trust Fund for its intended purposes, it will free up limited Federal dollars for transportation needs that do not currently have access to a trust fund or user fee revenue.

We know that jobs created by smart investments in transportation and infrastructure are good jobs that people can raise families on. In part, this is because of high union density is some of these sectors and in part because of the Federal policies that have been associated with these investments. In particular, labor standards specific to construction and transportation have been included in past infrastructure investment statutes and together have resulted in a high-road labor model and ensured a skilled workforce is utilized. These standards and other employee protections should be expanded and applied to future investments considered by the committee. In addition, Buy America rules should be aggressively applied to Federal infrastructure programs so that we can grow our manufacturing base as we seek to reverse decades of under-investment. It would be a grave mistake for the health of our Nation to use an infrastructure bill to attack these important laws or to undercut collective bargaining rights that are essential to the good jobs that can and should be created in this space.

Finally, we are here today to talk about our Nation's infrastructure and what happens if we don't invest. But there is another piece of the puzzle that must be stated clearly and loudly: we have to stop shutting down the Federal Government. During the last shutdown—the longest in U.S. history—two agencies vital to our transportation system, the U.S. Department of Transportation and U.S. Department of Homeland Security, went unfunded for 35 days. Grant money was not awarded to transit authorities. Accident investigators stayed home. And critical frontline transportation workers, including air traffic controllers, FAA inspectors and technicians and transportation security officers, were forced to perform safety-sensitive work without pay, or in some cases, not come to work at all. If we want to improve transportation infrastructure in this country, the very least we can do is put a stop to needless, self-inflicted wounds by way of Government shutdowns.

By taking these steps today, we can leave behind a legacy better than crumbling roads and insufficient transit. Better than seaports that no longer compete with our neighbors to the north and to the south. Better than airports where we ask our workforce to do more with less every single day. Better than an economy where the ultra-wealthy only get richer at the expense of everyone else.

It is your turn in Congress, now, to show America's working families that you are ready to meet this challenge. To show our children the kind of courage and leadership that our parents dared to show us. The kind of leadership that inspired a Nation to invest in the economic wellbeing of its people by building the Hoover Dam, the Panama Canal, the Interstate Highway System, and countless other projects named after great Americans who dared to dream bigger than we seem capable of today.

We must not find ourselves back at this table in 10 or 30 years asking what went wrong. Why nobody rose to meet the challenge. And so I challenge each of you and all of us to seize the opportunity before us.

With that, I am happy to answer any questions.

Mr. CARBAJAL. Thank you, Mr. Willis. And now we will proceed with questions from Members. Each Member will have 5 minutes, and we will start with the Members who were not able to ask questions, but were here for the previous panel.

And we will commence with Representative Davids. You have 5 minutes.

Ms. DAVIDS. From the great State of Kansas, thank you all for being here today. I really appreciate hearing from all of you. And I am going to start off just kind of—Mr. Willis, I will probably direct the only question I get to to you.

One, I am coming from a State where we just elected a new Governor in Laura Kelly, who, in our State of the State, came out immediately with her priority of investing in infrastructure, whether it is roads, bridges, our air system.

And the Highway Trust Fund is something that, literally, everybody on the last panel talked about. It is prevalent in all of the testimony. So I appreciate all of you continuing to bring that up. I think that it is going to be important as we move forward here.

One of the things, though, that I want to kind of shift to—although in the Kansas City metro area, in my district, in Johnson County and Wyandotte County, we have the U.S. 69 corridor, which is definitely in need. Secretary Chao came out and looked at that. We have got a north loop project in Wyandotte County. And all of these things will benefit from us addressing the Highway Trust Fund issues.

But you literally just touched on the thing that I have been thinking a lot about, which is the effects of the shutdown, and what it brought to light, in terms of what we need to be thinking about and investing in. Particularly, I am concerned about the air traffic controllers. I went out to—we have the—in Olathe we have a regional air traffic control center. And I am particularly concerned about our pipeline of an ability to not only attract, but retain and maintain a workforce.

And can you talk a little bit about the importance of—the air traffic controllers are organized, and I would love to hear a bit from you about the importance that you see there, and how that is going to help us attract and maintain people, as we move forward.

Mr. WILLIS. Well, thank you, and it is a great question.

The staffing crisis that air traffic controllers are facing was really exacerbated by the shutdown and the fact that the training facility, you know, went dark for 35 days. Right now, across the country, 18 percent of certified air traffic controllers are eligible for retirement. That number goes up considerably when you look at some of the high-traffic areas in New York and elsewhere.

So, you know, you start shutting down the Government, you start withholding pay from these workers, it gives them a real added incentive to walk out the door. So you have a staffing crisis today, you see those people hit the—you know, the retired button, and you have got a real problem.

And, by the way—and it is not just limited for controllers. We have FAA inspectors, which is a critical component of the FAA. These are the people that go out, inspect airlines, pilots, aircraft repair stations both in this country and abroad. They have a staffing crisis, as well.

And, of course, screeners we saw, you know, by some estimates, 1,800 people leave during the shutdown. And, quite frankly, they have got trouble staffing up on normal days. So it really set us back on those categories and other—that problem would exist in any event. But again, the shutdown really highlighted it and exacerbated it.

Ms. DAVIDS. As a followup, can you talk a little bit about whether—I suppose the importance of having an association being able to be organized and attracting or maintaining employees, losing 1,800 people that quickly—and that is just one sector that you were talking about—can you talk a little bit more about that?

Mr. WILLIS. Sure. Just to be clear, the 1,800 was the screeners, represented by—you are right, the air traffic controllers are represented by NATCA, and the FAA inspectors by another union called PASS. But yes, NATCA is very active in trying to recruit air traffic controllers, trying to work with the FAA to make sure that that training program gets back up and running. That is, you know, probably their number-one focus, in addition to making sure that their members are getting paid.

So yes, the union is very involved in making sure that we have a steady stream of qualified controllers going through the school or otherwise getting into those positions, because it can take a long time, not only for the training, but for the high-traffic places you can't just go in there from the schools. You have to have experience elsewhere. So it is a process that the unions are very involved with.

Ms. DAVIDS. Thank you.

Mr. DEFAZIO [presiding]. Mr. Smucker?

Mr. SMUCKER. Thank you, Mr. Chairman. I appreciate you holding this hearing as our first hearing of this session.

You know, I certainly agree that there is an opportunity cost here if we do not make the decisions that need to be in regards to investing our infrastructure. And I believe that it is an opportunity. We have an opportunity right now, this session, to get that done. This is one area where I think we can work together on a bipartisan basis.

We know we have a President in office who has made infrastructure a priority, and would be willing to, I think, sign a bill that would include additional investment in our infrastructure system. So, you know, I hope this is the start to what will be a good outcome out of this committee. So thank you for scheduling this.

I wanted to share just a little of experience that I have had in regards to infrastructure, passage of an infrastructure bill in the Pennsylvania Legislature when I was there in the State senate. We passed Act 89. Now, this is Highway Trust Fund. And in my district, when we talk infrastructure, it is roads and bridges, primarily, being in Pennsylvania.

But you know, the earlier panel—and I didn't get to ask a question from the earlier panel—I just wanted to point something out, pushing back a little on what the earlier panel had said. They said no member of any legislature had ever lost an election because they voted for infrastructure. That is not true.

In fact, in Pennsylvania, after I voted for an infrastructure package, it did become an issue in my campaign, and there was at least one State senator who lost an election primarily because he had voted for a transportation bill.

Now, I mention that not because I do not support investment in infrastructure, but the importance of convincing the American public of the need for this investment. People understand, when you talk to them about it, that infrastructure—everything from highways to ports to air—is absolutely critical for a growing economy. Everyone here understands that. We have talked about it.

But they also want to understand that their dollars are being spent efficiently and effectively, and they need to believe that the dollars that will be raised from additional revenue will be put to use, not only to improve the infrastructure system, but will improve the infrastructure system in their area, and will benefit them.

And what we went through in Pennsylvania was a strong effort by the administration at the time, by the secretary of transportation, by the industry, and by legislators, I should say—who believed in this, who went out and talked to the public about the importance of additional investment. That is what we need now, here, to generate this support.

And nobody should think this is an easy vote. And you know, people are here to do the right thing, but at the end of the day they are going to represent the will of the people in the district that they represent. So it is important that we think about and build the support for the kind of investment that we all need. People will respond when we talk to them about the need, and share with them how it will benefit them.

So, having gone off on that for a little while, I do have a question. You know, I understand the Chamber idea—and, Mr. McArdle, this will be a question for you—I understand the Chamber idea on a gas tax. It is obviously a declining source of revenue, but potentially for 5 years you do something in that regard.

There is another proposal out there that you may have referred to, but I wanted to get your thought on it, particularly from UPS, and that would be something called the BOLD Act, which included, essentially, a highway transportation services tax, or a tax on freight, if you will. And then also a—I think a—like a Federal registration on electric vehicles that are not paying into the system at all, if it is all based on the gas tax.

I just wanted to get your comments on whether you would support something like this. My understanding is that truckers association potentially is supporting that, and wondering whether you would.

Mr. MCARDLE. Well, I will tell you. Let me—to the—regarding the BOLD Act, I am not as familiar with that. I can't get too deep with you on that.

But what I can tell you, that—the first reaction would be that we have to make sure it is equitable. And any time I hear targeted towards freight, my radar goes up on that, and we would have to look at that a little bit closer.

But I would like to comment about the electric vehicles and the tax and the—how does a highway tax incorporate electric vehicles? Probably the first thing to let you know is that I think we are one of the largest, if not the largest, private holder of your alternate fleet, the private company that has got the largest alternate fleet out there. We are looking heavily at electric vehicles, as well, not just for the final mile, but we have also got 125 Tesla trucks on order that should be out here in 2020.

So looking at all that is available is important to us. But when you get to the question—I think there is about 20 States that have put a registration fee on electric vehicles. I think that one of the things that can be looked at relatively quickly is looking at a Federal registration fee on electric vehicles, perhaps even a battery fee. Batteries are going to be charging electric vehicles.

But you are right, there—you know, that is a gap that is only going to grow. I think about 1½ to 2 percent of the vehicles, registered vehicles, right now are electric. But that number will grow.

So it is—it becomes part of—I think I heard earlier this morning a 401(k) portfolio of how are we going to fund our highways. That has got to be looked at, as well.

Mr. SMUCKER. Thank you.

Mr. DEFAZIO. Next, Ms. Finkenauer, Representative Finkenauer.

Ms. FINKENAUER. Thank you, Chairman DeFazio, and thanks to all those on the panel, and also the panelists earlier, as well. I am happy to be here and work on this issue that I know we have been talking a lot about the last couple of years.

And I hope we—I am sure this joke has already been made today, but I hope we finally get Infrastructure Week. I know that is something that is incredibly important in my State of Iowa, in particular, given that we have got the most structurally deficient bridges in the entire country.

And I know Chairman DeFazio mentioned earlier that I sat on the Transportation Committee in the State house for 3 years, and I know worked a lot on these issues, and understand not only the need for investment in infrastructure, but specifically the fact that we also have a workforce issue.

And Mr. Willis, I would like to address this question to you, given, you know, your work, obviously, on this topic. You know, right now, specifically in Iowa, we need a lot of truck drivers and building trades workers, and I am concerned about the workforce shortages and making sure we have enough quality apprenticeships and training programs in place to meet future workforce needs, not to mention the bigger retirements we are seeing today, as well.

Mr. Willis, given the work you have been doing by representing transportation workers at the AFL–CIO, can you tell me how important workforce development is when thinking about infrastructure, from trucking to construction to water, and what you would like to see on a Federal level for investment in this area? And what is working now that we could expand? And what would you like to see?

Mr. WILLIS. Well, thank you. So, obviously, workforce is a huge component of this. You know, the building trades are well known for the tremendous apprenticeship programs that they provide, and opportunities for workers that, quite frankly, wouldn't exist but for the programs that they have. And they can come in and talk to you in more detail about that.

I will say, you know, at a transit level, I think that is a part that often gets missed. There are significant training needs on the bus and rail side, both, you know, mechanics and operator, elevator, escalator, you know, there is a lot that goes into these systems that I think gets lost.

And, you know, to your point, there are opportunities—you know, and this was included in the FAST Act—you know, money for front-line training for apprenticeship programs on transit. I think, quite frankly, those should be expanded. And we are part of a specific labor management program that we are very proud of, again, both management and labor at the table, figuring out these training programs and how to get them implemented.

So I think looking for funding opportunities in the context, whether it is an infrastructure bill or reauthorization, is definitely something that needs to be done.

Ms. FINKENAUER. Thank you. And I would like to open this question up, too, to anyone else on the panel who would like to answer. How are your industries working to attract and retain the transportation workforce of tomorrow? And how can the Federal Government be a partner in those efforts?

Mr. MCARDLE. Congresswoman, I would be glad to—you know, from the trucking industry viewpoint, one of the challenges we are worried about is the retiring workforce, as well, as the need for drivers continues to grow.

Not known by many people is that the operator of a tractor trailer, class A vehicle, within States can get that license at about 18 years of age.

Ms. FINKENAUER. Yes.

Mr. MCARDLE. To cross State lines you are going to have to be 21 years of age. And we lose quite a heck of a population in there. Now, we are not encouraging that it is completely open to 18-year-olds without some rigorous testing.

What we would like to see is—and we have worked, you know, with legislators—that if—looked at—or they are putting together some proposals of how we can pull together some really qualified trainers, trainers with 2 or 3 years of experience under their belt with impeccable safety records, and they can begin to mentor the employees that work for us at that young age, to get them into the seats and to fill the jobs that we do have.

The other thing that we are encouraged about is the technology that is coming to the cab is attracting folks more so than just shifting the gears and getting on down the road. There is—you know, our objective is to look for folks entering our workforce as they are coming out of high school, before they get into a first trade or a second trade, and then they turn to the trucking industry.

Ms. FINKENAUER. Great, thank you.

Ms. MEIRA. And Congresswoman, I can echo that from the ports industry. I can speak to the Northwest, where our ports, our towboat companies, our other folks who care very much about a working waterfront and protecting that, they are getting out to the high schools to let folks know, to let these young people know that we have family-wage jobs that are there, waiting for them.

And it is largely an unseen industry at times. You don't drive on it, you don't see it sometimes, but the ports are there. And so we are working hard to get to the high schools.

Ms. FINKENAUER. Great. Thank you.

Thank you, and I yield back my time.

Mr. DEFAZIO. Thank you. And now we turn to Representative Stauber.

Mr. STAUBER. Thank you very much, Mr. Chair and Ranking Member Graves. It is a privilege to be serving with you. I am really excited that we are going to have the opportunity to put an infrastructure bill that is going to help the entire country.

Just a couple of questions that I have, and my colleague from Iowa just talked—questioned Mr. Willis about the workforce. If this country—and I hope we do put—puts together an infrastructure package, do you think we will have the workforce, the blue collar union workforce, to build it in a timely fashion?

Mr. WILLIS. You know, absolutely. And I think that, again, the apprenticeships program on the construction side that I mentioned is a key component of it.

And, look, one of the reasons that we invest in infrastructure, A, the needs are crazy. But the other good reason, they create really good jobs, not only on the construction side, but they leave great operating jobs behind and you are moving goods to market faster. And so our manufacturing unions care about it. And if you do Buy America right, you again make the manufacturing employers much busier.

So there is a lot of different components of how these good jobs get created. From a construction perspective, the workers will definitely be there. But I think it is more than that. So——

Mr. STAUBER. Thank you. And the reason I ask that question is the prior session we talked about getting the infrastructure, the appropriations, out to the communities, out to the States in a timely fashion. So hopefully, if there is appropriations, it is not 9 or 10 years before the community sees that Federal project. Historically, it has been that way. So I am glad to hear your answer, that we are ready for that.

And then I just have a comment to Mr. Krauter on the airports. I am very excited to be on the Aviation Subcommittee. And aviation, it is a sector that is growing. We have—in Duluth, Minnesota, Cirrus Aircraft is the biggest seller of piston-driven airplanes in the world. And they need to expand, so they are working on expanding in our airport.

And I am looking forward to helping communities across this Nation with the airport concerns and issues, because that is a growing industry. And I think that, as we look forward to, you know, how we are going to fund it, et cetera, when you have the projects ready and some of the funding, we can package it together, not only from local, but State and some of the Federal dollars.

So I think I heard my colleagues talk earlier in the session, and they talked about putting projects forward that have the collaboration with the communities, because I think that is where we are going. And so it sounds like you are set for that.

Mr. KRAUTER. Thank you, Congressman Stauber. I have had the pleasure to fly in a Cirrus some days ago. Fantastic airplane, one of the safest airplanes manufactured in the world for general aviation.

I think the takeaway also with regard to that is that increasing the PFC will actually help general aviation in general aviation airports. We commonly flex AIP money from our airport, the international airport, over to our general aviation reliever airport, which I am very proud of, it is a world-class facility. So I do think that your comments are consistent and aligned with where we want to go with the PFC increase, as well. Thank you.

Mr. STAUBER. Thank you.

Mr. Chair, I yield back my time.

Mr. DEFAZIO. Thank you. Thanks for those questions. Now we got Representative García.

And after his questions are concluded, the committee will recess for votes on the floor. There are four votes, and so it will probably be a half hour or so, the way this place works.

So Representative García?

Mr. GARCÍA. Thank you, Mr. Chairman and Ranking Member Graves, for organizing this most important hearing. And, of course, thanks to all of the panelists before us this afternoon.

I come from Chicago, and I represent a district that is both city and suburban. And as all of you know, Chicago is part of the Nation's transportation networks, including rail, highways, waterways, and also home to two major airports, including one of the Nation's busiest. At its root, good transportation and urban planning means access to good jobs, access to health care, and access to school and job training.

I would also like to shed light and shift some focus within this committee to the needs of those too often overlooked in our urban planning and policymaking processes. I represent a district that has many foreign-born individuals like myself, and majority Latino. And I know all too well that, for too long, people of color in immigrant communities have not been given a seat at the table.

And surprisingly, urban planning—and I will confess I am an urban planner from the University of Illinois at Chicago—and transportation policies frequently fail to adequately address the needs of working-class and minority populations.

I am only one of two Members of color on this panel who hail from the Midwest, and the only one of Hispanic descent. I pledge to my constituents back home and to those without a seat at the table that I intend to be a voice for those communities that have been adversely affected by this lack of representation.

Studies from the Transportation Research Board confirm that immigrants in general and Hispanics and Asians are the fastest-growing users of public transit in the country. The gentleman from Amtrak, of course, knows this.

In Chicago, inadequate investment in Latino and African-American communities has led to people moving out. A neighborhood in my district, Logan Square, for example, has lost over 23,000 long-term Hispanic and African-American residents due to rising home costs, increasing problems in transit, frequency, and reliability, and increasing congestion. The lack of inaction not only hurts us as a Nation, but the impacts to communities of color and working-class families are profound and lasting.

So I would ask any of the panelists who could address this to talk about how we ensure, if we do an infrastructure bill—and I, of course, am very enthusiastic about it—how do we address those inequities? How should we begin to think about them? I think that is an important lens to introduce into the conversation.

And lastly, how do we ensure that we do projects like transit-oriented development that in Chicago, for the most part, have contributed to gentrifying communities, as opposed to being inclusive in helping create more livable working-class and lower income communities?

Mr. WILLIS. Well, let me take a stab at that. In part, Congressman—because I am from outside Chicago, and have family there, so I understand exactly the issues that you are talking about. And we talked about this in my written statement.

Chicago is a perfect example of where there are jobs in the area, there is no doubt about that, but we have trouble connecting the right communities to those jobs. And, obviously, it starts with transit, but it starts really drilling down at looking at those transit programs to figure out, you know, where those bus lines are going to go.

And quite frankly, while money doesn't solve all problems, and you can't just throw money at this problem, money is a big part of this. So if we do a big infrastructure bill, we run it through the existing transit programs, maybe refine them. I think that we can help solve that problem, because that is why we are here at the table. That is why the labor movement—we care about this issue for a lot of different reasons, but that is a big part of it.

So we are committed to figuring out how to deal with those issues, because we know there is a real disparity there on connecting those people to those jobs.

Mr. MCARDLE. Mr. Congressman, real quickly, from the American Trucking Associations workforce development committee that we are looking at, as well, we are just—have just initially started to have conversations where we can do things in the city of Baltimore.

There are folks inside the cities that really do not know what the opportunities are within our industry. That is clearly understood. And now we are taking a look to see how we can penetrate to be able to look to make those—make our industry available to those folks that really don't have an idea of, really, all the careers and the high-paying jobs that could be reached in our industry.

Mr. DEFAZIO. With that, the committee will be in recess until the conclusion of the votes.

[Recess.]

Mr. DEFAZIO. With that I would recognize Representative Gibbs.

Mr. GIBBS. Thank you, Mr. Chairman. Thank you to the panel for enduring all this activity all day long.

Mr. Anderson—yeah, right? On your testimony—I was reading through your testimony that—it must have been the Hackensack River Bridge in New Jersey there is your youngest asset? I think I heard you say, built in the early 1900s. I see in your testimony 450 trains cross that bridge every day. In a 24-hour period that comes out to about a train every 3 minutes.

I got to ask you. With that kind of utilization, how did Amtrak let an asset like that get depleted—such a situation, that many years old, and didn't take care of it, or didn't, you know, put a new bridge in? I mean——

Mr. ANDERSON. Well, we own it on behalf of the Federal Government.

Mr. GIBBS. What was that?

Mr. ANDERSON. Excuse me. We own it on behalf of the Federal Government. And there has never been an appetite to provide the proper funding to invest in the infrastructure up and down the Northeast Corridor.

So when you look at the asset base we have, the winner is the tunnel in Baltimore that was dedicated by General Grant, President Grant at the time, in 1873. And that is typical of what we see in the corridor, which is the busiest railroad in America, which is the spine to the economic development in the Northeast. And we just haven't, as a country, had the appetite to make the kind of investments that I think the people that live up and down the corridor expect.

Mr. GIBBS. Yes. I mean just kind of blows me away, the asset is that old, and that kind of utilization. You know, it really addresses the question, you know, what Amtrak has been doing. They can blame it on the Federal Government, that is fine, but that is multiple Congresses, multiple administrations. It just raises a red flag with me. So I just want to highlight that, OK?

Mr. ANDERSON. No, it is——

Mr. GIBBS. I am not trying to be disrespectful to you, or anything like that.

Mr. ANDERSON. No, it is a good question. I will say that we do and the people at Amtrak do a very good job maintaining a railroad that was built by the Penn Central Railroad at the turn of the century. And our people do a very good job——

Mr. GIBBS. Yes, the last century, right?

Mr. ANDERSON. Yes. Yes, that is true. Got to get my centuries right.

Mr. GIBBS. Well, I think, you know, we look at the private-sector railroads, you know, especially the ones out West. They seem to be doing pretty well.

So I got to move on because I only got a couple minutes left and I want to get to Mr. Fanning—Fanning is how you say it?

Mr. FANNING. Fanning, yes.

Mr. GIBBS. I am really kind of intrigued here. You talk about the urban air mobility, UAM. And I was reading through your testimony. I don't think I am living—I think I understood this right. You could have passenger vehicles, cars, that could actually go airborne and—we actually had a hearing last Congress, recently, where they said we are not that far away from—"The Jetsons," you know? I asked the question, "Are we getting close to where we are coming back to 'The Jetsons'?" And the person said yes. Do you remember that, Chairman?

Mr. DEFAZIO. I remember.

Mr. GIBBS. It just, like, kind of blew me away. So can you maybe talk a little bit about that?

And I think I heard in your testimony you talked about 400-foot level.

And then also, of course, with the interaction with drones, too, because we see all this stuff happening with—Amazon is talking about drone deliveries, et cetera, et cetera. So——

Mr. FANNING. So we already have vehicles in testing, and there are some photographs that we submitted from member companies who have developed and are testing things. There are vertical takeoff and landing vehicles. I actually took a reference to "The Jetsons" out of my testimony because people come up with it on their own.

So those vehicles do exist. The issue is the technology is not mature yet, battery capability, the power of those electric engines for that takeoff and landing. So there is still some more work that needs to be done on that. And——

Mr. GIBBS. I would assume the technology, too, would include anticollision technology, right?

Mr. FANNING. Well, that is a part of what industry and Government are working on right now, exactly, to make sure that we have the proper systems, framework, and processes, and regulation in place to make sure of that. And that is that cutoff at 400 feet, the different airspaces. But it needs to be thought of as one airspace when all this is up and flying.

But absolutely, there has to be a regulatory regime in place, and systems in place, much like we have now, to make sure——

Mr. GIBBS. So——

Mr. FANNING [continuing]. We don't have those kind of——

Mr. GIBBS. I only got 30 seconds, but interaction with drones?

Mr. FANNING. So some people call these drones, too.

Mr. GIBBS. Oh, OK.

Mr. FANNING. That is a part of what—that is a part of the framework that is being developed right now, thought through right now, which would lead to something like the air traffic management system we have now, or an extension of that, to track and cover everything that is in that airspace below 400 feet.

Mr. GIBBS. Interesting. Well, future society. Thank you. I yield back, Mr. Chairman.

Mr. DEFAZIO. Thank you.

Representative Carson?

Mr. CARSON. Thank you, Chairman DeFazio. The importance of completing the Gateway program cannot be overstated. I think we know that. The Hudson River Tunnels and the Portal Bridge move about 200,000 commuters every day. These tunnels are also a part of the larger Northeast Corridor, or the NEC, which carries 800,000 passengers every day and contributes $3 trillion to the national GDP.

The 10-mile stretch of the NEC is the focus of the Gateway program, which includes vital infrastructure that is more than a century old, and was badly damaged by Superstorm Sandy.

Given the significance of this corridor, can you describe—Mr. Anderson, you can take the lead, or anyone else—the regional and national impacts of failing to complete the desperately needed infrastructure upgrades called for in the Gateway program and along the NEC?

Mr. ANDERSON. We did. The Northeast Corridor Commission, which was put together by section 212 of PRIIA, which are all the States up and down the corridor that contribute to the operation of the corridor. They did a study in 2016 and estimated that if the Northeast Corridor were out of commission for 1 day, it is $100 million a day in economic impact.

I would actually submit that if you did not have the Hudson Tunnels and you had everyone trying to get over to Manhattan, it would basically ensnare the whole region into gridlock. And the follow-on effects of that would be so significant that I think—we shouldn't get to the point where we think that is what it is going to take for us to prioritize this as an investment.

If the President has said the money has been set aside for Gateway and Hudson Tunnel funding, we are ready with the Portal Bridge. We have done the design, the design is complete. We have gotten all the environmental approvals. We are ready right now and, in fact, have some preliminary construction underway on the first piece of that that is really important. But in our view, this is the most critical piece of transportation infrastructure in America today.

Mr. CARSON. In addition to that, Mr. Anderson, I represent the largest passenger rail maintenance facility in the country in Beech Grove, Indiana. The work done at this facility is critically important—I think you know that—to the safe and efficient operation of our passenger rail system.

I have heard numerous concerns that there may be plans to cut back on the operations and possibly personnel at the maintenance facility. Is this true? And if so, please explain what you all are planning.

Considering the short time here, I am going to ask you for a separate briefing on any plans to significantly change or reduce the work performed at the maintenance facilities.

Mr. ANDERSON. Right, and I would welcome the chance to come by your office——

Mr. CARSON. Sure.

Mr. ANDERSON [continuing]. And sit down and talk through where we are.

The—we are refleeting the—both the locomotion on Amtrak, so we just placed an order to replace the P42 fleet, because it was in violation of EPA regulations, about 30 years old. That fleet is maintained in Beech Grove. Over time we are—we have to refleet the Amtrak rolling stock.

In the current plans, current budget, there are no plans to close Beech Grove. We have been bringing down some of the work there. And I think, over the longer term, we have a much bigger effort underway to figure out where we are going to do our maintenance work.

We have two big construction projects underway right now at Amtrak to build maintenance facilities in Seattle and Oakland. And we have major work on the east coast on the—in Brooklyn and in Sunnyside Yard, and down here, in DC, in Ivy City.

So we have four big construction projects underway to expand our maintenance capability, but I think that footprint is going to change over time, because we are moving to much more modern equipment. And I will be glad to come by your office and sit with you and talk about what it means.

Mr. CARSON. Does that change equate to significant layoffs or a complete shutdown?

Mr. ANDERSON. No, it doesn't to layoffs at all. Because as we have to morph how we do business at Amtrak, we can't do it on the backs of labor. It has to be in a way where we mediate the issues in a way that doesn't impact people, because there are changes that we need to make in our network and changes in the way we do business to modernize from a 1970s railroad to a railroad that will meet the demand of millennials today. But as we go down that process, we have to be very mindful of its impact on our people.

Mr. CARSON. I look forward to speaking with you in the future. Thank you, Mr. Anderson.

Chairman, I yield back.

Mr. DEFAZIO. Mr. Massie?

Mr. MASSIE. Thank you, Mr. Chairman.

[Audio malfunction in hearing room]—allowing airports like yours to—more flexibility to set their own passenger facility charge is that you won't spend the money responsibly.

Is it true that you are going to build an amusement park ride with the extra PFC money you might generate?

Mr. KRAUTER. No, sir. It is not.

Mr. MASSIE. Can you tell us how PFCs would allow you to improve your airport, and what type of improvements those would be?

Mr. KRAUTER. Thank you, Representative Massie. I really appreciate the question. Our terminal renovation and expansion project is really a very conservative project. As I pointed out in the graphic, it is effectively making lemonade out of a 1960s terminal building and a 1999 terminal building, both built, obviously, before the—post-9/11 environment, and both very, very difficult to figure out how to make as efficient as possible.

Alternatives to that could have been going out into the greenfield and building the perfect terminal building, but that would have been $400 to $500 million, and we said that is just not going to be the right approach for our community. And so we looked at a more conservative approach, and that is how we developed the terminal renovation and expansion program.

It is about a $191 million program, and that will give us, probably, some functional life—15 years, potentially more—and some much-needed gate capacity, a consolidated passenger screening checkpoint, a consolidated baggage claim area. These are not things that are unnecessary or could be, I think, in any way, shape, or form defined as being frivolous or irresponsible in terms of a capital improvement program.

Mr. MASSIE. So it would cost $190 million, and how many passengers do you accommodate every year?

Mr. KRAUTER. Right now just under 2 million.

Mr. MASSIE. So one of the other arguments I hear about—against giving airports more flexibility to set their own PFCs, passenger facility charges, is that you will set them astronomically high. Would you—you know, how much would you have to raise your passenger facility charge to finance a project like that over, say, 15 years, or——

Mr. KRAUTER. I think we would end up somewhere in the $7 to $7.50 range if we wanted to, say, get somewhere between a 12- to 15-year payback on that.

But I would also like to point out——

Mr. MASSIE. Is that $7.50 in addition to $4.50?

Mr. KRAUTER. No, sir.

Mr. MASSIE. OK.

Mr. KRAUTER. It is $7.50, total.

Mr. MASSIE. So $3 extra passenger facility charge lets you build this facility?

Mr. KRAUTER. Yes, sir.

Mr. MASSIE. OK.

Mr. KRAUTER. And the other thing I would like to point out, too, is that the idea that we would be in a position where we would just set a passenger facility charge at a very high rate doesn't really make sense, because we are trying to manage to an objective in our industry. And managing to that objective is the cost per enplaned passenger.

We are very aware of the impact of our capital program on the cost per enplaned passenger to the airlines. And so it would not make any sense for us to price ourselves out of a market, of a competitive market, by having a very high CPE. So keeping that CPE competitive in a—you know, amongst our peers, is very important. So I think that that serves as a market regulatory function for all airports that are looking at how they are going to finance their capital programs.

Mr. MASSIE. So what do airlines charge to check a bag now at your airport?

Mr. KRAUTER. Up to $30.

Mr. MASSIE. Up to $30. And what are you allowed to charge for the use of your airport to a passenger?

Mr. KRAUTER. On the PFC, a maximum of $4.50, which I get $4.39 back.

Mr. MASSIE. So $4.50. So, like, one-sixth of what they are charging to check a bag, you—to use a bag. You get to charge to use an entire airport.

Mr. KRAUTER. For capital improvements. Yes, sir.

Mr. MASSIE. Right, for capital improvements. So if there—if, like, the bag fees and those sorts of things have such an effect on the price of a ticket, and you would be able to improve with just $3 extra on your passenger facility charge your facility, why do you think airlines are opposed to modernizing airports using PFCs?

Mr. KRAUTER. I am not sure it—that they are entirely opposed. I think in small airports in particular, where they don't have the concentration in their market to warrant their personal corporate investment in facilities—I think at smaller airports I think they like the fact that there is PFC capacity, because they don't have the corporate interest necessarily in coming in and building their own specific facilities.

So I think that in my case, in Spokane, I think the airlines are delighted that we have been very fiscally responsible and have significant PFC capacity available to build the TREX project.

Mr. MASSIE. Well, I hope you appreciate I am playing devil's advocate here a little bit. I support giving airports the flexibility to set their own passenger facility charges, and so do a lot of conservative organizations and a lot of my colleagues on the other side of the aisle.

So thank you, Mr. Chairman, for holding this hearing. I agree there is a big cost to doing nothing or being stuck 20 years prior in history. We haven't adjusted the passenger facility charge cap in a long time. So I support that, and I yield back, Mr. Chairman.

Mr. DEFAZIO. Thank you. And now we would—what we are doing is that we had to abbreviate the first hearing, and I said at that time anyone who was here at the end and had been waiting would get to go first. And then, after that, we would go to other people who didn't have an opportunity during the first panel, but you weren't here at the end. So this—that is how this order was established.

So, Representative Larsen is up next.

Mr. LARSEN. Thank you, Mr. Chairman.

Mr. Krauter, I guess without going into too much detail, what do you collect in revenues per year, and how much goes to operation, and how much goes to reserves and borrowing costs and so on? What are you left with? And I am getting at the question of why don't airports just finance terminal construction themselves.

Mr. KRAUTER. Thank you, Representative Larsen. Basically, I think what you—what we are getting at is how much unrestricted cash does my airport generate, and how much unrestricted cash do I have available for capital improvements.

So I am just going to talk a little bit very quickly about what unrestricted means, because it means different things to different people, the way it is defined. But to us it does not mean available, because we define available cash as that which is on hand after reserves. And we maintain a number of reserves, such as operations and maintenance reserve, other post-employee benefits reserve, environmental liability reserve, et cetera.

So after all of that, what we have available in funding of a $4 million to $6 million a year, non-grant-funded capital program is 6 to 8 months of cash on hand.

Mr. LARSEN. And can you build a terminal in a timely manner with that?

Mr. KRAUTER. I cannot build a terminal in a timely manner. We are good at—really good at what we do, sir, but we are not that good.

Mr. LARSEN. Well, you are pretty good in Spokane. You are pretty good.

Mr. KRAUTER. Thank you, sir.

Mr. LARSEN. I want you to go home and say that, that I said it. They will never believe it.

On your chart I think it is important to point out—well, I would like you to explain. You have the chart, you got the blues and the reds, and this is the chart that you handed out beforehand. Is the interest cost strictly based on the payoff that you have chosen? Or is it a combination of factors?

Mr. KRAUTER. The interest cost, really, is running at—on its own there. It is—if you look at the upper left corner of the graphic, you see the actual cost of TREX at $191 million, and then another $151 million, give or take, in interest over the course of the bonds. And you can see we have effectively figured that we would have general airport revenue bonds that would probably be 25 to 30 years, plus payoffs.

And so we go down from the top of the graphic to a scenario of what would that interest break decrease to, or interest total decrease to if we were able to charge a higher PFC. And we picked $6.50 in this particular example. You can see the interest beginning to disappear. And then, at $8.50 you can see that the interest goes from $151 million a—in the total project cost down to $66 million.

Mr. LARSEN. So in your world who pays that red bar?

Mr. KRAUTER. The passengers.

Mr. LARSEN. The passengers pay that interest?

Mr. KRAUTER. Yes, sir.

Mr. LARSEN. Do the general taxpayers at all pay that?

Mr. KRAUTER. No, sir. It is the users of the airport that pay for it. We do not rely on any taxpayer assistance to run our airport system.

Mr. LARSEN. This is how that works, OK.

Why is the AIP a less attractive method to pay for terminal improvements? Or is it an option at all?

Mr. KRAUTER. A couple reasons. First is that AIP has been flat for a very long time. And if you look at its purchasing power—we have talked about the decrease in the purchasing power of the PFC. But AIP has also had a corresponding decrease in its purchasing power. So the $3.35 billion per year after the FAA takes out what it needs to manage the program is $3.2 billion. But effectively, it is about worth $1.8 billion.

And so most AIP is actually—71 percent of AIP is directed towards air field projects only. And on top of that, we can't bond off of AIP.

Mr. LARSEN. You can't bond off AIP, all right. I want to switch gears a little bit with Mr. Fanning.

What is the single most—what is the one thing that FAA can do, from a regulatory perspective, to address or to advance the UAM?

Mr. FANNING. Well, first of all, it is getting the right regulation in time. Other countries are focused on this. And if we don't have the regulatory schemes in place in time for the realization of this technology, other countries will get there first. So it is not just a matter of slowing down the United States, it is ceding that market to other countries.

But what is also important—and Congress has taken leadership on this—is making sure it is the right regulation, that these are performance-based regulations, because these companies are approaching this in different ways, and this technology is very iterative. And so, if we use old, prescriptive regulation, it will slow down the advancement and utilization of this technology.

Mr. LARSEN. OK. And the other part of your answer is get the remote ID rule done?

Mr. FANNING. Get the remote ID rule done, yes.

Mr. LARSEN. That is what I thought you were going to say next.

Mr. FANNING. There are a number of things in the framework that—operations over people, operations beyond the line of sight—that we have got to figure out. But remote ID is definitely part of that.

Mr. LARSEN. Got it. Thank you, Mr. Chairman.

Mr. DEFAZIO. OK. Representative Balderson?

Mr. BALDERSON. Thank you, Mr. Chairman. My first question is directed to Mr. Krauter. And thank you so much for being here. It is quite a privilege to have a fellow Ohioan, O–H——.

Mr. KRAUTER. I–O.

[Laughter.]

Mr. BALDERSON [continuing]. Here this afternoon. I recently had the privilege of touring the air traffic control facility at the John Glenn Columbus International Airport, and I believe Congress must ensure that our air traffic controllers have access to necessary tools and the resources to keep us safe.

Earlier this afternoon I agreed with concerns shared today about how Government shutdowns impact the FAA and the aviation workforce, which is a major reason I, along with another fellow Ohioan, introduced a piece of legislation called End the Government Shutdown Act here.

But prior to the shutdown, the partial shutdown that we just had, there already was a shortage of qualified air traffic controllers in this country. And right now there is only one training facility for air traffic controllers in the United States. Do you believe it is important to increase the number of such training facilities?

Mr. KRAUTER. First of all, I started my career at Port Columbus, Representative Balderson, so I know the airport very well. And I do believe that there should be a number of different approaches taken to try and increase the controller workforce. I do think that regionalization of that training curriculum would be very helpful. We have had similar conversations, actually, with other Government agencies, like the TSA, in similar fashion.

I think we need to also recognize the importance of the United States contract tower program, which serves as a training ground for many controllers across the country. The U.S. contract tower program is 253 towers out of the 513 towers in our country. And it is a meaningful and important incubator for our future controllers.

Mr. BALDERSON. A followup to that would be are there other ways that we can expand and recruit folks out there to get involved in this industry, and encourage them, and encourage students to invest their future in this industry?

Mr. KRAUTER. There are. There are many ways. And there are many different organizations that are on the oars, trying to get that done. Even at the local level we have engagement with the Experimental Aircraft Association, with Aircraft Owners and Pilots Association, with our State aviation associations, with our Federal associations like the American Association of Airport Executives, in particular. And also with our DOT and FAA partners. I think everybody is really trying to look at ways to fill that pipeline of future aviation workforce.

I think one of the things we need to do a better job of is coordination of all of it. And I do think that Congress can play a meaningful role in helping us do a better job of coordination. And I think the infrastructure bill might be an opportunity for us to look at that—you know, that—methods that we are using right now to try to increase workforce.

Mr. BALDERSON. OK, thank you. One last question. Can you discuss the difficulty small- and medium-hub airports may have receiving the same tolls as the larger commercial airports?

Mr. KRAUTER. Absolutely. There is definitely an emphasis being placed on equipage of larger airports. And I am concerned about that, coming from a smaller airport, also an airport that operates a general aviation reliever facility with a contract tower.

And so, to me, I do think that it would be more helpful in the future if we could see a strategy pursued by the FAA, in which they are equipping the system, both from the top down and the bottom up. And—because I don't think it is right that you have to fly through time when you fly from a large community to a smaller community.

Mr. BALDERSON. I agree. Thank you. My last question is for Mr. McArdle, with UPS.

Sir, could you speak on how UPS is utilizing the drone technology to help alleviate some of your traffic congestion?

Mr. MCARDLE. Thank you for the question. UPS is—we have looked at drones for quite some time. And right now we do find a practical use where we are helping with humanitarian needs across the world, not just—as a matter of fact, not within the U.S., but outside of the U.S. Certainly you can imagine when there are needs when it is very tough to get to wherever blood or wherever medicine is needed, drones are a perfect way to do that. So through our foundation we partnered with that.

When it comes to the commercial use of drones, we have looked at it, we have tested it. We continue to look at it and test it. We stay active in—where, you know, the—where the space is going to go, and we are at the table with it. But it is certainly something that looks like it could be promising for extreme rural-type deliveries.

Mr. BALDERSON. Thank you very much.

Mr. Chairman, I yield back.

Mr. DEFAZIO. Thank you.

Mr. Lipinski.

Mr. LIPINSKI. Thank you, Mr. Chairman, and I thank all the witnesses for their patience being here today.

We are working on an infrastructure bill, we are here talking about that. We also—part of that also is we want to make sure that this is going to be a green infrastructure bill—that is, the transportation infrastructure that we help out and choose we make more green. And certainly rail is more green of a way to move both freight and also move people. Passenger rail is the greenest intercity and probably also for intracity.

So Mr. Anderson, I happened to have an opportunity to speak with you yesterday. I am glad we—yesterday we talked in my office about labor issues. I am glad that when we were talking about what—earlier you had mentioned in terms of work that you are doing to, say, streamline Amtrak, that you said we can't do it on the back of labor, and I am very happy that you said that. And we have to make sure that that is the way things move forward.

But I wanted to ask you, Mr. Anderson, about—you know, I am, obviously, as everyone knows, from Chicago. I have worked on CREATE since I have been here. We have made a tremendous amount of progress on CREATE. But there is still more work to do, as you told me yesterday about the issues of Amtrak getting into Chicago.

So I want you to—I want to ask how important is it in doing an infrastructure bill, if we are going to help passenger rail—not just Amtrak, it would also help, you know, the commuter rail. It would help also move freight in Chicago. How important is it that we, in this infrastructure bill, put more money into the Chicago rail system?

Mr. ANDERSON. Look, it is really important, not just for intercity passenger rail, but for Metra and for freight rail. When you come from Indiana and you get outside of Chicago, it is just a whole series of interlockings and a lot of delay and congestion. And so Amtrak has provided letters of support and matching funding for various aspects of the CREATE project, so we are supporters of it.

I would note for you that for intercity passenger rail we would like to build a direct line that is passenger-only from Indiana straight into Union Station, as being the long-term best solution to separating the freight traffic from the passenger traffic.

But in summary, we are big supporters. We have done matches when the local community has asked us to. We filed letters of support. And we think it would go a long way, not just for Amtrak, but for Metra and the freights.

Mr. LIPINSKI. And also important, as we had discussed yesterday about Union Station and work on Union Station making sure that the track areas get the work, the update that they need. And I want to make sure we continue to be focused on that, and I know—with anything else that may be moving forward with Union Station in redevelopment.

So I want to turn to Mr. McArdle. We have talked about—a little different issue here—we have talked about how we are going to pay for—what we are going to do for the Highway Trust Fund. And I just wanted to ask what your thoughts were.

I know that, for example, Germany has a VMT for heavy trucks. We have talked about moving to a VMT, but it seems like it would be easier than for cars and light trucks right now to move more quickly to VMT for heavy trucks. And I was just wondering what your thoughts were on that.

Mr. MCARDLE. Well, Congressman, thank you for the question. I am not sure why it would or would not be any easier. I think VMT is certainly one of those programs that needs to be tested.

We encourage pilots, true pilots, proof-of-concept pilots, pilots that will test the—you know, the personal security behind VMT, pilots that are going to test the—you know, the evasion rates behind VMT-type models. Who are those that are going to try to avoid it? Pilots are going to really understand what the true costs are with the VMT program.

Mr. LIPINSKI. But that would be easier for—right now, to do it for the heavy trucks, rather than—I mean easier than for passenger vehicles, though, because we already do some tracking of miles for trucks, right?

Mr. MCARDLE. We do. And then it gets into the equitable side with the VMT. We want to make sure that—when you look at—between passenger cars and vehicles, that the right approach is taken.

Just one other comment on the VMT. I think it does need to be evaluated and looked at, but when you take a look at the number of registered cars out there—there are, you know, what, close to 280 million registered vehicles out there—that we are going to have to make sure that we have a good handle on what we will be doing when it comes to the VMT.

So I think I heard it mentioned earlier today. It is the transition to the future, but I think the bridge to the future right now is still the Highway Trust Fund.

