

**DRIVING THE ROAD TO RECOVERY: REBUILDING
AMERICA'S TRANSPORTATION INFRASTRUCTURE**

HEARING

BEFORE THE

**COMMITTEE ON COMMERCE,
SCIENCE, AND TRANSPORTATION
UNITED STATES SENATE**

ONE HUNDRED SEVENTEENTH CONGRESS

FIRST SESSION

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MARCH 24, 2021
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SENATE COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION

ONE HUNDRED SEVENTEENTH CONGRESS

FIRST SESSION

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CONTENTS

	Page
Hearing held on March 24, 2021	1
Statement of Senator Cantwell	1
Statement of Senator Wicker	3
Statement of Senator Warnock	4
Statement of Senator Fischer	30
Statement of Senator Blumenthal	32
Statement of Senator Sullivan	33
Statement of Senator Peters	36
Statement of Senator Lummis	37
Statement of Senator Young	39
Statement of Senator Tester	40
Statement of Senator Thune	42
Statement of Senator Rosen	44

WITNESSES

Hon. John D. Porcari, Former Deputy Secretary of Transportation; Managing Partner, 3P Enterprises	5
Prepared statement	6
Douglas R. Hooker, Executive Director, Atlanta Regional Commission (ARC) ..	8
Prepared statement	10
Hon. Toby Baker, Mayor, City of Hattiesburg, Mississippi	15
Prepared statement	16
Mark McAndrews, Port Director, Port of Pascagoula	19
Prepared statement	20

APPENDIX

Letter dated March 23, 2021 to Hon. Maria Cantwell and Hon. Roger Wicker from Catherine Chase, President, Advocates for Highway & Auto Safety	49
Response to written questions submitted to Hon. John D. Porcari by:	
Hon. Maria Cantwell	60
Hon. Amy Klobuchar	61
Hon. Kyrsten Sinema	62
Hon. Shelley Moore Capito	62
Hon. Marsha Blackburn	64
Response to written questions submitted to Douglas R. Hooker by:	
Hon. Maria Cantwell	64
Response to written questions submitted to Mark McAndrews by:	
Hon. Maria Cantwell	66
Hon. Amy Klobuchar	67

**DRIVING THE ROAD TO RECOVERY:
REBUILDING AMERICA'S TRANSPORTATION
INFRASTRUCTURE**

WEDNESDAY, MARCH 24, 2021

U.S. SENATE,
COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION,
Washington, DC.

The Committee met, pursuant to notice, at 10:27 a.m., in room SH-216, Hart Senate Office Building, Hon. Maria Cantwell, Chair of the Committee, presiding.

Present: Senators Cantwell [presiding], Blumenthal, Schatz, Markey, Peters, Baldwin, Tester, Rosen, Hickenlooper, Warnock, Wicker, Thune, Fischer, Sullivan, Young, Lee, Capito, Scott, and Lummis.

**OPENING STATEMENT OF HON. MARIA CANTWELL,
U.S. SENATOR FROM WASHINGTON**

The CHAIR. The hearing that we are having today is on rebuilding America's infrastructure, and I believe this is one of the most important topics before us, as it relates to our economy.

We live in an ever-increasing global economy, where more than 95 percent of consumers live outside our borders. That means American workers and businesses need world-class infrastructure to reach customers, and we need to be competitive. Instead, The American Society of Civil Engineers gives the United States infrastructure a rating of C-. So, we definitely need to improve that grade. Right now, the United States only invests 0.7 percent of our GDP on transportation infrastructure. Other countries invest up to eight times that amount, and the United States needs to make more investments if we are to remain competitive.

In 2018, America shipped nearly \$19 trillion worth of freight. That number is expected to top \$25 trillion by 2030. In my home state of Washington, we moved over \$443 billion worth of goods alone, and every day we see the cost of failing to make this investment by the amount of delays in our movement of product. The Washington State Department of Transportation estimated that if truck congestion increased by 20 percent, it would cost farmers, manufacturers, and businesses \$14 billion in operating costs, resulting in thousands of job losses.

So, what we need to do today is start the conversation about how we are going to invest in America's infrastructure. To me, three things are very clear. One, Congress must provide funds to invest in megaprojects that are important to our Nation and regional

economies. For example, in my State, the I-5 bridge replacement between Vancouver and Portland, the West Seattle bridge repair, or the North Spokane Corridor, which is a major transportation hub of moving product from Canada through the United States, and onto other destinations. All three of these projects are significant regional projects that mean a lot to our Nation's economy.

Second, we have already seen that freight and infrastructure programs have helped our economy be more economically efficient, but more needs to be done. If we can ease the congestion on our roadways, and at rail crossings, and our ports, it only helps our economy grow. Now is the time to partner with local and regional people to solve these problems and get more out of America's competitiveness. With 95 percent of customers living outside the United States, those products, whether they are from the South or from the Midwest or from the East Coast, need to get to their destinations.

And third, I believe we need to do more to help at-grade crossings, particularly because of rail congestion. If we are seeing an increase of rail traffic and exports out of the United States, it is clear that we are also seeing more congestion at our railroads—that is, at railroad crossings. This is costing us safety and efficiency. We are releasing a report today, "Railroad Crossing Congestion and Its Impacts to Safety and Efficiency," showing that these delays are really causing concerns.

The report shows, for example, in Davis, Oklahoma, a town of 2,800 people, it took police about 20 minutes to respond to a person threatening suicide, even though the person was less than three blocks away. In my hometown, Edmonds, Washington, a train blocked the only access on the waterfront for 3 hours. This required first responders to literally crawl through the rail cars to aid a pregnant woman who was due to give birth. I am pretty sure that the story that is told locally is that they actually transported her out on a stretcher through the rail cars, to get her to the hospital. In Valley, Nebraska, on Christmas morning, firefighters were prevented from responding to a house fire for over an hour, only because a train blocked access to the home. These at-grade crossing issues are real, and we need to make more significant investments to help alleviate this congestion.

We also need to help the serious congestion at our ports with containers. There are currently 26 ships anchored in idle at the Port of LA, Long Beach, because they are not able to get to port. When ships are unable to get to port, too often foreign-owned carriers offload goods at American ports and then, load up empty containers to go back to Asia, leaving U.S. exports behind. A recent investigation found between July and December 2020, carriers rejected at least \$1.3 billion in U.S. agriculture exports.

These are important issues to keep our economy going, so I am glad today we are going to hear from Deputy Secretary of Transportation in the Obama Administration, John Porcari. He has an extensive record on public and private activities related to infrastructure and, before joining the Obama Administration, was Secretary of Maryland Transportation. We also have three other individuals on the docket to hear from. Executive Director of the Atlanta-Regional Commission, Mr. Douglas Hooker, is going to be

joining us remotely, and I am going to let our colleague from Georgia give a longer introduction of him in a moment. And two other individuals, Toby Baker, the Mayor of Hattiesburg, Mississippi, and Mark McAndrews, is going to be remote, from Pascagoula. But I am going to let my colleague, Ranking Member Wicker, make those introductions at the appropriate time. So now, I would like to turn to—unless we have gotten another member, I would like to turn to my colleague, Senator Wicker, for his opening statement.

**STATEMENT OF HON. ROGER WICKER,
U.S. SENATOR FROM MISSISSIPPI**

Senator WICKER. Thank you, Madam Chair. Let me say at the outset, Senators are often late for votes, or late for lunch, but the history of this committee, under Democrats and Republicans, is that we hardly ever start late. I can just say that, for my part, I have had four of my committees meeting this morning and I am sure that is the problem with some of our colleagues. So, those of you visiting and those of us listening in, should know that we do everything we can, and this Chair has done everything she has been able to do, to start this meeting on time.

But thank you, Senator Cantwell, for holding this important hearing to consider our Nation's infrastructure needs, and to discuss surface transportation reauthorization.

Our Nation's transportation system deserves a long-term authorization that is paid for, in order to provide certainty and support for infrastructure investments. In 2015, Congress passed the overwhelmingly bipartisan FAST Act. Last year, Congress extended the FAST Act only until September 30. Given the FAST Act's upcoming expiration, and the impacts of COVID-19 on the transportation sector, Congress, and this committee in particular, has an opportunity to provide funding sources and updates for transportation programs. Our State and local transportation officials depend on Federal programs to maintain roads and bridges, carry out safety programs, and perform other essential functions. The various users of our transportation system, including Amtrak passengers, trucks delivering essential goods, and ports moving imports and exports, rely on strong Federal programs. A long-term surface transportation reauthorization would support these programs and propel our economy forward, as we recover from COVID-19.

Surface transportation reauthorization needs to be a bipartisan effort. Transportation issues have a tremendous impact on all Americans. Therefore, all Senators should be included in the legislative process. There has been some discussion of addressing infrastructure through budget reconciliation. Reconciliation is a process that is an overtly partisan exercise. This committee has a long track record of consensus and bipartisanship, I look forward to collaborating with Senator Cantwell and all members of this committee, to meet the needs of transportation infrastructure, and I hope that is done outside of reconciliation.

Today's hearing provides an opportunity to hear regional and local perspectives on infrastructure needs. It also allows us to consider how best to support different modes of transportation and our freight network. For instance, this committee has jurisdiction over the Department of Transportation's Office of the Secretary, which

includes programs like the BUILD grants. Our committee also has jurisdiction over the Build America Bureau, which administers several other grant and loan programs that are important for infrastructure investments. A priority of mine is to ensure rural communities are able to utilize and leverage these programs, given the unique challenges that rural areas often face in funding critical projects.

Today, I have the privilege of introducing two Mississippians who have important perspectives on transportation issues. Mayor Toby Barker of Hattiesburg, Mississippi, has worked tirelessly to bring needed investment and updates to the transportation network that connects his city to the state and the rest of the country. From the local level, he has successfully navigated various Federal financing programs to improve his city. I look forward to hearing about his experiences with the Department of Transportation grant programs and his insights on managing infrastructure investment from the local perspective.

Mark McAndrews will join us remotely. He brings a wealth of experience as Director of the Port of Pascagoula, which is an essential connection point in our transportation system, for both the regional and national economies. He has served as Port Director since 2001, adding to his nearly 40 years of experience in the maritime sector. I look forward to hearing his views on how we can improve our multimodal freight transportation system.

Today's witnesses provide an opportunity for this committee to learn how Congress can improve the policies that ensure the safety and efficiency of our transportation infrastructure system. Thank you, Madam Chair.

The CHAIR. Thank you, Ranking Member Wicker. Senator Warnock, would you like to introduce your witness from Atlanta today? Actually, let us wait 1 second, if you could, thank you.

[Recess]

The CHAIR. Now, we will return to the hearing for—the previously discussed hearing on America's infrastructure needs and we will go to our panel. But first, we are going to allow Senator Warnock to introduce one of the panelists. Senator Warnock.

**STATEMENT OF HON. RAPHAEL WARNOCK,
U.S. SENATOR FROM GEORGIA**

Senator WARNOCK. Thank you, Madam Chair and I am honored to have the pleasure of introducing the next witness who hails from the great state of Georgia. Doug Hooker is Executive Director of the Atlanta Regional Commission, and in his career, he has worked in the public sector and private sector organizations. Among the places that he has worked are the City of Atlanta's Department of Public Works, the State Road and Tollway Authority, with BioLab Inc., and with Atkins Engineering.

The Committee will benefit, no doubt, from his wealth of experience working on important regional and local projects, in the areas of energy, education, transportation, transit, and water. I look forward to listening to his testimony, as he highlights the great work being done, right now, in Atlanta, and how the Federal Government can be a partner moving forward. Mr. Doug Hooker.

The CHAIR. Thank you, Senator Warnock, and again, thank you for helping to get this witness here. We are going to go in order. Mr. Porcari, Mr. Hooker, who I think will be remote, and then, the other witness—is that right? I cannot see that far down the—

Senator WICKER. It is Mayor Barker—

The CHAIR. OK, thank you. OK, so, and then, we will have Mayor Barker, who is here, and Mr. McAndrews. So, we will proceed, and start with you, John Porcari. Thank you so much.

STATEMENT OF HON. JOHN D. PORCARI, FORMER DEPUTY SECRETARY OF TRANSPORTATION; MANAGING PARTNER, 3P ENTERPRISES

Mr. PORCARI. Chair Cantwell, Ranking Member Wicker, members of the Committee, thanks for the opportunity to testify today on this important topic.

Transportation policy has never been more important to the future of our country, and indeed the planet, than it is today. We are compelled to admit that many past transportation investment decisions have not resulted in a cleaner, safer, more equitable world. We now face the urgent need to make immediate and profound changes, if we are to ensure a better future for the next generation of Americans.

This fundamental change in direction is best implemented through two policy lenses, climate change and equity. Simply put, the transportation sector is the largest single source of CO₂ emissions in the U.S. It needs to be the single largest component of our response to the existential threat of climate change. Equity, we have not paid adequate attention, in the past, to who benefits and who bears the burdens of our transportation investments. Equality of opportunity for all Americans should be a fundamental objective, not just the occasional happy by-product, of our investment choices. Each of the policy recommendations below will help directly address equity in climate change goals.

First, electrification of our transport system across land, sea and air should be our singular short-term imperative. It starts with better stewardship of our public rights of way. We need to modify 23 U.S.C. 111 explicitly to permit charging facilities at rest areas and inductive charging in travel lanes. We need to use our highway rights of way for both renewable power generation and long-distance transmission of renewable energy, via buried High Voltage Direct Current lines. We need to encourage the use of railroad rights of way for buried renewable HVDC transmission lines to tax credits and incentives.

America's ports, airports, and intermodal freight transfer facilities are the linchpins of our economy. The gantries, cranes, tractors, shore power for ships, aircraft tugs, and ground handling equipment can all be electrified immediately, and can be ramped up, through a competitive grant program that does not cap participation by freight projects.

Next, we need to build on America's existing passenger rail network, providing benefits to every part of the country. Amtrak long distance service provides crucial connectivity to rural communities. New city pairs should be added to existing services as building blocks for a comprehensive national network. And promising pri-

vate sector passenger rail proposals should be actively encouraged, through the use of the RIFF Loan Fund. Urgently needed improvements to the Northeast Corridor, Midwest and West Coast passenger service will continue to grow ridership.

And a surface transportation program that adopts a systems approach to moving people and goods safely and efficiently, needs to separately fund projects of national significance that are physically located in one state or region, yet provide crucial system wide benefits. For example, the Brent Spence Bridge carrying I-75 over the Ohio River, may be located in the greater Cincinnati/Northern Kentucky region, but it plays an outsized role in supporting the auto industry ecosystem from Michigan to Georgia, carrying 3 percent of America's GDP annually over an outdated, substandard bridge. Projects such as the I-5 Columbia River multi-modal bridge, the Gateway passenger rail project, as well as various coastal ports, inland waterways, and Great Lakes cargo projects, play a similar national function. These projects should be treated as a separate category of nationally critical projects.

The National Environmental Policy Act process should now incorporate climate change and equity considerations in the development of the foundational Purpose and Need statements for those documents. Our re-engineered interagency NEPA process can have the twin benefits of both a streamlined process and better environmental and community outcomes. Active transportation alternatives, such as bike lanes, trails, and last mile electrified mobility devices for persons with disabilities, must be included wherever possible.

The TIFIA and RIFF loan programs should be broadened and simplified, to encourage the construction of fleet charging facilities, and the acquisition of electrified rolling stock for transit systems, freight and commuter rail, school districts, and municipal fleets. Local employment and skills training needs to be an integral component of the project procurement process. Pilot programs have shown that local hiring and training component in those procurements, creates a ladder for good paying, middle-class jobs. Similarly, a whole of government approach at the Federal level is required to maximize the U.S. manufacturing opportunities for local infrastructure projects.

The genius of federalism, as it applies to our transportation system, is that project decisions are properly made at the local and State level based on local needs and priorities, and these projects aggregate into a national transportation system. We need to encourage bold, persistent experimentation by local jurisdictions in states through more aggressive use of the SEP-15 process and by funding innovative technology pilot projects, through the competitive grant programs.

Thank you for the opportunity to testify today.

[The prepared statement of Mr. Porcari follows:]

PREPARED STATEMENT OF HON. JOHN D. PORCARI, FORMER DEPUTY SECRETARY OF TRANSPORTATION; MANAGING PARTNER, 3P ENTERPRISES

Chair Cantwell, Ranking Member Wicker, members of the Committee:

Thank you for the opportunity to testify today on this important topic. My name is John Porcari and I have had the opportunity to serve in the public and private

sector in a variety of transportation and economic development positions, including the honor of serving as Deputy Secretary of the United States Department of Transportation and Secretary of the Maryland Department of Transportation.

At no time during my lifetime has transportation policy been more important to the future of our country, and indeed the planet, than it is today. If we are honest with ourselves, we are compelled to admit that many past transportation investment decisions have not resulted in a cleaner, safer, more equitable world.

We now face the urgent need to make immediate and profound changes throughout our transportation system if we are to ensure a better future for the next generation of Americans. A strong and compelling case is being made across the country and by my colleagues here today for increased investment across the transportation system. I would like to make the case for corresponding policy changes that would maximize the return on increased public infrastructure investments and rebuild our transportation infrastructure in a smarter, more resilient and sustainable way.

This fundamental change in direction is best described through two policy lenses: climate change and equity.

Climate change. Simply put, the transport sector is the largest single source of CO₂ emissions in the United States, and must, therefore, be the single largest component of our response to the existential threat of climate change.

Equity. We have not paid adequate attention in the past to who benefits and who bears the burdens of our transportation investments. Equality of opportunity for all Americans should be a fundamental objective, not just the occasional happy by-product, of our investment choices.

For each of the policy recommendations below, I will briefly describe how they can directly address equity and climate change goals.

Electrification of our transportation system across land, sea and air should be our singular short-term imperative. For our Interstate highway system, several legal and policy changes would accelerate these electrification efforts, including: modifying 23 USC Section 111 to explicitly permit charging facilities at rest areas and inductive charging in travel lanes; and commitment to both renewable power generation and long-distance transmission of renewable energy via buried High Voltage Direct Current (HVDC) lines in highway rights-of-way. Better stewardship of our public rights-of-way can greatly accelerate the generation and transmission of renewable energy. Similarly, early projects already underway utilizing private and public railroad rights-of-way for buried renewable energy HVDC transmission lines could be accelerated and scaled nationally through tax credits and incentives. These electrification efforts will also help to redress past inequities, in particular the disparate emissions impact on communities by diesel medium and heavy duty trucks, buses, and locomotives.

America's ports and intermodal freight transfer facilities, linchpins of our economy, need to be electrified as well. Cranes, rubber-tired gantries, drayage tractors and shore power for ships are all candidates for electrification and would benefit from a turbocharged *competitive grant program* that does not cap participation by freight projects. Airports would similarly benefit on the air side in the short term from electrification of tugs and ground handling equipment, and land side airport projects that provide electrified, portal to portal transit for passengers and employees. Increased investment in cleaner, more seamless goods movement across the transportation system is one of the most cost-effective investments we can make for future economic growth.

Building on America's existing *passenger rail* network will provide benefits to every part of the country. Amtrak long distance service provides crucial connectivity to rural communities. City pairs should be added to existing service in a building block fashion that will ultimately provide more of a national network, and promising private sector passenger rail proposals should be actively encouraged through the use of RRIF loans. Urgently needed improvements to the Northeast Corridor are a sound investment for a corridor with proven operating economics and strong growth potential. Likewise, Midwest and West coast passenger rail service has shown that infrastructure investments bring increased ridership. America's freight rail network is the envy of the world, and shared use of these rails can enhance both freight and passenger rail capacity, reducing our carbon footprint and providing mobility to underserved communities.

A surface transportation program that adopts a systems approach to moving people and goods safely and efficiently needs to specifically recognize and separately fund *projects of national significance* that are physically located in one state or region, yet provide crucial system-wide benefits. For example, the Brent Spence Bridge carrying I-75 over the Ohio River may be located in the greater Cincinnati/Northern Kentucky region, but it plays an outsized role in supporting the auto manufacturing ecosystem from Michigan to Georgia, carrying 3 percent of America's

GDP annually over an outdated, substandard bridge. Projects such as the I-5 Columbia River multi-modal bridge, the Gateway passenger rail project in New York/New Jersey, as well as various coastal ports, inland waterway and Great Lakes cargo projects, play a similar national function and should be treated as a separate category of nationally-critical projects.

Transportation projects requiring either an Environmental Impact Statement (EIS) or an Environmental Assessment (EA) under the *National Environmental Policy Act* (NEPA) should now incorporate climate change and equity considerations in the development of the foundational Purpose & Need statements of those documents. This will bring mitigation and remediation of climate impacts, as well as specific equity considerations, into the project scope. *Active transportation alternatives* such as bike lanes, trails, and last-mile electrified mobility devices, including those for persons with disabilities, should be integral components of surface transportation projects. A re-engineered interagency NEPA process can have the twin benefits of both a streamlined process and better environmental and community outcomes. The resulting NEPA documents will also be less vulnerable to legal challenges.

The eligibility of USDOT's *TIFIA and RRIF loan programs* can also be broadened to encourage the construction of fleet charging facilities and acquisition of electrified rolling stock for transit systems, freight and commuter rail, school districts and municipal fleets. The use of Master Credit Agreements for electrification across asset classes by counties, cities and public authorities would help spur the concurrent electrification of multiple surface transportation systems. Electrified intermodal facilities for moving goods and people, particularly port/rail and air/transit, should be given expanded eligibility and expedited processing for these loan programs.

The genius of federalism as it applies to our transportation system is that project decisions are properly made at the local and state level based on local needs and priorities, and these projects aggregate into a national transportation system. USDOT should, in the words of President Franklin Delano Roosevelt, encourage "*bold, persistent experimentation*" by local jurisdictions and states through more aggressive use of existing mechanisms such as the SEP-15 process and by funding higher risk/reward pilot projects through the competitive grant programs. Encouraging innovation in response to climate change and to redress the impacts of past project decisions should be central elements of our Federal transportation program, and USDOT should strive wherever possible to assist local jurisdictions. This innovation agenda should also include connected/autonomous vehicles, safety and other technology innovations.

At the same time, these local project choices should be encouraged at the Federal level to include *local employment and skills training* as an integral component of the project procurement. Multiple successful examples now exist of pilot programs that have squeezed more value out of infrastructure dollars by including a local hiring and training component that creates a ladder for good-paying middle class jobs. Similarly, a whole-of-government approach at the Federal level including USDOT, DOE, Commerce and other agencies is required to maximize the *US manufacturing* opportunities for local infrastructure projects.

As we drive forward in rebuilding America's transportation infrastructure, it is worth remembering President Biden's vow to "Build Back Better". What does that mean?

"Build Back" is an acknowledgement that we have under-invested in our Nation's future, that we have to do much more if we are going to rebuild our economy and establish a stronger foundation for America's future. "Better" means we have to do it differently, explicitly taking into account climate change and equity as, together, we develop smarter ways to make foundational investments in a better American future through infrastructure.

The policy suggestions in my testimony today are intended to help us Build Back Better by maximizing the impact of every dollar invested and putting our Nation on a glide path to a brighter, more sustainable future.

Thank you for the opportunity to testify today.

The CHAIR. Thank you, Mr. Porcari. We are now going to turn to Mr. Hooker. Thank you so much for joining us.

**STATEMENT OF DOUGLAS R. HOOKER, EXECUTIVE DIRECTOR,
ATLANTA REGIONAL COMMISSION (ARC)**

Mr. HOOKER. Good morning, Chair Cantwell, Ranking Member Wicker, and members of the Committee. Thank you for inviting me

here to offer the Atlanta Regional Commission's perspectives on challenges and opportunities in developing our transportation infrastructure. My name, as Senator Warnock says, is Douglas Hooker. I am Executive Director of the Atlanta Regional Commission, or ARC. In addition to being the metropolitan planning organization for a region of 20 counties and 5.8 million people, ARC leads important regional programs related to aging services, water resources planning, workforce development, and Homeland Security.

Wise investments in transportation infrastructure will boost our economy, support more equitable community development, and advance interstate commerce. These are goals that ARC shares with this committee, your colleagues in the Senate and the House, and all of our government partners. And with these outcomes in mind, I will focus my remarks on four key recommendations that I elaborated on in my written testimony.

First, continue to support the unique role the Nation's MPOs play in convening diverse groups of public and private stakeholders, to address transportation issues in metropolitan areas. Our work promotes regional efficiencies by avoiding each of our counties and cities having to fund its own transportation planning staff, along with all the technical elements needed to perform those functions effectively. In many ways, we serve, as a repository of services and professional expertise and the ARC is very proud to provide this vital role for our jurisdictions.

Second, since interstate goods movement is important and vital to our regional and national economies, focus additional resources on addressing challenges faced by these industries. The Port of Savannah is the largest container terminal in the western hemisphere, and a major export gateway for the United States. Metro Atlanta's location allows trucks to deliver goods to the region and return to the port, within a single day's service time. Thus, Metro Atlanta has become a major center for warehousing and distribution for the entire Southeastern United States. However, one of the consequences of this success is that I-285, the region's bypass freeway, has two of the Nation's five worst freight traffic, interchange bottlenecks.

Third, ensure that FAST Act reauthorization recognizes the critical role that quality-of-life considerations will play in building a stronger and more equitable economy when properly integrated into transportation development. We face the challenge of increasing housing costs for our work force, our Nation's most important resource. In Atlanta, one-third of homeowners and half of renters, are cost-burdened, meaning they spend 30 percent or more of their incomes on housing, or 50 percent or more on housing and transportation combined. Due to limited affordability, many employees are forced to undertake long and expensive commutes, which further congest our roadways, and adversely impacts interstate commerce.

Fourth, leverage the capacity of MPOs to convene broad stakeholder groups to plan for the future electrification and interconnection of our transportation system. For example, the ARC is partnering with Georgia DOT in several local communities to implement a large, connected vehicle, or CV, program. Our goal is to equip over 1,000 intersections with CV technology that enables ve-

hicles and traffic signals to share safety and signal timing messages with each other. This will be the Nation's largest deployment of connected vehicle technology in one region.

And in closing, I commend this committee for its focus on ensuring the future Federal transportation investments needed to support the Nation's interstate commerce, and in ways that will benefit all Americans. MPOs, such as ARC, are helping to forge consensus solutions, to advance critical interstate commerce goals. Your leadership and support are critical to help us build a more equitable transportation system that provides the opportunities for our Nation, and all of its residents to thrive in a global economy.

Please view ARC as a resource as you continue your critical work. We look forward to working with you on our common goals, and thank you, again, for inviting me here today.

[The prepared statement of Mr. Hooker follows:]

PREPARED STATEMENT OF DOUGLAS R. HOOKER, EXECUTIVE DIRECTOR,
ATLANTA REGIONAL COMMISSION (ARC)

Chair Cantwell, Ranking Member Wicker, and Members of the Committee, thank you for inviting me here to discuss the Atlanta Regional Commission's perspectives on the current challenges in developing our transportation infrastructure at the local, state, and Federal level, and how investment in transportation infrastructure can help boost our economy, support a more equitable community, and advance interstate commerce. My name is Doug Hooker, and I am the Executive Director of the Atlanta Regional Commission (ARC). My Board Chairman, Kerry Armstrong, joins me in thanking you for this opportunity to have the ARC's voice heard.

In 1947, the Metropolitan Planning Commission (MPC), was created in Atlanta and became the first publicly supported, multi-county planning agency in the United States. Ultimately renamed the Atlanta Regional Commission, the agency's responsibilities include: 1) being designated by the state of Georgia as a Metropolitan Area Planning and Development Commission as well as a Regional Commission; 2) the federally designated *Metropolitan Planning Organization* (MPO) that is responsible for developing a multi-modal, financially constrained transportation plan; 3) the federally designated *Area Agency on Aging* for the Atlanta region, providing services and policy guidance to improve the quality of life of older adults; 4) planning staff to the Metropolitan North Georgia *Water Planning District*, which develops comprehensive regional and watershed-specific water resources plans; 5) the administrative agency for the Atlanta Regional *Workforce Development Board*; and 6) the local administrative agency for the Atlanta *Urban Area Security Initiative* (UASI), which prepares and coordinates the region's response and recovery to homeland security issues. ARC's transportation planning area includes all or part of 20 counties and serves a population of 5.8 million people.

ARC's perspectives on meeting the infrastructure challenge and the need for investment to boost our economy and improve the transportation system.

The Nation's MPOs, in partnership with local communities, states, and other regions are in a unique position to work with our Federal partners to address and implement national transportation and interstate commerce goals.

The Nation's MPOs convene diverse groups of stakeholders that range from mayors, county commission chairs, local and state government staffs, business and community leaders, and Federal stakeholders, to address the pressing public challenges facing regions. These discussions cover a variety of questions: from 'How do we fix dangerous intersections so freight trucks can safely get to warehousing districts?'; to 'What are the best strategies to lower vehicle emissions to improve air quality and reduce greenhouse gases?'; to perhaps the most important questions we must wrestle with: 'How can we best design a transportation system that supports our economy while furthering equitable growth in our 20-county region?' 'How do we design a system that works well to meet the needs of all of our residents?'

Only a partnership among the local, regional, state, and Federal government officials can advance solutions to these challenges. This convening role is where regional planning agencies excel, including providing vital support as part of our mission for the under-resourced communities that exist within our region. The ARC is

proud to play a supporting and coordinating role across many city, county, and state agency jurisdictions.

In this capacity, the ARC and many other large MPOs have already started addressing the needs that are important to this Committee, such as providing funds for goods movement projects, planning for resilient transportation systems, factoring into our decisions the need to combat climate change, and strengthening equity considerations in the selection of the region's transportation investments. The ARC is closely monitoring the development of these policies by committees of Congress and the Administration, and hopes to work with you to fashion, strong, reasonable, and implementable changes in the Nation's transportation policies that serve our region and its people. We welcome the added emphasis to address these areas more thoroughly and comprehensively. MPOs will need additional resources beyond their current funding levels to implement these Federal priorities that advance interstate commerce, national economic competitiveness, and fairness at home.

We have shared with staff from the Senate's Environment and Public Works Committee a list of our recommendations for planning provisions in the FAST Act reauthorization. That document is appended to this written testimony.

We note that last year's House bill provided a 41 percent increase in funding resources for MPO planning to successfully address these national goods movement, equity, and environmental challenges. It is up to the Congress to decide what that number should be, but we strongly encourage that you make available the additional resources needed to implement any new responsibilities required of the Nation's MPOs.

Along these lines, a reauthorized FAST Act can be strengthened by lowering the required non-federal match for MPO planning programs, from the existing 20 percent level to a maximum of 10 percent or even eliminating this match requirement.

Further, the ARC supports creating the Metro Performance Program concept, for high-performing MPOs that direct funding to local communities, to advance transportation-focused investments that support Federal priorities related to goods movement, equity, congestion relief, climate change, and infrastructure resiliency.

We note that a core goal of the Senate Commerce Committee is furthering the Nation's economic competitiveness through interstate and international commerce. We are extremely proud that Georgia was named in September 2020 as the "Top State for Doing Business" by the magazine *Area Development*. This was the 7th consecutive year that our State received this recognition. While there are many factors that led to this recognition, Georgia's strong goods movement and logistics sector—including the ability to cost-effectively transport goods both throughout the Nation and to international markets—is a core foundation of our community's economic success. The Georgia legislature continues to prioritize supporting interstate commerce, with the creation in 2019 of the Georgia Commission on Freight & Logistics. This legislative initiative emphasizes finding solutions to the challenges being faced by industries supporting interstate commerce.

The state of Georgia has significantly increased transportation funding since 2015, with the passage of the *Transportation Funding Act* (HB 170). This action has doubled transportation revenues for the state. Local governments have also increased revenue to support transportation funding for both transit and roadways, including the transit funding referendums in both the City of Atlanta and Clayton County. It is critical that our Federal partners also identify strategies to increase transportation revenues.

Interstate goods movement is critical to Georgia and the Atlanta region's economy.

Nearly one-third of the jobs in Metro Atlanta are in industries that rely on freight transportation. These jobs comprise \$514.8 billion, or 38 percent, of our region's economic output. The Atlanta region's total freight tonnage will increase by 43 percent over the next 25 years. By 2050, the economic contribution of the goods movement sector will increase to \$1.2 trillion.

The Atlanta region has a close economic relationship with states and regions throughout the Nation, but the most critical goods movement partner is the Port of Savannah. The largest container terminal in the western hemisphere and the Nation's top export gateway, the Port of Savannah is a critical part of the Nation's interstate commerce. For example, while metro Atlanta is the Port's largest intermodal trade partner, the Memphis region is Savannah's No. 2 trading partner and is responsible for one out of every five containers. The Port of Savannah is one of the primary drivers of goods movement in the United States.

The location of metro Atlanta, relative to the Port of Savannah, allows for the transportation of goods to metro Atlanta and back to the Port in one business day. This has allowed metro Atlanta—and Georgia—to become a major center for

warehousing and distribution for the Southeastern United States. Georgia continues to emphasize development of inland ports, including the Appalachian Regional Port, the Bainbridge Terminal, and the Northeast Georgia Inland Port that is scheduled to open later this year. The Georgia Ports Authority continues to assess the feasibility of additional future inland ports.

The port's current annual capacity is four million TEUs, or twenty-foot equivalent units. By 2028, the Port of Savannah will have a capacity eight million TEUs.

The Atlanta region and other MPOs need the Committee's leadership to help our Nation's goods movement and logistics sector to succeed. The current USDOT National Highway Freight Program has helped states to improve goods movement bottlenecks. Additional funding is needed in this program to address the Nation's most significant freight movement bottlenecks. Two of the Nation's top five trucking bottlenecks are in the Atlanta region: #3 at the I-285 North/I-85 North interchange (DeKalb County) and #4 at the I-285 West/I-20 West interchange (Fulton County).

Without the necessary rail and roadways improvements, our Nation's economy will be at a disadvantage when competing globally. The ARC, in partnership with the Georgia Department of Transportation and local communities, conducts freight cluster plans to identify needed transportation improvements for our largest manufacturing and distribution centers. One outcome identified in these studies is that insufficient funding is available for the critical "last mile" freight connections that support interstate commerce. We recommend that the next transportation reauthorization bill not only increase freight program funding for states, but also provide the Nation's largest MPOs a suballocation of the National Highway Freight Program to fund needed improvements for these essential "last mile" freight bottlenecks.

Within the Atlanta region, examples of these "last mile" freight improvements include two intersection operations projects on SR 6 (Camp Creek Parkway), south of Atlanta. These projects will improve safety and reduce congestion along a corridor that serves an Amazon distribution center and numerous other industrial businesses, while connecting to three interstate highways and Hartsfield-Jackson Atlanta International Airport. Northeast of Atlanta, in the Gateway 85 area of Gwinnett County, several intersection projects have been identified that will add turn lanes, increase the turning radius on corners, and shift the location of stop bars at intersections so that trucks can turn left more easily. While these "last mile" projects are not as high profile as our largest interstate program projects, they are among the most critical needs identified by our trucking partners that use our roads.

ARC has conducted a truck parking study of needs within the Atlanta region. Most interstate commerce corridors in our region suffer from truck parking shortages, with this shortage forecast to worsen in the future. To support the Nation's interstate commerce, the trucking industry needs safe and accessible parking. We ask that you keep these critical truck parking considerations on the agenda for your Committee. Safe and accessible truck parking is not just a local issue, the needs cross state boundaries. A national program is needed that focuses on interstate commerce corridors and addresses the unmet needs for safe and accessible truck parking.

We need a strong national vision that encourages strategies to shift more of our Nation's interstate goods movement from trucking to rail. ARC often hears this desire from local and state officials. Increasing the share of interstate goods movement from trucks to rail is a strategy that would reduce crashes and congestion, lower truck-related NO_x and VOC emissions, and reduce greenhouse gases. Increased Federal assistance is needed to upgrade rail infrastructure and at-grade rail crossings in both rural communities and metropolitan areas. Due to economic factors associated with the rail industry, it is likely that train lengths will increase in the future and place additional delays at existing grade-crossings. To further community safety at these at-grade rail crossings, it is essential that the Federal Railway-Highway Crossings program be expanded well beyond the current \$250 million per year.

As the Committee continues deliberations on the necessary policies and investments needed to support interstate commerce and advance prosperity, we must always keep one item in mind. This leads to my third point.

Recognize the critical role that quality-of-life considerations play in building a strong economy.

One of the challenges we face is increasing housing costs for our workforce, the most important resource we have in our communities. No community can succeed in supporting interstate commerce without a diverse and affordable housing supply that meets the needs of our residents. We are rapidly losing housing affordability throughout the nation, and the Atlanta region is no exception.

The Atlanta region has been long recognized across the Nation as having relatively affordable housing costs. Historically, this housing cost advantage helped fuel the region's growth, allowing workers in critical interstate commerce industries to achieve the American Dream: shifting from renting to ultimately owning a home. But quality, affordable, housing is becoming more difficult to find in our region: and not only affordable housing, but quality, affordable renting as well. This threatens our quality of life by reducing our residents' ability to improve their economic prospects in an equitable manner, because they fail to fully share in in the region's prosperity. In metro Atlanta, about one-third of homeowners and half of renters are now considered "cost burdened"—that is, they spend least 30 percent or more of their income on housing or 50 percent or more on housing and transportation combined.

Over the past five years, rents have increased almost 27 percent in Atlanta, which is the largest five-year increase among the Nation's 11 largest metros. Rents have increased by 37 percent since 2011, but earnings have only increased 20 percent. Overall, housing prices in the Atlanta region are among the most reasonable among our peers, but once you add the cost of transportation, we are worse in terms of overall affordability than Seattle, New York, Chicago, and San Francisco, to name a few major metros.

Most of our workforce cannot afford housing close to where they work. High construction costs make it difficult to rehab existing housing stock and residential building permits are at about 1/3 the levels before the "Great Recession." Housing costs near major employment centers have soared, forcing many employees to undertake long and expensive commutes that further congest our roadways and adversely impact interstate commerce. If a historically lower housing cost region such as the Atlanta region is experiencing these challenges, this is an item that must be a national priority for our Nation to compete globally in commerce.

To further economic competitiveness and interstate commerce, ARC has developed multimodal transportation programs to address these needs through our pioneering Livable Centers Initiative. This program utilizes transportation investments to equitably plan for the development of mixed-use centers that reduce greenhouse gas emissions, support equitable growth, increase transit ridership, reduce congestion, and encourage housing to be constructed in a variety of price ranges. In moving forward, Federal programs should consider equity and its role in supporting economic mobility.

Congress can support these core Federal objectives by continuing to provide funding assistance to programs that clean our air and support resiliency goals. Funding for the Congestion Mitigation and Air Quality program should be expanded and dedicated exclusively to initiatives and projects that clean the air. This includes removing the current provision that permits 50 percent of program funding to be redirected to other programs.

Transit operators in the Atlanta region are in the planning, engineering, and environmental review phases of several major transit expansions. Many of these projects are supported by sales tax programs, such as those in the City of Atlanta and Clayton County. Examples of these projects range from expanded bus services, such as Bus Rapid Transit (BRT), to potential rail expansions such as streetcars in the City of Atlanta and rail on the Clifton Corridor connecting the MARTA rail network to the Emory and CDC area.

It is critical that the Federal government be major partners in these transit expansion programs, including having adequate funding through the FTA Capital Investment Program. Increases in transit funding will allow MPOs to meet the critical needs of our transit systems, which have suffered significant financial challenges because of the pandemic.

This leads to my fourth point.

Leverage the capacity of MPOs to convene broad groups from the public sector (local, state, federal) and the private sector, to plan for the electrification of the transportation sector.

One of the great challenges—and one that directly impacts interstate commerce—is the future electrification of our transportation sector. This transformation is being led by the private sector, for example with General Motors phasing out vehicles using internal combustion engines by 2035. Another example is FedEx recently committing to deploying electric-only vehicles by 2040. The trucking industry is evaluating clean energy technologies and major breakthroughs are expected in the coming years. We must prepare now to support this transition to electrification of the transportation sector.

High capacity MPOs can use their unique convening powers to bring together the public and private sectors to meet the needs of interstate commerce and the traveling public. Because of the expected challenges in meeting the future demand of

the evolving power grid—and one for which our communities were not originally designed to meet—federal leadership is also needed in identifying best practices for communities to follow in addressing this challenge. Opportunities will exist in the coming decade to co-locate broadband, power, and charging stations. This can support equitable outcomes for all residents that live in underserved communities, both in metropolitan areas and rural areas, ensuring they share in the benefits from electrification and expanded broadband services. However, achieving these goals will require Federal policy and Federal investment that help lower barriers to public-private cooperation and reduce the risk of innovation in this frontier.

The pandemic exposed the critical importance of broadband to our Nation. Due to the outstanding broadband availability in many parts of our region, ARC staff was able to work remotely. However, many rural and under-resourced communities lack these broadband resources, adversely impacting prosperity in our Nation. Creating synergy by co-locating broadband and electrification improvements alongside transportation projects provides the opportunity to advance equitable outcomes that span multiple needs.

One of the core missions of the Commerce Committee is the support of new transportation technologies. In the rapidly evolving arena of technology, what was once a state of the practice technology can be obsolete the next year. However, local governments and states need some stability to plan for and invest in needed transportation-related safety investments.

An example of this challenge is within the arena of connected vehicles. The Georgia Department of Transportation (GDOT) and ARC are pursuing a connected vehicle (CV) program called CV1K+. With a \$10 million budget, the initiative is a significant investment for the region. The goal is to equip over 1,000 intersections with CV technology that allows safety messages and signal timing information to be shared between vehicles and traffic signals. This will be the Nation's largest deployment of connected vehicle technology in one region. One of the great challenges in pursuing this project, which supports interstate commerce and safety, has been the rapidly evolving regulatory environment at the FCC in recent years regarding the 5.9 GHz safety spectrum. While we understand that the FCC must respond to the introduction of new technologies and changing needs, a stable regulatory environment is essential. While the project is now underway, instability in knowing what technologies will be allowed to use the 5.9 GHz safety spectrum created delay and uncertainty in implementing the program.

One item we have learned during the advancement of this technology program is the critical role of capacity-building. However nationally, many communities and smaller MPO's lack the technical capacity to do this. Our Federal partners need to emphasize capacity-building as a core element when designing Federal programs, allowing equitable outcomes to be achieved by all communities—metropolitan and rural—to advance our Nation's competitiveness.

There is one final point I want to share with you.

Design Federal programs that permit communities to invest in what is most needed for the community vs. pursuing Federal programs that are narrow and limit solution options.

Local communities best know their needs and what constitutes a priority investment. In the past the way Federal funding programs were funded prejudiced some decisions. An example is the Federal interstate program which permits funding as high as a 90 percent Federal share with a 10 percent non-federal match. Transportation projects off the interstate system historically have been largely funded with at an 80 percent Federal share and a 20 percent non-federal match. The FAST Act included a rail title for the first time, leveling the playing field. The economic competitiveness of the Nation depends on having resources to support intermodal goods movement, including by rail. It is critical to provide funding for rail in future Federal bills.

* * *

I commend the Committee for its focus on ensuring that the billions of dollars being spent on transportation support our Nation's interstate commerce in a way that benefits all Americans—including those in those under-resourced communities. These under-resourced communities exist both in our Nation's large metropolitan regions—such as the Atlanta region—and rural America. MPOs such as the Atlanta Regional Commission are working to help find solutions to our important interstate commerce goals. Your leadership is needed in helping us build an equitable transportation system that not only supports the Nation in competing—but thriving—in international commerce. Please view ARC as a resource as you continue the critical

work of this Committee. Thank you again for inviting me here today, and we look forward to working with you on these important issues.

The CHAIR. Thank you, Mr. Hooker. I think we could have had the same testimony from somebody from the Puget Sound region. So, I feel like the issues that you brought up are the exact same issues in a growing area of our State, as well.

We now turn to a more local view of the transportation needs, Mr. Toby Barker, Mayor of the City of Hattiesburg. Thank you for being here and joining us.

**STATEMENT OF HON. TOBY BARKER, MAYOR,
CITY OF HATTIESBURG, MISSISSIPPI**

Mr. BARKER. Thank you Chair Cantwell, Ranking Member Wicker, Members of the Committee for allowing me to share a local perspective on rebuilding America's infrastructure. Any mayor of any of the thousands of towns and cities across the United States could speak to the challenges faced when attempting to plan and finance infrastructure projects.

Hattiesburg is a city of around 50,000 residents in South Mississippi. Home to both The University of Southern Mississippi and William Carey University, as well as two hospitals, and Camp Shelby, around 150,000 people work in Hattiesburg daily. In its early days, the railroad brought economic growth, both in goods and in people. We have been very fortunate to be at, or near, the top of job growth in Mississippi for several years. Wall Street 24/7 reported that out of all the MSAs in the country, Hattiesburg was #2 in job growth nationwide, between February and November of last year.

Rail is a valued component of that growth, both freight and passenger. However, one challenge that developed over time is that when a city has a rail switchyard in the middle of its downtown, and 20 crossings, all at-grade in and around that downtown, problems will occur. Blocked crossings are part of daily life. Aside from being a source of frustration for motorists, they are a safety concern and have been the site of recent fatalities. It is a generations-old problem. The solution, of course, was simple. We need an overpass, or actually, two or three overpasses. Fortunately, we found Federal avenues to leverage our limited local capacity into real funding. In early 2020, we were awarded a CRISI grant to build the first overpass on a road just south of our downtown. And again, later last year, we were awarded a BUILD grant to build a second overpass. Our delegation, particularly Senator Wicker, were incredibly helpful in this effort. We also had the support of both freight railroads. If Federal surface transportation grants were not available, these projects would not happen for Hattiesburg.

Cities have a tough enough time maintaining their existing infrastructure maintenance issues. Roads need paving. Bridges need replacing. Water, sewer, and storm water lines are undersized or aging. There is public demand for sidewalks. And the list goes on. There is very little money available after taking care of all those other things, if you can take care of them, either to solve a big challenge, or to invest in game-changing projects that can lead to future growth. Surface transportation grants are a lifeline that

communities can use, and it is critical that Congress reauthorize those programs.

Furthermore, when weighing such reauthorization, there are a few items policymakers may want to consider. First, even with reauthorization, I believe the local community needs to continue to have skin in the game, through proper planning and prioritized budgeting. No community should expect the Federal Government to shoulder the full responsibility of infrastructure at the local level.

Second, I would encourage more investment in these programs. We went after an INFRA grant once and BUILD grant twice before finding success in 2020. There are other communities with strong projects that could be funded, if the available pool had the certainty and funding provided in a long-term surface transportation reauthorization.

Third, communities need technical support and assistance with planning when accessing these programs. We engaged local firms to assist with our grant, particularly for benefit-cost analysis and engineering. The city incurred costs for those programs, and we were more than willing to pay them. However, some communities might be weighing projects that require more outside expertise, and thus, more cost when it comes to even proposing a solution. Having funds available for planning would help, and it would also allow DOT to gain understanding on a community's unique challenges prior to the grant application going in.

Fourth, any transportation system must accommodate the needs of all users, whether in a vehicle, on a train, in a wheelchair, on bike, or on foot. Modern cities are expected to build out complete streets. However, other than TAP and FTA's 5339 grant program, or including complete street style elements in large projects, the direct resources available to cities, counties, and MPOs are limited.

Finally, it is important that programs remain accessible to communities of all size. Right now, there is a proposal before the Office of Management and Budget that would double the minimum population requirement from 50,000 to 100,000 for a community to be considered a metropolitan statistical area. This would adversely affect Hattiesburg and 143 other cities, and the implications of this could be profound on grants and other Federal programs, particularly in the transportation space. If this metric is changed, and we hope it is not, it is critical that any reauthorization not tie grant eligibility to the definition of an MSA.

In conclusion, the U.S. Department of Transportation's discretionary grant programs are vital to the aspirations of every city. As we look to where we want each of our communities to go, in economic development, in education, in tourism and in quality of life, I believe shared infrastructure investment between Federal, State and local governments can build strong, visionary cities, which, in turn, will be cornerstones of an even stronger nation. Thank you.

[The prepared statement of Mr. Barker follows:]

PREPARED STATEMENT OF TOBY BARKER, MAYOR, CITY OF HATTIESBURG, MISSISSIPPI

Introduction

Thank you Chair Cantwell, Ranking Member Wicker, Members of the Committee for allowing me to share a local perspective on rebuilding America's infrastructure. Any mayor of any of the thousands of towns and cities across the United States

could speak to the challenges local elected officials face when attempting to plan, finance and oversee infrastructure investments.

I believe every mayor wants similar things for his or her town. We want a good quality of life for our residents. We want safe communities. We want opportunities for economic growth. We want to provide solutions when our constituents have complaints. Quality infrastructure is both the bedrock and the catalyst for making these things happen.