Mr. LIPINSKI. Thank you, I yield back.

Mr. DEFAZIO. Thank you.

Representative Westerman?

Mr. WESTERMAN. Thank you, Mr. Chairman, and thank you to the witnesses for being here today. I appreciate Mr. Lipinski talking about efficient green modes of transportation.

You know, the one that comes to my mind is on our inland waterways, where it is our most green mode of transportation, it is the lowest cost and one of the highest efficient ways to move material where those waterways are available. But like all infrastructure in our country, it is facing its challenges, as well.

Ms. Meira, when you look at deepening projects and other authorized but not yet initiated or completed projects, what economic benefits are being forgone on the inland waterways that we could be realizing if those projects were done?

Ms. MEIRA. Thank you, Congressman. So out in our part of the country we have our own inland waterway. We have the inland Columbia-Snake River System. So once you leave the Portland, Oregon, area, you go 365 miles east, all the way to Lewiston, Idaho, and that is a 14-foot-deep barging channel between, again, Portland, Oregon, and Lewiston, Idaho. You go past eight navigation locks, four on the Columbia, four on the Snake. And these are the highest lift locks in the United States. So over 100 feet of lift at each of those locks. And we have one lock at each of those dams. So we have one chance to get it right.

And so, when you have infrastructure that is that massive as those projects are, you think long and hard about what their needs are, what components are reaching the ends of their design lives, what your plans are for repair, replacement.

And we have got, really, a wonderful story to tell out in the Northwest. We have had two extended lock maintenance closures. We learned from the Corps of Engineers that if we were to have a failure of one of our lock gates, it would take a year to design, fabricate, and then install one of those gates. So the idea of our system being down for a year was unacceptable.

So we worked with the Corps in a proactive way to get after those needs, and plan for them. And we had two extended lock maintenance closures, 15 weeks each, where we took the entire river system down. And it was well broadcast with all of our growers, our shippers, even our overseas buyers of soft white wheat, one of our main products we ship. It was a total success story. That is the way to do it, not to wait for a failure.

Mr. WESTERMAN. Not to do it on an unplanned basis.

Ms. MEIRA. Absolutely.

Mr. WESTERMAN. So, you know, as we look in other places around the world, we know that the Panama Canal project, it was conceived, designed, implemented, operational in a 10-year timeframe. Sometimes it takes twice that long just to do a feasibility study to see if we want to do a project in our country.

What do you think could be changed to make that process much more effective?

Ms. MEIRA. Well, the Corps of Engineers and the ports community, they have gotten to work on something called the 3 x 3 x 3 initiative, meaning that studies should take no more than 3 years, $3 million, and three levels of review. So let's get through the study and planning process faster so we can get to an authorized and then a constructed project and get those benefits out to the U.S. taxpayer. That is the way we should be building and doing these channel deepening projects.

Out our way we have had a successful—one already go through that 3 x 3 x 3. That is the Port of Seattle. They are ready to deepen. They are ready to go to 56 feet. The Port of Tacoma is just behind them. They are getting ready to go into the study process.

Contrast that with one of our more recent deepenings, one that concluded in 2010. That is the Columbia River Channel deepening. That project took 20 years, 20 years to get through studies, planning, the inevitable litigation, and then finally to authorization and appropriations and actually deepening.

Mr. WESTERMAN. But you finally got there.

Ms. MEIRA. We sure did.

Mr. WESTERMAN. So, yes, I personally understand why we need ports. You mentioned the port and the deepening project. But what would you tell people in other parts of the country who may be far away from a port why that port is important to them, even though it is on the west coast and they are living in the middle of the country?

Ms. MEIRA. Well, and first we have to say thank you to this committee for raising awareness over the past 6 or so years about the importance of WRDA and how everybody is connected here to ports. So whether you are growing and making things and you want to be part of the export community, you want to get your goods out overseas, ports are important to you. Or if you are going to the shelves and picking something up for your family, ports are important to you. It is the key to our everyday life here.

Mr. WESTERMAN. Thank you.

I yield back, Mr. Chairman.

Mr. DEFAZIO. Thank you. At this point now we are—Representative Pappas?

Mr. PAPPAS. Thank you, Mr. Chair. It is great to be with you all. Thank you to the panel for being here. It is exciting to be in a room of folks that are so excited about transportation and infrastructure they can talk about it all day, literally. And that is what we have been doing here today. So I really appreciate you being part of this.

You know, one of the exciting things of being a new Member of Congress is connecting with constituents. I have been doing that over the last several weeks, holding town halls, getting out there to local communities. And without fail, if I am visiting with a town manager, a city council, a mayor in a city mid-size or a real small community, they always bring up infrastructure as their top concern: they have a bridge that is not open, they have a culvert that is inadequate, they have a rail project that needs to be worked on.

So I think the folks around the country are really looking to this committee and the work that we are going to be doing to help advance the discussion over this in a way that is going to produce benefits at the local level.

What we have seen, as the chairman said in his introduction, over the past 10 years or so, was a 19-percent decrease in the Federal share of transportation investment. And we have a multibillion-dollar backlog that exists.

At the State level I have worked on developing our State's 10-year transportation plan. Always more needs than we have resources available. But we felt the pinch of the decreasing share of Federal investment, and it has resulted in more deficient bridges at the end of the 10 years than we have at the beginning, not keeping up with the paving, not to mention all the other investments in ports and water systems and things like that, that we are not able to adequately address.

So one of the bigger picture questions I had for the panel is this. You know, we talk about investment and funding streams that are available. We can also talk about financing projects. And I am wondering if you could all assess sort of what works best for your interests. Is it financing some of these large-scale projects over time? Or is it funding streams that could ensure that we don't crowd out future priorities?

I am thinking in particular of water infrastructure. I don't know if, Ms. Lee, you might be able to address that first.

Ms. LEE. Thank you for the question, Congressman. What works well for Charlotte Water is when we can get those State revolving loans in terms of funding and financing. The last 3 years, Charlotte Water has gotten $83 million from our State revolving loan fund. And what that does for us is that that allows us to manage our rates for our ratepayers.

So when you—you know, you think in terms of water and wastewater systems. It is really the ratepayers who are funding and, you know, who support our systems. And so just having financing available where we can get grants for the smaller systems and zero- to low-interest financing for the large systems like Charlotte, it really is very helpful and helps us maintain the infrastructure that we have.

Mr. PAPPAS. Well, thank you for that. And certainly the backlog is great.

And I am interested in hearing from Ms. Meira. I have an issue in my district. I have the 18 miles of New Hampshire's coastline in my district. There is a harbor that has some real serious shoaling going on to the point where there are many hours of the day where boats can't come in and out. I am wondering if you support fully utilizing the Harbor Maintenance Trust Fund to deal with the backlog that exists of about $2.3 billion of projects.

Ms. MEIRA. Absolutely. We have examples like that all around the country, where we are just not getting the funding out there that is required to do basic maintenance dredging of these Federal channels. All these channels were constructed for a reason in these communities. They are providing value. We should be out there maintaining them so they can continue supporting the communities, their regions, their States.

We have got so many examples back where we live, and it is not just the channels. The dredging ends up being a Band-Aid sometimes because we never get enough funding to take care of the structures that would, in some cases, help reduce the amount of dredging needed.

So it is not the most cost-effective way forward, and we are shortchanging ourselves in the long run. So yes, we need to spend that HMT.

Mr. PAPPAS. Thanks. I hope so.

And just for the entire panel—we just have a few seconds left here—I am wondering if anyone on the panel is earning the same amount of money that they did in 1993. And if you are, could you please raise your hand? That was the last time, of course—oh.

[Laughter.]

Mr. ANDERSON. I am not paid.

Mr. PAPPAS. Well, Amtrak is benefitting as a result. But thank you for your service. And how about since 2000? Anyone had a stagnant pay since 2000 on the panel?

Well, thanks. I look forward to the increased investment, Mr. Chairman.

Mr. DEFAZIO. OK. Mrs. Miller?

Mrs. MILLER. Thank you, Mr. Chairman. And thank you all for being here today to share your expertise with us. Chairman DeFazio, thank you for the opportunity to come together to discuss the many opportunities to rebuild and improve our Nation's infrastructure. I think the panels that you have assembled have a wealth of experience to share with us.

My home State of West Virginia is at a critical juncture. We have land that is abundant in resources and natural beauty, but we do not have the infrastructure to match. Much of my district lacks easy access to highways and interstates. This makes it difficult for my constituents in the rural parts of West Virginia to access services only available in more populous areas, such as health care, groceries, and other necessities.

The King Coal Highway, Route 2, Route 10, and the Coalfields Expressway are critical access points for my district, and need to be completed. I recognize the need to maintain and improve these roadways, while also working to improve safety and access for my constituents. These roads transport coal and energy and facilitate economic development for us.

My home town of Huntington is the home of the Port of Huntington Tri-State, which is one of the largest inland water ports in the United States. This port brings important commerce to West Virginia, and lets us share the bounties of our State with the entire Nation and world. I am proud to have this port in my home town, and I am excited to work in this community to improve our Nation's waterway.

Finally, rebuilding our infrastructure means jobs. These jobs can breathe new life into our communities, and give our constituents new opportunity. The aspect of improving West Virginia's infrastructure is very exciting to me. This means connecting our most urban and most rural areas, bettering our clean water access, revamping our rail, and enhancing our ports.

My first question is to Ms. Lee. In West Virginia the water infrastructure in our rural communities is aging and out of date. What are the best practices on the Federal level for working with our localities to improve our water infrastructure?

Ms. LEE. One of the best practices is to reauthorize the State revolving loan program. To pass funds from the Federal through the States to the local utilities, it is much needed. Aging infrastructure is an issue across this country.

As I stated before, we have gone from, in 1977, from 63 percent of water infrastructure being funded federally down to 9 percent. And so, ideally, that trend needs to change for the water and wastewater utilities in the country.

Mrs. MILLER. Thank you.

Mr. McArdle, as you are likely aware, West Virginia is an incredibly mountainous State, which poses safety issues for freight transportation. In your testimony you mention the importance of technology to improve safety for drivers and others on the road. Could you elaborate on this?

Mr. MCARDLE. Yes, and thank you, Congresswoman. The technology that we are speaking about is making sure that, as we look forward in the future, we leverage not only the virtual technology, the vehicle-to-vehicle, the vehicle-to-infrastructure, the vehicle-to-pedestrian, but also at the same time to making sure that, you know, our roadways are designed to handle the traffic they have now, to make sure that crashes that could be avoided, the types of crashes along the roadway sides, that vehicles and tractors and commuters could be protected. There is infrastructure that is in front of us every single day that could be improved to improve the safety of the roadways.

Mrs. MILLER. Thank you so much.

And to the panel as a whole, in my district I have a bridge to nowhere, nowhere. It just stopped. We have 3.8 miles of road that never were completed. How can we better facilitate coordinating and completing projects?

[No response.]

Mrs. MILLER. You look as dumbfounded as I feel.

Mr. KRAUTER. I will take a shot at that, Congresswoman.

Mrs. MILLER. OK.

Mr. KRAUTER. Having served on metropolitan planning organizations for many, many years, I do think that that tells me that we have some opportunities to do a better job in our planning process, and to make sure that when we are anticipating a project, that it has a rational nexus, it is going to end up somewhere.

Mrs. MILLER. Thank you.

I yield back my time.

Mr. DEFAZIO. Thank you. Now we would go to Representative Craig.

Mrs. CRAIG. Thank you so much, Mr. Chairman. We started in Minnesota with Governor Walz, back to Minnesota here for just a moment.

As you may be aware, my congressional district is a mix of really rural agricultural communities, as well as suburban communities just outside the—south of the Twin Cities of Minneapolis and Saint Paul.

So my question, really, to the panel—but perhaps we can start with Mr. Willis—is how can we make sure that any comprehensive infrastructure package that we come up with on this committee will really strengthen our rural communities throughout Minnesota's Second Congressional District and communities like mine? I want to make sure that we understand that America is a big place, and my towns and townships and cities all are very important, and we need to make sure that is represented in an infrastructure package.

Mr. WILLIS. Well, it has to be a priority. And I think one of the issues that gets to it is the question that we were discussing earlier: funding versus financing. And obviously, both of those have a role to play in sort of figuring out how you fund our Nation's infrastructure.

But I think especially in rural areas and what you are talking about, you have to do the funding. You know, financing can be a little tricky. You have got to find projects that are going to have some toll or some return or some way to pay that back. Again, there is a role there. But there is a lot of projects—rural, some rail projects—that are going to need direct funding from the Federal Government.

And that is why we are a big advocate of the gas tax to stabilize the Highway Trust Fund. I think it is always great when the labor movement and the AFL–CIO can agree on an issue, and this is one we agree on.

So I think doing the funding right gets to your rural issues quite well.

Mrs. CRAIG. Thank you so much. Anyone else have any comments on how we make sure we prioritize the balance?

[No response.]

Mrs. CRAIG. Perhaps then my second question. You know, importantly, we have talked about workforce development and recruiting, and what can be done to make sure we have a workforce to deliver on the infrastructure needs. What we haven't talked about is the impact, more broadly, on those working families across our Nation.

So again, Mr. Willis, I am going to pick on you in a very good way today, because I think we haven't talked a lot about the knock-on effect of just making sure we have that kind of economic, robust growth plan for the country.

Mr. WILLIS. Well, you know, as we have discussed earlier in the hearing, we are involved in these issues for a lot of reasons. Obviously, you create jobs when you do these projects, you have good operating jobs.

But we are also at the table because the labor movement broadly represents workers that have to get to work every day. And many of our members drive and take the bus and rail, and there is a lot of multimodal needs out there. And there are a lot of mobility problems in both cities and suburbs and rural areas, where people have trouble getting to work. And businesses are suffering, and we are hearing about it from our members.

So it is not just—when we talk about this creates good jobs, it is not just about the jobs it immediately creates and people that work in the system, it is the ability to get people to the jobs that we know are out there. So it is a big part of why the labor movement participates in this debate.

Mrs. CRAIG. Thank you so much. And I was the former head of HR—don't hold it against me—for a major Fortune 500 company for a number of years in the Twin Cities. And, you know, my observation was when we have public sector investment, that certainly private-sector investment follows—if not immediately, soon after.

So if I could ask, does anyone have any thoughts on just what impact it would have on your organization—perhaps UPS or others—if, in fact, that private-sector growth followed public sector investment?

Mr. MCARDLE. Sure, Congresswoman, I would be glad to comment on it.

Two programs that come to mind right off the top of my head at UPS, one is in the Chicagoland area, The other one is in Louisville. And we have found a way to where, when we need a workforce, we are able to go into the community, provide education assistance, if you would—meaning tuition, and it is not so much a tuition reimbursement, it is actually helping employees within the local colleges come together, create programs, create criteria, curriculums that not only support what we may need, but is important to the Chamber, the businesses around our community in Louisville. We can support in that fashion. We have a similar program in the Chicagoland area.

I will tell you it works where there is a mass, and you need the mass to make it work. But the—those are just two examples, and we found those to be extremely successful programs for both the community, as well as the company.

Mrs. CRAIG. Thank you.

Mr. Chairman, I yield back my time.

Mr. DEFAZIO. Thank you. We would turn to Mr. Rouda, Representative Rouda.

Mr. ROUDA. Thank you, Mr. Chairman.

Hi, I am Harley Rouda from Orange County, California. My district represents about 80 percent of the coastline there. And what I want to talk about is the intersection of infrastructure and climate change.

I talk a lot with my constituents about how climate change is the greatest threat facing humankind. And I predicate that on the fact that where we have built our homes, our cities, our farms are all based on predictable weather patterns over the last 1,000 years. And if you shift those predictable weather patterns by changing the ambient temperatures of the atmosphere in a matter of a few short generations, where we have built our homes, our cities, and our farms have been built in the wrong place. And we are talking about an infrastructure issue far greater than the widening of the 405 in Orange County.

And I am hopeful that I can get from you maybe some ideas where, in the infrastructure that you have participated in, that you have built, that you can share with the committee specific examples where you have used infrastructure as an opportunity to address climate change. Please.

Mr. ANDERSON. As we have said earlier, and as I said earlier in my remarks, passenger rail is the most efficient way with the most minimal carbon footprint to move people through urban areas.

So at Amtrak we have invested in a new Acela train set to increase the capacity in the Northeast Corridor by 40 percent over the next 8 years.

Second, we had the most foul diesel locomotives in our national network. I think, but for being Amtrak, owned by the Federal Government, we wouldn't have gotten a waiver from the EPA. We marshaled our resources and just placed a large order to buy tier 4, the most modern diesel-electric locomotives.

So I think we all have that same obligation to, in all of our businesses, to face up to what global warming really means in our businesses, and make real commitments.

In a prior life I was the chairman of the International Air Transport Association, IATA, and we adopted the first global framework around aviation to reduce aviation emissions 2 percent a year, ongoing from 2015, and to move to carbon neutrality by 2050, but by 2025 to be on a reduction basis.

So I think that you can find many of those kinds of concrete examples in industry.

Mr. ROUDA. So in your planning process for any infrastructure project—and, look, I know we have got extreme overdue maintenance. The U.S. spends about 2.5 percent of our GDP on infrastructure, which is about half of what the European Union nations spend, and about one-third of what China spends.

What are you seeing, though, in the long-term planning in these projects, taking into account the impact of climate change and the fact that there are estimates of 200 million climate change refugees by 2050, which will be impacting in so many different ways?

Mr. ANDERSON. We do it from a macro perspective of continuing to reduce Amtrak's carbon footprint by year, with a goal across the top of the company. Our goal is to really reduce our footprint and gain efficiencies of about 2 percent a year. But that is going to need to accelerate, given the statistics that you just gave us.

Mr. ROUDA. Anybody else on the panel who would like to weigh in? Please.

Ms. MEIRA. I know in the ports community the Corps of Engineers in our ports think about climate change whenever they are thinking about channels, about jetties, about the structures and the things that are in and adjacent to the water, which may have to survive higher wave heights, different temperatures, et cetera.

And then, within the ports industry itself, there is a lot of retrofitting of engines. The towboat community, they are repowering their towboats to use cleaner, greener engines.

And then, in the Northwest, we have a big focus on hydropower production. It is a green, renewable, outstanding source of energy. We are blessed with it in the Northwest, and we are always holding that up as a high priority to preserve.

Mr. ROUDA. I can't let that moment go by to not point out that if everybody would give up their cars and get on trains and California high-speed rail in LOSSAN and the Capitol Corridor, that is the biggest impact we can have on the carbon footprint.

Mr. MCARDLE. Mr. Congressman, I—we don't build infrastructure at UPS, but one of the things, certainly, our investment in alternative fuel fleets has been significant. It has been significant for the last 10 years. We have reduced our carbon footprint by about 18 percent since 2007. We have got close to 10,000 alternative fuel vehicles out there.

And speaking of the railroads, one of the things that is not well known is that we probably move about 3,000 containers a day on the rails. We have been one of the largest customers of the rails. So rails are important to not just our company, but to our industry, as well.

Mr. ROUDA. Thank you for your comments.

And Mr. Chairman, I yield back.

Mr. DEFAZIO. I thank the gentleman. With that, we would move to Representative Malinowski.

Mr. MALINOWSKI. Thank you so much, Mr. Chairman. Thank you for your emphasis up front on the Gateway project, which is, of course, extremely important to my constituents, as it is to the whole country, and for your intention to take the committee to take a closer look at that 10-mile stretch of the Northeast Corridor.

I had a chance to do that a couple of weeks ago with some members of our State delegation, and it was quite striking. I had been through and over that infrastructure probably hundreds of times in my life, but in the tunnel no one ever turned the lights on before until we stopped in a special train, and indeed turned the lights on. And you could see just what a 110-year-old tunnel looks like, close up. You could see just how close it is to, I think, what all of us would consider a catastrophic failure.

And of course, Mr. Anderson, you know some 200,000 people pass through and over that infrastructure every single day. Many tracks narrow down to two tracks——

Mr. ANDERSON. Right.

Mr. MALINOWSKI [continuing]. Over the Portal Bridge and through the Hudson River Tunnel. And it is not just the incredibly frustrated New Jersey and New York commuters. It is all of the rail traffic in the Northeast Corridor.

And I wonder if you could maybe expound for us a little bit on the importance of that 10-mile piece of transit infrastructure to everything from North Carolina to New England.

Mr. ANDERSON. We, actually, at Amtrak, think of the Northeast Corridor as running from Maine down to North Carolina, because we—when we sell tickets and people travel across that infrastructure, it is connecting people all the way down from North Carolina, even down into Florida, all the way up through the east coast to Maine and into Canada. So it is really an interconnected network, and we run that network on an interconnected basis with all of our commuter partners.

So it is really pretty remarkable, when you think about it. We run 24 trains an hour. And Amtrak maintains and dispatches all of that traffic, because it is our railroad. But we take it as our responsibility to make NJT, LIRR, VRE, SEPTA, all of our partners, we have to do a really good job for them.

So when you think about that 24 trains an hour, if you had one of those go down we would be running 6 trains an hour. And at six trains an hour you would put New York City in gridlock, and all those connections that we sell from down in North Carolina and down in Florida up through the Northeast would all be cut off.

And the impact would ripple all up and down the east coast, because, when you think about it, all the big—New York is the banking center of the world. Well, many of those banks have all of their infrastructure and operations in New Jersey. And the banking system relies upon—just like all the industry in New York and the financial services industry—relies on Amtrak.

And there is no way that you can somehow or another put that traffic over the George Washington Bridge or the Holland Tunnel. It is just not enough capacity to be able to do it. So in effect, you would shut down the economic activity in Manhattan.

Mr. MALINOWSKI. Exactly. Now, just this afternoon President Trump, in an interview with Newsday, said that he is now open to funding the Gateway project. I hope that is true. I would certainly welcome it if it is true. He said we have the money set aside, we haven't decided to use it yet, which is an interesting statement.

I want to ask you about the next step in the process, should the commitment be there. My understanding is that for the Hudson River Tunnel, that would be getting the final environmental impact statement done. Now, is that correct? And you have submitted all the paperwork, all the reports necessary for that.

Mr. ANDERSON. The—yes, we have.

Mr. MALINOWSKI. OK.

Mr. ANDERSON. The first piece is the Portal Bridge, so the——

Mr. MALINOWSKI. Right. That is all ready, that is right——

Mr. ANDERSON. That is ready to go. And New Jersey has given their half-a—you know, basically, a 50-percent match. And we are ready to begin construction on the Portal Bridge replacement. Everything is ready to go. The design is done, NEPA is done, we are set.

The Hudson River Tunnel, we have continued at Amtrak—and this is back to what we have been doing the last 3 years—we have been trying to be really good stewards, so we have continued the design process on the tunnels. In other words, while we are restricted by our FRA grant from spending anything on major construction, we are spending the money to do the design and the engineering. And the environmental approval is right now at DOT.

So the—and fortunately, the States of New York and New Jersey are both in the process of passing legislation to create the Gateway Development Corporation. We are fortunate at Amtrak to have Tony Coscia, who—as our chairman, who was the former chairman of the Port Authority of New York and New Jersey. He was in charge of building the tower. He is the chairman of the Gateway Development Corporation. And Stephen Gardner, behind me, who knows more about this project than anybody on earth, are the leaders of that effort for Amtrak.

So we get that legislation passed, then we have a recipient for the Federal funding. And you know, there is an inevitability that this is going to get built. So why we spend all this time gyrating around, it is not a Republican issue or a Democratic issue. It is an American issue. And what we ought to do is just fund it and get on with it, because a 1906 tunnel under the Hudson River just doesn't get it done for this country.

Mr. MALINOWSKI. Thank you so much.

Mr. DEFAZIO. Thank you. Now Representative Fletcher. Thanks for your patience.

Mrs. FLETCHER. Thank you so much, Chairman DeFazio. I want to thank you and Ranking Member Graves for holding this important hearing today, and I want to thank all the witnesses for coming. Your testimony has been extremely helpful and useful as we set about our work and think about the cost of doing nothing.

I represent Texas's Seventh Congressional District in Houston. And as many of you can probably imagine, I am very interested in these issues. It is a big part of why I decided to come to Washington.

Houston is a metropolitan area now of just under 7 million people, ranking as the fourth largest in the Nation. More than 250 people move to Houston every single day. And our infrastructure is feeling the challenge.

In particular, though, what we have talked about is the incredible infrastructure need we have in our community following Hurricane Harvey, which many of you will remember from August of 2017. And so I want to focus my questions, for the purpose of this hearing, on a concept that we have heard from some of you about, but I want to specifically follow up with Ms. Lee and Ms. Meira about: the conversation about resiliency planning and what it looks like to plan a resilient infrastructure.

I think not only for the Greater Houston area, which is on the gulf coast, but for coastal communities across the country, when we talk about rebuilding our infrastructure, we are talking about rebuilding resilient infrastructure. And I think we really need to understand what kinds of specific things that you think, Ms. Meira, in terms of ports and, Ms. Lee, for you, in terms of especially the stormwater conveyances and systems.

But the water systems in general, when we talk about what would make these more resilient, what are the things that you specifically would like to see? And how would you define that resiliency, or the kinds of things we should be doing in our ports and in our water systems?

Ms. MEIRA. Great. So I will start off, and I will tell you that in our part of the world we worry about earthquakes. And so we are actively planning for a 9.0 Cascadia subduction event to happen somewhere in the Portland-Seattle area. We are part of that ring of fire there. And so, when we have that earthquake, there is a high likelihood that it will be accompanied by a coastal tsunami.

So Portland is about 100 miles inland—river miles, at least—from the Pacific Ocean. But out on the ocean side there will likely be a tsunami that comes in and devastates our coastal ports. So we will have two things to respond to. We will have all of those folks in our metropolitan areas who will be without all of the basic services, and we will have hurting people out on the coast. And likely, all of the bridges down between Portland and the coast.

Those are the things that the State of Oregon and the State of Washington, our ports, the Federal—all of our Federal partners, we are all thinking about that and planning for that now, determining where we will actually shut down operations and say those folks are going to have to concentrate on their families, we are shifting the headquarters, whatever group it is, inland hundreds of miles, because we know that the impacted areas won't be able to respond.

So it is a combination of planning, but then also being thoughtful about the infrastructure that comes after it.

Mrs. FLETCHER. Thank you very much.

Ms. Lee?

Ms. LEE. Yes. I definitely echo her comments regarding planning.

What we look for would be controllable and uncontrollable impacts to our infrastructure. And the water sector is really implementing and evaluating a number of strategies regarding infrastructure resiliency. We are looking at our resource recovery, we are looking at energy, we are looking at ways to recycle our water and nutrients and nitrogen and phosphate. And so, you know, we are looking at technologies that will allow us to look at the controllable and the uncontrollable impacts.

Mrs. FLETCHER. Thank you. I guess one question I have in hearing about the ports, Ms. Meira, we experienced that same concern about storm surge and coastal storm surge. Have you all been working on plans, or do you have ideas about how we can create physical infrastructure to address the storm surge concerns?

Ms. MEIRA. Yes, absolutely. So our—the State of Oregon is working with our ports, working with the Coast Guard, working with the Corps of Engineers to understand exactly what our coastal ports can currently withstand, as built, trying to get a sense of what the tsunami will look like, and then trying to determine what infrastructure will be left.

Will we be able to land any kind of vessels at those ports, or will they have been essentially scrubbed clean? And then you are looking at parking offshore assets, and helicoptering in relief efforts. Those are the kinds of conversations we are having. It is likely to be devastating, and to take not weeks or months, but years to recover from.

Mrs. FLETCHER. Thank you very much.

Thank you, Mr. Chairman. I yield back my time.

Mr. DEFAZIO. Thank you. I thank the gentlelady. And now, last and not least, Representative Mucarsel-Powell from Florida.

Ms. MUCARSEL-POWELL. Thank you, Mr. Chairman. The last one, and the most interesting one. I can't tell you how excited I am to finally ask.

I have 1,000 questions. I don't know if I can do all of this in 5 minutes. But thank you so much for being here with us this afternoon.

I represent south Florida, all of the Florida Keys, Monroe County, and parts of Miami-Dade County. So, as you can imagine my excitement when I was chosen to be a part of this committee, because we definitely are ground zero for sea level rise, the impacts of climate change, and our infrastructure is crumbling.

So you know, we have been hit by major hurricanes, floods, and extreme weather events. In 2017, Hurricane Irma was the strongest hurricane in history coming from the Atlantic Ocean. We really saw there the cost of Federal inaction.

You can imagine how urgent it is for us to invest in protecting—we have seven bridges that ties Monroe County, all of the Florida Keys, to the mainland. One of them is the Card Sound Road Bridge, which is right now in dire need of investment and infrastructure. And I am wondering—and I—my first question, because I do have several. I don't know who would take this question, but you can tell me.

What do you think, with this bridge, which is only one of two bridges that connects the northern part of the Keys to the mainland, if we only have—if we were to invest in trying to get that bridge up to par with where it needs to be, what would that mean, if we only have one reliable means of evacuating to the mainland in the event of an emergency? So you would only have one road. Can you speak to us about the public safety risks that this would possess?

Mr. MCARDLE. Congresswoman, I can just tell you that, certainly from a transportation standpoint, motor carriers, a service, a delivery service option, any way that—you know, even to feed the goods and services to—or goods to the businesses that are on the wrong side of that traffic jam, it would be something to take a very, very long time to get through. It is going to be very, very difficult.

And you know, and then it is just—it is going to compound into what becomes the priority: evacuations, getting goods delivered, the rebuild time. I can see it would be a heck of a challenge for you, for all of us.

Ms. MUCARSEL-POWELL. And my community down in the Keys also has really seen the cost of not really investing in our infrastructure. Our local governments have fronted significant funds toward the implementation of the Florida Keys water quality improvement program. And, as a result, Keys residents have footed a majority of the bill for the water treatment system in the region.

We have also a very serious issue of leaky septic tanks in the southern part of Miami-Dade County, as well. And we have seen on a regular basis the consequences of having an insufficient system.

So I wanted to ask, Director Lee, if you could talk about the importance of the Clean Water State Revolving Fund, and building and maintaining a sufficient septic system. Because, as you can imagine, it is unacceptable that in our country and in south Florida we only have half of the septic tanks that function during parts of the year. So, if you could, speak about that.

Ms. LEE. Thank you for the question, Congresswoman. That fund is so important to utilities across the country, across the Nation. And that is a vehicle for us to be able to fund the infrastructure improvements that are needed. The cost is passed on to our ratepayers.

And so the more funding we can get for utilities, then there is a direct correlation to what our ratepayers will be paying. We need the—we just need that local funding. We need the State revolving loans. We need funds going down to the public utilities across this country, because aging infrastructure is an issue. It is not going away. Water and wastewater services are basic to human life, and you have given some examples of the impact of not being able to fund that infrastructure appropriately.

So if I could leave you with something, really consider reauthorizing State revolving funding, reauthorizing WIFIA in fiscal year 2021, and ensuring that we have got funds that can be passed down to the local level to take care of the basic infrastructure that is really responsible for human life.

Ms. MUCARSEL-POWELL. Thank you.

Thank you, Mr. Chairman. Yes, do I have more time?

Mr. DEFAZIO. No, you don't.

Ms. MUCARSEL-POWELL. I have, like, 10 more questions. Yes.

Mr. DEFAZIO. You are over, sorry.

[Laughter.]

Mr. DEFAZIO. OK, this will be—I think I will be the last one. I will go quickly.

And first, I wish to discuss the PFC. And I know that important people are listening. And so here is the argument I have been having for years with the airlines.

So if you put another dollar, $2 on the ticket, no one is going to fly again. They are just going to walk away. And I said, "Well, what about bag fees?" Well, that is part of the passage and the ticket, and all that.

But to me, a big part of the experience is, when you walk into the airport, is it properly configured for security so you are not standing in these lines forever? You know, when we go out, are the gates adequate for the number of people? Do you have enough gates so you don't sit on the tarmac idling, and wasting fuel, which is happening more and more and more and more frequently for people.

So I think it is all part of the experience. It is one experience. And I just quite can't get to the bottom of it. And I want to ask this question.

So if I look at your option 1, the 30-year payoff full bonding, there is $151 million of interest over 30 years. Now, who is going to pay that?

Mr. KRAUTER. The users.

Mr. DEFAZIO. The users, OK. And that would be both the airlines and their passengers, right? Because you are going to get to renegotiate your gate contract somewhere in that 30—I am sure you don't have longer than 30-year contracts, do you?

Mr. KRAUTER. No, sir.

Mr. DEFAZIO. So, one way or another, the airlines and/or the passengers are going to pay for that.

Mr. KRAUTER. That is correct, Mr. Chairman.

Mr. DEFAZIO. And so, if we look at your last—well, I won't even be that extreme.

Go to your next-to-the-last option, we are at $34,200,000. So we subtract that. So—OK, that takes us down to $117, $118 million of difference. So wouldn't it be prudent to do it now and not waste $118 million, and send it to the banks, or Wall Street, or wherever you borrowed the money?

Mr. KRAUTER. We believe that it would be prudent. We do not want to take on unnecessary debt.

Mr. DEFAZIO. Right.

Mr. KRAUTER. And on top of that, we don't want to be extended out 38 years on our passenger facility charge to pay for all that.

Mr. DEFAZIO. Right.

Mr. KRAUTER. We have a lot of other projects that we would like to build, instead of paying the banks the interest.

Mr. DEFAZIO. And you are not building a—you are not like Singapore, wherever they are putting in the waterfalls and the Taj Mahal, and the—all that stuff. I mean in the United States we restrict how you can use the PFC money.

Mr. KRAUTER. That is correct, Mr. Chairman. We have a very robust consultation process with our airline partners, and an approval process with the FAA. Our terminal renovation and expansion project is very modest, very lean, answering all those issues that you pointed out at the beginning of your question.

Mr. DEFAZIO. OK. And I would like Ms. Meira to answer just one—I mean—how about, you know, we have shutdowns, we have—you know, we don't know what is going to be in the President's budget or what Congress is going to appropriate on an annual basis, in terms of harbors, who is going to get dredged, who isn't, whose jetty is on the, you know, very long list the Corps has for reconstruction, and how much more will it fail before we fix it.

Could you just address how important it would be to have more predictability, let along more money being invested?

Ms. MEIRA. If we have both, if we have more consistent funding—so more funding and more consistency—we would have more efficient projects, and we would have better return on investment for the U.S. taxpayer.

We have seen in the Northwest what it looks like when the Corps is, at times, adequately funded for a particular project. They are very efficient. They work very well with stakeholders. We have got some great success stories. And I know that you are aware of them. But we also have a lot of failures, and that is because we are not funding the Corps the way we should.

And some of those failures, they lead to unsafe conditions. And you are very aware of them on the southern Oregon coast, some of the most challenging bar crossings in the United States. They are, literally, a matter of life and death. That dredging, those jetties, they matter, not just to the mariners who are trying to get out to make a living at a commercial fishery. But when they are put in harm's way, you have Coast Guard personnel who are having to go out and make countless more search and rescue missions, putting their lives at stake and their assets at stake. It all adds up.

So if we can be more thoughtful in the way we fund the Corps, have more predictability, it is better for the taxpayer, it is better for everyone.

Mr. DEFAZIO. I think that is a great place to end. Thank you very much.

Thanks to all of the panel. Wait, I am going to have to say—I have to read something, but I want to first—before I get to that part I want to thank you for your testimony. You know, this is a really important issue confronting this committee, and I think the things we heard today are going to help us to come together in a bipartisan way, and make some of the investments we need.

So I ask unanimous consent that the record of today's hearing remain open to such time as our witnesses have provided answers to any questions that may be submitted to them in writing, and unanimous consent that the record remain open for 15 days for any additional comments or information submitted by Members or witnesses to be included in the record of today's hearing.

Without objection, so ordered.

I would like to thank our witnesses again, and I have nothing to add.

Bob, do you have anything to add?

Mr. GIBBS. Well, I would like to say thank you to our witnesses, too. And I just wanted to—just for the record on the Army Corps stuff, it has been very bipartisan to get more of that Harbor Maintenance Trust money where it is supposed to go. And we did on the last couple WRDAs, the Inland Waterway Trust Fund, we did increase that. And we got—kind of off budget that saved a lot—brought a lot of money in.

So it has been very bipartisan. When we were in the majority we worked very hard to make those improvements. So that is bipartisan.

Mr. DEFAZIO. I agree. I started actually working on turning that trust fund into a real trust fund with Bud Shuster in 1996. We are almost there.

With that, the committee stands adjourned.

[Whereupon, at 4:26 p.m., the committee was adjourned.]

Submissions for the Record

Statement of Hon. Rick Larsen, a Representative in Congress from the State of Washington

Thank you, Chair DeFazio for calling today's hearing on "The Cost of Doing Nothing: Why Investing in Our Nation's Infrastructure Cannot Wait."

This morning, we are here to discuss why the Federal Government must invest now in the Nation's infrastructure and what is at risk if we do not. You cannot have a big-league economy with little league infrastructure. The backlog of infrastructure projects spans roads, bridges, ports and airports across the country. If Congress does not act and address these infrastructure needs, we not only risk the safety of travel, but also the U.S. economy. Without a 21st-century infrastructure network, our ability to move goods, engage in trade and enjoy a robust economy will be impossible.

Robust infrastructure investment is especially important for my home State of Washington, where transportation means jobs. According to the Association of Washington Business, Washington State alone needs $190 billion in infrastructure investment to help relieve congestion, improve safety and build on the State's economic growth by putting folks in the Pacific Northwest to work. Last year, I hosted a series of roundtable discussions with transportation and infrastructure stakeholders across Washington's Second District. During these discussions, I heard about the need to invest in modernization and maintenance of the regional highway system. Small and mid-size cities play a critical role in powering Washington's economy, but you would not know it based on how Federal transportation and infrastructure funding is allocated.

My legislation, the TIGER CUBS Act—which I will reintroduce this Congress—will help these cities earn their stripes as competitors for Federal infrastructure dollars to restore local roads, bridges and highways and creating good-paying jobs. Specifically, my bill would set-aside 20 percent of the funds for smaller and medium-sized cities made available through the popular Transportation Investment Generating Economic Recovery (TIGER) grant program, now known as BUILD.

According to a recent industry [1] scorecard, U.S. drivers spend more than 40 hours each year in traffic during peak hours.

In Everett, Washington, commuters spent more time stuck in traffic than anyone else in 2017, with a congestion rate of 28 percent on highways in and out of the city. Washingtonians travelling on the U.S. 2 trestle between Everett and Lake Stevens know this congestion and its related safety concerns all too well. Although Washington State has raised $1.8 million dollars in local funds to upgrade the U.S. 2 trestle, this allocation still does not cover its full design cost projected at $15 million. As the State considers additional funding options to complete the U.S.2 trestle project, either through an increased gas tax or public-private partnerships, robust Federal investment can play a key role in getting this project across the finish line.

Local officials in my district have also told me that improving at-grade rail crossings in Northwest Washington is critical for safety and efficient traffic flow. For instance, in the city of Marysville in my district, an overcrossing on Grove Street is needed to increase the flow of east-west traffic through the downtown core, which is significantly impeded by train traffic. Further, at-grade rail crossing accidents and fatalities are on the rise and pose a significant barrier to the region's transportation network. With a single at-grade crossing project estimated to cost localities up to $30 million, increased Federal investment is critical to making needed infrastructure improvements that will save lives.

The Fiscal Year 2018 Omnibus provided a $525 million increase to the Consolidated Rail Infrastructure and Safety Improvement Grants Program, also known as CRISI, which will help reduce rail congestion, improve rail infrastructure and in-

[1] INRIX, *INRIX 2017 Global Traffic Scorecard*, http://inrix.com/scorecard/ (last visited Aug. 29, 2018).

crease the deployment of safety technology. However, more can be done to increase Federal funding for rail safety. I am working to reintroduce legislation to enhance eligibility and make a series of technical improvements to ensure Federal funding for at-grade crossings and separations are more accessible for States and localities.

The expansion of reliable and efficient transit options is vital for commuters in Washington's Second District and across the Pacific Northwest. Recently in my district, Community Transit secured a $43.2 million Federal Capital Investment Grant to support their Swift Green Line bus rapid transit project. Without this Federal investment, this long-awaited transportation project would not have made it across the finish line. Investing in this project ensures commuters have safe, reliable transit options to work, school and home.

Outside of investments in ground transit infrastructure, Federal investment in the Nation's ports keeps the U.S. maritime system competitive, encourages new, good-paying maritime jobs and helps to ensure a healthy environment in the Pacific Northwest. According to Washington's Department of Commerce, the State's maritime industry contributes over $21 billion in gross business income and directly employs more than 69,500 people. Small ports across the United States, like the Ports of Skagit and Bellingham, drive economic activity across various sectors from fishing and manufacturing, to shipbuilding and recreation.

At the Port of Skagit, a new cycle of dredging is needed for the Swinomish Channel and will cost an estimated $2.4 million. Additionally, the preferred alternative to raise the Goat Island Jetty to reduce sedimentation will cost $3.75 million. Despite a $172 million increase for the Army Corps of Engineers in the recent Fiscal Year 2019 Energy and Water appropriations minibus, only $2,000 was allocated for the Swinomish Channel project. Congress must work to fund small and donor ports nationwide to ensure they are properly maintained.

Many often forget that infrastructure needs are not limited to the ground. As Chair of the Aviation Subcommittee, I also look at infrastructure investments through this lens. The Aviation Subcommittee will have a forward-looking aviation and aerospace agenda. This subcommittee will explore ensuring aviation safety, fostering innovation in U.S. airspace, improving U.S. competitiveness in the global marketplace; and enhancing the air travel experience for passengers. To that end, I am pleased that we have two witnesses today to speak strictly to what infrastructure investment means for the aviation system.

I would like to personally introduce Larry Krauter, the CEO of Spokane International Airport, from my home State of Washington. Mr. Krauter will testify today from the perspective of a small hub airport in Washington State about their capital needs, and how a simple change to a local fee could have a dramatic impact on airports' ability to maintain and modernize safe infrastructure, and plan for the future. Without increasing investment to public-service airports, they will be capacity constrained, unable to meet growing passenger demand and in some cases, be forced to deny new service to local communities.

In other words, a failure to act may be tantamount to a reduction in air service. Reducing air service hurts the traveling public and local communities by reducing robust competition and preventing regional economic growth. The United States has one of the most robust commercial passenger air service markets in the world. Airports need an influx of new capital to keep up with current capacity constraints and to plan for and build to accommodate future passenger growth.

These investments are not just needed at large hub airports. The U.S. aviation system is just that, a system that relies on large airports like SeaTac in Seattle, to smaller hubs, like Skagit Regional Airport or Paine Field in my district, all the way down to airports that provide a lifeline to rural and remote communities. Congress has an obligation to ensure Federal and local investments are in place to maintain the incredible connectivity these airports provide to communities across the U.S.

While I am proud of the passage of the recent Federal Aviation Administration (FAA) Reauthorization Act of 2018, there is one area where the bill fell very short: addressing the growing capital needs of airports. Despite many efforts, the bill holds flat Federal infrastructure investment in airports for the next 5 years. In other words, airports will receive the same Federal investment for 12 years in a row, while their needs continue to grow every year.

From 2012 through 2023, the Airport Improvement Program (AIP) grants will provide $3.35 billion annually to airports for critical safety airside projects. According to a leading industry survey, airports have capital needs over the next 10 years of $130 billion (or $13 billion annually). Washington State alone is estimated to need $12.6 billion in aviation infrastructure investment. You do not need to be an economist to see the Federal infrastructure investment in airports falls far short of meeting airports growing needs. However, there is an easy solution to closing this gap.

The passenger facility charge (PFC), is a federally authorized local charge that airports can collect on most passengers that travel to and from their airports. Congress needs to lift the cap of what airports can charge. This change does not even require Federal investment. It simply requires Congress to allow local airports to work with local communities to identify their needs and set fees accordingly. Raising the cap on the PFC, which has not been raised in almost 20 years, is a simple solution to a very big problem. And it will not cost the Federal Government a dime.

The current cap on the PFC is $4.50. In 2000, the value of the dollar went much further than a dollar goes today. Which is why this outdated and artificial cap on what a local community can collect to meet their needs should be updated, lifted, eliminated or simply adjusted for inflation.

In today's dollars, the PFC adjusted to inflation would be $10. This would double the amount of revenue airports could use to invest in critical terminal and capacity projects. The time to act is now. This decades-old fight must come to an end. The PFC is a local fee to help local communities decide what type of air service they want to attract and maintain.

I would like to also welcome Eric Fanning, CEO of the Aerospace Industries Association, who will discuss a very different side of the aviation system: the impact new technology can have on the Nation's growing congestion problems. Passenger air vehicles (PAVs) are slated to present a dramatic change in the transportation in and around urban centers in the very near future. With recent advances in design and technology, PAV concepts in development will have the ability to reduce traffic congestion and the demand on our roads and bridges by carrying everyday commuters through the air, at low altitudes, to work and other nearby destinations.

Of course, before this occurs there are many questions that will need to be answered to safely integrate them into complex airspace. This effort will require the FAA to develop a comprehensive regulatory framework to integrate these operations into U.S. airspace. As more users enter the U.S. airspace, safety must be Congress' number one priority.

Again, thank you Chair DeFazio for calling today's hearing.

And thank you to today's witnesses for being here to discuss this important issue. I appreciate your work to develop innovative solutions to address transportation and infrastructure needs across the country.