The Hattiesburg Story

Hattiesburg is a City of around 50,000 residents in South Mississippi, about an hour north of the Mississippi Gulf Coast. Home to both The University of Southern Mississippi and William Carey University, as well as two major medical facilities and Camp Shelby, around 150,000 work in and around Hattiesburg on a daily basis. In its early days, it earned the nickname “the Hub” because of its central location to other regional commercial centers such as New Orleans, Mobile, Gulfport, Jackson and Meridian. As with many towns in that era, it was the railroad that brought economic growth, both in goods and in people.

In our case, those rail lines continue today, serving the freight needs of our industrial park and the many rail lines that intersect in and around Hattiesburg. Additionally, those rail lines serve passenger rail, as Hattiesburg is Mississippi’s third most visited city and a beneficiary of being on Amtrak’s Crescent Line. We have been very fortunate to have been at or near the top of job growth in Mississippi for several years in a row. Even in the pandemic, we have held strong. In fact, *Wall Street 24/7* reported that out of all the metropolitan statistical areas in the country, Hattiesburg was #2 in job growth nationwide between February and November of last year.

Freight is a valued component in that growth. However, a challenge that developed over the course of the 135-plus years of our city’s existence is that when a city has a rail switchyard in the middle of its downtown—and 20 at-grade crossings in and around that downtown and no grade separated crossings—problems will occur. Blocked crossings are a part of daily life in Downtown Hattiesburg. Aside from being a source of frustration for motorists, they are also a safety concern and have been the site of recent fatalities. It has been a generations-old problem for Hattiesburg. The solution, of course, was simple. We needed an overpass. Actually, we needed two or three overpasses. However, overpasses cost a great deal of money—money that a city like Hattiesburg would not simply have at its disposal.

Fortunately, we found Federal avenues to leverage our limited local capacity into funding that could build those overpasses. In early 2020, we were awarded a CRISI grant—Consolidated Rail Infrastructure and Safety Improvements Program—that matched local support to build the first overpass on a road just south of our downtown. We were lucky a second time in 2020, as we were awarded a BUILD grant to build a second overpass along that same road, south of our downtown. Our Congressional delegation, particularly Senator Wicker, were incredibly helpful in this effort. We also had the support and collaboration of both freight railroads on our CRISI and BUILD applications.

By the time both of these overpasses are built, there will be one road—with one grade separated crossing on each end—that motorists, cyclists and pedestrians can take when trains are across the tracks.

If Federal surface transportation grants were not available, these projects would not happen for Hattiesburg. Most cities and towns cannot—on their own—solve these longstanding challenges without state, but more often, Federal support.

The Problem Facing Every Community

Cities and counties have a tough enough time meeting their existing infrastructure maintenance issues. There are roads that need paving. There are bridges that need replacing. There are water lines that are undersized or aging. There are sanitary sewer issues that lead to consent decrees, putting another external pressure on a municipality. There is a need for more storm water capacity. There is public demand for sidewalks and ADA accessibility.

However, there is very little extra revenue available—after taking care of all those other things, if you can take care of them—to either solve a longstanding challenge; or to invest in game-changing projects that can set the stage for potential growth areas. Surface transportation grants are a lifeline that cities and counties can use, and it is critical that Congress reauthorize those programs. Furthermore, when weighing such reauthorization, there are a few items I believe policymakers may want to consider.

#1—Local Governments Should Participate in Funding Infrastructure

First, even with reauthorization, I believe the local community needs to have skin in the game. No community should expect the Federal government or state government to shoulder the full responsibility of infrastructure at the local level. Proper planning and prioritized budgeting are responsibilities of local leaders. In our case, we were paying off some general obligation debt and used that existing debt service capacity in our millage to issue new bonds that will match the Federal investment on both of these grants.

#2—Additional Investment Needed

Secondly, I would encourage more investment in these programs. We went after an INFRA grant once and BUILD grants twice before finding success in 2020. I know there are other communities with strong projects that could win awards if the available pool of funding had the certainty and funding provided in a long-term surface transportation reauthorization. Our grade crossing projects were one longtime transportation challenge. However, there are a dozen other projects on my desk now waiting for funding so we can solve those problems and capitalize on opportunities for economic growth.

#3—The Need for Planning Funds and Technical Support

Third, communities need technical support and assistance with planning when trying to access these programs. We had a local firm that assisted in writing our grant and doing the benefit-cost analysis; and an engineering firm that helped with plans on where the overpasses should go, as well as cost estimates on the project. The city incurred costs for those services, and we were more than willing to pay them in order to apply for CRISI and BUILD. However, some communities might be weighing projects that require more outside expertise—and thus, more expense—when it comes to even proposing a solution to a transportation challenge. Having funds available for planning costs would help, and it would also allow for DOT to gain understanding on a community's unique challenges prior to the grant application going in.

I would also encourage DOT to continue providing technical support. Having this dialogue helped us improve our application with each application round, and I know many cities and counties could benefit from this outreach.

#4—Need for Direct Assistance to Cities, Counties and MPOs on Complete Street Infrastructure

Fourth, any 21st-century transportation system must accommodate the needs of all users, whether in a vehicle, on a train, in a wheelchair, on bike or on foot. Modern cities are expected to build out complete streets. Our residents demand it. However, other than TAP, FTA's 5339 grant program or including complete street style elements in large projects such as BUILD, the direct resources available to cities, counties and MPOs are limited.

#5—Reauthorization in Light of Potential OMB's Change to MSA Definition

Finally, if and when these programs are renewed, it is important they remain accessible to communities of all size. Right now, there is a proposal before the Office of Management and Budget that would double the minimum population requirement—from 50,000 to 100,000—for a community to be considered a metropolitan statistical area. This would adversely affect Hattiesburg and 143 other cities around the country, and the implications of changing this definition could be profound on grants and other Federal programs, particularly in the transportation space. If this metric is changed—and we certainly hope it is not—it is critical that any legislation that reauthorizes these grant programs not be tied to the definition of an MSA.

Conclusion

In conclusion, the U.S. Department of Transportation's discretionary grant programs are vital toward the aspirations of every city around the country. As mayors, we have a responsibility for maintaining what's here now. But if we stop there, we are choosing to settle for status quo. As we look to where we want each of our individual communities to go—in economic development, in education, in tourism and in quality of life—I have to believe shared infrastructure investment between federal, state and local governments can build strong, visionary cities—which in turn will be cornerstones of an even stronger nation.

The CHAIR. Thank you, Mayor. Thank you so much for that testimony and definitely, we will have questions to follow up for you from your statement.

Now, we are going to have Mr. Mark McAndrews, the Director of Port of Pascagoula. Welcome, thank you for joining us.

**STATEMENT OF MARK McANDREWS, DIRECTOR,
PORT OF PASCAGOULA**

Mr. McANDREWS. Good morning Chair Cantwell, Ranking Member Wicker, and Members of the Committee. Thank you for having me.

My name is Mark McAndrews, and I am the Port Director at the Port of Pascagoula in Mississippi and the past Chair of both the American Association of Port Authorities and the Gulf Ports Association. I would like to thank the Committee for working to ensure that our infrastructure system, and in particular, our freight, intermodal, and maritime infrastructure is, once again, the pride of our Nation. To make our observations as broad as possible, we solicited some input from AAPA, which is the collective voice of our Nation's seaport industry.

Port authorities exist to create and support economic activity by building transportation infrastructure and managing operations at our facilities. U.S. seaports represent a vital economic engine of our national economy. They have also played a crucial role in our national defense, a point acknowledged through the designation of 17 of our Nation's ports as "strategic seaports," by the Department of Defense, including our sister port of Gulfport, just down the road.

Investing in our port infrastructure and intermodal freight system pays dividends. Ports have seen significant impacts over the past year, and in order to remain competitive in the global economy, we must protect and expand Federal intermodal and port infrastructure investments and remove limitations on freight infrastructure investment.

The COVID-19 pandemic caused 2020 to be one of the most erratic and volatile years in terms of cargo volumes. Early in the year, China's efforts to stem the pandemic shuttered factories, led to canceled sailings, and coupled with a drop in consumer spending in the United States as shutdowns were implemented to stop the spread of the virus, ports experienced significant drops in volumes across the industry throughout the first half of 2020.

The second half of the year saw a rebound for many in the maritime industry, and these surges in cargo have led to challenges, from container shortages for the U.S. export market, to issues of chassis availability. But despite these challenges, goods and cargo have continued to move through our ports.

At the Port of Pascagoula, our major commodities at the public facilities are lumber, steel, forest products, and agricultural products, and our export partners for these are largely located in the Caribbean, Central, and South America. The price of lumber has nearly tripled through the course of the pandemic and tonnage has declined significantly. Domestic demand is high due to an active hurricane season and an upsurge in new home construction in the U.S. While many experienced surges in cargo in the second half of the year, others saw little recovery in revenue. What is clear is that each port has been impacted differently.

I commend the Chair and the Ranking Member for working to ensure that the Maritime Transportation System Emergency Relief

Program became law at the beginning of this year as part of the National Defense Authorization Act. While not yet funded, this new program gives the Maritime Administration the tools necessary to help ports respond to and recover from natural disasters. While critical to our national economy, our ports and our marine transportation system, do not always receive the attention they deserve as a main link in our Nation's supply system.

Energy commodities, such as petroleum and coal, are the dominant commodities moved through the ports by weight. At the Port of Pascagoula, over 27 million tons of crude oil is received, refined, and shipped out from Chevron's Refinery in our East Harbor. Presently, the Port of Pascagoula has several major projects in progress. The Gulf LNG terminal in the port is planning to add liquefaction and export capabilities to their import terminal. We have a \$60 million biomass export facility underway in our Bayou Casotte Harbor. It is a public/private partnership scheduled to be completed and functioning before 2021. Our ongoing \$37 million Rail Relocation project, partially funded through TIGER and CRISI grants, was a major factor in attracting this regional economic development venture.

The American Society of Civil Engineers gave ports a grade of B- in their 2020 Infrastructure Report Card. In the U.S. Committee on the Maritime Transportation System's Economic Analysis of Spending on Marine Transportation System Infrastructure, CMS notes that new funding for investment in our marine transportation infrastructure will help the United States catch up from a well-documented backlog of deferred infrastructure projects.

And as the Committee considers a surface transportation reauthorization and other transportation proposals, we offer the following recommendations, with more detail found in the written submission. Number 1, increase funding for the Port Infrastructure Development Program/Port and Intermodal Improvement Program. Number 2, increase funding for the FAST Act's INFRA and freight formula programs. And number 3, remove multimodal funding caps on the INFRA and freight formula programs.

To close, I appreciate the opportunity to share my thoughts on infrastructure investment, how best to facilitate the movement of freight, and the infrastructure needs of our Nation's ports. I appreciate the Committee's continued leadership and the ongoing commitment of Chair Cantwell and Ranking Member Wicker to highlight freight and the movement of goods by water as issues critical to our Nation's economic growth. I'll be glad to answer any questions at the appropriate time. Thank you very much.

[The prepared statement of Mr. McAndrews follows:]

PREPARED STATEMENT OF MARK McANDREWS, PORT DIRECTOR,
PORT OF PASCAGOULA

Good morning Chair Cantwell, Ranking Member Wicker, and members of the Committee.

My name is Mark McAndrews, and I am the Port Director at the Port of Pascagoula in Mississippi as well as a previous Chair of the American Association of Port Authorities (AAPA). I would like to thank the Senate Commerce Committee for working to ensure that our infrastructure system, and in particular our freight, intermodal, and maritime infrastructure, is once again the pride of our Nation.

This Committee's recognition of the important role played by ports and by those throughout the freight supply chains has been critical to ensuring investment in our

multimodal transportation system, and I appreciate the opportunity to be here today to discuss importance of infrastructure investment for regional and national freight movements, the particular infrastructure needs of ports, and how to rebuild our infrastructure to help drive the economic recovery from the ongoing COVID-19 pandemic.

Seaports are vital to the U.S.

Port authorities exist to create and support economic activity by building transportation infrastructure and managing operations at our facilities. U.S. seaports represent a vital economic engine of our national economy. In the National Economic Impact of the U.S. Coastal Port System, Martin Associates of Lancaster, PA, stated that America's seaports influence nearly 31 million U.S. jobs and generate \$378 billion in federal, state, and local tax revenue. This report found that nearly 26 percent of the Nation's economy is created by cargo activities in our deepwater ports, producing \$5.4 trillion in total economic activity.

Our nation's seaports deliver vital goods to consumers, facilitate the export of American-made goods, create jobs, and support local and national economic growth. The economic impacts of a port carry far beyond our own geographic regions because ports are not simply local assets in urban centers. Our port system is a fundamental foundation of the U.S. economy, supporting every region of the country—moving automobiles from the Midwest, agricultural commodities from the Heartland, airplanes from the Pacific Northwest, and more, from each and every corner of our nation, to markets abroad.

In fact, the American Association of Port Authorities has joined with Farmers for Free Trade to call for the removal of tariffs that hurt American exporters. Polling shows heartland Americans agree that investing in trade infrastructure to move their goods abroad is a top priority.

Ports also play a crucial role in our national defense—a point acknowledged through the designation of 17 of our Nation's ports as “strategic seaports” by the Department of Defense.

Investing in our port infrastructure and intermodal freight system pays dividends. Although ports have seen significant impacts over the past year, to remain competitive in the global economy we must protect and expand Federal intermodal and port infrastructure investments and remove limitations on freight infrastructure investment. Doing so would help ensure sustained investment is made in our intermodal and freight systems.

COVID 19 Impacts on Ports Business

Like nearly all aspects of life, ports have endured significant impacts over the past year.

Since the beginning of the COVID-19 pandemic, our port has worked with AAPA and other ports to monitor the impact of the pandemic, to communicate regarding the need for Federal relief and recovery, and to share best practices with one another as we all manage through this ongoing crisis. On this point I would highlight how impressive the collaboration within the industry has been; typically, the fiercest of competitors—ports have set aside market share aims in favor of keeping port workers safe and healthy, and moving critical goods, including personal protective equipment and other medical supplies, to the frontlines of the COVID-19 pandemic, as well as to consumers like you and me.

Ports, working with marine terminal operators and others operating within port footprints, have put in place protocols to maintain the health, safety, and well-being of our employees and all involved in the movement of goods and cargo throughout our facilities. AAPA has worked with port members to establish recommended COVID-19 protocols and best practices for the port industry. The maritime industry has not had sector-wide issues in terms of outbreaks, and we continue to voluntarily follow public health guidelines.

The COVID-19 pandemic caused 2020 to be one of the most erratic and volatile years in terms of cargo volumes. Early in the year, China's efforts to stem the pandemic shuttered factories, which led to cancelled sailings. Coupled with a drop in consumer spending in the United States as shutdowns were implemented to stop the spread of the COVID-19 virus, ports experienced significant drops in volumes across the industry throughout the first half of 2020. By the end of the year commercial cargo volumes had declined across the industry—with total waterborne trade volume down 4.8 percent compared to the prior year, while the value of trade dropped by 11.3 percent totaling nearly \$200 billion.

In the spring, the U.S. economy seemed headed for an historic collapse. Millions of people lost their jobs. Then, the second half of the year saw a rebound for many in the maritime industry, and these surges in cargo have let to challenges—from

container shortages for the United States export market, to issues of chassis availability. But despite these challenges and others, goods and cargo have continued to move through our ports. We surely could not have accomplished this without the hard work and dedication of our frontline port employees and dockworkers. In this process though, many workers have taken ill and some have passed away. The maritime industry has lost many to the COVID-19 pandemic.

At the Port of Pascagoula, our major commodities at the public docks are lumber, steel, forest products, and agricultural products, and our export partners for these are largely in the Caribbean, Central America, and South America. The price of lumber has nearly tripled through the course of the pandemic and tonnage has declined significantly. Domestic demand is high due to an active hurricane season and an upsurge in new home construction in the U.S.

While many experienced surges in cargo in the second half of the year, others saw little recovery in revenue. What's clear is that each port has been impacted differently. While there were encouraging signs at the end of the year for some of those ailing, the outlook for the coming year remains uncertain.

I commend the Chair and Ranking Member for working to ensure that the Maritime Transportation System Emergency Relief Program became law at the beginning of this year as part of the National Defense Authorization Act. While not yet funded, this new program gives the Maritime Administration (MARAD) the tools necessary to help ports respond to and recover from natural disasters and other emergencies, including the COVID-19 pandemic. Our port lies along the Gulf Coast and has been impacted by hurricanes in the past, and I believe that this new program will prove to be critical in the future as the Port of Pascagoula and others respond to extreme weather and other emergencies that may occur.

Our Port System's Infrastructure Challenges

While critical to our national economy, our ports and our maritime transportation system do not always receive the attention they deserve as a main link in our Nation's supply chains. I appreciate the attention that has been paid to ports and the needs of our intermodal freight system by this Committee and believe that my being invited to speak today at this hearing is the type of highlight necessary to bring about a greater understanding of the needs of our ports.

Ports facilitate trade and the movement of cargo throughout the supply chain. Ports of course move containerized cargo, but containers are only one important piece of a bigger picture. Millions of tons of non-containerized cargo are shipped annually through U.S. ports—commodities such as steel, coal, iron ore, cement, grain, soybeans, fertilizers—the raw and semi-processed inputs so vital to the functioning and health of our national economy.

Energy commodities such as petroleum and coal are the dominant commodities moved through ports by weight. At the Port of Pascagoula, over 27 million tons of crude oil is received, refined, and shipped out from Chevron's Refinery in our East Harbor. These commodities play a significant role in cargo movement at many Gulf Coast ports, and over the years significant investment has been made in energy infrastructure. Ports and our terminal partners expect to continue to make significant investments in the future.

Presently, the Port of Pascagoula has several major projects in progress: The Gulf LNG terminal in the Port of Pascagoula is planning to add liquefaction and export capabilities to their import terminal. This is an \$8 billion investment.

We also have a \$60 million biomass export facility underway in our Bayou Casotte Harbor. This venture is a public/private partnership which is scheduled to be completed and functioning before year end 2021. Vessel traffic will increase by approximately 30 percent in the Port when the terminal becomes operational. Of course, this project would not be viable without the \$40 million Bayou Casotte Channel Improvement Project, currently in the final phase for approval of assumption of maintenance by the U.S. government.

Prior to the outbreak of the pandemic, in information collected as part of the Port Planned Infrastructure Investment Survey, American Association of Port Authorities members and port property tenants projected that they would invest \$163.1 billion in port-related infrastructure by 2025. These investments are in marine terminals, berths, piers, roads, yard equipment, storage facilities, security, rail links, environmental controls, shipping channels, and more. However, as ports and port tenants have faced the challenges of the pandemic, and the resulting changes wrought by shifting supply chains, some ports have indicated that these investments would be delayed.

To take advantage of the billions of dollars being invested by ports and port tenants, we must ensure Federal investments like that in the Bayou Casotte Channel

Improvement Project are being made, and that we are adequately investing in our Nation's intermodal infrastructure and in first and last mile connections to ports.

The American Society of Civil Engineers (ASCE) gave ports a grade of B-in their 2020 Infrastructure Report Card. While this grade represents an increase over the C+ earned by ports in the 2017 Report Card, due in large part to the creation of the Port Infrastructure Development Program (PIDP), investment in ports through discretionary grant programs, and recent changes to ensure that Harbor Maintenance Tax receipts are invested in harbor and channel maintenance, the ASCE notes that there remains a significant need to invest in intermodal infrastructure and that this type of infrastructure has been historically underfunded.

Building a modern port system requires that we address the system's current deficiencies. This challenge is significant, and additional Federal investment and focus will be necessary to be successful in modernizing this sector.

But it isn't enough to simply maintain our current port infrastructure and ensure a state of good repair—we must also expand our port system's ability to handle more cargo. This need has been made clear recently as our Nation has struggled with cargo congestion. Freight volumes are projected to increase in coming years with the Department of Transportation predicting freight to double by 2045. Addressing this need will require steady investment, as many seaport terminals require restoration and modernization.

As a key component of global freight networks, ports must also manage the impacts of business decisions made by the shipping industry that have directly impacted how ports operate. These decisions impact the whole of our freight network. Ships using our ports are larger than ever before—as long as a skyscraper and as wide as a freeway. Accommodating these newer, larger ships requires major investment at ports, including deeper berths and deeper navigation channels; larger cranes and stronger docks to support them; electrical grid upgrades; new, high-efficiency cargo-handling equipment; and improvements to container yards and intermodal facilities to handle the flow of cargo coming from these ships.

In order to leverage the billions of dollars of investment being made inside the gate at port facilities, by public port authorities and by port tenants, the road and rail infrastructure that connects ports to the rest of the national freight system we must likewise invest in this infrastructure to accommodate the efficient movement of cargo.

To put multimodal needs into perspective, in the American Association of Port Authorities' State of Freight III survey, AAPA port members identified more than \$20 billion in projected multimodal port and rail access needs.

Additionally, many of these port projects have an on-dock rail component. 73 percent of our ports have on dock rail, but many of these systems are out-of-date and need to be significantly enhanced and reinforced, as well as integrated with new technology to accommodate rising shipping volumes.

With the creation of two funding programs; INFRA discretionary grants and National Highway Freight Program formula funding, the Fixing America's Surface Transportation (FAST) Act has proven a great start to investing in our Nation's freight system. The bill dedicated a total of \$11 billion for freight funding over five 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.

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 essential to our freight network, but ports are multimodal facilitators, involving trains, trucks, and ships, all of which need access to these funds. One could argue that as our supply chains becomes more sophisticated, and as consumers continue to shift to e-commerce resulting in the use of more inland distribution centers, demand for multimodal funding will increase.

It is also important to note that the port business is competitive. This is particularly true for discretionary cargo—that cargo bound for inland regions that can be shipped through any number of ports. Our international neighbors to both the north and south have recognized the importance of investing in their ports and in their intermodal infrastructure. Canada's national gateway initiative includes a strategy to serve America's heartland and Mexico's Interoceanic Corridor seeks to provide an alternative to the Panama Canal.

These investments have already begun to bleed discretionary cargo from ports in the Pacific Northwest. Should the United States not make port and intermodal investment a priority, we could see this pattern intensify in coming years.

How Can the Federal Government Help

In the U.S. Committee on the Maritime Transportation System's (CMS) Economic Analysis of Spending on Maritime Transportation System Infrastructure, CMS notes that "new funding [for investment in our maritime transportation infrastructure] will help the United States catch up from a well-documented backlog of deferred infrastructure projects that have accumulated, including maintenance, repair, and new capacity" and that "greater infrastructure investment will help sustain economic growth and resiliency." Essentially, this report is advising that by investing in our Nation's maritime transportation system and intermodal infrastructure we can Build Back Better.

The FAST Act has laid out the programmatic framework for a 21st-century multimodal freight network, with the Port Infrastructure Development Program and Marine Highway Programs likewise providing the framework for inside the gate investments. However, to fully leverage the success of the FAST Act's freight provisions, the next reauthorization bill will need to address increasing funding levels while identifying a multimodal funding source.

As the Committee considers a surface transportation reauthorization or other transportation proposals, I offer the following recommendations:

1. *Increase funding for the Port Infrastructure Development Program/Port and Intermodal Improvement Program*

We at the Port of Pascagoula and those throughout the U.S. port community were encouraged by the creation of the Port Infrastructure Development Program, now codified as the Port and Intermodal Improvement Program. I would like to thank Chair Cantwell and Ranking Member Wicker for your efforts to see this program authorized and to see the authorized level of funding raised to \$750 million. For Fiscal Year 2021, \$230 million has been authorized for the program, despite the program being oversubscribed by nearly 4-to-1 last year, under the \$225 million appropriation. These appropriations levels are significant, and this funding helps ports leverage Federal dollars to make critically needed infrastructure investments. However, if we hope to keep our ports competitive, we must increase the level of funding provided to this program.

Additionally, while PIDP dollars can and should be used to improve the movement of goods into, out of, and around ports, I encourage the Committee and the Department of Transportation to explore how to use this program to also invest in freight intelligent transportation systems, digital infrastructure systems, environmental mitigation measures, and operational improvements directly related to enhancing the efficiency of ports and intermodal connections to ports.

2. *Increase funding for the FAST Act's INFRA and freight formula programs*

U.S. ports view the INFRA and freight formula funding programs created in the FAST Act as another step towards adequate investment in our Nation's multimodal freight system. However, as noted earlier in my testimony, funding levels for these programs are not sufficient to meet the needs of our gateways and trade corridors and limits are put on these funds being invested in intermodal infrastructure. The INFRA program is oversubscribed, and state planning efforts required by the FAST Act have demonstrated that the freight formula program also is underfunded. Now on a year-long extension, with the FAST Act expiring later this year, this Committee has the opportunity to expand funding for these programs, while ensuring that the INFRA program remains focused on freight movement.

3. *Remove multimodal funding caps on the INFRA and freight formula programs*

As the Committee knows, our freight system is multimodal and Federal freight programs must reflect that reality if they hope to be effective. FAST Act funding programs currently cap the amount of funding that can go to non-road projects. INFRA intermodal funding was capped at \$500 million over the original five-year FAST Act authorization, while intermodal dollars were capped at 10 percent of freight formula funds. These limitations must be removed to allow our Nation to modernize our seaports and the first and last mile infrastructure that connects ports to the rest of the freight system and would allow for much needed flexibility to invest in critical, shovel worthy, multimodal freight projects.

Both the House and Senate found it appropriate to raise these caps in surface transportation reauthorization proposals released and considered during the 116th Congress. However, 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.

Conclusion

To close, I appreciate the opportunity to share my thoughts on infrastructure investment, how best to facilitate the movement of freight, and the infrastructure needs of our Nation's ports. Without enhanced and sustained investment in port and freight infrastructure, we risk falling behind the competition, and risk our Nation's trade infrastructure limiting our ability to compete economically on a global scale. Ports are our Nation's trade gateways, and it is critical that we make the investments necessary to remain an economic superpower.

I appreciate the Committee's continued leadership and the ongoing commitment of Chair Cantwell and Ranking Member Wicker to highlight freight and the movement of goods by water as issues critical to our Nation's economic growth. The American Association of Port Authorities and I look forward to working with the Committee as you consider FAST Act reauthorization and search for the most effective ways to invest in freight and intermodal infrastructure.

Thank you, and I look forward to your questions.

The CHAIR. Thank you—thank you, Director McAndrews, and thank you for, you know, mentioning the work that Senator Wicker and I were able to do, as it related to improvements in the NDAA bill, in enhancing port competitiveness. And thank you for that detailed list. In the State of Washington, I like to say, “ports are us.” So, to hear from a port director, it is music to my ears to hear about the competitiveness of our ports around the Nation. But I am going to defer to my colleague, Senator Warnock for the first round of questions.

Senator WARNOCK. Thank you so very much, Madam Chair, and thanks to all of you for your testimony. Keeping everyone moving and connected is critical. Without transportation mobility, there is little or no opportunity for social mobility. Poor people, disconnected communities find themselves, literally and economically, stuck.

And so, highways can play a big role in correcting this problem. Georgia is home to some of the busiest eight-lane highways in the country. However, there is a long history of transportation infrastructure, particularly highways and bridges, being used to segregate communities of color and cutting off access to job opportunities. I have seen this even in the highway infrastructure right near my church.

In other cases, the highway is built through the middle of blue-collar neighborhoods, displacing working class residents. Midtown Atlanta is a case in point, with I-75/I-85 splitting the community in two and limiting mobility and safe access across Atlanta's east-west divide.

I know that the ARC and other regional partners are exploring ways to reconnect midtown with an ambitious and creative solution that not only would enhance mobility, but also improve safety and create new greenspace and environmental benefits. I believe these are the types of bold projects that we need to be supporting.

Mr. Hooker, can you tell us a little bit about this project, and how metro Atlanta residents would benefit from such a project?

Mr. HOOKER. Thank you, Senator. Yes, happy to offer a thought about that. The Midtown Connector Project is being led by a private non-profit group called the NPC Foundation. They are two-thirds of the way through a 3-year feasibility study. And they are

constantly in consultation with us at ARC and we offer them a lot of technical advice, as well.

This project seeks to re-knit the city in the middle of its core. And the Midtown area, as you say, and provide transportation access—easy transportation access, for neighborhoods on the west side, to the east side of the city, where there had been a lot of strong job growth, primarily through innovation types of employment. Our early indications that this project will have a significant improvement on congestion in the downtown corridor, and safety, and restores tree connections, as you pointed out so well, that were lost when the interstate was originally built. And in addition to providing those benefits, it will give us the added benefit of 25 acres of additional green space and trails. And the early work on the feasibility of this suggests that there will be a large infusion of private capital, to go along with public capital and help make this possible.

Georgia DOT, and other stakeholders, as well as ARC, continue to work on this and our goal is to finalize a feasibility study within the year. A very exciting project and very innovative and creative project. Thank you.

Senator WARNOCK. Thank you, Mr. Hooker. In your view, is the Federal Government providing adequate funding or any targeted funding that reconnects these communities that have been divided by highways, in order to improve mobility in these communities?

Mr. HOOKER. Senator, I will say that, in honesty, no, we do not have enough funding. As we as a Nation, and as a region, are waking more to the need to address inequities that have been created by some of our highway construction. Having additional funding, particularly through programs like our CMAQ program, our Transportation Alternatives program, that will help us look at ways to reconnect our communities that were divided would be greatly appreciated. In addition to reconnecting communities and providing greater access and greater equitable development for communities, it will also improve our air quality outcomes, by making our transportation more seamless and efficient.

Senator WARNOCK. Thank you so very much. It is clear to me that Congress can and ought to do more to support these kinds of creative solutions that reconnect these communities that began to heal our communities, and provide greater mobility to communities that are marginalized, in terms of physical infrastructure, and therefore, marginalized economically. Not to mention the support for green space and overall air quality. And so, as we turn to infrastructure, I look forward to being in touch with you and other stakeholders. I will be doing everything I can to make sure that we support and fund these kinds of projects.

I yield the last 5 seconds of my time, Madam Chair.

The CHAIR. I just wanted to make sure. You are a man of many talents. So, I just wanted to make sure we were not going to hear more, thank you. And again, thank you for getting us a witness for a regional perspective on these issues.

So now, I am going to turn to Senator Wicker.

Senator WICKER. Thank you. Well, let me start with Mayor Barker. On page 5 of your testimony, you say that local communities need to have skin in the game and not look to the Federal or State

Governments to shoulder the full responsibility. I think we all agree with that. Let us talk about ways for you to have more skin to put into the game.

I introduced a local infrastructure act last year, which would provide additional funding through advanced refunds on tax-exempt municipal bonds. It would allow cities like Hattiesburg and local governments that use tax-free bonds to take advantage of the low interest rates, which we have right now. I have introduced the American Infrastructure Bonds Act, which would authorize a class of direct pay taxable bonds, to help State and local governments. Could either of these programs benefit cities like Hattiesburg, in coming up with the needed funds for that local skin in the game?

Mr. BARKER. Thank you, Senator, and the answer is absolutely. The BUILD grant and the CRISI grant were game changers for us; because there was no way that we could have accessed those without those funding programs. We matched that BUILD and CRISI grant with our own general obligation bonding. We had some bonds that were rolling off. We used that existing debt millage—debt service millage to access those.

But more specifically, to your question, municipal finance tools can play a critical role in bridging the current funding gap. Direct pay bonds and the ability to advance refund municipal debt on a tax-exempt basis are two tool that local and State governments could use. And I know, back in the 2009–2010 Build America bond, we saw investment in all 50 states, with over \$150 billion coming in.

And then, regarding advanced funding, just as all Americans have the opportunity to refinance their mortgage at a lower interest rate, reinstating such a tool would similarly provide State and local governments the ability to refinance outstanding debt at a lower interest rate, and free up borrowing capacity for new infrastructure investments, and boost local economy, in turn.

Senator WICKER. On the advanced refunding, Senator Stabenow and I will have this local infrastructure act to do that. I just do not see the downside of allowing State and local governments to refinance at these lower interest rates if, through advanced refunding, we can do as we have done in the past and hold harmless the investors who have invested in these, which is the whole idea.

Let me turn to Mr. McAndrews—you have utilized some of our infrastructure assistance. It needs to be better. What two or three extra things would you do if we could get more infrastructure money to you?

Mr. MCANDREWS. Well, sir, I think (poor connection). We have difficulty hiring consultants to—

Senator WICKER. You know, Madam Chair, if I could interject, we actually tested this communication before the hearing, and it worked fine. It is my luck with technical things, so I may have brought Mr. McAndrews bad luck here. Let me, turn to Mayor Barker. Mr. McAndrews will certainly supply that information on the record, and it will appear right here in the hearing.

Mayor, talk to us about technical assistance and how it is a big negative if you do not get it.

Mr. BARKER. Well, feedback from DOT, in the form of the debriefing calls that we were offered each time, we were not success-

ful. And I mentioned that we applied for INFRA and BUILD twice before we were able to secure CRISI and BUILD. Helped Hattiesburg, both in terms of navigating the grant programs and determining the actual components that we should submit. There were several iterations of what we wanted to do, and having that debriefing helped us reach that. And it helped us improve our application, with each round.

I would also say that, and I think that Mr.—the gentleman from the Port of Pascagoula was about to get to this. Expanded funding for planning and preliminary engineering for projects have merit, because they may give you a step forward in a project that has merit but does not meet DOT standard of project readiness yet. So, both those things are important because they are—the challenge may be so large that, if you do not have some funds to go and hire the right people to help you figure out what the solution is, you never get in the game to begin with.

Senator WICKER. Thank you, Mayor Barker. Let me just say that we actually had an announcement in Hattiesburg and the mayor was kind enough to invite me. I was late getting to that announcement because our car was blocked by a train. I yield.

The CHAIR. Well, thank you for that handoff. I heard all the witnesses, I believe, say that more investment in INFRA and helping us to move product and reduce congestion is key. You may have said it, you know, each differently, but I would like to have a, kind of, global discussion about this, if we could, Mr. Porcari. The context is, obviously, we do want more money for INFRA. We definitely feel this notion that the United States is growing and making things, but the big “aha” moment here is that the world market has just exploded with the growth of the middle-class around the globe. So, we have lot more to ship and we are feeling that. We are feeling the congestion and pains of that. We were able, with the INFRA project, to get the Landers Street project in Seattle, kind of like, a last mile, if you will, between I-5 and the Port of Seattle. So, big success.

So now, as we look at this, and I listen to what Mayor Barker explained, that very project is an example. So, do you increase INFRA? Do you go back to the CRISI grant program and look at at-grade crossings and put them on more steroids? What do we do? Because I feel like there are these big projects, like Lander and megaprojects, and we are getting some of them done, but I would say probably not enough of them done. And then, we have other regional projects that are also just, you know, the communities just left to deal with the congestions or not allowing an elected official to get to an important event. But, you know, there are these examples of projects, both enormous economic impact to a region, and then, these projects that are just the level of congestion. So, what do we do when looking at the Surface bill, to get this right? Mr. Porcari and Mayor Barker and Mr. McAndrews, if we got him back.

Mr. PORCARI. Thank you, Madam Chair. That really is the key question, and the short answer is, we need to do all of the above and do it in a targeted way. You mentioned INFRA and CRISI grants. Those are very helpful. I think you could make a strong argument for broadening the eligibility for some of those grants. Providing more technical assistance, as Senator Wicker has indicated,

because that is essential for many jurisdictions. You are not born knowing this and being able to have some technical assistance getting there is an important part of it.

And I had mentioned projects of national significance, but there is a whole cohort of projects, dozens and dozens of them, just below that level on goods movement, for example. Inland intermodal container transfer facilities, inland waterway projects, just to name two categories that, from a benefit cost point of view, are very effective investments for Federal dollars, in particular when they are matched by private and local dollars. And if we are going to take a systems approach to goods movement—and I know that you have worked hard to do that, both in your home state and nationally—we really need to look at the seams in the system, in particular where the shortcomings are, and make sure that competitive grant programs address those. That is an argument, in my opinion, for both more funding for those grant programs and broader eligibility to meet the particular needs of those projects.

The CHAIR. So, since I know you are familiar, where would you put the West Seattle Bridge in that? So, do you need funding for megaprojects, or are those more dollars for INFRA related—because they clearly—that is clearly a huge economic, you know, part of our delivery system?

Mr. PORCARI. In the Seattle example, I think you could make a strong case that that is a project of national significance—regional national significance, given its larger impact on the region. In my testimony, I mentioned that these projects are all in a specific place, but tend to have national and regional import, and that is certainly true in that case.

The CHAIR. So, do that. Make sure that we are funding those, because they also have a big economic impact to the Nation, and then, increase INFRA, based on a similar formula that we have today.

Mr. PORCARI. That is right. And I would specifically say, on INFRA, that freight projects, because of their cost effectiveness, should not be capped in terms of how they can participate. One other element I would mention, that goes back to the original TIGER grants, is a rule set aside to make sure that there are rural projects coming through the pipeline getting that assistance, is important, as well.

The CHAIR. Thank you. If I could, Mayor, ask you the same question. How are you looking at this?

Mr. BARKER. Thank you, Madam Chair.

The CHAIR. The Ranking Member is letting me go over my time here, so I can get an answer. But you—yes, thank you.

Mr. BARKER. Thank you, Madam Chair. As Mr. Porcari said, I think it is an all of the above type thing. I think you have to have a balanced approach that tackles those problems of national and regional significance, but also allows a community to shape its own destiny and future. I think INFRA and BUILD, CRISI, those are all good grants. But it is—you work several years to get one and, what happens is—you know, we had this long-standing transportation challenge, but we have a dozen other ones that are waiting behind it and you have to get creative in how you possibly could tackle two or three, within the next decade. And really, an overall

further deepened commitment to infrastructure that would spread across INFRA, CRISI, BUILD, even down to some of your TAP type programs. Those direct allocations to cities and counties and MPOs is very important.

I would also just echo the thought that there needs to be set asides for all communities to be eligible. And I go back to this potential rule; it is before OMB right now, which would change the definition of a metropolitan statistical area. That would take 144 cities out of those 390+ metropolitan areas we have nationwide right now. And so, does that affect eligibility for transportation grants, if definitions are tied to the definition of MSA.

The CHAIR. Thank you. Well, we do want to followup. And just to clarify, you—so, you are supporting more dollars for INFRA, but you think we need to do more on at-grade crossings, as well, and projects of—

Mr. BARKER. I think there are a lot of cities with a lot of challenges. And any avenue that we can take to get there, to solve those challenges, in whatever form it takes, is welcomed.

The CHAIR. Thank you. Senator Fischer.

**STATEMENT OF HON. DEB FISCHER,
U.S. SENATOR FROM NEBRASKA**

Senator FISCHER. Mr. Barker, I appreciate your testimony about the blocked railroad crossings in Hattiesburg. Railroads are important for our communities, but issues like blocked crossings are not only inconvenient, but they can hinder emergency vehicles.

I recently reintroduced bipartisan legislation with several members of this committee that would authorize the Federal Railroad Administration's Blocked Crossing Portal. Basically, this bill would give the public and law enforcement an opportunity to inform FRA of blocked crossings in their community. The FRA would then better understand the locations of frequently blocked crossings, which would lead to better policies to address blocked crossings going forward.

Mr. Barker, would you agree that if the Federal Government were better able to identify frequently blocked at-grade crossings, it would be in a better position to work with local communities to address these issues?

Mr. BARKER. Thank you, Senator, for the question. I do believe that data of any kind, that can help us figure out where these problems are happening most frequently, is absolutely important. I think train congestion is, hopefully, a symptom of growing rail traffic, which is a symptom of economic growth and commerce. It is a growing pain of something that ultimately could be good, but is still a pain, nonetheless. And I think any sort of data that would allow us to steer more investment, and steer assistance to those communities that can then meet the needs of both the railroad and the surrounding community would be welcomed.

Senator FISCHER. Thank you. Mr. Hooker, your testimony touched on the issue of the lack of truck parking spaces in the Atlanta region, and across many interstate corridors. As you know, the lack of truck parking is not only an inconvenience, it is also a safety issue for truck drivers. What did the ARC study that you mentioned find about the truck parking needs, in the Atlanta re-

gion? And additionally, do you think there are barriers or lack of awareness at the State and local level, regarding truck-parking needs?

Mr. HOOKER. Thank you, Senator Fischer. Yes, our study identified that we lacked a great deal of truck parking in the metro area. Most of our truck parking, unfortunately, is outside of the bounds of the metro region, which means trucker have to decide—make a decision very early on, are they going to stop outside of the region, even though their delivery is inside the region, or whether they will have time to make it through the congestion to get there. Because they are limited, obviously, by regulatory limits on how long they can drive the truck itself. And that creates a problem. We think that, at least in the Atlanta region, our local governments are increasingly more aware of the problem, because of the study we have done, because our transportation committee is composed of the elected officials of 20+ counties. And so, we are more aware of it, but I think, at large, a lot of us are appreciative of the systems problem that we have here.

With the increased regulation on the safety for truck drivers, which is very necessary, that throws another quandary to the system, as where can we safely park when they need to stop, before they are able to deliver. And a lot of time, even the place they have to deliver to will not allow them to be there for very long or stay overnight. So, it is a very tough problem for our truck drivers, who are trying to do us an essential service. So, I think, as a whole, the Nation, as well as many of our metro areas, are only beginning to wake up to a serious problem that we have.

Senator FISCHER. I hope you will be a messenger and spread that across the country, and really increase awareness. So, thank you.

Mr. HOOKER. Happy to do so, thank you. Thank you.

Senator FISCHER. Mr. McAndrews, as you noted the transportation network, including ports, has experienced a lot of freight volatility in the last year. In your opinion, do you expect the current surge of freight, and related congestion, at port facilities to continue? And has this congestion brought to the forefront any specific infrastructure needs at ports, that could be better addressed, the issues that we are seeing with that increase in freight, such as, using technology?

Mr. MCANDREWS. Yes. I hope you can hear me. I am going to get a little bit closer to the mic here. Freight is supposed to greatly increase Route 2045. So, the problem is only going to get worse.

First mile and the last mile, both highway and rail, is a critical part of what we do. And we have addressed that, here in Pascagoula, by what we call the Rail Relocation project, and it was funded by all kinds of things. The first phase was funded by a TIGER grant, funding from the State legislature, a Mississippi DOT grant, and our own funds. Phase two, is funded by a Mississippi Department of Transportation grant, legislative appropriations, BP Economic Damages Fund, port funds, and CRISI grant. It makes for messy bookkeeping, and difficult implementation. And perhaps, if the process of both application and implementation were streamlined, it would be better.

This is an important project here. It closed 17 at-grade crossings and rerouted the Mississippi exports mainline through some prop-

erty that we own, off CSX's mainline, to move the interchange from downtown.

Senator FISCHER. OK, thank you very much. I see our time is out.

Mr. MCANDREWS. Oh, OK.

Senator FISCHER. But if you would like to complete your thoughts and send it to the Committee that would be great.

Mr. MCANDREWS. Will do, thank you.

Senator FISCHER. Thank you. Thank you, Madam Chair.

The CHAIR. Yes, thank you. I am going to make sure all of Director McAndrews' comments are, you know, in the record for us. His testimony, I find very compelling. The statement that he just made on closing of at-grade crossings and streamlining the port's efficiency, exactly what we want to understand. And so, we have Senator Blumenthal next.

**STATEMENT OF HON. RICHARD BLUMENTHAL,
U.S. SENATOR FROM CONNECTICUT**

Senator BLUMENTHAL. Thank you, Madam Chair, and thank you for having this hearing. Thank you to Ranking Member, as well.

Secretary Porcari, in the course of your service as Deputy Secretary of Transportation, did you become familiar with the Gateway project?

Mr. PORCARI. Yes, I did, Senator.

Senator BLUMENTHAL. And you know about the need to replace the tunnel under the Hudson?

Mr. PORCARI. Yes, Senator.

Senator BLUMENTHAL. And that tunnel is decaying, becoming decrepit, and severely dangerous, correct?

Mr. PORCARI. Correct. It is 110 years old and—

Senator BLUMENTHAL. And what has been the reason—and I apologize for interrupting, but as you know, we are limited in time. In your view, what has been the reason for the delay in meeting that very, very urgent need?

Mr. PORCARI. Senator, it is the very definition of a project of national significance, like the Brent Spence Bridge, I-5 over the Columbia River, and the other examples I mentioned before, where the project may be in a jurisdiction, or in a region in this case, but 20 percent of America's GDP is represented by the Northeast Corridor.

Senator BLUMENTHAL. What is the reason for the delay? Just stating—and I agree that it is important.

Mr. PORCARI. The environmental impact statement was under review for over 27 months by the previous DOT leadership, with no response.

Senator BLUMENTHAL. The previous DOT leadership being who?

Mr. PORCARI. Secretary Chao.

Senator BLUMENTHAL. And is there any rational explanation for why there has been that 27-month delay?

Mr. PORCARI. There is not, Senator. It took us 22 months to put it together, which is actually very quite fast. But the review, I do not have an answer.

Senator BLUMENTHAL. I do not know whether you can respond in writing as to what an answer might be, but I am not going to press

you further because I know that you did not come here to talk about that issue. But I do think it is absolutely unconscionable that it has not moved more quickly. You have said absolutely correctly that it is of vital national importance. It is the gateway to the entire eastern region for freight, passenger rail. If it is crippled, the entire Northeast Corridor is crippled, correct?

Mr. PORCARI. That is correct, Senator.

Senator BLUMENTHAL. Thank you. Let me ask you, later this week or next, I expect to write to President Biden, asking him to implement the Connect Northeast Corridor 2035 plan. It is a consensus-based plan for Northeast Corridor stakeholders to identify and sequence capital investments. Early estimates suggest implementing the plan will cost approximately \$55 billion over the next 10 years. I think that that is underestimating, vastly, the amount but I am using that figure as a place to begin. Can Congress ensure that stakeholders along the Northeast Corridor are empowered to identify and prioritize projects in a good state of repair?

Mr. PORCARI. Yes, I think Congress plays a very important role in that and, in particular, in the Northeast Corridor, has done a good job of marshalling of consensus opinion on the improvements needed.

Senator BLUMENTHAL. Let me ask you about another proposal. I am the lead drafter of the Intercity—the Passenger Rail Trust Fund Act, which would provide a steady source of investment in rail. Every year, Amtrak depends on discretionary appropriations, to meet both capital and operating needs. As a result, the company's ability to make long-term plans and to make effective use of the support taxpayers provide is compromised. Rail is the only source and the only major type of transportation without a dedicated, reliable funding stream. Do you think that the Intercity Passenger Rail Trust Fund Act is worth support?

Mr. PORCARI. I do, Senator. I think it is critical that intercity passenger rail be put on an equal footing with the formula highway program that is out there. And I mentioned climate change inequities as two really important lenses that we should be looking through here. A trust fund would provide a great basis to, actually nationwide, move forward with passenger rail that is more equitable and more climate friendly.

Senator BLUMENTHAL. Excellent points. I really thank you for being here today, Mr. Secretary, thanks. Madam Chair.

The CHAIR. Thank you. Senator Sullivan.

**STATEMENT OF HON. DAN SULLIVAN,
U.S. SENATOR FROM ALASKA**

Senator SULLIVAN. Thank you, Madam Chair, and I want to thank the witnesses for being here. And I want to raise an issue that I think should be very bipartisan. As a matter of fact, Mr. Porcari, you just touched on it in Senator Blumenthal's questioning. It is about permitting reform, streamlining our permitting. You know, if we can do a \$3 trillion, we can do a \$7 trillion bill on infrastructure. And if you cannot permit the projects to get them out in time, it is going to be wasted money. So, this is a priority of many people. I think, actually, the more local you get—mayors, Governors, regional transportation officials, the more they

see it as an imperative. The building trades, all our top unions that build things in America, this is a top priority of theirs.

We had a hearing here a couple years ago on airport infrastructure. The head of the Sea-Tac airport was talking about their new runway that they build at Sea-Tac. The Chairman, obviously, is very interested in that. Took 15 years to permit, 15. It was unbelievable. He actually said—I was asking him the question, he said, “Senator, I believe it took the—I believe the ancient Egyptians built the pyramids in a shorter amount of time than—” Just to get the permits.

So, here is my question. In 2018, a lot of the top infrastructure permitting agencies, DOT, FERC, EPA, Interior, the Corps of Engineers, signed a memo of understanding that they agreed to complete a single environmental review. One point of contact. That was working well. I think it was very bipartisan. Unfortunately, President Biden, one of his numerous executive orders revoked that. So, I would like each of you to just talk a little bit about—briefly, because I have one more question—you know, if we are going to build back better, do you not think it makes sense to have a one Federal policy decision, similar to that previous MOU that has been revoked? And what other ways in which can we streamline permitting? We had a gold mine in Alaska took 20 years to permit. Twenty years, crazy.