I look forward to this discussion.

Statement of Hon. Colin Z. Allred, a Representative in Congress from the State of Texas

Good morning Chairman DeFazio and Ranking Member Graves. First, I want to say how pleased I am to serve on this committee. I am encouraged by the spirit of bipartisanship with which this committee operates, and I look forward to working with all Members to deliver solutions to the infrastructure challenges currently facing north Texans and the American people.

I also would like to thank Chairman DeFazio for holding this very important hearing to discuss the real consequences of our lack of investment in infrastructure. Nationwide, we have seen a deterioration of our airports, roads and bridges. Traffic congestion in cities across the country are costing businesses billions of dollars a year in revenue and productivity loss. This problem is all too real to the constituents of Texas' 32nd Congressional District, where our region is rapidly growing, and that growth is not going anywhere. According to one study conducted by a transportation consulting firm, Dallas ranks as the 10th most congested city in the United States and 22nd globally. Every year, Dallas commuters spend an average of 54 hours in traffic and incur traffic congestion costs of $1,654 per driver. I am committed to pursuing innovative solutions to address these traffic congestion challenges.

We must also place a greater focus on emerging transportation technologies such as smart highways and high-speed rail projects and develop new solutions for resilient infrastructure renewal. Doing so will put thousands of Americans to work revolutionizing the way we travel. In my home State of Texas, a network of local, regional, and State agencies and research institutions is using collaboration and innovative research to address mobility challenges and infrastructure needs across the State. For example, the Center for Infrastructure Renewal at Texas A&M University focuses on innovating new materials, technologies and processes to create solutions that last longer, have lower costs, and can be built in less time. Leveraging this type of research will be vitally important as we seek to modernize our Nation's infrastructure.

America deserves a competitive and modern transportation and infrastructure system and I look forward to working with Members on this committee to make that a reality.

Statement of the Airports Council International—North America Submitted for the Record by Mr. DeFazio

Mr. Chairman, Airports Council International—North America (ACI–NA)—the trade association representing local, regional, and State governing bodies that own and operate commercial airports throughout the United States—thanks you for holding this important hearing today.

The recent Federal-government shutdown highlighted the critical role the aviation industry plays in our national economy. Federal staffing and other resource shortfalls brought on by the shutdown threatened air service to communities across the country, harming air travelers, businesses, and regional economies all over America. The shutdown also slowed progress on important infrastructure projects at America's airports, investments we can ill-afford to put on the back burner. We are grateful that the shutdown is over, but it revealed to everyone the myriad of problems that could develop when the aviation system is not properly maintained and funded.

While we look forward to a final resolution to the Fiscal Year 2019 appropriations bills that will provide the U.S. Department of Transportation and U.S. Department of Homeland Security with the funding they need to staff and oversee aviation operations, we know that America's airports are falling further behind in their effort to upgrade their facilities and improve the overall experience of their customers. Airports strongly agree with you that the cost of doing nothing is further paralysis of the aviation system, and we are eager to work with you and this committee to advance a meaningful funding plan that will finally address our country's growing infrastructure needs.

AIRPORTS ARE TERMINALLY CHALLENGED

America's airports are a fundamental component of our nation's transportation infrastructure. In 2017, 1.8 billion passengers and 31.7 million metric tons of cargo traveled through U.S. airports. With a national economic impact of $1.4 trillion, airports contribute more than 7 percent to the U.S. gross domestic product and support over 11.5 million jobs around the country. To meet the capacity demands of the future with safe, efficient, and modern facilities that passengers and cargo shippers expect, airports need to make new investments to maintain and modernize our nation's airport infrastructure.

While passenger and cargo traffic through airport facilities continues to grow at a record pace, our outdated aviation infrastructure is not keeping up with demand. As a result, far too many airports around the country are overcrowded and cramped. ACI-NA's most recent infrastructure-needs survey shows that America's airports require more than $100 billion in infrastructure upgrades over a 5-year period, with 60 percent of those needs coming within airport terminals.

Inadequate airport infrastructure that fails to meet the growing needs of local businesses and tourists puts in jeopardy the continued economic growth of American cities, States, and regions. From established metropolitan areas to burgeoning growth regions to small communities, sustained economic growth depends on the expansion of, and investment in, local airports. As the U.S. economy has recovered from the significant economic downturn experienced during the Great Recession, the national unemployment rate has decreased and personal discretionary spending has increased. As such, enplanements nationwide have dramatically improved, growing at a compound annual growth rate of 3.8 percent between 2013 and 2017, putting further pressure on our already overloaded airport facilities.

Airport investment also promotes much-needed competition in the airline industry. New investments in airports can be valuable tools in helping local communities attract new air carriers, which increases competition and leads to lower airfares for passengers. Airports need additional resources to build the terminals, gates, and ramps necessary to attract new air carriers and entice existing ones to expand service. The traveling public gets more choices and lower airfares when airports can build the facilities that provide more airline options and more service alternatives.

In addition to the impact on local economies, deferred airport investment over the past two decades has challenged the ability of airports to deal with the evolving threats posed to aviation security. We live in vastly different times than when most U.S. airports were built, and the airports we have today simply were not designed and outfitted for a post-9/11 world that requires us to maximize both efficiency and security.

ADDRESSING THE INFRASTRUCTURE-FUNDING SHORTFALL

With America's airports facing over $100 billion in infrastructure needs across the system, it is time to find the means to rebuild our nation's aviation infrastructure and improve the passenger experience for millions of air travelers.

It is a common misconception that airports are funded with taxpayer dollars or a general tax on all citizens. In reality, though, infrastructure projects at U.S. airports are funded primarily with Federal grants through the FAA's Airport Improvement Program (AIP), a local user-fee called the Passenger Facility Charge (PFC), and airport-generated revenue from tenant rents and fees. Airports often turn to private-capital markets to debt-finance projects, using both PFC-revenue and airport-generated revenue to repay the bonds.

Traditionally AIP grants—which prioritize safety improvements—have been used on airfield projects, while PFC user fees—with greater funding flexibility—have gone toward terminal, ground-access, and major-runway projects. Both are essentially reimbursement programs used to pay for past or existing projects. In the case of PFCs, airports often have committed this revenue-stream for years or decades into the future to repay past projects, meaning they have no new money coming into the system to fund future projects. Federal law requires airports to be self-sustaining, yet it also artificially distorts and constrains the very funding mechanisms designed to ensure market competition and airport-infrastructure growth, as the Federal cap on the PFC has been in place since 2000, and Federal grants through the AIP have remained stagnant for over a decade.

Thus, under the industry's current financing-funding model airports lack stable, predictable funding sources that keep pace with travel growth, rising construction costs, and inflation for these intensive capital projects. The PFC cap—last adjusted 20 years ago—has seen its purchasing power eroded by 50 percent in the past two decades. And Federal airport grants through the AIP have been stagnant for nearly a decade, and will remain so for another 5 years under the recently enacted FAA reauthorization legislation. Moreover, many airports—even those with sterling credit ratings—have reached their debt capacity and either cannot finance new projects or have had to phase in their projects over a longer timeframe, increasing the costs and delaying the benefits for passengers.

Fortunately, we can rebuild America's airports without raising taxes or adding to deficit spending by modernizing the Federal cap on the PFC. Modestly adjusting the anti-competitive Federal cap on local PFCs would allow airports to take control of their own investment decisions and become more financially self-sufficient. Airports could build the appropriate facilities—terminals, gates, baggage systems, security checkpoints, roadways, and runways—to meet the travel demands and customer expectations of their community.

It is important to note that PFCs are not taxes—they are local user fees determined locally and used locally to help defray the costs of building airport infrastructure that benefits customers by improving the passenger experience and spurring airline competition. PFCs are imposed by States or units of local government; so they are not collected by the Federal Government, not spent by the Federal Government, and not deposited into the U.S. Treasury. Instead, PFCs go directly to fund local airport projects approved by the FAA, with input from airlines and local communities.

At a time of mounting pressure on our Federal budget, modernizing the Federal Government's cap on the PFC is the simplest and most free-market option for providing airports with the locally controlled self-help they need to fund vital infrastructure projects. It would give airports more flexibility to self-finance and leverage private investment without the need for additional taxpayer dollars, thereby allowing airports of all sizes to generate more local revenue for terminals, gates, runways, and taxiways that would increase capacity, stimulate competition, enhance safety and security, and improve the overall passenger experience. Ultimately, modernizing the PFC is the best way to meet the travel demands of today and challenges of tomorrow.

Letter from Catherine Chase, President, Advocates for Highway and Auto Safety, et al., Submitted for the Record by Mr. DeFazio

FEBRUARY 6, 2019.

Hon. PETER A. DEFAZIO
Chairman

Hon. SAM GRAVES
Ranking Member
Committee on Transportation and Infrastructure, U.S. House of Representatives, Washington, DC.

DEAR CHAIRMAN DEFAZIO AND RANKING MEMBER GRAVES:

As you prepare for tomorrow's hearing, "The Cost of Doing Nothing: Why Investing in Our Nation's Infrastructure Cannot Wait," we urge you to prioritize safety as you consider the needs of America's roads and highways. Each day on average, over 100 people are killed and 8,500 more are injured in motor vehicle crashes. This preventable toll also comes with a serious financial burden. Annually, crashes impose comprehensive costs of over $800 billion on society, $242 billion of which are economic costs—amounting to a "crash tax" of $784 per person each year. Yet, available solutions to the problems that perpetuate crashes continue to languish. Moreover, year after year proposals are considered to weaken or repeal the minimal safety protections that do exist. We respectfully request your consideration of our positions during the hearing and that this letter be included in the hearing record.

This hearing is well-timed considering that just this week the National Transportation Safety Board (NTSB) released the 2019–2020 Most Wanted List of safety improvements. The Most Wanted List calls attention to several areas that are directly relevant to issues that will likely come before the Transportation and Infrastructure Committee this Congress including: distraction; fatigue; alcohol and drug impairment; collision avoidance technologies in highway vehicles; speed; medical fitness, specifically obstructive sleep apnea; and, occupant protection. We look forward to working with you to improve safety on the nation's roads and to advance the improvements outlined by the NTSB.

Truck crashes deaths continue to rise. In 2017, 4,761 people were killed in crashes involving a large truck. This was a 9 percent increase from the previous year and a staggering 41 percent increase since a low in 2009. Additionally, in 2016, the latest year for which full data are available, 145,000 people were injured in crashes involving a large truck. Commercial motor vehicle (CMV) crashes amounted to $134 billion in costs that same year. These grim statistics are unacceptable and more must be done to prevent this needless carnage.

Proven countermeasures that would bring about safer conditions for both truck drivers and those with whom they share the road must be implemented. Technologies including speed limiting devices, automatic emergency braking (AEB), and comprehensive underride guards could be saving lives now if they were fully deployed. Similarly, a required minimum number of behind the wheel hours should be established as part of entry level driver training. We urge Congress to take swift action on legislation requiring these crucial upgrades.

We ask the Committee to also oppose efforts that would weaken or repeal existing truck safety rules. In the last few years, special interests have been relentless in their attempts to increase truck driver hours of service and evade compliance with the electronic logging device (ELD) rule, despite the known dangers associated with "tired truckers." It is also alarming that efforts have been underway to allow for "teen truckers" by lowering the age to obtain an interState commercial driver's license (CDL) from 21 to 18. This ill-conceived concept is especially egregious because truck drivers under the age of 21 are anywhere from 4 to 6 times more likely to be in a fatal crash, according to studies of intraState truck drivers. These dangerous proposals pose a direct threat to the safety of all road users and should be resoundingly rejected.

Bigger, heavier trucks would endanger all motorists and our infrastructure. Congress should oppose all attempts to further degrade safety by increasing truck size and weight limits. According to the 2017 Infrastructure Report Card from the American Society of Civil Engineers, America's roads receive a grade of "D" and our bridges were given a "C+". Nearly 40 percent of our 615,000 bridges in the National Bridge Inventory are 50 years or older and one out of 11 is structurally deficient. The U.S. Department of Transportation (DOT) Comprehensive Truck Size and Weight Study found that introducing double 33-foot trailer trucks, known as "Double 33s," would be projected to result in 2,478 bridges requiring strengthening or replacement at an estimated one-time cost of $1.1 billion. This figure does not even account for the additional, subsequent maintenance costs which will result from longer, heavier trucks. In fact, increasing the weight of a heavy truck by only 10 percent increases bridge damage by 33 percent. The Federal Highway Administration (FHWA) estimates that the investment backlog for bridges, to address all cost-beneficial bridge needs, is $123.1 billion. The U.S. would need to increase annual funding for bridges by 20 percent over current spending levels to eliminate the bridge backlog by 2032.

Longer trucks also come with operational difficulties such as requiring more time to pass, having larger blind spots, crossing into adjacent lanes, swinging into opposing lanes on curves and turns, and taking a longer distance to adequately brake. And, not surprisingly, trucks heavier than 80,000 pounds have a greater number of brake violations, which are a major reason for out-of-service violations. According to a North Carolina study by the Insurance Institute for Highway Safety (IIHS), trucks with out-of-service violations are 362 percent more likely to be involved in a crash. This is also troubling considering that tractor-trailers moving at 60 mph are required to stop in 310 feet—the length of a football field—once the brakes are applied. Actual stopping distances are often much longer due to driver response time before braking and the common problem that truck brakes are often not in adequate working condition.

There is overwhelming opposition to any increases to truck size and weight limits. The public, local government officials, safety, consumer and public health groups, law enforcement and first responders, truck drivers and labor representatives, families of truck crash victims and survivors, and even Congress have all rejected attempts to increase truck size and weight. It is clear that increasing truck size and weight will exacerbate safety and infrastructure problems, negate potential benefits from investments in roads and bridges, and divert rail traffic from privately owned freight railroads to our already overburdened public highways. Also, despite claims to the contrary, bigger trucks will not result in fewer trucks. Following every past increase to Federal truck size and weight, the number of trucks are on our roads has gone up. Since 1982, when Congress last increased the gross vehicle weight limit, truck registrations have more than doubled. The U.S. DOT study also addressed this meritless assertion and found that any potential mileage efficiencies from the use of heavier trucks would be offset in just 1 year.

Motor vehicle crash deaths have stagnated despite available, proven technology. Tremendous focus has been placed on the future potential of autonomous vehicles (AVs), also known as driverless cars, to eliminate crashes. While it is claimed that AVs may someday make meaningful reductions in deaths and injuries, this promise is still likely decades away. Further, at least three people have already been killed in crashes involving vehicles equipped with self-driving technologies. The real risks posed by experimental driverless cars must be addressed through a strong Federal Government role—including safety standards and oversight—before AVs are deployed on a large scale. However, a number of proven technologies such as automatic emergency braking, lane departure warning and blind spot detection should be made standard equipment on all new vehicles now. We urge Congress to require the U.S. DOT to establish minimum performance requirements for these lifesaving technologies and require that all new vehicles be equipped with them.

Infrastructure upgrades will be critical as driverless cars are deployed. As AVs are tested and eventually commercialized on our nation's roads, it will be vital that infrastructure improvements be made to ensure their safe operation. For example, research shows that driverless vehicles can easily be confused by poor infrastructure conditions leading to dangerous errors. In one experiment a standard stop sign with only a few alterations was interpreted by a driverless car as a 45 mph speed limit sign. The potential consequences of these types of mistakes could be catastrophic. Substantial investments in our infrastructure that benefit human drivers now and help to prepare our roads for self-driving cars should occur before driverless vehicles are ubiquitous on our streets. Additionally, despite claims that driverless technology will improve our congested roads, transportation experts have already found that the proliferation of mobility services like Lyft and Uber (precursors for mass deployment of driverless vehicles) have instead increased congestion and reduced mass transit use. In addition, a recent study predicted that AVs could exacerbate clogged arteries by constantly traveling at low speeds instead of parking while waiting for their next trip. These, and numerous other, issues must be comprehensively addressed before driverless vehicles are deployed on a large scale. In order to realize the full potential of AVs to be a catalyst for positive change, protections must be put in place to ensure the safety of all road users.

As the title of this hearing aptly states, "The Cost of Doing Nothing" and complacency with the status quo of high crash fatalities, injuries and costs from crashes is unacceptable. Effective solutions are readily available to save lives now. We look forward to working with the Committee this Congress on passing important legislation that will advance safety for everyone using our surface transportation systems.

Sincerely,

CATHERINE CHASE, President, Advocates for Highway and Auto Safety
GEORGES C. BENJAMIN, MD, Executive Director, American Public Health Association
HARRY ADLER, Executive Director, Truck Safety Coalition
JASON LEVINE, Executive Director, Center for Auto Safety
DAPHNE IZER, Co-Founder, Parents Against Tired Truckers (PATT)
JANETTE FENNELL, Founder and President, KidsAndCars.org
DAWN KING, Davisburg, MI, President, Truck Safety Coalition Board Member, CRASH Daughter of Bill Badger Killed in truck crash 12/23/04
JANE MATHIS, St. Augustine, FL, Vice President, TSC Board Member, PATT Mother of David Mathis, Mother-in-Law of Mary Kathryn Mathis, Killed in a truck crash 3/25/04
PETER MALARCZYK, Hastings-on-Hudson, NY, Volunteer, Truck Safety Coalition Injured in a truck crash 12/29/15, Son of Ryszard and Anita Malarczyk, Killed in a truck crash 12/29/15
SANTIAGO CALDERON, Arcata, CA, Volunteer, Truck Safety Coalition, Injured in a truck crash 4/10/14
JOAN CLAYBROOK, Chair, Citizens for Reliable and Safe Highways (CRASH) and Former Administrator, National Highway Traffic Safety Administration
JACK GILLIS, Executive Director, Consumer Federation of America
STEVE OWINGS, Co-Founder and President, Road Safe America
STEPHEN W. HARGARTEN, M.D., MPH, Society for the Advancement of Violence and Injury Research
SALLY GREENBERG, Executive Director, National Consumers League
ROSEMARY SHAHAN, President, Consumers for Auto Reliability and Safety
ANDREW MCGUIRE, Executive Director, Trauma Foundation
JENNIFER TIERNEY, Board Member, Citizens for Reliable and Safe Highways (CRASH) Foundation
RON WOOD, Washington, D.C., Volunteer, Truck Safety Coalition, Son of Betsy Wood, Brother of Lisa Wood Martin, Uncle of Chance, Brock, and Reid Martin, Killed in a truck crash 9/20/04
KATE BROWN, Gurnee, IL, Volunteer, Truck Safety Coalition, Mother of Graham Brown Injured in a truck crash 5/2/05
MICHELLE LEMUS, Los Angeles, CA , Volunteer, Truck Safety Coalition, Injured in a truck crash 4/10/14
TAMI FRIEDRICH TRAKH, Corona, CA, Board Member, CRASH, Sister of Kris Mercurio, Sister-in-Law of Alan Mercurio, Aunt of Brandie Rooker & Anthony Mercurio, Killed in a truck crash 12/27/89
MONICA MALARCZYK, Hastings-on-Hudson, NY, Volunteer, Truck Safety Coalition Injured in a truck crash 12/29/15, Son of Ryszard and Anita Malarczyk, Killed in a truck crash 12/29/15
BETH BADGER, Columbus, GA, Volunteer, Truck Safety Coalition, Daughter of Bill Badger, Killed in truck crash 12/23/04
PAUL BADGER, Davidson, NC, Volunteer, Truck Safety Coalition, Son of Bill Badger, Killed in truck crash 12/23/04
GARY WILBURN, Weatherford, OK, Volunteer, Truck Safety Coalition, Father of Orbie Wilburn Killed in a truck crash 9/2/02
JACKIE NOVAK, Hendersonville, NC, Volunteer, Truck Safety Coalition Mother of Charles “Chuck” Novak Killed in a truck crash 10/24/10
LAURIE HIGGINBOTHAM, Memphis, TN, Volunteer, Truck Safety Coalition Mother of Michael Higginbotham Killed in a truck crash, 11/18/14
VICKIE JOHNSON, Hartwell, GA, Volunteer, Truck Safety Coalition, Wife of Curt Johnson, Step-mother of Crystal, Johnson, Killed in a truck crash 10/1/2009
DEBRA CRUZ, Harlingen, TX, Volunteer, Truck Safety Coalition, Injured in a truck crash 8/8/2008
LINDA WILBURN WEATHERFORD, Board Member, PATT, Mother of Orbie Wilburn, Killed in a truck crash 9/2/02
VINCENT LAUBACH, Reno, NV, Volunteer, Truck Safety Coalition, Truck Crash Survivor
LARRY LIBERATORE, Severn, MD, Board Member, PATT Father of Nick Liberatore Killed in a truck crash 6/9/97

CHRISTINA MAHANEY, Jackman, ME, Volunteer, Truck Safety Coalition, Injured in a truck crash 7/19/2011, Mother of Liam Mahaney, Killed in a truck crash 7/19/2011

TINA SILVA, Ontario, CA, Volunteer, Truck Safety Coalition, Sister of Kris Mercurio, Sister-in-Law of Alan Mercurio, Aunt of Brandie Rooker & Anthony Mercurio, Killed in a truck crash 12/27/89

KATHLEEN LAUBACH, Reno, NV, Volunteer, Truck Safety Coalition, Truck Crash Survivor

BRUCE KING, Davisburg, MI, Volunteer, Truck Safety Coalition, Son-in-law of Bill Badger, Killed in truck crash 12/23/04

KIM TELEP, Harrisburg, PA, Volunteer, Truck Safety Coalition, Wife of Bradley Telep, Killed in a truck crash 8/29/12

CINDY SOUTHERN, Cleveland, TN, Volunteer, Truck Safety Coalition Wife of James Whitaker, sister-in-law Anthony Hixon and aunt of Amber Hixon Killed in a truck crash 9/18/09

MARC JOHNSON, Hartwell, GA, Volunteer, Truck Safety Coalition, Brother of Curt Johnson, Killed in truck crash 10/1/2009

MORGAN LAKE, Sunderland, MD, Volunteer, Truck Safety Coalition, Injured in a truck crash 7/19/13

STEVE IZER, Lisbon, ME, Board Member, PATT Father of Jeff Izer, Killed in a truck crash 10/10/93

SANDRA LANCE, Chesterfield, VA, Volunteer, Truck Safety Coalition, Mother of Kristen Belair, Killed in a truck crash 8/26/2009

BERNADETTE FOX, Davis, CA, Volunteer, Truck Safety Coalition Best friend of Daniel McGuire Killed in a truck crash 7/10/2014

JULIE BRANON MAGNAN, South Burlington, VT, Volunteer, Truck Safety Coalition, Injured in a truck crash 01/31/02, Wife of David Magnan, Killed in a truck crash 01/31/02

AMY FLETCHER, Perrysburg, OH, Volunteer, Truck Safety Coalition, Wife of John Fletcher, Killed in a truck crash 1/24/12

ALAN DANA, Plattsburgh, NY, Volunteer, Truck Safety Coalition, Son of Janet Dana, Uncle of Caitlyn & Lauryn Dana, Brother-in-law of Laurie Dana Killed in a truck crash 7/19/12

NANCY MEULENERS, Bloomington, MN, Volunteer, Truck Safety Coalition, Injured in a truck crash 12/19/89

ASHLEY MCMILLAN, Memphis,TN, Volunteer, Truck Safety Coalition Girlfriend of Michael Higginbotham Killed in a truck crash, 11/18/14

MARCHELLE WOOD, Falls Church, VA, Volunteer, Truck Safety Coalition, Mother of Dana Wood, Killed in a truck crash 10/15/02

MELISSA GOUGE, Washington, D.C., Volunteer, Truck Safety Coalition, Cousin of Amy Corbin, Killed in a truck crash 8/18/97

RANDALL HIGGINBOTHAM, Memphis, TN, Volunteer, Truck Safety Coalition, Father of Michael Higginbotham Killed in a truck crash, 11/18/14

FRANK WOOD, Falls Church, VA, Volunteer, Truck Safety Coalition, Father of Dana Wood, Killed in a truck crash 10/15/02

MICHELLE NOVAK, Delevan, NY, Volunteer, Truck Safety Coalition Aunt of Charles "Chuck" Novak, Killed in a truck crash 10/24/10

ED SLATTERY, Lutherville, MD, Board Member, PATT, Volunteer, Truck Safety Coalition, Husband of Susan Slattery, Killed in a truck crash 8/16/10, Sons Matthew & Peter Slattery critically injured

Letter from Agribusiness & Water Council of Arizona et al. Submitted for the Record by Mr. DeFazio

JANUARY 10, 2019.

Hon. NANCY PELOSI
Speaker, U.S. House of Representatives, Washington, DC.

Hon. MITCH MCCONNELL
Majority Leader, U.S. Senate, Washington, DC.

Hon. KEVIN MCCARTHY
Minority Leader, U.S. House of Representatives, Washington, DC.

Hon. CHARLES E. SCHUMER
Minority Leader, U.S. Senate, Washington, DC.

DEAR CONGRESSIONAL LEADERS,

The undersigned organizations write to urge Congress to include funding and financing for drinking water, wastewater, water reuse and stormwater infrastructure in any infrastructure package considered during the 116th Congress. Given the well-documented needs of our nation's aging water infrastructure, an infrastructure package represents an excellent opportunity to provide necessary resources to meet long-term economic, public health and environmental goals.

The U.S. EPA estimates that America's water and wastewater infrastructure requires nearly $750 billion worth of investment over the next 20 years just to maintain current levels of service, and independent estimates place this figure over $1 trillion. Local ratepayers will shoulder much of this burden, but all levels of government must be part of the solution.

Aging infrastructure replacement needs account for much of the investment gap. In addition, federal regulatory requirements over the last three decades have steadily grown to account for a significant portion of the cost associated with investment needs. While federal contributions to transportation infrastructure have stayed constant at approximately half of total capital spending, federal investment in water infrastructure has declined from 63 percent to 9 percent since 1977.

America's future economic strength depends on investments made today in water infrastructure. These investments create jobs and support the economy. Every $1 invested in drinking water and wastewater infrastructure increases long-term GDP by $6.35, creates 1.6 new jobs, and provides $23.00 in public health-related benefits. These new jobs in the water sector are also high-paying ($64,000/year), skilled, and largely recession proof since many are in municipal government. Studies also show that the US economy would stand to gain over $200 billion in annual economic activity and 1.3 million jobs over a 10-year period by meeting its current water infrastructure needs. Without these investments, breakdowns in water supply, treatment and wastewater capacity are projected to cost manufacturers and other businesses over $7.5 trillion in lost sales and $4.1 trillion in lost GDP from 2011 to 2040.

In a recent survey of American's opinions on the value of investing in our water resources, 78 percent of respondents said it's "extremely or very important" that the President and Congress develop a plan to rebuild America's water infrastructure. The same survey found that 88 percent of respondents agreed that increased federal investment was needed to rebuild water infrastructure.

As Congress develops a comprehensive infrastructure proposal, we urge you to remember that water infrastructure is often co-located with transportation infrastructure, such as roadways and bridges. When roadways are dug up or bridges rebuilt, it would be less expensive to rehabilitate water lines at that point in time instead of digging them up again.

In addition, the cost of water service to low-income customers is an increasing concern and the U.S. federal contributions to water infrastructure finance help local utilities cushion the costs of water service to customers.

Our nation has faced many challenges over the last two centuries, but through collaboration and perseverance we have found solutions. Our organizations applaud Congress for its past efforts to take action to address the nation's infrastructure challenges. We strongly encourage you to include water infrastructure as a major component of the infrastructure package in 2019.

Sincerely,

Agribusiness & Water Council of Arizona
Alabama Water Environment Association
American Council of Engineering Companies
American Membrane Technology Association
American Public Works Association
American Rivers
American Society of Civil Engineers
American Sustainable Business Council
American Water Works Association
Arizona Water Association
Arkansas Water Environment Association
Association of California Water Agencies
Association of Clean Water Administrators
Associated General Contractors of America
Association of Metropolitan Water Agencies
Association of Regional Water Organizations
Association of State Drinking Water Administrators
California Association of Sanitation Agencies
California Water Environment Association
Central States Water Environment Association
Clean Water Action

Chesapeake Water Environment Association
Conservation Voters of Pennsylvania
Colorado Wastewater Utility Council
Connecticut Association of Water Pollution Control Associations
Connecticut Water Pollution Abatement Association
Council of Infrastructure Financing Authorities
Design-Build Institute of America
Endangered Habitats League
Florida Water Environment Association
Freshwater Future
Georgia Association of Water Professionals
Green Mountain Water Environment Association
Gulf Restoration Network
Hawaii Water Environment Association
Illinois Association of Wastewater Agencies
Illinois Council of Trout Unlimited
Illinois Water Environment Association
Indiana Water Environment Association
Iowa Water Environment Association
Kansas Water Environment Association
Kentucky-Tennessee Water Environment Association
Michigan Water Environment Association
Maine Water Environment Association
Mississippi Water Environment Association
Missouri Public Utility Alliance
Missouri Water Environment Association
Narragansett Water Pollution Control Association
National Association of Clean Water Agencies
National Association of Sewer Service Companies
National Association of Water Companies
National Consumer Law Center, on behalf of our low-income clients
National Latino Farmers & Ranchers Trade Association
Natural Resources Defense Council
National Rural Water Association
National Water Resources Association
Nebraska Water Environment Association
New England Water Environment Association
New York Water Environment Association
North Carolina AWWA-WEA
North Dakota Water Environment Association
Ohio Environmental Council
Ohio Water Environment Association
Oklahoma Municipal Utility Providers
Oklahoma Water Environment Association
Oregon Association of Clean Water Agencies
Pacific Northwest Clean Water Association
Passaic River Coalition
Pennsylvania Council of Churches
Pennsylvania Water Environment Association
Rural Coalition
Rural Community Assistance Partnership
Sierra Club
South Dakota Water Environment Association
Southeast Watershed Alliance of New Hampshire
Southern California Alliance of Publicly Owned Treatment Works
Southern Environmental Law Center
Texas Association of Clean Water Agencies
The Sustainable Business Network of Greater Philadelphia
Trout Unlimited
US Water Alliance
Vermont Rural Water Association
WE ACT for Environmental Justice
Water & Wastewater Equipment Manufacturers Association
Water Environment Association of South Carolina
Water Environment Association of Texas
Water Environment Federation
WateReuse Association
WESTCAS

West Coast Infrastructure Exchange
West Virginia Water Environment Association

Statement of Mr. Jason Hartke, President, The Alliance to Save Energy, Submitted for the Record by Mr. DeFazio

Thank you for the opportunity to submit a written statement regarding the Committee's hearing titled, "The Cost of Doing Nothing: Why Investing in Our Nation's Infrastructure Cannot Wait."

We look forward to working with you in the 116th Congress to develop bipartisan policies for rebuilding American infrastructure, and we submit this statement to highlight the role that energy efficiency can play in sharply reducing both the costs and carbon footprint of infrastructure projects.

Infrastructure, of course, is more than roads and bridges. It's the foundation that determines where and how we fuel our vehicles, deliver electricity and natural gas, and treat and distribute water. It's our airports, seaports, transit hubs and other critical public buildings. These facilities have an enormous impact on U.S. energy consumption, and a nationwide infrastructure initiative presents an opportunity to "get it right" and save consumers and taxpayers decades of wasted energy costs.

Transportation is now the greatest source of greenhouse gas emissions in the United States and the second highest expense for households. Exciting breakthroughs in electrified transit, efficient alternative fuel vehicles, ridesharing, and other tools that have the potential to enhance travel experience while reducing energy waste, congestion and emissions.

Similar energy-saving opportunities exist across other infrastructure sectors. Water treatment and distribution facilities, for example, are typically the largest energy users in their local communities, often accounting for a third or more of a municipality's total energy consumption. Cutting their energy use by a modest 10 percent could save $400 million a year, according to the EPA. And, there are enormous opportunities for savings in modernizing public buildings. The Federal Government alone spends $6 billion annually on energy for its buildings.

We must avoid the temptation to look only at short-term costs and build a truly modern infrastructure network that locks in savings over decades and lays the foundation for a more competitive and productive economy. In some cases, infrastructure projects can pay for themselves through public-private partnerships and innovative financing around energy savings investments. Incorporating energy efficiency can also provide a host of additional benefits, such as reducing harmful emissions and improving power grid reliability and resilience—all while creating good-paying jobs.

Already, energy efficiency supports more than 2.2 million U.S. jobs, with an employment growth rate double the national average. Seven in 10 of energy efficiency jobs are in construction and manufacturing.

We encourage you incorporate energy efficiency in any infrastructure proposals from the start to make the best, most-efficient use of taxpayer investments. The Alliance to Save Energy's infrastructure priorities include:

- *Laying the foundation for an efficient transportation sector*. The transportation sector is undergoing rapid transformation due to innovation in new technologies, business models and connectivity. These new tools could enable a more efficient, effective, clean, and affordable transportation system, but their success depends heavily on effective infrastructure development. For example, for emerging alternative vehicle markets, especially electric vehicles, hydrogen fuel cell and renewable natural gas vehicles, the lack of such infrastructure presents a market barrier to deployment for highly efficient vehicles that have great potential to reduce energy waste and climate emissions in light-, medium-and heavy-duty sectors. Stronger transit systems have an outsized positive impact on the lives of low-income, elderly, and disabled communities, which rely on these services for mobility. Smarter traffic systems and system optimization at ports and distribution centers can enhance the longevity of infrastructure by controlling traffic congestion and optimizing the vehicles used, reducing maintenance costs while enhancing safety. And autonomous vehicles and ridesharing could change the shape of urban mobility. Congress should pursue opportunities to support these emerging trends to ensure that the infrastructure built today will be ready for tomorrow's needs.
- *Promoting adoption of updated building energy codes, high-performance buildings, and high-efficiency equipment*. Buildings account for roughly 40 percent of U.S. primary energy use and 76 percent of the electricity we use, and recent climate assessments and reports consistently point to reducing building energy

consumption as a top solution to reduce greenhouse gas emissions. As we invest in building and rebuilding the very places where people and commerce meet, we should ensure these structures meet the highest standards for efficiency. The latest model building energy codes deliver 30 percent more efficiency than codes of just a decade ago, which will result in more than $5 billion in annual savings for U.S. homes and businesses from, for example, improved thermal envelopes and high-efficiency heating and cooling equipment and lighting fixtures. Just as important, the experiences of States and communities demonstrate that more efficient buildings are key to enhancing energy system resilience in the face of extreme weather events. Congress should ensure that any infrastructure proposals encourage States and local governments to adopt and enforce updated building energy codes and promote energy efficiency retrofits of existing buildings that will deliver long-term savings to homeowners, renters, and commercial building owners and tenants and improve the health and resilience of communities. Energy efficiency delivers savings to all households and consumers, including those with limited incomes, and would ensure that the benefits of an infrastructure package will help the Nation as a whole.

- *Expanding opportunities for public-private partnerships to finance projects*. The burden of paying for infrastructure does not need to fall solely upon the shoulders of taxpayers through direct appropriations. The Federal Government should show leadership by addressing critical buildings and energy infrastructure upgrades through public-private partnerships that leverage private funds to implement resilience-enhancing energy-and water-conservation measures. To address the backlog of $165 billion in deferred maintenance projects in Federal facilities, any infrastructure package should encourage performance contracting and other financing mechanisms at all levels of government to install high-efficiency equipment and systems in individual buildings and across campuses with little to zero upfront cost to taxpayers and tremendous resilience benefits for mission-critical public facilities.
- *Applying life-cycle cost-effectiveness analysis to all appropriate projects*. To deliver the best long-term return-on-investment to taxpayers, Congress should avoid short-sighted decisions based on incremental first-costs and instead take into account costs and benefits over the expected lifetime of physical infrastructure. This focus on lower up-front costs rather than lower operations and maintenance costs tends to encourage an under-investment in energy-and water-saving technologies that then saddle unsuspecting homeowners, consumers, and businesses with an unpredictable burden of higher utility bills. A missed opportunity now means future generations of taxpayers will be paying for our mistake for decades to come.

We are eager to work with you and your colleagues to identify specific programs, activities, and projects that can help achieve our mutual goals and build a smarter, less expensive and more sustainable infrastructure system.

ABOUT THE ALLIANCE TO SAVE ENERGY

Founded in 1977, the Alliance to Save Energy is a nonprofit, bipartisan alliance of business, government, environmental and consumer leaders working to expand the economy while using less energy. Our mission is to promote energy productivity worldwide—including through energy efficiency—to achieve a stronger economy, a cleaner environment and greater energy security, affordability and reliability.

Statement of the American Association of Port Authorities Submitted for the Record by Mr. DeFazio

Chairman DeFazio and Ranking Member Graves, thank you for allowing the American Association of Port Authorities (AAPA) to submit testimony to this timely hearing. AAPA looks forward to working with you both throughout the 116th Congress.

It is a critical time for making needed Federal investments in the nation's port-related infrastructure. Rising freight volumes on all three coasts and the Great Lakes means we must upgrade our waterside and landside infrastructure to accommodate larger ships and the accompanying freight volume and passenger surges. AAPA members have identified $66 billion in landside, waterside and inside the gate funding needs over the next 10 years. We are submitting an overview and breakdown of these needs for the record. AAPA is also submitting the FAST Act Reauthorization Platform for the record.

Nowhere is there such a stark example of our country's infrastructure needs and the failure to keep pace with our growing economy than with freight- and port-related infrastructure investments.

To put our national state of freight into perspective, it's been more than 60 years since President Eisenhower proposed and began building out the Interstate Highway System in 1956. But until the FAST Act, freight had not been fully considered or realized as a national policy priority.

However, during the same 60-year period, there have been eight evolutions of the containership, starting with vessel capacities of 500 twenty-foot equivalent units (TEUs), evolving to ships with capacities of 18,000 TEUs and beyond, which are as high as a New York skyscraper and as wide as a 10-lane freeway. This means that that shipping industry has reinvested in their ships eight times, while our country has relied upon essentially the same infrastructure to accommodate and facilitate an astronomical growth in freight volumes. While the ports and private sector have been and continue to modernize and invest, it has been the Federal investment in infrastructure and modernization that's been lacking to fully connect and upgrade the connecting port infrastructure to the surface transportation network.

Maritime cargo volumes have also seen marked increases over the past six decades and have continuously impacted our freight infrastructure. Total U.S. waterborne tonnage roughly doubled between 1956 and 2017, but this is due almost entirely to U.S. foreign trade growth which has seen nearly a 500 percent increase during that timeframe, based on U.S. Army Corps of Engineers data.

In the last 17 years alone, container volumes have increased by 71 percent, passengers through our cruise port terminals increased by 98 percent, and total foreign trade in short tons increased by 37 percent.

Ports are national resources and we must invest in them as a Nation. Communities adjacent to ports and inland States rely on us for jobs and to connect them to the global economy, as well as to the occasional vacation aboard a cruise ship.

The infrastructure investments we make at ports, be it highway connectors or rail access projects, directly impact our partners in the rail and trucking industry. Just as important, targeted investments at maritime facilities provide a level of certainty and efficiency to a growing and interconnected supply chain.

Ports are the initiators and facilitators of the supply chain. Mega shipping alliances, operating mega-large vessels, have a cascading effect when their ships arrive at U.S. ports. This includes the need for larger cranes to load-and off-load containers, additional port-related labor, more chassis on which to move the containers in, out and around the terminals, and adjusting truck gate times to address the changing work load.

In 2015, America's seaports took a big step forward after passage of the FAST Act. With the creation of two funding programs; *Projects of Highway and Freight Significance* (discretionary) and *National Highway Freight Program* (formula), the FAST Act provided a total of $11 billion in dedicated freight funding over 5 years. However, of that total, only $1.13 billion is multimodal eligible, far below what is needed to build out a 21st century multimodal freight network. Only $200 million of multimodal eligibility remain for the INFRA program.

Last year, in *The State of Freight III* report, AAPA members identified more than $20 billion in multimodal funding needs for public port authorities alone over the next decade. A top priority for the port industry continues to be multimodal funding.

The immediate challenges confronting the freight programs are funding levels and project eligibility. The current freight programs are funded out of the Highway Trust Fund, which means that eligible projects are primarily highway focused. Highways are important to our freight network, but ports are multimodal facilitators, meaning trains, trucks, ships and barges all need access to them.

To build off the work in the FAST Act, AAPA recommends that all freight program funding should be 100 percent multimodal. A first step in accomplishing this would be to lift the multimodal cap on the INFRA grants and the formula program.

As Congress begins the process of reauthorizing the FAST Act, MARAD has several freight infrastructure programs that are important tools to be included and leveraged within the national freight portfolio. Specifically, the *America's Marine Highway* and the *Port Infrastructure Development* programs are currently authorized initiatives that will need to be revised, updated and refocused to meet the evolving supply chain needs of the multimodal freight network. AAPA is very supportive and appreciative of the recently passed FY 19 THUD appropriations bill which included $292.7 million in the Port Infrastructure Development account. AAPA looks forward to continuing to work with both the authorizing and appropriations committees during the reauthorization process and during future appropriation cycles on this program.

As stated in the previous paragraph, AAPA strongly supports Senate Commerce, Science and Transportation Committee Chairman Roger Wicker's PORTS Act, which updates MARAD's *Port Infrastructure Development Program* to provide resources to ports for first- and last-mile multimodal projects that connect ports to the surface transportation network. We would also like to work with the committee in updating *America's Marine Highway Program* so that it can meet the needs of ports and shippers and continue to be a viable supply chain tool. AAPA recommends that Congress include these programs as a maritime supply chain title in the next reauthorization bill.

Having additional maritime freight supply chain resources and updating the existing authorizations will leverage existing resources and programs, providing a more comprehensive approach to building out a 21st century freight network.

An example of refreshing prior authorizations from the last reauthorization bill would be the inclusion and consolidation of the *Federal Railroad Administration* (FRA) grant programs into the CRISI program in the FAST Act. In this program, multimodal and port rail access are eligible projects. In AAPA's *The State of Freight III—Rail Access and Port Multimodal Funding Needs Report*, a third of ports identified pressing rail project needs that will cost more than $50 million over the next decade. In fact, rail access is so important to the port and supply chain industry that within this same timeframe, 77 percent of ports said they are planning on-dock, near-dock or rail access projects.

Additionally, AAPA strongly supports the multimodal USDOT grant programs such as BUILD, CRISI and INFRA grants. But the BUILD program, and its TIGER predecessor, has been more than just a discretionary program to the port industry. It was the first program that ports were eligible for and is multimodal. It also brought ports into the surface transportation fold, which meant that whether ports received a TIGER/BUILD grant or not, they were encouraged to coordinate a project with their State and local MPO before submitting it. That meant ports were becoming part of the planning process and freight was beginning to get a seat at the table.

Further, international trade through seaports accounts for over a quarter of the U.S. GDP. At the center of trade and transportation are America's seaports, which handle approximately $6 billion worth of import and export goods daily, generate over 23 million jobs, and provide more than $320 billion annually in Federal, State and local tax revenues. Seaports also are projected to handle nearly 12 million cruise passengers from around the country and around the world.

While highly supportive of the BUILD program, AAPA is concerned that port States are penalized by the 10 percent maximum per State called for in previous appropriation bills, as well as the set asides for metropolitan and rural areas. Because seaports have such a national and international reach—ports are national infrastructure resources that support metropolitan and rural supply chains—that any port project award should not count against a State, rural or metropolitan cap.

Long-term, sustainable multimodal funding is critical, and we encourage you to start looking at solutions. AAPA has endorsed the concept of a 1-percent waybill fee as an equitable approach to provide immediate and long-term funding for multimodal freight infrastructure challenges. Additionally, AAPA supports a gas tax increase as well as a Vehicle Miles Traveled (VMT) program. With all increased funding, AAPA recommends that any new funding be multimodal eligible. AAPA also strongly supports Chairman Peter DeFazio's Penny for Progress legislation and looks forward to working with him to get it enacted.

The Build America Transportation Investment Center, or BATIC, which was codified in the FAST Act, can also be a tool for ports to explore ways to access private capital in public-private partnership. The *Rail Rehabilitation Innovation Financing* (RRIF) program has been in existence since 2002, and only late last year did a port (Port of Everett) receive a RRIF loan. One recommendation to make RRIF more accessible to ports is to provide 100 percent financing. AAPA members responded that there were potentially 75 BUILD/TIGER projects that would become RRIF-financed projects if the financing fee was removed.

On the operational front, the Federal Government has a vital role to play with freight flow performance. For our ports to perform efficiently, CBP must be adequately funded and staffed. In 2015, the last time CBP was funded to hire additional staff, only 20 of 2,000 staff were assigned to seaports. As an industry, with growing volumes in freight and passengers, we would like to see, at a minimum, annual hiring of CBP staff to 500 annually, over and above attrition. This may sound like an appropriations or Homeland Security issue, but it is a supply chain problem.

Another supply chain challenge is proper maintenance of Federal navigation channels. AAPA has a legislative proposal to make full use of Harbor Maintenance Tax (HMT) revenues, based on a fair and equitable funding framework that was agreed to last year by the nation's public ports. The current system to maintain Federal navigation channels to our nation's ports is broken and must be fixed. A comprehensive solution must provide both full use of the annual HMT revenues, as well as address tax fairness and cargo diversion problems.