So, maybe I will start with you, Mr. Porcari, and others, if you could keep your views short but succinct, how important is streamlining permitting for the topic we are talking about?

Mr. PORCARI. Senator, it is imperative, I think. And as I have in my written testimony, it is certainly possible to have both a streamlined process and better outcomes. And there are multiple examples of that around the country. It is less a question of one Federal permitting agency, although that is—that can be helpful—than having concurrent review upfront, not consecutive review, by all the resource agencies.

Senator SULLIVAN. Yes.

Mr. PORCARI. By all the resource agencies.

Senator SULLIVAN. Yes.

Mr. PORCARI. Which, if you look at the Tappan Zee bridge project, the environmental impact statement was 19 months, beginning to end, which is a record.

Senator SULLIVAN. Which is OK. It is still not great. I mean, I think we have, kind of, dumbed down what we believe is good. But I hear your point.

Mr. PORCARI. And it was typically 5 years or more before that.

Senator SULLIVAN. Yes.

Mr. PORCARI. But it is the interagency process part of it that I know is part of a build back better plan, where the benefits—

Senator SULLIVAN. You think China takes 5 years for EISs when they build infrastructure?

Mr. PORCARI. China does not have that process and a lot of their environment reflects that.

Senator SULLIVAN. Oh, I know. I agree with that. But I am not talking about cutting corners. I am talking about streamlining permitting that makes sense. Any other witnesses would like to weigh in on that?

Mr. BARKER. Thank you, Senator. I think it is important to understand that some of the principle goals of infrastructure investment are to promote safety and to boost economic development. And any process that would streamline those things that, whether it is a grant program, or whether it is a permit, are vitally important. We have a mega site south of our city, right now, that, you know, we are waiting for environmental permits that we could use to hopefully attract a—

Senator SULLIVAN. Are you waiting for Federal agencies?

Mr. BARKER. That is correct. In trying to—

Senator SULLIVAN. How long have you been waiting?

Mr. BARKER. Well, it has been a process. And we are trying to have a permit that can be flexible enough that, when we do have a potential, you know, manufacturer that comes down, that they can move faster to construction, as opposed to waiting in the process for an additional few years before it happens.

Senator SULLIVAN. Well, let me ask another, just very quick, question. Senator Blumenthal talked about projects of national interest. I just read that we are now importing more Russian oil than ever. So, America is the superpower of energy, and yet, we have a new administration that wants to curtail the production of oil and gas. And what is going to happen? We are going to import more oil and gas from our enemies. That is just obvious. It is happening right now, record—

We have a project in Alaska that would be of national significance, although, it is not directly related to surface reauthorization. President Biden himself has said, when we are building back, he is all in on natural gas. How important do you see natural gas for the development of your economy's clean burning, reduces greenhouse gas emissions? And should we look at ways to help expand the use of pipelines for natural gas? Additionally, big projects in Alaska, we have an L and G project that has been fully permitted by the Federal Government. Took years but it is shovel-ready, and we think the Nation needs it. So do our allies, and certainly, we do not want to be importing more Russian natural gas and oil. So, any thoughts on that?

Mr. PORCARI. Senator, I will be happy to express my personal opinion on this, which is that natural gas is, at best, a bridge strategy toward where we need to be, which is our—and I am specifically talking about our transportation system. It needs to be electrified as quickly as we can if we are going to meet the climate challenge, this existential challenge that we have. And anything that detracts from that singular goal will be to the detriment, again in my opinion, of the Nation.

Senator SULLIVAN. The International Energy Agency thinks that we are going to need oil and gas for at least the next five, six, seven, eight decades.

The CHAIR. Thank you.

Senator SULLIVAN. Thank you, Madam Chair.

The CHAIR. Thank you. Senator Peters. And, Senator, I am going to ask you to chair for a few moments while I run over to vote. But thank you so much.

**STATEMENT OF HON. GARY PETERS,
U.S. SENATOR FROM MICHIGAN**

Senator PETERS. Oh, absolutely. Thank you, Madam Chair. Thank you for your testimony here today. We appreciate you coming in.

Mr. Porcari, my first question is for you. Your written testimony suggests that we need to specifically recognize, and separately fund projects of national significance that are physically located in one state or region. And you use the example of an outdated crumbling bridge that plays an outsized role in supporting our Nation's auto manufacturing, carrying 3 percent of America's GDP annually. You also highlight Great Lakes Cargo projects, as well, which play a similar national function. I am well aware of both of these projects from the State of Michigan, and how important projects like these are critical, not just for a state but also for an entire country.

So, my question to you is, what changes would you recommend that we make to enable the Department of Transportation to identify these nationally important projects, that do not always compete successfully, for one reason or another, in our existing transportation grant programs?

Mr. PORCARI. It is an excellent question, Senator, and I argue that there needs to be, first, a separate funding category for projects of national significance. In the examples that you mentioned, it is arguably beyond the capability, certainly of local jurisdictions, but also, the states—or a state or states—to fund those projects by themselves.

It would be relatively easy for U.S. DOT to show, from a systems perspective, the national importance of a cohort of projects that, frankly, we have not invested in for generations. And in the case of the Brent Spence Bridge, from Michigan to Georgia, that is a significant facility.

So, that should be a separate funding category. It should be intermodal in the sense of sometimes they are bridges, sometimes it is passenger rail. It could be any mode of surface transportation. But we should think about those things in intermodal terms, and we should actually build for the future.

What we have found is, with these major projects, their effective life is 50 or 75 years, or in the case of Gateway, 110 years. So, we need to look far into the future, as we are thinking about capacity and future needs.

Senator PETERS. Great, thank you. Additionally, Mr. Porcari, you have noted that, as a matter of equity, promising private sector passenger rail proposals should be more actively encouraged, through the use of the Railroad Rehabilitation Improvement Financing loans. So, my question for you is, is encouragement enough, or are there legislative changes to the program that we should consider?

Mr. PORCARI. Well, certainly, Senator, encouragement for the private proposals. There may be legislative tweaks. One would be to put RIFF on par with the TIFIA program, where the credit risk premium is paid up front by a public funding pool. One of the real drawbacks, and one of the reasons that the RIFF program is underutilized, is because the credit risk premium has to be paid up front,

maybe 10 percent of the loan cost or more, by the applying entity, which is unlike the TIFIA program.

Senator PETERS. Very good. Mr. McAndrews, your testimony recommends Congress utilize the Port and Intermodal Improvement Program to further invest in freight intelligence, transportation systems, and other operational improvements directly related to enhancing the efficiency of ports and the intermodal connections to ports. Do you have the available tools and flexibility you need from the Federal Government to be able to invest in AI and digital infrastructure? Or are changes needed to more explicitly promote the use of grant funding to improve efficient, along these lines?

Mr. MCANDREWS. Well, I believe—Senator, thank you for the question. I believe that a bill such that Senator Wicker introduced last Congress, the Rural Infrastructure Advancement Act, would be very helpful to smaller ports, smaller cities, and giving advice for not just the project development, but in the application, feasibility studies, and cost-benefit analysis. We have been stuck on the cost-benefit analysis in the Port and Intermodal Investment Program for two rounds now, and we just cannot seem to, despite the assistance of the Metropolitan Planning Organization, we struggle with that.

Senator PETERS. All right, thank you. Mr. Porcari, in your testimony—your testimony mentions there are multiple successful examples of pilot programs that have maximized Federal infrastructure spending, to include local hiring and training components, creating opportunity for good paying jobs, which are essential to marry these two things together, with our transportation projects. What are some of the takeaways from these pilot programs to inform how we might better utilize jobs and training potential associated with these projects?

Mr. PORCARI. Yes, Senator, there is a U.S. Employment Plan that has been successfully used in several procurements. Chicago Amtrak has used it, Los Angeles, and others. And one of the takeaways from it is, on these large, complex projects, people can climb the skills scale from flagger to—I met a Chief Safety Officer that started, actually, as a flagger on that same project. So, the larger point, I think, is to turn infrastructure into a twofer or a threefer, by maximizing the local employment and skills training, and the threefer part of it is U.S. manufacturing.

Senator PETERS. Great, thank you. Thank you for your answers. I now recognize Senator Lummis. Senator Lummis, you are recognized for your questions.

**STATEMENT OF HON. CYNTHIA LUMMIS,
U.S. SENATOR FROM WYOMING**

Senator LUMMIS. Thank you very much, Mr. Chairman. My first question is for John Porcari, and thank you, witnesses, for participating today.

Mr. Porcari, I was concerned to learn about the FCC's decision to share the 5.9-gigahertz radio frequency band with other non-transportation related users. Auto manufacturers and State DOTs were relying on this spectrum, to deploy innovative, and potentially life-saving technology, like vehicle to everything communications. Does this decision by the FCC concern you, as well? And do you

think the decision could lead to interference on the spectrum and then, slow down the deployment of these new technologies?

Mr. PORCARI. Senator Lummis, it is an excellent question. I do believe the FCC's decision on 5.9 can really hurt. This is an important safety improvement. It is on where you are asking the industry ecosystem to invest billions of dollars in a, as you point out, vehicle to everything, including pedestrians. They are not going to do that without consistent and predictable support on the frequency side. The—I use the FAA analogy for air safety. The FCC should have to prove that it is safe and that there will be no signal interference from shared use of the 5.9 gigahertz frequency. As opposed to permitting mixed use of it for which it was specifically reserved for safety technology that, not coincidentally, is an opportunity for U.S. leadership.

Senator LUMMIS. Well, thank you for that response, and I appreciate your thoughts about how to address it. I have been struggling with that. My ideas have been far more complicated than what you just raised, so thanks for providing that.

For Toby Barker, I was pleased to see you mention the possible OMB change to their definition of a metropolitan statistical area. I joined a letter by my colleague, John Thune, because like Hattiesburg, Casper and Cheyenne, Wyoming would have been downgraded, as well. Is it your understanding that this change would adversely impact these cities, when it comes to Federal funding opportunities? And how concerned are you about this change?

Mr. BARKER. Thank you for that question, Senator. We are very concerned because this is so widespread. One hundred and forty-four cities, and I think that, out of the folks on this committee, every member, except for Senator Blumenthal and Senator Hickenlooper, will have one metro area affected by this. And between all the Committee members here, 91 cities will no longer be considered metropolitan statistical areas, out of the state's represented here. So, we are very concerned and—because you do not know the real implications, because these programs have existed for quite some time, and if they are tied to being a metropolitan statistical area, then that is a problem.

The other thing that concerns us is that, I referenced Hattiesburg last year was listed as #2 out of the almost 400 metro areas, in terms of job growth as far as job growth during the pandemic. If our metro area status was stripped, and we are now a more rural micro-politan status, we would not be mentioned in that job growth analysis. And site selection consultants and companies considering new and expanded facilities, you know, they want to locate in metro areas. And so, taking 144 of those off the table with this rule change, would be a hamper to recruitment and especially when it comes to trying to get talent and retain jobs, as well.

Senator LUMMIS. Well, thank you for that response, too. That is a massive concern for my state and our communities of Cheyenne and Casper, our two biggest communities, by the way.

Finally, for Mark McAndrews, do you believe that the Rural Project Initiative will prove to be a valuable resource to more rural, multimodal facilities, like the port you operate?

Mr. MCANDREWS. Yes, ma'am. We can use all the technical and expert advice that we can get our hands on. Our projects are com-

plicated, multimodal projects. And with multiple funding sources, we would greatly appreciate any assistance that we can get.

Senator LUMMIS. Well, Mr. Chairman, thank you for holding the hearing and I want to thank all three of the witnesses who responded to my questions. It is really an important panel discussion. Mr. Chairman, I yield back.

The CHAIR. Thank you. Thank you, Senator Lummis. Senator Young.

**STATEMENT OF HON. TODD YOUNG,
U.S. SENATOR FROM INDIANA**

Senator YOUNG. Well, I thank the Chairman for holding this hearing and I want to thank all of the witnesses for your appearance today before the Committee. My home state of Indiana is home to nearly 20,000 bridges, more than 250 high-hazard dams, 350 miles of inland waterways, approximately 4,500 miles of rail, five major water ports, over 100 public access airports, 355 miles of levees, and over 75,000 miles of road. So, as the crossroads of America, and then most manufacturing intensive state in the country, Indiana, of course, relies heavily on transportation infrastructure.

The State of Indiana and our localities leverage every Federal dollar to the greatest extent possible. And the Hoosier State's transportation infrastructure consistently ranks as one of the best in the country.

As we discuss, debate, and draft the Long-Term Surface Transportation Reauthorization Bill, it is essential that we focus on our core needs revolving around our Nation's infrastructure. Hoosiers know best that successful infrastructure projects are a product of timely and efficient cost and environmental assessments, strict but fair accountability standards throughout the process, and the use of incentives, to stretch every dollar as far as it can go. It is with these lessons that I believe we must fine tune existing programs where necessary and appropriate, eliminate those found to be ineffective, and continue to support our successful initiatives, all while embracing creative solutions and innovations to repair and upgrade our Nation's infrastructure.

I ask each of our panelists, could you discuss your thoughts on which transportation infrastructure program should be fine-tuned, maintained, or eliminated? Very general question, if you would just go down the line, please.

Mr. PORCARI. Yes, Senator Young, I will be happy to start. In the surface transportation program, as you point out, given the need for bridge rehabilitation and road rehabilitation, that is a program that can be plussed up, knowing that we can impact the state of good repair and have better state of good repair. On the transit programs, there is—because it is essentially a race to the bottom, with a single pot of money for new starts and core capacity projects, in particular that is a program that I believe we really need to increase the funding of, as well as the technical assistance that is out there.

The local project decisions are made at the local level properly. And that mix of projects should be flexible, meeting local needs. And I think you see that by and large, in the program, but any-

thing we can do to increase that flexibility for the local decision-making, should be encouraged.

Senator YOUNG. Thank you, sir. Should any programs be eliminated, as a followup?

Mr. PORCARI. I do not know of any programs that should be eliminated, Senator. There are some where maybe broadened eligibility or streamlined process would be useful.

Senator YOUNG. Thank you. Our next witness, please.

Mr. BARKER. I would just say, from a mayor's perspective, any program that helps us solve a problem—and we have to be creative in how we use these, because they are—when we had an issue—we first realized we really needed to do something about—the blocked grade crossings. We first went the BUILD route and that was not successful the first 2 years. And so, we pivoted to hit CRISI, and we were able to use that for the first one, and then, go back to BUILD for the second one. So, I think the ease and flexibility is important, and really, an overall investment that cities, counties, and NPOs can access, is important.

Senator YOUNG. I hear that time and again. More flexibility, streamlining existing programs so that the application process is easier, and implementation is easier. What about elimination? Are there any programs that you just found to be completely ineffectual or so burdensome that you think they merit elimination all together?

Mr. BARKER. Senator, I have not. But again, I approach it from a municipal, trying to solve a problem, standpoint.

Senator YOUNG. Sure.

Mr. BARKER. And I would say, broadening eligibility is the key thing. And then, increasing overall investment, because we do spend multiple years accessing one grant, and it does take the burden of solving a long-standing transportation challenge very difficult.

Senator YOUNG. Thank you, sir.

The CHAIR. Thank you. Thank you. Senator Tester.

**STATEMENT OF HON. JON TESTER,
U.S. SENATOR FROM MONTANA**

Senator TESTER. Yes, thank you, Madam Chair. I appreciate the opportunity to visit with you guys. I just want to add to the record a little bit. A previous Senator talked about importation of Russian oil. The stats that he gave came from the Trump Administration. I just want to make that clear, as far as importing of Russian oil.

Mr. Porcari, I want to talk to you a little bit. In your testimony, you mentioned the importance of maintaining a national transportation system. And I agree, rural transportation projects are—they provide critical system wide benefits. And I believe it is critically important we maintain our current system of formula funding. What is your opinion on that, when it comes to real investments being vital to our national network and the funding formula, overall?

Mr. PORCARI. Yes, it is a great question, Senator. I think the short answer is that continued rural investment is essential for us as a Nation. And formula funding is one way to do that, but from the founding days of the republic, our ability to export, for example,

agricultural products, has been foundational to our economic success. In my opinion, we under invest of some of our national resources, like the inland waterways and Great Lakes, that can certainly be stronger on the export side for our rural economies.

In addition, I will say we need, also, to think about transportation writ large, when we are talking about the use of public right of way, in particular. Bringing broadband to every corner of America is something that better use of our right of way resources can help with, as well.

Senator TESTER. I could not agree with you more on all of the above. And I would tell you that those inland waterways that you are talking about, even though it does not affect my state of Montana by having waterways, it affects our market because it would reduce the cost of transportation, which can make a big difference in the bottom-line of folks that are family farmers on the ground.

Another important thing is avoiding regulations that are one-size-fits-all kind of regulations, that make perfect sense in urban areas but rural areas, it really is really tough to sell, quite frankly, and they do not make a lot of sense. Let me give an example. Federal Motor Carrier Safety Administration has a rule in the books that does not take into account the challenges faced by livestock farmers. And they are different, by the way. They do not understand that, you know, when you are hauling a live animal, often times you just cannot pull over anywhere. And by the way, I might add on a previous thing we were talking about, municipalities and trucking—parking spots in municipalities. You are absolutely right. We need more of those. But you also have to be aware that—I fell asleep one night at a truck stop, and a load of hogs came by me in the wintertime and parked beside me and about took me out of the vehicle. That could be a problem in municipalities, okay. But the truth is, we do need them.

I want to talk about these regulations, though. And, Mr. Porcari, once again, from your experience on DOT, what is the best way to ensure that these regulations that impact rural America, in a whole different way, in my opinion, are taking into consideration, while the department formulates rules, or Congress develops transportation policy?

Mr. PORCARI. Senator, all of those rules and regulations really should start from a premise of safety and they, by and large, do. On things like truck size and weight, hours of service requirements, there should be a science and evidence-based basis for proposed regulations and rules. There has also been a lot of give and take and discussion about particular needs, for example, for rural economies during harvest season and other times of the year. The balance is, again, safety and wear and tear on bridges and highways, as opposed to the short-term needs. There is a balance there and I think what you find in practical terms is, when you use a science and evidence-based approach, starting from a safety perspective, you end up—and maybe not everyone is happy, but you end up in both a defensible and a good place.

Senator TESTER. Man, oh, man, I will tell you what. You take the words right out of my mouth. I think it is really critically important that we do use—we keep safety in mind, and we use science. It is really important.

Mr. Barker, I want to turn to you very, very quickly, and I want to thank you for your testimony. I am glad that you have had concerns with the OMB's proposal to increase the size of metropolitan statistical areas. I will just ask you point blank. Should OMB move forward with this? Are you worried about how this is going to affect your city, and you city's ability to invest infrastructure?

Mr. BARKER. Absolutely, and beyond infrastructure, be able to recruit companies and promote economic development. I think all of those are concerns. They are very real.

Senator TESTER. Yes, well, we need to shut this rule down. I am just telling you. It just totals out the State of Montana. Thank you all very much.

The CHAIR. Thank you. Senator Thune.

**STATEMENT OF HON. JOHN THUNE,
U.S. SENATOR FROM SOUTH DAKOTA**

Senator THUNE. Thank you, Madam Chair. And I would echo what my colleague from Montana said on MSAs. That rule needs to be shut down. I find that very concerning and recently led a letter with nine other Senate/House colleagues, encouraging OMB to reject that recommendation to increase the population required for communities to qualify for MSA.

I want to thank all the witnesses that are here today for your input as we begin working toward a reauthorization of surface transportation programs.

Transportation infrastructure investments has always been an area for bipartisan cooperation, as evidenced by the passage of the FAST Act in 2015, which enjoyed wide popularity in Congress and among states, and by the bipartisan Highway Bill reported out of the EPW Committee last Congress. We simply cannot tackle a reauthorizing of these programs without working together in a bipartisan manner.

Recognizing our Nation's diverse and highly interconnected transportation system, from my perspective, is crucial that transportation policy and investment continue to recognize the importance of rural areas, where the vast majority of agricultural and industrial commodities originate. I have said it before, and I will say it again. Those investments benefit the entire country, not just rural areas, by keeping the national transportation system fluid and interconnected. And while they may not be located in major cities or experience high traffic volumes, rural freight corridors are a crucial component of the Nation's transportation system, ensuring that goods are transported around the Nation and the world safely and efficiently.

So, thanks again to all the witnesses for being here today. I look forward to discussion. I want to start with Mr. Porcari and talk about automated vehicles, which I think have the potential to dramatically reduce highway fatalities, relieve congestion, and provide a safe and accessible transportation option for our seniors and persons with disabilities. I have a bill with Senator Peters, that we have worked on over the past several years, to enact automated vehicles legislation, which I believe, is the key to ensuring that AVs are tested and deployed under a safe and consistent regulatory

framework. And I remain committed to working with him to advance this critical, emerging technology.

Mr. Porcari, you mention in your testimony the importance of encouraging innovation in transportation policy and investment. Do you see AVs and other innovative transportation technologies as part of the solution?

Mr. PORCARI. Yes, Senator Thune, it is an integral part of the solution. And if we are to have national leadership on this, we need to move forward quickly. There are great opportunities throughout the country, including in our rural areas, for things like truck only lanes and platooning, that would greatly help on the freight movement side.

Senator THUNE. So, the National Council on Disability has recognized the potential of AVs to greatly improve the lives of persons with disabilities and together with several disability organizations, provided helpful input on passed drafts of AV legislation. Do you believe AVs will be a critical part of a more equitable and accessible transportation system?

Mr. PORCARI. Yes, I do, Senator. I think they are an integral element of a more equitable and safer transportation system.

Senator THUNE. Mr. Barker, in 2019 DOT established the Routes Initiative, meant to address important issues with rural access to discretionary grant programs like INFRA and BUILD. Additional outreach from the department can really make a difference for rural transportation agencies with limited resources to allocate for the application process. Mr. Barker, you discussed the need for additional planning and technical assistance to local governments applying for discretionary grant programs. Do you believe these programs should be continued under the current administration?

Mr. BARKER. I think it is as vital that local communities, particularly those that are rural, that have limited means, to have access to some sort of planning or technical assistance. Simply because, you know, a lot of communities may not have the expertise in house to try and figure out what the solution is to a long-standing transportation problem. And so, having resources that are there, so they can go and get the solution, will actually assist them in trying to find that solution. And then, also, the technical assistance from DOT is incredibly important to keep projects—getting the feedback is important, not only for the rural community to better their application, but also to DOT to understand what the unique challenges are, in communities around the country.

Senator THUNE. And do you have any other recommendations to improve Federal planning assistance to small and mid-size communities?

Mr. BARKER. I think there is a need for planning dollars, when going after things like BUILD and INFRA, because they are big projects. And having some set aside there, that you can go and access the engineering expertise or the cost-benefit analysis, would help smaller communities find their way into the game.

Senator THUNE. OK. How am I doing time wise?

The CHAIR. Eleven second.

Senator THUNE. OK, all right. All right, well I have another rural question, but I will yield back, Madam Chair, since my time has expired. Thank you.

The CHAIR. Thank you.

Senator THUNE. Thank you to all the witnesses.

The CHAIR. Thank you, Senator Thune. Senator Rosen.

**STATEMENT OF HON. JACKY ROSEN,
U.S. SENATOR FROM NEVADA**

Senator ROSEN. Thank you, Chair Cantwell and thank you to the witnesses for being here today. I really appreciate it.

I want to talk a little bit about our national strategy on travel and tourism infrastructure. Tourism, of course, essential to Nevada's economy, as well as the entire Nation. It is part—it is a comprehensive infrastructure plan that incorporates intermodal transportation to facilitate travel and tourism mobility.

So, the National Advisory Committee on Travel and Tourism Infrastructure drafted its 2020 report, during a healthy and robust economy, before the public health crisis of COVID-19 happened. And of course, Nevada's tourism grinded to a screeching halt. It cost us hundreds of thousands of jobs. Over a year later, the national strategy on travel and tourism is needed now more than ever to bring our industry back to pre-pandemic strength. And it means identifying strategic infrastructure investments that will enable our tourism economy to thrive in the future. As Chair of the Subcommittee on Tourism, Trade, and Export Promotion, I look forward to working with the administration and the Committee and all of the witnesses to make that happen.