Last year, after years of debate, AAPA identified a comprehensive proposal to fix the HMT problems. It calls for guaranteeing full use of the annual revenues of the HMT and outlines a funding structure for HMT spending that ports agreed would be fair and equitable. It makes maintenance the highest priority, provides protections to address small port and regional port needs, provides increasing equity to large HMT donors that subsidize the system, and acknowledges Congress's priority to provide support to energy transfer ports. AAPA urges this HMT solution be enacted.

Finally, in response to the Administrations infrastructure investment program, AAPA identified $66 billion in maritime infrastructure needs, $34 billion on the waterside and $32 billion on the landside of ports. The waterside includes full use of HMT revenues over the next 10 years, estimated at $18.6 billion—use the $9 billion HMT paid, but unappropriated funds to maintain Federal navigation channels, $3.1 billion for congressionally authorized navigation channel improvements passed in recent WRDA's and an additional $3.1 billion for projects currently under study to receive authorization during this 10-year period. The landside includes $29 billion for vital road and rail connectors to ports and $3.2 to improve port facility infrastructure.

AAPA looks forward to working with you throughout the 116th Congress.

AAPA FAST ACT REAUTHORIZATION PLATFORM

Retained in the Committee files and available at: http://aapa.files.cms-plus.com/PDFs/AAPA%20FAST%20Act%20Reauthorization%20Platform.pdf


23 MILLION
AMERICAN JOBS
SUPPORTED BY SEAPORTS
$6 BILLION+
VALUE OF GOODS HANDLED
BY SEAPORTS EACH WEEKDAY
$321 BILLION
A YEAR IN TAX REVENUE
GENERATED BY PORT ACTIVITY
$4.6 TRILLION
VALUE OF ECONOMIC ACTIVITY
RELATED TO SEAPORTS ANNUALLY
$66 BILLION
NEEDED FOR PORT-RELATED
INFRASTRUCTURE
OVER THE NEXT 10 YEARS
AMERICA:
KEEP IT MOVING
American seaport activity supports 26 percent of the economy.
Seaports serve a vital role in supporting U.S. jobs, economic prosperity, international competitiveness and tax revenue. Seaports are economic engines and vital freight gateways to the global marketplace for American farmers, manufacturers and consumers, and serve as critical infrastructure for the U.S. military.
As the unified voice of American seaports, the American Association of Port Authorities (AAPA) is working to make seaports a key priority for policymakers considering plans for investment in U.S. infrastructure.
To learn more about how ports keep America moving, scan the QR Code or visit:
aapa-ports.org/movingamerica
Building America's 21st Century Seaport Infrastructure
For job creation and economic growth
AAPA
American Association
of Port Authorities

$66 billion needed over the next decade for port-related infrastructure to ensure U.S. job creation, economic growth and tax fairness

The amount of freight moved in the U.S. is projected to grow 15 percent by 2045, and America's trade volume is expected to quadruple after 2030. By 2037, the U.S. will export more than 52 million shipping containers through U.S. seaports each year. We must prepare the nation's infrastructure to meet a growing demand for the safe, efficient movement of freight – American jobs are at stake.

What's at risk without adequate investment in U.S. seaport infrastructure?

$4 trillion
potential GDP loss by 2025

$575 billion
cost to American businesses and households by 2025

$14 billion
added cost of traded products due to shallow harbors by 2040

$3,400
loss per household by 2025

$155 billion
amount ports and their private sector partners will invest between 2016 and 2020

WATERSIDE
$33.8 BILLION FOR INVESTMENTS TO:

MAINTAIN DEEP-DRAFT NAVIGATION CHANNELS
$27.6 BILLION NEEDED
- $18. 6 billion for full use of annual Harbor Maintenance Tax (HMT) revenues, including increasing donor equity
- $9 billion to use the HMT surplus to address the chronic maintenance backlog
- Restore tax fairness to the HMT

MODERNIZE DEEP-DRAFT NAVIGATION CHANNELS
$6.2 BILLION NEEDED
- $3.1 billion for federal share of 15 current congressionally authorized construction channel improvements
- $3.1 billion for federal share of projects undergoing feasibility studies

LANDSIDE
$32.03 BILLION FOR INVESTMENTS TO:

BUILD VITAL ROAD AND RAIL CONNECTORS TO PORTS
$28.9 BILLION NEEDED
- Provide robust funding for federal programs to modernize landside port connectors, including DOT TIGER, FAST Act state formula funds and FASTLANE grants

IMPROVE PORT FACILITY INFRASTRUCTURE
$3.13 BILLION NEEDED
- Provide $1.25 billion annually to the U.S. DOT TIGER program, with 25 percent dedicated to port related infrastructure

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@AAPA_Seaports

www.aapa-ports.org/movingamerica

AAPA American Association of Port Authorities
1010 Duke Street · Alexandria, VA · 22314-3589
703.684.5700 · aapa-ports.org

Statement of Mr. David Lawry, President, and Mr. Scott Grayson, Executive Director, American Public Works Association, Submitted for the Record by Mr. DeFazio

Chairman DeFazio, Ranking Member Graves, and members of the Committee, on behalf of the American Public Works Association (APWA), we are honored to provide this testimony for the record.

APWA represents all aspects of public works—a fact that sets us apart from other associations and makes our members an effective voice for public works throughout North America. The hearing entitled "Why Investing in Our Nation's Infrastructure Cannot Wait" could not come at a more appropriate time. APWA appreciates this body's quick action to hold a hearing on a subject that we can all agree needs immediate action.

With a membership of more than 30,000, APWA includes not only personnel from local, county, State/province, and Federal agencies, but also private sector personnel who supply products and services to those professionals. Although originally chartered in the United States in 1937, APWA has roots in two predecessor groups that reach back to 1894, and has 63 chapters in North America, which includes eight chapters in Canada. A 17-member Board of Directors, all of whom are elected by Association members, governs APWA.

APWA appreciates this opportunity to submit testimony regarding the importance of addressing the state of America's infrastructure. It is certainly well known that our aging roads and bridges are deteriorating, traffic is increasing, and deaths on our roads are unacceptably high. Our nation cannot remain economically competitive if our transportation network is not maintained and improved. APWA professionals believe that continued investment in our country's transportation infrastructure is needed now. As the members of this Committee are keenly aware, the Federal Highway Administration (FHWA) estimates that every $1 billion invested in transportation creates about 27,800 jobs and up to $6 billion in gross domestic product.

Additionally, our nation's water infrastructure is in dire need of reinvestment. The Environmental Protection Agency (EPA) estimated in 2018 that the nation's drinking water infrastructure needs nearly $500 billion of investment over the next 20 years. Meanwhile, the Agency's 2012 estimate of investment need for clean water infrastructure is nearly $300 billion over the next 20 years. These needs are matched by the economic benefits of such investments. The US Department of Commerce Bureau of Economic Analysis (BEA) estimates that for every dollar spent on water infrastructure, about $2.62 is generated in the private economy. And for every job added in the water workforce, the BEA estimates 3.68 jobs are added to the national economy.

APWA has identified three top policy priority areas which are Transportation, Water Resiliency and Emergency Management and Response, copies of which are included as attachments with this testimony. Please find a brief mention of each of the priorities as follows:

Transportation: Supporting more fiscally viable methods of paying for transportation systems such as increasing and indexing the Federal motor fuel tax, and collecting revenue based on road usage such as vehicle miles traveled, or similar fee, to ensure all road system users pay their fair share. Additionally, APWA calls for continued investment and support of programs like High Risk Rural Roads, Safe Routes to Schools, Highway Safety Improvement Plan funds, and local bridges, as well as strong support for utilizing technology to improve safety while protecting users' privacy.

Water Resiliency: Providing robust funding for existing Federal programs that support water and wastewater infrastructure, such as the State Revolving Funds, Water Infrastructure Finance and Innovation Act, Rural Utilities Service, Public Water System Supervision grants, and the Public Works and Economic Development program.

Emergency Management and Response: Promote and enhance interoperable emergency communications systems to connect public works agencies to other responders, including law enforcement, fire, and emergency medical professionals during response and recovery operations. Developing national cybersecurity guidelines/best practices to significantly and constructively impact public works whose services require a 24-hour a day, 365-day a year operation should be considered.

APWA applauds this Committee for holding such an important hearing and we stand ready to work with and assist the Committee, and the other Members of Congress as you outline and discuss proposals to best serve the American people with the first-rate infrastructure they deserve and require. The needs of the nation's users of our infrastructure continue to evolve and we ask that you consider APWA a resource in your efforts to upgrade our national infrastructure.

AMERICAN PUBLIC WORKS ASSOCIATION
APWA
Your Comprehensive Public Works Resource

116th U.S. CONGRESS POLICY PRIORITIES

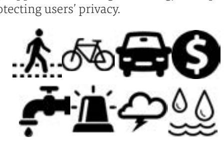
TRANSPORTATION WATER RESILIENCY EMERGENCY MANAGEMENT

The American Public Works Association (APWA) represents over 30,000 public works professionals across North America, dedicated to providing essential, high-quality services to millions of people in rural and urban communities, both small and large.

APWA members serve in both the public and private sectors providing expertise to the local, state, and federal government levels. Working in the public interest, our members plan, design, build, operate and maintain, and oversee America's vast infrastructure networks essential to our nation's economy, environment, safety, and way of life.

PRIORITY: TRANSPORTATION

- **Support more fiscally viable methods** of paying for transportation systems such as increasing and indexing the federal motor fuel tax, and collecting revenue based on road usage such as vehicle miles traveled, or similar fee, to ensure all road system users pay their fair share.
- **Set time limits for federal agency review** of transportation projects under the National Environmental Policy Act and support the "One Federal Decision" process laid out under Executive Order 13807, providing a more predictable, transparent, and timely federal review and authorization process for delivering major infrastructure projects. APWA strongly supports the Federal Highway Administration's (FHWA) "Every Day Counts" initiative and its work towards advancing successful streamlining initiatives.
- **Work towards improving safety for the traveling public.** APWA is committed to continue working towards improving safety for the traveling public through key initiatives such as the Road to Zero coalition and the FHWA's Traffic Incident Management initiative. APWA calls for continued investment and support of programs like High Risk Rural Roads, Safe Routes to Schools, Highway Safety Improvement Plan funds, and local bridges, as well as strong support for utilizing technology to improve safety while protecting users' privacy.



PRIORITY: WATER RESILIENCY

- **Provide robust funding for existing federal programs** that support water and wastewater infrastructure, such as the State Revolving Funds, Water Infrastructure Finance and Innovation Act, Rural Utilities Service, Public Water System Supervision grants, and the Public Works and Economic Development program.
- **Support a "One Water" stance** by applying a comprehensive, integrated planning approach to all Safe Drinking Water Act and Clean Water Act permitting (drinking water, wastewater, stormwater, combined sewer overflow) so that maximum flexibility and cost effectiveness is implemented into the decision-making process.
- **Support federal programs** like the Water Infrastructure Resiliency and Sustainability Act language from the Water Resources Development Act of 2018 that provide assistance to water systems to increase resilience to natural hazards.
- **Adhere to the "One Federal Decision"** process laid out under Executive Order 13807, providing a more predictable, transparent, and timely federal review and authorization process for delivering major infrastructure projects.

PRIORITY: EMERGENCY MANAGEMENT

- **Continue and fully fund** the State Homeland Security Grant Program and the Urban Area Security Initiative.
- **Promote and enhance interoperable emergency communications systems** to connect public works agencies to other responders, including law enforcement, fire, and emergency medical professionals during response and recovery operations.
- **Develop National Cybersecurity Guidelines/Best Practices** to significantly and constructively impact public works whose services require a 24-hour a day, 365-day a year operation.
- **Continue and fully fund mitigation grant programs** to enable public works agencies to respond to changing dynamics in natural and man-made hazards. Since 2014, there have been over 500 Presidential Disaster Declarations and APWA values and supports the evolving federal emphasis on mitigation efforts through federal grant programs and training opportunities. According to a 2017 National Institute of Building Sciences report, the nation saves six dollars in future disaster costs for every one dollar invested in mitigation activities.

Andrea Eales, APWA Director of Government Affairs
aeales@apwa.net, 202.218.6730

Statement of the American Society of Civil Engineers Submitted for the Record by Mr. DeFazio

INTRODUCTION

The American Society of Civil Engineers (ASCE)[1] appreciates the opportunity to submit our position on the importance of long-term, strategic investment in our nation's infrastructure systems. ASCE also wants to thank the U.S. House of Rep-

[1] ASCE was founded in 1852 and is the country's oldest national civil engineering organization. It represents more than 150,000 civil engineers individually in private practice, government, industry, and academia who are dedicated to the advancement of the science and profession of civil engineering. ASCE is a non-profit educational and professional society organized under Part 1.501(c) (3) of the Internal Revenue Code. www.asce.org,

resentatives Committee on Transportation and Infrastructure for holding a hearing on this critical issue. ASCE is eager to work with the Committee in the 116th Congress to find ways to further improve our nation's vital infrastructure systems.

ASCE has long been an advocate for maintaining and modernizing the nation's infrastructure. ASCE's *2017 Infrastructure Report Card* [2] rated the overall condition of the nation's infrastructure a cumulative grade of "D+," with an investment gap of $2 trillion.

Historically, our nation invested in infrastructure projects with long-term benefits, such as the Hoover Dam and Interstate Highway System, that strengthened the economy while the project was being designed and built, and for generations to come. ASCE has sought to raise awareness of the United States' pressing infrastructure challenges, and some incremental progress has been made since ASCE released its first Infrastructure Report Card in 1998.

These past successes inform us that the next major investment in American infrastructure will require bold vision coupled with thoughtful planning. If we are to achieve lasting progress for our infrastructure, the Federal Government must commit to not only financing infrastructure programs but to funding them. This funding must supplement—rather than replace—long-term solutions, regular appropriations, and scheduled reauthorizations. Further, all levels of government and the private sector must do their part to increase this investment in order to restore America's world-class infrastructure.

FAILURE TO ACT: CLOSING THE INFRASTRUCTURE INVESTMENT GAP FOR AMERICA'S ECONOMIC FUTURE

Infrastructure is the foundation that connects the nation's businesses, communities, and people, serves as the backbone to the U.S. economy, and is vital to the nation's public health and welfare.

In 2016, ASCE released *Failure to Act: Closing the Infrastructure Investment Gap for America's Economic Future* [3]. This economic study analyzed the impact of current infrastructure investment trends on America's GDP, jobs, personal income, and businesses. The study determined that the U.S. is on track to invest only half of what is needed in infrastructure over the next decade. This underinvestment will cause our infrastructure to further degrade, resulting in a loss of 2.5 million jobs, $3.9 trillion in GDP, and $7 trillion in lost business sales by 2025. In addition, poor infrastructure will cost each American family $3,400 a year, which is $9 a day, in personal disposable income. To catch up and fill in the investment gap, we must invest an additional $144 billion each year, which is an average investment of just $3 per day per household. This small investment would put $3,400 back into the wallets of American families each year for a three to one return.

Failure to Act found that our infrastructure challenges are significant, but solvable. Surface transportation categories, including roads, bridges, transit, and commuter rail, face the largest investment gap. We must invest an additional $1 trillion throughout this network. Airports require an additional $42 billion to close the funding gap, and inland waterways and ports need $15 billion. It is time to invest in our nation's infrastructure because the longer we wait, the more it will cost.

Fundamental Criteria for Future Infrastructure Investment

ASCE believes that all infrastructure programs and projects supported by infrastructure investment legislation must meet the following fundamental criteria:

- Investments must provide substantial, long-term benefits to the public and the economy;
- The cost of a project over its entire life span—including designing, building, operating, and maintaining the infrastructure—must be taken into account;
- Projects should be built sustainably and resiliently; and
- Federal investment should leverage State, local, and private investment, not replace these other critical sources of infrastructure funding.

ASCE urges the House Committee on Transportation and Infrastructure to focus first on prioritizing those aspects of our infrastructure most in need of repair, replacement, and modernization, to sustain our economy, public health, and safety.

The first step for the 116th Congress should be to address three major infrastructure priorities at the Federal level: fixing the Highway Trust Fund, increasing the cap on the Passenger Facility Charge to modernize our nation's airports, and ensuring all funds in Harbor Maintenance Trust Fund are utilized.

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[2] https://www.infrastructurereportcard.org/

[3] Failure to Act: Closing the Infrastructure Investment Gap for America's Economic Future. (2016) www.asce.org/failuretoact

HIGHWAY TRUST FUND

Fixing the Federal Highway Trust Fund (HTF) is a critical component of any plan to rebuild and modernize our infrastructure. Presently, many of our surface transportation system assets have reached the end of their design life, and in ASCE's *2017 Infrastructure Report Card*, our bridges, rail, road, and transit received grades of "C+," "D," and "D-," respectively. Despite these dismal grades, the Federal motor fuels tax rate hasn't been raised since 1993, and inflation has cut its real value by 40 percent. As a result of not increasing the Federal motor fuels tax, HTF revenues are not keeping pace with demand. By 2029, it is estimated that there will be a collective shortfall of $159 billion.

Because of this long underinvestment and inadequate support for the HTF, a large and growing investment gap of $1.1 trillion over the next 10 years has emerged. This gap must be closed if we hope to both repair and modernize our surface transportation infrastructure systems to be competitive in the 21st century. Our nation's surface transportation investment gap and subpar grades are a result of our dated Federal motor fuels tax and inability to properly fund the HTF and our current transportation infrastructure needs.

Our nation's elected leaders need to act quickly to address the ever-growing revenue gap. The Federal Government has historically been the leader in strengthening our surface transportation network. Because of this Federal leadership role, we urge Congress to:

- Fix the HTF by increasing the Federal motor fuels tax by 5 cents a year for 5 years. The current user fee must be raised and tied to inflation to restore its purchasing power. This idea has been led by the U.S. Chamber of Commerce and would provide a much-needed infusion of $394 billion over 10 years and combat the $1.1 trillion investment gap of surface transportation capital needs.
- Establish a broad pilot program to better understand how a Mileage-Based User Fee (MBUF) could be implemented in the future.
- Include a tax on electric vehicles that would account for their presence on our nation's roads.

PASSENGER FACILITY CHARGE

U.S. airports serve more than two million passengers every day. The aviation industry is marked by technologically advanced and economically efficient aircraft; however, the associated infrastructure of airports and air traffic control systems is not keeping up. Congestion at airports is growing; it is expected that 24 of the top 30 major airports may soon experience "Thanksgiving-peak traffic volume" at least 1 day every week. In ASCE's *2017 Infrastructure Report Card*, our nation's airports earned a "D" due to a lack of investment in our aviation infrastructure assets.

Because of an outdated, federally mandated cap on how much airports can charge passengers for facility expansion and renovation, airports struggle to keep up with investment needs, creating a $42 billion 10-year funding gap. Raising or eliminating the cap on the Passenger Facility Charge (PFC) will allow airports a much-needed revenue boost and the ability for long-term planning and modernizing of our aviation system for the 21st century.

HARBOR MAINTENANCE TRUST FUND

The nation's 926 ports support over 23.1 million jobs and are responsible for $4.6 trillion in economic activity. Notably, our ports serve as the gateway through which 99 percent of America's overseas trade passes. To remain competitive in the global market and to accommodate larger vessels, ports have been investing in their facilities and plan to spend over $154 billion from 2016 to 2020 on expansion, modernization, and repair. However, ports are contending with larger container ships and do not always have adequate access to the user-fee funded Harbor Maintenance Trust Fund (HMTF), which would help these facilities prepare for larger vessels. Underinvestment in our nation's ports has resulted in, by some accounts, a 25 percent decrease in port productivity in the past 10 years.

ASCE supported the provision in the Water Resources Reform & Development Act (WRRDA) of 2014 designed to encourage the use of the HMTF revenues for its designated purpose. The HMTF's balance currently sits at over $9 billion, but full appropriations of these funds have not yet occurred. Once fully funded, it will take 5 years of complete HMTF funding to dredge and restore channel depths and widths. ASCE urges the Committee to continue implementing the WRRDA 2014 agreement and to increase expenditures accordingly.

In addition, ASCE recommends Congress increase funding for key areas of infrastructure, such as:

Dams & Levees

Our nation's 90,580 dams and over 30,000 miles of levees are critical components of risk reduction and protect communities, critical infrastructure, and trillions of dollars in property. However, it is estimated that $80 billion is needed in the next 10 years to maintain and improve the nation's levees, while the Association of State Dam Safety Officials estimates the cost of rehabilitating our nation's Federal and non-Federal dams to exceed $64 billion. Included in this is the U.S. Army Corps of Engineers' (USACE) estimate that more than $25 billion will be required to address dam deficiencies for Corps-owned dams; at the current rate of investment, these repairs would take over 50 years to complete. ASCE's *2017 Infrastructure Report Card* gave our nation's dams and levees each a grade of "D."

Investment is needed to rehabilitate deficient dams and to complete the national inventory of levees outside of the USACE's authority. ASCE supported the WRRDA 2014 reauthorization of the National Dam Safety Program and the Water Infrastructure Improvements for the Nation (WIIN) Act's authorization of the High Hazard Potential Dam Rehabilitation Program. However, ASCE is concerned that the National Dam Safety Program consistently receives only a portion of its annual $13.9 million appropriations, while the High Hazard Potential Dam Rehabilitation Program has yet to receive any appropriations. Likewise, WRRDA 2014 created a new National Levee Safety Program to promote consistent safety standards, create levee safety guidelines, and provide funding assistance to States for establishing participating levee safety programs, yet it has received no funding other than funding for the levee inventory.

Inland Waterways

The USACE operates and maintains a vast network of 25,000 miles of inland waterways and 239 locks that support half a million jobs, deliver more than 600 million tons of cargo annually, and are the nation's connection to inland and ocean ports and international markets. Barge transport is the most fuel-efficient mode of the transportation of goods, but with a majority of locks and dams reaching well beyond their 50-year design life and thus requiring frequent shutdowns for maintenance and repairs, nearly half of all vessels traveling through our inland waterways experience delays. ASCE's *2017 Infrastructure Report Card* gave our nation's inland waterways a grade of "D."

ASCE supported the 2015 increase of the Inland Waterways Trust Fund user tax, and although recent increases in investment have resulted in some improvement in the projected completion date of many inland waterway lock and dam rehabilitation projects, funding must continue at a higher and more consistent level to meet the large backlog of needs.

ASCE also championed Section 5014 of WRRDA 2014, which authorizes the USACE to enter agreements with non-Federal interests, including private entities, to finance construction of at least 15 authorized water resources development projects. ASCE was pleased that President Trump's infrastructure proposal included several provisions to remove barriers to implementation of this program. Alternative financing and delivery mechanisms are an important new resourcing tool that can help the USACE meet the growing needs of our nation's inland waterways infrastructure.

ASCE was grateful that WRRDA 2014 authorized a new water infrastructure financing mechanism, the Water Infrastructure Finance and Innovation Act (WIFIA), which will be administered by the USACE and the U.S. Environmental Protection Agency (EPA). The WIFIA concept is modeled after a similar transportation project assistance program, the remarkably successful Transportation Infrastructure Finance and Innovation Act (TIFIA). Under this program, the USACE is authorized to provide WIFIA support for an array of projects, including environmental damage reduction projects, hurricane and storm damage reduction projects, flood damage reduction projects, coastal or inland harbor navigation improvement projects, and/or inland and intracoastal waterways navigation projects.

Drinking Water & Wastewater

Well-maintained public drinking water and wastewater infrastructure systems are critical for public health, strong businesses, and clean waters and aquifers. ASCE's *2017 Infrastructure Report Card* gave the nation's drinking water infrastructure a grade of "D," compared to the nation's wastewater infrastructure, which did not fare much better with a grade of "D+." Despite increased efficiency methods and sustainable practices, there is a growing gap between the capital needed to maintain drinking water and wastewater infrastructure and the actual investments made. By 2025, the investment gap for drinking water and wastewater infrastructure systems is estimated at $105 billion. According to the American Water Works Association, $1 trillion will be needed to maintain and expand drinking water service demands during the next 25 years.

The Clean Water State Revolving Fund (CWSRF) and the Drinking Water State Revolving Fund (DWSRF) play a vital role in providing States and localities with a critical source of funding for water infrastructure project through low-interest loans. This funding has been provided since their original authorizations in 1987 and 1996, respectively. ASCE was pleased that the DWSRF was reauthorized at increasing funding levels in the America's Water Infrastructure Act of 2018. ASCE urges the Committee to reauthorize the Clean Water State Revolving Fund at increasing funding levels, as well.

The Securing Required Funding for Water Infrastructure Now (SRF WIN) Act is an innovative new financing mechanism that blends the most successful parts of the SRFs and WIFIA to create a program that gives State Infrastructure Financing Authorities access to WIFIA loans for drinking water and wastewater infrastructure. Authorized in the America's Water Infrastructure Act of 2018, this new and efficient tool leverages limited Federal resources and stimulates additional investment in our nation's infrastructure.

The projects funded by these programs have already proven successful; providing more funding to existing programs rather than creating new programs will reduce overhead costs and startup time while still allowing for significant and noticeable improvements across all sectors of U.S. infrastructure.

CONCLUSION: A 21ST CENTURY VISION FOR AMERICA'S INFRASTRUCTURE

ASCE thanks the Committee for holding this hearing on a topic that affects the quality of life and livelihood of every American.

In the 21st century, we see an America that thrives because of high quality infrastructure. Infrastructure is the foundation that connects the nation's businesses, communities, and people—driving our economy and improving our quality of life. For the U.S. economy to be the most competitive country in the world, we must have a first-class infrastructure system: transport systems that move people and goods efficiently, at reasonable cost by land, water, and air; transmission systems that deliver reliable, low-cost power from a wide range of energy sources; and water systems that drive industrial processes as well as the daily functions in our homes.

We must commit today to make our vision of the future a reality—an American infrastructure system that is the source of our prosperity. ASCE and its 150,000 members look forward to working with the House Committee on Transportation and Infrastructure to improve America's infrastructure so that every family, community, and business can thrive.

Statement of Mr. Juan Arvizu, Chairman of the Board, American Traffic Safety Services Association, Submitted for the Record by Mr. DeFazio

Chairman DeFazio, Ranking Member Graves, and members of the Committee, thank you for the opportunity to submit written testimony today regarding the safety impacts of investing, or not investing, in America's surface transportation network. My name is Juan Arvizu, and I currently serve as Chairman of the Board of Directors for the American Traffic Safety Services Association (ATSSA). ATSSA is a 1,500-member international trade association which represents the manufacturers, installers and distributors of roadway safety infrastructure devices and services such as guardrail and cable barrier, traffic signs, pavement markings, rumble strips, high friction surface treatments, and work zone safety devices, among others. Our mission is to Advance Roadway Safety and reduce fatalities and serious injuries on U.S. roads toward zero.

I am also the Chief Operating Officer for Pavement Marking, Inc. (PMI) based in Tempe, AZ and with branches in El Paso, TX and Humble, TX. In fact, Rep. Stanton represents our headquarters office in Tempe, and I would like to congratulate him on his assignment to the Transportation and Infrastructure Committee. PMI was incorporated 28 years ago and is Arizona's oldest pavement marking company. We are a striping contractor focused on installing and removing pavement markings around the southwest, and we have extensive experience working with design-build and construction management at risk (CMAR) projects.

Congratulations to both Chairman DeFazio and Ranking Member Graves on your new leadership positions on the Committee, and thank you for holding this hearing.

Policy-makers at all levels of government routinely list safety as a top priority when it comes to infrastructure investments and surface transportation policy. However, safety needs to be more than a talking point. When we as a country do not robustly invest in proven, cost-effective roadway safety infrastructure projects, we are missing a significant opportunity to improve the lives of every American.

We know about the job creation impact from not investing in infrastructure; we know about the economic impact to local communities from not investing in infrastructure, and we know the impacts from increased congestion from not investing in infrastructure. However, arguably, the greatest impact of not investing in infrastructure is having this country continue to see an increase in fatalities and serious injuries on roadways in congressional districts across this Nation.

It can be easy to take roadway safety infrastructure for granted. But it is a critical component of a well-functioning transportation system. Cost-effective roadway safety infrastructure comes in many forms—including guardrails, cable barriers, pavement markings, highway signs and so much more. And we see the impacts of these investments every day.

For example, in a 2011 study analyzing work on Missouri roads, traditional 4-inch wide pavement markings were replaced with wider 6-inch wide markings on more than 1,000 miles of roadway.[1] Analysis indicates that there were significant reductions in fatal and serious injury crashes:

- 46 percent reduction on rural, multilane undivided highways
- 38 percent reduction on urban, two-lane highways
- 34 percent reduction on rural, multilane divided highways
- 21 percent reduction on rural freeways

For a moment, imagine the lives not saved without this cost-effective safety improvement.

Let me provide another example. As we look to the future, we know that connected and automated vehicles (CAVs) will become an increasing presence on our roadways. Having the right pavement markings and highway signs will play a critical role in the success—or failure—of these new systems. In fact, at a February 2017 House Transportation and Infrastructure Committee hearing focused on building a 21st Century infrastructure, President and CEO-North America of BMW was asked to identify components of the transportation system that were needed to successfully deploy CAVs—and he responded that clear lane markings were critical.[2]

We know that some automakers require clear pavement markings and signage for their CAVs to function properly, and we know that some studies have found that wider pavement markings have a positive safety benefit for drivers.[3] But do wider markings have a positive benefit for "machine drivers" or CAVs? The Texas A&M Transportation Institute undertook a recent study to examine just that and found that under certain conditions, wider pavement markings have a beneficial safety impact on CAVs. This October 2018 study found that six-inch wide pavement markings have a consistent positive impact for machine vision detection under adverse visibility conditions, including: remnants of previously removed markings, residual pavement scarring stemming from marking removal, blackout markings, crack seal, pavement seams, and glare, among other factors.[4]

Additionally, roadway safety infrastructure projects have a positive impact on human driver behavior. When a drowsy driver begins to drift out of his lane, a rumble strip will alert him to correct his action. When coming into a sharp curve at too high a rate of speed, high friction surface treatments help a vehicle's tires grip the road. When a vehicle departs a highway and heads toward oncoming traffic, median cable barrier or guardrail will stop that car from colliding with oncoming traffic. Roadway safety infrastructure projects are an integral piece to the overall safety of the American transportation network.

Pavement markings are just one example of a roadway safety infrastructure device that saves lives. As Congress looks to reauthorize the FAST Act and pursue an infrastructure initiative, investing in roadway safety infrastructure must be a priority. We cannot allow a lack of investment to mean more lives lost on our nation's roadways. We know what happens when we do not adequately address safety issues and the costs associated with that lack of investment. What is that cost? 37,133.[5] The number of fatalities on our roads in 2017. We can and must do better.

Mr. Chairman, thank you again for allowing ATSSA to submit testimony for the record. We stand ready to work with and the entire Transportation and Infrastruc-

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[1] "Innovative Safety Solutions with Pavement Markings and Delineation" https://www.atssa.com/LinkClick.aspx?fileticket=m30RHMJESp4%3d&portalid=0

[2] https://www.enotrans.org/article/two-decades-congress-still-pushing-21st-century-infrastructure/

[3] https://safety.fhwa.dot.gov/roadway__dept/night__visib/pavement__marking/ch3.cfm

[4] October 2018 Texas A&M Transportation Institute "Evaluation of the Effects of Pavement Marking Width on Detectability by Machine Vision: 4-Inch versus 6-Inch Markings" Study

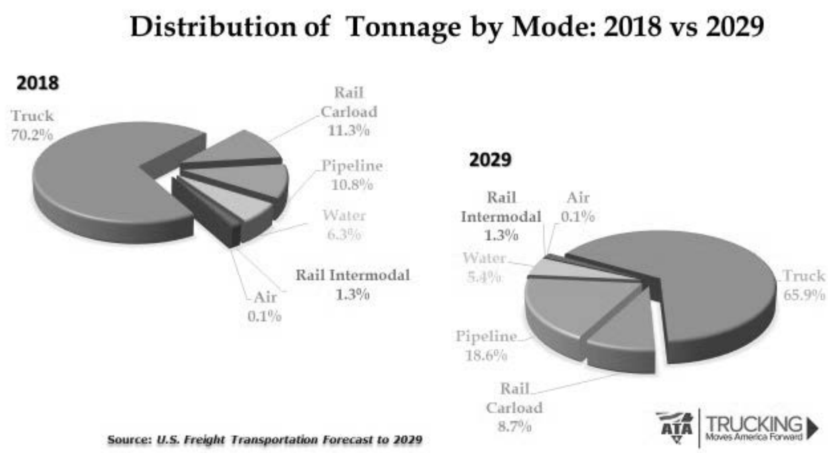
[5] Number of traffic fatalities in 2017: https://crashstats.nhtsa.dot.gov/Api/Public/ViewPublication/812603

ture Committee as you develop surface transportation legislation during this Congress.

Statement of Mr. Chris Spear, President and Chief Executive Officer, American Trucking Associations, Submitted for the Record by Mr. DeFazio

Chairman DeFazio, Ranking Member Graves, and members of the committee, the American Trucking Associations (ATA)[1] is pleased to submit testimony for the record on our nation's infrastructure needs.

Trucking is the fulcrum point in the United States' supply chain. This year, our industry will move 70 percent of the nation's freight tonnage, and over the next decade will be tasked with moving nearly three billion more tons of freight than it does today while continuing to deliver the vast majority of goods.[2] Trucks haul 83 percent of the freight originating in Oregon and 81 percent of the freight delivered from Missouri. In 2017, the goods moved by trucks were worth more than $10 trillion.[3] The trucking industry is also a significant source of employment, with 7.7 million people working in various occupations, accounting for every 1 in 18 jobs in the U.S.[4] Furthermore, "truck driver" is the top job in 29 States.[5]



Without trucks, our cities, towns and communities would lack key necessities including food and drinking water; there would be no clothes to purchase, and no parts to build automobiles or fuel to power them. The rail, air and water intermodal sectors would not exist in their current form without the trucking industry to support them. Trucks are central to our nation's economy and our way of life, and every time the government makes a decision that affects the trucking industry, those impacts are also felt by individuals and by the millions of businesses that could not exist without trucks.

Mr. Chairman, we are on the cusp of a transformation in the movement of freight, one that you and your colleagues will greatly influence. Radical technological change will, in the near future, allow trucks to move more safely and efficiently, and with less impact on the environment than we ever dared to imagine. Yet we are facing headwinds, due almost entirely to government action or, in some cases inaction that will slow or cancel out entirely the benefits of innovation. Failure to maintain and improve the highway system that your predecessors helped to create will destroy the

[1] American Trucking Associations is the largest national trade association for the trucking industry. Through a federation of 50 affiliated State trucking associations and industry-related conferences and councils, ATA is the voice of the industry America depends on most to move our nation's freight. Follow ATA on Twitter or on Facebook. Trucking Moves America Forward.

[2] *Freight Transportation Forecast 2018 to 2029*. American Trucking Associations, 2018.

[3] *2017 Commodity Flow Survey Preliminary Report*. U.S. Census Bureau, Dec. 7, 2018.

[4] *American Trucking Trends 2018*, American Trucking Associations.

[5] https://www.marketwatch.com/story/keep-on-truckin-in-a-majority-of-states-its-the-most-popular-job-2015-02-09

efficiencies that have enabled U.S. manufacturers and farmers to continue to compete with countries that enjoy far lower labor and regulatory costs.

Mr. Chairman, we are at a critical point in our country's history, and the decisions made by this committee over the next few months will impact the safety and efficiency of freight transportation for generations. ATA looks forward to working with you to develop and implement sound policy that benefits the millions of Americans and U.S. businesses that rely on a safe and efficient supply chain.

THE COST OF INACTION

A well-maintained, reliable and efficient network of highways is crucial to the delivery of the nation's freight, and vital to our country's economic and social well-being. However, the road system is rapidly deteriorating, and costs the average motorist nearly $1,600 a year in higher maintenance and congestion expenses.[6] Highway congestion also adds nearly $75 billion to the cost of freight transportation each year.[7] In 2016, truck drivers sat in traffic for nearly 1.2 billion hours, equivalent to more than 425,000 drivers sitting idle for a year.[8]

While the cost and scale of addressing highway improvement needs is daunting, it is important to note that much of the congestion is focused at a relatively small number of locations. Just 17 percent of National Highway System (NHS) miles represents 87 percent of total truck congestion costs nationwide.[9] Many of these locations are at highway bottlenecks that are identified annually by the American Transportation Research Institute. ATRI just released its latest freight bottlenecks report, which identifies the top 100 truck bottlenecks around the country.[10] The worst bottleneck was Interstate 95 at State Route 4 in Fort Lee, NJ. While most of the bottlenecks were in large metropolitan areas, the report found trouble spots even in smaller cities like Baton Rouge, LA, San Bernardino, CA, Birmingham, AL, Chattanooga, TN, and Greenville, SC. ATA's highway funding proposal, described below, would adopt a strategy for funding improvements at these costly choke points.

Most troubling is the impact of underinvestment on highway safety. In nearly 53 percent of highway fatalities, the condition of the roadway is a contributing factor.[11] In 2011, nearly 17,000 people died in roadway departure crashes, over 50 percent of the total.[12] Many of these fatalities result from collisions with roadside objects, such as trees or poles located close to the roadway.

The Highway Trust Fund (HTF), the primary source of Federal revenue for highway projects, safety programs and transit investments, is projected to run short of the funds necessary to maintain current spending levels by fiscal year 2021.[13] While an average of approximately $42 billion per year is expected to be collected from highway users over the next decade, nearly $60 billion will be required annually to prevent significant reductions in Federal aid for critical projects and programs.[14] It should be noted that a $60 billion annual average Federal investment still falls well short of the resources necessary to provide the Federal share of the expenditure needed to address the nation's surface transportation safety, maintenance and capacity needs.[15] According to the American Society of Civil Engineers, the U.S. spends less than half of what is necessary to address these needs. As the investment gap continues to grow, so too will the number of deficient bridges, miles of roads in poor condition, number of highway bottlenecks and, most critically, the number of crashes and fatalities attributable to inadequate roadways.

[6] *Bumpy Road Ahead: America's Roughest Rides and Strategies to make our Roads Smoother*, The Road Information Program, Oct. 2018; *2015 Urban Mobility Scorecard*. Texas Transportation Institute, Aug. 2015.

[7] *Cost of Congestion to the Trucking Industry: 2018 Update*. American Transportation Research Institute, Oct. 2018.

[8] Ibid.

[9] Ibid.

[10] https://truckingresearch.org/2019/02/06/atri-2019-truck-bottlenecks/

[11] *Roadway Safety Guide*. Roadway Safety Foundation, 2014.

[12] Ibid.

[13] *Projections of Highway Trust Fund Accounts—CBO's January 2018 Baseline*, Congressional Budget Office.

[14] Ibid.

[15] *2015 Status of the Nation's Highways, Bridges, and Transit: Conditions & Performance*. USDOT, Dec. 2016; see also **2017 Infrastructure Report Card**. American Society of Civil Engineers, 2017.

A recently released report[16] by the Transportation Research Board (TRB) requested by Congress focused specifically on the current state and future needs of the Interstate Highway System. This critical network binds our nation together and reaps immeasurable economic and national security benefits for the United States. Most importantly, because interstates are far safer than surface roads, since 1967 it has prevented nearly a quarter million people from losing their lives in vehicular crashes.[17] The Interstate Highway System accounts for about one-quarter of all miles traveled by light-duty vehicles and 40 percent of miles traveled by trucks.[18] The TRB report estimates that conservatively, the State and Federal investment necessary to address the Interstate system's maintenance and capacity needs will need to double or triple over today's expenditures in the next 20 years.[19]

BUILD AMERICA FUND

ATA's proposed solution to the highway funding crisis is the Build America Fund. The BAF would be supported with a new 20 cent per gallon fee built into the price of transportation fuels collected at the terminal rack, to be phased in over 4 years. The fee will be indexed to both inflation and improvements in fuel efficiency, with a 5 percent annual cap. We estimate that the fee will generate nearly $340 billion over the first 10 years. It will cost the average passenger vehicle driver just over $100 per year once fully phased in.[20]

We also support a new fee on hybrid and electric vehicles, which underpay for their use of the highway system or do not contribute at all. We look forward to working with Congress to identify the best approach to achieve that goal. In addition, ATA supports repeal of the Federal excise tax on trucking equipment, provided the revenue it generates for the HTF is replaced. This antiquated 12 percent sales tax, which was adopted during World War I, is a barrier to investment in the cleanest, safest trucks available on the market.

Under the BAF proposal, the first tranche of revenue generated by the new fee would be transferred to the HTF. Using a fiscal year 2020 baseline, existing HTF programs would be funded at authorized levels sufficient to prevent a reduction in distributed funds, plus an annual increase to account for inflation.

Second, a new National Priorities Program (NPP) would be funded with an annual allocation of $5 billion, plus an annual increase equivalent to the percentage increase in BAF revenue. Each year, the U.S. Department of Transportation would determine the location of the costliest highway bottlenecks in the Nation and publish the list. Criteria could include the number of vehicles; amount of freight; congestion levels; reliability; safety; or, air quality impacts. States with identified bottlenecks could apply to USDOT for project funding grants on a competitive basis. Locations could appear on the list over multiple years until they are addressed.

The funds remaining following the transfer to the HTF and the NPP would be placed into the Local Priorities Program (LPP). Funds would be apportioned to the States according to the same formula established by the Surface Transportation Block Grant Program, including sub-allocation to local agencies. Project eligibility would be the same as the eligibility for the National Highway Freight Program or National Highway Performance Program, for highway projects only.

This approach would give State and local transportation agencies the long-term certainty and revenue stability they need to not only maintain, but also begin to improve their surface transportation systems. They should not be forced to resort to costly, inefficient practices—such as deferred maintenance—necessitated by the unpredictable Federal revenue streams that have become all too common since 2008. Furthermore, while transportation investment has long-term benefits that extend beyond the initial construction phase, it is estimated that our proposal would add nearly half a million annual jobs related to construction nationwide, including nearly 6,000 jobs in Mississippi and more than 8,000 jobs in Washington State (see Appendix A for a full list of State-specific employment figures).[21]

The fuel tax is the most immediate, cost-efficient and conservative mechanism currently available for funding surface transportation projects and programs. Collec-

[16] *Renewing the National Commitment to the Interstate Highway System: A Foundation for the Future (2018)*. Transportation Research Board, National Academy of Sciences.

[17] Ibid, p. 2–18

[18] Ibid, p. 2–10.

[19] Ibid, p. S–5

[20] Federal Highway Administration, *Highway Statistics 2016*, Table VM–1. Average light-duty vehicle consumed 522 gallons of fuel.

[21] *A Framework for Infrastructure Funding*. American Transportation Research Institute, Nov. 2017.

tion costs are less than 1 percent of revenue.[22] Our proposal will not add to the Federal debt or force States to resort to detrimental financing options that could jeopardize their bond ratings. Unlike other approaches that simply pass the buck to State and local governments by giving them additional "tools" to debt-finance their infrastructure funding shortfalls for the few projects that qualify, the BAF will generate real money that can be utilized for any Federal-aid project.

Mr. Chairman, while some have suggested that a fuel tax is regressive, the economic harm of failing to enact our proposal will be far more damaging to motorists. The $100 per year paid by the average car driver under this proposal pales in comparison with the $1,600 they are now forced to pay annually due to additional vehicle maintenance, lost time, and wasted fuel that has resulted from underinvestment in our infrastructure. Borrowing billions of dollars each year from China to debt finance the HTF funding gap—a cost imposed on current and future generations of Americans who will be forced to pay the interest—is far more regressive than the modest fee needed to avoid further blowing up our already massive national debt. Forcing States to resort to tolls by starving them of Federal funds is far more regressive than the $2.00 a week motorists would pay under our proposal. One needs only look to I–66 in Northern Virginia, where tolls average more than $12.00 per roundtrip and can sometimes exceed $46.00, to understand the potential impacts on lower-or middle-income Americans.[23] To put this into perspective, even if motorists only paid the average toll, the cost of a 10-mile trip over an 8-day period on I–66 would be equivalent to their cost for an entire year under ATA's BAF proposal for all roads and bridges.

ALTERNATIVE REVENUE SOURCES

The fuel tax is the most fair and efficient method for funding highways. Just 0.2 percent of fuel tax revenue goes to collection costs.[24] However, we are willing to consider other funding options, provided they meet the following criteria:

- Be easy and inexpensive to pay and collect;
- Have a low evasion rate;
- Be tied to highway use; and
- Avoid creating impediments to interstate commerce.

While ATA is open to supporting a wide range of funding and financing options, we will oppose expansion of Interstate highway tolling authority and highway "asset recycling." Interstate tolls are a highly inefficient method of funding highways. Tolling also forces traffic onto secondary roads, which are weaker and less safe. Asset recycling involves selling or leasing public assets to the private sector. Where asset recycling has been utilized on toll roads in the U.S., toll payers have seen their rates increased, only to subsidize projects with little or no benefit to them. One need only consider the recent 35 percent increase in truck toll rates on the Indiana Toll Road for an example of these abusive practices. The State gets a single tranche of money for road, broadband, airport and other projects that have no direct benefit for toll road users, while the private operator of the highway reaps the profits for the next six decades. Please note that our position on asset recycling pertains only to the highway sector.

ATA is aware of proposals to create a new fee that taxes the cost of freight transportation services. While such a proposal is attractive in concept, we have identified several issues that have yet to be resolved to our satisfaction, and therefore we cannot support it at this time. Our primary (though by no means only) concerns are: high administrative costs; significant potential for evasion; and difficulty imposing the fee on private carriers

FUTURE REVENUE SOURCES

While ATA considers an increase in the fuel tax to be the best and most immediate means for improving our nation's roads and bridges, we also recognize that due to improvements in fuel efficiency and the development of new technologies that avoid the need to purchase fossil fuel altogether, the fuel tax is likely to be a diminishing source of revenue for surface transportation improvements. We, therefore, encourage Congress, in consultation with the executive branch, State and local partners and the private sector, to continue to work toward identifying future revenue sources.

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[22] Ibid.

[23] http://www.66expresslanes.org/documents/66__express__lanes__january__2018__performance__ereport.pdf

[24] Ibid.

The FAST Act created a new grant program designed to accomplish this objective, and we hope that this research will continue. While much work has already been accomplished in this regard, there is much still to be done before these new revenue mechanisms are ready for mainstream implementation. ATA encourages Congress to include in a future infrastructure package or surface transportation reauthorization bill a plan to bolster and, if necessary, ultimately replace current highway funding mechanisms with new, more sustainable revenue sources. We recommend a 10-year strategy that could include creation of a blue-ribbon commission to explore the results of pilot programs already completed or underway, with recommendations for either further research or a proposal for Congress to adopt a new funding approach.

FREIGHT TRANSPORTATION IMPROVEMENT

While trucks move the vast majority of freight, it is important to recognize the critical nature of the multimodal supply chain. The seamless interchange of freight between trucks, trains, aircraft, ships and waterways operators allows shippers to minimize costs and maximize efficiencies. While carriers do what they can to make this process as smooth as possible, some things are largely out of their hands and require government action.

Importance of the Federal Role

The Federal Government has a critical role to play in the supply chain. Freight knows no borders, and the constraints of trying to improve the movement of freight without Federal funding and coordination will create a drag on all freight providers' ability to serve national and international needs. As the maps in Appendix B show, trucks move products to and from all corners of the country, and serve international markets as well.

These maps demonstrate that parochial debates over how much funding each State receives is ultimately destructive to shippers no matter where they are located. The cost of congestion for a truck that moves freight from Kansas City to Chicago is no different whether that congestion occurs in Kansas City or in Chicago. There is little advantage to a truck moving a load of cars from the Port of Baltimore to a dealership in Washington, DC. if roadway improvements are made around the port, only to experience severe congestion in Washington. The critical role that only the Federal Government can play is to look at investment decisions in the context of national impacts and determine which investments can produce the greatest economic benefits regardless of jurisdictional considerations. Only the Federal Government can break down the artificial constraints of geographic boundaries that hamper sound investment in our nation's freight networks. Only the Federal Government can provide the resources necessary to fund projects whose benefits extend beyond State lines, but are too expensive for State or local governments to justify investments at the expense of local priorities.

Freight Intermodal Connectors

Freight intermodal connectors—those roads that connect ports, rail yards, airports and other intermodal facilities to the National Highway System—are publicly owned. And while they are an essential part of the freight distribution system, many are neglected and are not given the attention they deserve given their importance to the nation's economy. Just 9 percent of connectors are in good or very good condition, 19 percent are in mediocre condition, and 37 percent are in poor condition.[25] Not only do poor roads damage both vehicles and the freight they carry, but the Federal Highway Administration (FHWA) found a correlation between poor roads and vehicle speed. Average speed on a connector in poor condition was 22 percent lower than on connectors in fair or better condition.[26] FHWA further found that congestion on freight intermodal connectors causes 1,059,238 hours of truck delay annually and 12,181,234 hours of automobile delay.[27] Congestion on freight intermodal connectors adds nearly $71 million to freight transportation costs each year.[28]

One possible reason connectors are neglected is that the vast majority of these roads—70 percent—are under the jurisdiction of a local or county government.[29] Yet, these roads are serving critical regional or national needs well beyond the geographic boundaries of the jurisdictions that have responsibility for them, and these broader benefits may not be factored into the local jurisdictions' spending decisions.

[25] *Freight Intermodal Connectors Study*. Federal Highway Administration, April 2017.
[26] Ibid.
[27] Ibid.
[28] *An Analysis of the Operational Costs of Trucking: 2018 Update. American Transportation Research Institute, Oct. 2018*. Estimates average truck operational cost of $66.65 per hour.
[29] Ibid.

While connectors are eligible for Federal funding, it is clear that this is simply not good enough. We urge Congress to set aside adequate funding for freight intermodal connectors to ensure that these critical arteries are given the attention and resources they deserve.

TRUCK DRIVER PARKING SHORTAGE

Research and feedback from carriers and drivers suggest there is a significant shortage of available parking for truck drivers in certain parts of the country. Given the projected growth in demand for trucking services, this problem will likely worsen. There are significant safety benefits from investing in truck parking to ensure that trucks are not parking in unsafe areas due to lack of space.

Funding for truck parking is available to States under the current Federal-aid highway program, but truck parking has not been a priority given a shortage of funds for essential highway projects. Therefore, we support the creation of a new discretionary grant program with dedicated funding from the Federal-aid highway program for truck parking capital projects.

ADDITIONAL PRODUCTIVITY IMPEDIMENTS

It is helpful to understand the full range of productivity constraints we are facing in the context of addressing infrastructure-related impediments. There are a host of actions that Congress can take to improve freight mobility without compromising important societal goals such as safety and air quality.

While ATA supports State flexibility on certain matters, it should be recognized that Congress has a Constitutionally mandated responsibility to ensure the flow of interstate commerce. Where appropriate, Federal preemption may be necessary. Unfortunately, Federal avoidance of preemption in the name of States' rights or to avoid controversy sometimes leads to a patchwork of State regulations that creates significant inefficiencies. Where appropriate, the Federal Government must act to protect the public interest from the parochial demands of narrow constituencies.

Workforce Development

The trucking industry is facing a severe labor shortage that threatens to increase the cost of moving freight and reduce supply chain efficiencies. In 2017, for example, the industry was short 50,000 drivers, the highest level on record. If current trends hold, the shortage could grow to more than 174,000 by 2026. Over the next decade, the trucking industry will need to hire roughly 898,000 new drivers, or an average of nearly 90,000 per year.

In recognition of challenges like these, at last March's infrastructure hearing before this Committee, Labor Secretary Alex Acosta specifically advocated for workforce development reforms to be included in an infrastructure package. In particular, Secretary Acosta testified in support of occupational licensing reform. As you may be aware, reforming outdated occupational licensing requirements has been a bipartisan priority of the past three administrations, and there is broad bipartisan support for rolling back these unnecessary barriers that hold back so many Americans, and which disproportionately affect African-Americans, Hispanics, military spouses and veterans, returning citizens, and the poor.

To help alleviate this problem in the trucking industry, ATA supports a number of occupational licensing reforms. First, ATA supports lowering the minimum age requirement for interstate truck driving from 21 to 18, but only for qualified CDL-holding apprentices that satisfy the safety, training, and technology requirements spelled out in the DRIVE Safe Act (S. 3352 in the 115th Congress). Modern-day vehicle safety technologies have advanced by several orders of magnitude since the current minimum age requirement was promulgated decades ago. Research shows that the technologies required by the DRIVE Safe Act and endorsed by the NTSB—such as active braking, collision avoidance, and event recorders—significantly improve safety performance. Meanwhile, 6.4 million Opportunity Youth in this country are neither employed, nor in school, even as the Nation is short 50,000 truck drivers. An update to the minimum age requirement is long over-due.

Second, to better connect job-seekers to trucking careers that offer a median salary of $54,585, health and retirement benefits, and potentially thousands of dollars in signing bonuses, ATA supports efforts to require States to better serve the growing number of truck driver candidates who receive driver training outside their State of domicile. Currently, out-of-State trainees have to travel back and forth to their home State, every time they pass either the CDL knowledge test or skills test, just to obtain the basic occupational licenses necessary to launch their trucking career. This arrangement imposes unnecessary financial burdens on those who can least afford it and exposes them to skills degradation. This problem could be addressed by requiring States receiving Federal funds for infrastructure projects to allow such out-of-State trainees to (1) complete all training; (2) take all necessary tests; and (3) obtain all necessary credentials in the State in which they are receiving training—without having to travel back to their home State.

As the Council of Economic Advisers has noted:

> Because [occupational] licenses are largely granted by States (rather than being nationally recognized), licensing inhibits the free flow of licensed workers across State boundaries to better match labor supply to labor demand. Unless the geographic footprint and skill needs of expanded infrastructure investments match the geographic distribution of currently unemployed infrastructure workers, some reshuffling of workers across State lines may be needed.[30]

In the trucking industry, the geographic distribution of currently unemployed truck driver candidates does not match the geographic footprint of Federal workforce development investments. Accordingly, individuals aspiring to become truck drivers are crossing State lines to obtain state-of-the-art training from motor carriers that have the support of Federal workforce dollars and have been hiring minorities, veterans, apprentices, and other underrepresented populations at industry-leading rates.

To better facilitate and scale this innovative model of workforce development, ATA supports efforts to require States of domicile to (1) accept the results of an applicant's CDL knowledge test administered in another State, and to (2) electronically transmit or deliver by mail the relevant credential—be it a CLP or a CDL—to the applicant without requiring him or her to physically come back to the State of domicile.

Infrastructure and Trucking Technology

ATA supports the development and deployment of automated vehicle technology and connectivity for all vehicle types. The transportation industry is in an era of technological evolution that can deliver increased safety and efficiency for highway vehicles and vulnerable road users. Automated driving systems and vehicle safety communications are peaking in research and development, and are on the brink of market utilization. We encourage Congress to adopt legislation that facilitates the adoption of technology that improves safety, the environment, traffic congestion, and energy efficiency. It is important to ensure that all vehicles that share the road together, including commercial vehicles, are included in legislation that governs and facilitates these improvements. Furthermore, as you consider funding for infrastructure investment generally, keep in mind that these improvements are vital to the successful adoption of intelligent transportation systems.

CONCLUSION

Mr. Chairman, over the next decade, freight tonnage is projected to grow by 30 percent.[31] The trucking industry is expected to carry two-thirds of the nation's freight in 2029 and it will be tasked with hauling 2.6 billion more tons of freight than it moved this year.[32] Without Federal support and cooperation, the industry will find it extremely difficult to meet these demands at the price and service levels that its customers—American businesses—need to compete globally. It is imperative to our nation's economy and security that Congress, working in concert with the Administration, invest in critical highway freight infrastructure, and make the reforms necessary to create an improved regulatory environment that fosters greater safety and efficiency in our supply chain.

The trucking industry, and especially truck drivers, understands the importance of safe and efficient highways like nobody else. Roads and bridges are our workplace, and we cannot properly serve the needs of the Nation if elected officials continue to allow highways to fall into greater neglect. The trucking industry already pays nearly half the user fees into the HTF and we are willing to invest more. To us, and most Americans, this is not an ideological debate. It is simply a decision about whether we make the investments necessary to remain competitive and prevent needless injuries and deaths, or continue on the current path.

Mr. Chairman, on January 6, 1983, President Ronald Reagan, in signing into law legislation that increased the Federal fuel tax, said:

> Today . . . America ends a period of decline in her vast and world-famous transportation system . . . . [We] can now ensure for our children a special

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[30] The Council of Economic Advisers, "The Economic Benefits and Impacts of Expanded Infrastructure Investment," March 2018

[31] *Freight Transportation Forecast 2018–2029*. IHS Global Insight, 2018.

[32] Ibid.

> part of their heritage—a network of highways and mass transit that has enabled our commerce to thrive, our country to grow, and our people to roam freely and easily to every corner of our land.

That bill was supported by 261 Members of the House, including a majority of both Republicans and Democrats. Roads and bridges know no political party; we all benefit from them. It is time for elected officials to put aside partisan politics and regional differences and fulfill the promise to the American people expressed so eloquently by President Reagan.

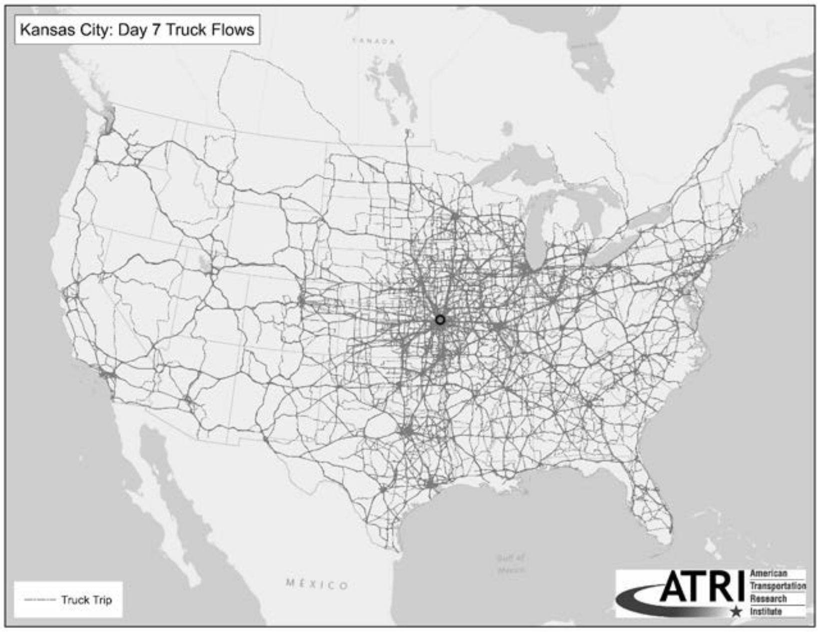
Mr. Chairman, we appreciate your support and the support that both House and Senate Leaders—Republican and Democrat—have given to passage of an infrastructure bill this Congress. In his State of the Union speech last week, President Trump called on Congress to work with him to pass an infrastructure bill, and correctly stated that this is not an option, it is a necessity. Congress has a unique opportunity this year to show the American people that it is, once more, able to work together, in partnership with the President, to pass bipartisan legislation that will improve their daily lives, create good jobs and grow the economy.

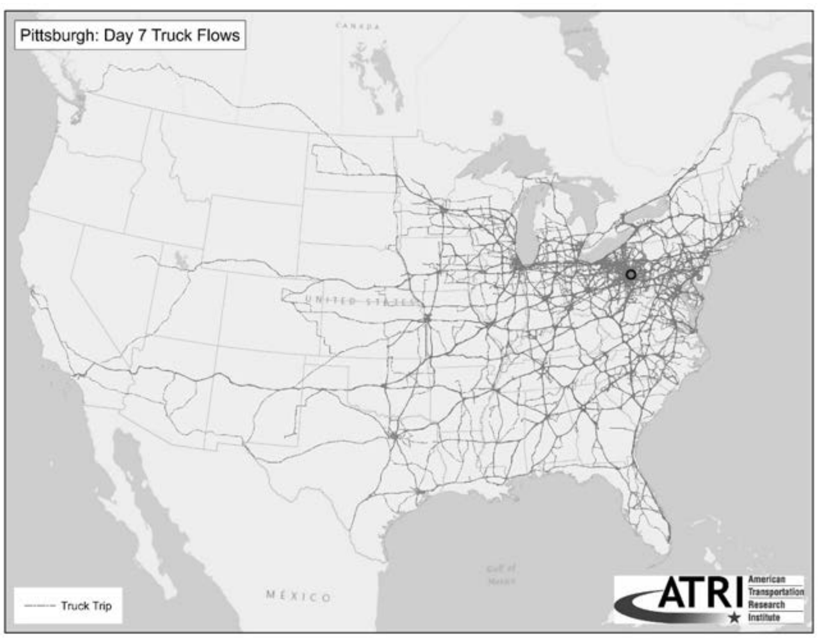
Thank you for the opportunity to provide testimony on this important subject. We look forward to working with the committee to advance legislation that enables the trucking industry to continue to provide safe and efficient freight transportation services to the American people.

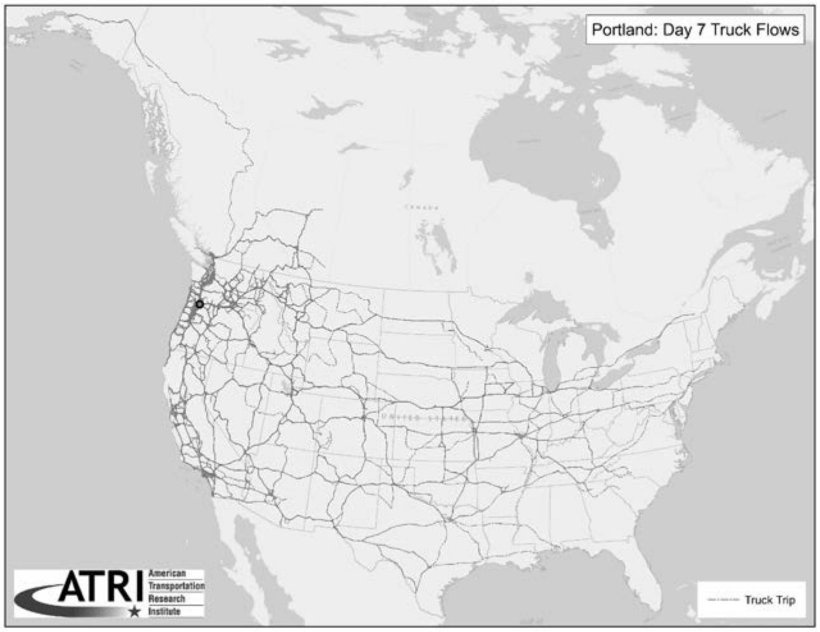
APPENDIX A: FUNDING IMPACT MATRIX—ANNUAL STATE-LEVEL JOB AND REVENUE INCREASES RESULTING FROM FEDERAL FUEL TAX INCREASES

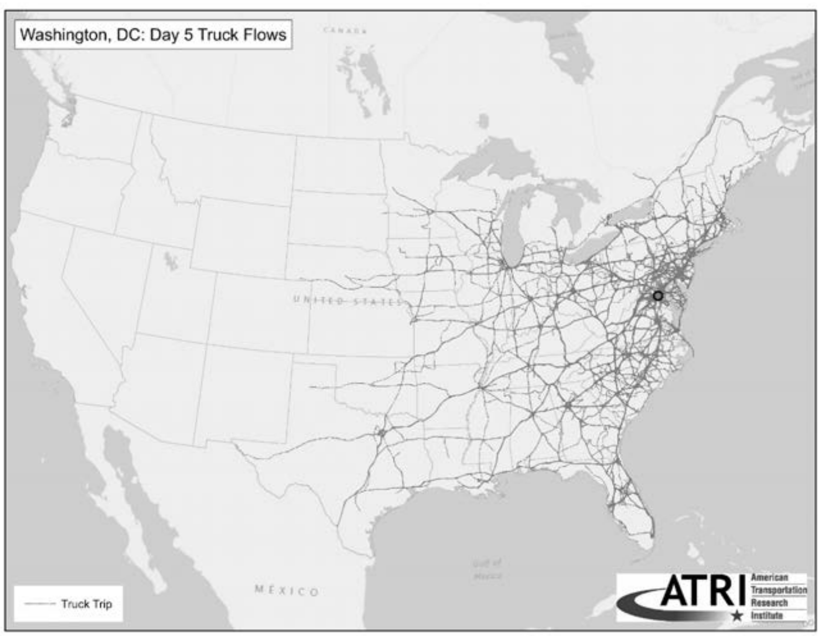
	Current Annual Allocation		Twenty Cent - Increase Federal Motor Fuels Tax Annual Benefits				Twenty Five Cent - Increase Federal Motor Fuels Tax Annual Benefits			
STATE	FAST ACT Apportioned Funds (in millions)	Percent of Total	Additional $30 Billion Federal Funding (in millions)	State Match (20%) (in millions)	Total New Funds (in millions)	# of Jobs	Additional $37.25 Billion Federal Funding (in millions)	State Match (20%) (in millions)	Total New Funds (in millions)	# of Jobs
ALABAMA	$ 770	1.9%	$ 581	$ 116	$ 697	9,067	$ 722	$ 144	$ 866	11,258
ALASKA	$ 509	1.3%	$ 384	$ 77	$ 461	5,992	$ 477	$ 95	$ 572	7,440
ARIZONA	$ 742	1.9%	$ 560	$ 112	$ 673	8,744	$ 696	$ 139	$ 835	10,857
ARKANSAS	$ 525	1.3%	$ 397	$ 79	$ 476	6,187	$ 492	$ 98	$ 591	7,682
CALIFORNIA	$ 3,723	9.4%	$ 2,812	$ 562	$ 3,374	43,862	$ 3,491	$ 698	$ 4,189	54,462
COLORADO	$ 542	1.4%	$ 410	$ 82	$ 492	6,390	$ 509	$ 102	$ 610	7,935
CONNECTICUT	$ 509	1.3%	$ 385	$ 77	$ 462	6,002	$ 478	$ 96	$ 573	7,453
DELAWARE	$ 172	0.4%	$ 130	$ 26	$ 156	2,022	$ 161	$ 32	$ 193	2,510
DIST. OF COL.	$ 162	0.4%	$ 122	$ 24	$ 147	1,907	$ 152	$ 30	$ 182	2,368
FLORIDA	$ 1,922	4.8%	$ 1,451	$ 290	$ 1,742	22,642	$ 1,802	$ 360	$ 2,163	28,114
GEORGIA	$ 1,310	3.3%	$ 989	$ 198	$ 1,187	15,430	$ 1,228	$ 246	$ 1,474	19,159
HAWAII	$ 172	0.4%	$ 130	$ 26	$ 155	2,021	$ 161	$ 32	$ 193	2,510
IDAHO	$ 290	0.7%	$ 219	$ 44	$ 263	3,418	$ 272	$ 54	$ 326	4,244
ILLINOIS	$ 1,442	3.6%	$ 1,089	$ 218	$ 1,307	16,990	$ 1,352	$ 270	$ 1,623	21,097
INDIANA	$ 967	2.4%	$ 730	$ 146	$ 876	11,387	$ 906	$ 181	$ 1,088	14,139
IOWA	$ 499	1.3%	$ 376	$ 75	$ 452	5,873	$ 467	$ 93	$ 561	7,292
KANSAS	$ 383	1.0%	$ 289	$ 58	$ 347	4,516	$ 359	$ 72	$ 431	5,607
KENTUCKY	$ 674	1.7%	$ 509	$ 102	$ 611	7,940	$ 632	$ 126	$ 758	9,859
LOUISIANA	$ 712	1.8%	$ 538	$ 108	$ 645	8,387	$ 668	$ 134	$ 801	10,414
MAINE	$ 187	0.5%	$ 141	$ 28	$ 170	2,206	$ 176	$ 35	$ 211	2,739
MARYLAND	$ 610	1.5%	$ 460	$ 92	$ 552	7,181	$ 572	$ 114	$ 686	8,917
MASSACHUSETTS	$ 616	1.6%	$ 465	$ 93	$ 558	7,258	$ 578	$ 116	$ 693	9,012
MICHIGAN	$ 1,068	2.7%	$ 807	$ 161	$ 968	12,582	$ 1,001	$ 200	$ 1,202	15,623
MINNESOTA	$ 661	1.7%	$ 500	$ 100	$ 599	7,793	$ 620	$ 124	$ 744	9,676
MISSISSIPPI	$ 491	1.2%	$ 370	$ 74	$ 445	5,780	$ 460	$ 92	$ 552	7,177
MISSOURI	$ 960	2.4%	$ 725	$ 145	$ 870	11,313	$ 900	$ 180	$ 1,081	14,047
MONTANA	$ 416	1.0%	$ 314	$ 63	$ 377	4,903	$ 390	$ 78	$ 468	6,088
NEBRASKA	$ 293	0.7%	$ 221	$ 44	$ 266	3,454	$ 275	$ 55	$ 330	4,289
NEVADA	$ 368	0.9%	$ 278	$ 56	$ 334	4,339	$ 345	$ 69	$ 414	5,388
NEW HAMPSHIRE	$ 168	0.4%	$ 127	$ 25	$ 152	1,974	$ 157	$ 31	$ 189	2,452
NEW JERSEY	$ 1,013	2.5%	$ 765	$ 153	$ 918	11,932	$ 950	$ 190	$ 1,140	14,816
NEW MEXICO	$ 372	0.9%	$ 281	$ 56	$ 338	4,389	$ 349	$ 70	$ 419	5,449
NEW YORK	$ 1,703	4.3%	$ 1,286	$ 257	$ 1,543	20,059	$ 1,597	$ 319	$ 1,916	24,907
NORTH CAROLINA	$ 1,058	2.7%	$ 799	$ 160	$ 959	12,464	$ 992	$ 198	$ 1,190	15,476
NORTH DAKOTA	$ 252	0.6%	$ 190	$ 38	$ 228	2,967	$ 236	$ 47	$ 283	3,684
OHIO	$ 1,360	3.4%	$ 1,027	$ 205	$ 1,232	16,019	$ 1,275	$ 255	$ 1,530	19,890
OKLAHOMA	$ 643	1.6%	$ 486	$ 97	$ 583	7,579	$ 603	$ 121	$ 724	9,411
OREGON	$ 507	1.3%	$ 383	$ 77	$ 459	5,973	$ 475	$ 95	$ 571	7,417
PENNSYLVANIA	$ 1,664	4.2%	$ 1,257	$ 251	$ 1,508	19,608	$ 1,561	$ 312	$ 1,873	24,346
RHODE ISLAND	$ 222	0.6%	$ 168	$ 34	$ 201	2,614	$ 208	$ 42	$ 250	3,245
SOUTH CAROLINA	$ 679	1.7%	$ 513	$ 103	$ 616	8,002	$ 637	$ 127	$ 764	9,936
SOUTH DAKOTA	$ 286	0.7%	$ 216	$ 43	$ 259	3,370	$ 268	$ 54	$ 322	4,185
TENNESSEE	$ 857	2.2%	$ 647	$ 129	$ 777	10,098	$ 804	$ 161	$ 965	12,539
TEXAS	$ 3,501	8.8%	$ 2,644	$ 529	$ 3,173	41,250	$ 3,283	$ 657	$ 3,940	51,219
UTAH	$ 352	0.9%	$ 266	$ 53	$ 319	4,150	$ 330	$ 66	$ 396	5,153
VERMONT	$ 206	0.5%	$ 155	$ 31	$ 187	2,425	$ 193	$ 39	$ 232	3,012
VIRGINIA	$ 1,032	2.6%	$ 780	$ 156	$ 935	12,161	$ 968	$ 194	$ 1,162	15,100
WASHINGTON	$ 688	1.7%	$ 519	$ 104	$ 623	8,101	$ 645	$ 129	$ 774	10,059
WEST VIRGINIA	$ 443	1.1%	$ 335	$ 67	$ 402	5,223	$ 416	$ 83	$ 499	6,485
WISCONSIN	$ 763	1.9%	$ 576	$ 115	$ 692	8,992	$ 716	$ 143	$ 859	11,165
WYOMING	$ 260	0.7%	$ 196	$ 39	$ 235	3,061	$ 244	$ 49	$ 292	3,801
TOTAL	$ 39,724	100.0%	$ 30,000	$ 6,000	$ 36,000	468,000	$ 37,250	$ 7,450	$ 44,700	581,100

APPENDIX B: TRUCK FLOWS AFTER 7 DAYS FROM CITY OF ORIGIN






Portland: Day 7 Truck Flows
ATRI
American Transportation Research Institute
Truck Trip


Washington, DC: Day 5 Truck Flows
MEXICO
Truck Trip
ATRI
American Transportation Research Institute

Statement of the Association of American Railroads Submitted for the Record by Mr. Graves of Missouri

INTRODUCTION

On behalf of the members of the Association of American Railroads (AAR), thank you for the opportunity to submit written testimony for this hearing's record. First, I'd like to extend a special greeting to the new members of this committee and offer my congratulations to Chairman DeFazio and Ranking Member Graves. Please know that the rail industry stands ready to work cooperatively with you, other members of this committee, and other policymakers to help ensure our nation has the freight transportation capability it needs to prosper in the future.

AAR members account for the vast majority of U.S. freight rail volume, employment, mileage, and revenue. When it comes to transportation, we're all in this together. It's true that the various modes of transportation compete fiercely against each other in virtually every market they serve. This competition is healthy and appropriate. At the same time, though, railroads, trucks, and barges also cooperate extensively in countless markets. No country can be a first-rate economic power without having first-rate logistics and transportation capabilities across modes.

Today, there is a tremendous amount of strength and flexibility in America's freight transportation systems. It's also clear, however, that our nation faces significant challenges in maintaining our existing freight-moving capability and in improving it to meet the needs of tomorrow. While the railroad industry is overwhelmingly privately funded, railroads have a strong vested interest that adequate investments be made in public infrastructure like ports and highways to ensure that the nation has a vibrant and integrated freight supply chain. The cost of doing nothing is high. Our nation has come to rely on an integrated network that will deliver goods rapidly and efficiently to homes and customers at all hours of the day to destinations far and wide. Deferring action to shore up needed investment in public highway, bridge, port, and passenger and commuter rail infrastructure will only cost American taxpayers more in the long run. Railroads agree that America's transportation system should not be run to the point of failure.

Examining solutions to transportation revenue shortages, railroads believe that for reasons of economic efficiency and modal equity, public infrastructure funding should adhere as closely as possible to the principle of "user pays."

A TRANSPORTATION BACKBONE

The more than 600 freight railroads that operate in the United States together form the best freight rail network in the world. Their global superiority is a direct result of a balanced regulatory system that relies on market-based competition to establish rate and service standards, with a regulatory safety net available to rail customers when there is an absence of effective railroad competition.

Railroads move vast amounts of just about everything, connecting businesses with each other across the continent and with markets overseas over a rail network spanning nearly 140,000 miles. Rail intermodal—the transport of shipping containers and truck trailers on railroad flatcars—has grown tremendously over the past 25 years, setting a record in 2018. Today, just about everything you find on a retailer's shelves likely traveled on an intermodal train. Increasing amounts of industrial goods are transported by intermodal trains as well.

Given the volume of rail freight (close to two billion tons and 30 million carloads and intermodal units in a typical year) and the long distances that freight moves by rail (nearly 1,000 miles, on average), freight railroads' direct role in our economy is immense, but freight railroads contribute to our nation in many other ways too:

- America's freight railroads are overwhelmingly privately owned and operate almost exclusively on infrastructure that they own, build, maintain, and pay for themselves. Since 1980, freight railroads have plowed more than $685 billion—of their own funds, not taxpayer funds—on capital expenditures and maintenance expenses related to locomotives, freight cars, tracks, bridges, tunnels and other infrastructure and equipment. That's more than 40 cents out of every revenue dollar, invested back into a rail network that keeps our economy moving.
- An October 2018 study from Towson University's Regional Economic Studies Institute found that, in 2017 alone, the operations and capital investment of America's major freight railroads supported approximately 1.1 million jobs (nearly eight jobs for every railroad job), $219 billion in economic output, and $71 billion in wages. Railroads also generated nearly $26 billion in tax revenues.
- Thanks to competitive rail rates—46 percent lower, on average, in 2017 than in 1981 adjusted for inflation—freight railroads save consumers billions of dol-

lars every year. Millions of Americans work in industries that are more competitive in the tough global economy thanks to the affordability and productivity of America's freight railroads.

- In 2017, railroads moved a ton of freight an average of 479 miles per gallon of diesel fuel. That's roughly equivalent to moving a ton from Jackson, MS to Springfield, MO, or Tacoma, WA to Helena, MT, on a single gallon. On average, railroads are four times more fuel efficient than trucks. That means moving freight by rail helps our environment by reducing energy consumption, pollution, and greenhouse gases.
- Because a single train can carry the freight of several hundred trucks, railroads cut highway gridlock and reduce the high costs of highway construction and maintenance.
- The approximately 167,000 freight railroad professionals are among America's most highly compensated workers. In 2017, the average U.S. Class I freight railroad employee earned total compensation of $125,400. By contrast, the average wage per full-time equivalent U.S. employee in domestic industries was $76,500, just 61 percent of the rail figure. Around 80 percent of the U.S. freight rail workforce is unionized, compared with only around 6 percent of all private sector workers.
- Railroads are safe and constantly working to get even safer. The train accident rate in 2017 was down 40 percent from 2000; the employee injury rate in 2017 was down 43 percent from 2000; and the grade crossing collision rate in 2017 was down 38 percent from 2000. By all these measures, recent years have been the safest in history. Railroads today have lower employee injury rates than most other major industries, including trucking, airlines, agriculture, mining, manufacturing, and construction—even lower than food stores.
- Freight railroads are committed to safely implementing positive train control (PTC) as quickly as feasible so that further safety gains can be achieved. The seven Class I freight railroads all met statutory requirements by having 100 percent of their required PTC-related hardware installed, 100 percent of their PTC-related spectrum in place, and 100 percent of their required employee training completed by the end of 2018. In aggregate, Class I railroads had 83 percent of required PTC route-miles in operation at the end of 2018, well above the 50 percent required by statute. Each Class I railroad expects to be operating trains in PTC mode on all their PTC routes no later than 2020, as required by statute. In the meantime, railroads are continuing to test and validate their PTC systems thoroughly to ensure they work as they should.

TRANSPORTATION CAPACITY IS KEY

The long-term demand for freight transportation in this country will grow. The Federal Highway Administration forecasts that U.S. freight tonnage will rise 37 percent by 2040. For railroads, meeting this demand is all about having adequate capacity and using it well, and that is what they focus on.

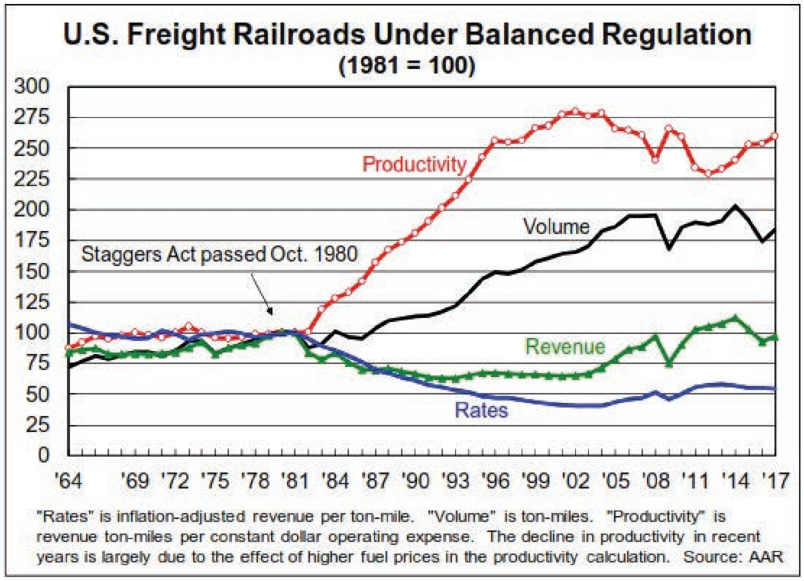
The requirement for capital in freight railroading is at or near the top among all U.S. industries. In recent years, the average U.S. manufacturer spent approximately three percent of revenue on capital expenditures. The comparable figure for freight railroads is nearly 19 percent, or more than six times higher.

Thanks to their massive investments, freight railroad infrastructure today is in its best overall condition ever. The challenge for railroads, and for policymakers, is to ensure that the current high quality of rail infrastructure is maintained, and that adequate freight rail capacity exists to meet our nation's current and future freight transportation needs. Policymakers can help by enacting policies that promote safety and efficiency and by avoiding policies that discourage private rail investment.

KEEP RAILROAD RATE AND SERVICE REGULATION BALANCED

The current structure of rail regulation relies on competition and market forces to determine rail rates and service standards in most cases, with maximum rate and other protections available to rail customers when there is an absence of effective competition. This deregulatory structure has benefited railroads and their customers.

However, despite the severe harm caused by excessive railroad regulation in years past and the substantial public benefits that have accrued since the current less regulatory regime was put in place, some want to again give government regulators control over crucial areas of rail operations. That would be a profound mistake. It would prevent America's railroads from making the massive investments a best-in-the-world freight rail system requires. Policymakers should be taking actions that enhance, rather than impair, railroads' ability and willingness to make those investments.



ENGAGE IN PUBLIC-PRIVATE PARTNERSHIPS THROUGH PROJECTS AND PROGRAMS

Public-private partnerships—arrangements under which private freight railroads and government entities both contribute resources to a project—offer a mutually beneficial way to solve critical transportation problems.

Without a partnership, many projects that promise substantial public benefits (such as reduced highway congestion by taking trucks off highways, or increased rail capacity for use by passenger trains) in addition to private benefits (such as enabling more efficient freight train operations) are likely to be delayed or never started at all because neither side can justify the full investment needed to complete them. Cooperation makes these projects feasible.

With public-private partnerships, the public entity devotes public dollars to a project equivalent to the public benefits that will accrue. Private railroads contribute resources commensurate with the private gains expected to accrue. Thus, the universe of projects that can be undertaken to the benefit of all parties is significantly expanded.

The most well-known public-private partnership involving railroads is the Chicago Region Environmental and Transportation Efficiency Program (CREATE), which has been underway for a number of years. CREATE is a multi-billion-dollar program of capital improvements aimed at increasing the efficiency of the region's rail and roadway infrastructure. A partnership among various railroads, the city of Chicago, the state of Illinois, the federal government, and Cook County, CREATE comprises 70 projects, including 25 new roadway overpasses or underpasses; six new rail overpasses or underpasses to separate passenger and freight train tracks; 35 freight rail projects including extensive upgrades of tracks, switches and signal systems; viaduct improvement projects; grade crossing safety enhancements; and the integration of information from the dispatch systems of all major railroads in the region into a single display. To date, 29 projects have been completed, six are under construction, and 16 are in various stages of design.

The intersection of rail tracks and roadways is an important element of rail infrastructure that often involves a public-private cooperative approach. Under the federal "Section 130" program, approximately $230 million in federal funds are allocated each year to states for installing new active warning devices, upgrading existing devices, and improving grade crossing surfaces. The program also allows for funding to go towards highway-rail grade separation projects. Without a budgetary set-aside like the Section 130 program, grade crossing needs would fare poorly in competition with more traditional highway needs such as highway construction and maintenance. Railroads urge Congress to continue to support the Section 130 program.

Railroads also urge Congress to support a permanent extension of the "Section 45G" short line tax credit program. Section 45G creates a strong incentive for short line railroads to invest private sector dollars on freight railroad track rehabilitation. Short line freight rail connections are critical to preserving the first and last mile of connectivity to factories, grain elevators, power plants, refineries, and mines in rural America and elsewhere.

ADDRESS MODAL INEQUITIES

As mentioned earlier, America's freight railroads operate overwhelmingly on infrastructure that they own, build, maintain, and pay for themselves. By contrast, trucks, airlines, and barges operate on highways, airways, and waterways that are largely taxpayer funded.

No one, and certainly not railroads, disputes that other transportation modes are crucial to our nation, and the infrastructure they use should be world-class—just like U.S. freight railroad infrastructure is world class. That said, public policies relating to the funding of other modes have become misaligned.

With respect to federally funded capacity investments in public road and bridge infrastructure, the United States has historically relied upon a "user pays" system. Unfortunately, the user-pays model has been eroded as Highway Trust Fund (HTF) revenues have not kept up with HTF investment needs and so the user pay system has had to be supplemented by general fund taxpayer dollars. Including general fund transfers scheduled to be made in the next two years through provisions of the FAST Act, general fund transfers to the HTF since 2008 have totaled almost $144 billion, according to the Congressional Budget Office (CBO). The CBO recently estimated that between 2020 and 2029, the HTF will require $191 billion in additional payments to keep the fund solvent.

Moving away from a user-pays system distorts the competitive environment by making it appear that commercial trucking is less expensive than it really is and puts other modes, especially rail, at a disadvantage. This is especially problematic for railroads precisely because they own, build, maintain, and pay for their infrastructure themselves (including paying well over a billion dollars in property taxes each year on that infrastructure).

Congress could help ameliorate this modal inequity by reaffirming the "user pays" requirement. Through application of current technology, the current fundamental imbalance could be rectified by ensuring that commercial users of taxpayer-financed infrastructure pay for their use.

This could be done through several different mechanisms. To its credit, the American Trucking Associations (ATA), through its Build America Fund proposal, is calling for a 20 cent per-gallon increase in the fuel tax phased in over four years, a recognition by the ATA that the current situation regarding the HTF is not tenable. Railroads believe that an increase in the fuel tax could be helpful as a short-term bridge to a longer-term future that, we think, should include a vehicle miles traveled fee or a weight-distance fee.

A handful of states already impose weight-distance taxes on heavier trucks, and others are engaged in pilot programs to assess the feasibility of transitioning their state highway taxes from a per gallon-based system to a mileage-based fee. In Oregon, for example, heavy trucks are charged a weight-mile tax that is intended to capture the full costs incurred by trucks relating to the state highway system.

FIRST-MILE AND LAST-MILE CONNECTIONS

One of the main reasons why the United States has the world's most efficient total freight transportation system is the willingness and ability of firms associated with various modes to work together in ways that benefit their customers and the economy. Policymakers can help this process by implementing programs that improve "first mile" and "last mile" connections where freight is handed off from one mode to another—for example, at ports from ships to railroads or from ships to trucks, or from railroads to trucks at intermodal terminals. These connections are highly vulnerable to disruptions and improving them would lead to especially large increases in efficiency and fluidity and forge a stronger, more effective total transportation package.

Some multimodal connection infrastructure projects that are of national and regional significance in terms of freight movement can be too costly for a local government or state to fund. Consequently, federal funding awarded through a competitive discretionary grant process is an appropriate approach for these needs.

The Transportation Investment Generating Economic Recovery (TIGER) federal grant program; its replacement, the Better Utilizing Investments to Leverage Development (BUILD) Transportation grant program; and the Infrastructure for Rebuilding America (INFRA) grant program are examples of approaches to help fund crucial multimodal projects of national and regional significance.

Attention to first- and last-mile connections is a critical element of both local and state freight planning and policy as well. At the local level, land use planning has been largely inadequate in accommodating the needs of freight. Freight movement—whether in rail yards, intermodal facilities, ports, or regional distribution—must be sufficiently considered when planning land uses such as residential developments, schools, and recreational areas.

FLEXIBILITY THROUGH REGULATORY AND PERMITTING REFORM

There is bipartisan agreement that America's regulatory and permitting processes require reform and could more accurately reflect rapid technological advancements. Federal regulations provide a critical safety net to the American public, but rules borne from faulty processes only deter economic growth without any corresponding public benefits. Dictating the means to an end via overly prescriptive policy increases compliance costs, can chill innovation and investment in new technologies. and can slow, or defeat entirely, an outcome both industry and government would view as a success.

Regulations should be based on a demonstrated need, as reflected in current and complete data and sound science. Regulations should provide benefits outweighing their costs and should take into consideration the big picture view for industries and sectors—including market forces, future offerings, and current regulations in place.

The freight rail industry believes policymakers should embrace performance-based regulations, where appropriate, to foster and facilitate technological advancement and achieve well-defined policy goals. Defining the end goal, rather than narrow steps, will boost citizen confidence in government, motivate U.S. industry to research and innovate, and create new solutions. Outcome-based measures can better avoid "locking in" existing technologies and processes so that new innovations, including new technologies, that could improve safety and improve efficiency, can flourish.

That's also why railroads respectfully urge policymakers to avoid one-size-fits-all policies that hinder modernization of safety practices and improvements to efficiency, such as policies that mandate a specific crew size for rail operations. We all want railroad safety and efficiency to continue to improve. Technological solutions are key to making this happen, but that requires regulatory oversight not prescriptive mandates.

As mentioned earlier, railroads are safe and getting safer, but more can be done by railroads, their employees, the FRA, and others working together to achieve the long-term goal of zero accidents. Regulatory reform can be a key part of that effort. Railroads respectfully urge this committee and others in Congress to encourage the FRA to become more forward-looking in how it proposes and promulgates new rules.

We also urge policymakers to streamline the permitting process to spur infrastructure investment. Railroads have faced significant permitting delays from federal agencies, which means that the amount of time and energy it takes to get many rail infrastructure projects from the drawing board to construction and completion has been growing longer every day.

In the face of local opposition, railroads try to work with the local community to find a mutually satisfactory arrangement, and these efforts are usually successful. When agreement is not reached, however, projects can face lawsuits, seemingly interminable delays, and sharply higher costs. Rail capacity, and railroads' ability to provide the transportation service upon which our nation depends, suffer accordingly. Recent efforts by Congress and the Administration are noteworthy and appreciated, but more must be done.

SUPPORT COMMUTER AND PASSENGER RAIL

Freight railroads agree that passenger railroads play a key role in alleviating highway and airport congestion; decreasing dependence on foreign oil; reducing pollution; and enhancing mobility, safety, and economic development opportunities. In the United States, freight railroads provide a crucial foundation for passenger rail: more than 70 percent of the miles traveled by Amtrak trains are on tracks owned by other railroads—mainly freight railroads—and many commuter railroads operate at least partially on freight-owned corridors.

Policymakers can help here too by recognizing that Amtrak should be adequately funded so that its infrastructure can be improved to a state of good repair. Commuter railroads too deserve this Committee's support.

CONCLUSION

Of the many different factors that affect how well a rail network functions, the basic amount and quality of infrastructure is among the most significant. That's why U.S. freight railroads have been expending, and will continue to expend, enormous resources to continuously improve safety and improve their asset base. Policymakers too have a key role to play. Freight railroads look forward to working with this Committee, others in Congress, and other appropriate parties to develop and implement policies that best meet this country's transportation needs.