And so, of course, we have to have a broad view of infrastructure, including a new Interstate 11, connecting Phoenix to Las Vegas to Reno. That is going to help our tourism, of course, in three of our major metropolitan areas. So, Mr. Porcari, as former Deputy Secretary of Transportation, can you talk about the importance of national strategy on travel and tourism, how surface transportation infrastructure investments can be part of that, especially as we recover from this downturn, as a result of the pandemic?

Mr. PORCARI. It is a great question, Senator Rosen. Clearly, a national strategy, as I have referred to before, using a systems approach to how we actually build and maintain infrastructure, would be very helpful. Just in the Nevada example of travel and tourism, making sure that we are multimodal that—you mentioned Interstate 11, certainly there is also a private sector passenger rail proposal that would directly serve the tourism and hospitality industry, and air service. And all of those are key elements of the strategy that ultimately work together to promote travel and tourism. The beauty of the system is that we can do that. It cuts across committees of jurisdiction and, certainly, funding lines. But a longer integrated strategy would benefit everyone.

Senator ROSEN. Thank you. I want to talk a little bit more, building upon that, about future infrastructure, technology initiatives. You know, in Nevada, we have our Las Vegas Convention Center and, of course, we have a highly innovated project going on, called our Convention Center Loop. It is a revolutionary, underground transportation system that is going to serve the entire 200-acre Las Vegas Convention Center campus. It will allow convention attendees to be transported across campus in over a minute, free of charge, in all electric Tesla vehicles.

And so, I just have a short time left, but Mr. Porcari, this is new and innovative work. How can Congress bring transportation innovations to the forefront, to help us start moving again, like the kinds of things we are doing at our Las Vegas Convention Center?

Mr. PORCARI. The Convention Center Loop project is a great example of one that does not fit neatly into any of the existing funding categories yet is an incredibly important pilot project that could be replicated, to some extent, nationally. So, the kind of flexibility in Federal funding for innovation—now, I mentioned before that project decisions are made at the local level. Those individual decisions should be supported through pilot projects, some of which are fairly high-risk reward, to prove the technology and show that it can part of an integrated transportation system.

Senator ROSEN. Thank you. I want to move to another topic, predictive analytics and transportation. We know how much data that we collect. We know the data tells a story. And our Regional Transportation Commission has been on the forefront of using predictive analytics to improve highway safety and efficiency. We can anticipate where congestion spots are and we can modify transportation patterns, perhaps in advance. And so, Mr. Porcari, can you speak to how predictive analytics, how we can use that, how it is supported, how this technology can help us reduce crashes, increase railway capacity, and reduce emissions for fuel and waste, all at the same time?

Mr. PORCARI. Yes, Senator, Nevada has been very aggressive and a leader in predictive analytics. And the explosion of available technology for analytics is incredible. Whether it is traffic congestion, spot safety issues, weather, or the vehicles themselves, and where the analytics can actually support better decisionmaking on routing, just in time delivery, and then like. What we have not done, as a country, is maximized our opportunity with predictive analytics.

As you know, there is a research program at DOT, where some of this, actually, I think in terms of pilot projects, would be a very useful expenditure of funds to build national leadership, on a more holistic, predictive analytics system.

The CHAIR. Thank you. Thank you, Senator Rosen. Thank you so much. So, gentlemen, we are going to take a 15-minute recess. I think we are done, but we are not sure. So, we are going to treat this as a last call to members, if they want to come back at that 15 minute and ask questions. If we have some takers we will continue. If not, we will close out the hearing. But if you could give us that time, we will recess for 15 minutes. Thank you.

[Recess 12:01 p.m.]

[End Recess 12:17 p.m.]

The CHAIR. The Commerce, Science, and Transportation Committee will come back into order. Again, thank our witnesses for waiting. I am not sure if we have other members who want to ask a question. But I wanted to follow up on the discussion from earlier about the funding of megaprojects and INFRA and these port competitiveness issues. And wanted to ask the witnesses if, on this megaproject funding concept: I am assuming states have had the same dilemmas, right? States have had projects that have been huge, significant impacts to their State budget. In our state, we

used to call the Cat-C projects, Category C. And, at times, you have to take action to eliminate your backlog. Literally, eliminate and get those projects done, otherwise they dwarf the whole transportation funding.

So, what have we seen in innovative ways to deal with this same dilemma? Mr. Porcari?

Mr. PORCARI. Madam Chair, one way is states are making better use of the loan funds that are out there. And those are limited tools, but for—with TIFIA and RIFF, in particular, you can use them as a project finance tool. One of the realities of the big projects is, we do not fund projects anymore, and we finance them. And so, you need to structure a finance program for them.

Another one is, in select cases, for the right project profile, public/private partnerships can be very useful. On a personal level, I did one with our container terminal at the Port of Baltimore. There are a number of examples around the country, on the aviation side, for example, where public/private partnerships have worked well. They can also work well with freight and cargo projects, again, in particular at ports.

The CHAIR. And so, what would—what are you—tell me more on that. Would you—are you saying that that is a way for us to get more mileage now?

Mr. PORCARI. Yes, it is a way to get more mileage. A couple of things. As you know, the TIFIA and RIFF programs are both 35-year loans. Maybe a more appropriate way to think about it is, if you are building a 75- or 85-year facility, maybe the loan term should be 75 percent of the lifespan of that facility. So, it would go beyond 35 years, in that example. That might be—that would significantly help jurisdictions that use those loan programs. Again, where appropriate. You cannot do that if it is a 20-year facility.

The CHAIR. Well, I mean, a lot of states have transportation benefit districts and other things that they have used to make regional improvements make sense for the region. Get buy-in from individuals in that community. So, how would you suggest we look at the megaprojects this way? Like, what percentage of the megaprojects do you think might benefit from this, or broadening the INFRA functionality?

Mr. PORCARI. Both of them, broadening the INFRA functionality—and if you establish a category of nationally significant projects, and separately fund it, having the loan programs more flexible, as I described, would be an additional way to help move those projects forward. You have a Federal funding component, but even financing the local share of it, whether it is 50 percent or whatever, with a more flexible loan program, would be very helpful.

The other short-term finance aide might be, the jurisdictions that have existing TIFIA and RIFF loans, refinancing those at today's interest rates can open headroom in a capital program. So, if they have a significant TIFIA portfolio, a refi of those TIFIA loans can help them.

The CHAIR. Anybody else on this point?

[No response.]

The CHAIR. Mayor or—yes.

Mr. BARKER. I will just say that the problem that faces all cities is, we have become a maintenance only type setup. You know, whether it is roads or bridges or water and sewer, and all of the external pressures that you put on municipalities and counties to take care of those things. There is very little left over to try to tackle big issues. And so, anything that is out there, whether it is INFRA or BUILD or CRISI, helps.

I think that the local governments should have skin in the game. For us, we took some—we had some—we are paying off some debt, and so, we use that existing debt service millage, and we max that out, under the current millage rates, to take out more that would match our CRISI and BUILD grants. If we had an opportunity to go after an INFRA grant, the 40 percent non-INFRA funding match is a challenge for smaller communities. And you really have to, kind of, either find a creative way to fill that gap, or collaborate with the State DOT to try to put an application in.

But again, it is a—you are dealing with areas that have become more focused on maintenance, and we can go after, maybe, one or two long-standing challenges, or game changing projects that could induce more growth. But there may be a dozen opportunities that are out there that you just will not have the resources to do.

The CHAIR. And the project you mentioned earlier, what was the non-INFRA funding? The 40 percent, where did that come from?

Mr. BARKER. That was the challenge for us with INFRA is trying to come up with that 40 percent non-Federal—

The CHAIR. But the project you mentioned earlier that, like, on the third try actually did get INFRA funding. So, where did you come up with that? That was the city, or—

Mr. BARKER. That was the—that was our BUILD and CRISI grants on the third try. And we used—we took out bonds ourselves to fill that funding gap, because we were paying off some other debt and we wanted to target our municipal borrowing toward long-term projects, as opposed to just paving streets. And so, that is what we used as our match for both CRISI and BUILD.

The CHAIR. So, Mr. Porcari, what about that example? What would you do there?

Mr. PORCARI. In that specific example, I think looking at capacity to come up with the local share makes a difference. And there may be jurisdictions that may be based out of size, for example, where the local match might, appropriately be, lower or different than it would be for other projects.

The CHAIR. But bonding capacity?

Mr. PORCARI. Bonding capacity—the Build America bonds program, I thought, was very successful as an additional funding source. You heard from you fellow Senators today that there is a lot of interest in that and having opportunities on both non-taxable and taxable debt financing at the local level would be very helpful.

The CHAIR. Well, to me this is—we know what the issue is. We have a ton of infrastructure investment we need to make. So then, the question becomes, what are the tools that we can give ourselves, that can drive down the cost of making that investment. And seems to me, that some additions or restructuring of some of these programs might give us the ability to finance more projects

in a more timely fashion and drive down the overall cost. Is that—am I getting this right?

Mr. PORCARI. I believe that is right. And as I mentioned before, in general terms, the larger the project, the more likely it is to be financed, as opposed to funded on a cashflow basis. So, it becomes more and more important for those nationally and regionally significant projects.

The CHAIR. Thank you. Thank you. Well, I do not know if we have any other members. It looks like we have no takers, at this moment. But we will leave the record open for a period of time here. Any Senators who want to submit questions for the record have 2 weeks to do so. And we ask, obviously, people to get back to us on those questions.

So, again, thank you to all the panelists for joining us, both here and virtually. A lot of illuminating information for the next steps of infrastructure investment.

With that, we are adjourned.

Mr. PORCARI. Thank you, Madam Chair.

[Whereupon, at 12:25 p.m., the hearing was adjourned.]

A P P E N D I X

ADVOCATES FOR HIGHWAY AND AUTO SAFETY
March 23, 2021

Hon. MARIA CANTWELL, Chair,
Hon. ROGER WICKER, Ranking Member,
Committee on Commerce, Science, and Transportation,
United States Senate,
Washington, DC.

Dear Chair Cantwell and Ranking Member Wicker:

Thank you for holding tomorrow's hearing, "Driving the Road to Recovery: Rebuilding America's Transportation Infrastructure." Advocates for Highway and Auto Safety (Advocates) urges you to prioritize the safety of all road users as you consider policies and legislation investing in infrastructure. We respectfully request this letter be included in the hearing record.

Every major surface transportation bill passed by Congress over the last three decades has included significant public safety improvements such as airbags,¹ electronic stability control² and safety belts on motorcoaches.³ These advances have garnered bipartisan support and saved thousands of lives. In fact, the National Highway Traffic Safety Administration (NHTSA) estimated that between 1960 and 2012, over 600,000 lives have been saved by motor vehicle safety technologies.⁴ The recent crash involving Tiger Woods is a prime example of the lifesaving benefits of regulations. Mr. Woods' life was saved, at least in part, by a seat belt, air bags and roof crush performance standards, all of which are required as standard equipment in cars. As *Auto Week* succinctly explained, "The details of Tiger Woods' crash are still being sorted out by investigators, but in general, the world's greatest golfer can thank more than 50 years of government-mandated safety advances that he is alive."⁵ Technologies, such as advanced driver assistance systems (ADAS) and impaired driving prevention systems, if similarly required, could be saving lives now.

Safety advances are urgently needed to address the persistently high and costly crash death and injury toll. Every year on average, over 36,000 people are killed and 2.74 million more are injured in motor vehicle crashes. Preliminary estimates from NHTSA indicate that the fatality rate and total for the first nine months of 2020 increased over the same time period in 2019. This is in line with troubling trends reported across the country, and confirmed by NHTSA, of drivers engaged in riskier driving behaviors including speeding, impairment, and lack of seat belt use during the COVID-19 pandemic. Media and analytics reports note distraction increased as well. Needless to say, the concurrent decline in vehicle miles traveled did not result in anticipated safer conditions on our roads.

In addition, the number of pedestrian and bicyclist deaths remain at or near the highest levels in three decades, with 6,205 and 846 fatalities respectively. Further, in 2018 and 2019, over 100 children were killed due to heatstroke as a result of being left unattended in a vehicle or gaining access independently into an unoccupied vehicle according to NHTSA. In 2019, more than 5,000 people were killed in crashes involving a large truck. Since 2009, the number of fatalities in large truck

¹Pub. L. 102-240 (Dec. 18, 1991).

²Pub. L. 109-59 (Aug. 10, 2005).

³Pub. L. 112-141 (Jan. 3, 2012).

⁴Lives Saved by Vehicle Safety Technologies and Associated Federal Motor Vehicle Safety Standards, 1960 to 2012, DOT HS 812 069 (NHTSA, 2015); See also, NHTSA AV Policy, Executive Summary, p. 5 endnote 1.

⁵Mark Vaughn, Tiger Woods Owes His Life to Decades of Government Safety Standards, *Auto Week* (Feb 26, 2021).

crashes has increased by 48 percent.⁶ An additional 159,000 people were injured in crashes involving a large truck, and the number of large truck occupants injured increased by 18 percent. In fatal crashes involving a truck and a passenger vehicle, 96 percent of the fatalities were passenger vehicle occupants, according to the Insurance Institute for Highway Safety (IIHS). The cost to society from crashes involving commercial motor vehicles (CMVs) was estimated to be \$143 billion in 2018, the latest year for which data is available.

The overall annual cost crashes impose on society exceeds \$800 billion, including \$242 billion in direct economic costs (NHTSA), based on 2010 data. When adjusted only for inflation, comprehensive crash costs now near one trillion dollars, with direct economic costs amounting to \$292 billion. This is equivalent to an \$885 “crash tax” on every American. Additionally, crashes cost employers \$47.4 billion in direct crash-related expenses annually, based on 2013 data from the Network of Employers for Traffic Safety (NETS). Similarly adjusted, the cost to employers is now approximately \$54 billion annually. Ending the physical, emotional and economic toll of motor vehicle crashes is achievable. As the Committee begins consideration of an infrastructure package/surface transportation reauthorization, we urge you to address these serious safety challenges with the proven “vaccines” detailed below.

*Require and expand the use of proven technologies which are demonstrated by data, research and experience to advance safer roadways, safer drivers and safer vehicles.*⁷ Advanced vehicle safety technologies, also known as advanced driver assistance systems (ADAS), prevent and lessen the severity of crashes. Research performed by IIHS has clearly demonstrated the benefits of these technologies. For example, IIHS determined that automatic emergency braking (AEB) can decrease front-to-rear crashes with injuries by 56 percent. The National Transportation Safety Board (NTSB) has included increasing implementation of collision avoidance technologies in its *Most Wanted List of Transportation Safety Improvements* since 2016. These technologies should be required in all new vehicles, subject to a minimum performance standard which sets a floor, not a ceiling, from which manufacturers can innovate. Congress should also direct NHTSA to update the New Car Assessment Program (NCAP) to include ADAS in vehicle ratings. The NTSB has recommended enhancing NCAP to include these safety improvements and Euro NCAP already evaluates a number of these systems.

Unfortunately, access to these lifesaving crash avoidance technologies currently is not equitable. They are often sold as part of an additional, expensive trim package coupled with other non-safety features, or included as standard equipment in high end models or vehicles, which are unaffordable to many families. A report from Consumer Reports found an astounding upcharge of more than \$16,000 for AEB with pedestrian detection in the second most popular vehicle sold in the U.S. Requiring vehicle safety technology as standard equipment will reduce its base cost due to economies of scale, make safety equitable and expedite the benefits to all road users from broad market saturation.

Many individuals rely on walking or biking for economic reasons, rather than choice, to reach work or school. The inability to afford a car or the decision to walk or bike should not come with an elevated risk for injury or death. Mandating safety equipment in new vehicles would ensure the protection of vulnerable road users. Moreover, efforts to address climate change including domestic production of electric vehicles (EVs), which requires automakers to reconfigure their production lines, can efficiently and economically coincide with integrating ADAS technologies.

Requiring that autonomous vehicles (AVs) meet minimum standards and that operations are subject to adequate oversight throughout development and deployment will save lives as well as costs for both the consumer and the manufacturer. Sweeping promises have been made about AVs bringing meaningful and lasting reductions in motor vehicle crashes and resulting deaths and injuries, traffic congestion and vehicle emissions. Additionally, claims have been made that AVs will expand mobil-

⁶Note, the 48 percent figure represents the overall change in the number of fatalities in large truck involved crashes from 2009 to 2019. However, between 2015 and 2016 there was a change in data collection at U.S. DOT that could affect this calculation. From 2009 to 2015 the number of fatalities in truck involved crashes increased by 21 percent and between 2016 to 2019, it increased by 7 percent.

⁷Past legislation which promotes these issues and should be advanced includes: Moving Forward Act (116th Congress, H.R. 2); Protecting Roadside First Responders Act (116th Congress, S. 2700/H.R. 4871); 21st Century Smart Cars Act (116th Congress, H.R. 6284); Reducing Impaired Driving for Everyone (RIDE) Act (116th Congress, S. 2604); HALT Drunk Driving Act (116th Congress, 4354); Safe Roads Act (116th Congress, H.R. 3773); Hot Cars Act (116th Congress, H.R. 3593); School Bus Safety Act (116th Congress, S. 2278/H.R. 3959); Stay Aware for Everyone Act (116th Congress, S. 4123); and, Five-Stars for Safe Cars Act (116th Congress, H.R. 6256), among others.

ity and accessibility, improve efficiency, and create more equitable transportation options and opportunities. However, these potentials remain far from a near-term certainty or reality. Without commonsense safeguards to ensure these desirable outcomes, the potentials are imperiled at best and could be doomed at worst. The absence of protections could result in adverse impacts including safety risks for all people and vehicles on and around the roads, job displacement, degradation of current mobility options, infrastructure and environmental problems, marginalization of certain users, and others.

The public backs a prudent and thoughtful approach to AVs. According to a 2020 poll commissioned by Advocates, 71 percent of respondents support government-mandated minimum safety requirements for new driverless car technologies and 68 percent reported that they would be less concerned about driverless cars if they knew that companies had to meet minimum safety requirements before selling them to the public.⁸ Moreover, on the path to driverless cars, ADAS can prevent or lessen the exorbitant death and injury toll now while laying the foundation for AVs in the future.

In November 2020, Advocates led a group of 60 diverse organizations to release the “AV Tenets” which must be the foundation for any AV policy that is considered.⁹ The core principles of the AV Tenets are: (1) prioritize safety for all road users; (2) guarantee accessibility and equity; (3) preserve consumer and worker rights; and, (4) ensure sustainable transportation and retain local control. During this transformational time in surface transportation history, we should pay heed to Benjamin Franklin’s infamous quote from 1736, “An ounce of prevention is worth a pound of cure.”

As this Committee moves forward with an infrastructure package/surface transportation reauthorization bill, a strong safety title must be at its core and provisions which would further degrade infrastructure and safety must be rejected. The variations in road use during the pandemic highlighted vulnerabilities inflicting our Nation’s roads. Now is the time to advance effective solutions to save lives.

Thank you again for holding this essential hearing and for your consideration of these issues. We look forward to working with you to improve safety on our Nation’s roadways.

Sincerely,

CATHERINE CHASE,
President.

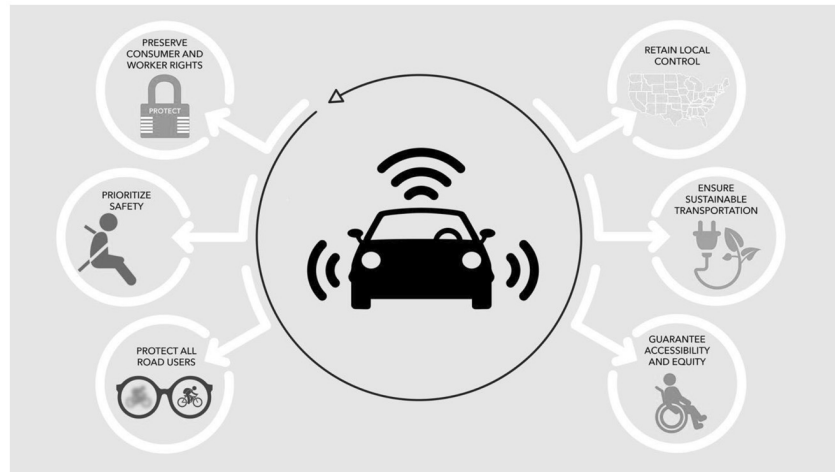
cc: Members of the U.S. Senate Committee on Commerce, Science, and Transportation

⁸ Advocates for Highway and Auto Safety, Engine Insights CARAVAN Survey: Public Concern about Driverless Cars is Strong, and the Support for Performance Requirements is Clear, January 2020.

⁹ The complete AV tenets are attached to this letter.

Autonomous Vehicle (AV) Tenets¹

March 2021



Prioritizing Safety of All Road Users

Safety Rulemakings: All levels of automated vehicles² must be subject to comprehensive and strong Federal standards ensuring they are safe and save lives. While the U.S. Department of Transportation (DOT) has the authority to issue motor vehicle safety standards for all levels of automated vehicles, for the last four years, it has abrogated this responsibility by focusing its efforts on inadequate voluntary initiatives. When Congress considers legislation on AVs, it is imperative that the protection of all road users is the guiding principle and that legislation requires the DOT to commence rulemakings on safety standards and issue final rules by a prompt date certain with a reasonable compliance date. The rulemakings must address known and foreseeable safety issues, many of which have been identified by the National Transportation Safety Board (NTSB) and other research institutions, including:

- **Revising Federal Motor Vehicle Safety Standards:** Any actions by the National Highway Traffic Safety Administration (NHTSA, Agency) to revise or repeal existing Federal Motor Vehicle Safety Standards (FMVSS) in order to facilitate the introduction of AVs must be preceded by and conducted in a public rulemaking process and cannot be undertaken by internal Agency actions. Any revision must meet the safety need provided by current standards.
- **Collision Avoidance Systems:** Certain advanced safety technologies, which may be foundational technologies for AVs, already have proven to be effective at preventing and mitigating crashes across all on-road modes of transportation and must be standard equipment with Federal minimum performance requirements. These include automatic emergency braking with pedestrian and cyclist detection, lane departure warning, and blind spot warning, among others. A lack of performance standards has contributed to instances of dangerous malfunctions of this technology, highlighting the need for rulemakings for collision avoidance systems and other fundamental AV technologies. As collision avoidance technology continues to improve and evolve, it should also be required to detect and prevent collisions with all vulnerable road users and objects in the operating environment.

¹These tenets are limited to vehicles with a gross vehicle weight rating (GVWR) of 10,000 pounds or less unless otherwise noted; however, it is imperative that automated delivery vehicles (including those used on sidewalks and other non-roadways) and commercial motor vehicles be subject to comprehensive regulations, including rules regarding the presence of a licensed, qualified driver behind the wheel.

²Partially automated vehicles (SAE International Level 2) and conditional/highly automated vehicles (SAE International Levels 3, 4, 5).