Statement of the Beyond the Runway Coalition Submitted for the Record by Mr. DeFazio

Mr. Chairman, the 92 members of the Beyond the Runway Coalition would like to thank you for making infrastructure the topic of your first hearing as chairman of this esteemed committee. We wholeheartedly agree with you that investing in our nation's infrastructure cannot wait any longer, as the poor condition of America's infrastructure is having a negative effect on economic prosperity and job creation. It is time to move forward with a robust investment plan to address our country's growing infrastructure needs.

Our coalition has come together specifically to urge Congress to make a true commitment to America's infrastructure improvement by investing in our nation's airports. The industries, businesses, and infrastructure groups represented in our coalition rely heavily on aviation infrastructure to support economic growth. Providing airports the opportunity to make new investments in their facilities in order to meet growing demand would help our industries continue to invest, grow, and create good jobs in our local communities.

America's airports are a fundamental component of our nation's transportation infrastructure. In 2017, 1.8 billion passengers and 31.7 million metric tons of cargo traveled through U.S. airports. With a national economic impact of $1.4 trillion, airports contribute more than 7 percent to the U.S. gross domestic product and support over 11.5 million jobs around the country. To meet the capacity demands of the future with safe, efficient, and modern facilities that passengers, businesses, and cargo shippers expect airports need to make new investments to maintain and modernize our nation's airport infrastructure. Unfortunately, existing Federal law inhibits the ability of airports to self-fund these important terminal, runway, and ground-access projects.

While passenger and cargo traffic through airport facilities continues to grow at a record pace, our outdated aviation infrastructure is not keeping up with demand. As a result, far too many airports around the country are overcrowded and cramped, which hinders commerce and business opportunities for thousands of companies. In fact, America's airports require well over $100 billion in infrastructure upgrades over the next 5 years. Outdated airport infrastructure that fails to meet the growing needs of local businesses and tourists puts in jeopardy the continued economic growth of American cities, States, and regions. From established metropolitan areas to new growth centers to traditionally rural areas, sustained economic growth depends on the expansion of, and investment in, local airports.

As you move forward with infrastructure legislation this year, we ask that you take into account the urgent needs of U.S. airports, and explore meaningful funding options to address the over $100 billion backlog in critical infrastructure and security projects at America's airports.

Statement of the Bluegreen Alliance Submitted for the Record by Mr. DeFazio

Our nation must move forward with an ambitious plan to rebuild and transform America's infrastructure that will boost our economy, create millions of jobs, and strengthen our communities, while simultaneously reducing pollution and combating climate change. We should be leading the world in building the innovative infrastructure systems that will ensure our global competitiveness in the 21st century and beyond.

A robust and ambitious infrastructure plan must address:

Power and the electric grid, including electric grid modernization, expansion of clean energy and transmission;

Methane leaks in the natural gas distribution sector;

Surface transportation, including modernizing our roads and bridges, investing in and expanding our transit systems, and leading in the next generation of transportation infrastructure;

Industrial infrastructure and advanced manufacturing, including making our industrial infrastructure more resilient and efficient, and boosting clean energy and transportation manufacturing;

Water infrastructure, including addressing lead and other harmful contaminants in water, rehabilitating and upgrading water distribution and treatment infrastructure, implementing sustainable stormwater solutions, upgrading our levees, and increasing affordability;

Buildings, including investing in and making our schools, hospitals, commercial, and residential buildings cleaner and more energy efficient; and

Natural infrastructure, including improving climate resilience through natural defenses that act as carbon sinks (including wetlands, forests, dunes, and grasslands), recovering America's wildlife, reclaiming mines, and addressing the public lands maintenance backlog.

Massive Job Creation and Pollution Reduction Potential

Investing now to repair these aspects of our infrastructure will boost our economy and create millions of jobs, while also reducing pollution and combating climate change. BlueGreen Alliance research has found that investing an estimated $2.2 trillion in America's infrastructure in these sectors to improve them from a "D+" grade overall to a "B" grade has the potential to s**upport or create an additional 14.5 million job-years across the U.S. economy**, add a cumulative $1.66 trillion to Gross Domestic Product (GDP) over 10 years, and reduce greenhouse gas pollution, versus a business as-usual approach.

Making these smart investments will also pay dividends for our environment by reducing air and water pollution—including the emissions driving climate change—as well as reducing the use of materials and chemicals that are hazardous to human health. For too long, America's leaders have neglected our infrastructure and cut vital resources and undermined workers at local and state levels of government that protect us all. Repairing America's infrastructure systems is an opportunity to boost the middle-class, build up American manufacturing, support local jobs, reduce our climate impact, and improve public health.

High-Road Standards Needed

We will accrue these benefits only if we **tackle this challenge the right way.** To ensure we maximize the benefits of our infrastructure investments for communities, the environment, and workers, any infrastructure package must:

Create family-sustaining jobs:

- Ensure all projects built with public resources are subject to **Buy America** standards that maximize the return to taxpayers and the American economy;
- Enforce **Davis-Bacon** provisions that ensure workers are paid prevailing wages;
- Utilize **project labor agreements (PLAs), community benefit agreements, local hire**, and other provisions and practices that prioritize improving training, working conditions, and project benefits;
- Maintain and grow jobs in the public sector necessary to maintain and operate assets, and ensure compliance and project quality.

Reduce pollution and make our communities more resilient:

- Drive forward-looking planning and investments that meet environmental standards and **build resilient infrastructure systems and communities**;
- Prioritize use of the most **efficient, resilient, and cleanest materials and products** with the lowest carbon and toxicity footprints;

Maximize benefits to our workers and communities, especially those most in need:

- Enhance **workforce training and development programs** to expand the number of skilled workers in new and existing industries and in the public sector;
- Increase **economic opportunities** for communities and local workers, especially for people of color and low-income communities;

Make a robust, impactful investment:

- Make a **robust, public investment** in our infrastructure systems;
- Investment must be **broad**—tackling the full array of our infrastructure needs.

BLUEGREEN ALLIANCE

bluegreenalliance.org

1300 Godward Street NE, Suite 2625
Minneapolis, MN 55413 | 1020 19th Street NW, Suite 600
Washington, D.C. 20036 | 369 Pine Street, Suite 700
San Francisco, CA 94104

Statement of Ms. Roberta L. Larson, Executive Director, California Association of Sanitation Agencies, Submitted for the Record by Mr. DeFazio

The California Association of Sanitation Agencies (CASA), provides the following statement as you conduct your February 7, 2019 hearing on "The Cost of Doing Nothing: Why Investing in Our Nation's Infrastructure Cannot Wait". We request that this statement be made a part of the formal record of the committee proceedings.

CASA strongly supports your priority to advance infrastructure legislation without delay. For too many years, our nation's wastewater infrastructure needs have gone unaddressed and have reached levels that urgently demand a robust Federal commitment to support local community needs. The U.S. Environmental Protection Agency's (USEPA) 2012 Clean Water Survey of Needs revealed a $26 billion investment gap in California alone for federally eligible projects. From a national perspective, the American Society of Civil Engineers' infrastructure report card gave wastewater infrastructure a D+ grade. The report noted that over the next two decades more than 56 million additional users will be making demands on this aging and under-capacity infrastructure. USEPA, by its own analysis, has concluded that $271 billion in wastewater investments will be required to address future demands and construct required water quality infrastructure. This data illustrates the absolute necessity of incorporating wastewater infrastructure in any Federal infrastructure initiative. Without such commitment, the ability to protect public health and improve our ecosystems will be seriously compromised. CASA believes that any infrastructure package should include, at a minimum, the following elements:

First, we ask Congress to recommit robust levels of Federal funding for the existing wastewater infrastructure funding programs. CASA strongly supports the Clean Water State Revolving Fund (SRF) Loan Program, Water Infrastructure Financing and Innovation Act (WIFIA) Program and other programs to provide Federal funds for clean water infrastructure projects. The Clean Water SRF should be authorized at $6 billion annually. This level would represent a nearly sixfold increase in the annual spending levels of recent years. However, this increased amount is absolutely vital for States and localities to begin addressing the significant needs that exist today, ranging from traditional treatment requirements to those challenges created by climate change, including drought, severe storm events and sea level rise.

Second, we request that the National Pollutant Discharge Elimination System (NPDES) permit terms be extended from five to up to 10 years. In addition to the need for financial assistance, there are other ways to stretch limited public dollars while protecting the public's health. Extending the length of NPDES permit terms up to 10 years is one important mechanism for ensuring that our limited dollars are spent wisely. This change would significantly benefit local public agencies by allowing for enhanced planning and efficient permitting of facilities and give agencies the time needed to comply with existing regulatory requirements before the imposition of new mandates. This would also better reflect the technological and administrative realities of the modern era. USEPA and delegated States would retain their existing authority to reopen permits to address changed circumstances.

Third, we request that Congress avoid inclusion of consolidation or reorganization of local wastewater agencies as a criterion for Federal funding assistance or ranking projects for funding. The impetus for consolidation and reorganization of local agencies is fact and site specific and must consider the purpose for which the agencies were formed and the roles they serve in the community. CASA believes that decisions to consolidate are best left to the communities that will be impacted and local governance processes designed to drive and guide such changes. In California, a comprehensive process to consider consolidation already exists, and we believe that this structure could be jeopardized by a top down approach that would determine eligibility for Federal assistance.

Fourth, we ask that Congress to consider updating the allocation formula that USEPA relies upon to provide States with capitalization grants for their Clean Water SRFs in order to better reflect today's realities. The formula has not been updated since 1987 and has not kept pace with demographic shifts in the United States toward the West and South. While California currently receives 7.2 percent of Federal SRF capitalization grants, the State is home to 12 percent of the nation's population. According to a USEPA report, California would be entitled to between 15 and 24 percent of appropriated assistance if the formula were to be updated to address population and needs. The Committee received USEPA's Report to Congress: Review of the Allotment of the Clean Water State Revolving Fund (May 2016), documenting the challenges created by the antiquated formula used to allocate SRF resources to States. The opportunity to update this formula to reflect current population and water quality needs of a State would ensure the delivery of Federal resources to those areas most in need.

Fifth, CASA urges the committee to resist creating new set-asides within the SRF program. If a compelling need exists, such as support for disadvantaged communities, a program should be created to address such needs through alternative mechanisms and avoid reducing the purchasing power of the Clean Water SRF that is already oversubscribed.

WATER AND WASTEWATER INFRASTRUCTURE ASSISTANCE: ADEQUATE AND RELIABLE FEDERAL FUNDING IS ESSENTIAL

CASA supports a robust infrastructure funding partnership between the Federal Government and local communities to protect the integrity of our receiving waters, deliver safe and reliable drinking water and enhance our ecosystems.

We recognize and thank the Committee for its decades of support of the SRF Program. From its inception, the SRF program has proven to be an effective and efficient means to help meet the significant needs of local communities.

In California, the SRF programs provide vital support for a variety of water infrastructure needs. We have used the programs to support core water quality treatment functions, develop recycled water capacity, build resilient water supplies and capture sustainable energy from treatment processes. During the most recent stretch of extraordinary drought conditions, the SRF served as a lifeline to construct water recycling facilities and other critical infrastructure. Without these funds, the impact of the already devastating drought would have been significantly more severe.

California, along with much of the Nation, faces deteriorating infrastructure, increased regulatory compliance costs, unpredictable weather conditions and general population growth. At the same time, financial support has declined for the key Federal partnership offering direct assistance through the SRF programs, which CASA agencies have relied on for decades. As noted above, in California alone, estimates show a $26 billion need for new wastewater infrastructure over the next 20 years. This figure is in addition to the funding required to continue operation and maintenance of existing facilities and programs.

CASA believes that the SRF program should continue to serve as the backbone of water and wastewater infrastructure financing at the State level and calls upon Congress to provide the programs with increased funding. The loan program provides the most important and effective infrastructure financing tool available today and should be viewed as an investment in the nation's health and its economy. Loan payments create the revolving aspect of the programs, meaning that outgoing moneys come back to the States to be loaned again for additional projects. The SRF program is the engine that allows CASA member agencies to continue their mission of protecting human health and the environment.

CASA also appreciates the continued development and implementation of the WIFIA Program. Several of our members have submitted to USEPA full applications for qualifying projects and are eager to utilize this new water infrastructure financing tool. With its focus on large projects, WIFIA complements the SRF program, particularly as USEPA implements the new State finance authority focused WIFIA program. CASA looks forward to working with the committee to ensure that this new program is leveraged under any new infrastructure policy.

We also see an important role for direct grant assistance. In many cases, smaller communities or segments of a service area lack the resources necessary to secure loans. In these circumstances, we strongly encourage Congress to authorize grants for such communities and service areas to serve as a catalyst for long-term water quality improvements. The financial commitment through grant assistance is a significant component of maintaining publ ic investment to improve public health and the environment.

THE CLEAN WATER SRF ALLOCATION FORMULA, UNCHANGED SINCE 1987, SHOULD BE UPDATED

The Clean Water Act allocation formula determines the amount of SRF capitalization grant assistance provided to each State. The formula, which is based on a variety of factors including census population and capital needs, has not been updated since 1987. Meanwhile, the population in California and throughout the Nation has dramatically changed. Additionally, water infrastructure needs have grown substantially beyond the levels identified in 1987.

As part of the Water Resources Reform and Development Act (WRRDA) of 2014, Congress directed the USEPA to conduct a study to examine the allocation formula and identify options to more accurately address current needs. In a May 2016 report (copy attached) "Review of the Allotment of the Clean Water State Revolving Fund (CWSRF): Report to Congress", the USEPA concluded, "most States do not currently receive appropriated funds in proportion to their reported needs or population, which demonstrates the inadequacy of the current allotment."

The Committee is commended for seeking the report, as it provides a data-driven analysis of the current formula's impacts on States, particularly how it disadvantages States where needs have grown since 1987. The report documents that the current 30-year-old allocation formula fails to equitably address the clean water infrastructure needs of today in an equitable State-by-State basis. Specifically, the current allocation formula fails to provide adequate funding assistance to the States based upon current water quality needs or population. For example, the report illustrated that SRF allocations to California should be significantly higher if they were based on a 2012 water quality needs survey. Alternatively, if 2010 population data was used, California's equitable share should also be significantly increased.

The report presented three options to more accurately gauge needs and set allotments for the States in the future. In each instance, California would gain significant allotment, increasing anywhere between 14.7 percent to 24.9 percent, all well over its current 7.3 percent allotment. These percentage changes were based on the 2012 needs survey and 2010 census data, while applying constraints on the maximum increase or decrease to States. CASA requests that Congress update the Clean Water SRF allocation formula to reflect the findings of the USEPA's May 2016 Report.

EXPANDED PRIVATE SECTOR ACCESS TO THE SRF PROGRAM WOULD BE COUNTERPRODUCTIVE

In the past, proposals have been made to allow for private sector use of Clean Water SRF resources. CASA strongly opposes any initiative to open access to the SRF programs to the private sector for several reasons. First, a source of tax-exempt financing for private sector needs already exists in the form of private activity bonds (PABs). Moreover, diluting the purchasing power of already oversubscribed programs designed for the delivery of "public works" is counterproductive. Public entities that rely on traditional public financing for water infrastructure cannot afford the diversion of limited resources to privatize systems that were constructed with public moneys.

EXTENSION OF NPDES PERMIT TERMS

The extension of NPDES permit terms from five to 10 years is our top priority for any non-funding related infrastructure response. Congress has an opportunity to modernize the Clean Water Act permitting process to reflect the realities of today by making a straightforward change to this important environmental statute.

The Clean Water Act requires publicly owned treatment works to secure a new permit to discharge highly treated wastewater every 5 years. These relatively short permit terms were predicated on the priority for agencies to upgrade treatment facilities to secondary standards and conformed to technology lifecycles and infrastructure expectations of the era. More than 40 years later, water quality needs are increasingly complex and require new methods and technologies to support innovation in making water quality improvements.

The existing 5-year renewal cycle results in unnecessary financial and technical burdens on local agencies and the State permitting authorities that must prepare and issue the permits. NPDES permits are becoming increasingly complex and restrictive, and the treatment technologies necessary to meet permit limits have become more expensive and time intensive to implement. As a result, many local public agencies have not completed the upgrades necessary to comply with their prior permit when they are faced with negotiating new terms and requirements. The 5-year term, established in 1972, does not reflect the realities of addressing today's clean water challenges and restricts State and local flexibility to address the highest clean water priorities. Additionally, the short permit term does not encourage long-term thinking that is essential to implement innovative solutions that produce the greatest benefits.

Examples of the policy disconnect between the realities of today's water treatment needs and an antiquated 5-year permitting cycle abound. Project construction timelines can extend more than a decade, as public agencies seek to implement very large clean water infrastructure projects that must meet extensive environmental, tribal, historical and antiquities reviews, not to mention considerations for labor agreements, project design, scheduling and technology acquisition. This means local agencies must expend time and money to prepare for permit renewals even as they try to comply with existing permit requirements. At the same time, State and Federal permitting agencies devote an overwhelming amount of resources to the administrative reviews and approvals necessitated by a constant treadmill of permit applications. The work diverts limited resources away from more pressing issues, such as non-point sources and other water quality improvement programs. Further, the workload can create a permit backlog, leading to administrative extensions that are discouraged by the USEPA and lack certainty for the permitted entity and public alike.

Authority to provide up to 10-year permit terms would facilitate the effective use of limited water quality resources, allowing local agencies and permitting authorities to focus on and address today's water quality needs, which have moved beyond the traditional point sources that were the focus in 1972. This change would benefit local public agencies, States and the public. Local water and wastewater agencies would be afforded adequate time to comply with existing regulatory requirements before the imposition of new ones and could better plan and more efficiently construct new facilities using the latest technology. States could direct more resources to non-point sources and watershed-based solutions. Further, existing permit reopener provisions currently provided for by law would allow new conditions to be addressed in NPDES permits during the 10-year term, if necessary, to protect water quality.

In closing, CASA strongly endorses the Committee's commitment to develop a national infrastructure policy that will propel the Nation to sustained economic growth and improved public health. We look forward to working with the Committee in the coming months on this important matter.

Letter from the Clean Water Council Submitted for the Record by Mr. DeFazio

JANUARY 28, 2019.

Hon. NANCY PELOSI
Speaker of the House, U.S. House of Representatives, Washington, DC.

Hon. MITCH MCCONNELL
Senate Majority Leader, U.S. Senate, Washington, DC.

Hon. KEVIN MCCARTHY
Minority Leader, U.S. House of Representatives, Washington, DC.

Hon. CHARLES E. SCHUMER
Minority Leader, U.S. Senate, Washington, DC.

DEAR CONGRESSIONAL LEADERS,

With the start of the 116th Congress, lawmakers have the opportunity to make a historic investment to rebuild our nation's infrastructure. At the Clean Water Council (CWC), we are a coalition of national organizations representing underground utility construction contractors, design professionals, manufacturers, suppliers, labor representatives, construction materials, and other organizations committed to ensuring a healthy quality of life through sound water infrastructure. Members of the CWC are writing to highlight the significant needs in our nation's underground water infrastructure and to urge you to address these needs in any infrastructure package that Congress considers.

Our nation's underground water infrastructure ensures that Americans have access to clean drinking water, provides businesses with the resources they need to keep our economy moving, and protects our nation's waterways, beaches, and other recreational opportunities. Taken together, well-functioning water infrastructure is indispensable to the health of our country.

Unfortunately, this infrastructure is in serious need of repair. According to the Environmental Protection Agency's (EPA) most recent assessments, $472.6 billion is needed to maintain and improve drinking water systems and $271 billion will be needed for wastewater and stormwater treatment systems over the next twenty years. The American Society of Civil Engineers' (ASCE) report card gives our nation's drinking water and wastewater infrastructure a D and D+, respectively. We see the evidence of these needs through daily stories of broken water pipes and other critical infrastructure failures.

With a renewed interest in infrastructure, Congress has an opportunity to address these challenges in a bipartisan way. Making these investments and improvements to water utilities would have multiple positive benefits.

First and foremost, addressing underground water infrastructure will lead to better public health outcomes. Whether it is preventing harmful pollution from entering our waterways, or protecting against tragedies like lead poisoning, water infrastructure gets the job done. To quantify these impacts, a recent study conducted by the College of William & Mary's Public Policy Program found that a single dollar spent on drinking water infrastructure generates hundreds of dollars in public health benefits.

In addition to health benefits, drinking water and wastewater infrastructure investments also generate economic activity and support high-paying jobs. Sudden Impact, a study previously conducted by the CWC, found that $1 billion invested in water infrastructure has the potential to create 20,003 to 26,669 jobs. Furthermore, a study by the Value of Water Campaign found that jobs and careers in the water infrastructure sector offer an average wage of $63,000 per year, and many of these opportunities are available to individuals with only a high school diploma.

In the 116th Congress, the CWC will be working to highlight these infrastructure needs and how lawmakers can address them. We urge you to include investment in water infrastructure as part of any infrastructure package.

Respectfully,

MEMBERS OF THE CLEAN WATER COUNCIL
AMERICAN CONCRETE PAVEMENT ASSOCIATION
AMERICAN CONCRETE PIPE ASSOCIATION
AMERICAN CONCRETE PRESSURE PIPE ASSOCIATION
AMERICAN COUNCIL OF ENGINEERING COMPANIES
AMERICAN IRON AND STEEL INSTITUTE
AMERICAN PUBLIC WORKS ASSOCIATION
AMERICAN ROAD & TRANSPORTATION BUILDERS ASSOCIATION
AMERICAN SUPPLY ASSOCIATION
ASSOCIATED EQUIPMENT DISTRIBUTORS
DUCTILE IRON PIPE RESEARCH ASSOCIATION
INTERLOCKING CONCRETE PAVEMENT INSTITUTE
INTERNATIONAL UNION OF OPERATING ENGINEERS
NATIONAL ASSOCIATION OF SEWER SERVICE COMPANIES
NATIONAL PRECAST CONCRETE ASSOCIATION
NATIONAL READY MIXED CONCRETE ASSOCIATION
NATIONAL STONE, SAND AND GRAVEL ASSOCIATION
NATIONAL UTILITY CONTRACTORS ASSOCIATION
NULCA—REPRESENTING UTILITY LOCATING PROFESSIONALS
PLASTICS PIPE INSTITUTE
PORTLAND CEMENT ASSOCIATION
WATER & SEWER DISTRIBUTORS OF AMERICA
WATER AND WASTEWATER EQUIPMENT MANUFACTURERS ASSOCIATION

Letter from the Corps Network Submitted for the Record by Mr. DeFazio

FEBRUARY 21, 2019.

Hon. PETER DEFAZIO
Chairman
Hon. SAM GRAVES
Ranking Member
Transportation and Infrastructure Committee, Washington, DC.

DEAR CHAIRMAN DEFAZIO AND RANKING MEMBER GRAVES,

On behalf of the Corps Network, I write with respect to the hearing that occurred on February 7, "The Cost of Doing Nothing: Why Investing in Our Nation's Infrastructure Cannot Wait." Thank you for convening the hearing with the sense of urgency the situation demands and for allowing outside written testimony for the record. As Congress continues researching the extent our national infrastructure needs and works to identify cost-efficient and effective solutions, we ask the Committee to consider the role and value brought forth by the nation's Service and Conservation Corps (Corps).

Corps provide cost-effective project assistance to build and maintain a wide array of natural resource, energy, water, transportation and recreation infrastructure and public works while developing the next generation workforce. With retirements looming in heavy industries, and workforce shortages in these industries already, Corps provide ready-to-work members with the 21st century job skills needed to be successful in the workplace. Corps align with career pathways and credentials in these industries and provide the in-demand hard skills necessary to advance into more skilled careers. Corps are not intended to displace or supplant contractors.

The 135 locally-based Corps of the Corps Network stand-ready to help accomplish a variety of infrastructure projects and represent a hire-American and buy-American philosophy by providing young adults and veterans (Corpsmembers) the opportunity to serve their country through national service and AmeriCorps, advance their education, and obtain in-demand skills and credentials. Serving in crews and individual placements, Corpsmembers perform conservation, infrastructure, wildfire and invasive species remediation, disaster response, recreation, and community development service projects on public lands and in rural and urban communities.

More of these innovative public-private partnerships should be developed, and taxpayer funds could be better leveraged, by prioritizing the use of Corps in an infrastructure package using existing funding to increase access, recreation opportunities, productivity of fish and wildlife habitat, enhance multi-use trials, and address wildfires, backlog maintenance, and historic preservation. Corps already have authority in federal law for these partnerships with DOI, USDA, DOT, and USACE and bring a significant match to these projects as well, making limited federal funds go even further.

Congress has, on numerous occasions, recognized Corps' capacity to prepare diverse youth to succeed in careers in transportation, water and natural resource management, and other related infrastructure fields. Federal precedent to engage Corps already exists:

- 33 U.S.C. 2339 Water Infrastructure Improvements for the Nation Act: Section 1101—Youth Service & Conservation Corps Organizations
- PL 112–141 Moving Ahead for Progress in the 21st Century Act (MAP–21): Section 1524—Use of Youth Service & Conservation Corps
- 42 U.S.C. 12656: Urban Youth Corps
- 16 U.S.C., Chapter 37, Subchapter II: Public Lands Corps

Federal transportation law exempts contracts and cooperative agreements with Corps from Federal-aid highway program contracting requirements under 23 U.S.C. 112. A State or regional transportation planning agency may sole-source contracts and cooperative agreements to Corps for work undertaken for byway, recreational trail, transportation alternatives, bicycle and pedestrian, or Safe Routes to School projects.

For example, the following activities and projects are performed by Corpsmembers on transportation projects:

- Trail construction and maintenance
- Transit workforce development
- CDL and forklift training
- Signage and fencing installation, painting
- Flagger Certification and site management;
- Green Infrastructure installation and maintenance
- Developing pedestrian and bicycle facilities including ensuring compliance with accessibility requirements
- Scenic turn-out and overlook construction
- Trail conversion of abandoned railway corridors
- Historic preservation and rehabilitation of historic transportation facilities
- Environmental mitigation
- Restoration and/or maintainingwildlife connectivity
- Landscaping and streetscaping to complete transportation projects
- Vegetation management

Through an infrastructure package, Corps can be utilized and prioritized on a wide variety of projects sponsored by the following federal agencies in order to better leverage limited taxpayer funds and have the added benefits of developing the next generation infrastructure workforce: Departments of Interior, Agriculture, Transportation, Energy, Housing, and FEMA, US Army Corps of Engineers, NOAA, EPA and the Corporation for National and Community Service.

As Congress considers the multitude of ways to modernize and strengthen our infrastructure to meet the current and future needs, we urge the Committee to consider prioritizing the following:

1. Use a broad definition of infrastructure to encompass natural resources; lands and recreation; disaster resiliency; drought, drinking and waste water; multiuse transportation; and energy efficiency.
2. Include a priority for the use of Corps as in past infrastructure laws for workforce development, national service, and work-based learning opportunities.
3. Include language amending existing agreement authority for Corps to partner with more federal agencies on projects through cooperative agreements (21CSC Act—S.1993 & HR 5114).
4. Ensure public-private partnerships (PPP's) are emphasized with non-profits in addition to investors and businesses.
5. Include AmeriCorps Education Awards tied to infrastructure projects as a method to further in-demand skills development.

As an infrastructure package develops, we respectfully urge you to include Corps as a priority project partner and identify other innovative ways for us to be engaged in improving our nation's infrastructure for all Americans. Thank you for your time and consideration of these issues.

Sincerely,

MARY ELLEN SPRENKEL
President & CEO

CORPS OF THE CORPS NETWORK

NATIONAL & REGIONAL ORGANIZATIONS:

American Conservation Experience AmeriCorps NCCC
Community Training Works, Inc/YACC Conservation Legacy
Greening Youth Foundation
Student Conservation Association (SCA)

ALASKA

Anchorage Park Foundation/YEP
Student Conservation Association (Anchorage Office)

ARIZONA

American Conservation Experience
Arizona Conservation Corps (Flagstaff, Tucson)
Work in State: CCYC (UT); NWYC (OR), RMYC (NM)

ARKANSAS

Cass Job Corps Civilian Conservation Center
Ouachita Job Corps Civilian Conservation Center

CALIFORNIA

AmeriCorps NCCC (Pacific Region)
California Conservation Corps
Civicorps
Conservation Corps of Long Beach
Conservation Corps North Bay
Desert Restoration Corps (SCA)
Fresno EOC Local Conservation Corps
Greater Valley Conservation Corps
Kern Service and Conservation Corps
Los Angeles Conservation Corps
Orange County Conservation Corps
Sacramento Regional Conservation Corps
San Francisco Conservation Corps
San Gabriel Valley Conservation Corps
San Joaquin Regional Conservation Corps
San Jose Conservation Corps & Charter School
Sequoia Community Corps
Sonoma County Youth Ecology Corps
Student Conservation Association (Oakland)
Urban Conservation Corps /S.CA. Mtns Foundation
Urban Corps of San Diego County
Work in State: ACE (AZ); ACC (AZ); NCC (NV); NYC (OR)

COLORADO

AmeriCorps NCCC (Southwest Region)
Collbran Job Corps Civilian Conservation Center
Conservation Legacy (HQ)
Environment for the Americas
Serve Colorado
Larimer County Conservation Corps
Mile High Youth Corps
Rocky Mountain Conservancy
Rocky Mountain Youth Corps (Steamboat Springs)
Southwest Conservation Corps (Four Corners, Los Valles)
Western Colorado Conservation Corps
Work in State: CCYC (UT)

CONNECTICUT

Knox Parks Foundation - Green Crew

DELAWARE

Delaware State Parks Youth Conservation Corps
Delaware State Parks Veterans Conservation Corps

DISTRICT OF COLUMBIA

AmeriCorps National Civilian Community Corps (HQ)
Student Conservation Association (Capital Region)

FLORIDA

Community Training Works, Inc. / Young American CC
Conservation Corps of the Forgotten Coast
Greater Miami Service Corps

GEORGIA

Greening Youth Foundation (HQ)

HAWAII

KUPU/Hawaii Youth Conservation Corps

IDAHO

Centennial Job Corps Civilian Conservation Center
Idaho Conservation Corps
SCA Idaho AmeriCorps
Work in State: MCC (MT); NCC (NV); NYC (OR)

ILLINOIS

Greencorps Chicago
Golconda Job Corps Civilian Conservation Center
Peoria Corps
Student Conservation Association (Chicago)
Youth Conservation Corps, Inc.
YouthBuild Lake County

IOWA

AmeriCorps NCCC (North Central Region)
Conservation Corps Minnesota & Iowa (Ames)

KENTUCKY

Frenchburg Job Corps Civilian Conservation Center
Great Onyx Job Corps Civilian Conservation Center
Pine Knot Job Corps Civilian Conservation Center

LOUISIANA

Limitless Vistas, Inc.
Work in State: AYW (TX)

MAINE

Maine Conservation Corps

MARYLAND

AmeriCorps NCCC (Southwest Region)
Civic Works
Maryland Conservation Corps
Montgomery County Conservation Corps
Work in State: CCCWV (WV)

MASSACHUSETTS

Massachusetts Corps (SCA)

MICHIGAN

Detroit Conservation Corps
Great Lakes Conservation Corps Michigan
Civilian Conservation Corps
Student Conservation Association (Detroit)
SEEDS Youth Conservation Corps
Work in State: CCMI (MN), GLCCC (WI)

MINNESOTA

Conservation Corps Minnesota & Iowa

MISSISSIPPI

CLIMB Community Development Corporation

MISSOURI

Mingo Job Corps Civilian Conservation Center
Work in State: CCMI (MN)

MONTANA

Anaconda Job Corps Civilian Conservation Center

Montana Conservation Corps
Trapper Creek Job Corps Civilian Conserv. Center

NEBRASKA

Pine Ridge Job Corps Civilian Conservation Corps

NEVADA

Nevada Conservation Corps (Great Basin Institute)
Work in State: ACC (AZ)

NEW HAMPSHIRE

New Hampshire Corps (SCA)
Work in State: GMC (VT)

NEW JERSEY

New Jersey Youth Corps of Atlantic Cape May
New Jersey Youth Corps of Camden/The Work Group
New Jersey Youth Corps of Elizabeth
New Jersey Youth Corps of Jersey City
New Jersey Youth Corps of Middlesex County
New Jersey Youth Corps of Monmouth County
New Jersey Youth Corps of Newark
New Jersey Youth Corps of Paterson
New Jersey Youth Corps of Phillipsburg
New Jersey Youth Corps of Trenton
New Jersey Youth Corps of Trenton Isles
New Jersey Youth Corps of Vineland
New York New Jersey Trail Conference
Student Conservation Association (New Jersey)

NEW MEXICO

EcoServants
Rocky Mountain Youth Corps (Taos)
Southwest Conservation Corps (Ancestral Lands)
YouthWorks Santa Fe

NEW YORK

Adirondack Corps (SCA)
Excelsior Conservation Corps Green City Force
Hudson Valley Corps (SCA)
New York City Justice Corps - Bronx
New York City Justice Corps - Brooklyn
New York City Justice Corps - Harlem
New York City Justice Corps - Queens
New York Restoration Project
Onondaga Earth Corps
Student Conservation Association (New York City)
The Place/Headwaters Youth Conservation Corps
The Service Collaborative of WNY, Inc.
Work in State: NYNJTC (NJ)

NORTH CAROLINA

American Conservation Experience
L.B. Johnson Job Corps Civilian Conservation Center
North Carolina Youth Conservation Corps
Northwest Piedmont Service Corps
Oconaluftee Job Corps Civilian Conservation Center
Schenk Job Corps Civilian Conservation Center
Work in State: VYCC (VT), ATCLC (WV)

NORTH DAKOTA

Work in State: CCMI (MN); MCC (MT)

OHIO

WSOS Community Action

OKLAHOMA

Work in State: AYW (TX)

OREGON

Angell Job Corps Civilian Conservation Center
Heart of Oregon
Northwest Youth Corps Oregon Volunteers
Timber Lake Job Corps Civilian Conservation Center
Wolf Creek Job Corps Civilian Conservation Center

PENNSYLVANIA

PowerCorpsPHL
Student Conservation Association (Pittsburg/Philadelphia)

SOUTH CAROLINA

Palmetto Conservation Corps
St. Bernard Project
The Sustainability Institute/Energy Conservation Corps

SOUTH DAKOTA

Boxelder Job Corps Civilian Conservation Center
Work in State: CCMI (MN); MCC (MT)

TENNESSEE

Jacobs Creek Job Corps Civilian Conserv. Center
Knox County CAC AmeriCorps
Southeast Youth Corps

TEXAS

American YouthWorks, incl. Texas Conservation Corps
Student Conservation Association (Houston)
Work in State: Southwest Conservation Corps (CO)

UTAH

American Conservation Experience
Canyon Country Youth Corps
Utah Conservation Corps
Weber Basin Job Corps Civilian Conservation Center
Work in State: ACC (AZ)

VERMONT

Green Mountain Club
Vermont Youth Conservation Corps

VIRGINIA

Flatwoods Job Corps Civilian Conservation Corps
SCA (Student Conservation Association) (HQ)
Virginia Service and Conservation Corps
Virginia State Parks Youth Conservation
Work in State: ATCLC (WV)

WASHINGTON

Columbia Basin Job Corps Civilian Conserv. Center
Curlew Job Corps Civilian Conservation Center
EarthCorps
Fort Simcoe Job Corps Conservation Center
Mt. Adams Institute
Northwest Youth Corps
Student Conservation Association (Seattle)
Washington Conservation Corps
Youth Green Corps - Seattle Parks & Recreation

WEST VIRGINIA

Appalachian Trail Conservancy Leadership Corps
Citizens Conservation Corps
Harpers Ferry Job Corps Civilian Conserv. Center
Stewards Individual Placement Program

WISCONSIN

Blackwell Job Corps Civilian Conservation Center
Fresh Start - ADVOCAP
Fresh Start - Renewal Unlimited, Inc.
Great Lakes Community Conservation Corps

Milwaukee Community Service Corps
Operation Fresh Start
Student Conservation Association (Milwaukee)
WisCorps / Wisconsin Conservation Corps
Work in State: CCMI (MN)

WYOMING

Wyoming Conservation Corps
Work in State: RMYC (CO); MCC (MT); UCC (UT)

Statement of GPS Innovation Alliance and CompTIA Space Enterprise Council Submitted for the Record by Mr. DeFazio

The GPS Innovation Alliance (GPSIA) and the CompTIA Space Enterprise Council jointly submit this statement in support of the Committee's examination of our nation's infrastructure.

America has a history of creating infrastructure milestones that have led to significant prosperity and national advantages. During the 1950s and 1960s, our nation was transformed by explosive growth in its public infrastructure ecosystem. That ecosystem allowed America to prosper by bridging communities and creating regional pockets of innovation. Coupled with the Space Race with the Soviet Union, the 20th century infrastructure ecosystem helped make America a technological superpower.

Now we have the opportunity to create a 21st century national infrastructure that will benefit all Americans. In almost every aspect of our infrastructure ecosystem, the Global Positioning System (GPS), a constellation of satellites located 12,500 miles above the earth, has played an integral role. The three capabilities derived from the constellation are Positioning, Navigation, and Timing. All three play key roles in the infrastructure ecosystem. According to theDepartment of Transportation, Positioning is the ability to accurately and precisely determine one's location and orientation two-dimensionally (or three-dimensionally when required), Navigation is the ability to determine current and desired position (relative or absolute) and apply corrections to course, orientation, and speed to attain a desired position anywhere around the world, from sub-surface to surface and from surface to space. Timing is the ability to acquire and maintain accurate and precise time from a standard (Coordinated Universal Time, or UTC), anywhere in the world and within user-defined timeliness parameters. Similarly, communication satellites provide voice, video, and data supporting aviation, defense, banking, and agriculture.

A 21st century infrastructure ecosystem includes transportation (roads, bridges, ports, and airports), water (public utilities) and energy (electric grid) that is layered by cross-cutting smart technology and enabled by ubiquitous broadband connectivity and sensors. Our infrastructure is urban, suburban, and rural, impacting every single American.

As we invest in our infrastructure, we must take into account emerging technologies for both the physical infrastructure (new durable materials) and the digital tier that makes the physical infrastructure smart. These technologies range from commercial earthmoving and grading equipment that use GPS to digital 3D models that can help streamline the construction process. When we utilize commercially-proven and competitively acquired technologies, we can improve efficiency, productivity and reduce delays associated with the engineering, construction and operation of infrastructure projects. All of this translates into substantial savings, both in terms of new and existing spending.

Whether in the air or on the ground, it is imperative that we invest the resources needed to build a 21st century infrastructure. The status quo of aging bridges and not yet universal broadband connectivity is simply unacceptable. We must aim for American exceptionalism. Our GPS constellation will play a leading role in that exceptionalism. GPSIA and the CompTIA Space Enterprise Council appreciate the opportunity to share this perspective with the Committee and stand ready to work with you on efforts to advance our nation's infrastructure while promoting, protecting, and enhancing GPS and other communication satellites.

Letter from the Great Lakes Metro Chambers Coalition Submitted for the Record by Mr. DeFazio

FEBRUARY 5, 2019.

Hon. PETER DEFAZIO
Chairman, House Committee on Transportation and Infrastructure, U.S House of Representatives, Washington, DC.

CHAIRMAN DEFAZIO:

Congratulations on your critical leadership position. The work you and the members of the House Transportation and Infrastructure Committee will lead will set the stage for important policy discussions regarding America's public transportation and infrastructure.

The Great Lakes Metro Chambers Coalition (GLMCC)—a collective of chambers of commerce that jointly advocate on core Federal policies that impact economic growth and job creation—represents more than 60,000 employers of all sizes. We have worked productively with Administrations and congressional leaders for 10 years on a bi-partisan policy agenda that supports the revitalization of the Great Lakes region.

As your record in Congress demonstrates, business and economic development efforts cannot succeed without a strong transportation and infrastructure network. Our Coalition shares your view that investment in public transportation pays significant economic and societal benefits. Research from Transportation for America shows that every dollar invested in public transportation generates a fourfold multiplier in benefit. As the nation's manufacturing and logistics powerhouse, these transportation investments are particularly important to the Great Lakes region and directly impact the national economy.

The GLMCC shares the following priorities that are important for the Great Lakes and have tremendous national impact:

- Direct Federal spending for transformative infrastructure and transportation projects across the Great Lakes region. This funding should allow for innovation and flexibility in how regions deploy transportation and infrastructure investments in order to advance regional priorities.
- Maintain the Poe Lock and build a second Poe-sized lock at the Soo Locks, the only channel for shipping commodities into and out of Lake Superior.
- Prioritize investments for the Great Lakes in the Water Resources Development Act.
- Mandate full use of the Harbor Maintenance Tax revenue for the Army Corps of Engineers' operational and maintenance activities. This is critically important for the Great Lakes as funds support the dredging of harbors, maintenance of breakwaters and the operation of the Soo Locks.

We also support several national policies that are important to transportation and infrastructure. These include full funding for the Capital Investment Grants (CIG) and Better Utilizing Investments to Leverage Development (BUILD) programs; fixing the Highway Trust Fund, a critically important program that is suffering from a structural revenue deficit; and advancing critically needed legislation to support the testing and development of autonomous vehicle technology and "Smart Cities" that will drive our economic future.

Thank you for your leadership on these important issues. We stand ready to work with you and the Committee to make progress toward these shared priorities.

Respectfully,

DOTTIE GALLAGHER,
President & CEO, Buffalo Niagara Partnership.

JOE ROMAN,
President & CEO, Greater Cleveland Partnership.

SANDY K. BARUAH,
President & CEO, Detroit Regional Chamber.

MATT SMITH,
President, Greater Pittsburgh Chamber of Commerce.

Letter from Healing Our Waters-Great Lakes Coalition Submitted for the Record by Mr. DeFazio

FEBRUARY 6, 2018.

Hon. PETER DEFAZIO
Chairman, Committee on Transportation and Infrastructure, U.S. House of Representatives, Washington, DC.

Hon. SAM GRAVES
Ranking Member, Committee on Transportation and Infrastructure, U.S. House of Representatives, Washington, DC.

DEAR CHAIRMAN DEFAZIO AND RANKING MEMBER GRAVES:

On behalf of the Healing Our Waters-Great Lakes Coalition, I write to thank you for holding a hearing on the impacts of not investing in our nation's infrastructure. We appreciate the committee making this a priority and support action for fixing our drinking water, wastewater, and stormwater infrastructure.

Communities across the Great Lakes region continue to grapple with crumbling, antiquated water infrastructure. A staggering $179 billion over the next 20 years is needed in improvements, upgrades, and repairs in the eight-state region of Minnesota, Wisconsin, Illinois, Indiana, Michigan, Ohio, Pennsylvania, and New York. Federal programs provide much-needed funding to help communities meet their clean water goals.

Congressional investment is vital so people in the Great Lakes do not foot the entire bill for these expensive, but necessary, water infrastructure upgrades. From 2010 to 2017, water costs increased 41 percent across the country. While water rates rise for consumers, federal funding for water infrastructure has dropped significantly since 1977. According to the U.S. Water Alliance, in that year investments from the federal government made up 63 percent of total spending on water infrastructure. By 2014, the federal government's contribution dropped to 9 percent.

Some communities simply cannot afford to bear the full weight of financing these expensive upgrades. Higher water rates, which are frequently a solution to covering infrastructure improvements at the local level, do not work for families that already cannot pay their water bills and face water shutoffs that jeopardize their health and the health of their children. Many communities, like Flint and Milwaukee, are living with lead in their drinking water, while other urban and rural communities are facing polluted farm runoff that contaminates ground water. The cost of not fixing our water infrastructure is being borne right now by people in communities around the Great Lakes.

The federal government can help, which is why we support Congress passing an infrastructure bill that includes robust support for fixing our region's drinking water, wastewater, and stormwater infrastructure. We ask Congress to:

- At least triple the funding for wastewater and stormwater improvements through the Clean Water and Drinking Water State Revolving Funds, to at least $5.1 billion and at least $3.5 billion respectively.
- Ensure that infrastructure funding supports nature-based solutions such as restoring wetlands, building rain gardens, and installing permeable roads and sidewalks-solutions that prevent problems before they become more serious, while enhancing climate resilience.
- Incorporate measures to ensure people can afford their water, such as providing more flexible financing options like grants for disadvantaged communities; supporting and creating programs like those in last year's Low Income Sewer and Water Assistance Program Act that help low-income households pay their water bills; providing incentives for utilities to adopt more equitable water and sewer rate structures; and ensuring funding is invested in communities in ways that empower and build those communities through job training and long-term employment.
- Preserve and strengthen source water protections that also help reduce runoff, support fish and wildlife, and provide recreational opportunities.
- Ensure that infrastructure legislation does not undermine or weaken environmental protections.

Investments in our region are paying off but there is much more to be done. The federal government needs to be a partner with our communities to help them meet their clean water goals. We have solutions; it is time to use them. Delay will only make the problems worse and costlier to solve.

Thank you again for your hearing highlighting an issue that affects the drinking water for 35 million Americans in the Great Lakes region. If you have any questions, please contact me.

Sincerely,

CHAD LORD,
Policy Director.