- **“Vision Test” for AVs:** Driverless cars must be subject to a “vision test” to guarantee an AV will operate on all roads and in all weather conditions and properly detect and respond to other vehicles, all people and objects in the operating environment including but not limited to Black and Brown people, pedestrians, bicyclists, wheelchair users and people with assistive technology, children and strollers, motorcycles, roadway infrastructure, construction zones and roadside personnel, and interactions with law enforcement and first responders. Any algorithm that will inform the technology must be free of bias. Risk assessments for AVs must ensure adequate training data which is representative of all users of the transportation system. Manufacturers and developers must be required to meet basic principles in the development and use of algorithms including: the use of algorithms should be transparent to the end users; algorithmic decision-making should be testable for errors and bias while still preserving intellectual property rights; algorithms should be designed with fairness and accuracy in mind; the data set used for algorithmic decision-making should avoid the use of proxies; and, algorithmic decision-making processes that could have significant consumer consequences should be explainable. The DOT must review algorithms and risk assessment procedures for potential issues, and any identified problems must be then corrected by the developer or manufacturer and verified by the DOT. Coordination and oversight should be led by the Office of the NHTSA Civil Rights Director in partnership with the Office of the Assistant Secretary for Research and Technology, NHTSA Office of Vehicle Safety Research, and NHTSA Chief Counsel’s office. The Office of the NHTSA Civil Rights Director should be given adequate resources, expertise and authority to accomplish this role.
- **Human-Machine Interface (HMI) for Driver Engagement:** Research demonstrates that even for a driver who is alert and performing the dynamic driving task, a delay in reaction time occurs between observing a safety problem, reacting and taking needed action. For a driver who is disengaged from the driving task during autonomous operation of a vehicle (*i.e.*, sleeping, texting, watching a movie), that delay will be longer because the driver must first be alerted to re-engage, understand and process the situation, and then take control of the vehicle before taking appropriate action. Therefore, an AV must provide adequate alerts to capture the attention of the human driver with sufficient time to respond and assume the dynamic driving task for any level of vehicle automation that may require human intervention. This mechanism must be accessible to all occupants, including people with disabilities and vulnerable populations.
- **Cybersecurity Standard:** Vehicles must be subject to cybersecurity requirements to prevent hacking and to ensure mitigation and remediation of cybersecurity events. The Federal Aviation Administration (FAA) has a process for the certification and oversight of all U.S. commercial airplanes, including avionics cybersecurity, although improvement is needed according to a recent Government Accountability Office (GAO) study.³ The DOT should be directed, in cooperation with the National Institute of Standards and Technology (NIST), to develop a cybersecurity standard for automated driving systems. The DOT should then require the cybersecurity standard be applied to all new vehicles. The DOT must be engaged in all relevant discussions on artificial intelligence.
- **Electronics and Software Safety Standard:** Vehicles must be subject to minimum performance requirements for the vehicle electronics and software that power and operate vehicle safety and driving automation systems individually and as interdependent components.
- **Operational Design Domain (ODD):** The NHTSA must issue Federal standards to ensure safeguards for driving automation systems to limit their operation to the ODD in which they are capable of functioning safely. An ODD includes elements such as: the type of roadway, geographical area, speed range, vehicle operating status, and environmental and temporal conditions in which the vehicle is capable of operating safely; any roadway or infrastructure asset required for the operation of the vehicle, such as roadside equipment, pavement markings, signage, and traffic signals; and, the means by which the vehicle will respond if the defined ODD changes or any circumstance which causes vehicle to operate outside of its defined ODD. The rule shall also: specify requirements for how the vehicle will safely transition to a minimal risk condition as a result of a malfunction or when operating outside of the ODD, including the necessity

³United States Government Accountability Office, Aviation Cybersecurity, FAA Should Fully Implement Key Practices to Strengthen Its Oversight of Avionics Risks, GAO–21–86 (Oct. 2020).

for human intervention that is accessible to all occupants including people with disabilities and vulnerable populations; and, the ability of the vehicle to comply with local laws as part of whether the vehicle is operating inside the ODD.

- **Functional Safety Standard:** Requires a manufacturer to ensure the design, development, verification and validation of safety-related electronics or software demonstrates to NHTSA that an AV will perform reliably and safely under the conditions the vehicle is designed to encounter. Additionally, NHTSA must validate that the manufacturer's certifications of functional safety are accurate and reliable by conducting their own testing as needed.
- **Safe Fallback:** Every driving automation system must be able to detect a malfunction, a degraded state, or operation outside of ODD and safely transition to a condition which reduces the risk of a crash or physical injury. In the event of a failure, it is essential that the occupants of a driverless car have the ability to assume manual control to complete or command a safe transition to reach a safe location and safely exit the vehicle. This mechanism must be accessible to all occupants, including people with disabilities and vulnerable populations. Commercial vehicles, including those used for public transportation or freight, present distinct challenges, such as the need to identify qualifications necessary to operate, that will need to be addressed separately.
- **Crash Procedures Standard:** Requires manufacturers to have procedures in place, including proper shutdown protocols, for when an AV is involved in a crash to ensure the safety of all occupants of the AV, other road users and emergency responders.
- **Standard for Over-the-Air (OTA) Updates:** Requires consumers be given timely and appropriate information on the details of the OTA update and ensures any needed training or tutorials are provided. Limits the circumstances in which manufacturers can update a vehicle OTA and provides requirements for OTA updates that necessitate a recall or an additional demonstration of safety. OTA updates that enhance the safety of a vehicle should not be optional or require the consumer to incur any additional expense. During the update process cybersecurity must be maintained. In developing the OTA standard, NHTSA should develop rigorous testing around the most effective way to push out OTA updates to owners and operators of vehicles. Updates must be accessible for all users, including people with disabilities. In addition, information on OTA updates should be available in multiple languages, similar to compliance with Section 508 of the Rehabilitation Act of 1973 (Pub. L. 93-112), and via video with closed captioning as appropriate, as well as other means of communication to promote access. In a commercial setting, it will be especially critical for there to be clear protocols for how and when OTA updates are carried out.

Safety and Performance Data: With the increasing number of vehicles with different automated technologies being tested and some being sold to the public, standardized data elements, recording, and access to safety event data are necessary for the proper oversight and analysis of the performance of the driving automation systems. Vehicles on the road today are already producing enormous amounts of data, and the amount and type of data will only increase as driving automation evolves. There are many stakeholders who need that data for numerous and varied reasons, most importantly safety. The DOT must issue a FMVSS requiring all vehicles to be equipped with technology that captures all necessary data to understand and evaluate the safety performance of AVs on the road. Moreover, following best practices, data on disengagements and near-misses would help to identify flaws in the technology and may allow cities and states to proactively invest in infrastructure improvements or update the design of dangerous intersections and corridors to ensure safety for all street users. Real-time data on vehicle speeds, travel times, and volumes enables states, cities, and communities to manage congestion and speed, uncover patterns of excessive speeds, evaluate the success of street design projects, and ultimately improve productivity and quality of life. It could also facilitate emergency response by summoning and providing important information to emergency personnel, assist in the safe extraction of occupants, and provide a way for first responders to safely disable and secure the vehicle. Safety and performance data should be made available to relevant stakeholders such as state and local governments, Federal agencies, operators or dispatchers of the vehicle itself, independent research bodies, law enforcement, first responders, insurers, and the public, with appropriate privacy protections.

Manufacturer Submissions to NHTSA: Any submission to NHTSA by AV manufacturers or developers must be mandatory, publicly available and include thorough and adequate data and documentation. Additionally, NHTSA must be directed to re-

view and evaluate all submissions to assess whether an approach to automated driving system (ADS) development and testing includes appropriate safeguards for operation on public roads. Moreover, submissions should be substantive and include, but not be limited to the following issues: ADS control capabilities; ODD; other limitations and constraints; methods and timing of driver engagement (if applicable); data definitions; recording; and, accessibility. Miles accumulated by simulation, as opposed to on-road testing, cannot substitute for on-road testing or serve as the sole basis for the data included in the submission. (See section below on Proper Oversight of Testing.) If NHTSA finds information indicating further operation of these vehicles on public streets poses a danger, the Agency must be able to intervene and enforce the law⁴ effectively, which will require not just the greater use of its existing authority but also new, stronger enforcement authorities that should be enacted by Congress (See section below on Additional Resources and Enforcement Authorities for NHTSA). If the Agency determines that a submission is deficient, manufacturers must be required to submit any additional information requested. The legislation should clarify that the Agency has civil and criminal penalty authority for false, fictitious or fraudulent submissions under 18 United States Code (USC) 1001. This submission process cannot be a substitute for NHTSA promptly issuing minimum performance standards through a public rulemaking process.

Proper Oversight of Testing: AV testing is already underway in many states and localities. Fundamental and commonsense safeguards must be instituted for testing on public roads including the establishment of independent institutional review boards (IRBs) to certify the safety of the protocols and procedures for testing of AVs on public roads. The IRB requirements established by the Department of Health and Human Services (HHS) in 45 Code of Federal Regulations (CFR) 46 should serve as a basis for the requirements for IRBs overseeing AV road testing and be modified as needed for this particular use. Test vehicles should be prohibited from providing a service for compensation. In Section 24404 of the Fixing America's Surface Transportation Act (FAST) Act (Pub. L. 114-94), Congress excluded test vehicles from having to comply with Federal standards as long as those vehicles are not sold to the public.

NHTSA actions required:

- Develop empirical data reporting standards and metrics for such data;
- Mandate developer reporting of the metrics to the public to enable comparison of AV safety performance among developers;
- Require manufacturers to provide data on the safety and performance of test vehicles and systems and to report safety-critical events including crashes and incidents that occur during testing that result in death, injuries or property damage;
- Verify developer compliance with all applicable laws;
- Make safety-critical event information publicly available with the rebuttable presumption in favor of disclosure, unless it is deemed proprietary or confidential in accordance with Federal law;
- Determine which safety-critical events must result in the suspension of testing until a thorough review is completed and additional safeguards are implemented and verified by the Agency, as necessary; and,
- Prior to the introduction of the AV into commerce, review and analyze testing for oversight and research purposes, including but not limited to rulemaking.

Additional Resources and Enforcement Authorities for NHTSA: Ensuring NHTSA has adequate resources, funds, staff, and enforcement authority is essential for the Agency to successfully carry out its statutory mission and address the multiple challenges presented by the testing and deployment of self-driving technologies. The Agency also should be given additional enforcement powers including imminent hazard authority, and enhanced authority to pursue criminal penalties and levy larger civil penalties to ensure industry accountability and thwart misconduct.⁵

Guaranteeing Accessibility for All

Access for Individuals with Disabilities and Older Adults: Nearly one in five people in the U.S. has a disability (more than 57 million), and 16 percent of the U.S. population is over the age of 65. Yet, significant barriers to accessible, affordable and reliable transportation remain across all modes, and many people with disabil-

⁴Motor Vehicle Safety Act, Pub. L. 89-563 (1966).

⁵If NHTSA is not to have authority over the commercial operation of an AV, these same oversight powers must be conveyed to the respective modal agency responsible for overseeing the deployment of commercial AVs.

ities are unable to obtain a driver's license and cannot afford to purchase an accessible vehicle. Autonomous driving technology has the potential to increase access and mobility for older adults and individuals with disabilities, including those with sensory, cognitive, and physical disabilities, wheelchair users, and people with neurological conditions, who have varying needs as well as traditionally underserved communities. This goal can be realized by Congressional directive ensuring access for everyone, including accessible HMI, and ramps and securement for wheelchair users. Discrimination on the basis of disability in licensing for SAE International level 4 and 5 AVs must also be prohibited. In addition, the diverse needs of all members of the disability community and older adults must be accommodated for systems that require human engagement as well as when developing a safe fallback.

Access for Underbanked Populations: Access to on-demand transport services is often predicated on the ability to make digital payments. Twenty-five percent of U.S. households are unbanked or underbanked, with higher incidence in working-age disabled households, lower-income households, less-educated households, younger households, Black and Hispanic households, and households with volatile income. AV-based transport services must consider a variety of ways in which payment for service can be made in order to ensure that this technology supports equitable access and the inclusion of all.

Equity: Transportation is an imperative part of life. It is the connector for people's work, medical care, worship, recreation, essentials for life and all other tasks. As new modes of transportation continue to grow and evolve, investment and development must include a process where all people can safely participate.

Accessibility, Passenger Safety, and Transportation Services: The safety of passengers is not a monolith, and the measurement and descriptions of safety differ for all people in particular for those who are part of marginalized communities. The use of public transportation safely is currently partially in control of the operators of the modes and vehicles. Human interaction remains essential even when there is an AV and no operators. There must be clear plans that coordinate the safe transportation for all people including the need for delivery of medical care as well as laws that embrace social equity to protect those who are marginalized (Black and Brown people, Indigenous people, lesbian, gay, bisexual, transgender, queer, + (LGBTQ+) people, people with disabilities, women, older adults, and all other groups) in the implementation of these transportation services.

Preserving Consumer and Worker Rights

Consumer Information: Consumer information regarding AVs should be available at the point of sale, in the owner's manual, including publicly accessible electronic owner's manuals, and in any OTA updates. The vehicle identification number (VIN) should be updated to reflect whether certain features were built into the vehicle, either as standard or optional equipment. Additionally, similar to the user-friendly safecar.gov website, NHTSA must establish a website accessible by VIN with basic safety information about the AV level, safety exemptions, and limitations and capabilities of the AV driving system including those resulting from OTA updates. The U.S. New Car Assessment Program (NCAP) was the first government program to provide the public with comprehensive auto safety ratings, including crash test results. It is vital that Congress require NHTSA to act upon consumer and stakeholder recommendations to modernize U.S. NCAP (See *Claybrook/Advocates for Highway and Auto Safety paper*) and include ratings on how vehicles perform in crashes with motorcyclists, pedestrians and bicyclists. This enhancement of NCAP will be especially crucial as AVs are introduced into the marketplace. Consumer information should be available in multiple languages, similar to compliance with Section 508 of the Rehabilitation Act of 1973 (Pub. L. 93-112), and via video with closed captioning as appropriate, as well as other means of communication to promote access.

Privacy: Passenger vehicles have the potential to collect significant amounts of data that could interfere with personal privacy rights. Therefore, all manufacturers of passenger motor vehicles, including AVs, should be required to comply with robust data privacy safeguards and policies. Any personally identifiable information (PII) should only be collected or shared for purposes of delivering the services a consumer has requested or affirmatively opted-in to, with appropriately tailored exceptions for essential public purposes, safety, data security, compliance with regulatory requirements, and analytics/performance monitoring, among other purposes. Companies should be required to be transparent with consumers and workers operating a vehicle about the collection and sharing of information, protect information associated with the vehicle and the vehicle itself from data breaches, obtain consumers' express permission to sell or disclose their PII to third parties, and provide consumers the ability to access and delete PII that is not needed to support essential

public purposes, safety, data security, compliance with regulatory requirements, and analytics/performance monitoring. The ability of NHTSA, the NTSB, and local law enforcement to access critical safety performance data, while preserving the integrity of personal, private or identifying data, in a timely manner for research, crash investigation and other governmental purposes must be preserved. In addition, radio spectrum needed for traffic safety purposes including vehicle-to-everything communications must be limited to non-commercial use.

Workforce Protections: The deployment of AV technology will have a significant impact on our Nation's workforce. While these technologies will create new business and employment opportunities, they will also lead to displacement and major shifts in jobs and job functions that will not necessarily be linked to those new opportunities, especially for those same individuals who are being displaced. Policymakers have a major role to play in determining whether AV deployment will help or harm working people and whether the benefits from these technologies will be broadly shared. Absent strong leadership, AV technology risks worsening severe inequalities already inherent in our society, predominantly for blue collar workers. Existing and foreseeable issues which stand to be greatly exacerbated by this technology must be addressed before this technology is broadly deployed on our roads. Similarly, unforeseeable issues throughout deployment will need to be resolved with input from affected stakeholders. Congress must ensure that workers and unions are partners in the development and implementation of AV technology and policy. It must recognize the projected negative effects of a transition to AVs, including but not limited to ensuring strong worker protections in Federal funding and procurements, and providing worker support programs for current and future workers including training and re-skilling to ensure that displaced and otherwise affected workers are able to move into middle class jobs created by technological change. In order to achieve these goals, Congress must also take action to require companies and government agencies that plan to transition to AV fleets to be transparent and honest with their workers regarding budgets, plans—including training programs—and timelines for the implementation of new technology. In workplaces where the employees are unionized and thus bargain collectively, these issues should be negotiated.

Whistleblower Protections: Employees or contractors of any manufacturer, supplier, or operator of software or hardware for AVs who want to report safety defects to NHTSA should not be prevented from doing so as the result of a non-disclosure agreement (NDA). The type of protections afforded whistleblowers in Section 31307 of the Moving Ahead for Progress in the 21st Century (MAP-21) Act (Pub. L. 112-141) as well as Section 24352 in the FAST Act (Pub. L. 114-94) must be extended in any AV bill. In addition, the Department of Labor prohibits a NDA that prevents an individual from providing information to the Federal government. However, only a limited number of cases have been filed with the Occupational Safety and Health Administration. Therefore, more must be done to inform employees as to their rights and responsibilities when such a situation arises.

Consumer and Worker Rights⁶: The well-established rights of consumers to seek accountability in a court of law for injuries suffered as a result of AVs must be preserved. Nothing in this bill shall exempt a person from liability at common law or under a state law, or permit a consumer to be required to forgo their rights by a manufacturer or provider of AVs. Moreover, exploitative independent contractor relationships that shield AV companies from liability and deny workers basic workplace rights should be explicitly prevented.

Ensuring Local Control and Sustainable Transportation

Local, State and Federal Regulatory Roles: The statutory mission of the DOT established by Congress in 1966 is to regulate the performance of motor vehicles to ensure public safety, which now includes AVs. In keeping with existing law and practice, the Federal government should prescribe regulations for the performance of these vehicles, leaving regulation of the operation of these vehicles to the states. Even after Federal regulations are in place regarding AVs, existing federalism practices demand that states retain a legal right and a duty to their residents to develop proposals and implement solutions to ensure public safety. In addition, state and local governments have the authority to manage the operation of vehicles on their streets to address concerns such as safety, noise, local air quality, and congestion. Any action on the regulation of AVs shall not preempt states and localities from regulating the operation of these vehicles just as they do for traditional motor vehicles.

In-Depth Study of AV Impacts on Transportation Systems and Environment: AVs could have direct and indirect negative impacts on safety, congestion, pollution, land use, accessibility, transportation infrastructure capacity and needs, energy consump-

⁶Advocates for Highway and Auto Safety does not take a position on this issue.

tion, public transit, jobs and job functions, mobility and equity. DOT must be directed to undertake a comprehensive study to inform policymakers and the public about how these vehicles will impact our existing transportation systems and ensure effective mitigation of problems identified. Implementation of infrastructure to support the safe operations of AVs, such as placement of electric vehicle charging stations, visible lane striping, and uniform and unobstructed signage, must be equitable for all communities to ensure equal opportunity for people of all racial and socioeconomic backgrounds.

NOTE: The AV Tenets outlined in this document do not constitute the entirety of each supporting organization's policy priorities related to AVs.

Supporters of Autonomous Vehicle (AV) Tenets

Active Transportation Alliance (Metro Chicago)
 Advocates for Highway and Auto Safety
 American Association for Justice
 American Motorcyclist Association
 American Public Health Association
 American Trauma Society
 Association of Pedestrian and Bicycle Professionals
 Bicycle Coalition of New Mexico
 BikeNWA
 BikeOklahoma
 Bike Pittsburgh
 BikeSD
 BikeWalkKC
 Brain Injury Association of America
 California Association of Bicycling Organizations
 Cascade Bicycle Club
 Center for Auto Safety
 Center for Disability Rights, Inc.
 Citizens for Reliable and Safe Highways
 Consumer Action
 Consumer Federation of America
 Consumers for Auto Reliability and Safety
 Consumer Reports
 Disability Rights Education and Defense Fund
 Emergency Nurses Association
 Environmental Law & Policy Center
 Families for Safe Streets
 Federal Law Enforcement Officers Association
 GorgePedal.com
 Health by Design
 Idaho Walk Bike Alliance
 International Brotherhood of Teamsters
 Joan Claybrook, President Emeritus, Public Citizen, Former Administrator, National Highway Traffic Safety Administration
 KidsAndCars.org
 LA Walks
 League of American Bicyclists
 Missouri Bicycle and Pedestrian Federation
 National Association of City Transportation Officials (NACTO)
 National Coalition for Safer Roads
 National Consumers League
 New Urban Mobility Alliance
 Parents Against Tired Truckers

Public Citizen
 Owner-Operator Independent Drivers Association
 Rails-to-Trails Conservancy
 Ride Illinois
 San Francisco Families for Safer Streets
 Shenandoah Valley Bicycle Coalition
 SoCal Families for Safe Streets
 The Daniel Initiative
 Transport Workers Union
 Transportation Alternatives
 Transportation for America
 Transportation Trades Department, AFL-CIO
 Trauma Foundation
 Truck Safety Coalition
 Walk SF
 Washington Bikes
 Whirlwind Wheelchair International
 Wyoming Pathways

Glossary of Acronyms

ADS—Automated Driving System
AV—Autonomous Vehicle
CFR—Code of Federal Regulations
DOT—Department of Transportation
FAA—Federal Aviation Administration
FAST—Fixing America’s Surface Transportation Act, Pub. L. 114–94
FMVSS—Federal Motor Vehicle Safety Standard
GAO—Government Accountability Office
GVWR—Gross Vehicle Weight Rating
HHS—Health and Human Services
HMI—Human-Machine Interface
IRB—Institutional Review Board
LGBTQ+—Lesbian, Gay, Bisexual, Transgender, Queer, +
MAP-21—Moving Ahead for Progress in the 21st Century Act, Pub. L. 112–141
NCAP—New Car Assessment Program
NDA—Non-Disclosure Agreement
NHTSA—National Highway Traffic Safety Administration
NIST—National Institute of Standards and Technology
NTSB—National Transportation Safety Board
ODD—Operational Design Domain
OTA—Over-the-Air
PII—Personally Identifiable Information
SAE—Society of Automotive Engineers
USC—United States Code
VIN—Vehicle Identification Number

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. MARIA CANTWELL TO
HON. JOHN D. PORCARI

Megaprojects. Large infrastructure projects are critical to increasing transportation capacity and improving mobility across the country. The I-5 Bridge in Vancouver, Washington across the Columbia River is a prime example. The bridge, which includes a span that is more than 100 years old, carries 135,000 vehicles and roughly \$110 million in freight traffic each day. Congestion on the bridge rose 278 percent between 2011 and 2016. Now, due to its seismic vulnerability, it is in desperate need of replacement to reduce congestion, improve safety, and enhance freight access. However, it is often challenging to fund these megaprojects due to their high cost and multistate jurisdictions.

Question 1. What are the primary obstacles for constructing mega projects with multi-state jurisdictions?

Answer. Primary obstacles to constructing multi-state mega projects include synchronizing the electoral, funding and procurement cycles of the states, as well as recognition of their national and regional significance through a separate Federal funding source.

Let me illustrate these obstacles through a project that I personally led, the Woodrow Wilson Bridge replacement over the Potomac River, connecting Maryland and Virginia. Like the I-5 bridge over the Columbia River, the existing Woodrow Wilson Bridge (I-95/495) was outmoded, well beyond its design capacity, and presented an ongoing safety issue. The existing bridge also had a highly disruptive drawspan, which was operated by the District of Columbia. As a result, two states and the District of Columbia had to partner in its replacement, although the District of Columbia did not bear any financial responsibility for the replacement structure. The first obstacle that had to be overcome was to build a tripartite governance structure for the \$2.4 billion replacement bridge that would survive multiple changes of administration in the District of Columbia, Maryland and Virginia (the two states are on different gubernatorial election cycles), and at the national level. Governors in both states had to make multi-year financial commitments that would bind their successors to fund their share of the bridge replacement. Changes of administration (and parties) in both states, as well as a change in control of Congress and the Presidency during the design and construction period, threatened the continued progress of the project at multiple points. The governance structure ultimately proved durable enough to withstand these changes of administration and political support.

Both states used substantial portions of their FHWA formula funds, as well as two substantial direct appropriations by the Congress. In this sense, the Wilson bridge replacement was treated as a project of national and regional significance, and funded accordingly. The procurement and operational responsibilities were divided between the two states, with Maryland being the actual procurement agency.

A primary lesson learned in delivering this project was that the political, financial and legal structure had to be designed from the beginning to anticipate and survive multiple electoral and funding cycles in order to deliver a successful project.

INFRA. The INFRA grant program was intended to provide funding for nationally and regionally significant freight projects. However, multimodal freight projects are subject to a 10 percent cap. The program is also significantly oversubscribed and has only been able to fund less than 10 percent of projects that have applied to the program.

Question 2. What reforms to the INFRA program would provide the greatest benefit to transportation stakeholders?

Answer. Arbitrarily capping intermodal freight projects in the INFRA grant program at 10 percent, in my opinion, works against one of the primary benefits of the program, which is to connect the seams in the national goods delivery system. A substantially larger INFRA program, without the 10 percent cap, would better serve America by helping to reduce the substantial backlog of worthy projects that have direct economic, environmental and other benefits.

RRIF Reforms. The Railroad Rehabilitation and Improvement Financing (RRIF) program is authorized to provide up to \$35 billion in loan guarantees to finance the development of rail infrastructure. Despite changes to the RRIF program under the FAST Act of 2015 intended to increase use of the program, utilization remains low.

Question 3. What can Congress do increase utilization of the RRIF program and to ensure that transportation projects are receiving the funding they need?

Answer. The single most important reform of the RRIF program to encourage its wider use would be to have a Federal allocation for the credit risk premium, as the

TIFIA program does. Multiple potential RRIF applicants have identified that as an insurmountable barrier to using the program.

Process reforms that result in a shorter, more consistent process would also be helpful. RRIF is truly an underutilized tool, and eliminating the need for the applicant to pay the credit risk premium and a shorter, more predictable process will make the program significantly more attractive to applicants.