Photo credit: Jim Wasley

Communities across Great Lakes region continue to grapple with crumbling, antiquated drinking water and waste water infrastructure. A staggering $179 billion over the next 20 years is needed in improvements, upgrades, and repairs in the eight-state region of Minnesota, Wisconsin, Illinois, Indiana, Michigan, Ohio, Pennsylvania, and New York. Federal programs provide much needed funding to help communities meet their clean water goals.

The Healing Our Waters-Great Lakes Coalition asks the U.S. Congress to:

- At least double the funding for wastewater, drinking water, and stormwater infrastructure in rural, urban, and suburban communities through the Clean Water or Drinking Water State Revolving Funds and through new and innovative funding sources.
- Ensure that infrastructure funding supports nature-based solutions that prevent problems before they become more serious and that enhance climate resilience. Funding should include a 15 percent set-aside for projects that incorporate nature-based infrastructure.
- Incorporate measures to ensure the affordability of clean water, such as providing more flexible financing options like grants for disadvantaged communities; support for programs like those in HR 2328, the Low Income Sewer and Water Assistance Program Act that help low-income households pay their water bills; and provide incentives for utilities to adopt more equitable water and sewer rate structures.
- Ensure that infrastructure legislation does not undermine or weaken environmental protections.
- Preserve and strengthen source water protections that also help reduce runoff, support fish and wildlife, and provide recreational opportunities.

The Great Lakes provide drinking water for more than 30 million people. They are the foundation of our economy and our way of life. Unfortunately, the lakes face serious threats. Repairing old infrastructure is a large undertaking—and expensive. Paying for these projects often falls on communities that cannot afford it, underscoring the importance of financial support from the federal government.

Photo credit: iStockPhoto

$179 BILLION OVER 20 YEARS NEEDED TO FIX WATER INFRASTRUCTURE

A survey of infrastructure investment needed in the nation shows that the Great Lakes region alone requires $179 billion over the next 20 years to repair and replace our wastewater and drinking water infrastructure. (Figure 1.)

CRUMBLING INFRASTRUCTURE CAUSES WATER RATES TO RISE

People in the Great Lakes region must foot the bill for these expensive, but necessary, water infrastructure upgrades. From 2010 to 2017, water costs increased 41 percent across the country.[1] At the same time, federalfunding for water infrastructure dropped significantly since 1977. In that year, investments from the federal government made up 63 percent of total spending on water infrastructure. By 2014, the federal government's contribution had dropped to 9 percent. In some communities, when individuals cannot pay their water bills they face water shutoffs, which jeopardize their health and the health of their children.[2]

THREATS TO DRINKING WATER PERSIST IN COMMUNITIES

Old, leaky pipes waste 6 billion gallons of clean drinking water every day at a time when many families are struggling to afford their bills.[3] Rural and urban communities still face threats: many communities, including Flint, Milwaukee, and others are living with lead in their drinking water, and in many others polluted farm runoff contaminates ground water.

Figure 1: Great Lakes Region Infrastructure Investment Needs

	Wastewater Infrastructure Need over 20 Years [4]	Drinking Water Infrastructure Need over 20 Years [5]	Total Infrastructure Need over 20 Years
Illinois	$6.537 billion	$18.985 billion	$25.913 billion
Indiana	$7.162 billion	$6.547 billion	$13.843 billion
Michigan	$2.077 billion	$13.814 billion	$16.175 billion
Minnesota	$2.389 billion	$7.363 billion	$9.903 billion
New York	$31.439 billion	$22.041 billion	$53.936 billion
Ohio	$14.587 billion	$12.191 billion	$27.030 billion
Pennsylvania	$6.950 billion	$14.227 billion	$21.471 billion
Wisconsin	$6.329 billion	$7.141 billion	$13.616 billion
Total Regional Need	$77.470 billion	$102.289 billion	$179.759 billion

SEWAGE POLLUTES THE GREAT LAKES, HARMING OUR WAY OF LIFE

Sewage overflows during heavy rains are still a reality in the Great Lakes region with tens of billions of gallons of sewage entering the lakes each year. As a result,

[1] Mack, E.A., and S. Wrase. "A Burgeoning Crisis? A Nationwide Assessment of the Geography of Water Affordability in the United States." PLOS ONE. Jan 11, 2017.

[2] U.S. Water Alliance. 2017. "An Equitable Water Future: A National Briefing Paper" P. 12.

[3] American Society of Civil Engineers 2017 "Infrastructure Report Card" https://www.infrastructurereportcard.org/wp-content/uploads/2017/01/Drinking-Water-Final.pdf

[4] U.S. E.P.A. 2016. "Clean Watersheds Needs Survey 2012: Report to Congress." Pp. A-1–A-2. https://www.epa.gov/sites/production/files/2015-12/documents/cwns__2012__report__to__congress-508-opt.pdf

[5] U.S. E.P.A. 2013. "Drinking Water Infrastructure Needs Survey and Assessment: Fifth Report to Congress." P. 19. https://www.epa.gov/sites/production/files/2015-07/documents/epa816r13006.pdf

beaches are closed and public health is threatened. Our quality of life is undermined when our Great Lakes are polluted.

FEDERAL INVESTMENTS KEY TO HELPING COMMUNITIES PROTECT CLEAN WATER

Sewage overflows can be prevented. Crumbling pipes can be replaced. Outdated facilities can be updated. But each of these projects costs money—often more money than communities alone can afford. Federal programs like the Clean Water and Drinking Water State Revolving Funds can help communities offset the cost of these needed investments in wastewater and drinking water infrastructure. Both offer low-interest loans to communities to address these costly infrastructure challenges. Funding levels have not kept pace with need, and Congress should take steps to make these investments a priority.

NATURE-BASED SOLUTIONS CAN SAVE COMMUNITIES MONEY

Not all investments need to be in restoring traditional infrastructure. Nature-based solutions including the construction of rain gardens, planting of trees, and restoration of wetlands can help absorb and filter rain water before it overwhelms outdated systems. This reduces the burden on traditional water infrastructure and saves communities money.

CONGRESS NEEDS TO ACT

Investments in the region are paying off—but much more needs to be done. The U.S. Congress needs to do its fair share to help local communities meet their clean water goals. We have solutions. It's time to use them. Delay will only make the problems worse and more costly to solve.

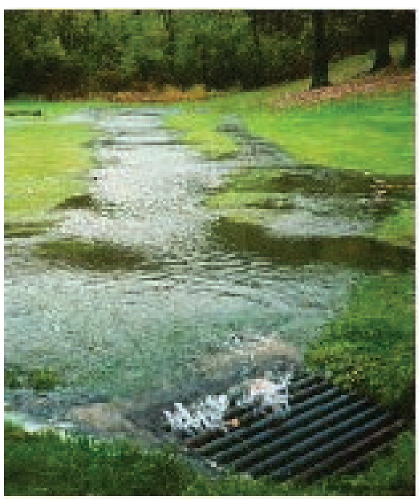


Photo credit: James M. Pease at commons.Wikimdia.org (Left) Cleveland Metroparks (Right)

Photo credit: Kari Lydersen

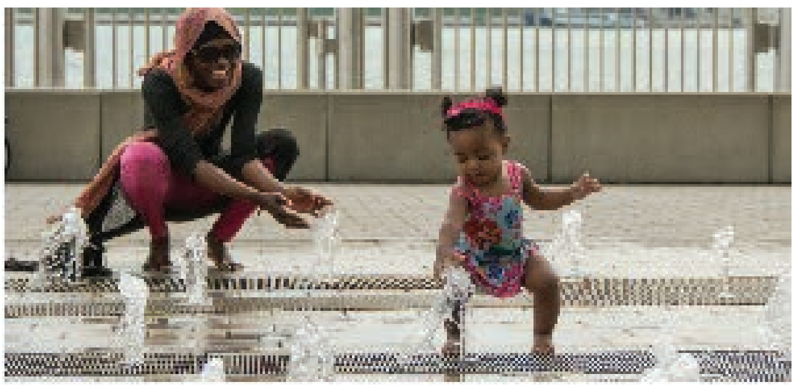


Photo credit: Donna Kert

THE HEALING OUR WATERS—GREAT LAKES COALITION

We are more than 150 local and national organizations representing the interests of business, agriculture, and outdoor recreation; local counties, cities, towns, and neighborhoods; and the environment, zoos, aquariums, and museums. Learn more at healthylakes.org. Follow us on Twitter @healthylakes.

Statement of the National Association of Small Trucking Companies Submitted for the Record by Mr. Babin

Chairman DeFazio, Ranking Member Graves, and members of the Committee on Transportation and Infrastructure, the National Association of Small Trucking Companies (NASTC) appreciates the committee's early focus on infrastructure. NASTC is pleased to share our views on the subject of your February 7 hearing.

NASTC is a member-based organization whose more than 10,000 member companies range from a single or two or three power units to more than 100 power units; however, our members average 16 power units. These companies for the most part operate in the long-haul, over-the-road, full-truckload, for-hire sector of interstate trucking. NASTC's members come from the largest segment of America's long-haul trucking—they are small motor carrier businesses. Thus, they are representative of the vast majority of our nation's commercial motor carriers, the roughly 440,000 having fewer than 100 power units, in contrast to the 1,441 megafleet carriers with more than 100 units.

NASTC appreciates the need to fix, maintain, and build new highways and bridges, and we acknowledge the logjam over how to fund this undertaking. We confine our comments to surface transportation infrastructure and the Highway Trust Fund, rather than speak to aviation, water, and other types of infrastructure.

NASTC is eager to play a constructive role in efforts to achieve the best interests of our country, the shipping and traveling public, and commercial motor carriers.

To begin, NASTC believes that all Americans benefit from having sound, safe roads and bridges. Assuring their maintenance is in the public interest. Thus, all users of federal highways, including electric and hybrid vehicles and bicycles, should help fund their construction and upkeep.

The fact that the federal fuel tax has not risen in more than 25 years directly contributes to the state of our infrastructure and the tenuous status of the Highway Trust Fund. The segments of highways and bridges in need of repair have steadily grown, due both to increased traffic volume and political failure to keep the "trust" in the trust fund. The 1990s fuel tax level's inadequacy two decades into the 21st century is compounded by allowing nonhighway use of HTF monies. It is unfair to drain limited user fee revenues (i.e. fuel tax monies) for superfluous uses that may be nice to have, but unrelated to ensuring safe roads and bridges for their users. It is imperative first and foremost to ensure that the Highway Trust Fund is solvent and that its funds are not unduly diverted.

The straightforward solution would be to phase in an increase in the federal fuel tax, along with indexing it for inflation. NASTC has generally been willing to go along with a phased-in increase in the federal fuel tax. However, we insist on certain conditions in exchange for lending our support to a fuel tax increase. This is because higher taxes hit small trucking hardest.

The first condition is ceasing to spend gas tax funds on things other than highways and bridges. The user-fee model represented by the federal fuel tax is the most efficient, fairest, and least costly to administer approach. Congress should recommit to the user-fee nature of the federal fuel tax.

Second, prioritization must become a top priority. Over time, HTF monies have been tapped for noninfrastructure purposes, such as mass transit, bike paths, and walking trails. These growing nonhighway uses have bled 20 percent of trust fund monies. They are not necessarily unworthy things, but they directly deprive core highway infrastructure needs that directly bear upon road safety from being met. NASTC urges that HTF priority return to federal roads and bridges, along with prioritizing highway projects in the greatest need of repair. Otherwise, lawmakers will owe an explanation to average truck drivers why the higher fuel taxes they now pay go toward projects unrelated to highways.

Third, any fuel tax increase must be fair to commercial carriers. The combination of taxes and user fees at all levels of government are borne most heavily by motor carriers. Commercial vehicles pay a much higher tax per gallon than do private cars (one-third higher at the federal level alone). Small trucking in particular is hardest hit by these taxes, which hurt their ability to hire and retain experienced drivers in rural areas. Thus, every dollar in taxes and fees undermines small carriers' competitive advantage against large fleets that churn through far less experienced drivers.

It would be unfair to raise fuel taxes and fees on commercial carriers alone. Thus, equalizing and phasing in both gasoline and diesel taxes by a few cents over a few years would achieve parity, without inflicting undue hardship. In NASTC's view, all users of our highways and roads should pay for their upkeep, and so any increase in fuel taxes should be equally shared by all types of highway users—including electric, LNG, and hybrid vehicles. A surcharge for vehicles with alternative fuel sources would be equitable.

Fourth, a significant cost factor of highway construction and maintenance comes from permitting and environmental review requirements that can delay a decision on a project by several years. Streamlined clearance and approvals would achieve significant savings and make our roads and bridges safer. Such reasonable, responsible reforms must be part of any infrastructure bill.

Fifth, NASTC opposes novel taxation methods. Taxpayers have paid for federal highways already. The driving public, particularly trucking, continues to pay for those roads' maintenance through fuel taxes and should not be subjected to multiple means of taxation going toward the same services. Inefficient, costly alternatives such as tolls and VMT fall most onerously on small motor carriers and small businesses, which is not only unfair but counterproductive to the economy.

Vehicle-miles-traveled taxation lacks transparency and is unduly intrusive, potentially encroaching on citizens' rights and enabling abuse. In order to use VMT, the government would necessarily have to track everyone's movement at all times, whether moving or stationary. This degree of intrusion would very likely face constitutional challenge.

Public-private partnerships for highways and infrastructure equate to tolling. NASTC has long opposed tolling our highways, particularly levying tolls on existing roadways. Tolling is often not cost-effective and involves outsourcing taxation to private entities that are unaccountable to those taxed. Thus, public officials are insulated, taxpayers are subject to those they cannot hold to account, and private entities, including foreign-based firms, gain undue, improper powers, including the ability to tax and spend. PPPs must be limited to nonroad projects and that minimize the above discussed risks.

Failure to put the Highway Trust Fund on solid footing would leave the nation's ailing infrastructure in a precarious condition and American drivers at greater risk to their safety. NASTC applauds Congress's and the Trump administration's serious attention being paid to highway infrastructure, and we look forward to participating in this process.

Letter from the National League of Cities Submitted for the Record by Mr. DeFazio

JANUARY 28, 2019.

Hon. NANCY PELOSI
Speaker, U.S. House of Representatives, Washington, DC.

Hon. MITCH MCCONNELL
Majority Leader, U.S. Senate, Washington, DC.

Hon. KEVIN MCCARTHY
Minority Leader, U.S. House of Representatives, Washington, DC.

Hon. CHARLES E. SCHUMER
Minority Leader, U.S. Senate, Washington, DC.

DEAR SPEAKER PELOSI, MAJORITY LEADER MCCONNELL, MINORITY LEADER SCHUMER AND MINORITY LEADER MCCARTHY:

As we emerge from this extended shutdown and return to a working, stable Federal Government, the National League of Cities is calling on Congress to not repeat this crisis and to double-down on efforts to address one of our country's most pressing challenges—rebuilding America's infrastructure. For our economy and for our future, America's cities, towns and villages call on our Federal leaders to come together in a bipartisan way to pass comprehensive legislation that rebuilds and reimagines America's infrastructure.

Infrastructure investments are the foundation that connects us as a country, improves the quality of life for our residents, supports jobs for thousands of workers, strengthens our nation's economic competitiveness, and keeps our communities safe. Unfortunately, the Federal partnership for infrastructure investments has eroded over the last two decades, putting America at risk of falling behind on an ever-increasing list of potential hazards that undermine our economy and threaten our standard of living. Today, our transportation network is a knot of congestion and disrepair, our broadband lags behind other countries and families drink from bottled water in the absence of safe tap water. Moving a bipartisan infrastructure package would demonstrate to the country that Congress is focused on delivering results that will improve the daily lives of our constituents.

Cities will continue doing our share, but it is time for Congress to act and rebuild with us. Across the country, much of our infrastructure is at a breaking point. We need a strong Federal-local partnership to upgrade the 100-year old leaking pipes, to replace the 50-year old crumbling bridges and to install modern and resilient solutions for the next 100 years.

Congress must prioritize a long-term infrastructure plan early in 2019 that will work holistically to improve our nation's water, broadband, and transportation systems and create well-paying jobs for our nation's workforce that will build and maintain these important assets.

As leaders of our cities and the National League of Cities, we are standing strong together with the 19,000 cities, towns and villages across the country to ensure that the Federal Government understands that infrastructure is our shared priority in 2019. We look forward to working with Congress to quickly move beyond the shutdown and prioritize crafting a comprehensive, bipartisan infrastructure plan that partners with cities like ours and invests in our vision to rebuild and reimagine our nation's infrastructure. We look forward to meeting with you soon to discuss how we can work together.

Sincerely,

KAREN FREEMAN-WILSON,
Mayor, Gary, IN,
President, National League of Cities.
KATHY MANESS,
Councilmember, Lexington, SC,
Second Vice President, National League of Cities.
CLARENCE E. ANTHONY,
CEO and Executive Director, National League of Cities.
JOE BUSCAINO,
Councilmember, Los Angeles, CA,
First Vice President, National League of Cities.
MATT ZONE,
Councilmember, Cleveland, OH,
Immediate Past President, National League of Cities.

Statement of the National Parks Second Century Action Coalition Submitted for the Record by Mr. DeFazio

We, the members of the National Parks Second Century Action Coalition[1] request that the following statement be submitted to the record for the hearing, The Cost of Doing Nothing, held on Thursday, February 7, 2019

For more than a century, our national parks have remained America's favorite places, important pieces of our natural, historical and cultural heritage set aside for future generations to explore and enjoy. But as record crowds enjoy our national parks, they find the facilities in the parks have become worn and inadequate to meet the demand.

The cost of doing nothing to update and maintain the infrastructure at our national parks over the decades is now $11.6 billion and rising. We are not talking about cyclical repairs that parks attend to constantly, but the more serious repairs that have been awaiting action for more than a year because of inadequate funding. The National Park System is the poster child of what happens when nothing or not enough is done to maintain infrastructure.

INFRASTRUCTURE REPAIR CHALLENGES FACING OUR NATIONAL PARKS

Not surprisingly, the National Park System, second only to the Department of Defense in the amount of federal infrastructure it manages, is a microcosm of the larger infrastructure revitalization challenge facing the U.S. Needed repairs range from deteriorating water systems to crumbling roads and trails to antiquated visitor centers that are in desperate need of updating.

In total, the agency is responsible for protecting and managing over 75,000 assets which include roads and bridges, trails, historic buildings, employee housing, wastewater and electrical systems, military fortifications, monuments and memorials, and seawalls. Nearly 40% of the 10,000 miles of park roads are in poor to fair condition. Some repairs would cost just a few thousand dollars to fix, while others could cost hundreds of millions of dollars. The 11.6 billion maintenance backlog has been summarized by the National Park Service in the following chart.

[1] The National Parks Second Century Action Coalition is made up of organizations supporting conservation, recreation, outdoor industry, travel and tourism and historic preservation that are dedicated to promoting the protection, restoration, and enjoyment of the National Park System for the long-term benefit it offers our nation.

NATIONAL PARK SERVICE ASSET INVENTORY

Asset Category	Number of Asset Locations	Critical Systems Deferred Maintenance	Deferred Maintenance	Current Replacement Value
Buildings	24,879	$680,836,286	$2,059,805,808	$22,777,514,643
Housing	3,870	$68,759,391	$181,619,412	$1,690,237,051
Campgrounds	1,388	$16,428,505	$75,771,964	$723,503,131
Trails	6,260	$222,521,243	$462,205,902	$4,860,375,991
Waste Water Systems	1,887	$159,431,258	$270,602,289	$2,036,481,323
Water Systems	1,529	$248,142,046	$420,456,287	$3,813,853,022
Unpaved Roads	5,534	$74,137,380	$209,115,006	$3,118,914,261
Paved Roads	11,978	N/A	$5,900,394,123	$26,940,518,097
All Other	18,557	$1,114,081,046	$2,026,809,602	$90,255,127,651
TOTAL	**75,882**	**$2,584,337,154**	**$11,606,780,393**	**$156,216,525,170**

Critical Systems Deferred Maintenance—The cost of critical or serious deferred maintenance located in critcal asset components. This figure is currently unavailable for the Paved Roads category.
Deferred Maintenance—The cost of maintenance and repairs that were not performed when they should have been or were scheduled to be and which are put off or delayed for a future period.
Source: https://www.nps.gov/subjects/infrastructure/upload/FY17-asset-inventory-Summary-AIS-Servicewide__Report__508-3.pdf

While not a specific category, the list of deferred maintenance needs also includes the thousands of historic structures that tell the stories of this country's cultural heritage. Whereas roads and water systems can be replaced, other infrastructure like historical buildings cannot. Thus, it is especially critical that any infrastructure revitalization plan addresses the needs of these special facilities.

EXAMPLES OF DEFERRED MAINTENANCE:

- *Mount Rainier National Park (Washington)*: Trails in Mount Rainier National Park are heavily used by visitors and are in dire need of upkeep. Without maintenance funding, the park uses recreation fees to complete critical projects and address unexpected needs but is unable to tackle the larger projects and complete critical assessments. The price tag for trail rehabilitation totals more than $10 million for the park.
- *Denali National Park Road (Alaska)*: Among Denali's most pressing needs is maintenance on the 92-mile Denali Park Road that is the only way to access the heart of the park. The park and preserve's buildings also need repair, including the Denali Park Kennel, which houses the only sled dogs in the National Park System. It is estimated to cost $32 million for these repairs.
- *Mesa Verde National Park (Colorado)*: Over $6 million is needed to rehabilitate historic buildings in the Chapin Mesa National Historic Landmark District at Mesa Verde National Park.
- *Grand Canyon National Park (Arizona)*: At a stunning cost of $120 million, the deferred costs of the Grand Canyon's drinking water systems are a symbol of decaying national park infrastructure. The Grand Canyon is in the middle of the desert, which required the monumental project of the Trans-Canyon Pipeline to be built in the 1960's. However, the pipeline is well past its thirty-year design life, has up to thirty leaks per year, and requires an entire replacement. Along with this, a water reclamation system of over a million dollars is needed.
- *Kalaupapa National Historical Park (Hawaii)*: Kalaupapa National Historical Park tells the story of Hawaiians banished by King Kamehameha V to the north shore of Molokai for contracting leprosy. Over $7 million is needed to replace historic buildings.
- *Yellowstone National Park (Wyoming and Montana)*: For the past three decades the National Park Service has been working to upgrade the park's 254-mile Grand Loop and entrance roads from 1940's standards that are woefully inadequate for modern day tour busses and recreational vehicles. Due to insufficient funding, only half of the loop and entrance roads have been reconstructed. To complete upgrading of the remainder of the roads in the park will cost anywhere from $800 million to $1.2 billion because the most challenging stretches of road remain to be rebuilt. At the current pace of funding it will take more than 75 years to complete the work.
- *Yosemite National Park (California)*: Yosemite National Park is home to some of our country's most breathtaking cliffs, domes and waterfalls. However, the park suffers from $582 million in needed repairs. For example, more than $20 million is needed to rehabilitate trails including the Yosemite Bike Path, the Stubblefield Canyon Trail, and the Clark Point Spur, a path that leads to the famous Vernal Fall.

- *Golden Gate National Recreation Area (California)*: Golden Gate National Recreation Area will require $9.5 million in wastewater treatment repairs to remedy all problems. The systems of the Marin Headlands and Fort Mason are some of the most expensive projects to be undertaken. Current repairs, such as the Muir Woods Water and Wastewater Service Rehabilitation project, have been stuck in the planning stage due to the lack of funding.
- *Appalachian National Scenic Trail (Maine to Georgia)*: The world's longest contiguous footpath is conservatively estimated to have a $20 million backlog. More than 6,000 volunteers currently maintain the 2,200-mile Trail, contributing 250,000 annual hours of mostly physical work, saving the U.S. government more $6 million each year. Still, funding is needed to support volunteer work, complete major deferred projects and cover expenses for materials.

FIXING NATIONAL PARK INFRASTRUCTURE IS GOOD FOR THE ECONOMY

National parks are an important part of the tourism economy and extremely popular with Americans. National parks received more than 331 million visits in 2017, that generated $35 billion for the U.S. economy. For every dollar Congress invests in the National Park Service, $10 is returned to the American economy, with much of that money directly benefiting parks' gateway communities. With national parks supporting nearly 300,000 private-sector jobs annually, these economic engines are worthy of a robust infrastructure investment in 2019 and beyond. Facilities in good repair improve visitor safety and are attractive to the public thus enhancing the economies of the many local communities that surround them.

CONCLUSION

For too long, the national parks have been undergoing infrastructure decline. The cost of doing nothing to fix the infrastructure in our national parks is the gradual loss of our natural and cultural heritage and the ability of the American public to enjoy and be inspired by it as preserved in our national parks. For much of the infrastructure of the parks, however, it will not be enough to restore it to its previous condition, but it will be important to make park infrastructure resilient to a changing climate. In addition, the NPS should continue to develop innovative, cost-effective and sustainable strategies for managing its assets.

1882 Project Foundation
American Society of Landscape Architects
Appalachian Trail Conservancy
Chinese American Citizens Alliance DC
Coalition to Protect America's National Parks
Evangelical Environmental Network
Friends of Acadia
Friends of Dyke Marsh
Mount Rushmore Society
National Park Hospitality Association
National Parks Conservation Association
National Tour Association
RV Industry Association
St. Croix River Association
Scenic America
United States Tour Operators Association
Western States Tourism Policy Council

Statement of the North American Concrete Alliance Submitted for the Record by Mr. DeFazio

Chairman DeFazio, Ranking Member Graves, and distinguished members of House Transportation and Infrastructure Committee, it is our pleasure and privilege to present written testimony on the timely and vitally important topic of investing in our nation's infrastructure.

The North American Concrete Alliance is a coalition of 12 concrete-related national trade associations, including the American Concrete Pavement Association, the American Concrete Pipe Association, the American Concrete Pressure Pipe Association, the American Concrete Pumping Association, the Concrete Reinforcing Steel Institute, the Concrete Foundations Association, the National Concrete Masonry Association, the National Precast Concrete Association, the National Ready Mixed Concrete Association, the Portland Cement Association, the Precast/Pre-stressed

Concrete Institute, and the Tilt-Up Concrete Association. Our members are involved in the construction of highways, airports, bridges, buildings, and underground infrastructure.

Our testimony will focus on the needed investment in the Nation's Federal-aid highways, airports, ports and water infrastructure, and the growing need to prioritize the resiliency of our infrastructure.

Our Nation's infrastructure is the backbone of commerce; personal mobility; and the safety, security and quality of life for our citizens. Highways, airports, bridges, ports, and water infrastructure do more than transporting people from one point to the next and products from market to consumers. They also define us and all developed nations in terms of our global competitiveness and our standing on the world stage of macroeconomics, politics, and military might. It is accurate to say that no civilization was ever built or endured with failing infrastructure.

For many years, investment levels in our Nation's surface transportation infrastructure have fallen short of the needs defined by the Government Accountability Office, transportation and transportation-construction advocacy groups and others. State highway transportation agencies and communities across the county are challenged to do more with less, and with inadequate funding available, many local governments and agencies are left with few options other than to "band-aid" existing highways, roads and bridges. Funding challenges resulted in wide-spread reports of highways and bridges falling into disrepair.

In response, many States raised excise taxes on fuel to cope with the insufficient funding, 27 States have raised or reformed gas taxes since 2013.[1] This increase in funding at the State level has ameliorated the situation somewhat, but funding levels are still insufficient to meet the current needs, let alone meet the future demands on our network of highways and bridges. We now stand at the junction of the past, present, and future, and for those and many other reasons, investment in America's infrastructure cannot wait. To meet the current and future needs, we must invest now and we must invest sufficiently to keep pace with the expected population increase of 70 million people expected by 2045.[2] This is essential to meeting not only the increase in population, but also the associated increase in vehicle traffic, freight loadings, and the proliferation of technologies either placed into pavements or on highway, bridge, and airfield appurtenances.

According to a recently published study[3] commissioned by Congress in the FAST Act, and sponsored by the National Academies of Sciences (NAS) and Federal Highway Administration, our Nation has lived off the fruits of previous investments made five to six decades ago. "Many of the Interstate pavements built in the 1950's and 1960's were designed for 20-year service lives but have been in use for more than 50 years without reconstruction of their foundations." The report continues that "even the majority of the newest Interstate segments, constructed in the 1980's and 1990's, will need to be rebuilt in the next 20 years." We must rebuild the system's pavements, bridges, and other assets before they become unserviceable and less safe, the report states.

We must be more open to funding alternatives to support adequate investment. The NAS study says, "Recent combined State and Federal capital spending on the Interstates has been $20 to $25 billion annually." The study says, "The total State and Federal spending needed to renew and modernize the Interstates over the next 20 years averages $45 to $70 billion per year," or more than two-to three-times current spending levels. Not factored into these estimates, the NAS report says, are the critical needs to reconfigure and/or reconstruct many of the system's approximately 15,000 interchanges; the critical need to make the system more resilient to the effects of climate change; expanding and allocating system capacity more efficiently in and around metropolitan areas; and "rightsizing" the length and scope of the systems through extensions and replacements of some controversial urban segments that do not serve through-traffic.

Congress must take the important step of increasing Federal investment in surface transportation. The 27 States that enacted gas tax reforms have dispelled the long-standing myth that a gas tax increase is a non-starter because of the possible

[1] "Most States Have Raised Gas Taxes in Recent Years," JUST TAXES BLOG, The Institute on Taxation and Economic Policy, May 22, 2018. https://itep.org/most-states-have-raised-gas-taxes-in-recent-years/.

[2] "Beyond Traffic: 2045 Final Report," U.S. Department of Transportation, Washington, DC. https://www.transportation.gov/policy-initiatives/beyond-traffic-2045-final-report.

[3] "Renewing the National Commitment to the Interstate Highway System: A Foundation for the Future," (TRB Special Report 329), ©2019, National Academy of Sciences, Washington, DC. https://www.nap.edu/catalog/25334/renewing-the-national-commitment-to-the-interstate-highway-system-a-foundation-for-the-future

political fallout. In fact, user-based options are among those recommended by the NAS report which cites three possible options:

- Increasing motor fuel taxes and other existing Federal user fees;
- Allowing States and metro areas to toll existing general-purpose Interstate highways; and
- Instituting mileage-based user fees.

The vast network of highways and bridges are a national treasure, but will only remain so if bold leadership, unwavering determination, and true bipartisan support prevail. The status quo of deferring and not prioritizing infrastructure investment; depleting the Highway Trust Fund; and not implementing funding alternatives that are in lock-step with technology and alternative fuels can no longer sustain the needs of our transportation network.

Not only does the nation's surface transportation system face a backlog in maintenance, America's airports have nearly $100 billion in infrastructure needs to accommodate the anticipated growth in passenger and cargo activity as well as to rehabilitate existing facilities. The annualized needs of approximately $20 billion, over the 5-year authorization of the Federal Aviation Administration (FAA) passed last year, for the nation's airport is greater than the funding available through airport generated net income, Airport Improvement Program grants and passenger facility charge revenue. These funding options have not been updated in 20 years. It is time to modernize the passenger facility charge and continue a robust Airport Improvement Program as a way to address the demands our airports are facing. Updating airport-funding options will give airports and their communities' access to the resources to address their unique needs.

It is also critical for an infrastructure bill to invest in our water infrastructure, including ports, locks and dams, and wastewater infrastructure. A critical part of ensuring the efficient movement of goods is the efficient operation and maintenance of the Nation's ports. At our 59 busiest ports, fully dredged navigation channels are available less than 35 percent of the time. An important step that can be taken to invest in the maintenance of ports across the country is the full-utilization of the Harbor Maintenance Trust Fund. NACA supports passage of legislation to fully utilize the Harbor Maintenance Trust Fund balance of $9 billion collected from the Harbor Maintenance Tax.

The Environmental Protection Agency estimates there is a $40 billion backlog in clean water infrastructure projects across the country and communities need approximately $270 billion in investment over the next 20 years to bring their systems into a state of good repair. An investment in this infrastructure will not only bring it into a state of good repair but improve public health.

As a nation we have been forced to invest a lot of disaster recovery over recent years as a result of the number of hurricanes, wildfires, and other severe weather-related events. This expenditure demonstrates the importance of investing in pre-disaster mitigation with resilient public infrastructure. NACA supports providing communities with the resources and tools needed to enhance the resilience of their infrastructure, including buildings, roads, and water and sewer infrastructure to minimize damage, disaster response time, and replacement costs, which translates into lower costs over time due to of improved durability and a decreased need for maintenance.

Without adequate, reliable, and long-term commitments of funding and policy decisions to support infrastructure development, agencies and local governments will fall farther behind in their goals of upgrading, modernizing, and expanding the network and the industry will continue to suffer from consolidation and attrition.

Without adequate and timely investment in our nation's infrastructure, the legacy passed on to future generations will be failing or even crumbling highways, bridges, airfields, locks and dams. Along with that, the system will not keep pace with population increases, vehicle loadings and traffic increases, and technology advances, and increased freight movement through our ports and highways. In contrast, if Congress rallies in support of the infrastructure and works closely with the Administration and the States, our Nation has a realistic opportunity to build on our existing assets and transform our network of highways, bridges, airfields and waterways to become the gold standard in transportation and technology for all the world to follow.

Statement from the Office of Hon. Eric Garcetti, Mayor, City of Los Angeles, California, Efforts on Resilient Infrastructure, submitted for the record by Mr. DeFazio

Information about Los Angeles Mayor Eric Garcetti's efforts on resilient infrastructure is below. We have provided short summaries about our *Sustainable City pLAn* and our *Resilience Strategy* which are the guiding principles and goals for infrastructure work in the City.

With these principles in mind, the City launched the following two comprehensive street infrastructure improvement programs: Complete Streets (repaving/repair) and Great Streets (infrastructure revitalization). Listed below is information highlighting the City's approach to road repair, pedestrian safety, and environmental resilience.

Sustainable City pLAn

In April 2015, Mayor Garcetti released the first-ever "Sustainable City pLAn", a roadmap for Los Angeles that is environmentally healthy, economically prosperous, and equitable in opportunity for all. The pLAn focuses on short-term results and long term goals to transform our city. L.A.'s Sustainable City pLAn connects the dots for Los Angeles by building on the three pillars needed for any thriving city: Environment, Economy and Equity. Details can be found at: http://plan.lamayor.org/

Resilience Strategy

In March 2018, Mayor Garcetti launched Los Angeles' first citywide Resilience Strategy with 15 goals and 96 actions for Angelenos, neighborhoods, the City, and our city partners to prepare Los Angeles in addressing current and future challenges. Details at https://www.lamayor.org/Resilience

Complete Streets Program Overview

In June 2018, Mayor Eric Garcetti launched the Complete Streets Program to repair the city's worst streets, based on traffic fatalities and pavement conditions, and improve safety measures across Los Angeles. It was the city's first proactive street reconstruction and resurfacing program in a decade, funded by a combination of local bond (Measure M) and state gas tax funding (SB1).

The key to the program is that the City makes street infrastructure improvements holistically to achieve multiple goals simultaneously, considering all opportunities for related improvements to maximize efficiency. For example, to repair a road, the City looks beyond just paving and evaluates public right-of-way, potential Vision Zero safety enhancements, sidewalk repair, and green infrastructure elements such as bioswales and dry wells to improve stormwater quality and local water supply.

As another example, when the City reconstructs or resurfaces a paved street, the City also integrates Vision Zero safety strategies (such as left hand turn signals, pedestrian refuge islands, and lead pedestrian intervals). Or, when the City of LA repairs sidewalks, other upgrades may be completed to integrate bioswales to clean stormwater runoff and increase groundwater infiltration. If adding a bike lane is supported by the neighboring community, the City will also consider other safety enhancements or infrastructure upgrades.

Multiple city departments work together to define the scope and identify opportunities, including:

- Pavement quality improvements, such as reconstruction and resurfacing as well as concrete bus pads where necessary (City of Los Angeles Street Services and LA Metro)
- Street safety improvements, such as adding bump outs, adjusting traffic lights, and marking crosswalks (City of Los Angeles Department of Transportation)
- Green infrastructure to improve water quality and drainage and to allow for groundwater infiltration (City of LA–Bureau of Sanitation and LA Department of Water and Power)
- Bioswales and drywells are often incorporated at locations with street or sidewalk reconstruction, reducing the costs of rebuilding curb and gutters to divert stormwater runoff, and
- Enhancing smart city infrastructure, such as adding motion sensors to street lights in order to increase lighting when sensing pedestrian motion, thereby increasing the visibility and safety of pedestrians.

Status of Complete Streets Projects

In the first two years of this initiative, the City of Los Angeles will deliver upgrades to six major corridors that have poor pavement conditions and are on the

City's High Injury Network. The City is spending an estimated $79.8 million with $35 million for street reconstruction, $25 million for sidewalk repairs, $15 million for Vision Zero safety improvements, and $4.8 million on green infrastructure.

Funding for these projects are allocated from Measure R, Measure M, SB1, and the Street Damage Restoration Fee (SDRF). Four projects will broke ground in 2018, and two are planned for 2019, with completion dates expected between mid-2019 to the summer of 2020 for all six projects.

Great Streets

The Great Streets initiative takes a community-based planning approach to re-imagining LA streets, the City's largest public spaces, into safer, more livable, and sustainable places. Through the Great Streets program, the City engages local residents, business owners, and other stakeholders by seeking their feedback on infrastructure projects to address challenges unique to their respective communities. Great Streets takes a comprehensive approach to infrastructure development by focusing on the following goals:

1. *Increasing economic activity*: Businesses cannot be successful if the street infrastructure does not encourage consumer access.
   - Business owners are key players in our communities and they have countless interactions with community members on a daily basis which is why we engage them from the onset of our projects to help identify specific infrastructure improvements that would catalyze business growth.
   - The City also look at projects that encourage all road users to conveniently access businesses that are on Great Streets Corridors, which means installing elements such as street furniture, facade improvements, better lighting, and high quality sidewalks to improve economic activity.
   - We also work with the Economic Workforce Development Department to include business development components such as loans, help with leases, and marketing to help accomplish this goal.
2. *Improving Access and Mobility*: Infrastructure must be designed not only for vehicles, but for all users and all demographics in mind, which is why in addition to studying the vehicular traffic, the City of Los Angeles considers the number of neighborhood pedestrians and cyclists. The City also considers neighborhood demographics, such as age, ability, and gender when it helps communities identify infrastructure-related solutions to meet its needs. The City then build and maintains sidewalks that encourage pedestrian use of the corridors, and also installs bike lanes and storage, where they are needed and appropriate.
3. *Enhancing Neighborhood Character*: Infrastructure investments should take into account the cultural and historical context of the community in order to build a stronger connection between the built environment of a neighborhood and the people that live, work, and play there.
   - The City engages local artists to create art, such as murals, on the Great Streets corridors.
   - Through the Department of Cultural Affairs, the City of LA offers grants for arts projects and events, working with artists local to the Great Streets corridors.
4. *Great Community Engagement*: Community planning led by local residents, business owners and stakeholders is at the heart of the Great Streets process. It is critical that community members are the leaders in identifying solutions to their neighborhood's challenges.
   - The City begins by asking community partners to write a challenge statement which expresses the community need. We believe community members are experts on their community, have ideas on how to address their challenges, and must be engaged throughout infrastructure improvement projects.
   - Once the City of LA has the challenge statement, we create a partnership between a community partner, technical consultant and the City. A minimum of six months of outreach is conducted and led by community partners to engage stakeholders in order to clearly define problems in the community and initiate ideas on how to address the problems.
   - Great Streets works with City departments, community partners and the consultant to design infrastructure projects based on community feedback collected during the outreach process.
   - After every project is implemented, Great Streets gathers feedback from the community to evaluate the project's impact.

5. *Improved Environmental Resilience and Sustainability*: Building infrastructure that is sustainable and environmentally resilient is a critical component of a livable neighborhood.
   - Sustainability and resilience are at the center of each project.
   - Great Streets projects include elements such as stormwater capture, bioswales and dry wells based on feasibility to help the City replenish our groundwater system, and the LA River. Whenever possible, the City installs semi-permeable sidewalks for water capture.
   - To address the major health concern of extreme heat, the City of Los Angeles is leading the country in deploying cool surfaces on our streets which can reduce the air surface temperature by 10 degrees. The City also plants trees on all Great Streets projects, particularly in areas identified as heat islands. These deployments have many benefits, including water capture, air quality improvement, shade for pedestrians, and enhanced corridor beautification.
   - The City of LA also strives to install energy efficient street lighting, electric vehicle (EV) chargers, and has plans to install air quality monitors to help better track air pollution.
   - When taking on construction projects, the City strives for sustainability materials, and considers the supply chain of materials. The City will include a greenhouse gas metric for our materials procurement.
6. *Safer and More Secure Communities*—Safety is at the heart of any infrastructure improvement, which is why the City of Los Angeles designs infrastructure investments with seniors and school children in mind since these two are the most vulnerable streets users.
   - The City of Los Angeles achieves this by reconfiguring traffic signals to allow more time for cross; installing speed limit signs that effectively communicate with drivers; installing curb extensions to reduce vehicle speed. Additionally, the City installs stop signs and speed humps when necessary.
   - The City also includes better lighting to encourage street usage at all times of the day.

Statement of The Pew Charitable Trusts Submitted for the Record by Mr. DeFazio

The Pew Charitable Trusts (Pew) appreciates the opportunity to submit testimony for the record of this hearing on America's infrastructure needs and the cost of doing nothing. Pew has been engaged for some time in highlighting the need for investment in our country's infrastructure. In particular, Pew has two initiatives of relevance to today's hearing: one to address the maintenance backlog in our national parks, and a second on flood-related issues promoting resilient infrastructure and investments in mitigation.

Pew applies a rigorous, analytical approach to improve public policy, inform the public, and invigorate civic life. We appreciate the opportunity to submit testimony in this first hearing of the House Transportation and Infrastructure Committee and look forward to working with the Committee as it explores these issues in the future.

NATIONAL PARK SYSTEM INFRASTRUCTURE BACKLOG

The National Park Service (NPS) manages more than 400 nationally significant sites in all 50 States and several territories, which encompass natural and historic sites that celebrate and commemorate the remarkable people, heritage, and ongoing story of America. The Restore America's Parks campaign at The Pew Charitable Trusts seeks to conserve the natural and cultural assets of the National Park System by providing common sense, long-term solutions to the infrastructure backlog challenge facing the park service.

NPS maintains 10,000 miles of roads (over 5,000 of which are paved); nearly 1,500 bridges and 60 tunnels; 18,000 miles of trails; more than 24,000 buildings; and over 2,000 sewage systems, as well as former military installations, parking lots, waterfronts, campgrounds, electrical and water systems, interpretive facilities, and iconic monuments and memorials. The NPS has estimated their backlog of infrastructure repair needs at $11.6 billion (based on fiscal year 2017 data).

There are multiple costs of doing nothing to address this backlog, including:

- The increased monetary cost of repairs as they are delayed and become more difficult and costly to fix.

- The economic cost to communities resulting from fewer visitors traveling to parks when public access is limited following closures of roads and trails due to maintenance issues.
- The unmeasurable costs to our nation's historic and cultural resources, if NPS lacks adequate funds to protect and maintain the sites and artifacts that document our collective heritage.
- The cost to park visitors who are denied access to the world class recreation, wildlife, and educational opportunities that our National Park Service is known for.

What Is Deferred Maintenance?

National parks often have the same infrastructure as a city or town, and as a result face the same deterioration and maintenance needs. In total, the agency is responsible for protecting and managing over 75,000 assets which include roads and bridges, trails, historic buildings, employee housing, wastewater and electrical systems, military fortifications, monuments and memorials, and seawalls. Maintenance is required at regular intervals to ensure acceptable park facility conditions; when this maintenance is delayed for more than a year, it is considered "deferred."

Why Is There a Deferred Maintenance Backlog?

- Aging infrastructure: many park facilities and systems are 50–70 years old and need updating.
- Record visitation causes wear and tear on resources: our parks received approximately 330 million visitors in 2017.
- Unreliable funding for deferred maintenance.
- A diverse portfolio that includes cultural, natural, and historical resources, many of them exposed to the elements.

The Path Forward

Preventing the escalation of the NPS maintenance backlog is not an insurmountable feat. But Congress and the Administration must pursue multiple approaches to ensure success. Focusing limited resources on priority assets must continue to be part of common sense solutions. To address the maintenance backlog at NPS sites across the country, Pew recommends a multi-pronged approach that includes:

- *Congressional Appropriations.* Reliable annual appropriations for transportation needs and NPS park maintenance are needed, as well as adequate staff capacity to implement projects.
- *Dedicated Annual Federal Funding*. The establishment of a dedicated Federal fund that would direct resources each year to priority NPS repairs would help the agency begin to address the most pressing, complex repairs.
- *Infrastructure Package*. Any potential national infrastructure package should include deferred maintenance provisions specific to the parks, recognizing that national park buildings, roads, trails, aging electrical and water systems, and monuments need significant updating.
- *Policy Reforms*. Enacting innovative policy reforms to ensure that deferred maintenance does not escalate. Reforms should consider innovative technologies to drive maintenance costs down and save staff time, as well as opportunities to maximize revenue generation at parks.