Climate and Resiliency. In 2020, the United States endured 22 separate billion-dollar weather and climate disasters that have harmed transportation infrastructure, disrupted service, and increased maintenance and operating costs. Climate impacts on transportation are not limited to individual events—the transportation sector is the largest contributor to greenhouse gas emissions (GHG) in the United States, accounting for nearly 30 percent of all GHG emissions.

Question 4. How can Congress ensure that climate and resiliency are priorities for transportation projects across the country?

Answer. Requiring consideration of climate and resiliency factors in the Purpose & Need statements that are a component of the National Environmental Policy Act (NEPA) Environmental Impact Statements (EIS) and Environmental Assessments (EA) will be an important step in building these considerations into the scope of projects from the beginning. No project should be going forward from this point without preferred alternatives and design elements that accommodate climate change and resiliency needs. Climate change and resiliency need to be integral elements of the selected project alternative.

Additionally, including climate and resiliency considerations as an evaluation criteria in USDOT competitive grant applications will also help build these considerations into project scopes.

Finally, USDOT can modify guidance on asset management requirements for transit, highway and other systems to include climate and resilience as a required component of lifecycle cost evaluations.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. AMY KLOBUCHAR TO
HON. JOHN D. PORCARI

Infrastructure Investment. As one of the first Senators to support the *Fixing America's Surface Transportation Act*, I understand the critical importance of direct investment in transportation infrastructure for local economies. A recent report by the American Public Transportation Association estimates that every \$1 invested in public transportation generates \$4 in economic returns.

Question 1. Can you speak to the critical importance of direct investment in transportation infrastructure, particularly for rural communities?

Answer. There is no substitute for direct and sustained investments in transportation infrastructure in communities across America, including rural communities. From the founding of the Republic, particularly in rural areas, we have come together as a nation to build farm to market roads, developed our unparalleled system of inland waterways and Great Lakes waterborne transportation, and built railroads that helped make America an agricultural export giant. By any objective measure, we are now living off the infrastructure investments made by previous generations, and by failing to pay it forward we are “eating our seed corn”.

Empire Builder: Rural Communities and Economies. The Empire Builder, one of Amtrak's longest rail lines, contributes \$327 million to the economies of the states in which it operates and provides a critical link for many rural communities in Minnesota helping students get to college, workers get to job centers, and tourists get to travel destinations.

Question 2. How vital are long-distance routes in connecting rural areas to urban centers, particularly for local economies?

Answer. Long distance passenger rail routes are crucial to the communities they serve today, the additional communities that they can serve in the future, and as a component of our national transportation network. For our citizens who depend on rail travel or live in underserved rural communities, these routes are a lifeline. The Empire Builder also plays a critical role for the tourism industry, travelling directly through Glacier National Park and the Cascade Mountains. Long distance passenger trains such as the Empire Builder are a source of continued economic vitality for small towns and cities across America.

Adding additional city pairs to the existing network of long distance routes will help weave communities together and provide an environmentally-friendly transportation alternative for generations to come.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. KYRSTEN SINEMA TO
HON. JOHN D. PORCARI

Interstate 11. A transportation priority for Arizona is I-11, which will run from the U.S./Mexican border to Phoenix, Las Vegas, and north through Nevada. Interstate 11 will be an important link between two of the largest cities in the county, will increase trade and commerce with Mexico and Canada throughout the region, and will relieve air pollution and congestion in downtown Phoenix.

Question 1. Based on your experience at the Department of Transportation, do you agree that interstate projects such as Interstate 11 are an important aspect of our Nation's transportation infrastructure, particularly given the continuing population growth in the region?

Answer. Interstate highways such play a crucial role in our Nation's economy, and the proposed I-11 has the potential to become an important north-south trade corridor in one of the fastest growing regions of the country.

Question 2. If so, what recommendations do you have for Congress and the Administration to continue to support the development and construction of such projects?

Answer. It is important to stipulate that maintaining and rebuilding our existing highway assets must be our first priority.

Providing that there is adequate funding for system preservation of our existing highway assets by the Federal government and states, proposed projects such as I-11 can benefit from a number of best practices that can be incorporated in the National Environmental Policy Act (NEPA) process. These include the latest tools for more thorough citizen and community involvement, careful consideration of design alternatives from an all-hazards resiliency and climate change perspective, and a more sophisticated review of potential impacts on historic properties, tribal lands and environmentally sensitive areas. In addition, the proposed corridor can provide the right-of-way for other essential infrastructure such as broadband and buried High Voltage Direct Current (HVDC) transmission of renewable energy.

Amtrak Southwest Chief and Sunset Limited. In my home state, the Southwest Chief provides service to Flagstaff, Kingman, and Winslow, Arizona. The Sunset Limited serves Tucson, Benson, Maricopa, and Yuma, Arizona. In these communities, Amtrak service is a significant financial driver. For example, over 50,000 riders disembark in Flagstaff each year and provide more than \$12 million in tourism dollars to the city.

Question 3. Based on your experience at the Department, do you agree that long-distance Amtrak service such as the Southwest Chief and the Sunset Limited provide crucial connectivity for many rural communities and can be significant financial drivers?

Answer. Yes, existing long-distance passenger rail routes such as the Southwest Chief and Sunset Limited provide crucial connectivity and economic opportunity to rural communities. Augmenting this network with proposed additional service such as the "Amtrak Connects US" plan will further assist rural communities throughout the country.

Question 4. If so, what recommendations do you have for Congress and the Administration to continue to support Amtrak long-distance service?

Answer. Consistent and predictable multi-year Federal financial support for long-distance service is essential to its stability and growth. Beyond that base support, funding for new rolling stock and co-investments with host railroads for track, bridge and signal improvements are sorely needed and are crucial for the long-term growth of the cross-country network. Finally, support for the "Amtrak Connects US" vision, which includes adding service to cities such as Phoenix, will ensure that we are handing over a significantly improved, environmentally friendly passenger rail network to the next generation of Americans.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. SHELLEY MOORE CAPITO TO
HON. JOHN D. PORCARI

Question 1. It takes an average of seven years to complete an environmental impact statement for a highway project. This process should be reviewed and can be improved in order to be able to "Build Back Better," we need to be able to "Build Back". During your time at DOT, did you experience roadblocks that made it difficult for States to move projects from concept to completion?

Answer. That is an excellent question, Senator and gets to the heart of timely, consistent and predictable project delivery. I will admit that I came to the USDOT

Deputy Secretary position with a bit of a chip on my shoulder, having twice served as Secretary of the Maryland Department of Transportation, where I delivered a number of large, complex highway, bridge, transit, airport and port projects, including coordinating highway and commuter rail improvements with the State of West Virginia. I made sure that re-engineering the NEPA process was an important component of our work program.

As you know, more than 90 percent of the NEPA transportation work is conducted under a Categorical Exclusion (Cat X) and another 3–4 under an Environmental Analysis (EA). The remaining approximately 3 percent of projects require a full Environmental Impact Statement (EIS). These projects, almost by definition are large, complex and involve a host of state and local agencies.

In the Obama administration, we established a cross-agency permitting Rapid Response Team across the executive branch, which I co-chaired with the Chair of the President's Council on Environmental Quality. The purpose of this team was to establish and validate process improvements, which would result in measurably better outcomes, including environmental outcomes, in a shorter, more predictable process. One of the first projects we tackled was the Tappan Zee Bridge replacement in the State of New York, where the EIS was approved in a record 13 months. We found that the single most significant process improvement was to front-load the EIS process and have all of the environmental resource agencies at the state and Federal level declare their objectives and specific issues up front, rather than one at a time at the end of the process. By literally having everyone around one table talking directly to each other, rather than through a series of interminable e-mail daisy chains, we were able to establish clear environmental priorities for the Tappan Zee replacement, incorporate them into the Final EIS/Record of Decision, and get the project underway. This Rapid Response Team approach was used successfully for other major projects as well. A similar process was undertaken for the Columbia River Crossing, a proposed I–5 bridge replacement connecting Oregon and Washington. And these lessons have now been incorporated into the work of the OMB-Chaired Permitting Improvement Council.

- *Follow-up:* Do you agree that we should explore ways to improve this process?

Answer. Yes, I strongly agree that we have shown that we can simultaneously be both good environmental stewards and implement a better process. In fact, most major projects would happily trade additional mitigation in return for a faster, more consistent process.

Close attention to the leadership and work program of the Permitting Improvement Council can substantially advance this agenda.

Question 2. Under the previous administration, former DOT Secretary Chao did a very good job recognizing that rural areas were being underfunded and make a concerted effort to use the Department's discretionary authority to help rural America. In your testimony, you mention that President Biden's vow to "Build Back Better" means rebuilding our economy and making foundational investments in America's future through infrastructure. I believe that investments in rural communities can maximize Federal funding and address our Nation's most immediate infrastructure needs. How can we utilize a whole-of-government approach to maximizing economic growth in rural states, like West Virginia?

Answer. From the founding of the Republic, rural development has been seen as an important national goal. Our earliest national pikes (roads) and our magnificent system of inland and Great Lakes waterways are two important examples of where a broad consensus of citizens understood that it is in everyone's interest to connect our rural communities with opportunities.

This determination to help our rural communities did not begin with Secretary Chao, nor should it end with her successor. For example, an essential element of the \$48 billion of infrastructure funding in the Recovery Act (ARRA) in 2009 was the TIGER competitive grant program, where President Obama established a rural set-aside to disproportionately advantage rural areas.

I strongly believe that this was the right thing to do, and you can see the same philosophy today, for example, in the Build Back Better plans to connect all of America with high-speed internet. Bringing high-speed Internet service to every corner of rural America now counts as "core" infrastructure, and is consistent with the economic development goals of infrastructure development.

The Executive Branch has strong convening authority across agencies and departments and can be used to bring some non-traditional actors on grid resiliency, broadband, rural air service and other issues to the forefront. This executive branch-wide convening authority should be synched with efforts of regional entities such as the Appalachian Regional Commission for maximum impact.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. MARSHA BLACKBURN TO
HON. JOHN D. PORCARI

Question 1. In your opening statement, you mentioned “Transportation projects requiring either an Environmental Impact Statement (EIS) or an Environmental Assessment (EA) under the National Environmental Policy Act (NEPA) should now incorporate climate change and equity considerations.” Could you please define what you mean by “equity” in this statement?

Answer. Thank you for asking this important question. The “Purpose & Need” section of an EIS or EA is where the fundamental justification for a project is outlined, including consideration of both the benefits and the impacts of the proposed project.

In this context, “equity” means understanding who gets the benefits, and who bears the burdens, of the proposed improvement.

In the past, communities of color have borne a disproportionate impact of interstate highway construction, rail expansion, pipeline construction and other infrastructure projects. Using equity as a lens to more fully understand who has benefitted and who has borne the burden of alignment and siting decisions in the past, combined with undertaking a similar analysis of current community conditions, provides a critical context for where, what, and how future infrastructure projects should be determined.

- *Follow-up:* NEPA is one of the most burdensome regulatory hurdles to rebuilding our Nation’s infrastructure. County officials in Tennessee constantly tell me how ridiculous it is to get a project approved due to this onerous regulation. Why should we continue to impose more regulatory requirements on states that are trying to get projects done in a more efficient, and effective matter?

Answer. I fundamentally disagree with this premise. When President Nixon signed the National Environmental Policy Act on January 1, 1970, he clearly embraced the premise that infrastructure construction and environmental protection are not mutually exclusive; in fact, they are symbiotic.

This has been my personal experience of over 35 years delivering both multi-billion dollar and smaller-scale projects at the local, state and Federal level. Front-loading the NEPA process by engaging all stakeholders at the beginning, rather than the end of the process invariably results in better project alternatives selection—and a streamlined process.

It is true that the NEPA process can be very intimidating for local officials that have not been through it before, and some states provide technical assistance and training, which I highly recommend.

Question 2. Many states, including Tennessee, are right-to-work states, but Federal rules like the Davis-Bacon Act and Project Labor Agreements mandate union pay scales and work rules across the country, increasing the cost of infrastructure projects by 10 to 30 percent. Due to these cost increases in infrastructure projects, why should we expand these rules, as the Biden administration has stated it intends to?

Answer. It is important to go back to the original premise for public investments in infrastructure, and remember that infrastructure is a means to an end, not an end in itself. In other words, the larger objective of these public investments is to build a stronger economy, enhance communities and provide equal access to opportunities for individuals.

The Davis-Bacon Act was signed into law in 1931 by President Hoover to prevent a race to the bottom on wages by requiring the payment of local prevailing wages for qualifying projects. Similarly, the Federal government requires the use of steel manufactured in the United States for federally-funded projects. In both cases, this is a recognition that public infrastructure investments should help build a stronger economy. I strongly support that premise, and believe that it makes sense for the Biden administration to review existing requirements, and update them for today’s conditions where necessary.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. MARIA CANTWELL TO
DOUGLAS R. HOOKER

Congestion. Freight congestion has real economic impacts for consumers and businesses. Nationally, truck congestion increases business operating costs by about \$74.5 billion annually.

Question 1. How is the Atlanta Regional Commission looking to leverage innovation to reduce freight congestion?

Answer. The Atlanta Regional Commission is looking to leverage innovation both through our regional MPO freight plans and our local plans, known as Freight Clus-

ter Plans, which are focused on freight movement and industrial development. Freight Cluster Plans help local jurisdictions identify ways to move freight more efficiently, improve safety, and expand access to jobs at industrial businesses. Project recommendations include some major, expensive projects such as highway interchange expansion/reconstruction, capacity projects, and major intersection improvements. They also include smaller, local projects such as adding turn lanes, increasing the turning radii at intersections, and shifting the stop bars further back so it's easier for trucks to turn, all of which can help address local bottlenecks near industrial businesses. Recommendations also include adding bus shelters, sidewalks, and improving pedestrian crossings so that workers can safely get to jobs at these growing industrial businesses.

Other recommendations focus on ITS (Intelligent Transportation Systems) and CV (Connected Vehicle) technology. Much of this technology is new, and it can help address traffic congestion and safety. However, identifying national standards for this technology, especially for CV technology, is vital for successful implementation for all vehicle types. Freight Cluster Plans also analyze truck parking in each study area, but expanding truck parking in major urban areas like Metro Atlanta is consistently a challenge. One growing issue nationally appears to be driver delay at industrial businesses. Truck drivers will allot a certain amount of time for a pickup or drop-off, but then might be delayed at this location for an extended period, maybe even for hours. The driver's hours of service are impacted while they are waiting, meaning they have little or no time to find a safe parking location once they leave this business. This issue can't be solved at the local or regional level.

These local Freight Cluster Plans will feed into ARC's next Regional Freight Plan Update, which will kickoff later in 2021. These plans also help local jurisdictions identify freight project needs of all types, providing them with clear freight project priorities in a way that they've never had in the past.

INFRA. The INFRA grant program was intended to provide funding for nationally and regionally significant freight projects. However, multimodal freight projects are subject to a 10 percent cap. The program is also significantly oversubscribed and has only been able to fund less than 10 percent of projects that have applied to the program.

Question 2. What reforms to the INFRA program would provide the greatest benefit to transportation stakeholders?

Answer. Many regions of the country are reaching the limit of being able to accommodate ever-increasing truck volumes on its freeways, arterials and other access roadways, and reorient Federal policy accordingly. Urban congestion and safety concerns created by trucks, coupled with a crippling shortage of drivers, means shifting a greater share of freight traffic to the other modes (including those which are still under development) will be critical to the long-term success of the U.S. economy. We would encourage future rounds of INFRA funding eliminate all caps on project types and encourage creative projects that facilitate long-distance freight movement by other viable existing transportation infrastructure, while also leveraging any new technologies which may become viable in the near future.

Many projects likely to be funded under an INFRA grant already have numerous other Federal programs at their avail at the state and regional level. Any Federal discretionary program should prioritize a smaller number of large-scale projects which are difficult to implement through traditional means, rather than a larger number of small-scale projects which can be advanced in other ways. For example, the INFRA (then FASTLANE) funded Mason Mega Rail project in Savannah will allow the port to construct longer trains on-site without disrupting the local roadway network, extending the port's reach via rail further outside the southeast. The INFRA funded C.R.E.A.T.E program of rail improvements in the Chicago area addresses the challenges with lots of rail movement in an urban area, a problem that also exists in Metro Atlanta. Projects such as these, as well as roads and highway interchanges serving industrial businesses, improved air cargo connections, truck parking facilities, and new technology for freight movement should be the focus of the INFRA grant program going forward. These types of projects show a clear need and purpose related to freight movement, which is necessary to best support freight movement nationally.

Finally, under the current manner in which sponsors apply for funding, implementing larger-scale projects of true national significance may be hindered if they cross multiple local, regional and state boundaries and/or involve multiple modes. We believe that to realize the full potential of the INFRA program (and other similar national competitive discretionary funding programs), consideration could be given to expanding the role which USDOT can serve in assembling, managing and

overseeing the broad coalitions of agencies and organizations which will be required for such projects.

Climate and Resiliency. In 2020, the United States endured 22 separate billion-dollar weather and climate disasters that have harmed transportation infrastructure, disrupted service, and increased maintenance and operating costs. Climate impacts on transportation are not limited to individual events—the transportation sector is the largest contributor to greenhouse gas emissions in the United States, accounting for nearly 30 percent of all GHG emissions.

Question 3. How can Congress ensure that addressing climate impacts and resiliency are priorities for transportation projects across the country?

Answer. ARC believes that national goals related to addressing the challenges of climate change and infrastructure resiliency can be best achieved by “mainstreaming” best design and planning practices throughout all aspects of related legislation. We see numerous references to these issues throughout initial transportation reauthorization proposals, which is encouraging.

There is some concern with the possible creation of numerous, and potentially duplicative and overlapping, discretionary programs targeted at narrow and isolated aspects of these challenges. By isolating such initiatives into relatively small programs with limited budgets, it can create the impression that these are unique “one-off” projects, while much larger funding programs will be allowed to continue following “business as usual” decision-making processes. Of particular concern is the ability of state DOTs to flex funds from the well-established CMAQ program to other core programs, which do not always have the same focus on air quality beneficial outcomes.

Rather than creating new small pots of money which may advance the same projects which are CMAQ-eligible, we believe a better approach would be to simply clarify the intended purpose of that existing program, increase the amount of funding it receives, and restrict the ability to divert funds to projects which do not support its objectives. This will send a much stronger message regarding Federal priorities than multiple underfunded and duplicative discretionary programs will.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. MARIA CANTWELL TO
MARK MCANDREWS

Freight Congestion. Freight congestion has real economic impacts for consumers and businesses. Nationally, truck congestion increases business operating costs by about \$74.5 billion annually. According to the state’s freight plan, freight shipments in Mississippi are expected to increase by 48 percent by 2040.

Question 1. What Federal policy or investment priorities would help prepare you to accommodate increased freight movement and to avoid congestion?

Answer. Investment in our Nation’s multimodal transportation system is critical to easing the congestion that may occur as freight shipments increase over the next two decades. Funding for non-road, intermodal infrastructure was limited in the last reauthorization of our Nation’s surface transportation policies. INFRA intermodal funding was capped at \$500 million over the original five-year FAST Act authorization, while intermodal dollars were capped at 10 percent of freight formula funds. Raising, or wholly eliminating, these artificial investment caps will give the U.S. Department of Transportation and State Departments of Transportation the flexibility necessary to make critical investments needed to accommodate increased freight volumes and avoid congestion that may result.

E-Commerce. E-commerce has exploded, growing from just \$27 billion in sales in 2000 to \$792 billion in 2020—that’s 14 percent of total sales. These packages travel through ports, over rail, and on trucks to reach consumers. I am concerned about the congestion our ports are currently experiencing, as well as export challenges facing American farmers and businesses working to export their products to global markets. Increases in e-commerce will continue to stress the shipping and port infrastructure.

Question 2. What port infrastructure investments should be made to prepare our economy for this emerging opportunity as consumers pivot to e-commerce?

Answer. As e-commerce continues to be prevalent, it becomes increasingly important to ensure that each state plans for supply chain cargo flows by all modes of transportation and benefits within each state freight plan and includes the impacts of e-commerce on freight infrastructure. By planning for an increasingly sophisticated freight system, investments can be prioritized to ensure the smooth movement of freight through our Nation’s maritime gateways.

Multimodal funding has taken on a greater relevance in recent years because of large population shifts to metropolitan areas where many ports are located. Additionally, projects are becoming more complex, integrating freight flow demands with passenger needs on both the highway and rail networks. With growing populations and rising freight volumes, rail access has been one of the vital tools in moving large volumes of freight to distribution centers outside major population centers. Increasingly, multimodal funding has been used to connect rail not only to ports but also to distribution centers nationwide.

As mentioned in my written testimony, the American Association of Port Authorities has identified more than \$20 billion in funding needs for public port authorities alone to improve our Nation's multimodal infrastructure, and as supply chain becomes more sophisticated the demand for multimodal funding will only increase. I applaud the committee for prioritizing investment in our multimodal freight system, and this focus must continue to ensure proper planning, investment, and modernization to accommodate freight flows as consumers continue to pivot to e-commerce.

INFRA. The INFRA grant program was intended to provide funding for nationally and regionally significant freight projects. However, multimodal freight projects are subject to a 10 percent cap. The program is also significantly oversubscribed and has only been able to fund less than 10 percent of projects that have applied to the program.

Question 3. What reforms to the INFRA program would provide the greatest benefit to transportation stakeholders?

Answer. Because the safe and efficient movement of freight requires many modes to work together, I recommend eliminating the arbitrary 10 percent cap on non-highway funding, allowing all projects to compete for much-needed funds, regardless of mode. I would also recommend greater transparency in the decision-making process to give stakeholders and Congress an increased understanding of 1) what differentiates a successful project, and 2) whether USDOT is correctly applying Congressionally directed criteria, such as increasing global economic competitiveness, improving connectivity between freight modes, and improving the safety, efficiency, and reliability of the movement of freight and people. Finally, the oversubscription of the program demonstrates a true need for additional funding. In the combined FY17 & FY18 round of awards, USDOT received \$12 in unique requests for every \$1 available; all 50 states, the District of Columbia, and Puerto Rico have submitted applications to the program, demonstrating freight infrastructure needs across the Nation. Based on these needs, the INFRA program should receive a minimum annual Federal investment of \$12 billion, dedicated to multimodal freight infrastructure.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. AMY KLOBUCHAR TO
MARK MCANDREWS

Minnesota: Port Infrastructure Improvements. The Port of Duluth supports industries from agriculture to manufacturing—it is the largest and busiest port on the Great Lakes with 900 vessels and an average of 35 million short tons of cargo per year. And in 2017, a new intermodal terminal opened for Canadian National Railway and Duluth Cargo Connect to improve the flow of freight in and out of the Midwest.

Question 1. Can you speak to the importance of viable ports in supporting rural communities?

Answer. Seaports have national and international reach, and ports are national infrastructure resources that support supply chains and produces in areas metropolitan and rural alike via the deep-water ports on the Pacific, Gulf and Atlantic coasts and the Great Lakes/St. Lawrence Seaway. Through intermodal connectors, ports leverage energy efficient transportation options to connect rural American farmers, manufacturers, workers, and consumers to the global marketplace. And in rural communities, connecting both surface and maritime transportation modes provide supply chain flexibility to regional businesses and logistics cost savings that keeps businesses competitive globally.

Question 2. In your view, why are investments in multi-modal port infrastructure helpful in reducing delays and congestion in the shipment of goods?

Answer. Ports serve as centers of commerce where freight and commodities are transferred between cargo ships, barges, trucks, trains, and pipelines. Port infrastructure supports transportation of critical bulk commodities that could not be moved any other way. At the Port of Pascagoula, we have undertaken a \$36 million Rail Relocation Project. As a result, the Mississippi Export Short Line and CSX

Interchange were relocated, increasing connectivity and efficiency, and closing sixteen at-grade crossings in the cities of Moss Point and Pascagoula.

And, when moving iron ore on the Great Lakes, one vessel replaces 2,800 trucks on our highways. To supply our Nation's steel mills by road, at every point on the Interstate Highway System between Minnesota and Indiana there would be a truck loaded with iron ore passing every 20 seconds on one side of the road and one truck returning empty on the other side of the road. The Interstate Highway System would have to be shut down to all traffic except for the iron ore trucks and no road maintenance could occur. Multi-modal investments ensure that this is not the case, and that freight and commodities are able to move through our freight system without causing undue congestion.