Why We Must Address Infrastructure the Backlog of Repairs and Restore Our Parks

Restoring the infrastructure and physical integrity of our national park assets is a common-sense investment:

- *Preservation*. Our national park units document America's history. If our historic and cultural resources are not maintained, pieces of our nation's history will be lost to future generations.
- *Access*. Without safe and reliable roads and facilities, visitors cannot access and enjoy park resources.
- *Economics*. Parks are proven economic engines and must be maintained to ensure positive visitor experience and thriving local communities. Based on fiscal year 2017 records, over 330 million park visits translated to $18.2 billion in direct spending in gateway communities, generating approximately $35.8 billion in national economic output and 306,000 jobs.
- *Recreation*. World class recreation opportunities in parks are supported by trails, campgrounds, and water facilities. These amenities need to be safe and updated to ensure a continued high-quality, safe recreation experience.
- *Infrastructure-related jobs*. Fully investing in the park maintenance backlog has the potential to generate over 110,000 additional infrastructure-related jobs, based on a Pew-commissioned analysis: http://www.pewtrusts.org/en/research-

and-analysis/blogs/compass-points/2017/12/01/job-creation-potential-if-we-restore-our-parks.

- *Cost-savings*. Proactively addressing park maintenance provide a cost-savings to taxpayers, as postponement of projects can lead to increased deterioration, and more costly and extensive repairs.

Almost 3,000 organizations across the Nation recognize these benefits and support directing more resources to restoring our parks. These groups—counties and cities, local officials, businesses, veterans, the hotel and restaurant industry, conservation groups, unions, the recreation industry, infrastructure groups, State tourism societies—can be viewed here: http://www.pewtrusts.org/en/research-and-analysis/articles/2018/04/18/calls-mount-for-congress-to-fix-our-parks.

ENSURING FEDERAL INVESTMENTS IN INFRASTRUCTURE ARE FLOOD-READY

Flooding is the costliest [1] and most common natural disaster [2] in the United States, affecting every region. In addition to homes, these coastal and inland floods damage infrastructure vital to community preparedness and resilience such as roads, bridges, schools and hospitals, costing billions to repair and rebuild. Since 2000, such events have cost the Federal Government over $800 billion.[3]

Despite rising costs and risks, investments in resilient infrastructure and mitigation activities have historically been insufficient to a point where trillions of dollars in investments are needed just to improve America's infrastructure to a state of "good" quality.[4] And making investments before disasters strike has been mostly ignored even when research shows every $1 invested in mitigation saves society at least $6.[5] Years of underinvesting have left much of America's infrastructure dangerously close to failing, according to a March 2017 report by the American Society of Civil Engineers.[6]

The challenge becomes how do we make much needed investments in infrastructure while ensuring those assets are not washed away by the next major flood? As Congress considers this conundrum, it is critical that stronger flood safeguards and future risks be incorporated into new infrastructure investments. In too many instances, federally backed projects have been built or rebuilt without serious consideration of future losses, leading to repeat flooding losses and a costly cycle of damage and repair.

The vulnerability of the country's infrastructure to flooding is too great to continue ignoring:

- 930 military sites across 48 States have been impacted by floods over the past 30 years.[7]
- Since 2000, the Federal Government has provided tens of billions of dollars in assistance for public infrastructure, such as roads, bridges, and public buildings, in response to major flood disasters.[8]

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[1] National Oceanic and Atmospheric Administration, *Billion-Dollar Weather and Climate Disasters: Summary Stats*, National Centers for Environmental Information, (accessed February 5, 2019) available at https://www.ncdc.noaa.gov/billions/summary-stats (considering tropical cyclone to be flood-related disasters).

[2] Federal Emergency Management Agency, *OpenFEMA Dataset: Disaster Declarations Summaries—V1*, (accessed January 22, 2019), available at https://www.fema.gov/openfema-dataset-disaster-declarations-summaries-v1.

[3] National Oceanic and Atmospheric Administration, *Billion-Dollar Weather and Climate Disasters: Table of Events*, National Centers for Environmental Information, (accessed February 5, 2019) available at https://www.ncdc.noaa.gov/billions/events/US/1980-2018; Leslie Scism and Erin Allworth, *Moody's Pegs Florence's Economic Cost at $38 Billion to $50 Billion* The Wall Street Journal (September 21, 2018), available at https://www.wsj.com/articles/moodys-pegs-florences-economic-cost-at-38-billion-to-50-billion-1537572161.

[4] American Society of Civil Engineers, *2017 Infrastructure Report Card*, https://www.infrastructurereportcard.org/.

[5] Laura Lightbody, *Every $1 Invested in Disaster Mitigation Saves $6*, Pew Charitable Trusts, (January 11, 2018) https://www.pewtrusts.org/en/research-and-analysis/articles/2018/01/11/every-$1-invested-in-disaster-mitigation-saves-$6.

[6] American Society of Civil Engineers, 2017 Infrastructure Report Card, (accessed February 5, 2019) available at https://www.infrastructurereportcard.org/.

[7] Department of Defense, *Climate-Related Risk to DoD Infrastructure Initial Vulnerability Assessment Survey* (SVLAS) Report), (January 2018) https://climateandsecurity.files.wordpress.com/2018/01/tab-b-slvas-report-1-24-2018.pdf.

[8] Federal Emergency Management Agency, *OpenFEMA Dataset: Public Assistance Funded Projects Details—V1*, accessed February 1, 2019, available at https://www.fema.gov/openfema-dataset-public-assistance-funded-projects-details-v1.

- As of 2016, 18,000 federally owned buildings are in a 100-year floodplain with a total replacement cost of $83 billion.[9]

Without comprehensive policy action to reduce the impact of flood-disasters, the Nation will continue to pay to rebuild infrastructure repeatedly after disasters and put assets in harm's way. We simply cannot afford to allow this pattern to continue.

The House Transportation and Infrastructure Committee should consider the following flood-ready solutions.

Update Flood-Ready Standards for Federally Funded Projects

Building smart, durable infrastructure in the first place is a commonsense practice. Hundreds of localities and numerous States across the Nation already have stronger infrastructure flood standards than the Federal Government. We also know that it pays to prepare: according to recent analysis by the National Institute of Building Sciences, flood mitigation projects on infrastructure like roads, rails, and wastewater treatment facilities produced positive benefit-cost ratios.[10]

Building resilient infrastructure enjoys a wide margin of support: A poll released in January 2018 by The Pew Charitable Trusts found that 89 percent of registered voters—across party lines—support requiring that all federally funded infrastructure in flood-prone areas be constructed to better withstand the impacts of flooding.[11] Incorporating future risk into flood safeguards across the Federal Government will limit damage, reduce the need to rebuild after floods and save taxpayer dollars.

Congress should ensure Federal assets located in a floodplain take into consideration current and future flood risks.

Establish a Flood Mitigation State Revolving Loan Fund

As severe weather events have spiked in recent decades, it is clear the Federal Government must break the cycle of paying to rebuild properties in vulnerable areas that flood repeatedly. It can do so—with a $6-to-$1 return on investment[2]—by increasing support for State disaster preparedness efforts, starting with a new revolving loan fund program.

Current funding levels for mitigation are not sufficient to address the nation's pressing need to prepare for floods. Of the $277.6 billion that the Federal Government spent on disaster assistance from 2005 to 2014, very little went to mitigation. In fact, spending on Pre-Disaster Mitigation (PDM) grants fell from $157 million in 2005 to $19 million in 2014.[12]

Establishing a flood mitigation State revolving loan fund would enable more communities to take measures to reduce risk to structures and infrastructure, such as elevating buildings, putting vents in the lowest level of structures to reduce pressure on the walls and allow floodwater to pass through, and fund larger-scale projects such as improving stormwater management and building berms or flood walls.

State revolving loan funds have a successful track record:

- Many States and municipalities have experience with revolving loan funds. They have been used to support affordable housing, renewable energy, clean water, energy efficiency, and other community interests.
- The Clean Water State Revolving Fund program, for example, has financed improvements to wastewater infrastructure. From its inception in 1987 through 2016, the program has leveraged $41 billion in Federal moneys for $118 billion worth of clean water infrastructure.[13]
- Established in 1996, the Drinking Water State Revolving Loan Fund has used just over $19 billion in Federal assistance to foster more than $32.5 billion in investments through 2016.[14]

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[9] Laura Lightbody, *3 Reasons the U.S. Needs a Flood-Ready Building Policy*, Pew Charitable Trusts (January 30, 2018) https://www.pewtrusts.org/en/research-and-analysis/articles/2018/01/30/3-reasons-the-us-needs-a-flood-ready-building-policy.

[10] Multihazard Mitigation Council, *Natural Hazard Mitigation Saves: 2018 Interim Report*, National Institute of Building Science (December 2018).

[11] Laura Lightbody, *Poll Shows Nationwide Support for Feds to Boost Rebuilding Standards*, Pew Charitable Trusts (February 1, 2018) https://www.pewtrusts.org/en/research-and-analysis/articles/2018/02/01/poll-shows-nationwide-support-for-feds-to-boost-rebuilding-standards.

[12] Government Accountability Office, "Federal Disaster Assistance: Federal Departments and Agencies Obligated at Least $277.6 Billion During Fiscal Years 2005 through 2014" (Sept 2016), http://www.gao.gov/assets/680/679977.pdf.

[13] Environmental Protection Agency, *2017 Annual Report: Clean Water State Revolving Fund Programs* (March 2018) https://nepis.epa.gov/Exe/ZyPDF.cgi/P100UAGH.PDF?Dockey=P100UAGH.PDF.

[14] Environmental Protection Agency, *20th Anniversary Drinking Water State Revolving Fund* (2017) https://www.epa.gov/sites/production/files/2018-08/documents/20th__anniversary__dwsrf__report__final__508.pdf.

Congress should establish and fund a revolving loan fund program for flood mitigation to improve infrastructure resilience.

Establish a Federal-Aid Highway Pre-Disaster Infrastructure Program

Federal-aid highways and roads are the lifeblood of the nation's economy. While accounting for only 25 percent of the nation's highway network, they shoulder 85 percent of total miles travelled each year.[15] Their reliability is not only key for the everyday mobility of Americans and transporting goods from coast to coast, but critical to community vitality during natural disasters. The Federal Highway Administration Emergency Relief (ER) program provides States and localities with access to funding to support disaster recovery efforts, but the reactive approach of the program does not do enough to ensure communities are prepared the next time it floods.

Growing risk to and impacts from flooding to our Federal-aid highways are unsustainable:

- More than 60,000 miles of U.S. roads and bridges are in coastal floodplains, threatening supply chains and local economies.[16]
- In 2018, flooding from Hurricane Florence forced the closure of more than 1,200 roads in North Carolina, cutting off the access of numerous communities to emergency responders and critical facilities, like hospitals and shelters.[17]
- Since 2000, flooding and other extreme events have resulted in the FHWA ER program receiving nearly $15 billion in supplemental appropriations. Without investments toward making our transportation infrastructure more resilient to increasingly stronger storms, the FHWA ER program will continue to be overburdened.[18]

Congress should establish a Federal Highway Administration Pre-Disaster Infrastructure program for projects that address Federal-aid roads, highways, and bridges.

Prioritize natural areas that benefit communities

Healthy wetlands, salt marshes, dunes, and free-flowing rivers can act as holding basins for floodwaters, decreasing the effects of flooding on people, homes, and businesses in adjacent communities while providing habitat for fish and wildlife. Along the coasts, such natural areas act as the first line of defense to reduce the effects of storm surge.

The use of nature-based solutions—either as alternatives or complements to grey infrastructure—can help achieve resilience to extreme weather while supporting other objectives (i.e., ecosystem restoration, recreational space, etc.). In managing risk to threats like flooding, nature-based solutions can be more effective compared to conventional approaches. Nature-based approaches are, in some cases, more adaptable, easier to scale up, and can become stronger and offer more resilience over time, compared to grey infrastructure, while grey infrastructure tends to become less resilient as it ages.

Research has shown that using nature-based solutions to mitigate the threats posed by severe weather can be both economical and long-lasting:

- Coastal ecosystems mitigate an estimated $23 billion each year in storm damages along the Atlantic and Southern coastlines alone.[19]
- According to the Gund Institute for Environment, wetlands and floodplains protected Middlebury, Vermont from as much as $1.8 million in flood damages dur-

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[15] Federal Highway Administration, *2013 Status of the Nation's Highways, Bridges, and Transit: Conditions and Performance* https://www.fhwa.dot.gov/policy/2013cpr/es.cfm.

[16] USGCRP, 2018: *Impacts, Risks, and Adaptation in the United States: Fourth National Climate Assessment*, Volume II [Reidmiller, D.R., C.W. Avery, D.R. Easterling, K.E. Kunkel, K.L.M. Lewis, T.K. Maycock, and B.C. Stewart (eds.)]. U.S. Global Change Research Program, Washington, DC, USA, 1515 pp. doi: 10.7930/NCA4.2018.

[17] North Carolina Department of Public Safety, *It Takes a Village: Emergency Management Leads Response and Recovery to Hurricane Florence* (Oct. 12, 2018) https://www.ncdps.gov/blog/2018/10/12/it-takes-village-emergency-management-leads-response-and-recovery-hurricane-florence.

[18] Congressional Research Service, *Emergency Relief for Disaster-Damaged Roads and Public Transportation Systems* (August 2018) https://fas.org/sgp/crs/homesec/R45298.pdf.

[19] Karen Thorne, et al., *U.S. Pacific Coastal Wetland Resilience and Vulnerability to Sea-Level Rise*, Science Advances, Vol 4, no 2 (Feb 2018) http://advances.sciencemag.org/content/4/2/eaao3270.full.

ing Tropical Storm Irene in 2011 and saved the town an average of $450,000 each year through flood mitigation.[20]

- Resources for the Future found that by not developing roughly 9,000 acres of land but instead preserving the area as State and local parks, the Meramec Greenway in St. Louis County, Missouri, benefits from $7.7 million in avoided flood damages on average each year.[21]

Congress should require the consideration of nature-based solutions as alternatives for grey infrastructure projects that involve investing Federal dollars in floodplains.

In summary, The Pew Charitable Trusts thanks the committee for the opportunity to submit this testimony and looks forward to working with the committee on the important task of developing an infrastructure package that addresses the critical issues facing our nation's parks and communities at risk.

Statement of the Resilient Navigation and Timing Foundation Submitted for the Record by Mr. DeFazio

When GPS signals are not available because of natural, accidental or malicious interference, every mode of transportation slows down, carries less capacity, and becomes more expensive and dangerous. First responder communications and coordination systems are degraded. If the disruption lasts long enough, networks of all kinds begin to fail.

For this reason, officials at the Department of Homeland Security have called our nation's over-reliance on GPS "a single point of failure for critical infrastructure." This sentiment and concern has been echoed by a wide range of engineers and technologists including the National Space-Based Positioning, Navigation and Timing Advisory Board, and the "father of GPS," Dr. Bradford Parkinson.

The lack of a difficult to disrupt, terrestrial backup system for GPS is a significant gap in our nation's infrastructure. It must be filled to protect and enable current applications and allow development of future transportation and IT systems.

Validating this shortfall, the National Institutes of Standards and Technology has twice warned that our nation's wireless precise timing architecture (almost entirely based on GPS signals) is insufficient to support development of the internet of things (IOT). As another example, further development of safe automated vehicles and intelligent transportation systems of all kinds will be unwise without difficult-to-disrupt, wide area location and timing signals to pair with the much weaker signals from space (see our comment to the Department of Transportation here: https://www.regulations.gov/document?D=DOT-OST-2018-0149-0022).

Congress began to address this shortfall by passing the National Timing Resilience and Security Act of 2018 which became law in December. This act requires the Secretary of Transportation to establish a terrestrial timing system as a backup for GPS by the end of 2020. Also, that this timing system be expandable to provide a backup for GPS navigation. Separate legislation last year provided $15M for a technology demonstration of GPS backup technology.

These initial steps are important but will not by themselves make our nation safer. Sufficient funds must be made available to establish the timing system, and the administration must be held accountable for progress on all fronts.

The last two administrations promised to establish backup systems for GPS, but never followed-through. And we have seen little action from the current administration. For example, funds for the GPS backup technology demonstration Congress mandated have been available for almost a year. Yet we have seen no public evidence that the project has even begun. This, despite Congress' mandate the demonstration be complete by June 2019.

Our nation's infrastructure is much more than just roads and waterworks. Our dependence upon wireless precise time and navigation continues to increase. We must focus on ensuring America has the positioning, navigation, and timing infrastructure it needs to be secure today, and to prosper in the future.

We urge you to:

[20] Keri B. Watson, et al., *Quantifying Flood Mitigation Services: The Economic Value of Otter Creek Wetlands and Floodplains to Middlebury, VT*, Ecological Economics Vol 130 (October 2016) https://www.sciencedirect.com/science/article/pii/S092180091630595X.

[21] Carolyn Kousky and Margaret Walls, *Floodplain Conservation as a Flood Mitigation Strategy Resources for the Future* (July 2013) http://www.rff.org/files/sharepoint/WorkImages/Download/RFF-DP-13-22-REV.pdf.

- Support funding for the timing system mandated by the National Timing Resilience and Security Act of 2018,
- Encourage the Department of Transportation to actively pursue its role as the Federal lead for civil positioning, navigation, and timing issues,
- Hold the administration accountable for complying with congressional direction and intent, and
- Identify a terrestrial, difficult-to-disrupt, terrestrial navigation and timing system as an essential part of our nation's infrastructure.

Letter from Congresswoman Mikie Sherrill Submitted for the Record by Mr. DeFazio

FEBRUARY 7, 2019.

Hon. PETER A. DEFAZIO
House Committee on Transportation and Infrastructure, Washington, DC.

DEAR CHAIRMAN DEFAZIO,

I write in support of your hearing today to highlight "the cost of doing nothing" and urge all members to consider the absolute urgency of immediately investing in our nation's infrastructure. The people of New Jersey know access to reliable trains, tunnels, and transit is essential for a strong economy and a good quality of life for our commuters.

There is no greater example of the urgent need for transportation infrastructure investment than the Gateway Tunnel Project. The current rail tunnel, built during the (Theodore) Roosevelt administration, is decaying and seriously damaged from Superstorm Sandy. The tunnel is the only passenger rail access point into Manhattan, serving 200,000 New Jersey commuters as well as more than 700,000 passengers along the Northeast Corridor. Needless delay threatens the national economy, with estimates of $100 million in lost revenue each day if the existing tunnel goes down.

We should be thrilled by the potential Gateway offers to our entire nation, from jobs to economic growth.

Instead, partisan politics has put Gateway on ice. The economic and environmental cost of doing nothing on Gateway is staggering: $1.6 billion lost for each year the project does not move forward, as well as an additional 181,898 tons of harmful pollutants released into the atmosphere from constant congestion on our roads. It jeopardizes the safety of our commuters who pass under the Hudson River each day, and erodes family time with each delayed or canceled train.

Our country is built on the ingenuity and tenacity of the American people. We must address our long-term infrastructure needs, including Gateway, with the same belief in America that first propelled our country during the Roosevelt administration to get Americans to work and create the original tunnel in 1904. We owe future generations no less.

Thank you again, Mr. Chairman, for taking up this national priority. I look forward to working with you in this Congress to getting this project done for the American people.

Sincerely,

MIKIE SHERRILL,
Member of Congress.

Letter from the Southern Environmental Law Center Submitted for the Record by Mr. DeFazio

FEBRUARY 21, 2019.

Hon. PETER DEFAZIO
Chairman

Hon. SAM GRAVES
Ranking Member
Transportation and Infrastructure Committee, Washington, DC.

DEAR CHAIRMAN DEFAZIO AND RANKING MEMBER GRAVES:

The Southern Environmental Law Center (SELC) would like to thank the U.S. House Committee on Transportation and Infrastructure for holding a hearing on "The Cost of Doing Nothing: Why Investing in Our Nation's Infrastructure Cannot Wait." SELC works on infrastructure issues at the federal level and in six states to promote clean water and healthy air, protect rural landscapes and natural areas, and promote vibrant, sustainable communities.

The United States has enormous infrastructure needs, such as building and repairing bridges, roads, transit and rail lines, renewable energy facilities, and water and sewer systems. We agree that investments to meet these needs cannot wait, and that substantial investments are needed. However, those investments must be well thought out and targeted toward improvements that strengthen all communities, protect public health, build resiliency, cut pollution, and help address the climate crisis.

For example, we should invest in cleaner transportation infrastructure like mass transit and rail rather than add more highways lanes that will soon become congested. We also should use taxpayer dollars more efficiently by adopting a "fix it first" approach that focuses on bringing existing infrastructure to a state of good repair. And we need to fully implement environmental protections and public-input requirements to ensure protection of our health, environment, and communities.

Moreover, there needs to be substantial federal investment to address our nation's pressing infrastructure needs, it is not acceptable to put most of the burden for infrastructure funding on states and localities, or to expect that private investment will solve the problem.

We appreciate your consideration of these brief comments while you continue your efforts to solve our infrastructure problems.

Sincerely,

MEGHAN BOIAN,
Legislative Associate.

Letter from the Technology Association of Oregon Submitted for the Record by Mr. DeFazio

FEBRUARY 7, 2019.

DEAR CHAIRMAN DEFAZIO, RANKING MEMBER GRAVE, AND MEMBERS OF THE HOUSE TRANSPORTATION AND INFRASTRUCTURE COMMITTEE:

I am writing on behalf of the Technology Association of Oregon ("TAO") to request that the House Transportation and Infrastructure Committee include specific funding for smart technologies in any Federal infrastructure package.

Many regional economies are increasingly dependent on a strong, vibrant technology industry. The same is true in Oregon. The tech industry in Oregon is a major driver for Statewide economic prosperity, and continues to generate more jobs with higher-than-average wages that directly benefit workers in Oregon. Since 2000, the industry has added 3,113 firms and 4,212 jobs. Year-over-year, the industry has grown by 5.67 percent, wages have increased by 10.65 percent, and the average worker now earns $81,645 per year.

Tech companies and startups increasingly locate where there is abundant, high-skilled talent and where infrastructure is in place that supports a high quality of life. To compete globally, In addition to investments in workforce and education programs, the United States must invest in infrastructure.

In Oregon, as in other States, population growth is placing stress on roads, utility grids, and public transportation systems, among other critical infrastructure. To make matters worse, much of this infrastructure has suffered from insufficient maintenance and lack of upgrades over the years. Rather than starting from a position of strength, many States across the United States are starting from a deficit. As a country, we are falling behind our international competition.

With a thoughtfully designed Federal infrastructure package that includes smart technologies, we have an opportunity to recapture the United States' position as a global leader in infrastructure investment, providing the country and its constituent States with a competitive advantage. In particular, we encourage members of the House Transportation and Infrastructure Committee to include specific funding that would:

- Increase broadband connectivity for purposes of decreasing the digital divide.
- Update and secure utility grid systems.
- Deploy intelligent transportation management software and roadway sensors to mitigate congestion and accidents as a means to building smarter and safer communities.

With these investments, we are confident the United States can regain its position as a leader in innovative infrastructure, creating economic opportunity for U.S. companies in the process. For these reasons, we respectfully request that the House Transportation and Infrastructure Committee provide specific funding for smart technologies as part of a Federal infrastructure package. Thank you for your consideration.

ABOUT TAO

The TAO aims to create an inclusive, innovation-based economy in Oregon. We work with nearly 500 tech and tech-enabled companies in Oregon, ranging from some of the largest technology companies in the world to early stage startups. We have offices in Portland, Bend and Eugene and offer services around the State. Our programs focus on helping companies to grow and remain competitive, and we have a particular emphasis on inputs to growth such as talent, capital, and the business environment.

Sincerely,

WARREN "SKIP" NEWBERRY,
TAO President.

APPENDIX

QUESTIONS FROM HON. HENRY C. "HANK" JOHNSON, JR. FOR HON. TIM WALZ

Introduction to Questions 1–2: New technologies are transforming the way we plan and build infrastructure and transportation. Data has naturally become an essential element of such ingenuities.

Intelligent systems can track buses and rail cars in real time, they can determine how many people are riding in a vehicle, and help control subway trains and light rail.

Question 1. Governor Walz, are there overarching concerns about cybersecurity and data collection that require Federal standards?

ANSWER. Our recent public survey report revealed the following concerns across the general public/stakeholder/technical expert spectrum with cybersecurity and data collection.

The general public identified a need for data privacy protections that minimized government access to and storage of data. There is a distinction between the public being able, and choosing, to provide personally identifiable information versus a private industry or the government collecting, storing and managing data. Many of these concerns center around potential mis-use of data and disclosure of personal information. This also includes a significant concern that connected and automated vehicles could be at risk due to cyber security attacks.

Eliminating the potential for hacking private data is something that the general public sees as a governmental responsibility. In response to this concern and government expectation, consistent cyber security standards were identified as partial solutions, along with additional consumer protection measures to ensure that personally identifiable information is aggregated and anonymized if collected. The 2018 Connected and Automated Vehicles Executive Report [https://urldefense.proofpoint.com/v2/url?u=http-3A__www.dot.state.mn.us__automated__docs__Governor-27s-2520Advisory-2520Council-2520Connected-2520and-2520Automated-2520Vehicles-2520Executive-2520R....pdf&d=DwMFAg&c=L93KkjKsAC98uTvC4KvQDdTDRzAeWDDRmG6S3YXllH0&r=mITDqG1bdQRZYzzUDLOcYQgnIstpV63qWQAogJVZD5I&m=dWmauySnZ3M0qnGRRJylYpw5Bii3LejSKh1Ff9cC5Ps&s=hT0C6E9ZUAzd3BthoiiY7Qt1B8dwj9ih1Dz4__mzqLuU&e=] identified several recommendations for the state of Minnesota to focus on developing systems to aggregate and anonymize data to protect personally identifiable information and to ensure that IT systems are developed with an eye for security at the beginning of development (e.g. security by design) to ensure personal information is protected and that products and systems cannot be exposed to cyber security risks.

Question 2a. Governor Walz, what are some challenges that transportation systems face regarding data breaches?

Question 2b. Are there systems in place to address the breach and notify interested parties?

ANSWER (*2a. and 2b.*) The general public communicated fears of a data breach affecting the mechanical operation of a vehicle in the automated vehicle testing phase. The technological solution this group identified includes data overrides and the ability to disconnect systems to ensure there are redundancies within data systems to manage and protect from data breaches that could "hijack" the vehicle during full automated vehicle operations. Stakeholders proposed state and federal policy solutions, such as the federal government requiring manufacturers to obtain product security certifications to preserve accountability and maintain control of the automated vehicle and its related software.

There are redundant systems in place within MnDOT and MnIT to address these concerns. The recommendations within Minnesota's CAV Executive Report [https://urldefense.proofpoint.com/v2/url?u=http-3A__www.dot.state.mn.us__automated__docs__Governor-27s-2520Advisory-2520Council-2520Connected-

2520and-2520Automated-2520Vehicles-2520Executive-2520R....
pdf&d=DwMFAg&c=L93KkjKsAC98uTvC4KvQDdTDRzAeWDDRmG6S3YXllH0&r=
mITDqG1bdQRZYzzUDLOcYQgnIstpV63qWQAogJVZD5I&m=
dWmauySnZ3M0qnGRRJylYpw5Bii3LejSKh1Ff9cC5Ps&s=
hT0C6E9ZUAzd3BthoiiY7Qt1B8dwj9ih1Dz4__mzqLuU&e=] also addressed ensuring data management and IT systems are programmed with security in mind (e.g. secure-by-design) to ensure that redundant privacy and cyber security systems are in place to respond to breaches if and when they occur. In addition, it is important that government address the issues of poor software design and user error as key factors in enabling hacking attempts.

QUESTION FROM HON. PETE STAUBER FOR HON. TIM WALZ

Question 1: In addition to highways, ports, airports, and railways, I believe we also must ensure the timely and secure delivery of energy to fuel our economies and to underpin these infrastructure projects we want to pursue. The safe and reliable delivery of energy is a necessary part of promoting critical infrastructure. We must modernize, and where appropriate, replace our aging pipeline infrastructure in Minnesota and across the nation to advance the more efficient and reliable delivery of energy with enhanced environmental protections. What's more, these private investments will have the added benefit of providing good paying jobs and critical tax revenue for our local towns and communities. Can you please comment on the importance of modernizing our pipeline infrastructure specifically in Minnesota and provide us with your thoughts on the benefits these energy infrastructure projects can provide to the state?

ANSWER. As our state transitions to a clean-energy economy, it is important for Minnesota to maintain safe and reliable energy infrastructure that meets the current needs of our consumers and businesses. Minnesota currently has numerous pipelines that transport both oil and natural gas and exist as part of our energy infrastructure. As we evaluate new projects that impact our environment, energy supply, and economy, we must follow the process, the law, and the science. It is critically important that pipelines are built and maintained in a way that protect the environment and health of surrounding communities. Our state has a process in place through the Public Utilities Commission to evaluate new projects and ensure that they meet the state's energy needs. Our process has a number of checks and balances, which help ensure that major energy projects are properly vetted. For example, our Department of Commerce's Division of Energy Resources is responsible for representing the interest of consumers during this process. Other state agencies like the Department of Natural Resources and Pollution Control Agency are responsible for permits, licenses, and other approvals in order to protect the state's natural resources and environment. Because pipelines traverse our state, we must work to ensure that state agencies engage in appropriate consultation throughout the process with tribal representatives and local government units.

QUESTIONS FROM HON. ALAN S. LOWENTHAL FOR RICHARD ANDERSON

Question 1: Mr. Anderson, I am very concerned with how employees were treated during the closure of the Riverside, California, call center in January. Specifically, it is my understanding that you provided your 500+ employees and their union representatives with only 60 days to negotiate over relocation, severance, and job transfer options. In addition, this 60-day window fell during the hectic holiday season, further complicating negotiations and constraining the ability of employees to make life-changing decisions. What was the impetus behind this sudden announcement and why weren't employees given more lead time than the WARN Act-required minimum?

ANSWER. The timing of our announcement was not just due to WARN requirements, but also the requirements of the Collective Bargaining Agreement with the Transportation Communications Union (TCU) which provides for a 60-day notice. We worked as quickly as we could to reach an agreement with the TCU so that the impacted employees at Riverside and in the California seniority district knew their options upon closure. Additionally, we continued to work with the TCU and employees to address individual circumstances as we could upon closure. Amtrak had 90 TCU-represented employees elect to relocate to the Philadelphia facility from California.

When Amtrak informed the TCU of its plan to use a contractor to handle overflow calls, there was no commitment made that the current facilities in Philadelphia and, at that time, Riverside, would not be consolidated. Rather, the response was that such a move was not part of the plan at that time, but that we would continue to review our options to maximize customer service and efficiencies.

Introduction to Question 2: Amtrak served the Transportation Communications Union notice in February of 2018 that the company intended to use a contractor in Florida to perform call center work, but in talks with employees and union representatives your managers assured them that neither of Amtrak's existing facilities would close. Some of your supervisors were even sent to Florida to train their replacements.

Question 2a. What—if anything—changed between February and November of last year that prompted the closure, and could you have provided employees with additional notice?

ANSWER. Amtrak is charged with being an efficient steward of public funds and part of that responsibility compels us to look at what costs (such as maintenance and operations of a facility) can be reduced. This is what Congress has told us to work towards in our statutory mission and goals. Coupled with the continued preference of our customers to use self-service options such as Amtrak.com and our mobile app, the consolidation of the two centers was deemed an excellent opportunity to continue progress in the direction that Congress has mandated. Every Riverside agreement employee was offered a position to relocate to Philadelphia.

Question 2b. In general, not just regarding the Riverside facility, is it your intention to circumvent unionized employees by shifting their work to outside contractors?

ANSWER. Amtrak's use of contractors, in the past, present and future, has never been to circumvent unionized employees. In fact, some of our contractors also have unionized work forces. Rather, the use of contractors is about efficiency—effective use of public monies—and staying focused on our mission. For example, we are a service transportation provider, not a catering company. We should leverage experts in hospitality to improve our overall customer service. Additionally, Amtrak will comply with the law—no employees are furloughed as a result of contracting work.

QUESTION FROM HON. SCOTT PERRY FOR RICHARD ANDERSON

Question 1. Another significant cost driver is federal requirements that drive up labor costs. The prevailing wage law hasn't been changed since 1935; the threshold is $2,000—since 1935. As a result of this law, it is estimated that the average wage is 22 percent higher than the actual market rate so the term "prevailing" is a bit of a misnomer. Reasonable people can and do disagree on the extent of the law's inflationary effect, but it's difficult to deny that the result is above-market wage rates. After all, the purpose of the law is to isolate labor costs from competition—the very mechanism that sets the market price of any good or service—through the imposition of government mandated wage rates; prohibiting those willing and able to do the work for less from offering lower cost alternatives. Since labor costs make up around 50 percent of total construction costs, the law's requirements tend to inflate total project costs by anywhere from 7 to nearly 10 percent. What role have these artificially inflated costs played in the degradation of our infrastructure?

ANSWER. The degradation of infrastructure is a rapidly growing problem in America, and while labor costs play a part in the increasing funding required to address this issue, the growing cost of labor is not a major factor. The larger issue is the fact that so much of our transportation infrastructure was put in place during the same era, and the useful live(s) are expiring near the same time. Additionally, with so much work needing to be done in such a short period of time, the prioritization of limited resources (financial resources and human resources) will be a challenge.

QUESTION FROM HON. SCOTT PERRY FOR HON. ERIC K. FANNING

Question 1. Another significant cost driver is federal requirements that drive up labor costs. The prevailing wage law hasn't been changed since 1935; the threshold is $2,000—since 1935. As a result of this law, it is estimated that the average wage is 22 percent higher than the actual market rate so the term "prevailing" is a bit of a misnomer. Reasonable people can and do disagree on the extent of the law's inflationary effect, but it's difficult to deny that the result is above-market wage rates. After all, the purpose of the law is to isolate labor costs from competition—the very mechanism that sets the market price of any good or service—through the imposition of government mandated wage rates; prohibiting those willing and able to do the work for less from offering lower cost alternatives. Since labor costs make up around 50 percent of total construction costs, the law's requirements tend to inflate total project costs by anywhere from 7 to nearly 10 percent. What role have these artificially inflated costs played in the degradation of our infrastructure?

ANSWER. AIA can address the aerospace-related aspects of your question. On average, a worker in the U.S. aerospace and defense industry is paid 81% above the national average, or $91,500, which includes wages and benefits paid out by employers. In total, the aerospace and defense industry employed 2.4 million people in 2017, mostly involved in the development and production of complex and technologically challenging systems for commercial aviation, military, and space requirements.

As your question notes, our nation's infrastructure is in significant need of improvement. My written testimony references the U.S. Academy of Civil Engineers' most recent report card, which gives the U.S. a D+ rating overall and individual grades for infrastructure components like roads and bridges. Unfortunately, there is not a similar report for the entirety of our aviation infrastructure. As we approach the integration of new technologies into our airspace, AIA believes it is important to begin analyzing our long-term aviation infrastructure needs. We are not aware of any specific data indicating the role of federal prevailing wage laws and regulations on the cost of aviation infrastructure or aerospace-related programs.

QUESTION FROM HON. SCOTT PERRY FOR ANGELA LEE

Question 1. The Highway Trust Fund (HTF) is on a path to insolvency because the money is being diverted from its core purpose—the construction and maintenance of roads and bridges—not due to a lack of revenue. The Government Accountability Office found that less than 50 percent of HTF expenditures go to actual highway construction and only six percent goes to major construction, reconstruction, and rehabilitation projects. Nearly 29 percent of the expenditures are diverted away from highway construction and maintenance to a wide range of projects including bureaucrats in regional planning agencies, bike and pedestrian trails, vegetation management, historic preservation, and transit. Ending this practice of diversions could make the HTF solvent—tomorrow. It would provide an additional $132 billion for investment over the next 10 years. The Chamber has come out in support of increasing the gas tax. Does the Chamber support ending this practice of diverting gas tax revenue to ensure the solvency of the HTF?

ANSWER. Charlotte Water is not positioned to speak to the funding of the Highway Trust Fund. Our core businesses are treatment of drinking water and wastewater.

QUESTIONS FROM HON. DAVID ROUZER FOR ANGELA LEE

Question 1. Can you please discuss some of the challenges North Carolina utilities face when extreme storms like Hurricane Florence hit?

ANSWER. On Sunday, September 16, as Tropical Depression Florence moved through the Charlotte metro area, Charlotte Water rapid response crews responded to multiple locations for sanitary sewer overflows (SSO). Heavy rains inundated the sanitary sewer system in eight locations causing approximately 1.5 million gallons of wastewater to escape the sanitary sewer collection system. The quick decisions and experience by our plant operators and rapid response crews was really on display. The plants handled hundreds of millions more gallons of extra flow; more than 5 times the usual day's volumes. The plants didn't flood, and they didn't spill. They treated the historic flow without compromising water quality standards. Other utilities across the state of NC were not nearly as fortunate.

Nationally, not all utilities are as prepared as Charlotte is to withstand a threat like Florence. Water and wastewater utilities are on the front lines of severe storms: these environmental conditions are outside our control but can directly impact utilities' ability to provide vital services. The water services utilities provide depend on having adequate funding and financing resources. Existing estimates of water and wastewater investment needs, such as EPA's Clean Watersheds Needs Survey, consider the costs to maintain current states of good repair—but changing conditions may drive even greater costs. Federal funding and financing tools such as the State Revolving Funds, tax-exempt municipal bonds, and other programs can help utilities make these investments. Targeted grant programs, such as the 2018 America's Water Infrastructure Act's authorization of resiliency grants for drinking water utilities, can also help utilities prepare for the challenges of extreme weather events or changing conditions, whether that be a severe rain event, persistent drought, wildfires, or another threat.

Question 2. While many communities are still focused on disaster recovery and rebounding, are there efforts that utilities can take, or are proactively taking, to help ensure vital services can face extreme storms as much as possible?

ANSWER. When extreme storms hit Charlotte, our main goal is to maintain essential water and wastewater services to our community. We make sure that our infrastructure has built-in redundancy, that our power systems are reliable and that our employees are skilled to make good decisions quickly and efficiently. Our utility participates in local All-Hazards Planning as well as regional crisis preparation exercises. In NC, a network of water utilities has been set up called NC WARN. The network creates an assistance structure for its members to reach out during times of emergency for resources. Through the partnership, agreements are pre-arranged so that resources can be shared quickly and efficiently. It's reassuring to know this network exists and has been very successful in NC. Charlotte Water has found that advanced hazard planning and establishing partner networks in advance of a crisis has provided Charlotte Water resiliency in the event of a natural disaster.

QUESTIONS FROM HON. SCOTT PERRY FOR RICH MCARDLE

Question 1. Another significant cost driver is federal requirements that drive up labor costs. The prevailing wage law hasn't been changed since 1935; the threshold is $2,000—since 1935. As a result of this law, it is estimated that the average wage is 22 percent higher than the actual market rate so the term "prevailing" is a bit of a misnomer. Reasonable people can and do disagree on the extent of the law's inflationary effect, but it's difficult to deny that the result is above-market wage rates. After all, the purpose of the law is to isolate labor costs from competition—the very mechanism that sets the market price of any good or service—through the imposition of government mandated wage rates; prohibiting those willing and able to do the work for less from offering lower cost alternatives. Since labor costs make up around 50 percent of total construction costs, the law's requirements tend to inflate total project costs by anywhere from 7 to nearly 10 percent. What role have these artificially inflated costs played in the degradation of our infrastructure?

ANSWER. The Chamber does not believe federal prevailing wage requirements have significantly impacted the degradation of our infrastructure. This is because in order to attract the high skilled worker in many communities, private engineering and construction companies provide compensation greater than any federal requirement may require.

A deeper reason for the degradation of our infrastructure is the inability of the federal government to adjust the federal motor fuel user fee since 1993. Another cause for lack of investment include vehicles which are significantly more fuel-efficient than they were 26 years ago. As a result, motorists use less fuel to drive the same number of miles, and there is significantly less revenue to maintain the roads upon which they drive.

Question 2. The Highway Trust Fund (HTF) is on a path to insolvency because the money is being diverted from its core purpose—the construction and maintenance of roads and bridges—not due to a lack of revenue. The Government Accountability Office found that less than 50 percent of HTF expenditures go to actual highway construction and only six percent goes to major construction, reconstruction, and rehabilitation projects. Nearly 29 percent of the expenditures are diverted away from highway construction and maintenance to a wide range of projects including bureaucrats in regional planning agencies, bike and pedestrian trails, vegetation management, historic preservation, and transit. Ending this practice of diversions could make the HTF solvent—tomorrow. It would provide an additional $132 billion for investment over the next 10 years. The Chamber has come out in support of increasing the gas tax. Does the Chamber support ending this practice of diverting gas tax revenue to ensure the solvency of the HTF?

ANSWER. The Chamber supports the current federal surface transportation program. We supported changes made in both MAP–21 and FAST Act to limit the federal programs HTF dollars are required to be used for the activities you mentioned and provide flexibility for states to make the best decisions for their communities.

While non-highways investment are part of this flexibility, the Chamber has been a long-time supporter of the current percent of gas tax revenue to be designated to the Mass Transit account of the HTF. We believe this must be maintained moving forward.

QUESTIONS FROM HON. HENRY C. "HANK" JOHNSON, JR. FOR LARRY I. WILLIS

Question 1. Minorities continue to be underrepresented in transportation industries, such as aviation. In 2012, the U.S. Bureau of Labor Statistics estimated that 93 percent of airline pilots and flight engineers were white and 2.7 percent were black or African-American.

Mr. Willis, what steps can we take to ensure that a transportation and infrastructure package will bolster and include minority labor participation, so they too can benefit from the opportunities?

Question 1a. Should enforcement of existing minority initiatives be part of the conversation?

Question 2. Mr. Willis, do you see progress in the inclusion and promotion of people of color in the transportation industries?

Question 2a. What about their inclusion in technology-driven jobs, like coding, database management or electrical engineering?

ANSWER TO QUESTIONS 1–2. The labor movement, and TTD as labor's unified voice for transportation workers, is committed to increasing minority participation and the development and implementation of pathways to transportation careers for minorities.

In the aviation industry, for example, our affiliated pilot union, the Air Line Pilots Association (ALPA) engages in career development opportunities through the Organization of Black Aerospace Professionals (OBAP), National Gay Pilots Association, Women in Aviation, etc. ALPA pilot volunteers visited more than 1,500 schools last year to educate young people about careers as pilots. ALPA also promotes careers in aviation for minorities, veterans, and young people at venues throughout the country and through www.clearedtodream.org and www.aviationworks4u.org.

Further, we were supportive of and pleased that last year's FAA reauthorization bill included a new Women in Aviation initiative and have been working closely with the U.S. Department of Transportation on its Forces to Flyers initiative.

Other transportation sectors also have programs dedicated to minority hiring. For instance, building and construction trade unions run pre-apprenticeship and apprenticeship readiness programs that feed into their registered apprenticeship programs. These are designed to introduce the trades and related careers to a diverse labor pool, with a focus on outreach to women and minorities. North America's Building Trades Unions' (NATBU) MC3 program begins this process in high school with construction education for students.

Further, on the transportation manufacturing since, TTD and several affiliated unions are active participants in the Jobs to Move America Coalition, which promotes domestic job creation through government procurement policies. In particular, JMA encourages government agencies to include a U.S. Employment plan as part of its RFP process, with bidding companies getting credit for jobs created, quality of jobs, and for hiring in disadvantaged communities (minorities, veterans, women, and others).

We believe in promoting an inclusive, diverse and skilled workforce throughout the transportation sector, and firmly believe in the enforcement of any existing minority initiatives enacted by Congress.

QUESTION FROM HON. SCOTT PERRY FOR LARRY I. WILLIS

Question 3. Another significant cost driver is federal requirements that drive up labor costs. The prevailing wage law hasn't been changed since 1935; the threshold is $2,000—since 1935. As a result of this law, it is estimated that the average wage is 22 percent higher than the actual market rate so the term "prevailing" is a bit of a misnomer. Reasonable people can and do disagree on the extent of the law's inflationary effect, but it's difficult to deny that the result is above-market wage rates. After all, the purpose of the law is to isolate labor costs from competition—the very mechanism that sets the market price of any good or service—through the imposition of government mandated wage rates; prohibiting those willing and able to do the work for less from offering lower cost alternatives. Since labor costs make up around 50 percent of total construction costs, the law's requirements tend to inflate total project costs by anywhere from 7 to nearly 10 percent. What role have these artificially inflated costs played in the degradation of our infrastructure?

ANSWER. Davis-Bacon rates are based upon actual surveys of pay rates in a local area which is the most effective way to accurately determine market conditions. Thus the statement that Davis Bacon rates are higher than "actual market rates" is false.

According to research by the Institute for Construction Labor Research (ICERES), the preponderance of the peer reviewed academic studies have found that prevailing wage has no impact on overall construction costs. Higher wages on a Davis Bacon project are easily offset by higher skill levels and productivity on the part of more highly trained workers.

However, I am assuming that you may be referring to the model that the Bureau of Labor Statics uses to compute their wage data. To assert that a statistical model is more accurate than actual surveys is, on its face, wrong.

Additionally, the BLS data only includes the wages that are "on the check" and excludes any employee benefits like health insurance, retirement security benefits, and other benefits that may be a part of a workers total compensation package.

Also, I believe that the assertion that construction's labor costs account for 50% of a project's total costs is wildly inflated. Most of the figures I am aware of project that labor amounts to between 17–23% of costs, which make the rest of the math incorrect.

Davis Bacon assures that infrastructure investments lift a local community up by assuring that the workers are paid a wage that can actually support themselves and their families. TTD proudly supports the Davis Bacon Act and the policy behind it.

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